

RCD-W7V

SERVICE MANUAL

US Model

Ver 1.2 2002.09



CD-R	Model Name Using Similar Mechanism	RCD-W1
	CD Mechanism Type	CDM-700(CD-RW)
	Optical Pick-up Type	KRS-220C
CD/DVD	Model Name Using Similar Mechanism	NEW
	CD/DVD Mechanism Type	DP-4RM

SPECIFICATIONS

DECK A (the CD/DVD player section)

System	CD/DVD player
Laser	Semiconductor laser
Signal format system	NTSC
Playable discs	DVD, CD, CD-R/CD-RW (for music use), MP3 disc
Frequency response	DVD (PCM 96 kHz): 20 Hz to 44 kHz (± 1.0 dB) DVD (PCM 48 kHz): 20 Hz to 22 kHz (± 0.5 dB) CD: 20 Hz to 20 kHz (± 0.5 dB)
Signal-to-noise ratio	More than 100dB (ANALOG OUT connectors only)
Harmonic distortion	Less than 0.015%
Dynamic range	More than 95 dB (DVD) More than 95 dB (CD)
Wow and flutter	Less than detected value ($\pm 0.001\%$ W PEAK)
Outputs	
VIDEO OUT	1.0 Vp-p, 75 ohms, sync negative
S-VIDEO OUT	Luminance signal: 1.0 Vp-p, 75 ohms C: 0.3 Vp-p, 75 ohms
COMPONENT VIDEO OUT	Y: 1.0 Vp-p, 75 ohms, sync negative
(Phono jacks)	CB/B-Y, Cr/R-Y: 0.7 Vp-p, 75 ohms

DECK B (the CD-R and CD-RW recording section)

System	Compact disc digital audio system
Laser	Semiconductor laser
Playable discs	CD, CD-R, CD-RW (for music use)
Frequency response	20 Hz to 20,000 Hz (± 0.5 dB)

Signal-to-noise ratio	Over 100 dB during playback
Dynamic range	More than 95 dB during playback
Input	
ANALOG IN (Phono jacks)	Impedance 47 kilohms, Rated input 330 mVrms
DIGITAL OPTICAL IN (Square optical connector jack)	Optical wavelength 660 nm

Outputs

ANALOG OUT (Phono jacks)	Impedance 47 kilohms, Rated input 2 Vrms
	Load impedance over 10 kilohms
DIGITAL OPTICAL OUT (Square optical connector jack)	Wavelength 660 nm
PHONES (Phone jacks)	Output level -18 dBm 28 mW, 32 ohms

General

Power requirements	120 V AC, 60 Hz
Power consumption	25W (120 V AC)
Dimensions (approx.)	430 x 107.5 x 370 mm (w/h/d) incl. projecting parts
Mass (approx.)	5.1 kg

Supplied accessories

- Video cord (1)
- Audio cords (2)
- Remote commander (remote) RM-R70 (1)
- R6 (size AA) batteries (2)

Design and specifications are subject to change without notice.

COMPACT DISC RECORDER

SONY®

9-873-470-03

2002I0200-1

© 2002.09

Sony Corporation

Home Audio Company

Published by Sony Engineering Corporation

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.

CAUTION

The use of optical instruments with this product will increase eye hazard. As the laser beam used in this Compact Disc Recorder is harmful to eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

CAUTION

VISIBLE LASER RADIATION
WHEN OPEN AND
INTERLOCK DEFEATED.
DO NOT STARE INTO BEAM.

This label is located on the rear panel of your recorder.

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 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.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK $\triangle$ OR DOTTED LINE WITH MARK $\triangle$ 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.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

The AC leakage from any exposed metal part to earth Ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

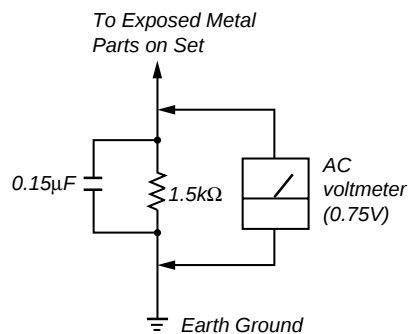


Fig. A. Using an AC voltmeter to check AC leakage.

ERROR MESSAGE

The following table explains the error messages that appear in the display.

CHECK DISC

- ➔ A record-related button has been pressed when a finalized disc is in the DECK B.
- ➔ A record-related button has been pressed when a standard CD is in the DECK B.
- ➔ An unplayable disc (CD-ROM, Video CD etc.) is inserted.

DATA DISC

- ➔ A non-audio CD-ROM or a CD-Video disc has been placed in the machine.

DISC ERROR

- ➔ An unfinalized disc has been placed in the DECK A.
- ➔ A DVD disc has been placed in the DECK B .
- ➔ The disc is not seated properly.
- ➔ There is a problem with the disc.

DISC FULL

- ➔ There is not enough time left on the disc to complete a planned recording.

ERROR

- ➔ The disc tray is not seated properly.

NO AUDIO

- ➔ A record-related button has been pressed when a non-audio disc is in the DECK B.

CAN NOT COPY

- ➔ A recording is not possible due to the Serial Copy Management System (SCMS).

UNLOCK

- ➔ There is not source for recording through DIGITAL OPTICAL IN jack.

NO DISC

- ➔ No disc is inserted in the recorder.

TABLE OF CONTENTS

1. SERVICING NOTE	4
2. GENERAL	8
3. DISASSEMBLY	
3-1. Top Case	9
3-2. Tray Door, Front Panel Assy	10
3-3. HP board, FL board, VOL board	10
3-4. Back Panel	11
3-5. Audio Board	11
3-6. Power Board	12
3-7. DVD Deck Assy (Deck A), CD-R Deck Assy (Deck B) ...	12
3-8. BD Board (Deck A)	13
3-9. Sled Base Assy (Deck A)	13
3-10. CD-R Board (Deck B)	14
3-11. PU Mechanism Assy (Deck B)	14
4. TEST MODE	15
5. ELECTRICAL ADJUSTMENT	16
6. DIAGRAMS	
6-1. Circuit Boards Location	23
6-2. Block diagrams – Overall Section –	24
Block diagrams – CD/DVD Section –	25
Block diagrams – CD-RW Section –	26
Block diagrams – I/O Section –	27
Block diagrams – Power Section –	28
6-3. Schematic Diagram – BD Section (1/5) –	29
6-4. Schematic Diagram – BD Section (2/5) –	30
6-5. Schematic Diagram – BD Section (3/5) –	31
6-6. Schematic Diagram – BD Section (4/5) –	32
6-7. Schematic Diagram – BD Section (5/5) –	33
6-8. Printed Wiring Board – BD Section (Side A) –	34
Printed Wiring Board – BD Section (Side B) –	35
6-9. Schematic Diagram – BD-R Section (1/4) –	36
6-10. Schematic Diagram – BD-R Section (2/4) –	37
6-11. Schematic Diagram – BD-R Section (3/4) –	38
6-12. Schematic Diagram – BD-R Section (4/4) –	39
6-13. Printed Wiring Board – BD-R Section (Side A) –	40
Printed Wiring Board – BD-R Section (Side B) –	41
6-14. Printed Wiring Board – Audio Section –	42
6-15. Schematic Diagram – Audio Section –	43
6-16. Printed Wiring Board – Display Section –	44
6-17. Schematic Diagram – Display Section –	45
6-18. Schematic Diagram – Power Section –	46
6-19. Printed Wiring Board – Power Section –	47
6-20. IC Pin Functions	48
6-21. IC Block Diagrams	54
7. EXPLODED VIEWS	
7-1. Front Panel Section	56
7-2. Chassis Section	57
7-3. DVD Play Section (Deck A) (DP-4RM)	58
7-4. CD Record Section (Deck B) (CDM-700(CD-RW))	59
8. ELECTRICAL PARTS LIST	60

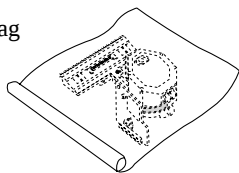
SECTION 1 SERVICING NOTE

NOTES REGARDING HANDLING OF THE PICK-UP

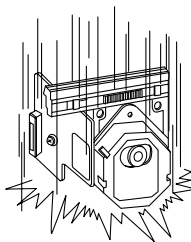
1. Notes for transport and storage

- 1) The pick-up should always be left in its conductive bag until immediately prior to use.
- 2) The pick-up should never be subjected to external pressure or impact.

Storage in conductive bag



Drop impact



2. Repair notes

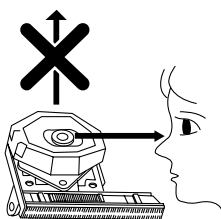
- 1) The pick-up incorporates a strong magnet, and so should never be brought close to magnetic materials.
- 2) The pick-up should always be handled correctly and carefully, taking care to avoid external pressure and impact. If it is subjected to pressure or impact, the result may be an operational malfunction and/or damage to the printed-circuit board.

- 3) Each and every pick-up is already individually adjusted to a high degree of precision, and for that reason the adjustment point and installation screws should absolutely never be touched.

- 4) Laser beams may damage the eyes!

Absolutely never permit laser beams to enter the eyes!

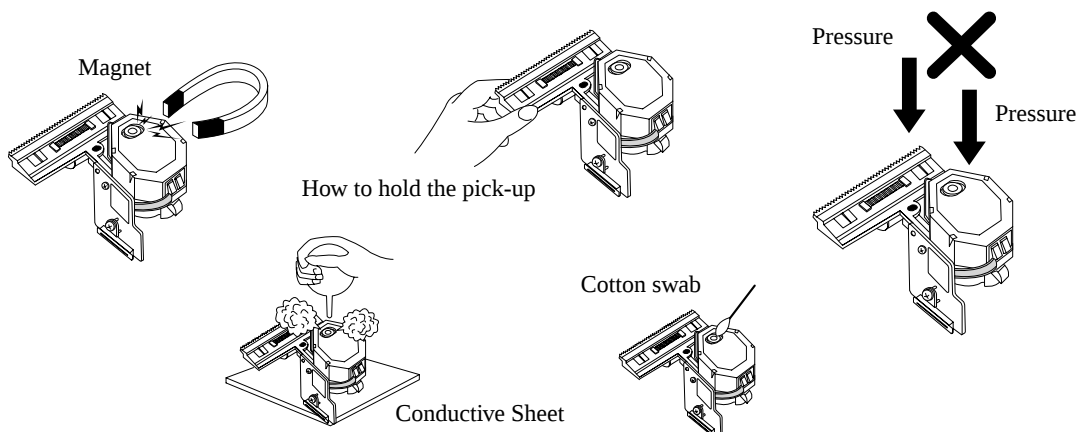
Also NEVER switch ON the power to the laser output part (lens, etc.) of the pick-up if it is damaged.



NEVER look directly at the laser beam, and don't let contact fingers or other exposed skin.

- 5) Cleaning the lens surface

If there is dust on the lens surface, the dust should be cleaned away by using an air bush (such as used for camera lens). The lens is held by a delicate spring. When cleaning the lens surface, therefore, a cotton swab should be used, taking care not to distort this.



- 6) Never attempt to disassemble the pick-up.

Spring by excess pressure. If the lens is extremely dirty, apply isopropyl alcohol to the cotton swab. (Do not use any other liquid cleaners, because they will damage the lens.) Take care not to use too much of this alcohol on the swab, and do not allow the alcohol to get inside the pick-up.

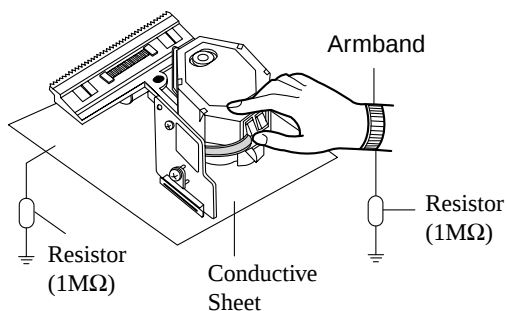
NOTES REGARDING COMPACT DISC PLAYER REPAIRS

1. Preparations

- 1) Compact disc players incorporate a great many ICs as well as the pick-up (laser diode). These components are sensitive to, and easily affected by, static electricity. If such static is high voltage, components can be damaged, and for that reason components should be handled with care.
- 2) The pick-up is composed of many optical components and other high-precision components. Care must be taken, therefore, to avoid repair or storage where the temperature of humidity is high, where strong magnetism is present, or where there is excessive dust.

2. Notes for repair

- 1) Before replacing a component part, first disconnect the power supply lead wire from the unit
- 2) All equipment, measuring instruments and tools must be grounded.
- 3) The workbench should be covered with a conductive sheet and grounded.
When removing the laser pick-up from its conductive bag, do not place the pick-up on the bag. (This is because there is the possibility of damage by static electricity.)
- 4) To prevent AC leakage, the metal part of the soldering iron should be grounded.
- 5) Workers should be grounded by an armband ($1M\Omega$)
- 6) Care should be taken not to permit the laser pick-up to come in contact with clothing, in order to prevent static electricity changes in the clothing to escape from the armband.
- 7) The laser beam from the pick-up should NEVER be directly facing the eyes or bare skin.



Electrostatically Sensitive Devices (ESD)

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive Devices (ESD). Examples of typical ESD devices are integrated circuits and some field-effect transistors and semiconductor chip components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ESD devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ESD devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ESD devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ESD devices.
6. Do not remove a replacement ESD device from its protective package until immediately before you are ready to install it. (Most replacement ESD devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive materials).
7. Immediately before removing the protective material from the leads of a replacement ESD device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

CAUTION : BE SURE NO POWER IS APPLIED TO THE CHASSIS OR CIRCUIT, AND OBSERVE ALL OTHER SAFETY PRECAUTIONS.

8. Minimize bodily motions when handling unpackaged replacement ESD devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ESD device).

MAKING THE ADJUSTMENT DISCS (CDR1/CDR2)

Copy the test programs to a blank CD-R or CD-RW disc.
(This test program is distributed with the service manual)

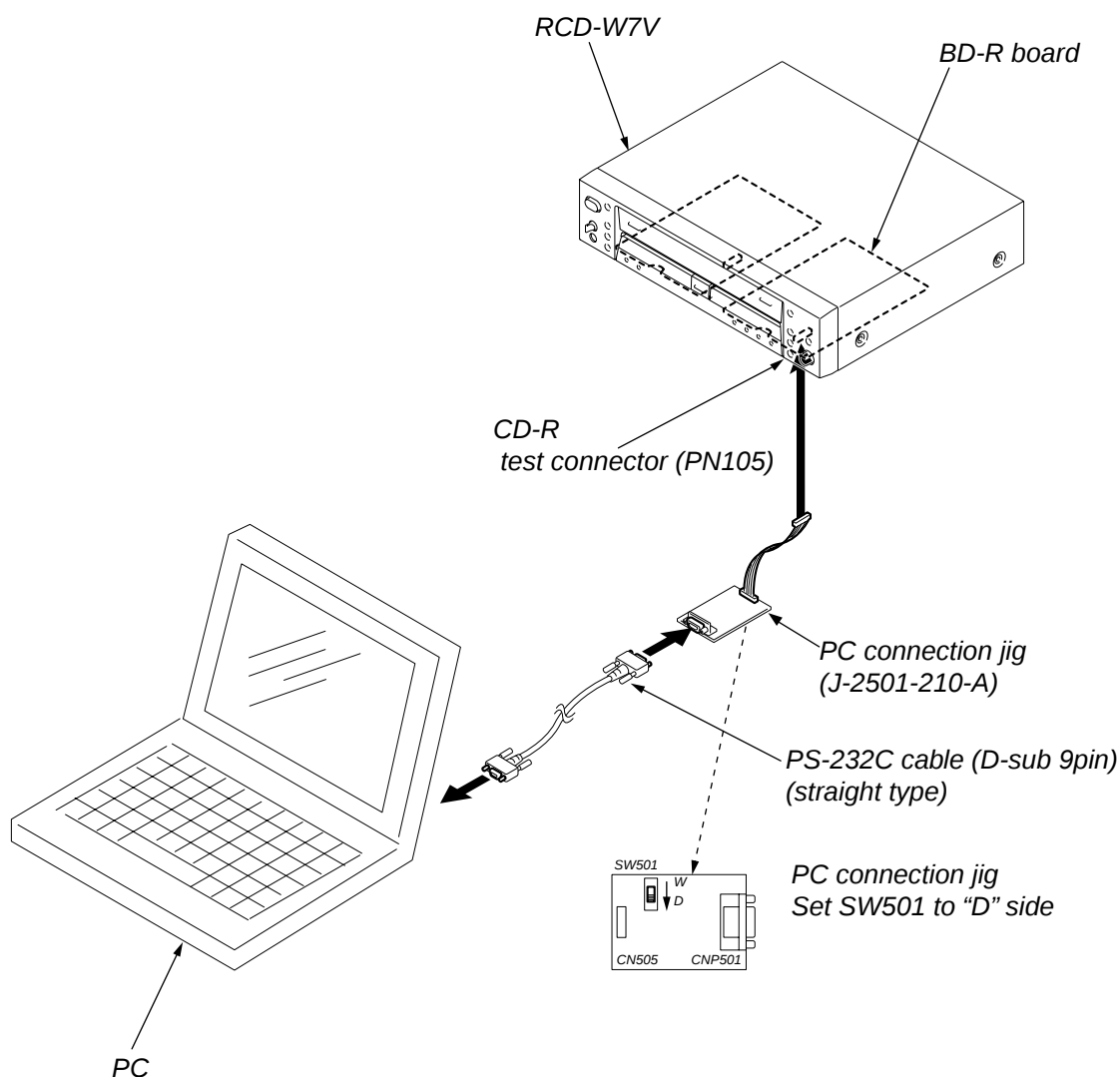
Note: CD-R or CD-RW must be written by "Easy CD Creator".

NOTE ON CHECKING POWER SUPPLY CIRCUIT

1. When check the primary part, you must remove the GND pin of the scope and soldering machine.
Primary GND : C103 (⊖) terminal at power board.
2. When check the primary part, you must open the another GND(not used GND) of scope.
(If another scope GND is connected to secondary GND or other system, input power line or system have some damage.)
3. When touch the primary part by hand in defected system, if you use the power line switch, remove the power cord and then check or touch.
Because in general power switch is switching only one line.
4. When check the primary part, after remove power cord and discharge the primary capacitor, and then check the system.
In the normal state, the voltage of the capacitor is small (about 10V), but in the abnormal state is very high (about 140V).
When discharge the capacitor, use the wattage resistor(about 100 ohm).
5. In the narrow system, Until set repaired completely, insert the power cord at the moment repeatedly and then check the waveform.
6. In the wide system, when insert the power cord, check the wave form after about 3 second.
Because the wide system is the soft start method.

BD-R BOARD CHECK AND ADJUSTING JIGS

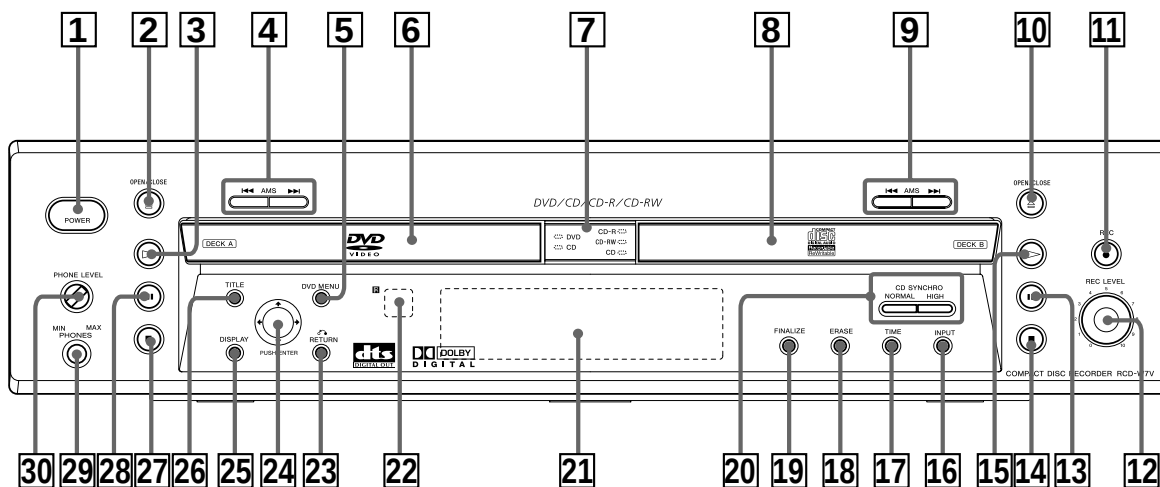
In case of checking or adjusting the LD power of BD-R board, the PC connection jig (J-2501-210-A) and the test program are required.
This test program is distributed with the service manual.



SECTION 2 GENERAL

This section is extracted from instruction manual.

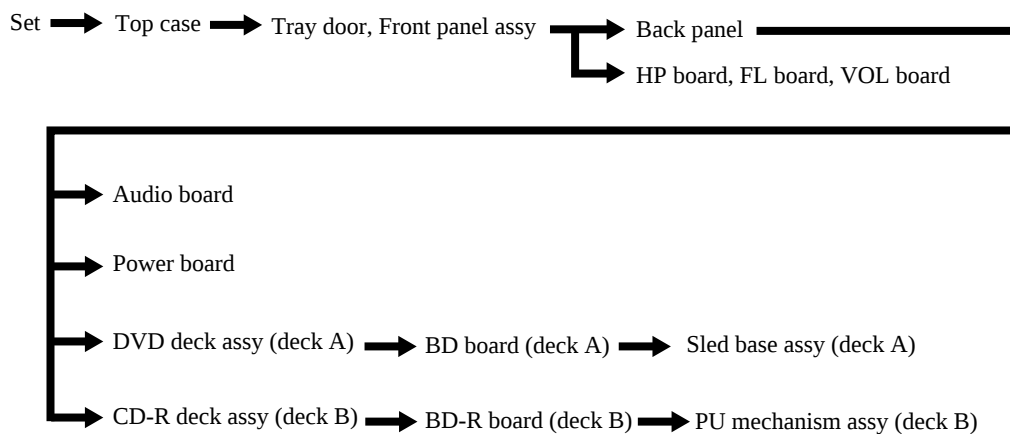
Front Panel



- | | |
|--|---|
| 1 POWER switch (23) | 16 INPUT select (48) |
| 2 $\triangle$ (open/close)-Deck A (23) | 17 TIME (50) |
| 3 $\triangleright$ (play)-Deck A (23) | 18 ERASE (52) |
| 4 AMS $\lll / \ggg$ -Deck A (24) | 19 FINALIZE (51) |
| 5 DVD MENU (27) | 20 CD SYNCHRO (NORMAL/HIGH) (46, 47) |
| 6 Disc tray-Deck A (23) | 21 DISPLAY |
| 7 Disc sort indicator | 22 $\blacksquare$ (remote sensor) |
| 8 Disc tray-Deck B (23) | 23 $\hookrightarrow$ RETURN (22) |
| 9 AMS $\lll / \ggg$ -Deck B (24) | 24 Arrow($\leftarrow/\uparrow/\downarrow/\rightarrow$)/PUSH ENTER (27) |
| 10 $\triangle$ (open/close)-Deck B (23) | 25 DISPLAY (31) |
| 11 $\bullet$ (record)-Deck B (48) | 26 TITLE (27) |
| 12 REC LEVEL control-Deck B (49) | 27 $\blacksquare$ (stop)-Deck A (24) |
| 13 $\parallel$ (pause)-Deck B (24) | 28 $\parallel$ (pause)-Deck A (24) |
| 14 $\blacksquare$ (stop)-Deck B (24) | 29 Headphone jack (24) |
| 15 $\triangleright$ (play)-Deck B (23) | 30 Headphone level control (24) |

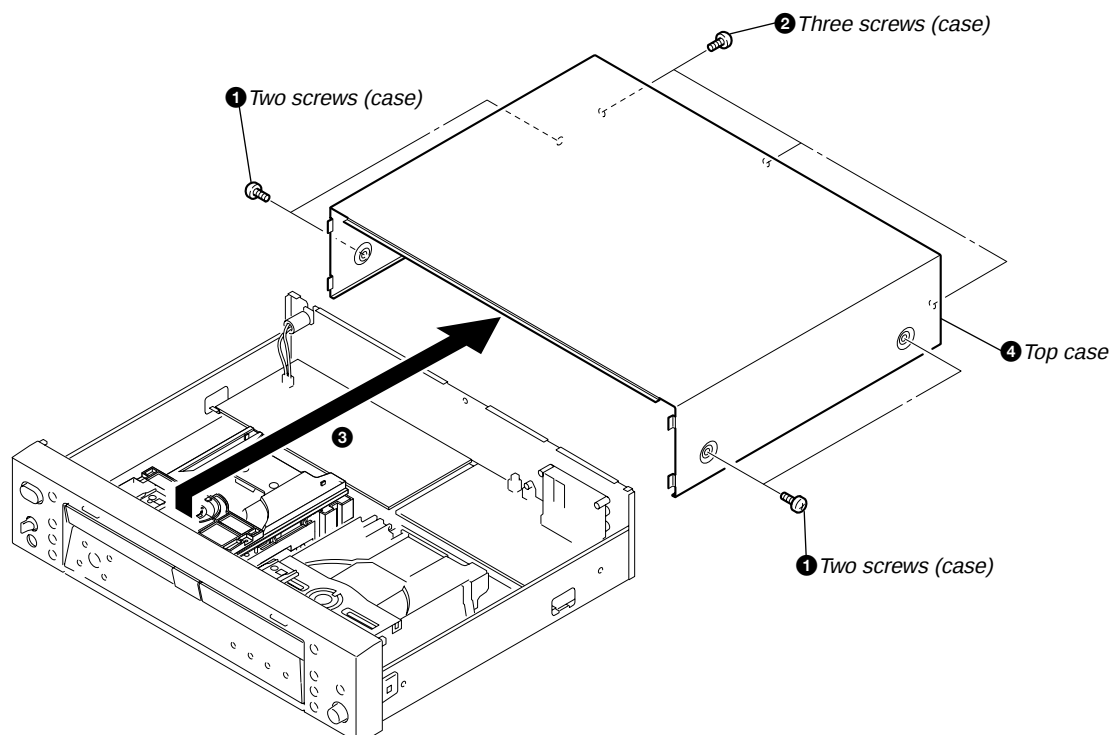
SECTION 3 DISASSEMBLY

Note: Disassemble the unit in the order as shown below.



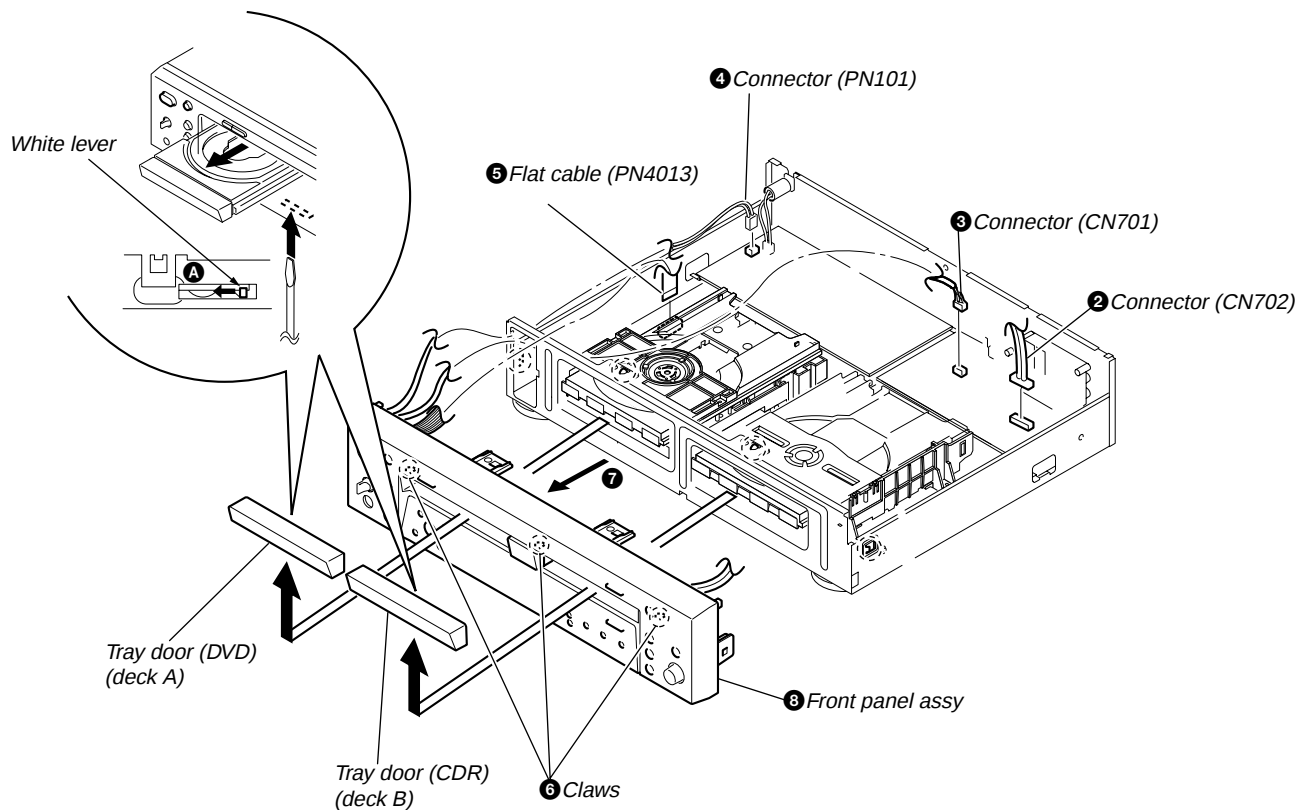
Note: Follow the disassembly procedure in the numerical order given.

3-1. TOP CASE

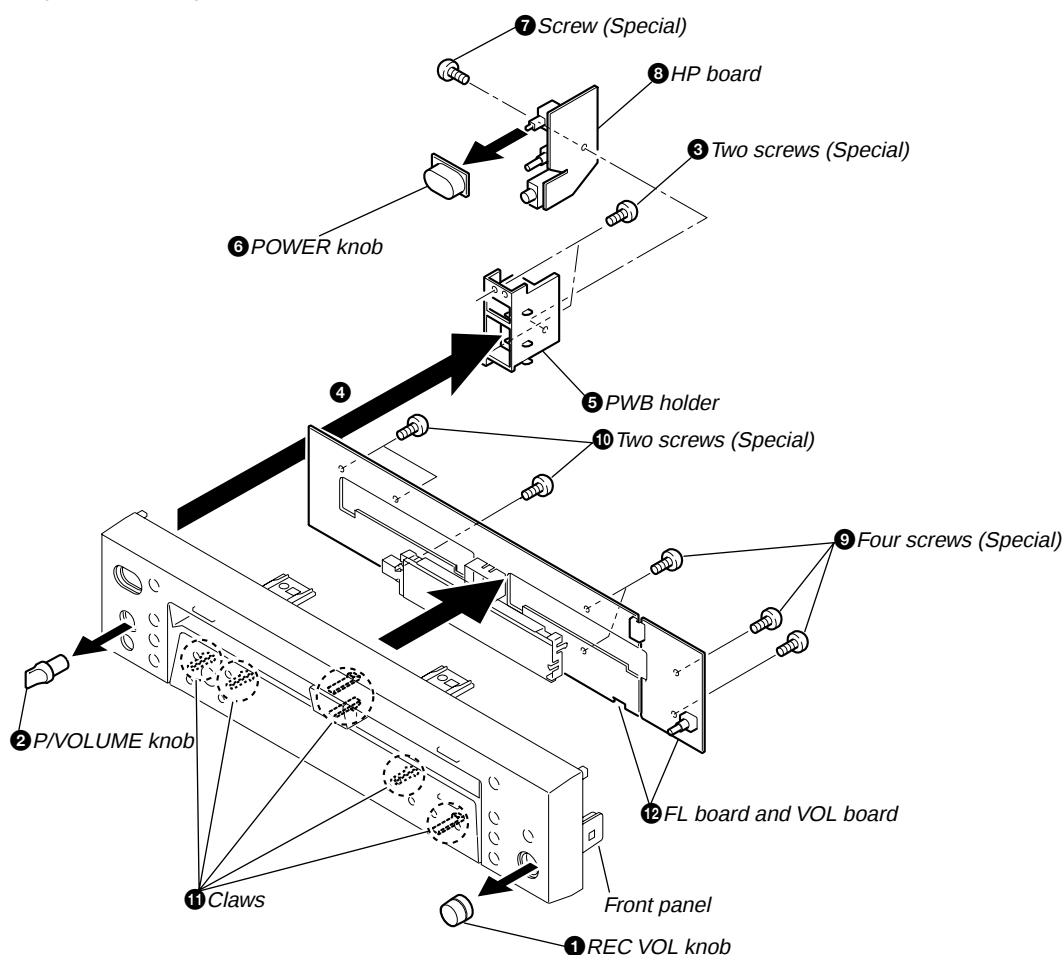


3-2. TRAY DOOR, FRONT PANEL ASSY

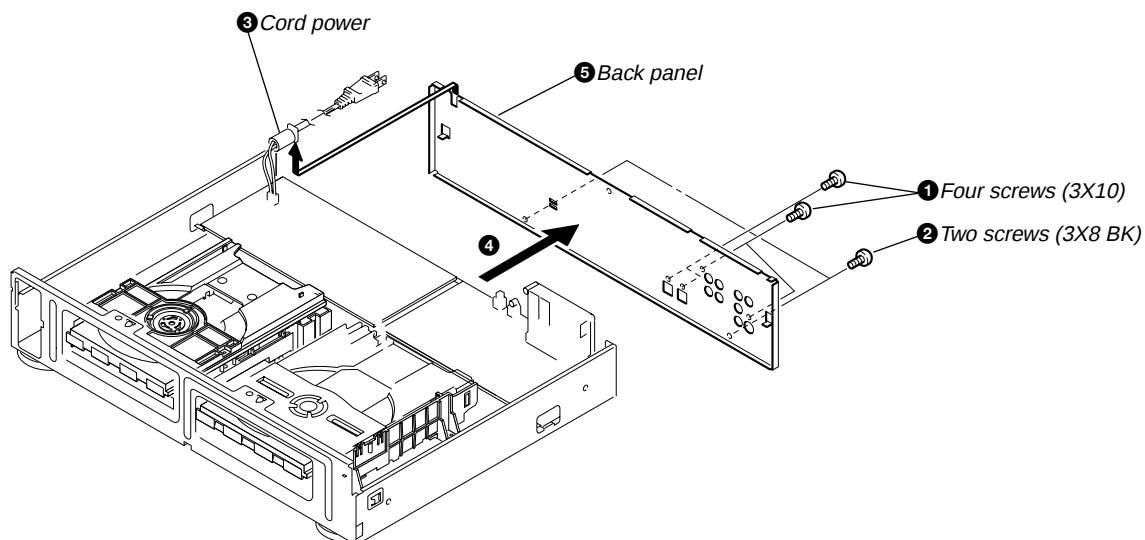
- ① Insert a screwdriver to the square hole on the bottom, and slide the white lever in the arrow A direction to open the tray.
Then remove the tray door.
(In the case of DECK B, remove it in the same manner.)



