

SERVICE MANUAL

MODEL	JP	E3	E2	EK	EA	E1	E1C	E1K
RCD-M40	✓		✓				✓	
RCD-M40DAB				✓				
D-M40S		✓						

CD RECEIVER

• For purposes of improvement, specifications and design are subject to change without notice.

• Please use this service manual with referring to the operating instructions without fail.

• Some illustrations using in this service manual are slightly different from the actual set.

DENON

D&M Holdings Inc.

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ABOUT THIS MANUAL

Read the following information before using the service manual.

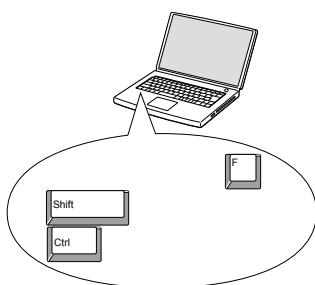
What you can do with this manual

Search for a Ref. No. (phrase) (Ctrl+Shift+F)

You can use the search function in Acrobat Reader to search for a Ref. No. in schematic diagrams, printed wiring circuit diagrams, block diagrams, and parts lists.

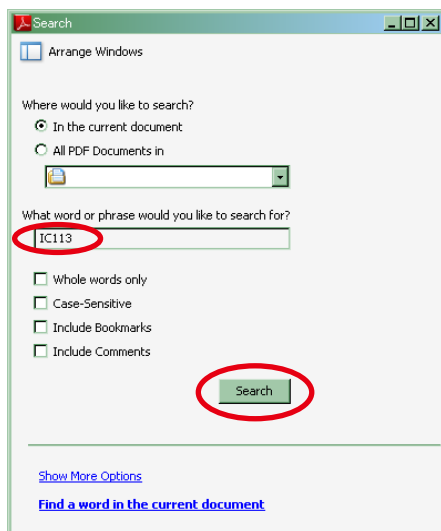
1. Press **Ctrl+Shift+F** on the keyboard.

- The Search window appears.



2. Enter the Ref. No. you want to search for in the Search window, and then click the **Search** button.

- A list of search results appears.



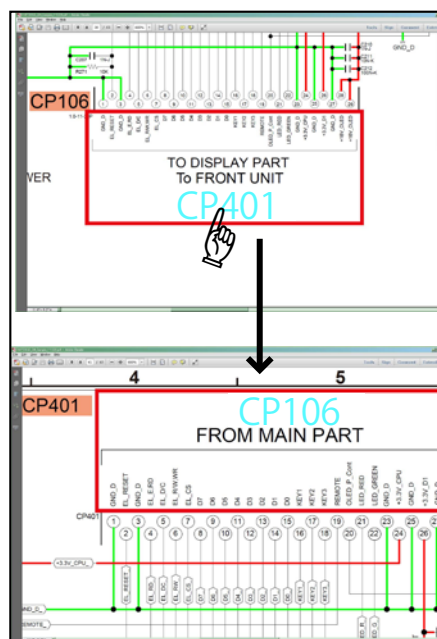
3. Click an item on the list.

- The screen jumps to the page for that item, and the search phrase is displayed.

Jump to the target of a schematic diagram connector

Click the Ref. No. of the target connector in the red box around a schematic diagram connector.

- The screen jumps to the target connector.



- Page magnification stays the same as before the jump.

Using Adobe Reader (Windows version)

Add notes to this data (Sign)

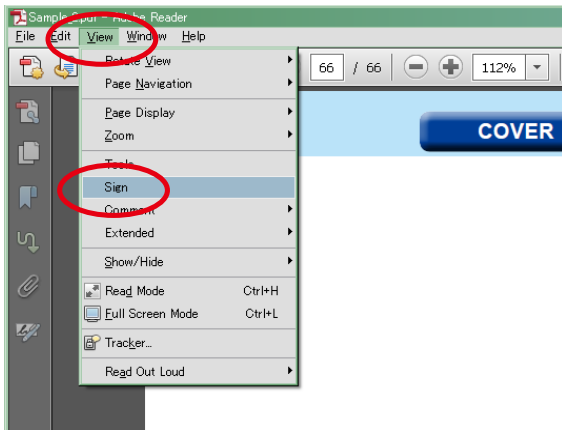
The Sign function lets you add notes to the data in this manual.

Save the file once you have finished adding notes.

[Example using Adobe Reader X]

On the "**View**" menu, click "**Sign**".

- The Sign pane appears.



[Example using Adobe Reader 9]

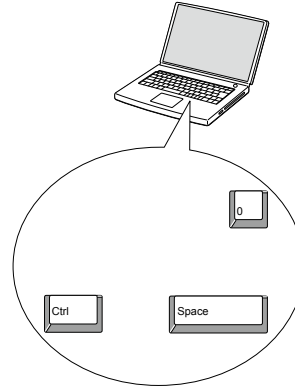
On the "**Document**" menu, click "**Sign**".

Magnify schematic / printed circuit board diagrams - 1

(Ctrl+Space, mouse operation)

Press **Ctrl+Space** on the keyboard and drag the mouse to select the area you want to view.

- The selected area is magnified.

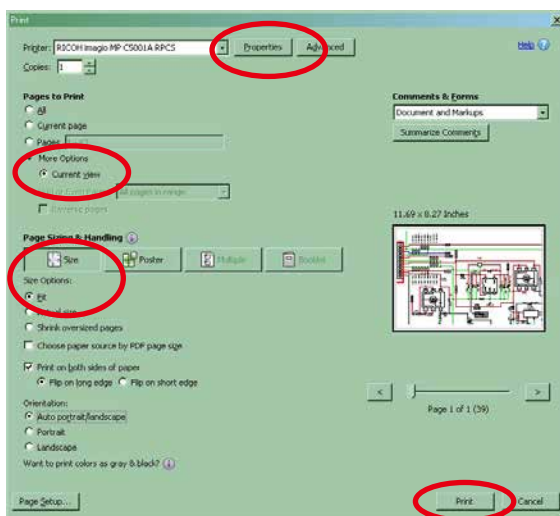


- When you want to move the area shown, hold down **Space** and drag the mouse.
- When you want to show a full page view, press **Ctrl+0** on the keyboard.

Print a magnified part of the manual

The Properties dialog box and functions will vary depending on your printer.

1. Drag the mouse to magnify the part you want to print.
2. On the "**File**" menu, click "**Print**".
3. Configure the following settings in the Print dialog box.



4. Click the **Print** button to start printing.

• Properties

Click this button and check that the printer is set to a suitable paper size.

• Page to print

Select the following checkbox.

"More Options" : "Current View"

• Page Sizing & Handling

Select the following checkbox.

"Size" / "Size Options" : "Fit"

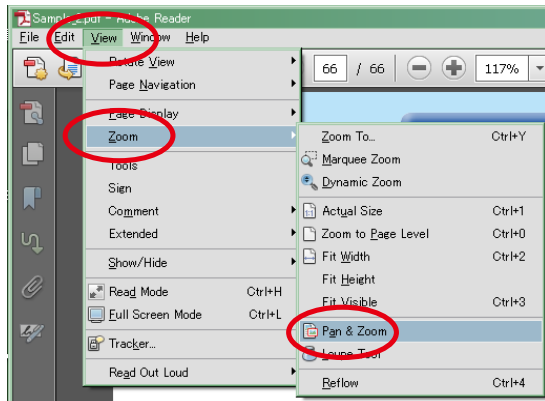
Magnify schematic / printed circuit board diagrams - 2

(Pan & Zoom function)

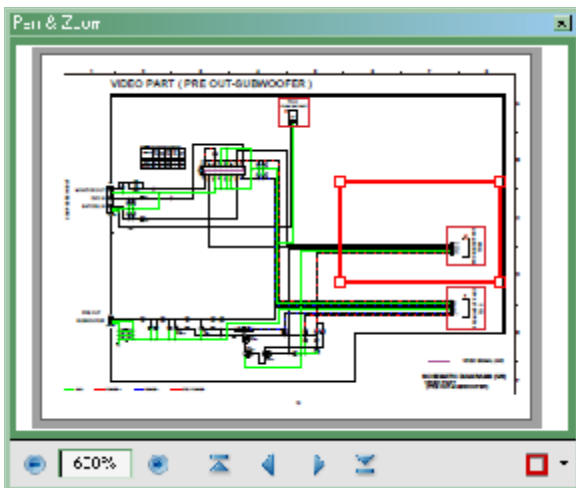
The Pan & Zoom function lets you see which part of a magnified diagram is being shown in a separate window.

[Example using Adobe Reader X]

On the "View" menu, point to "Zoom", and then click "Pan & Zoom".



- The Pan & Zoom window appears on the screen.



[Example using Adobe Reader 9]

On the "Tools" menu, point to "Select & Zoom", and then click "Pan & Zoom Window".

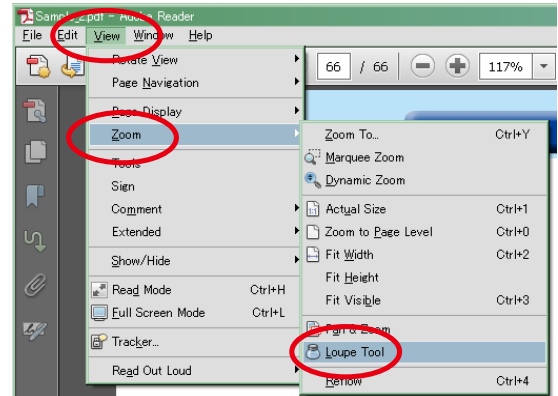
Magnify schematic / printed circuit board diagrams - 3

(Loupe Tool function)

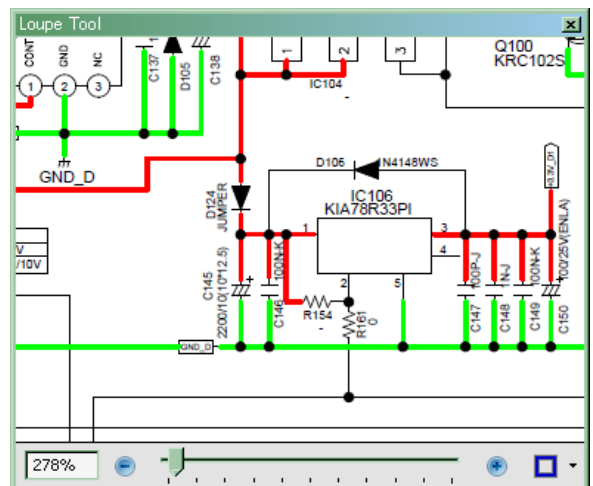
The Loupe Tool function lets you magnify a specific part of a diagram in a separate window.

[Example using Adobe Reader X]

On the "View" menu, point to "Zoom", and then click "Loupe Tool".



- The Loupe Tool window appears on the screen.



[Example using Adobe Reader 9]

On the "Tools" menu, point to "Select & Zoom", and then click "Loupe Tool Window".

SAFETY PRECAUTIONS

The following items should be checked for continued protection of the customer and the service technician.

leakage current check

Before returning the set to the customer, be sure to carry out either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the set is defective.

Be sure to test for leakage current with the AC plug in both polarities, in addition, when the set's power is in each state (on, off and standby mode), if applicable.

CAUTION Please heed the following cautions and instructions during servicing and inspection.

⊙ Heed the cautions!

Cautions which are delicate in particular for servicing are labeled on the cabinets, the parts and the chassis, etc. Be sure to heed these cautions and the cautions described in the handling instructions.

⊙ Cautions concerning electric shock!

- (1) An AC voltage is impressed on this set, so if you touch internal metal parts when the set is energized, you may get an electric shock. Avoid getting an electric shock, by using an isolating transformer and wearing gloves when servicing while the set is energized, or by unplugging the power cord when replacing parts, for example.
- (2) There are high voltage parts inside. Handle with extra care when the set is energized.

⊙ Caution concerning disassembly and assembly!

Through great care is taken when parts were manufactured from sheet metal, there may be burrs on the edges of parts. The burrs could cause injury if fingers are moved across them in some rare cases. Wear gloves to protect your hands.

⊙ Use only designated parts!

The set's parts have specific safety properties (fire resistance, voltage resistance, etc.). Be sure to use parts which have the same properties for replacement. The burrs have the same properties. In particular, for the important safety parts that are indicated by the ⚠ mark on schematic diagrams and parts lists, be sure to use the designated parts.

⊙ Be sure to mount parts and arrange the wires as they were originally placed!

For safety reasons, some parts use tapes, tubes or other insulating materials, and some parts are mounted away from the surface of printed circuit boards. Care is also taken with the positions of the wires by arranging them and using clamps to keep them away from heating and high voltage parts, so be sure to set everything back as it was originally placed.

⊙ Make a safety check after servicing!

Check that all screws, parts and wires removed or disconnected when servicing have been put back in their original positions, check that no serviced parts have deteriorate the area around. Then make an insulation check on the external metal connectors and between the blades of the power plug, and otherwise check that safety is ensured.

(Insulation check procedure)

Unplug the power cord from the power outlet, disconnect the antenna, plugs, etc., and on the power. Using a 500V insulation resistance tester, check that the insulation resistance value between the inplug and the externally exposed metal parts (antenna terminal, headphones terminal, input terminal, etc.) is 1MΩ or greater. If it is less, the set must be inspected and repaired.

CAUTION Concerning important safety parts

Many of the electric and the structural parts used in the set have special safety properties. In most cases these properties are difficult to distinguish by sight, and the use of replacement parts with higher ratings (rated power and withstand voltage) does not necessarily guarantee that safety performance will be preserved. Parts with safety properties are indicated as shown below on the wiring diagrams and the parts list in this service manual. Be sure to replace them with the parts which have the designated part number.

- (1) Schematic diagrams.....Indicated by the ⚠ mark.
- (2) Parts lists.....Indicated by the ⚠ mark.

The use of parts other than the designated parts could cause electric shocks, fires or other dangerous situations.

NOTE FOR SCHEMATIC DIAGRAM

WARNING:

Parts indicated by the $\triangle$ mark have critical characteristics. Use ONLY replacement parts recommended by the manufacturer.

CAUTION:

Before returning the set to the customer, be sure to carry out either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the set is defective.

WARNING:

DO NOT return the set to the customer unless the problem is identified and remedied.

NOTICE:

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM / M=1,000,000 OHM

ALL CAPACITANCE VALUES ARE EXPRESSED IN MICRO FARAD, UNLESS OTHERWISE INDICATED. P INDICATES MICRO-MICRO FARAD. EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION. CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

NOTE FOR PARTS LIST

1. Parts indicated by "nsp" on this table cannot be supplied.
2. When ordering a part, make a clear distinction between "1" and "I" (i) to avoid mis-supplying.
3. A part ordered without specifying its part number can not be supplied.
4. Part indicated by "★" mark is not illustrated in the exploded view.

WARNING: Parts indicated by the $\triangle$ mark have critical characteristics. Use ONLY replacement parts recommended by the manufacturer.

INSTRUCTIONS FOR HANDLING SEMI-CONDUCTORS AND OPTICAL UNIT

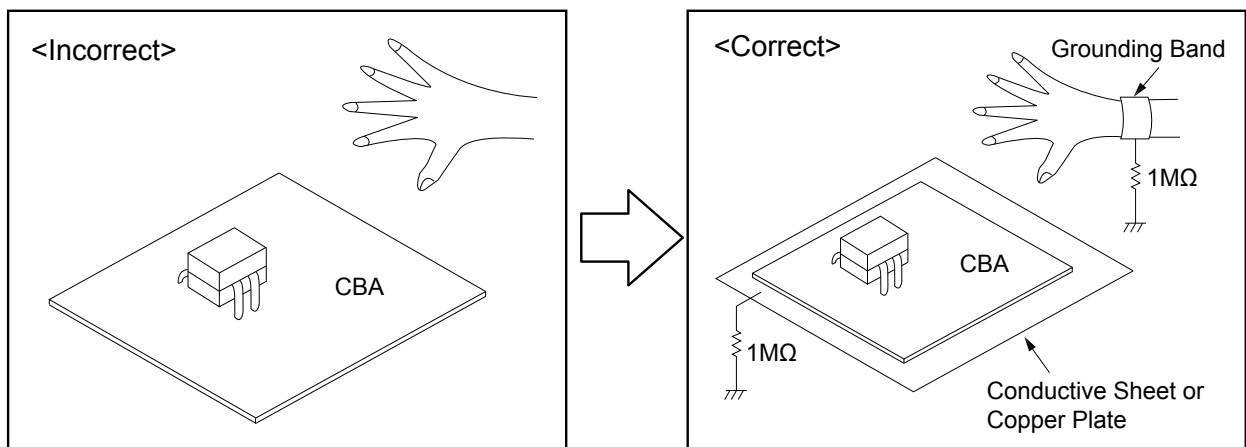
Electrostatic breakdown of the semi-conductors or optical pickup may occur due to a potential difference caused by electrostatic charge during unpacking or repair work.

1. Ground for Human Body

Be sure to wear a grounding band (1 M Ω) that is properly grounded to remove any static electricity that may be charged on the body.

2. Ground for Workbench

Be sure to place a conductive sheet or copper plate with proper grounding (1 M Ω) on the workbench or other surface, where the semi-conductors are to be placed. Because the static electricity charge on clothing will not escape through the body grounding band, be careful to avoid contacting semi-conductors with your clothing



WARNING AND LASER SAFETY INSTRUCTIONS

(GB) WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.

When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance.

Keep components and tools also at this potential.



(NL) WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor elektrostatische ontladingen (ESD).

Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen.

Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat.

Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

(F) ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD).

Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation.

Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfilier le braceleterti d'une résistance de sécurité.

Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

(D) WARNUNG

Alle IC und viele andere Halbleiter sind empfindlich gegen elektrostatische Entladungen (ESD).

Unvorsichtige Behandlung bei der Reparatur kann die Lebensdauer drastisch vermindern. Sorgen Sie dafür, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand mit dem Massepotential des Gerätes verbunden sind.

Halten Sie Bauteile und Hilfsmittel ebenfalls auf diesem Potential.

(I) AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD).

La loro longevità potrebbe essere fortemente ridatta in caso di non osservazione della più grande cauzione alla loro manipolazione.

Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialetto a resistenza.

Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

(GB)

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

(NL)

Veiligheidsbepalingen vereisen, dat het apparaat in zijn oorspronkelijke toestand wordt terug gebracht en dat onderdelen, identiek aan de gespecificeerde worden toegepast.

(D)

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Gerats darf nicht verändert werden.

Für Reparaturen sind Original-Ersatzteile zu verwenden.

(I)

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati pezzi di ricambio identici a quelli specificati.

(F)

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.

"Pour votre sécurité, ces documents doivent être utilisés par des spécialistes agréés, seuls habilités à réparer votre appareil en panne."

LASER SAFETY

This unit employs a laser. Only a qualified service person should remove the cover or attempt to service this device, due to possible eye injury.



USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURE OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

AVOID DIRECT EXPOSURE TO BEAM

WARNING

The use of optical instruments with this product will increase eye hazard.

Repair handling should take place as much as possible with a disc loaded inside the player

WARNING LOCATION: INSIDE ON LASER COVERSHIELD

CAUTION VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN AVOID EXPOSURE TO BEAM
ADVVARSEL SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING UNDGÅ UDSÆTTELSE FOR STRÅLING
ADVVARSEL SYNLIG OG USYNLIG LASERSTRÅLING NÅR DEKSEL Å PNES UNNGÅ EKSPONERING FOR STRÅLEN
VARNING SYNLIG OCH OSYNLIG LASERSTRÅLNING NÅR DENNA DEL ÅR ÖPPNAD BETRakta EJ STRÅLEN
VARO! AVATT AESSA OLET ALTTIINA NÄKYVÄLLE JA NÄKYMÄTTÖMÄLLE LASER SÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN
VORSICHT SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETSEN
DANGER VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN AVOID DIRECT EXPOSURE TO BEAM
ATTENTION RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE EXPOSITION DANGEREUSE AU FAISCEAU

TECHNICAL SPECIFICATIONS

□ Audio section

• CD player

Playable frequency response: 2 Hz - 20 kHz

Wow & flutter: Below measurable limits ($\pm 0.001\%$)

Sampling frequency:

• Audio amplifier

Rated output: 2-channel

30 W + 30 W (6 Ω , 1 kHz, T.H.D 10 %)

□ Tuner section

Receiving Range: FM 87.5 MHz - 107.9 MHz (for E3)
FM 87.5 MHz - 108.0 MHz (for E2, E1C)
FM 76.0 MHz - 95.0 MHz (for JP)
AM 520 kHz - 1710 kHz (for E3)
AM 522 kHz - 1629 kHz (for JP)
DAB 170 MHz - 240 MHz (for EK)

Usable sensitivity: FM 1.2 μ V
AM 20 μ V
DAB 90 dBm / 50 Ω (for EK)

FM STEREO separation: 35 dB (1 kHz)

□ Clock / Alarm / Sleep

Clock type: Crystal oscillator (Within 1 – 2 minutes per month)

Alarm: Once alarm / Everyday alarm : One system each

Sleep: Sleep timer : Max. 90 minutes

□ General

Power supply: (for E3): AC 120 V, 60 Hz
(for E2, EK): AC 230 V, 50 Hz / 60 Hz
(for E1C): AC 220 V, 50 Hz
(for JP): AC 100 V, 50 Hz / 60 Hz

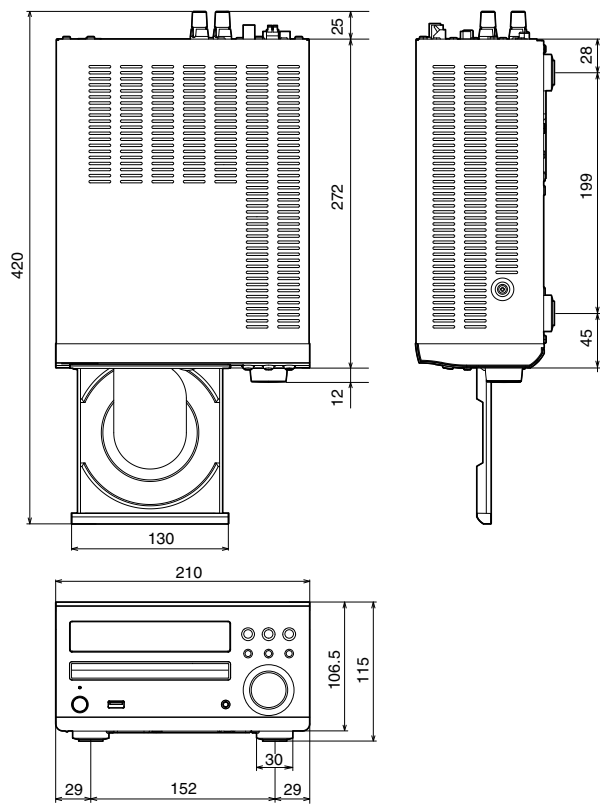
Power consumption: 70 W

Power consumption in clock mode: 14 W

Power consumption in standby mode: 0.3 W

For purposes of improvement, specifications and design are subject to change without notice.

DIMENSION
Unit : in. (mm)
Weight : 9 lb 14 oz (4.0 kg)



CAUTION IN SERVICING

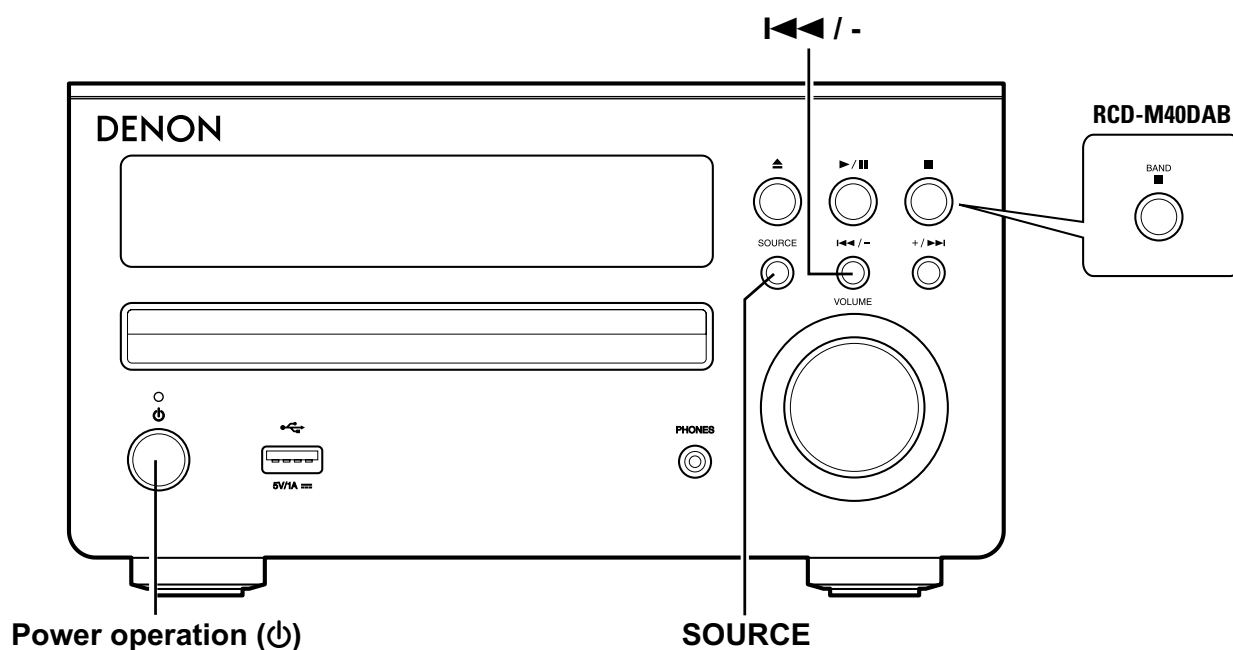
Initializing This Unit

Make sure to initialize this unit after replacing the microcomputer or any peripheral equipment, or the digital PCB.

1. Press the power button to turn off the power, then unplug the power cord.
2. While holding down buttons the "I◀◀/-" and "SOURCE" buttons simultaneously, insert the AC plug to turn the power on.
 - * The unit is initialized.

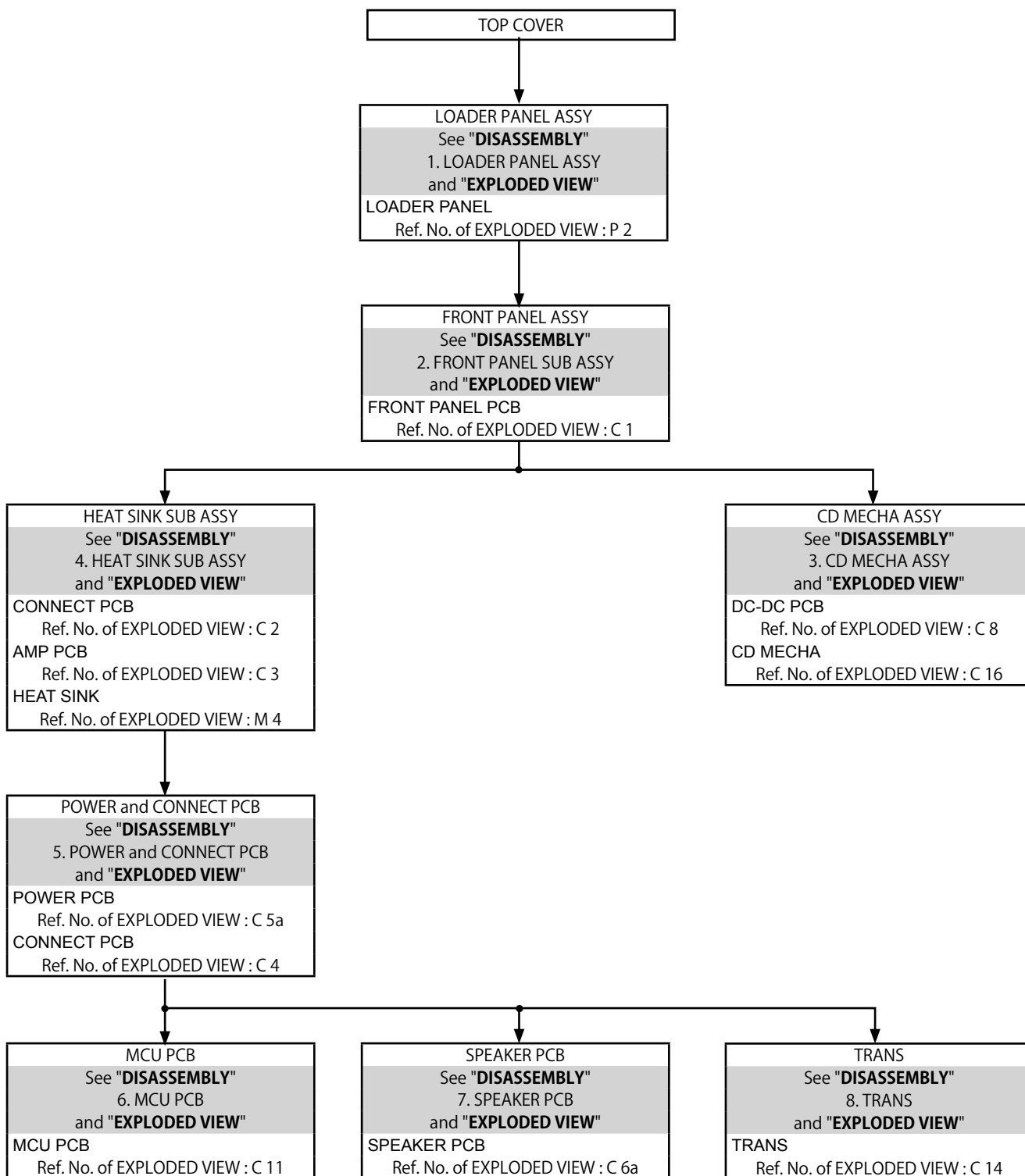
※ This unit can also be initialized by holding down the "I◀◀/-" and "SOURCE" buttons for at least three seconds while the power is on.

NOTE: • Initializing the device restores the customized settings to the factory settings. Write down your settings in advance and reconfigure the settings after initialization.



DISASSEMBLY

- Remove each part following the flow below.
- Reassemble the removed parts in the reverse order.
- Read "**Precautions During Work**" before reassembling the removed parts.
- If wire bundles are removed or moved during adjustment or part replacement, reshape the wires after completing the work. Failure to shape the wires correctly may cause problems such as noise.

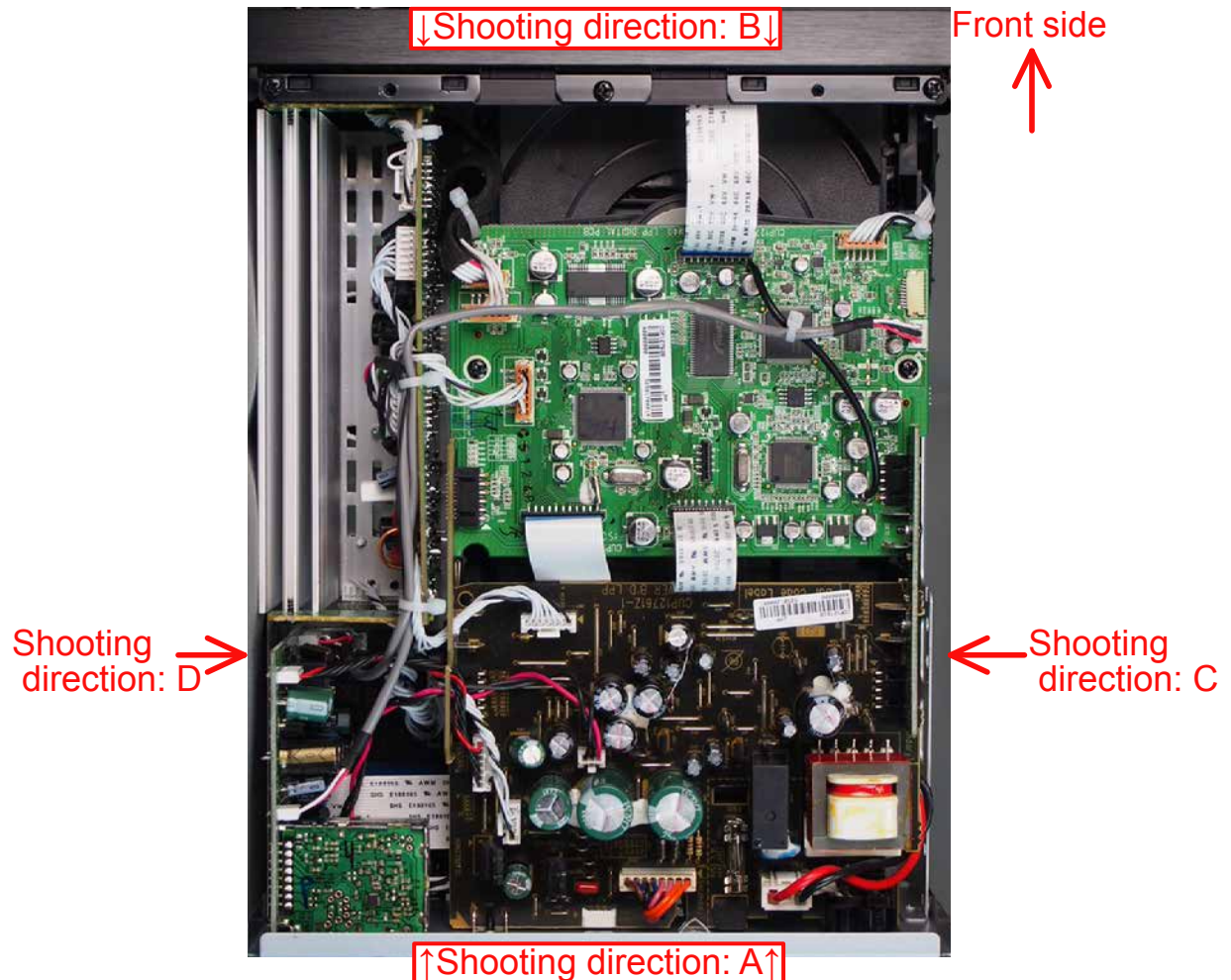


Explanatory Photos for DISASSEMBLY

- For the shooting direction of each photos used in this manual, see the photo below.
- **A, B, C and D** in the photo below indicate the **shooting directions** of photos.
- The photographs with no shooting direction indicated were taken from the top of the unit.
- Photos of RCD-M40 E2 are used in this manual.

The viewpoint of each photograph

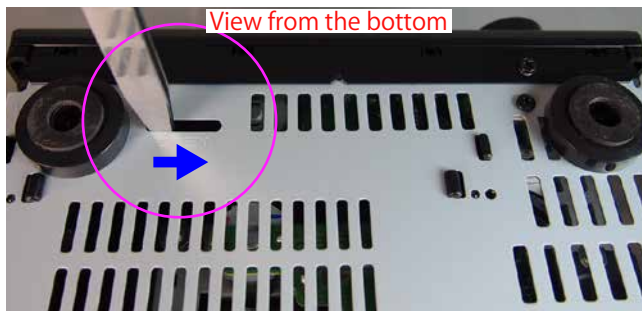
(Shooting direction:X)[View from the top]



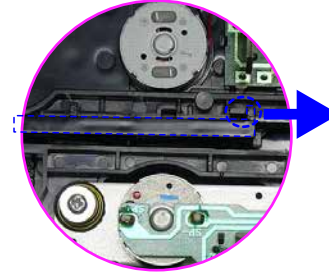
1. LOADER PANEL ASSY

Proceeding : **TOP COVER** → **LOADER PANEL ASSY**

(1) Tray is opened and CD DOOR is removed.



View from the CD MECHA bottom



NOTE: Please remove slowly so as not to damage the hook of Tray and LOADER PANEL.



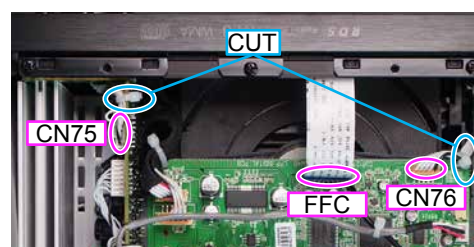
2. FRONT PANEL ASSY

Proceeding : **TOP COVER** → **LOADER PANEL ASSY** → **FRONT PANEL ASSY**

(1) Remove the screws.



(2) Cut the wire clamps, then remove the connector wires. Remove the FFC.

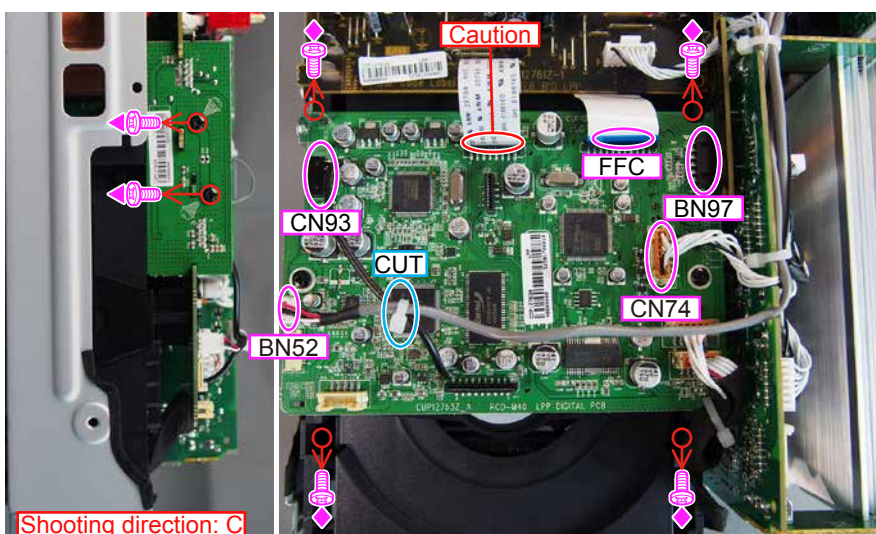


3. CD MECHA ASSY

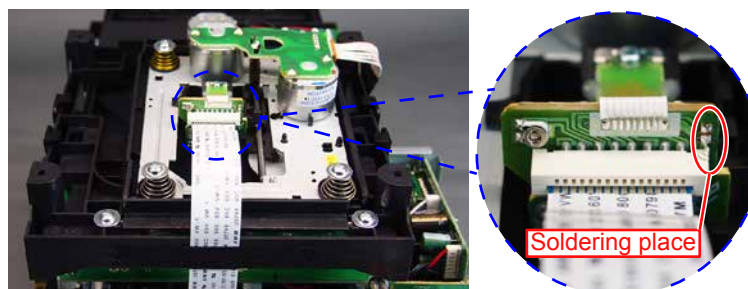
Proceeding : **TOP COVER** → **LOADER PANEL ASSY** → **FRONT PANEL ASSY** → **CD MECHA ASSY**

- (1) Remove the screws. Remove the connector wires.

Caution : Remove the FFC cable after the CD mecha's short circuit pattern for LD damage prevention has been short circuited.



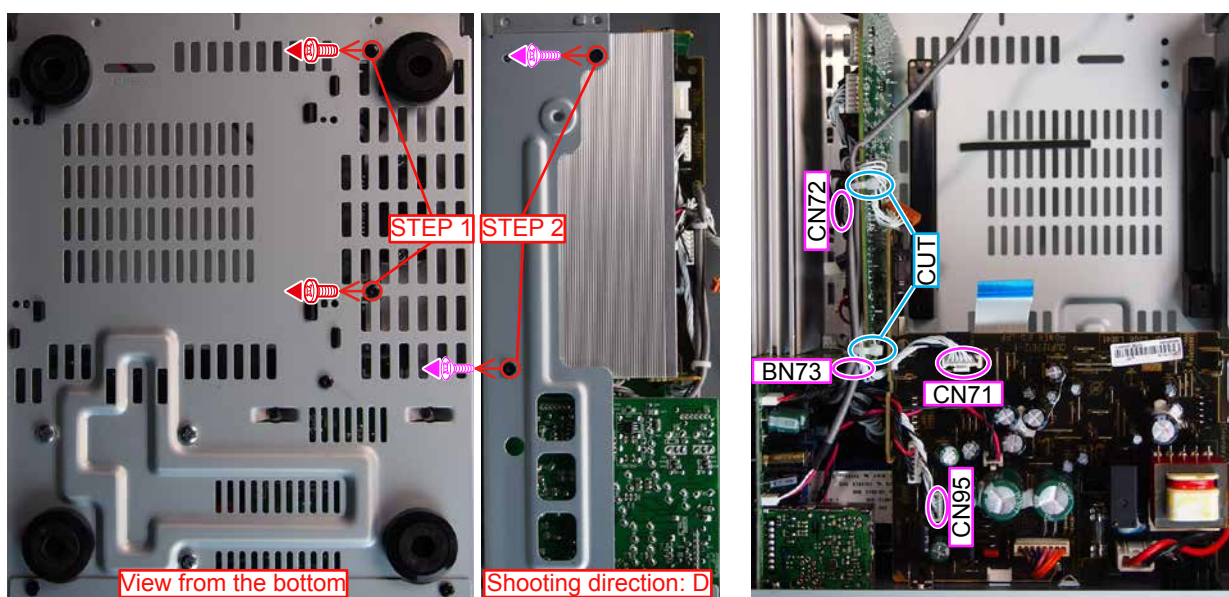
- (2) Remove the FFC cable after the CD mecha's short circuit pattern for LD damage prevention has been short circuited. Be sure to wear an earth band.



4. HEAT SINK SUB ASSY

Proceeding : **TOP COVER** → **LOADER PANEL ASSY** → **FRONT PANEL ASSY** → **HEAT SINK SUB ASSY**

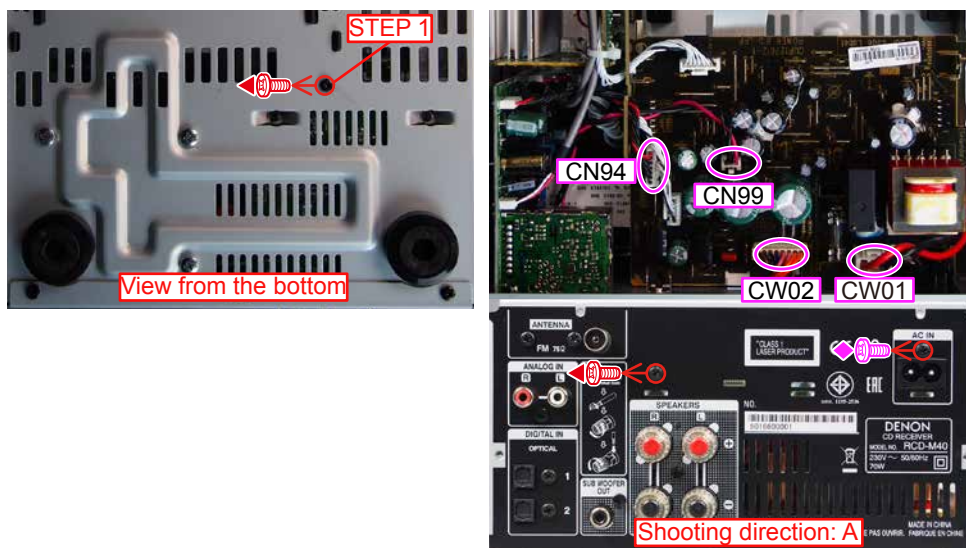
- (1) Remove the screws. Remove the connector wire.



5. POWER and CONNECT PCB

Proceeding : **TOP COVER** → **LOADER PANEL ASSY** → **FRONT PANEL ASSY** → **HEAT SINK SUB ASSY**
→ **POWER and CONNECT PCB**

(1) Remove the screws. Remove the connector wires.



