

Service Manual

Direct Drive Digital Turntable



SL-DZ1200PP
SL-DZ1200EB
SL-DZ1200EG
SL-DZ1200EP
SL-DZ1200GN

Colours

(S).....Silver Type

Specification

● Playable media

CD (12 cm) (5 "):

CD-Audio (CD-DA)
 CD-R / CD-RW (CD-DA, MP3)

SD Memory Card

● CD-MP3 player format

Compatible compression rate: between 32 kbps and 192 kbps
 (Recommended: 128 kbps)

Compatible sampling rate: 48 kHz / 44.1 kHz / 32 kHz

● SD Audio play format

Audio extension format: MPEG2-AAC / MP3

Compatible sampling rate: 48 kHz / 44.1 kHz / 32 kHz

● Audio

No. of channels: 2 (stereo)

Frequency response^{*}: 4 Hz-20 kHz

Output voltage: 2 Vrms (0 dB) (JEITA)

Output terminal: Pin jack

● Digital audio output

Coaxial digital output: Pin jack

● Headphone

Output level: 20 mW max. 32 Ω (adjustable)

● Pickup

Wave length: 790 nm

Laser Power: No hazardous radiation is emitted

● General

Power supply: PP ; AC 120 V, 60Hz
 EB,EG,EP,GN; AC 220-240 V, 50 Hz

Power consumption: 20 W

Dimensions (W × H × D): 320 × 111 × 330 mm
 (12³⁹ / 64 " × 4³ / 8 " × 13 ")

Mass: 5.8 kg
 (12.8 lb.)

Note:

Specifications are subject to change without notice.

Mss and dimensions are approximate.

* Specifications are the values when playing CD audio in the CD PLAYER mode with temporeset.

Technics

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

CONTENTS

	Page		Page
1 Safety Precaution	3	10.4. SW & LED TEST	36
2 Caution for AC Mains Lead	4	10.5. LED TEST	36
3 Handling Precautions for Optical pick-up	5	10.6. SD SAVE / LOAD	37
3.1. Handling of traverse deck optical pick-up	5	10.7. INITIAL	37
3.2. Grounding for electrostatic breakdown prevention	5	10.8. CD UNIT TEST 1	37
4 Precaution of Laser Diode	6	11 Cautions after Exchange of the Flash ROM (IC23)	38
5 Accessories	7	11.1. About obtaining the program.	38
6 Main features	8	11.2. Program Writing to the Flash ROM (IC23) after Replacement	39
7 Component part names	9	11.3. Program Confirmation	40
8 Operation Checks and Component Replacement Procedures	10	11.4. Adjusting the Display Contrast	41
8.1. Checking for the control panel (1) P.C.B. and control panel (2) P.C.B..	10	12 Type Illustration of IC ' s, Transistors and Diodes	42
8.2. Checking for the main P.C.B.	10	13 Schematic Diagram	43
8.3. Checking for the jack P.C.B.	10	13.1. Schematic Diagram Notes	43
8.4. Checking for the power supply P.C.B.	11	13.2. Schematic Diagram	45
8.5. Checking for the CD servo P.C.B.	11	14 Printed Circuit Board	61
8.6. Replacement for the LED P.C.B., loading motor P.C.B., CD mouse ass ' y and motor	12	14.1. CD SERVO P.C.B. test point table	61
8.7. Replacement for the center panel ass ' y and LCD	13	14.2. Printed Circuit Board	63
8.8. Replacement for the connection P.C.B. and sensor P.C.B.	14	15 Block Diagram	69
8.9. Replacement for the turntable ass ' y and slip plate ass ' y	14	16 Wiring Connection Diagram	75
8.10. Replacement for the control panel (2) P.C.B., button base B and button base C.	16	17 Terminal Function of ICs	77
8.11. Replacement for the control panel (1) P.C.B., reverse switch P.C.B., button base A and button base D	16	17.1. IC2(C2CBHH000043): SYSTEM CONTROL (UI Microcomputer)	77
8.12. Replacement for the CD servo P.C.B.	17	17.2. IC14(C0ZBZ0000910): MULTIMEDIA DIGITAL IMAGE PROCESSOR (SC Microcomputer)	78
8.13. Replacement for the optical pick-up	18	17.3. IC34(C0ZBZ0000910): MULTIMEDIA DIGITAL IMAGE PROCESSOR (MD Microcomputer)	80
9 Technological Explanation of the Circuit and Signal	20	17.4. IC1(AN8882SB-E1): SERVO AMP.	83
10 Self-diagnosis function	34	17.5. IC102 (C2BBGE000781): SYSTEM CONTROL	83
10.1. DEVICE TEST	34	18 Replacement Parts List	85
10.2. TT BRAKE TEST	35	18.1. Component, Accessory, and Packaging Parts	85
10.3. TT SPEED (Phase) TEST	35	18.2. CD Mechanism Parts	91
		19 Cabinet Parts Location	95
		20 CD Mechanism Parts Location	97
		21 Packaging	98

