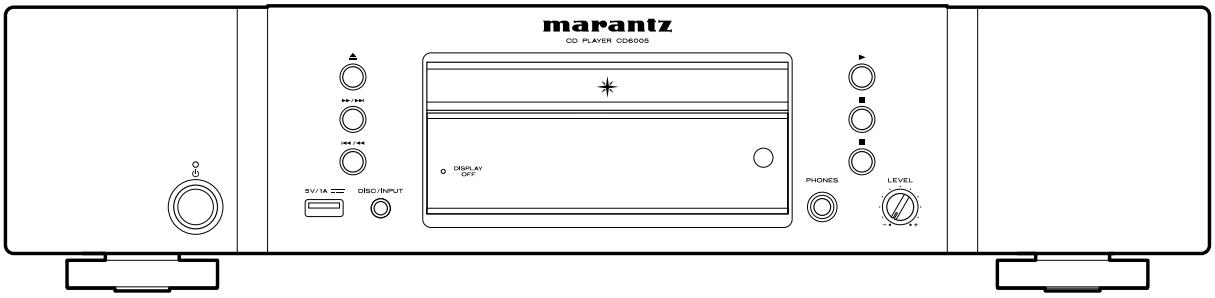
Service Manual

CD6005 /U1B/K1B
N1B/N1SG

CD Player



- 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.

marantz®

Ver. 1

CD6005

S0704-1V01DM/DG1307

CONTENTS

ABOUT THIS MANUAL

Read the following information before using the service manual.

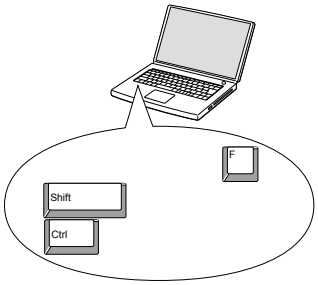
What you can do with this manual

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 board diagrams, block diagrams, and parts lists.

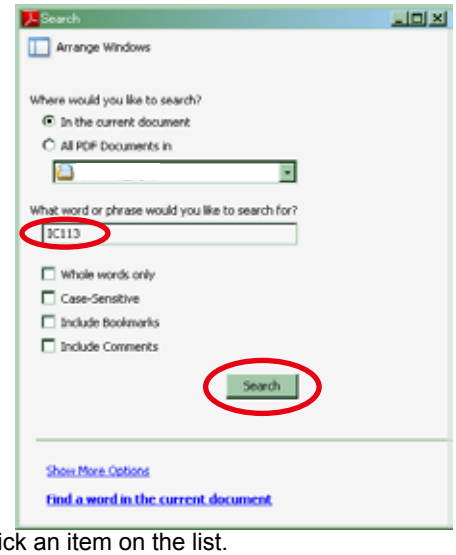
1.Press **Ctrl+Shift+F** on the keyboard.

- 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.



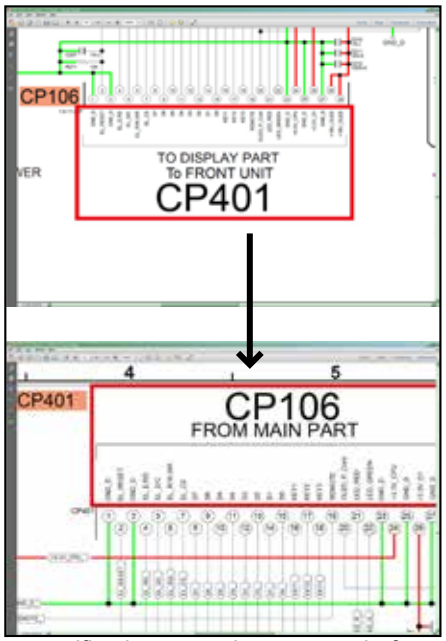
3.Click an item on the list.

• 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.

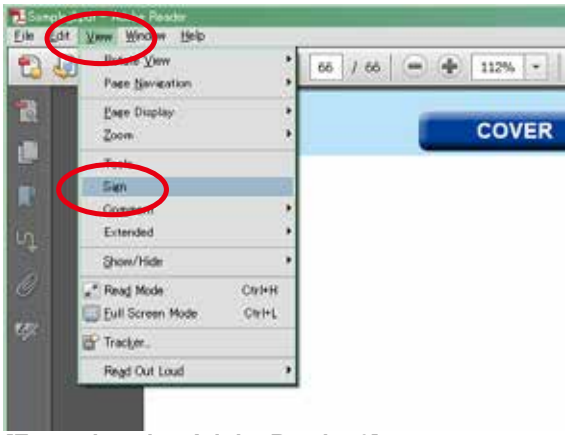
Using Adobe Reader (Windows version)

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.



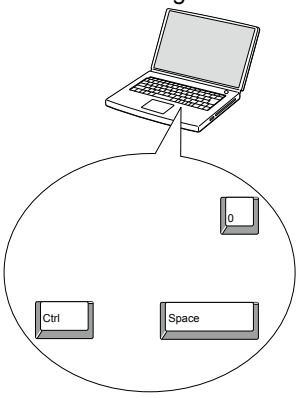
[Example using Adobe Reader 9]
On the **"Document"** menu, click **"Sign"**.

Magnify schematic / printed wiring 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.

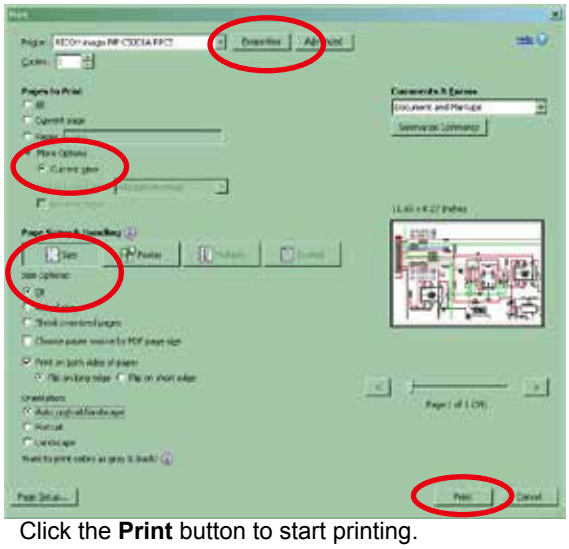


- When you want to move the area shown, hold down **Space** and drag the mouse.
- When you want to show a full page view, press **Ctrl+0** on the keyboard.

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.

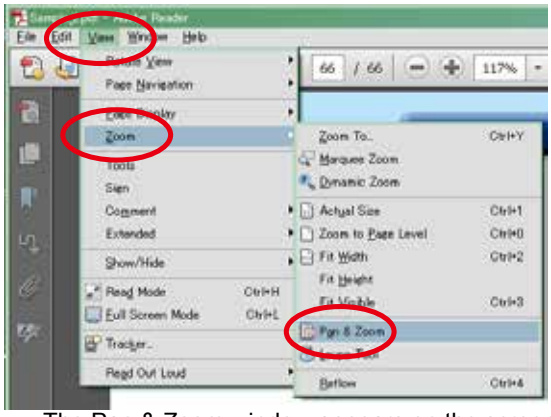
- **Properties**
  Click this button and check that the printer is set to a suitable paper size.
- **Page to print**
  Select the following checkbox.
  "More Options" : **"Current View"**
- **Page Sizing & Handling**
  Select the following checkbox.
  "Size" / **"Size Options"** : **"Fit"**

Magnify schematic / printed wiring board diagrams - 2

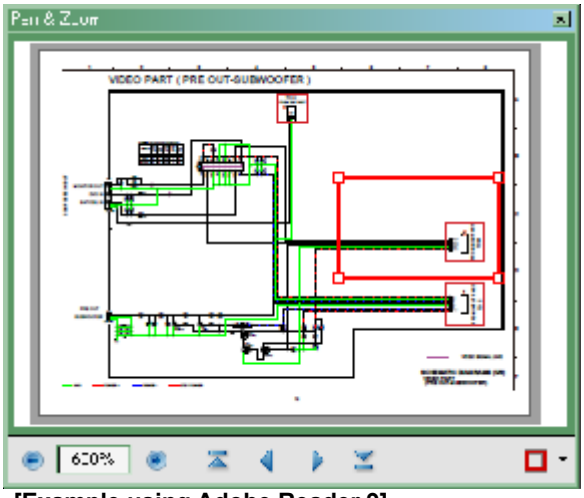
(Pan & Zoom function)

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.



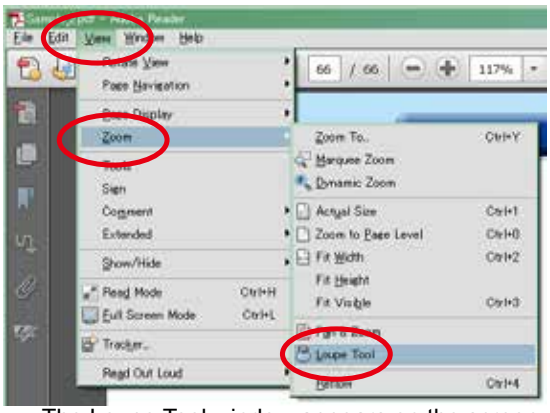
[Example using Adobe Reader 9]
On the **"Tools"** menu, point to **"Select & Zoom"**, and then click **"Pan & Zoom Window"**.

Magnify schematic / printed wiring board diagrams - 3

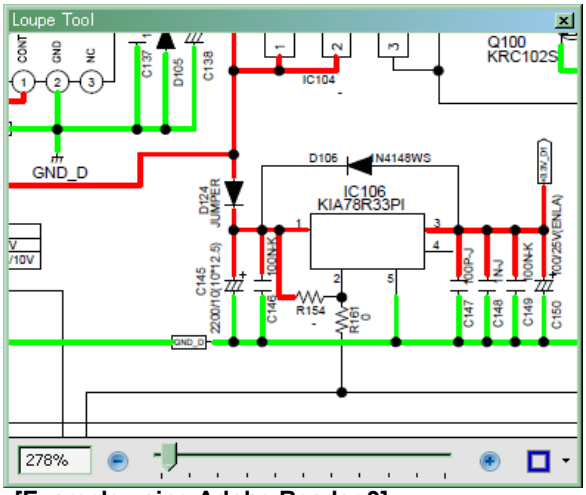
(Loupe Tool function)

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 seasons, 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 ⚠ 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

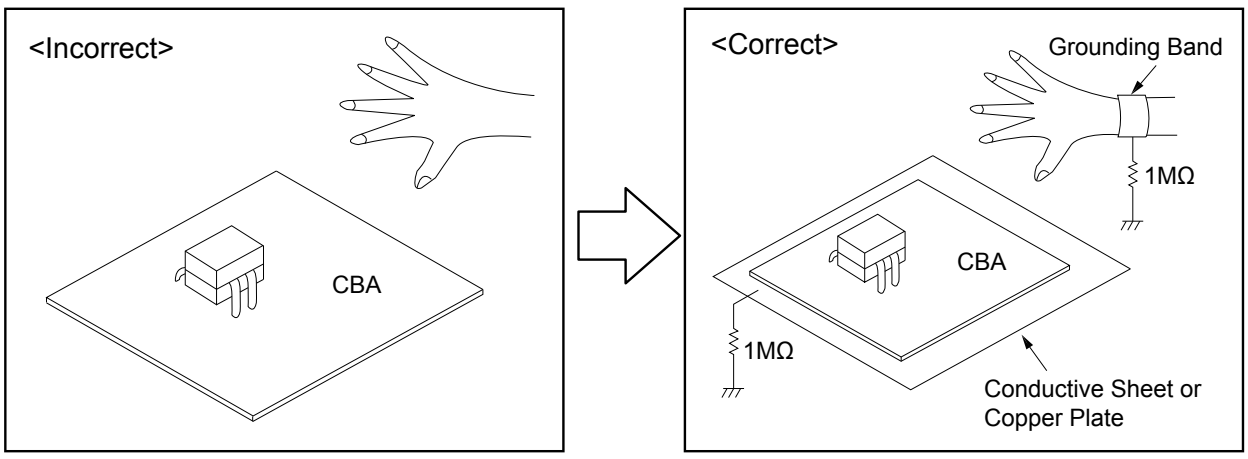
1. Parts indicated by "nsp" on this table cannot be supplied.
2. When ordering a part, make a clear distinction between "1" and "I" (i) to avoid mis-supplying.
3. A part ordered without specifying its part number can not be supplied.
4. Part indicated by "★" mark is not illustrated in the exploded view.
5. General-purpose Carbon Film Resistor in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)
6. General-purpose Carbon Chip Resistors are not included are not included in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

WARNING: Parts indicated by the ⚠ 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 MΩ) 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 MΩ) 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.

ESD

(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 apparaat.
Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

(F) ATTENTION

Tous les IC et beaucoup d'autres semiconducteurs sont sensibles aux décharges statiques (ESD).
Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise a leur manipulation.
Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfiler le bracelet serti d'une résistance de sécurité.
Veiller a ce que les composants ainsi que les outils que l'on utilise soient également a ce potentiel.

(D) WARNUNG

Alle IC und viele andere Halbleiter sind empfindlich gegen elektrostatische Entladungen (ESD).
Unsorgfältige Behandlung bei der Reparatur kann die Lebensdauer drastisch vermindern.
Sorgen sie dafür, das Sie im Reparaturfall dem Massepotential des Gerätes verbunden sind.
Halten Sie Bauteile und Hilfsmittel ebenfalls über ein Pulsarmband mit Widerstand mit auf diesem Potential.

(I) AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD).
La loro longevita potrebbe essere fortemente ridatta in caso di non osservazione della piu 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.

(D)

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten.
Der Originalzustand des Gerats darf nicht verandert werden.
Fur Reparaturen sind Original-Ersatzteile zu verwenden.

(NL)

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

(I)

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

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

(F)

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

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
ADVARSEL SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING UNDGÅ UDSÆTTELSE FOR STRÅLING
ADVARSEL SYNLIG OG USYNLIG LASERSTRÅLING NÅR DEKSEL Å PNES UNNGÅ EKSPONERING FOR STRÅLEN
VARNING SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR 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

100301DM

TECHNICAL SPECIFICATIONS

❑ **Audio performance**

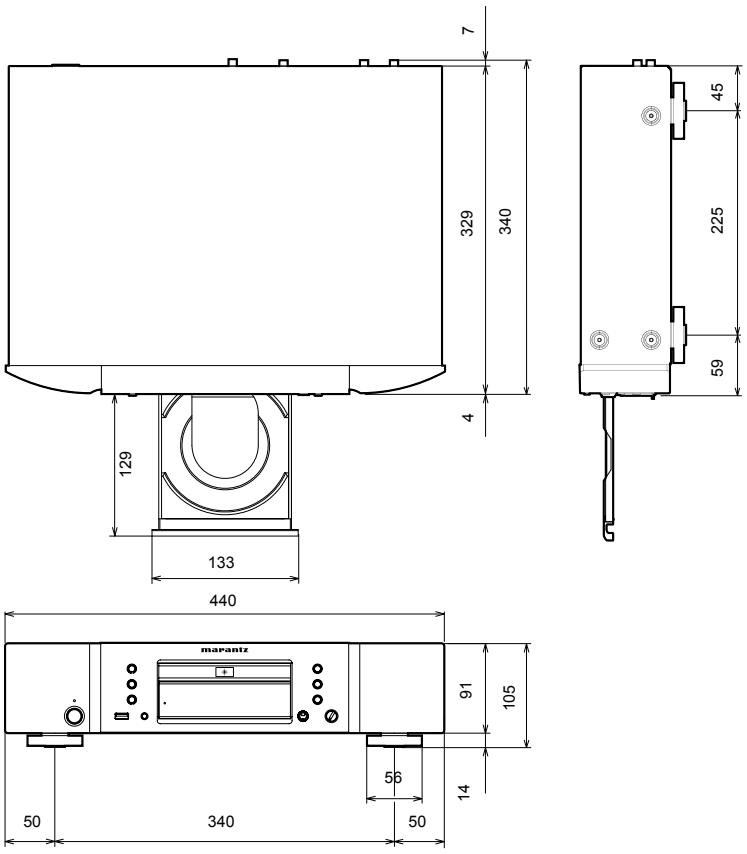
- **Analog output**
  Channels: 2 channels
  Playable frequency range: 2 Hz – 20 kHz
  Playable frequency response: 2 Hz – 20 kHz (±0.5dB)
  S/N: 110 dB
  Dynamic range: 100 dB
  Harmonic distortion: 0.002 % (1 kHz)
  Wow & flutter: Crystal accuracy
- **Output level**
  Signal type: 2.2 V RMS stereo
  Output impedance: 200 Ω/ohms
  Headphone output: 28 mW/32 Ω/ohms (variable maximum)
- **Digital output**
  Coaxial: 0.5 Vp-p / 75 Ω/ohms
  Optical: –19 dBm
- **Optical readout system**
  Laser: AlGaAs
  Wave length: 780 nm
  Signal type: 16-bit linear PCM
  Sampling frequency: 44.1 kHz

❑ **General**

Power supply:AC 120 V, 60 Hz
AC 230 V, 50/60 Hz
Power consumption: 32 W
Power consumption in standby mode: 0.3 W
Operating temperatures: +5 ˚C – +35 ˚C
Operating humidity: 5 – 90 % (without dew)

DIMENSION

Unit : mm
Weight : 6.6 kg



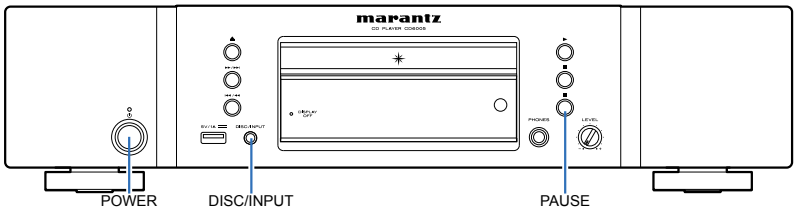
CAUTION IN SERVICING

Initializing CD Player

CD Player initialization should be performed when the µcom, peripheral parts of µcom, and CD PCB were replaced.

1. Turn off the power pressing Power operation button.
2. Turn on the AC plug while simultaneously while pressing **"II"** and **"DISC/INPUT"** buttons.
3. **"INITIALIZING"** is displayed on the FL tube.

> **Note:** •All user settings will be lost and this factory setting will be recovered when this initialization mode. So make sure to memorize your setting for restoring after the initialization.



NOTE HANDLING AND REPLACEMENT OF THE LASER PICK-UP

1. Protection of the LD

Short a part of the LD circuit by soldering. After connection to a circuit, remove the short solder.

2. Precautions when handling the laser CD mechanism

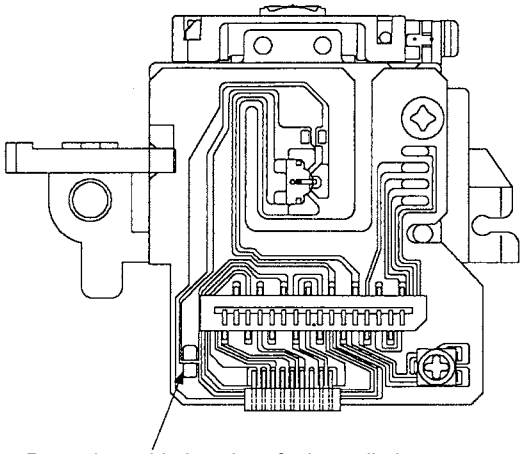
- Handle the laser pick-up so that it is not exposed to dust.
- Do not leave the laser pick-up bare. Be sure to cover it.
- If dust adheres on lens of the pick-up, blow it off with a blower brush.
- Do not shock the laser pick-up.
- Do not watch the light of the laser pick-up.

3. Cautions on assembling and adjustment

- Be sure that to 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 that damaging outside forces are not received.
- When carrying the finished mechanism, hold it by the chassis body
- For proper operation, storage and operating environment should not contain corrosive gases. For example H2S, SO2, NO2, CI2 etc. In addition storage environment should not have materials that emit corrosive gases especially from silicic, cyanic, formalin and phenol group. I the mechanism or the set, existence of corrosive gases may cause no rotation in motor.

4. Determining whether the laser pick-up is defective

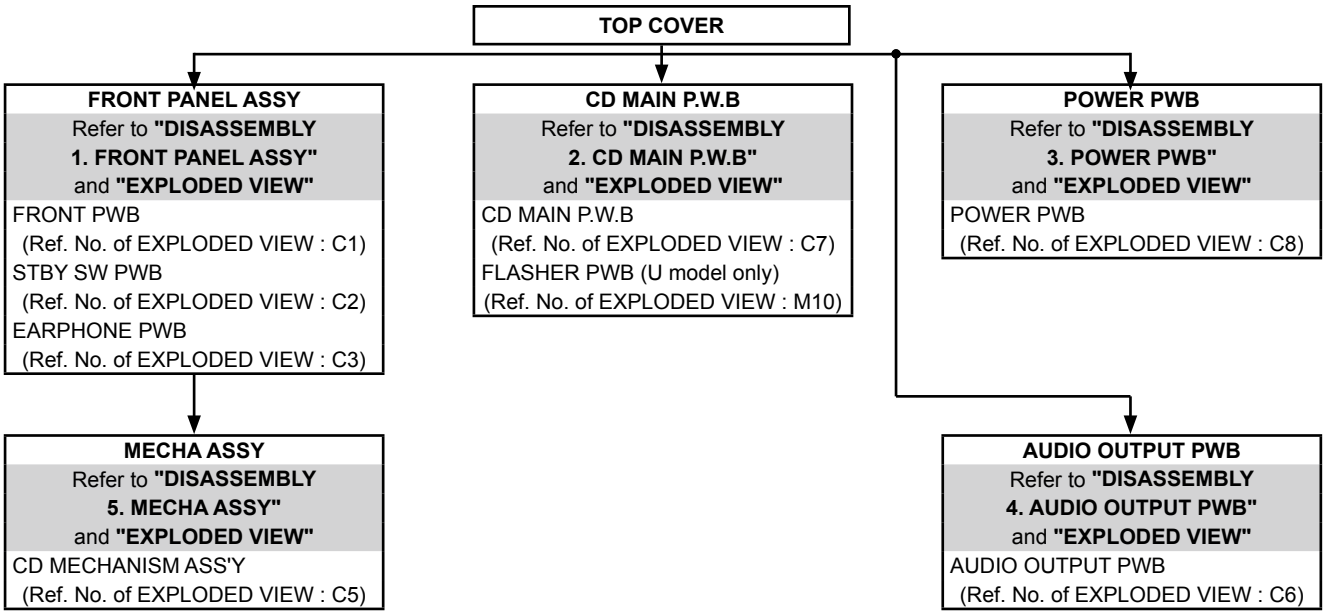
- Measure the waveform at RFO on **"**CUP12551 MAIN PCB ASSY ①RFEQO**"**.
  (For measuring points and waveforms, Rrfer to 37 page.)
- The laser pick-up is OK if the amplitude level of the measured RFEQO waveform is between 0.4 and 1.1 Vp-p, defective otherwise.



Protective soldering place for laser diode.

DISASSEMBLY

- Disassemble in order of the arrow in the following figure.
- In the case of the re-assembling, assemble it in order of the reverse of the following flow.
- In the case of the re-assembling, observe "attention of assembling".
- If wire bundles are untied or moved to perform adjustment or replace parts etc., be sure to rearrange them neatly as they were originally bundled or placed afterward.
  Otherwise, incorrect arrangement can be a cause of noise generation.

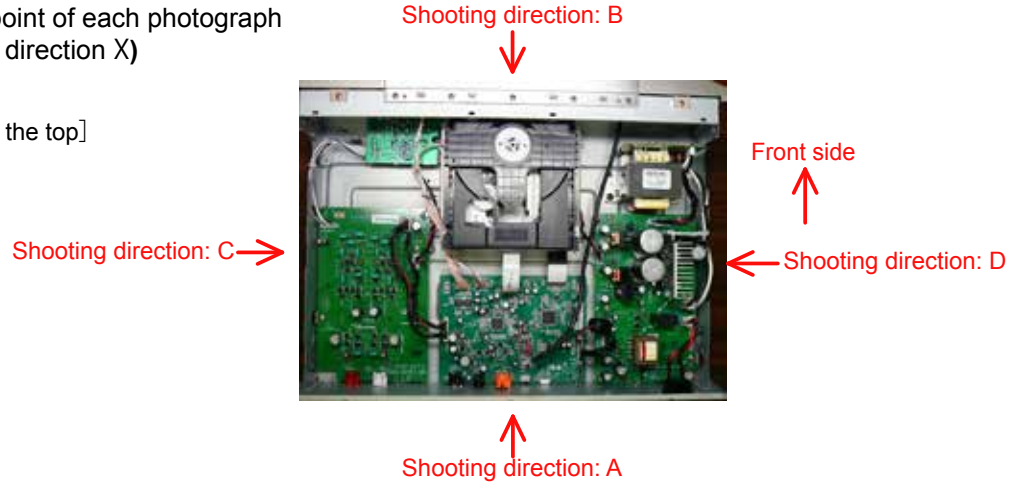


About the photos used for "descriptions of the DISASSEMBLY" section

- The shooting direction of each photograph used herein is indicated on the left side of the respective photograph as "Shooting direction: ***".
- Refer to the diagram below about the shooting direction of each photograph.
- Photographs with no shooting direction indicated were taken from the top of the set.

The viewpoint of each photograph (Shooting direction X)

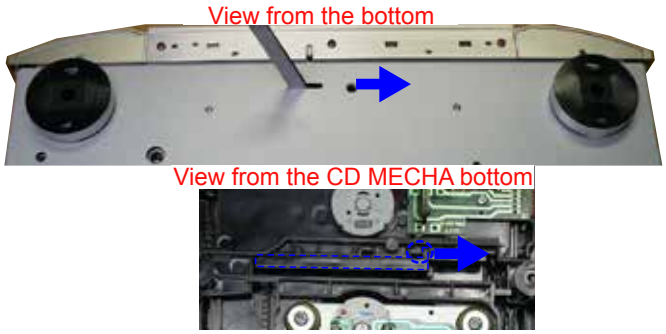
[View from the top]



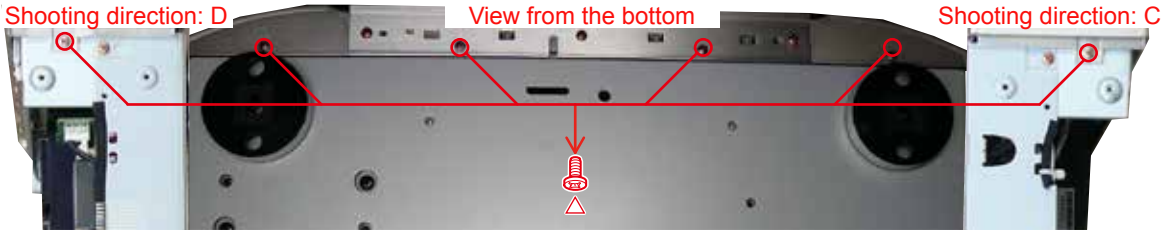
1. FRONT PANEL ASSY

Proceeding : TOP COVER → FRONT PANEL ASSY

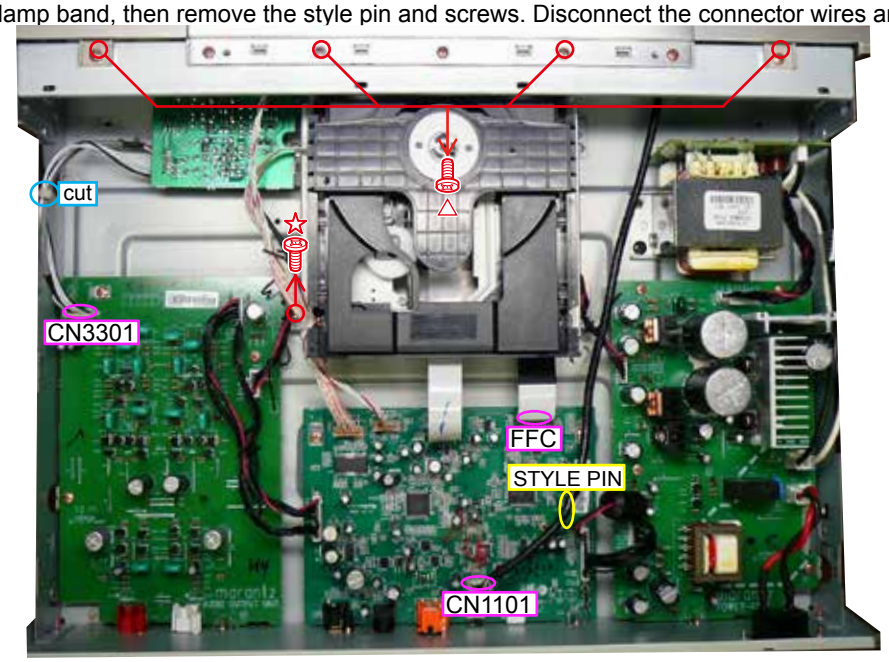
(1) Tray is opened and CD DOOR is removed.



(2) Remove the screws.



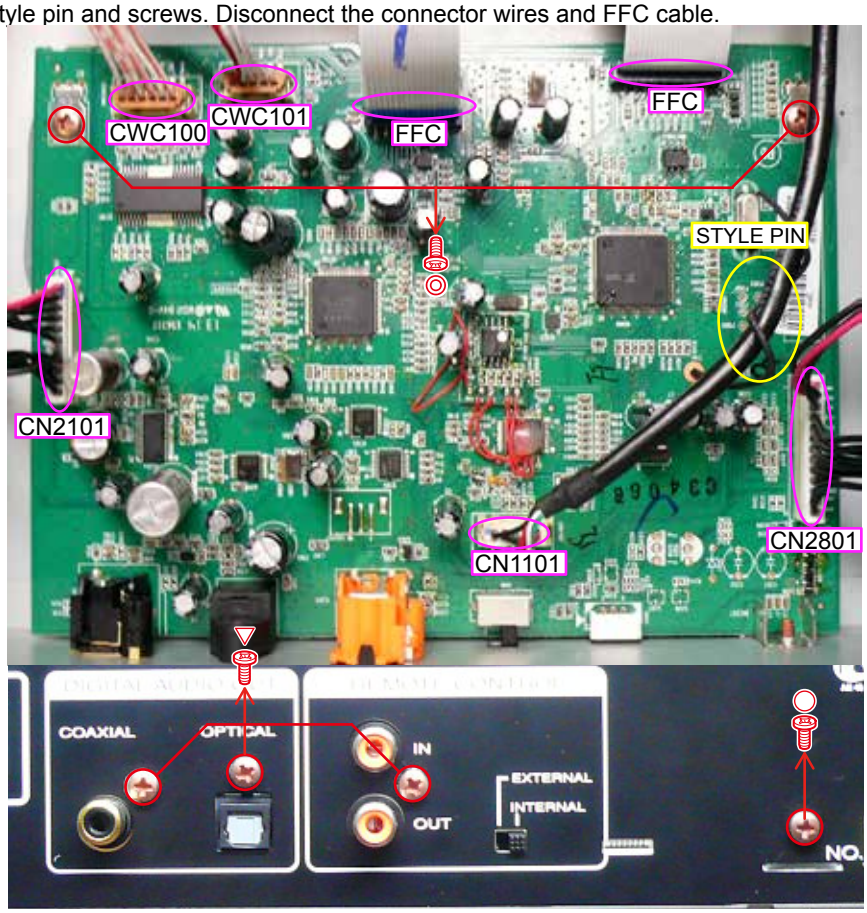
(3) Cut the wire clamp band, then remove the style pin and screws. Disconnect the connector wires and FFC cable.



2. CD MAIN P.W.B

Proceeding : **TOP COVER** → **CD MAIN P.W.B**

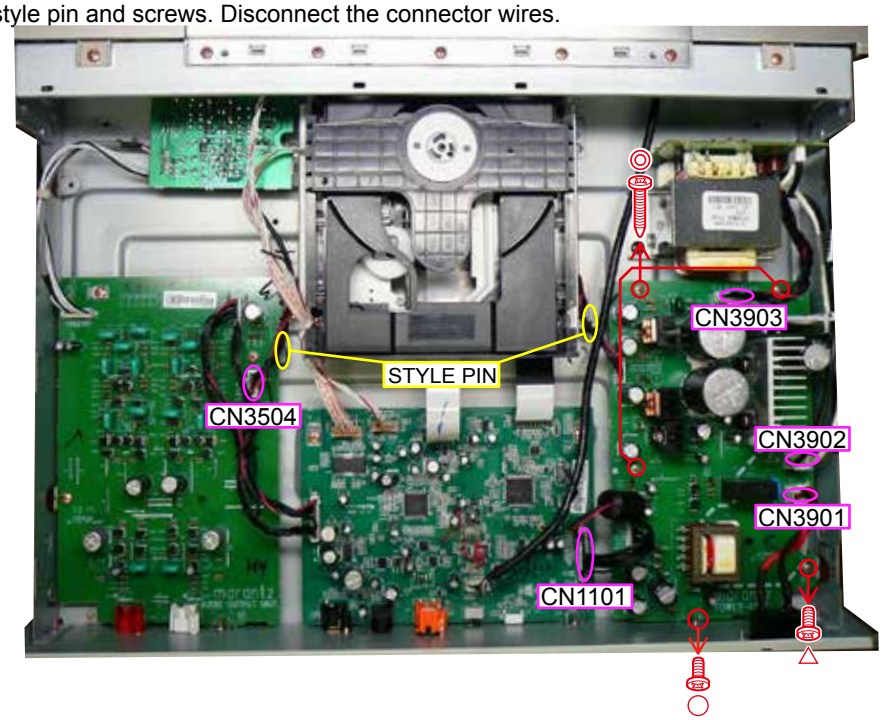
(1) Remove the style pin and screws. Disconnect the connector wires and FFC cable.