6. MCU PCB

Proceeding : **TOP COVER** → **LOADER PANEL ASSY** → **FRONT PANEL ASSY** → **HEAT SINK SUB ASSY**
→ **POWER and CONNECT PCB** → **MCU PCB**

See "EXPLODED VIEW" for instructions on removing the MCU PCB.

7. SPEAKER PCB

Proceeding : **TOP COVER** → **LOADER PANEL ASSY** → **FRONT PANEL ASSY** → **HEAT SINK SUB ASSY**
→ **POWER and CONNECT PCB** → **SPEAKER PCB**

See "EXPLODED VIEW" for instructions on removing the SPEAKER PCB.

8. TRANS

Proceeding : **TOP COVER** → **LOADER PANEL ASSY** → **FRONT PANEL ASSY** → **HEAT SINK SUB ASSY**
→ **POWER and CONNECT PCB** → **TRANS**

See "EXPLODED VIEW" for instructions on removing the transformer (TRANS).

NOTES ON HANDLING AND REPLACEMENT OF THE LASER PICK-UP

1. Protection of the LD

Solder a part of the LD circuit to short-circuit. After connecting the circuit, remove the soldering form. Precautions when handling the laser CD mechanism.

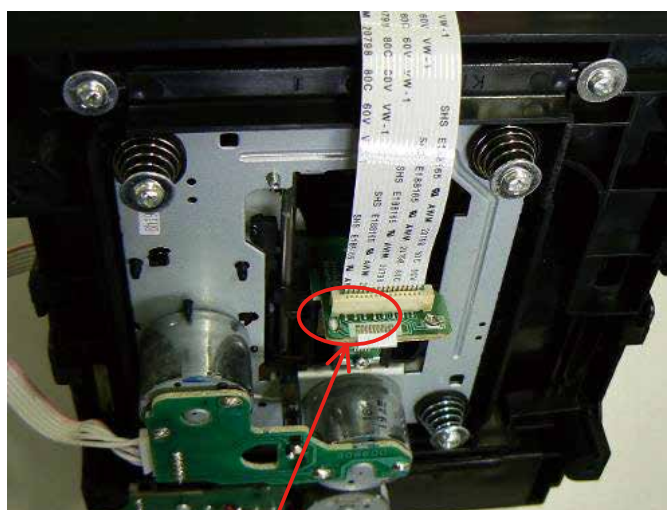
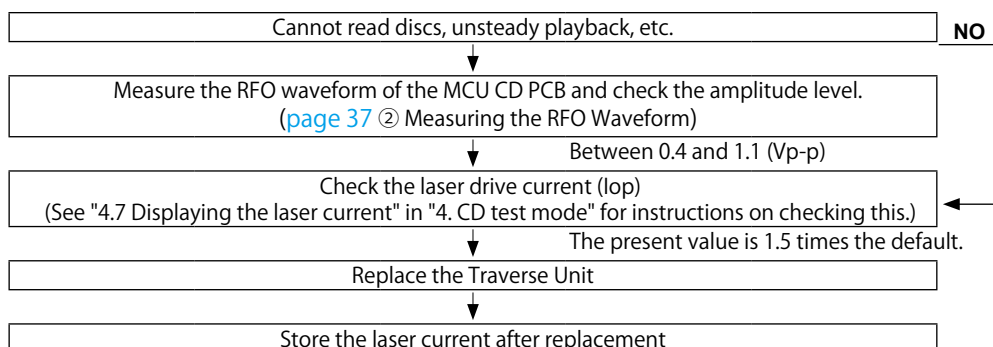
2. Precautions when handling the laser CD mechanism

- Be careful not to expose the laser pick-up to dust.
- Do not leave the laser pick-up bare. Be sure to cover it.
- If dust adheres on the laser pick-up lens, blow it off with a blower brush.
- Do not apply shock to the laser pick-up.
- Do not watch the light of the laser pick-up.

3. Cautions on assembling and adjustment

- Be sure that the bench, jig, head of soldering iron (with ceramic) and measuring instruments are well grounded.
- Workers who handle the laser pick-up must be grounded.
- The finished mechanism (prior to anchoring in the set) should be protected against static electricity and dust. The mechanism must be stored where abnormal external force is not applied.
- When carrying the finished mechanism, hold it by the chassis body.
- Do not use or store the mechanism where corrosive gas such as H₂S, SO₂, NO₂ and Cl₂ or toxic gas may be generated, or where substances especially organosilicon, cyanide, formalin and phenolic materials exist. In particular, make sure that these substances which generate toxic gas do not exist in the set. This may cause the motor not rotating.

4. Determining whether the laser pick-up is defective



Protective soldering place for laser diode.

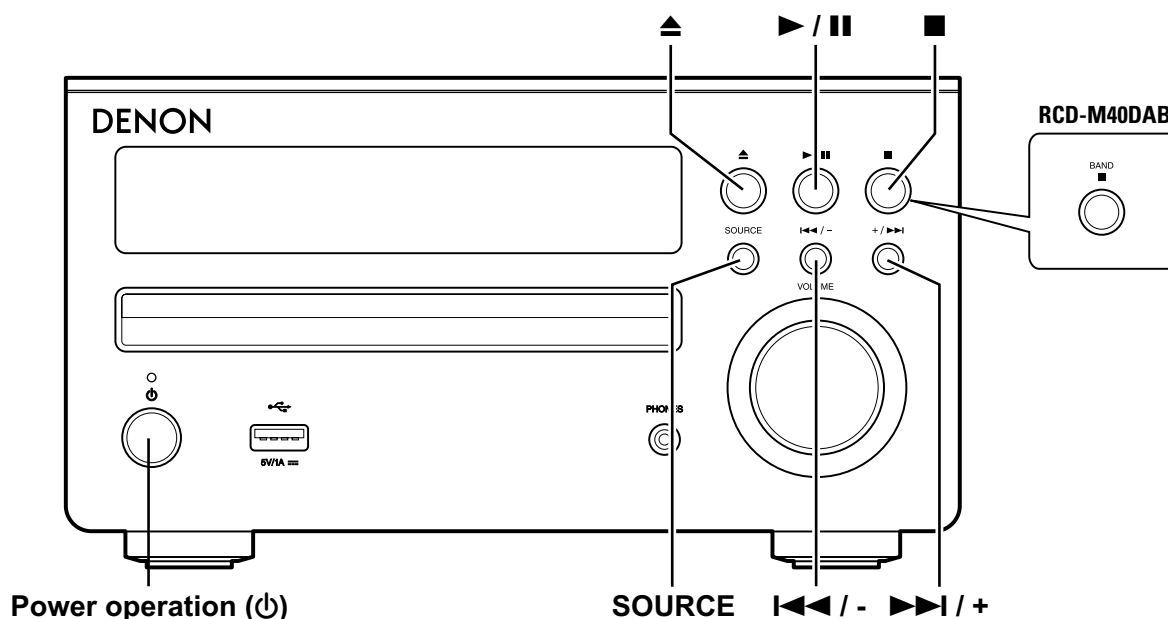
SPECIAL MODE

Special mode setting button

※ No.1 - 6, 8 - 9 : While holding down buttons "A" and "B" simultaneously, insert the AC plug into the wall outlet to turn on the power.

※ No.7 : Perform this operation while the power is on.

No.	Mode	Button A	Button B	Descriptions
1	Version Display Mode	■	I◀◀/–	Displays the version of firmware such as the main firmware. (See page 19)
2	Display check mode	▲	⏻	Lights and unlights each segment repeatedly. (See page 19)
3	Initialize (cold start)	SOURCE	I◀◀/–	Initializes the data. (See page 19)
4	CD test mode	SOURCE	⏻	Servo adjustment. Displaying the adjustment values and laser current. (See page 20)
4-1	Disc mounting	▲	–	For executing each CD mode.
4-2	Servo check	▶/	–	Checks each servo.
4-3	Pickup movement	I◀◀/– or +/▶▶I		Moves the pickup to the inner or outer circumference.
4-4	Stop	■	–	Stops playback operations and servos and loads the automatic adjustment values.
4-5	All servo on	SOURCE	–	Turns all servos on and performs automatic adjustment.
4-6	Display adjustment values	↑	–	Displays the following adjustment values. FOCUS BALANCE, FOCUS GAIN, TRACKING BALANCE, TRACKING GAIN, FOCUS OFFSET, TRACKING OFFSET, RFRP
4-7	Displaying the laser current	■	–	Indicates the present laser current.
5	CD heat Run mode	■	+ / ▶▶I	Executes each heat run mode. (See page 23)
5-1	Normal heat run mode	▶/	–	Executes normal heat run mode.
5-2	Chucking mode	■	–	Executes chucking mode.
5-3	Error display		–	Displays the error code.
6	Accumulated laser on time display mode	■	⏻	Indicates the accumulated laser on time. (See page 25)
6-1	Resetting the count value	▶/	–	The setting values are initialized.
7	Update MAIN u-COM	⏻	■	Updates the microprocessor. (See page 25)
8	Protection history display mode	SOURCE	+ / ▶▶I	Displays the protection occurrence history. (See page 26)
8-1	Resetting the protection history	▶/	–	Resetting the protection history.



1. Version Display Mode

- (1) While holding down buttons the "■" and "I◀◀/—" buttons simultaneously, insert the AC plug to turn the power on.
- (2) This unit cycles through 【MAIN u-COM Ver Display】 → 【USB u-COM Ver Display】 → 【MAIN u-COM Ver Display】 → ... each time the "SDB/TONE" button is pressed.

【MAIN u-COM Ver Display】

	U	e	r		1	5	0	3	0	1	0	1	u	E	K

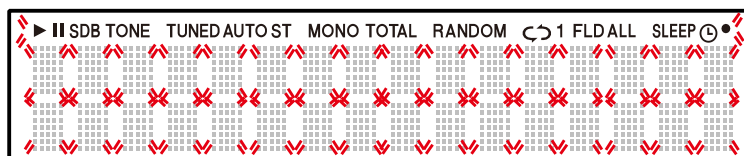
【USB u-COM Ver Display】

U	S	B		U	E	R									
2	0	1	5		0	2		0	2		8	5			

- (3) To exit this mode, unplug the power cord.

2. Display check mode

- (1) While holding down buttons the "⏻" and "▲" buttons simultaneously, insert the AC plug to turn the power on.
- (2) Lights and unlights all indicators at once in one-second intervals. Turns muting on.



- (3) To exit this mode, unplug the power cord.

3. Initialization (cold start)

- (1) While holding down buttons the "SOURCE" and "I◀◀/—" buttons simultaneously, insert the AC plug to turn the power on.
This unit is initialized.

			I	N	I	T	I	A	L	I	Z	E			

	Default
SOURCE	DISC
TUNER BAND	FM ("DAB" on the DAB model)
SDB	OFF
BASS	0
TREBLE	0
BLANCE	CENTER
DIMMER	100%
VOLUME	5
TUNER PRESET frequency	0
Set +/-	PRESET +/- button
Clock	00:00 Flashing (AM12:00 for E3)
ALARM SOURCE	DISC
ALARM ON	00:00 (AM12:00 for E3)
ALARM OFF	00:00 (AM12:00 for E3)
SPK OPTIMISE	ON
iPod MODE	From iPod
CD Auto Play setting	OFF
CLOCK MODE setting	OFF
HP GAIN setting	LOW
AUTO STANDBY	E2/EK : ON E3/JP/CN : OFF
DAB MODULE (EK)	Initializes the module

※ Initial value of laser current and The accumulated laser on time are not cleared.

※ Power failure flag is not cleared.

- (2) After initialization, the Unit returns to normal mode.

4. CD test mode

- (1) While holding down buttons the "⏮" and "SOURCE" buttons simultaneously, insert the AC plug to turn the power on.

"▶▶"																	
	0	0		C	D			T	E	S	T			M	O	D	E

(▶▶ flashes)

- (2) Return the slide to the default setting position (10mm from inner circumference).
 - (3) Perform the check by pressing the buttons. See 4.2 ① ~ 4.2 ⑥.
 - (4) Turn the power back on to cancel this mode.
- ※ Do not perform operations other than pressing the buttons that are intended to be used in this mode. (Otherwise, this unit may not work properly.)

4.1. Disc mounting

- (1) Press the "▲" button to open the tray.
- (2) Place the disc in the tray and press the "▲" button again to close the tray and start disc chucking.
- (3) Return the slide to the default setting position (10mm from inner circumference) and stop it in this position.

4.2. Servo check

Press "▲" button. Execute the following steps.

Press and hold the "▶▶" button continuously for over 1 second to skip to SUB CODE readout in step ⑤.

- ① LD ON (while servo is stopped)

▶▶															
	0	1								L	D			O	N

(▶▶ flashes)

- ② FOCUS ON (disc rotating, tracking off)
* If there is no disc, the unit retries the operation and then stops.

▶▶															
	0	2						F	O	C	U	S		O	N

(▶▶ flashes)

- ③ CLV ON

▶▶															
0	3							C	L	V		O	N		

(▶▶ flashes)

- ④ TRACKING ON

▶▶															
0	4			T	r	a	c	k	i	n	g		O	N	

(▶▶ flashes)

- ⑤ READ SUB CODE (playback sound output)

▶▶															
0	5			@	@	T	r			X	X	:	X	X	

(▶▶ flashes / @@ : T.No / XX:XX : time)

- ⑥ Press the "▶▶" button while ⑤ is displayed to show the BER display for two seconds.

▶▶															
				E	R	R		#	#	#	#	#	#		

(▶▶ / #### : BER)

4.3. Pickup movement

- (1) Press the "I◀◀/-" and "+/▶▶I" buttons to move the pickup to the inner or outer circumference.
Release the button to stop the pickup.
- (2) You can also stop the pickup by pressing the "I◀◀/-" button. After the inner switch is set to on, the pickup stops.
- (3) Release the button to stop the pickup.

4.4. Stop

- (1) Press the "■" button to stop the playback operation and servo.
- (2) After stopping, the auto adjustment values will be read.

4.5. All servo on

- Press and hold the "SOURCE" button for five seconds to turn all servos on.
The playback operation starts after automatic adjustment is performed (playback sound is output).

▶▶															
						@	@	T			X	X	:	X	X

(▶▶ flashes / @@ : T.No / XX:XX : time)

4.6. Adjustment value display

- (1) When "DIRECT" button is pressed, the adjustment values are displayed in the following order.

① FOCUS BALANCE

▶▶															
X	X	X	X												
F	O	C	U	S		B	A	L	A	N	C	E			

(▶▶ flashes / XXXX : adjustment values)

② FOCUS GAIN

▶▶															
X	X	X	X												
F	O	C	U	S		G	A	I	N						

(▶▶ flashes / XXXX : adjustment values)

③ TRACKING BALANCE

▶▶															
X	X	X	X												
T	R	A	C	K	I	N	G		B	A	L	A	N	C	E

(▶▶ flashes / XXXX : adjustment values)

④ TRACKING GAIN

▶▶															
X	X	X	X												
T	R	A	C	K	I	N	G		G	A	I	N			

(▶▶ flashes / XXXX : adjustment values)

⑤ FOCUS OFFSET

▶▶															
X	X	X	X												
F	O	C	U	S		O	F	F	S	E	T				

(▶▶ flashes / XXXX : adjustment values)

⑥ TRACKING OFFSET

▶▶															
X	X	X	X												
T	R	A	C	K	I	N	G		O	F	F	S	E	T	

(▶▶ flashes / XXXX : adjustment values)

⑦ RFRP

▶▶															
X	X	X	X												
R	F	R	P												

(▶▶ flashes / XXXX : adjustment values)

(2) "■" button to return to "4. CD TEST MODE (1)".

※ If you have not completed the adjustment, the displayed values are not correct.

4.7. Displaying the laser current

(1) Press and hold the "■" button for at least one second while stopped (during the display in "4. CD TEST MODE (1)") to turn the laser on and measure the laser current.

▶■															
S	/	C	:			X	X	m	A	/		Y	Y	m	A
L	A	S	E	R		C	U	R	R	E	N	T			

(▶■ blinks/XX : Stored data (stored EEPROM value))

- The initial current value is measured after the laser has been on for three seconds.
- The current value is updated every 3 seconds.
- The laser on current is measured using A/D conversion. Figures below decimal point are omitted.

(2) "■" button to return to "4. CD TEST MODE (1)".

※ Stored data is not erased when the unit is initialized (cold start mode).

4.7.1. Overwriting the stored data

(1) With the laser current displayed, press and hold the "▶■" button for over 5 second to save the current value on EEPROM (overwrite the stored data).

▶■															
S	T	O	R	E	D										
L	A	S	E	R		C	U	R	R	E	N	T			

(▶■ flashes)

(2) Press the "▶■" button to save the initial value to the EEPROM.

(3) After overwriting, the 4.7(1) appears again.

※ Rewriting is performed upon shipment from the factory and when the mechanism is replaced.

5. CD Heat run mode

- (1) Insert a disc and press the "■" and "+/▶▶" buttons together while inserting the AC plug and turning on the power.

▶▶													
	C	D				1	1	T	r			4	2
											:	5	2

(Same as the usual stopped display except that ▶▶ is lit/▶ and ■ are both lit)

- (2) The unit switches to the mode corresponding to the button that is pressed. See 5.3 ~ 5.5
- (3) If an error occurs, an error display appears and the operation stops immediately. The operation count is retained. See 5.3 ~ 5.5
- (4) Pressing the "■" button clears the heat run count.
- (5) Pressing the "▲" button clears the mode and opens the tray.
- (6) The mode can also be cleared by pressing the "⏻" button.

5.1. Normal heat run mode

- Press the "▶/■" button after the CD heat run mode starts and TOC reading is completed. The heat run repetition count is 0 at this time.
- ① Play the disc from the first track to the last track.
 - ② All tracks are played if the disc being used contains 20 tracks or less. If the disc contains 21 or more tracks, the unit plays track 1 and then skips to the last track.
 - ③ When playback of the disc is finished, move the pickup to the inner circumference and open the tray. An increment is added to the heat run count when the tray is opened.
 - ④ When the loader OPEN status is detected, close the tray again and start playing the disc from the first track after TOC has been loaded.
 - ⑤ Repeat steps ① ~ ④.

【Displaying playback】

▶▶													
	C	D				0	1	T	r			0	1
											:	4	7

(Same as the usual stopped display except that ▶▶ is lit/▶ and ■ are both lit)

【Displaying heat run repetition count (Display in step ③)】

▶▶													
	C	D										X	X
												X	X

(▶▶ lit/XXXX: heat run repetition count)

5.2. Chucking mode

- (1) Press the "■" button once while stopped after the CD heat run mode starts and TOC reading is completed.
- (2) Repeat TOC reading ⇒ search of first track on disc ⇒ OPEN tray ⇒ CLOSE tray ⇒ TOC reading.
The heat run repetition count is shown in the time display area.
- (3) An increment is added to the heat run count when the loader is OPEN and the process is completed.

【Display while tray is OPEN】

▶▶													
	C	D										X	X
												X	X

(▶▶ lit/XXXX: heat run repetition count)

【Display while tray is CLOSE】

▶▶													
						C	L	O	S	E			

(▶▶ lit)

【Display during TOC reading】

▶▶													
						R	E	A	D	I	N	G	

(▶▶ lit)

5.3. Error display

▶▶															
	C	D										E	X	-	X X

(▶▶ lit / XX-XX : error code)

Error Code	Description
E1-00	Disc cannot be detected.
E1-01	Tracking offset adjustment not possible.
E1-02	Focus offset adjustment not possible.
E2-00	The focus servo was disabled during playback.
E2-01	The focus servo was disabled during searching.
E2-03	The focus servo was disabled during TOC reading.
E2-06	The focus servo was disabled during manual search.
E2-10	Subcode became unreadable during playback.
E2-11	Subcode became unreadable during searching.
E2-12	Subcode became unreadable during TOC reading.
E2-14	Subcode cannot be read while pausing.
E2-15	Subcode cannot be read during manual search.
E3-00	TOC could not be read within the specified time.
E3-01	PVD/SVD analysis was not be completed within the specified time.
E4-04	Search time out (The search was not completed within the specified time).
E4-05	Decoder bus error (Error in communications with CD decoder).
E5-00	Inner switch is not on.
E6-00	Inner switch is not off.
E9-00	A CD u-COM error occurred
E9-01	Error other than above.

【Heat run count at the time the error occurred】

- (1) Press the "▶▶" button while the error code is displayed.
- (2) The heat run count is displayed for 5 seconds before returning to the error code display.

▶▶															
	C	D										X	X	X	X

(▶▶ lit / XXXX: heat run repetition count at the time the error occurred)

【Track number and elapsed time of track at the time the error occurred】

- (1) Press the "▶▶" button while the error code is displayed.
- (2) The track number and elapsed time of the track at the time the error occurred are displayed for 5 seconds before returning to the error code display.

▶▶															
	C	D					0	1	T	r			0	1	: 4 7

(▶▶ lit / mm:ss: elapsed time of track at the time the error occurred)

6. Accumulated laser on time display mode

(1) While holding down buttons the "⏻" and "■" buttons simultaneously, insert the AC plug to turn the power on.

X	X	X	X	X		h	o	u	r						
L	A	S	E	R		O	N		T	I	M	E			

- The laser drive time is added and the result is displayed.
 - Each count is 10 minutes (truncated if less than 10 minutes).
 - The count value is saved to the EEPROM.
 - The accumulated laser on time is displayed in hours.
 - The count value is not erased when the unit is initialized (3. Cold start mode).
 - Minimum display specification (also possible when the display time below is exceeded).
 - Number of digits retained in EPROM : 4 digits, 0xFFFF
 - Number of digits displayed : 5 digits
 - When 10922 hours are exceeded, the retained data is not updated and the value is fixed as 0xFFFF (the display is fixed as "10922 hour").
- (2) To exit this mode, unplug the power cord.

6.1. Resetting the count value

(1) With the accumulated laser-on time displayed, press and hold the "▶/||" button for over 5 second to reset the count value (overwrite the stored data).

C	L	E	A	R											
L	A	S	E	R		O	N		T	I	M	E			

(2) After initialization is completed, the unit returns to the display in "6. Accumulated laser on time display mode (1)" (top: "00000 hour").

※ The Count value is reset upon shipment from the factory and when the mechanism is replaced.

7. Updating MAIN u-COM

- Turn the power on.
- Switch SOURCE to iPod/USB.
- Connect the USB memory device on which the program is written.
- Press and hold "■" for five seconds or more.
- 1 Press "+/▶▶" (to start the update).
- 2 Press "◀◀/-" (to exit the update).

【Display when searching for update file】

	S	e	a	r	c	h	i	n	g		U	S	B		

【Display when starting/exiting the update】

		S	t	a	r	t		U	p	d	a	t	e		
	E	x	i	t	/	C	o	n	t	i	n	u	e		

【Display during update】

		M	C	U		U	p	d	a	t	i	n	g		

8. Protection History Display Mode

- (1) While holding down buttons the "SOURCE" and "+/▶▶" buttons simultaneously, insert the AC plug to turn the power on.
- (2) The last backed up protection to be detected is displayed.
- (3) To exit this mode, unplug the power cord.

【No detected history】

P	R	O	T	E	C	T	I	O	N	:					
N	O		P	R	O	T	E	C	T						

【AMP error detected】

P	R	O	T	E	C	T	I	O	N	:					
A	M	P													

【Power error detected】

P	R	O	T	E	C	T	I	O	N	:					
P	O	W	E	R											

8.1 Resetting the protection history

- (1) With the protection history displayed, press and hold the "▶/■" button for over 5 seconds to clear the backed up.

【Cleared display】

P	R	O	T	E	C	T	I	O	N	:					
C	L	E	A	R											

※ Protection history is not cleared, even when the set is reset (Cold start mode).

PROCEDURE AFTER REPLACING THE MICROPROCESSOR, ETC.

The procedure after replacing the u-COM (microprocessor) is as follows.

PCB Name	Ref. No.	Description	Procedure after Replacement	Remark
DIGITAL	IC11	MB9AF316NAPMC	B	
DIGITAL	IC31	BX8804	B	

Procedure after Replacement

A : The software has been written. The software is not written at the time of replacement.

B : The software has been written. The software may need to be rewritten by version updates. Check the version.

C : The software has not been written. The software needs to be written after replacement.

See "**Firmware Update Procedure**" for information on writing the software.

D : The software has been written. Be sure to rewrite with the latest software for your service region.

See "**Firmware Update Procedure**" for information on writing the software.

FIRMWARE UPDATE PROCEDURE

1. Updating via USB

The latest firmware can be downloaded to a USB memory for updates.

1.1. Connecting to the USB Memory

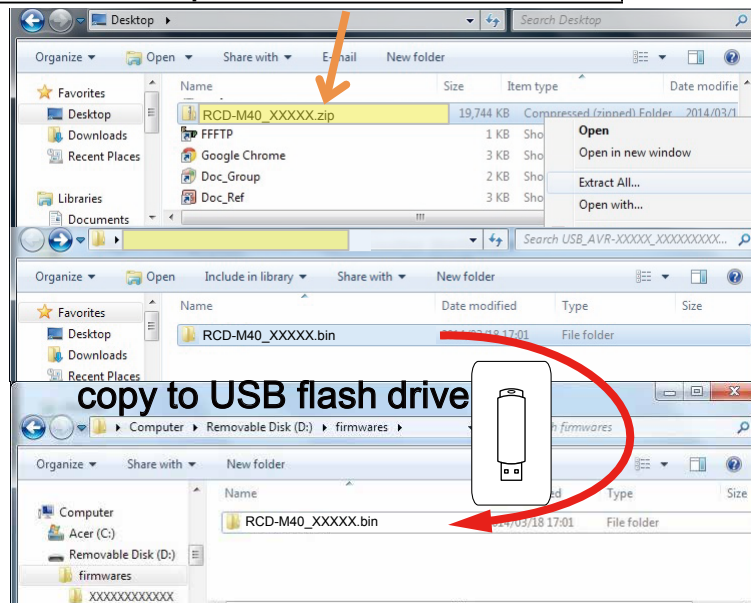
(1) Preparation

- Use a memory that supports USB2.0.
- USB format : Prepare a USB memory formatted in FAT16 or FAT32.
- Do not run the USB memory through a hub.
- Do not connect a computer to the USB port of this unit using a USB cable.
- Do not use an extension cable when connecting the USB unit.
- If a USB memory device cannot be updated, replace it with a different USB memory device and perform the update again.

1.2. Unzipping the Downloaded File

Unzip the downloaded file on your computer.

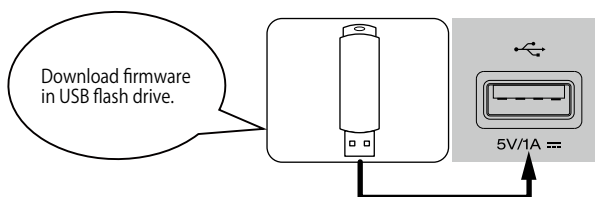
RCD-M40	RCD-M40_XXXXX.zip
---------	-------------------



Copy that folder to USB flash drive.

The "xxxxx.bin" file must be in the root directly of the USB flash drive (memory).

1.3. Insert the USB memory into the USB port.



1.4. MCU Updates

- Remove the AC power cord.
- Insert the USB memory into the USB port.
- Connect the power cord to an outlet.
- Press the "**POWER**" button on the remote control.
- Press the "**iPod/USB**" button on the remote control.

FLD	L2							L	O	A	D	I	N	G	.	.	.			
FLD	L1							E	M	P	T	Y								

- Press and hold the "**STOP**" button on this unit for 5 seconds or more.

FLD	L1	S	e	a	r	c	h	i	n	g		U	S	B				
-----	----	---	---	---	---	---	---	---	---	---	--	---	---	---	--	--	--	--

- **"Start Update"** is displayed.

FLD	L1	S	t	a	r	t	U	p	d	a	t	e	
	L2	E	x	i	t	/	C	o	n	t	i	n	u

- Press "+/▶▶" on this unit.
- The firmware update starts.
- **"MCU Update"** is displayed.

FLD	L1	M	C	U	U	P	d	a	t	i	n	g
-----	----	---	---	---	---	---	---	---	---	---	---	---

- The firmware update finishes.
- It takes about 20 seconds to complete the writing procedure.
- The display is cleared.

[illegible]

- Remove the power cord from the outlet.

---Checking the Firmware Version After the Update---

After updating the firmware, check the version. **"Version Display Mode"**(See [page 19](#))

---Cautions on Firmware Update---

- Never remove the USB memory before the update is finished.
- Never turn off the power before the update is completed.

1.5. USB Device Updates

- Remove the AC power cord.
- Insert the USB memory into the USB port.
- Connect the power cord to an outlet.
- Press the **"POWER"** button on the remote control.
- Press the **"iPod/USB"** button on the remote control.

FLD	L2					L	O	A	D	I	N	G	.	.	.			
FLD	L1						E	M	P	T	Y							

- Press and hold the **"STOP"** and **"I◀◀/-"** buttons on this unit for 5 seconds or more.

FLD	L1	S	e	a	r	c	h	i	n	g		F	I	L	E			
-----	----	---	---	---	---	---	---	---	---	---	--	---	---	---	---	--	--	--

- The firmware update starts.
- **"USB Update"** is displayed.

FLD	L1	U	S	B		U	P	d	a	t	i	n	g					
-----	----	---	---	---	--	---	---	---	---	---	---	---	---	--	--	--	--	--

- The firmware update finishes.
- It takes about 20 seconds to complete the writing procedure.
- The display is cleared.

FLD	L1																	
	L2																	

- Remove the power cord from the outlet.

---Checking the Firmware Version After the Update---

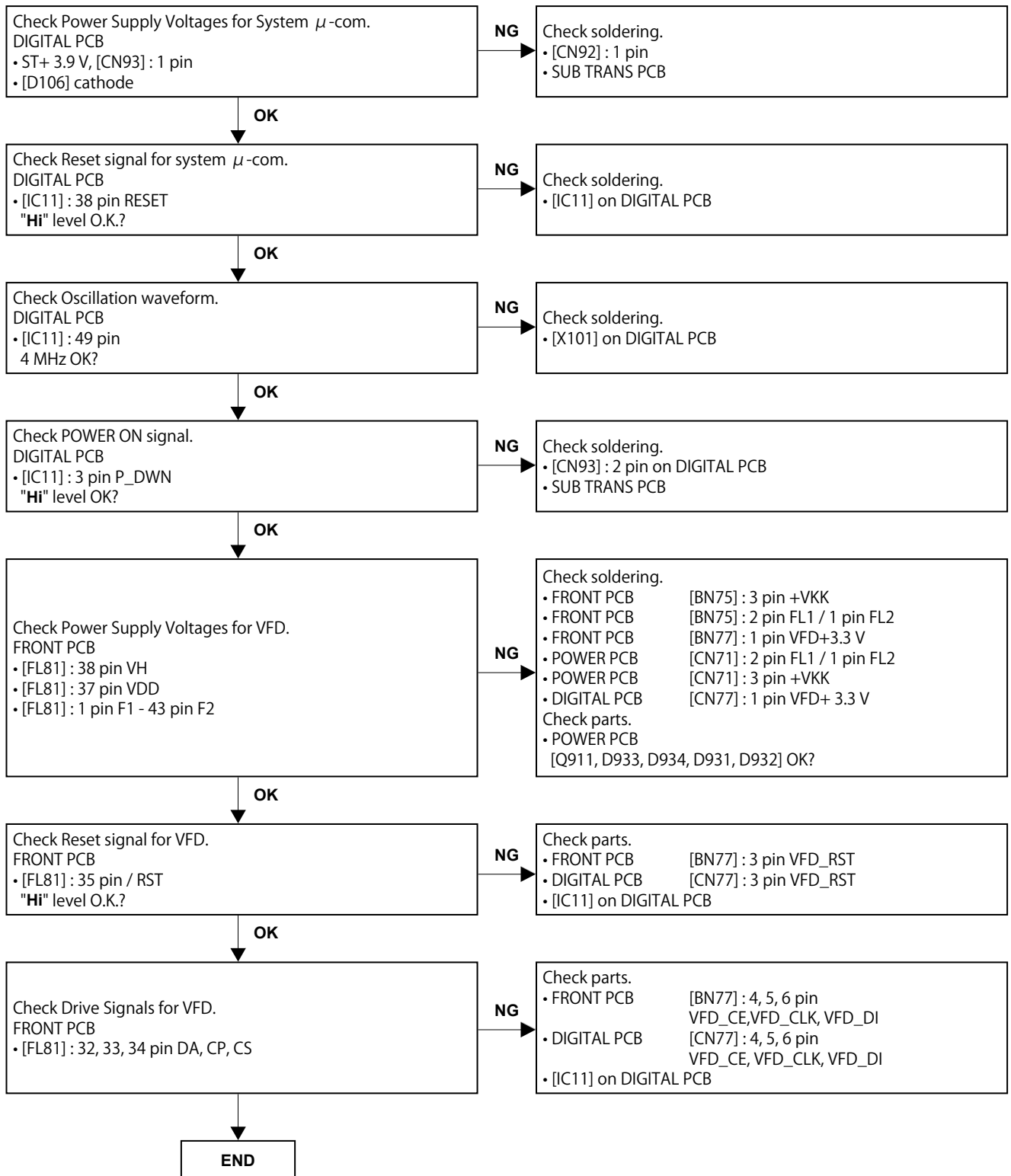
After updating the firmware, check the version. **"Version Display Mode"**(See [page 19](#))

---Cautions on Firmware Update---

- Never remove the USB memory before the update is finished.
- Never turn off the power before the update is completed.