1 Safety Precaution

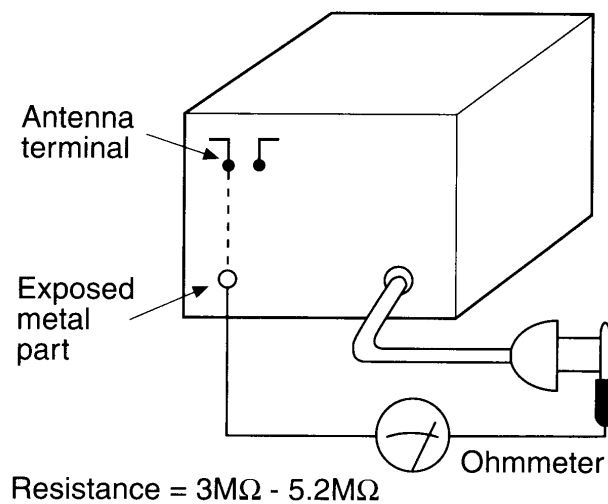
(This "Safety Precaution" is applied only in U.S.A.)

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacturer's recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

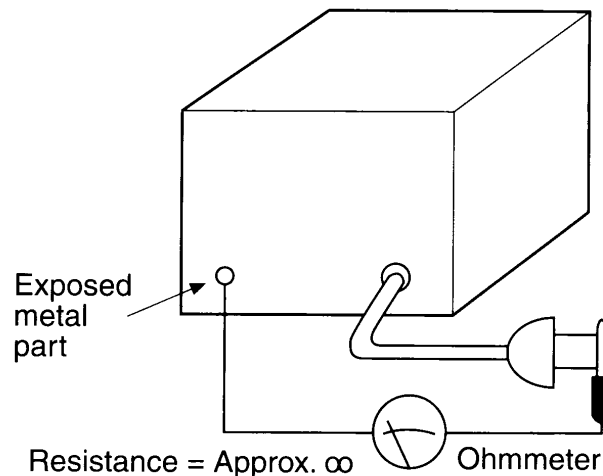
■ Insulation Resistance Test

1. Unplug the power cord and short the two prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with ohmmeter between the jumper AC plug and each exposed metal cabinet part, such as screw heads, control shafts, handle brackets, etc. Equipment with antenna terminals should read between $3\text{M}\Omega$ and $5.2\text{M}\Omega$ to all exposed parts. (Fig. A) Equipment without antenna terminals should read approximately infinity to all exposed parts. (Fig. B)

*Note: Some exposed parts may be isolated from the chassis by design. These will read infinity.



(Fig. A)



(Fig. B)

4. If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and rechecked before it is returned to the customer.

2 Caution for AC Mains Lead

(For United Kingdom)

("EB" area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

CAUTION!

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.

If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral, Brown: Live.

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL  OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

Before use

Remove the connector cover.

How to replace the fuse

The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.

Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.

