

# HCD-DZ119/DZ410

## SERVICE MANUAL



Ver. 1.1 2006.09

AEP Model

HCD-DZ119/DZ410

UK Model

HCD-DZ410



Photo : HCD-DZ410

- HCD-DZ119 is the amplifier, DVD/CD and tuner section in DAV-DZ119.
- HCD-DZ410 is the amplifier, DVD/CD and tuner section in DAV-DZ410.

This system incorporates with Dolby\*<sup>1</sup> Digital and Dolby Pro Logic (II) adaptive matrix surround decoder and the DTS\*<sup>2</sup> Digital Surround System.

\*1 Manufactured under license from Dolby Laboratories. "Dolby," "Pro Logic," and the double-D symbol are trademarks of Dolby Laboratories.

\*2 Manufactured under license from Digital Theater Systems, Inc. "DTS" and "DTS Digital Surround" are trademarks of Digital Theater Systems, Inc.

Model Name Using Similar Mechanism	HCD-DZ110
Mechanism Type	CDM85-DVBU102
Optical Pick-up Name	KHM-310CAA

### SPECIFICATIONS

#### Amplifier section DZ119

Stereo mode (rated)	108 W + 108 W (3 ohms at 1 kHz, 1 % THD)
Surround mode (reference)	RMS output power, 10 % THD Front: 142 W + 142 W (with SS-TS51) Center*: 142 W (with SS-CT51) Surround*: 142 W + 142 W (with SS-TS51) Subwoofer*: 140 W (with SS-WS51)

#### DZ410

Stereo mode (rated)	108 W + 108 W (3 ohms at 1 kHz, 1 % THD)
Surround mode (reference)	RMS output power, 10 % THD Front: 142 W + 142 W (with SS-TS53) Center*: 142 W (with SS-CT51) Surround*: 142 W + 142 W (with SS-TS53) Subwoofer*: 140 W (with SS-WS51)

\* Depending on the sound field settings and the source, there may be no sound output.

Inputs (Analog)  
LINE (AUDIO IN)  
AUDIO IN  
Outputs (Analog)  
Phones

#### DVD system

Laser  
Semiconductor laser (DVD:  $\lambda = 650$  nm)  
(CD:  $\lambda = 790$  nm)  
Emission duration: continuous  
PAL

Signal format system

#### Tuner section

System  
PLL quartz-locked digital synthesizer system  
FM tuner section  
Tuning range  
87.5 – 108.0 MHz (50 kHz step)  
Antenna (aerial)  
Antenna (aerial) terminals  
75 ohms, unbalanced  
Intermediate frequency  
10.7 MHz

AM tuner section

Tuning range  
531 – 1,602 kHz (with the interval set at 9 kHz)  
Antenna (aerial)  
Intermediate frequency  
AM loop antenna (aerial)  
450 kHz

#### Video section

Outputs  
VIDEO: 1 V<sub>p-p</sub> 75 ohms  
R/G/B: 0.7 V<sub>p-p</sub> 75 ohms  
COMPONENT:  
Y: 1 V<sub>p-p</sub> 75 ohms  
P<sub>B</sub>/C<sub>B</sub>, P<sub>R</sub>/C<sub>R</sub>: 0.7 V<sub>p-p</sub> 75 ohms

#### General

Power requirements  
Power consumption  
220 – 240 V AC, 50/60 Hz  
On: 150 W

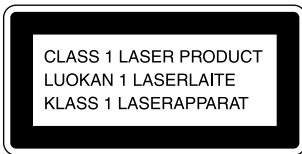
Standby: 0.3 W (at the Power Saving mode)

Dimensions (approx.)  
430 × 55 × 360 mm (w/h/d) incl. projecting parts

Mass (approx.)

3.8 kg  
Design and specifications are subject to change without notice.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.



This appliance is classified as a CLASS 1 LASER product. This marking is located on the bottom exterior.

### CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

### Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

### Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

### UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.



(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

### LEAD FREE MARK

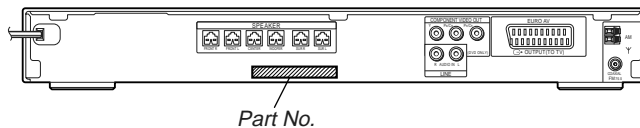
Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.  
Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.  
Soldering irons using a temperature regulator should be set to about 350 °C.  
Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity  
Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder  
It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

### MODEL IDENTIFICATION – Rear Panel –



Model	Part No.
HCD-DZ119	2-661-239-0□
HCD-DZ410	2-661-238-3□

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## SECTION 1 SERVICING NOTE

### NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

### NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.


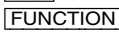


### LASER DIODE AND FOCUS SEARCH

1. Open the cover and turn POWER on with no disc inserted.
2. Confirm that the following operation is performed while observing the objecting lens.
  - 1) Confirm that laser beam is spread.
  - 2) Up and down motion of the objective lens. (3 times)



### DISC TRAY LOCK


The disc tray lock function for the antitheft of an demonstration disc in the store is equipped.

#### Setting Procedure :

1. Press the  button to turn the set on.
2. Press the  button to set DVD function.
3. Insert a disc.
4. Press the  button and the  button simultaneously for five seconds.
5. The message "LOCKED" is displayed and the tray is locked.

#### Releasing Procedure :

1. Press the  button and the  button simultaneously for five seconds again.
2. The message "UNLOCKED" is displayed and the tray is unlocked.

**Note:** When "LOCKED" is displayed, the tray lock is not released by turning power on/off with the  button.

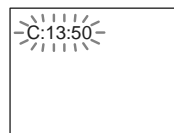
### Note on MAIN board replacement

New part of EEP ROM (IC1103) on the MAIN board cannot be used. Therefore, if the mounted MAIN board (A-1144-739-A, etc.) is replaced, exchange new EEP ROM (IC1103) with that used before the replacement.

## Self-diagnosis Function

*(When letters/numbers appear in the display)*

When the self-diagnosis function is activated to prevent the system from malfunctioning, a 5-character service number (e.g., C 13 50) with a combination of a letter and 4 digits appears on the screen and the front panel display. In this case, check the following table.



First 3 characters of the service number	Cause and/or corrective action
C 13	The disc is dirty. ➔Clean the disc with a soft cloth
C 31	The disc is not inserted correctly. ➔Restart the system, then re-insert the disc correctly.
E XX (xx is a number)	To prevent a malfunction, the system has performed the self-diagnosis function. ➔Contact your nearest Sony dealer or local authorized Sony service facility and give the 5-character service number. Example: E 61 10

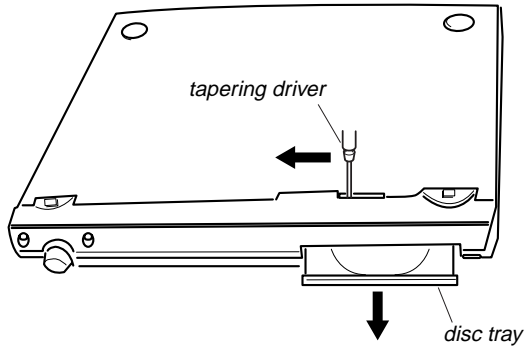
When displaying the version number on the screen

When you turn on the system, the version number [VER.X.XX] (X is a number) may appear on the screen. Although this is not a malfunction and for Sony service use only, normal system operation will not be possible. Turn off the system, and then turn on the system again to operate.



**HOW TO OPEN THE DISC TABLE WHEN POWER SWITCH TURNS OFF**

Insert a tapering driver into the aperture of the unit bottom, and slide it in the direction of the arrow.



**Discharge the charged electricity in capacitors to prevent electric shock as follows**

When disassembling the machine, be sure to discharge the charged electricity in the following capacitors. Use a resistor of 800 ohms, 2 Watts for discharging the following capacitors.

POWER board

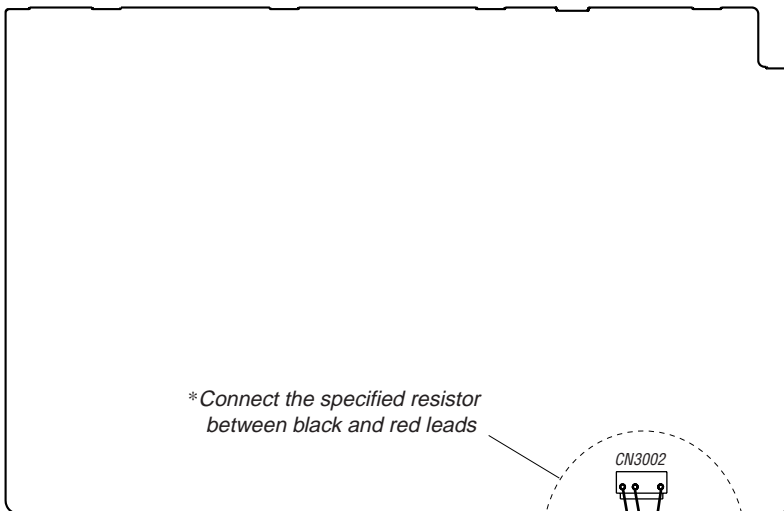
C903 : 600V

C932, C933, C939, CN902 : 30V

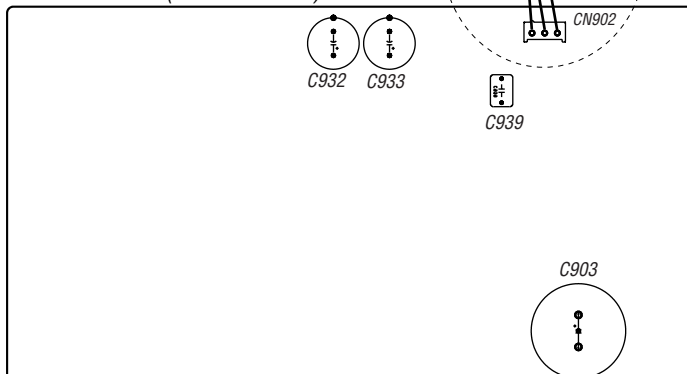
MAIN board

CN3002 : 30 V

**MAIN BOARD** (Parts face side)



**POWER BOARD** (Parts face side)

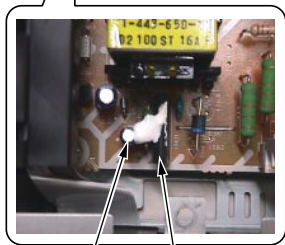
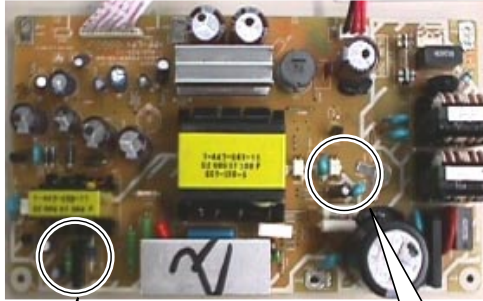


## **Fix the capacitors with adhesive agent as follows**

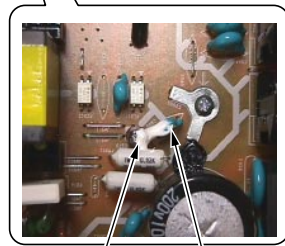
*Fixing the capacitors with adhesive agent is required by the safety regulation.*

*Be sure to fix the capacitors with adhesive agent when part or circuit board is replaced.*

### **POWER BOARD**

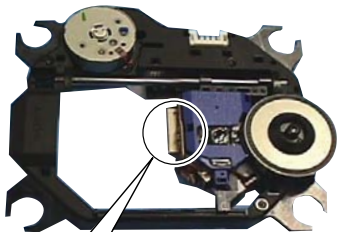


C924 IC921



C910 C930

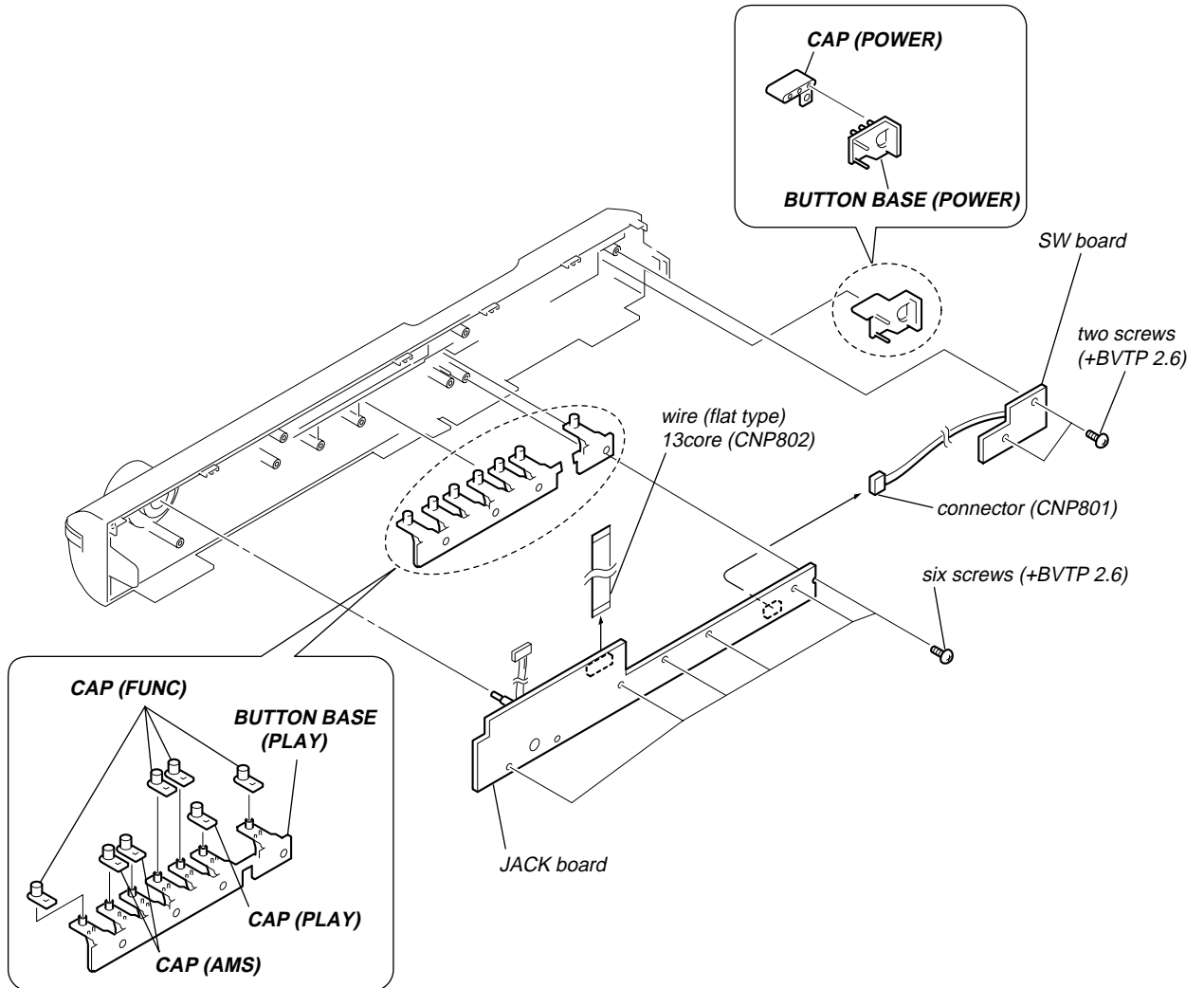
## **PRECAUTION WHEN INSTALLING A NEW OP UNIT / PRECAUTION BEFORE UNSOLDERING THE STATIC ELECTRICITY PREVENTION SOLDER BRIDGE**



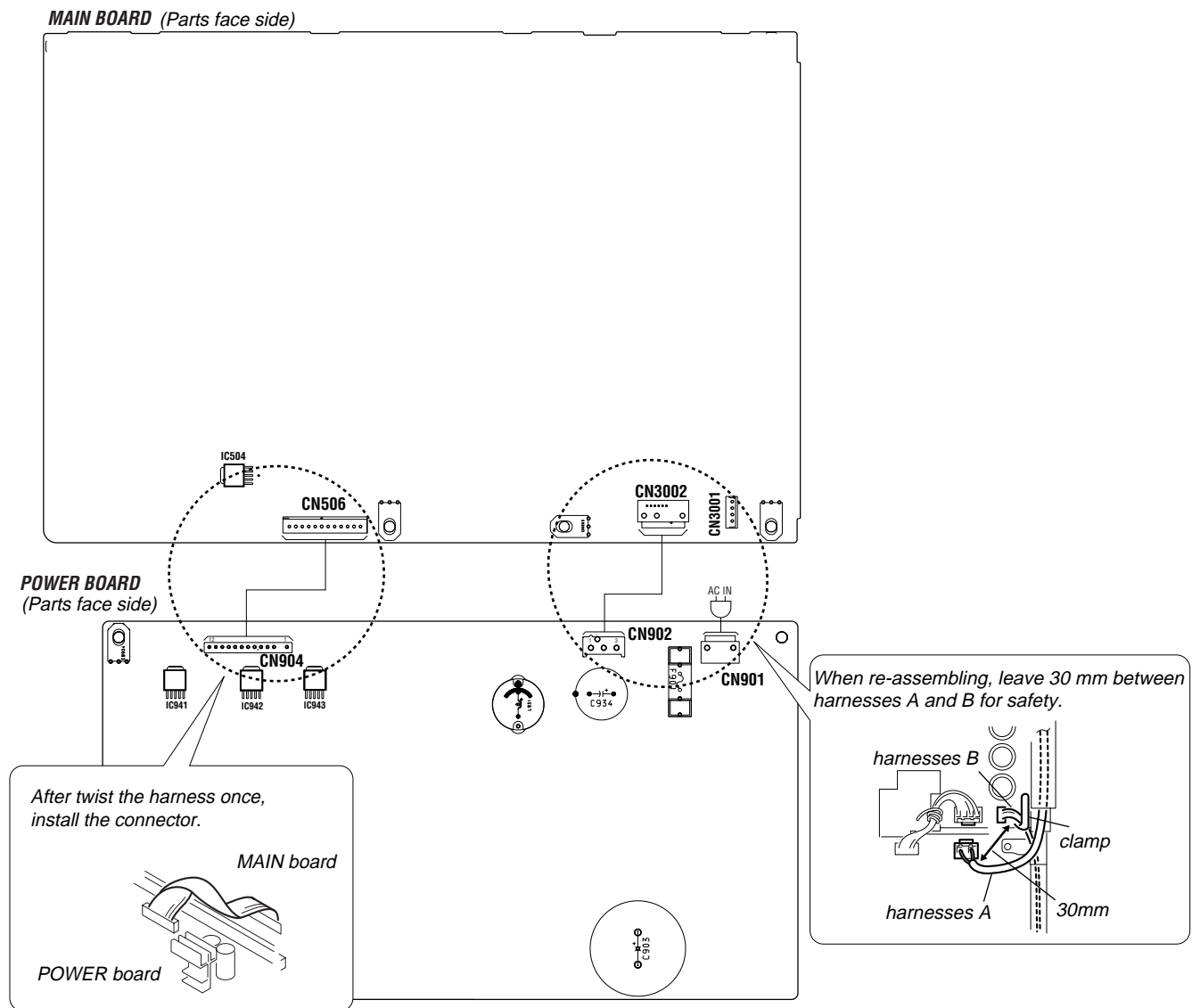
*When installing a new OP unit, be sure to connect the flexible printed circuit board first of all before removing the static electricity prevention solder bridge by unsoldering. Remove the static electricity prevention solder bridge by unsoldering after the flexible printed circuit board has already been connected.  
(Do not remove nor unsolder the solder bridge as long as the OP unit is kept standalone.)*

**Precaution when replacing the CAP (HCD-DZ410 model)**

Please apply the adhesive agent to the **BUTTON BASE (PLAY)** when replacing the CAP (PLAY) or CAP (FUNC) or CAP (AMS).  
 Please apply the adhesive agent to the **BUTTON BASE (POWER)** when replacing the CAP (POWER).



## Precaution on the connector processing of the POWER board.





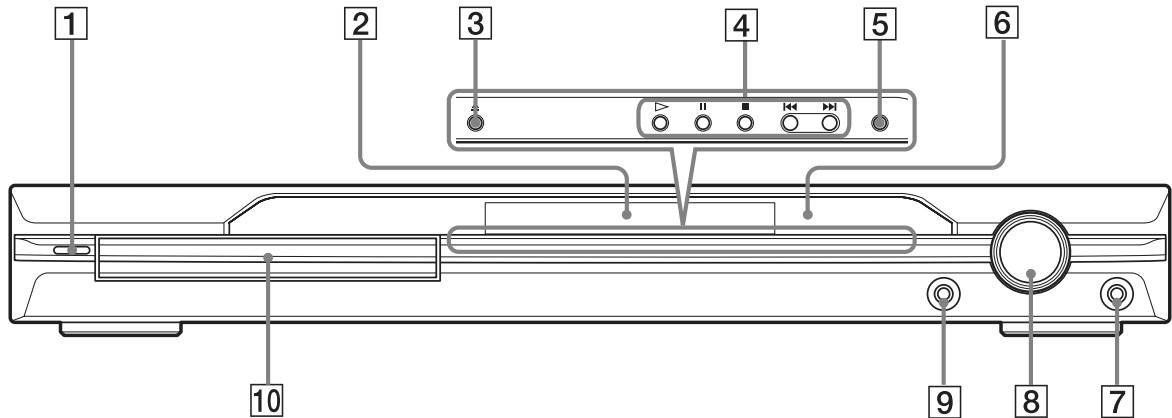
## SECTION 2 GENERAL

This section is extracted  
from instruction manual.

### Index to Parts and Controls

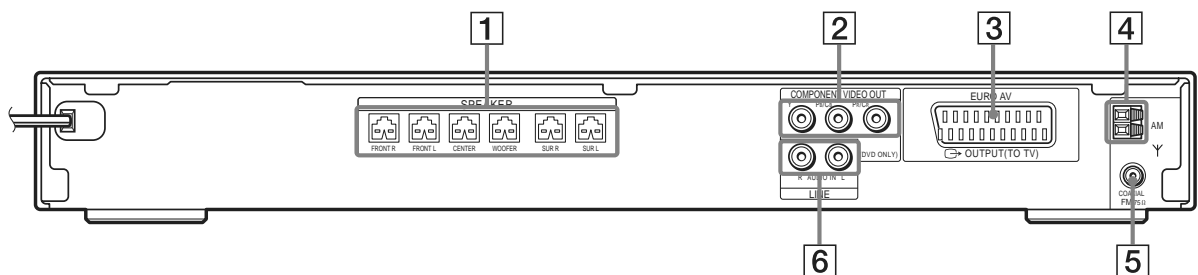
For more information, refer to the pages indicated in parentheses.

#### Front panel



- |                                   |   |
|-----------------------------------|---|
| 1 <b>I/⏻ (on/standby) (29)</b>    | 6 <b>Ⓜ (remote sensor) (8)</b>            |
| 2 <b>Front panel display (90)</b> | 7 <b>PHONES jack (29)</b>                 |
| 3 <b>⏮ (open/close) (29)</b>      | 8 <b>VOLUME control (29)</b>              |
| 4 <b>Disc operation (29)</b>      | 9 <b>AUDIO IN/A.CAL MIC jack (19, 30)</b> |
| 5 <b>FUNCTION (29)</b>            | 10 <b>Disc tray (29)</b>                  |

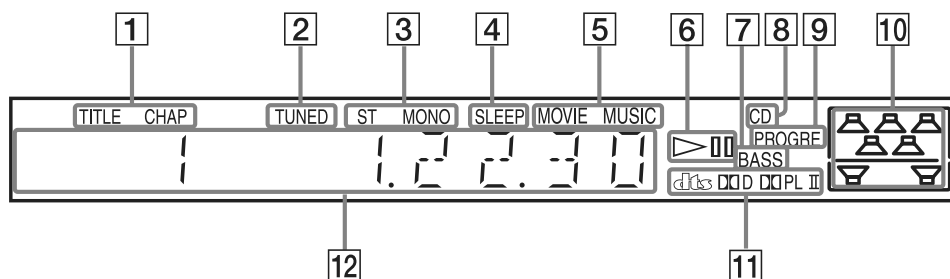
#### Rear panel



- |  |   |
|--|---|
| 1 <b>SPEAKER jacks (12)</b>  | 4 <b>AM terminal (12)</b>               |
| 2 <b>COMPONENT VIDEO OUT jacks (24)</b>                                    | 5 <b>COAXIAL FM 75Ω jack (12)</b>       |
| 3 <b>EURO AV <math>\hookrightarrow</math> OUTPUT (TO TV) jack (12, 24)</b> | 6 <b>LINE (AUDIO IN R/L) jacks (27)</b> |

## Front panel display

About the indications in the front panel display



- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>1 Lights up when the time information of a title or chapter appears in the front panel display. (DVD only) (45)</li> <li>2 Lights up when a station is received. (Radio only) (57)</li> <li>3 Monaural/Stereo effect (Radio only) (57)</li> <li>4 Lights up when the sleep timer is set. (62)</li> <li>5 Lights up when the music or movie mode is selected. (32)</li> <li>6 Playing status (DVD function only)</li> </ul> | <ul style="list-style-type: none"> <li>7 Lights up when the DYNAMIC BASS is selected. (61)</li> <li>8 Lights up when CD is loaded.</li> <li>9 Lights up when the system outputs progressive signals (DVD function only). (25)</li> <li>10 Indicates the selected [SPEAKER FORMATION]. (66)</li> <li>11 Current surround format (Except for JPEG)</li> <li>12 Displays system's status such as chapter, title, or track number, time information, radio frequency, playing status, sound field, etc.</li> </ul> |
|---|--|

## Remote control

### ALPHABETICAL ORDER

- A - O**
- AMP MENU **25** (22, 30, 60, 62, 95)
  - ANGLE **5** (47)
  - AUDIO **4** (42)
  - CLEAR **34** (36, 60, 71)
  - D.TUNING **24** (57)
  - DISC SKIP\* **18**
  - DISPLAY **3** (45, 58)
  - DYNAMIC BASS **23** (61)
  - ENTER **13** (19, 22, 30, 36, 57, 63)
  - FUNCTION **22** (25, 29, 30, 37, 57, 66)
  - MENU **26** (42, 57)
  - MOVIE/MUSIC **17** (32)
  - MUTING **7** (29)
  - Number buttons\*\* **15** (36, 57, 60, 63)

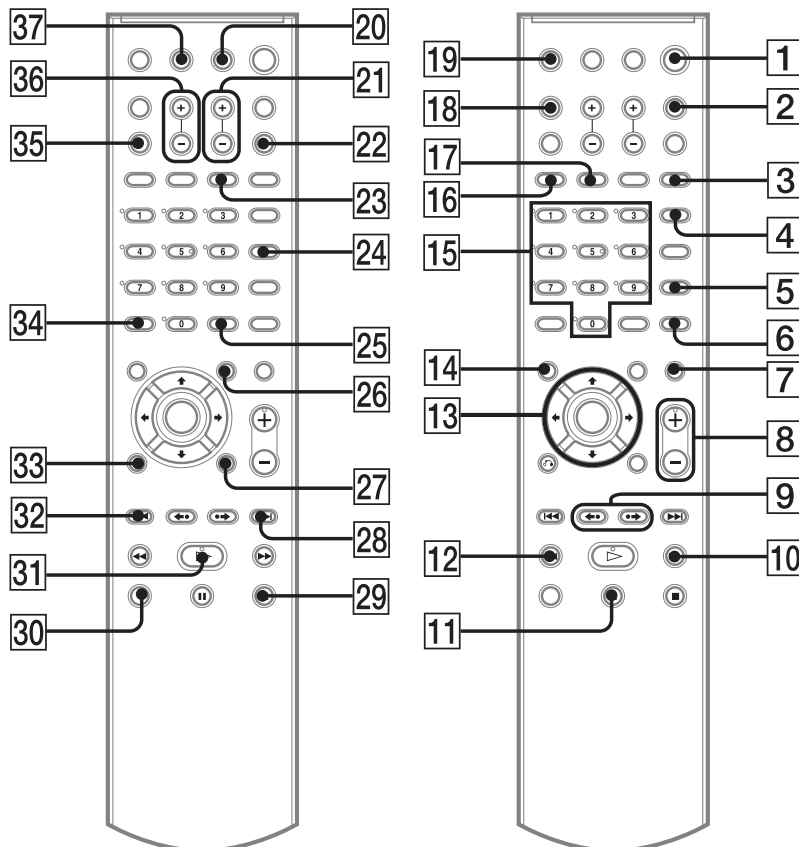
### P - Z

- PICTURE NAVI **6** (37, 60)
- PRESET +/- **28** **32** (57)
- PROGRESSIVE **35** (25)
- SLEEP **19** (62)
- SOUND FIELD **16** (33)
- SUBTITLE **24** (48)
- THEATRE SYNC **20** (61)
- TOP MENU **14** (42)
- TUNING +/- **10** **12** (57)
- TV **30** (60)
- TV CH +/- **21** (60)
- TV VOL +/- **36** (60)
- TV/VIDEO **2** (60)
- VOLUME +/-\*\* **8** (29, 57, 76)

### BUTTON DESCRIPTIONS

- I/⏻** (on/standby) **1** (19, 22, 29, 37, 57)
- TV **I/⏻** (on/standby) **37** (60)
- ←/↑/↓/→** **13** (19, 22, 30, 36, 57, 63)
- ←•/•→** REPLAY/ADVANCE **9** (29)
- ⏮/⏭** **32** **28** (29)
- ⏪/⏩** **12** **10** (35)
- ◀/▶** SLOW **12** **10** (35)
- ▷** (play)\*\* **31** (29, 37, 64)
- ◀◀/▶▶** STEP **9** (35)
- (stop) **29** (29, 37, 63)
- ⏸** (pause) **11** (29)
- ☰** DISPLAY **27** (21, 36, 63, 91)
- ↶** RETURN **33** (37)
- /--** **34** (60)

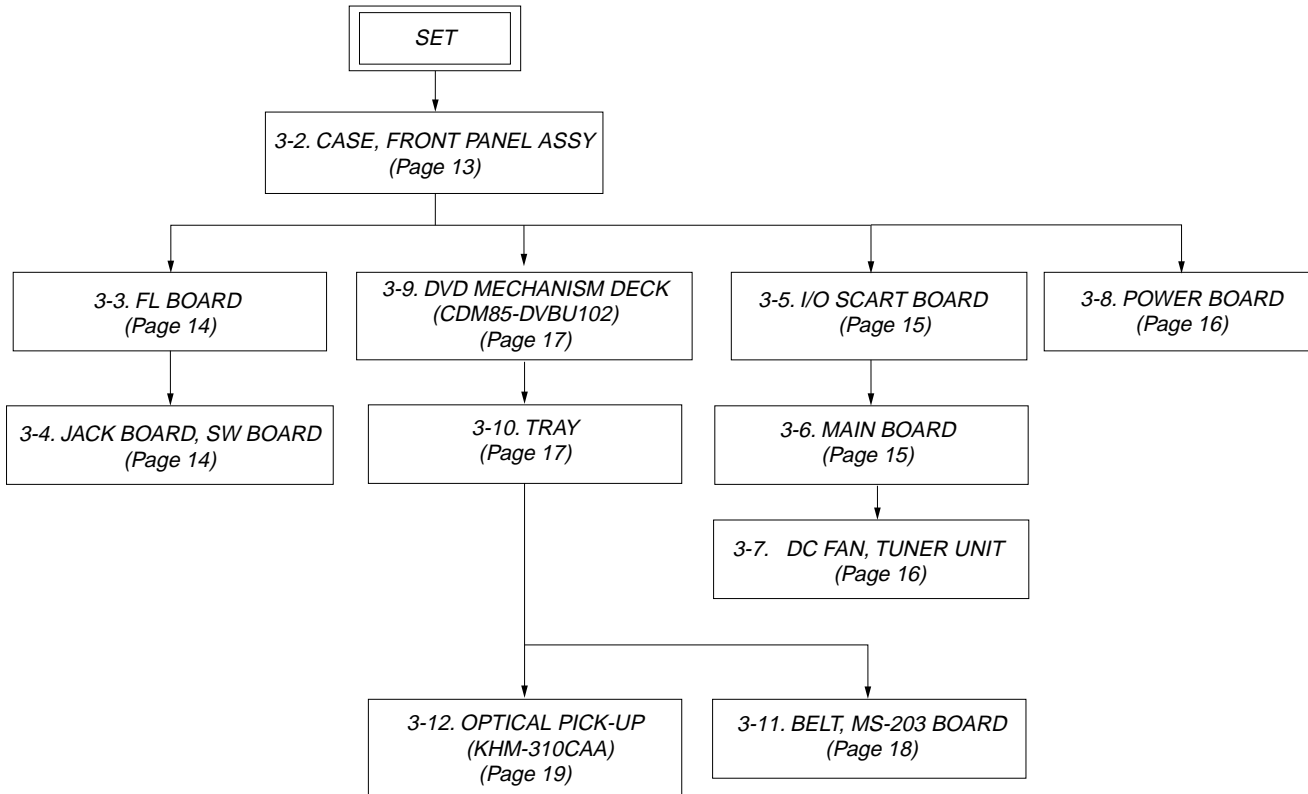
- \* The DISC SKIP button is not available for this model.
- \*\* The **▷**, number 5, and VOLUME + buttons have tactile dots. Use the tactile dots as references when operating the system.



## SECTION 3 DISASSEMBLY

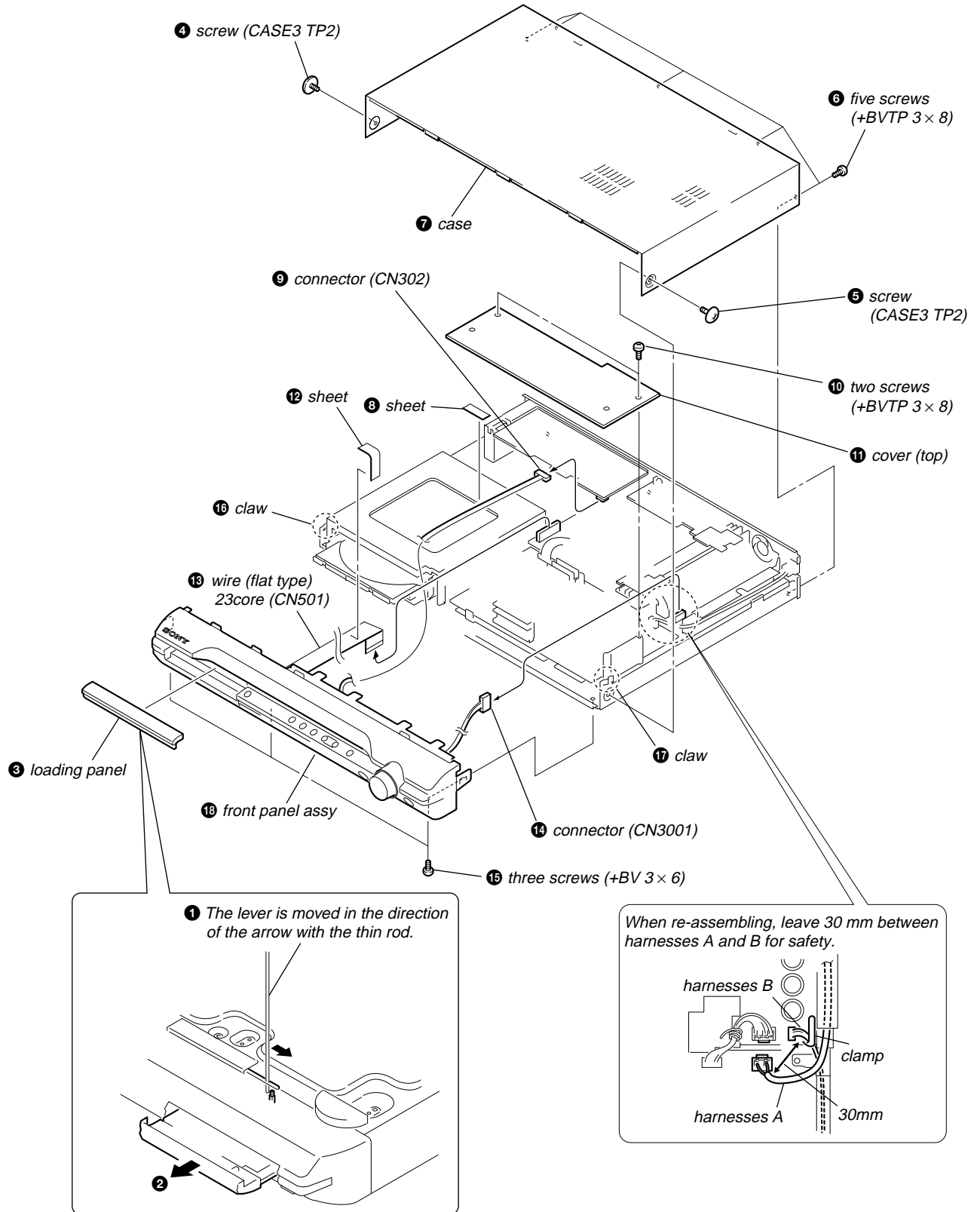
### 3-1. DISASSEMBLY FLOW

- This set can be disassembled in the order shown below.