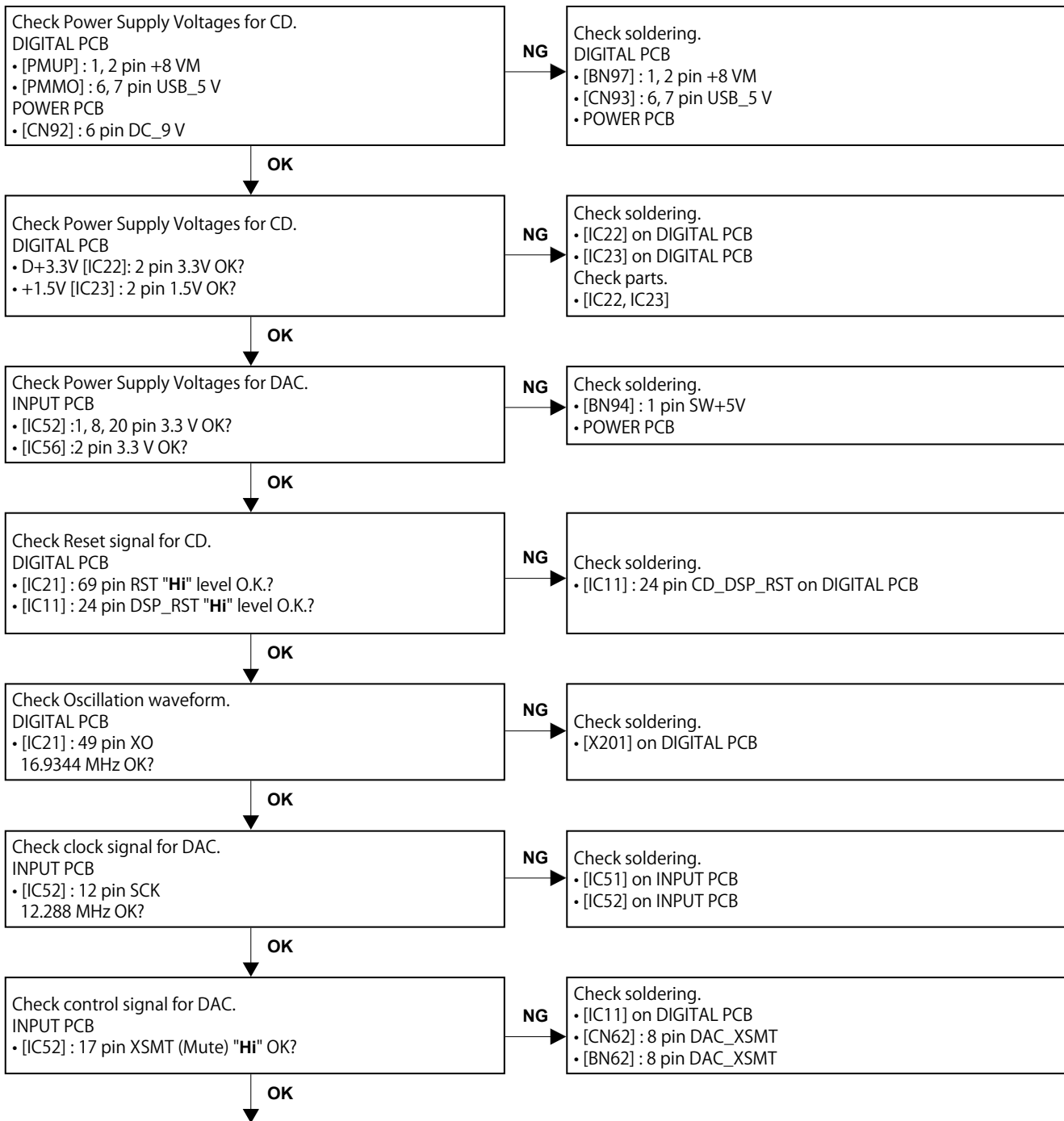
TROUBLE SHOOTING

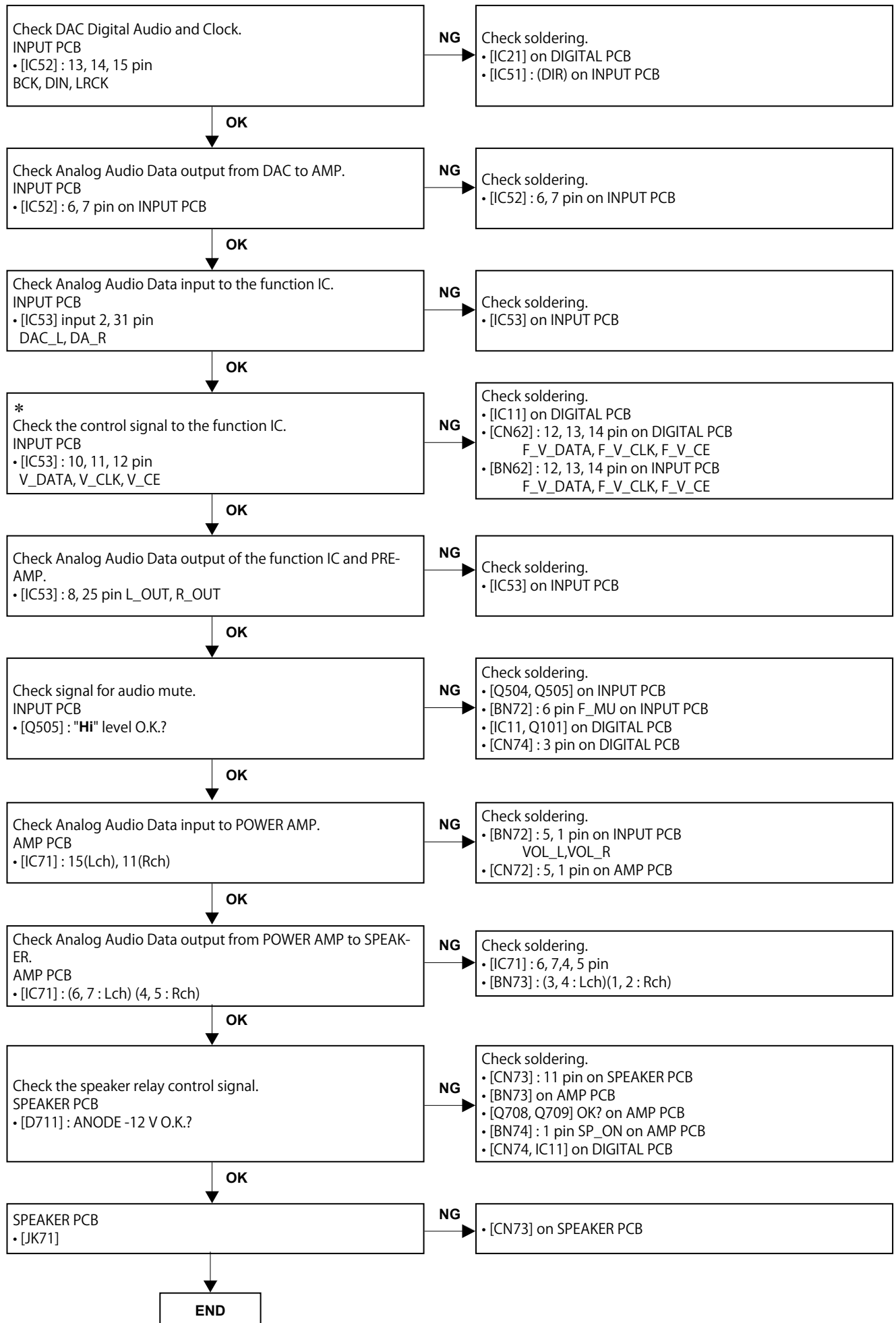
1. VFD is not lit



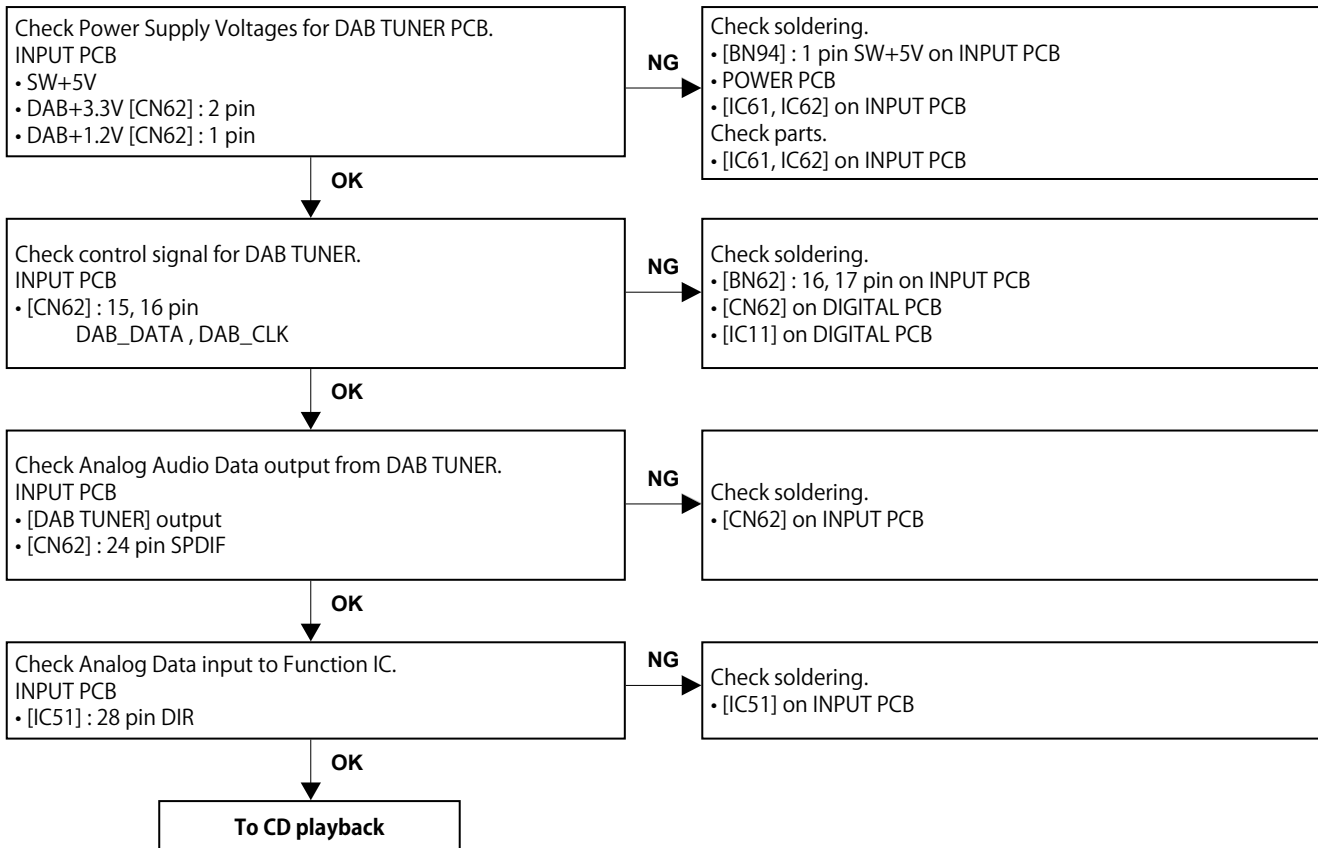
2. No sound or noise is output

2.1. CD playback

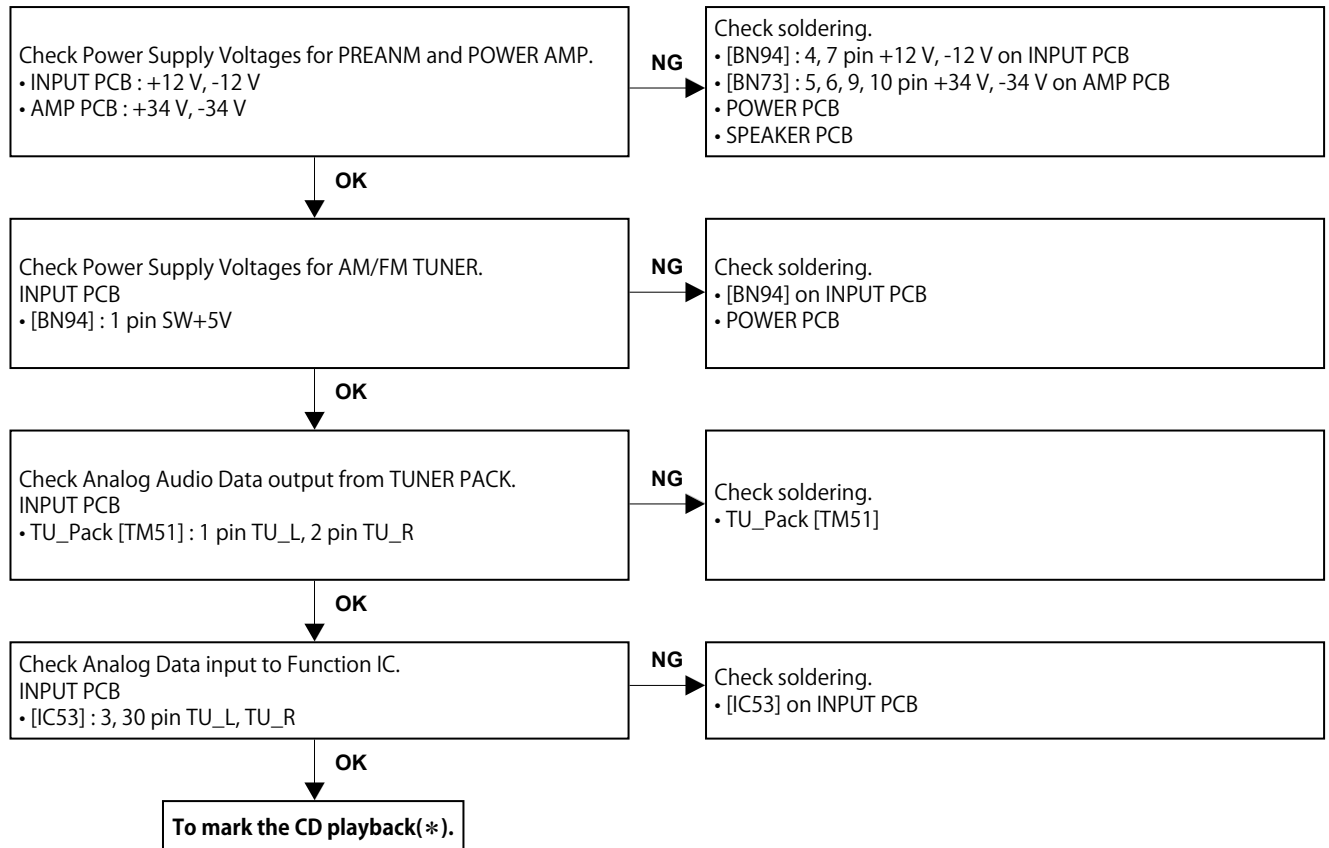




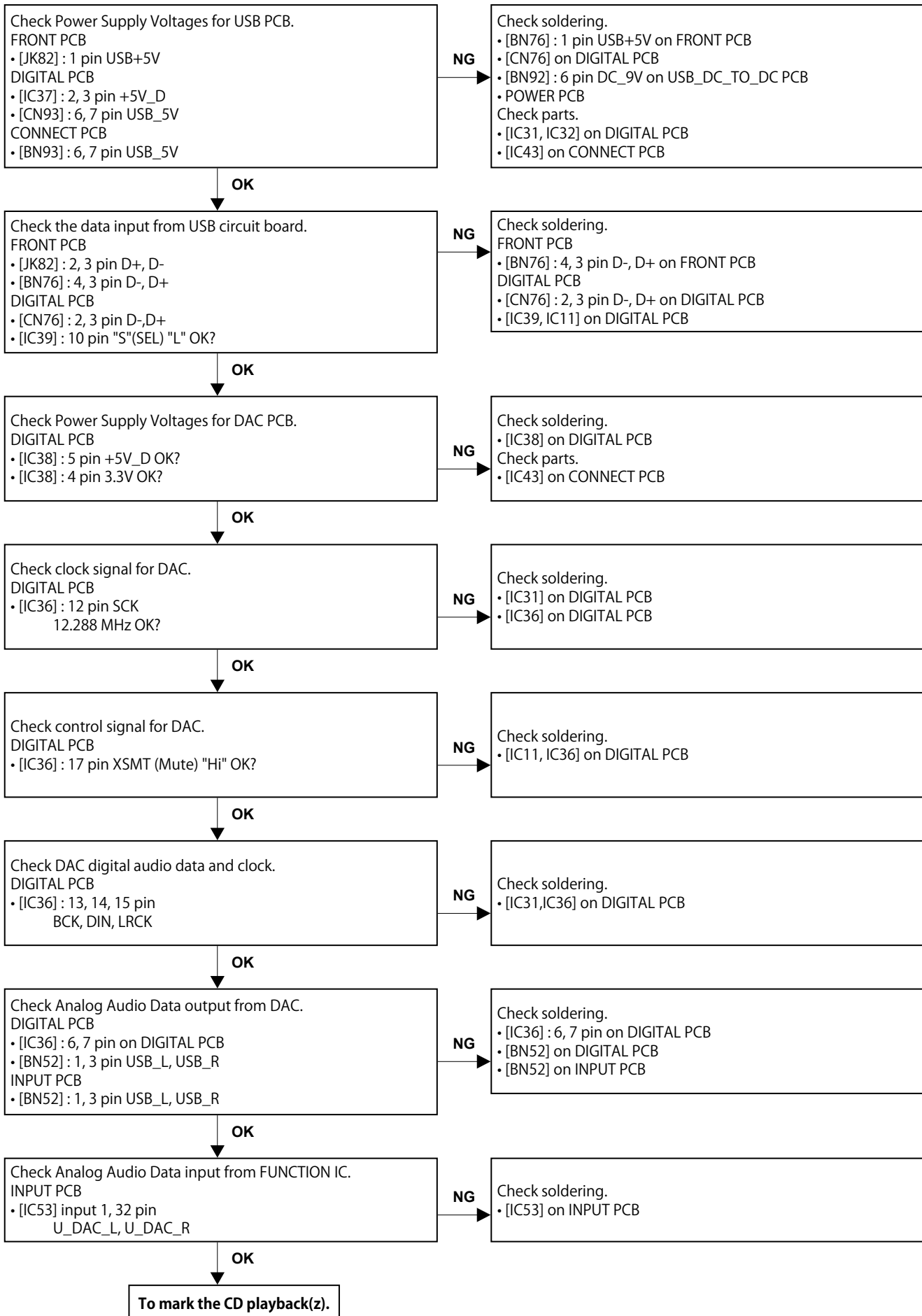
2.2. DAB TUNER input (EK model only)



2.3. AM/FM TUNER input



2.4. iPod / USB Playback



MEASURING METHOD AND WAVEFORMS

Connect the GND (-) probe of the oscilloscope to the specified reference voltage points to check the waveforms.

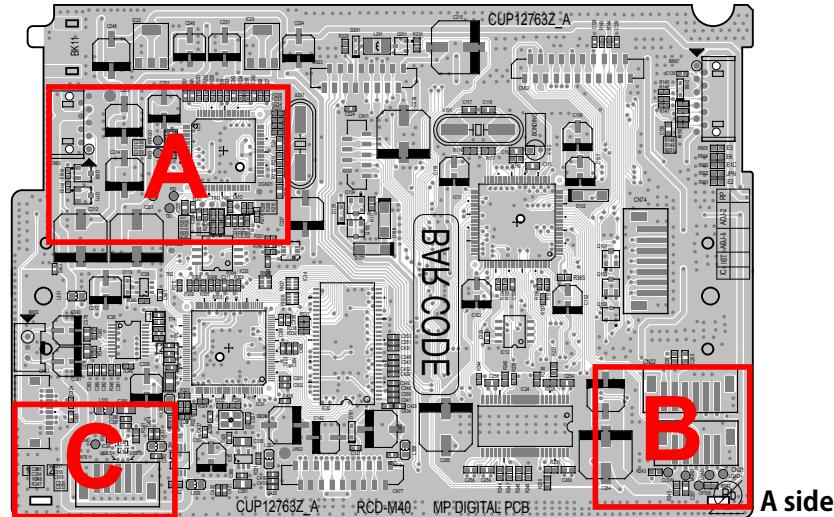
NOTES

Measuring Disc :
 CD/TCD-784
 CD-R/TCD-R082W
 CD-RW/TCD-W082W

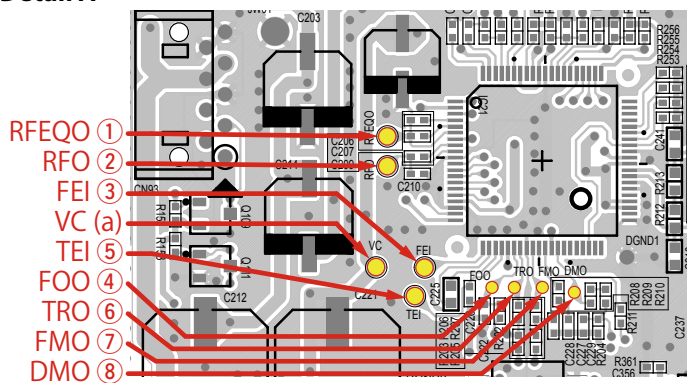
(It is recommended to use extension wires between the probe and test points.)

- When watching the HF waveform, use the extending wire as short as possible.
- When the HF waveform is noisy or the eye-pattern is unidentifiable, replace the Traverse Unit after measuring the loop.
- For points ① to ⑰, take measurements at the points shown in the diagram below.

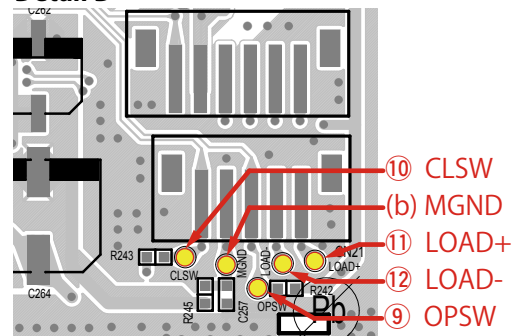
1. DIGITAL PCB test point



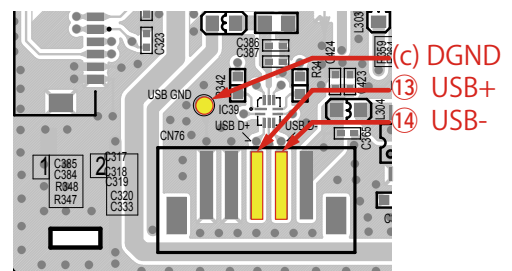
Detail A



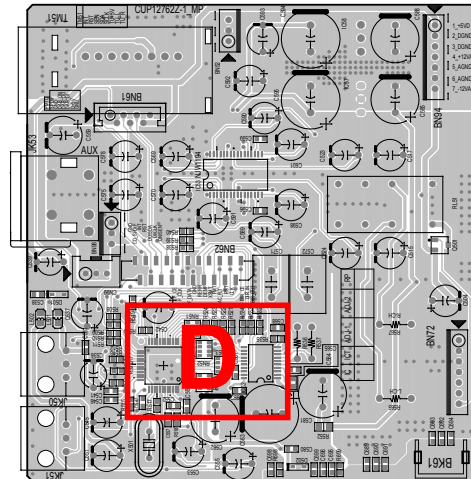
Detail B



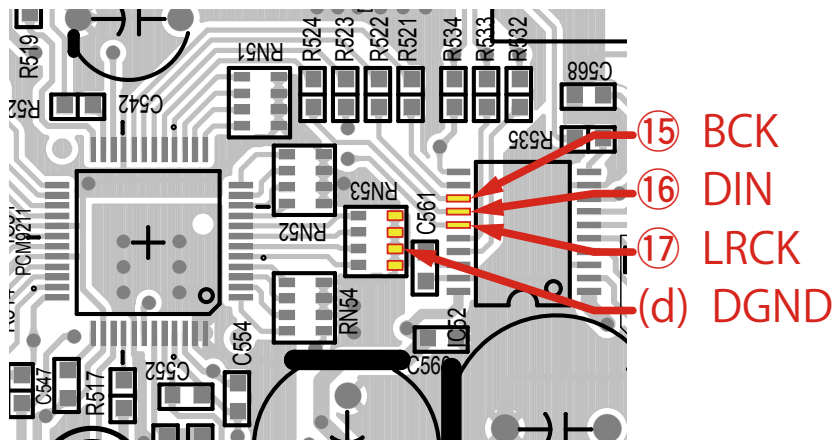
Detail C



2. INPUT PCB test point



A side



No.	Symbol	
①	TP	RFEQO
②	TP	RFO
③	TP	FEI
④	TP	FOO
⑤	TP	TEI
⑥	TP	TRO
⑦	TP	FMO
⑧	TP	DMO
⑨	TP	OPSW
⑩	TP	CLSW
⑪	TP	LOAD+
⑫	TP	LOAD-
⑬	CN76 (3)	D+
⑭	CN76 (2)	D-
⑮	IC52 (13)	BCK
⑯	IC52 (14)	DIN
⑰	IC52 (15)	LRCK

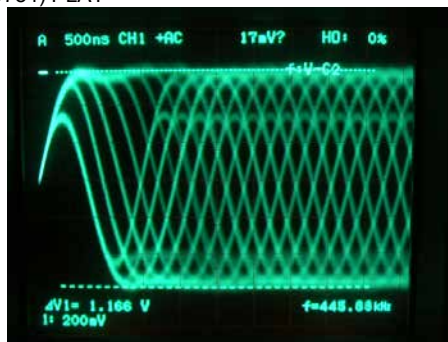
[illegible]

3. WAVEFORMS

1. DISC PLAY RF WAVEFORM (EYE-PATTERN)

1.1 CD(TCD784) PLAY

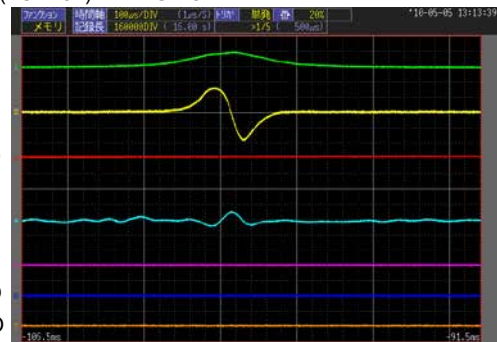
① RFEQO



2. DISC DETECTION

2.1 CD(TCD784) DETECTION

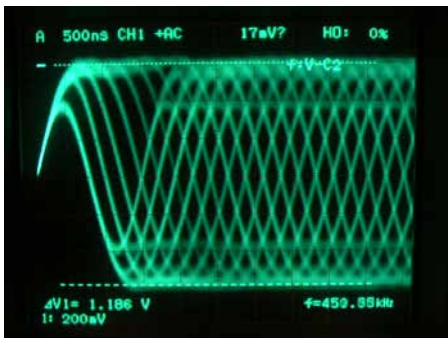
② RFO
③ FEI
④ FOO
⑤ TEI
⑥ TRO
⑦ FMO
⑧ DMO



1V/div
500mV/div
1V/div
1V/div
500mV/div
1V/div

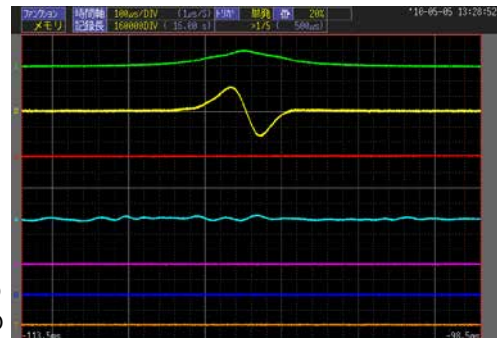
1.2 CD-R (TCDR082W) PLAY

① RFEQO



2.2 CD-R (TCDR082W) DETECTION

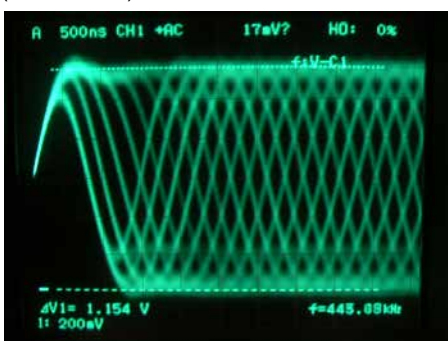
② RFO
③ FEI
④ FOO
⑤ TEI
⑥ TRO
⑦ FMO
⑧ DMO



1V/div
500mV/div
1V/div
1V/div
500mV/div
1V/div

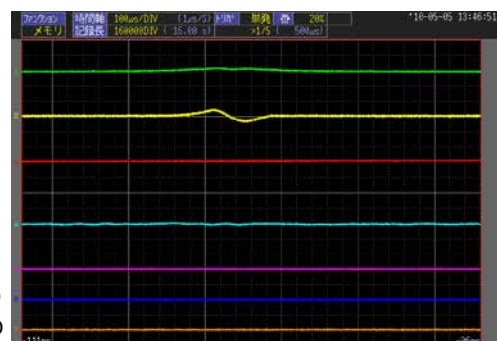
1.3 CD-RW (TCDW082W) PLAY

① RFEQO



2.3 CD-RW (TCDW082W) DETECTION

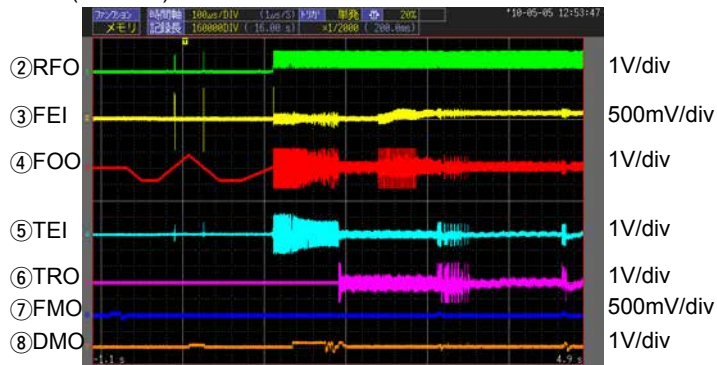
② RFO
③ FEI
④ FOO
⑤ TEI
⑥ TRO
⑦ FMO
⑧ DMO



1V/div
500mV/div
1V/div
1V/div
500mV/div
1V/div

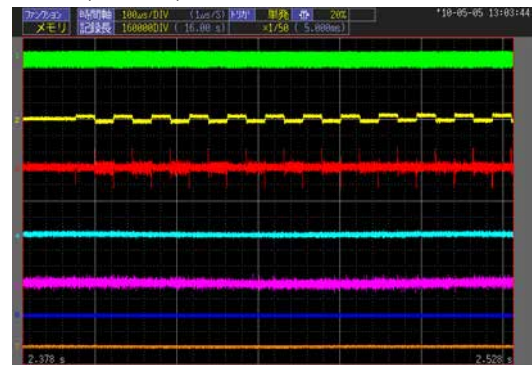
3. TOC READ

3.1 CD(TCD784) READ

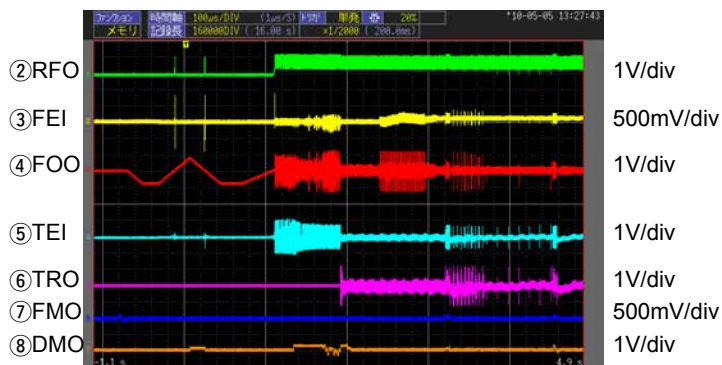


4. FOCUS ADJUSTMENT

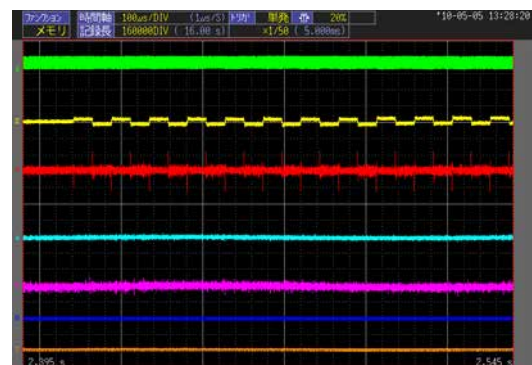
4.1 CD(TCD784) FOCUS ADJUSTMENT



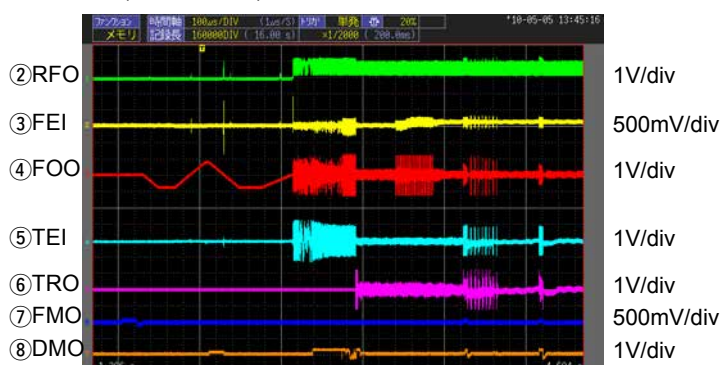
3.2 CD-R (TCDR082W) READ



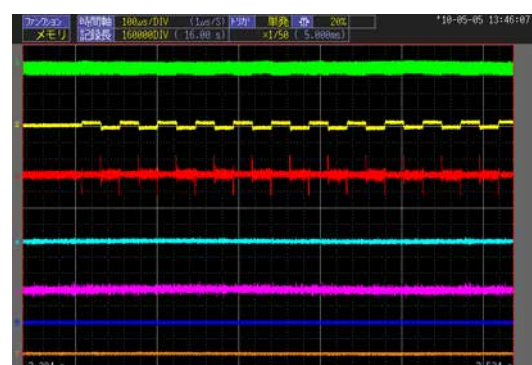
4.2 CD-R (TCDR082W) FOCUS ADJUSTMENT



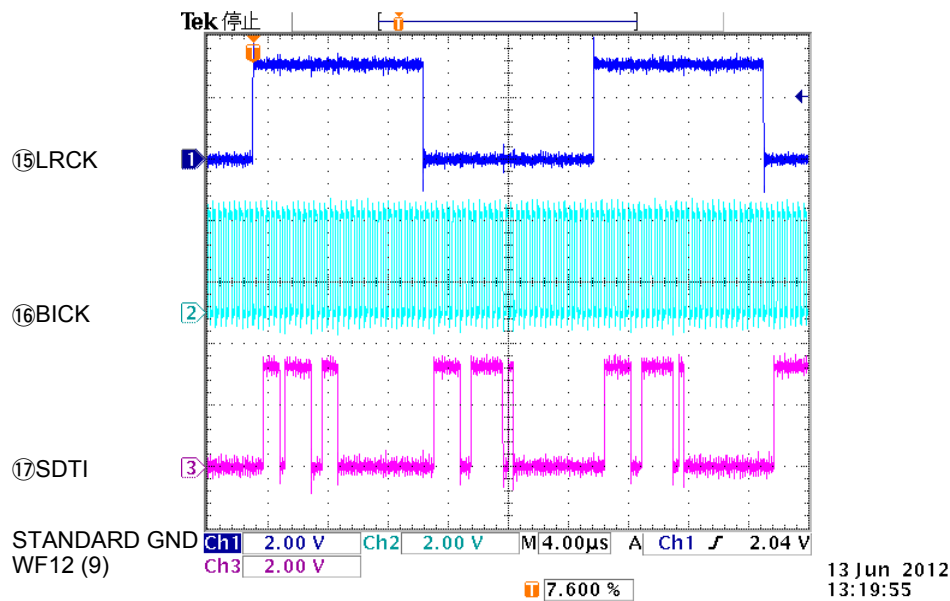
3.3 CD-RW (TCDW082W) READ



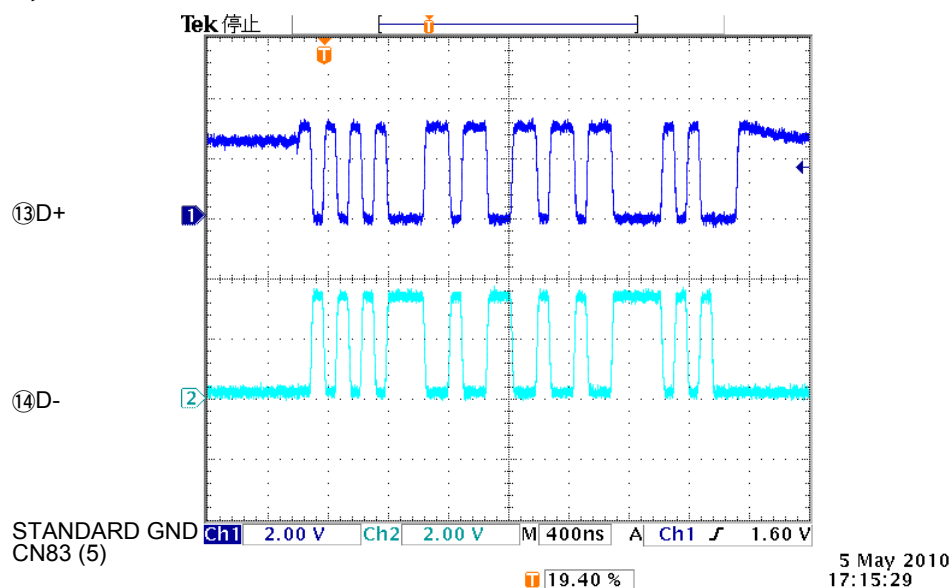
4.3 CD-RW (TCDW082W) FOCUS ADJUSTMENT



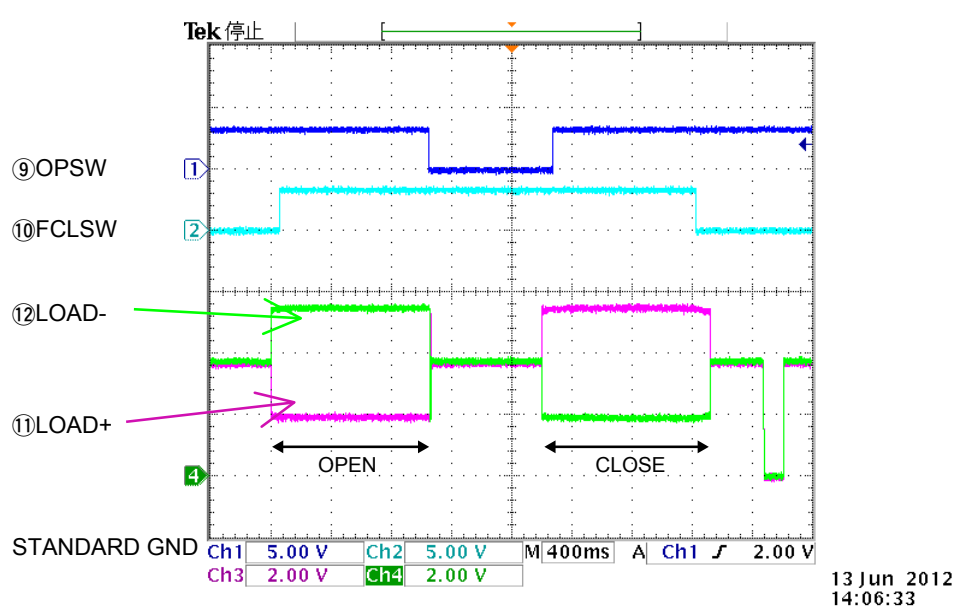
5. CD Playback



6. USB playback

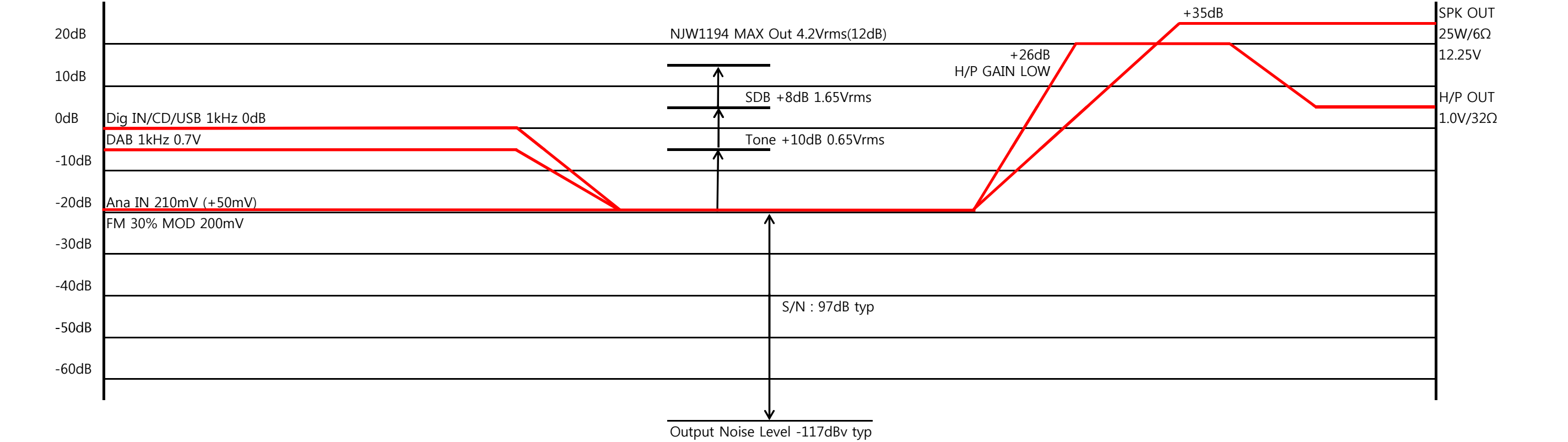
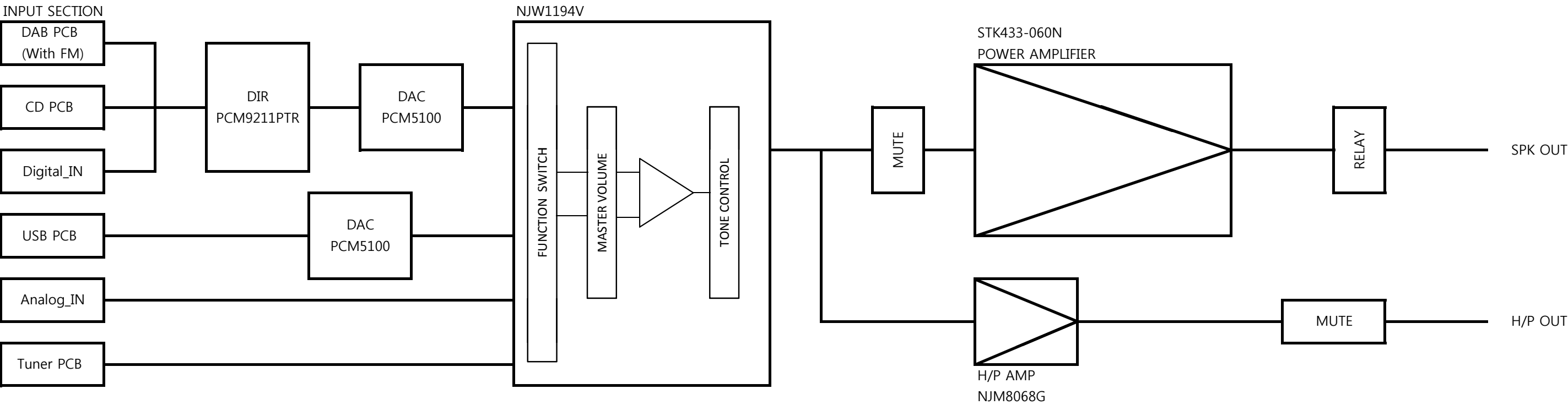