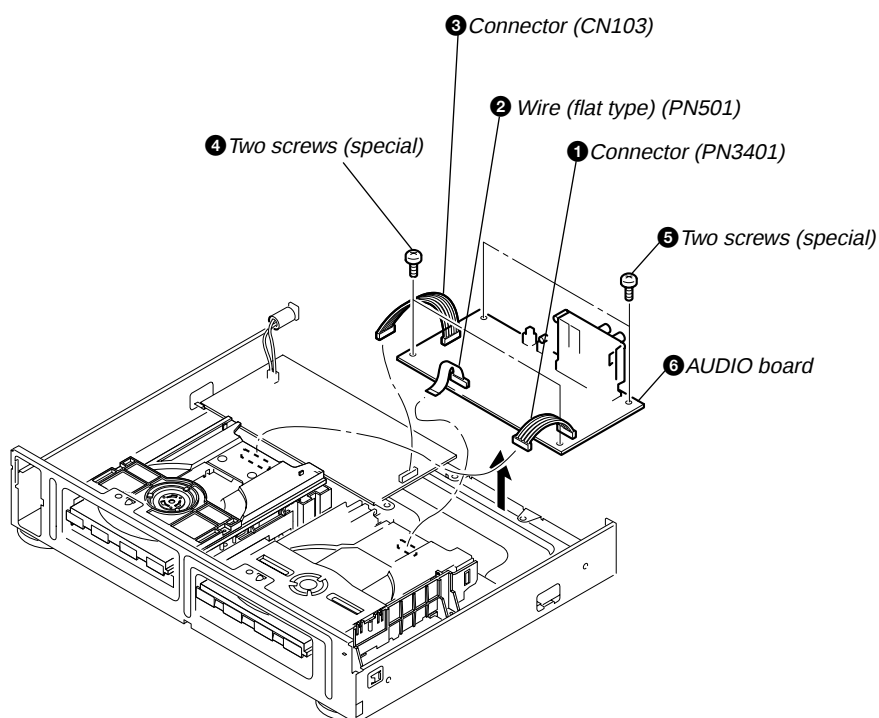
3-3. HP BOARD, FL BOARD, VOL BOARD



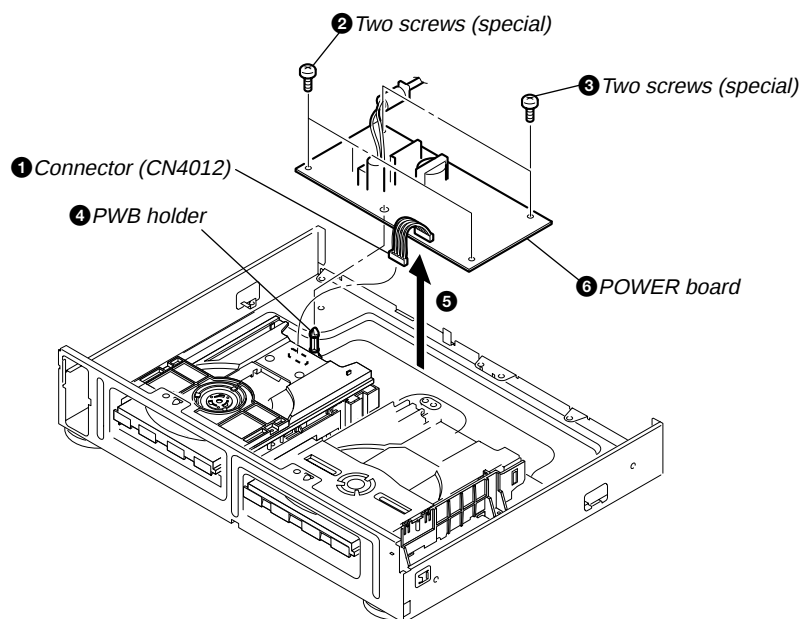
3-4. BACK PANEL



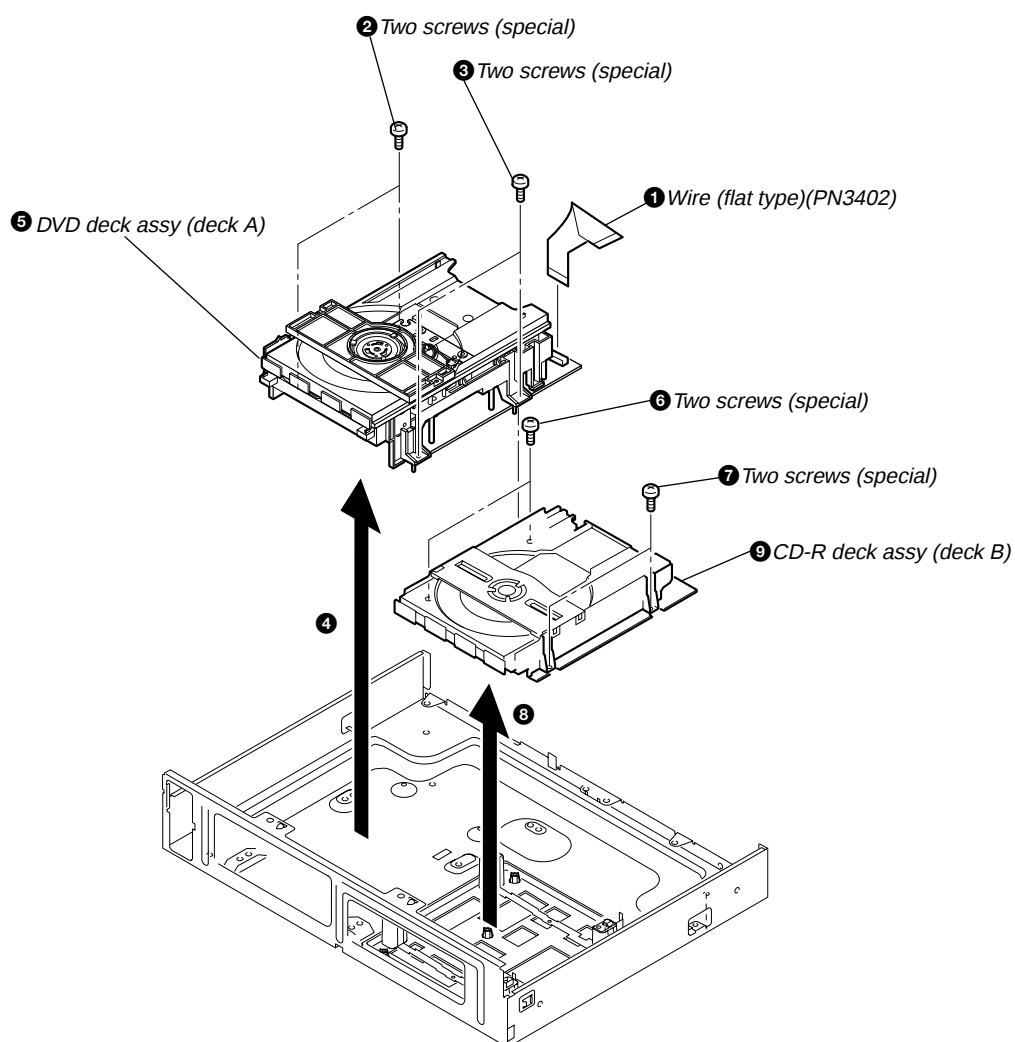
3-5. AUDIO BOARD



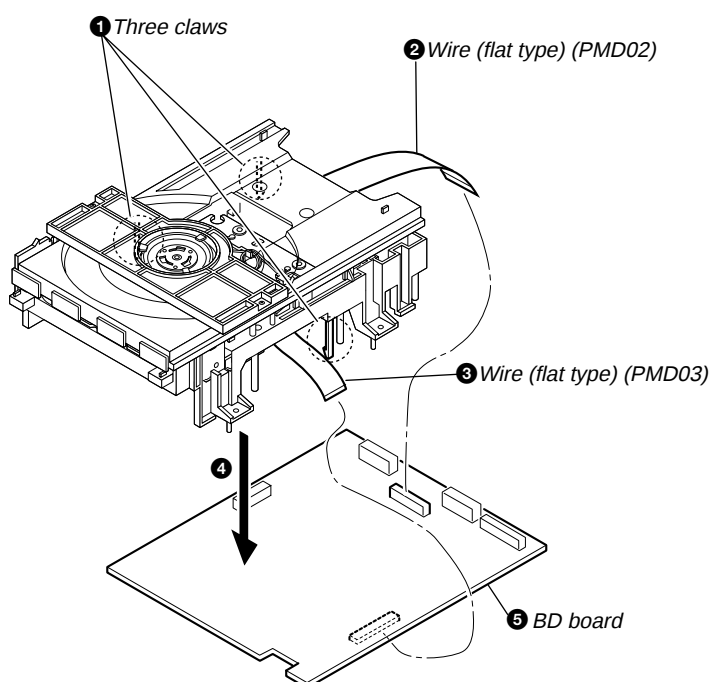
3-6. POWER BOARD



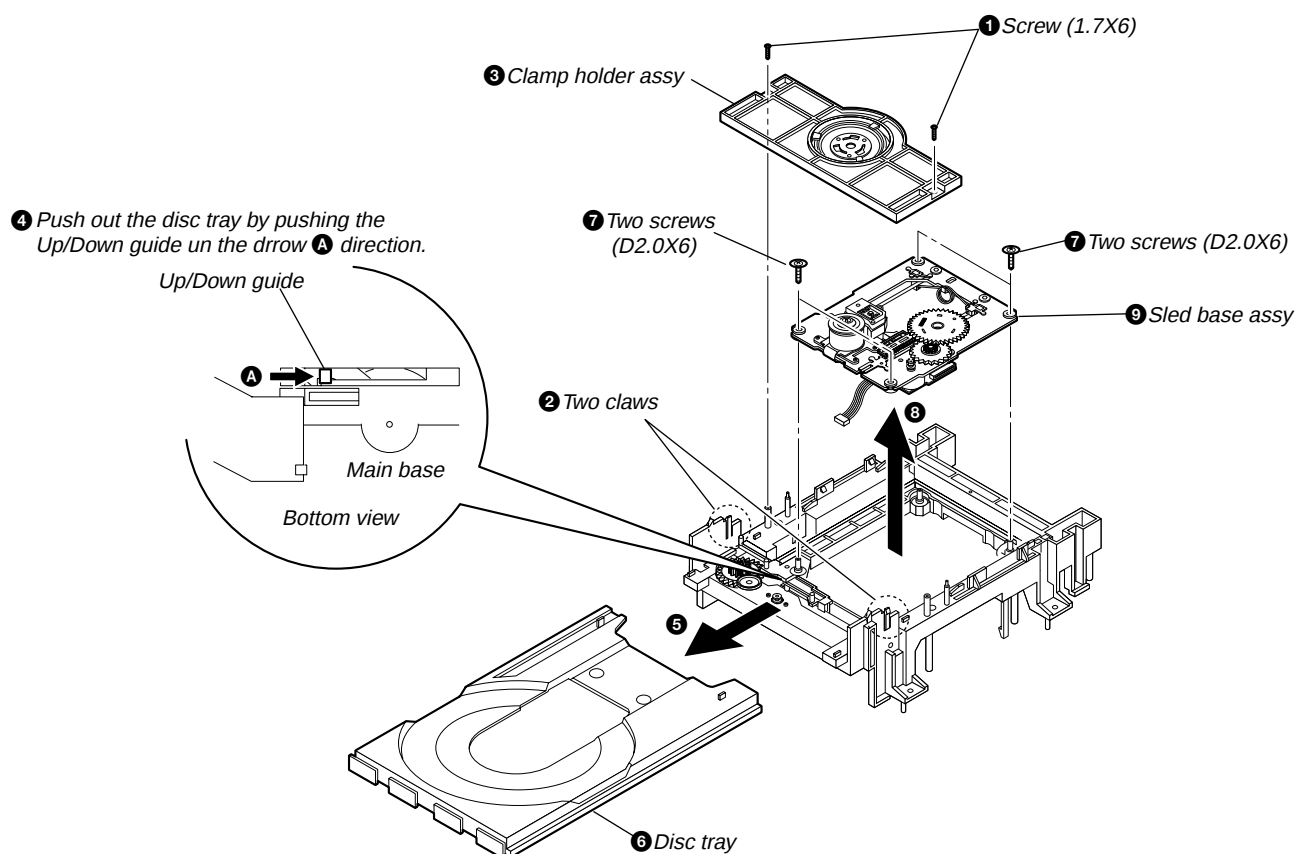
3-7. DVD DECK ASSY (DECK A), CD-R DECK ASSY (DECK B)



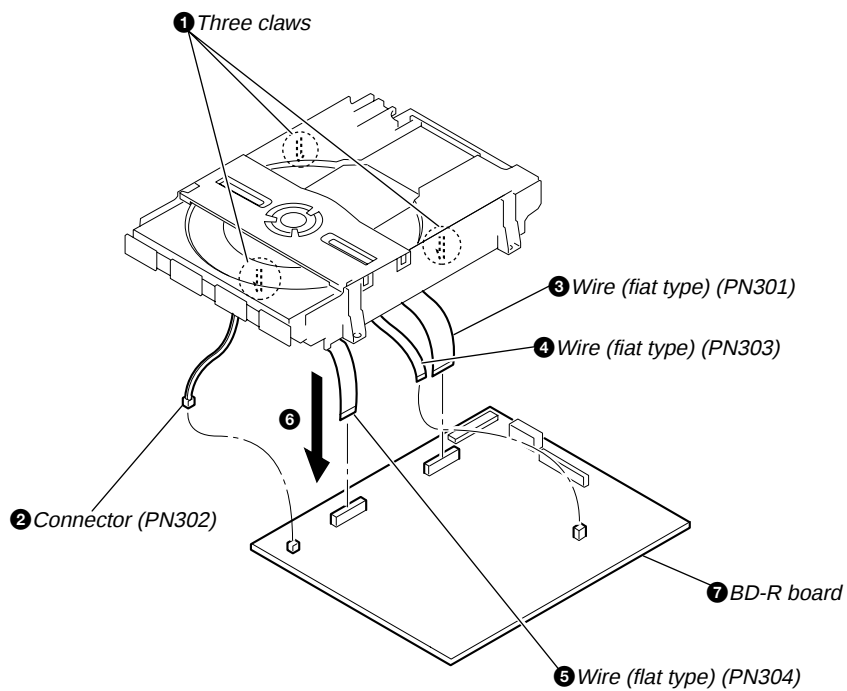
3-8. BD BOARD (DECK A)



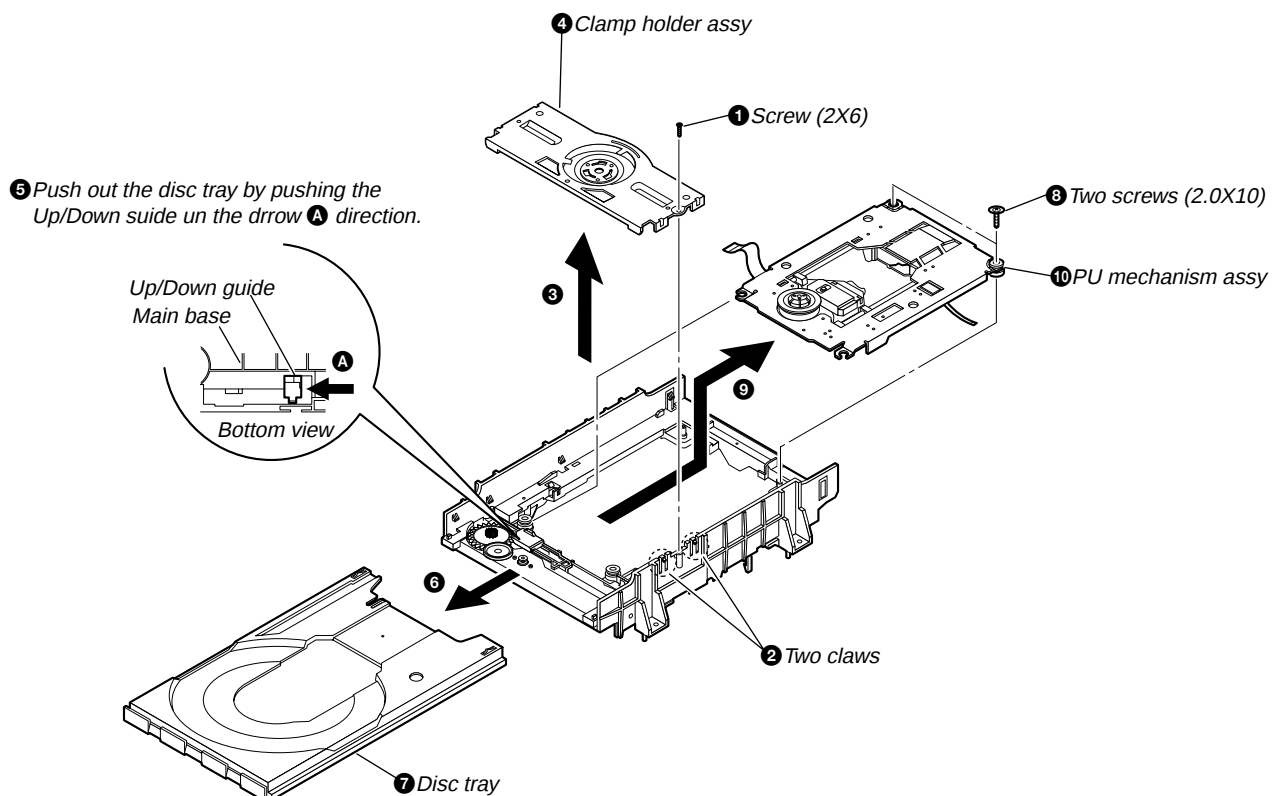
3-9. SLED BASE ASSY (DECK A)



3-10. CD-R BOARD (DECK B)



3-11. PU MECHANISM ASSY (DECK B)



SECTION 4

TEST MODE

4-1. MICROCOMPUTER VERSION DISPLAY

Setting Procedure

1. Connect a monitor to the "VIDEO OUT" terminal on RCD-W7V.
2. Insert the DVD disc to DVD player side (deck A).
3. Press  (DVD) button to stop the disc rotating.
4. Press  button.
5. MENU is displayed on the monitor screen.
6. Select "SET UP" with  or  buttons and press  button.
7. Select "TV Aspect" in the "SET UP MENU" with  or  buttons and press  button.
8. Select "16:9 Wide" in the "TV Aspect" with  or  buttons. (Don't press  button.)
9. Press the numerical buttons 1, 3, 9, 7, 1, 3, 9 in the order and press  button.
10. The microcomputer version is displayed on the monitor screen.

MODEL	: SONY RCD W7V
REGION	: NO. 01
NATION	: US 00
RID	: LGESY0200001
UCOM. P	: VO.1 20020204 01
UCOM. R	: VO.1 20020102 01
SERVO	: D104
MPEG	: OL4O 22MAR01
MISCEL	: 11 E0
55 53 00 4C 12 00 FF FF	

Microcomputer version display

11. Press  (DVD) button to quit the test mode.

SECTION 5

ELECTRICAL ADJUSTMENT

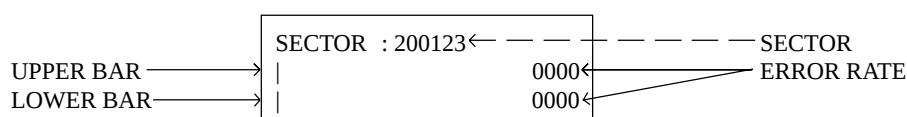
DVD MD Skew Adjustment

Equipments to be required:

- TV monitor (With RCA pin jack inputs)
- Adjustment disc (CDR1/CDR2) (See page 6)
- Test disc (0.8mm off-centered disc) TDV-534C (J-2501-222-A)
- L-Wrench (3mm) (Impossible to use an inch size)

Adjustment Procedure:

1. Press **POWER** button and insert CDR1 disc to the DVD player.
2. The display on the set changes automatically.
Wait until the display turns off. (Takes few minutes the display turns off completely.)
(Note: In case of the long time display stopped in progress or displays abnormally, do not anything and wait.)
3. Press **POWER** button to turn power "OFF".
4. Press **POWER** button to turn power "ON" and instantaneously press **▲** button to take out CDR1 disc.
5. Insert the TDV-534C disc and play it.
6. The error rate appears on the screen.
7. Set the position start to play to 200000 sector with **↑**, **↓** or **←**, **→** buttons on the remote commander.



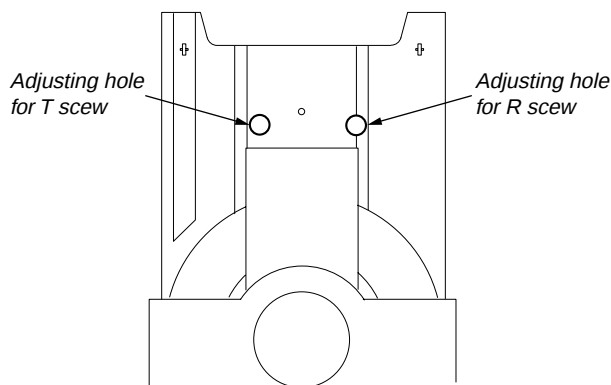
Error rate display

SECTOR : Current position of pick-up
 UPPER BAR : Peak to peak level of error rate.
 LOWER BAR : Average level of error rate.

Error rate specified value: 30 or less.

8. Adjust the R skew to minimize the error rate.
9. Adjust the T skew to minimize the error rate.
10. Adjust the R skew and T skew mutually several times to minimize the error rate.
11. After adjustment the error rate should be lower than the specified value.
12. Press **▲** button to take out the test disc (TDV-534V).
13. Insert CDR2 disc to the DVD player.
14. The display on the set changes automatically.
Wait until the display turns off. (Takes few minutes the display turns off completely.)
(Note: In case of the long time display stopped in progress or displays abnormally, do not anything and wait.)
15. Press **POWER** button to turn power "OFF".
16. Press **POWER** button to turn power "ON" and instantaneously press **▲** button to take out CDR2 disc.

Adjustment point:



DVD deck (Deck A)

LD Power Adjustment

Jigs used on this adjustment

- LD Power Meter

A laser power meter 10mW or more measurable is required. Don't use the laser power meter for Mini disc because of 10mW max.

Optical power meter (TQ8210): Product of ADVANTEST (on the market).

A thin type optical sensor (Q82017A): Product of ADVANTEST (on the market).

- PC Connection Jig (J-2501-210-A)

- Test Program FD

Dragon program Tool DV810 Ver. 0.9A

(This test program is distributed with the service manual.)

- PC (Windows 95/98)

- RS-232C Cable (on the market) D-SUB 9 pin, straight type

- Test Disc for Operation Check

A low reflecting rate disc for checking playback performance. OK: It can be played back.

- Low reflecting CD-R disc: TCD-R082LMT (J-2502-063-1)

- Low reflecting CD-RW disc: TCD-W082L (J-2502-063 -2)

- CD test disc (YEDS-18) (3-702-101-01)

- DVD test disc (HLX-503) (J-6090 -069 -A) (single layer)

- DVD test disc (HLX-504) (J-6090 -088 -A) (single layer)

- DVD test disc (HLX-505) (J-6090 -089 -A) (dual layer)

- Extension cable (4p, 1.0mm) (J-8000-023-A)

- Extension cable (23p, 1.0mm) (J-501-157-A)

Laser Power Adjustment (CD-R Only)

In case of the following parts are replaced, this adjustment is required.

1. CD-R optical pick-up block (KRS-220C)

2. IC208 (EP- ROM)

Specification of Dragon Program Usage Environment

The Dragon Program programmed by API function of Windows 95 can be surely operated on the Windows 95/98 platform.

It isn't guaranteed on the other platform.

Start up

Procedure:

1. Connect the PC connection jig with the RS-232C cable between the test connector (PN105) on CD-R of RCD-W7V and COM port on PC.(Check SW501 on the PC connection jig to "D" side.)
2. Turn power on RCD-W7V.
3. Execute Dragon_dv810_svc.exe on Windows.
(Two files Dragon_dv810_svc.exe and Dragon_dv810.cfg are displayed on the setup menu window.)
4. Select "Setup I/F" on "Setup" pull-down menu, then "Select I/F Method" window is open.
5. Select Com Port matching to the Com Port connected the PC connection jig.
6. Select "38400" of "Select Transfer Rate".
7. Click OK.



Fig 1 : Dragon menu and setup menu windows

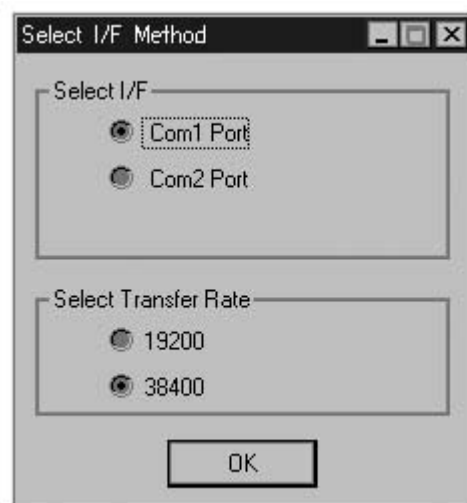


Fig 2 : Select I/F method window

CD-R LD Setting Check

(VRDC/VWDC/FPD Level Value Check)

This routine is for checking performances of the record/playback D-A converter (IC409), RFIC (IC413), the encoder/decoder IC (IC401), CPLD (IC601), the optical pick-up block (KRS-220C), the microcomputer(IC701) and so on.

It diagnoses malfunctions of interface, the pick-up or so on.

It diagnoses the circuit in the recording mode without disc.

Description of each item

OFF LEVEL: In case of the laser turns off, FPDO output is 3V. Sampling value at this time.

VRDC LEVEL: APC circuit VRDC signal sampling value after READ power setting.

VRDC FPD: Optical pick-up FPDO signal sampling value after READ power setting.

VWDC1 LEVEL: APC circuit VWDC signal sampling value after setting WRITE power to regular value.

VWDC1 FPD: Optical pick-up FPDO signal sampling value after setting WRITE power to regular value.

VWDC2-1 FPD: There are two types of characteristics because of a non-linearity period of laser diode in the over drive portion. This is FPDO sampling value in case of setting one of them to VWDC2 value.

VWDC2-2 FPD: FPDO sampling value in case of setting the other to VWDC2 value.

Specification of each item

$38400-3300 < \text{OFF_LEVEL} < 38400+3300$ ($3.0 \pm 0.25\text{V}$)

$10 < \text{VRDC_LEVEL} < 20000$

$880 < \text{VRDC_FPD} < 1320$

$2000 < \text{VWDC1_LEVEL} < 25000$

$8640 < \text{VWDC1_FPD} < 12960$

$10 < \text{VWDC2-1_FPD} < 9500$

$2000 < \text{VWDC2-2_FPD} < 16000$

Procedure:

1. Eject a disc from CD-R.
2. Select "Laser Inspection" on "LD Inspection" pull-down menu, then "Laser Power Test" window is open.
3. Click Trigger to execute LD check.
4. LD checked results are displayed.
("OK"/"NG" is displayed for every items.)
5. Click X to close "Laser Power Test" window.



Fig 3 : LD inspection menu windows

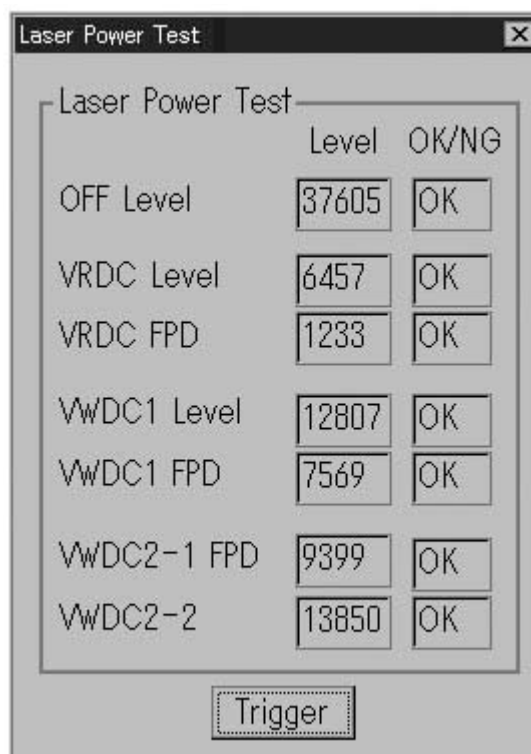


Fig 4 : Laser power test window

CD-R LD Power Setting

(VRDC/VWDC1 Resetting)

The optical pick-up and ICs in the circuit have a characteristics individually. In this routine, the parameters related to the recording/playback power are actually measured and set properly.

The parameters are VRDC, VWDC1, VWDC2, VWDC2 Offset and so on. The reading power and playback power are set properly by computing the related parameters on the basis of actually measuring values.

The preset parameters are used on power setting in case of performing Read/Write CD-R, CD-RW and so on.

Actual operation: The microcomputer receives serial data, then executes the related performances, and send parameter values to PC. PC checks its related parameters and judges OK/NG.

Description of each parameter

- VRDC: Used on the Read Power setting in case of reading CD-RW and CD-R. (DAC value on 100mW.)
- VWDC: There is VWDC1 (Write power) pin in the optical pick-up block. The recording power is set by it and VWDC2 (Over drive) pin. Used on setting VWDC1 pin power on recording. (Unit: DAC value/10mW)
- VWDC2: Used on setting VWDC2 (Over drive) pin power on recording. (Unit: DAC value/5mW)
- VWDC2 Offset: Used on setting VWDC2 (Over drive) pin power with VWDC2 parameter on recording. (Unit: DAC value)

Specification of each parameter

- 20<read power<200
 100<write power<2000
 30<VRDC<150
 48<VWDC1<150
 50<VWDC2<126
 VWDC2 Offset<35



Fig 5 : LD inspection menu windows

Procedure:

1. Eject a disc from CD-R.
2. Select "Laser Power Setup" on "LD Inspection" pull-down menu, then "Laser Power Setup (Manual)" window is open.
3. Click VRDC, then Pick-up moves outward and LD turns on.
4. Measure the LD power with a LD power meter. Write its value to the blank of "Read Power" column.
(Write a value to two decimal places. Ex: Write "93" in case of 0.93mW.)
5. Click VWDC1, then LD turns on.
6. Measure the LD power with a LD power meter. Write its value to the blank of "Write Power" column.
(Write a value to two decimal places. Ex: Write "1234" in case of 12.34mW.)
7. Click LD Off to turn LD off.
8. Click Setup, then setting is over and a result is displayed.
(“OK”/“NG” is displayed for every items.)
9. Click X to close "Laser Power Setup (Manual)" window.

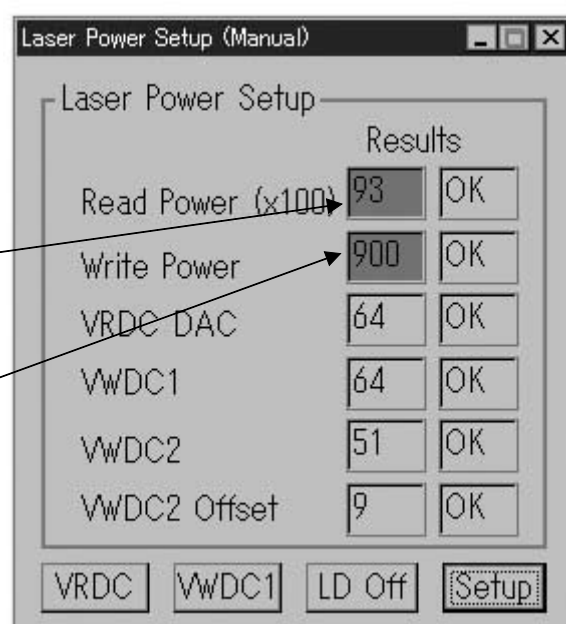


Fig 6 : Laser power setup window

Adjustment Data Check

Check if the error has occurred on reading "CD-R LD POWER SETTING" value.

Procedure:

1. Select "Calibration" on "Calibration" pull-down menu, then "Read Calibration Results" window is open.
2. Click Read, then the calibration data are displayed.
3. Data specification
 CD-R VRDC DAC: 30-150
 VWDC1: 48-150
 VWDC2: 50-126
 VWDC2 Offset: 0-35
4. Click X to close "Read Calibration Results" window.



Fig 7 : Calibration menu windows

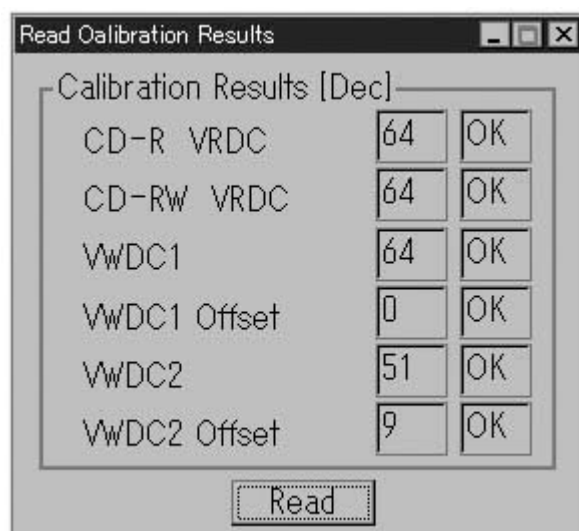


Fig 8 : Read calibration results window

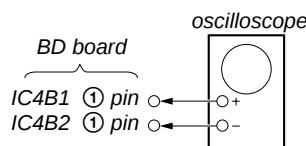
SERVO Check

DVD SECTION

Note :

1. DVD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use HLX-503 disc unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

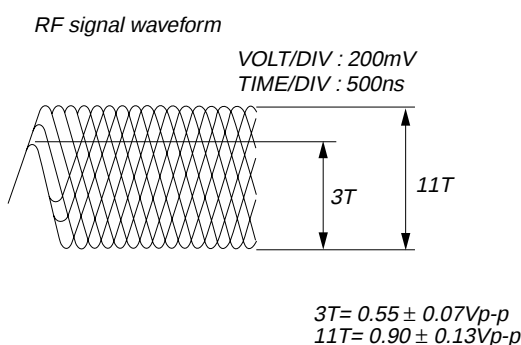
RF Level Check



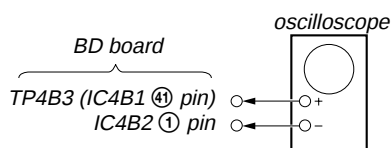
Procedure :

1. Connect oscilloscope to IC4B1 ① pin and IC4B2 ① pin.
2. Turned Power switch on.
3. Load a disc (HLX-503) and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note : Clear RF signal waveform means that the shape “◇” can be clearly distinguished at the center of the waveform.