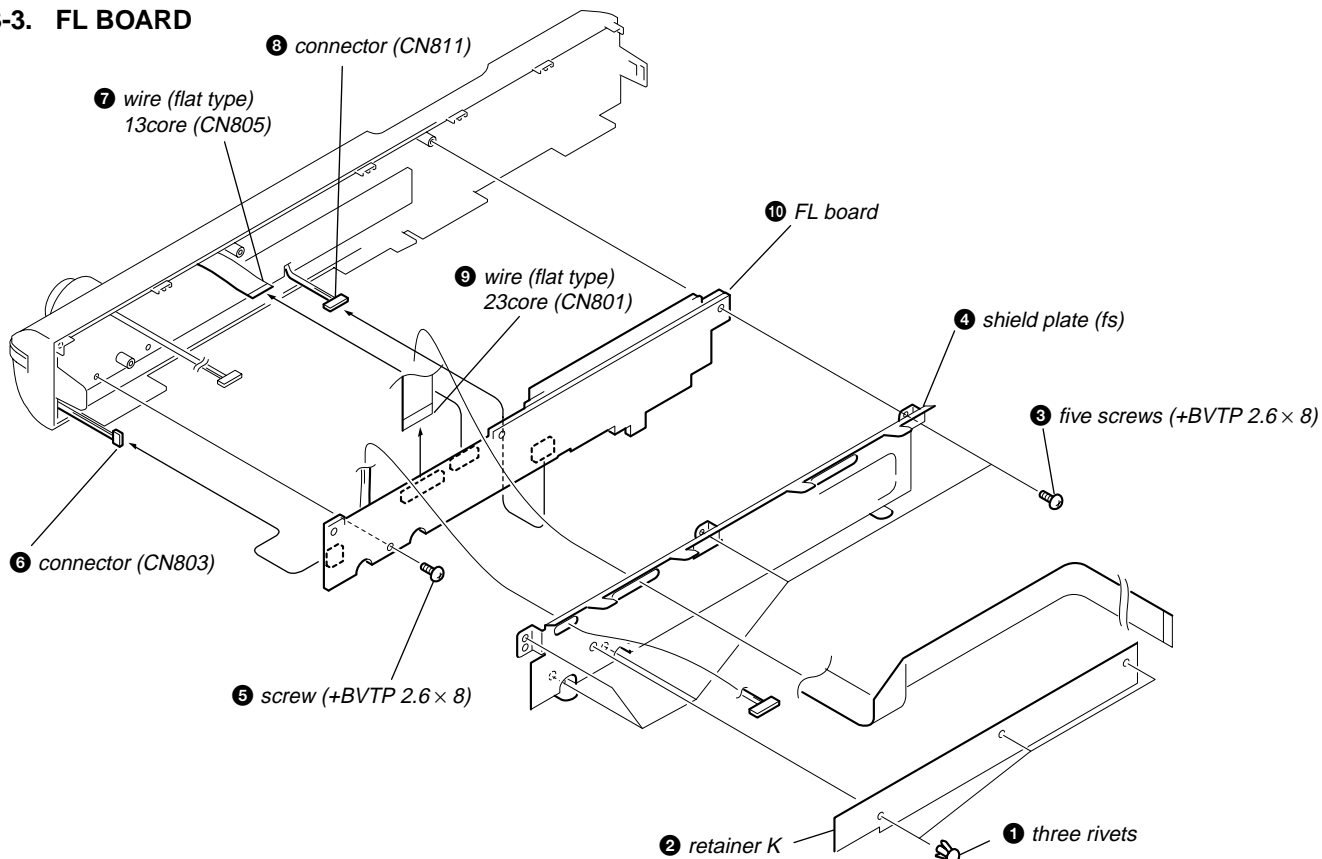


**Note:** Follow the disassembly procedure in the numerical order given.

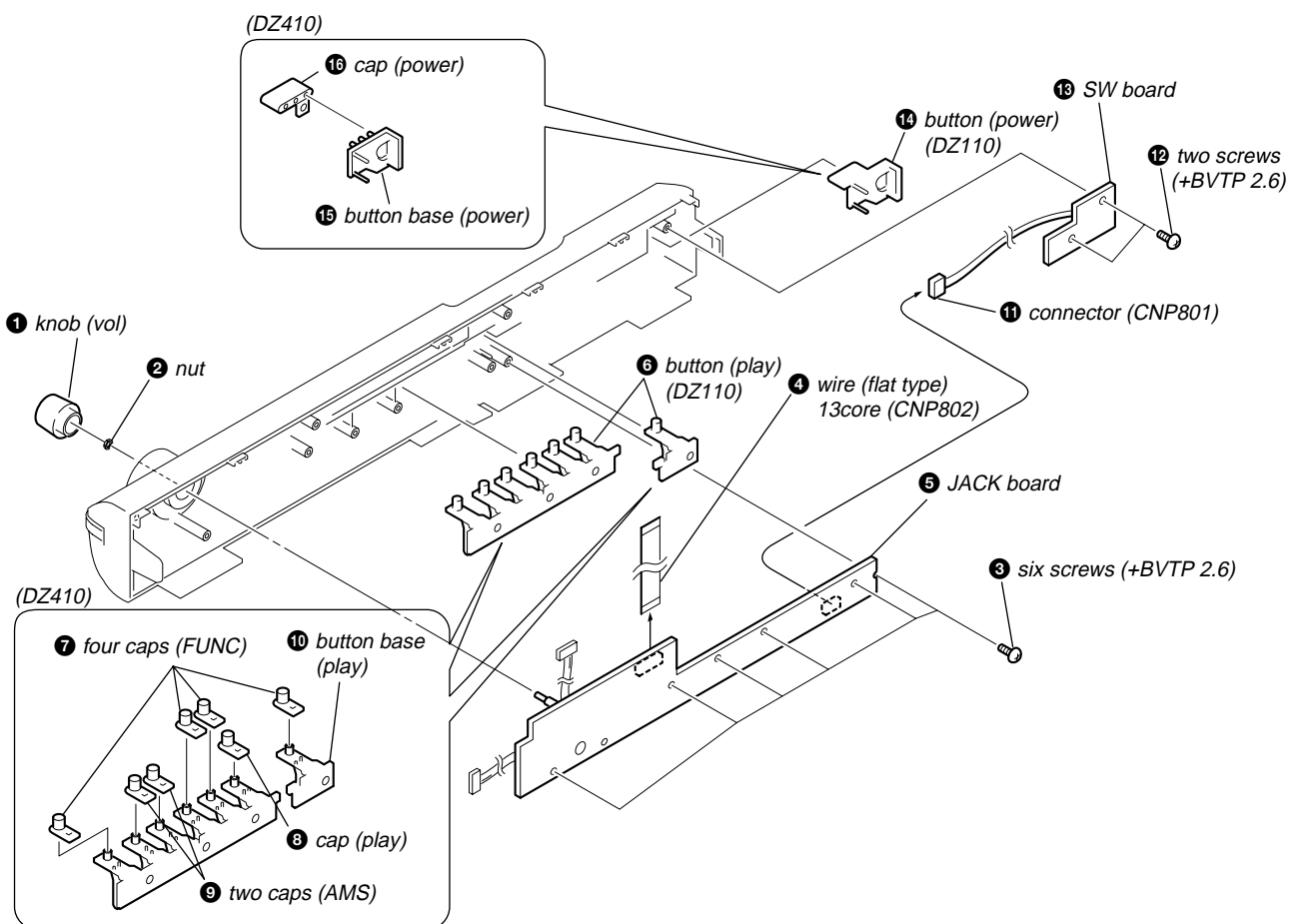
**3-2. CASE, FRONT PANEL ASSY**



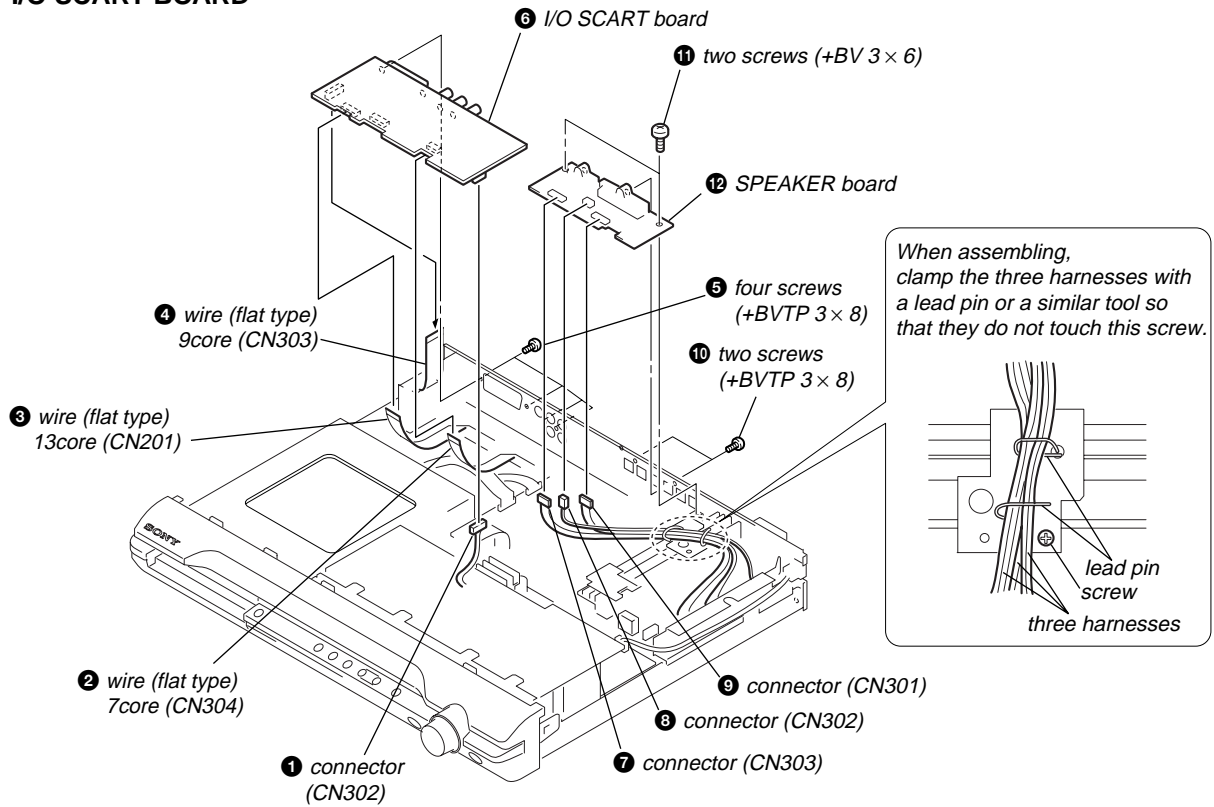
## 3-3. FL BOARD



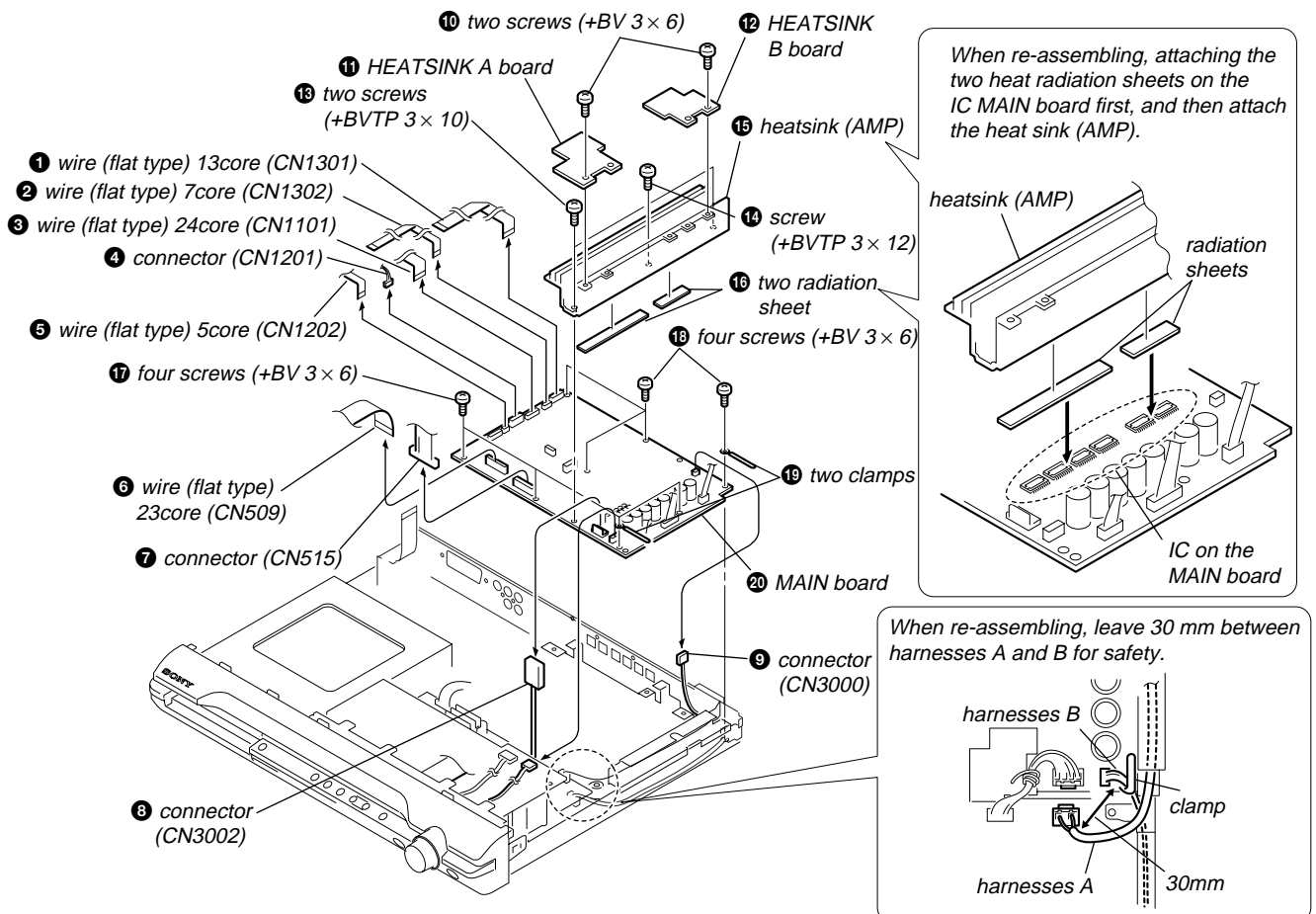
## 3-4. JACK BOARD, SW BOARD



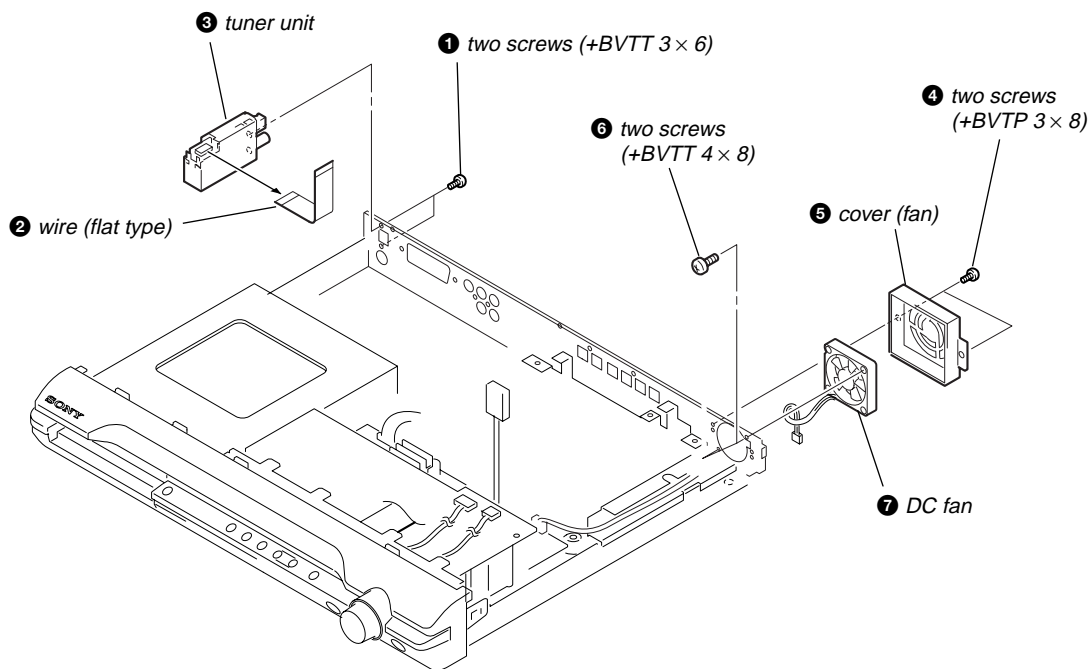
3-5. I/O SCART BOARD



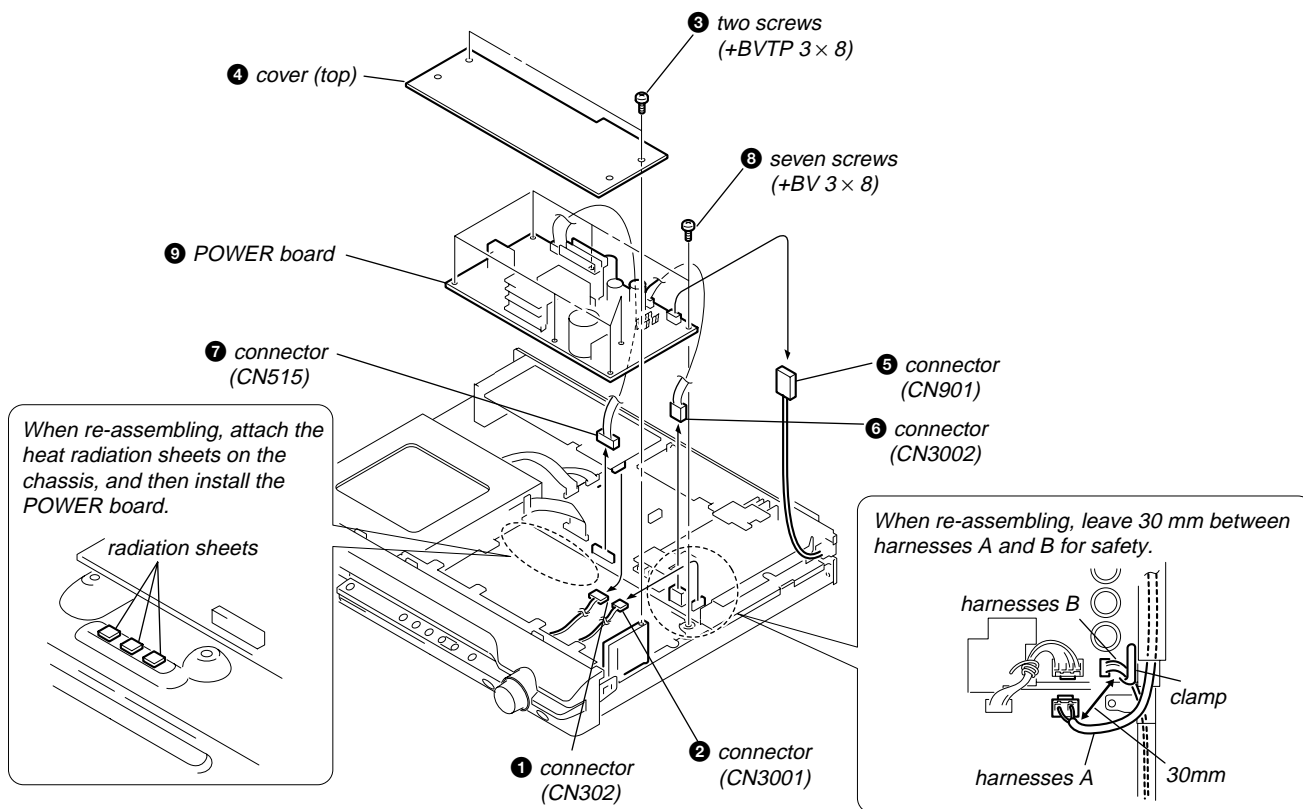
3-6. MAIN BOARD



3-7. DC FAN, TUNER UNIT

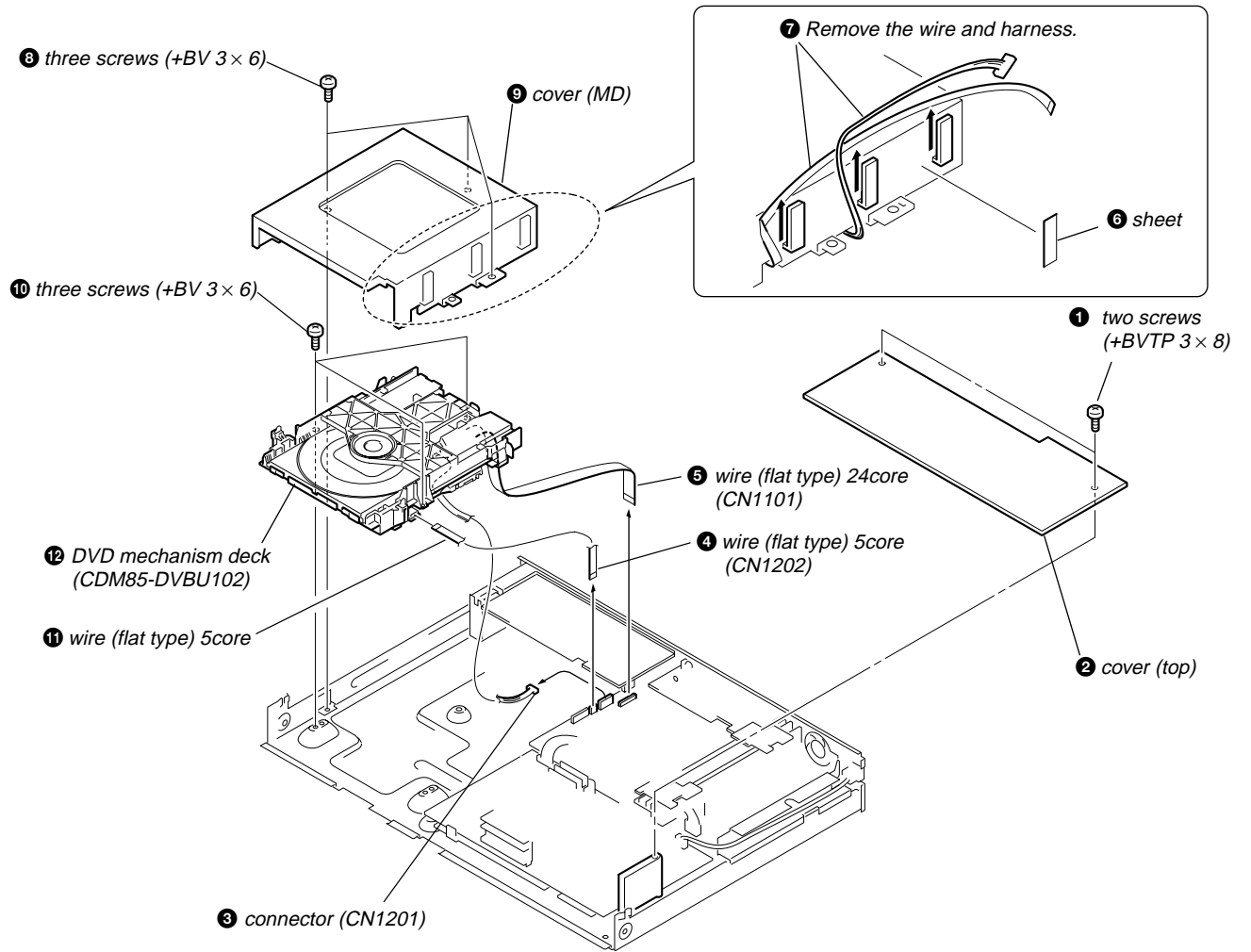


3-8. POWER BOARD

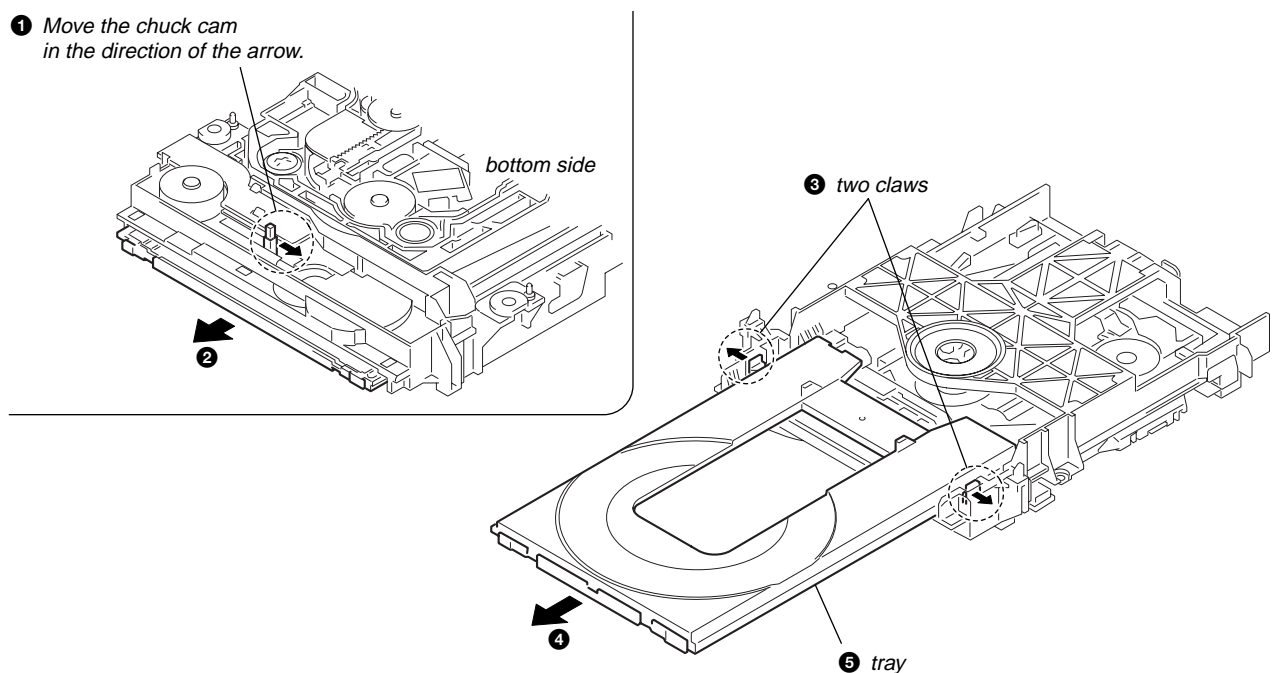




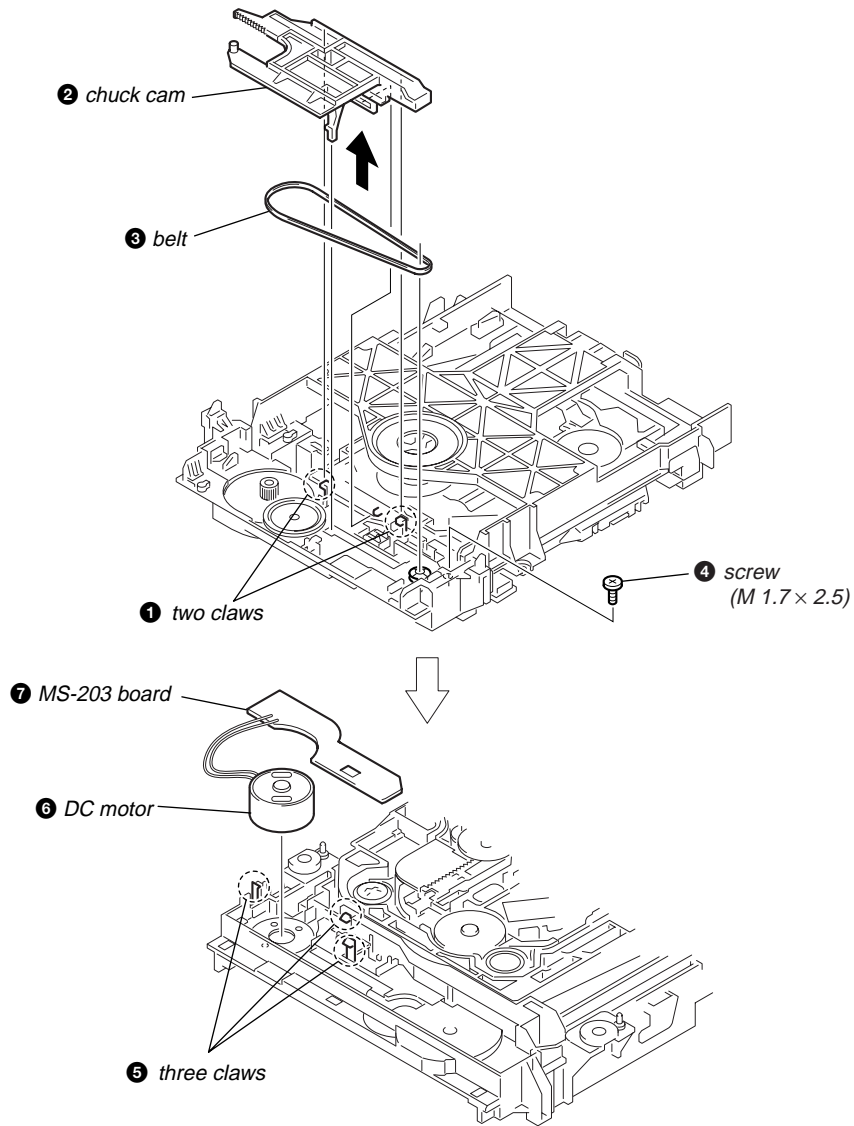
3-9. DVD MECHANISM DECK (CDM85-DVBU102)



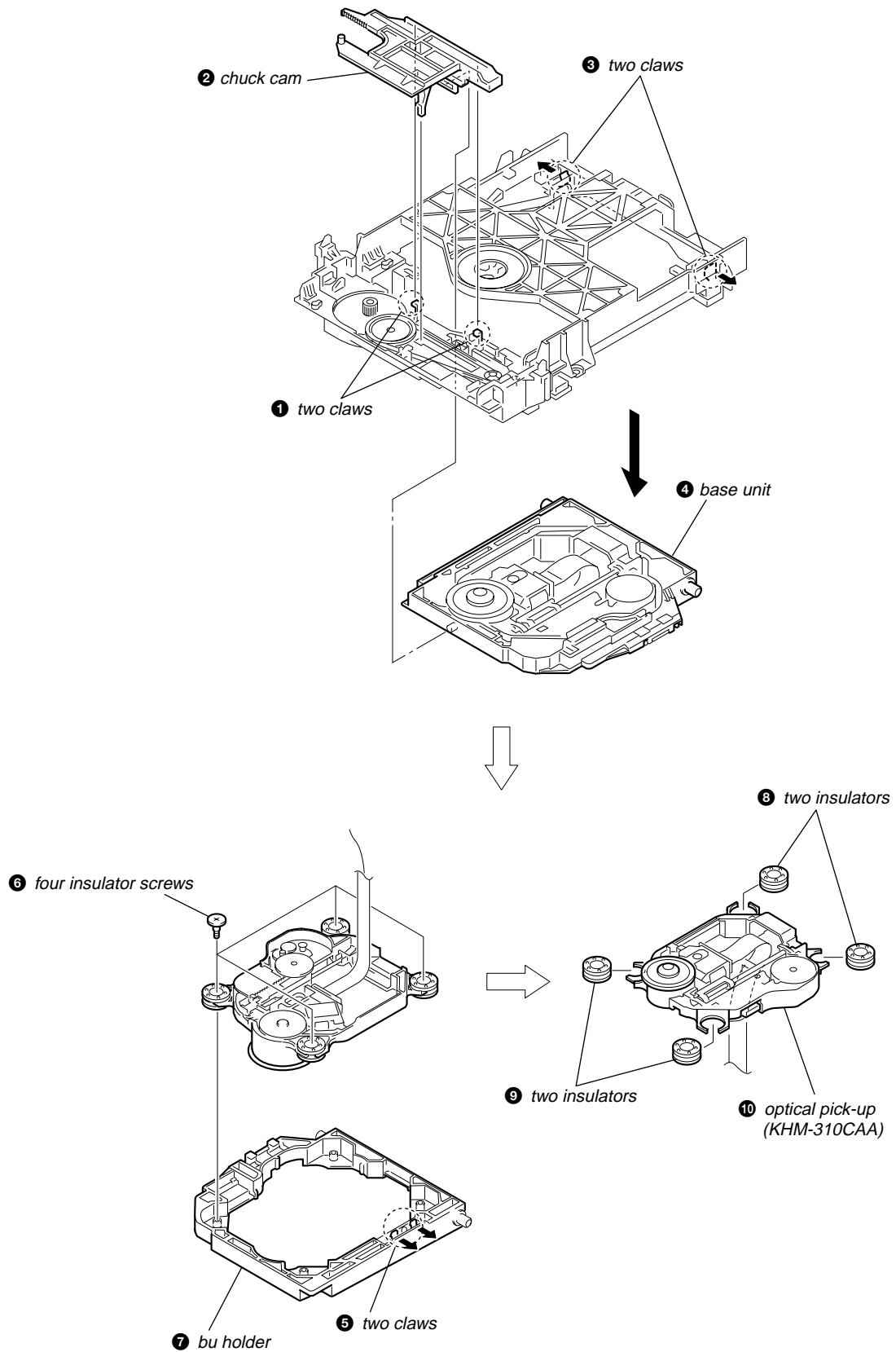
3-10. TRAY



## 3-11. BELT, MS-203 BOARD



3-12. OPTICAL PICK-UP (KHM-310CAA)



## SECTION 4 TEST MODE

**Note 1:** Regarding the notification symbol “R”  
Because the number of the operating buttons of this product are limited, some operations require use of the operating buttons of the remote commander. When a specific operation requires use of the operating buttons of the remote commander, “R” is added to the specific operating procedure in this manual. Example “R”. The button of remote commander.

**Note 2:** Incorrect operations may be performed if the test mode is not entered properly.  
In this case, press the button to turn the power off, and retry to enter the test mode.

### 1. Cold Reset

- The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customers.

#### Procedure:

- Press the button to turn the power on.
- Press three buttons , and simultaneously.
- When this button is operated, display as “COLD RESET” for a while and all of the settings are reset.

### 2. Panel Test Mode

- This mode is used to check the software version, FL, LED and KEY.

#### 2-1. Display Test Mode

##### Procedure:

- Press the button to turn the power on.
- Press three buttons , and simultaneously.
- When the display test mode is activated, all segments and LEDs are turned on.
- To exit from this mode, press three buttons , and simultaneously.

#### 2-2. Version Test Mode

##### Procedure:

- When the display test mode is activated, press the button and the message “DSX1D” (DZ119), “DSX1F” (DZ410) are displayed, the version test mode is activated.
- Whenever the button is pressed, the display changes in the following order.  
“DSX1D” (Model name) → “XX\*1” (Destination) → MC  
↑  
TM ← DSP ← TA ← ST ← DVD ← UI ← SYS ←
- \*1: Changes depending on destination.
- Press the button and the date of the software production is displayed.
- Press the button again and the version is displayed.
- To exit from this mode, press three buttons , and simultaneously.

#### 2-3. Key Test Mode

##### Procedure:

- When the display test mode is activated, press the button, to select the key test mode.
- To enter the KEY test mode, the fluorescent indicator displays “K0 V0”. Each time a button is pressed, “KEY” value increases. However, once a button is pressed, it is no longer taken into account. When all keys are pressed correctly, “K8 V0” is displayed.
- When the control is turned in the direction of (+), “V0” is changed to “V1”, then ... “V9”.  
When the control is turned in the direction of (-), “V0” is changed to “V9”, then ... “V1”.
- To exit from this mode, press three buttons , and simultaneously.

### 3. Disc Tray Lock

The disc tray lock function for the antitheft of an demonstration disc in the store is equipped.

#### Setting Procedure :

- Press the button to turn the set on.
- Press the button to set DVD function.
- Insert a disc.
- Press the button and the button simultaneously for five seconds.
- The message “LOCKED” is displayed and the tray is locked.

#### Releasing Procedure :

- Press the button and the button simultaneously for five seconds again.
- The message “UNLOCKED” is displayed and the tray is unlocked.

**Note:** When “LOCKED” is displayed, the slot lock is not released by turning power on/off with the button.

### 4. DVD Ship Mode

- Use this mode when returning the set to the customer after repair.

#### Procedure:

- Press the button to turn the set on.
- Press the button to set the function “DVD”.
- Remove all discs, and then press two buttons and simultaneously.
- After a message “MECHA LOCK” is displayed on the fluorescent indicator tube, pull out the AC plug.
- To exit from this mode, press the button to turn the set on.

### 5. AM Step Change

- A step of AM channels can be changed over between 9 kHz and 10 kHz.

#### Procedure:

- Press the button to turn the set ON.
- Select the function “TUNER”, and press button to select the BAND “AM”.
- Press the button to turn the set OFF.
- Press two buttons and simultaneously, and the display of fluorescent indicator tube changes to “AM 9 k STEP” or “AM 10 k STEP”, and thus the channel step is changed over.

### 6. Volume Test Mode

#### Procedure:

- Press the button to turn the power on.
- Press three buttons , and simultaneously.
- The message “VOLUME MAX” is displayed, when the control is turned in the direction of (+).  
The message “VOLUME MIN” is displayed, when the control is turned in the direction of (-).
- To exit from this mode, press the button to turn the set off.

### 7. Product Out

This mode moves the optical pick-up to the position durable to vibration and clears all data including preset data stored in the RAM to initial conditions. Use this mode when returning the set to the customer after repair.

#### Procedure:

- Press the button to turn the power on.
- Press the button to set the function “DVD”.
- Remove all discs, and then press three buttons , and simultaneously.
- After the “STANDBY” blinking display finishes, the message “MECHA LOCK” is displayed on the fluorescent indicator tube disconnect the AC power plug, then the ship mode is set.

**DVD SECTION**

**8-1. GENERAL DESCRIPTION**

The IOP measurement allows you to make diagnosis and adjustment simply by using the remote commander and monitor TV. The instructions, diagnosis results, etc. are given on the on-screen display (OSD).

Be sure to execute the IOP measurement when a BU (Base Unit) is replaced.

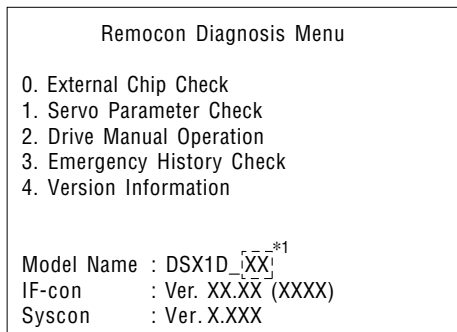
**8-2. HOW TO ENTER TEST MODE**

While pressing the  and  buttons simultaneously, turn **VOLUME +** with the DVD player in power on.

The Test Mode starts, then the menu shown below will be displayed on the TV screen.

\* The display of the "Model Name" of the "Remocon Diagnosis Menu" change with the model and the destination. Refer to below on the model name.

DZ119 : DSX1D  
DZ410 : DSX1F





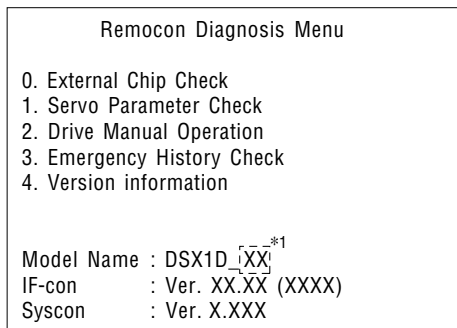
\*1: Changes depending on destination

The menu above is the Remocon Diagnosis Menu screen which consists of five main functions. At the bottom of the menu screen, the model name and IF-con version. To exit from the Test Mode, press the power button on the remote commander.

**8-3. EXECUTING IOP MEASUREMENT**

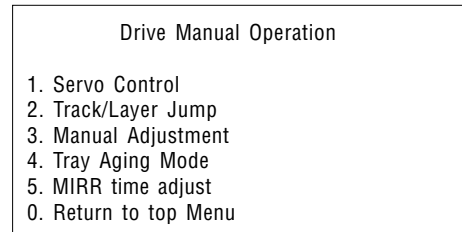
In order to execute IOP measurement, the following standard procedures must be followed.

- (1) In power on, while pressing the  and  buttons simultaneously, turn **VOLUME +**.

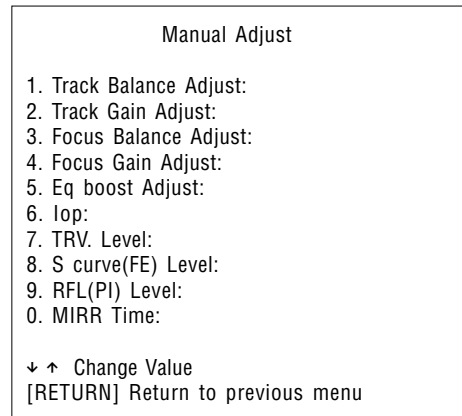


\*1: Changes depending on destination

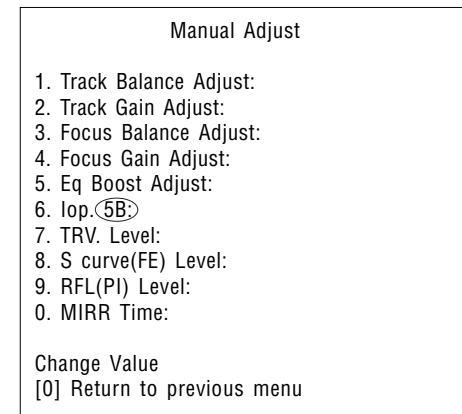
- (2) Select "2. Drive Manual Operation" by pressing the **2 "R"** button on the remote commander. The screen will appear as shown.



- (3) Select "3. Manual Adjustment" by pressing the **3 "R"** button on the remote commander. The screen will appear as shown.



- (4) Select "6.IOP" by pressing the **6 "R"** button on the remote commander.  
(5) Wait until a hexadecimal number appear.



- (6) Convert each data from hexadecimal to decimal using conversion table.  
(7) Please find the label on the rear of the BU (Base Unit). The default IOP value is written in the label.  
(8) Subtract between these two values.  
(9) If the remainder is smaller than 93 (decimal), then it is OK. However if the value is higher than 93, then the BU is defective and need to be change.  
(10) Press the **RETURN "R"** button to return back to previous menu.  
(11) Press the **0 "R"** button to return to Top Menu and power off the DVD Player.

**8-4. EMERGENCY HISTORY**

To check the emergency history, please follow the following procedure.

- (1) From the Top Menu of Remocon Diagnosis Menu, select “3. Emergency History Check” by pressing the [3 “R”] button on the remote commander. The following screen appears on the on-screen display.

Emg.History Check			
Laser Hours	CD DVD	999h 999h	59min 59min
1. 01 05 04 04		00 92 46	00
00 00 00 00		00 00 23	45
2. 02 02 01 01		00 A9 4B	00
00 00 00 00		00 00 23	45
<input type="button" value="Next"/> Next Page <input type="button" value="Prev"/> Prev Page <input type="button" value="0"/> Return to Top Menu			

- (2) You can check the total time when the laser is turned on during playback of DVD and CD from the above menu. The maximum time, which can be displayed are 999h 59min.
- (3) You can check the error code of latest 10 emergency history from the above menu. To view the previous or next page of emergency history, press [◀◀ “R”] or [▶▶ “R”] on the remote commander. The error code consists of the following three blocks. The first block indicates the error code. The second block indicates the parameter and the third block indicates the time of error code as shown below.

**• Error Code**

Emg.History Check			
Laser Hours	CD DVD	999h 999h	59min 59min
1. <sup>*1</sup> 01 <sup>*2</sup> 05 04 04		00 92 46	00
00 00 00 00		00 00 23	45 <sup>*3</sup>
2. 02 02 01 01		00 A9 4B	00
00 00 00 00		00 00 23	45
<input type="button" value="Next"/> Next Page <input type="button" value="Prev"/> Prev Page <input type="button" value="0"/> Return to Top Menu			

- \*1 : Error Code
- \*2 : Parameter of error code
- \*3 : Time of error code

**The meaning of error code is as below:**

- 01: Communication error (No reply from syscon)
- 02: Syscon hung up
- 03: Power OFF request when syscon hung up
- 19: Thermal shutdown
- 24: MoveSledHome error
- 25: Mechanical move error (5 Changer)
- 26: Mechanical move stack error
- 30: DC motor adjustment error
- 31: DPD offset adjustment error
- 32: TE balance adjustment error
- 33: TE sensor adjustment error
- 34: TE loop gain adjustment error
- 35: FE loop gain adjustment error
- 36: Bad jitter after adjustment
- 40: Focus NG
- 42: Focus layer jump NG
- 52: Open kick spindle error
- 51: Spindle stop error
- 60: Focus on error
- 61: Seek fail error
- 62: Read Q data/ID error
- 70: Lead in data read fail
- 71: TOC read time out (CD)
- 80: Can't buffering
- 81: Unknown media type

**8-4-1. Clear the Laser Hour**

Press [DISPLAY “R”] button and then press [CLEAR “R”] button. The data for both CD and DVD data are reset.