7. LOADER OPEN-CLOSE

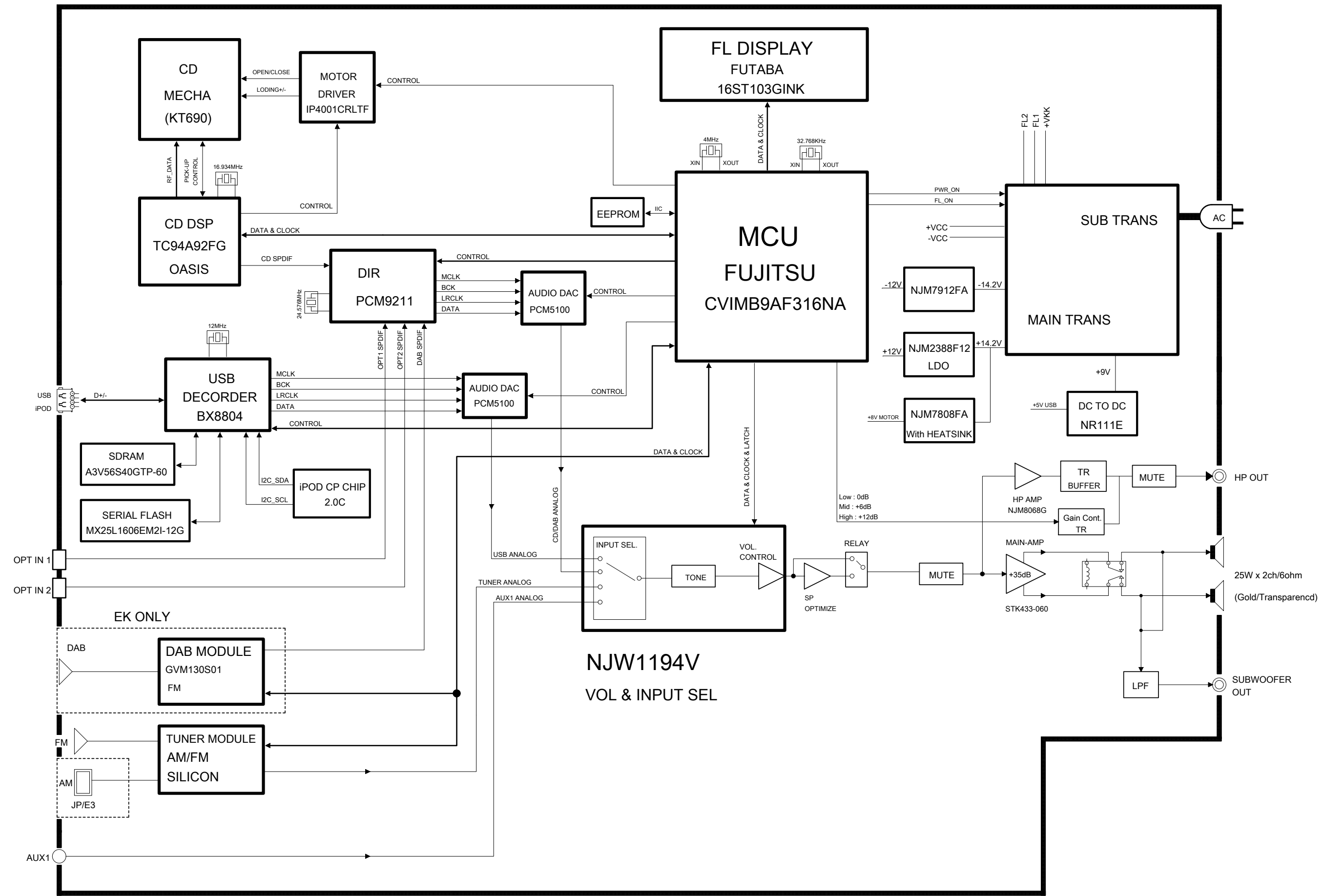


LEVEL DIAGRAM

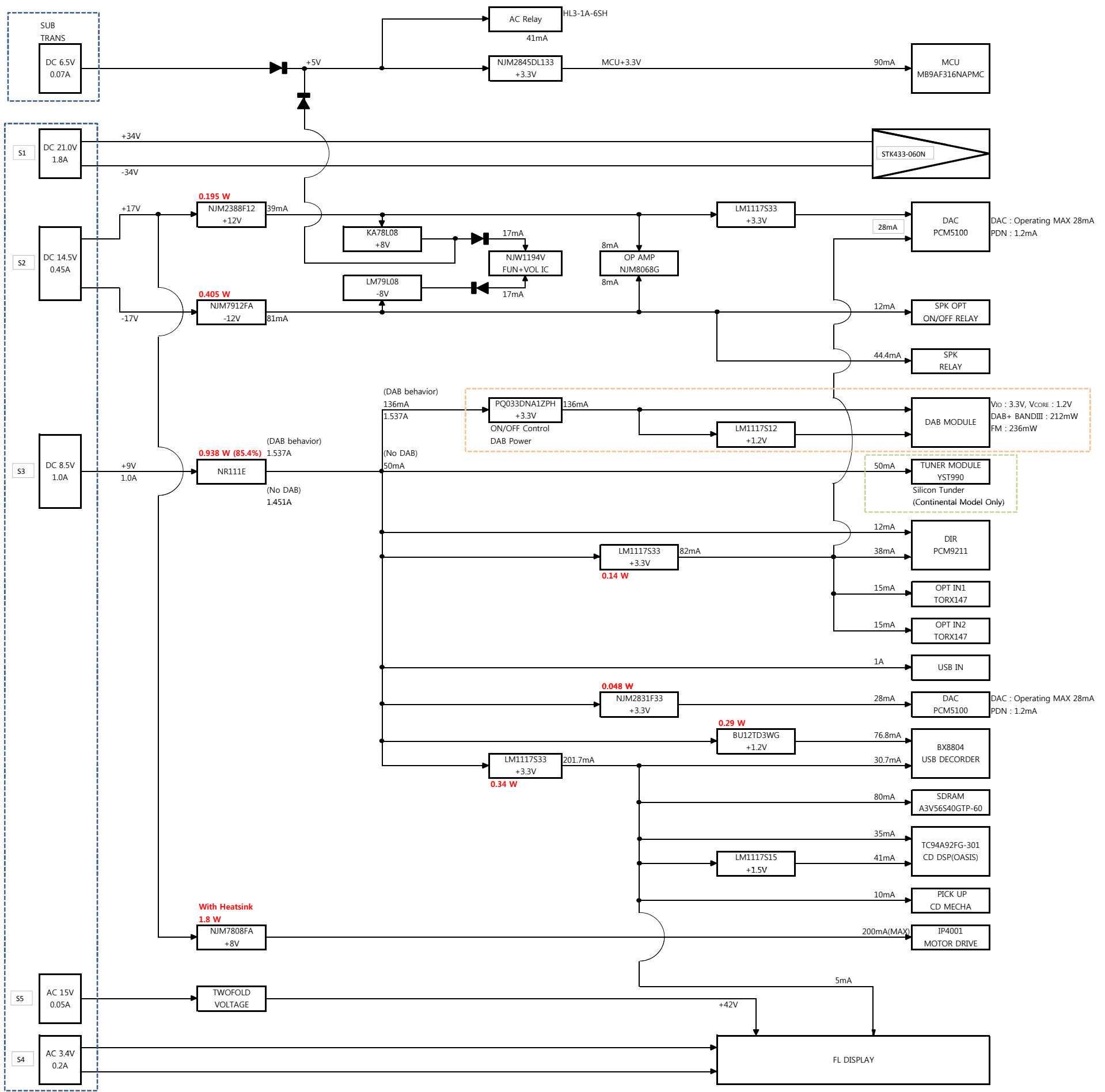
RCD-M40 LEVEL DIAGRAM



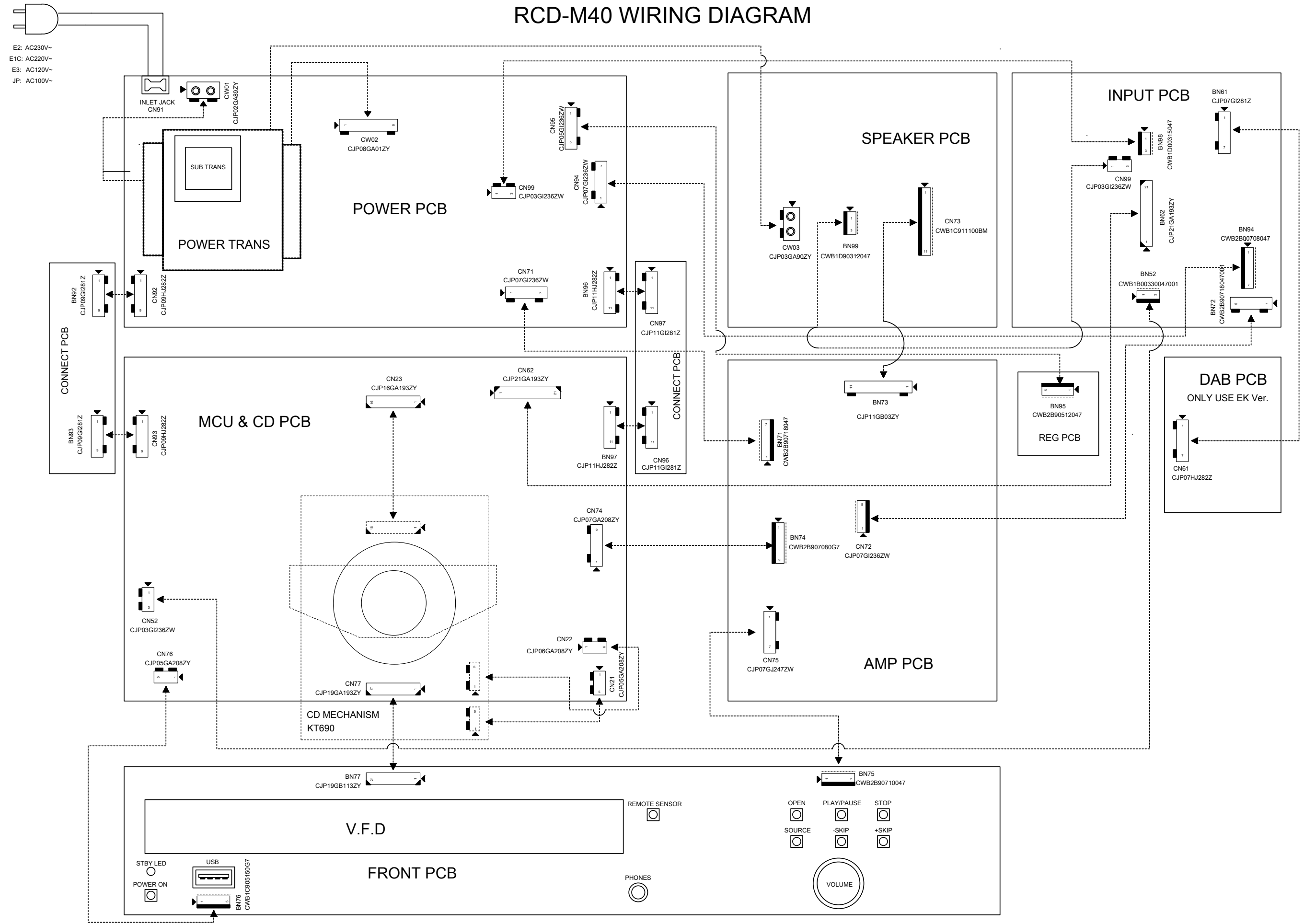
BLOCK DIAGRAM



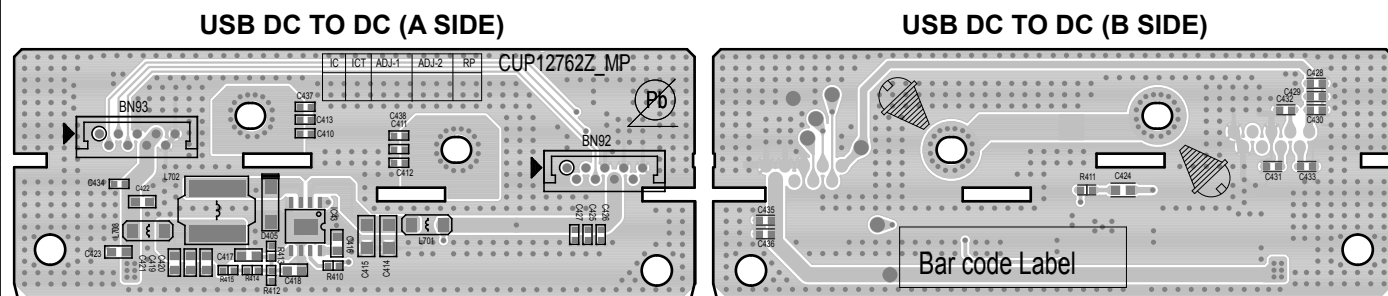
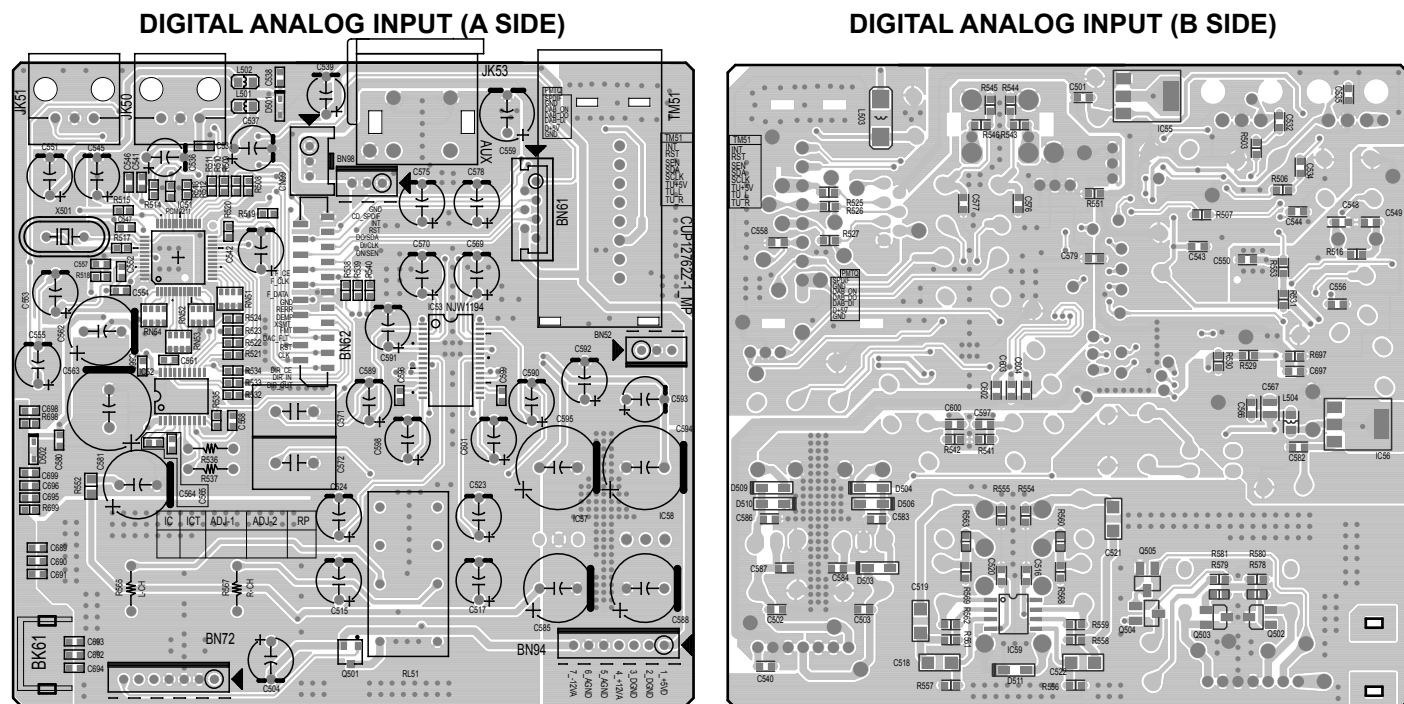
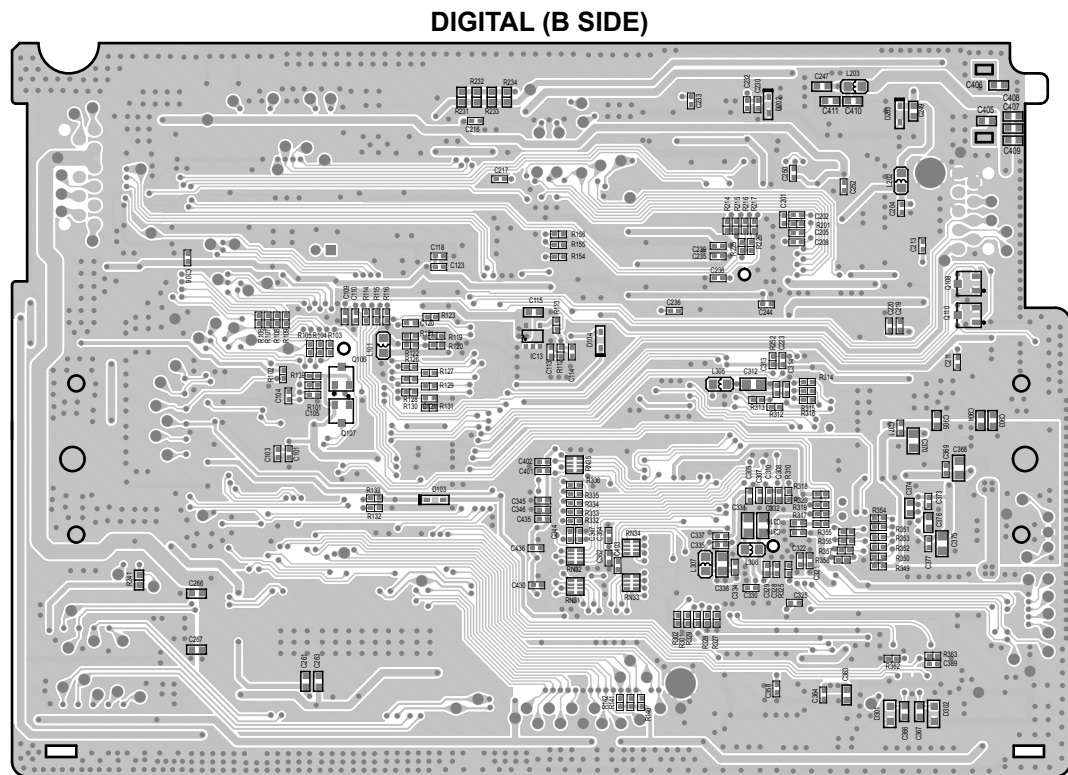
POWER DIAGRAM

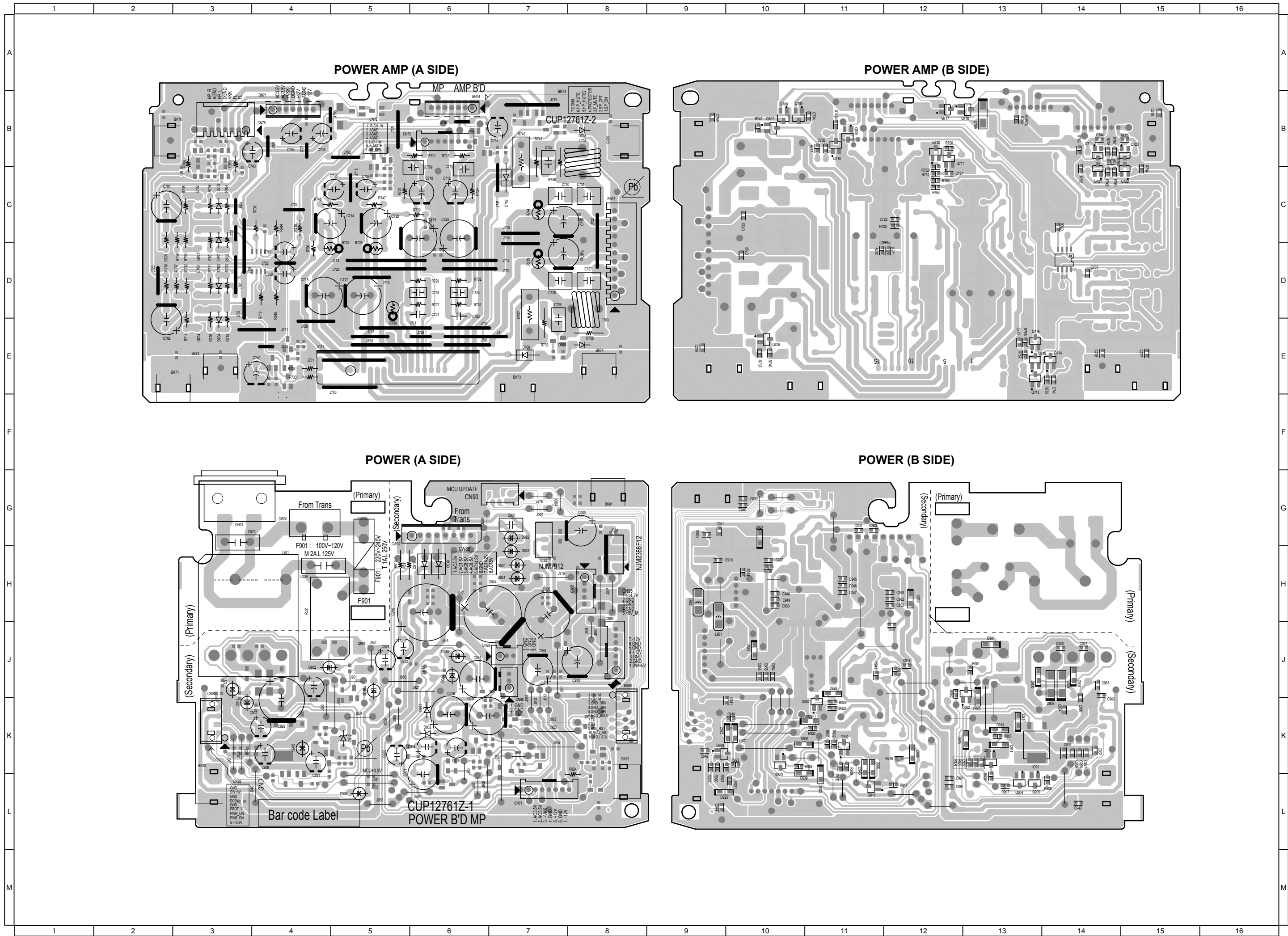


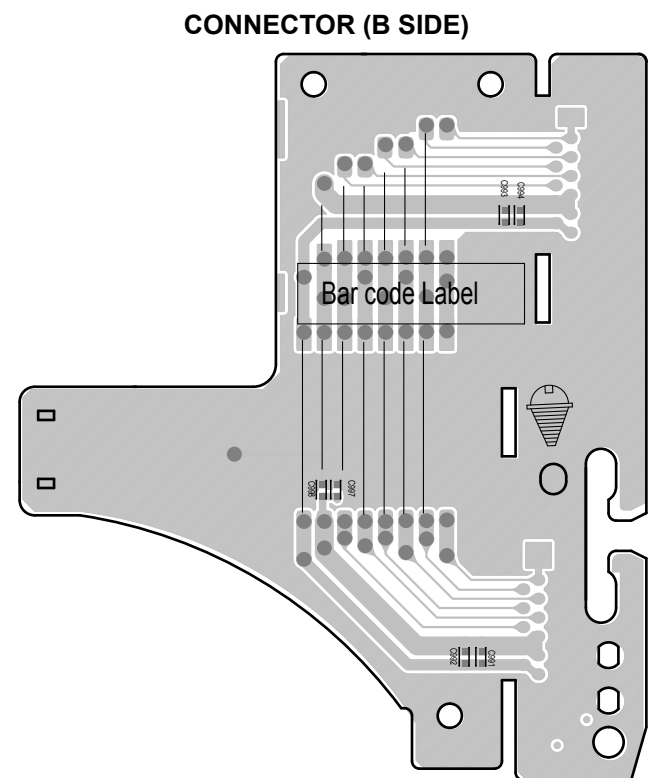
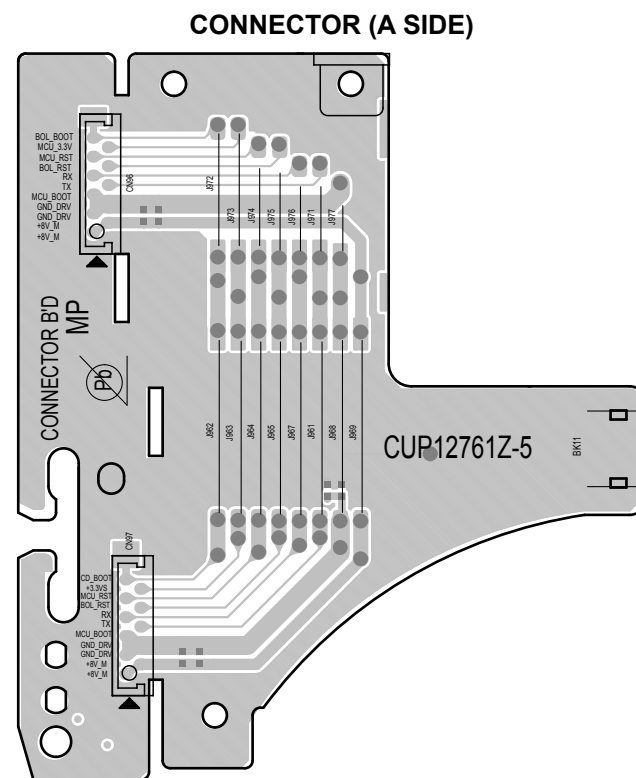
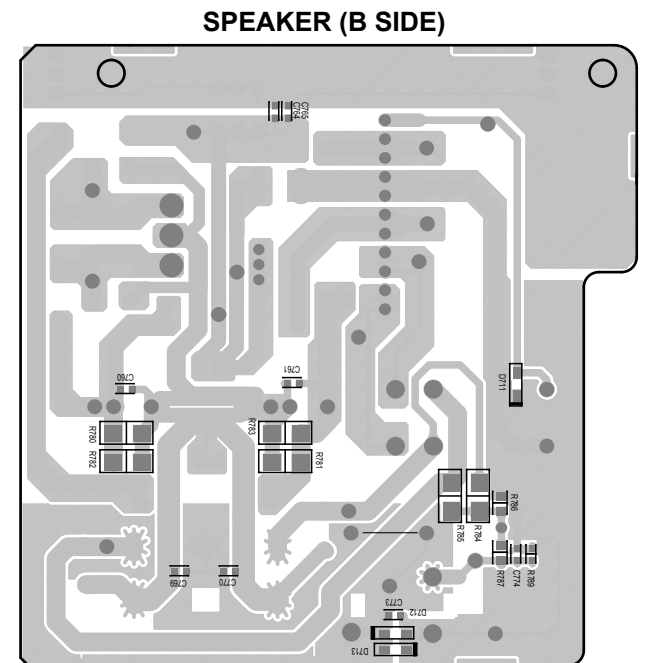
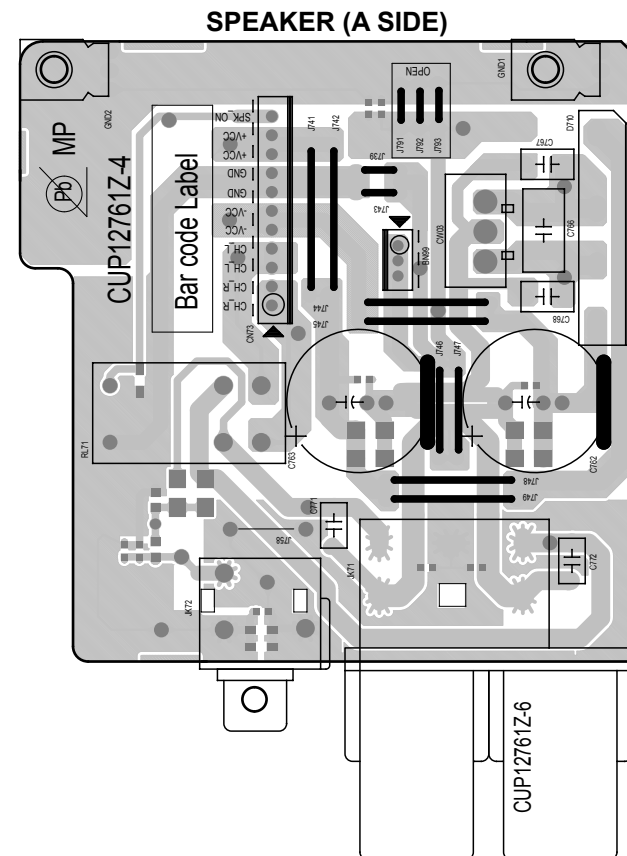
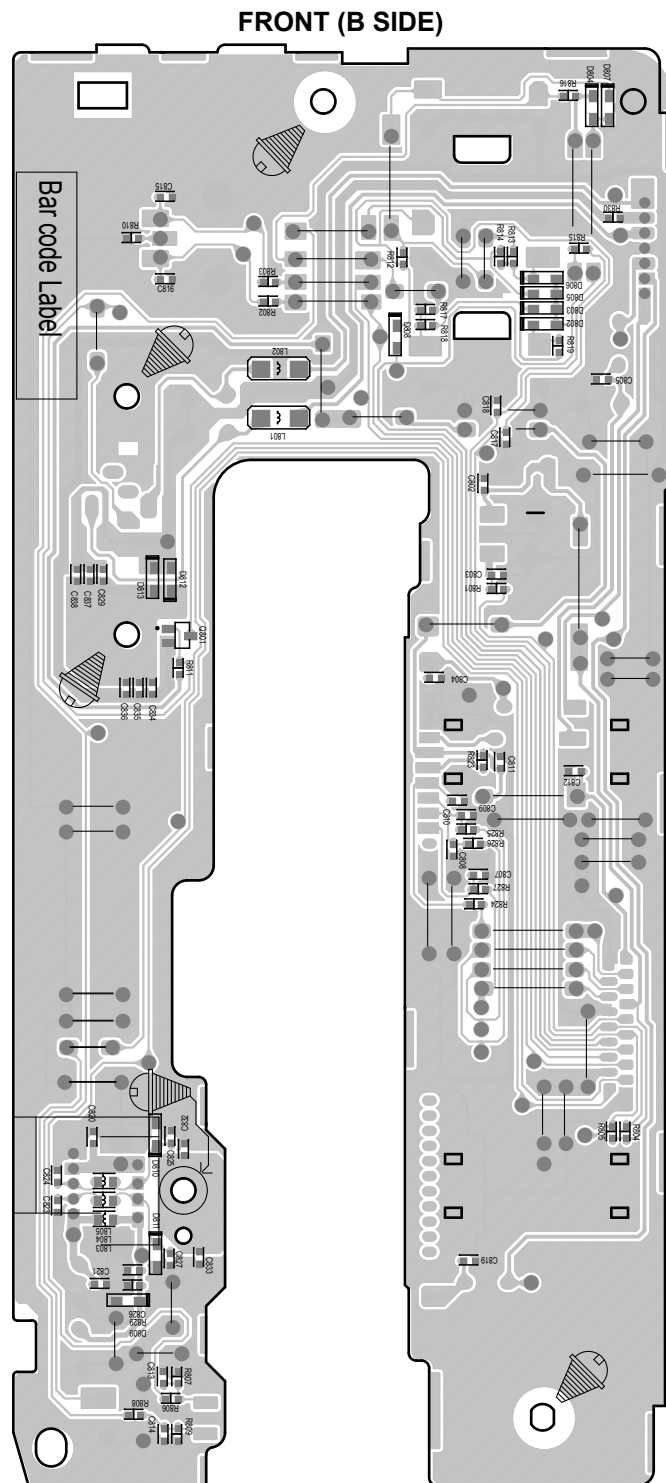
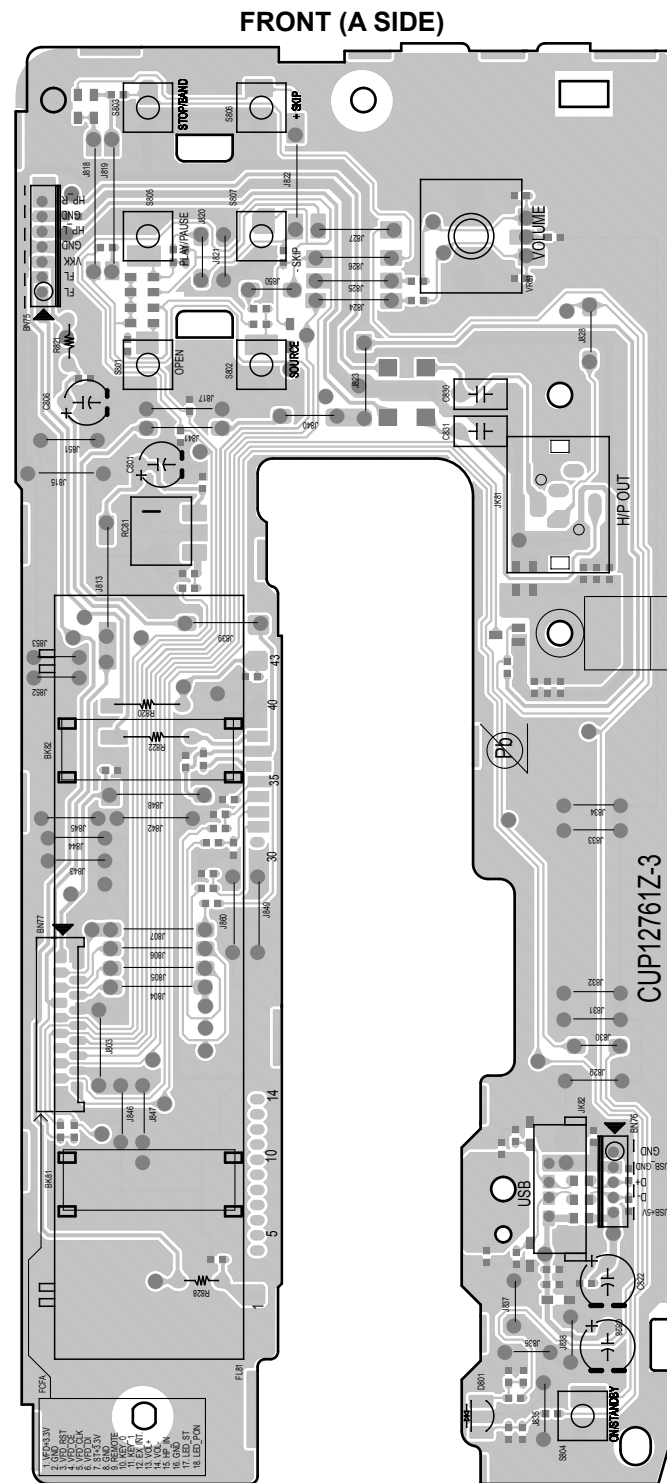
WIRING DIAGRAM



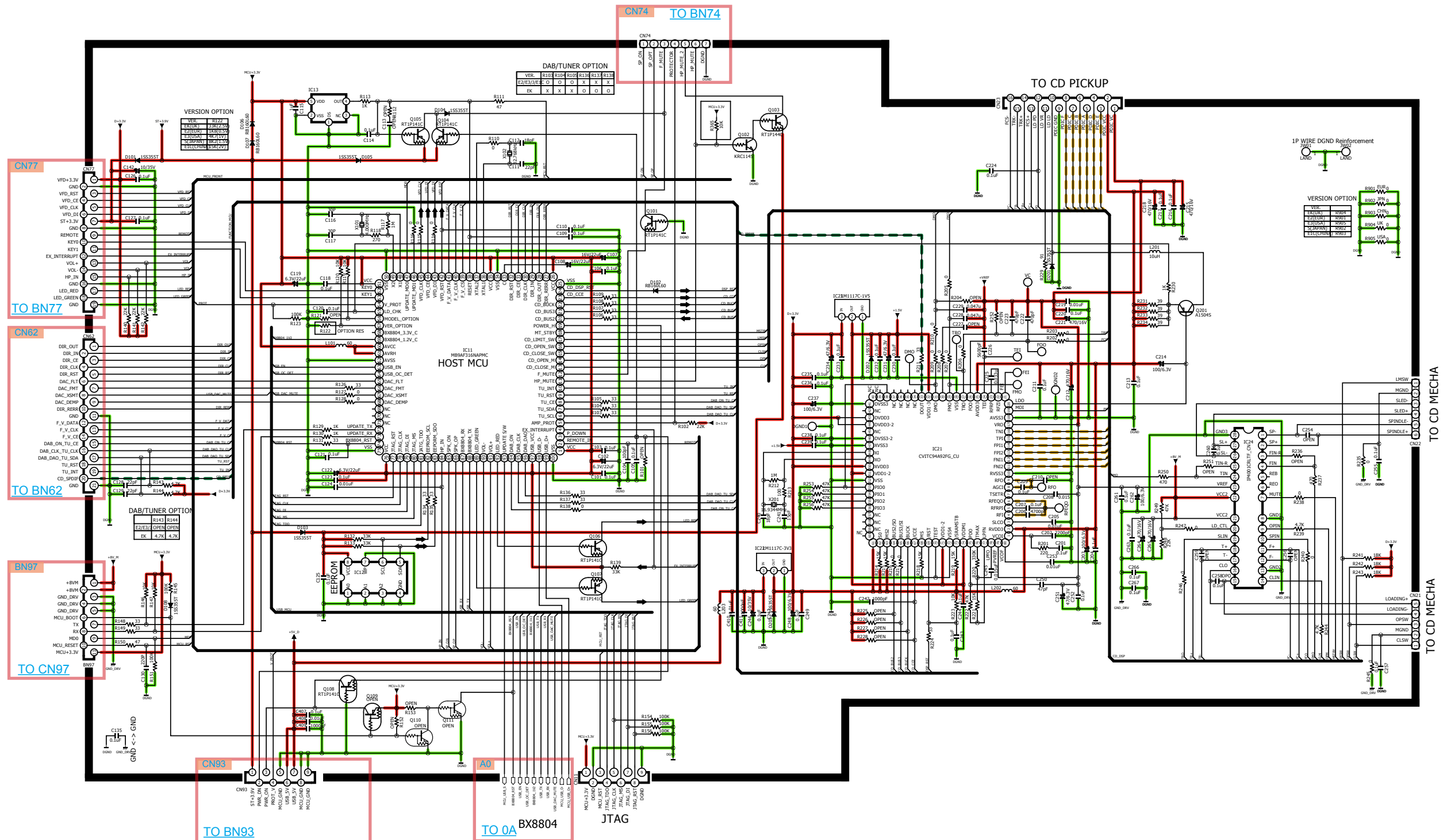
Lead-free Solder
When soldering, use the Lead-free Solder (Sn-Ag-Cu).







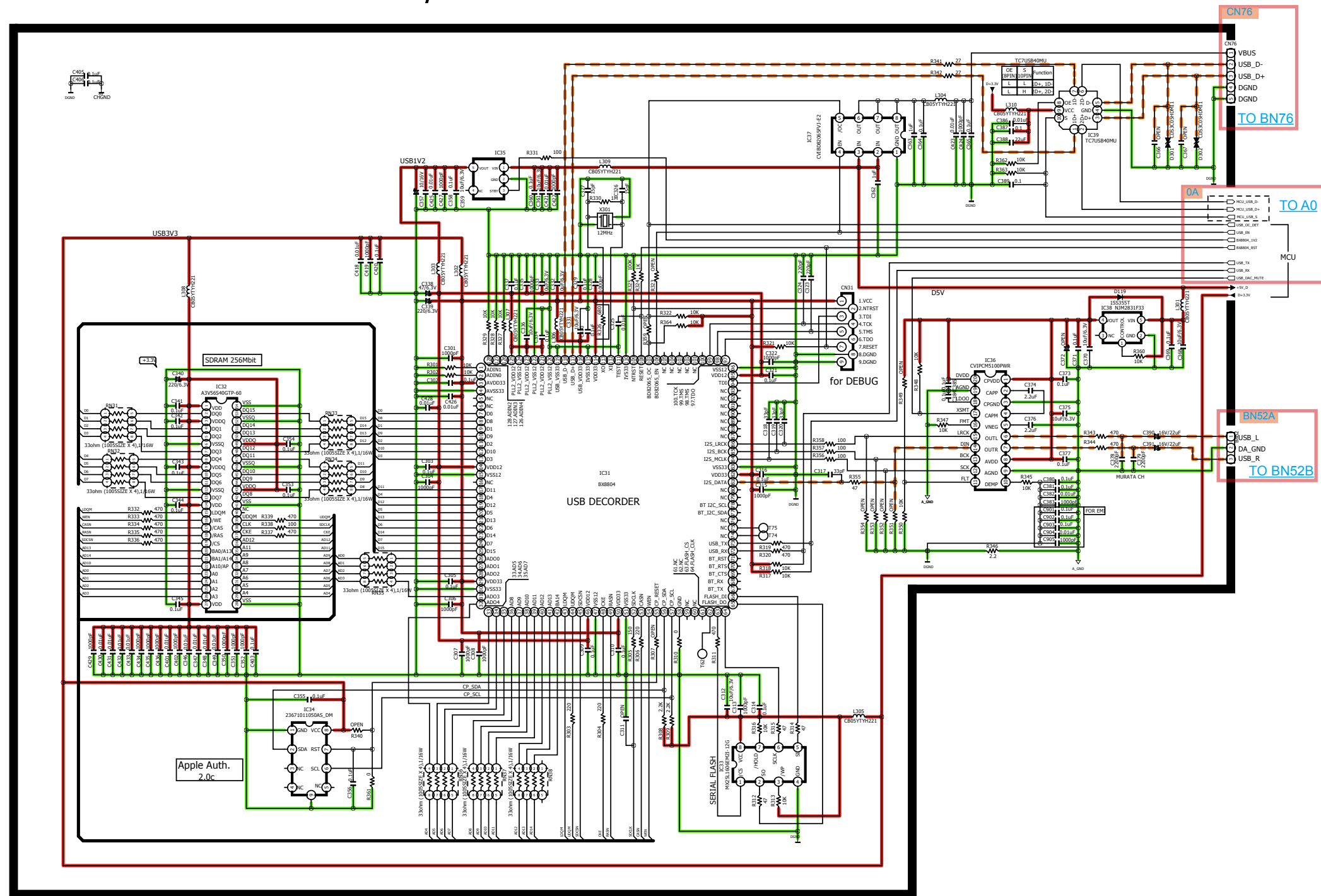
RCD-M40/RCDM40DAB MCU&CD SHCEMETIC DIAGRAM



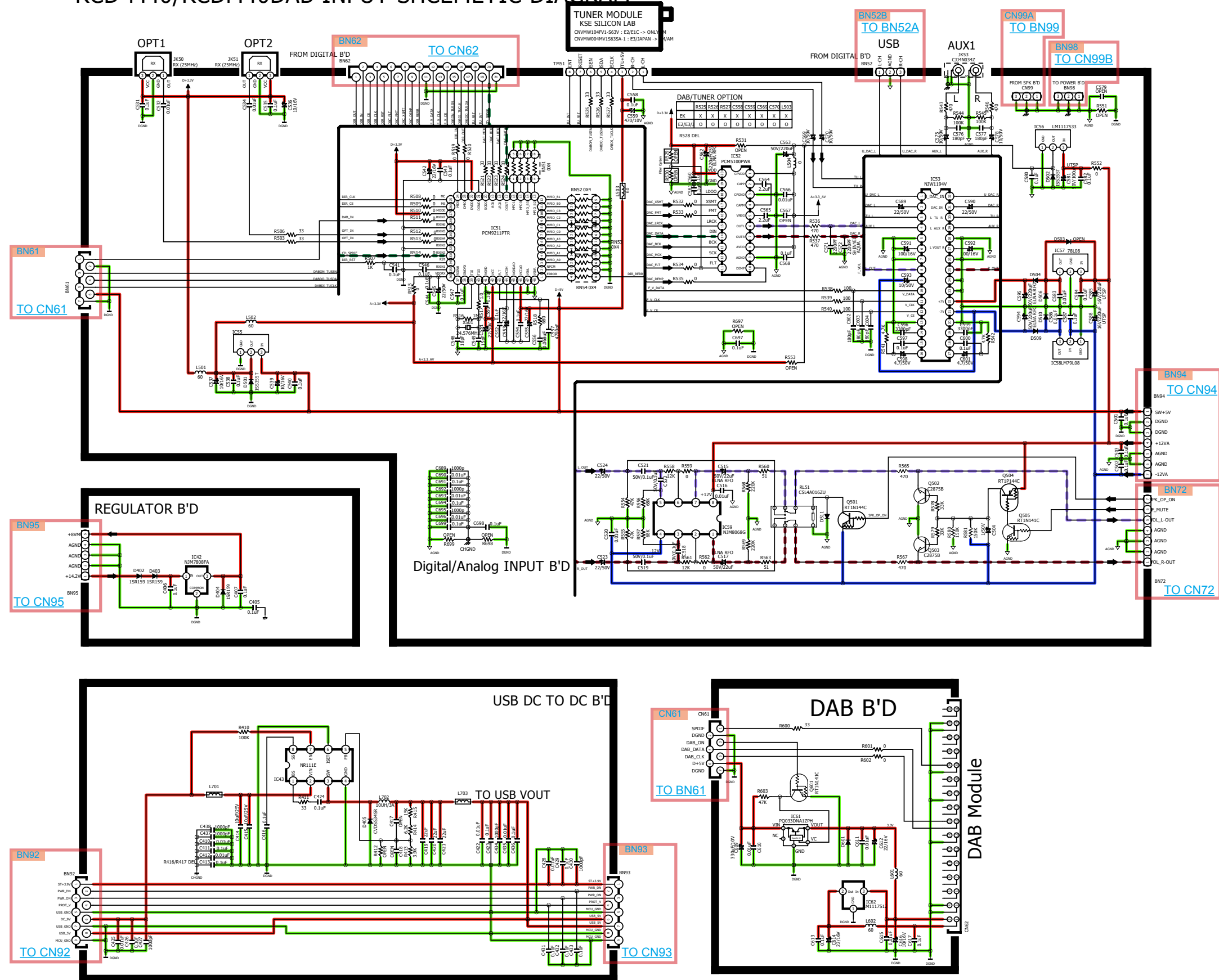
SCHEMATIC DIAGRAMS (1/4)

SCH01_DIGITAL MCU&CD

RCD-M40/RCDM40DAB USB SHCEMETIC DIAGRAM

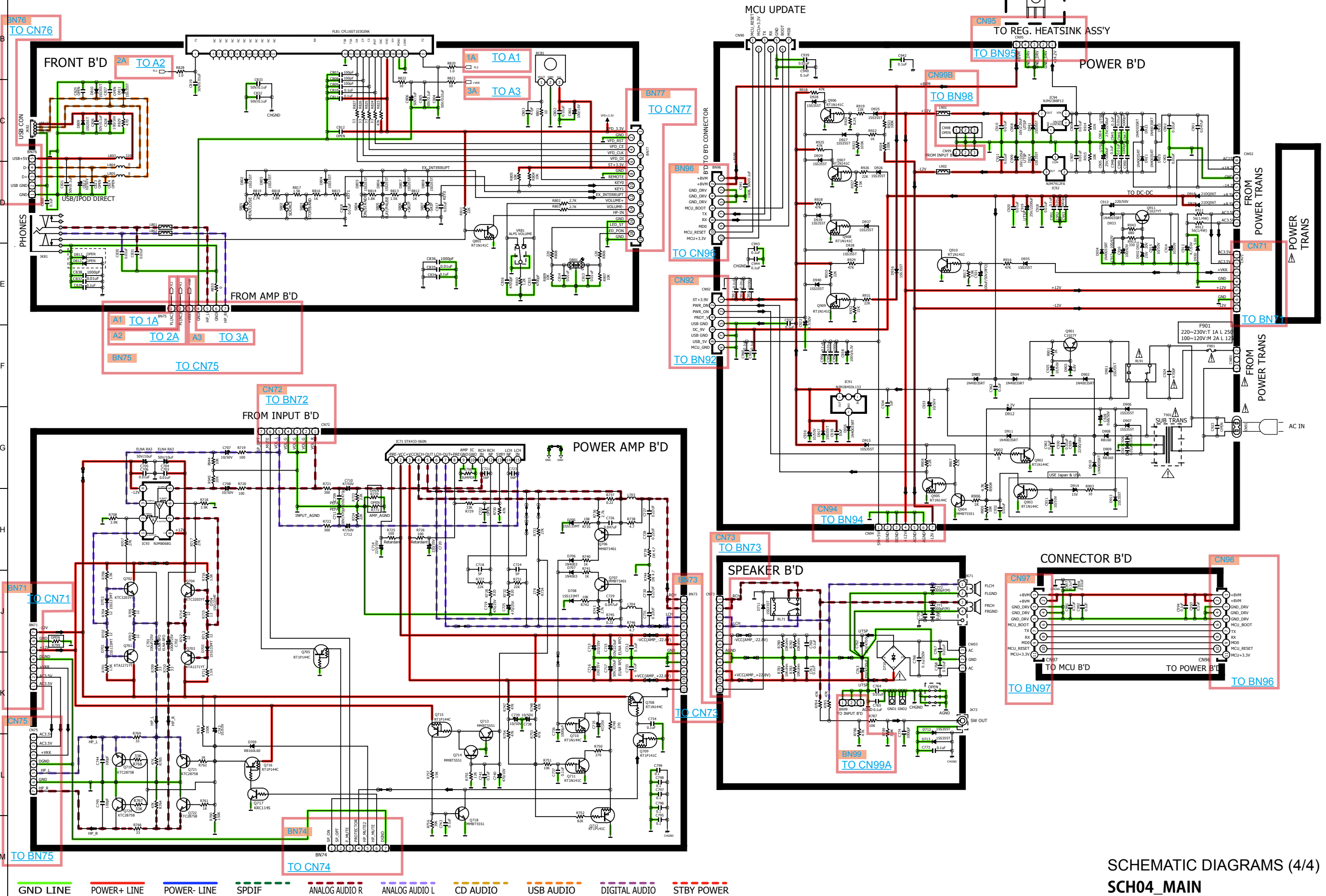


RCD-M40/RCDM40DAB INPUT SHCEMETIC DIAGRAM



SCH03_INPUT

RCD-M40/RCDM40DAB MAIN SHCEMETIC DIAGRAM

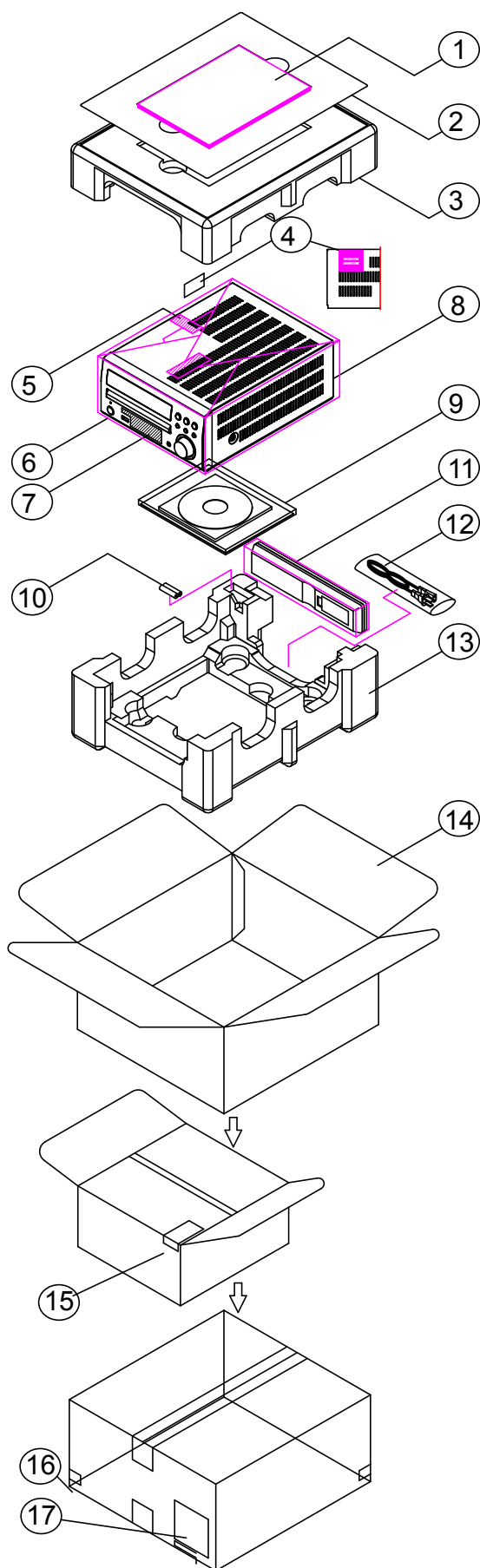


Please see the last chapter for the part list.