Figure A

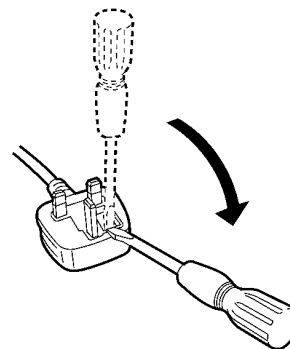
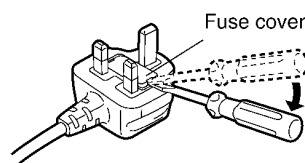


Figure B



2. Replace the fuse and close or attach the fuse cover.

Figure A

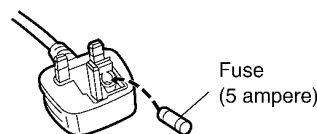
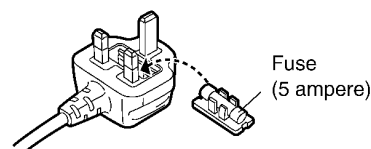


Figure B



3 Handling Precautions for Optical pick-up

The laser diode in the optical pick-up may break down due to potential difference caused by static electricity of clothes or human body.

So be careful of electrostatic breakdown during repair of the optical pick-up.

3.1. Handling of traverse deck optical pick-up

1. Do not subject the optical pick-up to static electricity as it is extremely sensitive to electrical shock.
2. To protect the laser diode against electrostatic breakdown, short the flexible board (FFC board) with a clip or similar object. Refer to Fig. 2-1.
3. Take care not to apply excessive stress to the flexible board (FFC board).
4. Do not turn the variable resistor (laser power adjustment). It has already been adjusted. Refer to Fig. 2-1.

Flexible board (FFC)
(Handle it carefully)

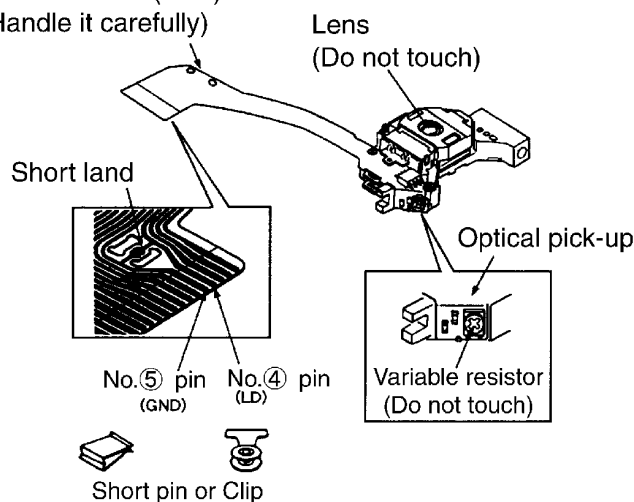


Fig. 2-1.

3.2. Grounding for electrostatic breakdown prevention

3.2.1. Human body grounding

Use the anti-static wrist strap to discharge the static electricity from your body. Refer to Fig. 2-2.

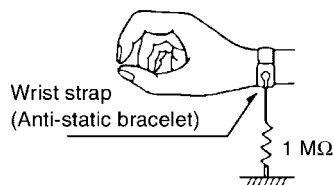


Fig. 2-2.

3.2.2. Work table grounding

Put a conductive material (sheet) or steel sheet on the area where the optical pick-up is placed, and ground the sheet. Refer to Fig. 2-3.

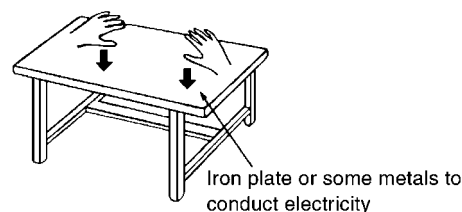


Fig. 2-3.

Caution:

The static electricity of your clothes will not be grounded through the wrist strap.

So take care not to let your clothes touch the optical pick-up.

4 Precaution of Laser Diode

CAUTION:

THIS PRODUCT UTILIZES A LASER.

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

CAUTION: This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pick-up lens.

Wave length: 780 nm

Maximum output radiation power from pick-up: 100 μ W/VDE

Laser radiation from the pick-up unit is safety level, but be sure the followings:

1. Do not disassemble the pick-up unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pick-up unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pick-up lens for a long time.