3. POWER PWB

Proceeding : TOP COVER → **POWER PWB**

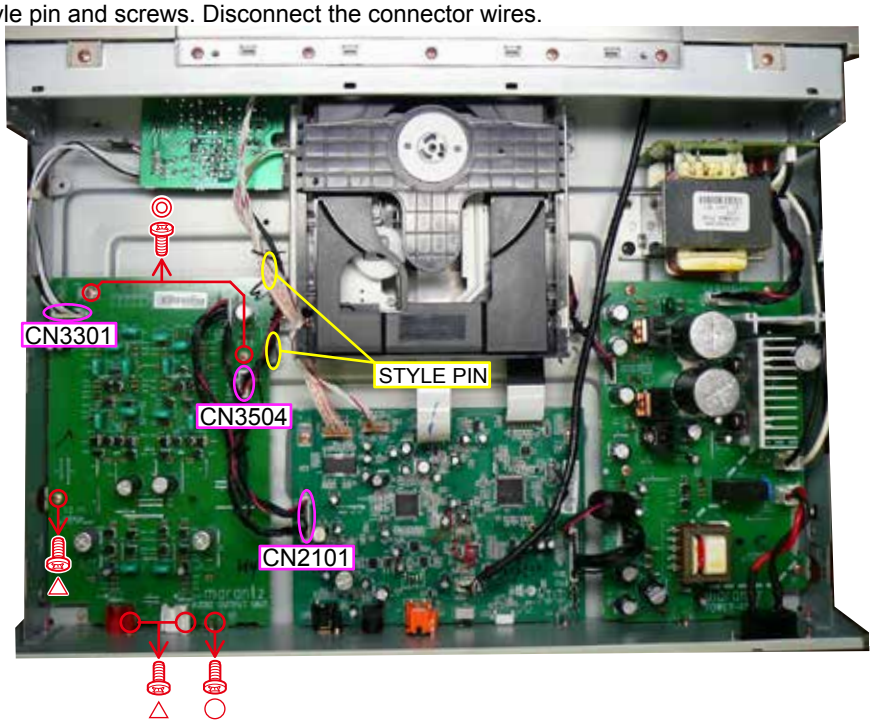
(1) Remove the style pin and screws. Disconnect the connector wires.



4. AUDIO OUTPUT PWB

Proceeding : TOP COVER → **AUDIO OUTPUT PWB**

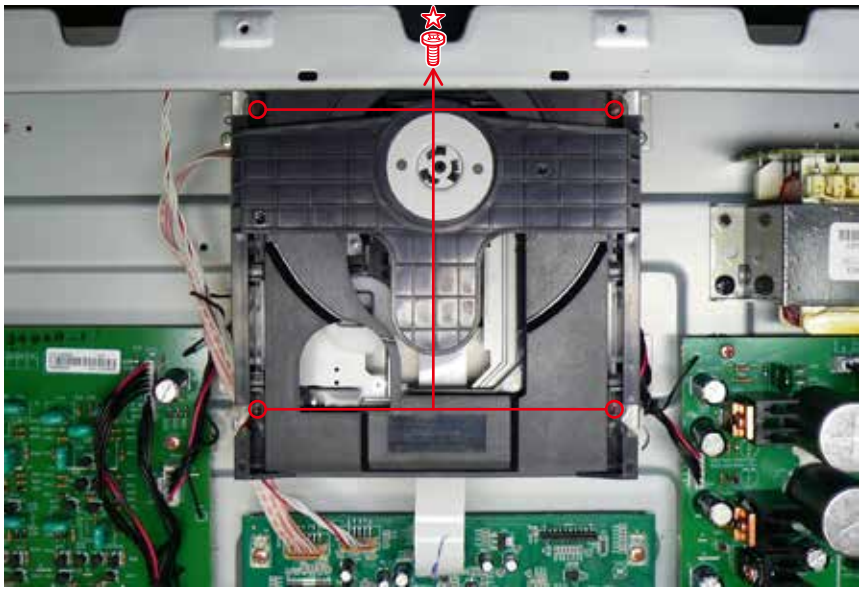
(1) Remove the style pin and screws. Disconnect the connector wires.



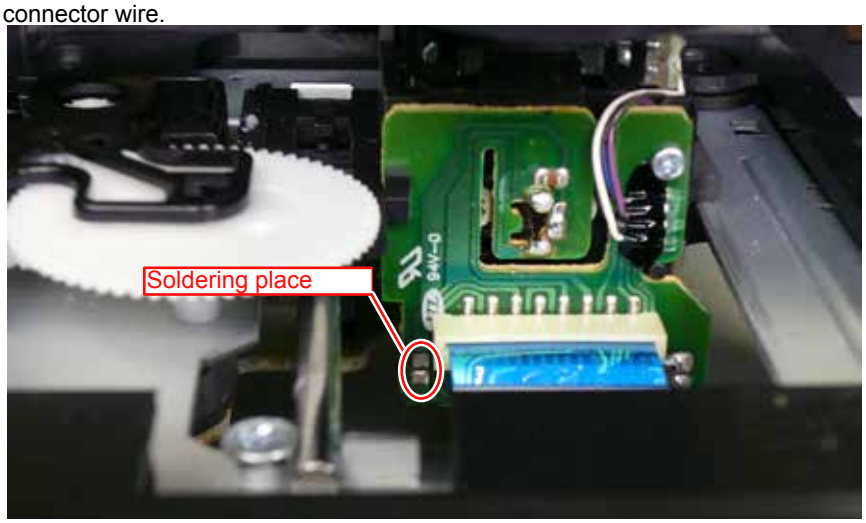
5. MECHA ASSY

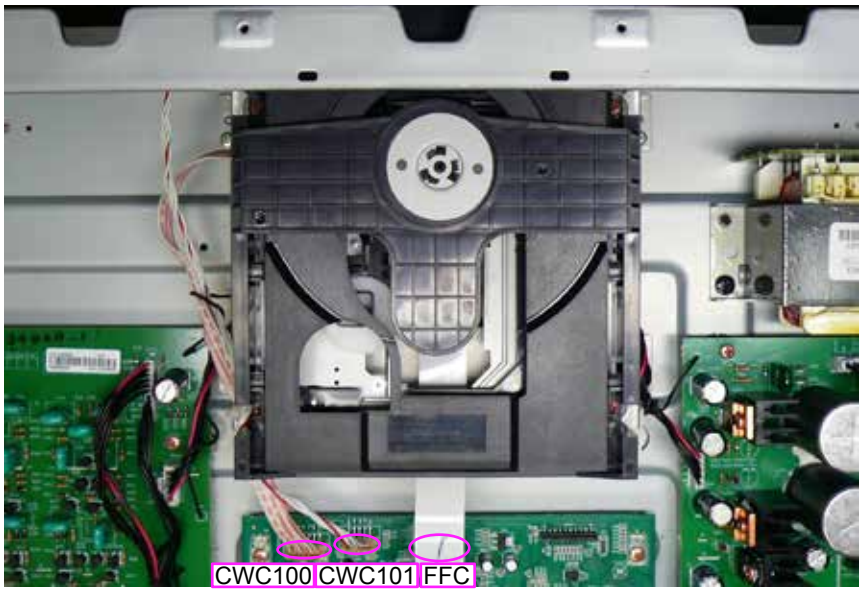
Proceeding : TOP COVER → FRONT PANEL ASSY → MECHA ASSY

(1) Remove the screws.



(2) Laser short-circuit in Pick-up of CD MECHANISM ASS'Y, then disconnect the connector wires and FFC cable.
Be sure to wear a grounding band.
Disconnect the connector wire.



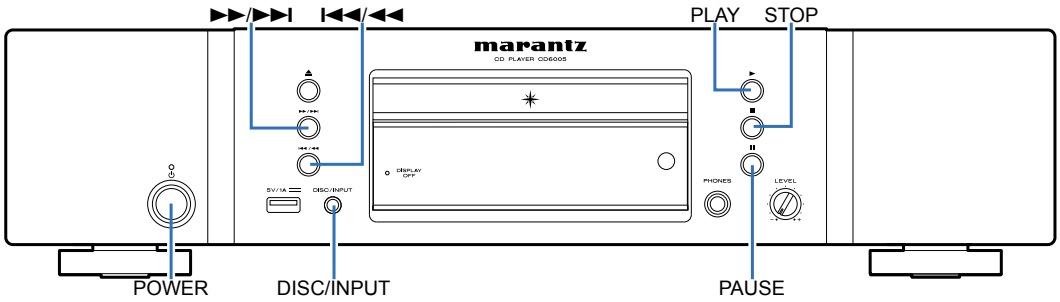


SPECIAL MODE

Special mode setting button

※ No.1 - 8 : Turn on the AC plug while pressing the button of A and B at the same time.

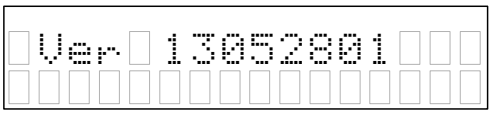
No.	Mode	Button A	Button B	Contents
1	Version display mode	DISC/INPUT	PLAY	Firmware versions such as Main or USB are displayed in the FL.
2	VFD check mode	DISC/INPUT	STOP	All displays on the FL tube flash every 2 seconds.
3	Cold start mode	DISC/INPUT	PAUSE	Initializing CD Player.
4	CD test mode	⏮/◀◀	PLAY	Test of CD mech.
5	CD heart run mode	⏮/◀◀	STOP	Heat run mode.
6	Laser on time	⏮/◀◀	PAUSE	Laser on time are Displayed. When the CD mech was replaced, Laser on time will need to reset. (in this mode)
7	Timer check mode	▶▶/⏭	PLAY	Not for service.



1. Version display mode

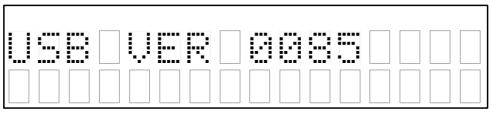
Turn on the AC plug while pressing the button of **"DISC/INPUT"** and **"►"**.
Now, press the **"I◄◄/◄◄"** or **"►►/►►I"** button, following information is displayed on the FL tube.
Display Order
Version of System µ-com → Version of USB µ-com → Serial number ·····
To exit, turn off.

main µ-com :



" _V e r_# # # # # # # # v * * **"**
########:Main microcomputer version
**:Destination

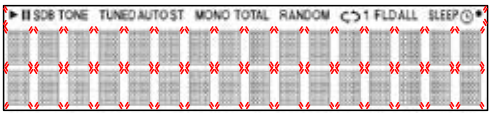
main µ-com :



" # # # # _ # # _ # # _ # # _ _ _ **"**
##:USB microcomputer version

2. VFD check mode

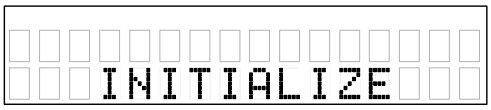
Turn on the AC plug while pressing the button of **"DISC/INPUT"** and **"■"**.
To exit, turn off.



All displays on the FL tube flash every 2 seconds. (Lit:1 second, Off:1 second)

3. Cold start mode

Turn on the AC plug while pressing the button of **"DISC/INPUT"** and **"▮▮"**.
"INITIALIZING" is displayed on the FL tube. Then start in Normal mode.

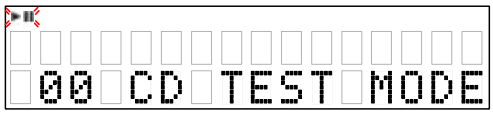


Initialization item
DIMMER : 100%
PURE DIRECT : OFF
DISC/USB : DISC
REMOTE/BROWSE : REMOTE
AUTO STANDBY : ON

∗ **"Laser on time"** is not erase.

4. CD test mode

Turn on the AC plug while pressing the button of **"I◄◄/◄◄"** and **"►"**.
To exit, turn off.



∗ : Blink

Detail of the CD test mode

No.	Mode	Button / Operation
1	Disc loading	⏏
2	Servo check	-
	LD ON	►
	FOCUS ON	►
	CLV ON	►
	TRACKING ON	►
	SUB CODE	►
	BER	►
3	Pickup movement	I◄◄/◄◄ or ►►/►►I (while the button is pressed)
4	STOP Servo	■
5	All servo on	■+⏏
6	Adjustment value display	■ (After **"**All servo on**"** state)
	FOCUS BALANCE	►►/►►I
	FOCUS GAIN	►►/►►I
	TRACKING BALANCE	►►/►►I
	TRACKING GAIN	►►/►►I
	FOCUS OFFSET	►►/►►I
	TRACKING OFFSET	►►/►►I
	RFRP	►►/►►I
7	Laser current is display	■ (Press more than 1second)

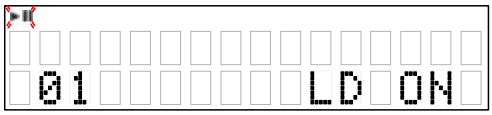
4.1. Disc loading mode

- Press the **"⏏"** button to open the tray.
- Set a disc on the tray, then press the **"⏏"** button again to close the tray. The disc is mounted automatically.
- Move the slide to the initially set position (10 mm towards the outside from the innermost position) and stop in this status.
- Return to CD test mode.

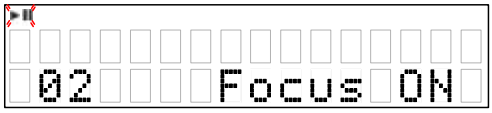
4.2. Servo check

- Press the **"►"** button. Execute the following steps.

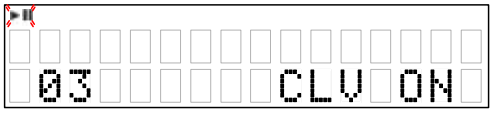
(1) LD ON (with servo still stopped)



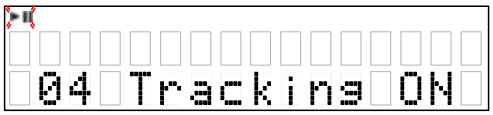
(2) FOCUS ON (disc rotation, tracking off)
If no disc loaded, retry then stop.



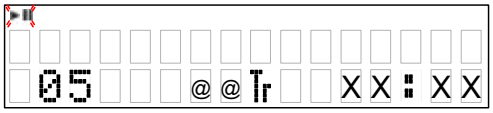
(3) CLV ON



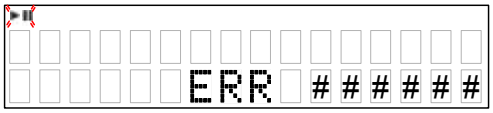
(4) TRACKING ON



(5) SUB CODE readout (playback sound output)



∗ : Blink
∗ @@ : T.No
∗ XX:XX : Elapsed Time
∗ BER: When display is as in SUB CODE and the **"►"** button is pressed, conduct BER (Block Error Rate) display for 2 seconds.



4.3. Pickup movement

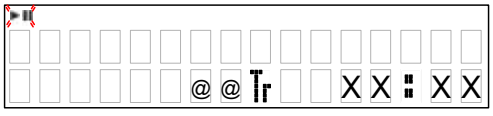
- In the stop mode, pickup moves in REV (inwards) or FWD (outwards) direction when **"I◄◄/◄◄"** or **"►►/►►I"** button pressed.
- When **"I◄◄/◄◄"** button pressed, move to stop operation after detection that inner switch has turned on.
- Pickup movement stops when button released.

4.4. STOP Servo

- When **"■"** button is pressed, play operation and servo stop.
- After stopping, conduct reading of auto adjust values.

4.5. All servo on

- When the **"I◄◄/◄◄"** and **"⏏"** buttons is pressed, all is performed and switch to playback operation. (Playback sound output)
- Press the **"■"** button is first.
- When the **"■"** button pressed more than 1 second, the Laser Current measurement will be started.

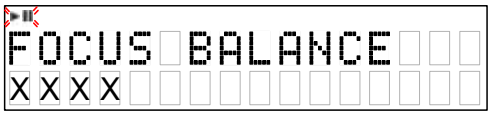


∗ : Blink

4.6. Adjustment value display

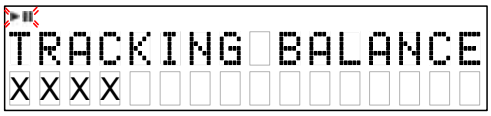
- When the "■" button is pressed, the adjustment values are displayed. (After All Servo on)
- Press the "►►/►►I" button is pressed, the adjustment value are displayed int the following order.

(1) FOCUS BALANCE



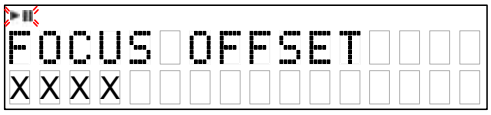
(2) FOCUS GAIN

(3) TRACKING BALANCE

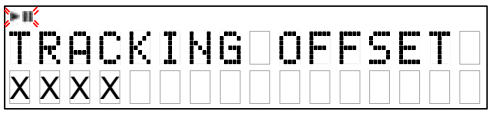


(4) TRACKING GAIN

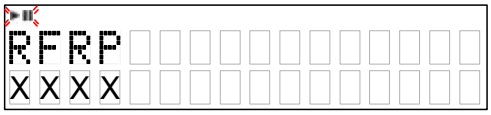
(5) FOCUS OFFSET



(6) TRACKING OFFSET



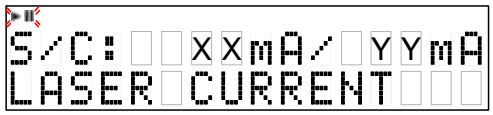
(7) RFRP



∗ XXXX : Adjustment value

4.7. Laser current is display

- When "■" button is pressed for over 1 second while the unit is in the stop mode, the laser turns on and the laser current is measured.
- The first current value is measured 3 seconds after the laser turns on.
- The current value is updated every 3 seconds.
- Press the "■" button, return to CD test mode.
- Stored data is not cleared, even when the unit is Initializing (Cold start mode).

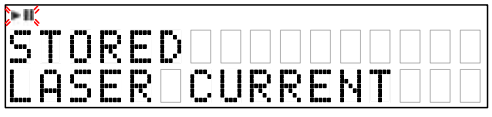


∗ XX : Stored data (EEPROM)

∗ YY : Current value

Overwriting the stored data

- When "►" button is pressed for over 5 seconds while the laser current is displayed, the current value is stored in the EEPROM. (overwriting the stored data)
- Once rewriting is completed, the display in "Laser current is display" reappears.
- Initialization of a count value is performed upon shipment from the factory and when the mechanism is replaced.



5. CD heart run mode

- Set the disc in the tray. Turn on the AC plug while pressing the button of **"I◄◄/◄◄"** and **"■"**.
- If an error occurs, display the error and stop operation at that point. Number of operations held. See **"**Error display**"**.
- Heat run count cleared when **"■"** button pressed.
  Mode canceled and tray opened after **"≜"** button pressed.

Detale of the CD heart run mode

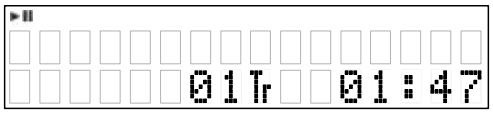
No.	Mode	Button / Operation
1	Normal heat run	►
2	Chacking	■
3	Error display	I◄◄/◄◄ or ►►/►►I (while the button is pressed)

5.1. Normal heat run

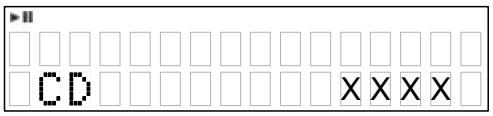
- The CD heat run mode is launched. Once writing of the TOC data is completed, press the **"►"** button. Count this as the 0th heat run repetition.

① Play from the first to last track on disc.
② If disc being used has less than 20 tracks, play all tracks. If disc has 21 or more tracks, skip to final track after playback of first track has finished.
③ After disc playback has finished, move pickup to innermost position and open tray.
④ When loader open status detected, close tray again, re-read TOC and start playback from the first track on the disc.
⑤ The heat run repetition count is incremented (increased by 1) when the tray is opened.
⑥ Conduct ① to ⑤ repeatedly.

①, ② Display during playback.



③

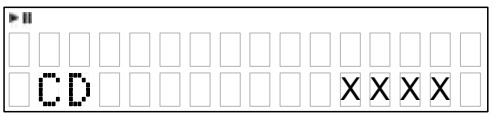


∗ XX:XX : No. of heat run repetitions
In cases other than when **"►"** is lights, same display as during normal playback.

5.2. Chacking mode

Start heat run mode, after TOC read, the Mechanism stopped, press **"■"** button.
Repeat the following.
TOC read
Sarch the first track on disc.
Open tray.
Close tray.

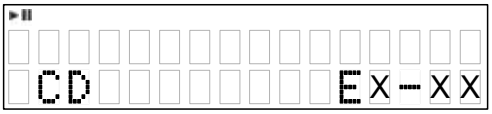
- The heat run repetition count is incremented (increased by 1) when the tray is opened.



∗ XX:XX : No. of heat run repetitions
In cases other than when **"►"** is lights, same display as during normal playback.

5.3. Error display

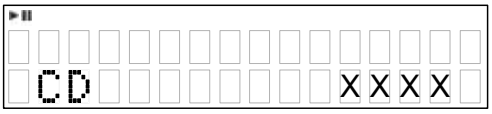
E1-00 : Disc cannot be detected
E1-01 : Tracking offset adjustment not possible
E1-02 : Focus offset adjustment not possible
E2-00 : Focus servo dropped during playback
E2-01 : Focus servo dropped during searching
E2-03 : Focus servo dropped during TOC reading
E2-06 : Focus servo dropped during manualsearch
E2-10 : Subcode can no longer be read during playback
E2-11 : Subcode can no longer be read during searching
E2-12 : Subcode can no longer be read during TOC reading
E2-14 : Subcode cannot be read during pause
E2-15 : Subcode cannot be read during manualsearch
E3-00 : TOC could not be read within specified time
E3-01 : PVD/SVD analysis could not be completed within specified time
E4-04 : Search time out
E4-05 : Error in communications with CD decoder
E5-00 : Inner switch not on
E6-00 : Inner switch not off
E9-00 : CD ucom error
E9-01 : Other error



∗ X-XX : Error cord

Number of heat run is displayed, when error occur.

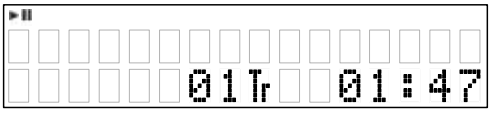
- Press the **"►►/►►I"** button while the error is displayed.
- No. heat runs is displayed for 5 seconds, the error display reappears.



∗ XXXX : Number of heart run repetitions.

The track no. and time when the error occurred is displayed.

- Press the **"I◄◄/◄◄"** button while the error is displayed.
- The track no. and time when the error occurred is displayed for 5 seconds, then error display reappears.

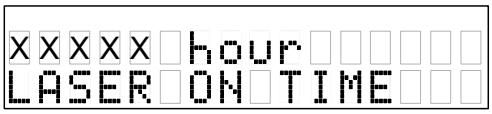


∗ **"** _ C D _ _ _ x x Tr _ _ m m : s s **"**
∗ xx : Track Nunber of error occurred.
∗ mm:ss : Display Elapsed time in track which error occurred.

6. Laser on time

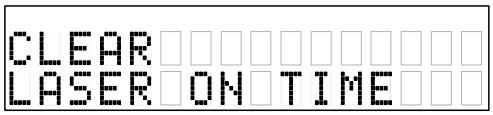
Turn on the AC plag while pressing the **"I◄◄/◄◄"** and **"▮▮"** button on this unit.

- One count corresponds to 10 minutes. (Values under 10 minutes are discarded.)
- When the time exceeds 10922 hours, the stored data is not updated and the value is fixed 10922.



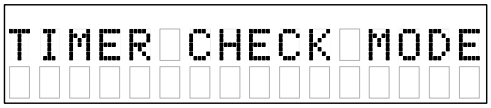
Initialization of a count value

- When the **"►"** button is pressed for over 5 seconds while the accumulated laser on time is displayed, the count value is reset.
- After resetting is completed, the display in 6(00000hours on the top line) reappears.
- Initialization of a count value is performed upon shipment from the factory and when the mechanism is replaced.



7. Timer check mode

Not for service.
Exit to Power off.



ABOUT REPLACE THE MICROPROCESSOR WITH A NEW ONE

When replaced of the U-PRO (Microprocessor) or the Flash ROM, confirm contents of the following.

PWB Name	Ref. No.	Description	After replaced	Remark
CD	IC302	TMPM330FWFG	**C**	SOFTWARE:Main

After replaced

A : Mask ROM (With software). No need write-in of software to the microprocessor.

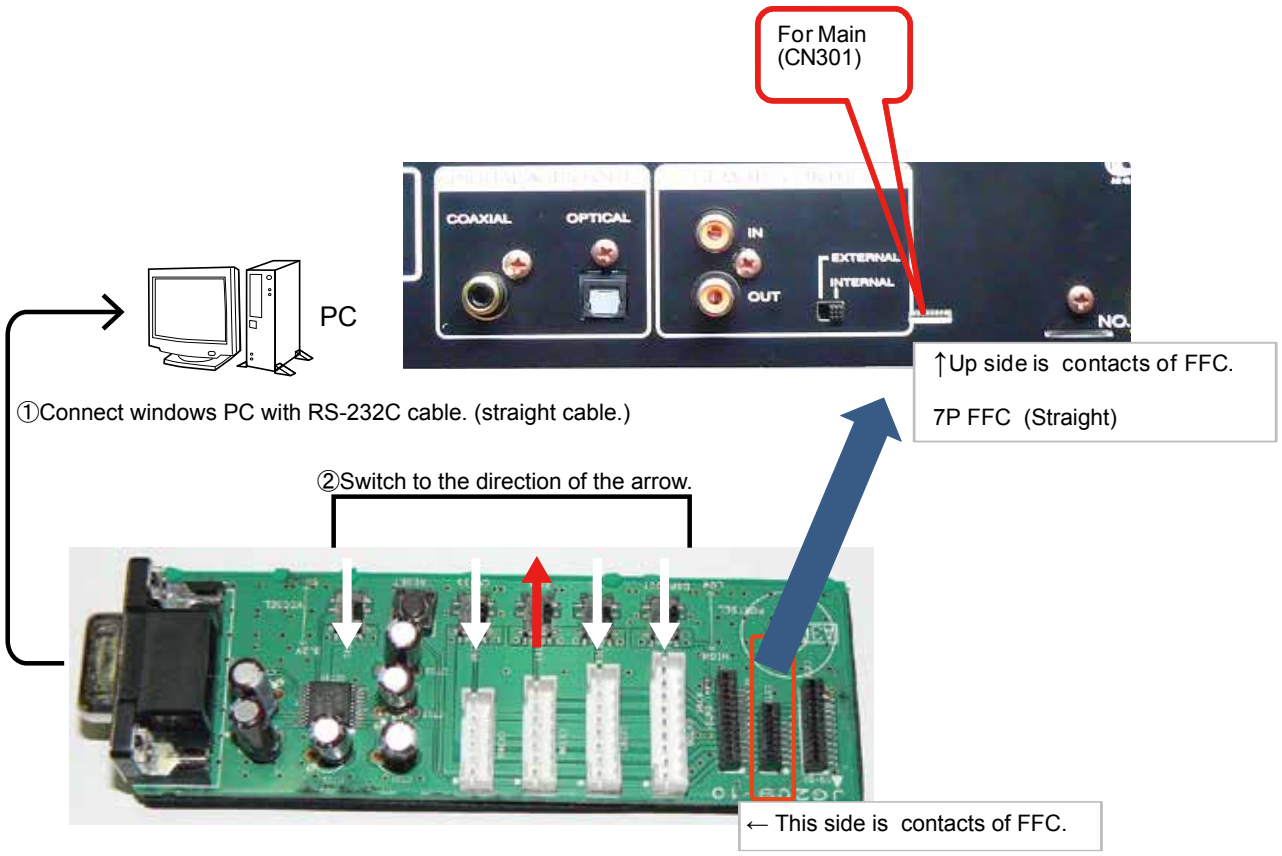
B : Flash ROM (With software). Usually, no need write-in of software. But, when the software was updated, you should be write-in of the new software to the microprocessor or flash ROM. Please check the software version.

C : Empty Flash ROM (Without software). You should be write-in of the software to the microprocessor or flash ROM. Refer to **"**Update procedure**"** or **"**writing procedure**"**, when you should be write-in the software.

D : Flash ROM (With software). But you should write to the latest version of each region.

VERSION UPGRADE PROCEDURE OF FIRMWARE

Connect SPK-581 as forrows.



Initial Version No.of main µ-com and USB µ-com.

① Main µ-com (IC11) Ver 13052302

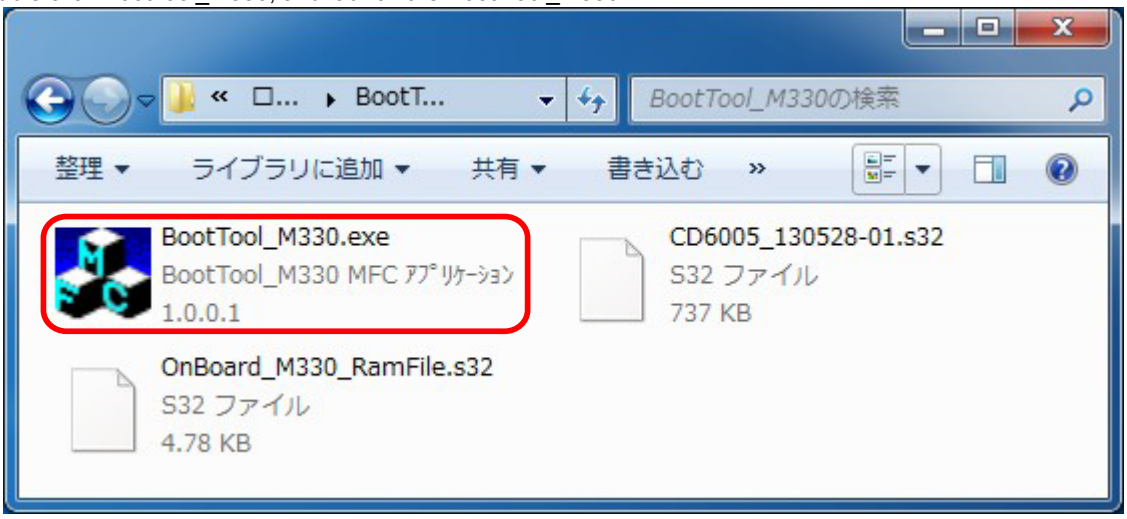
※ When update Firmware, please confirm a last version in SDI.

1. Update for IC302(TMPM330FWFG)

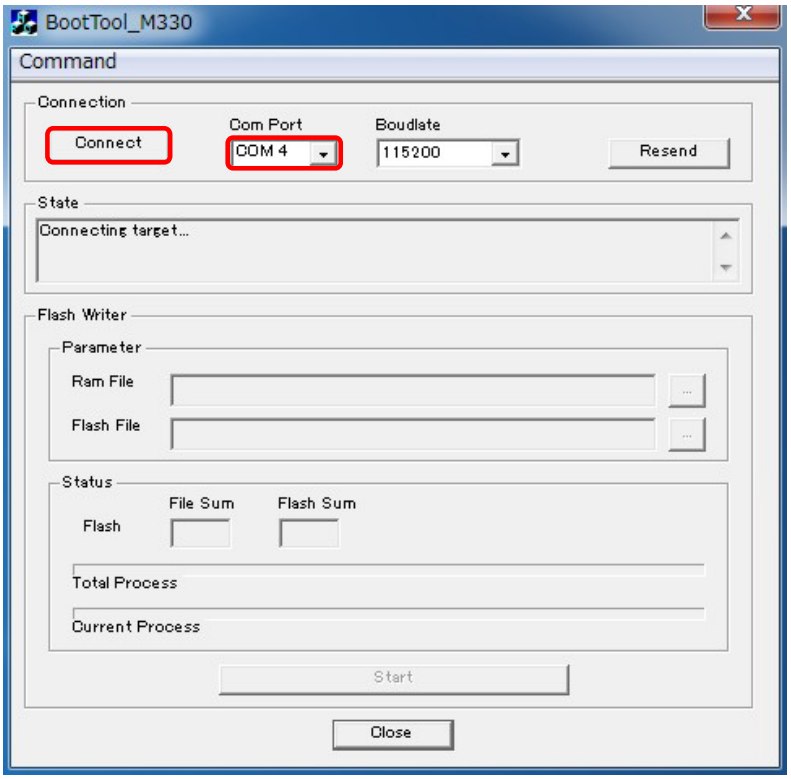
(1) Connection of SPK-581, PC and the unit.
See "Connect SPK-581 (25 Page)"

(2) Turn on the unit.

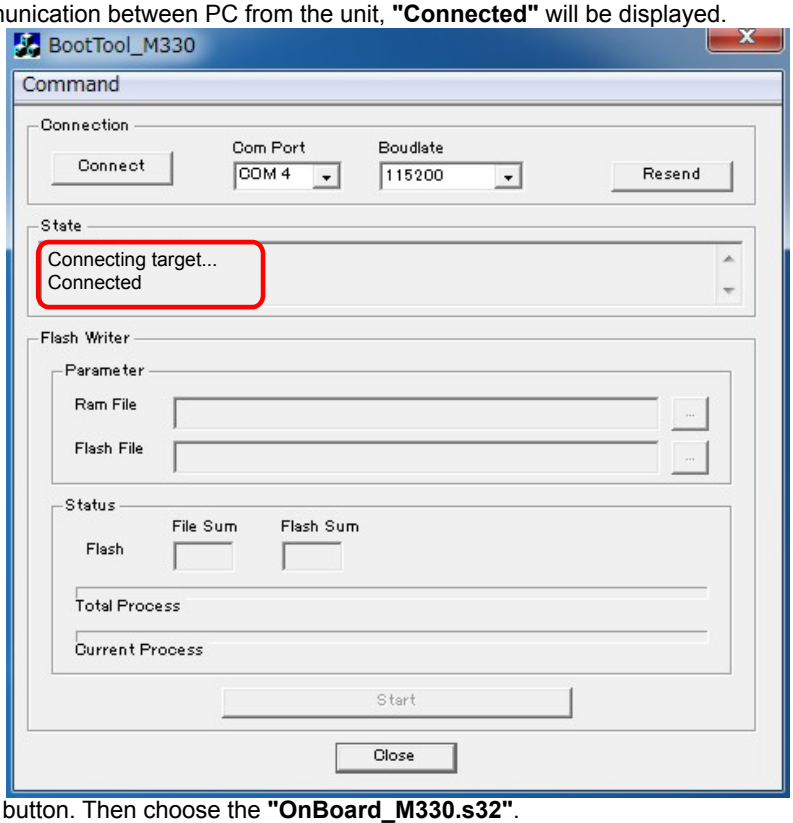
(3) Double click BootTool_M330, and launch the Boot Tool_M330.