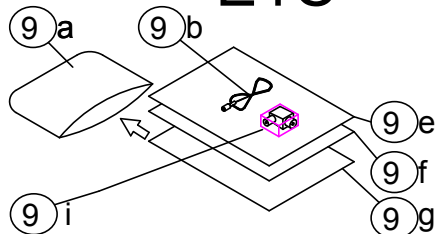
PACKING VIEW

Please see the last chapter for the part list.

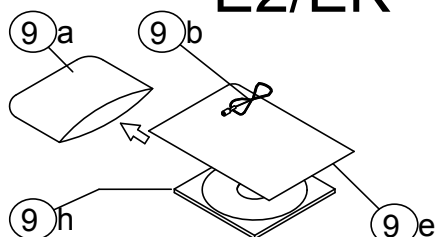


9 ACCESSORIC ASS'Y

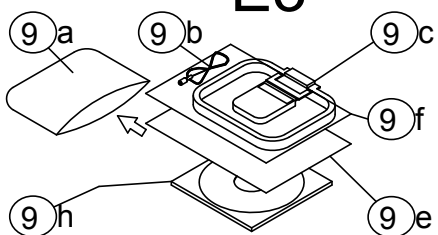
E1C



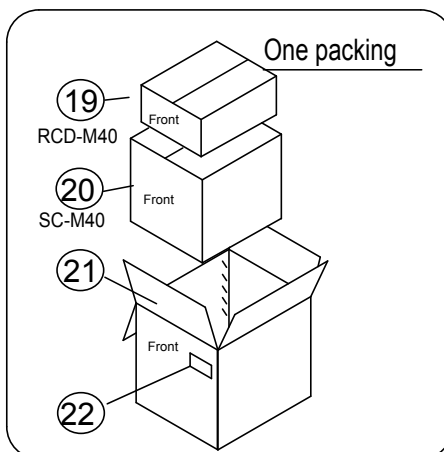
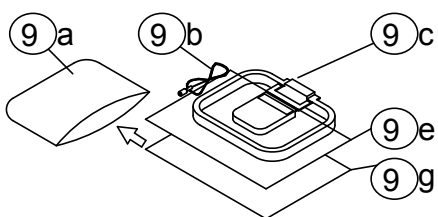
E2/EK



E3



JP

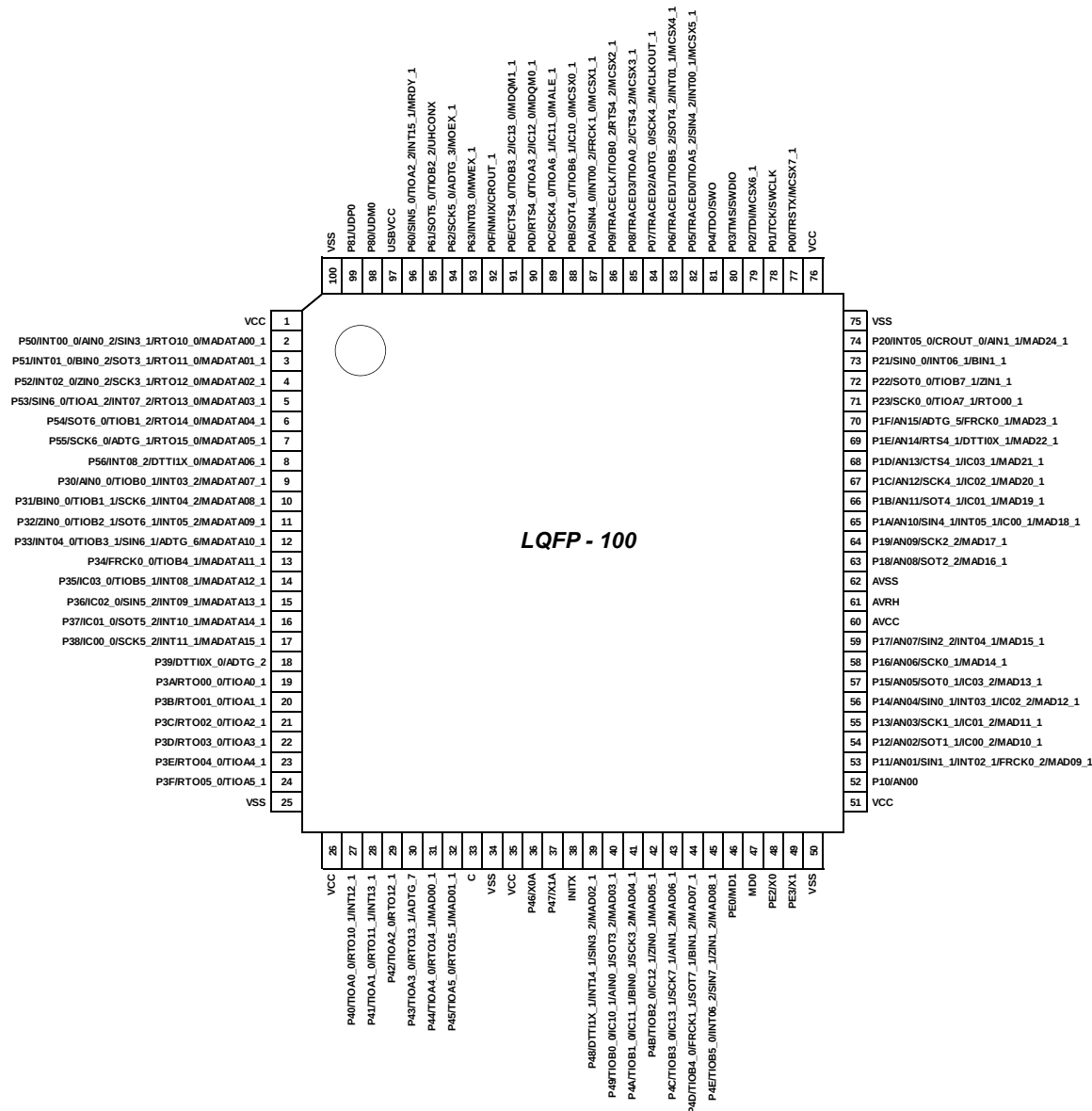


SEMICONDUCTORS

Only major semiconductors are shown, general semiconductors etc. are omitted to list.
The semiconductor which described a detailed drawing in a schematic diagram are omitted to list.

1. IC's

MB9AF316NA (DIGITAL : IC11)

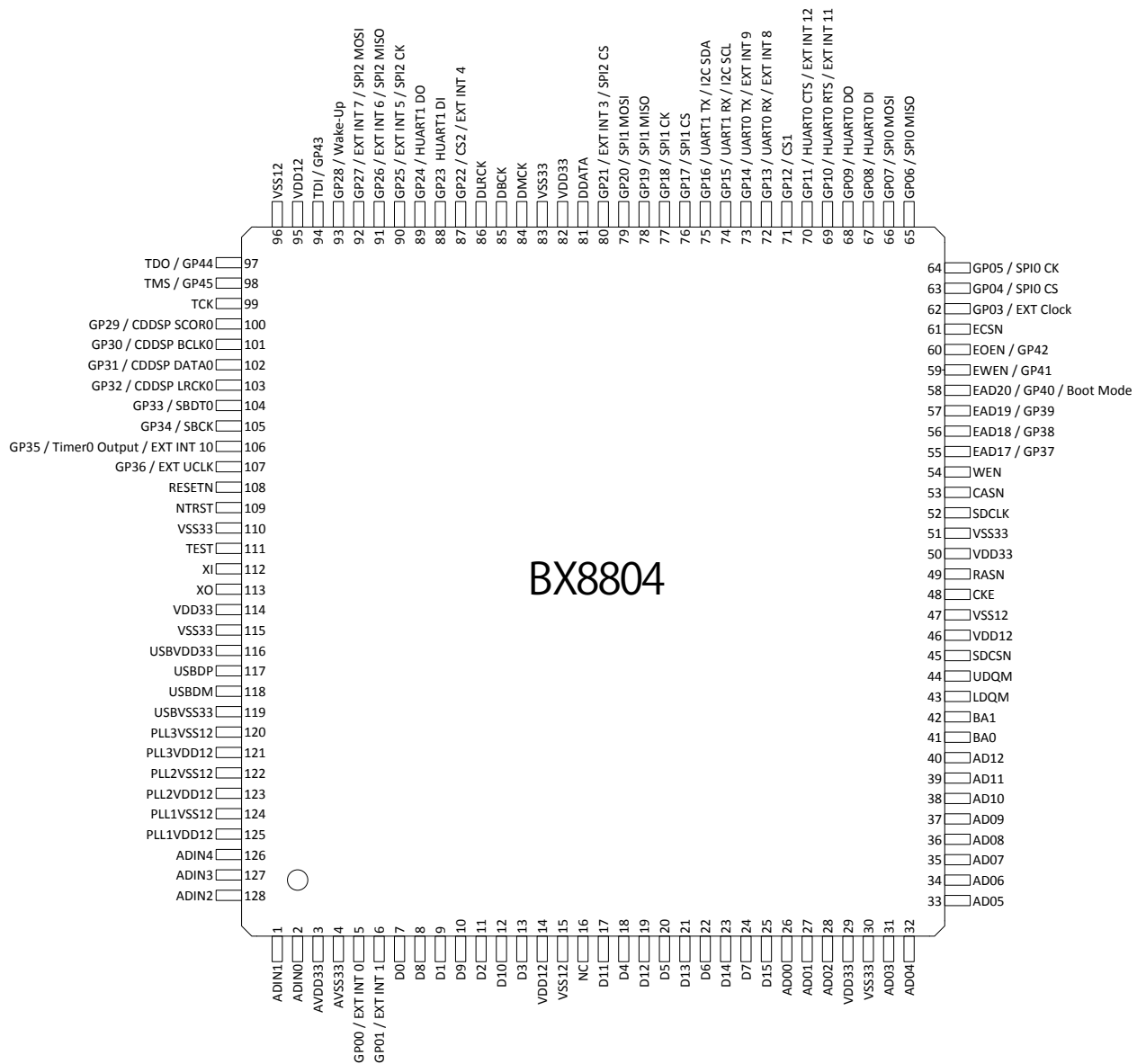


MB9AF316NA Terminal Function

pin No	Port Name	RCD-M40	Port	Use	Status						Note
			use		Pull-up	Pull-down	No Use	init	Eco stby	Act.	
1	VCC										
2	P50/SIN3_1/INT00_0/AIN0_2/RTO10_0/MADATA00_1	REMOTE_IN_1	INT00_0	I	X	X		-	H/L	H/L	Remote Control Input
3	P51/SOT3_1/INT01_0/BIN0_2/RTO11_0/MADATA01_1	POWER_DOWN	INT01_1	I	X	X		-	H/L	H/L	AC Cord Pull Out Detection
4	P52/SCK3_1/INT02_0/ZIN0_2/RTO12_0/MADATA02_1	EX_INTERRUPT	INT02_0	I	33K	X		-	H	L	External Key Interrupt Detection
5	P53/SIN6_0/INT07_2/TIOA1_2/RTO13_0/MADATA03_1	AMP_PRT	P53	I	22K	X		-	H	L	Amp Protect Detection
6	P54/SOT6_0/TIOB1_2/RTO14_0/MADATA04_1	TU_SCL	P54	O	X	X		L	L	H/L	
7	P55/SCK6_0/ADTG_1/RTO15_0/MADATA05_1	TU_SDA	P55	I/O	X	X		L	L	H/L	Tuner Data
8	P56/INT08_2/DTT11X_0/MADATA06_1	TU_CE	P56	O	X	X		L	L	H/L	Tuner Chip Enable
9	P30/INT03_2/AIN0_0/TIOB0_1/MADATA07_1	TU_RST	P30	O	X	X		L	L	L	Tuner Reset
10	P31/SCK6_1/INT04_2/BIN0_0/TIOB1_1/MADATA08_1	TU_GPIO2	INT04_2	I	X	X		-	-	H/L	Tuner Interrupt Detection
11	P32/SOT6_1/INT05_2/ZIN0_0/TIOB2_1/MADATA09_1	HP_MUTE	P32	O	X	X		L	L	H	Headphone Mute
12	P33/SIN6_1/INT04_0/TIOB3_1/ADTG_6/MADATA10_1	F_MUTE	P33	O	X	X		L	H	H	Function Mute
13	P34/FRCK0_0/TIOB4_1/MADATA11_1	CD_CLOSE_M	P34	O	X	X		L	L	H	cd close motor IP4001(14) Mute
14	P35/INT08_1/IC03_0/TIOB5_1/MADATA12_1	CD_OPEN_M	P35	O	X	X		L	L	H	cd open motor IP4001(9) Mute
15	P36/SIN5_2/INT09_1/IC02_0/MADATA13_1	CD_CLOSE_SW	P36	I	18K	X		-	L	H/L	cd close switch
16	P37/SOT5_2/INT10_1/IC01_0/MADATA14_1	CD_OPEN_SW	P37	I	18K	X		-	L	H/L	cd open switch
17	P38/SCK5_2/INT11_1/IC00_0/MADATA15_1	CD_LIMIT_SW	P38	I	18K	X		-	L	H/L	cd inner switch
18	P39/DTT10X_0/ADTG_2	MT_STBY	P39	O	X	X		L	L	H	motor stanby IP4001(7) Mute
19	P3A/RTO00_0/TIOA0_1	POWER_H	P3A	O	X	X		L	L	H	System power ON/OFF(Low:Power off,High:Power On)
20	P3B/RTO01_0/TIOA1_1	CD_BUS2	P3B	I	X	X		L	L	H/L	receive data from CD DSP (Oasis (64) pin OUT)
21	P3C/RTO02_0/TIOA2_1	CD_BUS3	P3C	O	X	X		-	L	H/L	send command to CD DSP (Oasis (65)pin IN)
22	P3D/RTO03_0/TIOA3_1	CD_BUCK	P3D	O	X	X		L	L	H/L	communication clock with CD DSP
23	P3E/RTO04_0/TIOA4_1	CD_CCE	P3E	O	X	X		L	L	H/L	communication chip enable with CD DSP
24	P3F/RTO05_0/TIOA5_1	CD_DSP_RST	P3F	O	X	X		L	L	L	CD DSP reset "L"=Reset Init&Stby=L
25	VSS										
26	VCC										
27	P40/INT12_1/TIOA0_0/RTO10_1	RERR	INT12_1	I	X	X		-	L	H	DIR Error Interrupt Detection
28	P41/INT13_1/TIOA1_0/RTO11_1	DIR_IN	P41	I	X	X		-	L	H/L	DIR MISO
29	P42/TIOA2_0/RTO12_1	DIR_OUT	P42	O	X	X		L	L	H/L	DIR MOSI
30	P43/TIOA3_0/RTO13_1/ADTG_7	DIR_CLK	P43	O	X	X		L	L	H/L	DIR Clock
31	P44/TIOA4_0/RTO14_1/MAD00_1	DIR_CE	P44	O	X	X		L	L	H/L	DIR Chip Enable
32	P45/TIOA5_0/RTO15_1/MAD01_1	DIR_RST	P45	O	X	x		L	L	L	DIR Reset
33	C										
34	VSS										
35	VCC										
36	P46/X0A	XTAL1 SUB									X-tal(32.768kHz)
37	P47/X1A	XTAL2 SUB									X-tal(32.768KHz)
38	INITX	RESET									MCU RESET
39	P48/SIN3_2/INT14_1/DTT11X_1/MAD02_1	F_V_CS	P48	O	X	X		L	L	L	NJW1194 Chip Select
40	P49/SOT3_2/TIOB0_0/IC10_1/AIN0_1/MAD03_1	F_V_CLK	P49	O	X	X		L	L	H/L	NJW1194 Clock
41	P4A/SCK3_2/TIOB1_0/IC11_1/BIN0_1/MAD04_1	F_V_DATA	P4A	O	X	X		L	L	H/L	NJW1194 Data
42	P4B/TIOB2_0/IC12_1/ZIN0_1/MAD05_1	VFD_RST	P4B	O	X	X		L	L	L	VFD Reset
43	P4C/SCK7_1/TIOB3_0/IC13_1/AIN1_2/MAD06_1	VFD_DI	P4C	O	X	X		L	L	H/L	VFD Data
44	P4D/SOT7_1/TIOB4_0/FRCK1_1/BIN1_2/MAD07_1	VFD_CS	P4D	O	X	X		L	L	H/L	VFD Chip Select
45	P4E/SIN7_1/INT06_2/TIOB5_0/ZIN1_2/MAD08_1	VFD_CLK	P4E	O	X	X		L	L	H/L	VFD Clock
46	PE0/MD1	UPDATE_MD1	MD1	I	X	X		-	-	-	MCU update mode1 change(Low Fix)
47	MD0	UPDATE_MD0	MD0	I	X	100K		-	-	-	MCU update mode0 change(Low:Normal,High:Update)
48	PE2/X0	XTAL1									X-tal(4MHZ)
49	PE3/X1	XTAL2									X-tal(4MHZ)
50	VSS										
51	VCC										
52	P10/AN00	KEY0	AN00	I	10K	X		-	-	-	KEY1 INPUT
53	P11/AN01/SIN1_1/INT02_1/FRCK0_2/MAD09_1	KEY1	AN01	I	10K	X		-	-	-	KEY2 INPUT
54	P12/AN02/SOT1_1/IC00_2/MAD10_1	POWER_PROT	AN02	I	X	100K		-	L	H	Voltage Protect Detection
55	P13/AN03/SCK1_1/IC01_2/MAD11_1	LD_CHK	AN03	I	X	X		-	-	-	A/D mA C116(0.1uF)OK
56	P14/AN04/SIN0_1/INT03_1/IC02_2/MAD12_1	Model_option	AN04	I	X	X		-	-	-	Model Option
57	P15/AN05/SOT0_1/IC03_2/MAD13_1	Version_Option	AN05	I	X	X		-	-	-	Version Option
58	P16/AN06/SCK0_1/MAD14_1	BX8804_3V3	P16	O	X	X		L	L	H	BX8804 3.3V
59	P17/AN07/SIN2_2/INT04_1/MAD15_1	BX8804_1V2	P17	O	X	X		L	L	H	BX8804 1.2V
60	AVCC										
61	AVRH										
62	AVSS										
63	P18/AN08/SOT2_2/MAD16_1	USB_EN	P18	O	X	X		L	L	H	USB 5V Enable
64	P19/AN09/SCK2_2/MAD17_1	USB_OC	P19	I	O	X		-	L	H/L	USB Over Current Detect

pin No	Port Name	RCD-M40	Port	Use	Status						Note
			use		Pull-up	Pull-down	No Use	init	Eco stby	Act.	
65	P1A/AN10/SIN4_1/INT05_1/IC00_1/MAD18_1	FLT	P1A	O	X	X		L	L	H/L	DAC FILTER SELECT (NORMAL LATENCY "L", LOW LATENCY "H")
66	P1B/AN11/SOT4_1/IC01_1/MAD19_1	FMT	P1B	O	X	X		L	L	H/L	DAC FORMAT SELECT(I2S "L", LEFT JUSTIFIED "H")
67	P1C/AN12/SCK4_1/IC02_1/MAD20_1	DEMP	P1C	O	X	X		L	L	H/L	DAC DE-EMPHASIS CONTROL(OFF"L" ON "H")
68	P1D/AN13/CTS4_1/IC03_1/MAD21_1	XSMT	P1D	O	X	X		L	L	H/L	DAC SOFT MUTE : MUTE ON "L", OFF "H"
69	P1E/AN14/RTS4_1/DTTIOX_1/MAD22_1	-	P1E	O			OPEN	L	L	L	OPEN= I / O is set to O
70	P1F/AN15/ADTG_5/FRCK0_1/MAD23_1	-	P1F	O			OPEN	L	L	L	OPEN= I / O is set to O
71	P23/SCK0_0/TIOA7_1/RTO00_1	-	P23	O			OPEN	L	L	L	OPEN= I / O is set to O
72	P22/SOT0_0/TIOB7_1/ZIN1_1	UPDATE_TX	SOT0	O	X	X	OPEN	-	-	-	MCU uart update tx
73	P21/SIN0_0/INT06_1/BIN1_1	UPDATE_RX	WKUP2	I	10K	X	OPEN	-	-	-	MCU uart update rx
74	P20/INT05_0/CROUT_0/AIN1_1/MAD24_1	BX8804_RST	P20	O	X	X		L	L	L	BX8804 Reset
75	VSS										
76	VCC										
77	P00/TRSTX/MCSX7_1	JTRST	TRSTX	I	X	100K	OPEN	-	-	-	J-Link emulator
78	P01/TCK/SWCLK	JTCK	TCK	I	X	100K	OPEN	-	-	-	J-Link emulator
79	P02/TDI/MCSX6_1	JTDI	TDI	I	X	100K	OPEN	-	-	-	J-Link emulator
80	P03/TMS/SWDIO	JTMS	TMS	O	X	X	OPEN	-	-	-	J-Link emulator
81	P04/TDO/SWO	TDO	TDO	O	X	X	OPEN	-	-	-	J-Link emulator
82	P05/SIN4_2/INT00_1/TRACED0/TIOA5_2/MCSX5_1	EEPROM_SCL	P05	O	33K	X		L	-	-	EEPROM clock
83	P06/SOT4_2/INT01_1/TRACED1/TIOB5_2/MCSX4_1	EEPROM_SDA	P06	I/O	33K	X		L	-	-	EEPROM data
84	P07/SCK4_2/TRACED2/ADTG_0/MCLKOUT_1	HP_IN	P07	I	22K	X		L	L	L	Headphone Input Detection
85	P08/TRACED3/TIOA0_2/CTS4_2/MCSX3_1	SP_ON	P08	O	X	X		L	L	H	Speaker Mute(Active Low)
86	P09/TRACECLK/TIOB0_2/RTS4_2/MCSX2_1	SPK_OP	P09	O	X	X		L	L	H	Speaker Optimize Select(Low Active)
87	P0A/SIN4_0/INT00_2/FRCK1_0/MCSX1_1	BX8804_RX	P0A	I	X	X		-	L	H/L	BX8804 Uart RX
88	P0B/SOT4_0/TIOB6_1	BX8804_TX	P0B	O	X	X		L	L	H/L	BX8804 Uart TX
89	P0C/SCK4_0/TIOA6_1/IC11_0/MALE_1	LED_GREEN	P0C	O	X	X		H	H	L	Power LED (GRREN) Control "L" ON
90	P0D/RTS4_0/TIOA3_2/IC12_0/MDQM0_1	VOL_EN1(VOL-)	P0D	I	22K	X		-	L	H/L	Volume Encoder -
91	P0E/CTS4_0/TIOB3_2/IC13_0/MDQM1_1	VOL_EN2(VOL+)	P0E	I	22K	X		-	L	H/L	Volume Encoder +
92	P0F/NMIX/CROUT_1	LED_RED	P0F	O	X	X		H	H	L	ST LED(RED) Control "L" ON
93	P63/INT03_0/MWEX_1	-	P63	O			OPEN	L	L	L	OPEN= I / O is set to O
94	P62/SCK5_0/ADTG_3/MOEX_1	DAB_ON	P62	O	X	X		L	L	H	DAB Power ON
95	P61/SOT5_0/TIOB2_2/UHCONX	DAB_TX	P61	O	X	X		L	L	H/L	DAB Uart TX
96	P60/SIN5_0/INT15_1/TIOA2_2/MRDY_1	DAB_RX	P60	I	X	X		-	L	H/L	DAB Uart RX
97	USBVCC										
98	P80/UDM0	USB_DN	UDM0	I/O						H/L	USB -
99	P81/UDP0	USB_DP	UDP0	I/O						H/L	USB +
100	VSS										

BX8804 (DIGITAL : IC31)



BX8804 Terminal Function

Pin	Name	Type	Description	Alternative Function
1	ADIN1	I	ADC analog input[1]	
2	ADIN0	I	ADC analog input[0]	
3	AVDD33	P	ADC Analog Power supply (3.3V)	
4	AVSS33	P	ADC Analog Ground	
5	GP00	BD	General Purpose IO 00	External Interrupt 0
6	GP01	BD	General Purpose IO 01	External Interrupt 1
7	D0	B	External SDRAM data bus [0]	External program data bus [0]
8	D8	B	External SDRAM data bus [8]	External program data bus [8]
9	D1	B	External SDRAM data bus [1]	External program data bus [1]
10	D9	B	External SDRAM data bus [9]	External program data bus [9]
11	D2	B	External SDRAM data bus [2]	External program data bus [2]
12	D10	B	External SDRAM data bus [10]	External program data bus [10]
13	D3	B	External SDRAM data bus [3]	External program data bus [3]
14	VDD12	P	Digital power supply (1.2V)	
15	VSS12	P	Digital Ground	
16	NC		Not Connected	
17	D11	B	External SDRAM data bus [11]	External program data bus [11]
18	D4	B	External SDRAM data bus [4]	External program data bus [4]
19	D12	B	External SDRAM data bus [12]	External program data bus [12]
20	D5	B	External SDRAM data bus [5]	External program data bus [5]
21	D13	B	External SDRAM data bus [13]	External program data bus [13]
22	D6	B	External SDRAM data bus [6]	External program data bus [6]
23	D14	B	External SDRAM data bus [14]	External program data bus [14]
24	D7	B	External SDRAM data bus [7]	External program data bus [7]
25	D15	B	External SDRAM data bus [15]	External program data bus [15]
26	AD0	O	External SDRAM address bus [0]	External program address bus [0]
27	AD1	O	External SDRAM address bus [1]	External program address bus [1]
28	AD2	O	External SDRAM address bus [2]	External program address bus [2]
29	IOVDD33	P	I/O Power supply (3.3V)	
30	IOVSS33	P	I/O Ground	
31	AD3	O	External SDRAM address bus [3]	External program address bus [3]
32	AD4	O	External SDRAM address bus [4]	External program address bus [4]
33	AD5	O	External SDRAM address bus [5]	External program address bus [5]
34	AD6	O	External SDRAM address bus [6]	External program address bus [6]
35	AD7	O	External SDRAM address bus [7]	External program address bus [7]
36	AD8	O	External SDRAM address bus [8]	External program address bus [8]
37	AD9	O	External SDRAM address bus [9]	External program address bus [9]
38	AD10	O	External SDRAM address bus [10]	External program address bus [10]
39	AD11	O	External SDRAM address bus [11]	External program address bus [11]
40	AD12	O	External SDRAM address bus [12]	External program address bus [12]
41	BA0	O	External SDRAM Bank selector 0	External program address bus [13]

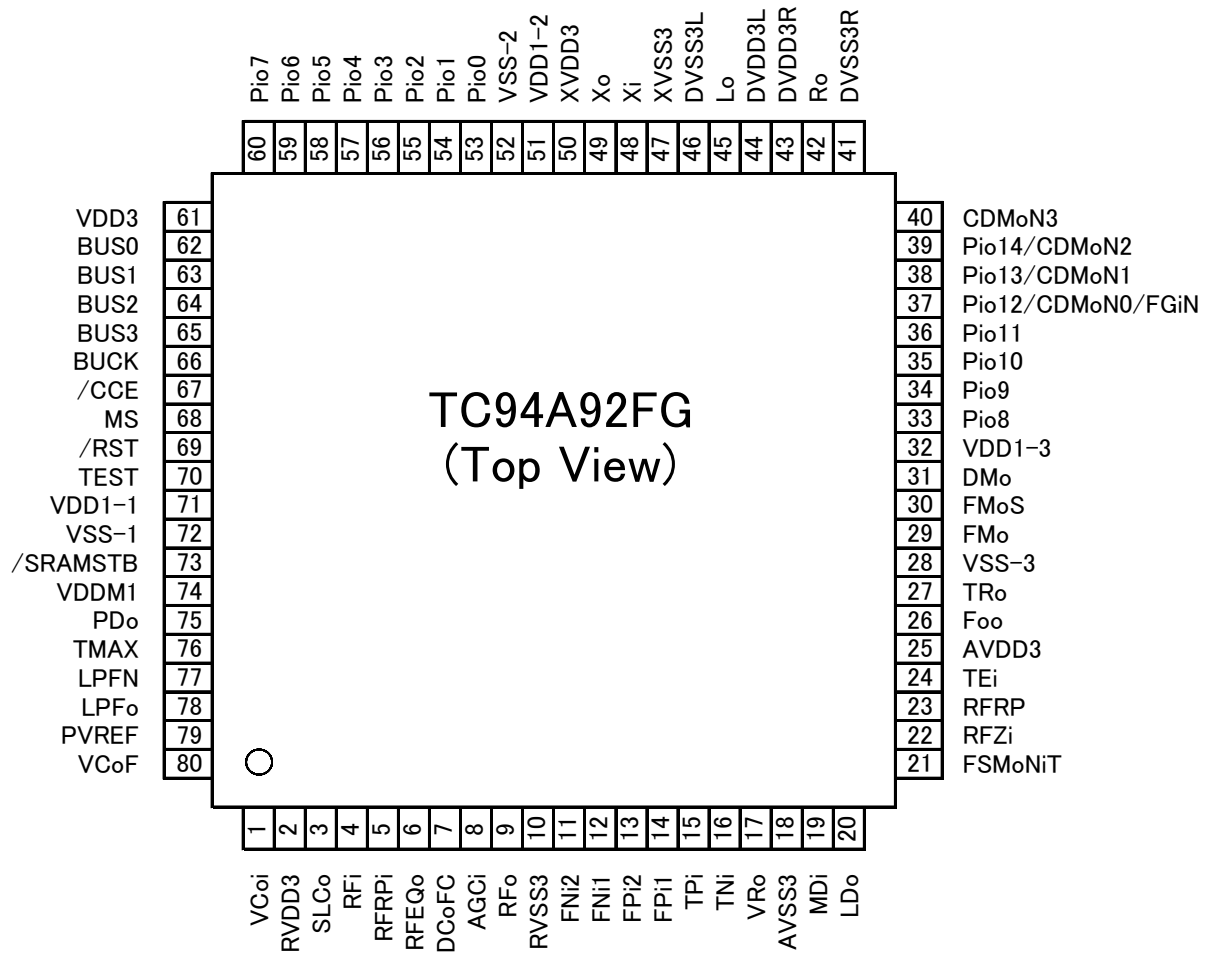
42	BA1	O	External SDRAM Bank selector 1	External program address bus [14]
43	LDQM	O	SDRAM Lower byte data mask	External program address bus [15]
44	UDQM	O	SDRAM Upper byte data mask	External program address bus [16]
45	SDCSN	O	SDRAM Chip select	
46	VDD12	P	Digital power supply (1.2V)	
47	VSS12	P	Digital Ground	
48	CKE	O	SDRAM clock enable	
49	RASN	O	SDRAM RAS	
50	IOVDD33	P	I/O Power supply (3.3V)	
51	IOVSS33	P	I/O Ground	
52	SDCLK	O	SDRAM clock	
53	CASN	O	SDRAM CAS	
54	WEN	O	SDRAM WEN	
55	EAD17	B	External memory address[17]	General Purpose IO 37
56	EAD18	B	External memory address[18]	General Purpose IO 38
57	EAD19	B	External memory address[19]	General Purpose IO 39
58	EAD20	B	External memory address[20]	General Purpose IO 40
				Bootling Mode
59	EWEN	B	External memory WEN	General Purpose IO 41
60	EOEN	B	External memory OEN	General Purpose IO 42
61	ECSN	O	External memory CSN	
62	GP03	B	General Purpose IO 03	External Clock (16.9344MHz)
63	GP04	B	General Purpose IO 04	SPI0 CS
64	GP05	B	General Purpose IO 05	SPI0 CK
65	GP06	B	General Purpose IO 06	SPI0 MISO
66	GP07	B	General Purpose IO 07	SPI0 MOSI
67	GP08	B	General Purpose IO 08	HUART0 DI
68	GP09	B	General Purpose IO 09	HUART0 DO
69	GP10	B	General Purpose IO 10	HUART0 RTS
				External Interrupt 11
70	GP11	B	General Purpose IO 11	HUART0 CTS
				External Interrupt 12
71	GP12	B	General Purpose IO 12	Chip Select 1 When GP12 is used for CS1, the external pull-up resistor (48 kΩ) has to be connected with this pin
72	GP13	B	General Purpose IO 13	UART0 RX Data
				External Interrupt 8
73	GP14	B	General Purpose IO 14	UART0 TX Data
				External Interrupt 9
74	GP15	B	General Purpose IO 15	UART1 RX Data
				I2C SCL
75	GP16	B	General Purpose IO 16	UART1 TX Data
				I2C SDA
76	GP17	B	General Purpose IO 17	SPI1 CS
77	GP18	B	General Purpose IO 18	SPI1 CK

78	GP19	B	General Purpose IO 19	SPI1 MISO
79	GP20	B	General Purpose IO 20	SPI1 MOSI
80	GP21	B	General Purpose IO 21	External Interrupt 3 SPI2 CS
81	DDATA	O	Audio serial data for external DAC	
82	IOVDD33	P	I/O Power supply (3.3V)	
83	IOVSS33	P	I/O Ground	
84	DMCK	O	Master clock for external DAC	
85	DBCK	O	Audio serial data Bit clock	
86	DLRCK	O	Audio serial data frame clock	
87	GP22	B	General Purpose IO 22	Chip Select 2 When GP22 is used for CS2, the external pull-up resistor (48 k Ω) has to be connected with this pin External Interrupt 4
88	GP23	B	General Purpose IO 23	HUART1 DI
89	GP24	B	General Purpose IO 24	HUART1 DO
90	GP25	B	General Purpose IO 25	External Interrupt 5 SPI2 CK
91	GP26	B	General Purpose IO 26	External Interrupt 6 SPI2 MISO
92	GP27	B	General Purpose IO 27	External Interrupt 7 SPI2 MOSI
93	GP28	B	General Purpose IO 28	Wake-UP When GP28 is used for WAKE-UP signal input pin, the external pull-down resistor (48k Ω) has to be connected with this pin.
94	TDI	B	JTAG TDI input When GP43 is used for TDI of JTAG, the external pull-up resistor (48k Ω) has to be connected with this pin.	General Purpose IO 43
95	VDD12	P	Digital power supply (1.2V)	
96	VSS12	P	Digital Ground	
97	TDO	B	JTAG TDO Output When GP44 is used for TDO of JTAG, the external pull-up resistor (48k Ω) has to be connected with this pin.	General Purpose IO 44
98	TMS	B	JTAG TMS input When GP45 is used for TMS of JTAG, the external pull-up resistor (48k Ω) has to be connected with this pin.	General Purpose IO 45
99	TCK	I	JTAG Clock Input	
100	GP29	B	General Purpose IO 29	CDDSP SCOR0

101	GP30	B	General Purpose IO 30	CDDSP BCLK0
102	GP31	B	General Purpose IO 31	CDDSP DATA0
103	GP32	B	General Purpose IO 32	CDDSP LRCK0
104	GP33	B	General Purpose IO 33	SBDT0
105	GP34	B	General Purpose IO 34	SBCK
106	GP35	B	General Purpose IO 35	Timer0 Output
				External Interrupt 10
107	GP36	B	General Purpose IO 36	External UCLK
108	RESETN	I	System Reset	
109	NTRST	I	JTAG NRST Input When NTRSR is used for Reset of JTAG, the external pull-up resistor (48k Ω) has to be connected with this pin.	
110	IOVSS33	P	I/O Ground	
111	TEST	I	Test	
112	XI	I	System clock input	
113	XO	O	System clock output	
114	IOVDD33	P	I/O Power supply (3.3V)	
115	IOVSS33	P	I/O Ground	
116	USBVDD33	P	USB Power supply (3.3V)	
117	USBDP	B	USB D+	
118	USBDM	B	USB D-	
119	USBVSS33	P	USB Ground (3.3V)	
120	PLL3VSS12	P	PLL3 Ground (1.2V)	
121	PLL3VDD12	P	PLL3 Power supply (1.2V)	
122	PLL2VSS12	P	PLL2 Ground (1.2V)	
123	PLL2VDD12	P	PLL2 Power supply (1.2V)	
124	PLL1VSS12	P	PLL1 Ground (1.2V)	
125	PLL1VDD12	P	PLL1 Power supply (1.2V)	
126	ADIN4	I	ADC analog input[4]	
127	ADIN3	I	ADC analog input[3]	
128	ADIN2	I	ADC analog input[2]	

Note: Pin type 'D' means open drain output

TC94A92FG (DIGITAL : IC21)



The diagram illustrates the internal architecture of the TDA1147H, a 16-bit digital video decoder. The system is organized into several main functional blocks:

- Input and Control Section:** Includes pins for SLC0, RFI, RVDD3, RVSS3, RFRPi, AGCi, DCoFc, RFEQo, RFo, FNI2, FNI1, FPI2, FPI1, VREF, PVREF, VRo, LD0, MDi, TPi, TNi, and TEi. These connect to various control and input blocks like the EFM slicer, VCO, PLL, and DSP-VCO.
- Video Processing Core:** The central part of the chip, featuring a DSP-VCO, PLL, SRAM (512kbit), and a complex ALU/MAC structure. It includes a 4KB SRAM, a 10-bit ADC, a 5-bit DAC, and a PWM block. The core is connected to a 16-bit DA converter and a multi-bit DAC.
- Output and Interface Section:** Includes pins for VDD1, VSS1, VDD3, and VSS3. It features a multi-bit DA converter, a 16.9MHz oscillator, and a multi-bit DAC. The output section also includes a multi-bit DAC and a multi-bit DAC.
- Internal Blocks and Connections:** The diagram shows a dense network of internal connections between various blocks, including a 10-bit ADC, a 5-bit DAC, a PWM block, a multi-bit DAC, and a multi-bit DAC. It also shows the connection of various pins to internal blocks, such as VDD1, VSS1, and VDD3.