Emg.History Check			
Laser Hours	CD DVD	0h 0h	0min 0min
1. 01 05 04 04		00 92 46	00
00 00 00 00		00 00 23	45
2. 02 02 01 01		00 A9 4B	00
00 00 00 00		00 00 23	45
<input type="button" value="Next"/> Next Page <input type="button" value="Prev"/> Prev Page <input type="button" value="0"/> Return to Top Menu			

**8-4-2. Clear the Emergency History**

Press [TOP MENU “R”] button and then press [CLEAR “R”] button. The error code for all emergency history would be reset.

Emg.History Check			
Laser Hours	CD DVD	999h 999h	59min 59min
1. 00 00 00 00		00 00 00	00
00 00 00 00		00 00 00	00
2. 00 00 00 00		00 00 00	00
00 00 00 00		00 00 00	00
<input type="button" value="Next"/> Next Page <input type="button" value="Prev"/> Prev Page <input type="button" value="0"/> Return to Top Menu			

**8-4-3. Clear the Initialize Setup Data**

Press [MENU “R”] button and then press [CLEAR “R”] button on the remote commander.

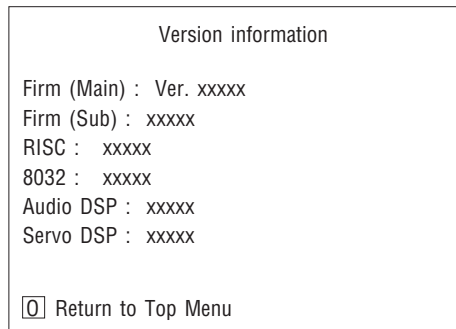
#### 8-4-4. Return to the Top Menu of Remocon Diagnosis Menu

Press  button on the remote commander.

##### • Check Version Information

To check the version information, please follow the following procedure.

- (1) From the Top Menu of Remocon Diagnosis Menu, select "4. Version Information" by pressing the  button on the remote commander. The following screen appears on the on-screen display.



To return to the Top Menu of Remocon Diagnosis Menu, press  on the remote commander.

## SECTION 5 ELECTRICAL ADJUSTMENT

### DVD SECTION

When the base unit is replaced, perform the adjustment and the measurement as shown below in this order.

EXECUTING IOP MEASUREMENT (See page 21)

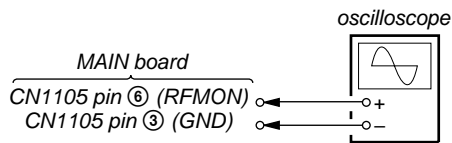
#### [TEST DISC LIST]

Be sure to use the DVD disc that matches the signal standards of your region.

- CD      YEDS-18            (Part No.: 3-702-101-01)  
            PATD-012            (Part No.: 4-225-203-01)
- DVD SL (Single Layer)  
  NTSC : HLX-503            (Part No.: J-6090-069-A)  
            HLX-504            (Part No.: J-6090-088-A)  
  PAL    : HLX-506            (Part No.: J-6090-077-A)
- DVD DL (Dual Layer)  
  NTSC : HLX-501            (Part No.: J-6090-071-A)  
            HLX-505            (Part No.: J-6090-089-A)  
  PAL    : HLX-507            (Part No.: J-6090-078-A)

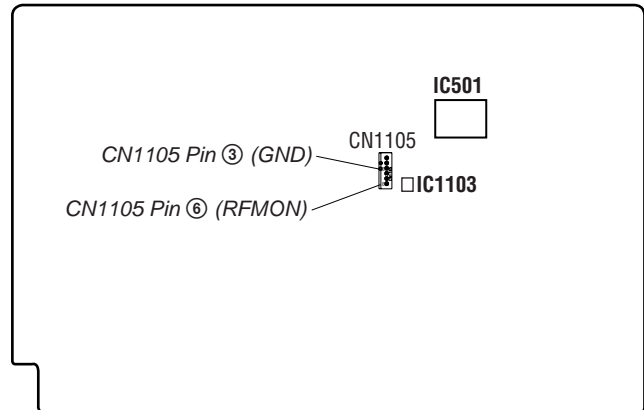
#### [RF Level Check]

Connection:



Checking Location: MAIN board (Side A)

#### [ MAIN BOARD ] (SIDE A)

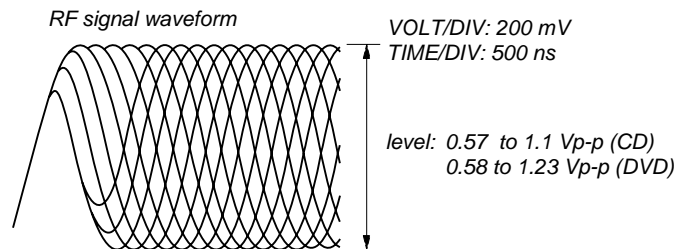


#### Procedure:

1. Connect an oscilloscope to CN1105 pin ⑥ (RFMON) and CN1105 pin ③ (GND) on the MAIN board.
2. Turn the power on.
3. Insert the CD test disc (refer to the TEST DISC LIST), and press the button to play the disc back.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

**Note:** A clear RF signal waveform means that the shape “∩” can be clearly distinguished at the center of the waveform.

5. Eject the CD disc, and insert the DVD SL test disc (refer to the TEST DISC LIST), and press the button to play the disc back.





## SECTION 6 DIAGRAMS

**THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.**  
(In addition to this, the necessary note is printed in each block.)

**For Schematic Diagrams.**

**Note:**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. (p: pF)  
50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.
- $\Delta$  : internal component.
- : panel designation.

**Note:** The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

☆ New part of EEP ROM (IC1103) on the MAIN board cannot be used. Therefore, if the mounted MAIN board (A-1144-739-A, etc.) is replaced, exchange new EEP ROM (IC1103) with that used before the replacement.

- — : B+ Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages and waveforms are dc with respect to ground in service mode.
- Waveforms are taken with a oscilloscope.  
Voltage variations may be noted due to normal production tolerances.
- no mark : DVD STOP  
\* : Impossible to measure
- Voltages are taken with VOM (Input impedance 10 M $\Omega$ ).
- Circled numbers refer to waveforms.
- Signal path.
  - ⇨ : AUDIO
  - ⇨ : CD PLAY
  - ⇨ : DVD PLAY
  - ⇨ : SACD PLAY
  - ⇨ : TUNER
  - ⇨ : VIDEO
  - ⇨ : Y
  - ⇨ : COMPONENT VIDEO
  - ⇨ : R, G, B
  - ⇨ : AUDIO IN

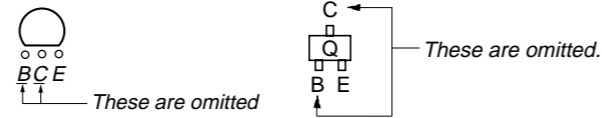
**For Printed Wiring Boards.**

**Note:**

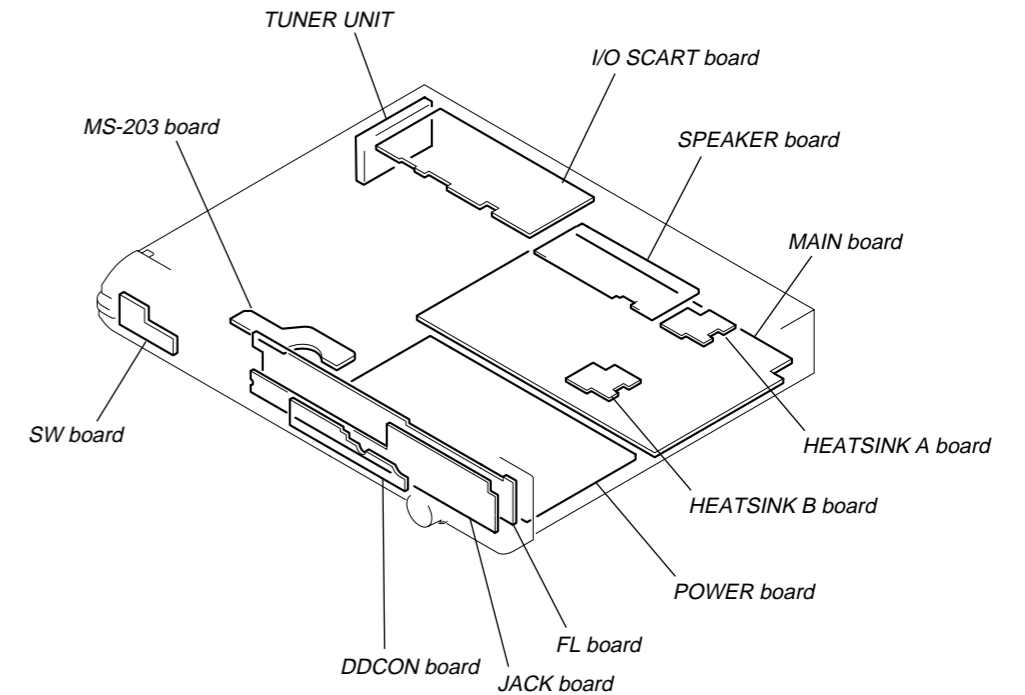
- : parts extracted from the component side.
- : Through hole.
- : Pattern from the side which enables seeing.  
(The other layers' patterns are not indicated.)

**Caution:**  
Parts face side: Parts on the parts face side seen from (SIDE A) the parts face are indicated.  
Pattern face side: Parts on the pattern face side seen from (SIDE B) the pattern face are indicated.

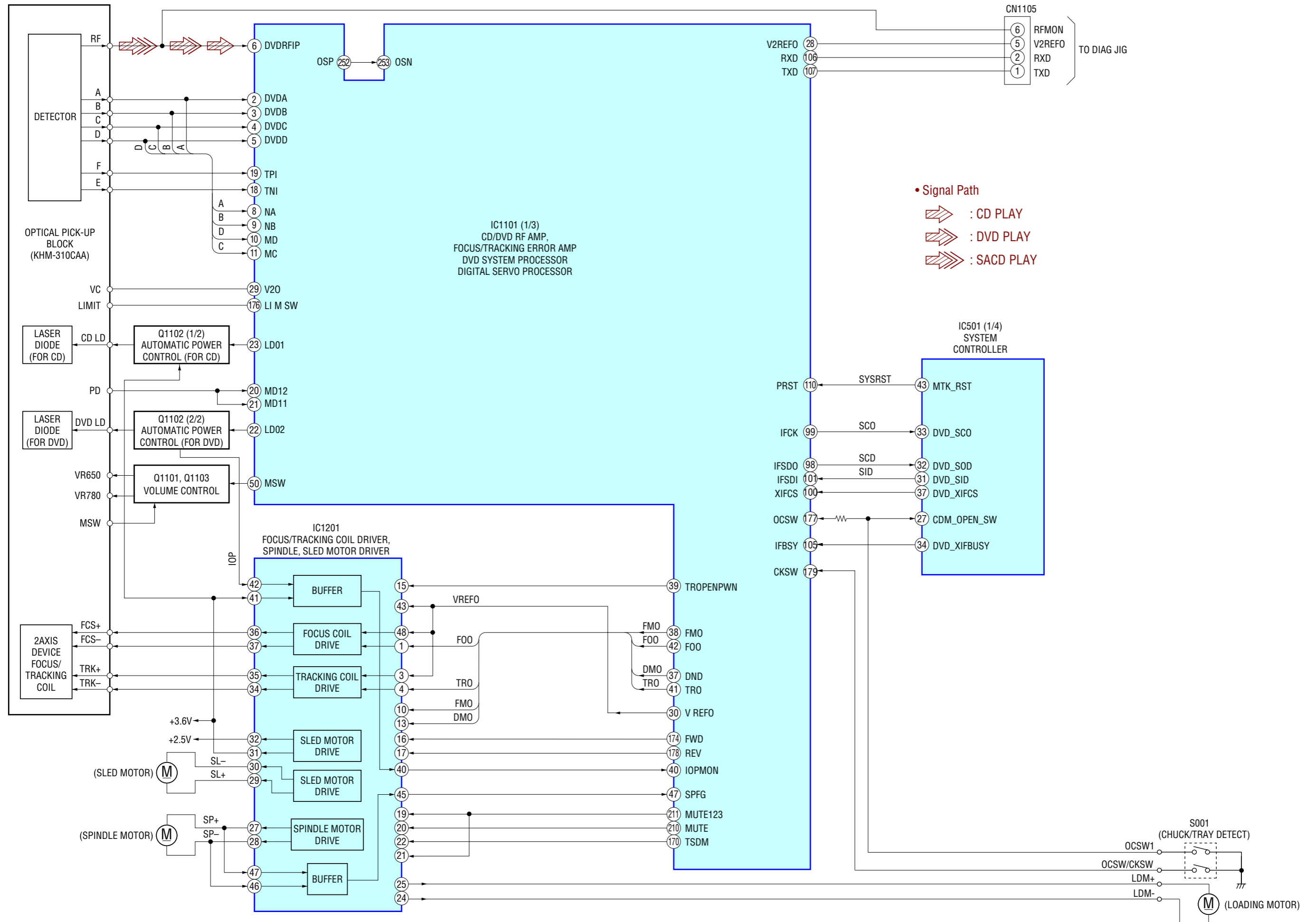
• Indication of transistor.



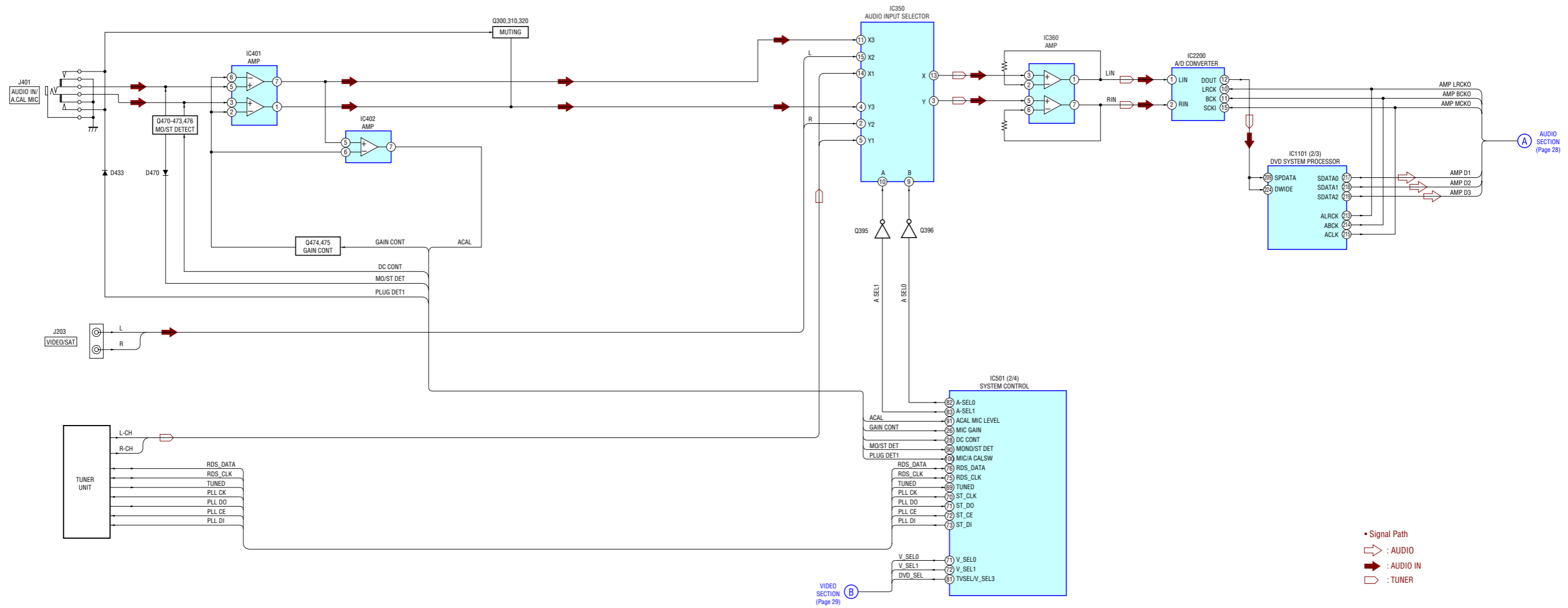
• Circuit Boards Location



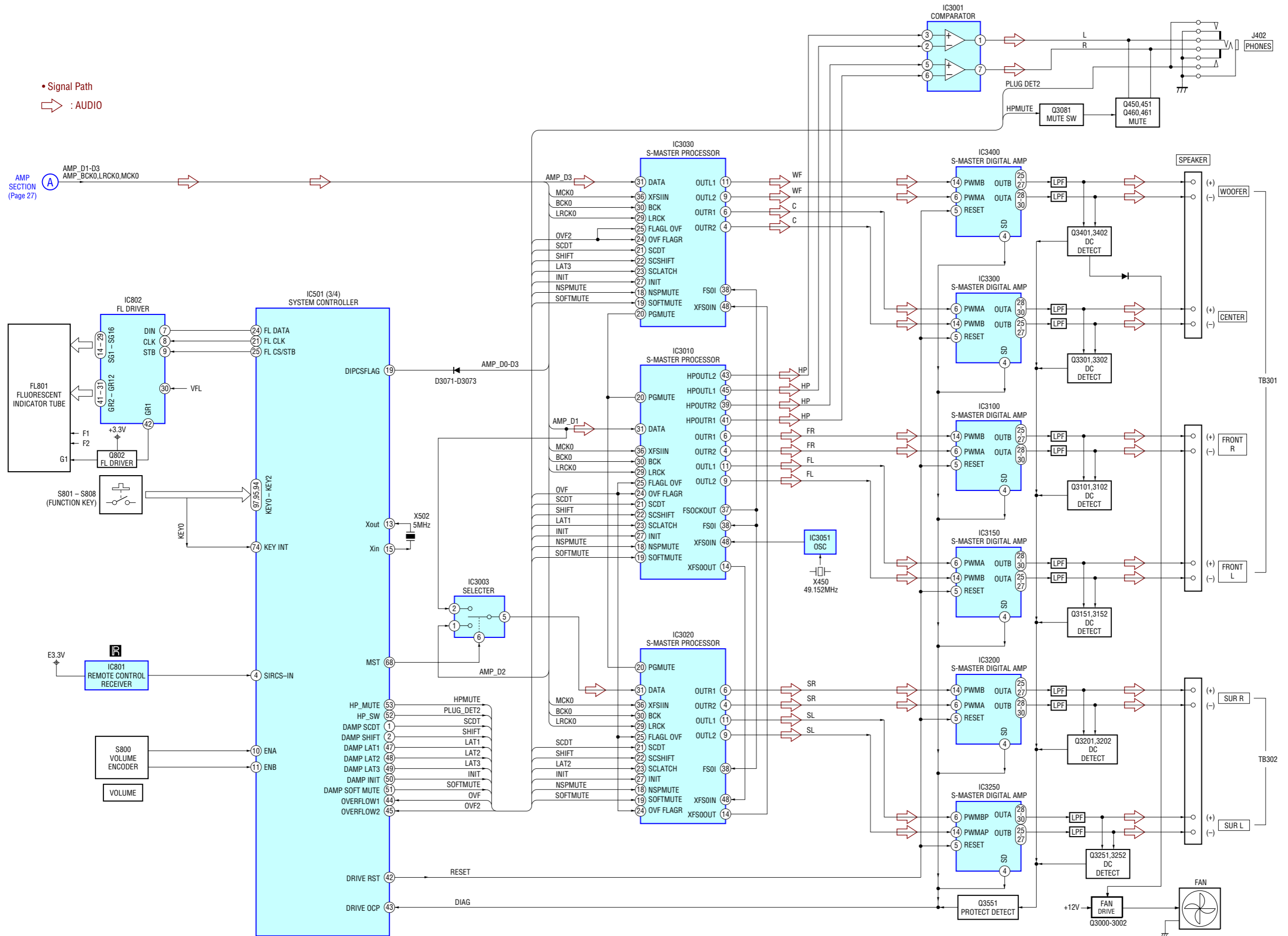
6-1. BLOCK DIAGRAM – RF SECTION –



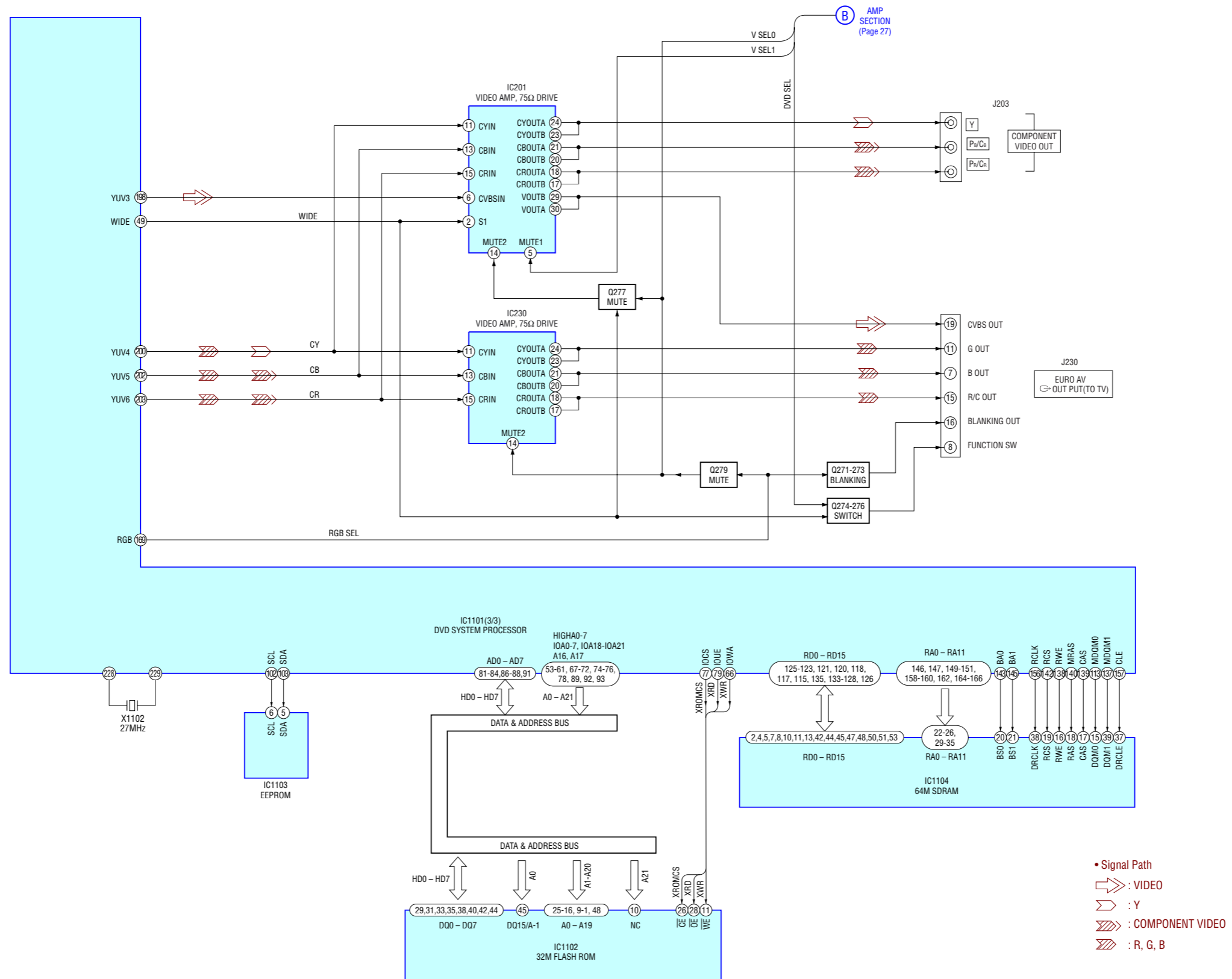
6-2. BLOCK DIAGRAM – AMP SECTION –



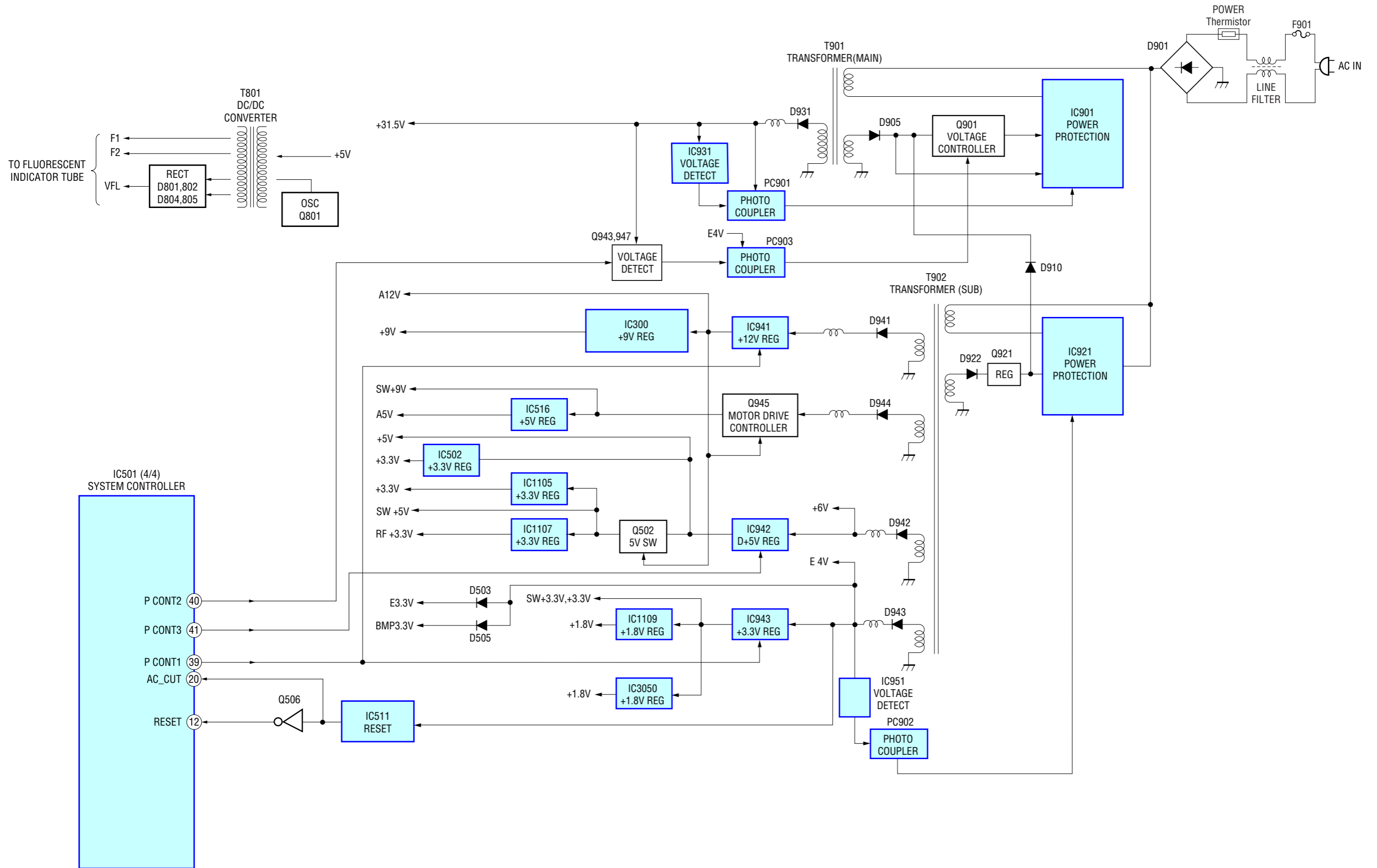
6-3. BLOCK DIAGRAM – AUDIO SECTION –




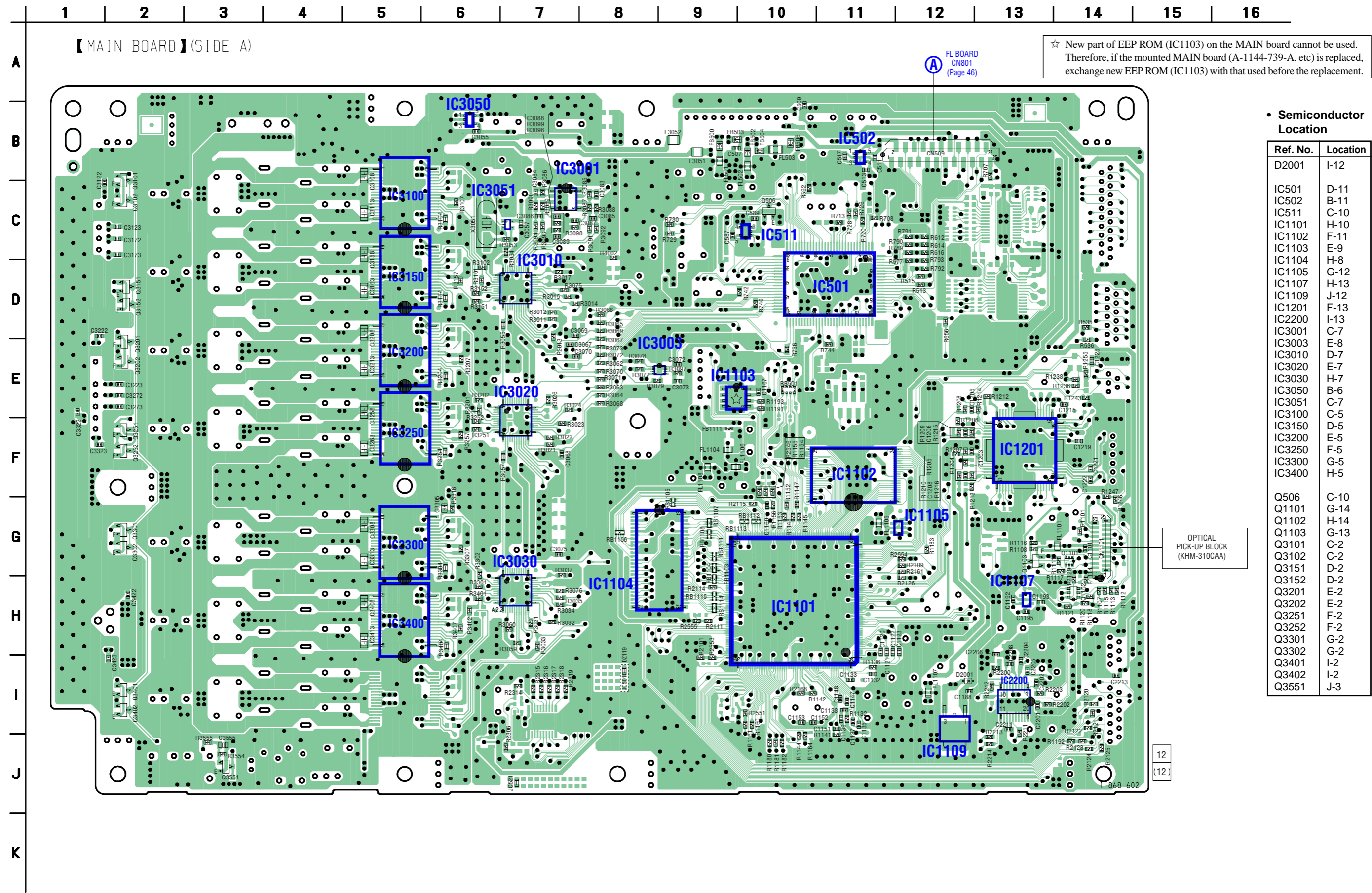
6-4. BLOCK DIAGRAM – VIDEO SECTION –



6-5. BLOCK DIAGRAM – POWER SECTION –

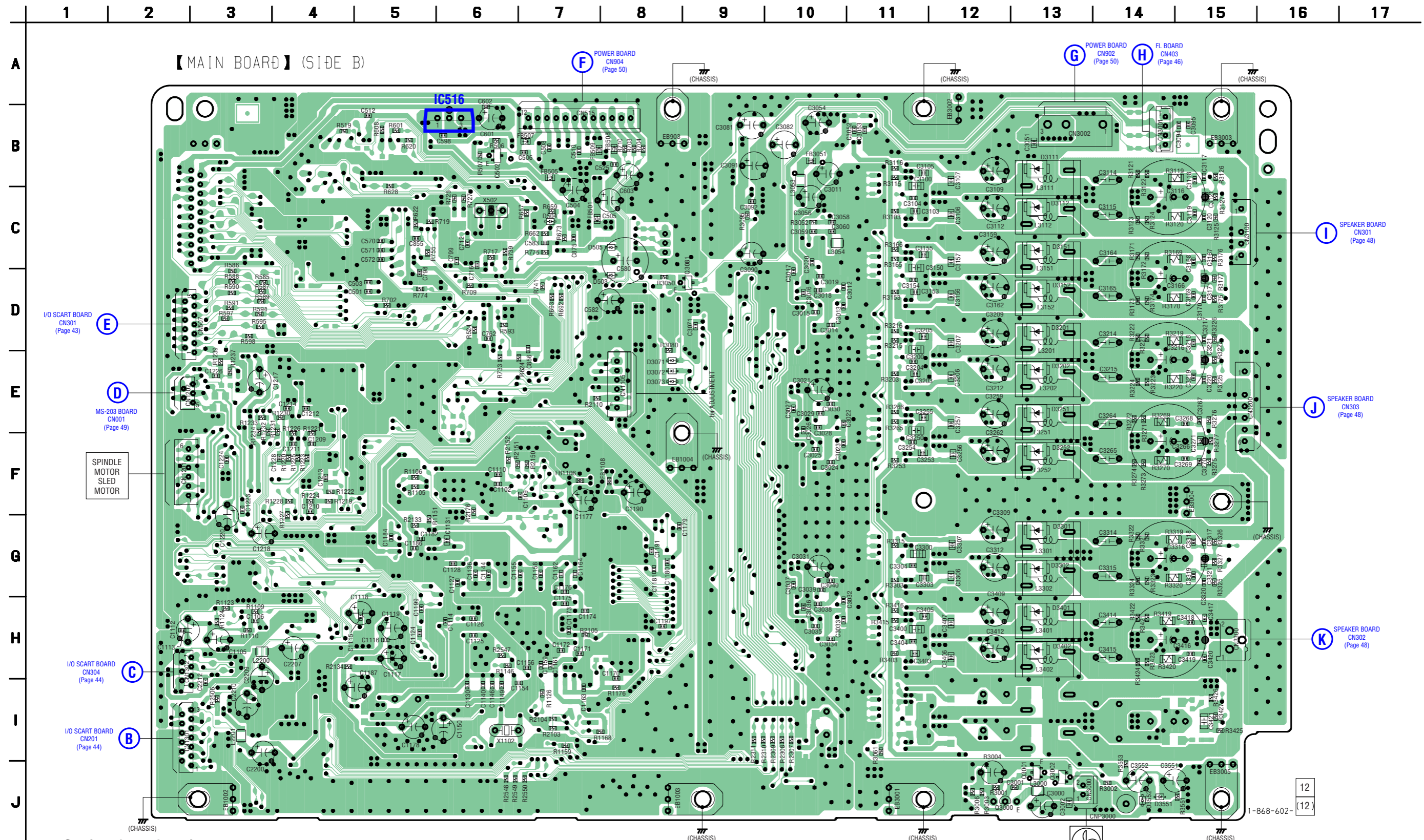


6-6. PRINTED WIRING BOARD – MAIN BOARD (SIDE A) – See page 25 for Circuit Boards Location. : Uses unleaded solder.