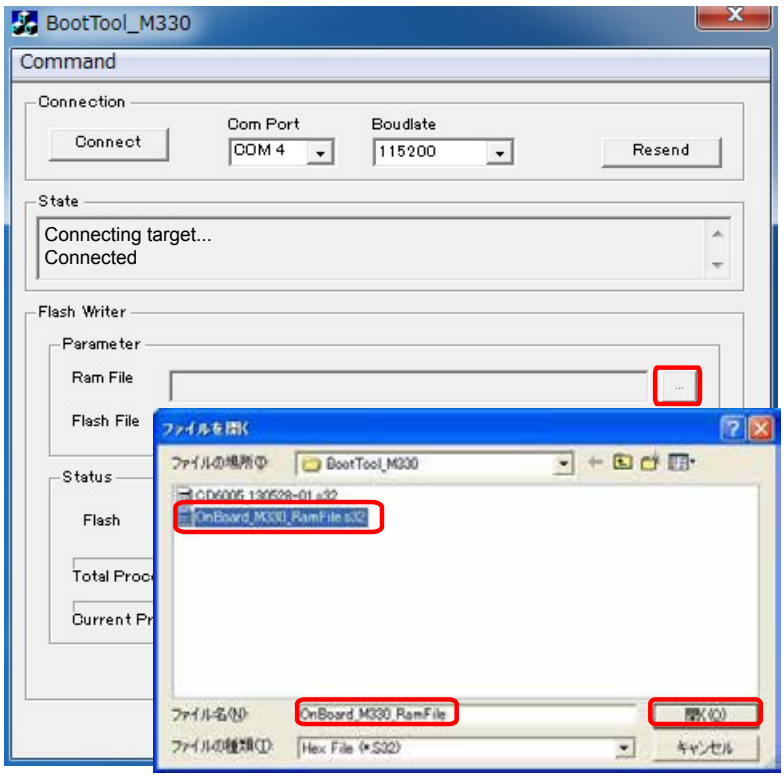
(4) Choose the Serial port number in the COM＊ Port.
Turn on the unit.
Click Connect button.



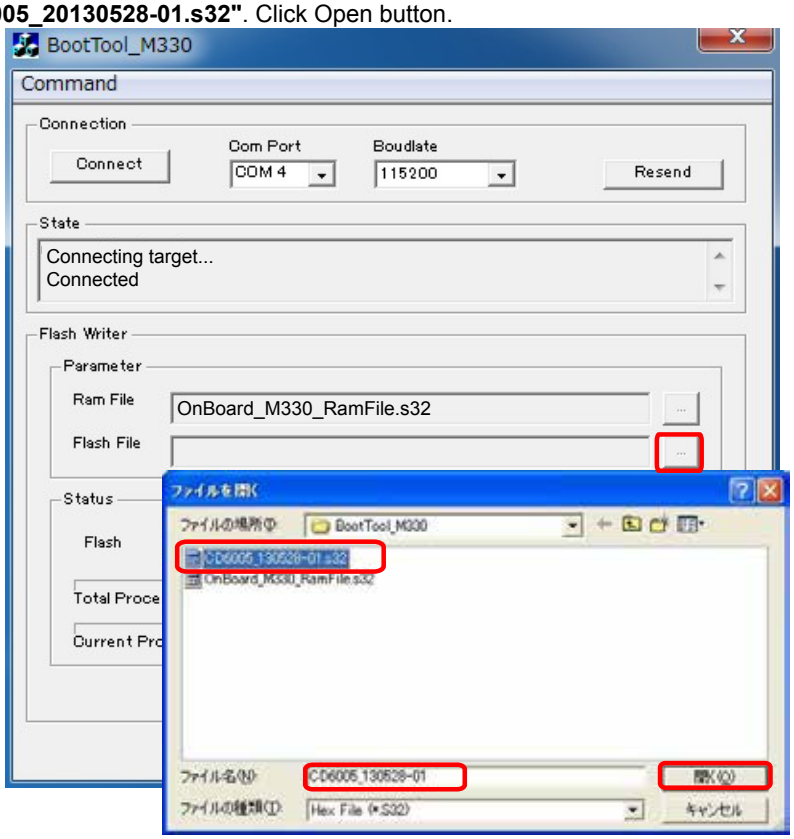
(5) If successful communication between PC from the unit, **"Connected"** will be displayed.



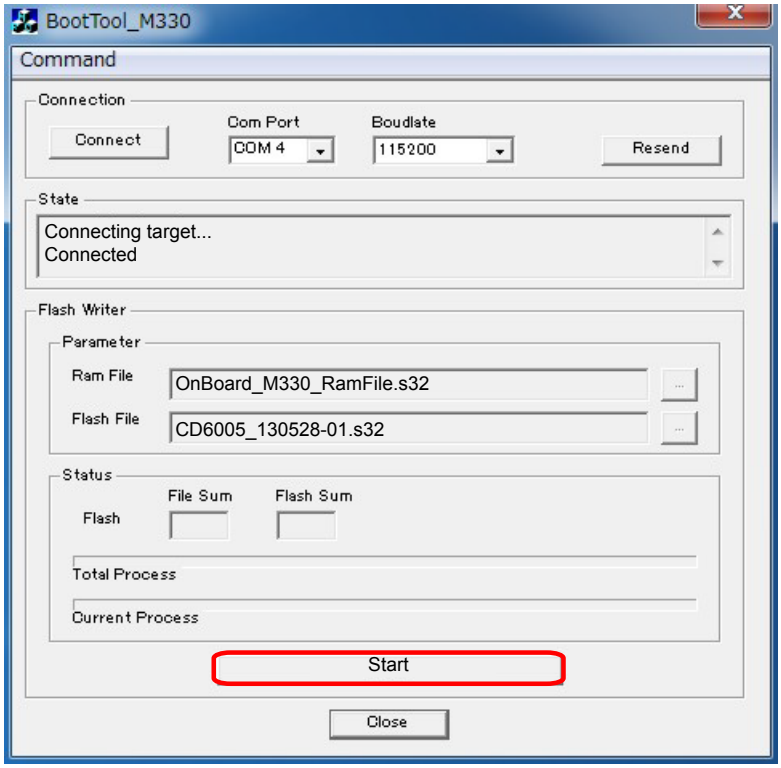
(6) Click Ram File [...] button. Then choose the **"OnBoard_M330.s32"**.
Click Open button.



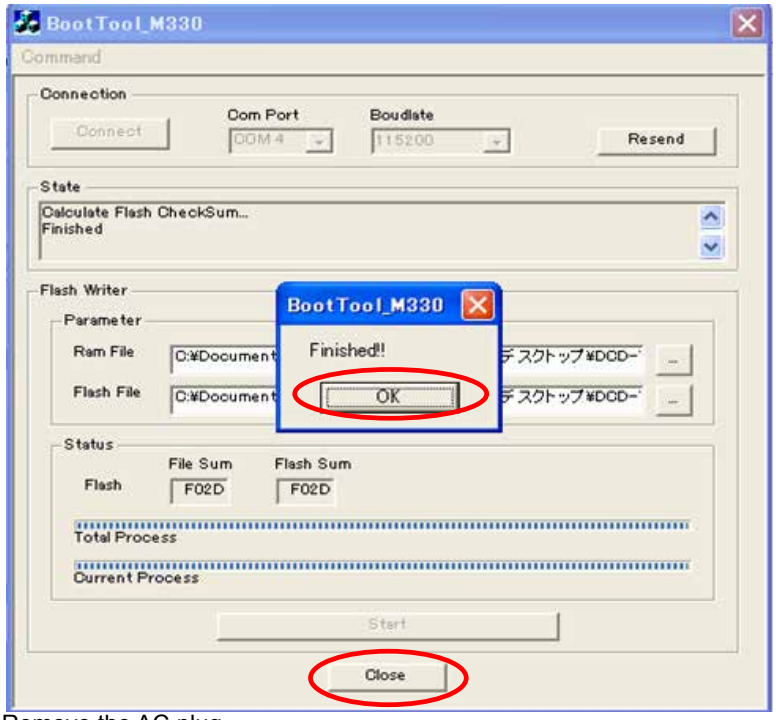
(7) Click **"Flash File [...]"**.
Choose the **"Hex File (∗.S32)"**.
Choose the **"CD6005_20130528-01.s32"**. Click Open button.



(8) Click Start button.



(9) If the software is updated successfully, **"OK."** appears. Click OK.
Disconnect mains cord from the unit, and then disconnect FFC of connection JIG from the unit.



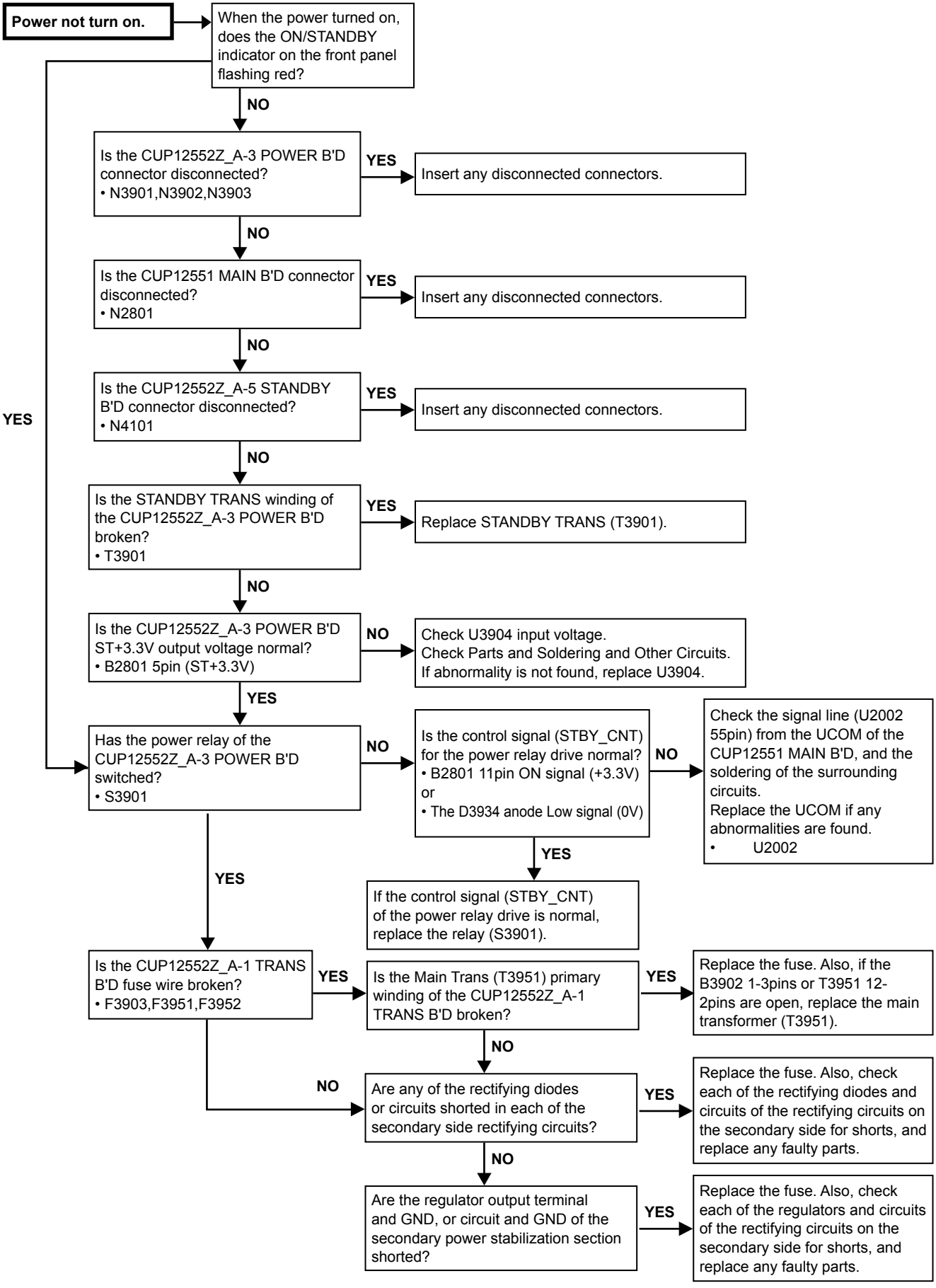
(10) Initializing the unit. Remove the AC plug.
Turn on the AC plug while pressing the button of **"DISC/INPUT"** and **"▮▮"**.

(11) After updating the firmware, check the version.
Turn on the AC plug while pressing the button of **"DISC/INPUT"** and **"▶"**.

TROUBLE SHOOTING

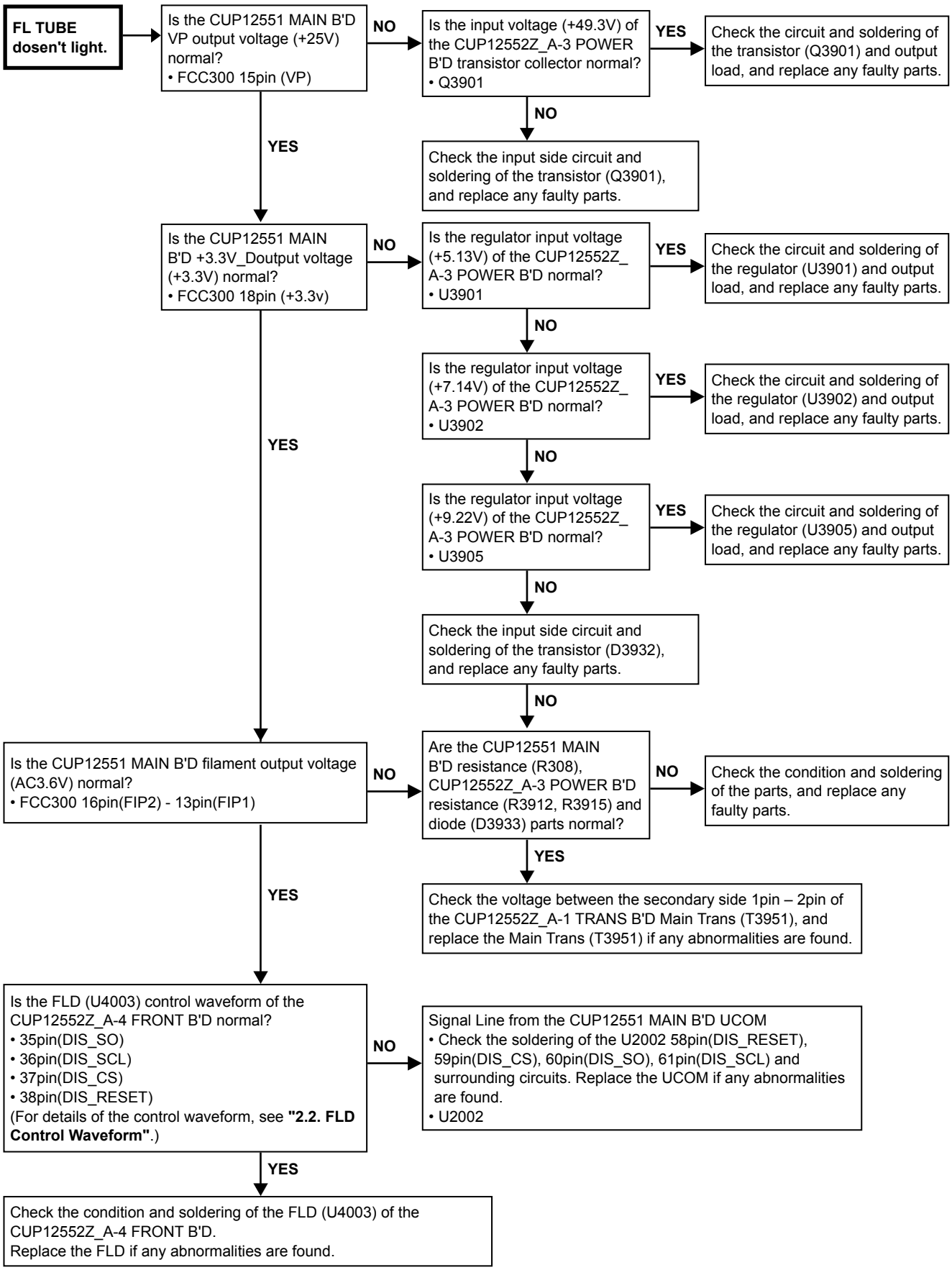
1. POWER

1.1. Power not turn on

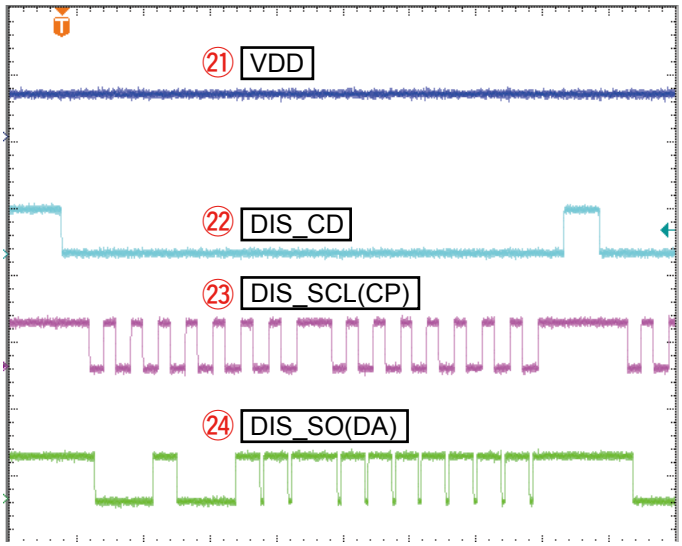


2. FLD

2.1. FL TUBE dosen't light



2.2. FLD Control Waveform



2.3. Remote control is not accepted

Remote control is not accepted.

↓

Is the power voltage (FST+3.3V) of the CUP12552Z_A-4 FRONT B'D remote control sensor (U4001) normal?
• FCC300 1pin,2pin (ST+3.3V)

NO → Check the U3904 input voltage of the CUP12552Z_A-3 POWER B'D, and the other circuits and soldering that handle the output load.
If there are no abnormalities, replace the U3904.

↓ **YES**

When a remote control button is pressed, is a remote control waveform (pulse waveform) output from the CUP12552Z_A-4 FRONT B'D remote control sensor (U4001)?
• FCC300 17pin (REMO)

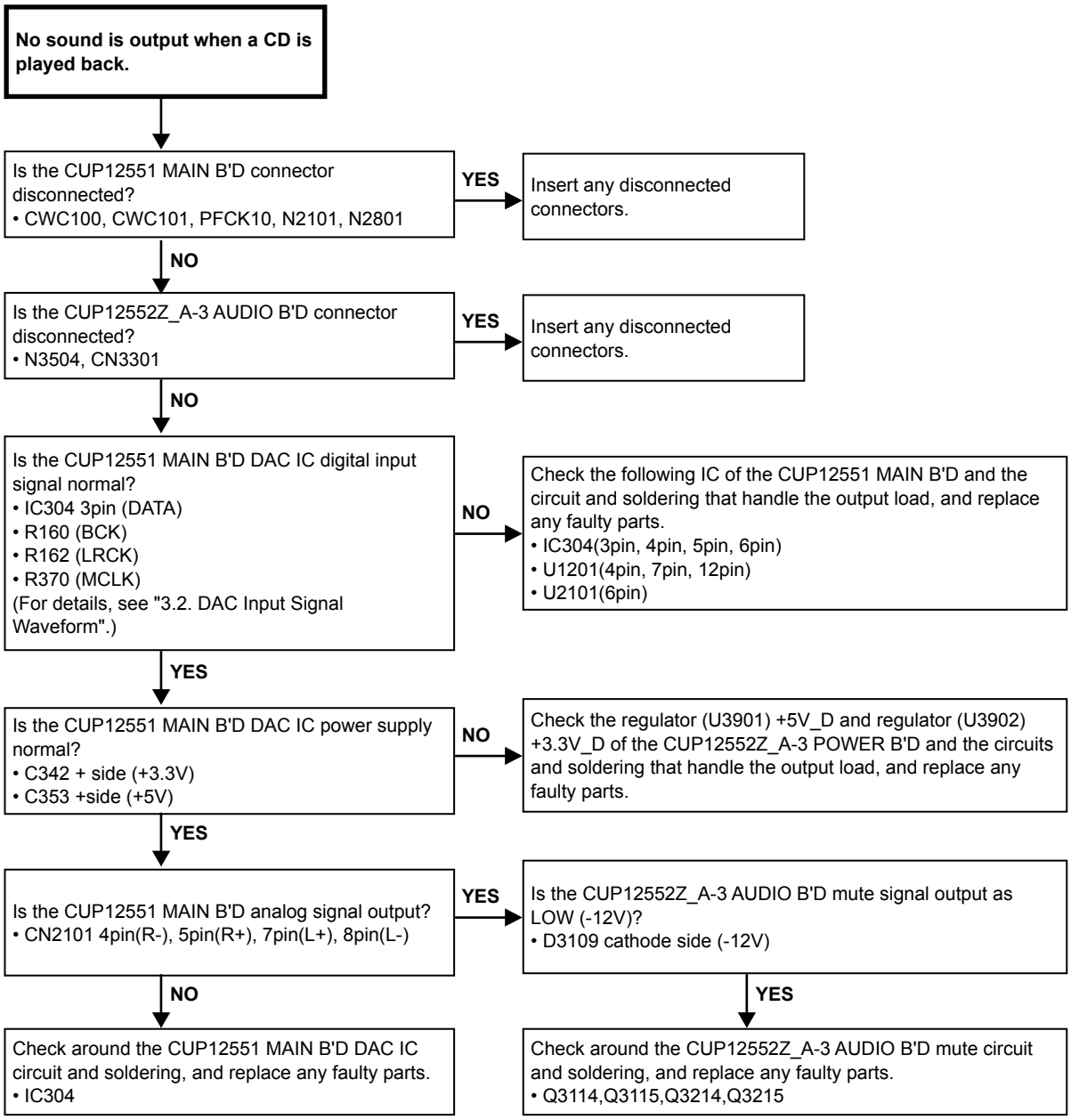
NO → Check the condition and soldering of the remote control sensor (U4001) pins etc. of the CUP12552Z_A-4 FRONT B'D.
Replace the remote control sensor if any abnormalities are found.

↓ **YES**

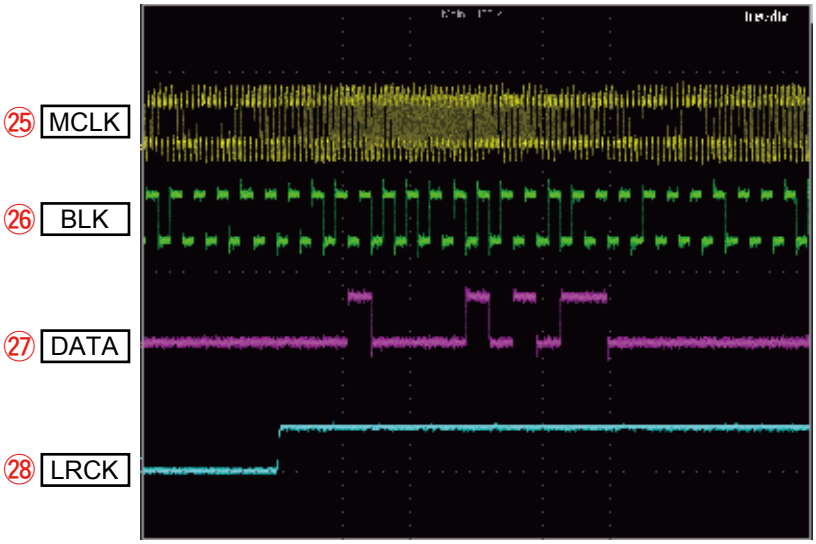
Check the condition and soldering of the remote control optical receiver circuit parts, and replace any faulty parts.

3. NO SOUND

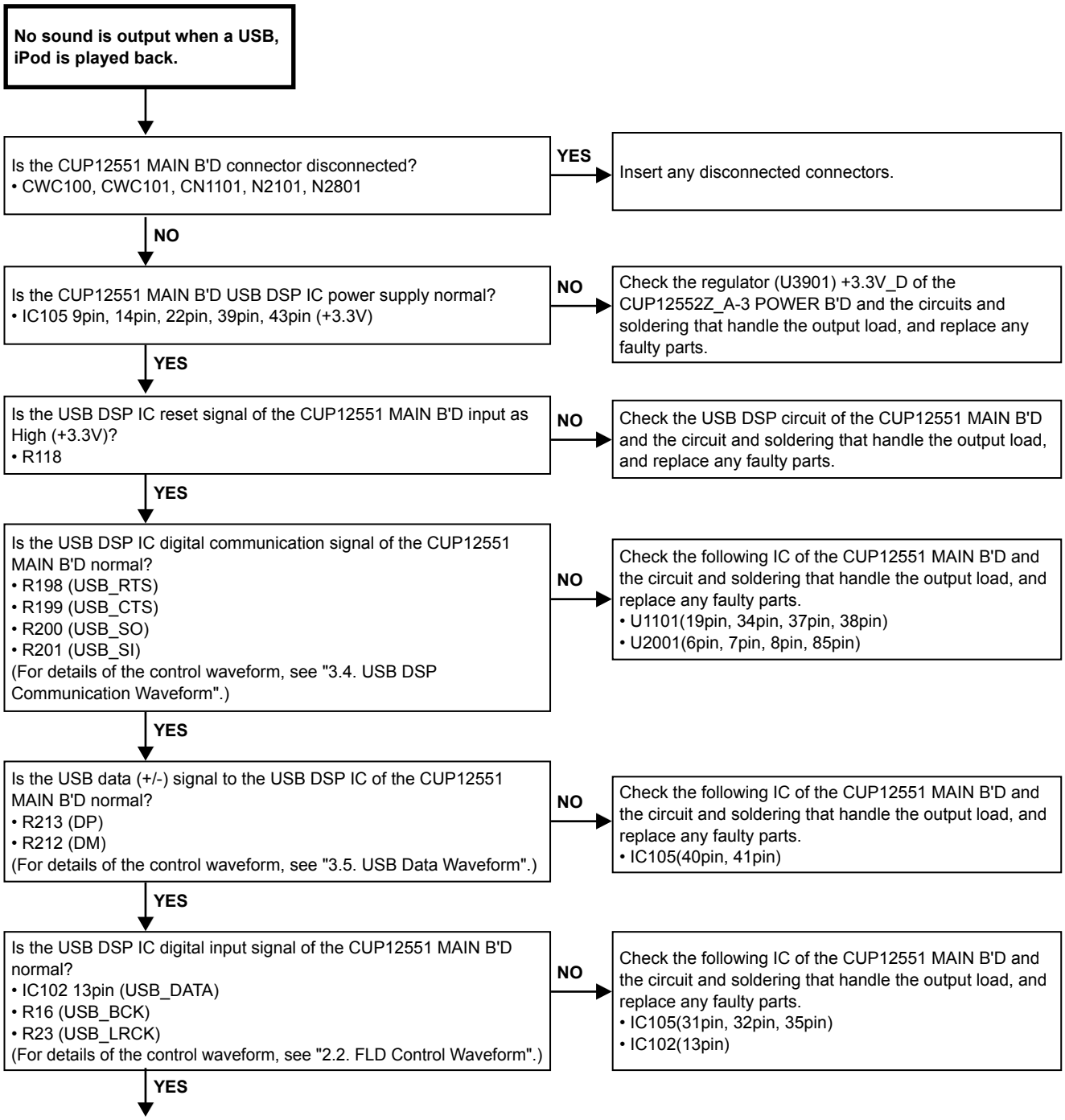
3.1. No sound is output when a CD is played back

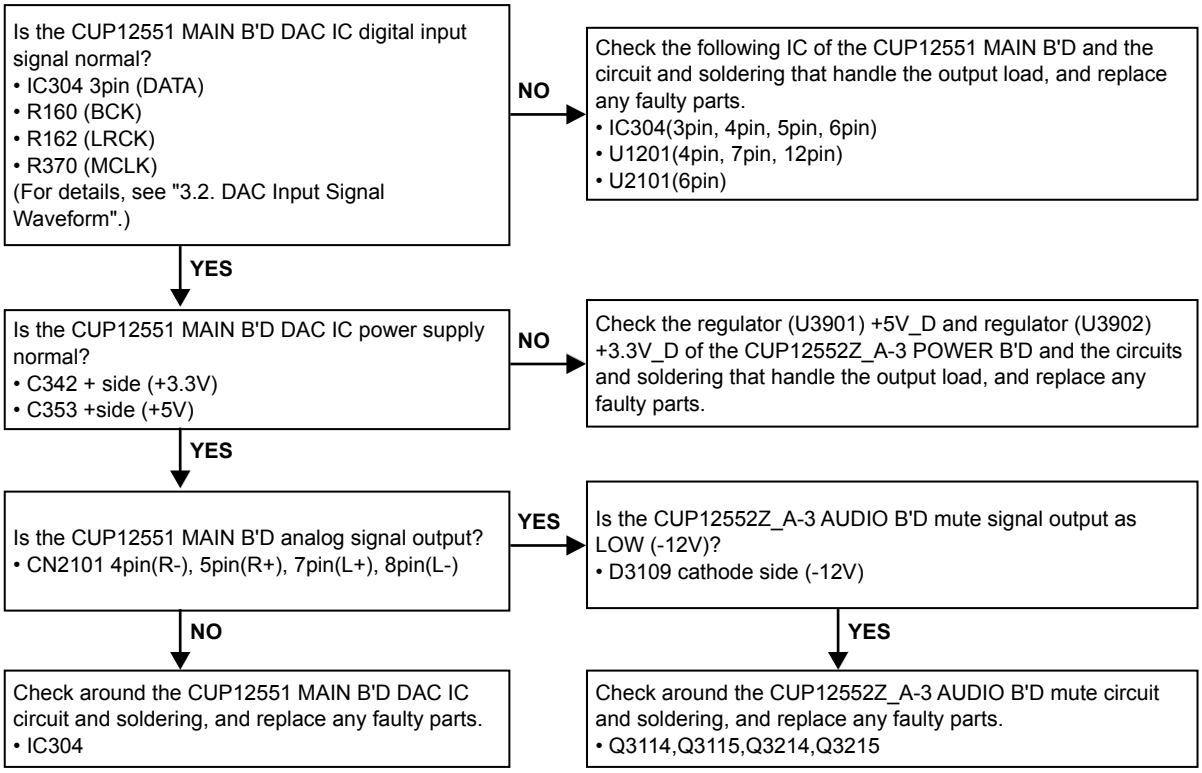


3.2. DAC Input Signal Waveform

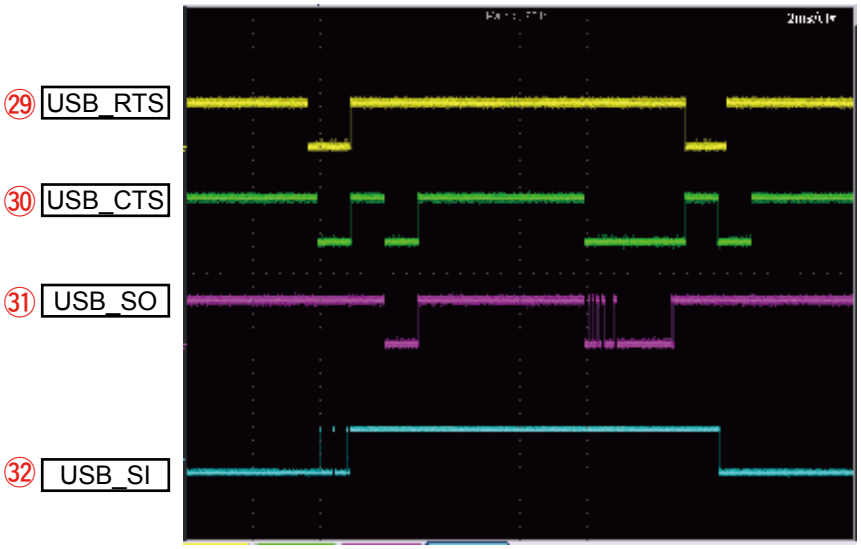


3.3. No sound is output when a USB, iPod is played back

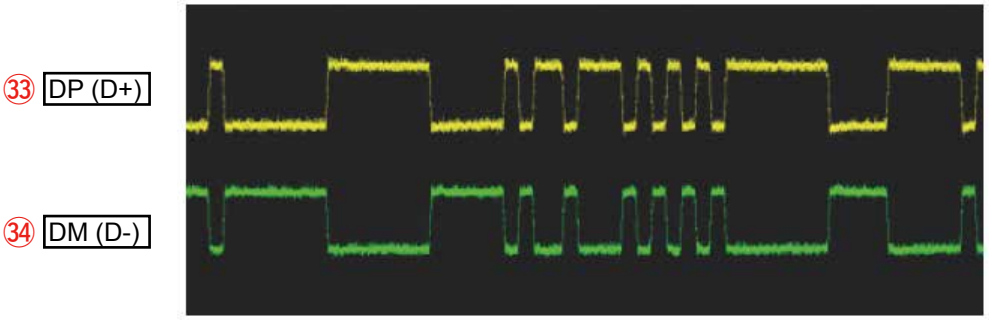




3.4. USB DSP Communication Waveform



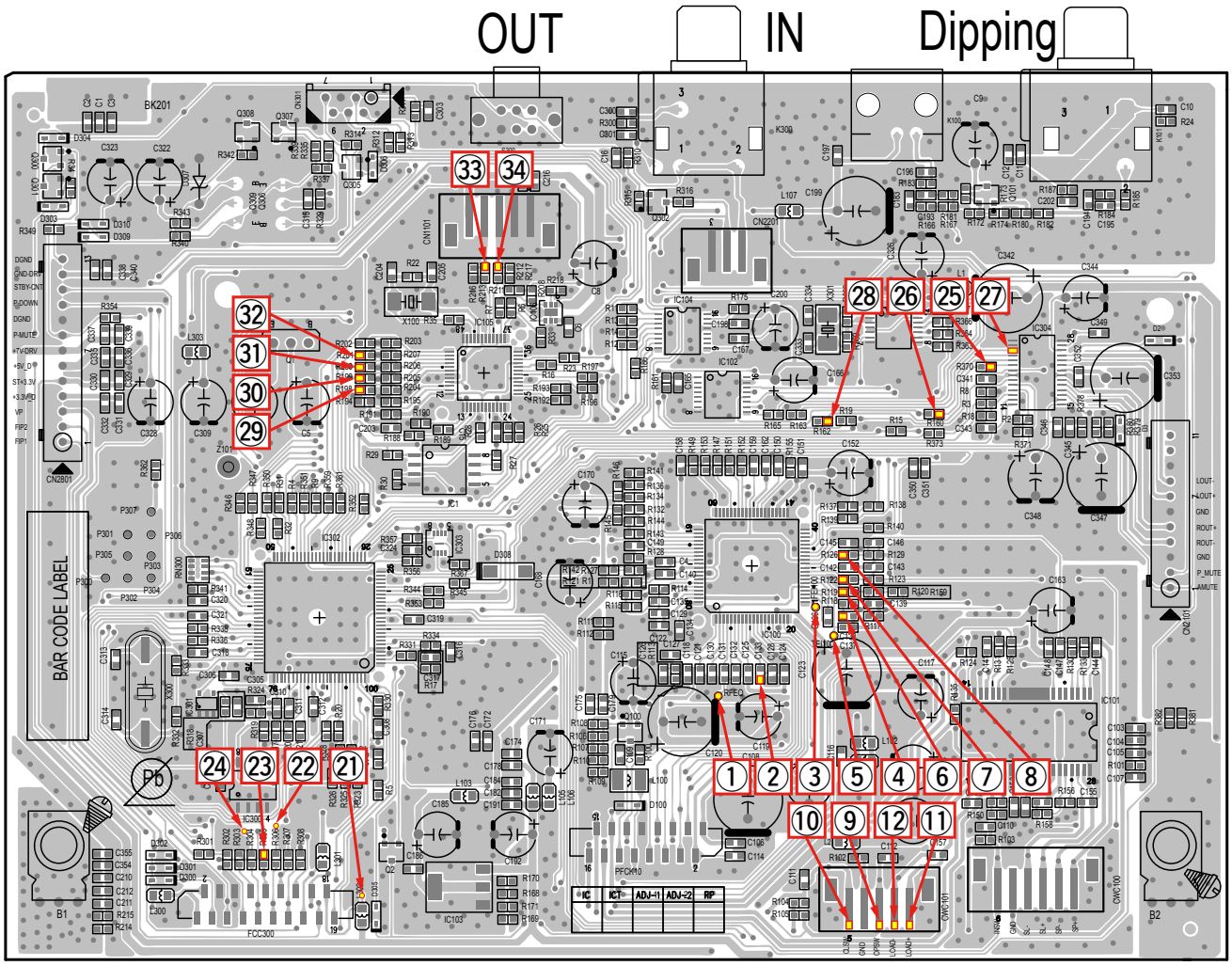
3.5. USB Data Waveform



MEASURING METHOD AND WAVEFORMS

Measuring Disc: 4822 397 30184
TCD-784
(It is better to use wires for extending between the probe and test points.)