TC94A92FG Terminal Function

Pin No.	Symbol	I/O	Description	Default	Remarks
1	VCoI	O 3A/I/F	DSP VCO - EFM and PLCK Phase difference signal output pin. (DSP VCO control voltage input pin.)	O	3 state output
2	RVDD3	-	CD-DSP-Power supply for 3.3V RF amplifier core and PLL circuit	-	
3	SLCo	O 3A/I/F	EFM slice level output pin	O	Connect capacitor according with servo frequency band.
4	RFi	I 3A/I/F	RF signal input pin	I	Selectable Zin 20/10 kΩ
5	RFRPi	I 3A/I/F	RF ripple signal input pin	I	
6	RFEQo	O 3A/I/F	RF equalizer circuit output pin.	O	Connect to RFRPi by 0.1uF, to RFi by 4700pF.
7	DCoFC	O 3A/I/F	RFEQo offset compensation LPF output	O	Connect to Vro by more than 0.015uF
8	AGCi	I 3A/I/F	RF signal AGC amplifier input pin	I	
9	RFo	O 3A/I/F	RF signal generation amplifier output pin	O	
10	RVSS3	-	Grounding pin for 3.3 RF amplifier core and PLL circuit	-	
11	FNI2	I 3A/I/F	Main beam signal input pin. To be connected to PIN diode C.	I	
12	FNI1	I 3A/I/F	Main beam signal input pin. To be connected to PIN diode A.	I	
13	FPI2	I 3A/I/F	Main beam signal input pin. To be connected to PIN diode D.	I	
14	FPI1	I 3A/I/F	Main beam signal input pin. To be connected to PIN diode B.	I	
15	TPi	I 3A/I/F	Sub beam signal input pin. To be connected to PIN diode F.	I	
16	TNi	I 3A/I/F	Sub beam signal input pin. To be connected to PIN diode E.	I	
17	VRo	O 3A/I/F	1.65 V reference voltage output pin.	O	Connected to PVREF, And connect to GNG by 0.1uF+100uF.
18	AVSS3	-	Grounding pin for 3.3V CD analog circuits.	-	
19	MDi	I 3A/I/F	Monitor photodiode amplifier input pin.	I	Reference Voltage=178mVtyp.
20	LDo	O 3A/I/F	Laser diode amplifier output pin	O	

Pin No.	Symbol	I/O	Description	Default	Remarks
21	FSMoNiT	O 3A/I/F	Focus Error signal / Sub beam add signal output pin(monitor pin/GND)	O	
22	RFZi	I 3A/I/F	RF ripple zero-cross signal Input pin	I	
23	RFRP	O 3A/I/F	RF ripple signal output pin.	O	
24	TEi	O 3A/I/F	Tracking error signal output pin.	O	Built-in series R=500Ω. Connect to VRo by capacitor.
25	AVDD3	-	Power supply pin for 3.3 V CD analog circuits.	-	
26	FOo	O 3A/I/F	Focus servo equalizer output pin.	O	Built-in series R=3.3 kΩ
27	TRo	O 3A/I/F	Tracking servo equalizer output pin.	O	Built-in output R=3.3 kΩ
28	VSS-3	-	Grounding pin for 1.5V Decoder-DSP CD circuit	-	
29	FMo	O 3A/I/F	Feed servo equalizer output pin.	O	Built-in output R=3.3 kΩ
30	FMoS	O 3A/I/F	Feed servo equalizer output pin. (Stepper motor application)	O	Built-in output R=3.3 kΩ
31	DMo	O 3A/I/F	Disc servo equalizer output pin	O	Built-in output R=3.3 kΩ
32	VDD1-3	I/O 3I/F	Power supply pin for 1.5V Decoder-DSP /CD circuit	-	
33	Pio8	I/O 3I/F	Port 8 (General Input/Output Port)	I	CMOS Port Schmitt input Refer to [1.2 Pin Assignment Table]
34	Pio9	I/O 3I/F	Port 9 (General Input/Output Port)	I	CMOS Port Schmitt input Refer to [1.2 Pin Assignment Table]
35	Pio10	I/O 3I/F	Port 10 (General Input/Output Port)	I	CMOS Port Schmitt input Refer to [1.2 Pin Assignment Table]
36	Pio11	I/O 3I/F	Port 11 (General Input/Output Port)	I	CMOS Port Schmitt input Refer to [1.2 Pin Assignment Table]
37	Pio12/ CDMoN0/ FGiN	I/O 3I/F	Port 12 (General Input/Output Port) / CD Monitor 0 / FG signal input	I	CMOS Port Schmitt input Refer to [1.2 Pin Assignment Table]
38	Pio13/ CDMoN1	I/O 3I/F	Port 13 (General Input/Output Port) / CD Monitor1	I	CMOS Port Schmitt input Refer to [1.2 Pin Assignment Table]
39	Pio14/ CDMoN2	I/O 3I/F	Port 14 (General Input/Output Port) / CD Monitor 2	I	CMOS Port Schmitt input Refer to [1.2 Pin Assignment Table]
40	CDMoN3	O 3I/F	CD Monitor3 (Default output : SBSY)	O	CMOS Port Refer to [1.2 Pin Assignment Table]

Pin No.	Symbol	I/O	Description	Default	Remarks
41	DVSS3R	-	Grounding pin for 3.3V Multi-Bit DAC circuit	-	
42	Ro	O 3A/I/F	R channel audio output pin of Audio DAC.	O	
43	DVDD3R	-	Power supply pin for 3.3V Audio DAC circuit.	-	
44	DVDD3L	-	Power supply pin for 3.3V Audio DAC circuit.	-	
45	Lo	O 3A/I/F	L channel audio output pin of Audio DAC	O	
46	DVSS3L	-	Grounding pin for 3.3V Multi-Bit DAC Circuit	-	
47	XVSS3	-	Grounding pin for 3.3V clock oscillator circuit	-	
48	Xi	I 3A/I/F	System clock Input pin	I	Xtal oscillation circuit. Connect feedback resistor 1 M Ω between Xo and Xi
49	Xo	O 3A/I/F	System clock Output pin	O	
50	XVDD3	-	Power Supply pin for 3.3V clock oscillator circuit	-	
51	VDD1-2	-	Power Supply pin for 1.5V Digital circuit	-	
52	VSS-2	-	Grounding pin for 1.5V digital circuit	-	
53	Pio0	I/O 3I/F	Port 0 (General Input/Output Port)	I	CMOS Port Schmitt input Refer to [1.2 Pin Assinment Table]
54	Pio1	I/O 3I/F	Port 1 (General Input/Output Port)	I	CMOS Port Schmitt input Refer to [1.2 Pin Assinment Table]
55	Pio2	I/O 3I/F	Port 2 (General Input/Output Port)	I	CMOS Port Schmitt input Refer to [1.2 Pin Assinment Table]
56	Pio3	I/O 3I/F	Port 3 (General Input/Output Port)	I	CMOS Port Schmitt input Refer to [1.2 Pin Assinment Table]
57	Pio4	I/O 3I/F	Port 4 (General Input/Output Port)	I	CMOS Port Schmitt input Refer to [1.2 Pin Assinment Table]
58	Pio5	I/O 3I/F	Port 5 (General Input/Output Port)	I	CMOS Port Schmitt input Refer to [1.2 Pin Assinment Table]
59	Pio6	I/O 3I/F	Port 6 (General Input/Output Port)	I	CMOS Port Schmitt input Refer to [1.2 Pin Assinment Table]
60	Pio7	I/O 3I/F	Port 7 (General Input/Output Port)	I	CMOS Port Schmitt input Refer to [1.2 Pin Assinment Table]

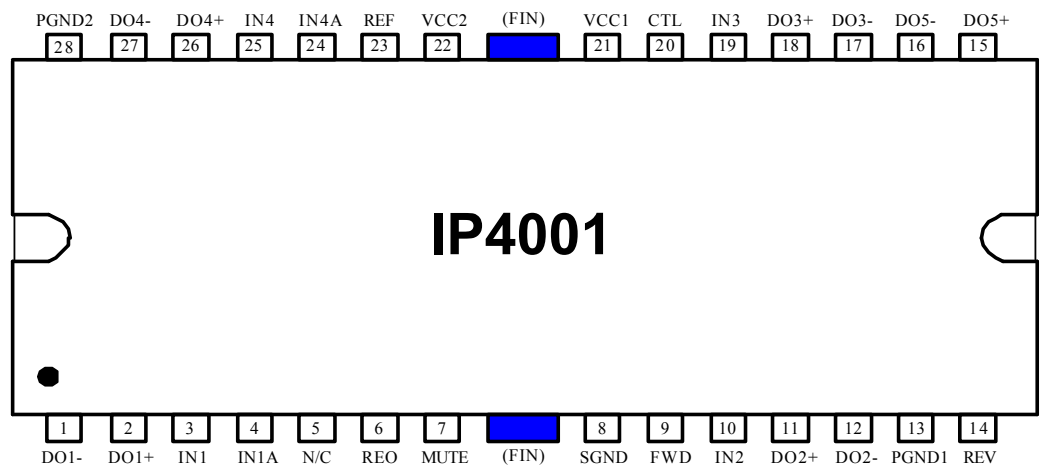
Pin No.	Symbol	I/O	Description	Default	Remarks
61	VDD3	-	Power Supply pin for 3.3V Digital circuit	-	
62	BUS0	I/O 3I/F	Microprocessor I/F data input/output pin 0	I	CMOS Port Schmitt input Refer to [1.2 Pin Assignment Table]
63	BUS1	I/O 3I/F	Microprocessor I/F data input/output pin 1	I	CMOS Port Schmitt input Refer to [1.2 Pin Assignment Table]
64	BUS2	I/O 3I/F	Microprocessor I/F data input/output pin 2	I	CMOS Port Schmitt input Refer to [1.2 Pin Assignment Table]
65	BUS3	I/O 3I/F	Microprocessor I/F data input/output pin 3	I	CMOS Port Schmitt input Refer to [1.2 Pin Assignment Table]
66	BUCK	I 3I/F	Microprocessor I/F BUS clock Input pin	I	Schmitt input Refer to [1.2 Pin Assignment Table]
67	/CCE	I 3I/F	Microprocessor I/F chip enable input pin	I	Schmitt input Refer to [1.2 Pin Assignment Table]
68	MS	I 3I/F	Microprocessor I/F mode selection pin. "H": Parallel I/F, "L": Serial I/F	I	Refer to [1.2 Pin Assignment Table]
69	/RST	I 3I/F	Reset Input pin	I	Schmitt input
70	Test	I 3I/F	Test pin ("L" fixed)	I	Connect to GND for normal operation
71	VDD1-1	-	Power Supply pin for 1.5V Digital circuit	-	
72	VSS-1	-	Grounding pin for 1.5V Digital circuit	-	
73	/SRAMSTB	I 3I/F	1Mbit SRAM stand by pin (/SRAMSTB="L")	I	
74	VDDM1	-	Power Supply for 1.5V 1Mbit SRAM circuit	-	
75	PDo	O 3AI/F	EFM and PLOCK Phase difference signal output pin.	O	4-state output (RVDD3, RVSS3,PVREF, Hiz)
76	TMAX	O 3AI/F	TMAX detection result output pin	O	3-state output (RVDD3, RVSS3, Hiz)
77	LPFN	I 3AI/F	PLL circuit LPF amplifier inversion input pin	I	
78	LPFo	O 3AI/F	PLL circuit LPF amplifier Output pin	O	
79	PVREF	-	PLL circuit 1.65 V reference voltage pin.	-	Connected to VRO. Connect to GND by 0.1uF and 100uF.
80	VCoF	O 3AI/F	VCO filter pin	O	Connect to GND by 0.01uF

3A I/F : 3 V analog circuit input/output pin.

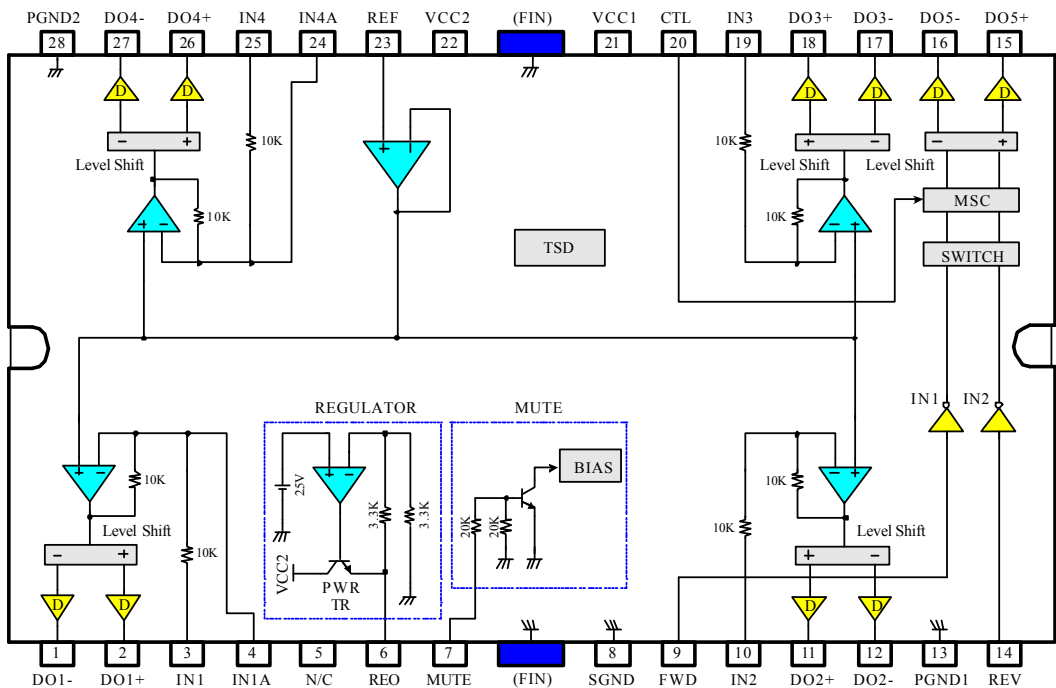
1.5 I/F : 1.5Vdigital input/output pin.

3 I/F : 3 V digital input/output pin.

CVIIP4001CRLTF (DIGITAL : IC24)



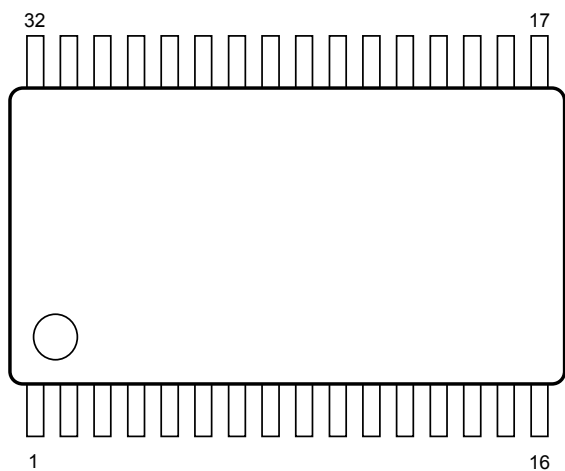
CVIIP4001CRLTF Block Diagram



CVIIP4001CRLTF Pin Discriptions

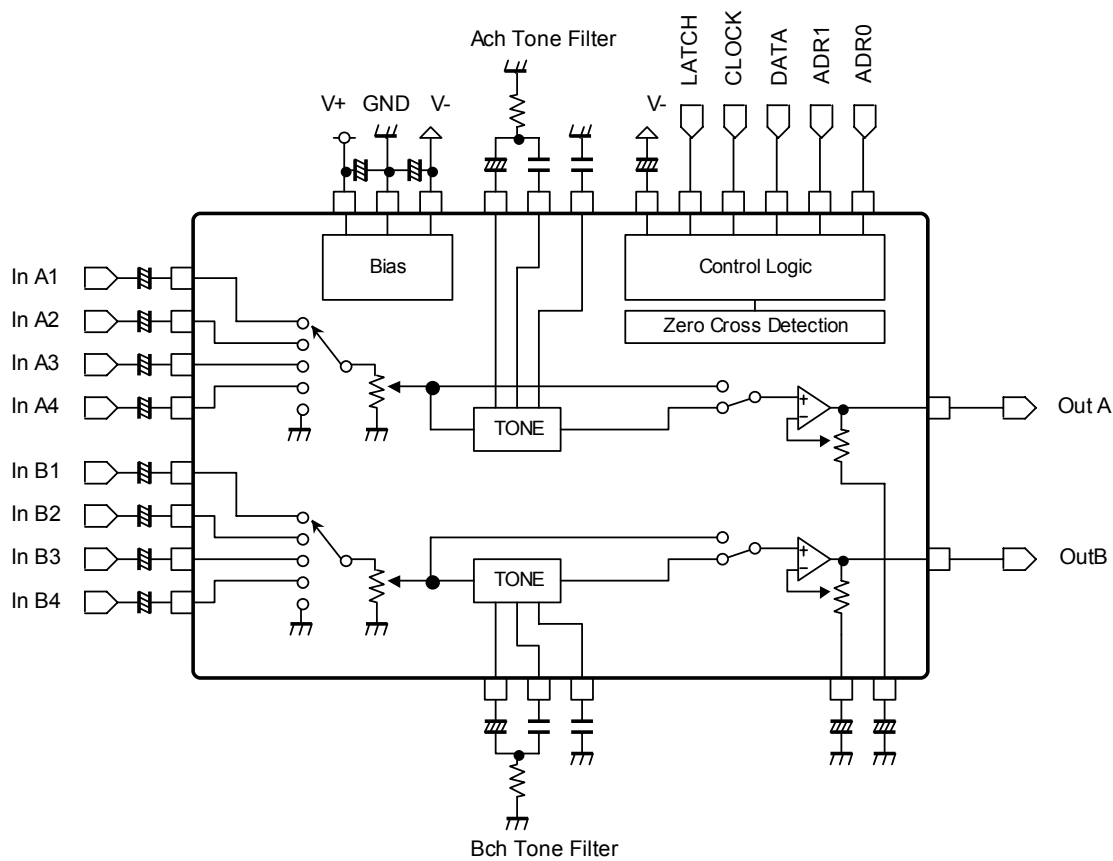
NO	SYMBOL	I/O	DESCRIPTION	NO	SYMBOL	I/O	DESCRIPTION
1	DO1-	O	CH1 OUTPUT (-)	15	DO5+	O	CH5 OUTPUT (+)
2	DO1+	O	CH1 OUTPUT (+)	16	DO5-	O	CH5 OUTPUT (-)
3	IN1	I	CH1 INPUT 1	17	DO3-	O	CH3 OUTPUT (-)
4	IN1A	I	CH1 INPUT 2	18	DO3+	O	CH3 OUTPUT (+)
5	N / C	-	NO-CONNECTION	19	IN3	I	CH3 INPUT
6	REO	O	REGULATOR OUTPUT	20	CTL	I	CH5 MOTOR SPEED CONTROL
7	MUTE	I	MUTE INPUT	21	VCC1	I	SUPPLY VOLTAGE 1 (CH2,CH3,CH5)
8	SGND	-	SIGNAL GROUND	22	VCC2	I	SUPPLY VOLTAGE 2 (CH1,CH4,SIGNAL,REG)
9	FWD	I	CH5 INPUT 1	23	REF	I	CH BIAS INPUT
10	IN2	I	CH2 INPUT	24	IN4A	I	CH4 INPUT 1
11	DO2+	O	CH2 OUTPUT (+)	25	IN4	I	CH4 INPUT 2
12	DO2-	O	CH2 OUTPUT (-)	26	DO4+	O	CH4 OUTPUT (+)
13	PGND1	-	POWER GROUND 1	27	DO4-	O	CH4 OUTPUT (-)
14	REV	I	CH5 INPUT 2	28	PGND2	-	POWER GROUND 2

NJW1194V (INPUT : IC53)



No.	Pin Name	No.	Pin Name
1	InA1	17	Tone_Ba2b
2	InA2	18	Tone_Ba1b
3	InA3	19	Tone_Tr1b
4	InA4	20	GND
5	GND	21	V -
6	DCCAP_A	22	V +
7	GND	23	ADR0
8	OutA	24	ADR1
9	VDDOUT	25	OutB
10	DATA	26	GND
11	CLOCK	27	DCCAP_B
12	LATCH	28	GND
13	GND	29	InB4
14	Tone_Tr1a	30	InB3
15	Tone_Ba1a	31	InB2
16	Tone_Ba2a	32	InB1

NJW1194V Block Diagram



PCM5100 PWR (INPUT : IC52)(DIGITAL : IC36)

PCM510X (top view)

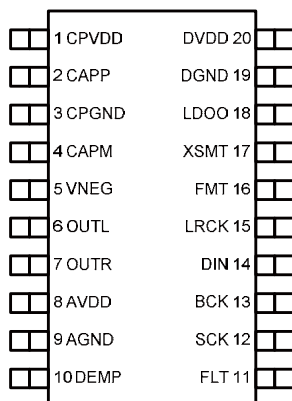


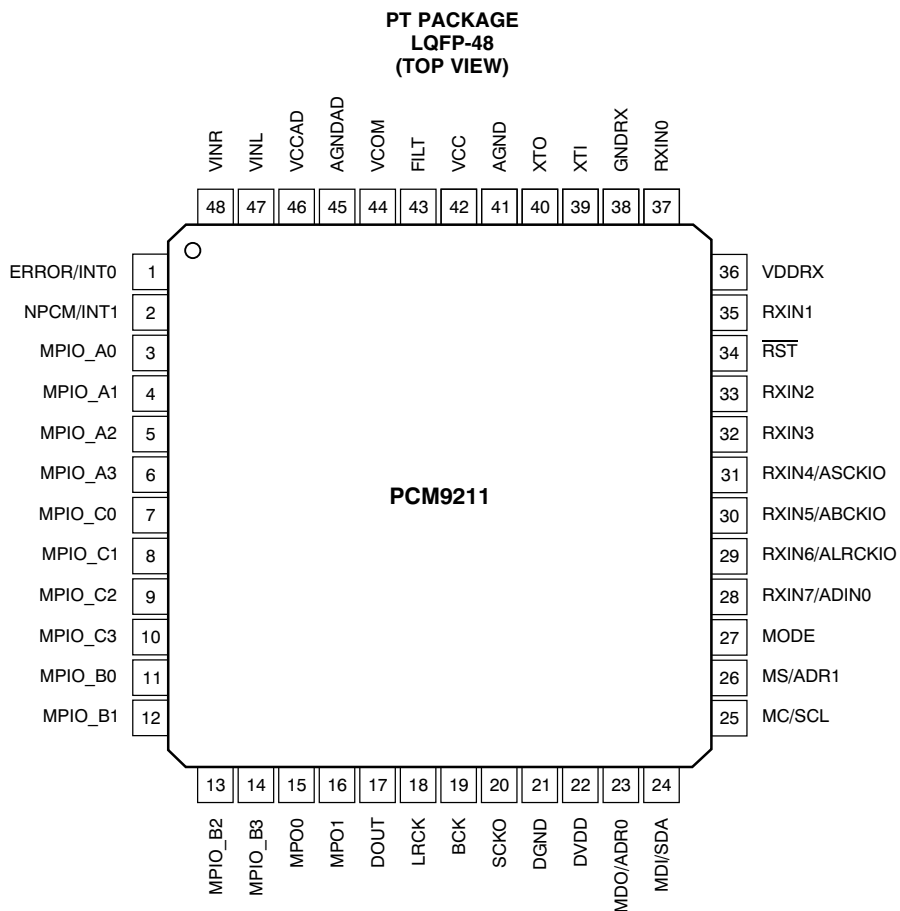
Table 2. TERMINAL FUNCTIONS, PCM510x

TERMINAL		I/O	DESCRIPTION
NAME	NO.		
CPVDD	1	-	Charge pump power supply, 3.3V
CAPP	2	O	Charge pump flying capacitor terminal for positive rail
CPGND	3	-	Charge pump ground
CAPM	4	O	Charge pump flying capacitor terminal for negative rail
VNEG	5	O	Negative charge pump rail terminal for decoupling, -3.3V
OUTL	6	O	Analog output from DAC left channel
OUTR	7	O	Analog output from DAC right channel
AVDD	8	-	Analog power supply, 3.3V
AGND	9	-	Analog ground
DEMP	10	I	De-emphasis control for 44.1kHz sampling rate ⁽¹⁾ : Off (Low) / On (High)
FLT	11	I	Filter select : Normal latency (Low) / Low latency (High)
SCK	12	I	System clock input
BCK	13	I	Audio data bit clock input
DIN	14	I	Audio data input
LRCK	15	I	Audio data word clock input
FMT	16	I	Audio format selection : I ² S (Low) / Left justified (High)
XSMT	17	I	Soft mute control : Soft mute (Low) / soft un-mute (High)
LDOO	18	-	Internal logic supply rail terminal for decoupling
DGND	19	-	Digital ground
DVDD	20	-	Digital power supply, 3.3V

(1) Failsafe LVCMOS Schmitt trigger input

DIR PCM9211 (INPUT : IC51)

PIN CONFIGURATIONS



PIN FUNCTIONS

PIN				DESCRIPTION
NO.	NAME	I/O	5-V TOLERANT	
1	ERROR/INT0	O	No	DIR Error detection output / Interrupt0 output
2	NPCM/INT1	O	No	DIR Non-PCM detection output / Interrupt1 output
3	MPIO_A0	I/O	Yes	Multipurpose I/O, Group A ⁽¹⁾
4	MPIO_A1	I/O	Yes	Multipurpose I/O, Group A ⁽¹⁾
5	MPIO_A2	I/O	Yes	Multipurpose I/O, Group A ⁽¹⁾
6	MPIO_A3	I/O	Yes	Multipurpose I/O, Group A ⁽¹⁾
7	MPIO_C0	I/O	Yes	Multipurpose I/O, Group C ⁽¹⁾
8	MPIO_C1	I/O	Yes	Multipurpose I/O, Group C ⁽¹⁾
9	MPIO_C2	I/O	Yes	Multipurpose I/O, Group C ⁽¹⁾
10	MPIO_C3	I/O	Yes	Multipurpose I/O, Group C ⁽¹⁾
11	MPIO_B0	I/O	Yes	Multipurpose I/O, Group B ⁽¹⁾
12	MPIO_B1	I/O	Yes	Multipurpose I/O, Group B ⁽¹⁾
13	MPIO_B2	I/O	Yes	Multipurpose I/O, Group B ⁽¹⁾
14	MPIO_B3	I/O	Yes	Multipurpose I/O, Group B ⁽¹⁾
15	MPO0	O	No	Multipurpose output 0

PIN				DESCRIPTION
NO.	NAME	I/O	5-V TOLERANT	
16	MPO1	O	No	Multipurpose output 1
17	DOUT	O	No	Main output port, serial digital audio data output
18	LRCK	O	No	Main output port, LR clock output
19	BCK	O	No	Main output port, Bit clock output
20	SCKO	O	No	Main output port, System clock output
21	DGND	–	–	Ground, for digital
22	DVDD	–	–	Power supply, 3.3 V (typ.), for digital
23	MDO/ADR0	I/O	Yes	Software control I/F, SPI data output / I ² C slave address setting ⁽²⁾
24	MDI/SDA	I/O	Yes	Software control I/F, SPI data input / I ² C data input/output ⁽²⁾⁽³⁾
25	MC/SCL	I	Yes	Software control I/F, SPI clock input / I ² C clock input ⁽²⁾
26	MS/ADR1	I	Yes	Software control I/F, SPI chip select / I ² C slave address setting ¹⁽²⁾
27	MODE	I	No	Control mode setting, (see the Serial Control Mode section, Control Mode Pin Setting)
28	RXIN7/ADIN0	I	Yes	Biphase signal, input 7 / AUXIN0, serial audio data input ⁽²⁾
29	RXIN6/ALRCKI0	I	Yes	Biphase signal, input 6 / AUXIN0, LR clock input ⁽²⁾
30	RXIN5/ABCKI0	I	Yes	Biphase signal, input 5 / AUXIN0, bit clock input ⁽²⁾
31	RXIN4/ASCKI0	I	Yes	Biphase signal, input 4 / AUXIN0, system clock input ⁽²⁾
32	RXIN3	I	Yes	Biphase signal, input 3 ⁽²⁾
33	RXIN2	I	Yes	Biphase signal, input 2 ⁽²⁾
34	$\overline{\text{RST}}$	I	Yes	Reset Input, active low ⁽²⁾⁽⁴⁾
35	RXIN1	I	Yes	Biphase signal, input 1, built-in coaxial amplifier
36	VDDRX	–	–	Power supply, 3.3 V (typ.), for RXIN0 and RXIN1.
37	RXIN0	I	Yes	Biphase signal, input 0, built-in coaxial amplifier
38	GNDRX	–	–	Ground, for RXIN
39	XTI	I	No	Oscillation circuit input for crystal resonator or external XTI clock source input ⁽⁵⁾
40	XTO	O	No	Oscillation circuit output for crystal resonator
41	AGND	–	–	Ground, for PLL analog
42	VCC	–	–	Power supply, 3.3 V (typ.), for PLL analog
43	FILT	O	No	External PLL loop filter connection terminal; must connect recommended filter
44	VCOM	O	No	ADC common voltage output; must connect external decoupling capacitor
45	AGNDAD	–	–	Ground, for ADC analog
46	VCCAD	–	–	Power supply, 5.0 V (typ.), for ADC analog
47	VINL	I	No	ADC analog voltage input, left channel
48	VINR	I	No	ADC analog voltage input, right channel

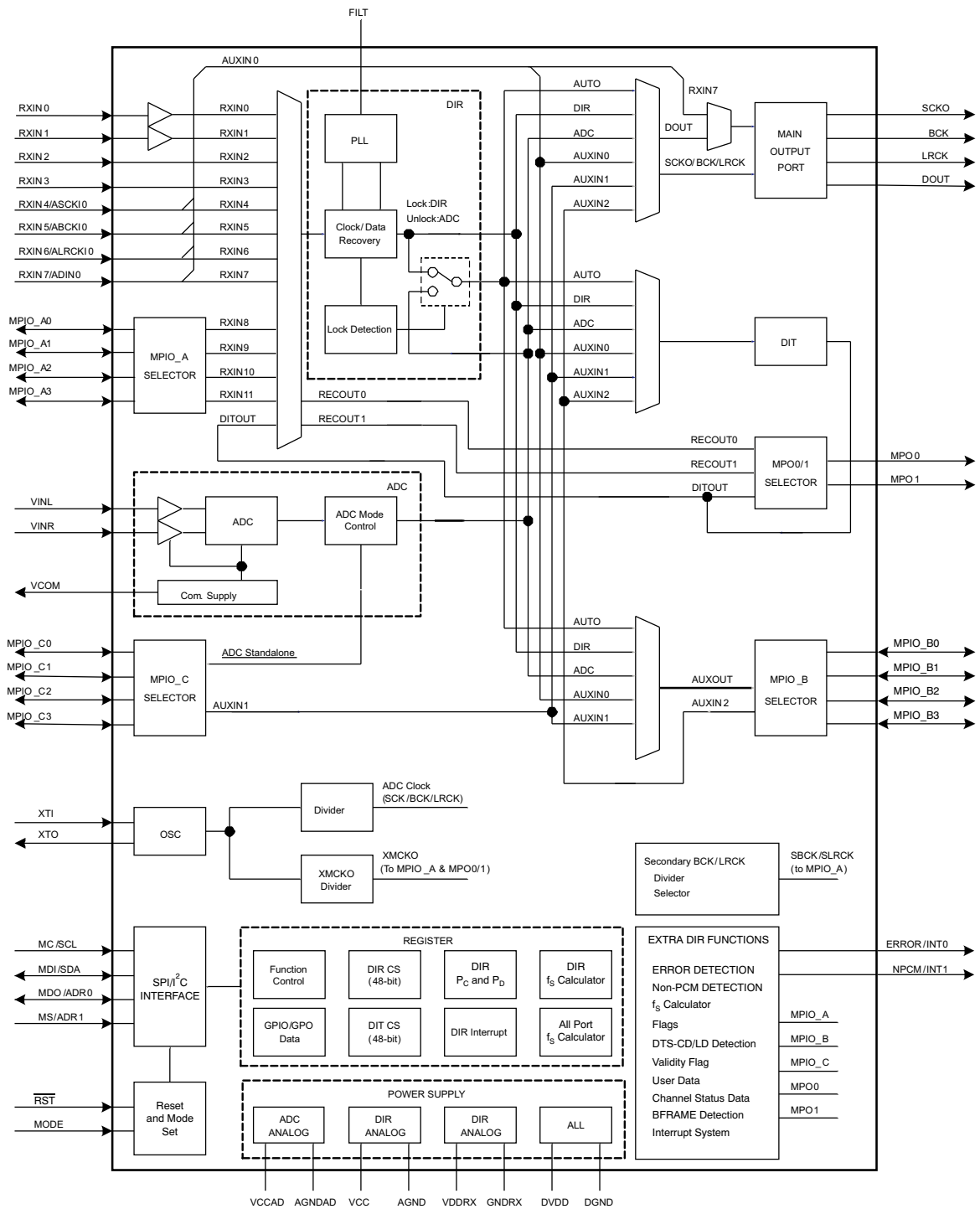
(2) Schmitt trigger input

(3) Open-drain configuration in I²C mode

(4) Onboard pull-down resistor (50 k Ω , typical)

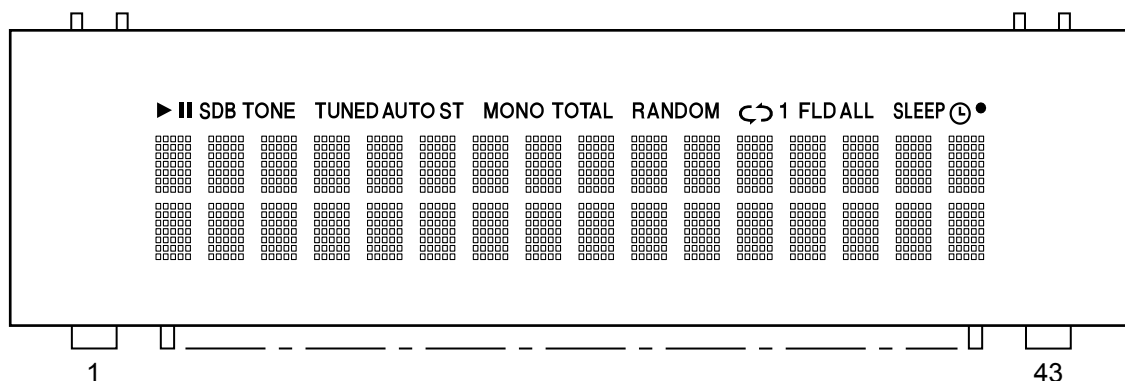
(5) CMOS Schmitt trigger input

DIR PCM9211 Block Diagram



2. FL DISPLAY

16ST103GINK (MAIN : FL81)

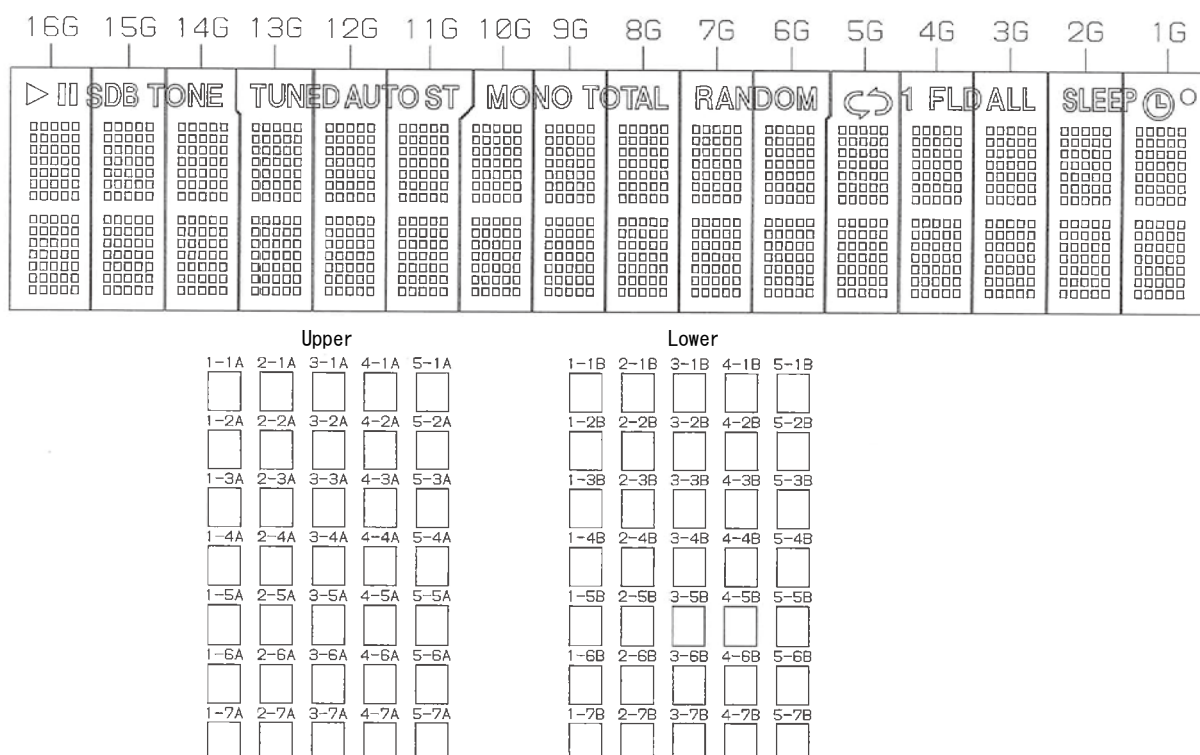


PIN CONNECTION

PIN NO.	1	2	3	4	~	11	45	~	2	3	3	3	3	3	3	3	3	4	4	4
CONNECTION	F1	NPP	NPP		NLC		NXX		TSS	TSS	DAA	CCP	CUS	IRI	SSQ	VDV	PHV	PLG	PLG	PLG

- NOTE
- 1) F1, F2 --- Filament
 - 2) NP ----- No pin
 - 3) NC ----- No connection
(NC pin should be electrically open on the PC board)
 - 4) NX ----- No extend pin
 - 5) DL ----- Datum Line
 - 6) LGND ----- Logic GND pin
 - 7) PGND ----- Power GND pin
 - 8) VH ----- High Voltage Supply pin
 - 9) VDD ----- Logic Voltage Supply pin
 - 10) CP ----- Shift Register Clock
 - 11) DA ----- Serial Data Input
 - 12) TSA, B --- Test pin
 - 13) CS ----- Chip Select Input pin
 - 14) RESET --- Reset Input
 - 15) OSC ----- Pin for self-oscillation
 - 16) Solder composition is Sn-3Ag-0.5Cu.

GRID ASSIGNMENT



ANODE CONNECTION

	T21	T20	T19	T18	T17	T16~T1
D0A	—	—	—	—	—	1-1A
D1A	—	—	—	—	—	2-1A
D2A	—	—	—	—	—	3-1A
D3A	—	—	—	—	—	4-1A
D4A	—	—	—	—	—	5-1A
D5A	—	—	—	—	—	1-2A
D6A	—	—	—	—	—	2-2A
D7A	—	—	—	—	—	3-2A
D8A	—	—	—	—	—	4-2A
D9A	—	—	—	—	—	5-2A
D10A	—	—	—	—	—	1-3A
D11A	—	—	—	—	—	2-3A
D12A	—	—	—	—	—	3-3A
D13A	—	—	—	—	—	4-3A
D14A	—	—	—	—	—	5-3A
D15A	—	—	—	—	—	1-4A
D16A	—	—	—	—	—	2-4A
D17A	—	—	—	—	—	3-4A
D18A	—	—	—	—	—	4-4A
D19A	—	—	—	—	—	5-4A
D20A	—	—	—	—	—	1-5A
D21A	—	—	—	—	—	2-5A
D22A	—	—	—	—	—	3-5A
D23A	—	—	—	—	—	4-5A
D24A	—	—	—	—	—	5-5A
D25A	—	—	—	—	—	1-6A
D26A	—	—	—	—	—	2-6A
D27A	—	—	—	—	—	3-6A
D28A	—	—	—	—	—	4-6A
D29A	—	—	—	—	—	5-6A
D30A	—	—	—	—	—	1-7A
D31A	—	—	—	—	—	2-7A
D32A	—	—	—	—	—	3-7A
D33A	—	—	—	—	—	4-7A
D34A	—	—	—	—	—	5-7A

	T21	T20	T19	T18	T17	T16~T1
D0B	—	—	—	—	—	1-1B
D1B	—	—	—	—	—	2-1B
D2B	—	—	—	—	—	3-1B
D3B	—	—	—	—	—	4-1B
D4B	—	—	—	—	—	5-1B
D5B	—	—	—	—	—	1-2B
D6B	—	—	—	—	—	2-2B
D7B	—	—	—	—	—	3-2B
D8B	—	—	—	—	—	4-2B
D9B	—	—	—	—	—	5-2B
D10B	—	—	—	—	—	1-3B
D11B	—	—	—	—	—	2-3B
D12B	—	—	—	—	—	3-3B
D13B	—	—	—	—	—	4-3B
D14B	—	—	—	—	—	5-3B
D15B	—	—	—	—	—	1-4B
D16B	—	—	—	—	—	2-4B
D17B	—	—	—	—	—	3-4B
D18B	—	—	—	—	—	4-4B
D19B	—	—	—	—	—	5-4B
D20B	—	—	—	—	—	1-5B
D21B	—	—	—	—	—	2-5B
D22B	—	—	—	—	—	3-5B
D23B	—	—	—	—	—	4-5B
D24B	—	—	—	—	—	5-5B
D25B	—	—	—	—	—	1-6B
D26B	—	—	—	—	—	2-6B
D27B	—	—	—	—	—	3-6B
D28B	—	—	—	—	—	4-6B
D29B	—	—	—	—	—	5-6B
D30B	—	—	—	—	—	1-7B
D31B	—	—	—	—	—	2-7B
D32B	—	—	—	—	—	3-7B
D33B	—	—	—	—	—	4-7B
D34B	—	—	—	—	—	5-7B
AD1	TONE	ST	RANDOM	ALL	○	—
AD2	SDB	AUTO	TOTAL	FLD	⌚	—
AD3	II	TUNED	MONO	1	SLEEP	—
AD4	▷	—	—	↺↻	—	—

INPUT PCB ASS'Y

※Parts indicated by "nsp" on this table cannot be supplied.

※The parts listed below are only for maintenance. Therefore they might differ from the parts used in the unit in appearances or dimensions

NOTE:The symbols in the column Remarks indicate the following destinations.