• Semiconductor Location

Ref. No.	Location
D2001	I-12
IC501	D-11
IC502	B-11
IC511	C-10
IC1101	H-10
IC1102	F-11
IC1103	E-9
IC1104	H-8
IC1105	G-12
IC1107	H-13
IC1109	J-12
IC1201	F-13
IC2200	I-13
IC3001	C-7
IC3003	E-8
IC3010	D-7
IC3020	E-7
IC3030	H-7
IC3050	B-6
IC3051	C-7
IC3100	C-5
IC3150	D-5
IC3200	E-5
IC3250	F-5
IC3300	G-5
IC3400	H-5
Q506	C-10
Q1101	G-14
Q1102	H-14
Q1103	G-13
Q3101	C-2
Q3102	C-2
Q3151	D-2
Q3152	D-2
Q3201	E-2
Q3202	E-2
Q3251	F-2
Q3252	F-2
Q3301	G-2
Q3302	G-2
Q3401	I-2
Q3402	I-2
Q3551	J-3



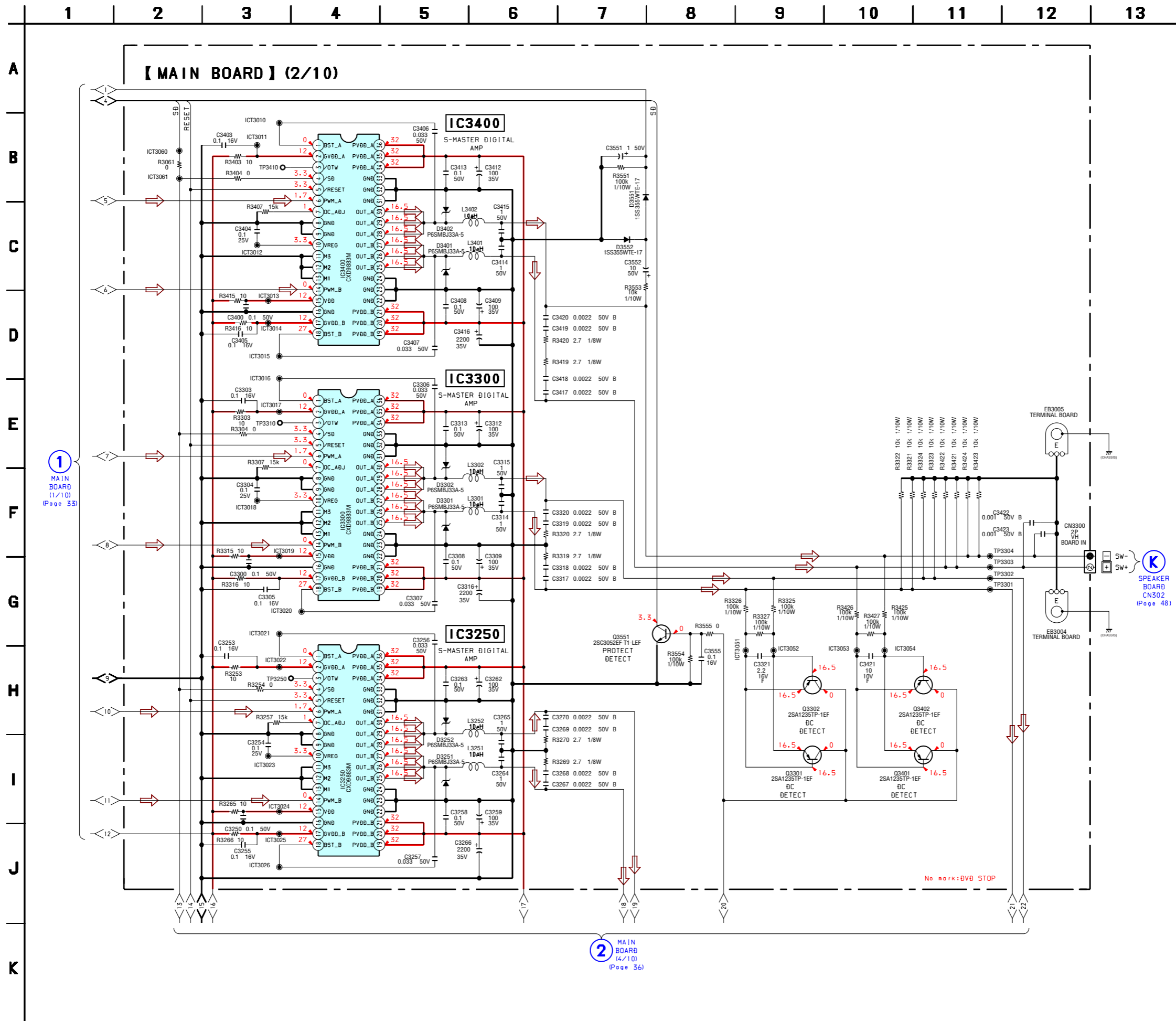
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D503	D-8	D3201	D-13	IC516	B-6
D504	C-7	D3202	E-13	Q502	B-6
D505	C-8	D3251	E-13	Q3000	J-12
D3071	E-8	D3252	F-13	Q3001	J-13
D3072	E-8	D3301	G-13	Q3002	J-13
D3111	B-13	D3401	H-13	Q3081	D-9
D3112	C-13	D3402	H-13		
D3151	C-13	D3551	J-14		
D3152	D-13	D3552	J-14		

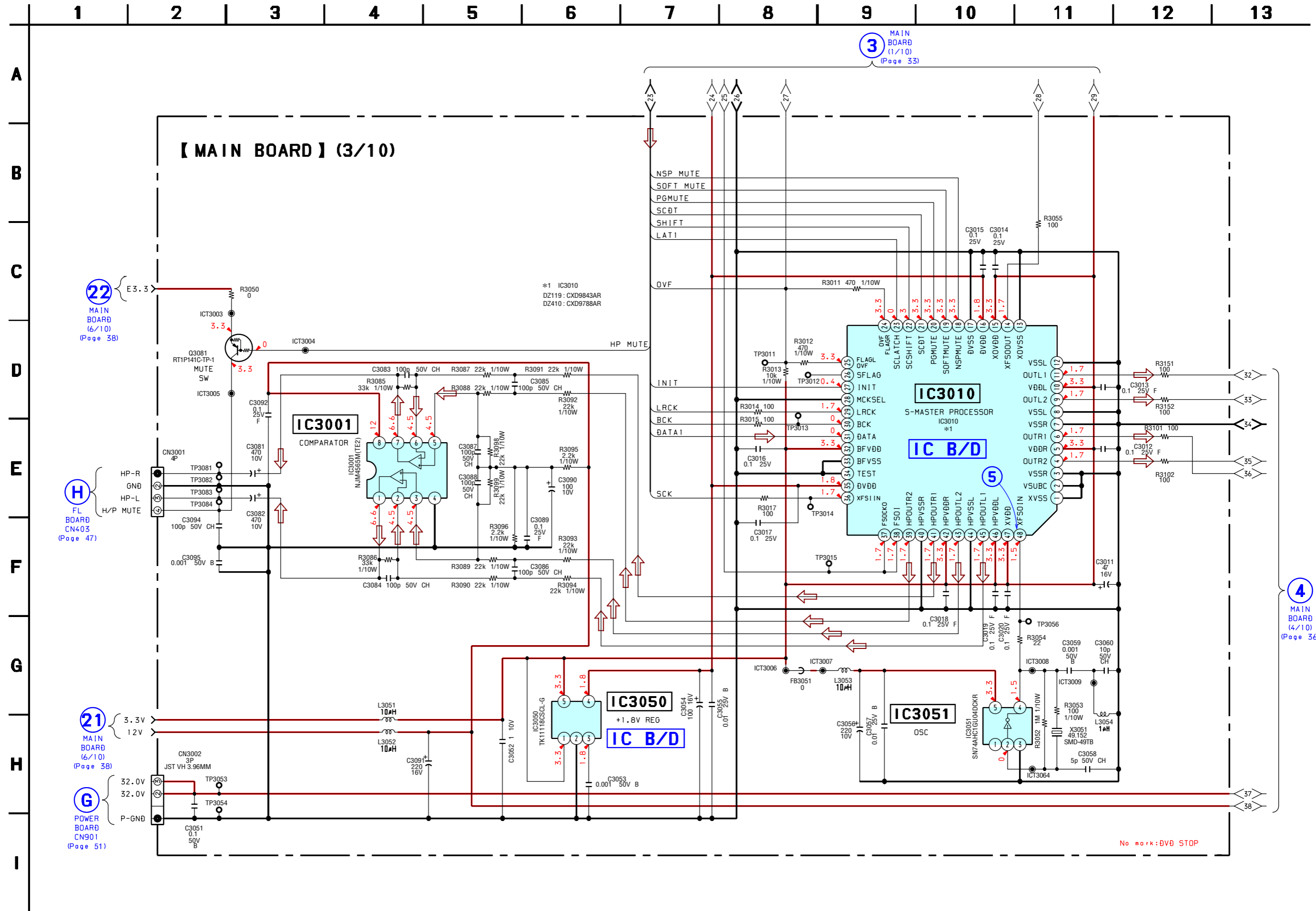




6-9. SCHEMATIC DIAGRAM – MAIN BOARD (2/10) –

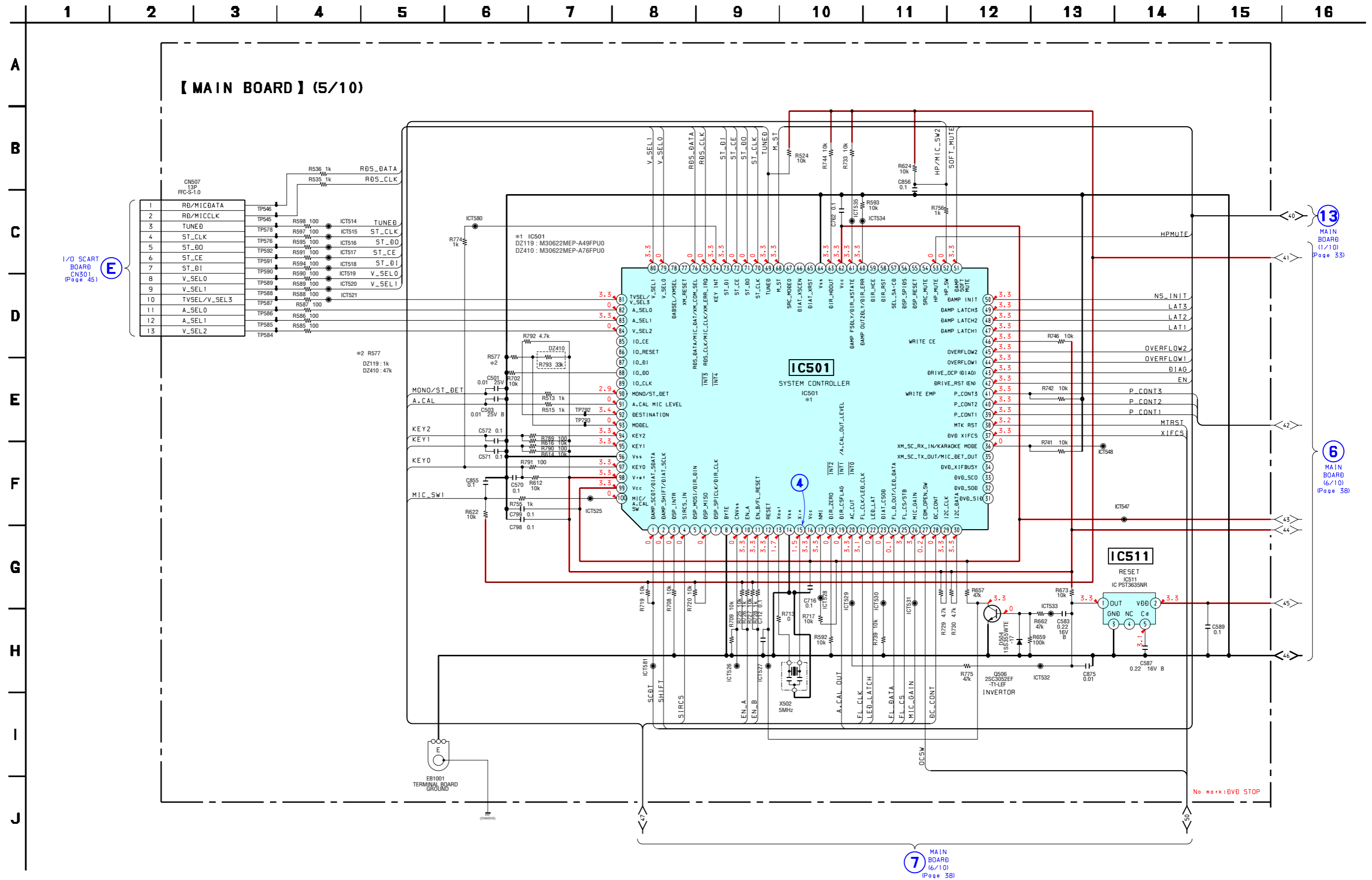


6-10. SCHEMATIC DIAGRAM – MAIN BOARD (3/10) – • See page 25 for Waveform. • See page 52, 53 for IC Block Diagrams.





6-12. SCHEMATIC DIAGRAM – MAIN BOARD (5/10) – • See page 25 for Waveform. • See page 55 for IC Pin Function Description.



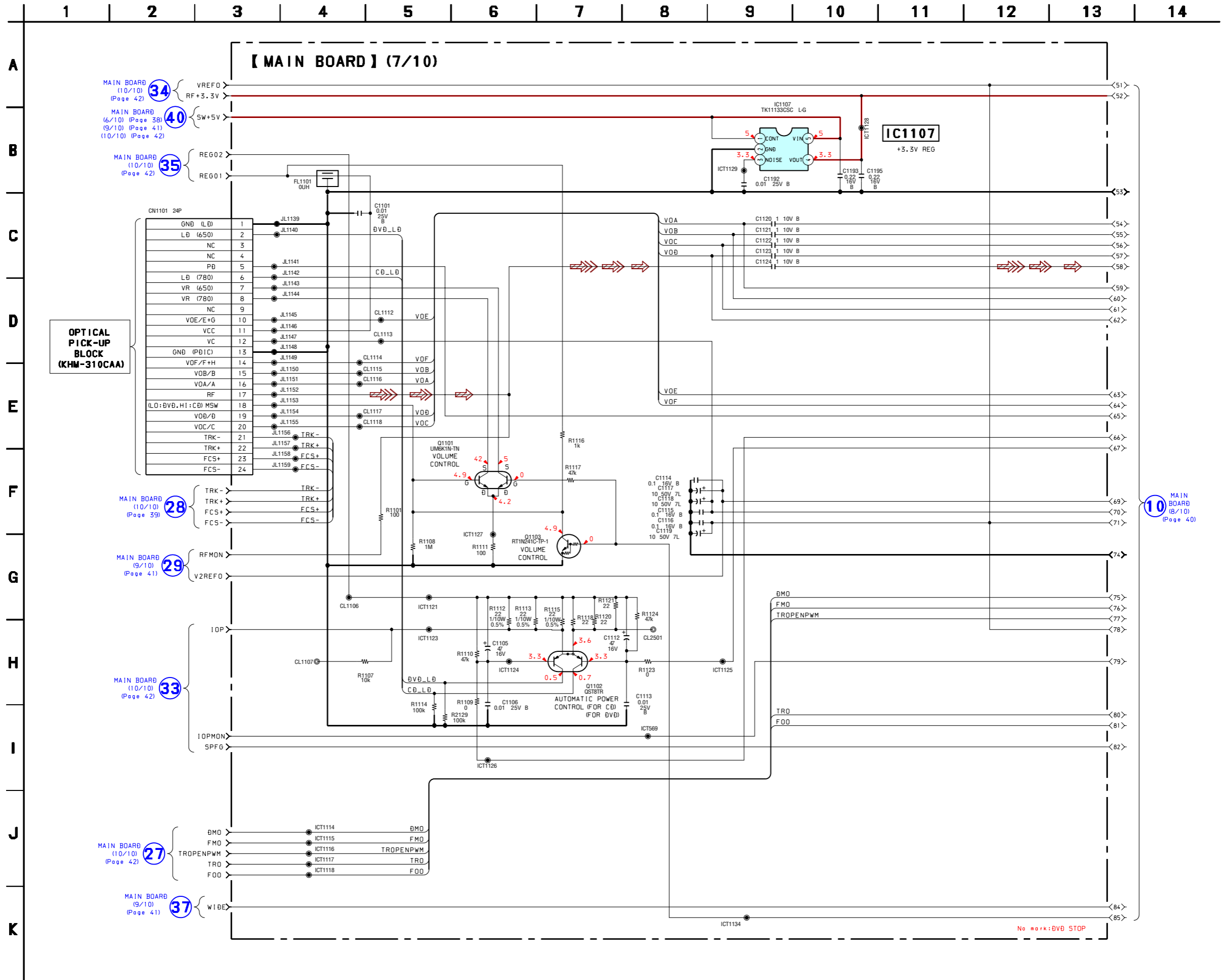
13 MAIN BOARD (1/10) (Page 33)

6 MAIN BOARD (6/10) (Page 38)

7 MAIN BOARD (6/10) (Page 38)



6-14. SCHEMATIC DIAGRAM – MAIN BOARD (7/10) –



OPTICAL PICK-UP BLOCK (KHM-310CAA)

IC1107  
+3.3V REG

Q1101  
UMK119-TN  
VOLUME CONTROL

Q1102  
QST8TR  
AUTOMATIC POWER CONTROL (FOR CD) (FOR DVD)

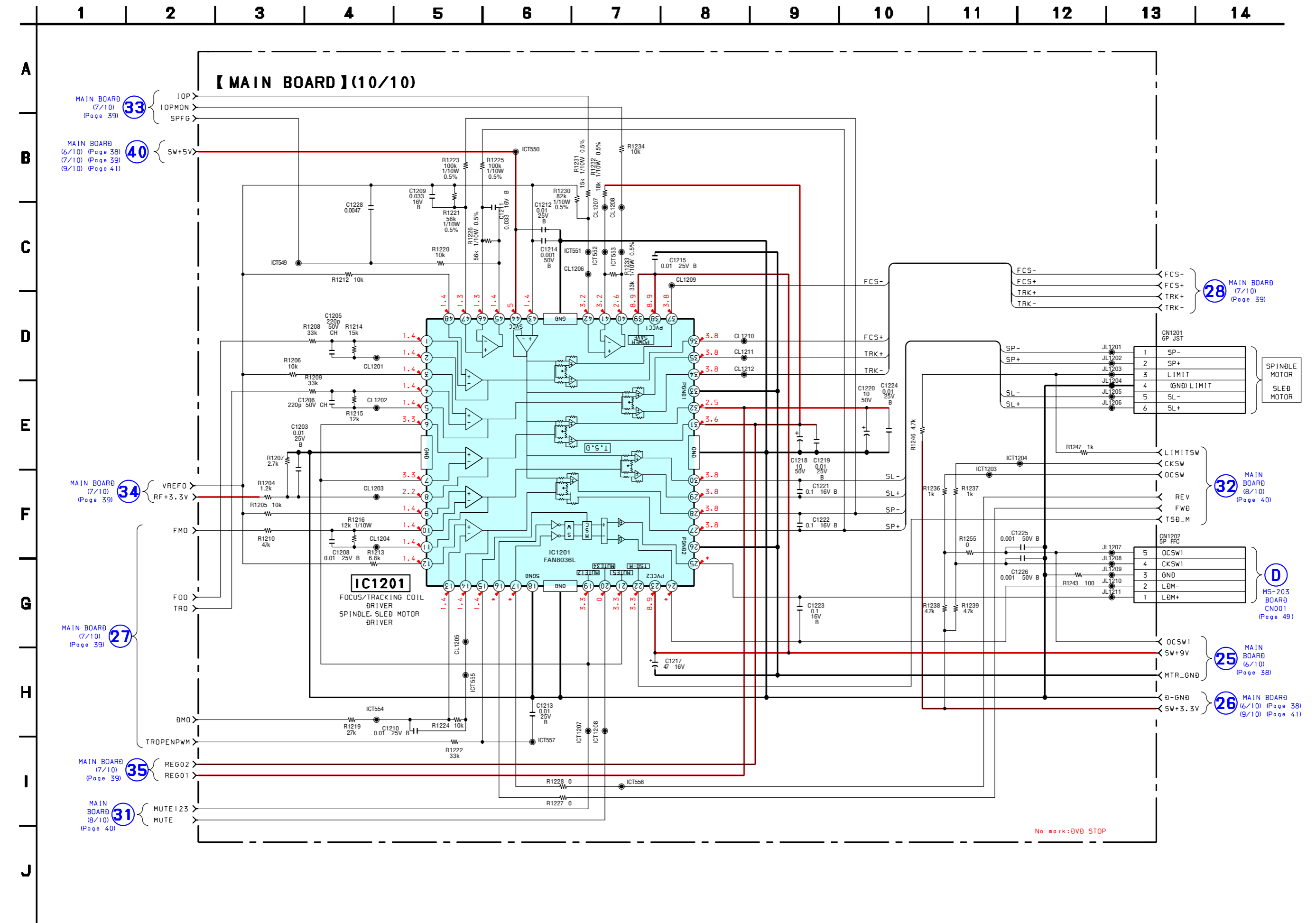
10 MAIN BOARD (8/10) (Page 40)

No mark: DVD STOP

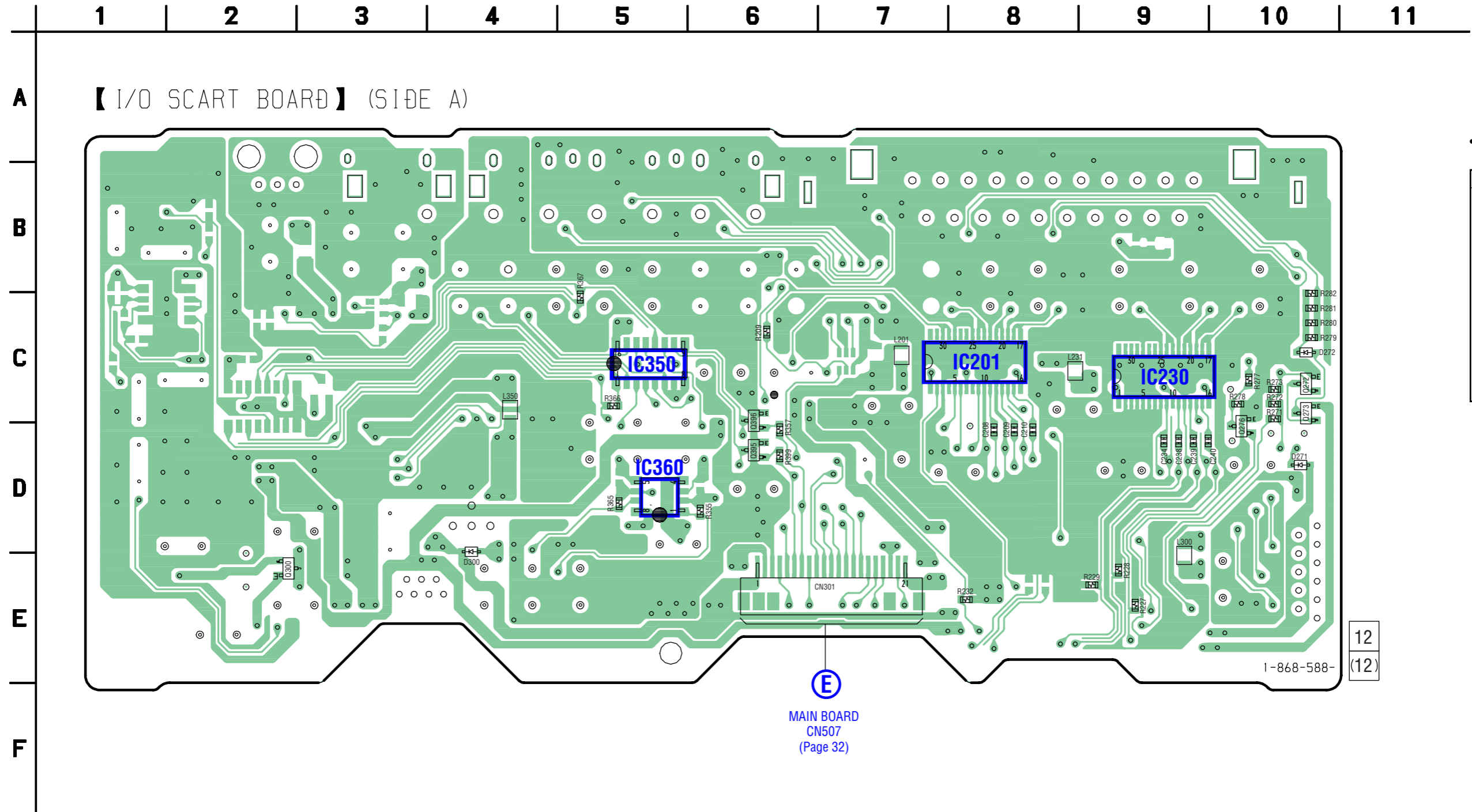








6-18. PRINTED WIRING BOARD – I/O SCART BOARD (SIDE A) – • See page 25 for Circuit Boards Location.  :Uses unleaded solder.

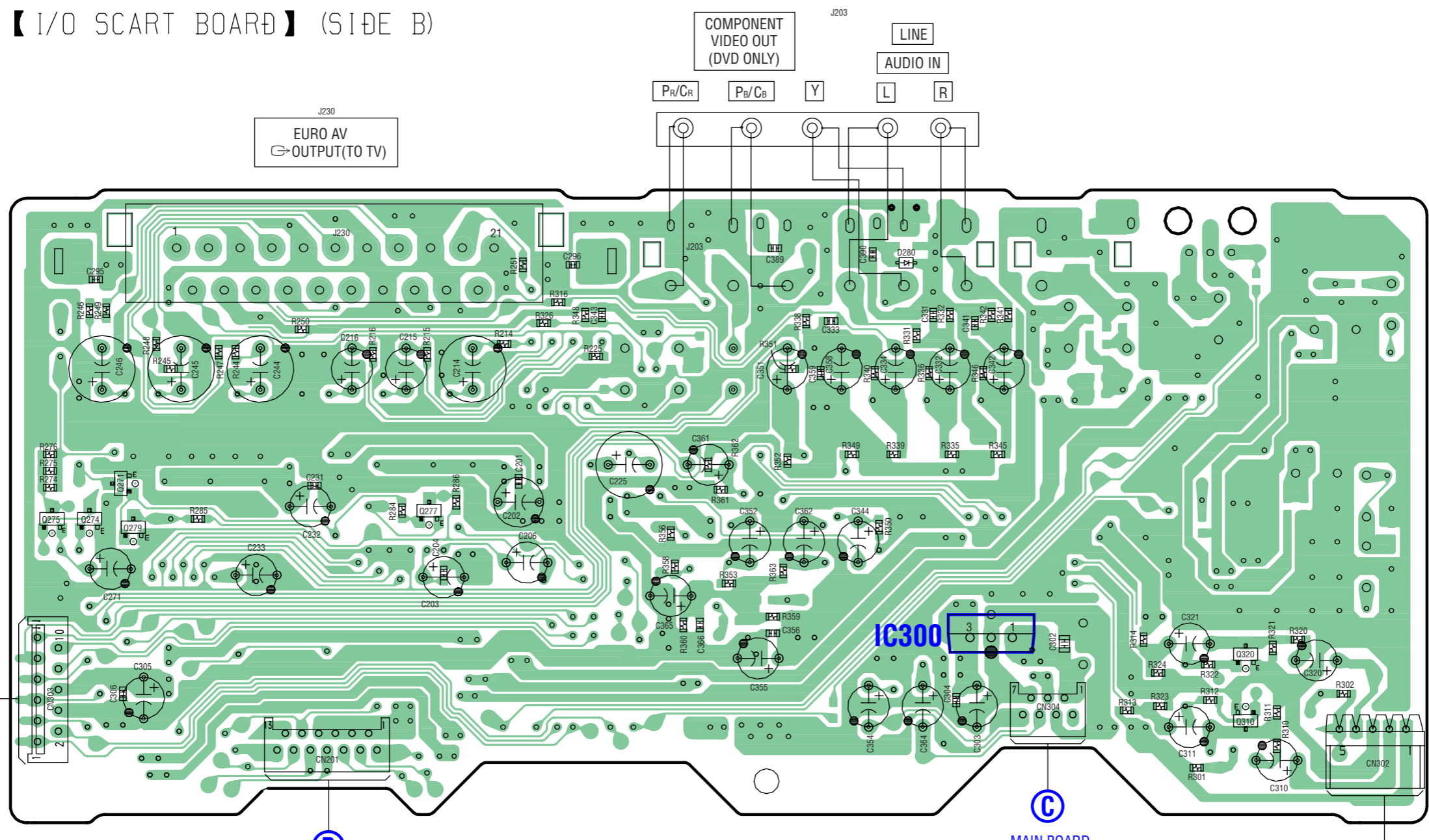


• Semiconductor Location

Ref. No.	Location
D271	D-10
D272	C-10
D300	D-4
IC201	C-8
IC230	C-9
IC350	C-5
IC360	D-5
Q272	C-10
Q273	C-10
Q276	C-10
Q300	E-2
Q395	D-6
Q396	C-6

1 2 3 4 5 6 7 8 9 10 11 12

A  
B  
C  
D  
E  
F  
G



**B**  
MAIN BOARD  
CN1301  
(Page 32)

**C**  
MAIN BOARD  
CN1302  
(Page 32)

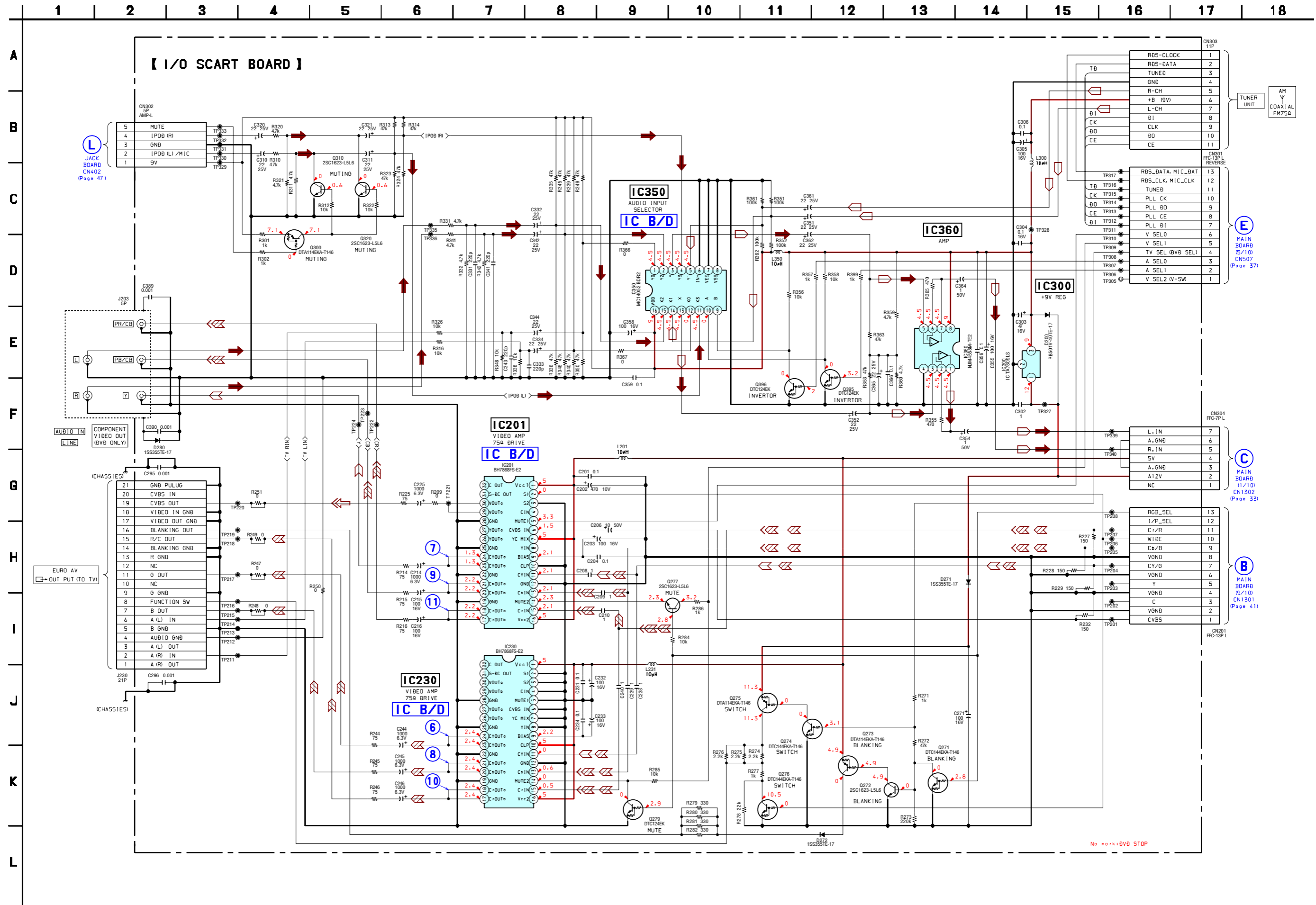
**L**  
JACK BOARD  
CN402  
(Page 46)

• Semiconductor Location

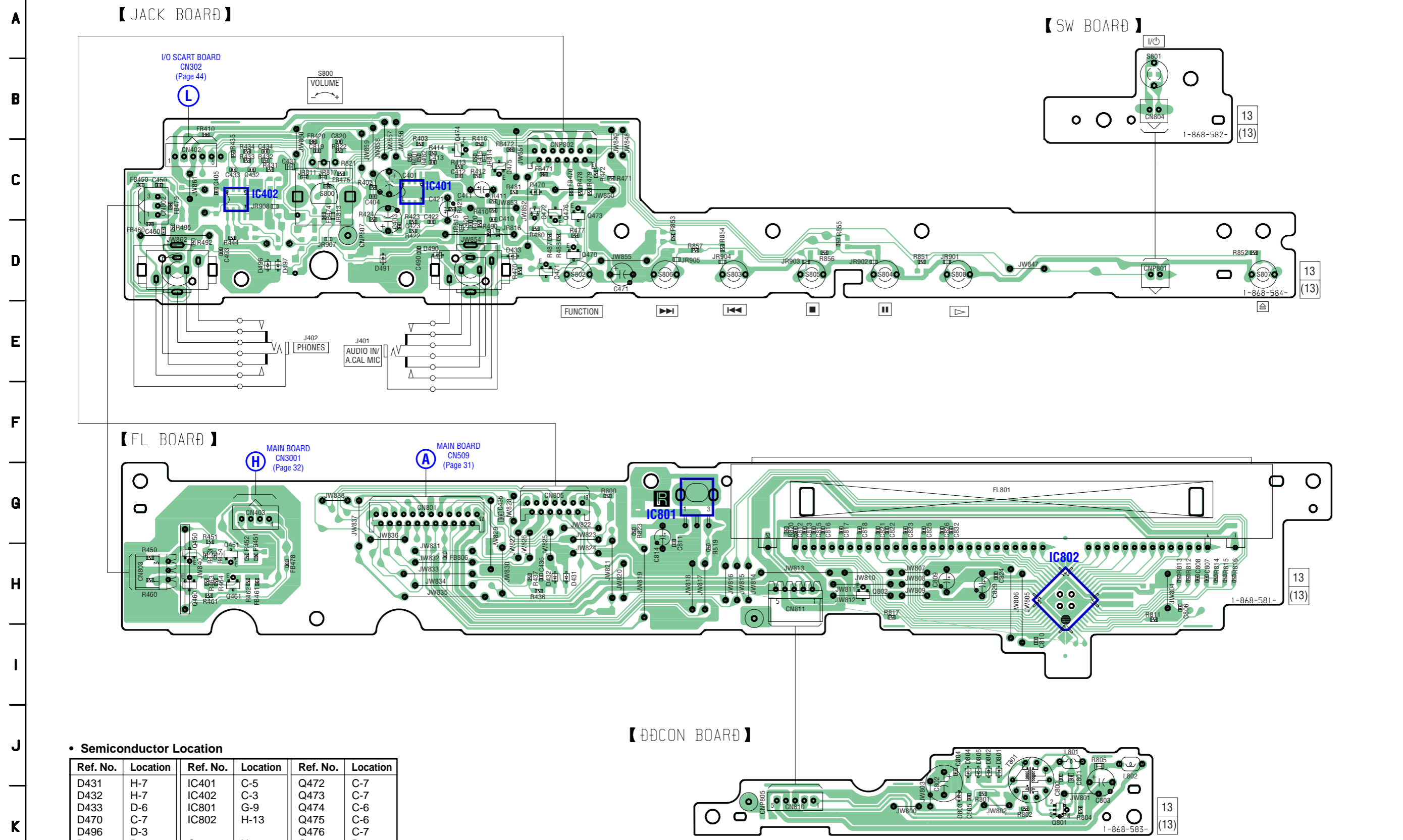
Ref. No.	Location
D280	B-8
IC300	E-8
Q271	D-3
Q274	D-2
Q275	D-2
Q277	D-5
Q279	D-3
Q310	E-10
Q320	E-10

1-868-588- (12)

6-20. SCHEMATIC DIAGRAM – I/O SCART BOARD – • See page 25 for Waveforms. • See page 53 for IC Block Diagrams.



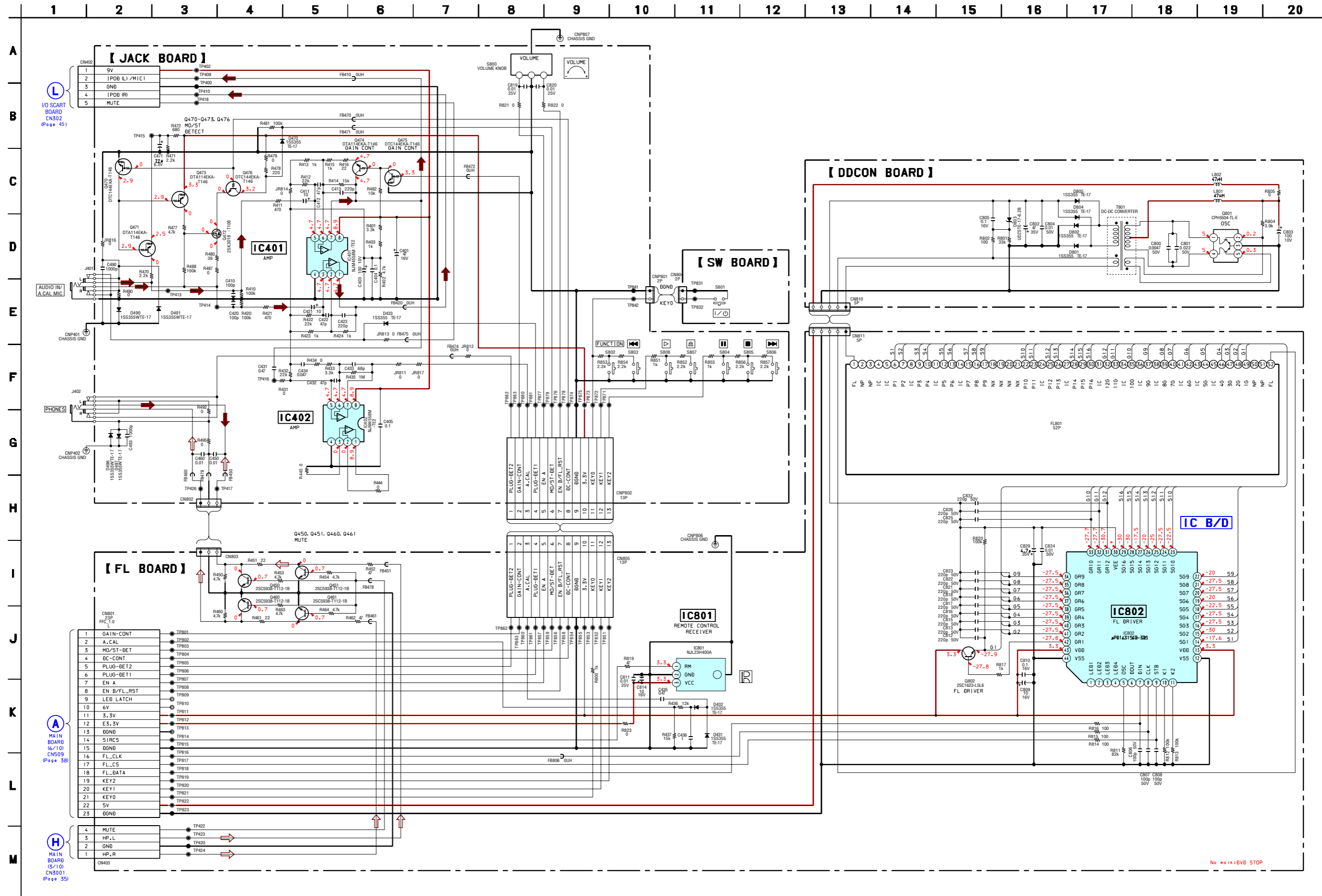
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17




• Semiconductor Location

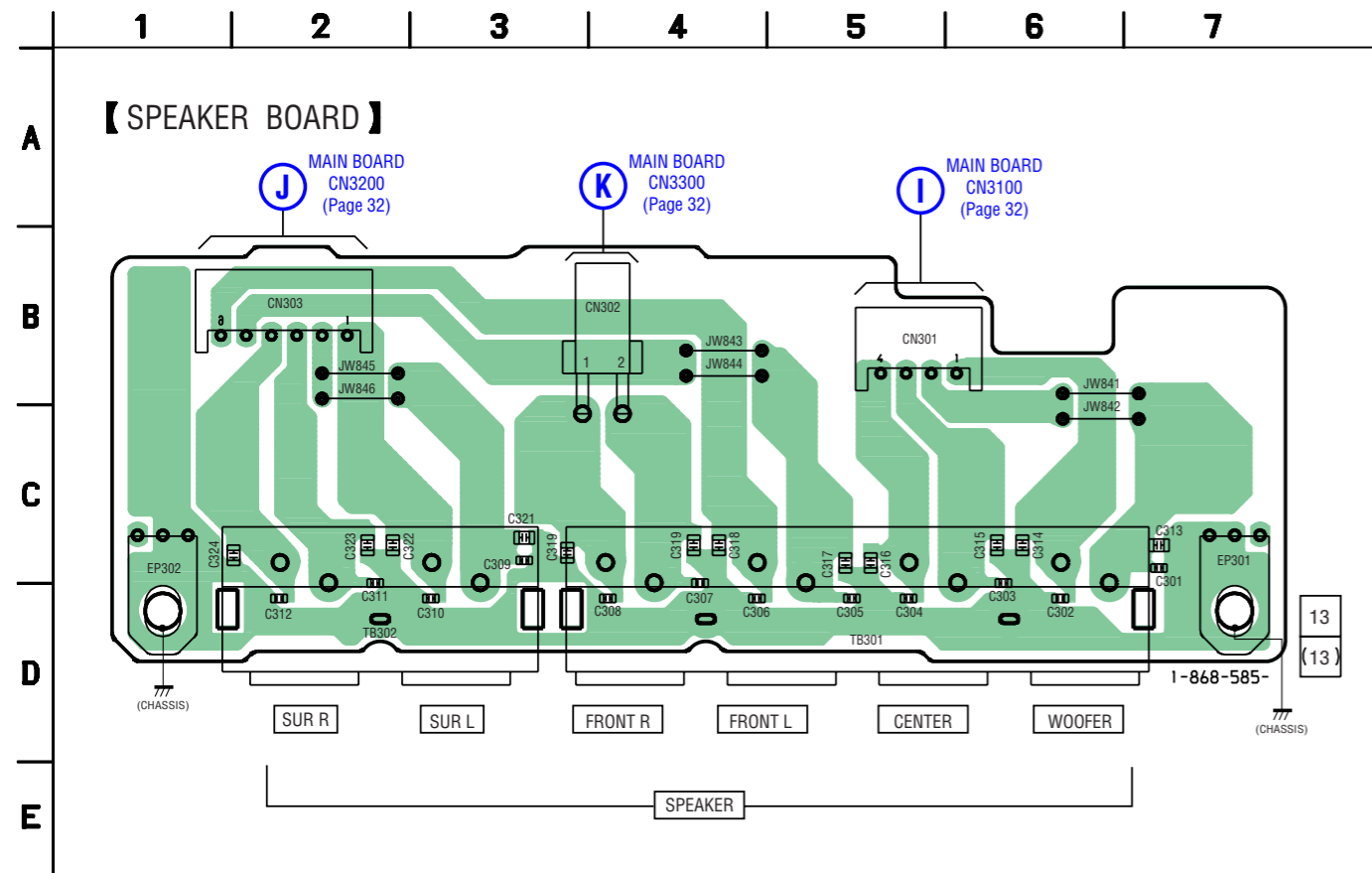
Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D431	H-7	IC401	C-5	Q472	C-7
D432	H-7	IC402	C-3	Q473	C-7
D433	D-6	IC801	G-9	Q474	C-6
D470	C-7	IC802	H-13	Q475	C-6
D496	D-3			Q476	C-7
D497	D-4	Q450	H-3	Q477	D-4
D801	J-13	Q451	H-3	Q478	D-4
D802	J-12	Q460	H-3	Q801	K-13
D803	K-12	Q461	H-3	Q802	H-11
D804	J-12	Q470	D-7		
D805	J-12	Q471	D-7		

6-22. SCHEMATIC DIAGRAM – PANEL SECTION – • See page 54 for IC Block Diagram.