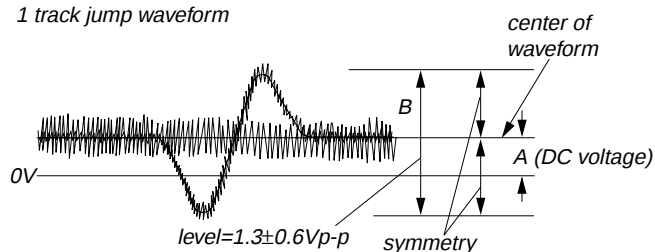
E-F Balance (1 Track jump) Check



Procedure :

1. Connect oscilloscope to TP4B3 (IC4B2 ① pin) and IC4B2 ① pin.
2. Turned Power switch on.
3. Load a disc (HLX-503) and playback the number one track.
4. Press the button. (Becomes the 1 track jump mode.)
5. Confirm that the level B and A (DC voltage) on the oscilloscope waveform.

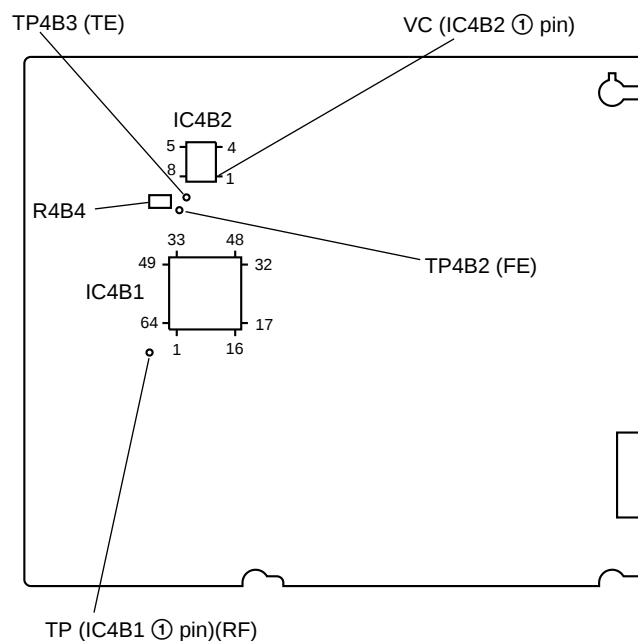
1 track jump waveform



Specified level: $\frac{A}{B} \times 100 = \text{less than } \pm 22\%$

Adjustment Location:

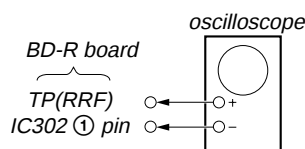
[BD BOARD] (SIDE B)



CD-R SECTION

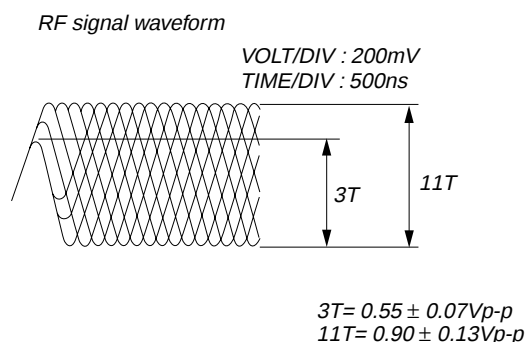
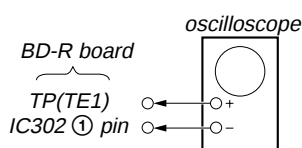
Note :

1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than $10M\Omega$ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

RF Level Check**Procedure :**

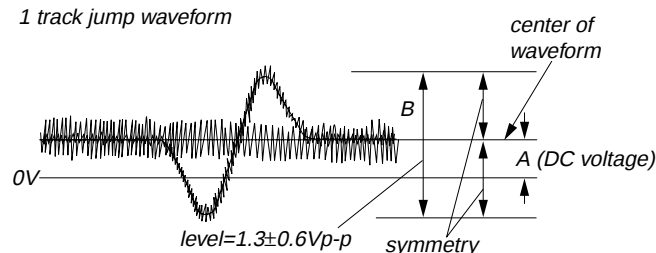
1. Connect oscilloscope to TP (RRF) and IC302 ① pin.
2. Turned Power switch on.
3. Load a disc (YEDS-18) and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note : Clear RF signal waveform means that the shape “ $\diamond$ ” can be clearly distinguished at the center of the waveform.

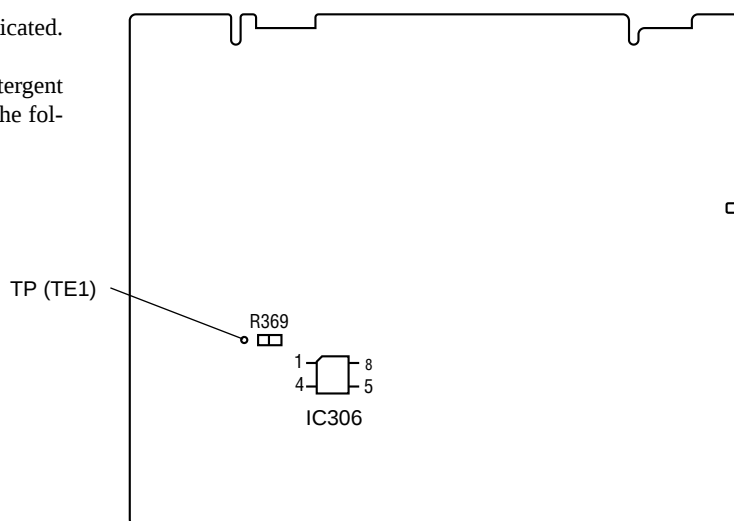
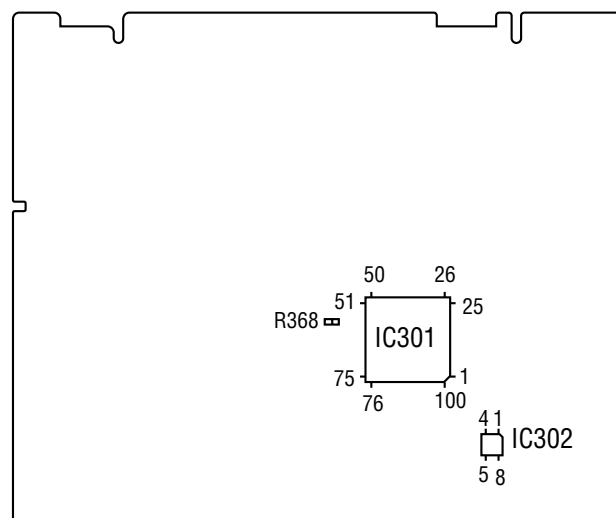
**E-F Balance (1 Track jump) Check****Procedure :**

1. Connect oscilloscope to TP (TE1) and IC302 ① Pin.
2. Turned Power switch on.
3. Load a disc (YEDS-18) and playback the number five track.
4. Press the [II] button. (Becomes the 1 track jump mode.)
5. Confirm that the level B and A (DC voltage) on the oscilloscope waveform.

1 track jump waveform



Specified level: $\frac{A}{B} \times 100 = \text{less than } \pm 22\%$

Adjustment Location:**[BD-R BOARD] (SIDE B)****[BD-R BOARD] (SIDE A)**

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 μF unless otherwise noted. pF : $\mu\mu\text{F}$
50 WV or less are not indicated except for electrolytics
and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{ W}$ or less unless otherwise
specified.
- % : indicates tolerance.
- Δ : internal component.
-  : panel designation.

Note:

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

-  : B+ Line.
-  : B- Line.
-  : adjustment for repair.
- AC voltage readings in the bias oscillator with a level
meter.
- Voltages and waveforms are dc with respect to ground
under no-signal conditions.
no mark : STOP
() : PLAY
< > : REC (CD-R only)
- Voltages are taken with a VOM (Input impedance $10\text{ M}\Omega$).
Voltage variations may be noted due to normal produc-
tion tolerances.
- Waveforms are taken with a oscilloscope.
Voltage variations may be noted due to normal produc-
tion tolerances.
- Circled numbers refer to waveforms.

• Signal path.

-  : DVD
-  : CD
-  : CD (digital)
-  : CD REC
-  : CD REC (digital)
-  : VIDEO

For printed wiring boards.

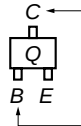
Note:

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

Caution:

- | | |
|--------------------|--|
| Pattern face side: | Parts on the pattern face side seen from the
(Side B) pattern face are indicated. |
| Parts face side: | Parts on the parts face side seen from the
(Side A) parts face are indicated. |