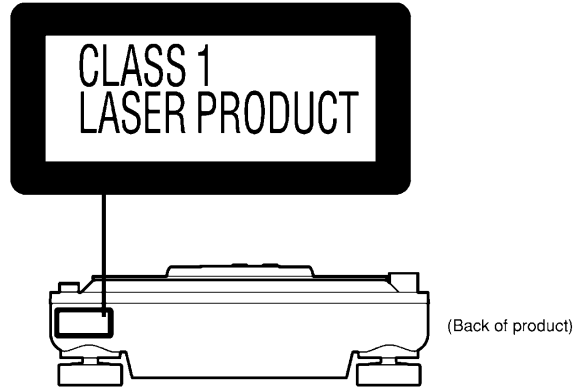
ACHTUNG: Dieses Produkt enthält eine Laserdiode. Im eingeschalteten Zustand wird unsichtbare Laserstrahlung von der Lasereinheit adgestrahlt.

Wellenlänge: 780 nm

Maximale Strahlungsleistung der Lasereinheit: 100 μ W/VDE

Die strahlungen der Lasereinheit ist ungefährlich, wenn folgende Punkte beachtet werden:

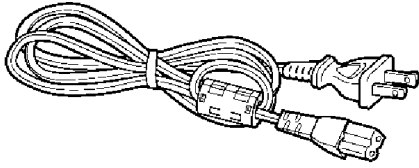
1. Die Lasereinheit nicht zerlegen, da die Strahlung an der freigelegten Laserdiode gefährlich ist.
2. Den werksseitig justierten Einstellregler der Lasereinheit nicht verstellen.
3. Nicht mit optischen Instrumenten in die Fokussierlinse blicken.
4. Nicht über längere Zeit in die Fokussierlinse blicken.



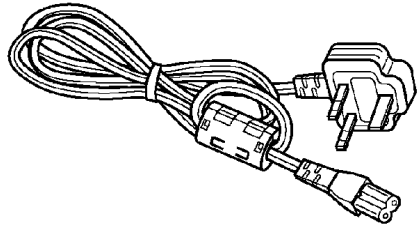
CAUTION	CLASS 3B INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM. (IEC 60825-1 +A2)	(Inside of product)
VARNING	KLASS 3B OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. UNDVIK EXPONERING FÖR STRÅLEN.	(Indersiden at apparatet)
ADVARSEL	KLASSE 3B USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDSÆTTELSE FOR STRÅLING.	(Tuotteen sisällä)
ADVARSEL	KLASSE 3B USYNLIG LASERSTRÅLING NÄR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.	(Apparatens insida)
VARO	AVATTAESSA OLET NÄKYMÄTÖNTÄ ALTTIINA LUOKAN 3B LASERSÄTELYLLE. VARO ALTISTUMISTA SÄTEELLE.	(Produktets innsida)
VORSICHT	UNSIHTBARE LASERSTRALHUNG KLASSE 3B, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.	(Im Inneren des Gerätes)
ATTENTION	RAYONNEMENT LASER INVISIBLE CLASSE 3B EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU. R0LS0311	

5 Accessories

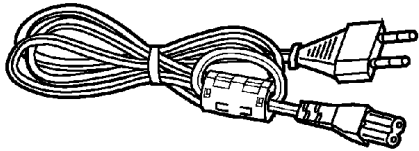
- AC power supply cord for (PP) area
(REZ1619).....1 pc.



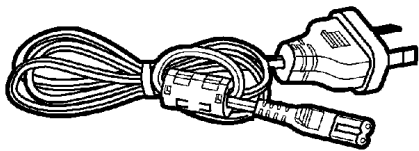
- AC mains lead for (EB) area
(REZ1496).....1 pc.



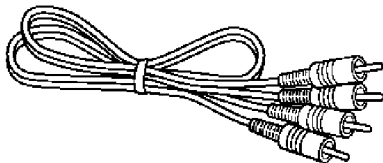
- AC mains lead for (EG),(EP) areas
(REZ1495).....1 pc.



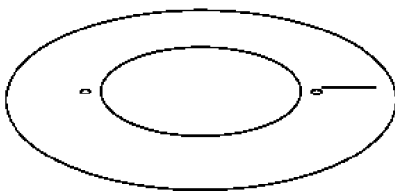
- AC mains lead for (GN) areas
(REZ1620).....1 pc.



- Stereo connection cable for all areas
(SFDHBD2N01).....1 pc.



- Slip surface for all areas
(RGK1704-S2).....1 pc.



6 Main features

This direct drive digital turntable is designed for DJs to play digital media (CDs and SD audio) giving an analog-like feeling. Having the feeling of an analog turntable, this unit delivers digitally robust functions and performance realizing a new style of play.