CUP12551 MAIN B'D ASSY: TEST POINT



①	RFEQO
②	RFO
③	FSMONIT
④	FOO
⑤	TEI
⑥	TRO
⑦	FMO
⑧	DMO
⑨	OP SW
⑩	CL SW
⑪	LOAD+
⑫	LOAD-

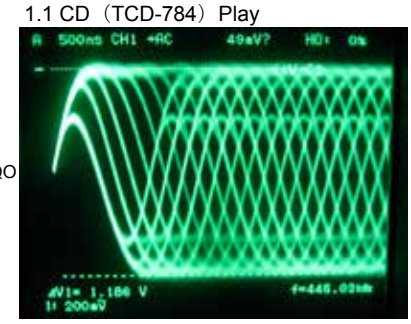
㉑	VDD
㉒	DIS CD
㉓	DIS SCL(CP)
㉔	DIS SO(DA)
㉕	MCLK
㉖	BLK
㉗	DATA
㉘	LRCK
㉙	USB RTS
㉚	USB CTS
㉛	USB SO
㉜	USB SI
㉝	DP
㉞	NP

WAVEFORMS

1. DISC PLAY RF WAVEFORM（EYE-PATTERN）

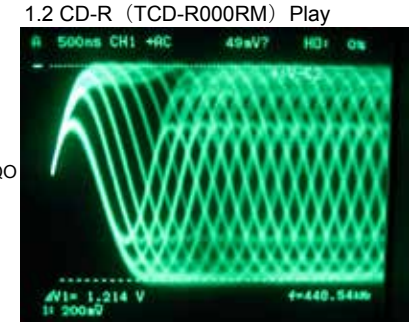
1.1 CD（TCD-784）Play

①RFEQO



1.2 CD-R（TCD-R000RM）Play

①RFEQO

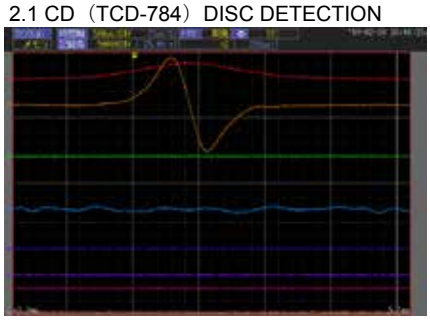


1.3 CD-RW（TCD-W000RM）Play

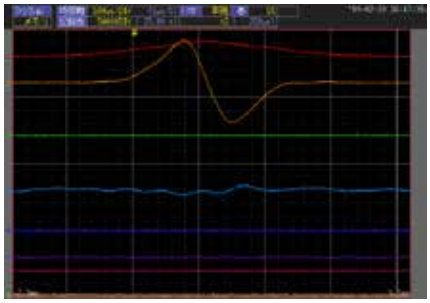
①RFEQO

2. DISC DETECTION

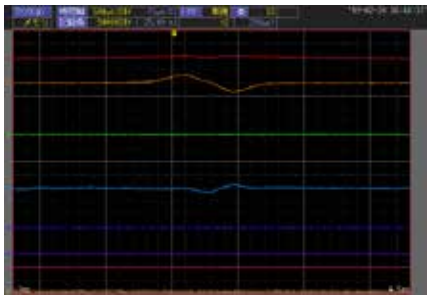
2.1 CD（TCD-784）DISC DETECTION



2.2 CD-R（TCD-R000RM）DISC DETECT

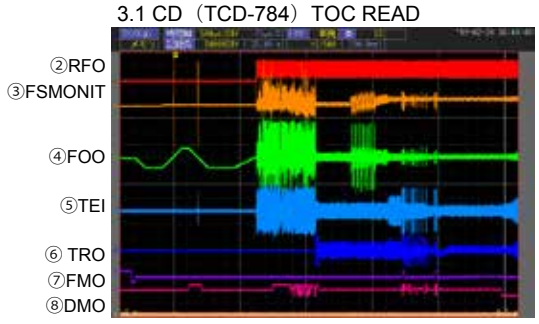


2.3 CD-RW（TCD-W000RM）DISC DETECTION

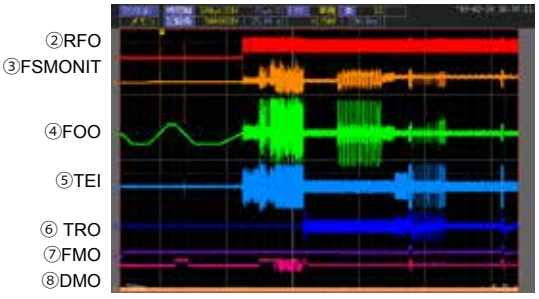


3. TOC READ

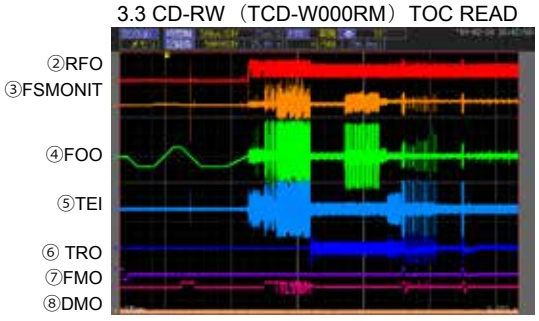
3.1 CD（TCD-784）TOC READ



3.2 CD-R（TCD-R000RM）TOC READ

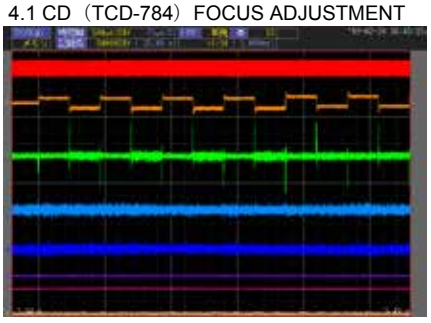


3.3 CD-RW （TCD-W000RM） TOC READ

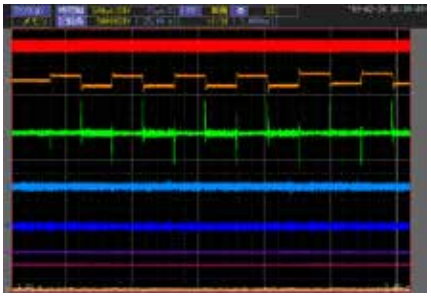


4. FOCUS ADJUSTMENT

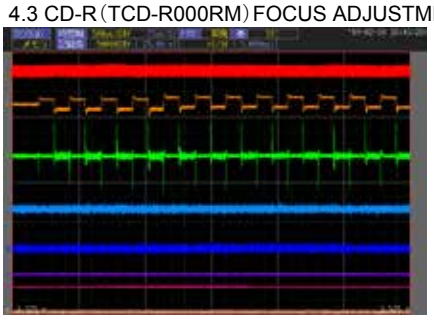
4.1 CD（TCD-784）FOCUS ADJUSTMENT



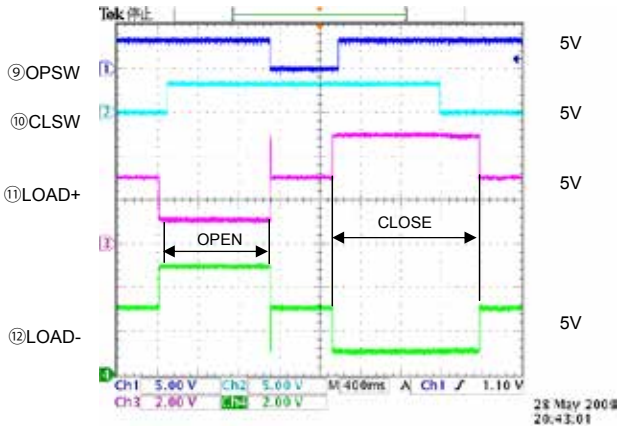
4.2 CD-R（TCD-R000RM）FOCUS ADJUSTMENT



4.3 CD-R（TCD-R000RM）FOCUS ADJUSTMENT

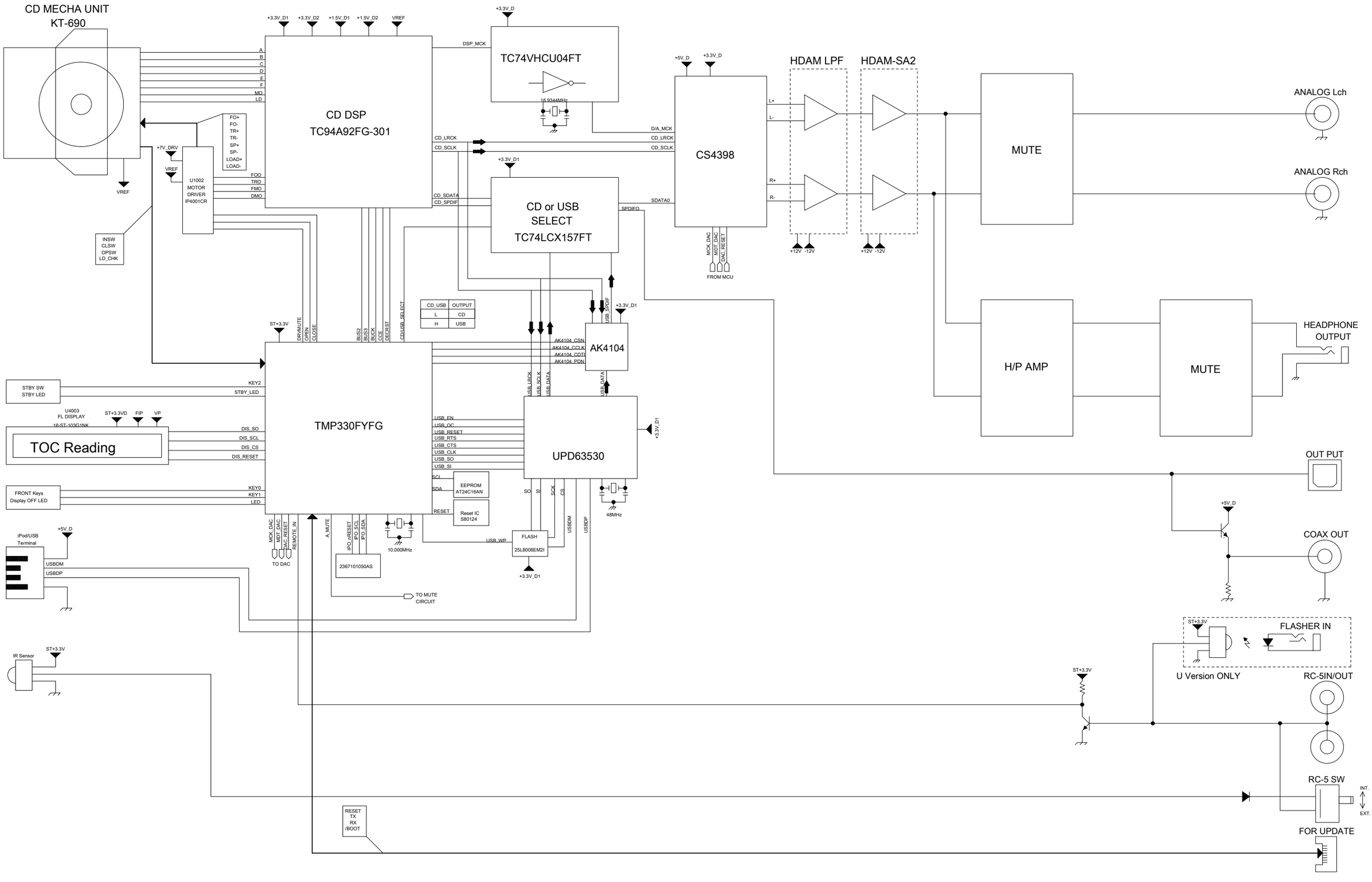


5. LOADER OPEN-CLOSE



Personal notes:

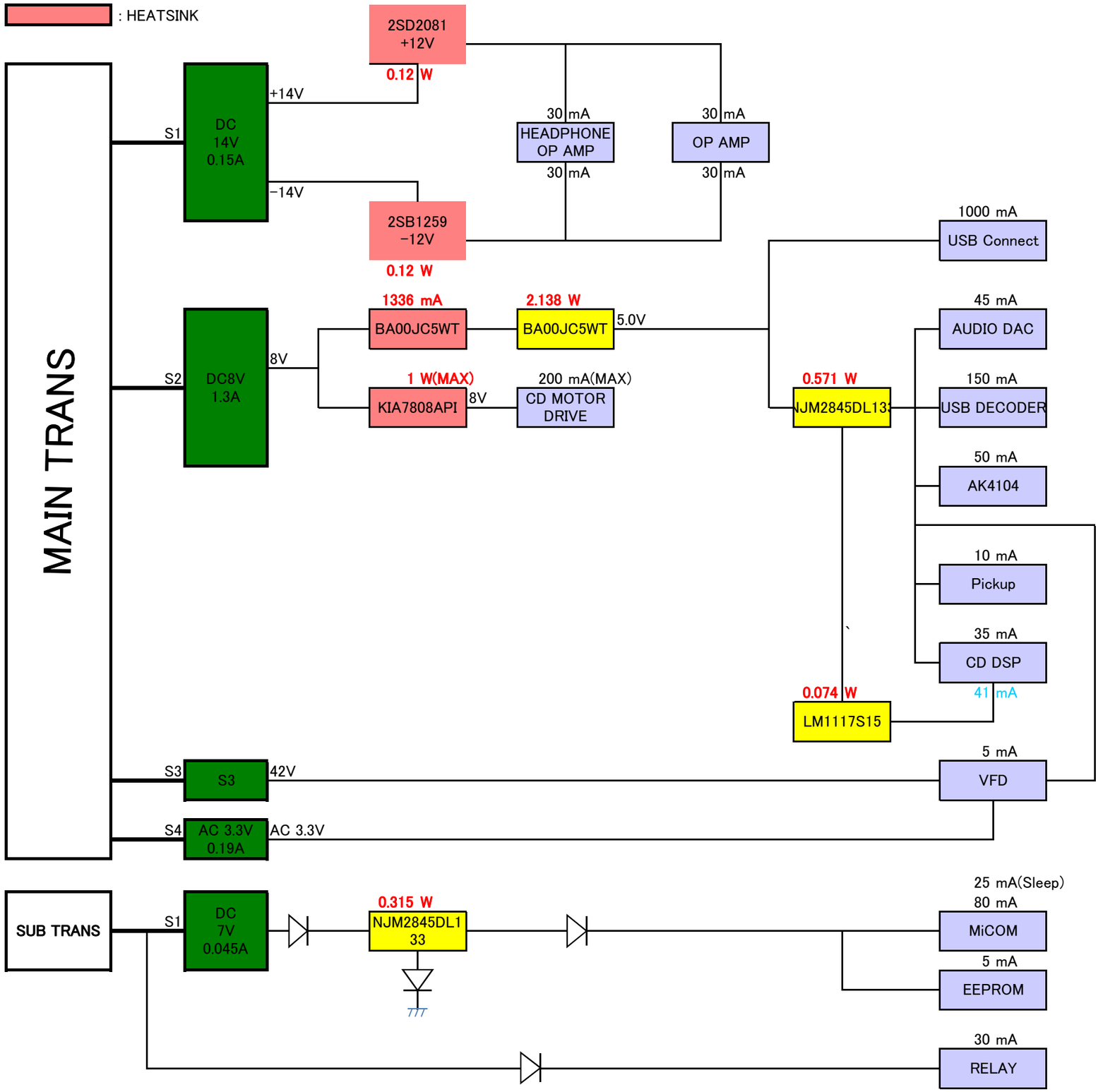
BLOCK DIAGRAM



電源ダイヤグラム
POWER DIAGRAM

CD6005 CURRENT BLOCK DIAGRAM

2012.10.17

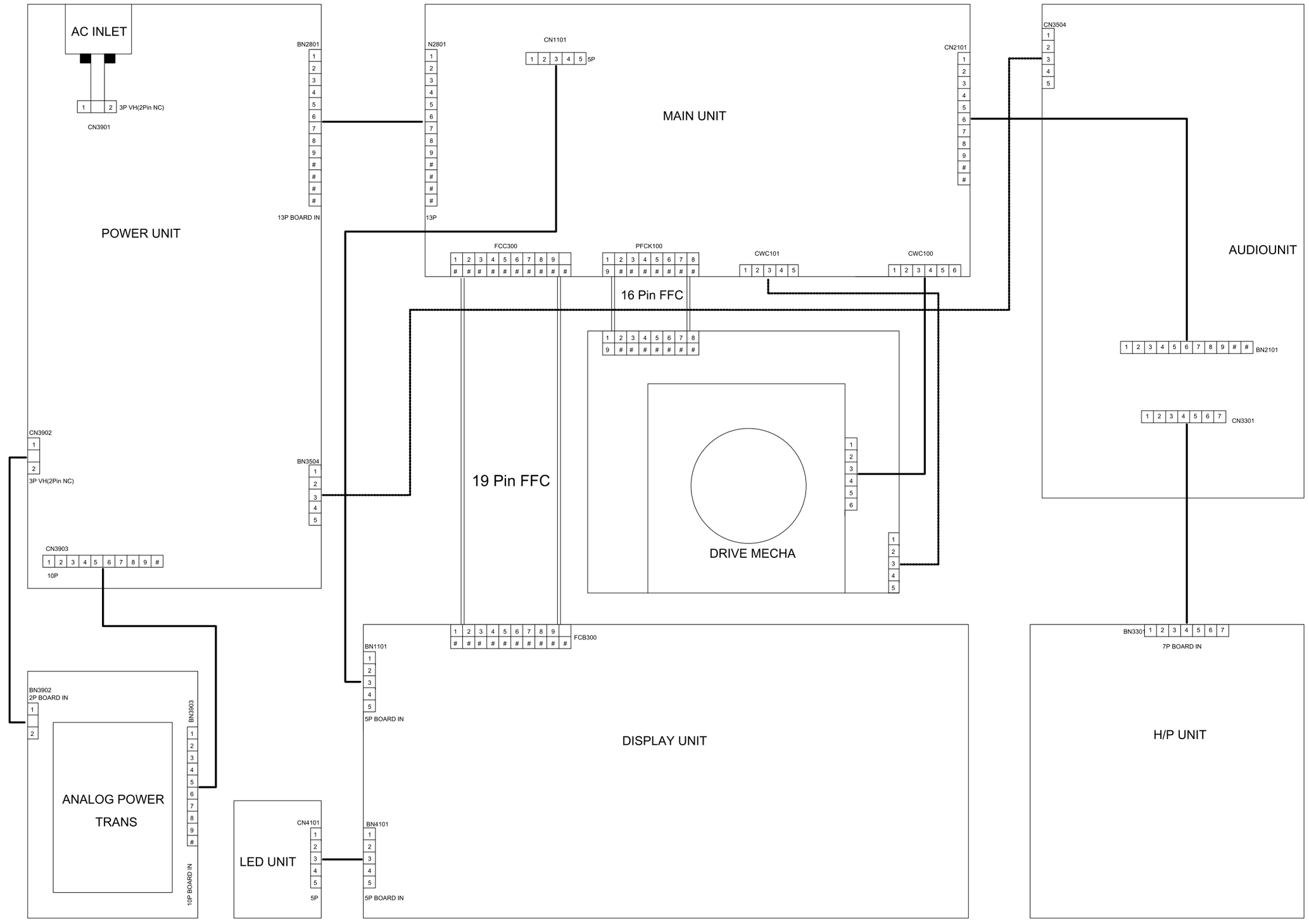


S1	A+14V	A−14V	A+12V	A−12V
OP AMP			30	30
2SD2081				
2SB1259				
HP OP AMP			30	30
Total Current	**0**	**0**	**60**	**60**
Pc			0.12	0.12

S2	D+10V	DRV7V	D+5V	D+3.3V	D+1.5V
USB			1000		
AUDIO DAC				45	
USB DECODER				150	
DIX				50	
PICKUP				10	
CD DSP				35	41
VFD				5	
MOTOR IC		200			
LM1117S15					
NJM2845DL133				41	
BA00JC5WT			336		
KIA7808API	200				
BA00JC5WT					
Total Current	**1336**	**200**	**1336**	**336**	**41**
Pc		1	2.1376	0.5712	0.0738

SUB TRANS	ST+7V	ST+3.3V
MCU		80
EEPROM		5
NJM2845DL133	85	
RELAY	30	
Total Current	115	85
Pc		0.3145

配線ダイヤグラム
WIRING DIAGRAM



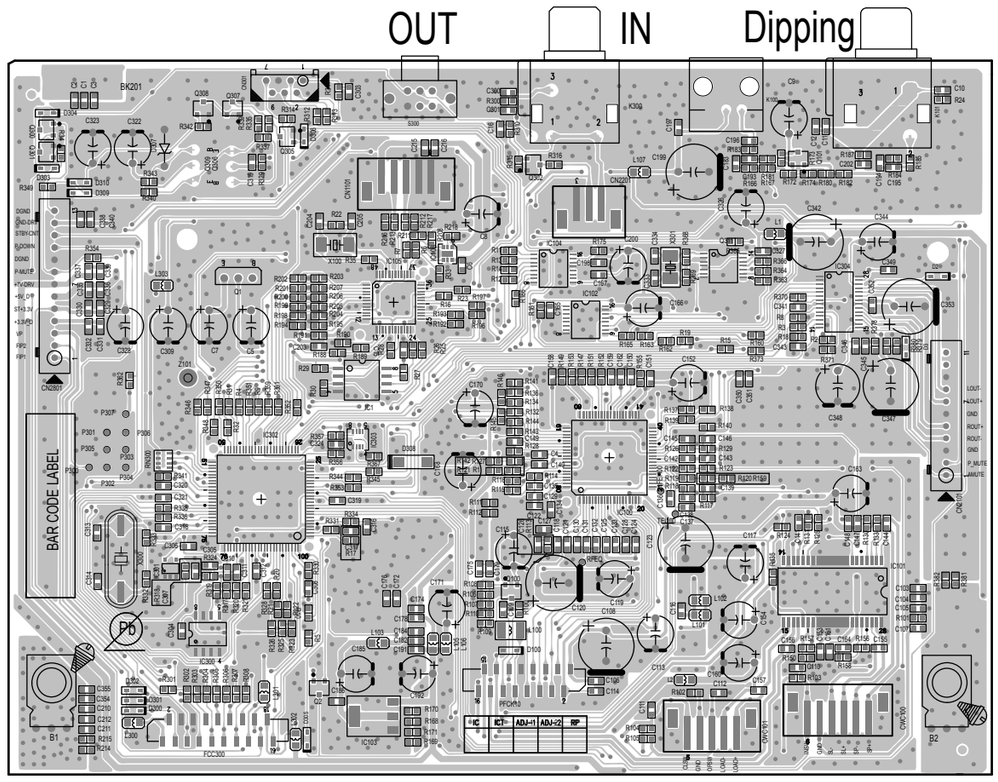
基板図

鉛フリー半田
半田付けには、鉛フリー半田 (Sn-Ag-Cu) を使用してください。

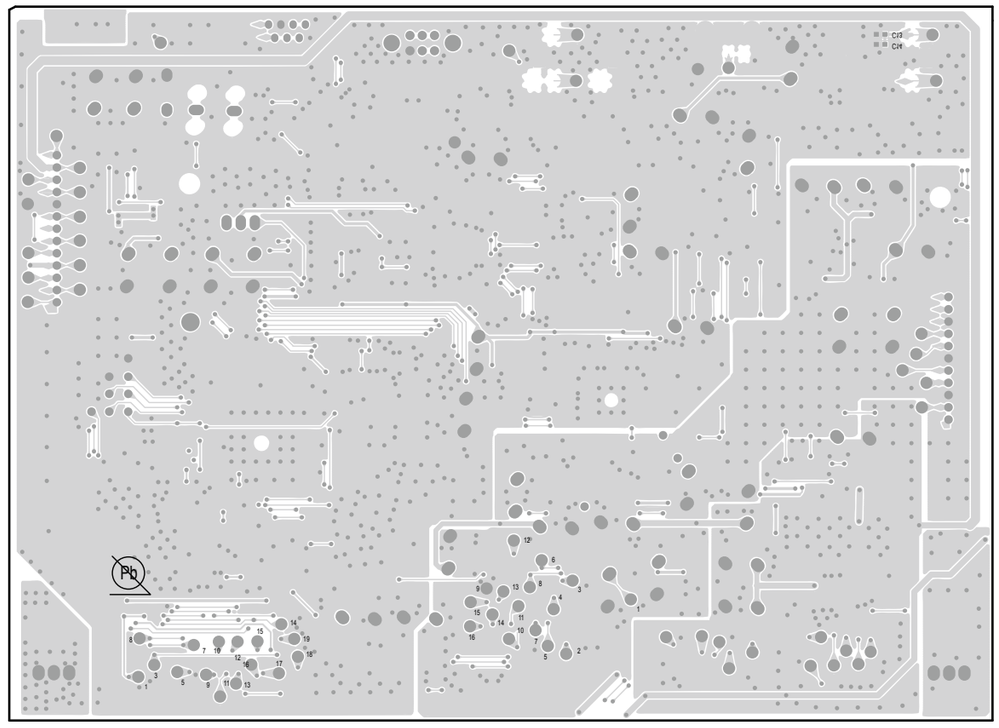
PRINTED WIRING BOARDS

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

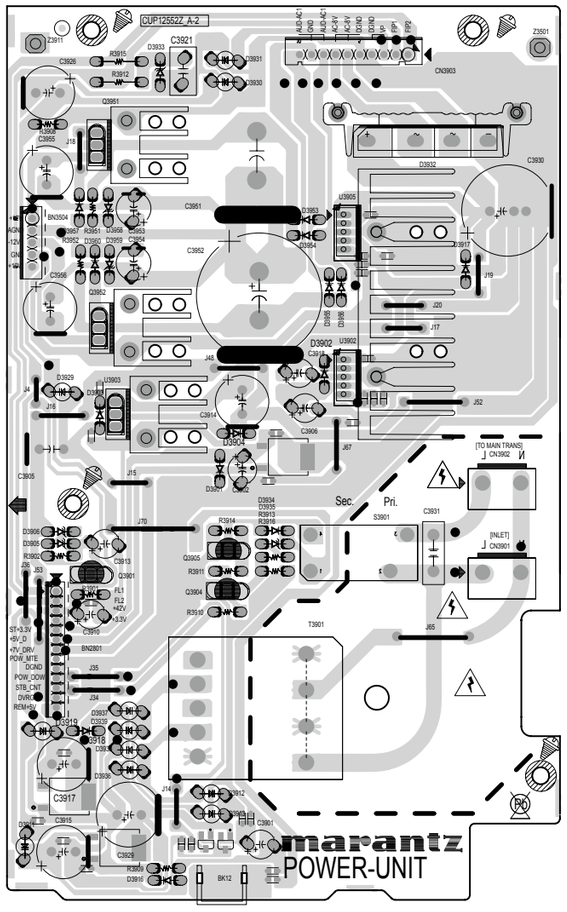
MAIN (A SIDE)



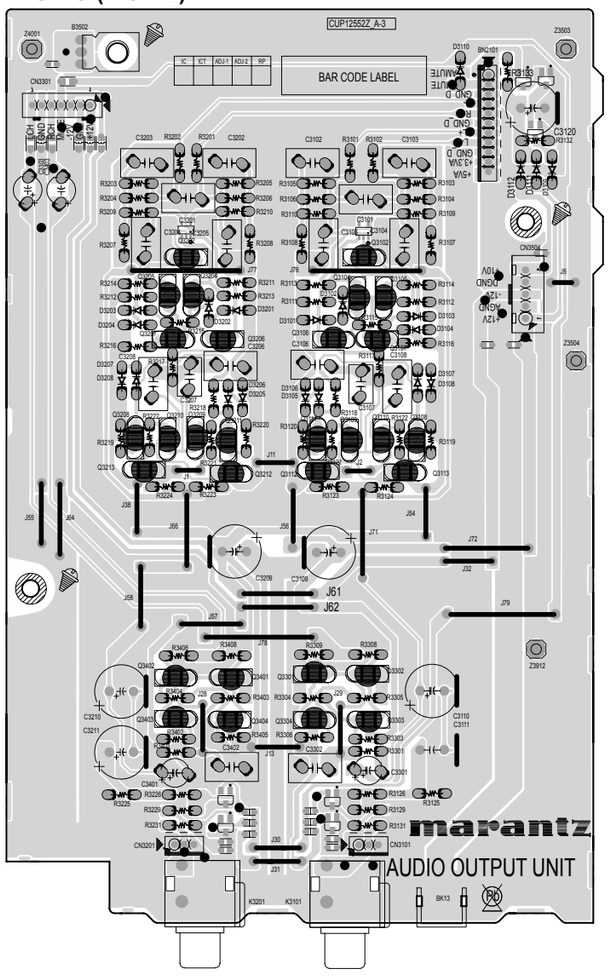
MAIN (B SIDE)



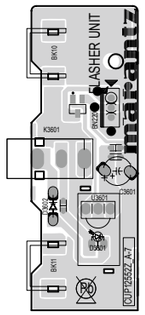
POWER (A SIDE)



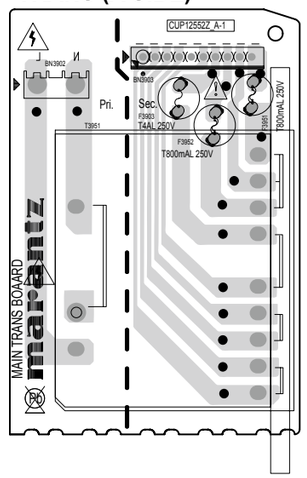
AUDIO (A SIDE)



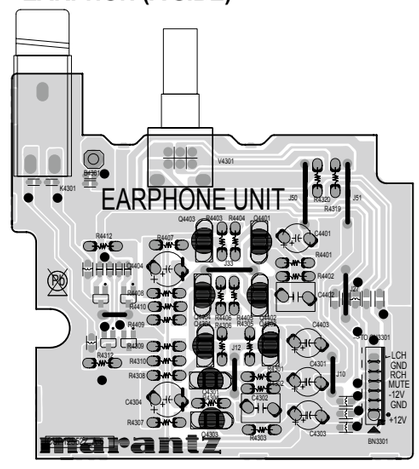
FLASHER (A SIDE)



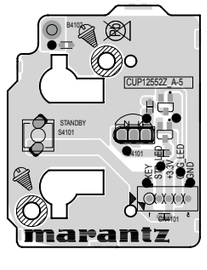
TRANS (A SIDE)



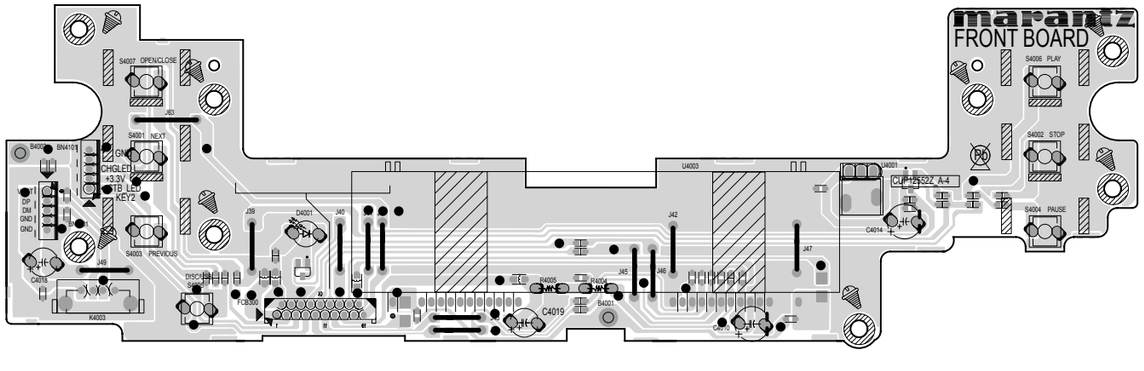
EARPHON (A SIDE)