• Indication of transistor

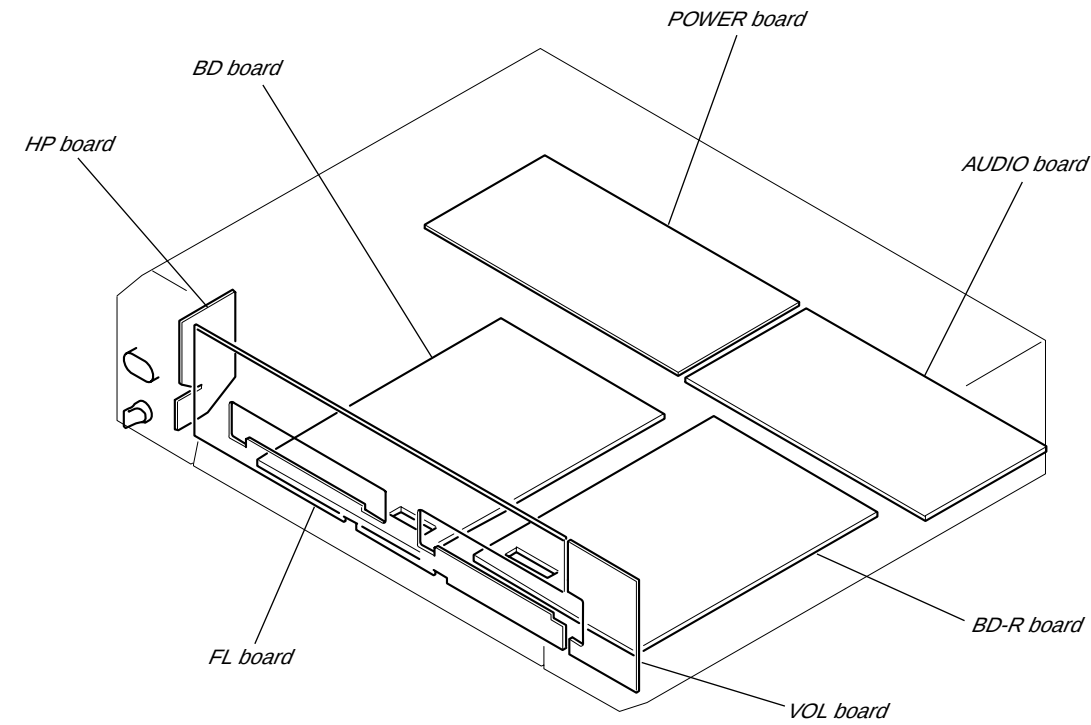


These are omitted

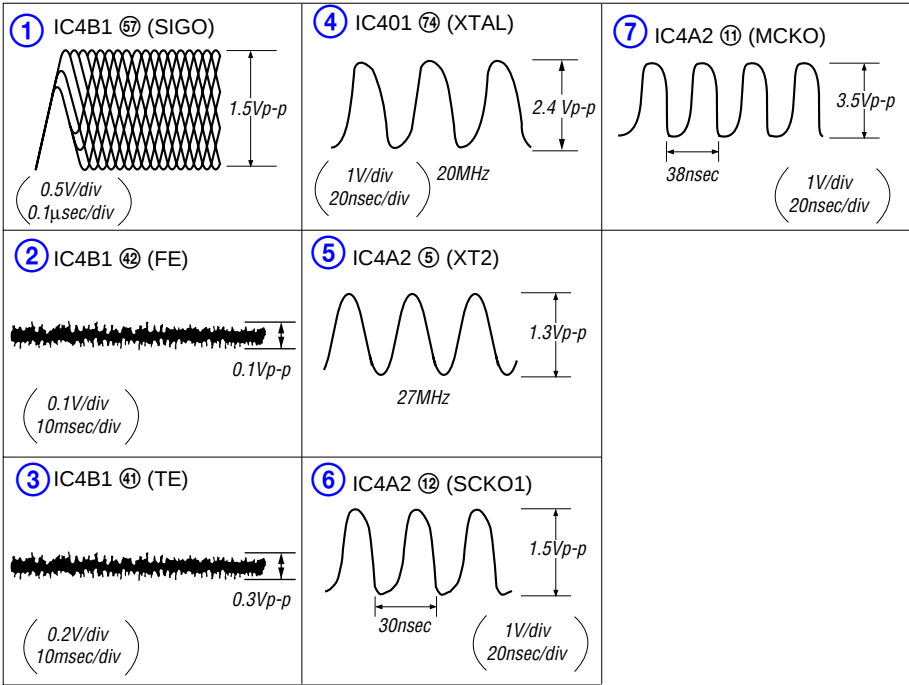


These are omitted

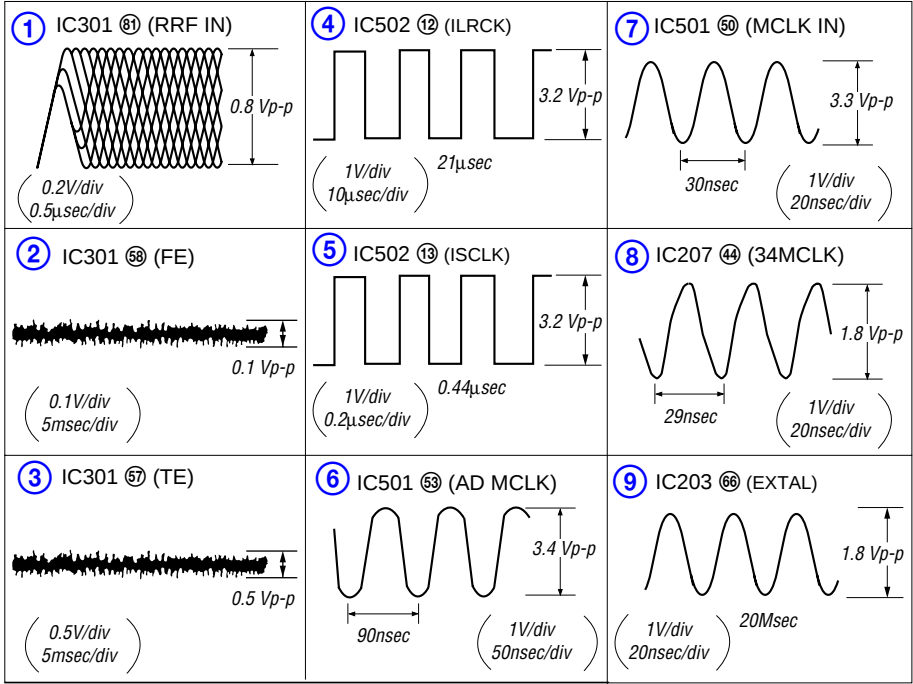
6-1. CIRCUIT BOARDS LOCATION



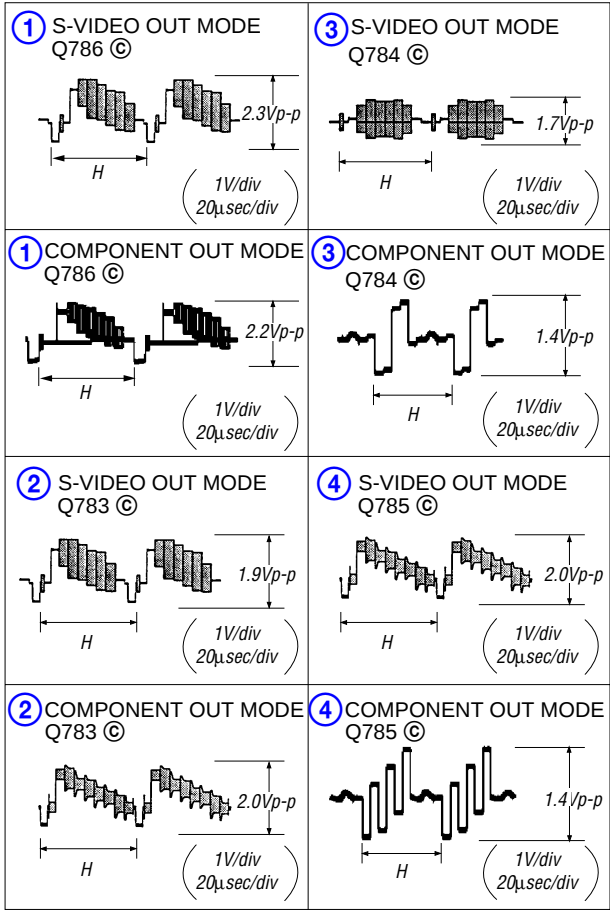
WAVEFORMS
- BD SECTION -



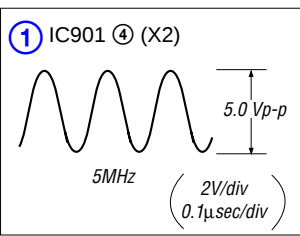
- BD-R SECTION -



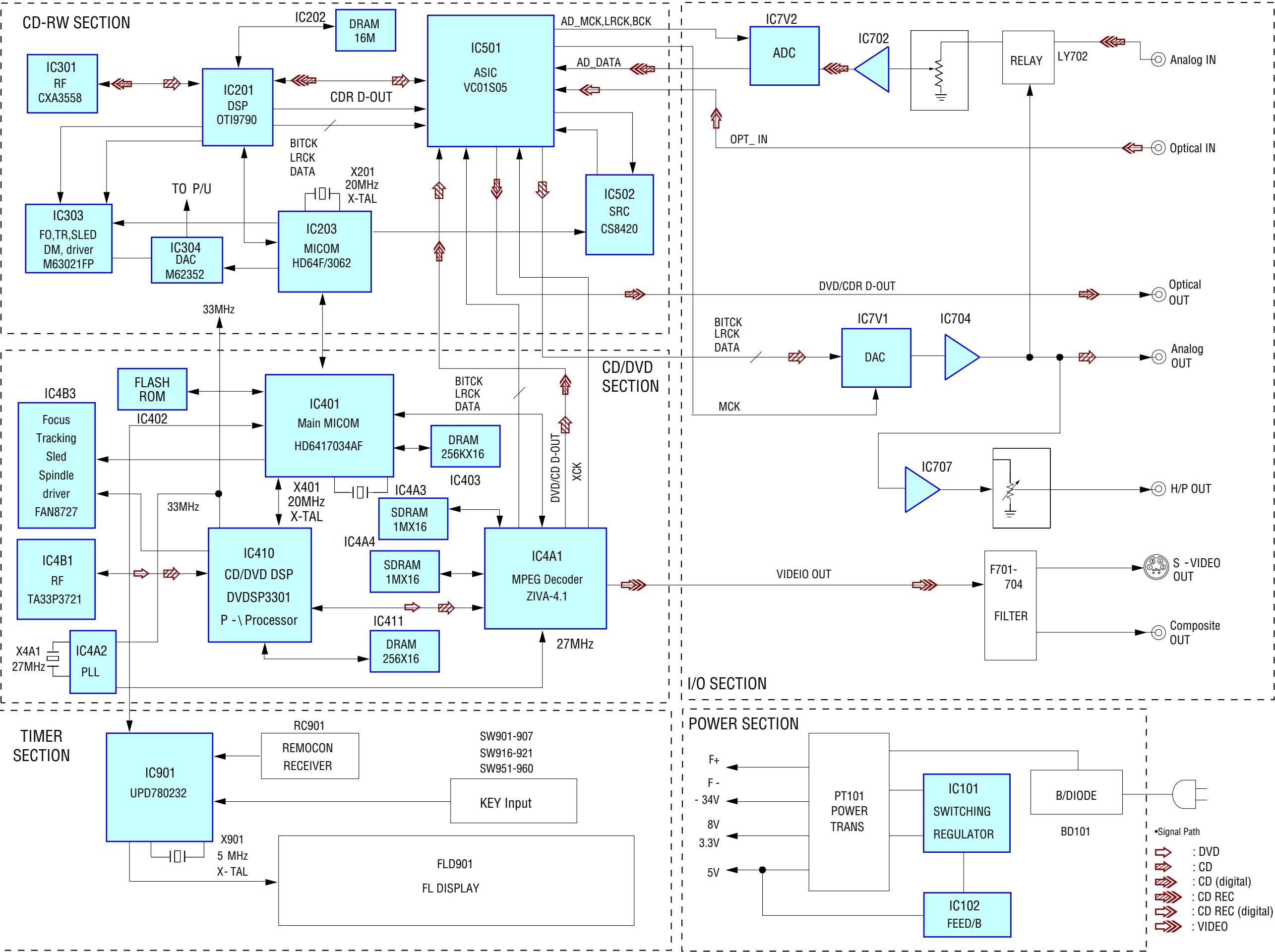
- AUDIO SECTION -



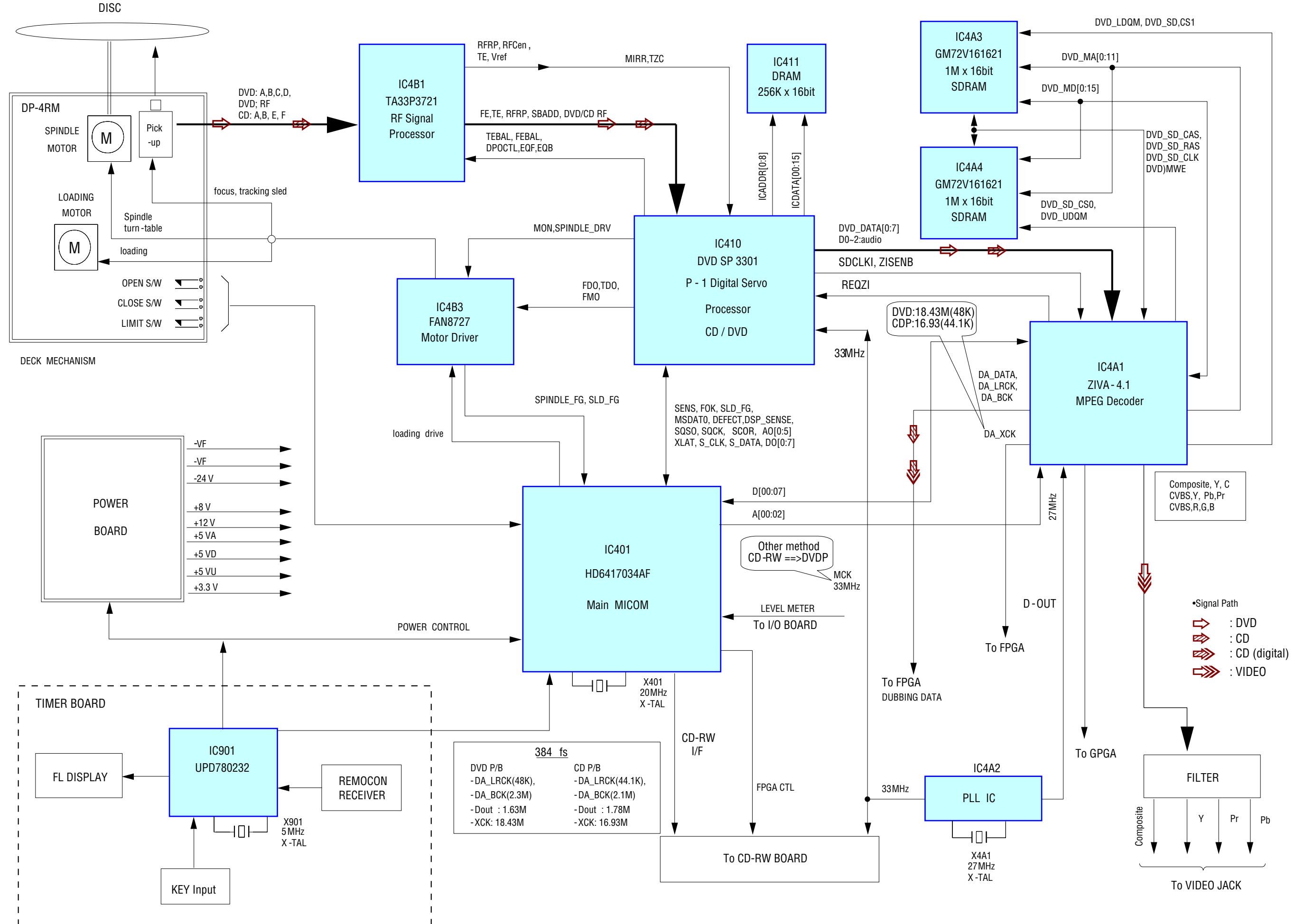
- DISPLAY SECTION -

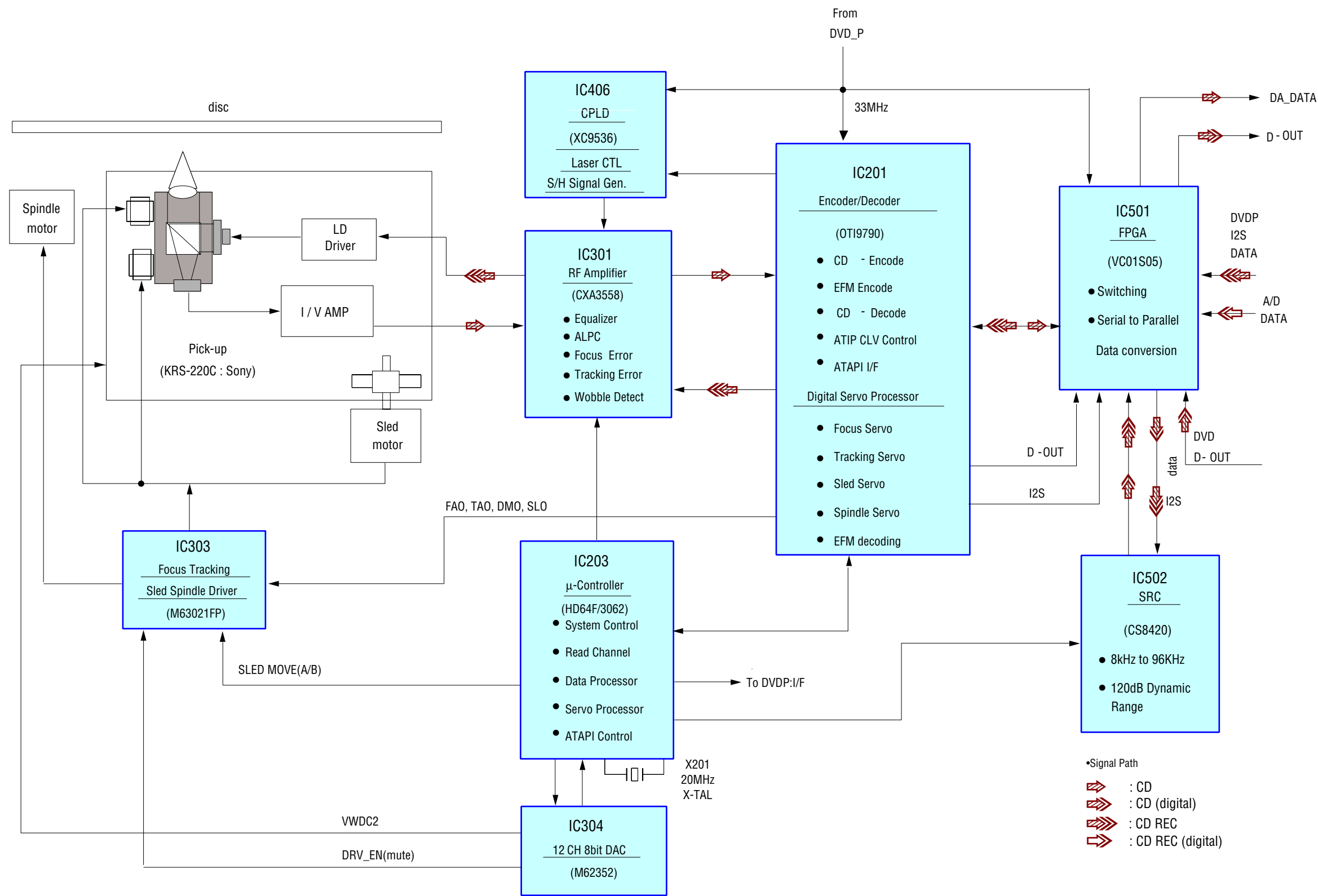


6-2. BLOCK DIAGRAMS – OVERALL SECTION –

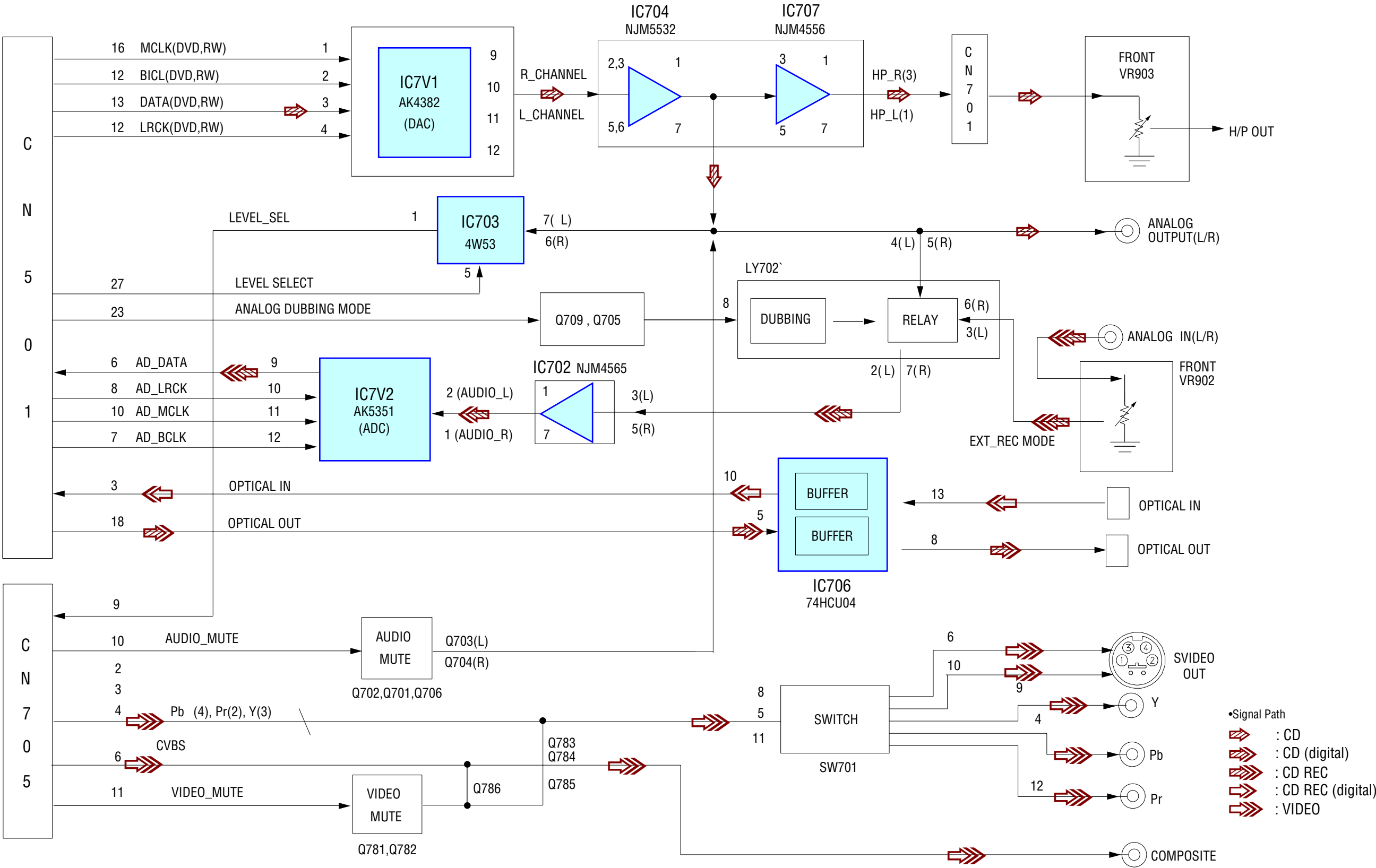


– CD/DVD SECTION –

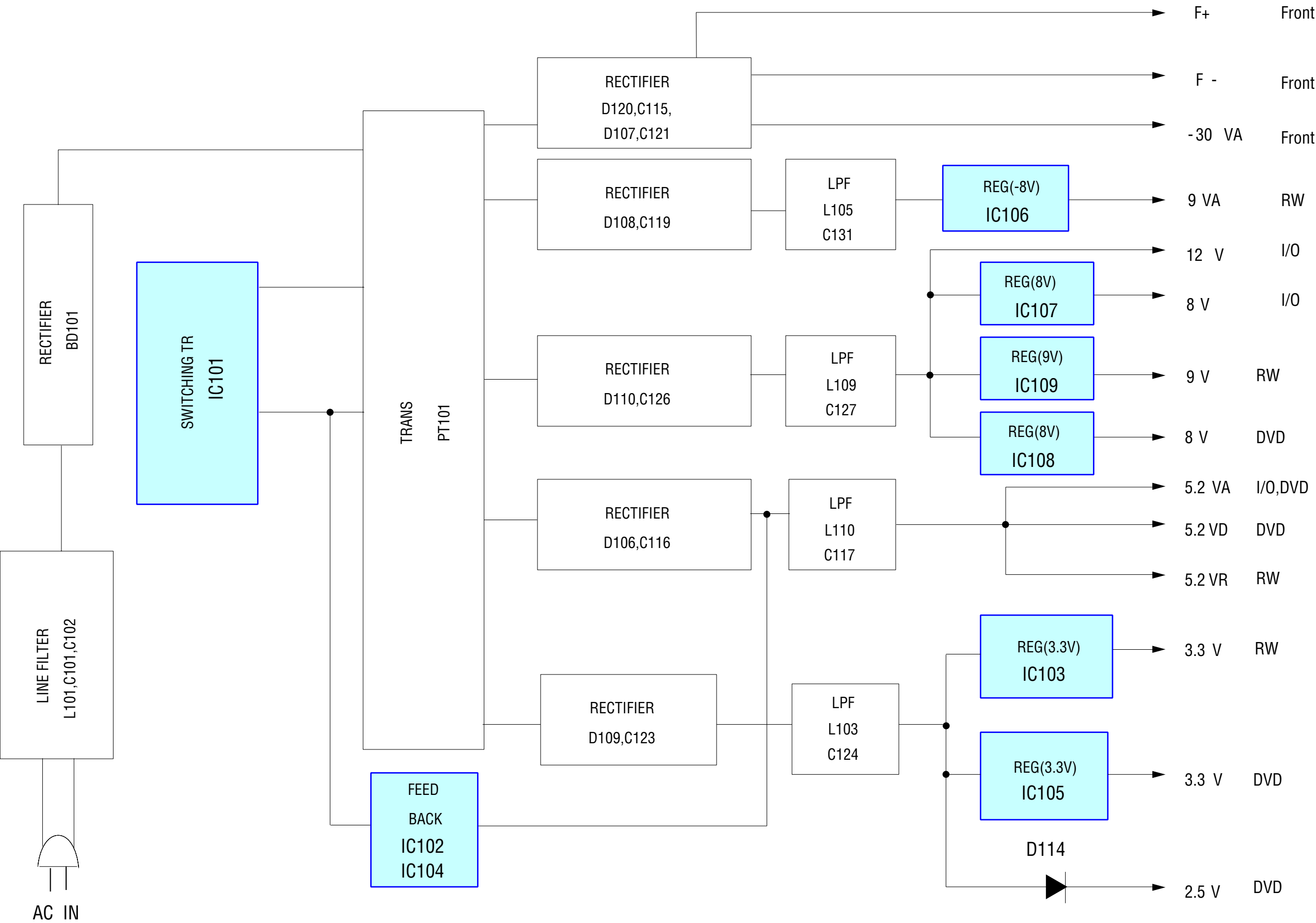




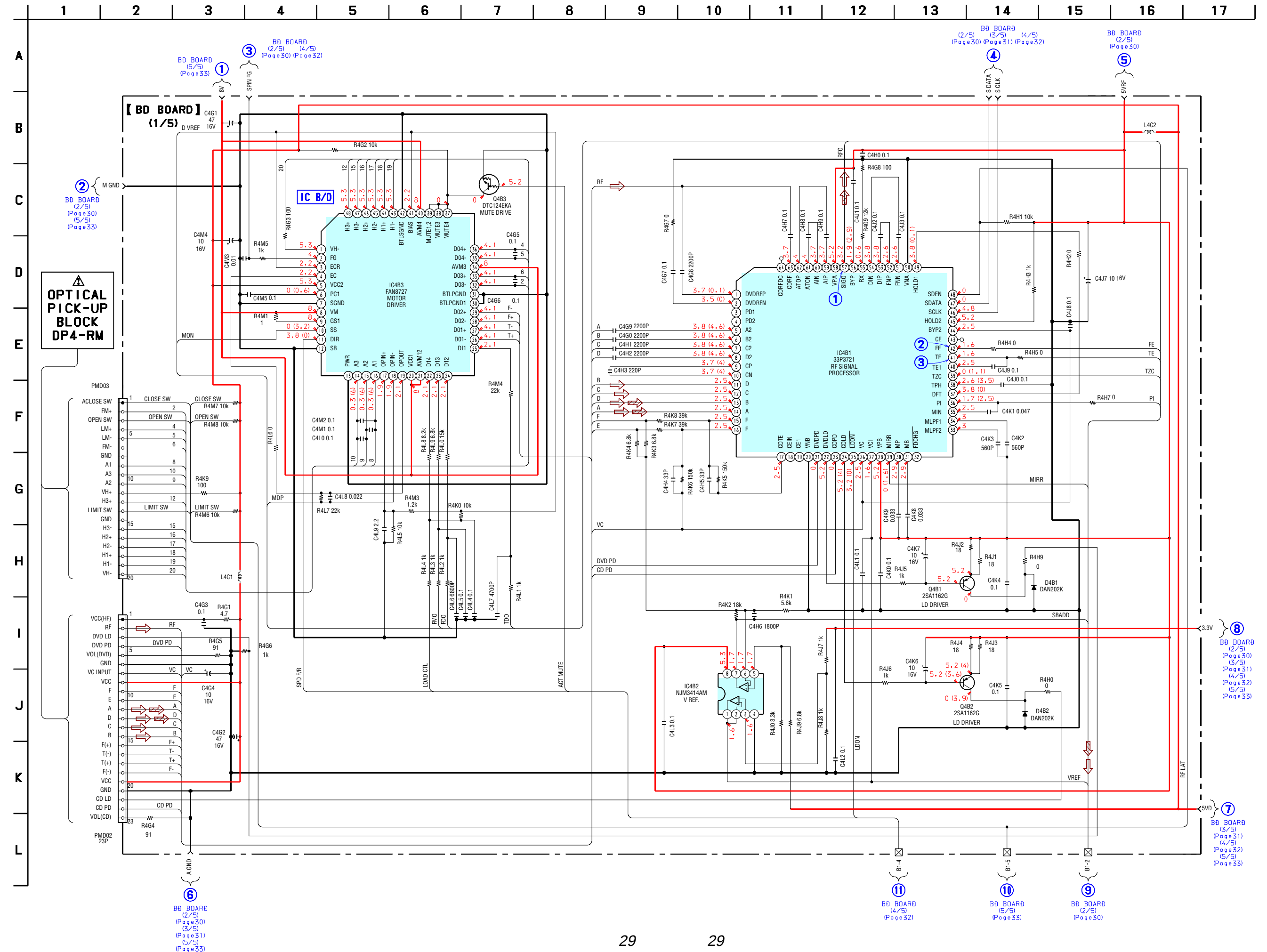
– I/O SECTION –



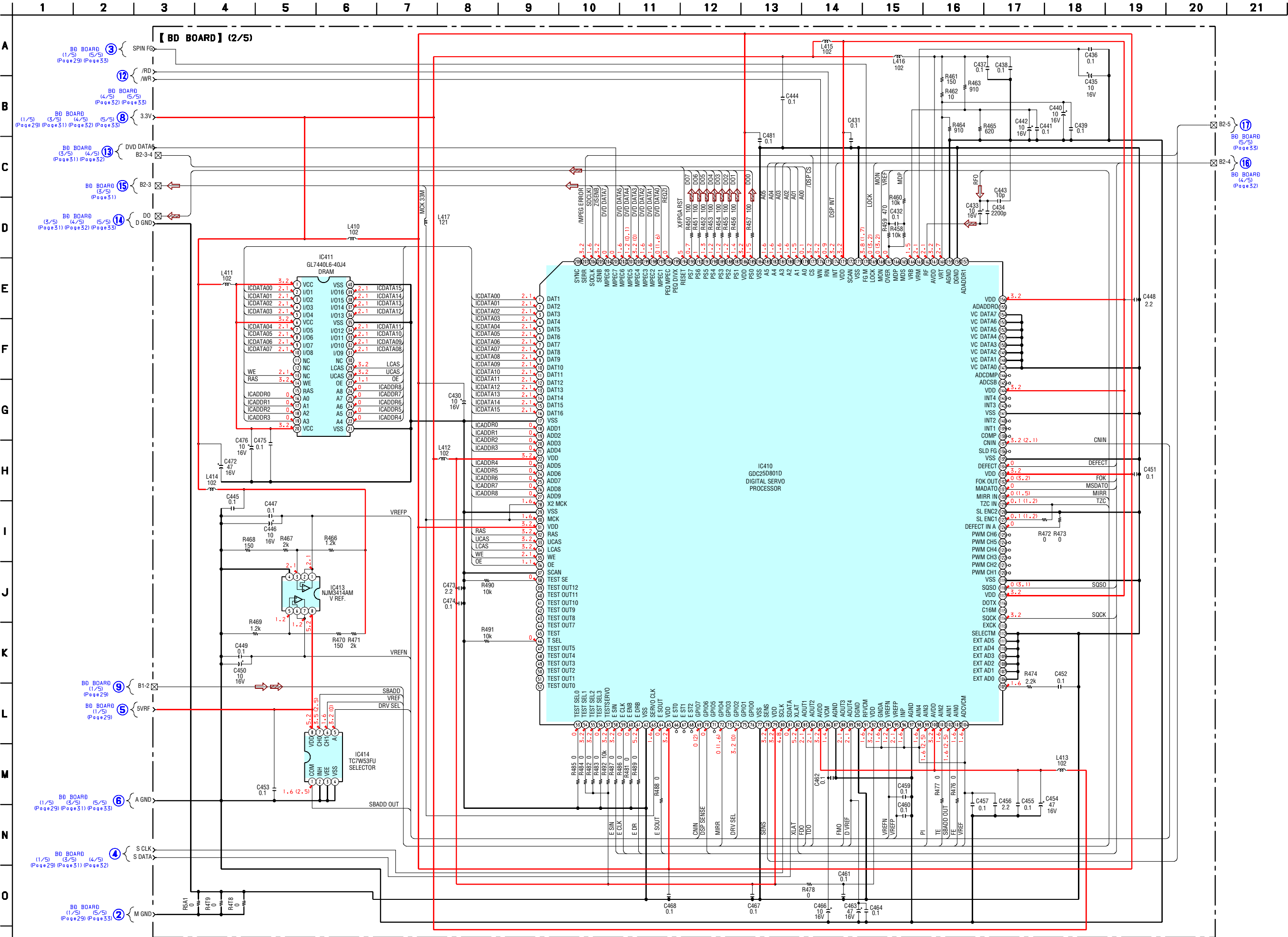
– POWER SECTION –



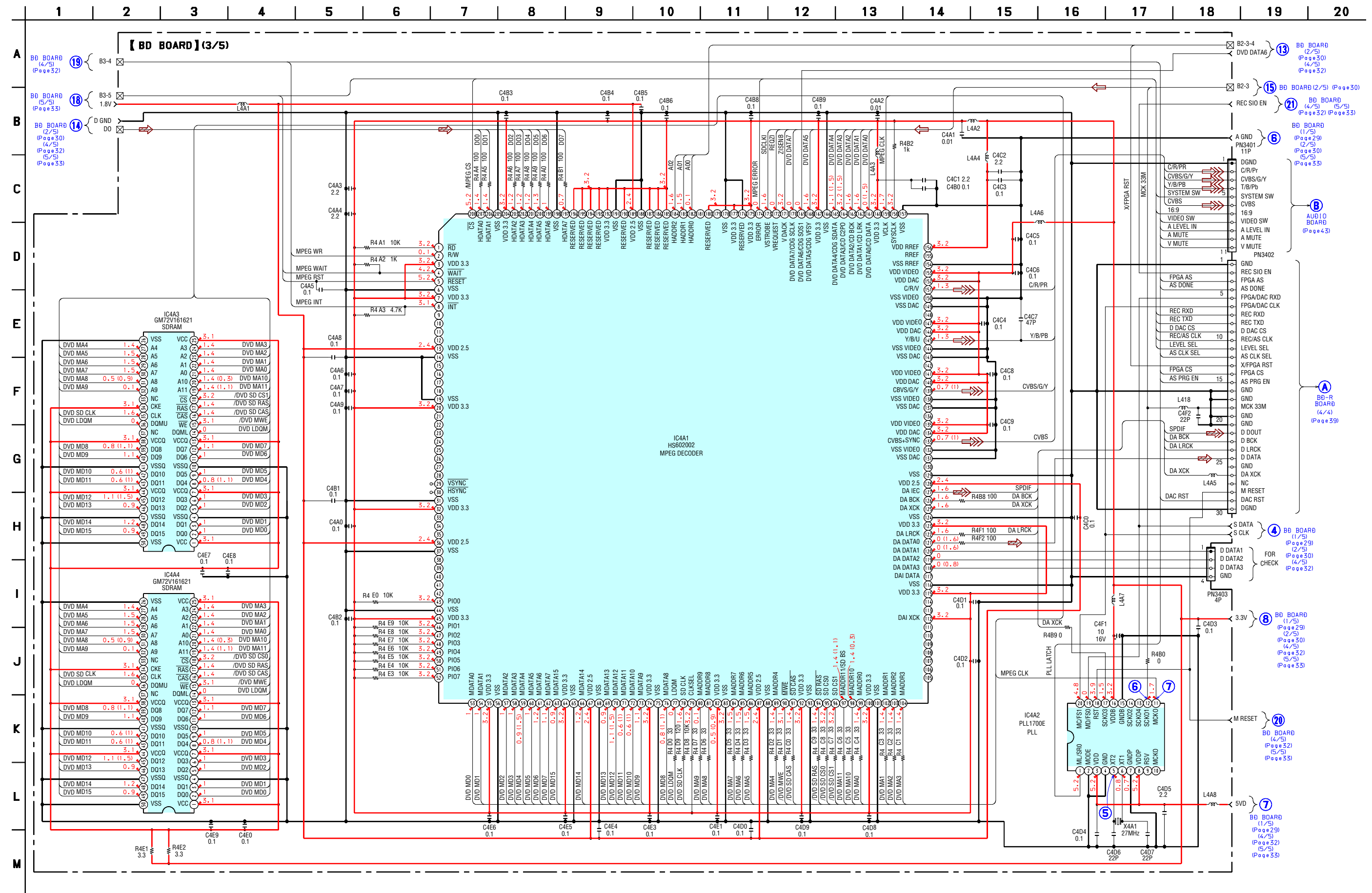
6-3.SCHEMATIC DIAGRAM -BD SECTION (1/5)-



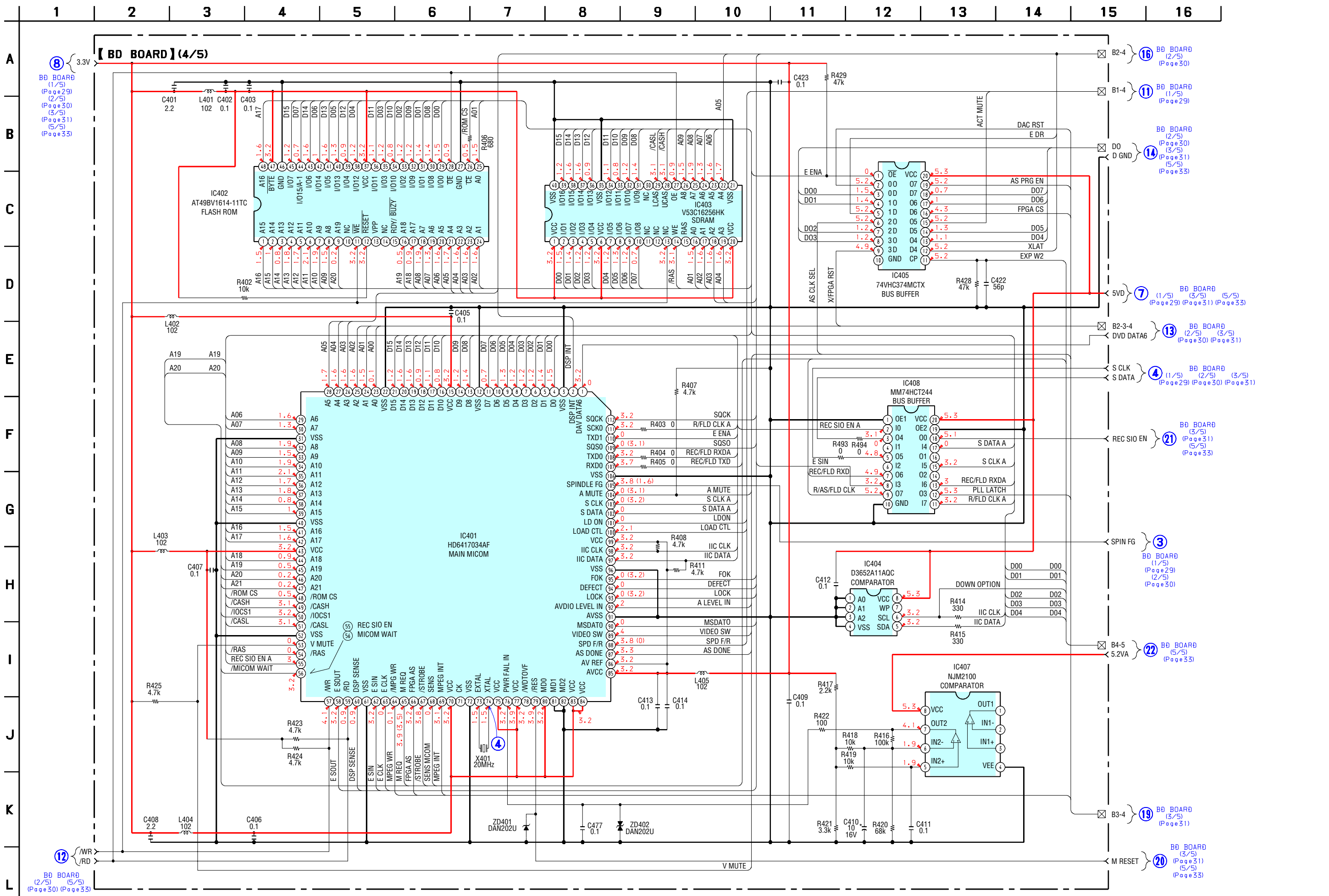
6-4.SCHEMATIC DIAGRAM -BD SECTION (2/5)-



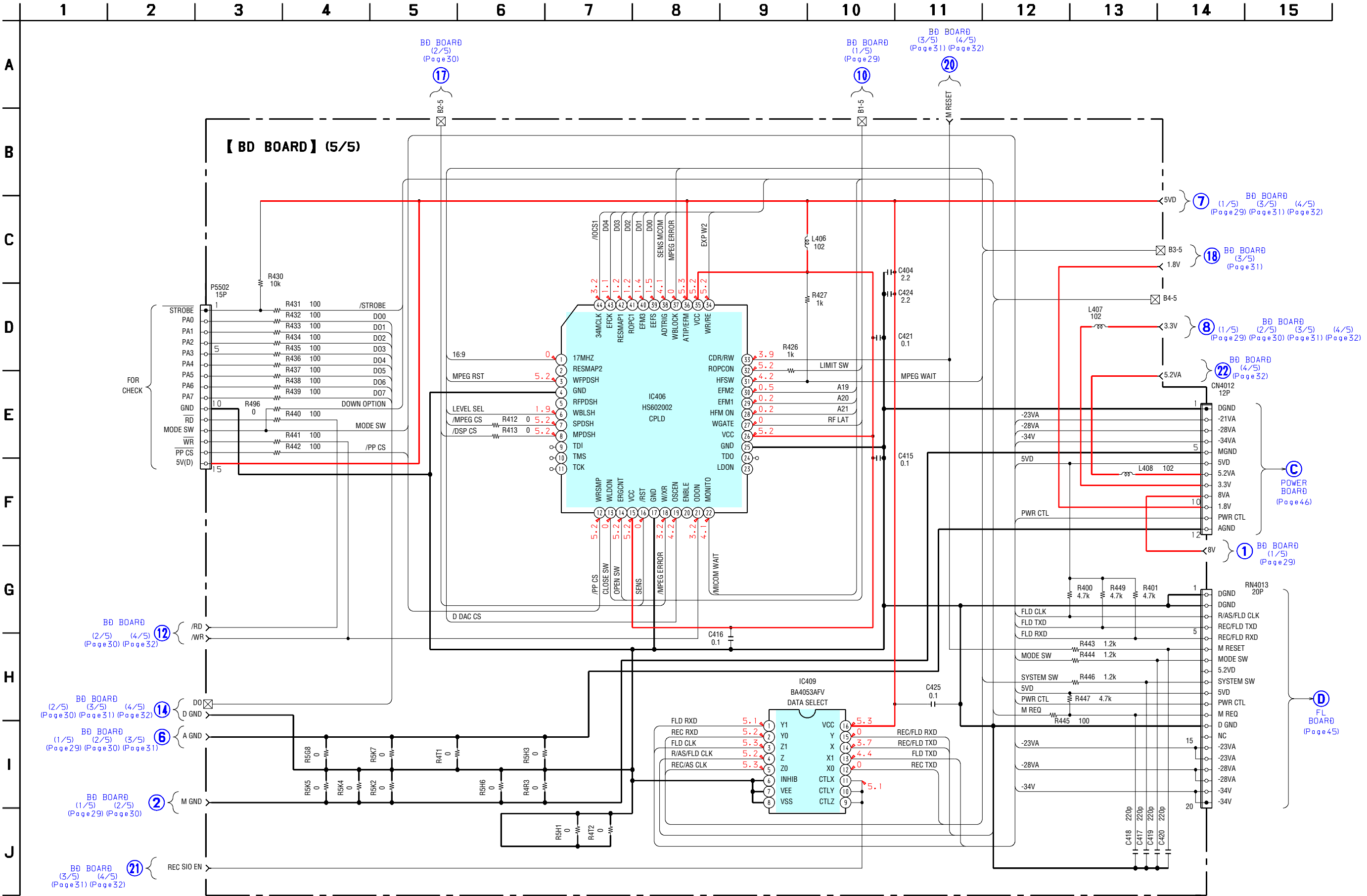
6-5.SCHEMATIC DIAGRAM -BD SECTION (3/5)-



6-6.SCHEMATIC DIAGRAM -BD SECTION (4/5)- • See page 48 for IC Pin Function Description.

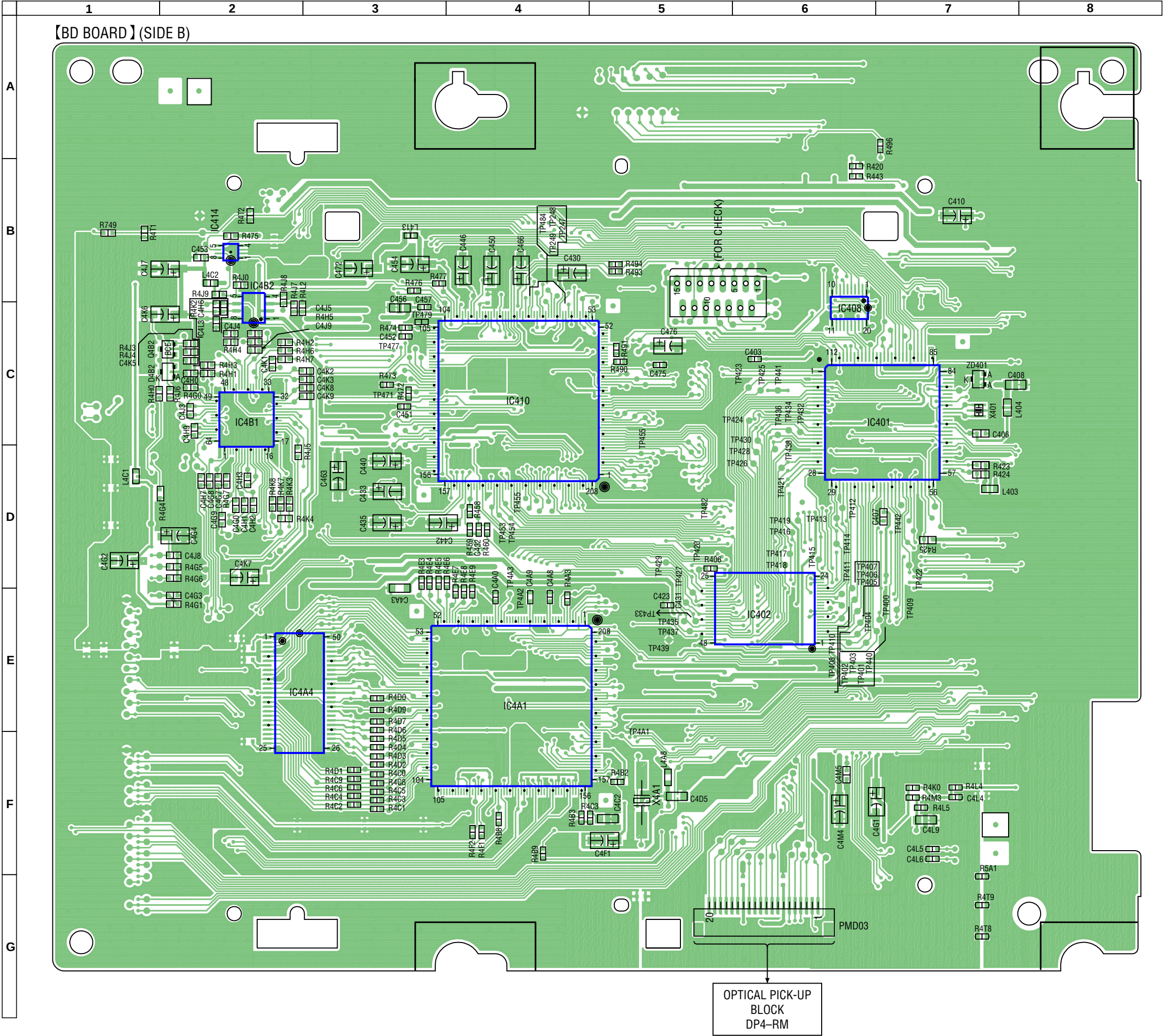


6-7.SCHEMATIC DIAGRAM -BD SECTION (5/5)- • See page 50 for IC Pin Function Description.





Ref. No.	Location
D4B1	E-7
IC403	D-3
IC404	C-2
IC405	E-4
IC406	D-2
IC407	B-2
IC409	C-3
IC411	D-4
IC413	C-5
IC4A2	F-4
IC4A3	E-6
IC4B3	F-3
Q4B1	E-7
Q4B3	F-3
ZD402	C-2

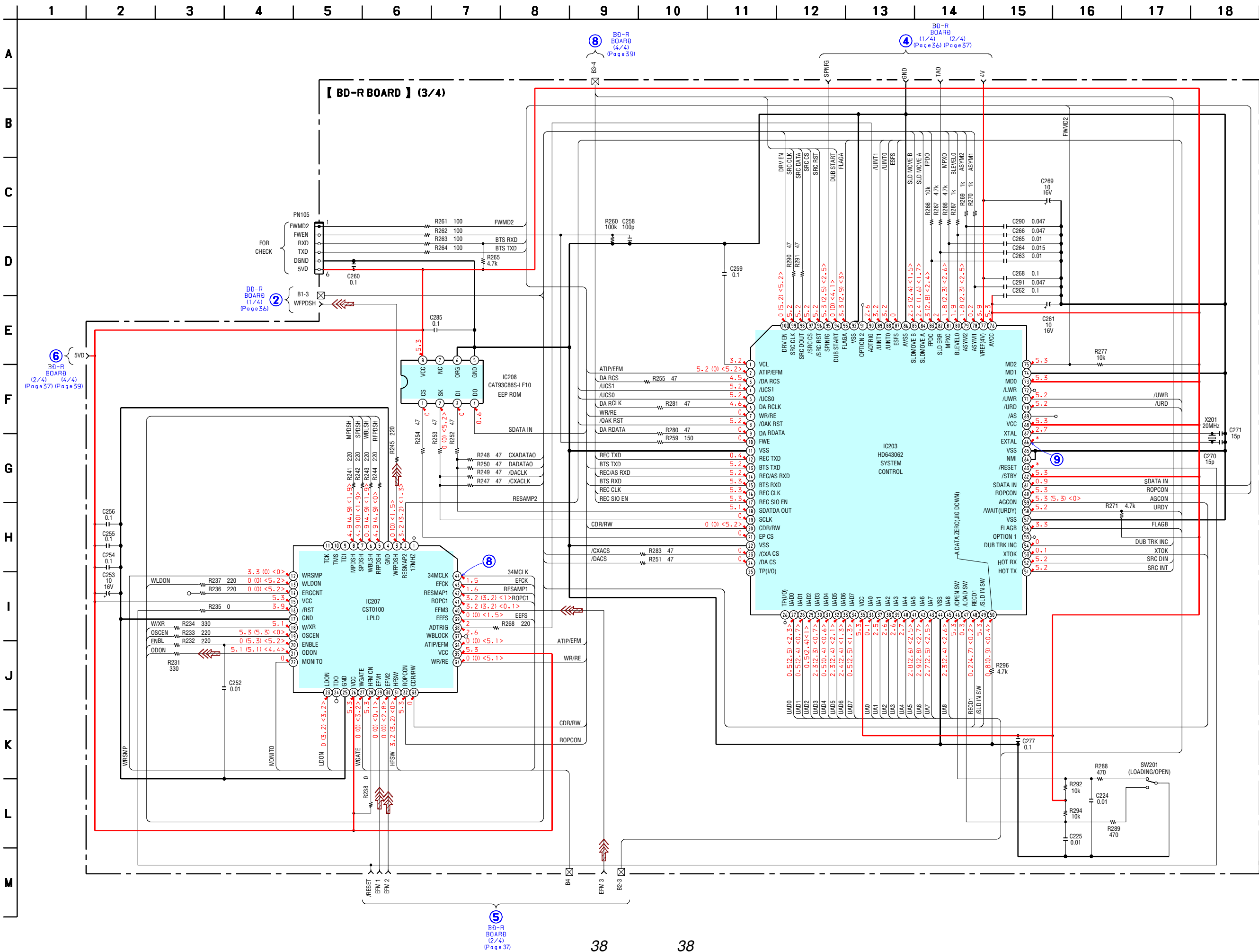


• Semiconductor Location

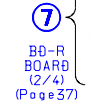
Ref. No.	Location
D4B2	C-2
IC401	C-7
IC402	E-6
IC408	C-6
IC410	C-4
IC414	B-2
IC4A1	E-4
IC4A4	E-2
IC4B1	C-2
IC4B2	C-2
Q4B2	C-2
ZD401	C-7



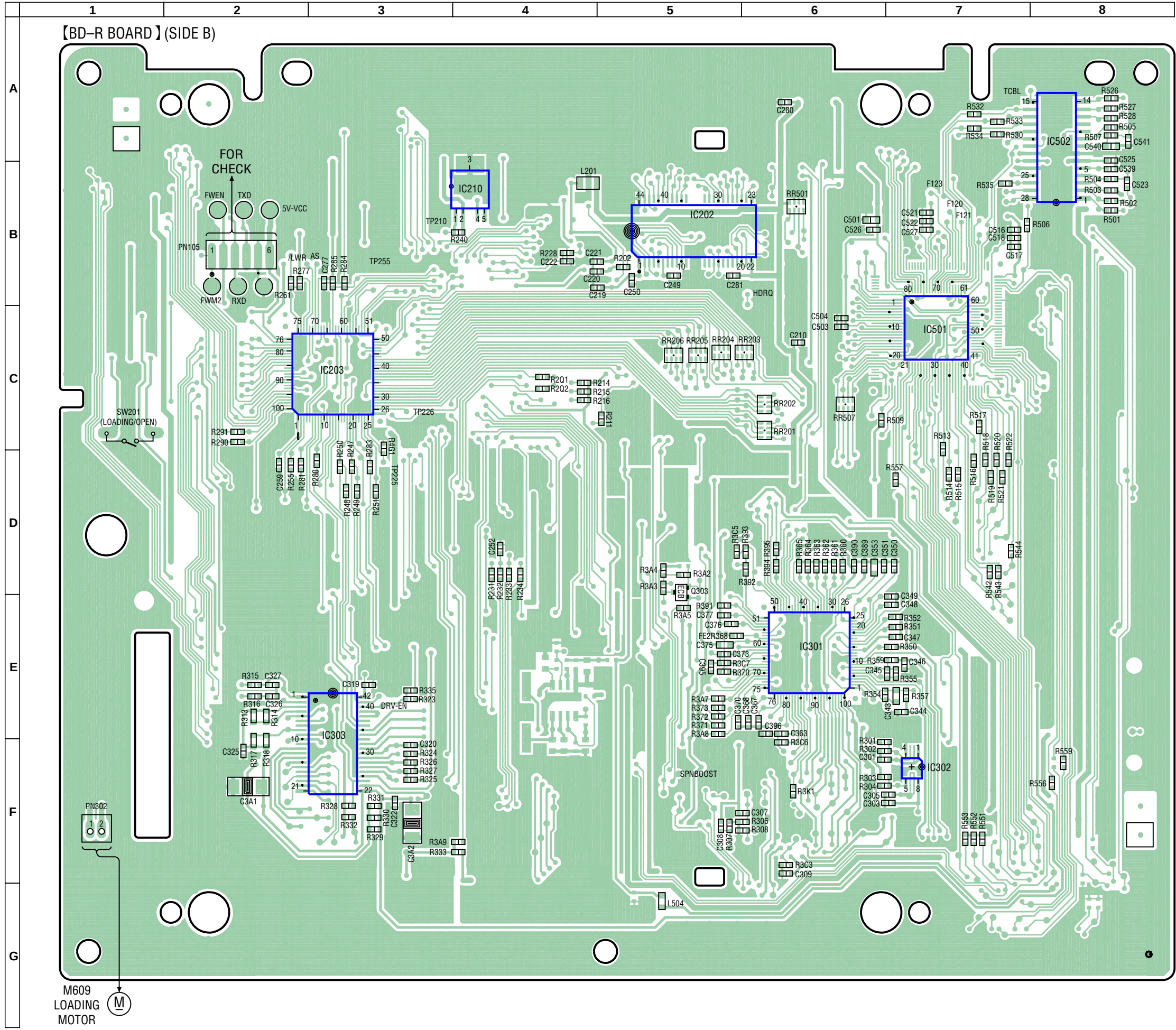
6-11.SCHEMATIC DIAGRAM -BD-R SECTION (3/4)- • See page 51, 53 for IC Pin Function Description.