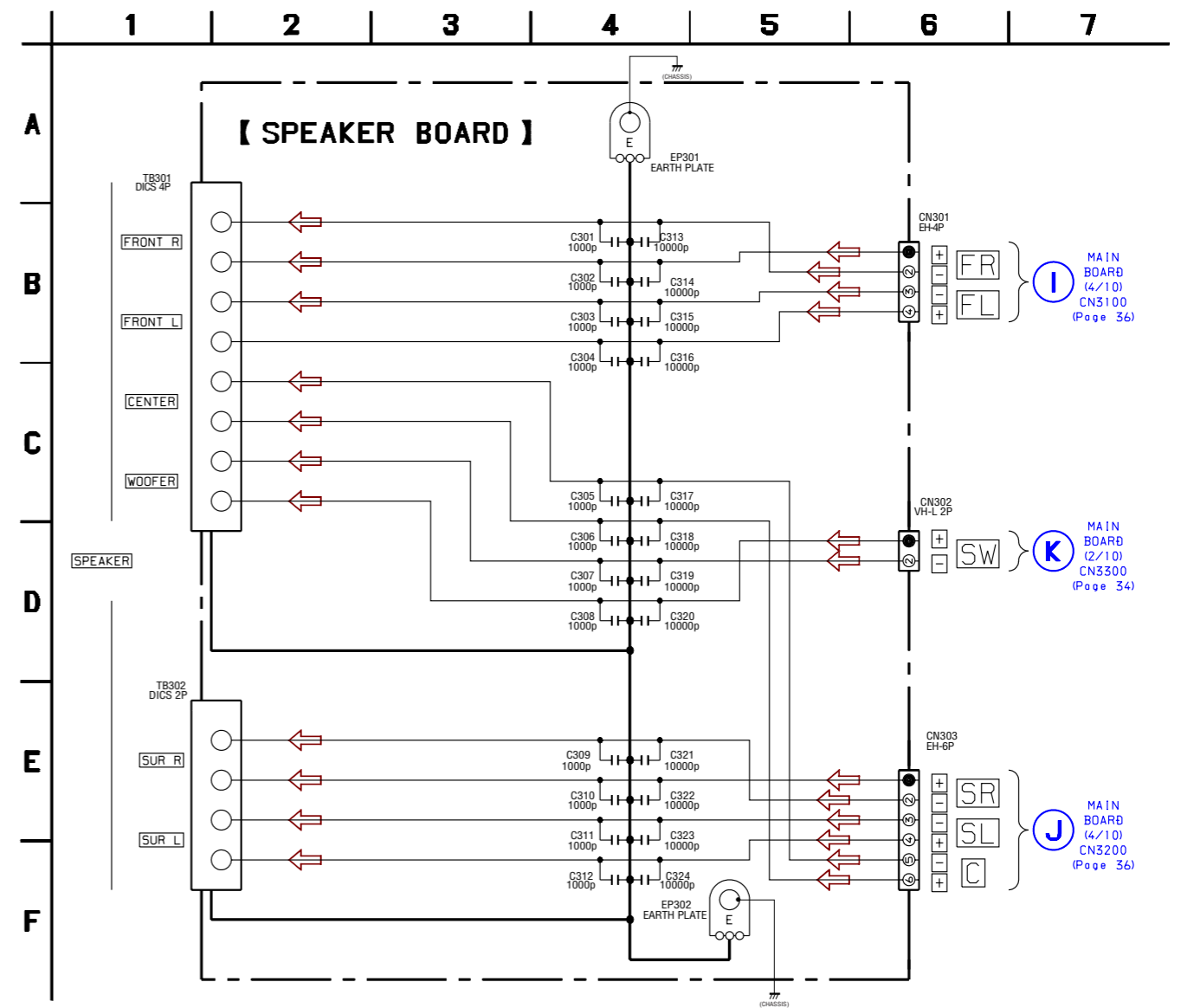


6-23. PRINTED WIRING BOARD – SPEAKER BOARD – • See page 25 for Circuit Boards Location.

 :Uses unleaded solder.




6-24. SCHEMATIC DIAGRAM – SPEAKER BOARD –

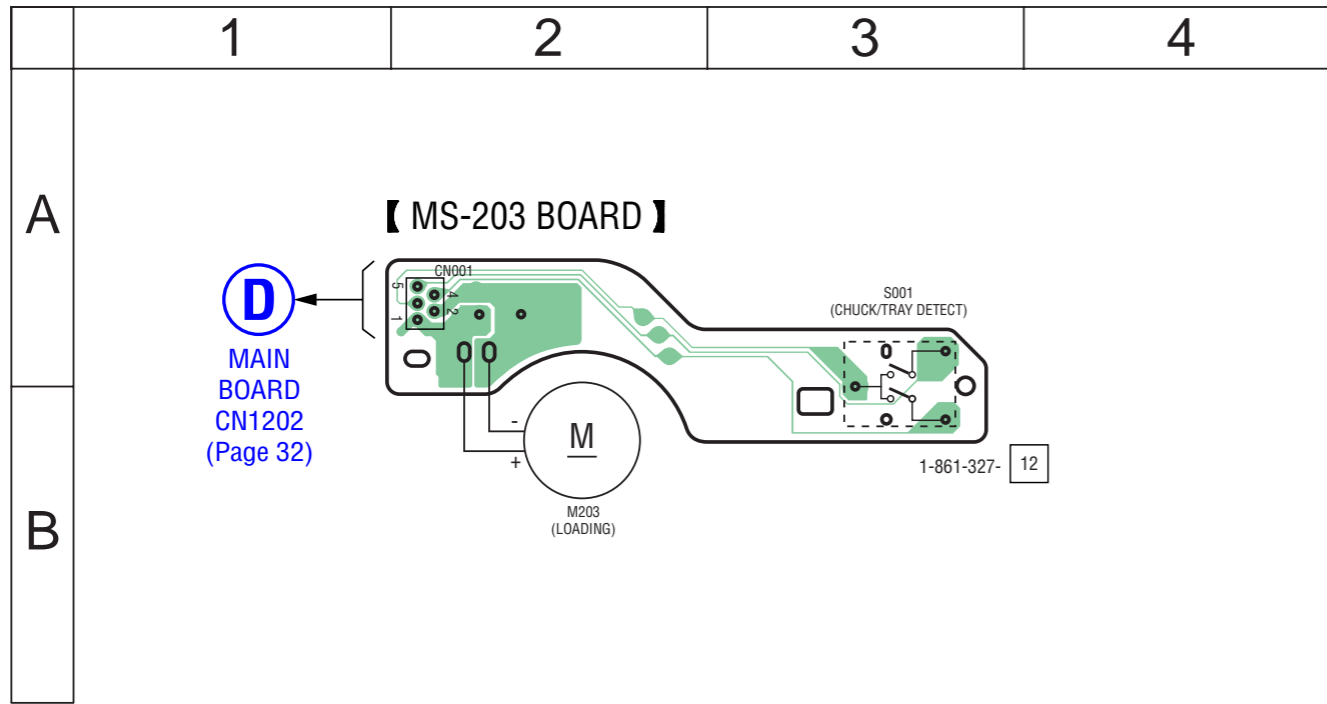




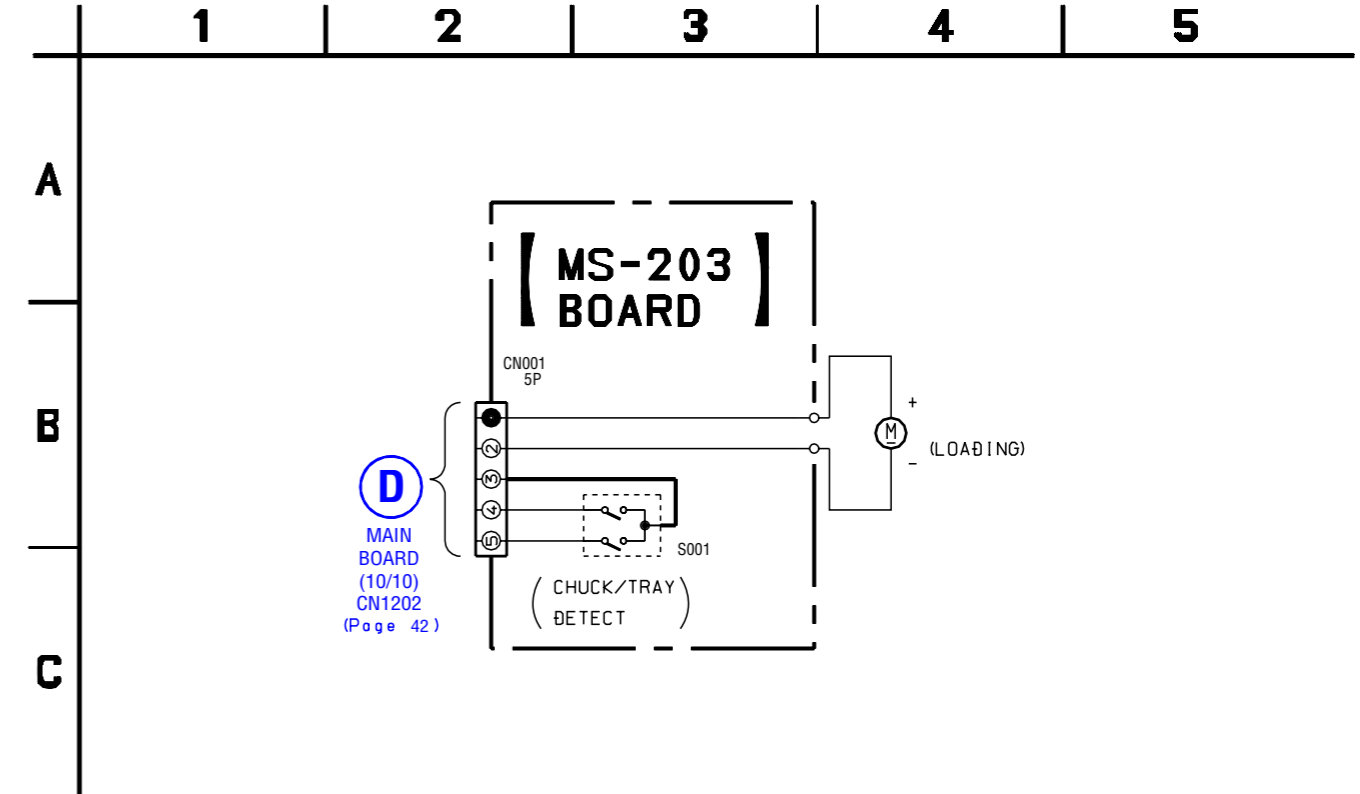
6-25. PRINTED WIRING BOARD – MS-203 BOARD –

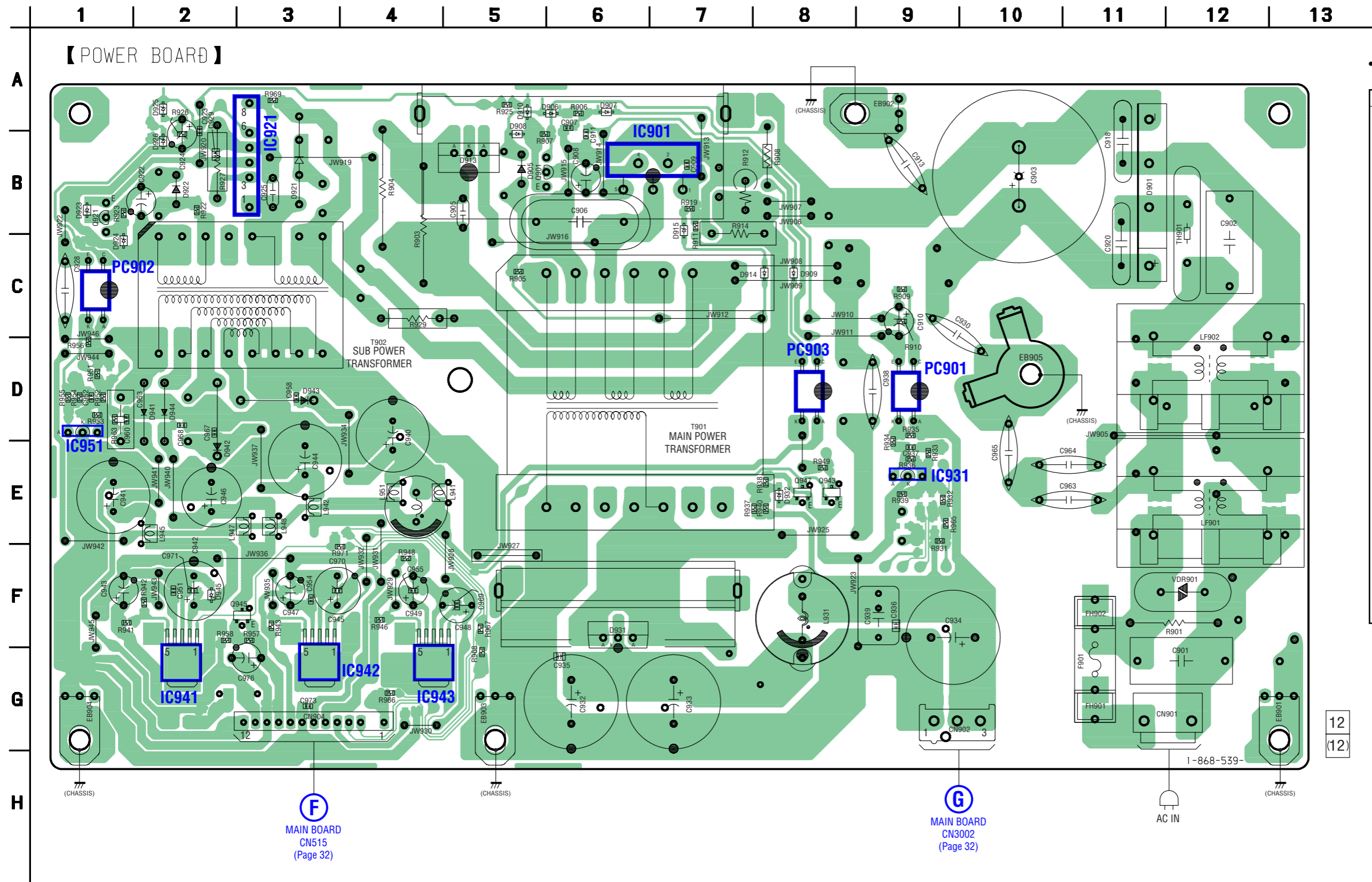
• See page 25 for Circuit Boards Location.

 :Uses unleaded solder.



6-26. SCHEMATIC DIAGRAM – MS-203 BOARD –



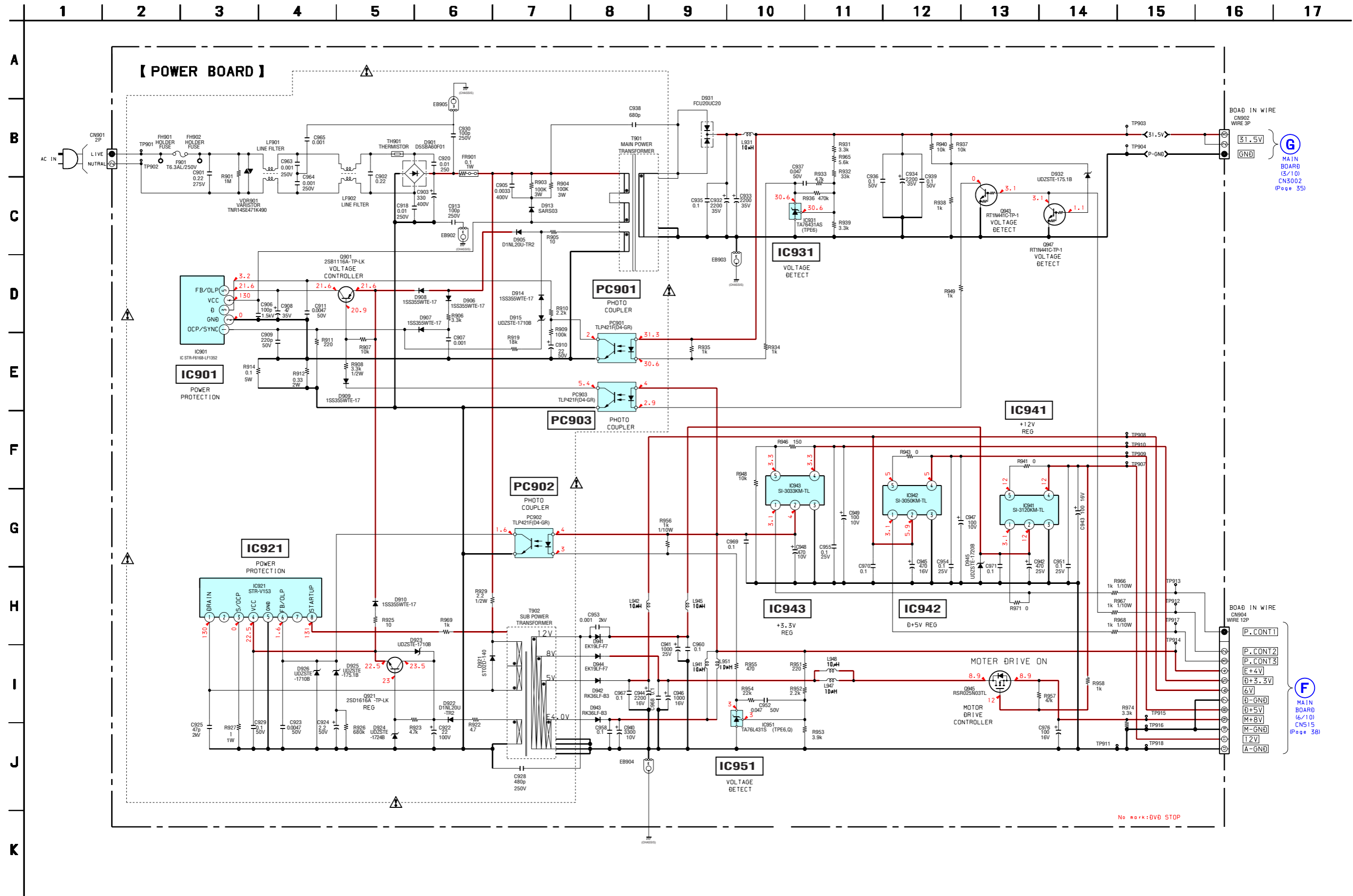


• Semiconductor Location

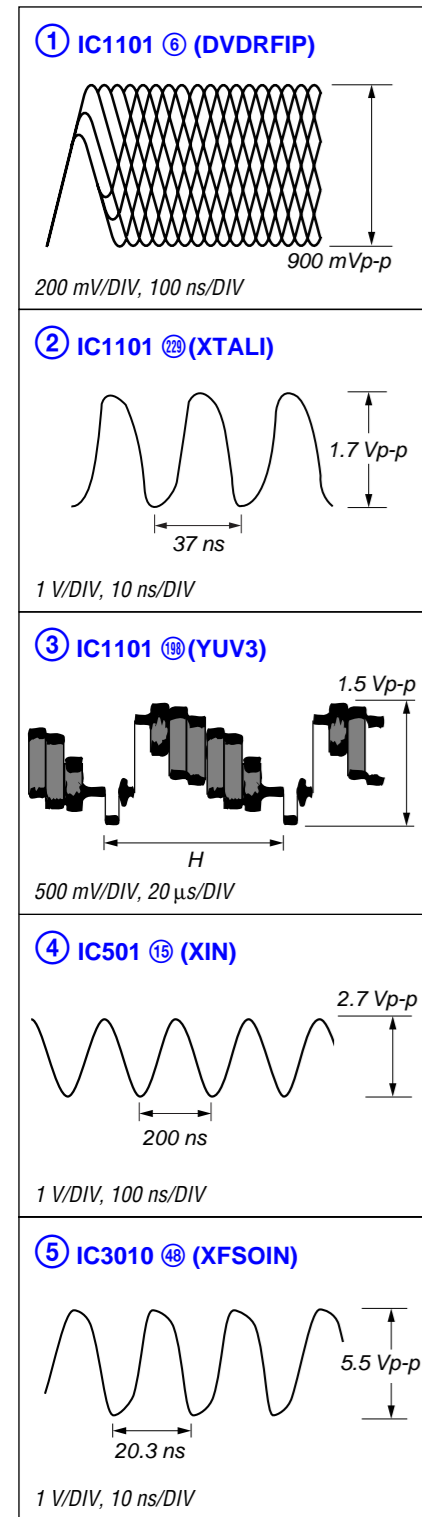
Ref. No.	Location
D901	B-11
D905	B-5
D906	A-6
D907	A-7
D908	B-5
D909	C-8
D910	A-5
D913	B-5
D914	C-8
D915	B-7
D921	B-3
D922	B-2
D923	B-1
D924	C-1
D925	A-1
D926	B-2
D931	F-6
D932	E-8
D941	D-2
D942	E-2
D943	D-3
D944	D-2
D945	F-2
IC901	B-6
IC921	B-3
IC931	E-9
IC941	G-2
IC942	G-3
IC943	G-4
IC951	D-1
PC901	D-9
PC902	C-1
PC903	D-8
Q901	B-5
Q921	B-1
Q943	E-8
Q945	F-3
Q947	E-8

12  
(12)

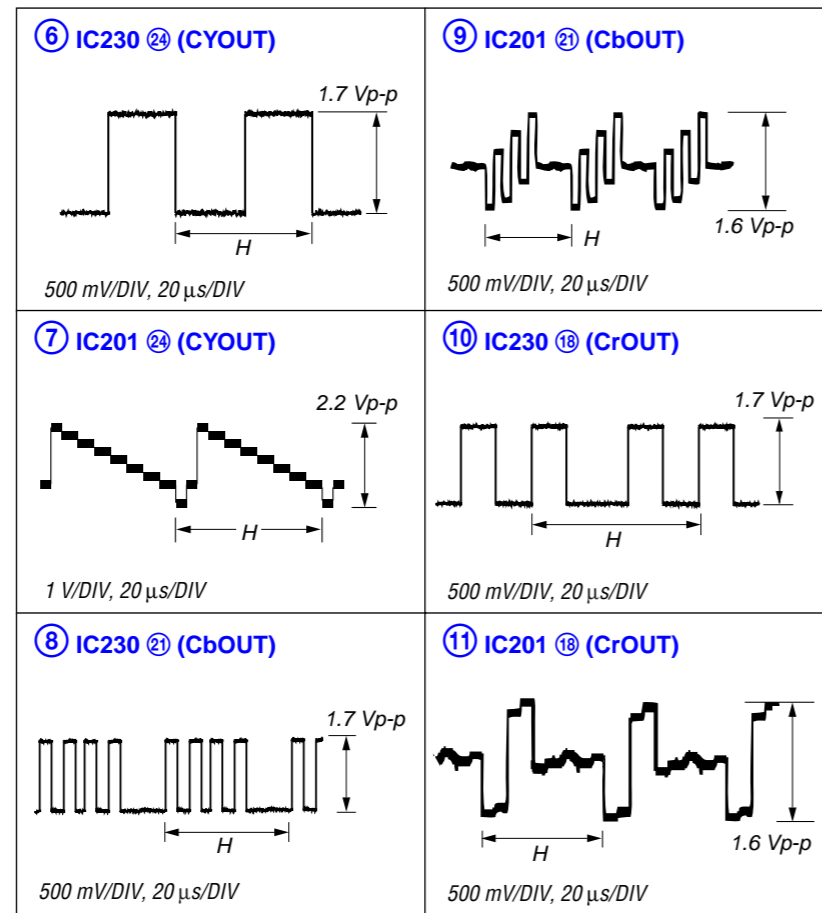
6-28. SCHEMATIC DIAGRAM – POWER BOARD –



• Waveforms  
– MAIN Board –



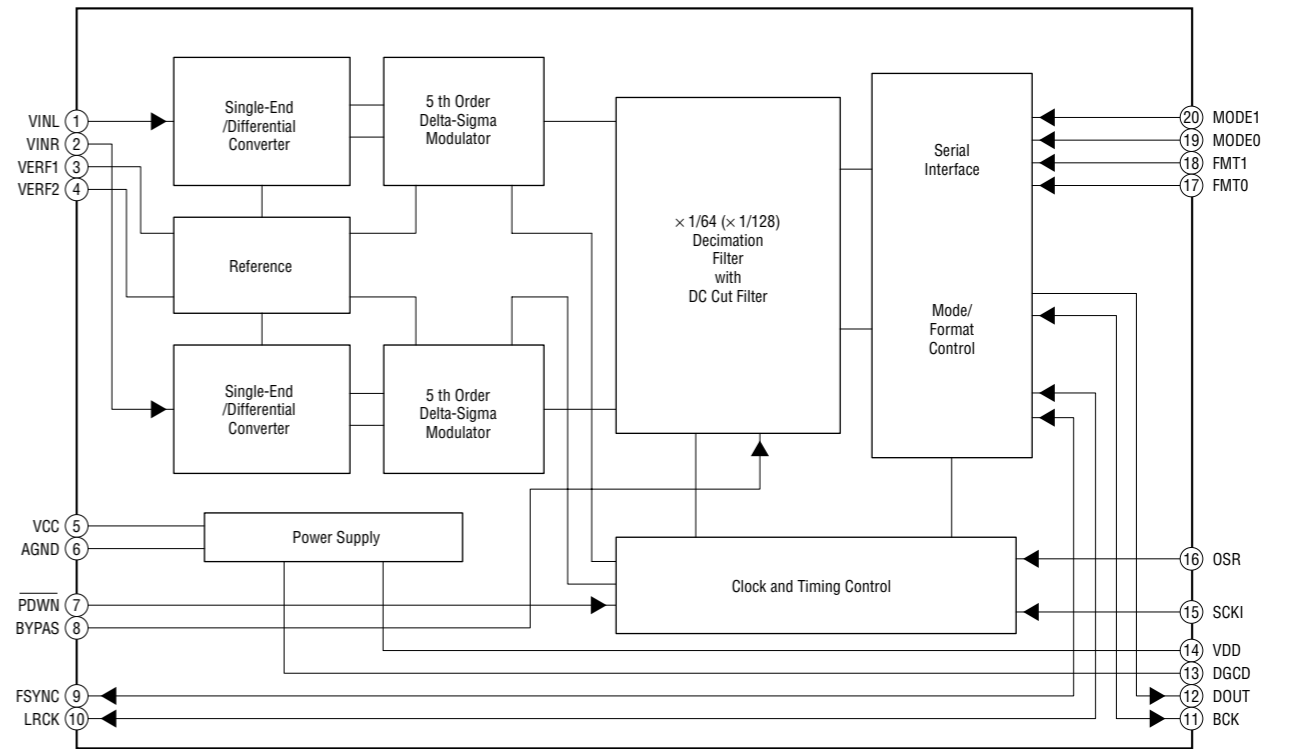
– I/O SCART Board –



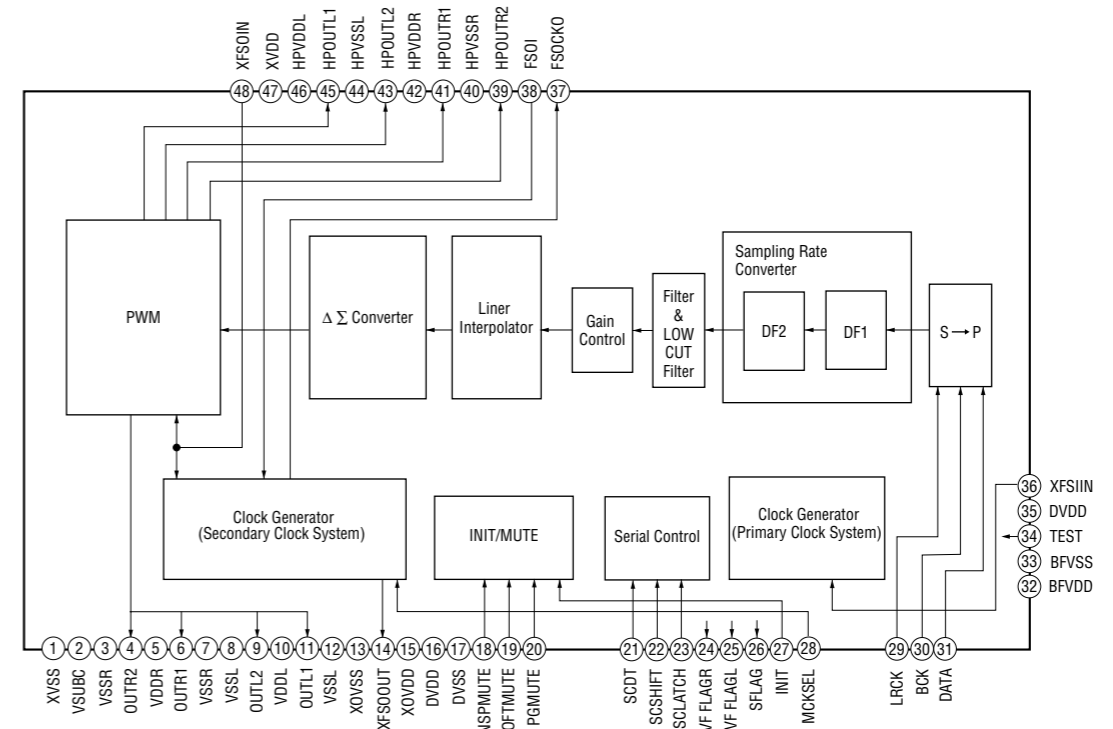
• IC Block Diagrams

– MAIN Board –

IC2200 PCM1803DBR

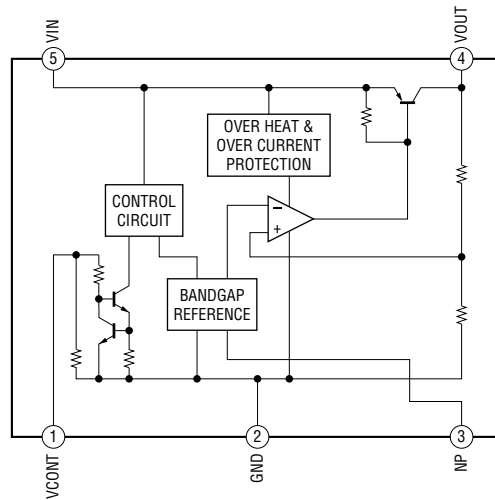


IC3010, IC3020, IC3030 CXD9843AR (DZ119), CXD9788AR (DZ410)



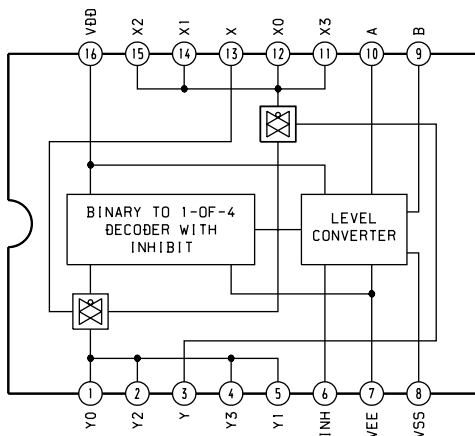
– MAIN Board –

IC3050 TK1118CSCL-G

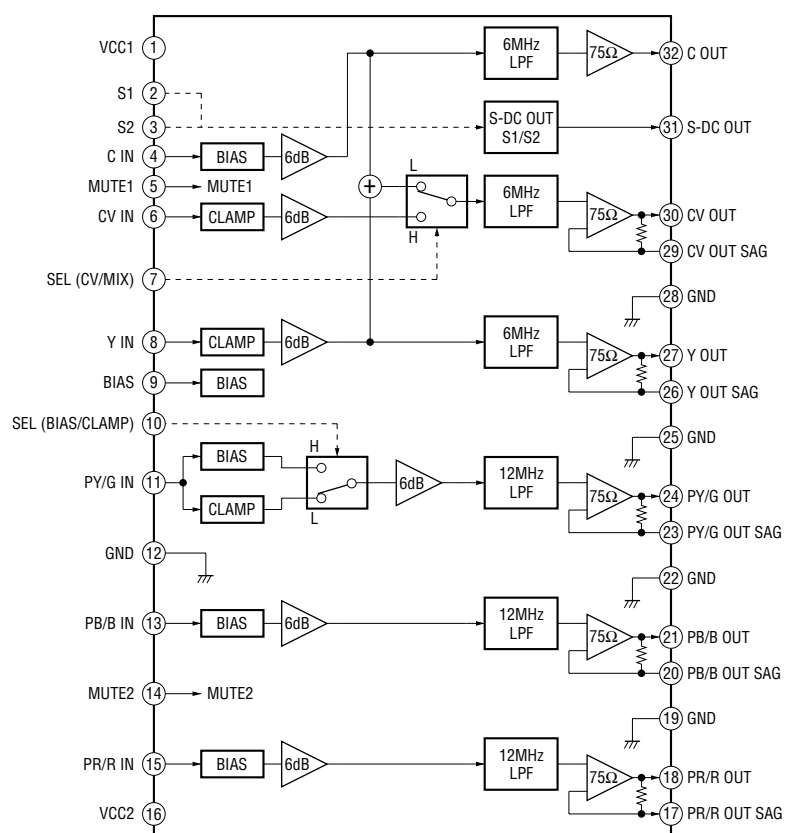


– I/O SCART Board –

IC350 MC14052BDR2

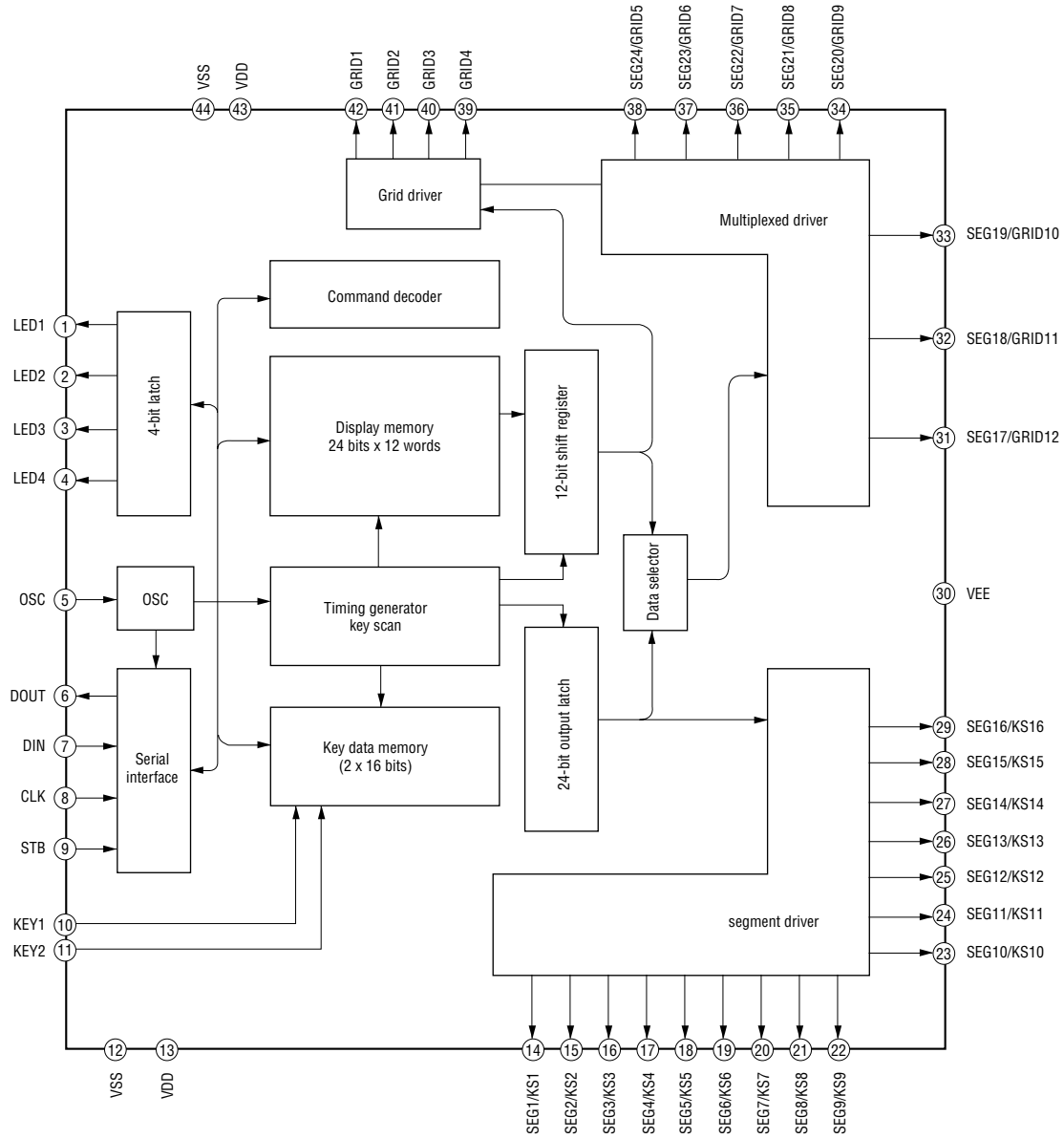


IC201, IC230 BH7868FS-E2



– FL Board –

## IC802 uPD16315GB-3BS



## • IC Pin Function Description

## MAIN BOARD IC501 M30622MEP-A49FPU0 (DZ119), M30622MEP-A76FUPU0 (DZ410)(SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	DAMP_SCDT/ DIAT_SDATA	O	DAMP processor and Diat data output
2	DAMP_SHIFT/ DIAT_SCLK	O	DAMP processor and Diat clock output
3	DSP_INTR	I	DSP interrupt (not used)
4	SIRCS_IN	I	Sircs input
5	DSP_MOSI/DIR_DIN	O	DSP and DIR data output (not used)
6	DSP_MOSI	I	DSP data input (not used)
7	DSP_SPICLK/DIR_CLK	O	DSP/DIR clock output (not used)
8	BYTE	I	External data bus (Ground terminal)
9	CNVSS	I	Change processor mode (Pull down)
10	EN_A	I	Volume control for ENCODER (Pull up)
11	EN_B/FL_RESET	I	Volume control for ENCODER (Pull up)
12	RESET	I	System reset signal input
13	XOUT	O	Crystal output for main clock (5MHz)
14	VSS	—	Ground terminal
15	XIN	I	Crystal input for main clock (5MHz)
16	VCC	—	Power supply (BUP+3.3V)
17	NMI	I	BUP 3.3V
18	DIR_ZERO	I	DIR zero data detect (not used)
19	DIR_CSFLAG	I	Out level detect for auto calibration
20	AC_CUT	I	Detect AC-CUT
21	FL_CLK/LED_CLK	O	FL and LED driver clock output
22	LED_LAT	O	LED driver latch (not used)
23	DIAT_CSOD	I	DIAT CSOD signal input (not used)
24	FL_D_OUT/LED_DATA	O	FL and LED driver data output
25	FL_CS/STB	O	FL driver chip select
26	MIC_GAIN	O	MIC gain control
27	CDM_OPEN_SW	I	CDM open switch input
28	DC_CONT	O	A.CAL MIC DC control output
29	I2C_CLK	I/O	I <sup>2</sup> C clock input
30	I2C_DATA	I/O	I <sup>2</sup> C data input
31	DVD_SID	O	Media Tek data out/Flash white TXD1
32	DVD_SOD	I	Media Tek data in/Flash white RXD1
33	DVD_SCO	I	Media Tek clock in/Flash white CLK1
34	DVD_XIFBUSY	O	Media Tek busy request/Flash white RTS1
35	XM_SC_TX_OUT/ MIC_DET_OUT	O	MIC detect status out to Media Tek
36	XM_SC_RX_IN/ KARAOKE MODE	I	KARAOKE mode information from Media Tek
37	DVD XIFCS	I	Media Tek chip select
38	MTK_RST	O	Media Tek reset
39	P_CONT1	O	Control for power supply 1
40	P_CONT2	O	Control for power supply 2
41	P_CONT3	O	Control for power supply 3
42	DRIVE_RST (EN)	O	DAMP driver reset
43	DRIVE_OCP (DIAG)	I	DAMP driver shut down