Control panel

SAMPLE PADS

- You can store up to 4 audio segments to memory.
- You can use for dual play for up to 2 sample pads, and use for switching between one shot and loop play.

CUE PADS

You can store 4 cue points to memory. Play can be started instantly from one of those cue points.

LOOP play

You can set the IN and OUT points and play as a loop.

Strobe Dot Reflectors

You can use the red strobo illuminator to check changes in tempo.

CUE

- Setting the cue point
Store the cue point to memory.
- Back cue
During play you can instantly return to the set cue point and the unit waits in the pause state.

SD CARD LOAD and SAVE

You can SAVE and LOAD sample pad, cue point panel data etc. to the SD Memory Card.

VINYL SIM

You can simulate sound similar to an analog player.

DYNAMIC FX

You can transform sound by using the platter.

FORWARD and REVERSE

The rotation direction of the platter can be reversed by switching the play direction switch to REVERSE or FORWARD.

Platter

Play media is synchronized with platter movement.

Platter slip surface

Use your hand to turn the platter slip surface for scratch, brake and spin DJ play.

TEMPO

- You can control the play speed (tempo).
- You can adjust the tempo to 4 levels of settings between ± 8 and ± 50 using the RANGE button.
- You can instantly return to normal playing speed using the RESET button.
- By using the PITCH LOCK button the pitch is held even if the tempo is changed.

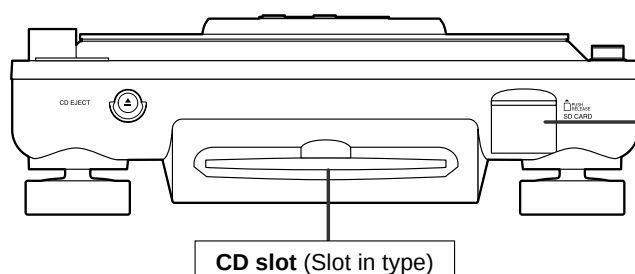
FREE WHEEL

You can switch the platter to freewheel.

PLAY SELECT

Selects CD or SD play.

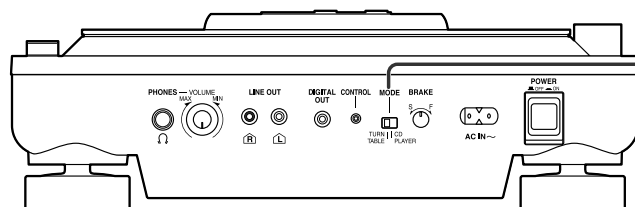
Front panel



SD Memory Card slot

CD slot (Slot in type)

Rear panel



TURNTABLE

Mode for DJ play.

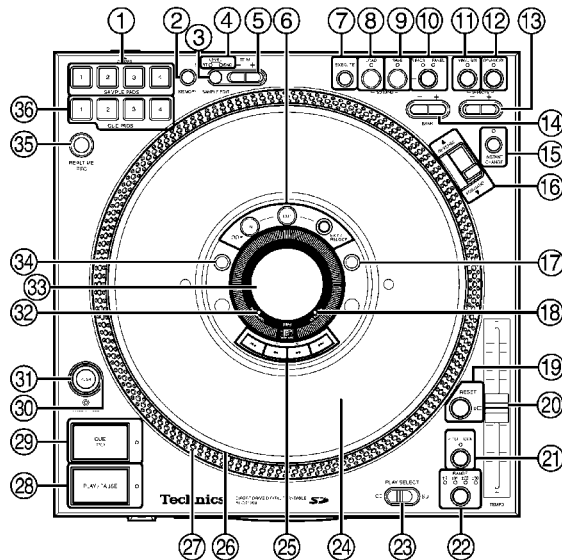
CD PLAYER

Mode for use as an audio player.

7 Component part names

The unshaded numbers ① etc, correspond to the numbered illustrations.