A
B
C
D
E
F
G
H
I
J
K



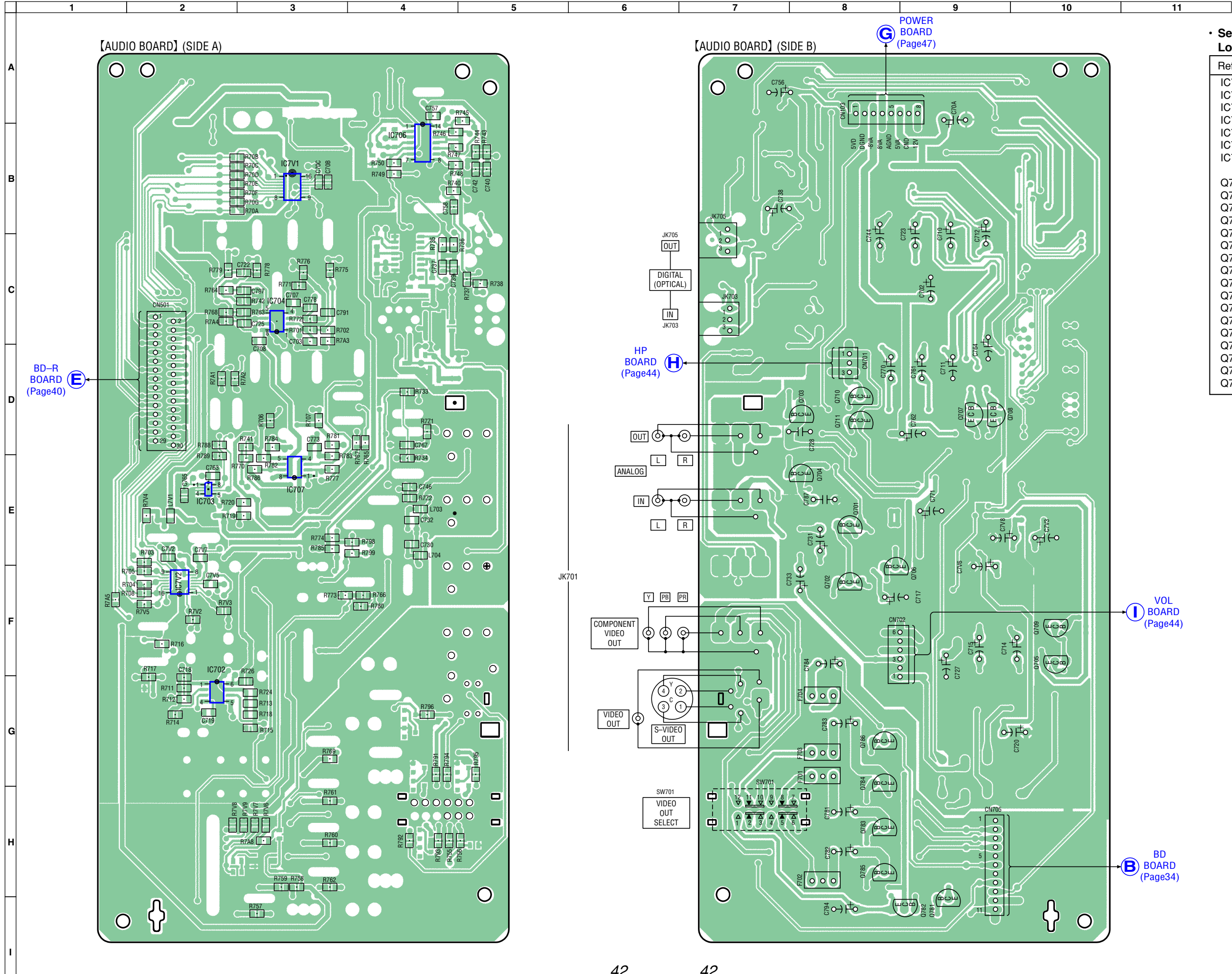




• Semiconductor Location

Ref. No.	Location
IC202	B-5
IC203	C-3
IC210	B-4
IC301	E-6
IC302	F-7
IC303	E-3
IC501	C-7
IC502	A-8
Q303	D-5

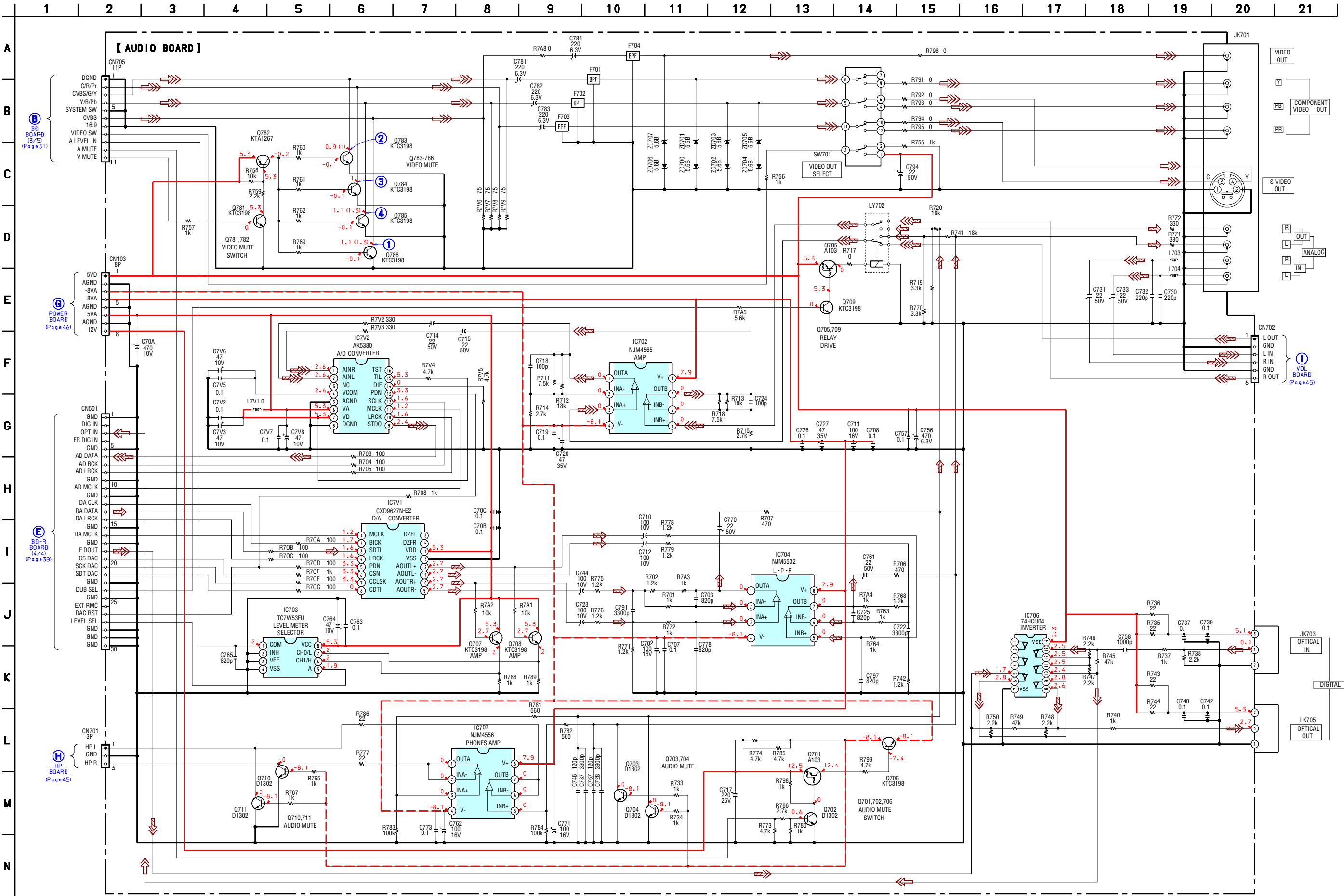
6-14.PRINTED WIRING BOARD -AUDIO SECTION- • See page 23 for Circuit Board location.



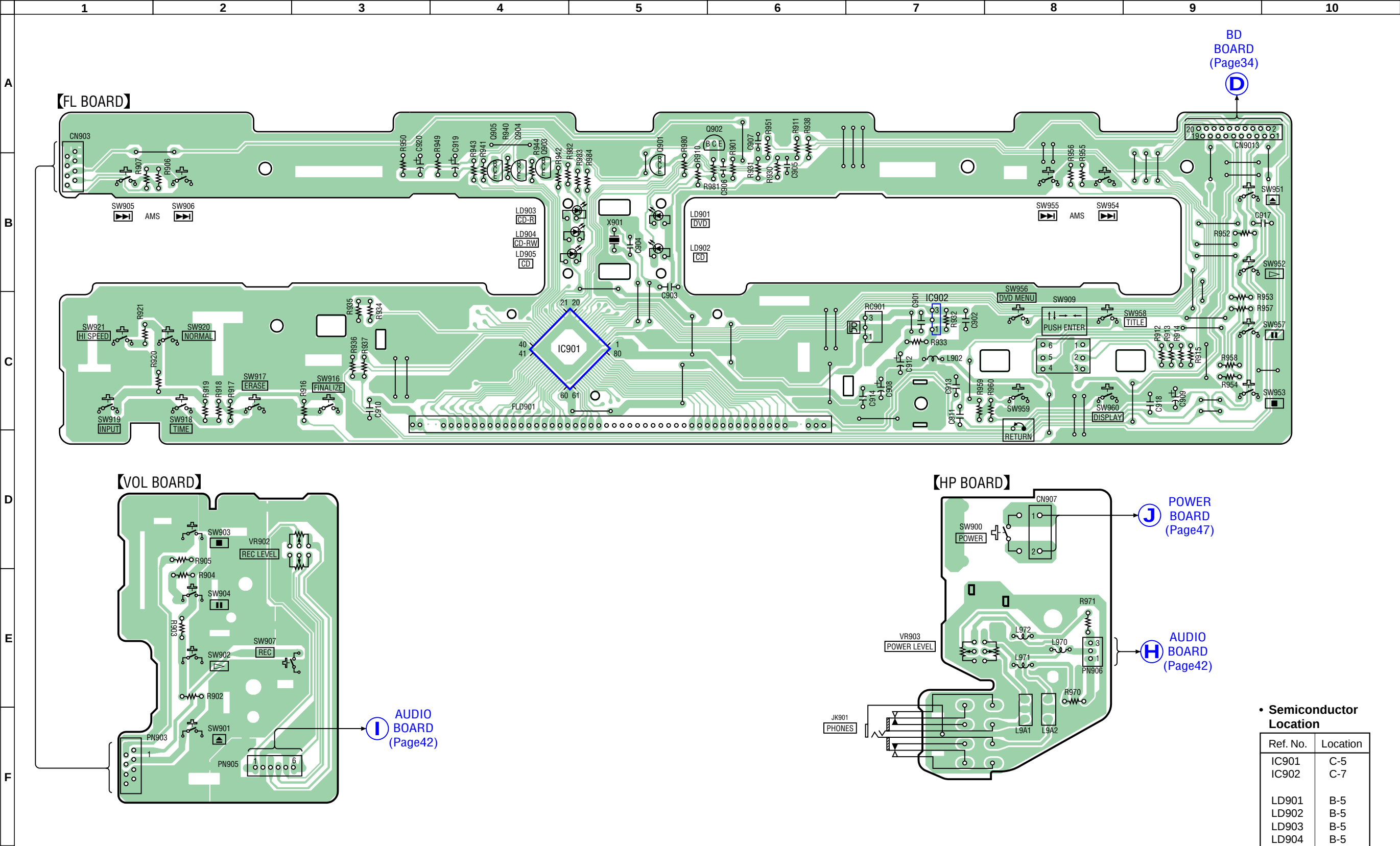
• Semiconductor Location

Ref. No.	Location
IC702	G-2
IC703	E-2
IC704	C-3
IC706	B-4
IC707	E-3
IC7V1	B-3
IC7V2	F-2
Q701	E-8
Q702	E-8
Q703	D-8
Q704	E-8
Q705	F-10
Q706	F-9
Q707	D-9
Q708	D-9
Q709	F-10
Q710	D-8
Q711	D-8
Q781	I-9
Q782	I-9
Q783	H-8
Q784	G-8
Q785	H-8
Q786	G-8

6-15.SCHEMATIC DIAGRAM -AUDIO SECTION -



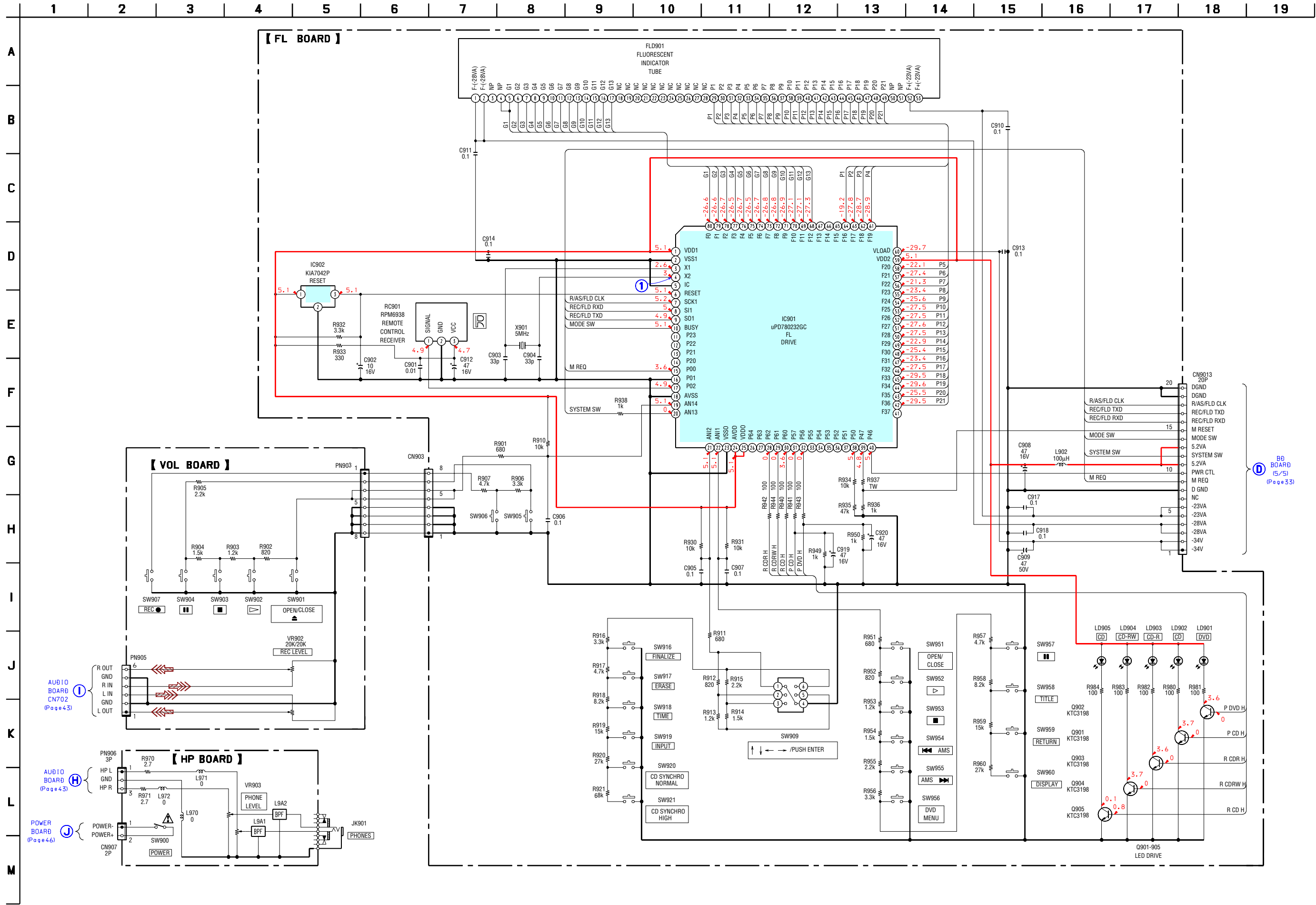
6-16.PRINTED WIRING BOARD -DISPLAY SECTION- • See page 23 for Circuit Board location.



• Semiconductor Location

Ref. No.	Location
IC901	C-5
IC902	C-7
LD901	B-5
LD902	B-5
LD903	B-5
LD904	B-5
LD905	B-5
Q901	B-5
Q902	A-6
Q903	B-4
Q904	B-4
Q905	B-4
RC901	C-7

6-17.SCHEMATIC DIAGRAM -DISPLAY SECTION -

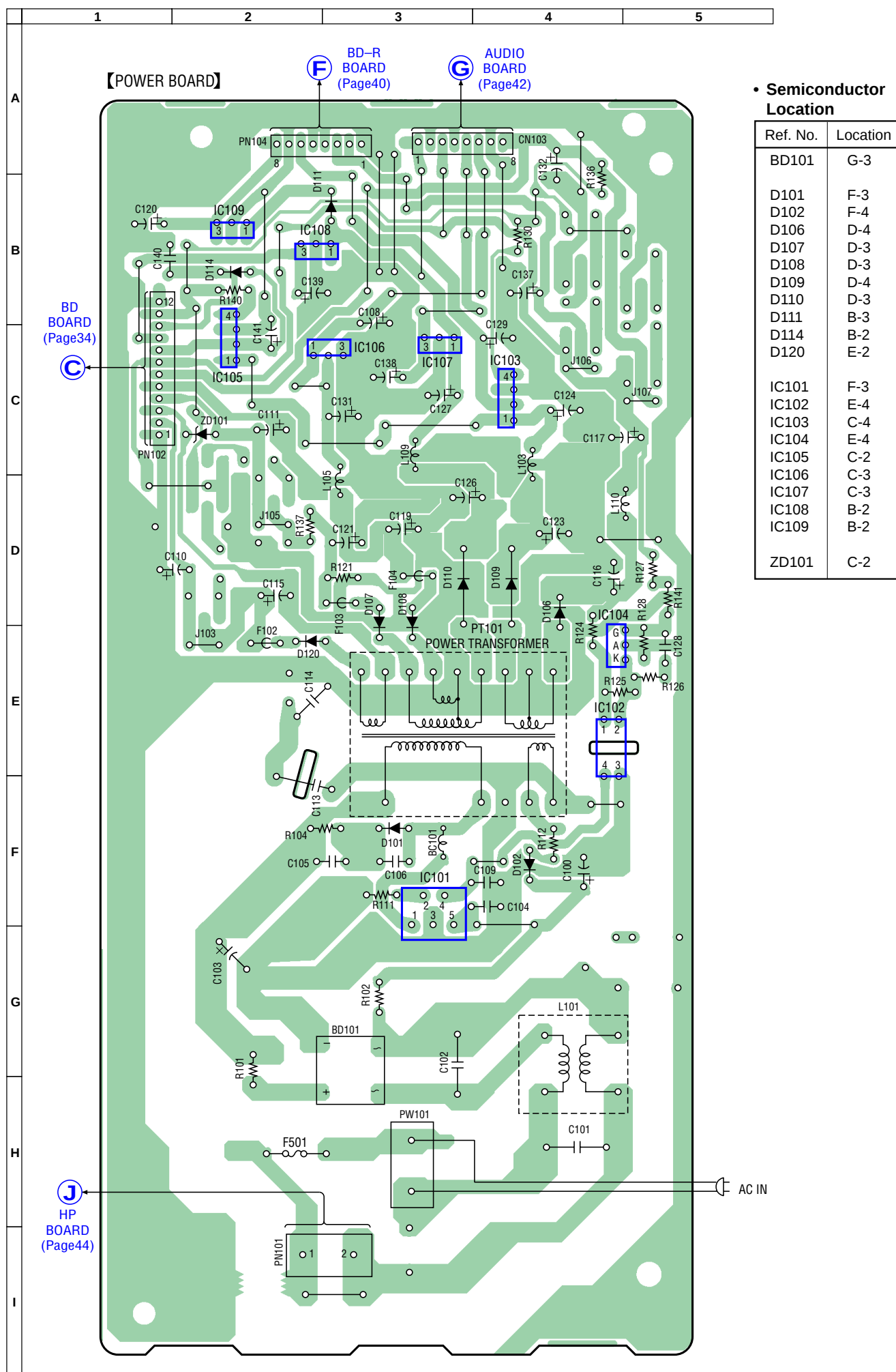


RD BOARD (5/5) (Page 33)

A —
B —
C —
D —
E —
F —
G —
H —
I —
J



6-19.PRINTED WIRING BOARD -POWER SECTION- • See page 23 for Circuit Board location.



6-20. IC PIN FUNCTION DESCRIPTION

• IC401 HD6417034AF DVD SYSTEM CONTROL (BD BOARD (4/5))

Pin No.	Pin Name	I/O	Description
1	DAV_DATA6	I	MPEG data (bit 6) input
2	DSP_INT	I	Interrupt signal input from DSP
3	VSS	—	Ground
4 to 11	HD0 to 7	I/O	Data input/output to SRAM
12	VSS	—	Ground
13,14	HD8,9	I/O	Data input/output to SRAM
15	VSS	—	Power supply (+3.3V)
16 to 21	HD10 to 15	I/O	Data input/output to SRAM
22	VSS	—	Ground
23 to 30	HA0 to 7	O	Address bus to SRAM
31	VSS	—	Ground
32 to 39	HA8 to 15	O	Address bus to SRAM
40	VCC	—	Ground
41,42	HA16, 17	O	Address bus to SRAM
43	VCC	—	Power supply (+3.3V)
44 to 47	HA18 to 21	O	Address bus to SRAM
48	/ROM_CS	O	Chip enable signal output to ROM
49	/CASH	O	CAS for higher byte output to DRAM
50	/IOCSI	I	Chip enable signal input from CPLD
51	/CASL	O	CAS for lower byte output to DRAM
52	VSS	—	Ground
53	V_MUTE	O	Video mute signal output
54	/RAS	O	RAS signal output to DRAM
55	REC_SIO_EN	O	SIO enable output to CDP
56	/MICOM_WAIT	I	MICOM wait signal input
57	/WR	O	Data write signal output
58	E_SOUT	I	Serial data input
59	/RD	O	Data read signal output
60	DSP_SENSE	I	SENSE signal input to DSP
61	VSS	—	Ground
62	E_SIN	O	Serial data output
63	E_CLK	O	Clock signal output
64	/MPEG_WR	O	MPEG host I/F read/write signal output
65	M_REQ	O	Serial data request output to FLD
66	FPGA_AS	O	FPGA address strobe signal output
67	/STROBE	I	Flash download I/F signal
68	SENS	I	SENS signal input to DSP
69	MPEG_INT	I	Interrupt signal input from MPEG
70	VCC	—	Power supply (+3.3V)
71	CK	O	Not used
72	VSS	—	Ground
73	X1	I	External crystal terminal (20MHz)
74	X0	O	External crystal terminal (20MHz)
75	VCC	—	Power supply (+3.3V)
76	PWR_FAIL_IN	I	Power fail signal input
77	VCC	—	Power supply (+3.3V)
78	/WDTOVF	O	Watch dog timer over flow output (Not used)
79	/RES	I	Reset signal input

Pin No.	Pin Name	I/O	Description
80	MD0	I	Mode signal input (connected to VCC)
81	MD1	I	Mode signal input (connected to ground)
82	MD2	I	Mode signal input (connected to ground)
83	VCC	—	Power supply (+3.3V)
84	VCC	—	Power supply (+3.3V)
85	AVCC	—	Power supply (+3.3V)
86	AVREF	I	ADC reference voltage input (connected to VCC)
87	AS_DONE	I	FPGA data download finished
88	SPD_F/R	I	Spindle servo control signal input
89	VIDEO_SW	I	Component/s-video output select signal input
90	MSDATO	I	MS data input
91	AVSS	—	Ground
92	AUDIO_LEVEL_IN	I	Audio level input
93	LOCK	I	CLV servo lock signal input from DSP
94	DEFECTION	I	Defect signal input
95	FOK	I	Focus OK signal input
96	VSS	—	Ground
97	IIC_DATA	I/O	IIC bus data input/output
98	IIC_CLK	I/O	IIC bus clock input/output
99	VCC	—	Power supply (+3.3V)
100	LOAD_CTL	O	Loading motor control signal output
101	LD_ON	O	Laser ON/OFF control signal output
102	S_DATA	O	Serial I/F data output
103	S_CLK	O	Serial I/F clock output
104	A_MUTE	O	Audio mute signal output
105	SPINDLE_FG	I	Spindle motor FG signal input
106	VSS	—	Ground
107	RXDO	I	Serial data input from FLD
108	TXDO	O	Serial data output to FLD
109	SQSO	I	SUB Q data read signal input
110	TXDI	I	Serial data input from CD-R
111	SCKO	O	Serial I/F clock to FLD
112	SQCK	O	SUB Q data request signal output

• IC406 HS602002 (CPLD) (BD BOARD (5/5))

Pin No.	Pin Name	I/O	Description
1	16:09	O	Not used
2	N.C	I/O	Not used
3	MPEG_RST	O	Reset signal output to ZIVA_4.1
4	GND	—	Ground
5	N.C	—	Not Used
6	LEVEL_SEL	O	FLD audio level meter L/R select signal output
7	MPEG_CS	O	Latch signal output to ZIVA_4.1
8	DSP_CS	O	Chip select signal to DSP
9	TDI	I	Not used
10	TMS	I	Not used
11	TCK	I	Not used
12	PP_CS	O	Chip select signal to DOWNLOAD jig
13	CLOSE_SW	I	DVD MD tray close signal input
14	OPEN_SW	I	DVD MD tray open signal input
15	VCC	—	Power supply (+5V)
16	SENS	I	Servo DSP Internal status monitoring
17	GND	—	Ground
18	MPEG_ERROR	I	Error detection signal input from ZIVA_4.1
19	D_DAC_CS	I	Chip select signal input
20	N.C	—	Not used
21	WR	O	Write enable signal output to DOWNLOAD jig
22	MICOM_WAIT	O	Requests the insertion of wait states into the bus cycle when the external address space is accessed
23	N.C	—	Not used
24	TDO	O	Not used
25	GND	—	Ground
26	VCC	—	Power supply (+5V)
27	RF_LAT	O	Latch signal output to SSI33P3721
28	A21	I/O	Memory address access
29	A20	I/O	Memory address access
30	A19	I/O	Memory address access
31	MPEG_WAIT	I	Transfer not complete
32	LIMIT_SW	I	Current limiter signal of DVD stepping motor
33	M_RESET	I	Reset signal input
34	EXP_W2	I/O	Expander clock signal
35	VCC	—	Power supply (+5V)
36	VCC	—	Power supply (+5V)
37	MPEG_ERROR	I	Error signal input from ZIVA_4.1
38	SENS_MICOM	I	MICOM internal bus monitoring signal input
39	D00	I/O	Memory data accessed
40	D01	I/O	Memory data accessed
41	D02	I/O	Memory data accessed
42	D03	I/O	Memory data accessed
43	D04	I/O	Memory data accessed
44	IOCS1	I	I/O port enable signal input

• IC203 HD64F3062 (SYSTEM CONTROL) (BD-R BOARD (3/4))

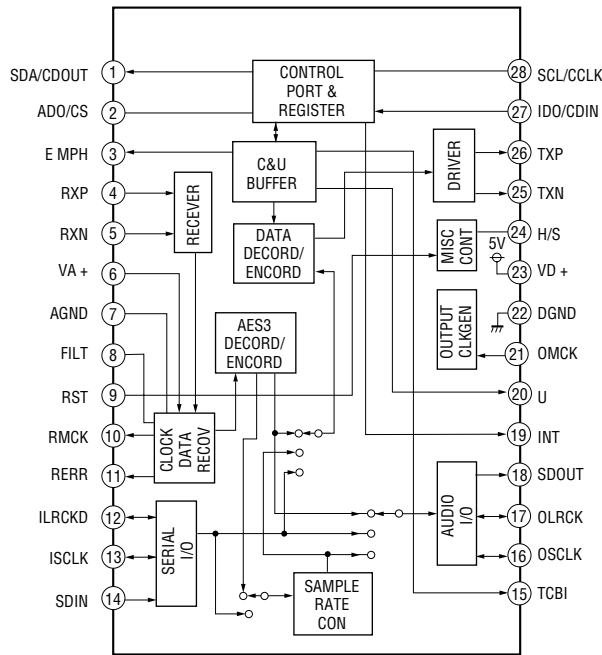
Pin No.	Pin Name	I/O	Description
1	VCL	I	Not used (Connected to ground through capacitor)
2	ATIP/EFM#	O	ATIP/EFM signal output to CST0100C
3	/DA_RCS	O	Chipselect signal output to VC01S05
4	/UCS1	O	Mode set signal output to OTI-9790CE
5	/UCS0	O	Mode set signal output to OTI-9790CE
6	DA_RCLK	O	Clock output to VC01S05
7	WR/nRE	O	Read or write (CPLD) select signal output
8	/OAK_RST	O	Audio mute
9	DA_RDATA	O	Data output to VC01S05
10	FWE	I	Flash memory write enable
11	VSS	—	Ground
12	REC_TXD	O	Serial data output to CDP
13	BTS_TXD	O	Flash write data output
14	REC/AS_RXD	I	Serial data input from CDP
15	BTS_RXD	I	Receive data from flash read
16	REC_CLK	I	Clock input from to CDP
17	REC_SIO_EN	I/O	SIO enable input/output to CDP
18	SDATA_OUT	O	Serial data output to EEPROM
19	SCLK	O	Serial clock to EEPROM
20	CDR/nRW	O	CDR/CDRW select signal output
21	/EP_CS	O	EPROM chip selector signal output
22	VSS	—	Ground
23	/CXA_CS	O	CXA3558R chip select signal output
24	/CDA_CS	O	DAC chip select signal output
25	TP(I/O)	I/O	Not used (Pull down)
26	TP(I/O)	I/O	Not used
27 to 34	UAD0 to 7	I/O	Data BUS
35	VCC	—	Power supply
36 to 43	UA0 to 7	O	Address BUS
44	VSS	—	Ground
45	UA8	O	Address BUS
46	/OPEN_SW	I	OPEN switch signal input
47	/LOAD_SW	I	LOAD switch signal input
48	RECD1	I	RECD1 signal input from CXA3558R
49	/SLD_IN_SW	I	SLD-IN switch signal input
50	A_DATA_ZERO (JIG_DOWN)	I	Not used (Pull down)
51	SRC_INT (HOT_TX)	I	Serial data input from CS8420-CSR
52	SRC_DIN (HOT_RX)	I	Interrupt signal input from CS8420-CSR
53	XTOK	I	XTOK signal input from CXA3558R
54	DUB_TRK_INC	I	DUB-TRK signal input from VC01S05
55	OPTION-1	I	Not used
56	FLAGB	I	Servo flag input
57	VSS	—	Ground
58	/WAIT (URDY)	I	Data ready signal input from OTI-9790
59	AGCON	O	AGC on signal output to CXA3558R
60	ROPCON	O	ROPC related CPLD signal output
61	SDATA_IN	I	Serial data input from EEPROM
62	/STBY	I	Hardware standby signal input
63	/RESET	I	Reset signal input

Pin No.	Pin Name	I/O	Description
64	NMI	I	Non maskable interrupt (connected to ground)
65	VSS	—	Ground
66	EXTAL	I	Crystal oscillator input (20MHz)
67	XTAL	O	Crystal oscillator output (20MHz)
68	VCC	—	Power supply
69	/AS	O	Not used
70	/URD	O	μ-COM data read signal output
71	/UWR	O	μ-COM data write signal output
72	/LWR	O	Not used
73	MD0	I	Mode select input
74	MD1	I	Mode select input (connected to ground)
75	MD2	I	Mode select input
76	AVCC	—	Power supply
77	VREF (4V)	I	VREF input (+4V)
78	ASYM1	I	RF hold data input
79	ASYM2	I	RF hold data input
80	BLEVELO	I	Write RF signal input
81	MPXO	I	Multiplexed input from CXA3558R
82	SLD_ERR	I	AD signal for sled control
83	FPDO	I	Laser power monitoring voltage input
84	SLD_MOVE_A	O	Sled kick level output
85	SLD_MOVE_B	O	Sled kick level output
86	AVSS	—	Ground
87	ESFS	I	Encoding subframe FS signal input from OTI-9790
88	/UINT0	I	Interrupt signal input from OTI-9790
89	/UINT1	I	Interrupt signal input from OTI-9790
90	ADTRIG	I	AD trig signal input from CST0100C
91	OPTION-2	I	Not used
92	VSS	—	Ground
93	FLAGA	I	Servo flag input
94	DUB_START	O	DUB_START signal output to VC01S05
95	SPNFG	I	Spindle FG signal input
96	/SRC_RST	O	Reset signal output to CS8420-CSR
97	/SRC_CS	O	Chip select signal output to CS8420-CSR
98	SRC_DOUT	O	Serial data output to CS8420-CSR
99	SRC_CLK	O	Clock output to CS8420-CSR
100	DRV_EN	O	Motor drive mute signal output

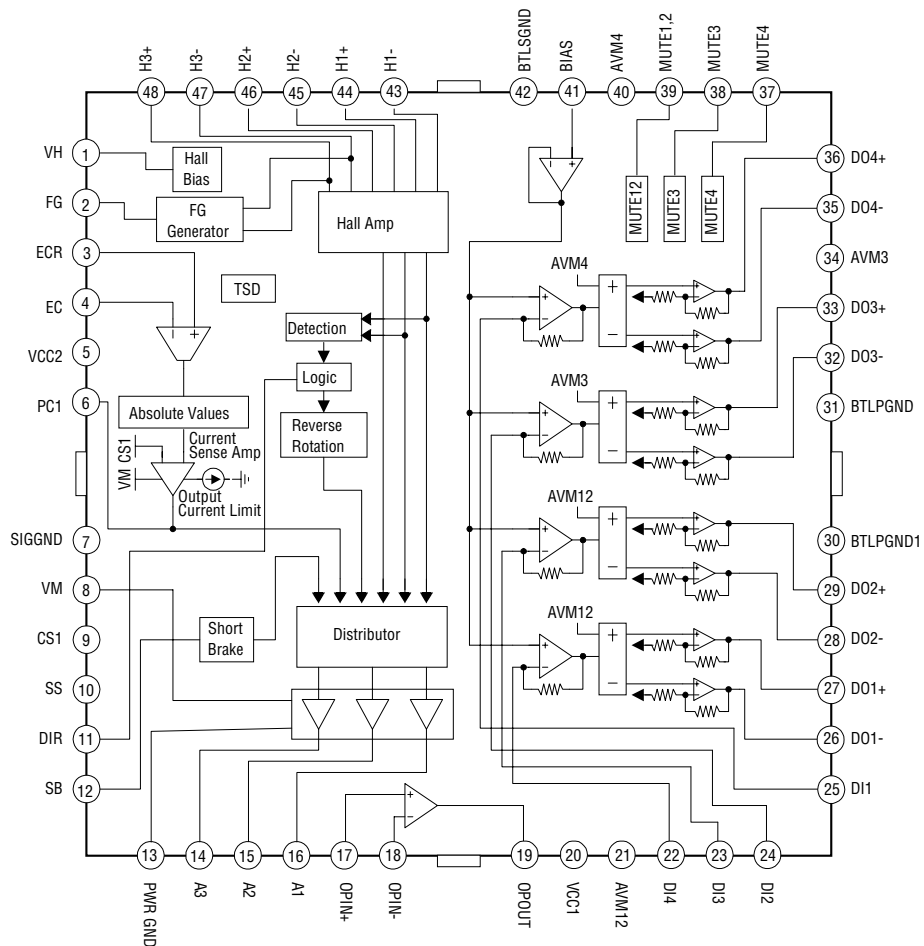
• IC207 CST0100C (LPLD) (BD-R BOARD (3/4))