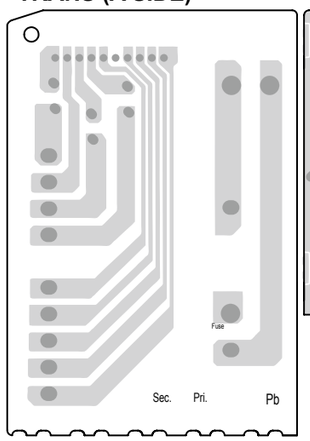
STANDBY (A SIDE)



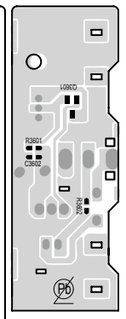
FRONT (A SIDE)



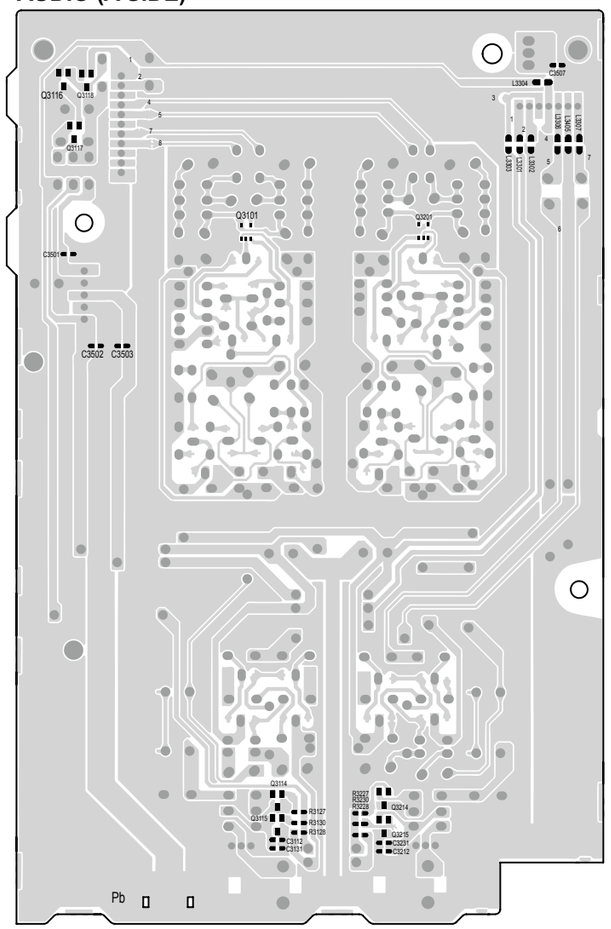
TRANS (A SIDE)



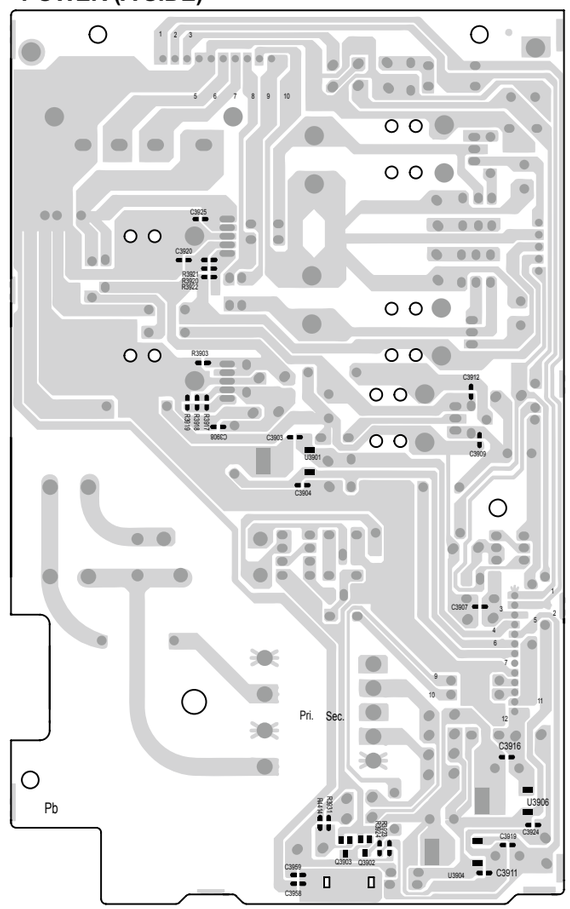
FLASHER (A SIDE)



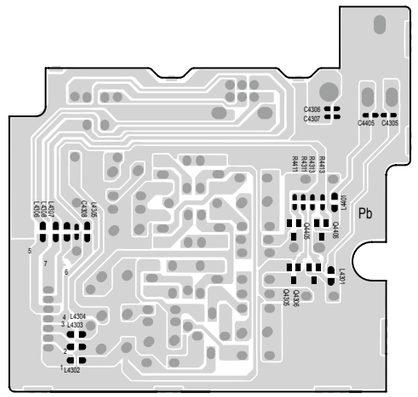
AUDIO (A SIDE)



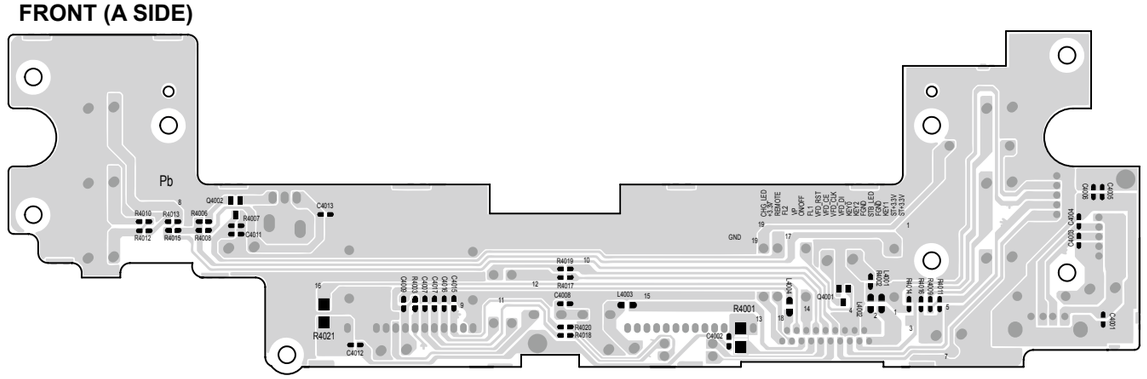
POWER (A SIDE)



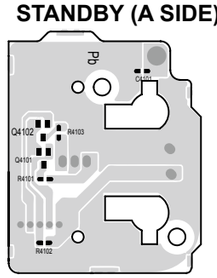
EARPHON (A SIDE)

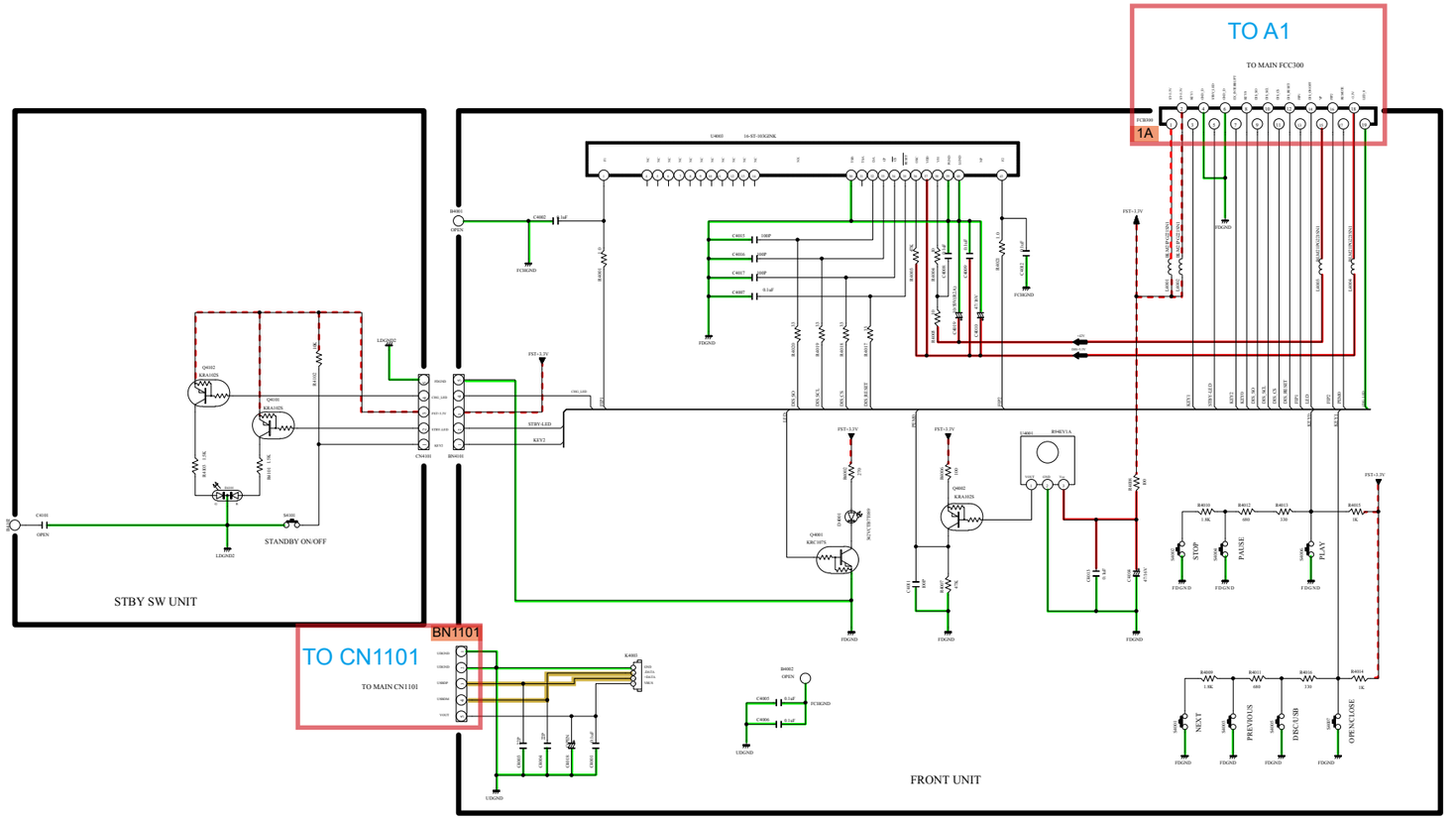


FRONT (A SIDE)



STANDBY (A SIDE)

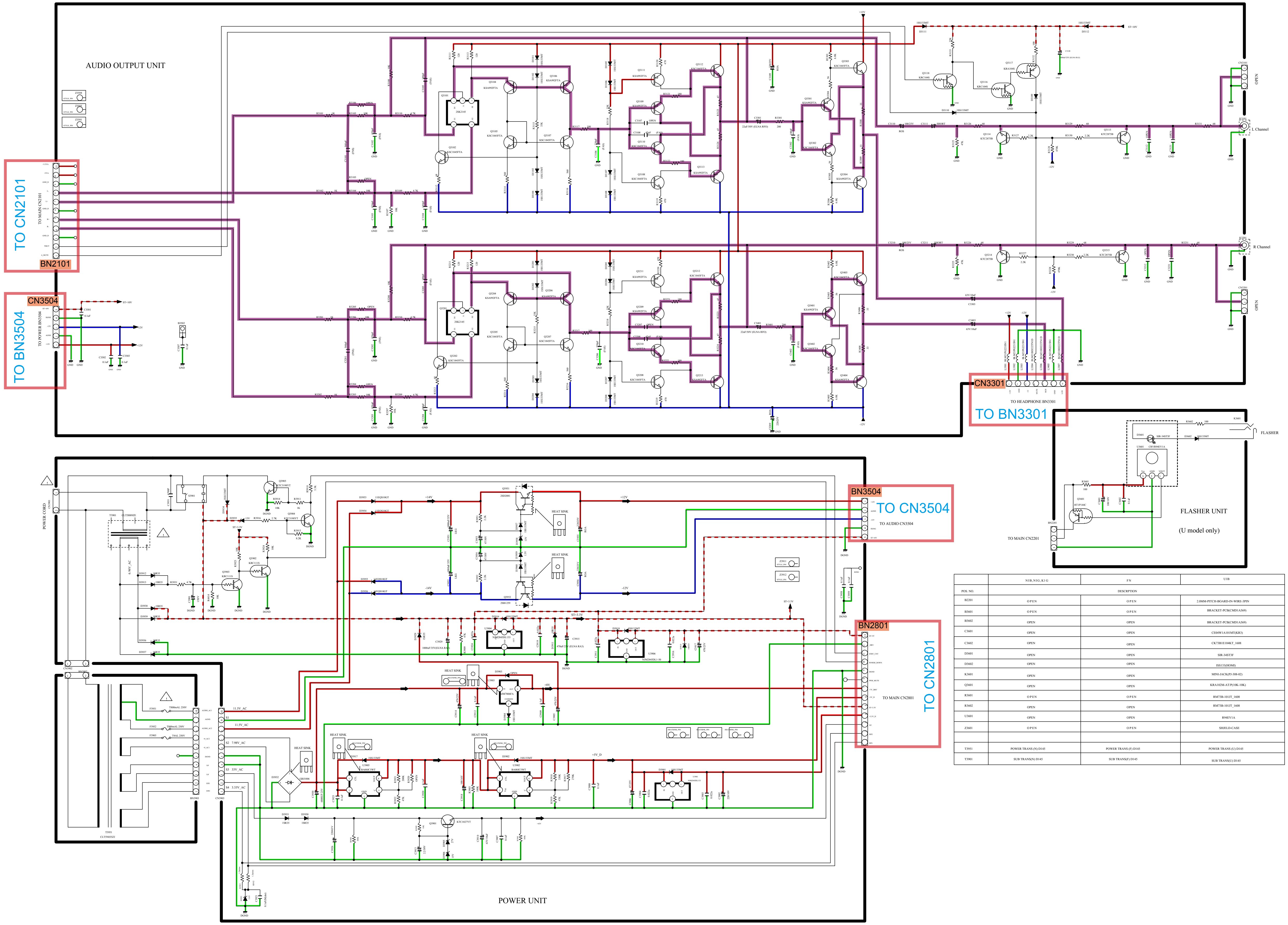




GND POWER + POWER - STBY POWER ANALOG AUDIO SIGNAL LINE USB SIGNAL LINE

SCHEMATIC DIAGRAMS (1/4)

SCH01_FRONT_EAR_PHONE_UNIT

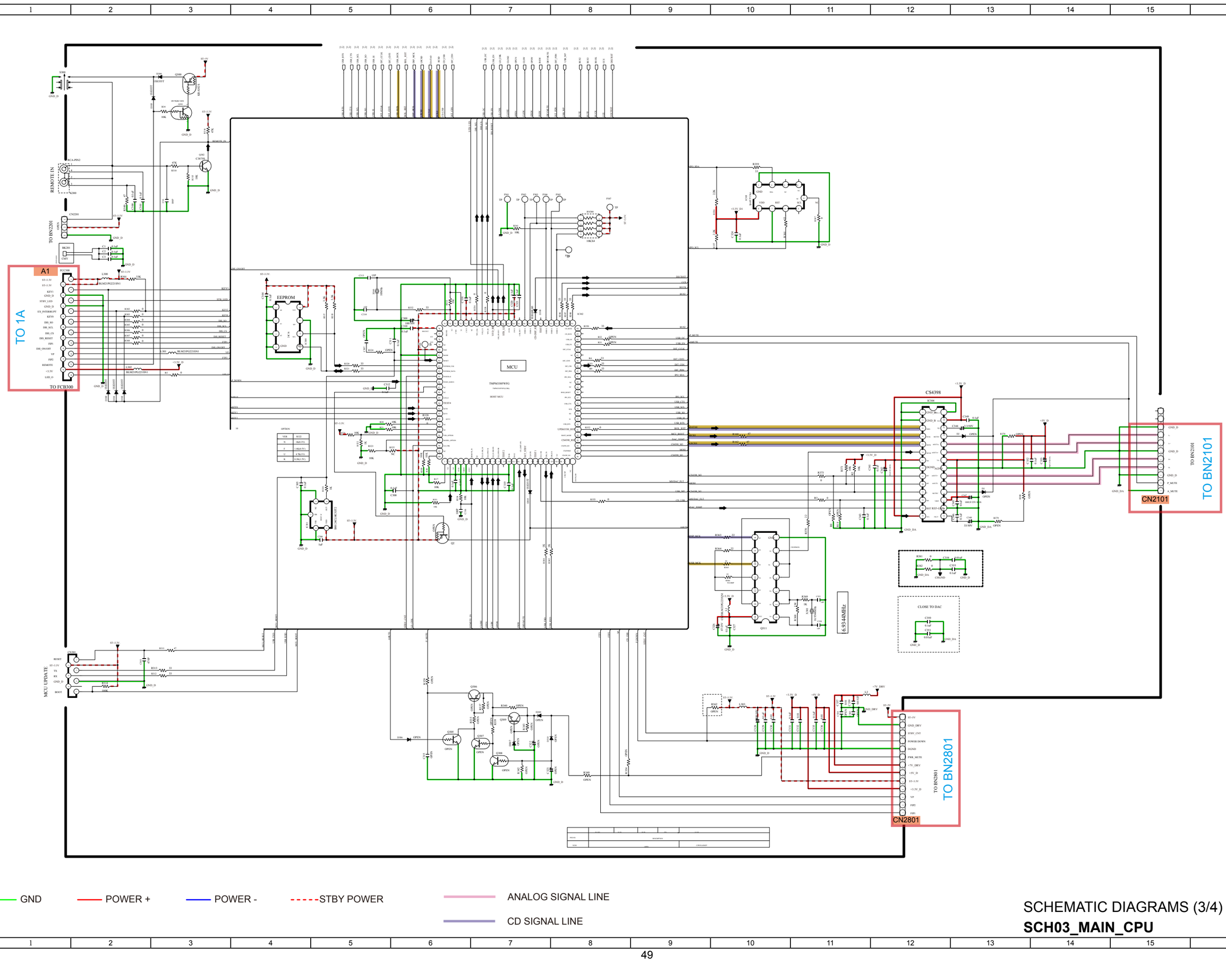


POS. NO.	NIB,NIG,K1G	FN	UIB
	DESCRPTION		
B2201	OPEN	OPEN	2.0MM-PITCH-BOARD-IN-WIRE-3PIN
B3601	OPEN	OPEN	BRACKET-PCB(CMD1A569)
B3602	OPEN	OPEN	BRACKET-PCB(CMD1A569)
C3601	OPEN	OPEN	CE04W1A101MT(KR3)
C3602	OPEN	OPEN	CK73B1E104KT_1608
D3601	OPEN	OPEN	SIR-34ST3F
D3602	OPEN	OPEN	ISS133(HOMI)
K3601	OPEN	OPEN	MINI-JACK(PJ-308-02)
Q3601	OPEN	OPEN	KRA102M-AT/P(10K-10K)
R3601	OPEN	OPEN	RM73B-101JT_1608
R3602	OPEN	OPEN	RM73B-101JT_1608
U3601	OPEN	OPEN	R94EV1A
Z3601	OPEN	OPEN	SHIELD-CASE
T3951	POWER TRANS (N) D145	POWER TRANS (F) D145	POWER TRANS (U) D145
T3901	SUB TRANS(N) D145	SUB TRANS(F) D145	SUB TRANS(U) D145

🟩 GND
🟥 POWER +
🟦 POWER -
- - - - STBY POWER
🟪 ANALOG AUDIO SIGNAL LINE

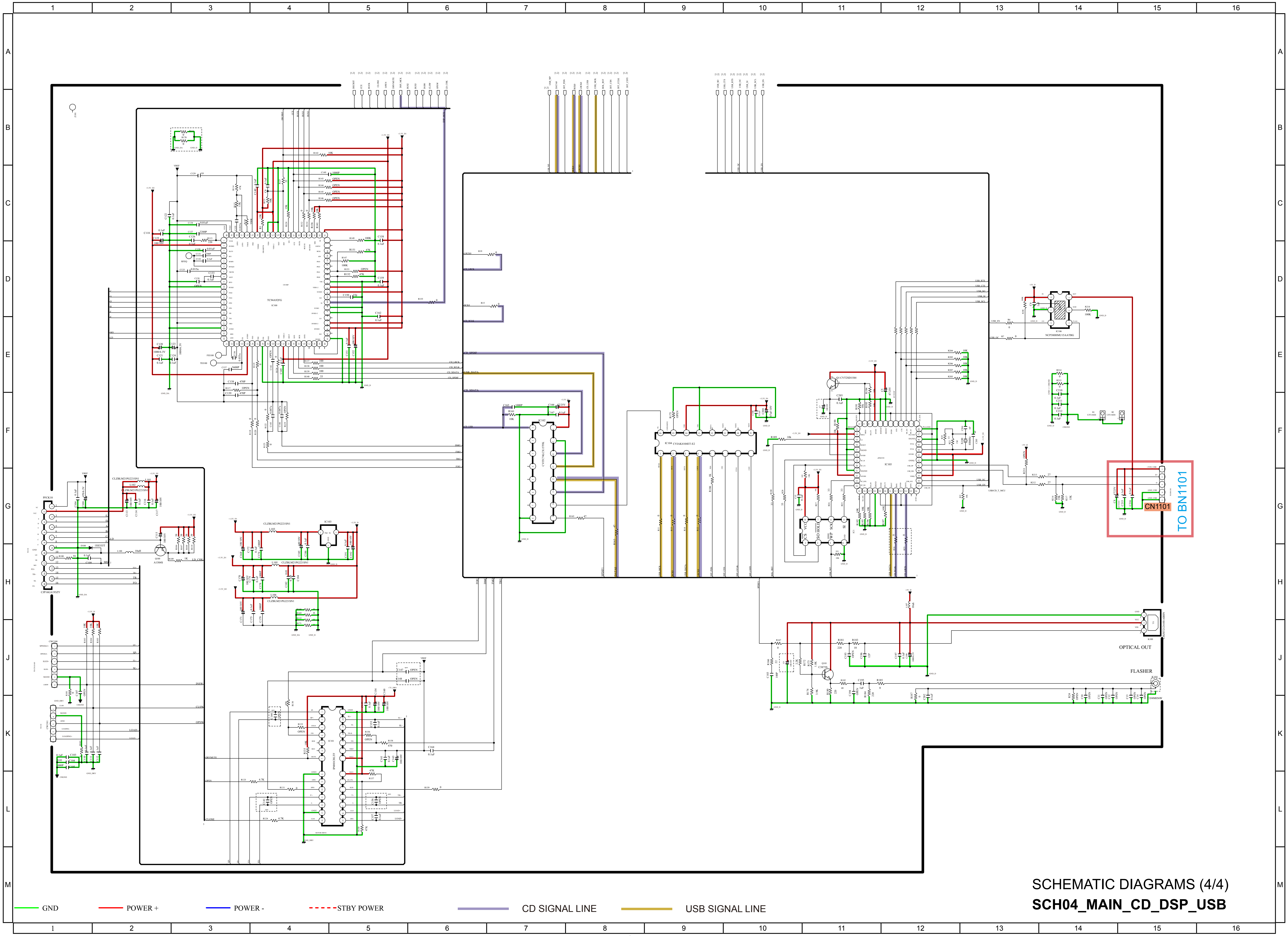
SCHEMATIC DIAGRAMS (2/4)

SCH02_POWER_AUDIO_OUTPUT_UNIT



SCHEMATIC DIAGRAMS (3/4)

SCH03_MAIN_CPU



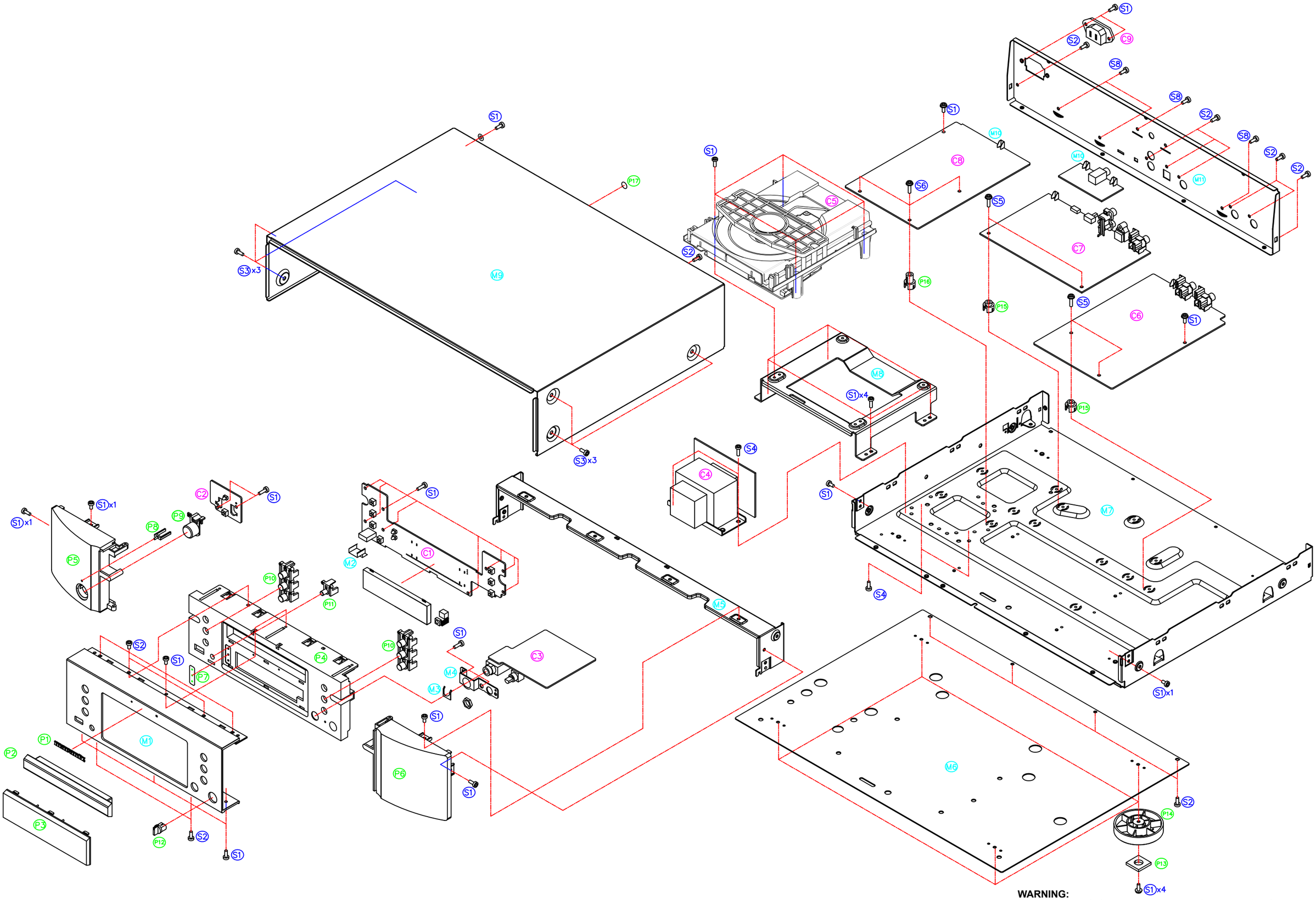
GND
POWER +
POWER -
STBY POWER
CD SIGNAL LINE
USB SIGNAL LINE

SCHEMATIC DIAGRAMS (4/4)

SCH04_MAIN_CD_DSP_USB

EXPLODED VIEW

Please refer to the last chapter for the part list.



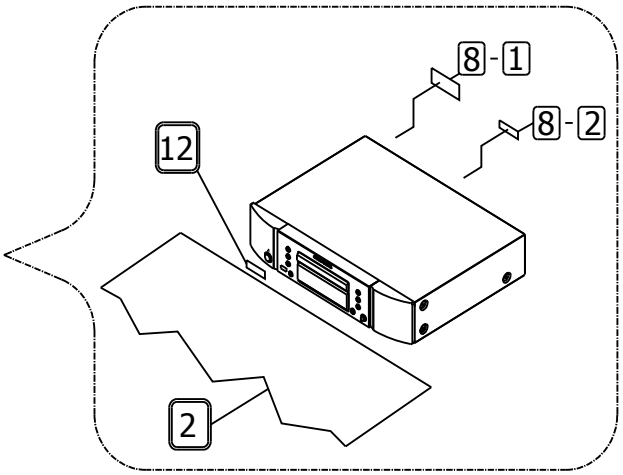
WARNING:
Parts marked with this symbol ⚠ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

Personal notes:

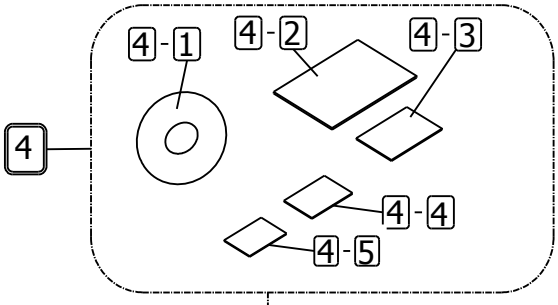
Personal notes:

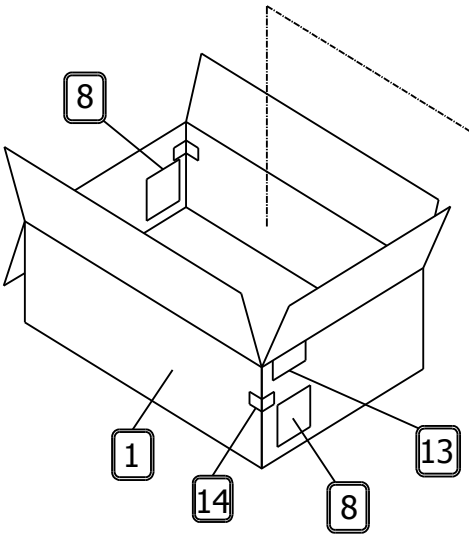
PACKING VIEW

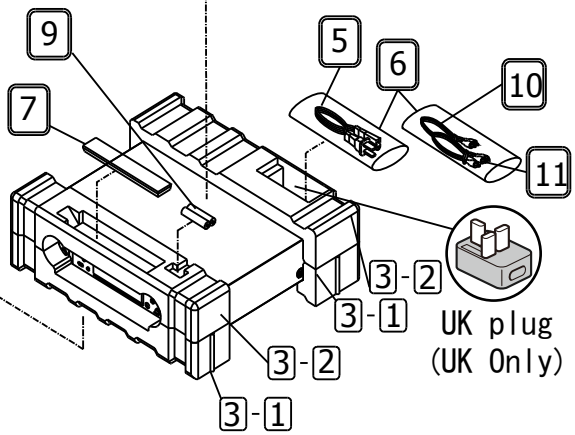
Please refer to the last chapter for the part list.