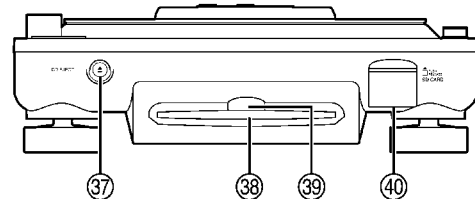
Control panel



- ① Sampling data record, play, and erase button, lamp (1-4 SAMPLE PADS)
- ② Sample pad play mode, edit memory button (MEMORY)
- ③ Play mode and edit item select button (SAMPLE EDIT)
- ④ Start point (START) lamp, end point (END) lamp, level (LEVEL) lamp
- ⑤ Modify data button (- + TRIM)
- ⑥ Loop play button (LOOP)
Start of loop play point setting, erase button, lamp (IN)
End of loop play point setting, erase button, lamp (OUT)
Play or cancel loop play button (EXIT/RELOOP)
- ⑦ Execute button (EXECUTE)
- ⑧ Load SD Memory Card data button, lamp (LOAD)
- ⑨ Save SD Memory Card data button, lamp (SAVE)
- ⑩ SD Memory Card save mode select button, lamp (S.PADS, PANEL)
- ⑪ Analog player simulation button, lamp (VINYL SIM)
- ⑫ Special effects button, lamp (DYNAMIC FX)
- ⑬ Simulation, effect type select button (- + TYPE)
- ⑭ Cue bank, file number select button (- + BANK)
- ⑮ Instant play select button, lamp (INSTANT CHANGE)
- ⑯ Play direction switch (REVERSE, FORWARD)
- ⑰ Display angle setting, function setting button (-DISPLAY ANGLE -FUNCTION)
- ⑱ SD Memory Card access indicator (SD ACCESS)
- ⑲ Normal tempo button, lamp (RESET)
- ⑳ Tempo, pitch control slider (TEMPO)
- ㉑ Fixed pitch play button, lamp (PITCH LOCK)
- ㉒ Tempo variation range button, lamp (RANGE)
- ㉓ Media play select switch (PLAY SELECT)
- ㉔ Platter slip surface

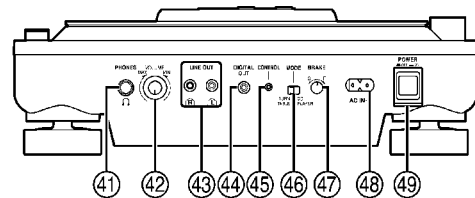
- ㉕ Track skip, search, setting buttons (◀◀, ◀, ▶, ▶▶)
- ㉖ Platter
- ㉗ Strobe dot reflectors
- ㉘ Play pause button, lamp (PLAY/PAUSE)
- ㉙ Cue setting, load and stop button, lamp (CUE STOP)
- ㉚ Strobe illuminator
- ㉛ Platter free wheel setting button (PUSH)
- ㉜ Platter free wheel indicator (FREE WHEEL)
- ㉝ Display
- ㉞ Remaining time display, auto cue setting button (-REMAIN -AUTO CUE)
- ㉟ Cue point, pad memory button (REALTIME REC)
- ㊱ Cue memory, play and erase button, lamp (1-4 CUE PADS)

Front panel



- ㊲ CD eject button (▲ CD EJECT)
- ㊳ CD slot
- ㊴ Power lamp
- ㊵ SD Memory Card slot (SD CARD)

Rear panel

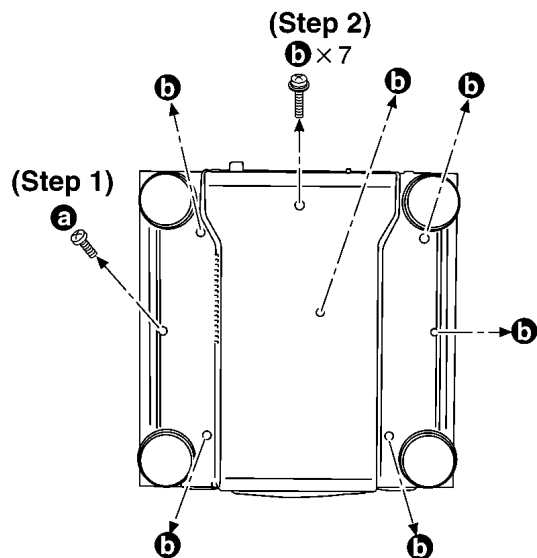


- ㊶ Headphone terminal (PHONES)
- ㊷ Headphone volume control knob (VOLUME)
- ㊸ Output terminal (LINE OUT)
- ㊹ Digital output terminal (DIGITAL OUT)
- ㊺ Digital turntable control terminal (CONTROL)
- ㊻ Turntable, CD player select switch (MODE)
- ㊼ Platter brake control (BRAKE)
- ㊽ AC input terminal (AC IN ~)
- ㊾ Power button (POWER ■ OFF ■ ON)