Pin No.	Pin Name	I/O	Description
1	TP	—	Not used
2	RESAMP2	I	Timing signal input for OTI9790
3	WFPDSH	O	Sample & hold signal of CXA3558R
4	GND	—	Ground
5	RFPDSH	O	Sample & hold signal of CXA3558R
6	WBLSH	I	Sample pulse input for CXA3558R
7	SPDSH	I	Sample pulse input for CXA3558R
8	MPDSH	I	Sample pulse input for CXA3558R
9	TDI	—	Not used
10	TMS	—	Not used
11	TCK	—	Not used
12	WRSMP	I	Timing signal input for CXA3558R
13	WLDON	O	WLDON of RFIC & PICK-UP signal output
14	ERGCNT	O	Gain control signal output
15	VCC	—	Power supply (+5V)
16	RESET	I	Reset signal input
17	GND	—	Ground
18	W/XR	O	Write enable1 signal output
19	OSCEN	O	Oscillation enable signal output to pick-up
20	ENBL	O	Signal to turn on the pick-up
21	ODON	O	Over drive enable signal output
22	MONITO	I	Monitoring signal input
23	LDON	I	Laser diode ON/OFF control signal input
24	TDO	—	Not used
25	GND	—	Ground
26	VCC	—	Power supply (+5V)
27	WGATE	I	WGATE signal input from OTI9790
28	HFM ON	—	Not used (connected to VCC)
29	EFM1	I	WE1 control signal from OTI9790
30	EFM2	I	ODON control signal from OTI9790
31	HFSW	I	HFSW signal input from OTI9790
32	ROPCON	I	ROPCON signal input from HD64F3062
33	CDR/RW	I	CDR/RW detect signal input
34	WR/RE	I	REAL_WRITE signal input
35	VCC	—	Power supply (+5V)
36	ATIP/EFM	I	WBLOCK signal control input
37	TP	—	Not used
38	ADTRIG	O	ADTRIG signal output to HD64F3062
39	EEFS	I	Sync signal input from OTI9790
40	EFM3	I	OSCEN control signal while reading
41	ROPC1	I	Determines ROPC S/H timing when writing
42	RESAMP1	I	S/H Level input from OTI9790
43	EFCK	I	Generating S/H control signal according to EFM bit clock and other signals
44	34MCLK	I	Clock input OTI9790

IC502 CS8420-CSR (BD-R board)



IC4B3 FAN8727 (BD board)



SECTION 7
EXPLODED VIEWS

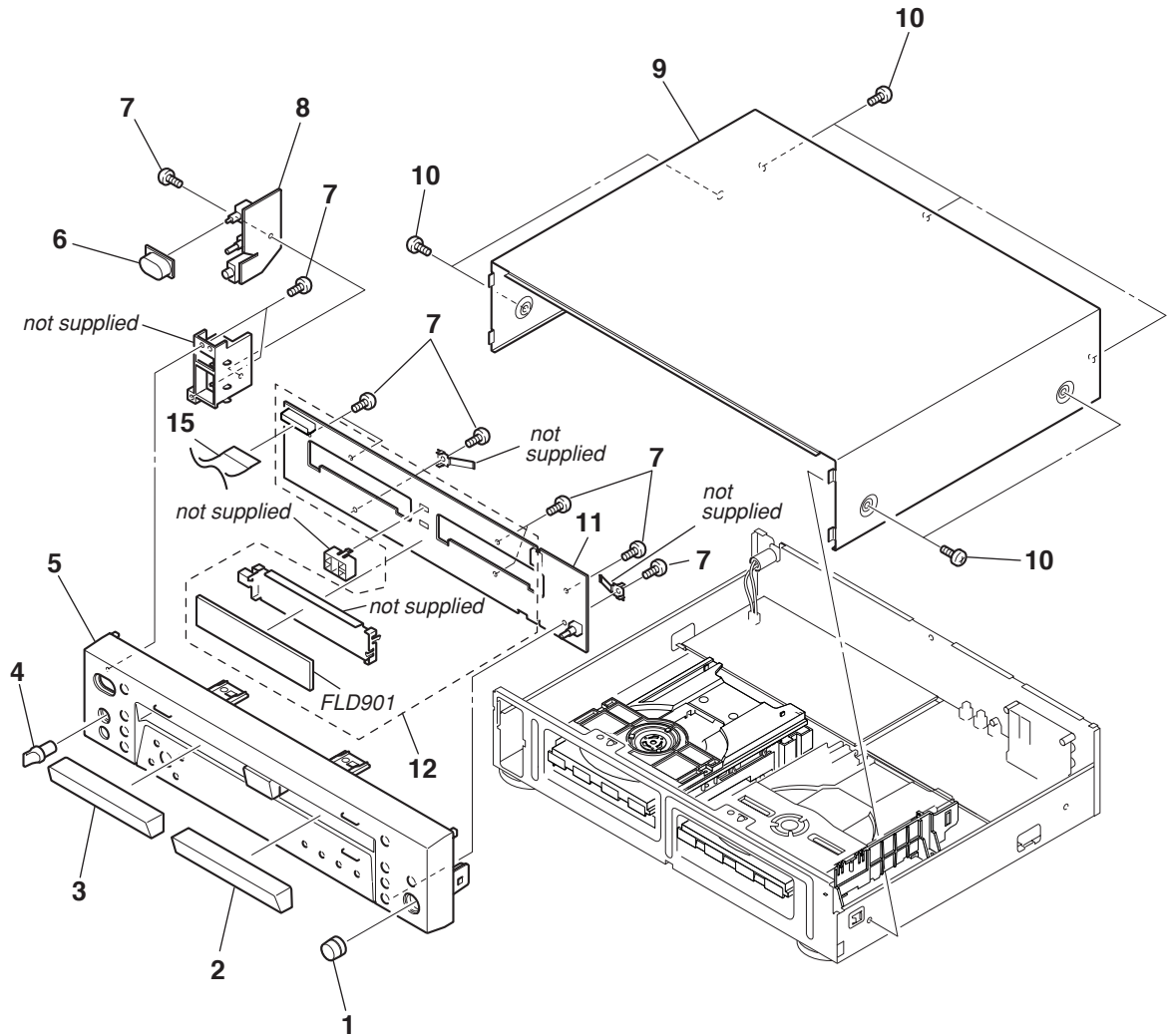
NOTE:

- -XX, -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.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

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

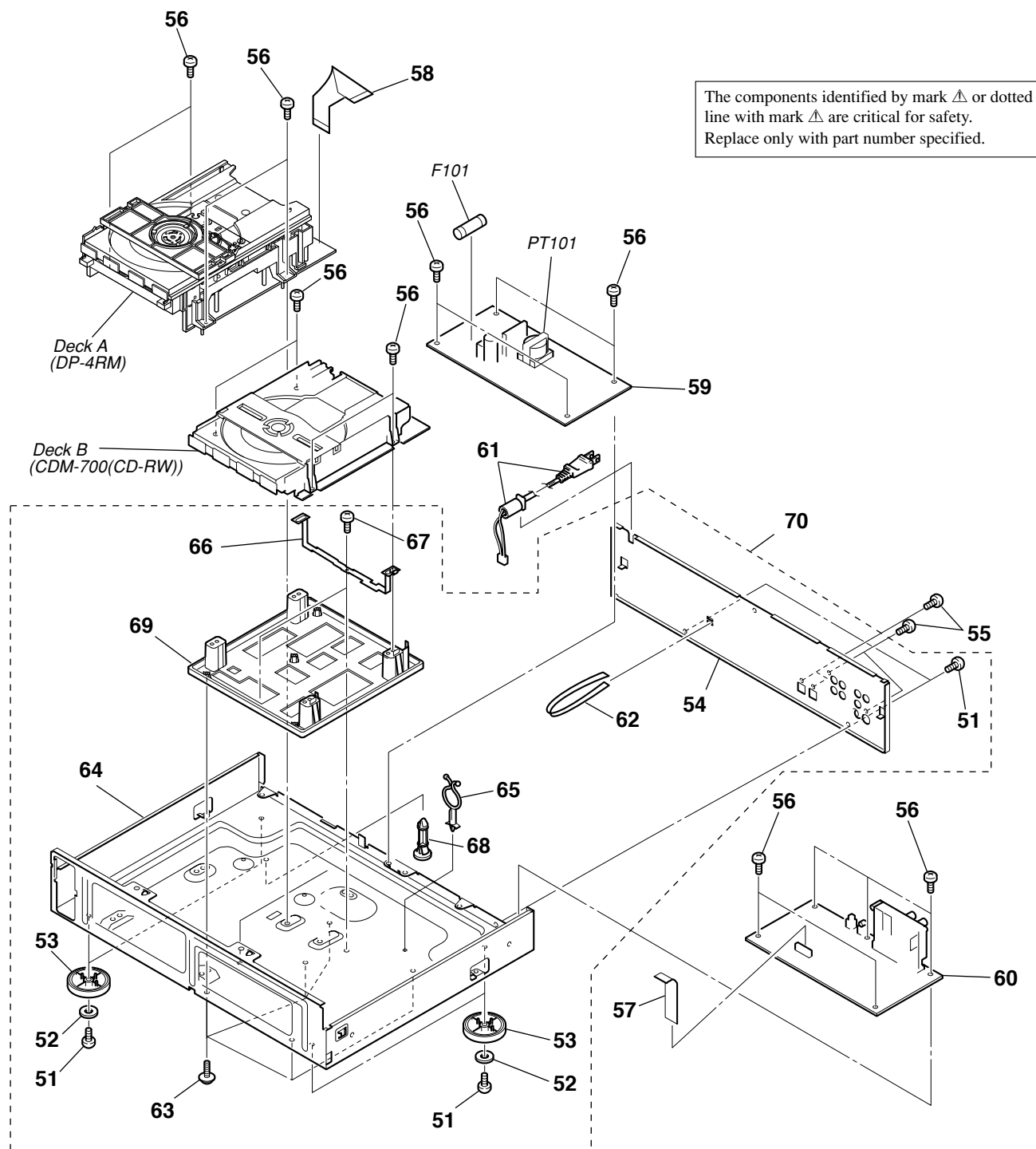
The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety. Replace only with part number specified.

7-1. FRONT PANEL SECTION



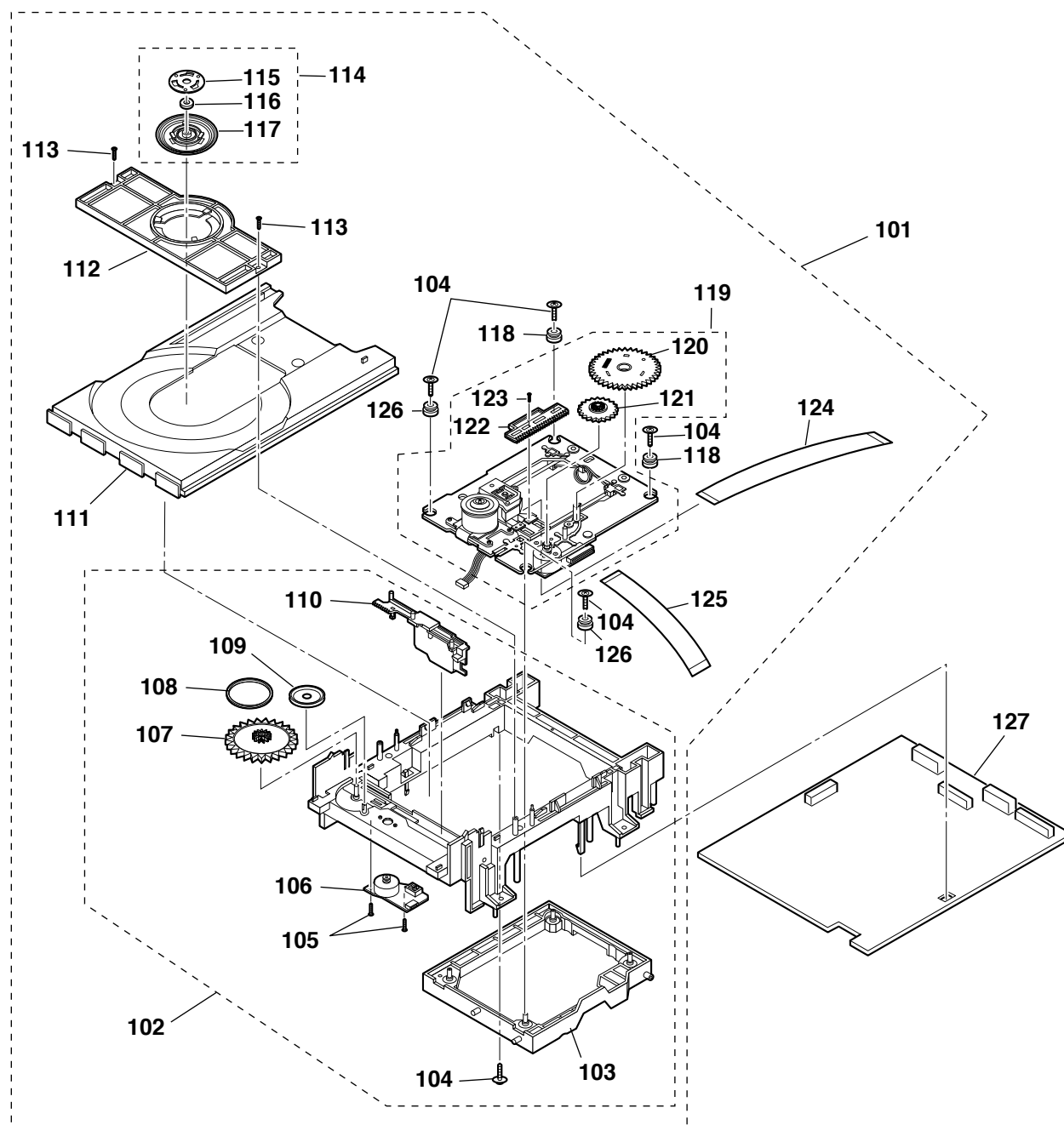
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-235-379-01	KNOB, REC VOL		8	A-4728-644-A	HP BOARD, COMPLETE	
2	4-241-170-01	DOOR, TRAY (CDR)		9	4-235-363-01	CASE, TOP	
3	4-241-171-01	DOOR, TRAY (DVD)		10	4-241-173-01	SCREW (4X8 BK S-TYPE)	
4	4-235-378-01	KNOB, P/VOLUME		11	A-4728-645-A	VOL BOARD, COMPLETE	
5	4-241-169-01	PANEL ASSY, FRONT		12	A-4728-646-A	FL BOARD, COMPLETE	
6	4-235-380-01	KNOB, POEWR		15	1-824-266-11	WIRE (FLAT TYPE) (20 CORE)	
7	4-235-377-01	SCREW, SPECIAL		FLD901	1-518-830-11	INDICATOR TUBE, FLUORESCENT	

7-2. CHASSIS SECTION



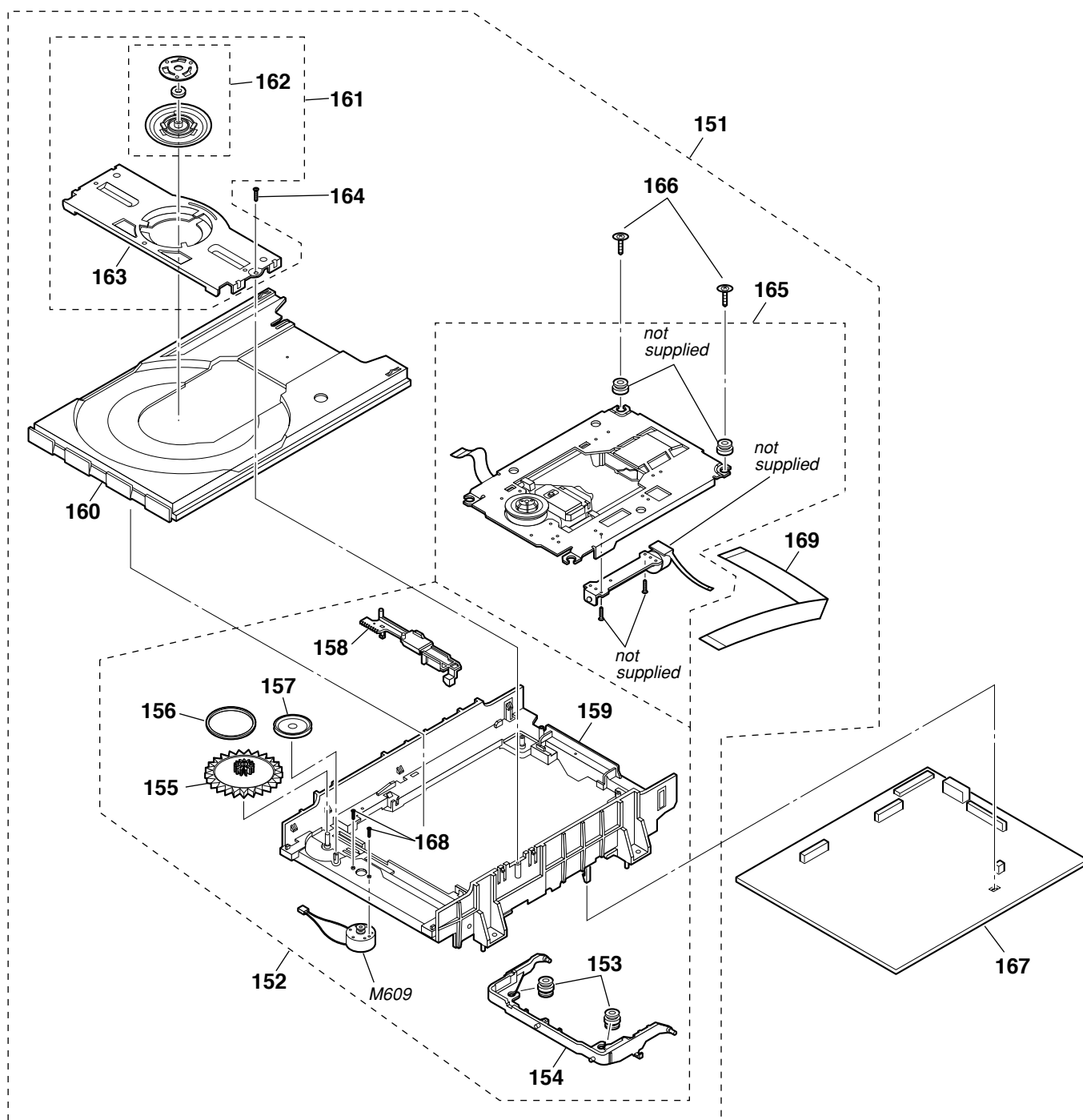
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	4-235-403-01	SCREW, SPECIAL (3X8 BK)		62	4-241-178-01	CLAMP, CORD	
52	4-235-400-01	RUBBER, FOOT		63	4-241-184-01	SCREW, SPECIAL	
53	4-235-402-01	HOLDER, FOOT		64	4-241-175-01	CHASSIS, MAIN	
54	4-241-176-01	PANEL, BACK		65	4-241-177-01	SUPPORTER, PU	
55	4-241-172-01	SCREW SPECIAL (3X8 BK)					
56	4-241-174-01	SCREW, SPECIAL		66	4-241-182-01	PLATE, GND	
57	1-824-264-11	WIRE (FLAT TYPE) (30 CORE)		67	4-241-183-01	SCREW, SPECIAL (3X6 FZMY)	
58	1-824-265-11	WIRE (FLAT TYPE) (30 CORE)		68	4-241-179-01	HOLDER, PWB (JOBS 16R)	
59	A-4728-642-A	POWER BOARD, COMPLETE		69	4-241-181-01	GUIDE, CDR	
60	A-4728-643-A	AUDIO BOARD, COMPLETE		70	A-4735-926-A	CHASSIS ASSY, MAIN	
Δ 61	1-823-044-11	CORD, POWER		Δ PT101	1-437-810-11	TRANSFORMER, POWER	
				Δ F101	1-532-503-51	FUSE (1.6A 250V)	

7-3. DVD PLAY SECTION (DECK A) (DP-4RM)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	A-4735-923-A	DECK ASSY (DVD)		115	4-241-339-01	PLATE, CLAMP	
102	4-241-358-01	BASE ASSY, MAIN		116	4-241-340-01	MAGNET, CLAMP	
103	4-241-344-01	FRAME, UP/D (MULTI)		117	4-241-341-01	CLAMP, UPPER	
104	4-241-354-01	SCREW, (D2.0X6)		118	4-241-345-01	RUBBER, DAMPER	
105	4-241-355-01	SCREW, DRAWING (D2.0X6)		119	4-241-359-01	BASE ASSY, SLED	
106	4-241-349-01	PWB ASSY, MOTER		120	4-241-350-01	GEAR, ASSY FEED	
107	4-241-351-01	GEAR, LOADING		121	4-241-343-01	GEAR, MIDDLE	
108	4-241-347-01	BELT, LOADING		122	4-241-342-01	GEAR, ASSY RACK	
109	4-241-348-01	GEAR, PULLEY		123	4-241-356-01	SCREW, MACHINE	
110	4-241-352-01	GUIDE, UP/DOWN		124	1-824-613-11	CABLE, FLAT (23P)	
111	4-241-360-01	TRAY, DISC		125	1-824-612-11	CABLE, FLAT (20P)	
112	4-241-361-01	HOLDER, CLAMP		126	4-241-346-01	RUBBER, DAMPER	
113	4-241-353-01	SCREW, B-TITE		127	A-4728-647-A	BD BOARD, COMPLETE	
114	4-241-357-01	CLAMP ASSY, DISC(DP4)					

7-4. CD RECORD SECTION (DECK B) (CDM-700(CD-RW))



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	A-4735-925-A	DECK ASSY (CDR)		161	4-241-166-01	HOLDER ASSY, CLAMP	
152	4-241-164-01	MECHANISM ASSY, LOADING		162	4-241-167-01	CLAMP ASSY, DISC	
153	4-235-389-01	RUBBER, FRONT		163	4-235-404-01	HOLDER, CLAMP	
154	4-235-384-01	BASE, UP/DOWN		164	4-235-419-01	SCREW, 2X6	
155	4-235-407-01	GEAR, LOADING		165	4-241-217-01	MECHANISM ASSY, PU	
156	4-235-381-01	BELT		166	4-241-168-01	SCREW, 2.0X10	
157	4-235-382-01	GEAR, PULLEY		167	A-4728-649-A	BD-R BOARD, COMPLETE	
158	4-235-387-01	GUIDE, UP/DOWN		168	4-235-391-01	SCREW, 1.7X4.5	
159	4-235-386-01	BASE, MAIN		169	1-823-046-11	CABLE, FLAT(32P)	
160	4-235-388-01	TRAY, DISC		M609	4-241-165-01	MOTOR ASSY, LOADING	

AUDIO

SECTION 8
ELECTRICAL PARTS LIST

Note:

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

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

- 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, -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.
- 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...: μ A..., uPA...: μ PA..., uPB...: μ PB...,
uPC...: μ PC..., uPD...: μ PD...
- CAPACITORS
uF : μ F
- COILS
uH : μ H

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
	A-4728-643-A	AUDIO BOARD, COMPLETE *****		C770	1-126-965-91	ELECT 22uF 20%	50V
		< CAPACITOR >		C771	1-126-933-11	ELECT 100uF 20%	16V
C702	1-126-933-11	ELECT 100uF 20%	16V	C773	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C703	1-163-139-00	CERAMIC CHIP 820PF 5%	50V	C778	1-163-139-00	CERAMIC CHIP 820PF 5%	50V
C707	1-165-319-11	CERAMIC CHIP 0.1uF	50V	C781	1-126-934-11	ELECT 220uF 20%	10V
C708	1-165-319-11	CERAMIC CHIP 0.1uF	50V	C782	1-126-934-11	ELECT 220uF 20%	10V
C70A	1-126-935-11	ELECT 470uF 20%	10V	C783	1-126-934-11	ELECT 220uF 20%	10V
C70B	1-165-319-11	CERAMIC CHIP 0.1uF	50V	C784	1-126-934-11	ELECT 220uF 20%	10V
C70C	1-165-319-11	CERAMIC CHIP 0.1uF	50V	C785	1-164-346-11	CERAMIC CHIP 1uF	16V
C710	1-104-665-11	ELECT 100uF 20%	10V	C787	1-165-590-11	MYLAR 0.0039uF 100V	
C711	1-126-933-11	ELECT 100uF 20%	16V	C791	1-164-182-11	CERAMIC CHIP 0.0033uF 10%	50V
C712	1-104-665-11	ELECT 100uF 20%	10V	C794	1-126-965-91	ELECT 22uF 20%	50V
C714	1-126-965-91	ELECT 22uF 20%	50V	C797	1-163-139-00	CERAMIC CHIP 820PF 5%	50V
C715	1-126-965-91	ELECT 22uF 20%	50V	C7V2	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C717	1-104-666-11	ELECT 220uF 20%	25V	C7V3	1-126-947-11	ELECT 47uF 20%	10V
C718	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	C7V5	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C719	1-165-319-11	CERAMIC CHIP 0.1uF	50V	C7V6	1-126-947-11	ELECT 47uF 20%	10V
C720	1-126-947-11	ELECT 47uF 20%	35V	C7V7	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C722	1-164-182-11	CERAMIC CHIP 0.0033uF 10%	50V	C7V8	1-126-947-11	ELECT 47uF 20%	10V
C723	1-104-665-11	ELECT 100uF 20%	10V			< CONNECTOR >	
C724	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	CN501	1-779-298-11	CONNECTOR,FFC(LIF(NON-ZIF))30P	
C725	1-163-139-00	CERAMIC CHIP 820PF 5%	50V	* CN701	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
C726	1-165-319-11	CERAMIC CHIP 0.1uF	50V	* CN702	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P	
C727	1-126-947-11	ELECT 47uF 20%	35V			< COIL >	
C728	1-165-590-11	MYLAR 0.0039uF	100V	F701	1-400-217-11	INDUCTOR 0UH	
C730	1-163-259-91	CERAMIC CHIP 220PF 5%	50V	F702	1-400-217-11	INDUCTOR 0UH	
C731	1-126-965-91	ELECT 22uF 20%	50V	F703	1-400-217-11	INDUCTOR 0UH	
C732	1-163-259-91	CERAMIC CHIP 220PF 5%	50V	F704	1-400-217-11	INDUCTOR 0UH	
C733	1-126-965-91	ELECT 22uF 20%	50V			< IC >	
C737	1-165-319-11	CERAMIC CHIP 0.1uF	50V	IC702	8-759-710-97	IC NJM4565M(TE2)	
C739	1-165-319-11	CERAMIC CHIP 0.1uF	50V	IC703	8-759-564-49	IC TC7W53FU(TE12R)	
C740	1-165-319-11	CERAMIC CHIP 0.1uF	50V	IC704	8-759-064-92	IC NJM5532M-D	
C742	1-165-319-11	CERAMIC CHIP 0.1uF	50V	IC706	8-759-644-49	IC 74HCU04D	
C744	1-104-665-11	ELECT 100uF 20%	10V	IC707	8-759-369-74	IC NJM4556AM-TE2	
C746	1-163-253-11	CERAMIC CHIP 120PF 5%	50V	IC7V1	8-759-825-32	IC CXD9627N-E2	
C756	1-126-935-11	ELECT 470uF 20%	10V	IC7V2	6-702-527-01	IC AK5380VT-E2	
C757	1-165-319-11	CERAMIC CHIP 0.1uF	50V			< JACK >	
C758	1-163-275-11	CERAMIC CHIP 0.001uF 5%	50V	JK701	1-816-547-11	JACK, PIN 9P (VIDEO OUT/S VIDEO OUT/COMPONENT VIDEO OUT/ ANALOG IN/OUT)	
C761	1-126-965-91	ELECT 22uF 20%	50V	JK703	8-749-017-36	IC TORX179 (DIGITAL OPTICAL IN)	
C762	1-126-933-11	ELECT 100uF 20%	16V				
C763	1-165-319-11	CERAMIC CHIP 0.1uF	50V				
C764	1-126-947-11	ELECT 47uF 20%	10V				
C767	1-163-253-11	CERAMIC CHIP 120PF 5%	50V				

AUDIO

Ref. No.	Part No.	Description	Remark			
JK705	8-749-017-80	IC GP1FA551TZ (DIGITAL OPTICAL OUT)				
		< COIL >				
L703	1-400-091-21	FERRITE	0uH			
L704	1-400-091-21	FERRITE	0uH			
L7V1	1-400-091-21	FERRITE	0uH			
		< RELAY >				
LY702	1-755-470-11	RELAY				
		< TRANSISTOR >				
Q701	8-729-037-16	TRANSISTOR	KRA103M-AT			
Q702	8-729-016-64	TRANSISTOR	KTD1302			
Q703	8-729-016-64	TRANSISTOR	KTD1302			
Q704	8-729-016-64	TRANSISTOR	KTD1302			
Q705	8-729-037-16	TRANSISTOR	KRA103M-AT			
Q706	8-729-036-89	TRANSISTOR	KTC3198GR-A			
Q707	8-729-036-89	TRANSISTOR	KTC3198GR-A			
Q708	8-729-036-89	TRANSISTOR	KTC3198GR-A			
Q709	8-729-036-89	TRANSISTOR	KTC3198GR-A			
Q710	8-729-016-64	TRANSISTOR	KTD1302			
Q711	8-729-016-64	TRANSISTOR	KTD1302			
Q781	8-729-036-89	TRANSISTOR	KTC3198GR-A			
Q782	8-729-026-41	TRANSISTOR	2SA933AS-QRT			
Q783	8-729-036-89	TRANSISTOR	KTC3198GR-A			
Q784	8-729-036-89	TRANSISTOR	KTC3198GR-A			
Q785	8-729-036-89	TRANSISTOR	KTC3198GR-A			
Q786	8-729-036-89	TRANSISTOR	KTC3198GR-A			
		< RESISTOR >				
R701	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R702	1-216-051-00	METAL CHIP	1.2K	5%	1/10W	
R703	1-216-025-11	RES-CHIP	100	5%	1/10W	
R704	1-216-025-11	RES-CHIP	100	5%	1/10W	
R705	1-216-025-11	RES-CHIP	100	5%	1/10W	
R706	1-216-041-00	METAL CHIP	470	5%	1/10W	
R707	1-216-041-00	METAL CHIP	470	5%	1/10W	
R708	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R709	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R70A	1-216-025-11	RES-CHIP	100	5%	1/10W	
R70B	1-216-025-11	RES-CHIP	100	5%	1/10W	
R70C	1-216-025-11	RES-CHIP	100	5%	1/10W	
R70D	1-216-025-11	RES-CHIP	100	5%	1/10W	
R70E	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R70F	1-216-025-11	RES-CHIP	100	5%	1/10W	
R70G	1-216-025-11	RES-CHIP	100	5%	1/10W	
R711	1-216-073-91	METAL CHIP	10K	5%	1/10W	
R712	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R713	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R714	1-216-059-00	METAL CHIP	2.7K	5%	1/10W	
R715	1-216-059-00	METAL CHIP	2.7K	5%	1/10W	
R716	1-216-073-91	RES-CHIP	10K	5%	1/10W	
R717	1-216-295-00	SHORT CHIP	0			
R718	1-216-073-91	METAL CHIP	10K	5%	1/10W	
R719	1-216-061-91	RES-CHIP	3.3K	5%	1/10W	
R720	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R733	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R734	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R735	1-216-009-91	RES-CHIP	22	5%	1/10W	
R736	1-216-009-91	RES-CHIP	22	5%	1/10W	

Ref. No.	Part No.	Description	Remark			
R737	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R738	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R740	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R741	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R742	1-216-051-00	METAL CHIP	1.2K	5%	1/10W	
R743	1-216-009-91	RES-CHIP	22	5%	1/10W	
R744	1-216-009-91	RES-CHIP	22	5%	1/10W	
R745	1-216-089-91	RES-CHIP	47K	5%	1/10W	
R746	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R747	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R748	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R749	1-216-089-91	RES-CHIP	47K	5%	1/10W	
R750	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R755	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R756	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R757	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R758	1-216-073-91	RES-CHIP	10K	5%	1/10W	
R759	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R760	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R761	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R762	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R763	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R764	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R765	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R766	1-216-059-00	METAL CHIP	2.7K	5%	1/10W	
R767	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R768	1-216-051-00	METAL CHIP	1.2K	5%	1/10W	
R769	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R770	1-216-061-91	RES-CHIP	3.3K	5%	1/10W	
R771	1-216-051-00	METAL CHIP	1.2K	5%	1/10W	
R772	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R773	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	
R774	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	
R775	1-216-051-00	METAL CHIP	1.2K	5%	1/10W	
R776	1-216-051-00	METAL CHIP	1.2K	5%	1/10W	
R777	1-216-009-91	RES-CHIP	22	5%	1/10W	
R778	1-216-051-00	METAL CHIP	1.2K	5%	1/10W	
R779	1-216-051-00	METAL CHIP	1.2K	5%	1/10W	
R780	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R781	1-216-043-91	RES-CHIP	560	5%	1/10W	
R782	1-216-043-91	RES-CHIP	560	5%	1/10W	
R783	1-216-097-11	RES-CHIP	100K	5%	1/10W	
R784	1-216-097-11	RES-CHIP	100K	5%	1/10W	
R785	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	
R786	1-216-009-91	RES-CHIP	22	5%	1/10W	
R788	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R789	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R791	1-216-295-00	SHORT CHIP	0			
R792	1-216-295-00	SHORT CHIP	0			
R793	1-216-295-00	SHORT CHIP	0			
R794	1-216-295-00	SHORT CHIP	0			
R795	1-216-295-00	SHORT CHIP	0			
R796	1-216-295-00	SHORT CHIP	0			
R798	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R799	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	
R7A1	1-216-073-91	RES-CHIP	10K	5%	1/10W	
R7A2	1-216-073-91	RES-CHIP	10K	5%	1/10W	
R7A3	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R7A4	1-216-049-11	RES-CHIP	1K	5%	1/10W	
R7A5	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	
R7A8	1-216-295-00	SHORT CHIP	0			

RCD-W7V

AUDIO	BD
-------	----

Ref. No.	Part No.	Description			Remark
R7V2	1-216-037-00	METAL CHIP	330	5%	1/10W
R7V3	1-216-037-00	METAL CHIP	330	5%	1/10W
R7V4	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R7V5	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R7V6	1-216-022-00	RES-CHIP	75	5%	1/10W
R7V7	1-216-022-00	RES-CHIP	75	5%	1/10W
R7V8	1-216-022-00	RES-CHIP	75	5%	1/10W
R7V9	1-216-022-00	RES-CHIP	75	5%	1/10W
< SWITCH >					
SW701	1-786-347-11	SWITCH, SLIDE (VIDEO OUT SELECT)			