E3 : U.S.A. & Canada model E2 : Europe model E1C : China model E1 : Asia model JP : Japan model EK : DAB model

BK : Black model SP : Premium Silver model

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
SEMICONDUCTORS GROUP						
D402-404	943204500410S	DIODE, SCHOTTKY		CVD1SR159-200H	3	
D405	943204006840S	DIODE, SCHOTTKY(40V/3A)		CVSS34SR	1	
D501,502	943209001080S	DIODE, CHIP, SWITCHING		CVD1SS355T	2	
D504	943209001080S	DIODE, CHIP, SWITCHING		CVD1SS355T	1	
D506	943209001080S	DIODE, CHIP, SWITCHING		CVD1SS355T	1	
D509-511	943209001080S	DIODE, CHIP, SWITCHING		CVD1SS355T	3	
D601	943209001080S	DIODE, CHIP, SWITCHING	EK	CVD1SS355T	1	
IC42	00D2630810008	I.C REGULATOR		HVINJM7808FA	1	
IC43	943239101470S	I.C DC to DC (4A, 8Pin,SOIC)		CVINR111E	1	
IC51	943236101350D	I.C, DIR/DIT(WITH ADC,LQFP-48P)		CVIPCM9211PTR	1	
IC52	943239100690S	I.C, 2CH DAC(32BIT,384KHZ,TSSOP-20P)		CVIPCM5100PWR	1	
IC53	00D2623727904	I.C, 2CH VOLUME		CVINJW1194V	1	
IC55,56	943219500160M	I.C, REGULATOR(1.0A, 3.3V, SOT-223)		CVILM1117S33	2	
IC57	00D943000560S	I.C, REGULATOR (+8V)		HVKA78L08AZT	1	
IC58	943231101250D	IC, REGULATOR (-8V, TO-92, TAPPING)		CVILM79L08TA	1	
IC59	23281004250AS	I.C, Dual Audio OPAMP(SOP-8)		CVINJM8068G	1	
IC61	231310009508S	I.C, REGULATOR (3.3V)	EK	CVIPQ033DNA1ZPH	1	
IC62	00D963030060S	IC LM1117S-1.2V SOT223	EK	CVILM1117S12	1	
Q501	963216500060S	T.R.RT1N144C(10K-47K)		CVTRT1N144C	1	
Q502,503	00D9430072502	T.R, CHIP, SOT-23		HVTKTC2875B	2	
Q504	943215500140D	T.R.RT1P144C(10K-47K)		CVTRT1P144C	1	
Q505	943216500020S	T.R.RT1N141C(10K-10K)		CVTRT1N141C	1	
Q601	943216500020S	T.R.RT1N141C(10K-10K)	EK	CVTRT1N141C	1	
RESISTOR GROUP						
R410	nsp	RES, CHIP(1608/5%/100Kohm)		CRJ10DJ104T	1	
R411	nsp	RES, CHIP(1608/5%/33ohm)		CRJ10DJ330T	1	
R413	nsp	RES, CHIP(1608/5%/3.9Kohm)		CRJ10DJ392T	1	
R414	nsp	RES, CHIP(1608/5%/6.2Kohm)		CRJ10DJ622T	1	
R415	nsp	RES, CHIP(1608/5%/15Kohm)		CRJ10DJ153T	1	
R503	nsp	RES, CHIP(1608/5%/33ohm)		CRJ10DJ330T	1	
R506	nsp	RES, CHIP(1608/5%/33ohm)		CRJ10DJ330T	1	
R507	nsp	RES, CHIP(1608/5%/1Kohm)		CRJ10DJ102T	1	
R508-515	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	8	
R516	nsp	RES, CHIP(1608/5%/1Mohm)		CRJ10DJ105T	1	
R517	nsp	RES, CHIP(1608/5%/1ohm)		CRJ10DJ1R0T	1	
R518	nsp	RES, CHIP(1608/5%/680ohm)		CRJ10DJ681T	1	
R519,520	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	2	
R521-524	nsp	RES, CHIP(1608/5%/33ohm)		CRJ10DJ330T	4	
R525-527	nsp	RES, CHIP(1608/5%/33ohm)	E3, E2, E1C, JP	CRJ10DJ330T	3	
R532-535	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	4	
R536,537	nsp	RES, CARBON(1/5W,470ohm,J)		CRD20T3471T	2	
R538-540	nsp	RES, CHIP(1608/5%/100ohm)		CRJ10DJ101T	3	
R541,542	nsp	RES, CHIP(1608/5%/4.7Kohm)		CRJ10DJ472T	2	
R543	nsp	RES, CHIP(1608/5%/470ohm)		CRJ10DJ471T	1	
R544,545	nsp	RES, CHIP(1608/5%/100Kohm)		CRJ10DJ104T	2	
R546	nsp	RES, CHIP(1608/5%/470ohm)		CRJ10DJ471T	1	
R552	nsp	RES, CHIP(2012/5%/0ohm)		CRJ18AJ0R0T	1	
R554,555	nsp	RES, CHIP(1608/5%/47Kohm)		CRJ10DJ473T	2	
R556,557	nsp	RES, CHIP(1608/5%/68Kohm)		CRJ10DJ683T	2	
R558	nsp	RES, CHIP(1608/5%/12Kohm)		CRJ10DJ123T	1	
R559	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1	
R560	nsp	RES, CHIP(1608/5%/51ohm)		CRJ10DJ510T	1	
R561	nsp	RES, CHIP(1608/5%/12Kohm)		CRJ10DJ123T	1	
R562	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1	
R563	nsp	RES, CHIP(1608/5%/51ohm)		CRJ10DJ510T	1	
R565	nsp	RES, CARBON(1/5W,470ohm,J)		CRD20T3471T	1	
R567	nsp	RES, CARBON(1/5W,470ohm,J)		CRD20T3471T	1	
R568,569	nsp	RES, CHIP(1608/5%/220Kohm)		CRJ10DJ224T	2	
R578,579	nsp	RES, CHIP(1608/5%/33Kohm)		CRJ10DJ333T	2	
R580,581	nsp	RES, CHIP(1608/5%/150Kohm)		CRJ10DJ154T	2	
R600	nsp	RES, CHIP(1608/5%/33ohm)	EK	CRJ10DJ330T	1	
R601,602	nsp	RES, CHIP(1608/5%/0ohm)	EK	CRJ10DJ0R0T	2	
R603	nsp	RES, CHIP(1608/5%/47Kohm)	EK	CRJ10DJ473T	1	
RN51-54	90M-BW000470R	RES, CHIP(1608/5%/0ohm*4)		CRJ104DJ0R0T	4	
CAPACITORS GROUP						
C405-407	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	3	
C410	nsp	CAP, CHIP(1608, 50V/0.01uF, X7R) SAMSUNG		CCUS1H103KCS	1	
C411	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	1	
C412	nsp	CAP, CHIP(1608, 50V/0.01uF, X7R) SAMSUNG		CCUS1H103KCS	1	
C413	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	1	
C414,415	nsp	CAP, CHIP(3216, 25V/10uF)		CCUSSP1E106KC	2	
C416	nsp	CAP, CHIP(2012, 50V/0.1uF, X7R) SAMSUNG		CCUC1H104KCS	1	
C419-421	nsp	CAP, CHIP(2012, 25V/22uF, X7R)		CCUC1E226KC	3	
C422	nsp	CAP, CHIP(2012, 50V/0.01uF, X7R) SAMSUNG		CCUC1H103KCS	1	
C423,424	nsp	CAP, CHIP(2012, 50V/0.1uF, X7R) SAMSUNG		CCUC1H104KCS	2	
C425	nsp	CAP, CHIP(1608, 50V/0.01uF, X7R) SAMSUNG		CCUS1H103KCS	1	
C426	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	1	
C427	nsp	CAP, CHIP(1608, 50V/1000pF, X7R) SAMSUNG		CCUS1H102KCS	1	
C428	nsp	CAP, CHIP(1608, 50V/0.01uF, X7R) SAMSUNG		CCUS1H103KCS	1	
C429	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	1	
C430	nsp	CAP, CHIP(1608, 50V/1000pF, X7R) SAMSUNG		CCUS1H102KCS	1	
C431-433	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	3	
C434	nsp	CAP, CHIP(1608, 50V/1000pF, X7R) SAMSUNG		CCUS1H102KCS	1	
C435	nsp	CAP, CHIP(1608, 50V/0.01uF, X7R) SAMSUNG		CCUS1H103KCS	1	
C436	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	1	
C437,438	nsp	CAP, CHIP(1608, 50V/1000pF, X7R) SAMSUNG		CCUS1H102KCS	2	
C501-503	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	3	
C504	nsp	CAP, ELECT(50V/1uF)		CCEA1HH1R0T	1	
C515	00D2544693900	CAP, ELECT(50V/22uF,ELNA/RFO)		CCEA1HRFO220T	1	
C516	nsp	CAP, CHIP(1608, 50V/0.01uF, X7R) SAMSUNG		CCUS1H103KCS	1	
C517	00D2544693900	CAP, ELECT(50V/22uF,ELNA/RFO)		CCEA1HRFO220T	1	
C518,519	nsp	CAP, CHIP(3216, 50V/0.1uF, MURATA GRM31)		CCUMUP1H104JAM	2	
C520	nsp	CAP, CHIP(1608, 50V/0.01uF, X7R) SAMSUNG		CCUS1H103KCS	1	
C521,522	nsp	CAP, CHIP(3216, 50V/0.1uF, MURATA GRM31)		CCUMUP1H104JAM	2	
C523,524	nsp	CAP, ELECT(50V/22uF)		CCEA1HH220T	2	
C531	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	1	
C532	nsp	CAP, CHIP(1608, 50V/0.01uF, X7R) SAMSUNG		CCUS1H103KCS	1	
C534	nsp	CAP, CHIP(1608, 50V/0.01uF, X7R) SAMSUNG		CCUS1H103KCS	1	
C535	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	1	
C536	nsp	CAP, ELECT(16V/10uF)-S		CCEA1CKS100T	1	
C537	nsp	CAP, ELECT(16V/10uF)		CCEA1CH100T	1	
C538	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	1	
C539	nsp	CAP, ELECT(16V/10uF)-S		CCEA1CKS100T	1	
C540,541	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	2	
C542	00MOA22601620	CAP, ELECT(16V/22uF)		CCEA1CH220T	1	

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
C543,544	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG		CCUS1H104KCS	2	
C545	nsp	CAP, ELECT(50V/22uF)		CCEA1HH220T	1	
C546,547	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG		CCUS1H104KCS	2	
C548	nsp	CAP,CHIP(1608,50V/18pF,C0G) SAMSUNG		CCUS1H180JAS	1	
C549	nsp	CAP,CHIP(1608,50V/15pF,C0G) SAMSUNG		CCUS1H150JAS	1	
C550	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG		CCUS1H104KCS	1	
C551	nsp	CAP, ELECT(50V/22uF)		CCEA1HH220T	1	
C552	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG		CCUS1H104KCS	1	
C553	nsp	CAP, ELECT(16V/22uF)-S		CCEA1CK5220T	1	
C554	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG		CCUS1H104KCS	1	
C555	nsp	CAP, ELECT(16V/22uF)-S		CCEA1CK5220T	1	
C556	nsp	CAP,CHIP(1608,50V/0.068uF,X7R) SAMSUNG		CCUS1H683KCS	1	
C557	nsp	CAP,CHIP(1608,50V/4700pF,X7R) SAMSUNG		CCUS1H472KCS	1	
C558	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG	E3, E2, E1C, JP	CCUS1H104KCS	1	
C559	nsp	CAP, ELECT(10V/470uF)	E3, E2, E1C, JP	CCEA1AH471T	1	
C560,561	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG		CCUS1H104KCS	2	
C562	00D2544694912	CAP, ELECT(220uF/25V, RFO)		CCEA1ERF0221T	1	
C563	134050059238S	CAP, ELECT (ELNA RFG, 50V/220uF, 85°C, 10X16)		CCEA1HRFY221E	1	
C564,565	nsp	CAP,CHIP(1608,6.3V/2.2uF,X7R) SAMSUNG		CCUS0J225KCS	2	
C566	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG		CCUS1H103KCS	1	
C568	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG		CCUS1H104KCS	1	
C569,570	nsp	CAP, ELECT(50V/10uF)	E3, E2, E1C, JP	CCEA1HH100T	2	
C571,572	943133501490D	POLYPROPYLENE SHINYEI (AQUA, 222)		CCMP2A222J507T	2	
C575	nsp	CAP, ELECT(50V/10uF)		CCEA1HH100T	1	
C576,577	nsp	CAP,CHIP(1608,50V/180pF,C0G) SAMSUNG		CCUS1H181JAS	2	
C578	nsp	CAP, ELECT(50V/10uF)		CCEA1HH100T	1	
C580	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG		CCUS1H104KCS	1	
C581	943134502170D	CAP, ELECT(TOSHIN, UTSP, 50V/100uF, 85°C)		CCEA1HUTSP101T	1	
C582	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG		CCUS1H104KCS	1	
C583	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG		CCUS1H103KCS	1	
C584	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG		CCUS1H104KCS	1	
C585	943134502140D	CAP, ELECT(TOSHIN, UTSP, 16V/220uF, 85°C)		CCEA1CUTSP221T	1	
C586	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG		CCUS1H103KCS	1	
C587	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG		CCUS1H104KCS	1	
C588	943134502140D	CAP, ELECT(TOSHIN, UTSP, 16V/220uF, 85°C)		CCEA1CUTSP221T	1	
C589,590	nsp	CAP, ELECT(50V/22uF)		CCEA1HH220T	2	
C591,592	nsp	CAP, ELECT(16V/100uF)		CCEA1CH101T	2	
C593	nsp	CAP, ELECT(50V/10uF)		CCEA1HH100T	1	
C594,595	00D2544693942	CAP, ELECT(50V/220uF,ELNA/RFO)		CCEA1HRFO221E	2	
C596	nsp	CAP,CHIP(1608,50V/3300pF,X7R) SAMSUNG		CCUS1H332KCS	1	
C597	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG		CCUS1H104KCS	1	
C598	nsp	CAP, ELECT(50V/4.7uF)		CCEA1HH47T	1	
C599	nsp	CAP,CHIP(1608,50V/3300pF,X7R) SAMSUNG		CCUS1H332KCS	1	
C600	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG		CCUS1H104KCS	1	
C601	nsp	CAP, ELECT(50V/4.7uF)		CCEA1HH47T	1	
C602-604	nsp	CAP,CHIP(1608,50V/180pF,C0G) SAMSUNG		CCUS1H181JAS	3	
C609	nsp	CAP, ELECT(10V/330uF)-S	EK	CCEA1AKS331T	1	
C610,611	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	EK	CCUS1H103KCS	2	
C612	nsp	CAP, ELECT(16V/22uF)-S	EK	CCEA1CK5220T	1	
C613	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG	EK	CCUS1H104KCS	1	
C614	nsp	CAP, ELECT(16V/22uF)-S	EK	CCEA1CK5220T	1	
C615	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	EK	CCUS1H103KCS	1	
C616	nsp	CAP, ELECT(16V/10uF)-S	EK	CCEA1CK5100T	1	
C617	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG	EK	CCUS1H104KCS	1	
C689	nsp	CAP,CHIP(1608,50V/1000pF,X7R) SAMSUNG		CCUS1H102KCS	1	
C690	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG		CCUS1H103KCS	1	
C691	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG		CCUS1H104KCS	1	
C692	nsp	CAP,CHIP(1608,50V/1000pF,X7R) SAMSUNG		CCUS1H102KCS	1	
C693	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG		CCUS1H103KCS	1	
C694	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG		CCUS1H104KCS	1	
C695	nsp	CAP,CHIP(1608,50V/1000pF,X7R) SAMSUNG		CCUS1H102KCS	1	
C696	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG		CCUS1H103KCS	1	
C697-699	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG		CCUS1H104KCS	3	
OTHER PARTS GROUP						
BK62	nsp	SUPPORT , PCB(DAB)	EK	CDF1A046	1	*
BN52	nsp	WIRE ASS'Y(3P, 300MM, 2MM PITCH, SHIELD)		CWB1B00330047001	1	*
BN61	nsp	PIN HEADER (07P,1.25mm,STRAIGHT,B-TO-B)	EK	CJP07GI281Z	1	
BN62	nsp	WAFER, FFC, SMD(21P-1mm, STRAIGHT)		CJP21GA193ZY	1	
BN72	nsp	WIRE ASS'Y(7P, 180MM, 2MM PITCH, SHIELD)		CWB2B90718047001	1	*
BN92,93	nsp	PIN HEADER (09P,1.25mm,STRAIGHT,B-TO-B)		CJP09GI281Z	2	
BN94	nsp	WIRE ASS'Y (7P, 80mm, Flat Type)		CWB2B00708047	1	
BN95	nsp	WIREASS'Y(5P,120mm)		CWB2B90512047	1	
BN98	nsp	WIRE ASS'Y(3P, 150MM, 2MM PITCH)		CWB1D00315047	1	*
CN61	nsp	PIN SOCKET (07P,1.25mm,ANGLE,B-TO-B)	EK	CJP07HJ282Z	1	
CN62	nsp	2.54mm 32PIN WAFER	EK	CJP32GA221ZB	1	
CN99	nsp	LOCKING TYPE , STRAIGHT WAFER , 2MM		CJP03GI236ZW	1	
JK50,51	943643102630M	MODULE , OPTICAL(RX 25MHz)		CJSJSR2124-00-BBBN	2	
JK53	00D9430191700	JACK , IN/OUT		CJ4N034Z	1	
L501,502	nsp	FERRITE , CHIP BEAD(60ohm, 2012)		CLZ9R001Z	2	
L503	nsp	FERRITE CHIP BEAD(4516/60R)	E3, E2, E1C, JP	CLZ9Z014Z	1	
L504	nsp	RES,CHIP(2012/5%/0ohm)		CRJ18AJ0R0T	1	
L601	nsp	FERRITE , CHIP BEAD(60ohm, 2012)	EK	CLZ9R001Z	1	
L602	nsp	CHIP BEAD(600R, 1808, 0.5A)	EK	HLZ9Z008Z	1	
L701	nsp	FERRITE CHIP BEAD(4516/60R)		CLZ9Z014V	1	
L702	nsp	INDUCTOR, POWER, SMD, 10uH, 3A		CLQ19E100MRZ	1	
L703	nsp	FERRITE CHIP BEAD(4516/60R)		CLZ9Z014V	1	
RL51	943682000810S	RELAY BC3-12H,DC12V,2C2P		CSL4A016ZU	1	
X501	943141100760D	X-TAL, 24.576MHz, HC-49/S, 15pF, 20PPM		COX24576E150TF	1	

MAIN PCB ASS'Y

※Parts indicated by "nsp" on this table cannot be supplied.

※The parts listed below are only for maintenance. Therefore they might differ from the parts used in the unit in appearances or dimensions

NOTE: The symbols in the column Remarks indicate the following destinations.

E3 : U.S.A. & Canada model E2 : Europe model E1C : China model E1 : Asia model JP : Japan model EK : DAB model

BK : Black model SP : Premium Silver model

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
SEMICONDUCTORS GROUP						
D701-705	00D9430182609	DIODE, SWITCHING		CVD1SS133MT	5	
D706,707	00D9430182502	DIODE, RECT		CVD1N4003ST	2	
D708	00D9430182609	DIODE, SWITCHING		CVD1SS133MT	1	
D709	90M-HD201820R	DIODE, SCHOTTKY BARRIER		HVDRB160L60TE25	1	
D710	943203500560S	DIODE, BRIDGE(600V/10A)		CVDD10SB60	1	*
D711-713	943209001080S	DIODE, CHIP, SWITCHING		CVD1SS355T	3	
D801	00D9430106203	L.E.D., 2COLOR(RED/GREEN)		HVDSR39MVW3	1	
D802-811	943209001080S	DIODE, CHIP, SWITCHING		CVD1SS355T	10	
D901	943209001080S	DIODE, CHIP, SWITCHING		CVD1SS355T	1	
D902	00D9430209400	DIODE, RECT		CVD1N4003SRT	1	
D903	90M-HD302280R	DIODE, ZENER(CHIP,6.8V)		HVDUDZS6.8BSR	1	
D904,905	00D9430209400	DIODE, RECT		CVD1N4003SRT	2	
D906,907	943209001080S	DIODE, CHIP, SWITCHING		CVD1SS355T	2	
D908,909	90M-HD201820R	DIODE, SCHOTTKY BARRIER		HVDRB160L60TE25	2	
D910,911	00D9430209400	DIODE, RECT		CVD1N4003SRT	2	
D912	90M-HD302440R	DIODE, ZENER, 1/2W, 4.7V		CVDZJ4.7BT	1	
D913	943209001080S	DIODE, CHIP, SWITCHING	E3, JP	CVD1SS355T	1	
D914	943202500460D	DIODE, ZENER(CHIP,15V)	E3, JP	HVDUDZS15BSR	1	
D915	943209001080S	DIODE, CHIP, SWITCHING		CVD1SS355T	1	
D916	00D9430209400	DIODE, RECT		CVD1N4003SRT	1	
D917	943209001080S	DIODE, CHIP, SWITCHING		CVD1SS355T	1	
D918,919	943204500490S	DIODE, SCHOTTKY		CVD21DQ06T	2	*
D920-923	00D9430209400	DIODE, RECT		CVD1N4003SRT	4	
D924-929	943209001080S	DIODE, CHIP, SWITCHING		CVD1SS355T	6	
D930	90M-HD302270R	DIODE, ZENER(CHIP,5.6V)		HVDUDZS5.6BSR	1	
D931,932	943202001360S	DIODE, ZENER, 1/2W, 20V		CVDZJ20BT	2	
D933,934	00D9430209400	DIODE, RECT		CVD1N4003SRT	2	
D935-941	943209001080S	DIODE, CHIP, SWITCHING		CVD1SS355T	7	
IC71	943239100850D	I.C. HYBRID AMP (2-channel class AB)		CVISTK433-060N	1	
IC91	943239010400S	I.C. REGULATOR(3.3V/TO-252)		CVINJM2845DL133	1	
IC92	00D2630641002	I.C., REGULATOR		HVINJM7912FA	1	
IC93	23281004250AS	I.C., Dual Audio OPAMP(SOP-8)		CVINJM8068G	1	
IC94	943239101670S	I.C., Regulator(LDO, 12V, 1A /TO-220F-4)		CVINJM2388F12	1	*
Q701	00MHT600141B1	T.R		HVTKTA1271YT	1	
Q702	00MHT800951B1	T.R		HVTKTC3203YT	1	
Q703	00MHT600141B1	T.R		HVTKTA1271YT	1	
Q704	00MHT800951B1	T.R		HVTKTC3203YT	1	
Q705	943215500140D	T.R,RT1P144C(10K-47K)		CVTRT1P144C	1	
Q706,707	943212500020S	High Voltage PNP Transistors(SOT-23)		CVTMMBT5401	2	
Q708	963216500060S	T.R,RT1N144C(10K-47K)		CVTRT1N144C	1	
Q709	943215500020S	T.R,RT1P141C(10K-10K)		CVTRT1P141C	1	
Q710	963216500060S	T.R,RT1N144C(10K-47K)		CVTRT1N144C	1	
Q711	943216500020S	T.R,RT1N141C(10K-10K)		CVTRT1N141C	1	
Q712	943215500020S	T.R,RT1P141C(10K-10K)		CVTRT1P141C	1	
Q713,714	943214500040S	High Voltage NPN Transistors(SOT-23)		CVTMMBT5551	2	
Q715,716	943215500140D	T.R,RT1P144C(10K-47K)		CVTRT1P144C	2	
Q717	90M-HX800030R	T.R, CHIP, SOT-23		HVTKRC114S	1	
Q718	943214500040S	High Voltage NPN Transistors(SOT-23)		CVTMMBT5551	1	
Q719-722	00D9430072502	T.R, CHIP, SOT-23		HVTKTC2875B	4	
Q801	943216500020S	T.R,RT1N141C(10K-10K)		CVTRT1N141C	1	
Q901	943219006820S	T.R		CVTKTC1027YT	1	
Q902	963216500060S	T.R,RT1N144C(10K-47K)		CVTRT1N144C	1	
Q903	963216500060S	T.R,RT1N144C(10K-47K)	E3, JP	CVTRT1N144C	1	
Q904	943214500040S	High Voltage NPN Transistors(SOT-23)		CVTMMBT5551	1	
Q905	963216500060S	T.R,RT1N144C(10K-47K)		CVTRT1N144C	1	
Q906-910	943216500020S	T.R,RT1N141C(10K-10K)		CVTRT1N141C	5	
Q911	943219006820S	T.R		CVTKTC1027YT	1	
RESISTOR GROUP						
R701	nsp	RES, CARBON(1/5W,1.5Kohm,J)		CRD20TJ152T	1	
R702-705	nsp	RES, CARBON(1/5W,12ohm,J)		CRD20TJ120T	4	
R706	nsp	RES, CARBON(1/5W,1.5Kohm,J)		CRD20TJ152T	1	
R707	nsp	RES, CARBON(1/5W,27Kohm,J)		CRD20TJ273T	1	
R708	nsp	RES, CARBON(1/5W,3.9Kohm,J)		CRD20TJ392T	1	
R709,710	nsp	RES, CARBON(1/5W,33ohm,J)		CRD20TJ330T	2	
R711	nsp	RES, CARBON(1/5W,1.5Kohm,J)		CRD20TJ152T	1	
R712-715	nsp	RES, CARBON(1/5W,12ohm,J)		CRD20TJ120T	4	
R716	nsp	RES, CARBON(1/5W,1.5Kohm,J)		CRD20TJ152T	1	
R717	nsp	RES, CARBON(1/5W,27Kohm,J)		CRD20TJ273T	1	
R718	nsp	RES, CARBON(1/5W,3.9Kohm,J)		CRD20TJ392T	1	
R719,720	nsp	RES, CARBON(1/5W,100ohm,J)		CRD20TJ101T	2	
R721,722	nsp	RES, CARBON(1/5W,300ohm,J)		CRD20TJ301T	2	
R723,724	nsp	RES, CARBON(1/5W,22Kohm,J)		CRD20TJ223T	2	
R725,726	943124500510S	RES, FLAME RETARDANT (1W/100ohm)		CRG1SANCJ101RTP	2	*
R727	nsp	RES, CARBON(1/5W,22Kohm,J)		CRD20TJ223T	1	
R728	nsp	RES, CARBON(1/5W,820ohm,J)		CRD20TJ821T	1	
R729	nsp	RES, CARBON(1/5W,33Kohm,J)		CRD20TJ333T	1	
R730	nsp	RES, CHIP(1608/5%/47Kohm)		CRJ10DJ473T	1	
R731	nsp	RES, CARBON(1/5W,22Kohm,J)		CRD20TJ223T	1	
R732	nsp	RES, CARBON(1/5W,820ohm,J)		CRD20TJ821T	1	
R733,734	nsp	RES, CARBON(1/5W,27Kohm,J)		CRD20TJ273T	2	
R735	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1	
R736	nsp	RES, CARBON(1/4W,2.7Kohm,J)		CRD25TJ272T	1	
R737	943129500920M	RES, CEMENT		CRF5EKR22	1	
R738	943121006200M	RES, CARBON		CRD25FJ4R7T	1	
R739	943124500040S	RES, M-OXIDE FILM(1W/4.7ohm)		CRG1SANJ4R7RT	1	
R740,741	nsp	RES, CHIP(1608/5%/1Kohm)		CRJ10DJ102T	2	
R742	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1	
R743	nsp	RES, CARBON(1/4W,2.7Kohm,J)		CRD25TJ272T	1	
R744	943124500040S	RES, M-OXIDE FILM(1W/4.7ohm)		CRG1SANJ4R7RT	1	
R745	943129500920M	RES, CEMENT		CRF5EKR22	1	
R746	943121006200M	RES, CARBON		CRD25FJ4R7T	1	
R747,748	nsp	RES, CARBON(1/5W,47Kohm,J)		CRD20TJ473T	2	
R749,750	nsp	RES, CHIP(1608/5%/270ohm)		CRJ10DJ271T	2	
R751	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1	
R752	nsp	RES, CHIP(1608/5%/82Kohm)		CRJ10DJ823T	1	
R753,754	nsp	RES, CHIP(1608/5%/47Kohm)		CRJ10DJ473T	2	
R755	nsp	RES, CHIP(1608/5%/12Kohm)		CRJ10DJ123T	1	
R756	nsp	RES, CHIP(1608/5%/39Kohm)		CRJ10DJ393T	1	
R757	nsp	RES, CHIP(1608/5%/15Kohm)		CRJ10DJ153T	1	
R760	nsp	RES, CHIP(1608/5%/150Kohm)		CRJ10DJ154T	1	
R761,762	nsp	RES, CHIP(1608/5%/1Kohm)		CRJ10DJ102T	2	
R763	nsp	RES, CHIP(1608/5%/150Kohm)		CRJ10DJ154T	1	
R764,765	nsp	RES, CHIP(1608/5%/47Kohm)		CRJ10DJ473T	2	
R766	nsp	RES, CARBON(1/5W,33ohm,J)		CRD20TJ330T	1	
R767,768	nsp	RES, CHIP(1608/5%/33Kohm)		CRJ10DJ333T	2	

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
R769	nsp	RES, CARBON(1/5W,33ohm,J)		CRD20TJ330T	1	
R780-783	nsp	RES, CHIP(3216/5%/10Kohm)		CRJ14CJ103T	4	*
R784,785	nsp	RES, CHIP(3216/5%/47Kohm)		CRJ14CJ473T	2	
R786	00MNI05473110	RES, CHIP(2012/5%/47Kohm)		CRJ18AJ473T	1	
R787	nsp	RES, CHIP(2012/5%/10Kohm)		CRJ18AJ103T	1	
R789	nsp	RES, CHIP(1608/5%/3.9Kohm)		CRJ10DJ392T	1	
R790	nsp	WIRE, COPPER(D0.6)		C3A206	0.02	
R801	nsp	RES, CHIP(1608/5%/10ohm)		CRJ10DJ100T	1	
R802,803	nsp	RES, CHIP(1608/5%/2.7Kohm)		CRJ10DJ272T	2	
R804,805	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	2	
R806	nsp	RES, CHIP(1608/5%/120ohm)		CRJ10DJ121T	1	
R807	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1	
R808	nsp	RES, CHIP(1608/5%/220ohm)		CRJ10DJ221T	1	
R809	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1	
R810	nsp	RES, CHIP(1608/5%/1.2Kohm)		CRJ10DJ122T	1	
R811	nsp	RES, CHIP(1608/5%/22Kohm)		CRJ10DJ223T	1	
R812	nsp	RES, CHIP(1608/5%/1Kohm)		CRJ10DJ102T	1	
R813	nsp	RES, CHIP(1608/5%/1.5Kohm)		CRJ10DJ152T	1	
R814	nsp	RES, CHIP(1608/5%/1.8Kohm)		CRJ10DJ182T	1	
R815	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1	
R816	nsp	RES, CHIP(1608/5%/1Kohm)		CRJ10DJ102T	1	
R817	nsp	RES, CHIP(1608/5%/1.5Kohm)		CRJ10DJ152T	1	
R818	nsp	RES, CHIP(1608/5%/1.8Kohm)		CRJ10DJ182T	1	
R819	nsp	RES, CHIP(1608/5%/2.7Kohm)		CRJ10DJ272T	1	
R820	nsp	RES, CARBON(1/5W,1ohm,J)		CRD20TJ1R0T	1	
R821,822	nsp	RES, CARBON(1/5W,10ohm,J)		CRD20TJ100T	2	
R823	nsp	RES, CHIP(1608/5%/47Kohm)		CRJ10DJ473T	1	
R824-827	nsp	RES, CHIP(1608/5%/33ohm)		CRJ10DJ330T	4	
R828	nsp	RES, CARBON(1/5W,1ohm,J)		CRD20TJ1R0T	1	
R829	nsp	RES, CHIP(1608/5%/470ohm)		CRJ10DJ471T	1	
R830	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1	
R901	nsp	RES, CHIP(1608/5%/1Kohm)		CRJ10DJ102T	1	
R902	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1	
R903	nsp	RES, CHIP(1608/5%/10ohm)	E3, JP	CRJ10DJ100T	1	
R904	nsp	RES, CHIP(1608/5%/4.7Kohm)		CRJ10DJ472T	1	
R905	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1	
R906	nsp	RES, CHIP(1608/5%/1Kohm)		CRJ10DJ102T	1	
R907	nsp	RES, CHIP(1608/5%/4.7Kohm)		CRJ10DJ472T	1	
R908	nsp	RES, CHIP(1608/5%/2.2Kohm)		CRJ10DJ222T	1	
R911,912	nsp	RES, CARBON(1/4W,56ohm,J)		CRD25TJ560T	2	
R913	nsp	RES, CHIP(1608/5%/330ohm)		CRJ10DJ331T	1	
R914,915	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	2	
R916	nsp	RES, CHIP(1608/5%/47Kohm)		CRJ10DJ473T	1	
R917	nsp	RES, CHIP(1608/5%/3.9Kohm)		CRJ10DJ392T	1	
R918	nsp	RES, CHIP(1608/5%/47Kohm)		CRJ10DJ473T	1	
R919	nsp	RES, CHIP(1608/5%/22Kohm)		CRJ10DJ223T	1	
R920	nsp	RES, CHIP(1608/5%/8.2Kohm)		CRJ10DJ822T	1	
R921	nsp	RES, CHIP(1608/5%/100Kohm)		CRJ10DJ104T	1	
R922	nsp	RES, CHIP(1608/5%/1Kohm)		CRJ10DJ102T	1	
R923	nsp	RES, CHIP(1608/5%/100Kohm)		CRJ10DJ104T	1	
R924	nsp	RES, CARBON(1/5W,100Kohm,J)		CRD20TJ104T	1	
R925	nsp	RES, CHIP(1608/5%/47Kohm)		CRJ10DJ473T	1	
R926	nsp	RES, CHIP(1608/5%/22Kohm)		CRJ10DJ223T	1	
R927	nsp	RES, CHIP(1608/5%/15Kohm)		CRJ10DJ153T	1	
R928,929	nsp	RES, CHIP(1608/5%/47Kohm)		CRJ10DJ473T	2	
R930,931	nsp	RES, CHIP(1608/5%/22Kohm)		CRJ10DJ223T	2	
R932	nsp	RES, CHIP(1608/5%/15Kohm)		CRJ10DJ153T	1	
R943	nsp	RES, CHIP(1608/5%/680ohm)		CRJ10DJ681T	1	
R944,945	nsp	RES, CARBON(1/5W,10Kohm,J)		CRD20TJ103T	2	
CAPACITORS GROUP						
C701,702	00D9430185402	CAP, ELECT(ELNA RFO 100uF/25V)		CCEA1ERFO101T	2	
C703	nsp	CAP, CHIP(1608, 50V/0.01uF, X7R) SAMSUNG		CCUS1H103KCS	1	
C704,705	nsp	CAP, ELECT(50V/10uF),ELNA/RA3,5X11		CCEA1HRA38P100T	2	
C706	nsp	CAP, CHIP(1608, 50V/0.01uF, X7R) SAMSUNG		CCUS1H103KCS	1	
C707,708	nsp	CAP, ELECT(50V/10uF)		CCEA1HH100T	2	
C709	nsp	CAP, PE-FILM(100V/470pF/J)		CCME2A471JR11T	1	
C710	nsp	CAP, ELECT(50V/47uF)		CCEA1HH470T	1	
C711	nsp	CAP, PE-FILM(100V/470pF/J)		CCME2A471JR11T	1	
C712	nsp	CAP, ELECT(50V/47uF)		CCEA1HH470T	1	
C713,714	943134010580S	CAP, ELECT(35V/220uF)		CCEA1VH221T	2	
C715	00D2544693942	CAP, ELECT(50V/220uF,ELNA/RFO)		CCEA1HRFO221E	1	
C716	943134010580S	CAP, ELECT(35V/220uF)		CCEA1VH221T	1	
C717	00D2544693942	CAP, ELECT(50V/220uF,ELNA/RFO)		CCEA1HRFO221E	1	
C718	nsp	CAP, CERAMIC(50V/5pF/C)		CCCT1H050CC	1	
C719	00MOA47702520	CAP, ELECT(25V/470uF)		CCEA1EH471E	1	
C720	943134010580S	CAP, ELECT(35V/220uF)		CCEA1VH221T	1	
C721	943132100560S	CAP, CERAMIC(56PF/50V)		CCBS1H560JT	1	*
C723	943132100560S	CAP, CERAMIC(56PF/50V)		CCBS1H560JT	1	*
C724	nsp	CAP, CERAMIC(50V/5pF/C)		CCCT1H050CC	1	
C725	00MOA47702520	CAP, ELECT(25V/470uF)		CCEA1EH471E	1	
C726	nsp	CAP,METAL-FILM(100V/0.047uF)		CCME2A473JXT	1	
C727,728	nsp	CAP,METAL-FILM(100V/0.22uF)		CCME2A224JXT	2	
C729	nsp	CAP,METAL-FILM(100V/0.047uF)		CCME2A473JXT	1	
C730,731	nsp	CAP,METAL-FILM(100V/0.22uF)		CCME2A224JXT	2	
C732-734	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	3	
C735	00D9430175001	CAP, ELECT(25V/47uF)		CCEA1EH470T	1	
C736	nsp	CAP, CHIP(1608, 50V/1000pF, X7R) SAMSUNG		CCUS1H102KCS	1	
C737	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	1	
C738,739	nsp	CAP, ELECT(50V/10uF)		CCEA1HH100T	2	
C740	nsp	CAP, ELECT(10V/470uF)		CCEA1AH471T	1	
C741,742	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	2	
C743	nsp	CAP, ELECT(50V/10uF)		CCEA1HH100T	1	
C744,745	nsp	CAP, CHIP(1608, 50V/100pF, C0G) SAMSUNG		CCUS1H101JAS	2	
C760,761	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	2	
C762,763	943134502110D	CAP, ELECT(TOSHIN, UTSP, 35V/4700uF, 85°C)		CCEA1VUTSP472E	2	
C764	nsp	CAP, CHIP(1608, 50V/0.01uF, X7R) SAMSUNG		CCUS1H103KCS	1	
C765	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	1	
C766	90M-OF100490R	CAP, METAL PE FILM(250V/0.1uF)		KCME2E104JP04T	1	
C767,768	943139001280S	CAP,METAL-FILM(100V/0.01uF)		CCME2A103JXT	2	
C769,770	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	2	
C771,772	nsp	CAP, MYLAR(50V/3300pF/J)		HQCI1H332J2T	2	
C773	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	1	
C774	nsp	CAP, CHIP(1608, 50V/1000pF, X7R) SAMSUNG		CCUS1H102KCS	1	
C795-799	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	5	
C801	nsp	CAP, ELECT(16V/100uF)-S		CCEA1ICKS101T	1	
C802	nsp	CAP, CHIP(1608, 50V/0.01uF, X7R) SAMSUNG		CCUS1H103KCS	1	
C803	nsp	CAP, CHIP(1608, 50V/47pF, C0G) SAMSUNG		CCUS1H470JAS	1	
C804	nsp	CAP, CHIP(1608, 50V/0.01uF, X7R) SAMSUNG		CCUS1H103KCS	1	
C805	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	1	
C806	nsp	CAP, ELECT(50V/1uF)-S		CCEA1HKS1R0T	1	
C807-809	nsp	CAP, CHIP(1608, 50V/100pF, C0G) SAMSUNG		CCUS1H101JAS	3	
C810,811	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	2	
C813,814	nsp	CAP, CHIP(1608, 50V/0.01uF, X7R) SAMSUNG		CCUS1H103KCS	2	

	REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
	C815,816	nsp	CAP,CHIP(1608,50V/4700pF,X7R) SAMSUNG	CCUS1H472KCS	2		
	C817-819	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	CCUS1H103KCS	3		
	C820,821	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG	CCUS1H104KCS	2		
	C822	nsp	CAP,ELECT(50V/10uF)-S	CCEA1HKS100T	1		
	C826	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG	CCUS1H104KCS	1		
	C828	nsp	CAP,ELECT(16V/100uF)-S	CCEA1CKS101T	1		
	C829	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG	CCUS1H104KCS	1		
	C830,831	943139001280S	CAP,METAL-FILM(100V/0.01uF)	CCME2A103JXT	2		
	C832-834	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG	CCUS1H104KCS	3		
	C835	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	CCUS1H103KCS	1		
	C836	nsp	CAP,CHIP(1608,50V/1000pF,X7R) SAMSUNG	CCUS1H102KCS	1		
	C837	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	CCUS1H103KCS	1		
	C838	nsp	CAP,CHIP(1608,50V/1000pF,X7R) SAMSUNG	CCUS1H102KCS	1		
	C901	nsp	CAP,METAL-FILM(100V/0.047uF)	CCME2A473JXT	1		
	C902,903	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	CCUS1H103KCS	2		
	C904	943134502120D	CAP,ELECT(TOSHIN,UTSP,25V/2200uF,85°C)	CCEA1EUTSP222E	1		
	C905	943134502130D	CAP,ELECT(TOSHIN,UTSP,25V/1000uF,85°C)	CCEA1EUTSP102E	1		
	C906,907	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	CCUS1H103KCS	2		
	C908,909	943134502140D	CAP,ELECT(TOSHIN,UTSP,16V/220uF,85°C)	CCEA1CUTSP221T	2		
	C910,911	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	CCUS1H103KCS	2		
	C912	nsp	CAP,ELECT(50V/4.7uF)	CCEA1HH4R7T	1		
	C913	00MOA22705020	CAP,ELECT(50V/220uF)	CCEA1HH221E	1		
	C914,915	nsp	CAP,ELECT(50V/10uF)	CCEA1HH100T	2		
	C916,917	nsp	CAP,ELECT(63V/100uF)	CCEA1JH101E	2		
	C918	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	CCUS1H103KCS	1		
	C919	943134502120D	CAP,ELECT(TOSHIN,UTSP,25V/2200uF,85°C)	CCEA1EUTSP222E	1		
	C920	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	CCUS1H103KCS	1		
	C921	00D2544693939	CAP,ELECT(50V/100uF,ELNA/RFO)	CCEA1HRFO101T	1		
	C922	nsp	CAP,ELECT(50V/4.7uF)	CCEA1HH4R7T	1		
!	C924	00D9430024408	CAP,CERAMIC(X1/Y2/SC)	KCKDKS472ME	1		
	C925	nsp	CAP,ELECT(50V/10uF)	CCEA1HH100T	1		
	C926,927	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	CCUS1H103KCS	2		
	C928	nsp	CAP,ELECT(50V/0.68uF)	CCEA1HHR68T	1	*	
	C929	nsp	CAP,ELECT(16V/2200uF)	CCEA1CH222E	1		
	C930	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	CCUS1H103KCS	1		
	C931	nsp	CAP,ELECT(50V/10uF)	CCEA1HH100T	1		
	C932	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	CCUS1H103KCS	1		
	C933	nsp	CAP,ELECT(50V/10uF)	CCEA1HH100T	1		
	C934	nsp	CAP,CHIP(1608,10V/1uF,X7R,X7S) SAMSUNG	CCUS1A105KCS	1		
	C935	nsp	CAP,CHIP(2012,6.3V/10uF,X5R) SAMSUNG	CCUC0J106KCS	1		
	C936	nsp	CAP,ELECT(50V/10uF)	CCEA1HH100T	1		
	C937	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG	CCUS1H104KCS	1		
	C938	nsp	CAP,ELECT(6.3V/1000uF)	CCEA0JH102T	1		
	C939	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	CCUS1H103KCS	1		
	C940-945	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG	CCUS1H104KCS	6		
	C946	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	CCUS1H103KCS	1		
	C947	nsp	CAP,CHIP(1608,50V/1000pF,X7R) SAMSUNG	CCUS1H102KCS	1		
	C948	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG	CCUS1H104KCS	1		
	C949	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	CCUS1H103KCS	1		
	C950	nsp	CAP,CHIP(1608,50V/1000pF,X7R) SAMSUNG	CCUS1H102KCS	1		
	C951	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG	CCUS1H104KCS	1		
	C952	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	CCUS1H103KCS	1		
	C953	nsp	CAP,CHIP(1608,50V/1000pF,X7R) SAMSUNG	CCUS1H102KCS	1		
	C954	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG	CCUS1H104KCS	1		
	C955	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	CCUS1H103KCS	1		
	C956	nsp	CAP,CHIP(1608,50V/1000pF,X7R) SAMSUNG	CCUS1H102KCS	1		
	C957	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG	CCUS1H104KCS	1		
	C958	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	CCUS1H103KCS	1		
	C959	nsp	CAP,CHIP(1608,50V/1000pF,X7R) SAMSUNG	CCUS1H102KCS	1		
	C960-963	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG	CCUS1H104KCS	4		
	C991-994	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG	CCUS1H104KCS	4		
	C997	nsp	CAP,CHIP(1608,50V/0.1uF,X7R) SAMSUNG	CCUS1H104KCS	1		
	C998	nsp	CAP,CHIP(1608,50V/0.01uF,X7R) SAMSUNG	CCUS1H103KCS	1		
OTHER PARTS GROUP							
	BN71	nsp	WIRE ASS'Y(7P,180MM,2MM PITCH)	CWB2B90718047	1	*	
	BN73	nsp	WAFER/ANGLE/2.5mm/11P	CJP11GB03ZY	1	*	
	BN74	nsp	WIRE ASS'Y (7P,80mm,Flat Type)	CWB2B907080G7	1		
	BN75	nsp	WIREASS'Y(7P,100mm)	CWB2B90710047	1		
	BN76	nsp	WIRE ASS'Y (5P,150mm,Flat Type)	CWB1C905150G7	1		
	BN77	nsp	WAFER,FFC(19P-1mm,ANGLE)	CJP19GB113ZY	1		
	BN96	nsp	PIN SOCKET (11P,1.25mm,ANGLE,B-TO-B)	CJP11HJ282Z	1		
	BN99	nsp	WIRE ASS'Y(3P,120MM,2MM PITCH)	CWB1D90312047	1	*	
	CN71,72	nsp	LOCKING TYPE ,STRAIGHT WAFER ,2MM	CJP07GI236ZW	2		
	CN73	nsp	WIRE ASS'Y	CWB1C911100BM	1		
	CN75	nsp	WAFER (7P LOCK ANGLE 2.0MM)	CJP07GJ247ZW	1		
	CN90	nsp	WAFER,FFC(7P-1mm,ANGLE)	CJP07GB113ZY	1		
	CN92	nsp	PIN SOCKET (09P,1.25mm,ANGLE,B-TO-B)	CJP09HJ282Z	1		
	CN94	nsp	LOCKING TYPE ,STRAIGHT WAFER ,2MM	CJP07GI236ZW	1		
	CN95	nsp	LOCKING TYPE ,STRAIGHT WAFER ,2mm	CJP05GI236ZW	1		
	CN96,97	nsp	PIN HEADER (11P,1.25mm,STRAIGHT,B-TO-B)	CJP11GI281Z	2		
	CN99	nsp	LOCKING TYPE ,STRAIGHT WAFER ,2MM	CJP03GI236ZW	1		
	CW01	nsp	WAFER,2P,7.92mm	CJP02GA89ZY	1		
	CW02	nsp	WAFER/STRAIGHT/2.5mm/8P	CJP08GA01ZY	1		
	CW03	nsp	WAFER,YW396-03B(3.96mm)	CJP03GA90ZY	1		
	F901	nsp	HOLDER ,FUSE	KJCFCS5	2		
!	F901	00D9430170909	FUSE ,GLASS TUBE(125V,2A,20MM)	KBA1C2000A4UY	1		
!	F901	943652001740S	FUSE(218Series,250V/1A)	KBA2C1000TLEY	1		
	FL81	943172100160S	V.F.D (FUTABA,16ST103GINK)	CFL16ST103GINK	1		
	GND1,2	nsp	PLATE ,EARTH(TRONIC ELECTRONICS)	CJT1A026	2		
	JK72	nsp	JACK ,BOARD	CJ34M046Z	1		
	JK81	943643102870S	JACK ,HEADPHONE (SILVER)	CJ32D003Z	1		
	JK82	943643103160S	JACK ,USB,VERTICAL(MFI,A TYPE)	CJ39X023ZT	1	*	
	L703,704	943115010260S	COIL ,SPEAKER(0.5uH)	CLEY0R5KAK	2		
	L801,802	nsp	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	2		
	L803	nsp	FERRITE CHIP BEAD(2012/220R,CB05YTYH221)	CLZ9R018V	1		
	L804,805	nsp	RES,CHIP(2012/5%/0ohm)	CRJ18AJ0R0T	2		
	L901,902	nsp	FERRITE CHIP BEAD(4516/60R)	CLZ9Z014Z	2		
	RC81	943262010290S	SENSOR ,REMOTE/U	CRVKSM603TH5B	1		
	RL71	90M-LY000330R	RELAY	HSL4A004ZU	1		
!	RL91	943682100540S	RELAY,DC6V ,1C1P,0.25W	CSL1E007ZE	1	*	
	S801-807	00D943000440Z	SW ,TACT	CST1A0122T	7		
	VR81	943667007540S	ENCODER VOLUME	CSR2A052Z	1		
★		nsp	HEAT SINK ASS'Y	CMYRCDM40ZA	1	*	
★		nsp	SINK ,HEAT(M40)	CMY2A38Z	1	*	

DIGITAL PCB ASS'Y

※Parts indicated by "nsp"on this table cannot be supplied.

※The parts listed below are only for maintenance. Therefore they might differ from the parts used in the unit in appearances or dimensions

NOTE:The symbols in the column Remarks indicate the following destinations.