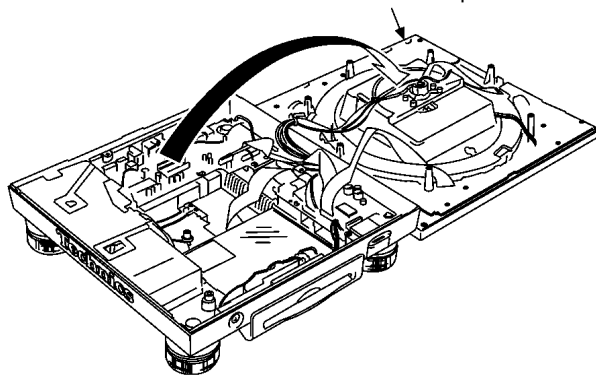
8 Operation Checks and Component Replacement Procedures

- This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.
- For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.

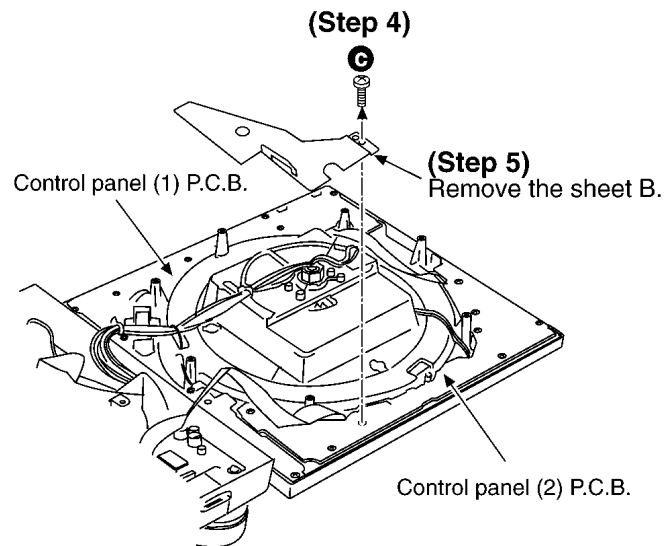
8.1. Checking for the control panel (1) P.C.B. and control panel (2) P.C.B..



(Step 3)
Remove the control panel unit.

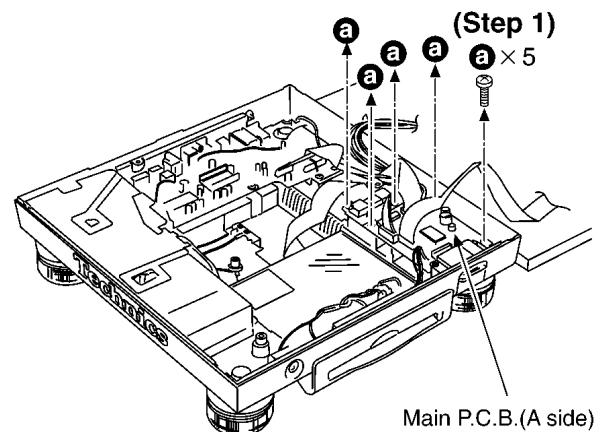


- Check the control panel (1) P.C.B. and control panel (2) P.C.B. as shown below.



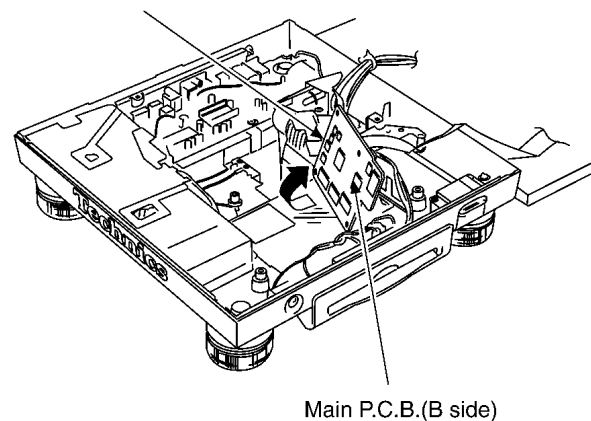
8.2. Checking for the main P.C.B.