Pin No.	Pin Name	I/O	Description
44	OVERFLOW1	I	DAMP processor F/C/S over flow detect
45	OVERFLOW2	I	DAMP processor SW over flow detect
46	WRITE CE	I	Flash write CE (not used)
47	DAMP LATCH1	O	DAMP processor latch1
48	DAMP LATCH2	O	DAMP processor latch2
49	DAMP LATCH3	O	DAMP processor latch3
50	DAMP INIT	O	DAMP processor reset
51	DAMP SOFT MUTE	O	DAMP processor soft muting
52	MIC2_SW	I	MIC2 insert switch
53	HP_MUTE	O	Headphone muting (not used)
54	SRC_MUTE	O	Sampling rate converter mute control (not used)
55	DSP_RESET	O	DSP reset (not used)
56	DSP_SPIDS	O	DSP device select (not used)
57	SEL_SA-CD	O	DSP input data select (not used)
58	DSP_RST	O	DIR reset (not used)
59	DSP_HCE	O	DIR chip enable (not used)
60	DAMP OUT2DLY/ DIR_ERR	I	Not used
61	DAMP FSDLY/ DIR_XSTATE	I	Not used
62	VCC	—	Power supply (BUP 3.3V)
63	DIR_HDOUT	I	DIR data in (not used)
64	VSS	—	Ground terminal
65	DIAT_XRST	O	DIAT reset (not used)
66	DIAT_XSCEN	O	DIAT chip enable (not used)
67	SRC_MODEO	O	Sampling rate convertor MODEO control (not used)
68	M_ST	O	LINK (Multi STEREO) control
69	TUNED	I	TUNER tuned input
70	ST_CLK	O	TUNER clock output
71	ST_DC	I	TUNER data input
72	ST_CE	O	TUNER chip enable
73	ST_DI	O	TUNER data output
74	KEY INT	I	Wakeup from ECO mode by key input
75	RDS_CLK/MIC_CLK/ XM_ERR_IRQ	O	RDS clock input
76	RDS-DATA/MIC-DAT/ XM_COM_SEL	O	RDS data input
77	XM_RESET	O	XM reset (not used)
78	DABSEL/XMSEL	O	XM clock select (not used)
79	V_SEL0	O	VIDEO selector 0
80	V_SEL1	O	VIDEO selector 1
81	TVSEL/V_SEL3	O	TV control/VIDEO selector 3 (not used)
82	A_SEL0	O	Audio selector 0
83	A_SEL1	O	Audio selector 1
84	V_SEL2	O	VIDEO selector 2
85	IO_CE	O	I/O expander IC chip enable (not used)
86	IO_RESET	O	I/O expander IC reset (not used)
87	IO_DI	O	I/O expander IC data output (not used)
88	IO_DO	I	I/O expander IC data input (not used)



Pin No.	Pin Name	I/O	Description
89	IO_CLK	O	I/O expander IC clock output (not used)
90	MONO/ST_DET	I	Front jack MONO or STEREO detect
91	A.CAL MIC LEVEL	I	MIC level detect for auto calibration
92	DESTINATION	I	Destination select input
93	MODEL	I	Model select input
94	KEY2	I	Key input 2 input
95	KEY1	I	Key input 1 input
96	VSS	—	Ground terminal
97	KEY0	I	Key input 0 input
98	VREF	I	Reference voltage (E3.3V)
99	VCC	I	Power supply (BUP3.3V)
100	MIC/A.CAL SW	I	MIC insert switch

## MAIN BOARD IC1101 CXD9849R

(CD/DVD RF AMP, FOCUS/TRACKING ERR AMP, DVD SYSTEM PROCESSOR, DIGITAL SERVO PROCESSOR)

Pin No.	Pin Name	I/O	Description
1	AGND	—	Ground terminal
2	DVDA	I	AC coupled input path A
3	DVDB	I	AC coupled input path B
4	DVDC	I	AC coupled input path C
5	DVDD	I	AC coupled input path D
6	DVDRFIP	I	AC coupled DVD RF signal input RFIP
7	DVDRFIN	I	AC coupled DVD RF signal input RFIN (not used)
8	NA	I	DC coupled main-beam RF signal input A
9	NB	I	DC coupled main-beam RF signal input B
10	MC	I	DC coupled main-beam RF signal input C
11	MD	I	DC coupled main-beam RF signal input D
12	SA	I	DC coupled sub-beam RF signal input A (not used)
13	SB	I	DC coupled sub-beam RF signal input B (not used)
14	SC	I	DC coupled sub-beam RF signal input C (not used)
15	SD	I	DC coupled sub-beam RF signal input D (not used)
16	CDFON	I	CD focusing error negative input (not used)
17	CDFOP	I	CD focusing error positive input (not used)
18	TNI	I	3 beam satellite PD signal negative input
19	TPI	I	3 beam satellite PD signal positive input
20	MDI1	I	Laser power PD monitor input
21	MDI2	I	Laser power PD monitor input
22	LDO2	O	Laser drive output
23	LDO1	O	Laser drive output
24	SVDD3	—	Power supply (RF+3.3V)
25	CSD	O	Central servo, positive main beam summing output (not used)
26	RFLVL	O	RFRP low pass, or Positive main beam summing output (not used)
27	SGND	—	Ground terminal
28	V2REFO	O	Reference voltage 2.8V
29	V2O	O	Reference voltage 2.0V
30	VREFO	O	Reference voltage 1.4V
31	FED	O	Focus error monitor output (not used)
32	TEO	O	Tracking error monitor output (not used)
33	TEZISLV	O	TE slicing level (not used)
34	OPOUT	O	Op amp output (not used)
35	OPIN	I	Op amp negative input (not used)
36	OPIN	I	Op amp positive input (not used)
37	DMO	O	Disk motor control output. PWM output
38	FMO	O	Feed motor control. PWM output
39	TROPENPWM	O	Tray PWM output/tray open output.
40	IOPMON	O	General PWM output
41	TRO	O	Tracking servo output
42	FOO	O	Focus servo output
43	DVSS	—	Ground terminal
44	NC	—	USB port DPLUS analog pin (not used)
45	NC	—	USB port DMINUS analog pin (not used)
46	DVDD3	—	Power supply (SW+3.3V)
47	SPFG	I	Motor hall sensor input

Pin No.	Pin Name	I/O	Description
48	DSEL	—	Not used
49	WIDE	I	Wide switch signal input terminal
50	MSW	I	Mute signal control input
51	MAMUTE	O	MAMUTE signal output to system controller (IC501) (not used)
52	DVDD18	—	Power supply (+1.8V from IC1109)
53 to 58	IOA 2 to 7	O	Address bus 2 to 7 output to PROM (IC1102)
59	HIGHA0	O	Address bus 8 output to PROM (IC1102)
60, 61	IOA18, 19	O	Address bus 18, 19 output to PROM (IC1102)
62	DVSS	—	Ground terminal
63	APLLCAP	I	APLL external capacitance connection
64	APLLVSS	—	Ground terminal
65	VDD3	—	Power supply (+3.3V from IC1105)
66	IOWR	O	WE signal output to PROM (IC1102)
67	A16	O	Address bus 16 output to PROM (IC1102)
68 to 72	HIGHA 7 to 3	O	Address bus 15 to 11 output to PROM (IC1102)
73	DVDD3	—	Power supply (SW+3.3V)
74, 75	HIGHA 2, 1	O	Address bus 10, 9 output to PROM (IC1102)
76	IOA20	O	Address bus 20 output to PROM (IC1102)
77	IOCS	O	CE signal output to PROM (IC1102)
78	IOA1	O	Address bus 1 output to PROM (IC1102)
79	IOOE	O	OE signal output to PROM (IC1102)
80	DVDD3	—	Power supply (SW+3.3V)
81 to 84	AD 0 to 3	I	Data bus 0 to 3 input from PROM (IC1102)
85	DVSS	—	Ground terminal
86 to 88	AD 4 to 6	I	Data bus 4 to 6 input from PROM (IC1102)
89	IOA21	O	Address bus 21 output to PROM (IC1102)
90	ALE	O	Address latch enable (not used)
91	AD7	I	Data bus 7 input from PROM (IC1102)
92	A17	O	Address bus 17 output to PROM (IC1102)
93	IOA0	O	Address bus 0 output to PROM (IC1102)
94	DVSS	—	Ground terminal
95	UWA	I	System controller write strobe (not used)
96	URD	I	System controller read strobe (not used)
97	DVDD18	—	Power supply (+1.8V from IC1109)
98	IFSDO	I	DVD SOD signal input from system controller (IC501)
99	IFCK	O	DVD SCO signal output to system controller (IC501)
100	XIFCS	I	DVD XIFCS signal input from system controller (IC501)
101	IFSDI	I	VIFBUSY signal input from system controller (IC501)
102	SCL	O	SCL signal output to EEPROM (IC1103)
103	SDA	O	SDA signal output to EEPROM (IC1103)
104	TRG-SW	O	RS232 RXD signal output (not used)
105	IFBSY	I	RS232 TXD signal input from system controller (IC501)
106	RXD	I	RD232 RXD clock
107	TXD	I	RD232 TXD data
108	DVDD3	—	Power supply (SW+3.3V)
109	ICE	I	ICE mode enable (not used)
110	PRST	I	MTRST signal input from system controller (IC501)
111	IR	I	IR control signal input (not used)
112	INT0	I	External interrupt0 (not used)

Pin No.	Pin Name	I/O	Description
113	DQMO	O	DQM0 signal output to SD-RAM (IC1104)
114	MREQ	I	DQM signal input (not used)
115	RD7	I	Data bus 7 from SD-RAM (IC1104)
116	DVSS	—	Ground terminal
117, 118	RD 6, 5	I	Data bus 6, 5 from SD-RAM (IC1104)
119	DVSS	—	Ground terminal
120, 121	RD 4, 3	I	Data bus 4, 3 from SD-RAM (IC1104)
122	DVDD18	—	Power supply (+1.8V from IC1109)
123 to 125	RD 2 to 0	I	Data bus 2 to 0 from SD-RAM (IC1104)
126	RD15	I	Data bus 15 from SD-RAM (IC1104)
127	DVDD3	—	Power supply (SW+3.3V)
128	RD 14	I	Data bus 14 from SD-RAM (IC1104)
129 to 133	RD 13 to 9	I	Data bus 13 to 9 from SD-RAM (IC1104)
134	DVSS	—	Ground terminal
135	RD8	I	Data bus 8 from SD-RAM (IC1104)
136	GPI0	—	Not used
137	DQM1	O	DQM1 signal output to SD-RAM (IC1104)
138	RWE	O	WE signal output to SD-RAM (IC1104)
139	CAS	O	CAS signal output to SD-RAM (IC1104)
140	RAS	O	RAS signal output to SD-RAM (IC1104)
141	DVDD3	—	Power supply (SW+3.3V)
142	RCS	O	RCS signal output to SD-RAM (IC1104)
143	BA0	O	BA0 signal output to SD-RAM (IC1104)
144	DVSS	—	Ground terminal
145	BA1	O	BA1 signal output to SD-RAM (IC1104)
146	RA10	O	Address bus 10 output to SD-RAM (IC1104)
147	RA0	O	Address bus 0 output to SD-RAM (IC1104)
148	DVSS	—	Ground terminal
149 to 151	RA 1 to 3	O	Address bus 1 to 3 output to SD-RAM (IC1104)
152	DVDD18	—	Power supply (+1.8V from IC1109)
153	NC	—	Reference voltage
154	NC	—	Dram clock
155	DVDD3	—	Power supply (SW+3.3V)
156	RCLK	O	CLK signal output to SD-RAM (IC1104)
157	CKE	O	CKE signal output to SD-RAM (IC1104)
158 to 160	RA 11 to 8	O	Address bus 11 to 8 output to SD-RAM (IC1104)
161	DVSS	—	Ground terminal
162	RA7	O	Address bus 7 output to SD-RAM (IC1104)
163	DVSS	—	Ground terminal
164 to 166	RA 6 to 4	O	Address bus 6 to 4 output to SD-RAM (IC1104)
167	DVDD3	—	Power supply (SW+3.3V)
168	DISC/X	—	Not used
169	RGB	O	RGB control signal output
170	TSD_M	O	TSD signal output to IC1201
171	NC	—	Not used
172	NC	—	Not used
173	DVDD18	—	Power supply (+1.8V)
174	FWD	O	FWD signal output to IC1201
175	NC	—	Not used

Pin No.	Pin Name	I/O	Description
176	LIMSW	O	LIMSW signal output to optical pick-up
177	OCSW	I	SEN signal input from system controller (IC501)/OCSW signal input
178	REW	—	REW signal output to IC1201
179	CKSW	I	CKSW signal input
180	NC	—	Not used
181	NC	—	Not used
182	DVDD3	—	Power supply (SW+3.3V)
183	NC	—	Not used
184	NC	—	Not used
185	NC	—	Not used
186	NC	—	Not used
187	NC	—	Not used
188	NC	—	Not used
189	DAVCC	—	Power supply (+3.3V from IC1105)
190	VREF	I	Bandgap reference voltage (not used)
191	FS	O	Full scale adjustment (pull down)
192	YUV0	—	Not used
193	DAVSS	—	Ground terminal
194	YUV1	O	Y signal output to VIDEO AMP (IC201)
195	DAVDD	—	Power supply (+3.3V from IC1105)
196	YUV2	O	CHROMA signal output to VIDEO AMP (IC201)
197	DAVSS	—	Ground terminal
198	YUV3	O	VIDEO signal output to VIDEO AMP (IC201)
199	DAVDD	—	Power supply (+3.3V from IC1105)
200	YUV4	O	G signal output to VIDEO AMP (IC201)
201	DAVSS	—	Ground terminal
202	YUV5	O	B signal output to VIDEO AMP (IC201)
203	YUV6	O	R signal output to VIDEO AMP (IC201)
204	DVDD3	—	Power supply (SW+3.3V)
205	MIC/VSYNC	I	MIC_DET signal to IC501
206	VOICE/YUV7	—	Not used
207	KRMOD/HSYNC	O	KARAOKE MODE signal to IC501
208	SMSCK	—	Not used
209	SPDATA/SMSDI	I	Audio data of SPDIF input
210	MUTE	O	MUTE signal to IC1201
211	MUTE123	O	MUTE123 signal to IC1201
212	DVDD3	—	Power supply (SW+3.3V)
213	ALRCK	I	Audio left/right channel clock
214	ABCK	O	Audio bit clock
215	ACLK	I	Audio DAC master clock
216	DVSS	—	Ground terminal
217	ASDATA0	O	Audio serial data 0
218	ASDATA1	O	Audio serial data 1
219	ASDATA2	O	Audio serial data 2
220	XRST	—	Not used
221	DVDD18	—	Power supply (+1.8V)
222	ASDATA4	O	Audio serial data (not used)
223	DVSS	—	Ground terminal
224	DWIDE	—	To pin 209 of IC1101

Pin No.	Pin Name	I/O	Description
225	SDPIF	—	SPDIF output (not used)
226	RFVDD18	—	Ground terminal
227	RFVDD18	—	Power supply (RF+1.8V)
228	XTALO	O	Oscillator output signal (27MHz)
229	XTALI	I	Oscillator input signal (27MHz)
230	JITFO	O	RF jitter meter output
231	JITFN	I	Negative input of operation amplifier for RF jitter meter
232	PLLSS	—	Ground terminal
233	IDAC	—	Not used
234	PLLVD3	—	Power supply (RF+3.3V)
235	LPFON	O	Negative output of loop filter amplifier
236	LPFIP	I	Positive input of loop filter amplifier
237	LPFIN	I	Negative input of loop filter amplifier
238	LPFOP	O	Positive output of loop filter amplifier
239	VDD3	I	Power supply (RF+3.3V)
240	NC	I	Not used
241	VSS	—	Ground terminal
242	NC	—	Not used
243	NC	—	Not used
244	RFVDD3	—	Power supply (RF+3.3V)
245	RFRPDC	I	RFRP signal input
246	RFRPAC	I	RFRP signal input
247	HRFZC	I	High frequency RF ripple zero crossing
248	CRTPLP	O	Defect level filter capacitor connecting
249	RFVDD	—	Ground terminal
250	NC	—	Not used
251	NC	—	Not used
252	OSP	O	RF offset cancellation capacitor connecting
253	OSN	I	RF offset cancellation capacitor connecting
254	RFGC	O	RF offset loop capacitor connecting for DVD-ROM
255	IREF	I	Current reference input (not used)
256	AVDD3	—	Power supply (RF+3.3V)

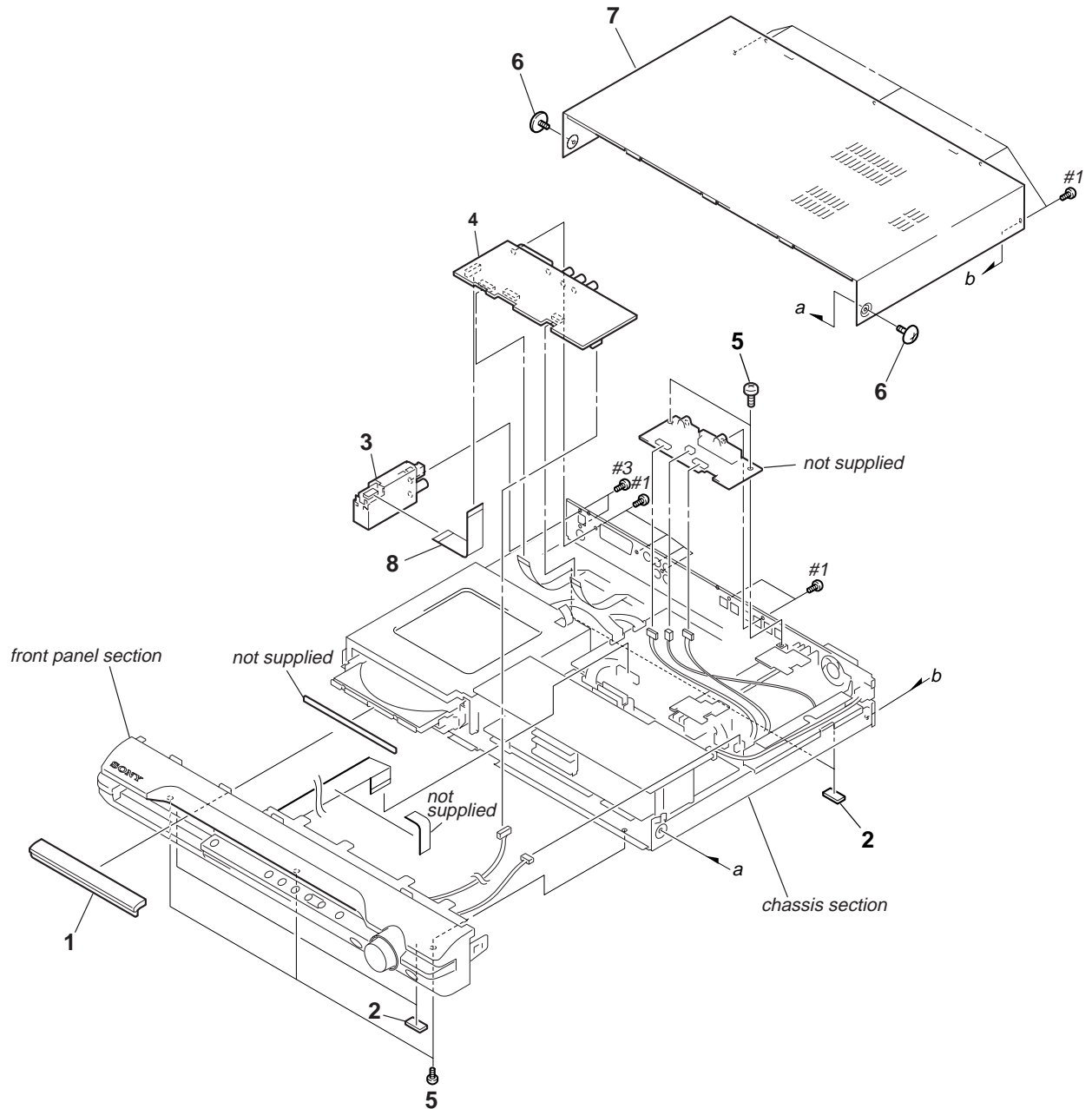
## SECTION 7 EXPLODED VIEWS

**NOTE:**

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked “\*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

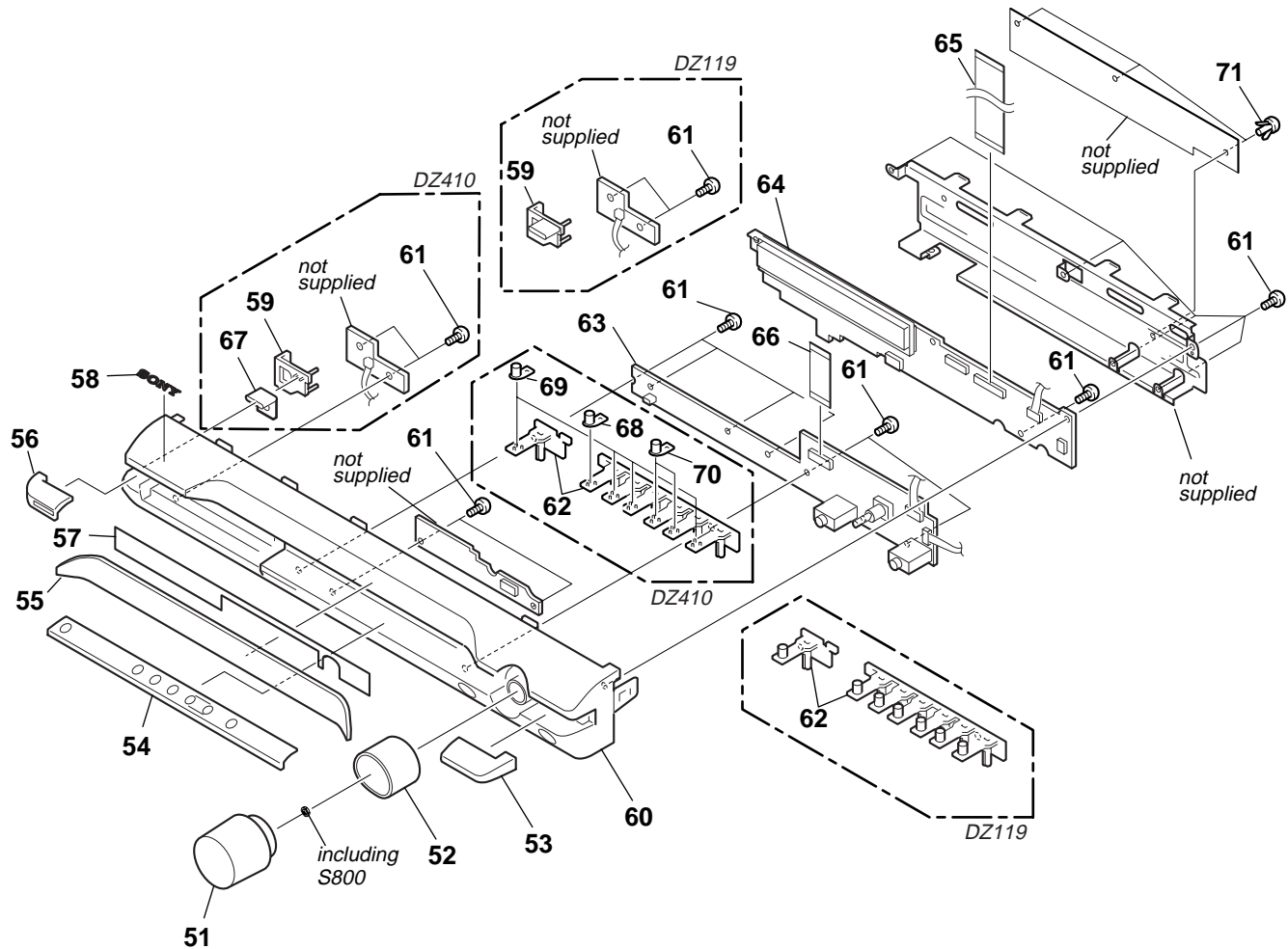
### 7-1. OVERALL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	2-652-972-01	PANEL, LOADING		6	3-363-099-51	SCREW (CASE 3 TP2)	
2	4-232-478-41	FOOT		7	2-653-932-01	CASE	
3	1-693-700-11	TUNER (FM/AM) (TM10SCE)		8	1-828-962-11	WIRE (FLAT TYPE)(11 CORE)	
4	A-1146-119-A	I/O SCART BOARD, COMPLETE (DZ410)		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
4	A-1167-326-A	I/O SCART BOARD, COMPLETE (DZ119)		#3	7-685-871-01	SCREW +BVTT 3X6 (S)	
5	3-077-331-21	+BV3 (3-CR)					

**Note:** If the wire (flat type) was replaced, fold it some as the wire (flat type) before replacement.

## 7-2. FRONT PANEL SECTION

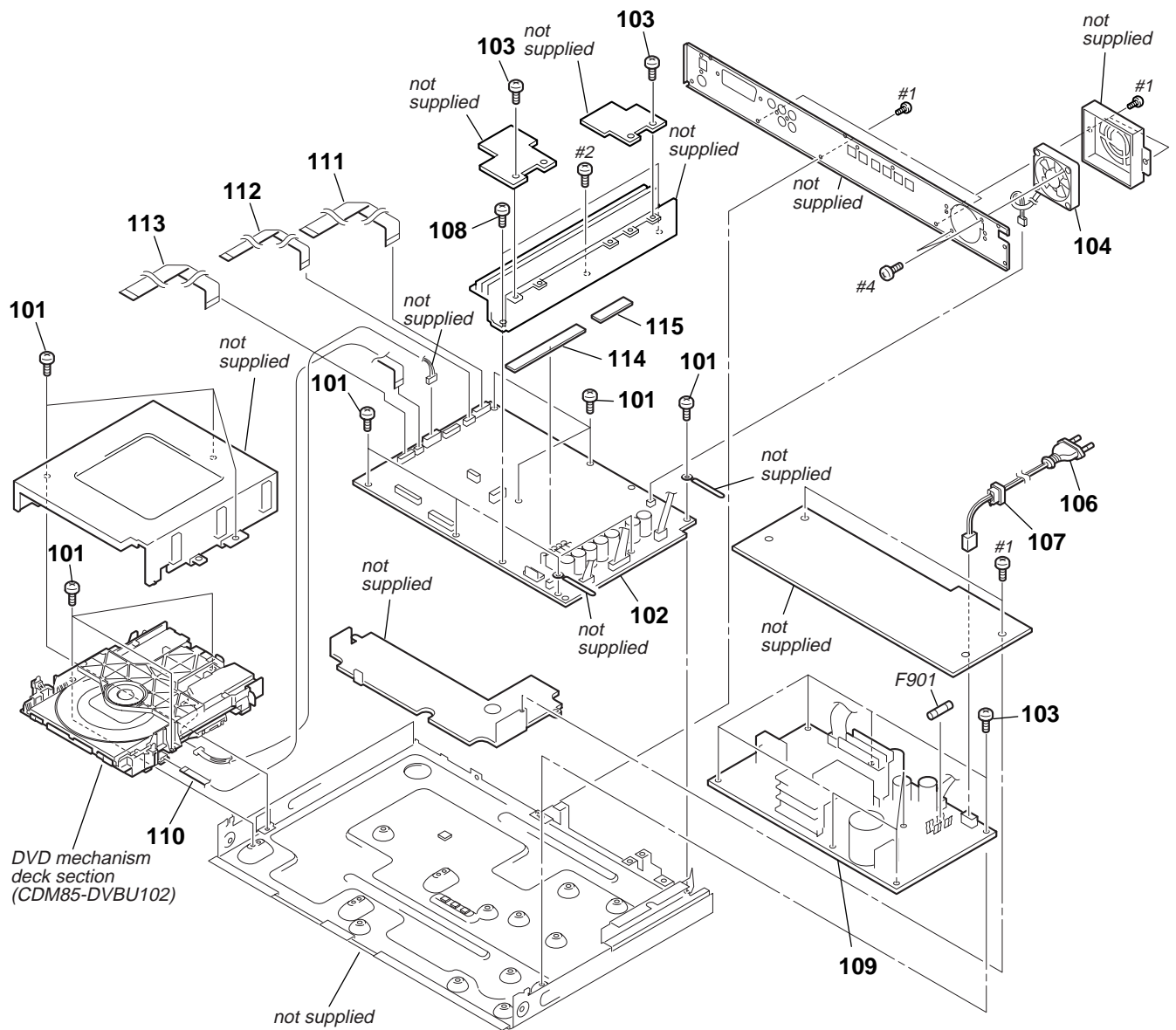


Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	2-652-983-01	KNOB (VOL)		62	2-653-930-01	BUTTON (PLAY)(DZ119)	
52	2-652-982-01	RING (VOL)		63	A-1144-767-A	JACK BOARD, COMPLETE (DZ410)	
53	2-652-981-01	ORNAMENT (RIGHT)		63	A-1167-323-A	JACK BOARD, COMPLETE (DZ119)	
54	2-652-980-01	ORNAMENT (PLAY)		64	A-1144-764-A	FL BOARD, COMPLETE (DZ410)	
55	2-652-984-01	WINDOW, INDICATION		64	A-1167-320-A	FL BOARD, COMPLETE (DZ119)	
56	2-652-979-01	ORNAMENT (POWER)		65	1-828-384-11	WIRE (FLAT TYPE)(23 CORE)	
57	2-661-952-01	SHEET (WINDOW), ADHESIVE		66	1-828-325-11	WIRE (FLAT TYPE)(13 CORE)	
58	3-943-995-31	EMBLEM (NO.5), SONY (DZ410)		67	2-652-973-01	CAP (POWER)(DZ410)	
59	2-652-977-01	BUTTON BASE (POWER)(DZ410)		68	2-652-974-01	CAP (PLAY)(DZ410)	
59	2-653-929-01	BUTTON (POWER)(DZ119)		69	2-652-975-01	CAP (FUNC)(DZ410)	
60	2-654-345-41	PANEL, FRONT (DZ119)		70	2-652-976-01	CAP (AMS)(DZ410)	
60	2-661-871-31	PANEL, FRONT (SB)(DZ410)		71	3-531-576-01	RIVET	
61	3-087-053-01	+BVTP2.6 (3CR)					
62	2-652-978-01	BUTTON BASE (PLAY)(DZ410)					

**Note:** If the wire (flat type) was replaced, fold it some as the wire (flat type) before replacement.



7-3. CHASSIS SECTION

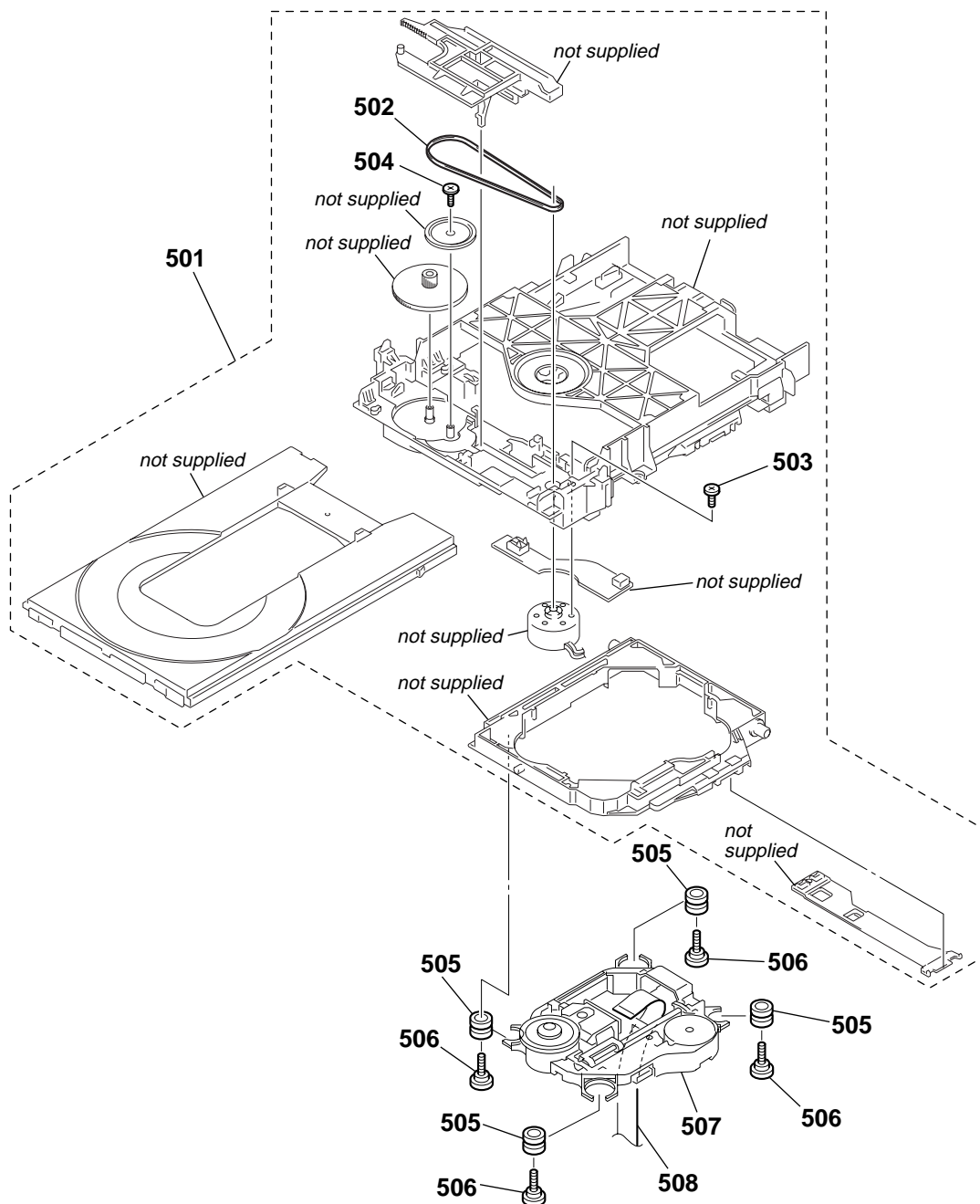


Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	3-077-331-21	+BV3 (3-CR)		109	A-1177-660-A	POWER BOARD, COMPLETE (DZ410)	
☆ 102	A-1144-739-A	MAIN BOARD, COMPLETE (DZ119)		110	1-828-292-11	WIRE (FLAT TYPE)(5 CORE)	
☆ 102	A-1178-935-A	MAIN BOARD, COMPLETE (DZ410)		111	1-828-332-11	WIRE (FLAT TYPE)(13 CORE)	
103	3-077-331-01	+BV3 (3-CR)		112	1-828-300-11	WIRE (FLAT TYPE)(7 CORE)	
104	1-787-331-11	FAN, D.C.		113	1-828-330-11	WIRE (FLAT TYPE)(13 CORE)	
△ 106	1-751-520-31	CORD, POWER (UK)		114	2-597-972-11	SHEET, RADIATION	
△ 106	1-777-071-22	CORD, POWER (DZ119)		115	2-597-972-21	SHEET, RADIATION	
△ 106	1-830-188-11	CORD, POWER (DZ410:AEP)		△ F901	1-532-325-00	FUSE, TIME-LAG (T6.3AL/250V)	
107	3-703-244-00	BUSHING (2104), CORD		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
108	3-077-331-11	+BV3 (3-CR)		#2	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3	
109	A-1144-737-A	POWER BOARD, COMPLETE (DZ119)		#4	7-685-881-09	SCREW +BVTT 4X8 (S)	

**Note:** If the wire (flat type) was replaced, fold it some as the wire (flat type) before replacement.

☆ New part of EEP ROM (IC1103) on the MAIN board cannot be used. Therefore, if the mounted MAIN board (A-1144-739-A, etc.) is replaced, exchange new EEP ROM (IC1103) with that used before the replacement.

## 7-4. DVD MECHANISM DECK SECTION (CDM85-DVBU102)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
501	A-6071-669-A	LOADING ASSY (J)		506	3-087-599-01	INSULATOR SCREW	
502	3-088-371-01	BELT		△507	8-820-290-02	DEVICE, OPTICAL KHM-310CAA/C2RP	
503	4-974-725-11	SCREW (M1.7X2.5), P		508	1-828-773-51	WIRE (FLAT TYPE)(24 CORE)	
504	4-674-137-11	SCREW (PTP2X5)					
505	2-634-618-01	INSULATOR					

**Note:** If the wire (flat type) was replaced, fold it some as the wire (flat type) before replacement.

**SECTION 8  
ELECTRICAL PARTS LIST**

**DDCON** **FL**

**NOTE:**

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS  
uF: μF

- COILS  
uH: μH
- RESISTORS  
All resistors are in ohms.  
METAL: Metal-film resistor.  
METAL OXIDE: Metal oxide-film resistor.  
F: nonflammable
- SEMICONDUCTORS  
In each case, u: μ, for example:  
uA. . . : μA. . .      uPA. . . : μPA. . .  
uPB. . . : μPB. . .    uPC. . . : μPC. . .  
uPD. . . : μPD. . .

When indicating parts by reference number, please include the board name.