A-4728-647-A		BD BOARD, COMPLETE			

< CAPACITOR >					
C401	1-164-337-11	CERAMIC CHIP	2.2uF		16V
C402	1-131-992-11	CERAMIC CHIP	100000PF		35V
C403	1-131-992-11	CERAMIC CHIP	100000PF		35V
C404	1-164-337-11	CERAMIC CHIP	2.2uF		16V
C405	1-131-992-11	CERAMIC CHIP	100000PF		35V
C406	1-131-992-11	CERAMIC CHIP	100000PF		35V
C407	1-131-992-11	CERAMIC CHIP	100000PF		35V
C408	1-164-337-11	CERAMIC CHIP	2.2uF		16V
C409	1-131-992-11	CERAMIC CHIP	100000PF		35V
C410	1-124-779-00	ELECT CHIP	10uF	20%	16V
C411	1-131-992-11	CERAMIC CHIP	100000PF		35V
C412	1-131-992-11	CERAMIC CHIP	100000PF		35V
C413	1-131-992-11	CERAMIC CHIP	100000PF		35V
C414	1-131-992-11	CERAMIC CHIP	100000PF		35V
C415	1-131-992-11	CERAMIC CHIP	100000PF		35V
C416	1-131-992-11	CERAMIC CHIP	100000PF		35V
C417	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C418	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C419	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C420	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C421	1-131-992-11	CERAMIC CHIP	100000PF		35V
C422	1-162-924-11	CERAMIC CHIP	56PF	5%	50V
C423	1-131-992-11	CERAMIC CHIP	100000PF		35V
C424	1-164-337-11	CERAMIC CHIP	2.2uF		16V
C425	1-131-992-11	CERAMIC CHIP	100000PF		35V
C430	1-124-779-00	ELECT CHIP	10uF	20%	16V
C431	1-131-992-11	CERAMIC CHIP	100000PF		35V
C432	1-131-992-11	CERAMIC CHIP	100000PF		35V
C433	1-124-779-00	ELECT CHIP	10uF	20%	16V
C434	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C435	1-124-779-00	ELECT CHIP	10uF	20%	16V
C436	1-131-992-11	CERAMIC CHIP	100000PF		35V
C437	1-131-992-11	CERAMIC CHIP	100000PF		35V
C438	1-131-992-11	CERAMIC CHIP	100000PF		35V
C439	1-131-992-11	CERAMIC CHIP	100000PF		35V
C440	1-124-779-00	ELECT CHIP	10uF	20%	16V
C441	1-131-992-11	CERAMIC CHIP	100000PF		35V
C442	1-124-779-00	ELECT CHIP	10uF	20%	16V
C443	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C444	1-131-992-11	CERAMIC CHIP	100000PF		35V
C445	1-131-992-11	CERAMIC CHIP	100000PF		35V
C446	1-124-779-00	ELECT CHIP	10uF	20%	16V
C447	1-131-992-11	CERAMIC CHIP	100000PF		35V
C448	1-164-337-11	CERAMIC CHIP	2.2uF		16V
C449	1-131-992-11	CERAMIC CHIP	100000PF		35V

Ref. No.	Part No.	Description			Remark
C450	1-124-779-00	ELECT CHIP	10uF	20%	16V
C451	1-131-992-11	CERAMIC CHIP	100000PF		35V
C452	1-131-992-11	CERAMIC CHIP	100000PF		35V
C453	1-131-992-11	CERAMIC CHIP	100000PF		35V
C454	1-126-204-11	ELECT CHIP	47uF	20%	16V
C455	1-131-992-11	CERAMIC CHIP	100000PF		35V
C456	1-164-337-11	CERAMIC CHIP	2.2uF		16V
C457	1-131-992-11	CERAMIC CHIP	100000PF		35V
C459	1-131-992-11	CERAMIC CHIP	100000PF		35V
C460	1-131-992-11	CERAMIC CHIP	100000PF		35V
C461	1-131-992-11	CERAMIC CHIP	100000PF		35V
C462	1-131-992-11	CERAMIC CHIP	100000PF		35V
C463	1-126-204-11	ELECT CHIP	47uF	20%	16V
C464	1-131-992-11	CERAMIC CHIP	100000PF		35V
C466	1-124-779-00	ELECT CHIP	10uF	20%	16V
C467	1-131-992-11	CERAMIC CHIP	100000PF		35V
C468	1-131-992-11	CERAMIC CHIP	100000PF		35V
C472	1-126-204-11	ELECT CHIP	47uF	20%	16V
C473	1-164-337-11	CERAMIC CHIP	2.2uF		16V
C474	1-131-992-11	CERAMIC CHIP	100000PF		35V
C475	1-131-992-11	CERAMIC CHIP	100000PF		35V
C476	1-124-779-00	ELECT CHIP	10uF	20%	16V
C477	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4A0	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4A1	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C4A2	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C4A3	1-164-337-11	CERAMIC CHIP	2.2uF		16V
C4A4	1-164-337-11	CERAMIC CHIP	2.2uF		16V
C4A5	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4A6	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4A7	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4A8	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4A9	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4B0	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4B1	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4B2	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4B3	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4B4	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4B5	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4B6	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4B8	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4B9	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4C0	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4C1	1-164-337-11	CERAMIC CHIP	2.2uF		16V
C4C2	1-164-337-11	CERAMIC CHIP	2.2uF		16V
C4C3	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4C4	1-164-337-11	CERAMIC CHIP	2.2uF		16V
C4C5	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4C6	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4C7	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C4C8	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4C9	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4D0	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4D1	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4D2	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4D3	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4D4	1-131-992-11	CERAMIC CHIP	100000PF		35V
C4D5	1-164-337-11	CERAMIC CHIP	2.2uF		16V
C4D6	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C4D7	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C4D8	1-131-992-11	CERAMIC CHIP	100000PF		35V

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C4D9	1-131-992-11	CERAMIC CHIP	100000PF 35V	C4M3	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C4E0	1-131-992-11	CERAMIC CHIP	100000PF 35V	C4M4	1-124-779-00	ELECT CHIP	10uF 20% 16V
C4E1	1-131-992-11	CERAMIC CHIP	100000PF 35V	C4M5	1-131-992-11	CERAMIC CHIP	100000PF 35V
C4E3	1-131-992-11	CERAMIC CHIP	100000PF 35V	< DIODE >			
C4E4	1-131-992-11	CERAMIC CHIP	100000PF 35V	D4B1	8-719-914-43	DIODE DAN202K	
C4E5	1-131-992-11	CERAMIC CHIP	100000PF 35V	D4B2	8-719-914-43	DIODE DAN202K	
C4E6	1-131-992-11	CERAMIC CHIP	100000PF 35V	< IC >			
C4E7	1-131-992-11	CERAMIC CHIP	100000PF 35V	IC401	6-702-976-01	IC HD6417034AF	
C4E8	1-131-992-11	CERAMIC CHIP	100000PF 35V	IC402	6-801-816-01	IC AT49BV1614-11TC	
C4E9	1-131-992-11	CERAMIC CHIP	100000PF 35V	IC403	6-702-400-01	IC GLT440L16-40J4	
C4F1	1-124-779-00	ELECT CHIP	10uF 20% 16V	IC404	6-702-339-01	IC D36521A11AQC	
C4F2	1-162-919-11	CERAMIC CHIP	22PF 5% 50V	IC405	6-701-276-01	IC MC74VHC374DTR2	
C4G0	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V	IC406	6-702-403-01	IC HS602002	
C4G1	1-126-204-11	ELECT CHIP	47uF 20% 16V	IC407	8-759-710-55	IC NJM2100M-TE1	
C4G2	1-124-779-00	ELECT CHIP	10uF 20% 16V	IC408	8-759-674-44	IC MM74HCT244MTCX	
C4G3	1-131-992-11	CERAMIC CHIP	100000PF 35V	IC409	8-759-448-71	IC BU4053BCFV-E2	
C4G4	1-124-779-00	ELECT CHIP	10uF 20% 16V	IC410	6-702-401-01	IC GDC25D801D	
C4G5	1-131-992-11	CERAMIC CHIP	100000PF 35V	IC411	6-702-400-01	IC GLT440L16-40J4	
C4G6	1-131-992-11	CERAMIC CHIP	100000PF 35V	IC413	8-759-545-66	IC NJM3414M-TE1	
C4G7	1-131-992-11	CERAMIC CHIP	100000PF 35V	IC414	8-759-564-49	IC TC7W53FU(Te12R)	
C4G8	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V	IC4A1	6-702-404-01	IC ZIVA4.1B0	
C4G9	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V	IC4A2	8-759-567-31	IC PLL1700E/2K	
C4H0	1-131-992-11	CERAMIC CHIP	100000PF 35V	IC4A3	8-759-682-38	IC GM72V161621ET-7	
C4H1	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V	IC4A4	8-759-682-38	IC GM72V161621ET-7	
C4H2	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V	IC4B1	8-749-016-23	IC SSI33P3721-R4	
C4H3	1-164-230-11	CERAMIC CHIP	220PF 5% 50V	IC4B2	8-759-545-66	IC NJM3414AM-TE2	
C4H4	1-162-921-11	CERAMIC CHIP	33PF 5% 50V	IC4B3	6-702-402-01	IC FAN8727	
C4H5	1-162-921-11	CERAMIC CHIP	33PF 5% 50V	< COIL >			
C4H6	1-162-977-11	CERAMIC CHIP	0.0018uF 10% 50V	L401	1-400-217-11	FILTER, EMI 0uH	
C4H7	1-131-992-11	CERAMIC CHIP	100000PF 35V	L402	1-400-217-11	FILTER, EMI 0uH	
C4H8	1-131-992-11	CERAMIC CHIP	100000PF 35V	L403	1-400-217-11	FILTER, EMI 0uH	
C4H9	1-131-992-11	CERAMIC CHIP	100000PF 35V	L404	1-400-217-11	FILTER, EMI 0uH	
C4J0	1-131-992-11	CERAMIC CHIP	100000PF 35V	L405	1-400-217-11	FILTER, EMI 0uH	
C4J1	1-131-992-11	CERAMIC CHIP	100000PF 35V	L406	1-400-217-11	FILTER, EMI 0uH	
C4J2	1-131-992-11	CERAMIC CHIP	100000PF 35V	L407	1-400-217-11	FILTER, EMI 0uH	
C4J3	1-131-992-11	CERAMIC CHIP	100000PF 35V	L408	1-400-217-11	FILTER, EMI 0uH	
C4J7	1-124-779-00	ELECT CHIP	10uF 20% 16V	L410	1-400-217-11	FILTER, EMI 0uH	
C4J8	1-131-992-11	CERAMIC CHIP	100000PF 35V	L411	1-400-217-11	FILTER, EMI 0uH	
C4J9	1-131-992-11	CERAMIC CHIP	100000PF 35V	L412	1-400-217-11	FILTER, EMI 0uH	
C4K0	1-131-992-11	CERAMIC CHIP	100000PF 35V	L413	1-400-217-11	FILTER, EMI 0uH	
C4K1	1-164-361-11	CERAMIC CHIP	0.047uF 16V	L414	1-400-217-11	FILTER, EMI 0uH	
C4K2	1-164-739-11	CERAMIC CHIP	560PF 5% 50V	L415	1-400-217-11	FILTER, EMI 0uH	
C4K3	1-164-739-11	CERAMIC CHIP	560PF 5% 50V	L416	1-400-217-11	FILTER, EMI 0uH	
C4K4	1-131-992-11	CERAMIC CHIP	100000PF 35V	L417	1-795-645-11	FILTER, CERAMIC (EMI)	
C4K5	1-131-992-11	CERAMIC CHIP	100000PF 35V	L418	1-795-645-11	FILTER, CERAMIC (EMI)	
C4K6	1-124-779-00	ELECT CHIP	10uF 20% 16V	L4A1	1-400-217-11	FILTER, EMI 0uH	
C4K7	1-124-779-00	ELECT CHIP	10uF 20% 16V	L4A2	1-400-217-11	FILTER, EMI 0uH	
C4K8	1-164-373-11	CERAMIC CHIP	0.033uF 25V	L4A3	1-400-217-11	FILTER, EMI 0uH	
C4K9	1-164-373-11	CERAMIC CHIP	0.033uF 25V	L4A4	1-400-217-11	FILTER, EMI 0uH	
C4L0	1-131-992-11	CERAMIC CHIP	100000PF 35V	L4A5	1-400-217-11	FILTER, EMI 0uH	
C4L1	1-131-992-11	CERAMIC CHIP	100000PF 35V	L4A6	1-400-217-11	FILTER, EMI 0uH	
C4L2	1-131-992-11	CERAMIC CHIP	100000PF 35V	L4A7	1-400-217-11	FILTER, EMI 0uH	
C4L3	1-131-992-11	CERAMIC CHIP	100000PF 35V	L4A8	1-400-217-11	FILTER, EMI 0uH	
C4L4	1-131-992-11	CERAMIC CHIP	100000PF 35V	L4C1	1-400-217-11	FILTER, EMI 0uH	
C4L5	1-131-992-11	CERAMIC CHIP	100000PF 35V	L4C2	1-400-217-11	FILTER, EMI 0uH	
C4L6	1-162-969-11	CERAMIC CHIP	0.0068uF 10% 25V	< CONNECTOR >			
C4L7	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V	PMD02	1-793-991-11	CONNECTOR, FFC/FPC 23P	
C4L8	1-162-995-11	CERAMIC CHIP	0.022uF 50V				
C4L9	1-164-337-11	CERAMIC CHIP	2.2uF 16V				
C4M1	1-131-992-11	CERAMIC CHIP	100000PF 35V				
C4M2	1-131-992-11	CERAMIC CHIP	100000PF 35V				

RCD-W7V

BD

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description			Remark
PMD03	1-794-425-11	CONNECTOR, FCC/FPC 20P				R453	1-216-809-11	METAL CHIP	100	5%	1/16W
PN3402	1-784-386-21	CONNECTOR, FCC/FPC 30P				R454	1-216-809-11	METAL CHIP	100	5%	1/16W
PN4013	1-784-378-21	CONNECTOR, FCC/FPC 20P				R455	1-216-809-11	METAL CHIP	100	5%	1/16W
PN5502	1-784-374-21	CONNECTOR, FCC/FPC 15P				R456	1-216-809-11	METAL CHIP	100	5%	1/16W
						R457	1-216-809-11	METAL CHIP	100	5%	1/16W
< TRANSISTOR >											
Q4B1	8-729-216-22	TRANSISTOR 2SA1162-G				R458	1-216-833-11	METAL CHIP	10K	5%	1/16W
Q4B2	8-729-216-22	TRANSISTOR 2SA1162-G				R459	1-216-817-11	METAL CHIP	470	5%	1/16W
Q4B3	8-729-027-52	TRANSISTOR DTC124EKA-T146				R460	1-216-833-11	METAL CHIP	10K	5%	1/16W
						R461	1-216-811-11	METAL CHIP	150	5%	1/16W
						R462	1-216-797-11	METAL CHIP	10	5%	1/16W
< RESISTOR >											
R400	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R463	1-218-457-11	RES-CHIP	910	5%	1/10W
R401	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R464	1-218-457-11	RES-CHIP	910	5%	1/10W
R402	1-216-833-11	METAL CHIP	10K	5%	1/16W	R465	1-220-373-11	RES-CHIP	620	5%	1/10W
R403	1-216-864-11	METAL CHIP	0	5%	1/16W	R466	1-216-822-11	METAL CHIP	1.2K	5%	1/16W
R404	1-216-864-11	METAL CHIP	0	5%	1/16W	R467	1-218-271-11	RES-CHIP	2K	5%	1/10W
R405	1-216-864-11	METAL CHIP	0	5%	1/16W	R468	1-216-811-11	METAL CHIP	150	5%	1/16W
R406	1-216-819-11	METAL CHIP	680	5%	1/16W	R469	1-216-822-11	METAL CHIP	1.2K	5%	1/16W
R407	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R470	1-216-811-11	METAL CHIP	150	5%	1/16W
R408	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R471	1-218-271-11	RES-CHIP	2K	5%	1/10W
R411	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R472	1-216-864-11	METAL CHIP	0	5%	1/16W
R412	1-216-864-11	METAL CHIP	0	5%	1/16W	R473	1-216-864-11	METAL CHIP	0	5%	1/16W
R413	1-216-864-11	METAL CHIP	0	5%	1/16W	R474	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R414	1-216-815-11	METAL CHIP	330	5%	1/16W	R475	1-216-833-11	METAL CHIP	10K	5%	1/16W
R415	1-216-815-11	METAL CHIP	330	5%	1/16W	R476	1-216-864-11	METAL CHIP	0	5%	1/16W
R416	1-216-845-11	METAL CHIP	100K	5%	1/16W	R477	1-216-864-11	METAL CHIP	0	5%	1/16W
R417	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R478	1-216-864-11	METAL CHIP	0	5%	1/16W
R418	1-216-833-11	METAL CHIP	10K	5%	1/16W	R481	1-216-864-11	METAL CHIP	0	5%	1/16W
R419	1-216-833-11	METAL CHIP	10K	5%	1/16W	R482	1-216-864-11	METAL CHIP	0	5%	1/16W
R420	1-216-843-11	METAL CHIP	68K	5%	1/16W	R483	1-216-864-11	METAL CHIP	0	5%	1/16W
R421	1-216-827-11	METAL CHIP	3.3K	5%	1/16W	R484	1-216-864-11	METAL CHIP	0	5%	1/16W
R422	1-216-809-11	METAL CHIP	100	5%	1/16W	R485	1-216-864-11	METAL CHIP	0	5%	1/16W
R423	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R486	1-216-864-11	METAL CHIP	0	5%	1/16W
R424	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R487	1-216-864-11	METAL CHIP	0	5%	1/16W
R425	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R488	1-216-864-11	METAL CHIP	0	5%	1/16W
R426	1-216-821-11	METAL CHIP	1K	5%	1/16W	R489	1-216-864-11	METAL CHIP	0	5%	1/16W
R427	1-216-821-11	METAL CHIP	1K	5%	1/16W	R490	1-216-833-11	METAL CHIP	10K	5%	1/16W
R428	1-216-841-11	METAL CHIP	47K	5%	1/16W	R491	1-216-833-11	METAL CHIP	10K	5%	1/16W
R429	1-216-841-11	METAL CHIP	47K	5%	1/16W	R493	1-216-864-11	METAL CHIP	0	5%	1/16W
R430	1-216-833-11	METAL CHIP	10K	5%	1/16W	R494	1-216-864-11	METAL CHIP	0	5%	1/16W
R431	1-216-809-11	METAL CHIP	100	5%	1/16W	R495	1-216-864-11	METAL CHIP	0	5%	1/16W
R432	1-216-809-11	METAL CHIP	100	5%	1/16W	R496	1-216-864-11	METAL CHIP	0	5%	1/16W
R433	1-216-809-11	METAL CHIP	100	5%	1/16W	R4A0	1-216-809-11	METAL CHIP	100	5%	1/16W
R434	1-216-809-11	METAL CHIP	100	5%	1/16W	R4A1	1-216-833-11	METAL CHIP	10K	5%	1/16W
R435	1-216-809-11	METAL CHIP	100	5%	1/16W	R4A2	1-216-821-11	METAL CHIP	1K	5%	1/16W
R436	1-216-809-11	METAL CHIP	100	5%	1/16W	R4A3	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R437	1-216-809-11	METAL CHIP	100	5%	1/16W	R4A4	1-216-809-11	METAL CHIP	100	5%	1/16W
R438	1-216-809-11	METAL CHIP	100	5%	1/16W	R4A5	1-216-809-11	METAL CHIP	100	5%	1/16W
R439	1-216-809-11	METAL CHIP	100	5%	1/16W	R4A6	1-216-809-11	METAL CHIP	100	5%	1/16W
R440	1-216-809-11	METAL CHIP	100	5%	1/16W	R4A7	1-216-809-11	METAL CHIP	100	5%	1/16W
R441	1-216-809-11	METAL CHIP	100	5%	1/16W	R4A8	1-216-809-11	METAL CHIP	100	5%	1/16W
R442	1-216-809-11	METAL CHIP	100	5%	1/16W	R4A9	1-216-809-11	METAL CHIP	100	5%	1/16W
R443	1-216-822-11	METAL CHIP	1.2K	5%	1/16W	R4B0	1-216-864-11	METAL CHIP	0	5%	1/16W
R444	1-216-822-11	METAL CHIP	1.2K	5%	1/16W	R4B1	1-216-809-11	METAL CHIP	100	5%	1/16W
R445	1-216-809-11	METAL CHIP	100	5%	1/16W	R4B2	1-216-821-11	METAL CHIP	1K	5%	1/16W
R446	1-216-822-11	METAL CHIP	1.2K	5%	1/16W	R4B8	1-216-809-11	METAL CHIP	100	5%	1/16W
R447	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R4B9	1-216-864-11	METAL CHIP	0	5%	1/16W
R449	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R4C0	1-216-803-11	METAL CHIP	33	5%	1/16W
R450	1-216-809-11	METAL CHIP	100	5%	1/16W	R4C1	1-216-803-11	METAL CHIP	33	5%	1/16W
R451	1-216-809-11	METAL CHIP	100	5%	1/16W	R4C2	1-216-803-11	METAL CHIP	33	5%	1/16W
R452	1-216-809-11	METAL CHIP	100	5%	1/16W	R4C3	1-216-803-11	METAL CHIP	33	5%	1/16W
						R4C4	1-216-803-11	METAL CHIP	33	5%	1/16W

BD

BD-R

Ref. No.	Part No.	Description			Remark
R4C5	1-216-803-11	METAL CHIP	33	5%	1/16W
R4C6	1-216-803-11	METAL CHIP	33	5%	1/16W
R4C7	1-216-803-11	METAL CHIP	33	5%	1/16W
R4C8	1-216-803-11	METAL CHIP	33	5%	1/16W
R4C9	1-216-803-11	METAL CHIP	33	5%	1/16W
R4D0	1-216-803-11	METAL CHIP	33	5%	1/16W
R4D1	1-216-803-11	METAL CHIP	33	5%	1/16W
R4D2	1-216-803-11	METAL CHIP	33	5%	1/16W
R4D3	1-216-803-11	METAL CHIP	33	5%	1/16W
R4D4	1-216-803-11	METAL CHIP	33	5%	1/16W
R4D5	1-216-803-11	METAL CHIP	33	5%	1/16W
R4D6	1-216-803-11	METAL CHIP	33	5%	1/16W
R4D7	1-216-803-11	METAL CHIP	33	5%	1/16W
R4D8	1-216-833-11	METAL CHIP	10K	5%	1/16W
R4D9	1-216-810-11	METAL CHIP	120	5%	1/16W
R4E0	1-216-833-11	METAL CHIP	10K	5%	1/16W
R4E1	1-216-304-11	METAL CHIP	3.3	5%	1/10W
R4E2	1-216-304-11	METAL CHIP	3.3	5%	1/10W
R4E3	1-216-833-11	METAL CHIP	10K	5%	1/16W
R4E4	1-216-833-11	METAL CHIP	10K	5%	1/16W
R4E5	1-216-833-11	METAL CHIP	10K	5%	1/16W
R4E6	1-216-833-11	METAL CHIP	10K	5%	1/16W
R4E7	1-216-833-11	METAL CHIP	10K	5%	1/16W
R4E8	1-216-833-11	METAL CHIP	10K	5%	1/16W
R4E9	1-216-833-11	METAL CHIP	10K	5%	1/16W
R4F1	1-216-809-11	METAL CHIP	100	5%	1/16W
R4F2	1-216-809-11	METAL CHIP	100	5%	1/16W
R4G1	1-216-793-11	RES-CHIP	4.7	5%	1/10W
R4G2	1-216-833-11	METAL CHIP	10K	5%	1/16W
R4G3	1-216-809-11	METAL CHIP	100	5%	1/16W
R4G4	1-218-667-11	RES-CHIP	91	5%	1/10W
R4G5	1-218-667-11	RES-CHIP	91	5%	1/10W
R4G6	1-216-821-11	METAL CHIP	1K	5%	1/16W
R4G7	1-216-864-11	METAL CHIP	0	5%	1/16W
R4G8	1-216-809-11	METAL CHIP	100	5%	1/16W
R4G9	1-216-834-11	METAL CHIP	12K	5%	1/16W
R4H0	1-216-864-11	METAL CHIP	0	5%	1/16W
R4H1	1-216-833-11	METAL CHIP	10K	5%	1/16W
R4H2	1-216-864-11	METAL CHIP	0	5%	1/16W
R4H3	1-216-821-11	METAL CHIP	1K	5%	1/16W
R4H4	1-216-864-11	METAL CHIP	0	5%	1/16W
R4H5	1-216-864-11	METAL CHIP	0	5%	1/16W
R4H7	1-216-864-11	METAL CHIP	0	5%	1/16W
R4H9	1-216-864-11	METAL CHIP	0	5%	1/16W
R4J0	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R4J1	1-216-800-11	RES-CHIP	18	5%	1/10W
R4J2	1-216-800-11	RES-CHIP	18	5%	1/10W
R4J3	1-216-800-11	RES-CHIP	18	5%	1/10W
R4J4	1-216-800-11	RES-CHIP	18	5%	1/10W
R4J5	1-216-821-11	METAL CHIP	1K	5%	1/16W
R4J6	1-216-821-11	METAL CHIP	1K	5%	1/16W
R4J7	1-216-821-11	METAL CHIP	1K	5%	1/16W
R4J8	1-216-821-11	METAL CHIP	1K	5%	1/16W
R4J9	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
R4K0	1-216-833-11	METAL CHIP	10K	5%	1/16W
R4K1	1-216-830-11	METAL CHIP	5.6K	5%	1/16W
R4K2	1-216-836-11	METAL CHIP	18K	5%	1/16W
R4K3	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
R4K4	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
R4K5	1-216-847-11	METAL CHIP	150K	5%	1/16W
R4K6	1-216-847-11	METAL CHIP	150K	5%	1/16W

Ref. No.	Part No.	Description			Remark
R4K7	1-216-840-11	METAL CHIP	39K	5%	1/16W
R4K8	1-216-840-11	METAL CHIP	39K	5%	1/16W
R4K9	1-216-809-11	METAL CHIP	100	5%	1/16W
R4L0	1-216-835-11	METAL CHIP	15K	5%	1/16W
R4L1	1-216-821-11	METAL CHIP	1K	5%	1/16W
R4L2	1-216-821-11	METAL CHIP	1K	5%	1/16W
R4L3	1-216-821-11	METAL CHIP	1K	5%	1/16W
R4L4	1-216-821-11	METAL CHIP	1K	5%	1/16W
R4L5	1-216-833-11	METAL CHIP	10K	5%	1/16W
R4L6	1-216-864-11	METAL CHIP	0	5%	1/16W
R4L7	1-216-837-11	METAL CHIP	22K	5%	1/16W
R4L8	1-216-832-11	METAL CHIP	8.2K	5%	1/16W
R4L9	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
R4M1	1-217-671-11	METAL CHIP	1	5%	1/10W
R4M2	1-217-671-11	METAL CHIP	1	5%	1/10W
R4M3	1-216-822-11	METAL CHIP	1.2K	5%	1/16W
R4M4	1-216-837-11	METAL CHIP	22K	5%	1/16W
R4M5	1-216-821-11	METAL CHIP	1K	5%	1/16W
R4M6	1-216-833-11	METAL CHIP	10K	5%	1/16W
R4M7	1-216-833-11	METAL CHIP	10K	5%	1/16W
R4M8	1-216-833-11	METAL CHIP	10K	5%	1/16W
R4R3	1-216-864-11	METAL CHIP	0	5%	1/16W
R4T1	1-216-864-11	METAL CHIP	0	5%	1/16W
R4T2	1-216-864-11	METAL CHIP	0	5%	1/16W
R4T8	1-216-864-11	METAL CHIP	0	5%	1/16W
R4T9	1-216-864-11	METAL CHIP	0	5%	1/16W
R5A1	1-216-864-11	METAL CHIP	0	5%	1/16W
R5G8	1-216-864-11	METAL CHIP	0	5%	1/16W
R5H1	1-216-864-11	METAL CHIP	0	5%	1/16W
R5H3	1-216-864-11	METAL CHIP	0	5%	1/16W
R5H4	1-216-864-11	METAL CHIP	0	5%	1/16W
R5H5	1-216-864-11	METAL CHIP	0	5%	1/16W
R5H6	1-216-864-11	METAL CHIP	0	5%	1/16W
R5K2	1-216-864-11	METAL CHIP	0	5%	1/16W
R5K4	1-216-864-11	METAL CHIP	0	5%	1/16W
R5K5	1-216-864-11	METAL CHIP	0	5%	1/16W
R5K7	1-216-864-11	METAL CHIP	0	5%	1/16W
< VIBRATOR >					
X401	1-795-642-11	VIBRATOR, CERAMIC (20MHz)			
X4A1	1-795-641-11	VIBRATOR, CRYSTAL (27MHz)			
< ZENER DIODE >					
ZD401	8-719-941-87	DIODE DAN202UT106			
ZD402	8-719-941-87	DIODE DAN202UT106			

A-4728-649-A BD-R BOARD, COMPLETE					

< CAPACITOR >					
C201	1-124-779-00	ELECT CHIP	10uF	20%	16V
C202	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C207	1-131-992-11	CERAMIC CHIP	100000PF		35V
C208	1-131-992-11	CERAMIC CHIP	100000PF		35V
C209	1-131-992-11	CERAMIC CHIP	100000PF		35V
C210	1-131-992-11	CERAMIC CHIP	100000PF		35V
C211	1-131-992-11	CERAMIC CHIP	100000PF		35V
C212	1-131-992-11	CERAMIC CHIP	100000PF		35V
C213	1-131-992-11	CERAMIC CHIP	100000PF		35V
C214	1-131-992-11	CERAMIC CHIP	100000PF		35V

BD-R

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark				
C215	1-131-992-11	CERAMIC CHIP	100000PF	35V	C319	1-162-959-11	CERAMIC CHIP	330PF	5%	50V	
C216	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C320	1-131-992-11	CERAMIC CHIP	100000PF		35V
C217	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V	C321	1-165-589-21	ELECT CHIP	220uF		6.3V
C218	1-131-992-11	CERAMIC CHIP	100000PF		35V	C322	1-131-992-11	CERAMIC CHIP	100000PF		35V
C219	1-131-992-11	CERAMIC CHIP	100000PF		35V						
C220	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C325	1-131-992-11	CERAMIC CHIP	100000PF		35V
C221	1-131-992-11	CERAMIC CHIP	100000PF		35V	C326	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C222	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V	C327	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C223	1-131-992-11	CERAMIC CHIP	100000PF		35V	C328	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C224	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C329	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C225	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C330	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C244	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V	C331	1-131-992-11	CERAMIC CHIP	100000PF		35V
C245	1-131-992-11	CERAMIC CHIP	100000PF		35V	C332	1-131-992-11	CERAMIC CHIP	100000PF		35V
C246	1-124-779-00	ELECT CHIP	10uF	20%	16V	C333	1-131-992-11	CERAMIC CHIP	100000PF		35V
C247	1-131-992-11	CERAMIC CHIP	100000PF		35V	C335	1-127-688-21	TANTAL. CHIP	10uF	20%	6.3V
C248	1-124-779-00	ELECT CHIP	10uF	20%	16V	C336	1-131-992-11	CERAMIC CHIP	100000PF		35V
C249	1-131-992-11	CERAMIC CHIP	100000PF		35V	C337	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C250	1-131-992-11	CERAMIC CHIP	100000PF		35V	C338	1-164-217-11	CERAMIC CHIP	150PF	5%	50V
C251	1-131-992-11	CERAMIC CHIP	100000PF		35V	C339	1-131-992-11	CERAMIC CHIP	100000PF		35V
C252	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C340	1-164-346-11	CERAMIC CHIP	1uF		16V
C253	1-124-779-00	ELECT CHIP	10uF	20%	16V	C341	1-124-779-00	ELECT CHIP	10uF	20%	16V
C254	1-131-992-11	CERAMIC CHIP	100000PF		35V	C342	1-131-992-11	CERAMIC CHIP	100000PF		35V
C255	1-131-992-11	CERAMIC CHIP	100000PF		35V	C343	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C256	1-131-992-11	CERAMIC CHIP	100000PF		35V	C344	1-164-217-11	CERAMIC CHIP	150PF	5%	50V
C258	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	C345	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V
C259	1-131-992-11	CERAMIC CHIP	100000PF		35V	C346	1-164-217-11	CERAMIC CHIP	150PF	5%	50V
C260	1-131-992-11	CERAMIC CHIP	100000PF		35V	C347	1-131-992-11	CERAMIC CHIP	100000PF		35V
C261	1-124-779-00	ELECT CHIP	10uF	20%	16V	C348	1-164-373-11	CERAMIC CHIP	0.033uF		25V
C262	1-131-992-11	CERAMIC CHIP	100000PF		35V	C349	1-164-373-11	CERAMIC CHIP	0.033uF		25V
C263	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C350	1-164-373-11	CERAMIC CHIP	0.033uF		25V
C264	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V	C351	1-131-992-11	CERAMIC CHIP	100000PF		35V
C265	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C352	1-117-681-11	ELECT CHIP	100uF	20%	16V
C266	1-164-361-11	CERAMIC CHIP	0.047uF		16V	C353	1-164-336-11	CERAMIC CHIP	0.33uF		25V
C268	1-131-992-11	CERAMIC CHIP	100000PF		35V	C354	1-131-992-11	CERAMIC CHIP	100000PF		35V
C269	1-124-779-00	ELECT CHIP	10uF	20%	16V	C362	1-131-992-11	CERAMIC CHIP	100000PF		35V
C270	1-162-917-11	CERAMIC CHIP	15PF	5%	50V	C363	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C271	1-162-917-11	CERAMIC CHIP	15PF	5%	50V	C364	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C277	1-131-992-11	CERAMIC CHIP	100000PF		35V	C365	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C279	1-124-779-00	ELECT CHIP	10uF	20%	16V	C367	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C280	1-131-992-11	CERAMIC CHIP	100000PF		35V	C368	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C281	1-131-992-11	CERAMIC CHIP	100000PF		35V	C369	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C285	1-131-992-11	CERAMIC CHIP	100000PF		35V	C370	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C290	1-164-361-11	CERAMIC CHIP	0.047uF		16V	C371	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C291	1-164-361-11	CERAMIC CHIP	0.047uF		16V	C372	1-131-992-11	CERAMIC CHIP	100000PF		35V
C2A1	1-124-779-00	ELECT CHIP	10uF	20%	16V	C373	1-164-361-11	CERAMIC CHIP	0.047uF		16V
C301	1-131-992-11	CERAMIC CHIP	100000PF		35V	C374	1-164-336-11	CERAMIC CHIP	0.33uF		25V
C302	1-124-779-00	ELECT CHIP	10uF	20%	16V	C375	1-164-336-11	CERAMIC CHIP	0.33uF		25V
C303	1-131-992-11	CERAMIC CHIP	100000PF		35V	C376	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C304	1-124-779-00	ELECT CHIP	10uF	20%	16V	C377	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C305	1-131-992-11	CERAMIC CHIP	100000PF		35V	C378	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C306	1-162-923-11	CERAMIC CHIP	47PF	5%	50V	C380	1-164-217-11	CERAMIC CHIP	150PF	5%	50V
C307	1-162-920-11	CERAMIC CHIP	27PF	5%	50V	C381	1-131-992-11	CERAMIC CHIP	100000PF		35V
C308	1-162-920-11	CERAMIC CHIP	27PF	5%	50V	C382	1-131-992-11	CERAMIC CHIP	100000PF		35V
C309	1-131-992-11	CERAMIC CHIP	100000PF		35V	C384	1-131-992-11	CERAMIC CHIP	100000PF		35V
C310	1-124-779-00	ELECT CHIP	10uF	20%	16V	C385	1-131-992-11	CERAMIC CHIP	100000PF		35V
C311	1-131-992-11	CERAMIC CHIP	100000PF		35V	C386	1-124-779-00	ELECT CHIP	10uF	20%	16V
C312	1-124-779-00	ELECT CHIP	10uF	20%	16V	C387	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C315	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C388	1-124-779-00	ELECT CHIP	10uF	20%	16V
C316	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C389	1-131-992-11	CERAMIC CHIP	100000PF		35V
C317	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C390	1-131-992-11	CERAMIC CHIP	100000PF		35V
C318	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C391	1-126-204-11	ELECT CHIP	47uF	20%	16V
					C392	1-126-204-11	ELECT CHIP	47uF	20%	16V	