PP TAPE





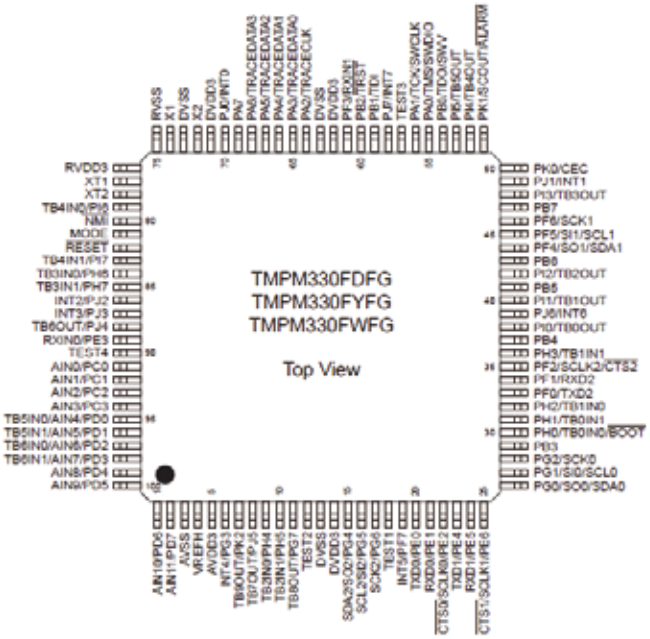


SEMICONDUCTORS

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

TMP92FD23AFG (IC302)

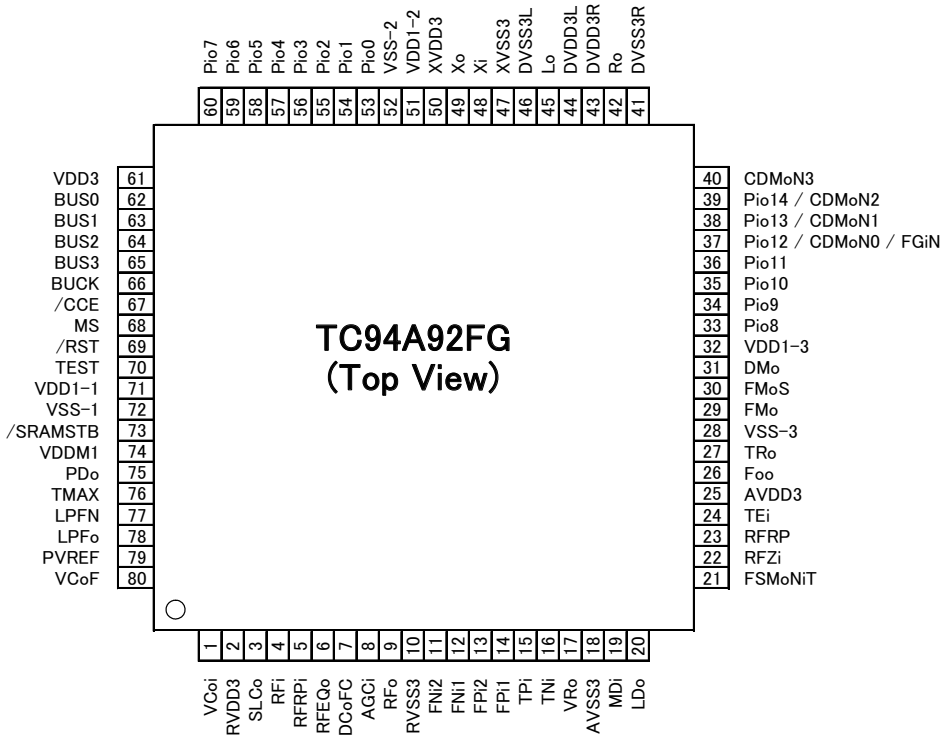


MAIN MCU PORT MAP

Pin	Symbol	Pin Name	I/O	Pu/Pd	STBY	Description
1	AN10/PD6	NC	I		L	unused
2	AN11/PD7	NC	I		L	unused
3	AVSS	AVSS	G			GND
4	VREFH	VREFH	P		H	Vref voltage
5	AVCC	AVCC	G			3.3V power supply
6	INT4/PG3	REMOTE_IN	P		H	Remote signal input
7	TB9OUT/PK2	NC	I/O		L	unused
8	TB7OUT/PJ2	CD_CLOSE_M	I/O		L	press key (open/close) send command TO IP4001CRLTF action drive motor close the CD door
9	TB2INT0/PH4	CD_OPEN_M	I/O		L	press key (open/close) send command TO IP4001CRLTF action drive motor open the CD door
10	TB2INT1/PH5	CD_CLOSE_SW	I/O		L	CD closethe door switch detect
11	TB8OUT/PG7	CD_OPEN_SW	I/O		L	CD open the door switch detect
12	TEST2	TEST2			L	unused
13	DVSS	DVSS	G			GND
14	DVCC	DVCC	P			3.3V power supply
15	SDA2/SO2/PG4	CD_LIMIT_SW	I/O		L	CD laser head limit switch detect
16	SCL2/SI2/PG5	MT_STBY	I/O		L	enable mute CD deive chip
17	SCK2/PG6	F_MUTE	I/O		L	enable mute hardware circuit
18	TEST1	TEST1			L	unused
19	INT5/PF7	CD_USB	I/O		L	control TC74LCX157FK change CD,USB clock source
20	TXD0/PE0	USB_TX	I/O		L	mcu chip update uart tx
21	RXD0/PE1	USB_RX	I/O		L	mcu chip update uart rx
22	SCLK0/PE2	NC	I/O		L	unused
23	TXD1/PE4	USB_WP	I/O		L	FLASH _WP
24	RXD1/PE5	NC	I/O		L	unused
25	SCLK1/PE6	CS4398_M0	I/O		L	cs4398 m0 control pin
26	SDA0/SO0/PG0	CS4398_M1	I/O		L	cs4398 m1 control pin
27	SCL0/SI0/PG1	CS4398_M2	I/O		L	cs4398 m2 control pin
28	SCK0/PG2	CS4398_M3	I/O		L	cs4398 m3 control pin
29	PB3	CS4398_RST	I/O		L	cs4398 rst control pin
30	BOOT/TB0INT/PH0	BOOT_MODE	I/O		H	mcu chip update and working mode set
31	TB0INT0/PH1	UPD63530_RST	I/O		L	control upd63530 chip reset
32	TB0INT1/PH0	USB_RST	I/O	pd	L	usb mode reset
33	TXD2/PF0	SI	I/O	pd	L	usb mosi data
34	RXD2/PF1	SO	I/O	pd	L	usb miso data
35	SCLK2/PF2	SCK	I/O	pd	L	usb clk

Pin	Symbol	Pin Name	I/O	Pu/Pd	STBY	Description
36	TBINT1/PH3	USB_CTS	I/O	pd	L	usb cts control
37	PB4	IPOD_SCL	I/O	pu	L	ipod chip clk pin
38	TB0OUT/TP1	IPOD_RESET	I/O		L	ipod chip reset pin
39	INT6/PJ6	NC	I/O		L	unused
40	TB1OUT/PI1	NC	I/O		L	unused
41	PB5	IPOD_SDA	I/O	pu	L	control ipod chip date pin
42	TB2OUT/PI2	DIT_PDN	I/O		L	ak4104 power
43	PB6	DIT_CSN	I/O		L	ak4104 chip set
44	SDA1/SO1/PF4	DIT_CDTI	I/O		L	ak4104 CDTI
45	SCL1/PF5	NC	I/O		L	unused
46	SCLK1/PE6	DIT_CLK	I/O		L	ak4104 clk
47	PB7	USB_EN	I/O		L	unused
48	TB3OUT/PI3	USB_OC	I/O		L	unused
49	INT1/PJ1	NC	I/O		L	unused
50	CEC/PK0	CD_BUS2	I/O		L	receive data from CD DSP (Oasis (64)pin OUT)
51	PK1/SCOUT	CD_BUS3	I/O		L	send command to CD DSP (Oasis (65)pin IN)
52	PI4/TB4OUT	BUCK	I/O		L	communication clock with CD DSP
53	PI5/TB5OUT	CCE	I/O		L	communication chip enable with CD DSP
54	PB0/TD0/SWV	DEBUG PORT	I/O	pu	H	debug port
55	PA0/TMS/SWDIO	DEBUG PORT	I/O	pu	H	debug port
56	PA1/TCK/SWCLK	DEBUG PORT	I/O	pd	L	debug port
57	TEST3	TEST3			H	unused
58	PJ7/INT7	DECRST	I/O		L	cd DSP reset
59	PB1/TDI	DEBUG PORT	I/O	pu	H	debug port
60	PB2/TRS-	DEBUG PORT	I/O	pu	H	debug port
61	PF3/RXIN1	NC	I/O		L	unused
62	DVCC	DVCC	P			3.3V power supply
63	DVSS	DVSS	G			GND
64	PA2/TRACECLK	STB_LED	I/O		L	standby led
65	PA3/TRACEDATA0	DIS_ON/OFF	I/O		H	display on/off
66	PA4/TRACEDATA1	VFD_RST	I/O		L	vfd reset pin
67	PA5/TRACEDATA2	VFD_DI	I/O		L	vfd di data pin
68	PA6/TRACEDATA3	VFD_CE	I/O		L	vfd enable pin
69	PA7	VFD_CLK	I/O		L	vfd clk pin
70	PJ0/INT0	NC	I/O		L	unused
71	CVCC	CVCC	P			3.3V power supply
72	X2	X1			H	stsyem clock 10MHz
73	CVSS	CVSS	G			GND
74	X1	X2			H	stsyem clock 10MHz
75	REGVSS	REGVSS	G			GND
76	REGVCC	REGVCC	P			3.3V power supply
77	XT1	NC			H	unused
78	XT2	NC			H	unused
79	PI6/TB4OUT	NC	I/O		L	unused
80	NMI	NMI	P			3.3V power supply
81	MODE	MODE	G			GND
82	RESET	RESET	I		H	mcu reset
83	PI7/TB4INT1	EEPROM_CLK	I/O	pu	L	eeprom clk
84	PH6/TB3INT0	EEPROM_DATA	I/O	pu	L	eeprom data
85	PH7/TB3INT1	POWER_H	I/O		L	power on
86	PJ2/INT2	POWER_DOWN	I/O		H	power down detect
87	PJ3/INT3	NC	I/O		L	unused
88	PJ4/TB60UT	NC	I/O		L	unused
89	PE3/RXINT0	STB_CHG_LED	I/O		H	IPOD Change LED Control
90	TST4	TEST4			H	unused
91	PC0/INT0	KEY0	I		H	AD key
92	PC1/INT1	KEY1	I		H	AD key
93	PC2/INT2	KEY2	I		H	standby key
94	PC3/INT3	NC	I		L	unused
95	PD0/INT4	NC	I		L	unused
96	PD1/INT5	VER_OPTION	I	pu	L	voltage detect
97	PD2/INT6	MODE_OPTION	I	pd	L	mode set
98	PD3/INT7	LD_CHK	I		L	cd LD check
99	PD4/INT8	NC	I		L	unused
100	PD5/INT9	NC	I		L	unused

TC94A92FG (IC100)



TC94A92FG Terminal Function

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

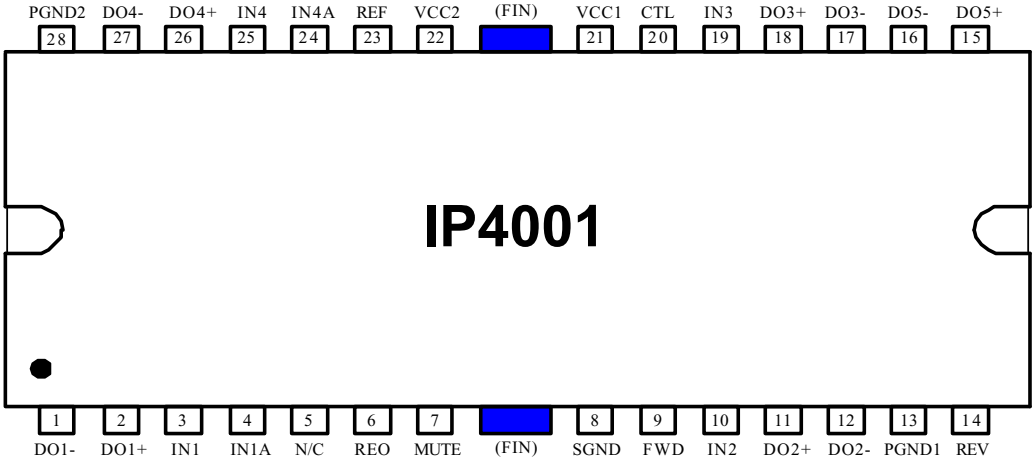
Pin No.	Symbol	I/O	Description	Default	Remarks
21	FSMoNiT	O 3AI/F	Focus Error signal / Sub beam add signal output pin(monitor pin/GND)	O	
22	RFZi	I 3AI/F	RF ripple zero-cross signal Input pin	I	
23	RFRP	O 3AI/F	RF ripple signal output pin.	O	
24	TEi	O 3AI/F	Tracking error signal output pin.	O	Bulit-in serises R=500Ω. Connect to VRo by capacitor.
25	AVDD3	-	Power supply pin for 3.3 V CD analog circuits.	-	
26	FOo	O 3AI/F	Focus servo equalizer output pin.	O	Bulit-in serises R=3.3 kΩ
27	TRo	O 3AI/F	Tracking servo equalizer output pin.	O	Bulit-in output R=3.3 kΩ
28	VSS-3	-	Grounding pin for 1.5V Decoder-DSP CD circuit	-	
29	FMo	O 3AI/F	Feed servo equalizer output pin.	O	Bulit-in output R=3.3 kΩ
30	FMoS	O 3AI/F	Feed servo equalizer output pin. （Stepper motor application）	O	Bulit-in output R=3.3 kΩ
31	DMo	O 3AI/F	Disc servo equalizer output pin	O	Bulit-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 Assinment Table]
34	Pio9	I/O 3I/F	Port 9（General Input/Output Port ）	I	CMOS Port Schmitt input Refer to [1.2 Pin Assinment Table]
35	Pio10	I/O 3I/F	Port 10（General Input/Output Port ）	I	CMOS Port Schmitt input Refer to [1.2 Pin Assinment Table]
36	Pio11	I/O 3I/F	Port 11（General Input/Output Port ）	I	CMOS Port Schmitt input Refer to [1.2 Pin Assinment 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 Assinment 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 Assinment 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 Assinment Table]
40	CDMoN3	O 3I/F	CD Monitor3 (Default output : SBSY)	O	CMOS Port Refer to [1.2 Pin Assinment Table]

Pin No.	Symbol	I/O	Description	Default	Remarks
41	DVSS3R	-	Grounding pin for 3.3V Muiti-Bit DAC circuit	-	
42	Ro	O 3AI/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 3AI/F	L channel audio output pin of Audio DAC	O	
46	DVSS3L	-	Grounding pin for 3.3V Muiti-Bit DAC Circuit	-	
47	XVSS3	-	Grounding pin for 3.3V clock oscillator circuit	-	
48	Xi	I 3AI/F	System clock Input pin	I	Xtal oscillation circuit. Connect feedback resistor 1 MΩ between Xo and Xi
49	Xo	O 3AI/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 Assinment 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 Assinment 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 Assinment 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 Assinment Table]
66	BUCK	I 3I/F	Microprocessor I/F BUS clock Input pin	I	Schmitt input Refer to [1.2 Pin Assinment Table]
67	/CCE	I 3I/F	Microprocessor I/F chip enable input pin	I	Schmitt input Refer to [1.2 Pin Assinment 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 Assinment 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 PLCK 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.

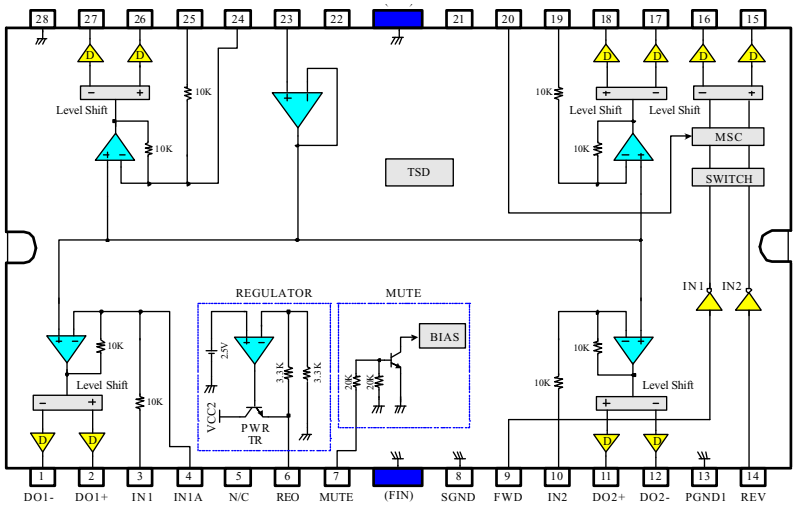
IP4001 (IC101)



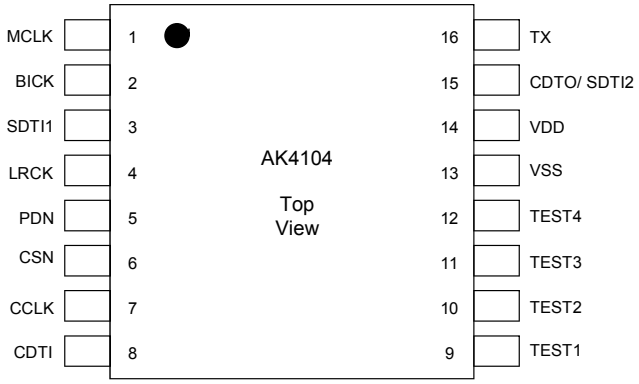
Pin Discriptions

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

Block Diagram



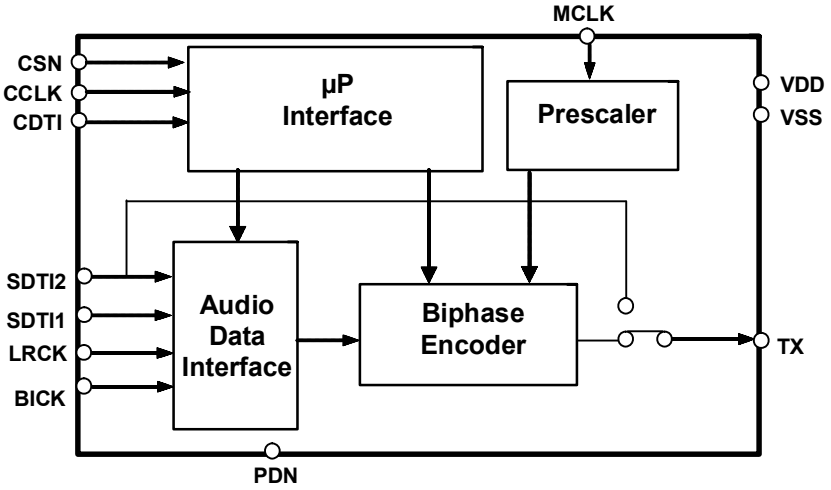
AK4104 (IC104)



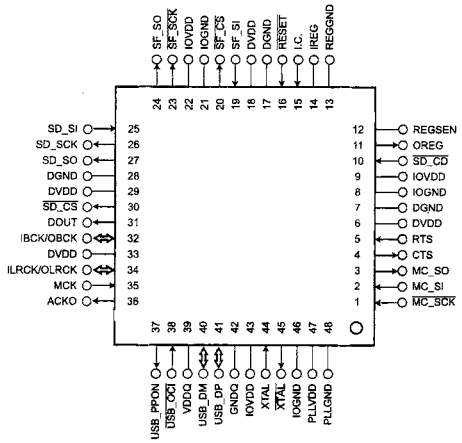
AK4104 Terminal Function

No.	Pin Name	I/O	Function
1	MCLK	I	Master Clock Input Pin
2	BICK	I	Audio Serial Data Clock Pin
3	SDTI1	I	Audio Serial Data Input 1 Pin
4	LRCK	I	Input Channel Clock Pin
5	PDN	I	Power Down and Reset Pin "L": Power down and Reset, "H": Power up
6	CSN	I	Chip Select Pin
7	CCLK	I	Control Data Clock Pin
8	CDTI	I	Control Data Input Pin
9	TEST1	I	TEST Pin This pin should be connected to VDD.
10	TEST2	O	TEST Pin This pin should be OPEN.
11	TEST3	O	TEST Pin This pin should be OPEN.
12	TEST4	O	TEST Pin This pin should be OPEN.
13	VSS	-	Ground Pin
14	VDD	-	Power Supply Pin, 2.7 ~ 3.6V
15	CDTO	O	Control Data Output Pin, The output is "Hi-Z" when PDN pin = "L".
	SDTI2	I	Audio Serial Data Input 2 Pin
16	TX	O	Transmit Channel Output Pin, The output is "L" when PDN pin = "L" or RSTN bit ="0" or PW bit = "0" or MCLK stops.

Block Diagram



UPD63530 (IC105)



UPD63530 Terminal Function

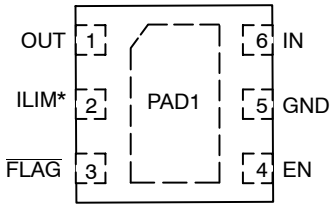
Pin No.	Pin Name	I/O	RESET Status	Handling of Unused Pins	Description
1	$\overline{\text{MC\_SCK}}$	I	Hi-Z	–	3-wire serial interface pin (command communication clock) (Host interface)
2	MC_SI	I	Hi-Z	–	3-wire serial interface pin (command communication data input) (Host interface)
3	MC_SO	O	Hi-Z	–	3-wire serial interface pin (command communication data output) (Host interface)
4	CTS	O	Hi-Z	–	Output for command communication CTS control (Host interface)
5	RTS	I	Hi-Z	–	Input for command communication RTS control (Host interface)
6	DVDD	–	–	–	Power supply for internal digital circuits (1.0 V)
7	DGND	–	–	–	GND for internal digital circuits
8	IOGND	–	–	–	GND for digital I/O buffers
9	IOVDD	–	–	–	Power supply for digital I/O buffers (3.3 V)
10	$\overline{\text{SD\_CD}}$	I	Hi-Z	Pull down	Input for SD card detection (SD card interface)
11	OREG	O	O	–	Driver pin for external regulator transistor (1.0 V: Reference output)
12	REGSEN	–	–	–	Sensing input for 1.0 V internal regulator (1.0 V)
13	REGGND	–	–	–	GND for internal regulator
14	IREG	–	–	–	Power supply for OREG generator (3.3 V)
15	I.C.	–	–	GND	–
16	$\overline{\text{RESET}}$	I	I	–	Device reset pin
17	DGND	–	–	–	GND for internal digital circuits
18	DVDD	–	–	–	Power supply for internal digital circuits (1.0 V)
19	SF_SI	I	Hi-Z	–	3-wire serial interface pin (serial data input for SD card) (Serial flash interface)
20	$\overline{\text{SF\_CS}}$	O	Hi-Z	–	3-wire serial interface pin (chip select input for serial flash) (Serial flash interface) Note
21	IOGND	–	–	–	GND for digital I/O buffers

Pin No.	Pin Name	I/O	RESET Status	Handling of Unused Pins	Description
22	IOVDD	–	–	–	Power supply for digital I/O buffers (3.3 V)
23	$\overline{\text{SF\_SCK}}$	O	Hi-Z	–	3-wire serial interface pin (serial clock for serial flash) (Serial flash interface)
24	SF_SO	O	Hi-Z	–	3-wire serial interface pin (serial data output for serial flash) (Serial flash interface)
25	SD_SI	I	Hi-Z	Pull down	3-wire serial interface pin (serial data input for SD card) (SD card interface)
26	SD_SCK	O	Hi-Z	Pull down	3-wire serial interface pin (serial clock for SD card) (SD card interface)
27	SD_SO	O	Hi-Z	Pull down	3-wire serial interface pin (serial data output for SD card) (SD card interface)
28	DGND	–	–	–	GND for internal digital circuits
29	DVDD	–	–	–	Power supply for internal digital circuits (1.0 V)
30	$\overline{\text{SD\_CS}}$	O	Hi-Z	Pull down	Chip select input for SD card (SD card interface)
31	DOUT	O	Hi-Z	Pull down	Output pin for 3-wire audio interface (IIS) (External audio DAC interface)
32	IBCK/ OBCK	I/O	Hi-Z	Pull down	Bit clock pin for 3-wire audio interface (IIS) (External audio DAC interface)
33	DVDD	–	–	–	Power supply for internal digital circuits (1.0 V)
34	ILRCK/ OLRCK	I/O	Hi-Z	Pull down	Audio LR clock for 3-wire audio interface (IIS) (External audio DAC interface)
35	MCK	I	Hi-Z	Pull down	Clock input for 3-wire audio interface (IIS) (External audio DAC interface)
36	ACKO	O	Hi-Z	Pull down	Output pin for 3-wire audio interface (IIS) (External Audio DAC interface)
37	USB_PP ON	O	Hi-Z	Pull down	Output pin for power supply (USB interface)
38	$\overline{\text{USB\_OCI}}$	I	Hi-Z	Pull up	Input pin for overcurrent on USB-VBUS (USB interface)

Note: This pin must be pulled up.

Pin No.	Pin Name	I/O	RESET Status	Handling of Unused Pins	Description
39	VDDQ	–	–	–	Power supply for USB (3.3 V)
40	USB_DM	I/O	L	Leave open	USB data – (minus) (USB interface)
41	USB_DP	I/O	L	Leave open	USB data + (plus) (USB interface)
42	GNDQ	–	–	–	Analog GND for USB
43	IOVDD	–	–	–	Power supply for digital I/O buffers (3.3 V)
44	XTAL	I	–	–	Oscillator clock (48 MHz)
45	$\overline{\text{XTAL}}$	O	–	–	Oscillator clock (48 MHz)
46	IOGND	–	–	–	GND for digital I/O buffers
47	PLLVDD	–	–	–	Power supply for PLL (1.0 V)
48	PLLGND	–	–	–	GND for PLL

NCP380 (IC106)



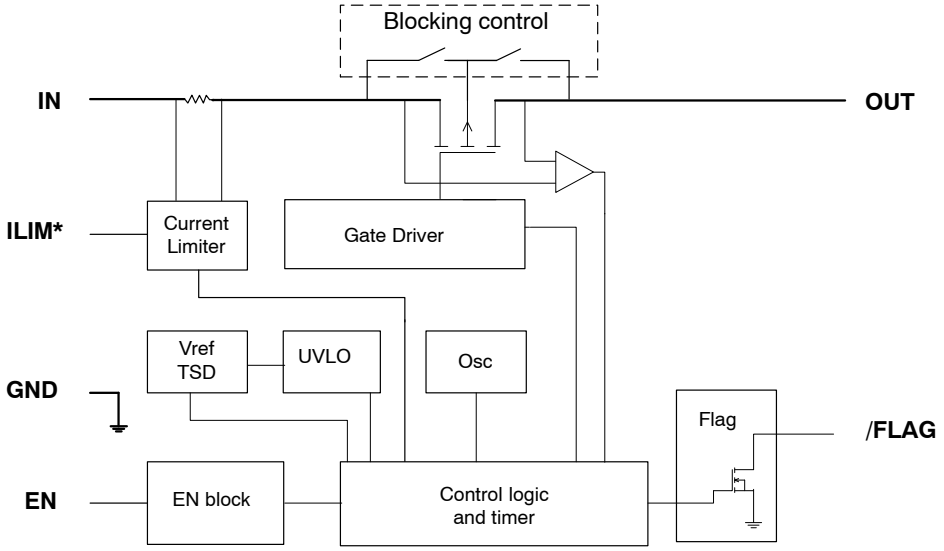
UDFN6
(Top view)

NCP380 Terminal Function

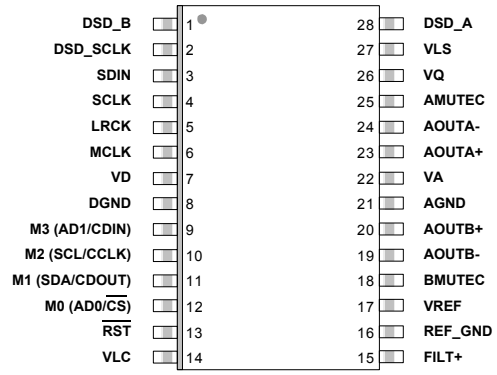
Pin Name	Type	Description
EN	INPUT	Enable input, logic low/high (i.e. $\overline{EN}$ or EN) turns on power switch
GND	POWER	Ground connection;
IN	POWER	Power−switch input voltage; connect a 1 μF or greater ceramic capacitor from IN to GND as close as possible to the IC.
$\overline{FLAG}$	OUTPUT	Active−low open−drain output, asserted during overcurrent, overtemperature or reverse−voltage conditions. Connect a 10 kΩ or greater resistor pull−up, otherwise leave unconnected.
OUT	OUTPUT	Power−switch output; connect a 1 μF ceramic capacitor from OUT to GND as close as possible to the IC is recommended. A 1 μF or greater ceramic capacitor from OUT to GND must be connected if the USB requirement (i.e.120 μF capacitor minimum) is not met.
ILIM*	INPUT	External resistor used to set current−limit threshold; recommended 5 kΩ < R_{ILIM} < 250 kΩ.
PAD1**	THERMAL	Exposed Thermal Pad: Must be soldered to PCB Ground plane

*(For adjustable version only, otherwise not connected.
**For DFN version only.

Block Diagram



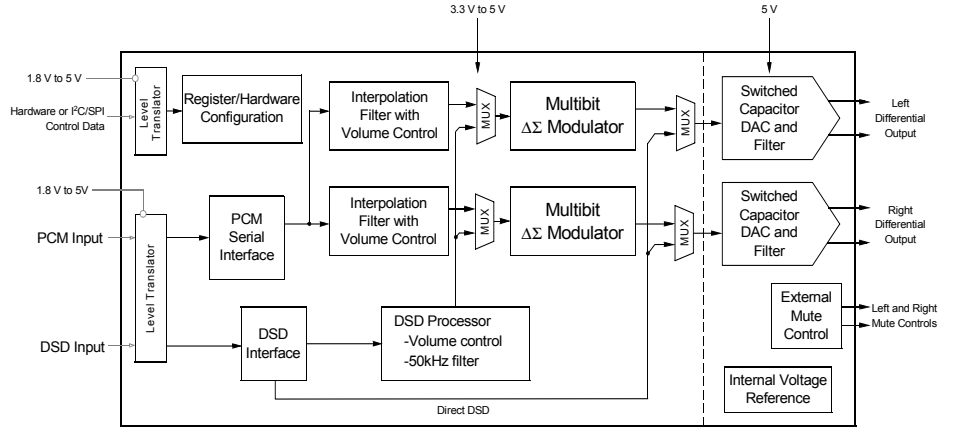
CS4398 (IC304)



CS4398 Terminal Function

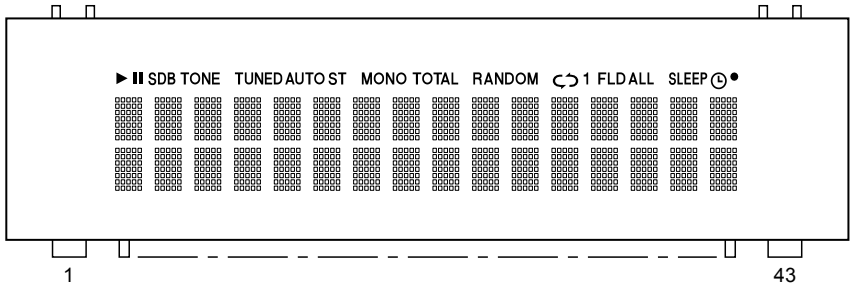
Pin Name	Pin #	Pin Description
DSD_A DSD_B	28 1	**Direct Stream Digital Input** (*Input*) - Input for Direct Stream Digital serial audio data.
DSD_SCLK	2	**DSD Serial Clock** (*Input*) - Serial clock for the Direct Stream Digital audio interface.
SDIN	3	**Serial Audio Data Input** (*Input*) - Input for two's complement serial audio data.
SCLK	4	**Serial Clock** (*Input*) - Serial clock for the serial audio interface.
LRCK	5	**Left Right Clock** (*Input*) - Determines which channel, Left or Right, is currently active on the serial audio data line.
MCLK	6	**Master Clock** (*Input*) - Clock source for the delta-sigma modulator and digital filters.
VD	7	**Digital Power** (*Input*) **-** Positive power for the digital section.
DGND	8	**Digital Ground** (*Input*) - Ground reference for the digital section.
RST	13	**Reset** (*Input*) - The device enters system reset when enabled.
VLC	14	**Control Port Power** (*Input*) **-** Positive power for Control Port I/O.
FILT+	15	**Positive Voltage Reference** (*Output*) **-** Positive reference voltage for the internal sampling circuits.
REF_GND	16	**Reference Ground** (*Input*) - Ground reference for the internal sampling circuits.
VREF	17	**Voltage Reference** (*Input*) - Positive voltage reference for the internal sampling circuits.
BMUTEC AMUTEC	18 25	**Mute Control** (*Output*) - The Mute Control pin is active during power-up initialization, muting, power-down or if the master clock to left/right clock frequency ratio is incorrect. During reset, these outputs are set to a high impedance.
AOUTB+ AOUTB-	20 19	**Differential Right Channel Analog Output** (*Output*) - The full-scale differential analog output level is specified in the Analog Characteristics specification table.
AGND	21	**Analog Ground** (*Input*) - Ground reference for the analog section.
VA	22	**Analog Power** (*Input*) **-** Positive power for the analog section.
AOUTA+ AOUTA-	23 24	**Differential Left Channel Analog Output** (*Output*) - The full-scale differential analog output level is specified in the Analog Characteristics specification table.
VQ	26	**Quiescent Voltage** (*Output*) - Filter connection for internal quiescent voltage.
VLS	27	**Serial Audio Interface Power** (*Input*) **-** Positive power for serial audio interface I/O.
Stand-Alone Mode Definitions		
M3 M2 M1 M0	9 10 11 12	**Mode Selection** (*Input*) - Determines the operational mode of the device.
Control Port Mode Definitions		
AD1/CDIN	9	**Address Bit 1 (I²C) / Control Data Input (SPI)** (*Input*) - AD1 is a chip address pin in I²C mode; CDIN is the input data line for the Control Port interface in SPI mode.
SCL/CCLK	10	**Serial Control Port Clock** (*Input*) - Serial clock for the serial Control Port.
SDA/CDOUT	11	**Serial Control Data (I²C) / Control Data Output (SPI)** (*Input/Output*) - SDA is a data I/O line in I²C mode. CDOUT is the output data line for the Control Port interface in SPI mode.
AD0/$\overline{CS}$	12	**Address Bit 0 (I²C) / Control Port Chip Select (SPI)** (*Input*) - AD0 is a chip address pin in I²C mode; $\overline{CS}$ is the chip select signal for SPI format.

Block Diagram



2. FL DISPLAY

V.F.D (FUTABA, 16ST103GINK) (U4003)



PIN CONNECTION

PIN NO.	1	2	3	4 ~ 14	15 ~ 29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
CONNECTION	F1	NP	NP	NC	NX	TSB	TSA	DA	CP	-CS	-RESET	SOSCD	VDD	VH	PGND	LGND	NP	NP	F2

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) $\overline{TS}$A,B --- Test pin
13) $\overline{CS}$ ------ Chip Select Input pin
14) $\overline{RESET}$ --- Reset Input
15) OSC ----- Pin for self-oscillation
16) Solder composition is Sn-3Ag-0.5Cu.