The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		DDCON BOARD *****		C809	1-126-157-11	ELECT 10uF 20%	16V
		< CAPACITOR >		C810	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C800	1-162-968-11	CERAMIC CHIP 0.0047uF 10%	50V	C811	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C801	1-163-037-11	CERAMIC CHIP 0.022uF 10%	50V	C812	1-162-960-11	CERAMIC CHIP 220PF 10%	50V
C802	1-119-772-91	ELECT 47uF 20%	35V	C813	1-162-960-11	CERAMIC CHIP 220PF 10%	50V
C803	1-124-584-00	ELECT 100uF 20%	10V	C814	1-126-157-11	ELECT 10uF 20%	16V
C804	1-162-974-11	CERAMIC CHIP 0.01uF	50V	C815	1-162-960-11	CERAMIC CHIP 220PF 10%	50V
C805	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C816	1-162-960-11	CERAMIC CHIP 220PF 10%	50V
		< DIODE >		C817	1-162-960-11	CERAMIC CHIP 220PF 10%	50V
D801	8-719-988-61	DIODE 1SS355TE-17		C818	1-162-960-11	CERAMIC CHIP 220PF 10%	50V
D802	8-719-988-61	DIODE 1SS355TE-17		C821	1-162-960-11	CERAMIC CHIP 220PF 10%	50V
D803	8-719-069-56	DIODE UDZSTE-176.2B		C822	1-162-960-11	CERAMIC CHIP 220PF 10%	50V
D804	8-719-988-61	DIODE 1SS355TE-17		C823	1-162-960-11	CERAMIC CHIP 220PF 10%	50V
D805	8-719-988-61	DIODE 1SS355TE-17		C824	1-162-974-11	CERAMIC CHIP 0.01uF	50V
		< COIL >		C825	1-162-960-11	CERAMIC CHIP 220PF 10%	50V
L801	1-410-671-31	INDUCTOR 47uH		C826	1-162-960-11	CERAMIC CHIP 220PF 10%	50V
L802	1-410-671-31	INDUCTOR 47uH		C829	1-124-259-11	ELECT 4.7uF 20%	35V
		< TRANSISTOR >		C832	1-162-960-11	CERAMIC CHIP 220PF 10%	50V
Q801	6-550-065-01	TRANSISTOR CPH5504-TL-E				< CONNECTOR >	
		< RESISTOR >		CN801	1-779-560-21	CONNECTOR, FFC (LIF (NON-ZIF)) 23P	
R801	1-216-839-11	METAL CHIP 33K 5%	1/10W	CN803	1-785-329-11	PIN, CONNECTOR (LIGHT ANGLE) 3P	
R802	1-216-809-11	METAL CHIP 100 5%	1/10W	CN805	1-794-506-51	CONNECTOR, FFC/FPC 13P	
R804	1-216-828-11	METAL CHIP 3.9K 5%	1/10W	CN811	1-785-331-11	PIN, CONNECTOR (LIGHT ANGLE) 5P	
R805	1-216-295-91	SHORT CHIP 0				< DIODE >	
		< TRANSFORMER >		D431	8-719-988-61	DIODE 1SS355TE-17	
T801	1-443-645-11	TRANSFORMER, DC CONVERTER		D432	8-719-988-61	DIODE 1SS355TE-17	
		*****				< FERRITE BEAD >	
A-1144-764-A	FL BOARD, COMPLETE (DZ410)			FB451	1-469-144-21	FERRITE, EMI (SMD) (2012)	
A-1167-320-A	FL BOARD, COMPLETE (DZ119)			FB461	1-469-144-21	FERRITE, EMI (SMD) (2012)	
	*****			FB478	1-469-144-21	FERRITE, EMI (SMD) (2012)	
	< CAPACITOR >			FB806	1-414-813-11	FERRITE, EMI (SMD) (2012)	
C435	1-107-823-11	CERAMIC CHIP 0.47uF 10%	16V			< FLUORESCENT INDICATOR >	
C436	1-115-156-11	CERAMIC CHIP 1uF	10V	FL801	1-519-852-11	FLUORESCENT INDICATOR	
C806	1-162-927-11	CERAMIC CHIP 100PF 5%	50V			< IC >	
C807	1-162-927-11	CERAMIC CHIP 100PF 5%	50V	IC801	6-600-349-21	IC NJL23H400A	
C808	1-162-927-11	CERAMIC CHIP 100PF 5%	50V	IC802	8-759-643-83	IC PT6315	
						< TRANSISTOR >	
Q450	6-550-889-01	TRANSISTOR 2SC5938-T112-1B		Q451	6-550-889-01	TRANSISTOR 2SC5938-T112-1B	

# HCD-DZ119/DZ410

## FL I/O SCART

Ref. No.	Part No.	Description	Remark		
Q460	6-550-889-01	TRANSISTOR	2SC5938-T112-1B		
Q461	6-550-889-01	TRANSISTOR	2SC5938-T112-1B		
Q802	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
< RESISTOR >					
R436	1-216-834-11	METAL CHIP	12K	5%	1/10W
R437	1-216-835-11	METAL CHIP	15K	5%	1/10W
R450	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R451	1-216-801-11	METAL CHIP	22	5%	1/10W
R452	1-216-805-11	METAL CHIP	47	5%	1/10W
R453	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R454	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R460	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R461	1-216-801-11	METAL CHIP	22	5%	1/10W
R462	1-216-805-11	METAL CHIP	47	5%	1/10W
R463	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R464	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R800	1-216-821-11	METAL CHIP	1K	5%	1/10W
R811	1-216-844-11	METAL CHIP	82K	5%	1/10W
R812	1-216-845-11	METAL CHIP	100K	5%	1/10W
R813	1-216-845-11	METAL CHIP	100K	5%	1/10W
R814	1-216-809-11	METAL CHIP	100	5%	1/10W
R815	1-216-809-11	METAL CHIP	100	5%	1/10W
R816	1-216-809-11	METAL CHIP	100	5%	1/10W
R817	1-216-821-11	METAL CHIP	1K	5%	1/10W
R819	1-216-805-11	METAL CHIP	47	5%	1/10W
R820	1-216-845-11	METAL CHIP	100K	5%	1/10W
R823	1-216-864-11	SHORT CHIP	0		
*****					
A-1146-119-A	I/O SCART BOARD, COMPLETE (DZ410)				
A-1167-326-A	I/O SCART BOARD, COMPLETE (DZ119)				
*****					
< CAPACITOR >					
C201	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C202	1-126-925-91	ELECT	470uF	20%	10V
C203	1-126-933-11	ELECT	100uF	20%	16V
C204	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C206	1-126-964-11	ELECT	10uF	20%	50V
C208	1-115-156-11	CERAMIC CHIP	1uF		10V
C209	1-115-156-11	CERAMIC CHIP	1uF		10V
C210	1-115-156-11	CERAMIC CHIP	1uF		10V
C214	1-126-916-11	ELECT	1000uF	20%	6.3V
C215	1-126-933-11	ELECT	100uF	20%	16V
C216	1-126-933-11	ELECT	100uF	20%	16V
C225	1-126-916-11	ELECT	1000uF	20%	6.3V
C231	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C232	1-126-933-11	ELECT	100uF	20%	16V
C233	1-126-933-11	ELECT	100uF	20%	16V
C234	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C238	1-115-156-11	CERAMIC CHIP	1uF		10V
C239	1-115-156-11	CERAMIC CHIP	1uF		10V
C240	1-115-156-11	CERAMIC CHIP	1uF		10V
C244	1-126-916-11	ELECT	1000uF	20%	6.3V
C245	1-126-916-11	ELECT	1000uF	20%	6.3V
C246	1-126-916-11	ELECT	1000uF	20%	6.3V
C271	1-126-933-11	ELECT	100uF	20%	16V
C295	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V

Ref. No.	Part No.	Description	Remark		
C296	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C302	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C303	1-126-947-11	ELECT	47uF	20%	16V
C304	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C305	1-126-933-11	ELECT	100uF	20%	16V
C306	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C310	1-104-662-91	ELECT	22uF	20%	25V
C311	1-104-662-91	ELECT	22uF	20%	25V
C320	1-104-662-91	ELECT	22uF	20%	25V
C321	1-104-662-91	ELECT	22uF	20%	25V
C331	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C332	1-104-662-91	ELECT	22uF	20%	25V
C333	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C334	1-104-662-91	ELECT	22uF	20%	25V
C341	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C342	1-104-662-91	ELECT	22uF	20%	25V
C343	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C344	1-104-662-91	ELECT	22uF	20%	25V
C351	1-104-662-91	ELECT	22uF	20%	25V
C352	1-104-662-91	ELECT	22uF	20%	25V
C354	1-126-960-11	ELECT	1uF	20%	50V
C355	1-126-933-11	ELECT	100uF	20%	16V
C356	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C358	1-126-933-11	ELECT	100uF	20%	16V
C359	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C361	1-104-662-91	ELECT	22uF	20%	25V
C362	1-104-662-91	ELECT	22uF	20%	25V
C364	1-126-960-11	ELECT	1uF	20%	50V
C365	1-104-662-91	ELECT	22uF	20%	25V
C366	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C389	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C390	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
< CONNECTOR >					
CN201	1-779-550-21	CONNECTOR, FFC (LIF (NON-ZIF)) 13P			
CN302	1-785-331-11	PIN, CONNECTOR (LIGHT ANGLE) 5P			
CN303	1-568-830-11	CONNECTOR, FFC 11P			
CN304	1-779-544-21	CONNECTOR, FFC (LIF (NON-ZIF)) 7P			
< DIODE >					
D271	8-719-988-61	DIODE	1SS355TE-17		
D272	8-719-988-61	DIODE	1SS355TE-17		
D280	8-719-988-61	DIODE	1SS355TE-17		
D300	8-719-058-24	DIODE	RB501V-40TE-17		
< IC >					
IC201	6-707-489-01	IC	BH7868FS-E2		
IC230	6-707-489-01	IC	BH7868FS-E2		
IC300	6-703-550-01	IC	TA7809LS		
IC350	8-759-385-76	IC	MC14052 BDR2		
IC360	8-759-100-96	IC	NJM4558M-TE2		
< JACK >					
J203	1-819-925-11	JACK, PIN 5P (Y, PB/CB, PR/CR)COMPONENNT VIDEO OUT) (R, AUDIO IN, L)LINE)			
J230	1-815-911-11	CONNECTOR, SQUARE TYPE 21P (EURO AV ⇄ OUT PUT (TO TV))			

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< COIL >					
L201	1-469-525-91	INDUCTOR 10uH		R311	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
L231	1-469-525-91	INDUCTOR 10uH		R312	1-216-833-11	METAL CHIP 10K 5%	1/10W
L300	1-469-525-91	INDUCTOR 10uH		R313	1-216-841-11	METAL CHIP 47K 5%	1/10W
L350	1-469-525-91	INDUCTOR 10uH		R314	1-216-841-11	METAL CHIP 47K 5%	1/10W
		< TRANSISTOR >		R316	1-216-833-11	METAL CHIP 10K 5%	1/10W
Q271	8-729-027-59	TRANSISTOR DTC144EKA-T146		R320	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
Q272	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R321	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
Q273	8-729-027-23	TRANSISTOR DTA114EKA-T146		R322	1-216-833-11	METAL CHIP 10K 5%	1/10W
Q274	8-729-027-59	TRANSISTOR DTC144EKA-T146		R323	1-216-841-11	METAL CHIP 47K 5%	1/10W
Q275	8-729-027-23	TRANSISTOR DTA114EKA-T146		R324	1-216-841-11	METAL CHIP 47K 5%	1/10W
Q276	8-729-027-59	TRANSISTOR DTC144EKA-T146		R326	1-216-833-11	METAL CHIP 10K 5%	1/10W
Q277	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R331	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
Q279	8-729-901-00	TRANSISTOR DTC124EK		R332	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
Q300	8-729-027-23	TRANSISTOR DTA114EKA-T146		R335	1-216-841-11	METAL CHIP 47K 5%	1/10W
Q310	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R336	1-216-841-11	METAL CHIP 47K 5%	1/10W
Q320	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R338	1-216-833-11	METAL CHIP 10K 5%	1/10W
Q395	8-729-901-00	TRANSISTOR DTC124EK		R339	1-216-841-11	METAL CHIP 47K 5%	1/10W
Q396	8-729-901-00	TRANSISTOR DTC124EK		R340	1-216-841-11	METAL CHIP 47K 5%	1/10W
		< RESISTOR >		R341	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R209	1-216-864-11	SHORT CHIP 0		R342	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R214	1-218-285-11	METAL CHIP 75 5%	1/10W	R345	1-216-841-11	METAL CHIP 47K 5%	1/10W
R215	1-218-285-11	METAL CHIP 75 5%	1/10W	R346	1-216-841-11	METAL CHIP 47K 5%	1/10W
R216	1-218-285-11	METAL CHIP 75 5%	1/10W	R348	1-216-833-11	METAL CHIP 10K 5%	1/10W
R225	1-218-285-11	METAL CHIP 75 5%	1/10W	R349	1-216-841-11	METAL CHIP 47K 5%	1/10W
R227	1-218-827-11	METAL CHIP 150 0.5%	1/10W	R350	1-216-841-11	METAL CHIP 47K 5%	1/10W
R228	1-218-827-11	METAL CHIP 150 0.5%	1/10W	R351	1-216-845-11	METAL CHIP 100K 5%	1/10W
R229	1-218-827-11	METAL CHIP 150 0.5%	1/10W	R352	1-216-845-11	METAL CHIP 100K 5%	1/10W
R232	1-218-827-11	METAL CHIP 150 0.5%	1/10W	R353	1-216-841-11	METAL CHIP 47K 5%	1/10W
R244	1-218-285-11	METAL CHIP 75 5%	1/10W	R355	1-216-817-11	METAL CHIP 470 5%	1/10W
R245	1-218-285-11	METAL CHIP 75 5%	1/10W	R356	1-216-833-11	METAL CHIP 10K 5%	1/10W
R246	1-218-285-11	METAL CHIP 75 5%	1/10W	R357	1-216-821-11	METAL CHIP 1K 5%	1/10W
R247	1-216-864-11	SHORT CHIP 0		R358	1-216-833-11	METAL CHIP 10K 5%	1/10W
R248	1-216-864-11	SHORT CHIP 0		R359	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R249	1-216-864-11	SHORT CHIP 0		R360	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R250	1-216-864-11	SHORT CHIP 0		R361	1-216-845-11	METAL CHIP 100K 5%	1/10W
R251	1-216-864-11	SHORT CHIP 0		R362	1-216-845-11	METAL CHIP 100K 5%	1/10W
R271	1-216-821-11	METAL CHIP 1K 5%	1/10W	R363	1-216-841-11	METAL CHIP 47K 5%	1/10W
R272	1-216-841-11	METAL CHIP 47K 5%	1/10W	R365	1-216-817-11	METAL CHIP 470 5%	1/10W
R273	1-216-849-11	METAL CHIP 220K 5%	1/10W	R366	1-216-864-11	SHORT CHIP 0	
R274	1-216-825-11	METAL CHIP 2.2K 5%	1/10W	R367	1-216-864-11	SHORT CHIP 0	
R275	1-216-825-11	METAL CHIP 2.2K 5%	1/10W	R399	1-216-821-11	METAL CHIP 1K 5%	1/10W
R276	1-216-825-11	METAL CHIP 2.2K 5%	1/10W	*****			
R277	1-216-821-11	METAL CHIP 1K 5%	1/10W	A-1144-767-A	JACK BOARD, COMPLETE (DZ410)		
R278	1-216-837-11	METAL CHIP 22K 5%	1/10W	A-1167-323-A	JACK BOARD, COMPLETE (DZ119)		
R279	1-216-815-11	METAL CHIP 330 5%	1/10W	*****			
R280	1-216-815-11	METAL CHIP 330 5%	1/10W	< CAPACITOR >			
R281	1-216-815-11	METAL CHIP 330 5%	1/10W	C401	1-124-589-11	ELECT 47uF 20%	16V
R282	1-216-815-11	METAL CHIP 330 5%	1/10W	C403	1-124-584-00	ELECT 100uF 20%	10V
R284	1-216-833-11	METAL CHIP 10K 5%	1/10W	C404	1-164-156-11	CERAMIC CHIP 0.1uF	25V
R285	1-216-833-11	METAL CHIP 10K 5%	1/10W	C405	1-164-156-11	CERAMIC CHIP 0.1uF	25V
R286	1-216-821-11	METAL CHIP 1K 5%	1/10W	C410	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
R301	1-216-821-11	METAL CHIP 1K 5%	1/10W	C411	1-126-157-11	ELECT 10uF 20%	16V
R302	1-216-821-11	METAL CHIP 1K 5%	1/10W	C412	1-162-923-11	CERAMIC CHIP 47PF 5%	50V
R310	1-216-829-11	METAL CHIP 4.7K 5%	1/10W	C413	1-162-960-11	CERAMIC CHIP 220PF 10%	50V
				C420	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
				C421	1-126-157-11	ELECT 10uF 20%	16V

# HCD-DZ119/DZ410

## JACK

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C422	1-162-923-11	CERAMIC CHIP	47PF 5% 50V	JR905	1-216-864-11	SHORT CHIP	0
C423	1-162-960-11	CERAMIC CHIP	220PF 10% 50V	JR907	1-216-864-11	SHORT CHIP	0
C431	1-107-823-11	CERAMIC CHIP	0.47uF 10% 16V	JR908	1-216-864-11	SHORT CHIP	0
C432	1-162-923-11	CERAMIC CHIP	47PF 5% 50V			< TRANSISTOR >	
C433	1-162-925-11	CERAMIC CHIP	68PF 5% 50V	Q470	8-729-027-59	TRANSISTOR	DTC144EKA-T146
C434	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V	Q471	8-729-027-23	TRANSISTOR	DTA114EKA-T146
C450	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	Q472	8-729-048-50	TRANSISTOR	2SK3018-T106
C460	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	Q473	8-729-027-23	TRANSISTOR	DTA114EKA-T146
C471	1-124-222-91	ELECT	22uF 20% 6.3V	Q474	8-729-027-24	TRANSISTOR	DTA114TKA-T146
C490	1-162-971-11	CERAMIC CHIP	0.001uF 10% 50V	Q475	8-729-027-59	TRANSISTOR	DTC144EKA-T146
C493	1-162-971-11	CERAMIC CHIP	0.001uF 10% 50V	Q476	8-729-027-44	TRANSISTOR	DTC114EKA-T146
C819	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V			< RESISTOR >	
C820	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	R401	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
		< CONNECTOR >		R402	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
CNP802	1-779-550-21	CONNECTOR, FFC (LIF (NON-ZIF)) 13P		R403	1-216-821-11	METAL CHIP	1K 5% 1/10W
		< DIODE >		R410	1-216-845-11	METAL CHIP	100K 5% 1/10W
D433	8-719-988-61	DIODE 1SS355TE-17		R411	1-216-817-11	METAL CHIP	470 5% 1/10W
D470	8-719-988-61	DIODE 1SS355TE-17		R412	1-216-837-11	METAL CHIP	22K 5% 1/10W
D490	6-501-193-01	DIODE 1SS355WTE-17		R413	1-216-821-11	METAL CHIP	1K 5% 1/10W
D491	6-501-193-01	DIODE 1SS355WTE-17		R414	1-216-835-11	METAL CHIP	15K 5% 1/10W
D496	6-501-193-01	DIODE 1SS355WTE-17		R415	1-216-821-11	METAL CHIP	1K 5% 1/10W
D497	6-501-193-01	DIODE 1SS355WTE-17		R416	1-216-801-11	METAL CHIP	22 5% 1/10W
		< FERRITE BEAD >		R420	1-216-845-11	METAL CHIP	100K 5% 1/10W
FB410	1-469-144-21	FERRITE, EMI (SMD) (2012)		R421	1-216-817-11	METAL CHIP	470 5% 1/10W
FB420	1-469-144-21	FERRITE, EMI (SMD) (2012)		R422	1-216-837-11	METAL CHIP	22K 5% 1/10W
FB450	1-216-864-11	SHORT CHIP	0	R423	1-216-821-11	METAL CHIP	1K 5% 1/10W
FB460	1-216-864-11	SHORT CHIP	0	R424	1-216-821-11	METAL CHIP	1K 5% 1/10W
FB470	1-469-144-21	FERRITE, EMI (SMD) (2012)		R431	1-216-864-11	SHORT CHIP	0
FB471	1-469-144-21	FERRITE, EMI (SMD) (2012)		R432	1-216-837-11	METAL CHIP	22K 5% 1/10W
FB472	1-469-144-21	FERRITE, EMI (SMD) (2012)		R433	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
FB474	1-469-144-21	FERRITE, EMI (SMD) (2012)		R434	1-216-864-11	SHORT CHIP	0
FB475	1-469-144-21	FERRITE, EMI (SMD) (2012)		R435	1-216-857-11	METAL CHIP	1M 5% 1/10W
FB479	1-500-284-21	INDUCTOR, FERRITE BEAD		R444	1-216-864-11	SHORT CHIP	0
		< IC >		R445	1-216-864-11	SHORT CHIP	0
IC401	8-759-100-96	IC NJM4558M-TE2		R470	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
IC402	8-759-100-96	IC NJM4558M-TE2		R471	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
		< JACK >		R472	1-216-819-11	METAL CHIP	680 5% 1/10W
J401	1-819-878-11	JACK (AUDIO IN/A.CAL MIC)		R477	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
J402	1-819-878-11	JACK (PHONES)		R478	1-216-813-11	METAL CHIP	220 5% 1/10W
		< SHORT >		R479	1-216-864-11	SHORT CHIP	0
JR811	1-216-864-11	SHORT CHIP	0	R480	1-216-804-11	METAL CHIP	39 5% 1/10W
JR813	1-216-864-11	SHORT CHIP	0	R481	1-216-845-11	METAL CHIP	100K 5% 1/10W
JR814	1-216-864-11	SHORT CHIP	0	R482	1-216-833-11	METAL CHIP	10K 5% 1/10W
JR815	1-216-864-11	SHORT CHIP	0	R487	1-216-864-11	SHORT CHIP	0
JR816	1-216-864-11	SHORT CHIP	0	R488	1-216-845-11	METAL CHIP	100K 5% 1/10W
JR817	1-216-864-11	SHORT CHIP	0	R490	1-216-864-11	SHORT CHIP	0
JR901	1-216-864-11	SHORT CHIP	0	R492	1-216-864-11	SHORT CHIP	0
JR902	1-216-864-11	SHORT CHIP	0	R495	1-216-864-11	SHORT CHIP	0
JR903	1-216-864-11	SHORT CHIP	0	R821	1-216-864-11	SHORT CHIP	0
JR904	1-216-864-11	SHORT CHIP	0	R822	1-216-864-11	SHORT CHIP	0
				R851	1-216-821-11	METAL CHIP	1K 5% 1/10W
				R852	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
				R853	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
				R854	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
				R855	1-216-821-11	METAL CHIP	1K 5% 1/10W
				R856	1-216-825-11	METAL CHIP	2.2K 5% 1/10W

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R857	1-216-825-11	METAL CHIP 2.2K 5%	1/10W	C1112	1-126-947-11	ELECT 47uF 20%	16V
		< SWITCH >		C1113	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
S800	1-418-725-51	ENCODER, ROTARY (12 TYPE)		C1114	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
		(VOLUME, ← ↷ →)		C1115	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
S802	1-762-875-21	SWITCH, KEYBOARD (FUNCTION)		C1116	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
S803	1-762-875-21	SWITCH, KEYBOARD (◀▶)		C1117	1-126-795-11	ELECT 10uF 20%	50V
S804	1-762-875-21	SWITCH, KEYBOARD (■)		C1118	1-126-795-11	ELECT 10uF 20%	50V
S805	1-762-875-21	SWITCH, KEYBOARD (■)		C1119	1-126-795-11	ELECT 10uF 20%	50V
S806	1-762-875-21	SWITCH, KEYBOARD (▶▶)		C1120	1-165-908-11	CERAMIC CHIP 1uF 10%	10V
S807	1-762-875-21	SWITCH, KEYBOARD (⊕)		C1121	1-165-908-11	CERAMIC CHIP 1uF 10%	10V
S808	1-762-875-21	SWITCH, KEYBOARD (▷)		C1122	1-165-908-11	CERAMIC CHIP 1uF 10%	10V
*****							
☆	A-1144-739-A	MAIN BOARD, COMPLETE (DZ119)		C1123	1-165-908-11	CERAMIC CHIP 1uF 10%	10V
☆	A-1178-935-A	MAIN BOARD, COMPLETE (DZ410)		C1124	1-165-908-11	CERAMIC CHIP 1uF 10%	10V
		*****		C1125	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
		< CAPACITOR >		C1126	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C501	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V	C1127	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C503	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V	C1128	1-162-965-11	CERAMIC CHIP 0.0015uF 10%	50V
C504	1-126-947-11	ELECT 47uF 20%	16V	C1130	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C505	1-126-947-11	ELECT 47uF 20%	16V	C1131	1-125-838-11	CERAMIC CHIP 2.2uF 10%	6.3V
C506	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C1132	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C507	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C1133	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C508	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	C1135	1-164-677-11	CERAMIC CHIP 0.033uF 10%	16V
C509	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	C1136	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C510	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C1137	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C511	1-165-908-11	CERAMIC CHIP 1uF 10%	10V	C1138	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C512	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C1139	1-162-919-11	CERAMIC CHIP 22PF 5%	50V
C513	1-165-908-11	CERAMIC CHIP 1uF 10%	10V	C1140	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C517	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	C1144	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C525	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C1146	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C570	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C1147	1-165-176-11	CERAMIC CHIP 0.047uF 10%	16V
C571	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C1148	1-165-176-11	CERAMIC CHIP 0.047uF 10%	16V
C572	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C1149	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C580	1-104-656-11	ELECT 2200uF 20%	6.3V	C1150	1-126-795-11	ELECT 10uF 20%	50V
C582	1-104-658-91	ELECT 100uF 20%	10V	C1151	1-115-416-11	CERAMIC CHIP 0.001uF 5%	25V
C583	1-127-715-91	CERAMIC CHIP 0.22uF 10%	16V	C1152	1-162-915-11	CERAMIC CHIP 10PF 0.5PF	50V
C587	1-127-715-91	CERAMIC CHIP 0.22uF 10%	16V	C1153	1-162-917-11	CERAMIC CHIP 15PF 5%	50V
C589	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C1154	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C598	1-127-573-11	CERAMIC CHIP 1uF 10%	16V	C1155	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C601	1-126-947-11	ELECT 47uF 20%	16V	C1156	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C602	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C1158	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C603	1-104-658-91	ELECT 100uF 20%	10V	C1159	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C712	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C1160	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C716	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C1161	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C762	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C1162	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C798	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C1163	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C799	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C1164	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C855	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C1167	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C856	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C1170	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C875	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V	C1171	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C1101	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V	C1172	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C1102	1-165-908-11	CERAMIC CHIP 1uF 10%	10V	C1173	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C1105	1-126-947-11	ELECT 47uF 20%	16V	C1174	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C1106	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V	C1175	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C1109	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	C1176	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C1110	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V	C1177	1-126-947-11	ELECT 47uF 20%	16V
				C1178	1-126-786-11	ELECT 47uF 20%	16V
				C1179	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V

☆ New part of EEP ROM (IC1103) on the MAIN board cannot be used. Therefore, if the mounted MAIN board (A-1144-739-A, etc.) is replaced, exchange new EEP ROM (IC1103) with that used before the replacement.

# HCD-DZ119/DZ410

## MAIN

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
C1180	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C1181	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C1182	1-127-715-91	CERAMIC CHIP	0.22uF	10%	16V						
C1184	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
C1186	1-127-715-91	CERAMIC CHIP	0.22uF	10%	16V						
C1187	1-126-786-11	ELECT	47uF	20%	16V						
C1188	1-128-934-91	CERAMIC CHIP	0.33uF	20%	10V						
C1190	1-126-947-11	ELECT	47uF	20%	16V						
C1191	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C1192	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
C1193	1-127-715-91	CERAMIC CHIP	0.22uF	10%	16V						
C1195	1-127-715-91	CERAMIC CHIP	0.22uF	10%	16V						
C1197	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C1199	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V						
C1203	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
C1205	1-164-230-11	CERAMIC CHIP	220PF	5%	50V						
C1206	1-164-230-11	CERAMIC CHIP	220PF	5%	50V						
C1208	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
C1209	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V						
C1210	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
C1211	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V						
C1212	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
C1213	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
C1214	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V						
C1215	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
C1217	1-126-947-11	ELECT	47uF	20%	16V						
C1218	1-126-964-11	ELECT	10uF	20%	50V						
C1219	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
C1220	1-126-964-11	ELECT	10uF	20%	50V						
C1221	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C1222	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C1223	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C1224	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
C1225	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V						
C1226	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V						
C1228	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V						
C2200	1-126-795-11	ELECT	10uF	20%	50V						
C2201	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
C2202	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
C2204	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C2205	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C2206	1-216-864-11	SHORT CHIP	0								
C2207	1-126-786-11	ELECT	47uF	20%	16V						
C2208	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C2209	1-126-795-11	ELECT	10uF	20%	50V						
C2210	1-126-795-11	ELECT	10uF	20%	50V						
C2211	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C2212	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C2213	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V						
C3000	1-125-972-91	ELECT	100uF	20%	16V						
C3001	1-126-947-11	ELECT	47uF	20%	16V						
C3002	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V						
C3011	1-126-947-11	ELECT	47uF	20%	16V						
C3012	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3013	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3014	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3015	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3016	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3017	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3018	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3019	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3020	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3021	1-126-947-11	ELECT	47uF	20%	16V						
C3022	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3023	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3024	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3025	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3026	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3027	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3028	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3029	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3030	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3031	1-126-947-11	ELECT	47uF	20%	16V						
C3032	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3033	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3034	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3035	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3036	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3037	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3038	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3039	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3040	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3051	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V						
C3052	1-165-908-11	CERAMIC CHIP	1uF	10%	10V						
C3053	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V						
C3054	1-126-933-11	ELECT	100uF	20%	16V						
C3055	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
C3056	1-126-923-91	ELECT	220uF	20%	10V						
C3057	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
C3058	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V						
C3059	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V						
C3060	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V						
C3067	1-162-927-11	CERAMIC CHIP	100PF	5%	50V						
C3068	1-162-927-11	CERAMIC CHIP	100PF	5%	50V						
C3069	1-162-927-11	CERAMIC CHIP	100PF	5%	50V						
C3070	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V						
C3071	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3072	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C3073	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						
C3075	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V						
C3081	1-126-925-91	ELECT	470uF	20%	10V						
C3082	1-126-925-91	ELECT	470uF	20%	10V						
C3083	1-162-927-11	CERAMIC CHIP	100PF	5%	50V						
C3084	1-162-927-11	CERAMIC CHIP	100PF	5%	50V						
C3085	1-162-927-11	CERAMIC CHIP	100PF	5%	50V						
C3086	1-162-927-11	CERAMIC CHIP	100PF	5%	50V						
C3087	1-162-927-11	CERAMIC CHIP	100PF	5%	50V						
C3088	1-162-927-11	CERAMIC CHIP	100PF	5%	50V						
C3089	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3090	1-104-658-91	ELECT	100uF	20%	10V						
C3091	1-126-934-11	ELECT	220uF	20%	16V						
C3092	1-164-156-11	CERAMIC CHIP	0.1uF		25V						
C3094	1-162-927-11	CERAMIC CHIP	100PF	5%	50V						
C3095	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V						
C3100	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V						



Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
C3103	1-107-725-11	CERAMIC CHIP	0.1uF	10%	16V	C3216	1-112-831-11	ELECT	2200uF	20%	35V
C3104	1-164-156-11	CERAMIC CHIP	0.1uF		25V						(DZ410)
C3105	1-107-725-11	CERAMIC CHIP	0.1uF	10%	16V	C3216	1-126-953-11	ELECT	2200uF	20%	35V
											(DZ119)
C3106	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V	C3217	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C3107	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V	C3218	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C3108	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V	C3219	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C3109	1-112-246-11	ELECT	100uF	20%	35V						
C3112	1-112-246-11	ELECT	100uF	20%	35V	C3220	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
						C3221	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C3113	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V	C3222	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C3114	1-136-177-00	FILM	1uF	5%	50V	C3223	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C3115	1-136-177-00	FILM	1uF	5%	50V	C3250	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V
C3116	1-112-831-11	ELECT	2200uF	20%	35V						
					(DZ410)	C3253	1-107-725-11	CERAMIC CHIP	0.1uF	10%	16V
C3116	1-126-953-11	ELECT	2200uF	20%	35V	C3254	1-164-156-11	CERAMIC CHIP	0.1uF		25V
					(DZ119)	C3255	1-107-725-11	CERAMIC CHIP	0.1uF	10%	16V
						C3256	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C3117	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	C3257	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C3118	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V						
C3119	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	C3258	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V
C3120	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	C3259	1-112-246-11	ELECT	100uF	20%	35V
C3121	1-164-505-11	CERAMIC CHIP	2.2uF		16V	C3262	1-112-246-11	ELECT	100uF	20%	35V
						C3263	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V
C3122	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C3264	1-136-177-00	FILM	1uF	5%	50V
C3123	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V						
C3150	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V	C3265	1-136-177-00	FILM	1uF	5%	50V
C3153	1-107-725-11	CERAMIC CHIP	0.1uF	10%	16V	C3266	1-112-831-11	ELECT	2200uF	20%	35V
C3154	1-164-156-11	CERAMIC CHIP	0.1uF		25V						(DZ410)
						C3266	1-126-953-11	ELECT	2200uF	20%	35V
											(DZ119)
C3155	1-107-725-11	CERAMIC CHIP	0.1uF	10%	16V	C3267	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C3156	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V	C3268	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C3157	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V						
C3158	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V	C3269	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C3159	1-112-246-11	ELECT	100uF	20%	35V	C3270	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
						C3271	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C3162	1-112-246-11	ELECT	100uF	20%	35V	C3272	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C3163	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V	C3273	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C3164	1-136-177-00	FILM	1uF	5%	50V						
C3165	1-136-177-00	FILM	1uF	5%	50V	C3300	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V
C3166	1-112-831-11	ELECT	2200uF	20%	35V	C3303	1-107-725-11	CERAMIC CHIP	0.1uF	10%	16V
					(DZ410)	C3304	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C3166	1-126-953-11	ELECT	2200uF	20%	35V	C3305	1-107-725-11	CERAMIC CHIP	0.1uF	10%	16V
					(DZ119)	C3306	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C3167	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V						
C3168	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	C3307	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C3169	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	C3308	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V
C3170	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	C3309	1-112-246-11	ELECT	100uF	20%	35V
						C3312	1-112-246-11	ELECT	100uF	20%	35V
C3171	1-164-505-11	CERAMIC CHIP	2.2uF		16V	C3313	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V
C3172	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V						
C3173	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C3314	1-136-177-00	FILM	1uF	5%	50V
C3200	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V	C3315	1-136-177-00	FILM	1uF	5%	50V
C3203	1-107-725-11	CERAMIC CHIP	0.1uF	10%	16V	C3316	1-112-831-11	ELECT	2200uF	20%	35V
											(DZ410)
C3204	1-164-156-11	CERAMIC CHIP	0.1uF		25V	C3316	1-126-953-11	ELECT	2200uF	20%	35V
C3205	1-107-725-11	CERAMIC CHIP	0.1uF	10%	16V						(DZ119)
C3206	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V	C3317	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C3207	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V						
C3208	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V	C3318	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
						C3319	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C3209	1-112-246-11	ELECT	100uF	20%	35V	C3320	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C3212	1-112-246-11	ELECT	100uF	20%	35V	C3321	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C3213	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V	C3322	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C3214	1-136-177-00	FILM	1uF	5%	50V						
C3215	1-136-177-00	FILM	1uF	5%	50V	C3323	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
						C3400	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V
						C3403	1-107-725-11	CERAMIC CHIP	0.1uF	10%	16V

# HCD-DZ119/DZ410

## MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark	
C3404	1-164-156-11	CERAMIC CHIP	0.1uF	25V	D3401	6-500-885-01	DIODE P6SMBJ33A-5	
C3405	1-107-725-11	CERAMIC CHIP	0.1uF	10%	16V	D3402	6-500-885-01	DIODE P6SMBJ33A-5
C3406	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V	D3551	6-501-193-01	DIODE 1SS355WTE-17
C3407	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V	D3552	6-501-193-01	DIODE 1SS355WTE-17
C3408	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V			< GROUND TERMINAL BOARD >
C3409	1-112-246-11	ELECT	100uF	20%	35V			
C3412	1-112-246-11	ELECT	100uF	20%	35V			
C3413	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V	* EB903	1-537-738-21	TERMINAL, EARTH (DZ119)
C3414	1-136-177-00	FILM	1uF	5%	50V	EB903	1-537-770-21	TERMINAL BOARD, GROUND (DZ410)
C3415	1-136-177-00	FILM	1uF	5%	50V	* EB1001	1-537-738-21	TERMINAL, EARTH (DZ119)
C3416	1-112-831-11	ELECT	2200uF	20%	35V	EB1001	1-537-770-21	TERMINAL BOARD, GROUND (DZ410)
						* EB1002	1-537-738-21	TERMINAL, EARTH (DZ119)
C3416	1-126-953-11	ELECT	2200uF	20%	35V	EB1002	1-537-770-21	TERMINAL BOARD, GROUND (DZ410)
						* EB1003	1-537-738-21	TERMINAL, EARTH (DZ119)
C3417	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	EB1003	1-537-770-21	TERMINAL BOARD, GROUND (DZ410)
C3418	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	* EB1004	1-537-738-21	TERMINAL, EARTH (DZ119)
C3419	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	EB1004	1-537-770-21	TERMINAL BOARD, GROUND (DZ410)
C3420	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V			
C3421	1-117-370-11	CERAMIC CHIP	10uF	10V		* EB3001	1-537-738-21	TERMINAL, EARTH (DZ119)
C3422	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	EB3001	1-537-770-21	TERMINAL BOARD, GROUND (DZ410)
C3423	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	* EB3002	1-537-738-21	TERMINAL, EARTH (DZ119)
C3551	1-126-960-11	ELECT	1uF	20%	50V	EB3002	1-537-770-21	TERMINAL BOARD, GROUND (DZ410)
C3552	1-126-964-11	ELECT	10uF	20%	50V	* EB3003	1-537-738-21	TERMINAL, EARTH (DZ119)
C3555	1-163-038-91	CERAMIC CHIP	0.1uF	25V		EB3003	1-537-770-21	TERMINAL BOARD, GROUND (DZ410)
						* EB3004	1-537-738-21	TERMINAL, EARTH (DZ119)
						EB3004	1-537-770-21	TERMINAL BOARD, GROUND (DZ410)
						* EB3005	1-537-738-21	TERMINAL, EARTH (DZ119)
						EB3005	1-537-770-21	TERMINAL BOARD, GROUND (DZ410)
								< FERRITE BEAD >
CN507	1-779-281-11	CONNECTOR, FFC (LIF (NON-ZIF)) 13P				FB500	1-469-324-21	FERRITE, EMI (SMD) (2012)
CN509	1-784-380-51	CONNECTOR, FFC/FPC 23P (DZ410)				FB501	1-469-324-21	FERRITE, EMI (SMD) (2012)
CN509	1-793-991-21	CONNECTOR, FFC/FPC 23P (DZ119)				FB502	1-469-324-21	FERRITE, EMI (SMD) (2012)
* CN515	1-564-714-11	PIN, CONNECTOR (SMALL TYPE) 12P				FB503	1-469-324-21	FERRITE, EMI (SMD) (2012)
CN1101	1-815-763-32	CONNECTOR, FFC/FPC 24P				FB504	1-469-324-21	FERRITE, EMI (SMD) (2012)
* CN1105	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P				FB505	1-469-324-21	FERRITE, EMI (SMD) (2012)
* CN1201	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P				FB506	1-469-324-21	FERRITE, EMI (SMD) (2012)
CN1202	1-779-273-11	CONNECTOR, FFC (LIF (NON-ZIF)) 5P				FB507	1-469-324-21	FERRITE, EMI (SMD) (2012)
CN1301	1-779-281-11	CONNECTOR, FFC (LIF (NON-ZIF)) 13P				FB508	1-469-324-21	FERRITE, EMI (SMD) (2012)
CN1302	1-779-275-11	CONNECTOR, FFC (LIF (NON-ZIF)) 7P				FB509	1-469-324-21	FERRITE, EMI (SMD) (2012)
CN3000	1-564-704-41	PIN, CONNECTOR (SMALL TYPE) 2P				FB1106	1-414-226-21	INDUCTOR, FERRITE BEAD
CN3001	1-506-469-11	PIN, CONNECTOR 4P				FB1108	1-414-226-21	INDUCTOR, FERRITE BEAD
CN3002	1-785-101-11	PIN, CONNECTOR (3.96mm PITCH) 3P				FB1111	1-414-226-21	INDUCTOR, FERRITE BEAD
						FB3051	1-216-295-91	SHORT CHIP 0
								< FLUORESCENT INDICATOR >
D503	6-501-193-01	DIODE 1SS355WTE-17				FL501	1-234-177-21	FILTER, CHIP EMI
D504	6-501-193-01	DIODE 1SS355WTE-17				FL502	1-234-177-21	FILTER, CHIP EMI
D505	6-501-193-01	DIODE 1SS355WTE-17				FL503	1-233-893-21	FILTER, CHIP EMI
D2001	8-719-058-24	DIODE RB501V-40TE-17				FL1101	1-234-177-21	FILTER, CHIP EMI
D3071	6-501-193-01	DIODE 1SS355WTE-17				FL1104	1-234-177-21	FILTER, CHIP EMI
D3072	6-501-193-01	DIODE 1SS355WTE-17				FL1105	1-234-177-21	FILTER, CHIP EMI
D3073	6-501-193-01	DIODE 1SS355WTE-17				FL1106	1-234-177-21	FILTER, CHIP EMI
D3111	6-500-885-01	DIODE P6SMBJ33A-5				FL1107	1-234-177-21	FILTER, CHIP EMI
D3112	6-500-885-01	DIODE P6SMBJ33A-5				FL1108	1-234-177-21	FILTER, CHIP EMI
D3151	6-500-885-01	DIODE P6SMBJ33A-5						< IC >
D3152	6-500-885-01	DIODE P6SMBJ33A-5				IC501	6-806-015-01	IC M30622MEP-A49FPU0 (DZ119)
D3201	6-500-885-01	DIODE P6SMBJ33A-5				IC501	6-806-589-01	IC M30622MEP-A76FPU0 (DZ410)
D3202	6-500-885-01	DIODE P6SMBJ33A-5				IC502	6-702-302-01	IC TK11133CSCL-G
D3251	6-500-885-01	DIODE P6SMBJ33A-5						
D3252	6-500-885-01	DIODE P6SMBJ33A-5						
D3301	6-500-885-01	DIODE P6SMBJ33A-5						
D3302	6-500-885-01	DIODE P6SMBJ33A-5						

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
IC511	6-708-922-01	IC PST3635NR		Q506	8-729-120-28	TRANSISTOR	2SC1623-L5L6
IC516	6-703-547-01	IC TA7805LS		Q1101	6-550-008-01	TRANSISTOR	UM6K1N-TN
IC1101	6-707-535-01	IC CXD9849R		Q1102	6-550-653-01	TRANSISTOR	QST8TR
IC1102	6-806-818-01	IC MX29LV320CBTC70-OBA2-0604CE (DZ410)		Q1103	8-729-901-00	TRANSISTOR	DTC124EK
IC1102	6-806-745-01	IC MX29LV320CBTC70-OBA1-0603CE (DZ119)		Q3000	8-729-142-48	TRANSISTOR	2SD1616-TP-LK
☆ IC1103	not supplied	IC BR24L64F-WE2		Q3001	8-729-120-28	TRANSISTOR	2SC1623-L5L6
IC1104	6-709-370-01	IC A2V64S40CTP-G75		Q3002	8-729-120-28	TRANSISTOR	2SC1623-L5L6
IC1105	6-702-302-01	IC TK11133CSCL-G		Q3081	8-729-027-23	TRANSISTOR	DTA114EKA-T146
IC1107	6-702-302-01	IC TK11133CSCL-G		Q3101	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R (DZ119)
IC1109	6-707-485-01	IC NJM2885DL1-18 (TE2)		Q3101	8-729-600-22	TRANSISTOR	2SA1235-F (DZ410)
IC1201	6-704-524-01	IC FAN8036L		Q3102	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R (DZ119)
IC2200	6-707-608-01	IC PCM1803DBR		Q3102	8-729-600-22	TRANSISTOR	2SA1235-F (DZ410)
IC3001	8-759-710-97	IC NJM4565M (TE2)		Q3151	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R (DZ119)
IC3003	8-759-680-48	IC TC7WH157FK (TE85R)		Q3151	8-729-600-22	TRANSISTOR	2SA1235-F (DZ410)
IC3010	6-705-979-01	IC CXD9788AR (DZ410)		Q3152	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R (DZ119)
IC3010	6-707-939-01	IC CXD9843AR (DZ119)		Q3152	8-729-600-22	TRANSISTOR	2SA1235-F (DZ410)
IC3020	6-705-979-01	IC CXD9788AR (DZ410)		Q3201	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R (DZ119)
IC3020	6-707-939-01	IC CXD9843AR (DZ119)		Q3201	8-729-600-22	TRANSISTOR	2SA1235-F (DZ410)
IC3030	6-705-979-01	IC CXD9788AR (DZ410)		Q3202	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R (DZ119)
IC3030	6-707-939-01	IC CXD9843AR (DZ119)		Q3202	8-729-600-22	TRANSISTOR	2SA1235-F (DZ410)
IC3050	6-702-300-01	IC TK11118CSCL-G		Q3251	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R (DZ119)
IC3051	8-759-649-50	IC SN74AHC1GU04DCKR		Q3251	8-729-600-22	TRANSISTOR	2SA1235-F (DZ410)
IC3100	6-708-921-01	IC CXD9883M		Q3252	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R (DZ119)
IC3150	6-708-921-01	IC CXD9883M		Q3252	8-729-600-22	TRANSISTOR	2SA1235-F (DZ410)
IC3200	6-708-921-01	IC CXD9883M		Q3301	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R (DZ119)
IC3250	6-708-921-01	IC CXD9883M		Q3301	8-729-600-22	TRANSISTOR	2SA1235-F (DZ410)
IC3300	6-708-921-01	IC CXD9883M		Q3302	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R (DZ119)
IC3400	6-708-921-01	IC CXD9883M		Q3302	8-729-600-22	TRANSISTOR	2SA1235-F (DZ410)
		< SHORT >		Q3401	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R (DZ119)
JC500	1-216-864-11	SHORT CHIP	0 (DZ410)	Q3402	8-729-026-49	TRANSISTOR	2SA1235-F (DZ410)
JC501	1-216-864-11	SHORT CHIP	0 (DZ119)	Q3402	8-729-600-22	TRANSISTOR	2SA1037AK-T146-R (DZ119)
JC521	1-216-864-11	SHORT CHIP	0	Q3551	8-729-120-28	TRANSISTOR	2SC1623-L5L6
		< COIL >				< RESISTOR >	
L2200	1-414-754-11	INDUCTOR	10uH	R506	1-216-821-11	METAL CHIP	1K 5% 1/10W
L2201	1-216-295-91	SHORT CHIP	0	R507	1-216-841-11	METAL CHIP	47K 5% 1/10W
L3000	1-469-527-91	INDUCTOR	47uH	R513	1-216-821-11	METAL CHIP	1K 5% 1/10W
L3051	1-414-754-11	INDUCTOR	10uH	R515	1-216-821-11	METAL CHIP	1K 5% 1/10W
L3052	1-414-754-11	INDUCTOR	10uH	R519	1-216-809-11	METAL CHIP	100 5% 1/10W
L3053	1-414-754-11	INDUCTOR	10uH	R524	1-216-833-11	METAL CHIP	10K 5% 1/10W
L3054	1-412-939-11	INDUCTOR	1uH	R535	1-216-821-11	METAL CHIP	1K 5% 1/10W
L3111	1-456-680-11	INDUCTOR	10uH	R536	1-216-821-11	METAL CHIP	1K 5% 1/10W
L3112	1-456-680-11	INDUCTOR	10uH	R577	1-216-821-11	METAL CHIP	1K 5% 1/10W
L3151	1-456-680-11	INDUCTOR	10uH	R577	1-216-841-11	METAL CHIP	47K 5% 1/10W (DZ119) (DZ410)
L3152	1-456-680-11	INDUCTOR	10uH	R585	1-216-809-11	METAL CHIP	100 5% 1/10W
L3201	1-456-680-11	INDUCTOR	10uH	R586	1-216-809-11	METAL CHIP	100 5% 1/10W
L3202	1-456-680-11	INDUCTOR	10uH	R587	1-216-809-11	METAL CHIP	100 5% 1/10W
L3251	1-456-680-11	INDUCTOR	10uH	R588	1-216-809-11	METAL CHIP	100 5% 1/10W
L3252	1-456-680-11	INDUCTOR	10uH	R589	1-216-809-11	METAL CHIP	100 5% 1/10W
L3301	1-456-680-11	INDUCTOR	10uH	R590	1-216-809-11	METAL CHIP	100 5% 1/10W
L3302	1-456-680-11	INDUCTOR	10uH	R591	1-216-809-11	METAL CHIP	100 5% 1/10W
L3401	1-456-680-11	INDUCTOR	10uH	R592	1-216-833-11	METAL CHIP	10K 5% 1/10W
L3402	1-456-680-11	INDUCTOR	10uH	R593	1-216-833-11	METAL CHIP	10K 5% 1/10W
		< TRANSISTOR >		R594	1-216-809-11	METAL CHIP	100 5% 1/10W
Q502	6-550-718-01	TRANSISTOR	RSR025N03TL	R595	1-216-809-11	METAL CHIP	100 5% 1/10W

☆ New part of EEP ROM (IC1103) on the MAIN board cannot be used.  
Therefore, if the mounted MAIN board (A-1144-739-A, etc.) is replaced,  
exchange new EEP ROM (IC1103) with that used before the replacement.