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
C395	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	IC503	8-759-082-61	IC TC4W53FU(TE12R)			
C396	1-162-912-11	CERAMIC CHIP	7PF	0.5PF	50V	IC504	8-759-082-61	IC TC4W53FU(TE12R)			
C399	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V						
								< COIL >			
C3A1	1-104-919-11	ELECT CHIP	10uF	20%	25V	L201	1-412-058-11	INDUCTOR CHIP	10uH		
C3A2	1-104-919-11	ELECT CHIP	10uF	20%	25V	L301	1-412-058-11	INDUCTOR CHIP	10uH		
C501	1-164-346-11	CERAMIC CHIP	1uF		16V	L302	1-412-058-11	INDUCTOR CHIP	10uH		
C502	1-126-206-11	ELECT CHIP	100uF	20%	6.3V	L304	1-412-058-11	INDUCTOR CHIP	10uH		
C503	1-131-992-11	CERAMIC CHIP	100000PF		35V	L306	1-412-058-11	INDUCTOR CHIP	10uH		
C504	1-131-992-11	CERAMIC CHIP	100000PF		35V	L501	1-412-058-11	INDUCTOR CHIP	10uH		
C505	1-131-992-11	CERAMIC CHIP	100000PF		35V	L502	1-400-090-21	FERRITE	0uH		
C507	1-131-992-11	CERAMIC CHIP	100000PF		35V	L504	1-216-864-11	METAL CHIP	0	5%	1/16W
C508	1-131-992-11	CERAMIC CHIP	100000PF		35V	L505	1-412-058-11	INDUCTOR CHIP	10uH		
C510	1-131-992-11	CERAMIC CHIP	100000PF		35V						
								< CONNECTOR >			
C511	1-131-992-11	CERAMIC CHIP	100000PF		35V	PN105	1-815-765-11	SOCKET, CONNECTOR 6P			
C512	1-131-992-11	CERAMIC CHIP	100000PF		35V	PN301	1-815-764-11	CONNECTOR, FFC			
C513	1-131-992-11	CERAMIC CHIP	100000PF		35V	* PN302	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
C514	1-131-992-11	CERAMIC CHIP	100000PF		35V	PN303	1-784-364-21	CONNECTOR, FFC/FPC 4P			
C515	1-131-992-11	CERAMIC CHIP	100000PF		35V	PN304	1-793-989-21	CONNECTOR, FFC/FPC 13P			
C516	1-131-992-11	CERAMIC CHIP	100000PF		35V	PN501	1-784-386-21	CONNECTOR, FFC/FPC 30P			
C517	1-131-992-11	CERAMIC CHIP	100000PF		35V	PN502	1-816-676-11	CONNECTOR (FFC) 30P			
C518	1-131-992-11	CERAMIC CHIP	100000PF		35V	PN503	1-815-766-11	SOCKET, CONNECTOR 8P			
C520	1-131-992-11	CERAMIC CHIP	100000PF		35V						
C521	1-131-992-11	CERAMIC CHIP	100000PF		35V						
								< TRANSISTOR >			
C522	1-131-992-11	CERAMIC CHIP	100000PF		35V	Q301	1-801-806-11	TRANSISTOR DTC144EKA			
C523	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	Q302	1-801-806-11	TRANSISTOR DTC144EKA			
C524	1-124-779-00	ELECT CHIP	10uF	20%	16V	Q303	1-801-806-11	TRANSISTOR DTC144EKA			
C525	1-131-992-11	CERAMIC CHIP	100000PF		35V						
C526	1-131-992-11	CERAMIC CHIP	100000PF		35V						
								< RESISTOR >			
C527	1-131-992-11	CERAMIC CHIP	100000PF		35V	R201	1-216-841-11	METAL CHIP	47K	5%	1/16W
C529	1-126-206-11	ELECT CHIP	100uF	20%	6.3V	R203	1-216-813-11	METAL CHIP	220	5%	1/16W
C530	1-131-992-11	CERAMIC CHIP	100000PF		35V	R205	1-216-833-11	METAL CHIP	10K	5%	1/16W
C531	1-126-206-11	ELECT CHIP	100uF	20%	6.3V	R206	1-216-833-11	METAL CHIP	10K	5%	1/16W
C532	1-131-992-11	CERAMIC CHIP	100000PF		35V	R208	1-216-833-11	METAL CHIP	10K	5%	1/16W
C533	1-117-681-11	ELECT CHIP	100uF	20%	16V	R209	1-216-864-11	METAL CHIP	0	5%	1/16W
C534	1-131-992-11	CERAMIC CHIP	100000PF		35V	R210	1-216-813-11	METAL CHIP	220	5%	1/16W
C539	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	R211	1-216-813-11	METAL CHIP	220	5%	1/16W
C540	1-164-174-11	CERAMIC CHIP	0.0082uF	10%	25V	R213	1-216-864-11	METAL CHIP	0	5%	1/16W
C541	1-131-992-11	CERAMIC CHIP	100000PF		35V	R214	1-216-835-11	METAL CHIP	15K	5%	1/16W
C542	1-131-992-11	CERAMIC CHIP	100000PF		35V	R215	1-242-957-91	RES-CHIP	5.6M	5%	1/10W
		< DIODE >				R216	1-216-821-11	METAL CHIP	1K	5%	1/16W
D301	8-719-084-78	DIODE KDS121				R217	1-216-812-11	METAL CHIP	180	5%	1/16W
		< IC >				R218	1-216-813-11	METAL CHIP	220	5%	1/16W
						R219	1-216-813-11	METAL CHIP	220	5%	1/16W
IC201	6-700-905-01	IC OTI-9790CE				R220	1-216-813-11	METAL CHIP	220	5%	1/16W
IC202	6-702-528-01	IC GM71C18163C				R221	1-216-813-11	METAL CHIP	220	5%	1/16W
IC203	6-801-922-01	IC HD64F3062				R222	1-216-813-11	METAL CHIP	220	5%	1/16W
IC207	6-700-341-01	IC CST0100C				R223	1-216-813-11	METAL CHIP	220	5%	1/16W
IC208	8-759-466-52	IC CAT93C86S-LE10				R224	1-216-813-11	METAL CHIP	220	5%	1/16W
IC210	8-759-458-10	IC BA3939-E2				R225	1-216-813-11	METAL CHIP	220	5%	1/16W
IC301	8-752-097-68	IC CXA3558R				R226	1-216-813-11	METAL CHIP	220	5%	1/16W
IC302	8-759-359-49	IC NJM3414AV(TE2)				R227	1-216-864-11	METAL CHIP	0	5%	1/16W
IC303	6-702-529-01	IC M63021FP				R228	1-216-839-11	METAL CHIP	33K	5%	1/16W
IC304	8-759-635-27	IC M62352GP-75E				R231	1-216-815-11	METAL CHIP	330	5%	1/16W
IC305	8-759-338-95	IC NJM2903V(TE2)				R232	1-216-813-11	METAL CHIP	220	5%	1/16W
IC306	8-759-058-43	IC NJM3404AV				R233	1-216-813-11	METAL CHIP	220	5%	1/16W
IC307	6-702-232-01	IC NC7SZ66M5X				R234	1-216-815-11	METAL CHIP	330	5%	1/16W
IC308	8-759-082-58	IC TC7W08FU(TE12R)				R235	1-216-864-11	METAL CHIP	0	5%	1/16W
IC501	6-801-923-01	IC VC01S05				R236	1-216-813-11	METAL CHIP	220	5%	1/16W
IC502	6-700-346-01	IC CS8420-CSR				R237	1-216-813-11	METAL CHIP	220	5%	1/16W

RCD-W7V

BD-R

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R238	1-216-864-11	METAL CHIP	0	5%	1/16W	R318	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R240	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R319	1-216-801-11	METAL CHIP	22	5%	1/16W
R241	1-216-813-11	METAL CHIP	220	5%	1/16W	R320	1-216-801-11	METAL CHIP	22	5%	1/16W
R242	1-216-813-11	METAL CHIP	220	5%	1/16W						
R243	1-216-813-11	METAL CHIP	220	5%	1/16W	R321	1-216-801-11	METAL CHIP	22	5%	1/16W
R244	1-216-813-11	METAL CHIP	220	5%	1/16W	R322	1-216-801-11	METAL CHIP	22	5%	1/16W
R245	1-216-813-11	METAL CHIP	220	5%	1/16W	R323	1-216-839-11	METAL CHIP	33K	5%	1/16W
R247	1-216-805-11	METAL CHIP	47	5%	1/16W	R324	1-216-826-11	METAL CHIP	2.7K	5%	1/16W
R248	1-216-805-11	METAL CHIP	47	5%	1/16W	R325	1-216-826-11	METAL CHIP	2.7K	5%	1/16W
R249	1-216-805-11	METAL CHIP	47	5%	1/16W	R326	1-216-824-11	METAL CHIP	1.8K	5%	1/16W
R250	1-216-805-11	METAL CHIP	47	5%	1/16W	R327	1-216-824-11	METAL CHIP	1.8K	5%	1/16W
R251	1-216-805-11	METAL CHIP	47	5%	1/16W	R328	1-216-833-11	METAL CHIP	10K	5%	1/16W
R252	1-216-805-11	METAL CHIP	47	5%	1/16W	R329	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R253	1-216-805-11	METAL CHIP	47	5%	1/16W	R330	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R254	1-216-805-11	METAL CHIP	47	5%	1/16W	R331	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R255	1-216-805-11	METAL CHIP	47	5%	1/16W	R332	1-216-813-11	METAL CHIP	220	5%	1/16W
R259	1-216-811-11	METAL CHIP	150	5%	1/16W	R333	1-216-837-11	METAL CHIP	22K	5%	1/16W
R260	1-216-845-11	METAL CHIP	100K	5%	1/16W	R335	1-216-836-11	METAL CHIP	18K	5%	1/16W
R261	1-216-809-11	METAL CHIP	100	5%	1/16W	R336	1-216-833-11	METAL CHIP	10K	5%	1/16W
R262	1-216-809-11	METAL CHIP	100	5%	1/16W	R337	1-216-837-11	METAL CHIP	22K	5%	1/16W
R263	1-216-809-11	METAL CHIP	100	5%	1/16W	R338	1-216-833-11	METAL CHIP	10K	5%	1/16W
R264	1-216-809-11	METAL CHIP	100	5%	1/16W	R339	1-216-833-11	METAL CHIP	10K	5%	1/16W
R265	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R340	1-216-844-11	METAL CHIP	82K	5%	1/16W
R266	1-216-833-11	METAL CHIP	10K	5%	1/16W	R350	1-216-843-11	METAL CHIP	68K	5%	1/16W
R267	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R351	1-216-838-11	METAL CHIP	27K	5%	1/16W
R268	1-216-813-11	METAL CHIP	220	5%	1/16W	R352	1-216-838-11	METAL CHIP	27K	5%	1/16W
R269	1-216-821-11	METAL CHIP	1K	5%	1/16W	R353	1-216-843-11	METAL CHIP	68K	5%	1/16W
R270	1-216-821-11	METAL CHIP	1K	5%	1/16W	R354	1-216-851-11	METAL CHIP	330K	5%	1/16W
R271	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R355	1-216-857-11	METAL CHIP	1M	5%	1/16W
R277	1-216-833-11	METAL CHIP	10K	5%	1/16W	R356	1-216-833-11	METAL CHIP	10K	5%	1/16W
R279	1-216-864-11	METAL CHIP	0	5%	1/16W	R357	1-216-817-11	METAL CHIP	470	5%	1/16W
R280	1-216-805-11	METAL CHIP	47	5%	1/16W	R358	1-216-833-11	METAL CHIP	10K	5%	1/16W
R281	1-216-805-11	METAL CHIP	47	5%	1/16W	R359	1-216-821-11	METAL CHIP	1K	5%	1/16W
R283	1-216-805-11	METAL CHIP	47	5%	1/16W	R360	1-216-809-11	METAL CHIP	100	5%	1/16W
R284	1-216-809-11	METAL CHIP	100	5%	1/16W	R361	1-216-819-11	METAL CHIP	680	5%	1/16W
R285	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R362	1-216-819-11	METAL CHIP	680	5%	1/16W
R286	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R363	1-216-819-11	METAL CHIP	680	5%	1/16W
R287	1-216-821-11	METAL CHIP	1K	5%	1/16W	R364	1-216-819-11	METAL CHIP	680	5%	1/16W
R288	1-216-817-11	METAL CHIP	470	5%	1/16W	R365	1-216-819-11	METAL CHIP	680	5%	1/16W
R289	1-216-817-11	METAL CHIP	470	5%	1/16W	R368	1-216-864-11	METAL CHIP	0	5%	1/16W
R290	1-216-805-11	METAL CHIP	47	5%	1/16W	R369	1-216-864-11	METAL CHIP	0	5%	1/16W
R291	1-216-805-11	METAL CHIP	47	5%	1/16W	R370	1-216-864-11	METAL CHIP	0	5%	1/16W
R292	1-216-833-11	METAL CHIP	10K	5%	1/16W	R371	1-216-864-11	METAL CHIP	0	5%	1/16W
R293	1-216-833-11	METAL CHIP	10K	5%	1/16W	R372	1-216-864-11	METAL CHIP	0	5%	1/16W
R294	1-216-833-11	METAL CHIP	10K	5%	1/16W	R373	1-216-864-11	METAL CHIP	0	5%	1/16W
R296	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R374	1-216-850-11	METAL CHIP	270K	5%	1/16W
R2Q1	1-216-809-11	METAL CHIP	100	5%	1/16W	R375	1-216-833-11	METAL CHIP	10K	5%	1/16W
R2Q2	1-216-809-11	METAL CHIP	100	5%	1/16W	R376	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R301	1-216-822-11	METAL CHIP	1.2K	5%	1/16W	R377	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R302	1-216-827-11	METAL CHIP	3.3K	5%	1/16W	R388	1-216-839-11	METAL CHIP	33K	5%	1/16W
R303	1-216-817-11	METAL CHIP	470	5%	1/16W	R389	1-216-839-11	METAL CHIP	33K	5%	1/16W
R304	1-216-833-11	METAL CHIP	10K	5%	1/16W	R390	1-216-833-11	METAL CHIP	10K	5%	1/16W
R305	1-216-864-11	METAL CHIP	0	5%	1/16W	R391	1-216-837-11	METAL CHIP	22K	5%	1/16W
R306	1-216-819-11	METAL CHIP	680	5%	1/16W	R392	1-216-864-11	METAL CHIP	0	5%	1/16W
R307	1-216-819-11	METAL CHIP	680	5%	1/16W	R394	1-216-864-11	METAL CHIP	0	5%	1/16W
R308	1-216-841-11	METAL CHIP	47K	5%	1/16W	R396	1-216-835-11	METAL CHIP	15K	5%	1/16W
R313	1-216-298-00	METAL CHIP	2.2	5%	1/10W	R397	1-216-850-11	METAL CHIP	270K	5%	1/16W
R314	1-216-298-00	METAL CHIP	2.2	5%	1/10W	R398	1-216-837-11	METAL CHIP	22K	5%	1/16W
R315	1-216-835-11	METAL CHIP	15K	5%	1/16W	R399	1-216-835-11	METAL CHIP	15K	5%	1/16W
R316	1-216-835-11	METAL CHIP	15K	5%	1/16W	R3A1	1-216-864-11	METAL CHIP	0	5%	1/16W
R317	1-216-298-00	METAL CHIP	2.2	5%	1/10W	R3A2	1-216-835-11	METAL CHIP	15K	5%	1/16W
						R3A3	1-216-828-11	METAL CHIP	3.9K	5%	1/16W

BD-R

FL

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R3A4	1-216-834-11	METAL CHIP	12K	5%	1/16W	R5S2	1-216-864-11	METAL CHIP	0	5%	1/16W
R3A5	1-216-833-11	METAL CHIP	10K	5%	1/16W	R5S3	1-216-864-11	METAL CHIP	0	5%	1/16W
						R5S4	1-216-864-11	METAL CHIP	0	5%	1/16W
R3A7	1-216-864-11	METAL CHIP	0	5%	1/16W	< NETWORK RESISTOR >					
R3A8	1-216-864-11	METAL CHIP	0	5%	1/16W	RR201	1-239-416-11	NETWORK RESISTOR (CHIP)	220		
R3A9	1-216-813-11	METAL CHIP	220	5%	1/16W	RR202	1-239-416-11	NETWORK RESISTOR (CHIP)	220		
R3C1	1-216-837-11	METAL CHIP	22K	5%	1/16W	RR203	1-239-416-11	NETWORK RESISTOR (CHIP)	220		
R3C2	1-216-839-11	METAL CHIP	33K	5%	1/16W	RR204	1-239-416-11	NETWORK RESISTOR (CHIP)	220		
						RR205	1-239-416-11	NETWORK RESISTOR (CHIP)	220		
R3C3	1-216-864-11	METAL CHIP	0	5%	1/16W	RR206	1-239-416-11	NETWORK RESISTOR (CHIP)	220		
R3C5	1-216-864-11	METAL CHIP	0	5%	1/16W	RR501	1-239-416-11	NETWORK RESISTOR (CHIP)	220		
R3C6	1-216-827-11	METAL CHIP	3.3K	5%	1/16W	RR502	1-239-416-11	NETWORK RESISTOR (CHIP)	220		
R3C7	1-216-837-11	METAL CHIP	22K	5%	1/16W	RR503	1-239-416-11	NETWORK RESISTOR (CHIP)	220		
R3K1	1-218-271-11	RES-CHIP	2K	5%	1/10W	RR504	1-239-416-11	NETWORK RESISTOR (CHIP)	220		
						RR505	1-239-416-11	NETWORK RESISTOR (CHIP)	220		
R501	1-216-813-11	METAL CHIP	220	5%	1/16W	RR506	1-239-416-11	NETWORK RESISTOR (CHIP)	220		
R502	1-216-813-11	METAL CHIP	220	5%	1/16W	RR507	1-239-416-11	NETWORK RESISTOR (CHIP)	220		
R503	1-216-841-11	METAL CHIP	47K	5%	1/16W	< SWITCH >					
R504	1-216-821-11	METAL CHIP	1K	5%	1/16W	SW201	1-786-204-11	SWITCH, DETECTION (LIMIT)			
R505	1-216-815-11	METAL CHIP	330	5%	1/16W	< VIBRATOR >					
						X201	1-781-136-21	VIBRATOR, CERAMIC (20MHz)			
R506	1-216-809-11	METAL CHIP	100	5%	1/16W	*****					
R507	1-218-272-11	RES-CHIP	5.1K	5%	1/10W	A-4728-646-A	FL BOARD, COMPLETE				
R509	1-216-864-11	METAL CHIP	0	5%	1/16W	*****					
R512	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	4-241-186-01	HOLDER, FLD				
R513	1-216-864-11	METAL CHIP	0	5%	1/16W	< CAPACITOR >					
						C901	1-164-159-11	CERAMIC	0.1uF		50V
R514	1-216-864-11	METAL CHIP	0	5%	1/16W	C902	1-126-791-11	ELECT	10uF	20%	16V
R515	1-216-864-11	METAL CHIP	0	5%	1/16W	C903	1-162-211-31	CERAMIC	33PF	5%	50V
R516	1-216-864-11	METAL CHIP	0	5%	1/16W	C904	1-162-211-31	CERAMIC	33PF	5%	50V
R517	1-216-864-11	METAL CHIP	0	5%	1/16W	C905	1-164-159-11	CERAMIC	0.1uF		50V
R518	1-216-864-11	METAL CHIP	0	5%	1/16W						
						C906	1-164-159-11	CERAMIC	0.1uF		50V
R519	1-216-864-11	METAL CHIP	0	5%	1/16W	C907	1-164-159-11	CERAMIC	0.1uF		50V
R520	1-216-864-11	METAL CHIP	0	5%	1/16W	C908	1-124-589-11	ELECT	47uF	20%	16V
R521	1-216-864-11	METAL CHIP	0	5%	1/16W	C909	1-119-943-91	ELECT	47uF	20%	50V
R522	1-216-864-11	METAL CHIP	0	5%	1/16W	C910	1-164-159-11	CERAMIC	0.1uF		50V
R523	1-216-829-11	METAL CHIP	4.7K	5%	1/16W						
						C911	1-164-159-11	CERAMIC	0.1uF		50V
R524	1-216-833-11	METAL CHIP	10K	5%	1/16W	C912	1-124-589-11	ELECT	47uF	20%	16V
R525	1-216-809-11	METAL CHIP	100	5%	1/16W	C913	1-164-159-11	CERAMIC	0.1uF		50V
R526	1-216-809-11	METAL CHIP	100	5%	1/16W	C914	1-164-159-11	CERAMIC	0.1uF		50V
R527	1-216-809-11	METAL CHIP	100	5%	1/16W	C917	1-164-159-11	CERAMIC	0.1uF		50V
R528	1-216-809-11	METAL CHIP	100	5%	1/16W						
						C918	1-164-159-11	CERAMIC	0.1uF		50V
R529	1-216-815-11	METAL CHIP	330	5%	1/16W	C919	1-124-589-11	ELECT	47uF	20%	16V
R530	1-216-815-11	METAL CHIP	330	5%	1/16W	C920	1-124-589-11	ELECT	47uF	20%	16V
R531	1-216-815-11	METAL CHIP	330	5%	1/16W	< CONNECTOR >					
R532	1-216-813-11	METAL CHIP	220	5%	1/16W	* CN903	1-816-678-11	CONNECTOR (BOARD TO BOARD) 8P			
R533	1-216-813-11	METAL CHIP	220	5%	1/16W	CN9013	1-779-288-11	CONNECTOR,FFC(LIF(NON-ZIF))20P			
						< FLUORESCENT DISPLAY TUBE >					
R534	1-216-813-11	METAL CHIP	220	5%	1/16W	FLD901	1-518-830-11	INDICATOR TUBE, FLUORESCENT			
R535	1-216-815-11	METAL CHIP	330	5%	1/16W	< IC >					
R536	1-216-809-11	METAL CHIP	100	5%	1/16W	IC901	6-801-579-01	IC uPD780232GC-LG2			
R537	1-216-809-11	METAL CHIP	100	5%	1/16W	IC902	8-759-971-11	IC KIA7042P-TP			
R538	1-216-809-11	METAL CHIP	100	5%	1/16W						
R539	1-216-809-11	METAL CHIP	100	5%	1/16W						
R540	1-216-829-11	METAL CHIP	4.7K	5%	1/16W						
R541	1-216-864-11	METAL CHIP	0	5%	1/16W						
R542	1-216-864-11	METAL CHIP	0	5%	1/16W						
R543	1-216-864-11	METAL CHIP	0	5%	1/16W						
R544	1-216-864-11	METAL CHIP	0	5%	1/16W						
R551	1-218-867-11	RES-CHIP	6.8K	5%	1/10W						
R552	1-218-867-11	RES-CHIP	6.8K	5%	1/10W						
R553	1-218-867-11	RES-CHIP	6.8K	5%	1/10W						
R555	1-216-864-11	METAL CHIP	0	5%	1/16W						
R556	1-216-864-11	METAL CHIP	0	5%	1/16W						
R557	1-216-809-11	METAL CHIP	100	5%	1/16W						
R559	1-216-864-11	METAL CHIP	0	5%	1/16W						
R5Q1	1-216-809-11	METAL CHIP	100	5%	1/16W						
R5S1	1-216-864-11	METAL CHIP	0	5%	1/16W						

RCD-W7V



Ref. No.	Part No.	Description	Remark			
< COIL >						
L902	1-410-482-31	INDUCTOR	100uH			
< LED >						
LD901	8-719-301-46	DIODE	SEL2413E			
LD902	8-719-301-46	DIODE	SEL2413E			
LD903	8-719-301-46	DIODE	SEL2413E			
LD904	8-719-301-46	DIODE	SEL2413E			
LD905	8-719-301-46	DIODE	SEL2413E			
< TRANSISTOR >						
Q901	8-729-036-90	TRANSISTOR	KTC3198BL-AT			
Q902	8-729-036-90	TRANSISTOR	KTC3198BL-AT			
Q903	8-729-036-90	TRANSISTOR	KTC3198BL-AT			
Q904	8-729-036-90	TRANSISTOR	KTC3198BL-AT			
Q905	8-729-036-90	TRANSISTOR	KTC3198BL-AT			
< RESISTOR >						
R901	1-249-415-11	CARBON	680	5%	1/4W	F
R906	1-247-843-11	CARBON	3.3K	5%	1/4W	
R907	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R910	1-249-429-11	CARBON	10K	5%	1/4W	
R911	1-249-415-11	CARBON	680	5%	1/4W	F
R912	1-249-416-11	CARBON	820	5%	1/4W	F
R913	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R914	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R915	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R916	1-247-843-11	CARBON	3.3K	5%	1/4W	
R917	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R918	1-249-428-11	CARBON	8.2K	5%	1/4W	F
R919	1-249-431-11	CARBON	15K	5%	1/4W	
R920	1-249-434-11	CARBON	27K	5%	1/4W	
R921	1-249-439-11	CARBON	68K	5%	1/4W	
R930	1-249-429-11	CARBON	10K	5%	1/4W	
R931	1-249-429-11	CARBON	10K	5%	1/4W	
R932	1-247-843-11	CARBON	3.3K	5%	1/4W	
R933	1-249-411-11	CARBON	330	5%	1/4W	
R934	1-249-429-11	CARBON	10K	5%	1/4W	
R935	1-249-437-11	CARBON	47K	5%	1/4W	
R936	1-249-417-11	CARBON	1K	5%	1/4W	F
R938	1-249-417-11	CARBON	1K	5%	1/4W	F
R940	1-247-807-31	CARBON	100	5%	1/4W	
R941	1-247-807-31	CARBON	100	5%	1/4W	
R942	1-247-807-31	CARBON	100	5%	1/4W	
R943	1-247-807-31	CARBON	100	5%	1/4W	
R944	1-247-807-31	CARBON	100	5%	1/4W	
R949	1-249-417-11	CARBON	1K	5%	1/4W	F
R951	1-249-415-11	CARBON	680	5%	1/4W	F
R952	1-249-416-11	CARBON	820	5%	1/4W	F
R953	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R954	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R955	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R956	1-247-843-11	CARBON	3.3K	5%	1/4W	
R957	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R958	1-249-428-11	CARBON	8.2K	5%	1/4W	F
R959	1-249-431-11	CARBON	15K	5%	1/4W	
R960	1-249-434-11	CARBON	27K	5%	1/4W	
R980	1-247-807-31	CARBON	100	5%	1/4W	
R981	1-247-807-31	CARBON	100	5%	1/4W	
R982	1-247-807-31	CARBON	100	5%	1/4W	
R983	1-247-807-31	CARBON	100	5%	1/4W	

Ref. No.	Part No.	Description	Remark			
R984	1-247-807-31	CARBON	100	5%	1/4W	
< REMOTE RECEIVER >						
RC901	8-749-016-29	IC	RPM6938			
< SWITCH >						
SW905	1-572-184-11	SWITCH, KEYBOARD (AMS:▶▶▶)				
SW906	1-572-184-11	SWITCH, KEYBOARD (AMS:▶▶▶)				
SW909	1-771-879-11	SWITCH, TACTILE (PUSH ENTER)				
SW916	1-572-184-11	SWITCH, KEYBOARD (FINALIZE)				
SW917	1-572-184-11	SWITCH, KEYBOARD (ERASE)				
SW918	1-572-184-11	SWITCH, KEYBOARD (TIME)				
SW919	1-572-184-11	SWITCH, KEYBOARD (INPUT)				
SW920	1-572-184-11	SWITCH, KEYBOARD (CD SYNCHRO: NORMAL)				
SW921	1-572-184-11	SWITCH, KEYBOARD (CD SYNCHRO: HIGH)				
SW951	1-572-184-11	SWITCH, KEYBOARD (OPEN/CLOSE)				
SW952	1-572-184-11	SWITCH, KEYBOARD (▶)				
SW953	1-572-184-11	SWITCH, KEYBOARD (■)				
SW954	1-572-184-11	SWITCH, KEYBOARD (AMS:▶▶▶)				
SW955	1-572-184-11	SWITCH, KEYBOARD (AMS:▶▶▶)				
SW956	1-572-184-11	SWITCH, KEYBOARD (DVD MENU)				
SW957	1-572-184-11	SWITCH, KEYBOARD (■)				
SW958	1-572-184-11	SWITCH, KEYBOARD (TITLE)				
SW959	1-572-184-11	SWITCH, KEYBOARD (RETURN)				
SW960	1-572-184-11	SWITCH, KEYBOARD (DISPLAY)				
< VIBTATOR >						
X901	1-795-348-11	VIBRATOR, CRYSTAL (5MHz)				

		A-4728-644-A	HP BOARD, COMPLETE			

< CONNECTOR >						
* CN907	1-568-226-11	PIN, CONNECTOR(3.96MM PITCH)2P				
< JACK >						
JK901	1-815-702-11	JACK (LARGE TYPE) (PHONES)				
< COIL >						
L970	1-400-104-11	FERRITE	0uH			
L971	1-400-104-11	FERRITE	0uH			
L972	1-400-104-11	FERRITE	0uH			
< RESISTOR >						
R970	1-249-386-11	CARBON	2.7	5%	1/6W	F
R971	1-249-386-11	CARBON	2.7	5%	1/6W	F
< SWITCH >						
△ SW900	1-771-757-12	SWITCH, PUSH (1 KEY) (POWER)				
< VARIABLE RESISTOR >						
VR903	1-227-425-11	RES, VAR, CARBON 50K/50K (PHONES LEVEL)				

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

POWER

VOL

Ref. No.	Part No.	Description	Remark		
	A-4728-642-A	POWER BOARD, COMPLETE	*****		
Note: Parts with no description are out of service.					
	7-685-545-14	SCREW +BTP 3X6 TYPE2 N-S			
		< BRIDGE DIODE >			
BD101	8-719-510-06	DIODE S1WB60			
		< CAPACITOR >			
C103	1-165-878-11	ELECT	150uF	250V	
		< DIODE >			
D102	8-719-085-16	DIODE EU01W			
D107	8-719-085-16	DIODE EU01W			
D108	8-719-085-16	DIODE EU01W			
D110	8-719-085-15	DIODE RU3YXLF-C1			
D120	8-719-085-16	DIODE EU01W			
		< FUSE >			
△ F101	1-532-503-51	FUSE (1.6A 250V)			
		< IC >			
IC101	6-700-520-01	IC STR-G6153T			
IC102	6-700-521-01	PHONT COUPLER PS2561-1-V			
IC103	8-759-574-75	IC KA78R33TU			
IC104	6-700-522-01	IC KIA431			
IC105	8-759-574-75	IC KA78R33TU			
		< POWER TRANSFORMER >			
△ PT101	1-437-810-11	TRANSFORMER, POWER			
		< RESISTOR >			
R101	1-244-389-11	METAL	2.7	2W	
		< ZENER DIODE >			
ZD101	8-719-109-85	DIODE MTZJ-5.1B			

	A-4728-645-A	VOL BOARD, COMPLETE	*****		
		< CONNECTOR >			
* PN903	1-816-677-11	CONNECTOR (BOARD TO BOARD) 8P			
		< RESISTOR >			
R902	1-249-416-11	CARBON	820	5%	1/4W
R903	1-249-418-11	CARBON	1.2K	5%	1/4W
R904	1-249-419-11	CARBON	1.5K	5%	1/4W
R905	1-249-421-11	CARBON	2.2K	5%	1/4W
		< SWITCH >			
SW901	1-572-184-11	SWITCH, KEYBOARD (OPEN/CLOSE△)			
SW902	1-572-184-11	SWITCH, KEYBOARD (▷)			
SW903	1-572-184-11	SWITCH, KEYBOARD (■)			
SW904	1-572-184-11	SWITCH, KEYBOARD (▣)			
SW907	1-572-184-11	SWITCH, KEYBOARD (REC●)			
		< VARIABLE RESISTOR >			
VR902	1-223-799-11	RES, VAR, CARBON 20K/20K (REC LEVEL)			

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	*****
15	1-824-266-11	WIRE (FLAT TYPE) (20 CORE)	
57	1-824-264-11	WIRE (FLAT TYPE) (30 CORE)	
58	1-824-265-11	WIRE (FLAT TYPE) (30 CORE)	
△ 61	1-823-044-11	CORD, POWER	
124	1-824-613-11	CABLE, FLAT (23P)	
125	1-824-612-11	CABLE, FLAT (20P)	
169	1-823-046-11	CABLE, FLAT (32P)	

		ACCESSORIES	*****
1-476-830-11		REMOTE COMMANDER (RM-R70)	
1-558-271-11		CORD, CONNECTION	
3-053-633-01		COVER, BATTERY (FOR RM-R70)	
4-241-188-01		MANUAL ASSY (ENGLISH)	

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

REVISION HISTORY

Clicking the version allows you to jump to the revised page.

Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

[illegible]