FRONT_PWR PCB ASS'Y

NOTE:The symbols in the column Remarks indicate the following destinations.
U : North America model N : Europe model K : China model F : Japan model
B : Black model SG : Silver gold model

	REF No.	Part No.	Part Name	Remarks		Q'ty	New	Ver
	SEMICONDUCTORS GROUP							
	D3101-3112	00D9430182609	DIODE , SWITCHING		CVD1SS133MT	10		
	D3111,3112	00D9430182609	DIODE , SWITCHING	K/F/U	CVD1SS133MT	2		
	D3201-3208	00D9430182609	DIODE , SWITCHING		CVD1SS133MT	8		
	D3601	90M-HI200020R	INFRARED L.E.D	U	BVDSIR34ST3F	1		
	D3602	00D9430182609	DIODE , SWITCHING	U	CVD1SS133MT	1		
	D3901,3902	00D9430182609	DIODE , SWITCHING		CVD1SS133MT	2		
	D3904	00D9430182609	DIODE , SWITCHING		CVD1SS133MT	1		
	D3905	90M-HD302350R	DIODE , ZENER ,1/2W, 27V		CVDZJ27BT	1		
	D3906	90M-HD302480R	DIODE , ZENER ,1/2W, 15V		CVDZJ15BT	1		
	D3911-3913	943203500400M	DIODE , RECT		CVD1SR35-400ART	3	*	
	D3916-3918	00D9430182609	DIODE , SWITCHING		CVD1SS133MT	3		
	D3919	943203500400M	DIODE , RECT		CVD1SR35-400ART	1	*	
	D3929-3931	943203500400M	DIODE , RECT		CVD1SR35-400ART	3	*	
	D3932	943206500020M	DIODE HEAT SINK ASS'Y (CMY2A138)	K/F/U	CVDGBJ1006BIA	1	*	
	D3932	90M-HE200390R	DIODE , BRIDGE	N	HVDGBJ1006	1		
	D3933	00D9600095607	DIODE , ZENER ,1/2W, 5.6V	K/F/U	CVDZJ5.6BT	1		
	D3933	90M-HD302440R	DIODE , ZENER ,1/2W, 4.7V	N	CVDZJ4.7BT	1		
	D3934	00D9430182609	DIODE , SWITCHING		CVD1SS133MT	1		
	D3935	90M-HD302450R	DIODE , ZENER ,1/2W, 13V		CVDZJ13BT	1		
	D3936-3939	943203500400M	DIODE , RECT		CVD1SR35-400ART	4	*	
	D3953-3956	00MHD20055100	DIODE , SCHOTTKY (100V/1A)		CVD11EQS10GT	4		
	D3957	00D9430182609	DIODE , SWITCHING		CVD1SS133MT	1		
	D3958,3959	90M-HD302450R	DIODE , ZENER ,1/2W, 13V		CVDZJ13BT	2		
	D3960	00D9430182609	DIODE , SWITCHING		CVD1SS133MT	1		
	D4001	90M-HI101040R	L.E.D , RED		HVD342VCTB7T089	1		
	D4101	943176100160M	L.E.D , 2COLOR(ORANGE,RED)	K/F/U	CVDGY5Y5U25Y2W	1	*	
	D4101	90M-HI101040R	L.E.D , RED	N	HVD342VCTB7T089	1		
	Q3101	943222500200D	F.E.T , 2SK2145 (N-CH, 2-3L1C, LOW NOISE, TOSHIBA)		CVT2SK2145	1		
	Q3102	943213500150S	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSC1845FTA	1		
	Q3104	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSA992FTA	1		
	Q3105	943213500150S	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSC1845FTA	1		
	Q3106	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSA992FTA	1		
	Q3107,3108	943213500150S	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSC1845FTA	2		
	Q3109	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSA992FTA	1		
	Q3110	943213500150S	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSC1845FTA	1		
	Q3111	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSA992FTA	1		
	Q3112	943213500150S	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSC1845FTA	1		
	Q3113	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSA992FTA	1		
	Q3114,3115	00D9430072502	T.R , CHIP , SOT-23		HVTKTC2875B	2		
	Q3116	943219500200M	T.R , CHIP , SOT-23		HVTKRC104S	1	*	
	Q3117	00D2690191903	T.R , CHIP , SOT-23		HVTKRA104S	1		
	Q3118	943219500200M	T.R , CHIP , SOT-23	K/F/U	HVTKRC104S	1	*	
	Q3201	943222500200D	F.E.T , 2SK2145 (N-CH, 2-3L1C, LOW NOISE, TOSHIBA)		CVT2SK2145	1		
	Q3202	943213500150S	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSC1845FTA	1		
	Q3204	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSA992FTA	1		
	Q3205	943213500150S	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSC1845FTA	1		
	Q3206	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSA992FTA	1		
	Q3207,3208	943213500150S	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSC1845FTA	2		
	Q3209	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSA992FTA	1		
	Q3210	943213500150S	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSC1845FTA	1		
	Q3211	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSA992FTA	1		
	Q3212	943213500150S	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSC1845FTA	1		
	Q3213	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSA992FTA	1		
	Q3214,3215	00D9430072502	T.R , CHIP , SOT-23		HVTKTC2875B	2		
	Q3301	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSA992FTA	1		
	Q3302,3303	943213500150S	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSC1845FTA	2		
	Q3304	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSA992FTA	1		
	Q3401	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSA992FTA	1		
	Q3402,3403	943213500150S	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSC1845FTA	2		
	Q3404	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSA992FTA	1		
	Q3601	943215500140D	T.R,RT1P144C(10K-47K)	K/F/U	CVTRT1P144C	1		
	Q3901	943219006820S	T.R		CVTKTC1027YT	1		
	Q3902,3903	90M-HX800090R	T.R , CHIP , SOT-23		HVTKRC111S	2		
	Q3904,3905	00D9430154404	T.R		HVTKTC3198YT	2		
	Q3951	nsp	HEAT SINK ASS'Y(CVT2SD2081+CMY1A338)		CVT2SD2081BSA	1		
	Q3951A	nsp	HEAT SINK 25MM		CMY1A338	1		
	Q3951B	nsp	SCREW		CTB3+8FFB	1		
	Q3951C	943219500190M	T.R, 2SD2081, NPN, TO220F, SANKEN		CVT2SD2081	1	*	
	Q3951D	nsp	COMPOUND , SILICONE		K8AYG6260	0.2		
	Q3952	nsp	HEAT SINK ASS'Y(CVT2SB1259+CMY1A338)		CVT2SB1259BSA	1		
	Q3952A	nsp	HEAT SINK 25MM		CMY1A338	1		
	Q3952B	nsp	SCREW		CTB3+8FFB	1		
	Q3952C	943219500170M	T.R, 2SB1259, PNP, TO220F, SANKEN		CVT2SB1259	1	*	
	Q3952D	nsp	COMPOUND , SILICONE		K8AYG6260	0.2		
	Q4001	00D9630121606	T.R , CHIP , SOT-23		HVTKRC107S	1		
	Q4002	943215500140D	T.R,RT1P144C(10K-47K)		CVTRT1P144C	1		
	Q4101	00D2690184907	T.R , CHIP , SOT-23		HVTKRA102S	1		
	Q4102	00D2690184907	T.R , CHIP , SOT-23	K/F/U	HVTKRA102S	1		
	Q4301	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSA992FTA	1		
	Q4302,4303	943213500150S	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSC1845FTA	2		
	Q4304	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSA992FTA	1		
	Q4305,4306	00D9430072502	T.R , CHIP , SOT-23		HVTKTC2875B	2		
	Q4401	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSA992FTA	1		
	Q4402,4403	943213500150S	NPN, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSC1845FTA	2		
	Q4404	943211500150S	PNP, TO-92, LOW NOISE, HFE:300-600, FAILCHILD		CVTKSA992FTA	1		
	Q4405,4406	00D9430072502	T.R , CHIP , SOT-23		HVTKTC2875B	2		
	U3601	262010007707S	REMOTE SENSOR , R94EV1A	U	CRVR94EV1A	1		
	U3901	943219500160M	I.C, REGULATOR(1.0A, 3.3V, SOT-223)		CVILM1117S33	1	*	
	U3902	943219500150M	I.C, REGULATOR 5PIN,5V, 1.5A		CVIBA00JC5WT	1	*	
	U3902	nsp	HEAT SINK ASS'Y(CVIBA00JC5WT+CMY1A337)		CVIBA00JC5WTBRA	1		
	U3902A	nsp	HEAT SINK ASS'Y		CMYCD6005	1		
	U3902B	nsp	HEAT SINK, TR		CMY4A300	1		
	U3902C	nsp	SCREW		CTB3+8FFB	2		
	U3902D	nsp	COMPOUND , SILICONE		K8AYG6260	0.4		
	U3904	943239010400S	I.C, REGULATOR(3.3V/TO-252)		CVINJM2845DL133	1		
	U3905	943219500150M	I.C, REGULATOR 5PIN,5V, 1.5A		CVIBA00JC5WT	1	*	
	U3905	nsp	HEAT SINK ASS'Y(CVIBA00JC5WT+CMY1A337)		CVIBA00JC5WTBRA	1		
	U3906	943219500140M	I.C, REGULATOR(5.0V/TO-252)		CVINJM2845DL1-05	1	*	

	REF No.	Part No.	Part Name	Remarks		Q'ty	New	Ver
	U4001	943262010290S	SENSOR , REMOTE/U		CRVKSM603TH5B	1		
	U4003	943172100160S	V.F.D (FUTABA, 16ST103GINK)		CFL16ST103GINK	1		
	RESISTOR GROUP							
	R3101,3102	nsp	RES, CARBON(1/5W,1Kohm,J)		CRD20TJ102T	2		
	R3104,3105	nsp	RES, CARBON(1/5W,10Kohm,J)		CRD20TJ103T	2		
	R3107,3108	nsp	RES, CARBON(1/5W,10Kohm,J)		CRD20TJ103T	2		
	R3109,3110	nsp	RES, CARBON(1/5W,4.7Kohm,J)		CRD20TJ472T	2		
	R3111	00MGD05121160	RES, CARBON(1/5W,120ohm,J)		CRD20TJ121T	1		
	R3112	00MGD05680160	RES, CARBON(1/5W,68ohm,J)		CRD20TJ680T	1		
	R3113	00MGD05121160	RES, CARBON(1/5W,120ohm,J)		CRD20TJ121T	1		
	R3114	00MGD05561160	RES, CARBON(1/5W,560ohm,J)		CRD20TJ561T	1		
	R3115	00MGD05333160	RES, CARBON(1/5W,33Kohm,J)		CRD20TJ333T	1		
	R3116	00MGD05561160	RES, CARBON(1/5W,560ohm,J)		CRD20TJ561T	1		
	R3117	nsp	RES, CARBON(1/5W,100ohm,J)		CRD20TJ101T	1		
	R3118	00MGD05333160	RES, CARBON(1/5W,33Kohm,J)		CRD20TJ333T	1		
	R3119,3120	nsp	RES, CARBON(1/5W,470ohm,J)		CRD20TJ471T	2		
	R3121,3122	00MGD05181160	RES, CARBON(1/5W,180ohm,J)		CRD20TJ181T	2		
	R3123,3124	00MGD05220160	RES, CARBON(1/5W,22ohm,J)		CRD20TJ220T	2		
	R3125	nsp	RES, CARBON(1/5W,47Kohm,J)		CRD20TJ473T	1		
	R3126	00MGD05680160	RES, CARBON(1/5W,68ohm,J)		CRD20TJ680T	1		
	R3127	nsp	RES, CHIP(1608/5%/2.2Kohm)		CRJ10DJ222T	1		
	R3128	nsp	RES, CHIP(1608/5%/470Kohm)		CRJ10DJ474T	1		
	R3129	00MGD05680160	RES, CARBON(1/5W,68ohm,J)		CRD20TJ680T	1		
	R3130	nsp	RES, CHIP(1608/5%/2.2Kohm)		CRJ10DJ222T	1		
	R3131	00MGD05680160	RES, CARBON(1/5W,68ohm,J)		CRD20TJ680T	1		
	R3132	nsp	RES, CARBON(1/5W,100ohm,J)		CRD20TJ101T	1		
	R3133	nsp	RES, CARBON(1/5W,10Kohm,J)	K/F/U	CRD20TJ103T	1		
	R3201,3202	nsp	RES, CARBON(1/5W,1Kohm,J)		CRD20TJ102T	2		
	R3203	nsp	RES, CARBON(1/5W,10Kohm,J)		CRD20TJ103T	1		
	R3206-3208	nsp	RES, CARBON(1/5W,10Kohm,J)		CRD20TJ103T	3		
	R3209,3210	nsp	RES, CARBON(1/5W,4.7Kohm,J)		CRD20TJ472T	2		
	R3211	00MGD05121160	RES, CARBON(1/5W,120ohm,J)		CRD20TJ121T	1		
	R3212	00MGD05680160	RES, CARBON(1/5W,68ohm,J)		CRD20TJ680T	1		
	R3213	00MGD05121160	RES, CARBON(1/5W,120ohm,J)		CRD20TJ121T	1		
	R3214	00MGD05561160	RES, CARBON(1/5W,560ohm,J)		CRD20TJ561T	1		
	R3215	00MGD05333160	RES, CARBON(1/5W,33Kohm,J)		CRD20TJ333T	1		
	R3216	00MGD05561160	RES, CARBON(1/5W,560ohm,J)		CRD20TJ561T	1		
	R3217	nsp	RES, CARBON(1/5W,100ohm,J)		CRD20TJ101T	1		
	R3218	00MGD05333160	RES, CARBON(1/5W,33Kohm,J)		CRD20TJ333T	1		
	R3219,3220	nsp	RES, CARBON(1/5W,470ohm,J)		CRD20TJ471T	2		
	R3221,3222	00MGD05181160	RES, CARBON(1/5W,180ohm,J)		CRD20TJ181T	2		
	R3223,3224	00MGD05220160	RES, CARBON(1/5W,22ohm,J)		CRD20TJ220T	2		
	R3225	nsp	RES, CARBON(1/5W,47Kohm,J)		CRD20TJ473T	1		
	R3226	00MGD05680160	RES, CARBON(1/5W,68ohm,J)		CRD20TJ680T	1		
	R3227	nsp	RES, CHIP(1608/5%/2.2Kohm)		CRJ10DJ222T	1		
	R3228	nsp	RES, CHIP(1608/5%/470Kohm)		CRJ10DJ474T	1		
	R3229	00MGD05680160	RES, CARBON(1/5W,68ohm,J)		CRD20TJ680T	1		
	R3230	nsp	RES, CHIP(1608/5%/2.2Kohm)		CRJ10DJ222T	1		
	R3231	00MGD05680160	RES, CARBON(1/5W,68ohm,J)		CRD20TJ680T	1		
	R3301	nsp	RES, CARBON(1/5W,100ohm,J)		CRD20TJ101T	1		
	R3303	nsp	RES, CARBON(1/5W,6.8Kohm,J)		CRD20TJ682T	1		
	R3304,3305	nsp	RES, CARBON(1/5W,56ohm,J)		CRD20TJ560T	2		
	R3306	nsp	RES, CARBON(1/5W,6.8Kohm,J)		CRD20TJ682T	1		
	R3308,3309	nsp	RES, CARBON(1/5W,33ohm,J)		CRD20TJ330T	2		
	R3401	nsp	RES, CARBON(1/5W,100ohm,J)		CRD20TJ101T	1		
	R3402	nsp	RES, CARBON(1/5W,6.8Kohm,J)		CRD20TJ682T	1		
	R3403,3404	nsp	RES, CARBON(1/5W,56ohm,J)		CRD20TJ560T	2		
	R3405	nsp	RES, CARBON(1/5W,6.8Kohm,J)		CRD20TJ682T	1		
	R3406	nsp	RES, CARBON(1/5W,33ohm,J)		CRD20TJ330T	1		
	R3408	nsp	RES, CARBON(1/5W,33ohm,J)		CRD20TJ330T	1		
	R3601,3602	nsp	RES, CHIP(1608/5%/100ohm)	U	CRJ10DJ101T	2		
	R3901	00MGD05104160	RES, CARBON(1/5W,100Kohm,J)	K/F/U	CRD20TJ104T	1		
	R3901	nsp	RES, CARBON(1/5W,12Kohm,J)	N	CRD20TJ123T	1		
	R3902	nsp	RES, CARBON(1/5W,10Kohm,J)	K/F/U	CRD20TJ103T	1		
	R3902	nsp	RES, CARBON(1/5W,6.8Kohm,J)	N	CRD20TJ682T	1		
	R3903	nsp	RES, CHIP(1608/5%/100Kohm)		CRJ10DJ104T	1		
	R3904,3905	nsp	RES, M-OXIDE FILM(1W/3.3Kohm)	N	CRG1SANJ332RT	2		
	R3908	00MGD05104160	RES, CARBON(1/5W,100Kohm,J)	K/F/U	CRD20TJ104T	1		
	R3908	nsp	RES, CARBON(1/5W,22Kohm,J)	N	CRD20TJ223T	1		
	R3909	nsp	RES, CARBON(1/5W,47Kohm,J)		CRD20TJ473T	1		
	R3910	nsp	RES, CARBON(1/5W,3.3Kohm,J)		CRD20TJ332T	1		
	R3911	nsp	RES, CARBON(1/5W,1Kohm,J)		CRD20TJ102T	1		
	R3912	nsp	RES, CARBON(1/4W,1.2Kohm,J)	K/F/U	CRD25TJ122T	1		
	R3912	943126500060M	RES, FLAME RETARDANT(1/4W 5% 100 OHM) CFPS1/4CMHTA	N	CRG14SANJ101CLP	1	*	
	R3913	00MGD05822160	RES, CARBON(1/5W,8.2Kohm,J)		CRD20TJ822T	1		
	R3914	nsp	RES, CARBON(1/5W,10Kohm,J)		CRD20TJ103T	1		
	R3915	nsp	RES, CARBON(1/4W,1.2Kohm,J)	K/F/U	CRD25TJ122T	1		
	R3915	943126500060M	RES, FLAME RETARDANT(1/4W 5% 100 OHM) CFPS1/4CMHTA	N	CRG14SANJ101CLP	1	*	
	R3916	00MGD05272160	RES, CARBON(1/5W,2.7Kohm,J)		CRD20TJ272T	1		
	R3917	nsp	RES, CHIP(1608/5%/270Kohm)		CRJ10DJ274T	1		
	R3918	nsp	RES, CHIP(1608/5%/330Kohm)		CRJ10DJ334T	1		
	R3919	nsp	RES, CHIP(1608/5%/47Kohm)		CRJ10DJ473T	1		
	R3921	nsp	RES, CHIP(1608/5%/200Kohm)		CRJ10DJ204T	1		
	R3922	nsp	RES, CHIP(1608/5%/47Kohm)		CRJ10DJ473T	1		
	R3923,3924	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	2		
	R3931	nsp	RES, CHIP(1608/5%/4.7Kohm)		CRJ10DJ472T	1		
	R3951,3952	nsp	RES, CARBON(1/5W,2.2Kohm,J)		CRD20TJ222T	2		
	R4001	nsp	RES, CHIP(3216/5%/1ohm)		CRJ14CJ1R0T	1		
	R4002	nsp	RES, CHIP(1608/5%/270ohm)		CRJ10DJ271T	1		
	R4003	nsp	RES, CHIP(1608/5%/47Kohm)		CRJ10DJ473T	1		
	R4004,4005	nsp	RES, CARBON(1/5W,10ohm,J)		CRD20TJ100T	2		
	R4006	nsp	RES, CHIP(1608/5%/100ohm)		CRJ10DJ101T	1		
	R4007	nsp	RES, CHIP(1608/5%/47Kohm)		CRJ10DJ473T	1		
	R4008	nsp	RES, CHIP(1608/5%/100ohm)		CRJ10DJ101T	1		
	R4009,4010	nsp	RES, CHIP(1608/5%/1.8Kohm)		CRJ10DJ182T	2		
	R4011,4012	nsp	RES, CHIP(1608/5%/680ohm)		CRJ10DJ681T	2		
	R4013	nsp	RES, CHIP(1608/5%/330ohm)		CRJ10DJ331T	1		
	R4014,4015	nsp	RES, CHIP(1608/5%/1Kohm)		CRJ10DJ102T	2		
	R4016	nsp	RES, CHIP(1608/5%/330ohm)		CRJ10DJ331T	1		
	R4017-4020	nsp	RES, CHIP(1608/5%/33ohm)		CRJ10DJ330T	4		
	R4021	nsp	RES, CHIP(3216/5%/1ohm)		CRJ14CJ1R0T	1		
	R4101	nsp	RES, CHIP(1608/5%/1Kohm)	K/F/U	CRJ10DJ102T	1		
	R4101	nsp	RES, CHIP(1608/5%/330ohm)	N	CRJ10DJ331T	1		
	R4102	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1		
	R4103	nsp	RES, CHIP(1608/5%/1Kohm)	K/F/U	CRJ10DJ102T	1		
	R4103	nsp	RES, CHIP(1608/5%/10Kohm)	N	CRJ10DJ103T	1		

	REF No.	Part No.	Part Name	Remarks		Q'ty	New	Ver
	R4301	nsp	RES, CARBON(1/5W,470ohm,J)		CRD20TJ471T	1		
	R4302	00MGD05104160	RES, CARBON(1/5W,100Kohm,J)		CRD20TJ104T	1		
	R4303	nsp	RES, CARBON(1/5W,5.6Kohm,J)		CRD20TJ562T	1		
	R4304,4305	nsp	RES, CARBON(1/5W,56ohm,J)		CRD20TJ560T	2		
	R4306	nsp	RES, CARBON(1/5W,5.6Kohm,J)		CRD20TJ562T	1		
	R4307,4308	00MGD05220160	RES, CARBON(1/5W,22ohm,J)		CRD20TJ220T	2		
	R4309	nsp	RES, CARBON(1/5W,47Kohm,J)		CRD20TJ473T	1		
	R4310	nsp	RES, CARBON(1/5W,10ohm,J)		CRD20TJ100T	1		
	R4311	nsp	RES, CHIP(1608/5%/2.2Kohm)		CRJ10DJ222T	1		
	R4312	nsp	RES, CARBON(1/5W,10ohm,J)		CRD20TJ100T	1		
	R4313	nsp	RES, CHIP(1608/5%/2.2Kohm)		CRJ10DJ222T	1		
	R4401	nsp	RES, CARBON(1/5W,470ohm,J)		CRD20TJ471T	1		
	R4402	00MGD05104160	RES, CARBON(1/5W,100Kohm,J)		CRD20TJ104T	1		
	R4403	nsp	RES, CARBON(1/5W,5.6Kohm,J)		CRD20TJ562T	1		
	R4404,4405	nsp	RES, CARBON(1/5W,56ohm,J)		CRD20TJ560T	2		
	R4406	nsp	RES, CARBON(1/5W,5.6Kohm,J)		CRD20TJ562T	1		
	R4407,4408	00MGD05220160	RES, CARBON(1/5W,22ohm,J)		CRD20TJ220T	2		
	R4409	nsp	RES, CARBON(1/5W,47Kohm,J)		CRD20TJ473T	1		
	R4410	nsp	RES, CARBON(1/5W,10ohm,J)		CRD20TJ100T	1		
	R4411	nsp	RES, CHIP(1608/5%/2.2Kohm)		CRJ10DJ222T	1		
	R4412	nsp	RES, CARBON(1/5W,10ohm,J)		CRD20TJ100T	1		
	R4413	nsp	RES, CHIP(1608/5%/2.2Kohm)		CRJ10DJ222T	1		
	R4414	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1		
	CAPACIITORS GROUP							
	C3101	943133501550M	CAP , POLYPROPYLENE(FNS(135)-100VDC-561J)		CCMP2A561JS13T	1	*	
	C3102,3103	943133501560M	CAP , POLYPROPYLENE(FNS(135)-100VDC-821J)		CCMP2A821JS13T	2	*	
	C3104,3105	943133501570M	CAP , POLYPROPYLENE(FAS(133)-200V-181K)		CCMP2B181KS17T	2	*	
	C3106	943133501580M	CAP , POLYPROPYLENE(FAS(133)-200V-221K)		CCMP2B221KS17T	1	*	
	C3108	943133501590M	CAP , POLYPROPYLENE (FAS(133)-200VDC 470KTP		CCMP2B470KS17T	1	*	
	C3109	00MOA227025R0	CAP, ELECT(220UF/25V, 10X20, ELNA/ROA)		CCEA1EROA221T	1		
	C3110	00MOA107025Z1	CAP , ELECT (ELNA/R0S, 25V/100UF)		HCEA1ER101T	1		
	C3111	nsp	WIRE, COPPER(D0.6)		C3A206	0.02		
	C3120	00D2544569720	CAP, ELECT(25V/1000uF)		CCEA1ERA3102E	1		
	C3201	943133501550M	CAP , POLYPROPYLENE(FNS(135)-100VDC-561J)		CCMP2A561JS13T	1	*	
	C3202,3203	943133501560M	CAP , POLYPROPYLENE(FNS(135)-100VDC-821J)		CCMP2A821JS13T	2	*	
	C3204,3205	943133501570M	CAP , POLYPROPYLENE(FAS(133)-200V-181K)		CCMP2B181KS17T	2	*	
	C3206	943133501580M	CAP , POLYPROPYLENE(FAS(133)-200V-221K)		CCMP2B221KS17T	1	*	
	C3208	943133501590M	CAP , POLYPROPYLENE (FAS(133)-200VDC 470KTP		CCMP2B470KS17T	1	*	
	C3209	00MOA227025R0	CAP, ELECT(220UF/25V, 10X20, ELNA/ROA)		CCEA1EROA221T	1		
	C3210	00MOA107025Z1	CAP , ELECT (ELNA/R0S, 25V/100UF)		HCEA1ER101T	1		
	C3211	nsp	WIRE, COPPER(D0.6)		C3A206	0.02		
	C3301	00D2544693900	CAP , ELECT(22uF/50V, ELNA, RFO)		CCEA1HRFO220T	1		
	C3302	nsp	CAP , POLYPROPYLENE(FAS(133)-200V-101K)		CCMP2B101KS17T	1		
	C3303	943134502680M	CAP , ELECT(10uF/63V)		CCEA1JH100T	1	*	
	C3401	00D2544693900	CAP , ELECT(22uF/50V, ELNA, RFO)		CCEA1HRFO220T	1		
	C3402	nsp	CAP , POLYPROPYLENE(FAS(133)-200V-101K)		CCMP2B101KS17T	1		
	C3403	943134502680M	CAP , ELECT(10uF/63V)		CCEA1JH100T	1	*	
	C3501	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C3502 ,3503	nsp	CAP, CHIP(1608, 50V/0.1uF)	K/F/U	CCUS1H104KC	2		
	C3507	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C3601	13405012840AS	CAP, ELECT(10V/100uF)	U	CCEA1AH101T	1		
	C3602	nsp	CAP, CHIP(1608, 50V/0.1uF)	U	CCUS1H104KC	1		
	C3901	nsp	CAP, ELECT(50V/1uF)		CCEA1HH1R0T	1		
	C3902	nsp	CAP, ELECT(10V/220uF)		CCEA1AH221T	1		
	C3903,3904	nsp	CAP, CHIP(1608, 50V/0.022uF)		CCUS1H223KC	2		
	C3905	00MOA47702520	CAP, ELECT(25V/470uF)		CCEA1EH471E	1		
	C3906	00D9430175001	CAP, ELECT(25V/47uF)		CCEA1EH470T	1		
	C3907-3909	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	3		
	C3910	943134502680M	CAP , ELECT(10uF/63V)		CCEA1JH100T	1	*	
	C3911	nsp	CAP, CHIP(1608, 50V/0.022uF)		CCUS1H223KC	1		
	C3912	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C3913	nsp	CAP, ELECT(50V/2.2uF)		CCEA1HH2R2T	1		
	C3914	00MOA47702520	CAP, ELECT(25V/470uF)		CCEA1EH471E	1		
	C3915	13405022440AS	CAP, ELECT(25V/470uF, ELNA, RA3)		CCEA1ERA3471E	1		
	C3916	nsp	CAP, CHIP(1608, 50V/0.022uF)		CCUS1H223KC	1		
	C3917	00MOA47702520	CAP, ELECT(25V/470uF)		CCEA1EH471E	1		
	C3918	13405012940AS	CAP, ELECT(16V/100uF)		CCEA1CH101T	1		
	C3919	nsp	CAP, CHIP(1608, 50V/0.022uF)		CCUS1H223KC	1		
	C3920	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C3921	nsp	CAP, MYLAR(50V/0.1uF/J)		HCQI1H104JZT	1		
	C3924	nsp	CAP, CHIP(1608, 50V/0.022uF)		CCUS1H223KC	1		
	C3925	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C3926	nsp	CAP , ELECT(63V/220uF)		CCEA1JH221E	1		
	C3929	00D2544576713	CAP, ELECT(35V/1000uF, ELNA, RA3))		CCEA1VRA3102E	1		
	C3930	943134502740M	CAP, ELECT(6800UF/25V, RJ4, ELNA)		CCEA1ERJ4682E	1	*	
	C3931	00D9430024408	CAP , CERAMIC(X1/Y2/SC)		KCKDKS472ME	1		
	C3951,3952	943134502750M	CAP , ELECT(NICHICON, 35V/1000UF)		CCEA1VLKG102E	2	*	
	C3953,3954	00D9430148708	CAP, ELECT(50V/47uF)		CCEA1HH470T	2		
	C3955,3956	00MOA227025R0	CAP, ELECT(220UF/25V, 10X20, ELNA/ROA)		CCEA1EROA221T	2		
	C3958,3959	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2		
	C4001,4002	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2		
	C4003,4004	nsp	CAP, CHIP(1608, 50V/22pF)	K/F/U	CCUS1H220JA	2		
	C4005-4009	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	5		
	C4010	943134010670S	CAP, ELECT(16V/47uF)-S		CCEA1CKS470T	1		
	C4011	nsp	CAP, CHIP(1608, 50V/100pF)		CCUS1H101JA	1		
	C4012,4013	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2		
	C4014	943134010670S	CAP, ELECT(16V/47uF)-S		CCEA1CKS470T	1		
	C4015-4017	nsp	CAP, CHIP(1608, 50V/100pF)		CCUS1H101JA	3		
	C4019	943134501930D	CAP, ELECT(50V/10uF)-S		CCEA1HKS100TC	1		
	C4301	943134502680M	CAP , ELECT(10uF/63V)		CCEA1JH100T	1	*	
	C4302	nsp	CAP, PE-FILM(100V/220pF/J)		CCME2A221JR11T	1		
	C4303	00D9430175001	CAP, ELECT(25V/47uF)		CCEA1EH470T	1		
	C4304	00D9430148708	CAP, ELECT(50V/47uF)		CCEA1HH470T	1		
	C4305,4306	nsp	CAP, CHIP(1608, 50V/1000pF)		CCUS1H102KC	2		
	C4307,4308	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2		
	C4401	943134502680M	CAP , ELECT(10uF/63V)		CCEA1JH100T	1	*	
	C4402	nsp	CAP, PE-FILM(100V/220pF/J)		CCME2A221JR11T	1		
	C4403	00D9430175001	CAP, ELECT(25V/47uF)		CCEA1EH470T	1		
	C4404	00D9430148708	CAP, ELECT(50V/47uF)		CCEA1HH470T	1		
	C4405	nsp	CAP, CHIP(1608, 50V/1000pF)		CCUS1H102KC	1		
	OTHER PARTS GROUP							
	B3502	nsp	PLATE , EARTH(TRONIC ELECTRONICS)		CJT1A026	1		
	B4301	nsp	WIRE ASS'Y		CWE8202150RV	1		
	BK10,11	nsp	BRACKET , PCB	U	CMD1A569-V1	4		
	BK12,13	nsp	BRACKET , PCB		CMD1A569-V1	4		
	BN1101	nsp	USB WIRE ASS'Y (5PIN,350MM,61205032500AS)		CWZCD6004B1101	1		

	REF No.	Part No.	Part Name	Remarks		Q'ty	New	Ver
	BN2101	nsp	WIRE ASS'Y (11PIN,160MM,61205033100AS)		CWZCD6004B2101	1		
	BN2201	nsp	WIRE ASS'Y (3PIN,140MM,61205032800AS)	U	CWZCD6004B2201	1		
	BN2801	nsp	WIRE ASS'Y (13PIN,80MM,61205032400AS)		CWZCD6004B2801	1		
	BN3301	nsp	WIRE ASS'Y (7PIN,160MM,61205033200AS)		CWZCD6004B3301	1		
	BN3504	nsp	WIRE ASS'Y (5PIN,300MM,61205032600AS)		CWZCD6004B3504	1		
	BN3902	nsp	WIRE ASS'Y (2PIN,200MM,61205032200AS)		CWZCD6004B3902	1		
	BN3903	nsp	WIRE ASS'Y (10PIN,120MM,61205032300AS)		CWZCD6004B3903	1		
	BN4101	nsp	WIRE ASS'Y (5PIN,40MM,61205032700AS)		CWZCD6004B4101	1		
	CN3301	nsp	WAFER , STRAIGHT(7PIN)		CJP07GA19ZY	1		
	CN3504	nsp	LOCKING TYPE , STRAIGHT WAFER , 2.5MM		CJP05GI237ZW	1		
	CN3901,3902	nsp	WAFER, 2P, 3.96mm		CJP02KA060ZY	2		
	CN3903	nsp	LOCKING TYPE , STRAIGHT WAFER , 2.5MM 10PIN		CJP10GI237ZW	1		
	CN4101	nsp	WAFER , STRAIGHT		CJP05GA19ZY	1		
!	F3903	943652500330M	FUSE(372 Series/4A/TR5)		CBA2D4000A3EYT	1	*	
!	F3951,3952	90M-FS001530R	FUSE(0.8A, 372 SERIES/TR5)		KBA2D0800A3EYT	2		
	FCB300	nsp	WAFER, FFC(19P-1mm, STRAIGHT)		CJP19GA117ZY	1		
	J4,5	nsp	WIRE, COPPER(D0.6)	K/F/U	C3A206	2		
	J27	nsp	WIRE, COPPER(D0.6)	K/F/U	C3A206	1		
	J79	nsp	WIRE, COPPER(D0.6)	K/F/U	C3A206	1		
	K3101	943643002370S	JACK , 1P BOARD (WHITE, GD PLATE)		CJJ4M064Z	1		
	K3201	943643002380S	JACK , 1P BOARD (RED, GD PLATE)		CJJ4M065Z	1		
	K3601	90M-YT004860R	JACK, STEREO (BLK MOLD)	U	CJJ2D008Z	1		
	K4003	943643100150S	JACK , USB STRAIGHT(BLACK)		CJJ9X006Z	1		
	K4301	943643102640M	JACK , PHONE(6.3mm,4PIN,Silver)		CJJ2E036Z	1	*	
	L3301-3303	nsp	FERRITE CHIP BEAD(2012/220R)		CLZBLM21PG221SN	3		
	L3304	nsp	FERRITE CHIP BEAD(2012/2200OHM)		CLZBLM21BD222TN	1		
	L3306,3307	nsp	FERRITE CHIP BEAD(2012/2200OHM)		CLZBLM21BD222TN	2		
	L3405	nsp	FERRITE CHIP BEAD(2012/220R)		CLZBLM21PG221SN	1		
	L4001-4004	nsp	FERRITE CHIP BEAD(2012/220R)		CLZBLM21PG221SN	4		
	L4301	nsp	FERRITE CHIP BEAD(2012/220R)		CLZBLM21PG221SN	1		
	L4302-4304	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	3		
	L4305,4306	nsp	FERRITE CHIP BEAD(2012/2200OHM)		CLZBLM21BD222TN	2		
	L4307	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1		
	L4308	nsp	FERRITE CHIP BEAD(2012/2200OHM)		CLZBLM21BD222TN	1		
	L4401	nsp	FERRITE CHIP BEAD(2012/220R)		CLZBLM21PG221SN	1		
!	S3901	00D9430194900	RELAY,G5PA-1,DC6V,1C1P		CSL1E002ZE	1		
	S4001-4007	00D9430004402	SW , TACT		CST1A012ZT	7		
	S4101	00D9430004402	SW , TACT		CST1A012ZT	1		
!	T3901	943101002880M	TRANS , SUB C515	U	CLT5I009ZU	1		
!	T3901	90M-TS003180R	TRANS , SUB CD6002/N	N/K	CLT5I009ZE	1		
!	T3901	90M-TS003170R	TRANS , SUB CD6002/F	F	CLT5I009ZJ	1		
	V4301	943129500940M	V092Q20FA103 (METAL)(00D2115646001)		CVV2U02A103Z	1	*	
	Z3501	nsp	WIRE ASS'Y (1P, 80MM,BLK,#22)		CWE5202080A	1		
	Z3503,3504	nsp	WIRE ASS'Y (1P, 80MM,BLK,#22)		CWE5202080A	2		
	Z3911,3912	nsp	WIRE ASS'Y (1P, 80MM,BLK,#22)		CWE5202080A	2		
	★	nsp	FL SUPPORT		CHG1A584	2		