# HCD-DZ119/DZ410

## MAIN

Ref. No.	Part No.	Description	Quantity	Unit	Remark	Ref. No.	Part No.	Description	Quantity	Unit	Remark
R597	1-216-809-11	METAL CHIP	100	5%	1/10W	R1111	1-216-809-11	METAL CHIP	100	5%	1/10W
R598	1-216-809-11	METAL CHIP	100	5%	1/10W	R1112	1-211-977-11	METAL CHIP	22	0.5%	1/10W
R601	1-216-809-11	METAL CHIP	100	5%	1/10W						
R608	1-216-809-11	METAL CHIP	100	5%	1/10W	R1113	1-211-977-11	METAL CHIP	22	0.5%	1/10W
						R1114	1-216-845-11	METAL CHIP	100K	5%	1/10W
R612	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1115	1-211-977-11	METAL CHIP	22	0.5%	1/10W
R614	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1116	1-216-821-11	METAL CHIP	1K	5%	1/10W
R616	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1117	1-216-841-11	METAL CHIP	47K	5%	1/10W
R620	1-216-809-11	METAL CHIP	100	5%	1/10W						
R622	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1118	1-216-801-11	METAL CHIP	22	5%	1/10W
						R1120	1-216-801-11	METAL CHIP	22	5%	1/10W
R624	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1121	1-216-801-11	METAL CHIP	22	5%	1/10W
R628	1-216-821-11	METAL CHIP	1K	5%	1/10W	R1123	1-216-864-11	SHORT CHIP	0		
R656	1-216-864-11	SHORT CHIP	0			R1124	1-216-841-11	METAL CHIP	47K	5%	1/10W
R657	1-216-841-11	METAL CHIP	47K	5%	1/10W						
R659	1-216-845-11	METAL CHIP	100K	5%	1/10W	R1126	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
						R1132	1-216-845-11	METAL CHIP	100K	5%	1/10W
R662	1-216-841-11	METAL CHIP	47K	5%	1/10W	R1136	1-216-835-11	METAL CHIP	15K	5%	1/10W
R673	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1141	1-218-916-11	METAL CHIP	750K	5%	1/10W
R692	1-216-809-11	METAL CHIP	100	5%	1/10W	R1142	1-216-845-11	METAL CHIP	100K	5%	1/10W
R693	1-216-809-11	METAL CHIP	100	5%	1/10W						
R702	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1144	1-216-864-11	SHORT CHIP	0		
						R1145	1-216-864-11	SHORT CHIP	0		
R703	1-216-809-11	METAL CHIP	100	5%	1/10W	R1146	1-216-805-11	METAL CHIP	47	5%	1/10W
R704	1-216-809-11	METAL CHIP	100	5%	1/10W	R1147	1-216-864-11	SHORT CHIP	0		
R707	1-216-809-11	METAL CHIP	100	5%	1/10W	R1148	1-216-864-11	SHORT CHIP	0		
R708	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R709	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1151	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R1152	1-216-864-11	SHORT CHIP	0		
R710	1-216-809-11	METAL CHIP	100	5%	1/10W	R1153	1-216-864-11	SHORT CHIP	0		
R713	1-216-864-11	SHORT CHIP	0			R1154	1-216-809-11	METAL CHIP	100	5%	1/10W
R717	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1155	1-216-809-11	METAL CHIP	100	5%	1/10W
R719	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R720	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1156	1-216-809-11	METAL CHIP	100	5%	1/10W
						R1159	1-216-805-11	METAL CHIP	47	5%	1/10W
R725	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1160	1-216-864-11	SHORT CHIP	0		
R726	1-216-821-11	METAL CHIP	1K	5%	1/10W	R1161	1-216-864-11	SHORT CHIP	0		
R727	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1164	1-216-864-11	SHORT CHIP	0		
R728	1-216-821-11	METAL CHIP	1K	5%	1/10W						
R729	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R1168	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R1171	1-216-864-11	SHORT CHIP	0		
R730	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R1176	1-216-864-11	SHORT CHIP	0		
R733	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1180	1-216-805-11	METAL CHIP	47	5%	1/10W
R739	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1181	1-216-805-11	METAL CHIP	47	5%	1/10W
R741	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R742	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1182	1-216-805-11	METAL CHIP	47	5%	1/10W
						R1191	1-216-821-11	METAL CHIP	1K	5%	1/10W
R744	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1193	1-216-821-11	METAL CHIP	1K	5%	1/10W
R746	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1204	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R755	1-216-821-11	METAL CHIP	1K	5%	1/10W	R1205	1-216-833-11	METAL CHIP	10K	5%	1/10W
R756	1-216-821-11	METAL CHIP	1K	5%	1/10W						
R774	1-216-821-11	METAL CHIP	1K	5%	1/10W	R1206	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R1207	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R775	1-216-841-11	METAL CHIP	47K	5%	1/10W	R1208	1-216-839-11	METAL CHIP	33K	5%	1/10W
R789	1-216-809-11	METAL CHIP	100	5%	1/10W	R1209	1-216-839-11	METAL CHIP	33K	5%	1/10W
R790	1-216-809-11	METAL CHIP	100	5%	1/10W	R1210	1-216-841-11	METAL CHIP	47K	5%	1/10W
R791	1-216-809-11	METAL CHIP	100	5%	1/10W						
R792	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R1212	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R1213	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R793	1-216-839-11	METAL CHIP	33K	5%	1/10W	R1214	1-216-835-11	METAL CHIP	15K	5%	1/10W
						R1215	1-216-834-11	METAL CHIP	12K	5%	1/10W
R1101	1-216-809-11	METAL CHIP	100	5%	1/10W	R1216	1-216-834-11	METAL CHIP	12K	5%	1/10W
R1105	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R1106	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1219	1-216-838-11	METAL CHIP	27K	5%	1/10W
R1107	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1220	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R1221	1-218-889-11	METAL CHIP	56K	0.5%	1/10W
R1108	1-216-857-11	METAL CHIP	1M	5%	1/10W	R1222	1-216-839-11	METAL CHIP	33K	5%	1/10W
R1109	1-216-864-11	SHORT CHIP	0			R1223	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R1110	1-216-841-11	METAL CHIP	47K	5%	1/10W						

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R1224	1-216-833-11	METAL CHIP	10K	5%	1/10W	R2316	1-216-864-11	SHORT CHIP	0		
R1225	1-218-895-11	METAL CHIP	100K	0.5%	1/10W	R2317	1-216-864-11	SHORT CHIP	0		
R1226	1-218-889-11	METAL CHIP	56K	0.5%	1/10W						
R1227	1-216-864-11	SHORT CHIP	0			R2318	1-216-864-11	SHORT CHIP	0		
R1228	1-216-864-11	SHORT CHIP	0			R2319	1-216-864-11	SHORT CHIP	0		
						R2506	1-216-864-11	SHORT CHIP	0		
R1230	1-218-893-11	METAL CHIP	82K	0.5%	1/10W	R2546	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R1231	1-218-875-11	METAL CHIP	15K	0.5%	1/10W	R2547	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1232	1-218-877-11	METAL CHIP	18K	0.5%	1/10W						
R1233	1-218-883-11	METAL CHIP	33K	0.5%	1/10W	R2548	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1234	1-216-833-11	METAL CHIP	10K	5%	1/10W	R2549	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
						R2550	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1236	1-216-821-11	METAL CHIP	1K	5%	1/10W	R2551	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1237	1-216-821-11	METAL CHIP	1K	5%	1/10W	R2553	1-216-864-11	SHORT CHIP	0		
R1238	1-216-829-11	METAL CHIP	4.7K	5%	1/10W						
R1239	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R2554	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1243	1-216-809-11	METAL CHIP	100	5%	1/10W	R2555	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R3001	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1246	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R3002	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1247	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3003	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R1255	1-216-864-11	SHORT CHIP	0								
R2101	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R3004	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R2103	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3006	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
						R3011	1-216-817-11	METAL CHIP	470	5%	1/10W
R2104	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3012	1-216-817-11	METAL CHIP	470	5%	1/10W
R2105	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3013	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2109	1-216-864-11	SHORT CHIP	0								
R2110	1-216-826-11	METAL CHIP	2.7K	5%	1/10W	R3014	1-216-809-11	METAL CHIP	100	5%	1/10W
R2111	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3015	1-216-809-11	METAL CHIP	100	5%	1/10W
						R3017	1-216-809-11	METAL CHIP	100	5%	1/10W
R2114	1-216-809-11	METAL CHIP	100	5%	1/10W	R3021	1-216-817-11	METAL CHIP	470	5%	1/10W
R2115	1-216-809-11	METAL CHIP	100	5%	1/10W	R3022	1-216-817-11	METAL CHIP	470	5%	1/10W
R2120	1-216-864-11	SHORT CHIP	0								
R2121	1-216-864-11	SHORT CHIP	0			R3023	1-216-809-11	METAL CHIP	100	5%	1/10W
R2122	1-216-864-11	SHORT CHIP	0			R3024	1-216-809-11	METAL CHIP	100	5%	1/10W
						R3026	1-216-809-11	METAL CHIP	100	5%	1/10W
R2123	1-216-864-11	SHORT CHIP	0			R3031	1-216-817-11	METAL CHIP	470	5%	1/10W
R2124	1-216-864-11	SHORT CHIP	0			R3032	1-216-817-11	METAL CHIP	470	5%	1/10W
R2125	1-216-864-11	SHORT CHIP	0								
R2126	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3033	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2129	1-216-845-11	METAL CHIP	100K	5%	1/10W	R3034	1-216-809-11	METAL CHIP	100	5%	1/10W
						R3035	1-216-809-11	METAL CHIP	100	5%	1/10W
R2133	1-216-864-11	SHORT CHIP	0			R3037	1-216-809-11	METAL CHIP	100	5%	1/10W
R2134	1-216-864-11	SHORT CHIP	0			R3050	1-216-864-11	SHORT CHIP	0		
R2150	1-216-827-11	METAL CHIP	3.3K	5%	1/10W						
R2151	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R3052	1-216-857-11	METAL CHIP	1M	5%	1/10W
R2152	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R3053	1-216-809-11	METAL CHIP	100	5%	1/10W
						R3054	1-216-801-11	METAL CHIP	22	5%	1/10W
R2161	1-216-864-11	SHORT CHIP	0			R3055	1-216-809-11	METAL CHIP	100	5%	1/10W
R2168	1-216-815-11	METAL CHIP	330	5%	1/10W	R3057	1-216-809-11	METAL CHIP	100	5%	1/10W
R2176	1-216-864-11	SHORT CHIP	0								
R2200	1-216-809-11	METAL CHIP	100	5%	1/10W	R3059	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2202	1-216-817-11	METAL CHIP	470	5%	1/10W	R3060	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R3061	1-216-864-11	SHORT CHIP	0		
R2203	1-216-817-11	METAL CHIP	470	5%	1/10W	R3062	1-216-809-11	METAL CHIP	100	5%	1/10W
R2211	1-216-809-11	METAL CHIP	100	5%	1/10W	R3063	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2212	1-216-809-11	METAL CHIP	100	5%	1/10W						
R2213	1-216-809-11	METAL CHIP	100	5%	1/10W	R3064	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2214	1-216-809-11	METAL CHIP	100	5%	1/10W	R3065	1-216-821-11	METAL CHIP	1K	5%	1/10W
						R3066	1-216-809-11	METAL CHIP	100	5%	1/10W
R2306	1-216-864-11	SHORT CHIP	0			R3067	1-216-809-11	METAL CHIP	100	5%	1/10W
R2307	1-216-864-11	SHORT CHIP	0			R3068	1-216-809-11	METAL CHIP	100	5%	1/10W
R2308	1-216-864-11	SHORT CHIP	0								
R2309	1-216-864-11	SHORT CHIP	0			R3069	1-216-809-11	METAL CHIP	100	5%	1/10W
R2310	1-216-864-11	SHORT CHIP	0			R3070	1-216-809-11	METAL CHIP	100	5%	1/10W
						R3071	1-216-809-11	METAL CHIP	100	5%	1/10W
R2311	1-216-864-11	SHORT CHIP	0			R3072	1-216-809-11	METAL CHIP	100	5%	1/10W
R2314	1-216-864-11	SHORT CHIP	0			R3073	1-216-809-11	METAL CHIP	100	5%	1/10W
R2315	1-216-864-11	SHORT CHIP	0								

# HCD-DZ119/DZ410

## MAIN

Ref. No.	Part No.	Description	Quantity	Unit	Remark	Ref. No.	Part No.	Description	Quantity	Unit	Remark
R3075	1-216-809-11	METAL CHIP	100	5%	1/10W	R3215	1-216-797-11	METAL CHIP	10	5%	1/10W
R3076	1-216-809-11	METAL CHIP	100	5%	1/10W	R3216	1-216-797-11	METAL CHIP	10	5%	1/10W
R3077	1-216-809-11	METAL CHIP	100	5%	1/10W						
R3078	1-216-809-11	METAL CHIP	100	5%	1/10W	R3219	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R3079	1-216-809-11	METAL CHIP	100	5%	1/10W	R3220	1-216-136-00	RES-CHIP	2.7	5%	1/8W
						R3221	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3080	1-216-845-11	METAL CHIP	100K	5%	1/10W	R3222	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3085	1-216-839-11	METAL CHIP	33K	5%	1/10W	R3223	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3086	1-216-839-11	METAL CHIP	33K	5%	1/10W						
R3087	1-216-837-11	METAL CHIP	22K	5%	1/10W	R3224	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3088	1-216-837-11	METAL CHIP	22K	5%	1/10W	R3225	1-216-845-11	METAL CHIP	100K	5%	1/10W
						R3226	1-216-845-11	METAL CHIP	100K	5%	1/10W
R3089	1-216-837-11	METAL CHIP	22K	5%	1/10W	R3227	1-216-845-11	METAL CHIP	100K	5%	1/10W
R3090	1-216-837-11	METAL CHIP	22K	5%	1/10W	R3251	1-216-809-11	METAL CHIP	100	5%	1/10W
R3091	1-216-837-11	METAL CHIP	22K	5%	1/10W						
R3092	1-216-837-11	METAL CHIP	22K	5%	1/10W	R3252	1-216-809-11	METAL CHIP	100	5%	1/10W
R3093	1-216-837-11	METAL CHIP	22K	5%	1/10W	R3253	1-216-797-11	METAL CHIP	10	5%	1/10W
						R3254	1-216-864-11	SHORT CHIP	0		
R3094	1-216-837-11	METAL CHIP	22K	5%	1/10W	R3257	1-216-835-11	METAL CHIP	15K	5%	1/10W
R3095	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R3265	1-216-797-11	METAL CHIP	10	5%	1/10W
R3096	1-216-825-11	METAL CHIP	2.2K	5%	1/10W						
R3097	1-216-809-11	METAL CHIP	100	5%	1/10W	R3266	1-216-797-11	METAL CHIP	10	5%	1/10W
R3098	1-216-837-11	METAL CHIP	22K	5%	1/10W	R3269	1-216-136-00	RES-CHIP	2.7	5%	1/8W
						R3270	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R3099	1-216-837-11	METAL CHIP	22K	5%	1/10W	R3271	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3101	1-216-809-11	METAL CHIP	100	5%	1/10W	R3272	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3102	1-216-809-11	METAL CHIP	100	5%	1/10W						
R3103	1-216-797-11	METAL CHIP	10	5%	1/10W	R3273	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3104	1-216-864-11	SHORT CHIP	0			R3274	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R3275	1-216-845-11	METAL CHIP	100K	5%	1/10W
R3107	1-216-835-11	METAL CHIP	15K	5%	1/10W	R3276	1-216-845-11	METAL CHIP	100K	5%	1/10W
R3115	1-216-797-11	METAL CHIP	10	5%	1/10W	R3277	1-216-845-11	METAL CHIP	100K	5%	1/10W
R3116	1-216-797-11	METAL CHIP	10	5%	1/10W						
R3119	1-216-136-00	RES-CHIP	2.7	5%	1/8W	R3301	1-216-809-11	METAL CHIP	100	5%	1/10W
R3120	1-216-136-00	RES-CHIP	2.7	5%	1/8W	R3302	1-216-809-11	METAL CHIP	100	5%	1/10W
						R3303	1-216-797-11	METAL CHIP	10	5%	1/10W
R3121	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3304	1-216-864-11	SHORT CHIP	0		
R3122	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3307	1-216-835-11	METAL CHIP	15K	5%	1/10W
R3123	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R3124	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3315	1-216-797-11	METAL CHIP	10	5%	1/10W
R3125	1-216-845-11	METAL CHIP	100K	5%	1/10W	R3316	1-216-797-11	METAL CHIP	10	5%	1/10W
						R3319	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R3126	1-216-845-11	METAL CHIP	100K	5%	1/10W	R3320	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R3127	1-216-845-11	METAL CHIP	100K	5%	1/10W	R3321	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3151	1-216-809-11	METAL CHIP	100	5%	1/10W						
R3152	1-216-809-11	METAL CHIP	100	5%	1/10W	R3322	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3153	1-216-797-11	METAL CHIP	10	5%	1/10W	R3323	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R3324	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3154	1-216-864-11	SHORT CHIP	0			R3325	1-216-845-11	METAL CHIP	100K	5%	1/10W
R3157	1-216-835-11	METAL CHIP	15K	5%	1/10W	R3326	1-216-845-11	METAL CHIP	100K	5%	1/10W
R3165	1-216-797-11	METAL CHIP	10	5%	1/10W						
R3166	1-216-797-11	METAL CHIP	10	5%	1/10W	R3327	1-216-845-11	METAL CHIP	100K	5%	1/10W
R3169	1-216-136-00	RES-CHIP	2.7	5%	1/8W	R3401	1-216-809-11	METAL CHIP	100	5%	1/10W
						R3402	1-216-809-11	METAL CHIP	100	5%	1/10W
R3170	1-216-136-00	RES-CHIP	2.7	5%	1/8W	R3403	1-216-797-11	METAL CHIP	10	5%	1/10W
R3171	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3404	1-216-864-11	SHORT CHIP	0		
R3172	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R3173	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3407	1-216-835-11	METAL CHIP	15K	5%	1/10W
R3174	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3415	1-216-797-11	METAL CHIP	10	5%	1/10W
						R3416	1-216-797-11	METAL CHIP	10	5%	1/10W
R3175	1-216-845-11	METAL CHIP	100K	5%	1/10W	R3419	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R3176	1-216-845-11	METAL CHIP	100K	5%	1/10W	R3420	1-216-136-00	RES-CHIP	2.7	5%	1/8W
R3177	1-216-845-11	METAL CHIP	100K	5%	1/10W						
R3201	1-216-809-11	METAL CHIP	100	5%	1/10W	R3421	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3202	1-216-809-11	METAL CHIP	100	5%	1/10W	R3422	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R3423	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3203	1-216-797-11	METAL CHIP	10	5%	1/10W	R3424	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3204	1-216-864-11	SHORT CHIP	0			R3425	1-216-845-11	METAL CHIP	100K	5%	1/10W
R3207	1-216-835-11	METAL CHIP	15K	5%	1/10W						

Ref. No.	Part No.	Description	Remark
R3426	1-216-845-11	METAL CHIP 100K 5%	1/10W
R3427	1-216-845-11	METAL CHIP 100K 5%	1/10W
R3551	1-216-845-11	METAL CHIP 100K 5%	1/10W
R3553	1-216-833-11	METAL CHIP 10K 5%	1/10W
R3554	1-216-845-11	METAL CHIP 100K 5%	1/10W
R3555	1-216-864-11	SHORT CHIP 0	
R4002	1-216-864-11	SHORT CHIP 0	
< NETWORK RESISTOR >			
RB501	1-233-576-11	RES, CHIP NETWORK 100 (3216)	
RB1103	1-234-372-11	RES, NETWORK 100 (1005X4)	
RB1104	1-234-372-11	RES, NETWORK 100 (1005X4)	
RB1105	1-234-372-11	RES, NETWORK 100 (1005X4)	
RB1106	1-234-372-11	RES, NETWORK 100 (1005X4)	
RB1107	1-234-372-11	RES, NETWORK 100 (1005X4)	
RB1108	1-234-372-11	RES, NETWORK 100 (1005X4)	
RB1111	1-234-372-11	RES, NETWORK 100 (1005X4)	
RB1112	1-234-371-21	RES, NETWORK 47 (1005X4)	
RB1113	1-234-371-21	RES, NETWORK 47 (1005X4)	
RB1114	1-234-372-11	RES, NETWORK 100 (1005X4)	
RB1115	1-234-372-11	RES, NETWORK 100 (1005X4)	
< VIBRATOR >			
X502	1-795-058-21	VIBRATOR, CERAMIC 5MHz	
X1102	1-813-539-11	QUARTZ CRYSTAL UNIT 27MHz	
X3051	1-795-660-21	QUARTZ CRYSTAL UNIT 49.152MHz	
*****			
MS-203 BOARD			
*****			
< CONNECTOR >			
CN001	1-815-412-11	CONNECTOR, FFC/FPC 5P	
< SWITCH >			
S001	1-786-693-11	SWITCH, DETECTION	
*****			
A-1144-737-A	POWER BOARD, COMPLETE (DZ119)		
A-1177-660-A	POWER BOARD, COMPLETE (DZ410)		
*****			
< CAPACITOR >			
△C901	1-165-529-11	MYLAR 0.22uF 10	275V
△C902	1-165-529-11	MYLAR 0.22uF 10	275V
△C903	1-112-332-11	ELECT (BLOCK) 330uF 20%	400V
△C905	1-112-335-91	FILM 0.0033uF 5%	400V
△C906	1-117-815-11	FILM 1000PF 3%	1.5KV
△C907	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
△C908	1-107-909-11	ELECT 47uF 20%	35V
△C909	1-162-960-11	CERAMIC CHIP 220PF 10%	50V
△C910	1-126-965-91	ELECT 22uF 20%	50V
△C911	1-162-968-11	CERAMIC CHIP 0.0047uF 10%	50V
△C913	1-117-693-11	CERAMIC 100PF 10%	250V
△C918	1-113-925-11	CERAMIC 0.01uF 20%	250V
△C920	1-113-925-11	CERAMIC 0.01uF 20%	250V
△C922	1-128-560-11	ELECT 22uF 20%	100V
△C923	1-162-968-11	CERAMIC CHIP 0.0047uF 10%	50V

Ref. No.	Part No.	Description	Remark
△C924	1-126-961-11	ELECT 2.2uF 20%	50V
△C925	1-107-974-81	CERAMIC 47PF 5%	2KV
△C928	1-113-900-11	CERAMIC 470PF 10%	250V
△C929	1-115-339-11	CERAMIC CHIP 0.1uF 10%	50V
△C930	1-117-693-11	CERAMIC 100PF 10%	250V
C932	1-100-924-21	ELECT 2200uF 20%	35V
C933	1-100-924-21	ELECT 2200uF 20%	35V
C934	1-112-831-11	ELECT 2200uF 20%	35V (DZ410)
C934	1-126-953-11	ELECT 2200uF 20%	35V (DZ119)
C935	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C936	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C937	1-100-756-91	CERAMIC CHIP 0.047uF	50V
△C938	1-117-698-51	CERAMIC 680PF 10%	250V
C939	1-136-165-00	FILM 0.1uF 5%	50V
C940	1-128-947-31	ELECT 3300uF 20%	10V
C941	1-128-954-11	ELECT 1000uF 20%	25V
C942	1-126-941-11	ELECT 470uF 20%	25V
C943	1-126-933-11	ELECT 100uF 20%	16V
C944	1-128-951-21	ELECT 2200uF 20%	16V
C945	1-126-935-11	ELECT 470uF 20%	16V
C946	1-128-950-21	ELECT 1000uF 20%	16V
C947	1-104-658-91	ELECT 100uF 20%	10V
C948	1-126-925-91	ELECT 470uF 20%	10V
C949	1-165-722-11	ELECT 100uF 20%	10V
C951	1-100-566-91	CERAMIC CHIP 0.1uF 10%	25V
C952	1-100-756-91	CERAMIC CHIP 0.047uF	50V
C953	1-117-214-11	CERAMIC 0.001uF 10%	2KV
C954	1-100-566-91	CERAMIC CHIP 0.1uF 10%	25V
C955	1-100-566-91	CERAMIC CHIP 0.1uF 10%	25V
C958	1-100-566-91	CERAMIC CHIP 0.1uF 10%	25V
C960	1-100-566-91	CERAMIC CHIP 0.1uF 10%	25V
△C963	1-117-699-11	CERAMIC 0.001uF 99%	250V
△C964	1-117-699-11	CERAMIC 0.001uF 99%	250V
C965	1-117-699-11	CERAMIC 0.001uF 99%	250V
C967	1-100-566-91	CERAMIC CHIP 0.1uF 10%	25V
C968	1-100-566-91	CERAMIC CHIP 0.1uF 10%	25V
C969	1-100-566-91	CERAMIC CHIP 0.1uF 10%	25V
C970	1-100-566-91	CERAMIC CHIP 0.1uF 10%	25V
C971	1-100-566-91	CERAMIC CHIP 0.1uF 10%	25V
C976	1-126-933-11	ELECT 100uF 20%	16V
< CONNECTOR >			
CN901	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P	
< DIODE >			
△D901	8-719-082-57	DIODE D5SBA60F01	
△D905	8-719-063-74	DIODE D1NL20U-TR2	
△D906	6-501-193-01	DIODE 1SS355WTE-17	
△D907	6-501-193-01	DIODE 1SS355WTE-17	
△D908	6-501-193-01	DIODE 1SS355WTE-17	
△D909	6-501-193-01	DIODE 1SS355WTE-17	
△D910	6-501-193-01	DIODE 1SS355WTE-17	
△D913	6-500-241-01	DIODE SARS03	
△D914	6-501-193-01	DIODE 1SS355WTE-17	
△D915	8-719-977-28	DIODE UDZSTE-1710B	
△D921	6-501-424-01	DIODE ST02D-140	

# HCD-DZ119/DZ410

## POWER

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
△ D922	8-719-063-74	DIODE D1NL20U-TR2		△ PC903	6-600-438-01	IC TLP421F (D4-GR)	
△ D923	8-719-977-28	DIODE UDZSTE-1710B				< TRANSISTOR >	
△ D924	8-719-083-69	DIODE UDZSTE-1724B					
△ D925	8-719-069-54	DIODE UDZSTE-175.1B		△ Q901	8-729-140-04	TRANSISTOR 2SB1116A-TP-LK	
△ D926	8-719-977-28	DIODE UDZSTE-1710B		△ Q921	8-729-142-51	TRANSISTOR 2SD1616A-TP-LK	
D931	6-501-413-01	DIODE FCU20UC20		Q943	8-729-027-59	TRANSISTOR DTC144EKA-T146	
D932	8-719-069-54	DIODE UDZSTE-175.1B		Q945	6-550-718-01	TRANSISTOR RSR025N03TL	
D941	6-500-288-11	DIODE EK19LF-F7		Q947	8-729-027-59	TRANSISTOR DTC144EKA-T146	
D942	8-719-080-53	DIODE RK36LF-B3				< RESISTOR >	
D943	8-719-080-53	DIODE RK36LF-B3		△ R901	1-219-759-11	METAL 1M 5% 1/2W	
D944	6-500-288-11	DIODE EK19LF-F7		△ R903	1-215-929-11	METAL OXIDE 100K 5% 3W	
D945	8-719-083-67	DIODE UDZSTE-1720B		△ R904	1-215-929-11	METAL OXIDE 100K 5% 3W	
		< GROUND TERMINAL BOARD >		△ R905	1-216-797-11	METAL CHIP 10 5% 1/10W	
EB901	1-537-770-21	TERMINAL BOARD, GROUND (DZ410)		△ R906	1-216-827-11	METAL CHIP 3.3K 5% 1/10W	
* EB901	1-537-738-21	TERMINAL, EARTH (DZ119)		△ R907	1-216-833-11	METAL CHIP 10K 5% 1/10W	
EB902	1-537-770-21	TERMINAL BOARD, GROUND (DZ410)		△ R908	1-260-105-11	CARBON 3.3K 5% 1/2W	
* EB902	1-537-738-21	TERMINAL, EARTH (DZ119)		△ R909	1-216-845-11	METAL CHIP 100K 5% 1/10W	
EB903	1-537-770-21	TERMINAL BOARD, GROUND (DZ410)		△ R910	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
* EB903	1-537-738-21	TERMINAL, EARTH (DZ119)		△ R911	1-216-813-11	METAL CHIP 220 5% 1/10W	
EB904	1-537-770-21	TERMINAL BOARD, GROUND (DZ410)		△ R912	1-216-363-00	METAL OXIDE 0.33 5% 2W	
* EB904	1-537-738-21	TERMINAL, EARTH (DZ119)		△ R914	1-219-718-11	METAL 0.1 10% 5W	
		< FUSE HOLDER >		△ R919	1-216-836-11	METAL CHIP 18K 5% 1/10W	
△ FH901	1-533-217-41	HOLDER, FUSE (DZ119)		△ R922	1-216-793-11	METAL CHIP 4.7 5% 1/10W	
△ FH901	1-533-313-11	FUSE HOLDER 0A 0V (DZ410)		△ R923	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
△ FH902	1-533-217-41	HOLDER, FUSE (DZ119)		△ R925	1-216-797-11	METAL CHIP 10 5% 1/10W	
△ FH902	1-533-313-11	FUSE HOLDER 0A 0V (DZ410)		△ R926	1-216-855-11	METAL CHIP 680K 5% 1/10W	
		< FUSIBLE >		△ R927	1-216-349-00	METAL OXIDE 1 5% 1W	
△ FR901	1-220-886-11	FUSIBLE 0.1 10% 1W		△ R929	1-249-478-11	CARBON 2.2 5% 1/2W	
		< IC >		R931	1-218-859-11	METAL CHIP 3.3K 0.5% 1/10W	
△ IC901	6-707-742-01	IC STR-F6168-LF1352		R932	1-218-883-11	METAL CHIP 33K 0.5% 1/10W	
△ IC921	6-707-740-01	IC STR-V153		R933	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
IC931	8-759-648-34	IC TA76431AS (TPE6)		R934	1-216-821-11	METAL CHIP 1K 5% 1/10W	
IC941	6-707-746-01	IC SI-3120KM-TL		R935	1-216-821-11	METAL CHIP 1K 5% 1/10W	
IC942	6-707-745-10	IC SI-3050KM-TL		R936	1-216-853-11	METAL CHIP 470K 5% 1/10W	
IC943	6-707-744-01	IC SI-3033KM-TL		R937	1-216-833-11	METAL CHIP 10K 5% 1/10W	
IC951	6-707-743-01	IC TA76L431S (TPE6, Q)		R938	1-216-821-11	METAL CHIP 1K 5% 1/10W	
		< COIL >		R939	1-218-859-11	METAL CHIP 3.3K 0.5% 1/10W	
L931	1-457-226-11	INDUCTOR 10uH		R940	1-216-833-11	METAL CHIP 10K 5% 1/10W	
L941	1-414-398-11	INDUCTOR 10uH		R941	1-216-864-11	SHORT CHIP 0	
L942	1-414-398-11	INDUCTOR 10uH		R943	1-216-864-11	SHORT CHIP 0	
L945	1-414-398-11	INDUCTOR 10uH		R946	1-216-811-11	METAL CHIP 150 5% 1/10W	
L947	1-414-398-11	INDUCTOR 10uH		R948	1-216-833-11	METAL CHIP 10K 5% 1/10W	
L948	1-414-398-11	INDUCTOR 10uH		R949	1-216-821-11	METAL CHIP 1K 5% 1/10W	
L951	1-414-398-11	INDUCTOR 10uH		R951	1-218-831-11	METAL CHIP 220 0.5% 1/10W	
		< LINE FILTER >		R952	1-218-855-11	METAL CHIP 2.2K 0.5% 1/10W	
△ LF901	1-457-079-11	COIL, LINE FILTER		R953	1-218-861-11	METAL CHIP 3.9K 0.5% 1/10W	
△ LF902	1-457-079-11	COIL, LINE FILTER		R954	1-216-837-11	METAL CHIP 22K 5% 1/10W	
		< IC >		R955	1-216-817-11	METAL CHIP 470 5% 1/10W	
△ PC901	6-600-438-01	IC TLP421F (D4-GR)		R956	1-216-821-11	METAL CHIP 1K 5% 1/10W	
△ PC902	6-600-438-01	IC TLP421F (D4-GR)		R957	1-216-841-11	METAL CHIP 47K 5% 1/10W	
				R958	1-216-821-11	METAL CHIP 1K 5% 1/10W	
				R965	1-218-865-11	METAL CHIP 5.6K 0.5% 1/10W	
				R966	1-216-821-11	METAL CHIP 1K 5% 1/10W	
				R967	1-216-821-11	METAL CHIP 1K 5% 1/10W	
				R968	1-216-821-11	METAL CHIP 1K 5% 1/10W	
				△ R969	1-216-821-11	METAL CHIP 1K 5% 1/10W	
				R971	1-216-864-11	SHORT CHIP 0	



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R974	1-216-827-11	METAL CHIP 3.3K 5%	1/10W	*****			
		< TRANSFORMER >				SW BOARD	
						*****	
△ T901	1-443-874-11	TRANSFORMER, CONVERTER				< SWITCH >	
△ T902	1-443-650-11	TRANSFORMER, CONVERTER					
		< THERMISTOR >		S801	1-762-875-21	SWITCH, KEYBOARD (I/⏏)	
△ TH901	1-805-842-21	THERMISTOR, NTC 6.0		*****			
		< VARISTOR >				MISCELLANEOUS	
						*****	
△ VDR901	1-805-482-11	VARISTOR		3	1-693-700-11	TUNER (FM/AM) (TM10SCE)	
*****				8	1-828-962-11	WIRE (FLAT TYPE)(11 CORE)	
		SPEAKER BOARD		65	1-828-384-11	WIRE (FLAT TYPE)(23 CORE)	
		*****		66	1-828-325-11	WIRE (FLAT TYPE)(13 CORE)	
		< CAPACITOR >		104	1-787-331-11	FAN, D.C.	
C301	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	△ 106	1-751-520-31	CORD, POWER (UK)	
C302	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	△ 106	1-777-071-22	CORD, POWER (DZ119)	
C303	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	△ 106	1-830-188-11	CORD, POWER (DZ410:AEP)	
C304	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	110	1-828-292-11	WIRE (FLAT TYPE)(5 CORE)	
C305	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	111	1-828-332-11	WIRE (FLAT TYPE)(13 CORE)	
C306	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	112	1-828-300-11	WIRE (FLAT TYPE)(7 CORE)	
C307	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	113	1-828-330-11	WIRE (FLAT TYPE)(13 CORE)	
C308	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	△ 507	8-820-290-02	DEVICE, OPTICAL KHM-310CAA/C2RP	
C309	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	508	1-828-773-51	WIRE (FLAT TYPE)(24 CORE)	
C310	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	△ F901	1-532-325-00	FUSE, TIME-LAG (T6.3AL/250V)	
C311	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V				
C312	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V				
C313	1-163-021-91	CERAMIC CHIP 0.01uF 10%	50V				
C314	1-163-021-91	CERAMIC CHIP 0.01uF 10%	50V				
C315	1-163-021-91	CERAMIC CHIP 0.01uF 10%	50V				
C316	1-163-021-91	CERAMIC CHIP 0.01uF 10%	50V				
C317	1-163-021-91	CERAMIC CHIP 0.01uF 10%	50V				
C318	1-163-021-91	CERAMIC CHIP 0.01uF 10%	50V				
C319	1-163-021-91	CERAMIC CHIP 0.01uF 10%	50V				
C320	1-163-021-91	CERAMIC CHIP 0.01uF 10%	50V				
C321	1-163-021-91	CERAMIC CHIP 0.01uF 10%	50V				
C322	1-163-021-91	CERAMIC CHIP 0.01uF 10%	50V				
C323	1-163-021-91	CERAMIC CHIP 0.01uF 10%	50V				
C324	1-163-021-91	CERAMIC CHIP 0.01uF 10%	50V				
		< CONNECTOR >					
* CN301	1-564-519-11	PLUG, CONNECTOR 4P					
CN302	1-818-651-11	PIN, CONNECTOR 2P					
* CN303	1-564-521-11	PLUG, CONNECTOR 6P					
		< EARTH TERMINAL >					
EP301	1-537-738-21	TERMINAL, EARTH (DZ119)					
EP301	1-537-770-21	TERMINAL BOARD, GROUND (DZ410)					
EP302	1-537-738-21	TERMINAL, EARTH (DZ119)					
EP302	1-537-770-21	TERMINAL BOARD, GROUND (DZ410)					
		< TERMINAL >					
TB301	1-780-344-11	TERMINAL BOARD (SPEAKER) 4P (FRONT R, FRONT L, CENTER, WOOFER)					
TB302	1-780-343-11	TERMINAL BOARD (SPEAKER) 2P (SUR R, SUR L)					