E3 : U.S.A. & Canada model E2 : Europe model E1C : China model E1 : Asia model JP : Japan model EK : DAB model

BK : Black model SP : Premium Silver model

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
SEMICONDUCTORS GROUP						
D101	943209001080S	DIODE , CHIP , SWITCHING		CVD1SS355T	1	
D102	90M-HD201820R	DIODE, SCHOTTKY BARRIER		HVDRB160L60TE25	1	
D103-105	943209001080S	DIODE , CHIP , SWITCHING		CVD1SS355T	3	
D106,107	90M-HD201820R	DIODE, SCHOTTKY BARRIER		HVDRB160L60TE25	2	
D108	943209001080S	DIODE , CHIP , SWITCHING		CVD1SS355T	1	
D119	943209001080S	DIODE , CHIP , SWITCHING		CVD1SS355T	1	
D201-203	943209001080S	DIODE , CHIP , SWITCHING		CVD1SS355T	3	
D301,302	963209003510S	DIODE , RELIABLE ESD PROTECTION		CVDCDS3C05HDM1	2	
IC11	-	I.C , MCU (512KB,32KB, LQFP-100P)		CVIMB9AF316NAPMC	1	*
IC11	943243103000D	I.C , MCU (RCD-M40)		CVIANAM2224CR	1	*
IC12	943246101070M	I.C , EEPROM (16KBIT,SOP-8P)		CVIK24C16SIRXA	1	
IC13	943234009290S	I.C , RESET 2.4V (200ms,C-MOS,SOT23-5P)		CVIS80124CLMC3JT2	1	
IC21	943245006980S	I.C , CD DSP(DSP,LQFP-80P)		CVITC94A92FG_CU	1	
IC22	943231101820S	I.C REGULATOR 3.3V LDO,SOT-223		CVILM1117C-3V3	1	
IC23	943231101630S	I.C REGULATOR 1.5V LDO,SOT-223		CVILM1117C-1V5	1	
IC24	943239006900S	I.C , 5-CH MOTOR DRIVE(REG,SSOP-28P)		CVIIP4001CRLTF_CN	1	
IC31	943243102260D	I.C , SYSTEM CONTROLLER(TQFP-128P)		CVIBX8804	1	
IC32	943246101060S	I.C , SDRAM(256M,TSOP-54P)		CVIA3V56S40GTP-60	1	
IC33	-	I.C , SERIAL FLASH(16M)		CVIMX25L1606EM2I-12G	1	
IC33	943248103160S	I.C , SERIAL FLASH 16M (RCD-M40)		CVIANAM2225CR	1	*
IC34	23671011050AS	I.C , IPOD AUTHENTICATION FROM D&M		CVI23671011050AS_DM	1	
IC35	943231101880D	IC,regulator(1.2V , SSOP5)		CVIBU12TD3WVG	1	
IC36	943239100690S	I.C , 2CH DAC(32BIT,384KHZ,TSSOP-20P)		CVIPCM5100PWR	1	
IC37	943239101090S	I.C , High side switch (TSSOP-B8)		CVIBD82065FVJ-E2	1	
IC38	00D263124290S	I.C , VOLTAGE REGULATOR(3.3V, SOP-23-5)		CVINJM2831F33	1	
IC39	943606502150M	I.C , USB SWITCH(DUAL SPDT,UQFN10)		CVITC7USB40MU	1	
Q101	943215500020S	T.R,RT1P141C(10K-10K)		CVTRT1P141C	1	
Q102	90M-HX800030R	T.R , CHIP , SOT-23		HVTKRC114S	1	
Q103	943215500140D	T.R,RT1P144C(10K-47K)		CVTRT1P144C	1	
Q104-108	943215500020S	T.R,RT1P141C(10K-10K)		CVTRT1P141C	5	
Q201	00D9430058908	T.R , CHIP , SOT-23		HVTKTA1504SYRTK	1	
RESISTOR GROUP						
R102	nsp	RES,CHIP(1005/5%/22Kohm)		CRJ06IJ223T	1	
R103-105	nsp	RES,CHIP(1005/5%/33ohm)	E3, E2, E1C, JP	CRJ06IJ330T	7	
R104-109	nsp	RES,CHIP(1005/5%/33ohm)		CRJ06IJ330T	7	
R110	nsp	RES,CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1	
R111	nsp	RES,CHIP(1608/5%/47ohm)		CRJ10DJ470T	1	
R113	nsp	RES,CHIP(1005/5%/1Kohm)		CRJ06IJ102T	1	
R114-116	nsp	RES,CHIP(1005/5%/0ohm)		CRJ06IJ0R0T	3	
R117	nsp	RES,CHIP(1608/5%/1Mohm)		CRJ10DJ105T	1	
R118	nsp	RES,CHIP(1608/5%/270ohm)		CRJ10DJ271T	1	
R119,120	nsp	RES,CHIP(1005/5%/10Kohm)		CRJ06IJ103T	2	
R122	nsp	RES,CHIP(1005/5%/4.7Kohm)	E3	CRJ06IJ472T	1	
R122	nsp	RES,CHIP(1005/5%/1.8Kohm)	E2	CRJ06IJ182T	1	
R122	nsp	RES,CHIP(1005/5%/33Kohm)	EK	CRJ06IJ333T	1	
R122	nsp	RES,CHIP(1005/5%/15Kohm)	E1C	CRJ06IJ153T	1	
R122	nsp	RES,CHIP(1005/5%/8.2Kohm)	JP	CRJ06IJ822T	1	
R123	nsp	RES,CHIP(1005/5%/100Kohm)		CRJ06IJ104T	1	
R126	nsp	RES,CHIP(1005/5%/33ohm)		CRJ06IJ330T	1	
R127,128	nsp	RES,CHIP(1005/5%/0ohm)		CRJ06IJ0R0T	2	
R129,130	nsp	RES,CHIP(1005/5%/1Kohm)		CRJ06IJ102T	2	
R131	nsp	RES,CHIP(1005/5%/33ohm)		CRJ06IJ330T	1	
R132,133	nsp	RES,CHIP(1005/5%/33Kohm)		CRJ06IJ333T	2	
R134,135	nsp	RES,CHIP(1005/5%/33ohm)		CRJ06IJ330T	2	
R136,137	nsp	RES,CHIP(1005/5%/33ohm)	EK	CRJ06IJ330T	2	
R138	nsp	RES,CHIP(1005/5%/0ohm)	EK	CRJ06IJ0R0T	1	
R139	nsp	RES,CHIP(1005/5%/33Kohm)		CRJ06IJ333T	1	
R140-142	nsp	RES,CHIP(1005/5%/22Kohm)		CRJ06IJ223T	3	
R143,144	nsp	RES,CHIP(1005/5%/4.7Kohm)	EK	CRJ06IJ472T	2	
R145	nsp	RES,CHIP(1005/5%/100Kohm)		CRJ06IJ104T	1	
R146,147	nsp	RES,CHIP(1005/5%/10Kohm)		CRJ06IJ103T	2	
R148,149	nsp	RES,CHIP(1005/5%/33ohm)		CRJ06IJ330T	2	
R150	nsp	RES,CHIP(1005/5%/47ohm)		CRJ06IJ470T	1	
R151	nsp	RES,CHIP(1005/5%/100Kohm)		CRJ06IJ104T	1	
R154-156	nsp	RES,CHIP(1005/5%/100Kohm)		CRJ06IJ104T	3	
R201	nsp	RES,CHIP(1005/5%/220ohm)		CRJ06IJ221T	1	
R202,203	nsp	RES,CHIP(1005/5%/0ohm)		CRJ06IJ0R0T	2	
R205-210	nsp	RES,CHIP(1005/5%/0ohm)		CRJ06IJ0R0T	6	
R211	nsp	RES,CHIP(1005/5%/33ohm)		CRJ06IJ330T	1	
R212	nsp	RES,CHIP(1608/5%/1Mohm)		CRJ10DJ105T	1	
R213	nsp	RES,CHIP(1608/5%/100ohm)		CRJ10DJ101T	1	
R214,215	nsp	RES,CHIP(1005/5%/15Kohm)		CRJ06IJ153T	2	
R216,217	nsp	RES,CHIP(1005/5%/0ohm)		CRJ06IJ0R0T	2	
R218,219	nsp	RES,CHIP(1005/5%/15Kohm)		CRJ06IJ153T	2	
R220	nsp	RES,CHIP(1005/5%/330Kohm)		CRJ06IJ334T	1	
R221	nsp	RES,CHIP(1005/5%/15Kohm)		CRJ06IJ153T	1	
R222	nsp	RES,CHIP(1005/5%/47Kohm)		CRJ06IJ473T	1	
R223	nsp	RES,CHIP(1005/5%/10Kohm)		CRJ06IJ103T	1	
R224	nsp	RES,CHIP(1005/5%/33ohm)		CRJ06IJ330T	1	
R229	nsp	RES,CHIP(1608/5%/91ohm)		CRJ10DJ910T	1	
R230	nsp	RES,CHIP(1608/5%/1Kohm)		CRJ10DJ102T	1	
R231-234	nsp	RES,CHIP(1608/5%/39ohm)		CRJ10DJ390T	4	
R235	nsp	RES,CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1	
R237	nsp	RES,CHIP(1608/5%/470ohm)		CRJ10DJ471T	1	
R238	nsp	RES,CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1	
R239	nsp	RES,CHIP(1005/5%/4.7Kohm)		CRJ06IJ472T	1	
R240	nsp	RES,CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1	
R241-243	nsp	RES,CHIP(1608/5%/18Kohm)		CRJ10DJ183T	3	
R244	nsp	RES,CHIP(1005/5%/4.7Kohm)		CRJ06IJ472T	1	
R245-247	nsp	RES,CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	3	
R248	nsp	RES,CHIP(1608/5%/22Kohm)		CRJ10DJ223T	1	
R249	nsp	RES,CHIP(1608/5%/47Kohm)		CRJ10DJ473T	1	
R250	nsp	RES,CHIP(1608/5%/470ohm)		CRJ10DJ471T	1	
R253-256	nsp	RES,CHIP(1005/5%/47Kohm)		CRJ06IJ473T	4	
R301,302	nsp	RES,CHIP(1005/5%/10Kohm)		CRJ06IJ103T	2	
R303,304	nsp	RES,CHIP(1005/5%/220ohm)		CRJ06IJ221T	2	
R305	nsp	RES,CHIP(1005/5%/150ohm)		CRJ06IJ151T	1	
R306	nsp	RES,CHIP(1005/5%/220ohm)		CRJ06IJ221T	1	
R308,309	nsp	RES,CHIP(1005/5%/2.2Kohm)		CRJ06IJ222T	2	
R310	nsp	RES,CHIP(1005/5%/0ohm)		CRJ06IJ0R0T	1	
R311	nsp	RES,CHIP(1005/5%/470ohm)		CRJ06IJ471T	1	
R312	nsp	RES,CHIP(1005/5%/47ohm)		CRJ06IJ470T	1	
R313	nsp	RES,CHIP(1005/5%/10Kohm)		CRJ06IJ103T	1	
R314,315	nsp	RES,CHIP(1005/5%/47ohm)		CRJ06IJ470T	2	
R316-318	nsp	RES,CHIP(1005/5%/10Kohm)		CRJ06IJ103T	3	

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
R319,320	nsp	RES, CHIP(1005/5%/470ohm)		CRJ06IJ471T	2	
R321,322	nsp	RES, CHIP(1005/5%/10Kohm)		CRJ06IJ103T	2	
R324	nsp	RES, CHIP(1005/5%/1Kohm)		CRJ06IJ102T	1	
R325	nsp	RES, CHIP(1005/5%/100Kohm)		CRJ06IJ104T	1	
R326	nsp	RES, CHIP(1005/5%/680ohm)		CRJ06IJ681T	1	
R327-329	nsp	RES, CHIP(1005/5%/10Kohm)		CRJ06IJ103T	3	
R330	nsp	RES, CHIP(1005/5%/1Mohm)		CRJ06IJ105T	1	
R331	nsp	RES, CHIP(1005/5%/100ohm)		CRJ06IJ101T	1	
R332-337	nsp	RES, CHIP(1005/5%/470ohm)		CRJ06IJ471T	6	
R338	nsp	RES, CHIP(1005/5%/100ohm)		CRJ06IJ101T	1	
R339	nsp	RES, CHIP(1005/5%/470ohm)		CRJ06IJ471T	1	
R341,342	nsp	RES, CHIP(1608/5%/27ohm)		CRJ10DJ270T	2	
R343,344	nsp	RES, CHIP(1005/5%/470ohm)		CRJ06IJ471T	2	
R345	nsp	RES, CHIP(1005/5%/10Kohm)		CRJ06IJ103T	1	
R346	nsp	RES, CHIP(1005/5%/2.2ohm)		CRJ06IJ2R2T	1	*
R347,348	nsp	RES, CHIP(1005/5%/10Kohm)		CRJ06IJ103T	2	
R350	nsp	RES, CHIP(1005/5%/10Kohm)		CRJ06IJ103T	1	
R355	nsp	RES, CHIP(1005/5%/47ohm)		CRJ06IJ470T	1	
R356-358	nsp	RES, CHIP(1005/5%/100ohm)		CRJ06IJ101T	3	
R360	nsp	RES, CHIP(1005/5%/10Kohm)		CRJ06IJ103T	1	
R361	nsp	RES, CHIP(1005/5%/0ohm)		CRJ06IJO0T	1	
R362-364	nsp	RES, CHIP(1005/5%/10Kohm)		CRJ06IJ103T	3	
R365	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1	
R901	nsp	RES, CHIP(1608/5%/0ohm)	E2	CRJ10DJ0R0T	1	
R902	nsp	RES, CHIP(1608/5%/0ohm)	JP	CRJ10DJ0R0T	1	
R903	nsp	RES, CHIP(1608/5%/0ohm)	E1C	CRJ10DJ0R0T	1	
R904	nsp	RES, CHIP(1608/5%/0ohm)	EK	CRJ10DJ0R0T	1	
R905	nsp	RES, CHIP(1608/5%/0ohm)	E3	CRJ10DJ0R0T	1	
RN31-38	nsp	RES, CHIP(1005/5%/33ohm*4)		CRJ064IJ330T	8	
CAPACITORS GROUP						
C101	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	1	
C102	nsp	CAP, ALUMINUM ELECTROLYTIC (6.3V/22uF)		CCCEC0JMVG220T	1	
C103	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	1	
C104	nsp	CAP, CHIP(1005, 50V/100pF, C0G) SAMSUNG		CCU1H101JAS	1	
C105,106	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	2	
C107,108	943134503060S	CAP, SMD ELECT(16V/22uF)		CCCEC1CMVG220T	2	
C109,110	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	2	
C111	nsp	CAP, CHIP(1608, 50V/22pF, C0G) SAMSUNG		CCUS1H220JAS	1	
C112	nsp	CAP, CHIP(1608, 50V/18pF, C0G) SAMSUNG		CCUS1H180JAS	1	
C114	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	1	
C115	nsp	CAP, CHIP(1608, 10V/1uF, X7R, X7S) SAMSUNG		CCUS1A105KCS	1	
C116,117	nsp	CAP, CHIP(1608, 50V/30pF)		CCUS1H300JA	2	
C118	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	1	
C119	nsp	CAP, ALUMINUM ELECTROLYTIC (6.3V/22uF)		CCCEC0JMVG220T	1	
C120,121	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	2	
C122	nsp	CAP, ALUMINUM ELECTROLYTIC (6.3V/22uF)		CCCEC0JMVG220T	1	
C123	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	1	
C124	nsp	CAP, CHIP(1005, 50V/0.01uF, X7R) SAMSUNG		CCU1H103KCS	1	
C125-127	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	3	
C128,129	nsp	CAP, CHIP(1005, 50V/22pF, C0G) SAMSUNG		CCU1H220JAS	2	
C130	nsp	CAP, CHIP(1608, 50V/220pF, C0G) SAMSUNG		CCUS1H221JAS	1	
C135	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	1	
C142	nsp	CAP, SMD ELECT(35V/10uF)		HCEC1VRV2100T	1	
C201	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	1	
C202	nsp	CAP, CHIP(1005, 50V/2200pF, X7R) SAMSUNG		CCU1H222KCS	1	
C203	nsp	CAP, SMD ELECT(6.3V/100uF)		HCEC0JRV2101T	1	
C204	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	1	
C205	nsp	CAP, CHIP(1005, 50V/0.01uF, X7R) SAMSUNG		CCU1H103KCS	1	
C206	nsp	CAP, CHIP(1005, 50V/4700pF, X7R) SAMSUNG		CCU1H472KCS	1	
C207	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	1	
C208	nsp	CAP, CHIP(1005, 25V/0.015uF, X7R) SAMSUNG		CCU1E153KCS	1	
C209	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	1	
C211	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	1	
C212	943134500030S	CAP, SMD ELECT(16V/470uF)		CCCEC1CRV471T	1	
C213	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	1	
C214	nsp	CAP, SMD ELECT(6.3V/100uF)		HCEC0JRV2101T	1	
C215	943134500030S	CAP, SMD ELECT(16V/470uF)		CCCEC1CRV471T	1	
C216,217	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	2	
C218	943134500030S	CAP, SMD ELECT(16V/470uF)		CCCEC1CRV471T	1	
C219	nsp	CAP, CHIP(1005, 50V/0.01uF, X7R) SAMSUNG		CCU1H103KCS	1	
C220	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	1	
C221	943134500030S	CAP, SMD ELECT(16V/470uF)		CCCEC1CRV471T	1	
C222,223	nsp	CAP, CHIP(1005, 50V/470pF, C0G) SAMSUNG		CCU1H471JAS	2	
C224	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	1	
C225	nsp	CAP, CHIP(1608, 50V/0.033uF, X7R) SAMSUNG		CCUS1H333KCS	1	
C226	nsp	CAP, CHIP(1005, 50V/5600pF)		CCU1H562KC	1	*
C228,229	nsp	CAP, CHIP(1005, 25V/0.047uF, X7R) SAMSUNG		CCU1E473KCS	2	
C230	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	1	
C231	nsp	CAP, SMD ELECT(6.3V/47uF)		HCEC0JRV2470T	1	
C232,233	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	2	
C234	nsp	CAP, SMD ELECT(6.3V/47uF)		HCEC0JRV2470T	1	
C235,236	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	2	
C237	nsp	CAP, SMD ELECT(6.3V/100uF)		HCEC0JRV2101T	1	
C238,239	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	2	
C240	nsp	CAP, CHIP(1608, 50V/18pF, C0G) SAMSUNG		CCUS1H180JAS	1	
C241	nsp	CAP, CHIP(1608, 50V/15pF, C0G) SAMSUNG		CCUS1H150JAS	1	
C242	nsp	CAP, CHIP(1005, 50V/1000pF, X7R) SAMSUNG		CCU1H102KCS	1	
C243,244	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	2	
C245	nsp	CAP, CHIP(1005, 25V/0.015uF, X7R) SAMSUNG		CCU1E153KCS	1	
C246	nsp	CAP, SMD ELECT(35V/10uF)		HCEC1VRV2100T	1	
C247	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	1	
C248	nsp	CAP, SMD ELECT(6.3V/100uF)		HCEC0JRV2101T	1	
C249	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	1	
C250	nsp	CAP, CHIP(1005, 50V/47pF, C0G) SAMSUNG		CCU1H470JAS	1	*
C251	nsp	CAP, SMD ELECT(6.3V/47uF)		HCEC0JRV2470T	1	
C252	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	1	
C253	nsp	CAP, CHIP(1005, 50V/0.01uF, X7R) SAMSUNG		CCU1H103KCS	1	
C255	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	1	
C257,258	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	2	
C260,261	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	2	
C262	nsp	CAP, SMD ELECT(6.3V/100uF)		HCEC0JRV2101T	1	
C263	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	1	
C264,265	943134500030S	CAP, SMD ELECT(16V/470uF)		CCCEC1CRV471T	2	
C266,267	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG		CCUS1H104KCS	2	
C301	nsp	CAP, CHIP(1005, 50V/1000pF, X7R) SAMSUNG		CCU1H102KCS	1	
C302,303	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	2	
C304	nsp	CAP, CHIP(1005, 50V/1000pF, X7R) SAMSUNG		CCU1H102KCS	1	
C305	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	1	
C306-308	nsp	CAP, CHIP(1005, 50V/1000pF, X7R) SAMSUNG		CCU1H102KCS	3	
C309,310	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	2	
C312	nsp	CAP, CHIP(2012, 6.3V/10uF, X5R) SAMSUNG		CCUC0J106KCS	1	
C313	nsp	CAP, CHIP(1005, 50V/1000pF, X7R) SAMSUNG		CCU1H102KCS	1	
C314	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG		CCU1C104KCS	1	

REF No.	Part No.	Part Name	Remarks	Q'ty	New	Ver
C315	nsp	CAP, CHIP(1005, 50V/1000pF, X7R) SAMSUNG	CCU1H102KCS	1		
C316	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	1		
C317-320	nsp	CAP, CHIP(1005, 50V/33pF, C0G) SAMSUNG	CCU1H330JAS	4		
C321	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	1		
C322	nsp	CAP, CHIP(1005, 50V/1000pF, X7R) SAMSUNG	CCU1H102KCS	1		
C323,324	nsp	CAP, CHIP(1005, 50V/220pF, C0G) SAMSUNG	CCU1H221JAS	2		
C325	nsp	CAP, CHIP(1005, 50V/0.01uF, X7R) SAMSUNG	CCU1H103KCS	1		
C326,327	nsp	CAP, CHIP(1005, 50V/150pF, C0G) SAMSUNG	CCU1H150JAS	2		
C328	nsp	CAP, CHIP(1005, 50V/1000pF, X7R) SAMSUNG	CCU1H102KCS	1		
C329,330	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	2		
C331-333	nsp	CAP, CHIP(2012, 6.3V/10uF, X5R) SAMSUNG	CCUC0J106KCS	3		
C334	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	1		
C335	nsp	CAP, CHIP(1005, 50V/1000pF, X7R) SAMSUNG	CCU1H102KCS	1		
C336	nsp	CAP, CHIP(2012, 6.3V/10uF, X5R) SAMSUNG	CCUC0J106KCS	1		
C337	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	1		
C338	nsp	CAP, SMD ELECT(6.3V/47uF)	HCCEC0JRV2470T	1		
C339,340	943134502560M	CAP,ALUMINUM ELECTROLYTIC (6.3V/220uF)	CCCEC0JMVG221T	2		
C341-345	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	5		
C346-349	nsp	CAP, CHIP(1005, 50V/0.01uF, X7R) SAMSUNG	CCU1H103KCS	4		
C350-352	nsp	CAP, CHIP(1005, 50V/1000pF, X7R) SAMSUNG	CCU1H102KCS	3		
C353-356	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	4		
C357	nsp	CAP,ALUMINUM ELECTROLYTIC (16V/10uF)	CCCEC1CMVG100T	1		
C358	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	1		
C359	nsp	CAP, CHIP(2012, 6.3V/10uF, X5R) SAMSUNG	CCUC0J106KCS	1		
C360	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	1		
C361	nsp	CAP, CHIP(2012, 6.3V/10uF, X5R) SAMSUNG	CCUC0J106KCS	1		
C362,363	nsp	CAP, CHIP(1608, 10V/1uF, X7R, X7S) SAMSUNG	CCUS1A105KCS	2		
C364,365	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	2		
C368	nsp	CAP, CHIP(2012, 6.3V/10uF, X5R) SAMSUNG	CCUC0J106KCS	1		
C369	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	1		
C370	nsp	CAP, CHIP(2012, 6.3V/10uF, X5R) SAMSUNG	CCUC0J106KCS	1		
C371	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	1		
C373	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	1		
C374	nsp	CAP, CHIP(1608, 6.3V/2.2uF, X7R) SAMSUNG	CCUS0J225KCS	1		
C375	nsp	CAP, CHIP(2012, 6.3V/10uF, X5R) SAMSUNG	CCUC0J106KCS	1		
C376	nsp	CAP, CHIP(1608, 6.3V/2.2uF, X7R) SAMSUNG	CCUS0J225KCS	1		
C377	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	1		
C378,379	00D2570505936	CAP, CHIP(1608, 50V/2200pF, CH, MURATA GRM18)	CCUMUSCH1H222JAM	2		
C380-385	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	6		
C386	nsp	CAP, CHIP(1005, 50V/0.01uF, X7R) SAMSUNG	CCU1H103KCS	1		
C387	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	1		
C388	nsp	CAP, CHIP(2012, 6.3V/22uF, X5R) SAMSUNG	CCUC0J226KCS	1		
C389	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	1		
C390,391	943134503060S	CAP, SMD ELECT(16V/22uF)	CCCEC1CMVG220T	2		
C401	nsp	CAP, CHIP(1005, 25V/0.01uF, X7R) SAMSUNG	CCU1E103KCS	1		
C402	nsp	CAP, CHIP(1005, 50V/1000pF, X7R) SAMSUNG	CCU1H102KCS	1		
C403	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	1		
C405-407	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG	CCUS1H104KCS	3		
C408	nsp	CAP, CHIP(1608, 50V/0.01uF, X7R) SAMSUNG	CCUS1H103KCS	1		
C409	nsp	CAP, CHIP(1608, 50V/1000pF, X7R) SAMSUNG	CCUS1H102KCS	1		
C410	nsp	CAP, CHIP(1608, 50V/0.01uF, X7R) SAMSUNG	CCUS1H103KCS	1		
C411	nsp	CAP, CHIP(1608, 50V/1000pF, X7R) SAMSUNG	CCUS1H102KCS	1		
C418	nsp	CAP, CHIP(1005, 25V/0.01uF, X7R) SAMSUNG	CCU1E103KCS	1		
C419	nsp	CAP, CHIP(1005, 50V/1000pF, X7R) SAMSUNG	CCU1H102KCS	1		
C420	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	1		
C421	nsp	CAP, CHIP(1005, 25V/0.01uF, X7R) SAMSUNG	CCU1E103KCS	1		
C422	nsp	CAP, CHIP(1005, 50V/1000pF, X7R) SAMSUNG	CCU1H102KCS	1		
C423	nsp	CAP, CHIP(1005, 25V/0.01uF, X7R) SAMSUNG	CCU1E103KCS	1		
C424	nsp	CAP, CHIP(1005, 50V/1000pF, X7R) SAMSUNG	CCU1H102KCS	1		
C425,426	nsp	CAP, CHIP(1005, 25V/0.01uF, X7R) SAMSUNG	CCU1E103KCS	2		
C427	nsp	CAP, CHIP(1005, 50V/1000pF, X7R) SAMSUNG	CCU1H102KCS	1		
C428	nsp	CAP, CHIP(1005, 25V/0.01uF, X7R) SAMSUNG	CCU1E103KCS	1		
C429	nsp	CAP, CHIP(1005, 50V/1000pF, X7R) SAMSUNG	CCU1H102KCS	1		
C430-433	nsp	CAP, CHIP(1005, 25V/0.01uF, X7R) SAMSUNG	CCU1E103KCS	4		
C434-436	nsp	CAP, CHIP(1005, 50V/1000pF, X7R) SAMSUNG	CCU1H102KCS	3		
C901,902	nsp	CAP, CHIP(1005, 16V/0.1uF, X7R) SAMSUNG	CCU1C104KCS	2		
C903	nsp	CAP, CHIP(1608, 50V/0.1uF, X7R) SAMSUNG	CCUS1H104KCS	1		
C904	nsp	CAP, CHIP(1608, 50V/0.01uF, X7R) SAMSUNG	CCUS1H103KCS	1		
C905	nsp	CAP, CHIP(1608, 50V/1000pF, X7R) SAMSUNG	CCUS1H102KCS	1		
OTHER PARTS GROUP						
BN52	nsp	LOCKING TYPE , STRAIGHT WAFER , 2MM	CJP03GI236ZW	1		
BN97	nsp	PIN SOCKET (11P,1.25mm,ANGLE,B-TO-B)	CJP11HJ282Z	1		
CN21	nsp	WAFER , SMD (2MM PITCH)	CJP05GA208ZY	1		
CN22	nsp	WAFER , SMD (2MM PITCH)	CJP06GA208ZY	1		
CN23	nsp	WAFER, FFC, SMD(16P-1mm, STRAIGHT)	CJP16GA193ZY	1		
CN62	nsp	WAFER, FFC, SMD(21P-1mm, STRAIGHT)	CJP21GA193ZY	1		
CN74	nsp	WAFER, 2mm, SMD, Vertical, 07p	CJP07GA208ZY	1		
CN76	nsp	WAFER , SMD (2MM PITCH)	CJP05GA208ZY	1		
CN77	nsp	WAFER, FFC, SMD(19P-1mm, STRAIGHT)	CJP19GA193ZY	1		
CN93	nsp	PIN SOCKET (09P,1.25mm,ANGLE,B-TO-B)	CJP09HJ282Z	1		
JW01	nsp	WIRE ASS'Y (1P, 100mm, BLK, UL1015#20, CKM-T)	CWE7102100TT	1		
L101	nsp	FERRITE , CHIP BEAD(60ohm, 2012)	CLZ9R001Z	1		
L201	90M-LU000220R	INDUCTOR CHIP 10UH (3225 PKG)	HLQ10E100KRZ	1		
L202,203	nsp	FERRITE , CHIP BEAD(60ohm, 2012)	CLZ9R001Z	2		
L301-310	nsp	FERRITE CHIP BEAD(2012/220R, CB05YTYH221)	CLZ9R018V	10		
X101	943141101370S	X-TAL, HC-49/S SMD , 4.000MHZ, 18PF	COX04000E180ST	1	*	
X102	nsp	X-TAL, 32.768KHz, TuningFork, 12.5pF, 10ppm	COX00032K125I10	1		
X201	943141001190S	X-TAL, 16.934MHz, HC-49/SMD, 12pF, 25PPM	COX16934E120S	1		
X301	943141100610S	X-TAL, SMD 3.2X2.5, 12.000MHZ, 10PF	COX12000I100ST	1		

EXPLODED

※Parts indicated by "nsp" on this table cannot be supplied.

※The parts listed below are only for maintenance. Therefore they might differ from the parts used in the unit in appearances or dimensions.

NOTE: The symbols in the column Remarks indicate the following destinations.

E3 : U.S.A. & Canada model E2 : Europe model E1C : China model E1 : Asia model JP : Japan model EK : DAB model

BK : Black model SP : Premium Silver model

REF No.	Part No.	Part Name	Remarks		Q'ty	New	Ver
C1	nsp	FRONT PCB ASSY		COP12761Z-3	1	*	
C2	nsp	CONNETER PCB		CUP12761Z-6,7	2	*	
C3	nsp	AMP PCB ASSY		COP12761Z-2	1	*	
C4	nsp	CONNETER PCB ASSY		COP12761Z-5	1	*	
C5a	nsp	POWER PCB ASSY		COP12761Z-1	1	*	
! C5b (T901 for MAIN)	943101000980D	TRANS , SUB RCD-M37USA	E3	CLT5I010ZU	1		
! C5b (T901 for MAIN)	943101000960D	TRANS , SUB RCD-M37EUR	E2, EK	CLT5I010ZE	1		
! C5b (T901 for MAIN)	943101101970S	TRANS , SUB RCD-M39CHN	E1C	CLT5I010ZH	1		
! C5b (T901 for MAIN)	943101000970D	TRANS , SUB RCD-M37JPN	JP	CLT5I010ZJ	1		
C6a	nsp	SPEAKER PCB ASSY		COP12761Z-4	1	*	
C6b (JK71 for MAIN)	943646100640S	4P SCREW SPK (BK/RD,GOLD,94V-0,Transparence)		CJJ5P043Z	1	*	
C7	nsp	INPUT PCB ASSY		COP12762Z-1	1	*	
C8	nsp	DC-DC PCB ASSY		COP12762Z-2	1	*	
C9	nsp	REGULATOR PCB ASSY		COP12762Z-3	1	*	
C10	nsp	DAB PCB ASSY		COP12762Z-4	1	*	
C11	nsp	MCU PCB ASSY		COP12763Z	1	*	
C12 (TM51 for INPUT)	943183100570S	TUNER(USA) FM(SCREW:F TYPE),	E3, JP	CNVVM004MV1S63SA-1	1	*	
C12 (TM51 for INPUT)	943183100210S	TUNER , RDS , FM(PAL TYPE)	E2, E1C	CNVMW104FV1-S63V	1		
C13	943183100560S	MODULE, DAB(DAB/DAB+/DMB-audio/FM-RDS)	EK	CNVGVM130S01	1	*	
! C14	943101000990D	TRANS , POWER RCD-M37USA	E3	CLT5P047ZU	1		
! C14	943101000290D	TRANS , POWER RCD-M37EUR	E2, EK	CLT5P047ZE	1		
! C14	943101101960S	TRANS , POWER RCD-M39CHN	E1C	CLT5P047ZH	1		
! C14	943101000300D	TRANS , POWER RCD-M37JPN	JP	CLT5P047ZJ	1		
! C15 (CN91 for MAIN)	943641500240D	INLET , AC , NON-POL (250V/2.5A PCB MOUNT TYPE)		CJJ8A019Z	1		
C16	943302100130D	CD MECHANISM(KOTY LOADER + EBG EM101RNK)		CJDKT690	1	*	
└─★	900302100200S	CD MECHANISM (Traverse)		CJD5C6Z01Z	1		
└─C16-1	30201005100AD	LM BELT	For LOADING	CDV1A011	1		
M1	943411103660D	VOLUME KNOB ASS'Y	BK	CGK1A204ZA	1	*	
M1	943411103670D	VOLUME KNOB ASS'Y	SP	CGK1A204YA	1	*	
M3	943402105310D	PANEL , FRONT AL	BKE3, BKJP	CKM1A291XC45	1	*	
M3	943402105320D	PANEL , FRONT AL BLACK	BKE2	CKM1A291ZC45	1	*	
M3	943402105330D	PANEL , FRONT AL SILVER	SPE2	CKM1A291ZC62	1	*	
M3	943402105340D	PANEL , FRONT AL BLACK	BKEK	CKM1A291WC45	1	*	
M3	943402105350D	PANEL , FRONT AL	SPEK	CKM1A291WC62	1	*	
M3	943402105360D	PANEL , FRONT AL	E1C	CKM1A291YC45	1	*	
M3	943402105370D	PANEL , FRONT AL	SPJP	CKM1A291XC62	1	*	
M4	nsp	SINK , HEAT(M40)		CMY2A38Z	1	*	
M5	nsp	USB EARTH PLATE		CMC1A351	1		
M6	nsp	EARTH PLATE		CMC1A350	1		
M7	nsp	CHASSIS , BOTTOM		CUA1A336	1		
M8	943401100730D	CABINET , TOP	BK	CKC3A186K117	1		
M8	943401100720D	CABINET , TOP	SP	CKC3A186D11	1		
M9	nsp	REAR, PANEL E3 : CKF4A458X	E3	CKF4A458X	1	*	
M9	nsp	REAR, PANEL E2 : CKF4A458Y	E2	CKF4A458Y	1	*	
M9	nsp	REAR, PANEL DAB : CKF4A458Z	EK	CKF4A458Z	1	*	
M9	nsp	REAR, PANEL E1C : CKF6A458Z	E1C	CKF6A458Z	1	*	
M9	nsp	REAR, PANEL JP : CKF6A458Y	JP	CKF6A458Y	1	*	
M10	-	WASHER	EK	-	1	*	
M11	-	DAB NUT	EK	-	1	*	
M12	nsp	BRACKET , FLT		CMD1A468-V1	2	*	
M13	nsp	BRACKET , PCB		CMD1A629	1	*	
M14	nsp	BRACKET , PCB(BK61, 72, 74)		CMD1A387-V1	3		
M15	nsp	BRACKET , PCB(BK11, 71, 73, 75, 76, 91-93, 11)		CMD1A569-V1	9		
M16	nsp	WASHER , GROUND		CNW1A035	1		
P1	943443101080S	PANEL , INNER BLACK	BK	CGW1A570B28	1	*	
P1	943443101090S	PANEL , INNER SILVER	SP	CGW1A570RGG45	1	*	
P2	943415100400D	DOOR , CD	BK	CGR1A537B28	1		
P2	943415100390D	DOOR , CD	SP	CGR1A537RGG45	1		
P3	943416100780D	WINDOW , FIP		CGU1A464Z	1		
P4	00D9430189903	LENS		CGL1A254	1		
P5	nsp	BUTTON, CAP	BK	CGR1A511	1		
P5	nsp	BUTTON, CAP	SP	CGR1A511C73	1		
P6	nsp	TAPE , POWER CAP		CHP1A077	1		
P7	943412101410D	KNOB , 6KEY	BK	CBT1A1215	1	*	
P7	943412101420D	KNOB , 6KEY	SP	CBT1A1215C73	1	*	
P8	nsp	SUPPORT , MECHA		CMH1A331	2		
P9	00D9430094603	CUSHION , FOOT		CHG1A285	4		
P10	00D9430094506	FOOT		CKL1A189	4		
P11	nsp	INSULATOR , TRANS		CMX1A310	1		
P12	nsp	CUSHION , MECHA		CHG1A546	1		
S1	nsp	SCREW		CTB4+8FR	4		
S2	nsp	SCREW		CTW3+18JR	2		
S3	nsp	SCREW		CTB3+8JFZR	5		
S4	nsp	SCREW		CTB3+10JFZR	14		
S5	nsp	DOT SCREW		CTBD3+8JFZR	6		
S5	nsp	DOT SCREW	BK	CTBD3+8JFZR	6		
S5	nsp	DOT SCREW	SP	CTBD3+8JFN	6		
S6	nsp	SCREW	BK	CTWD4+6FFZR	2		
S6	nsp	SCREW	SP	CTWD4+6FFN	2		
S7	nsp	SCREW		CTB3+6FFZR	10		
S8	nsp	SCREW		CTS3+8JFZR	2		
S9	nsp	SCREW		CTB3+6JFZR	13		
★CN21	nsp	WIRE ASS'Y (5P, 100mm, With Hemelon, Flat Type)		CWB1B005100GG001	1	*	
★CN22	nsp	WIRE ASS'Y (6P, 150mm, With Hemelon, Flat Type)		CWB5A906150GG001	1	*	
★CN23	943606502750S	CABLE , CARD(16P, 160mm CD MECHA)		CWC4F1A16A160A08	1	*	
★CN62	943606502770S	CARD CABLE (21P,1.0mm,250mm,B TYPE)		CWC4F4A21A200B08	1		
★CN77	943606502760S	CABLE , CARD (19P, 80mm, 1mm PITCH)		CWC4F4A19A080B08	1		

PACKING

※Parts indicated by "nsp"on this table cannot be supplied.

※The parts listed below are only for maintenance. Therefore they might differ from the parts used in the unit in appearances or dimensions

NOTE:The symbols in the column Remarks indicate the following destinations.

E3 : U.S.A. & Canada model E2 : Europe model E1C : China model E1 : Asia model JP : Japan model EK : DAB model

BK : Black model SP : Premium Silver model

REF No.	Part No.	Part Name	Remarks		Q'ty	New	Ver
1	54111127000AD	MANUAL QUICK	E3	CQX1A1907Z	1	*	
1	54111126900AD	MANUAL QUICK	E2, EK	CQX1A1906Z	1	*	
1	54111127200AD	MANUAL QUICK	E1C	CQX1A1908Z	1	*	
1	54111127100AD	MANUAL QUICK(J)	JP	CQX1A1909Z	1	*	
2	943539100930S	SHEET , TOP		CQE1A777	1	*	
3	943533102980D	PAD ,SNOW TOP		CPS1A1040	1	*	
4	nsp	LABEL , FCC	E3	CQB1A1384Z	1	*	
5	nsp	TAPE , OPP		CHS1A258Y	3		
6	nsp	set, sheet (600*600)		CPB1A237Z	1		
7	-	SET , CD RECEIVER		-	1	*	
8	nsp	LABEL , POP	E3, E2, JP	CQB1A1386Z	1	*	
8	nsp	LABEL , POP	EK	CQB1A1387Z	1	*	
9	-	INSTRUCTION MANUAL ASSY		-	1	*	
9a	nsp	BAG , ZIPPER POLY(A5)		CPB1A227Z	1		
9b	90M-ZA000230R	FM 1 POLE ANT(UL)	E3, JP	CSA1A019Z	1		
9b	00D9430113403	FM 1 POLE ANT	E2, E1C	CSA1A018Z	1		
9b	943429007990S	ANT , DAB	EK	CSA1A036Z	1		
9c	963116100070S	ANT, AM LOOP(9.5uH/5T)	E3, JP	CSA1A039Z	1		
9e	nsp	SHEET , SAFETY	E3	CQE1A776Z	1	*	
9e	nsp	SHEET , SAFETY	E2, EK	CQE1A775Z	1	*	
9e	nsp	SHEET , SAFETY	E1C	CQE1A784Z	1	*	
9e	nsp	SHEET , SAFETY	JP	CQE1A785Z	1	*	
9f	nsp	CARD , WARRANTY	E3	CQE1A224N	1		
9f	nsp	CARD FOR CHINA IDENTIFICATION	E1C	CQE1A450Z	1		
9g	54111126300AD	MANUAL , INSTRUCTION (E1C)	E1C	CQX1A1904Z	1	*	
9g	54111126200AD	MANUAL , INSTRUCTION (J)	JP	CQX1A1905Z	1	*	
9h	35201038100AD	CD MANUAL ASS'Y (E3)	E3	CFT1A169ZA	1	*	
9h	35201038000AD	CD MANUAL ASS'Y (E2)	E2, EK	CFT1A168ZA	1	*	
9i	nsp	China Tuner Isolator, SGLBF-6B	E1C	CLR9Z001Z	1		
10	nsp	BATTERY , AAA 2PCS IN PACK		CABR03PPB-GN	2	*	
11	30701021500AS	REMOCON TRANSMITER ASS'Y (RCD-M40)		CARTRCDM40	1	*	
! 12	943693100500D	CORD , POWER(7A/125V, USA, INLET TYPE, WHITE TIE)	E3	CJA2A141ZH	1		
! 12	943611501000D	CORD , POWER EUR(H03VVH2-F 2X0.75MM NM)	E2	CJA2B108ZV	1		
! 12	943611000210S	CORD , POWER UK(H03VVH2-F 2X0.75MM)	EK	CJA2E106ZV	1		
! 12	943611500440S	CORD , POWER	E1C	CJA2N078Z	1		
! 12	943611009390S	CORD , POWER JPN INLET TYPE(2.5A, 250V)	JP	CJA2J116Z	1		
13	943533102990D	PAD , SNOW BOTTOM		CPS1A1041	1	*	
14	943531104920D	BOX , OUT CARTON(E3)	E3	CPG3A860AI	1	*	
14	943531104930D	BOX , OUT CARTON(E2)	E2	CPG3A860AH	1	*	
14	943531104940D	BOX , OUT CARTON(EK)	EK	CPG3A860AJ	1	*	
14	943531104950D	BOX , OUT CARTON(E1C)	E1C	CPG3A860AG	1	*	
14	943531104960D	BOX , OUT CARTON	JP	CPG3A860AK	1	*	
15	nsp	CARD , WARRANTY CHINA	E1C	CQE1A473W	1		
15	nsp	CARD , WARRANTY JAPAN	JP	CQE1A194T	1		
16	544110091014M	LABEL , WHITE M1 SG	SP	CQB1A908Z	2		
17	nsp	CONTROL, LABEL		CQB1A993Z	1		
19	-	SET		-	1		
20	nsp	RCDM40 SPEAKER	E3	SCM40BKE3	1	*	
21	943531104970D	BOX , MASTER	E3	CPG1A966Y	1	*	
22	nsp	CONTROL, LABEL		CQB1A993Z	1		
★	nsp	LABEL, CA ATCM	E3	CQB1A963D	1	*	