DSP_MCU PCB ASS'Y

NOTE:The symbols in the column Remarks indicate the following destinations.
U : North America model N : Europe model K : China model F : Japan model
B : Black model SG : Silver gold model

	REF No.	Part No.	Part Name	Remarks		Q'ty	New	Ver
	SEMICONDUCTORS GROUP							
	D100	943209001080S	DIODE , CHIP , SWITCHING		CVD1SS355T	1		
	D300-305	943209001080S	DIODE , CHIP , SWITCHING		CVD1SS355T	6		
	D308	90M-HD201820R	DIODE, SCHOTTKEY BARRIER		HVDRB160L60TE25	1		
	IC100	943245006980S	EOL item I.C , CD DSP (DSP,LQFP-80P)		CVITC94A92FG	1		
	IC101	943239006900S	I.C , 5-CH MOTOR DRIVE(REG,SSOP-28P)		CVIIP4001CRLTF_C	1		
	IC102	90M-HC700640R	I.C , 2CH X 4 MUX		CVITC74VCX157FT	1		
	IC103	943231101240D	I.C , REGULATOR(SOT-223)		CVIKIA1117BS15	1		
	IC104	943239101150M	I.C , DIT (192K,24BIT,TSSOP-16P)		CVIAK4104ET-E2	1	*	
	IC105	943239101160M	I.C , USB HOST CONTROLLER(LQFP-48P)		CVIUPD63530AGAG	1	*	
	IC106	943239100710S	I.C , CURRENT LIMITE(1.5A,UDFN-6P)		CVINCP380HMU15A	1		
	IC300	943246100770D	I.C , EEPROM (16KBIT,SOP-8P,K-Line)		CVIK24C16BSIRGA	1		
	IC301	943234009290S	I.C , RESET 2.4V (200ms,C-MOS,SOT23-5P)		CVIS80124CLMCJIJ	1		
	IC303	23671011050AS	I.C , IPOD AUTHENTICATION FROM D&M		CVI23671011050AS	1		
	IC304	90M-HC109330R	AUDIO DAC (TSSOP-28 PACKAGE)		HVICS4398CZ	1		
	IC302	943243101100D	I.C , U-COM (256KB/32KB, LQFP100P) TOSHIBA		CVITMPM330FYFG	1		
	Q1	943219500180M	T.R, 2SD1584, NPN, TO-251, RENESAS		CVT2SD1584	1	*	
	Q100	00D9430058908	T.R , CHIP , SOT-23		HVTKTA1504SYRTK	1		
	Q101	00D2730464901	T.R , CHIP , SOT-23		HVTKTC3875SYRTK	1		
	Q300	00D2690184907	T.R , CHIP , SOT-23		HVTKRA102S	1		
	Q301	90M-HX800090R	T.R , CHIP , SOT-23		HVTKRC111S	1		
	Q302	00D2730464901	T.R , CHIP , SOT-23		HVTKTC3875SYRTK	1		
	Q304	943215500020S	T.R,RT1P141C(10K-10K)	N	CVTRT1P141C	1		
	Q310	943215500020S	T.R,RT1P141C(10K-10K)	N	CVTRT1P141C	1		
	Q311	00D2623077900	I.C, HEX INVERTER		HVITC74VHCU04FT	1		
	RESISTOR GROUP							
	R1	nsp	RES, CHIP(1608/5%/15Kohm)		CRJ10DJ153T	1		
	R2	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1		
	R3	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1		
	R4	nsp	RES, CHIP(1608/5%/33ohm)		CRJ10DJ330T	1		
	R5	nsp	RES, CHIP(1608/5%/0ohm)	N/U	CRJ10DJ0R0T	1		
	R6,7	nsp	RES, CHIP(1608/5%/0ohm)	K/F/U	CRJ10DJ0R0T	2		
	R8	nsp	RES, CHIP(1608/5%/33ohm)	N	CRJ10DJ330T	1		
	R9	nsp	RES, CHIP(1608/5%/33ohm)		CRJ10DJ330T	1		
	R10	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1		
	R11-14	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	4		
	R15,16	nsp	RES, CHIP(1608/5%/0ohm)	K/F/U	CRJ10DJ0R0T	2		
	R17	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1		
	R18	nsp	RES, CHIP(1608/5%/1Mohm)	N	CRJ10DJ105T	1		
	R19	nsp	RES, CHIP(1608/5%/0ohm)	K/F/U	CRJ10DJ0R0T	1		
	R20,21	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	2		
	R22	nsp	RES, CHIP(1608/5%/1Mohm)	K/F/U	CRJ10DJ105T	1		
	R23	nsp	RES, CHIP(1608/5%/0ohm)	K/F/U	CRJ10DJ0R0T	1		
	R100	nsp	RES, CHIP(1608/5%/91ohm)		CRJ10DJ910T	1		
	R101,102	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	2		
	R103-105	nsp	RES, CHIP(1608/5%/18Kohm)		CRJ10DJ183T	3		
	R106-108	nsp	RES, CHIP(1608/5%/39ohm)		CRJ10DJ390T	3		
	R109	nsp	RES, CHIP(1608/5%/1Kohm)		CRJ10DJ102T	1		
	R110	nsp	RES, CHIP(1608/5%/39ohm)		CRJ10DJ390T	1		
	R111,112	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	2		
	R113	nsp	RES, CHIP(1608/5%/220ohm)		CRJ10DJ221T	1		
	R114	nsp	RES, CHIP(1608/5%/47Kohm)		CRJ10DJ473T	1		
	R115	nsp	RES, CHIP(1608/5%/15Kohm)		CRJ10DJ153T	1		
	R116	nsp	RES, CHIP(1608/5%/330Kohm)		CRJ10DJ334T	1		
	R118-120	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	3		
	R121	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1		
	R122,123	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	2		
	R124,125	nsp	RES, CHIP(1608/5%/4.7Kohm)		CRJ10DJ472T	2		
	R126	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1		
	R127	nsp	RES, CHIP(1608/5%/33ohm)		CRJ10DJ330T	1		
	R128	nsp	RES, CHIP(1608/5%/15Kohm)		CRJ10DJ153T	1		
	R130	nsp	RES, CHIP(1608/5%/470ohm)		CRJ10DJ471T	1		
	R131,132	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	2		
	R134	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1		
	R135,136	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	2		
	R137-139	nsp	RES, CHIP(1608/5%/100ohm)		CRJ10DJ101T	3		
	R140	nsp	RES, CHIP(1608/5%/33ohm)		CRJ10DJ330T	1		
	R141,142	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	2		
	R147	nsp	RES, CHIP(1608/5%/100Kohm)		CRJ10DJ104T	1		
	R149	nsp	RES, CHIP(1608/5%/100Kohm)		CRJ10DJ104T	1		
	R150-152	nsp	RES, CHIP(1608/5%/47Kohm)		CRJ10DJ473T	3		
	R155	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1		
	R157	nsp	RES, CHIP(1608/5%/47Kohm)		CRJ10DJ473T	1		
	R158	nsp	RES, CHIP(1608/5%/470ohm)		CRJ10DJ471T	1		
	R159	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1		
	R160	nsp	RES, CHIP(1608/5%/47ohm)		CRJ10DJ470T	1		
	R161	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1		
	R162,163	nsp	RES, CHIP(1608/5%/47ohm)		CRJ10DJ470T	2		
	R165	nsp	RES, CHIP(1608/5%/47ohm)		CRJ10DJ470T	1		
	R166	nsp	RES, CHIP(1608/5%/22ohm)		CRJ10DJ220T	1		
	R167-171	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	5		
	R172	nsp	RES, CHIP(1608/5%/2.2Kohm)		CRJ10DJ222T	1		
	R173	nsp	RES, CHIP(1608/5%/1.8Kohm)		CRJ10DJ182T	1		
	R174	nsp	RES, CHIP(1608/5%/3.9Kohm)		CRJ10DJ392T	1		
	R180,181	nsp	RES, CHIP(1608/5%/220ohm)		CRJ10DJ221T	2		
	R182	nsp	RES, CHIP(1608/5%/68ohm)		CRJ10DJ680T	1		
	R183	nsp	RES, CHIP(1608/5%/10ohm)		CRJ10DJ100T	1		
	R184	nsp	RES, CHIP(1608/5%/220ohm)		CRJ10DJ221T	1		
	R185	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1		
	R186	nsp	RES, CHIP(1608/5%/1Kohm)		CRJ10DJ102T	1		
	R187	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1		
	R188	nsp	RES, CHIP(1608/5%/33ohm)		CRJ10DJ330T	1		
	R189-197	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	9		
	R198-202	nsp	RES, CHIP(1608/5%/33ohm)		CRJ10DJ330T	5		
	R203-207	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	5		
	R208	nsp	RES, CHIP(1608/5%/100Kohm)	K/F/U	CRJ10DJ104T	1		
	R208	nsp	RES, CHIP(1608/5%/0ohm)	N	CRJ10DJ0R0T	1		
	R209-211	nsp	RES, CHIP(1608/5%/0ohm)	N	CRJ10DJ0R0T	3		
	R212,213	nsp	RES, CHIP(1608/5%/27ohm)		CRJ10DJ270T	2		

	REF No.	Part No.	Part Name	Remarks		Q'ty	New	Ver
	R214,215	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	2		
	R216,217	nsp	RES, CHIP(1608/5%/15Kohm)		CRJ10DJ153T	2		
	R218	nsp	RES, CHIP(1608/5%/100Kohm)		CRJ10DJ104T	1		
	R300	nsp	RES, CHIP(1608/5%/47ohm)		CRJ10DJ470T	1		
	R301	nsp	RES, CHIP(1608/5%/33Kohm)		CRJ10DJ333T	1		
	R302-308	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	7		
	R310	nsp	RES, CHIP(1608/5%/47Kohm)		CRJ10DJ473T	1		
	R311	nsp	RES, CHIP(1608/5%/47ohm)		CRJ10DJ470T	1		
	R312,313	nsp	RES, CHIP(1608/5%/33ohm)		CRJ10DJ330T	2		
	R314	nsp	RES, CHIP(1608/5%/100Kohm)		CRJ10DJ104T	1		
	R315	nsp	RES, CHIP(1608/5%/18Kohm)		CRJ10DJ183T	1		
	R316	nsp	RES, CHIP(1608/5%/47Kohm)		CRJ10DJ473T	1		
	R317	nsp	RES, CHIP(1608/5%/3.3Kohm)		CRJ10DJ332T	1		
	R318	nsp	RES, CHIP(1608/5%/1Kohm)		CRJ10DJ102T	1		
	R319	nsp	RES, CHIP(1608/5%/3.3Kohm)		CRJ10DJ332T	1		
	R320,321	nsp	RES, CHIP(1608/5%/33ohm)		CRJ10DJ330T	2		
	R322	nsp	RES, CHIP(1608/5%/1Kohm)	N	CRJ10DJ102T	1		
	R323	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1		
	R326	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1		
	R328	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1		
	R330	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1		
	R331	nsp	RES, CHIP(1608/5%/10Kohm)	K/F/U	CRJ10DJ103T	1		
	R331	nsp	RES, CHIP(1608/5%/100Kohm)	N	CRJ10DJ104T	1		
	R332	nsp	RES, CHIP(1608/5%/33ohm)		CRJ10DJ330T	1		
	R333	nsp	RES, CHIP(1608/5%/1Mohm)		CRJ10DJ105T	1		
	R334	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1		
	R336	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1		
	R338	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1		
	R341	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1		
	R344,345	nsp	RES, CHIP(1608/5%/1Kohm)		CRJ10DJ102T	2		
	R346-348	nsp	RES, CHIP(1608/5%/33ohm)		CRJ10DJ330T	3		
	R350,351	nsp	RES, CHIP(1608/5%/33ohm)		CRJ10DJ330T	2		
	R352,353	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	2		
	R356,357	nsp	RES, CHIP(1608/5%/2.2Kohm)		CRJ10DJ222T	2		
	R359	nsp	RES, CHIP(1608/5%/33ohm)		CRJ10DJ330T	1		
	R360	nsp	RES, CHIP(1608/5%/33ohm)	N	CRJ10DJ330T	1		
	R361	nsp	RES, CHIP(1608/5%/33ohm)		CRJ10DJ330T	1		
	R363-366	nsp	RES, CHIP(1608/5%/22ohm)		CRJ10DJ220T	4		
	R367	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1		
	R368	nsp	RES, CHIP(1608/5%/1Mohm)		CRJ10DJ105T	1		
	R369	nsp	RES, CHIP(1608/5%/1Kohm)		CRJ10DJ102T	1		
	R370	nsp	RES, CHIP(1608/5%/22ohm)		CRJ10DJ220T	1		
	R371	nsp	RES, CHIP(1608/5%/10Kohm)		CRJ10DJ103T	1		
	R373	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	1		
	R381,382	nsp	RES, CHIP(1608/5%/0ohm)		CRJ10DJ0R0T	2		
	CAPACIITORS GROUP							
	C1-4	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	4		
	C5	00D9430175001	CAP, ELECT(25V/47uF)		CCEA1EH470T	1		
	C6	nsp	CAP, CHIP(1608, 10V/1uF)	K/F/U	CCUS1A105KC	1		
	C7	13405012840AS	CAP, ELECT(10V/100uF)	K/F/U	CCEA1AH101T	1		
	C8	00D9430175001	CAP, ELECT(25V/47uF)		CCEA1EH470T	1		
	C9	13405012840AS	CAP, ELECT(10V/100uF)	K/F/U	CCEA1AH101T	1		
	C103	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C104	nsp	CAP, CHIP(1608, 50V/0.01uF)		CCUS1H103KC	1		
	C105	nsp	CAP, CHIP(1608, 50V/1000pF)		CCUS1H102KC	1		
	C106	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C108	9431340106605	CAP, ELECT(6.3V/470uF)		CCEA0JH471T	1		
	C109-112	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	4		
	C113	13405012840AS	CAP, ELECT(10V/100uF)		CCEA1AH101T	1		
	C114	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C115	13405012840AS	CAP, ELECT(10V/100uF)		CCEA1AH101T	1		
	C116	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C117	13405012840AS	CAP, ELECT(10V/100uF)		CCEA1AH101T	1		
	C118	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C119	13405012840AS	CAP, ELECT(10V/100uF)		CCEA1AH101T	1		
	C120	00MOA10800620	CAP, ELECT(6.3V/1000uF)		CCEA0JH102T	1		
	C121,122	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2		
	C123	00MOA10800620	CAP, ELECT(6.3V/1000uF)		CCEA0JH102T	1		
	C124	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C125	nsp	CAP, CHIP(1608, 50V/0.015uF)		CCUS1H153KC	1		
	C126	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C127	nsp	CAP, CHIP(1608, 50V/2200pF)		CCUS1H222KC	1		
	C129	nsp	CAP, CHIP(1608, 50V/47pF)		CCUS1H470JA	1		
	C130	nsp	CAP, CHIP(1608, 50V/0.01uF)		CCUS1H103KC	1		
	C131	nsp	CAP, CHIP(1608, 50V/4700pF)		CCUS1H472KC	1		
	C132,133	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2		
	C134	nsp	CAP, CHIP(1608, 50V/0.01uF)		CCUS1H103KC	1		
	C135	nsp	CAP, CHIP(1608, 50V/0.015uF)		CCUS1H153KC	1		
	C136	nsp	CAP, CHIP(1608, 50V/0.033uF)		CCUS1H333KC	1		
	C137	nsp	CAP, CHIP(1608, 50V/5600pF)		CCUS1H562KC	1		
	C138,139	nsp	CAP, CHIP(1608, 50V/470pF)		CCUS1H471JA	2		
	C140	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C143	nsp	CAP, CHIP(1608, 50V/0.047uF)		CCUS1H473KC	1		
	C145	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C146	nsp	CAP, CHIP(1608, 50V/0.047uF)		CCUS1H473KC	1		
	C149	nsp	CAP, CHIP(1608, 50V/1000pF)		CCUS1H102KC	1		
	C150	nsp	CAP, CHIP(1608, 50V/22pF)		CCUS1H220JA	1		
	C151	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C152	13405012840AS	CAP, ELECT(10V/100uF)		CCEA1AH101T	1		
	C153	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C154	13405012840AS	CAP, ELECT(10V/100uF)		CCEA1AH101T	1		
	C155	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C157-159	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	3		
	C160	13405012840AS	CAP, ELECT(10V/100uF)		CCEA1AH101T	1		
	C161,162	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2		
	C163	13405012840AS	CAP, ELECT(10V/100uF)		CCEA1AH101T	1		
	C164	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C165	nsp	CAP, CHIP(1608, 50V/1000pF)		CCUS1H102KC	1		
	C166	00D9430175001	CAP, ELECT(25V/47uF)		CCEA1EH470T	1		
	C167	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C168	13405012840AS	CAP, ELECT(10V/100uF)		CCEA1AH101T	1		
	C170,171	13405012840AS	CAP, ELECT(10V/100uF)		CCEA1AH101T	2		
	C172	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C174,175	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2		
	C176	nsp	CAP, CHIP(1608, 50V/1000pF)		CCUS1H102KC	1		
	C178,179	nsp	CAP, CHIP(1608, 50V/1000pF)		CCUS1H102KC	2		

	REF No.	Part No.	Part Name	Remarks		Q'ty	New	Ver
	C182	nsp	CAP, CHIP(1608, 50V/0.01uF)		CCUS1H103KC	1		
	C183	nsp	CAP, CHIP(1608, 50V/100pF)		CCUS1H101JA	1		
	C184	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C185	13405012840AS	CAP, ELECT(10V/100uF)		CCEA1AH101T	1		
	C186	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C191	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C192	13405012840AS	CAP, ELECT(10V/100uF)		CCEA1AH101T	1		
	C195	nsp	CAP, CHIP(1608, 10V/1uF)		CCUS1A105KC	1		
	C196	nsp	CAP, CHIP(1608, 50V/12pF)		CCUS1H120JA	1		
	C197,198	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2		
	C199	00MOA10800620	CAP, ELECT(6.3V/1000uF)		CCEA0JH102T	1		
	C200	nsp	CAP, ELECT(10V/47uF)		CCEA1AH470T	1		
	C202,203	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2		
	C204,205	00MDD91080300	CAP, CHIP(1608, 50V/8pF)	K/F/U	CCUS1H080DA	2		
	C204,205	nsp	CAP, CHIP(1608, 50V/20pF)	N	CCUS1H200JA	2		
	C210-212	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	3		
	C215,216	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2		
	C300,301	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2		
	C303	nsp	CAP, CHIP(1608, 50V/470pF)		CCUS1H471JA	1		
	C304,305	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2		
	C306	nsp	CAP, CHIP(1608, 10V/1uF)		CCUS1A105KC	1		
	C308	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C309	13405012840AS	CAP, ELECT(10V/100uF)		CCEA1AH101T	1		
	C310-312	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	3		
	C313	nsp	CAP, CHIP(1608, 50V/15pF)		CCUS1H150JA	1		
	C314	nsp	CAP, CHIP(1608, 50V/15pF)	K/F/U	CCUS1H150JA	1		
	C314	nsp	CAP, CHIP(1608, 50V/12pF)	N	CCUS1H120JA	1		
	C316	nsp	CAP, CHIP(1608, 50V/100pF)		CCUS1H101JA	1		
	C317-321	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	5		
	C324	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C325	nsp	CAP, CHIP(1608, 50V/0.1uF)	N	CCUS1H104KC	1		
	C326	00D9430175001	CAP, ELECT(25V/47uF)		CCEA1EH470T	1		
	C327	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C328	13405012840AS	CAP, ELECT(10V/100uF)		CCEA1AH101T	1		
	C329	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C330	nsp	CAP, CHIP(1608, 50V/0.01uF)		CCUS1H103KC	1		
	C331	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C332	nsp	CAP, CHIP(1608, 50V/0.01uF)		CCUS1H103KC	1		
	C333,334	nsp	CAP, CHIP(1608, 50V/15pF)		CCUS1H150JA	2		
	C335	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C336,337	nsp	CAP, CHIP(1608, 50V/0.01uF)		CCUS1H103KC	2		
	C339	nsp	CAP, CHIP(1608, 50V/0.01uF)		CCUS1H103KC	1		
	C341	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C342	00MOA107025Z1	CAP , ELECT (ELNA/R0S, 25V/100UF)		HCEA1ER101T	1		
	C343	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C344	00MOA33505020	CAP, ELECT(50V/3.3uF)		CCEA1HH3R3T	1		
	C345,346	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2		
	C347	00MOA107025Z1	CAP , ELECT (ELNA/R0S, 25V/100UF)		HCEA1ER101T	1		
	C348	nsp	CAP, ELECT(50V/33uF)		CCEA1HH330T	1		
	C349,350	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	2		
	C351	nsp	CAP, CHIP(1608, 50V/0.01uF)		CCUS1H103KC	1		
	C352	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	C353	00MOA107025R1	CAP, ELECT (100uF/25V, ROA, ELNA)		CCEA1EROA101T	1		
	C354	nsp	CAP, CHIP(1608, 50V/0.01uF)		CCUS1H103KC	1		
	C355	nsp	CAP, CHIP(1608, 50V/0.1uF)		CCUS1H104KC	1		
	OTHER PARTS GROUP							
	B1,2	nsp	PLATE , EARTH(TRONIC ELECTRONICS)	K/F/U	CJT1A026	2		
	BK201	nsp	BRACKET , PCB	K/F/U	CMD1A569-V1	1		
	CN1101	nsp	WAFER , SMD (2MM PITCH)		CJP05GA208ZY	1		
	CN2101	nsp	WAFER , STRAIGHT		CJP11GA19ZY	1		
	CN2201	nsp	WAFER , SMD (2MM PITCH)-3P	U	CJP03GA208ZY	1		
	CN2801	nsp	WAFER, STRAIGHT, 13PIN		CJP13GA19ZY	1		
	CN301	nsp	WAFER, FFC(7P-1mm, ANGLE)		CJP07GB113ZY	1		
	CWC100	nsp	WAFER , SMD (2MM PITCH)		CJP06GA208ZY	1		
	CWC101	nsp	WAFER , SMD (2MM PITCH)		CJP05GA208ZY	1		
	FCC300	nsp	WAFER, FFC, SMD(19P-1mm, STRAIGHT)		CJP19GA193ZY	1		
	K100	943623100030D	MODULE , OPTICAL(TX 16MHz)		CJSJST1124	1		
	K101	943646000840S	JACK, 1P(BK),SEPA-GND,GOLD		CJJ4M056W	1		
	K300	943643102610M	JACK RCA, 2P(O/O), VERTICAL, SILVER		CJJ4N102Z	1	*	
	L1	nsp	FERRITE CHIP BEAD(2012/220R)		CLZBLM21PG221SN	1		
	L2	nsp	FERRITE CHIP BEAD(2012/220R)	K/F/U	CLZBLM21PG221SN	1		
	L100	90M-LU000220R	INDUCTOR CHIP 10UH (3225 PKG)		HLQ10E100KRZ	1		
	L101-103	nsp	FERRITE CHIP BEAD(2012/220R)		CLZBLM21PG221SN	3		
	L105-107	nsp	FERRITE CHIP BEAD(2012/220R)		CLZBLM21PG221SN	3		
	L300-303	nsp	FERRITE CHIP BEAD(2012/220R)		CLZBLM21PG221SN	4		
	PFCK10	nsp	WAFER, FFC, SMD(16P-1mm, STRAIGHT)	K/F/U	CJP16GA193ZY	1		
	RN300	nsp	RES, CHIP(1608/5%/10Kohm*4)		CRJ104DJ103T	1		
	S300	90M-SS000710R	SWITCH , SLIDE		KSS2B016Z	1		
	X100	943141101040M	X-TAL, SMD, 48MHz/FCX-03,8.6PF		COX48000I086SR	1	*	
	X300	943141100750D	X-TAL, 10MHz, HC-49/SMD, 12pF	K/F/U	COX10000E120S	1		
	X300	943141101020M	X-TAL, SMD, 10MHz/FCX-03,10PF	N	COX10000I100SR	1	*	
	X301	943141101030M	X-TAL, SMD, 16.9344MHz/FCX-03,10PF		COX16934I100SR	1	*	
	Z101	nsp	WIRE ASS'Y (1P, 80MM,BLK,#22)	K/F/U	CWE5202080A	1		

EXPLODED PCB ASS'Y

NOTE:The symbols in the column Remarks indicate the following destinations.
U : North America model N : Europe model K : China model F : Japan model
B : Black model SG : Silver gold model

	REF No.	Part No.	Part Name	Remarks		Q'ty	New	Ver
	C1	nsp	FRONT PCB ASS'Y		CUP12552Z-4	1		
	C2	nsp	FRONT PCB ASS'Y		CUP12552Z-5	1		
	C3	nsp	EARPHONE PCB ASS'Y		CUP12552Z-6	1		
	C4	nsp	TRANS PCB ASS'Y		CUP12552Z-1	1		
!	C4-T3951	943101102260M	POWER TRANS(U)	U	CLT5N039ZU	1	*	
!	C4-T3951	943101102261M	POWER TRANS(N)	N/K	CLT5N039ZE	1	*	
!	C4-T3951	943101102263M	POWER TRANS(F)	F	CLT5N039ZJ	1	*	
	C5	943302100130D	CJDKT690 CD MECHA ASSY DCD720		CJDKT690	1		
	C6	nsp	AUDIO OUTPUT PCB ASS'Y		CUP12552Z-3	1		
	C7	nsp	CD MAIN PCB ASS'Y		CUP12551Z	1		
	C8	nsp	POWER PCB ASS'Y		CUP12552Z-2	1		
!	C9	00MYJ04002640	AC INLET ASSY		CJJ8A006ZW	1		
	M10	nsp	FLASHER	U				
	P1	421410006004M	BADGE , MARANTZ		CGB1A206	1		
	P2	943415100410M	ORNAMENT, DOOR BLACK	BK	CGR1A552ZB37	1	*	
	P2	943415100400M	ORNAMENT, DOOR	SG	CGR1A552RMZD10	1	*	
	P3	943416101150M	WINDOW , FIP		CGU1A423A12Y	1	*	
	P4	nsp	PANEL , SUB CD5003/N1B	BK	CGW1A462B37	1		
	P4	nsp	PANEL , SUB	SG	CGW1A462RMD10	1		
	P5	943404100590M	PANEL , SIDE L	BK	CGW1A463RNVB37	1	*	
	P5	943404100600M	PANEL , SIDE L	SG	CGW1A463ROVD10	1	*	
	P6	943402007080M	PANEL , SIDE R CD5003/N1B	BK	CGW1A464RNB37	1		
	P6	943402007090M	PANEL , SIDE R CD5003/N1SG	SG	CGW1A464ROD10	1		
	P7	nsp	SHEET , LED		CGX1A411Z	1		
	P8	481510003006M	INDICATOR , POWER		CGL1A274	1		
	P9	411510015017M	KNOB , TACT POWER AV8003/U	BK	CBT1A1072	1		
	P9	411510021036M	KNOB , POWER	SG	CBT1A1072RMD10	1		
	P10	943411102840M	BUTTON , PLAY	BK	CBT1A1181	2	*	
	P10	943411102850M	BUTTON , PLAY	SG	CBT1A1181RMD10	2	*	
	P11	943411102860M	BUTTON , USB	BK	CBT1A1182	1	*	
	P11	943411102870M	BUTTON , USB	SG	CBT1A1182RMD10	1	*	
	P12	943411007050M	KNOB , LEVEL	BK	CBN1A170B37	1		
	P12	00M24AW154120	KNOB , LEVEL	SG	CBN1A170RMD10	1		
	P13	nsp	CUSHION , FOOT		CHG1A360	4		
	P14	nsp	FOOT , FRONT		CKL2A042H46	4		
	P15	nsp	HOLDER , PCB		CHE170	4		
	P16	nsp	HOLDER , PCB		CHE2A030	3		
	P17	nsp	SHEET , SCREW		CGX1A439	1		
	M1	943402104100M	PANEL , AL FRONT	BK	CKM2A203PC23	1	*	
	M1	943402104110M	PANEL , AL FRONT	SG	CKM2A203PC62	1	*	
	M2	nsp	PLATE , EARTH USB		CMC1A370	1		
	M3	nsp	WASHER		CNW2A028	1		
	M4	nsp	BRACKET SA7003 33AK		CMD1A757	1		
	M5	nsp	FRAME , FRONT		CUF2A004	1		
	M6	nsp	BOTTOM PLATE		CUA2A298	1		
	M7	nsp	BOTTOM CHASSIS		CUA4A289	1		
	M8	nsp	SUPPORT , MECHA		CMD1A842	1		
	M9	401310003002M	CABINET , TOP CD5003/N1B	BK	CKC2A187K117	1		
	M9	401310003033M	CABINET , TOP CD5003/N1SG	SG	CKC2A187D11	1		
	M11	nsp	PANEL REAR	U	CKF4A390H	1		
	M11	nsp	PANEL REAR	N	CKF3A390N	1		
	M11	nsp	PANEL REAR	K	CKF3A390K	1		
	M11	nsp	PANEL REAR	F	CKF3A390J	1		
	S1	nsp	SCREW		CTB3+8JFB	34		
	S2	nsp	SCREW , DOT		CTBD3+8JFB	27		
	S3	nsp	SCREW	BK	CTW3+8JFZR	6		
	S3	nsp	SCREW	SG	CTW3+8JFC	6		
	S4	nsp	SCREW		CTB4+6FFZR	4		
	S5	nsp	SCREW		CTB3+12JFB	4		
	S6	nsp	SCREW		CTB3+18JFB	3		
	S7	nsp	SCREW , ROUND		CTBR3+6JR	4		
	S8	nsp	SCREW , DOT		CTBD3+6FFB	3		
	★	nsp	WIRE ASS'Y (5P, 250MM, MECHA)		CWB2B005250GG	1		
	★	nsp	WIRE ASS'Y (6P, 220MM, MECHA)		CWB5A906220GG	1		
	★	943606502280M	CABLE , CARD CD Mecha (16P, 1mm, 140mm, A TYPE)		CWC4F1A16A140A1	1	*	
	★	943606007140M	CABLE , CARD (19P,1.0MM,250MM,B,8MM)		CWC4F4A19A250B0	1		
	★	00MYJ04002640	RECEPTACLE , AC(15A/250V,R-301,B21)		CJJ8A006ZW	1		
	★	90M-FC500130R	FERRITE , CORE		CLZ9Z071Z	1		
	★	nsp	INLET WIRE ASS'Y		CWZCD6002BN95ZA	1		
	★	00MYJ04002640	RECEPTACLE , AC(15A/250V,R-301,B21)		CJJ8A006ZW	1		
	★	nsp	WIRE ASS'Y		CWZCD6002BN95	1		
	★	nsp	TUBE , UL		C4B120062	1		

PACKING PCB ASS'Y

NOTE:The symbols in the column Remarks indicate the following destinations.
U : North America model N : Europe model K : China model F : Japan model
B : Black model SG : Silver gold model

	REF No.	Part No.	Part Name	Remarks		Q'ty	New	Ver
	1	943531103920M	BOX OUT CARTON		CPG1A994Z	1	*	
	2	nsp	BAG , POLY(SET)		CPB1A213	1		
	3-1	943533101990M	PAD , SNOW BOTTOM(F/R)		CPS1A964	1	*	
	3-2	943533101980M	PAD , SNOW		CPS1A962	1	*	
	4	544510081006M	INSTRUCTION MANUAL ASS'Y		-	1		
	4-1	35201027000AM	CD MANUAL ASS'Y	N	CFT1A112ZA	1	*	
	4-1	35201029000AM	CD MANUAL ASS'Y	U	CFT1A113ZA	1	*	
	4-1	35201029200AM	CD MANUAL ASS'Y	K	CFT1A114ZA	1	*	
	4-1	54111109200AM	MANUAL , INSTRUCTION	F	CQX1A1796Z	1	*	
	4-2	54311027300AM	SAFETY INSTRUCTION	N	CQE1A636Z	1		
	4-2	54311028500AM	SAFETY INSTRUCTION	U	CQE1A637Z	1		
	4-2	NOT FIX	SAFETY INSTRUCTION	K	CQE1A639Z	1		
	4-2	54111093410AD	SAFETY INSTRUCTION	F	CQE1A638Z	1		
	4-3	54111111500AM	MANUAL , GETTING START	N	CQX1A1788Z	1		
	4-3	54111111600AM	MANUAL , GETTING START	U	CQX1A1789Z	1		
	4-3	54111111800AM	MANUAL , GETTING START	K	CQX1A1791Z	1		
	4-3	54111111700AM	MANUAL , GETTING START	F	CQX1A1790Z	1		
	4-4	nsp	SHEET , GOST	N	CQE1A642Z	1		
	4-4	nsp	CARD , WARRANTY	U	CQE1A131V	1		
	4-4	nsp	CARD FOR CHINA INDENTIFICATION	K	CQE1A450Z	1		
	4-4	nsp	CARD , USER (JAPAN)	F	CQE1A139S	1		
	4-5	nsp	WARRANTY CANADA	U	CQE1A132V	1		
	4-5	delete	SHEET , ADDRESS (JAPAN)	F	CQE1A195Q	1		
!	5	90M-ZC000320R	CORD , POWER(DETACHABLE/EUR)	N	CJA2B054Z	1		
!	5	90M-ZC000310R	CORD , POWER(PLUG+SOCKET)UL	U	CJA2A070Z	1		
!	5	90M-ZC000650R	CORD , POWER	K	CJA2N075Z	1		
!	5	611050028007S	CORD , POWER JPN INLET TYPE (250V)	F	CJA2J115ZV	1		
	6	nsp	BAG , POLY		CPB1A008Z	2		
	7	30701015400AM	RC001PMCD		CARTPMCD6005	1	*	
	8	nsp	LABEL , CONTROL		CQB2A993Z	1		
	8-1	nsp	LABEL, SERI AL		CQB2A993Z-1	1		
	9	nsp	BATTERY , AAA 2PCS IN PACK		CABR03PPB	1		
	10	nsp	CORD, PIN		CJ S4M009X	1		
	11	nsp	CORD, PIN		CJ S4N014Z	1		
	12	nsp	LABEL , WHITE M1 SG	SG/FN	CQB1A908Z	2		
	13	nsp	CARD , WARRANTY CHINA	K	CQE1A449X	1		
	13	nsp	CARD , WARRANTY (JAPAN)	F	CQE1A123W	1		
	14	nsp	LABEL , POWER	K	CQB1A1006U	1		