- Follow the (Step 1) - (Step 3) of item 8.1.
- Check the main P.C.B. (A side) as shown below.



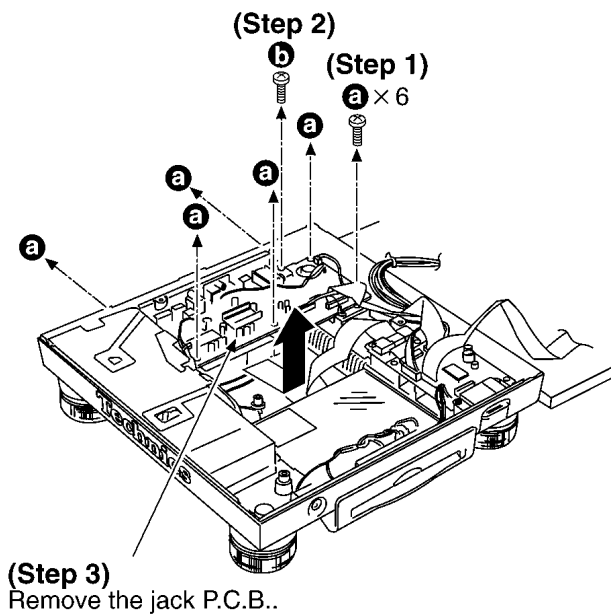
- Check the main P.C.B. (B side) as shown below.

(Step 2)
Raise the main P.C.B..

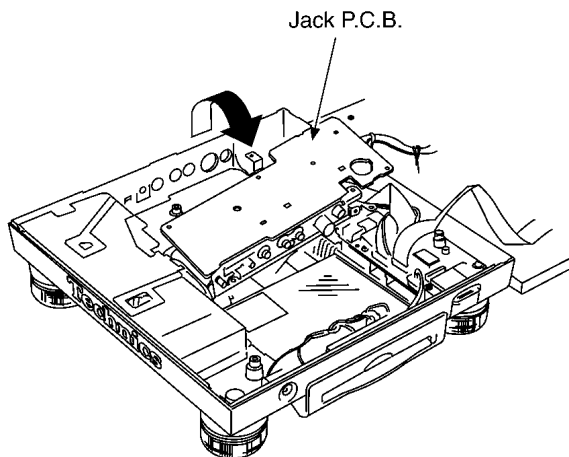


8.3. Checking for the jack P.C.B.

- Follow the (Step 1) - (Step 3) of item 8.1.

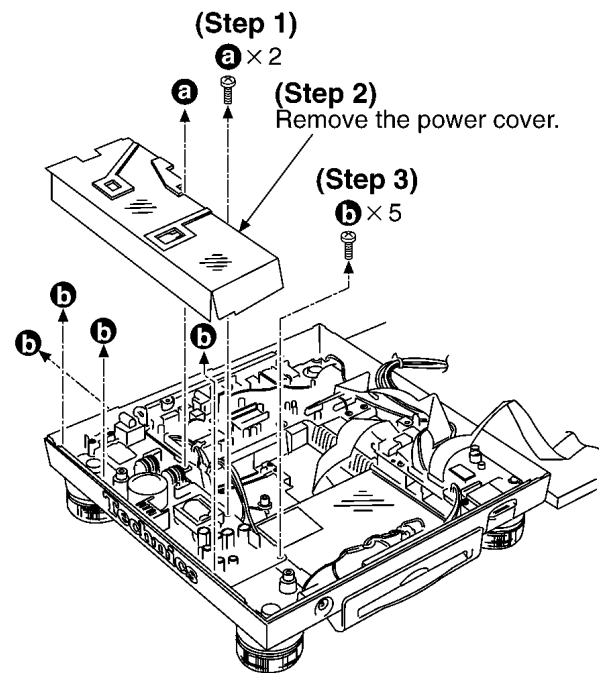


- Check the jack P.C.B. as shown below.

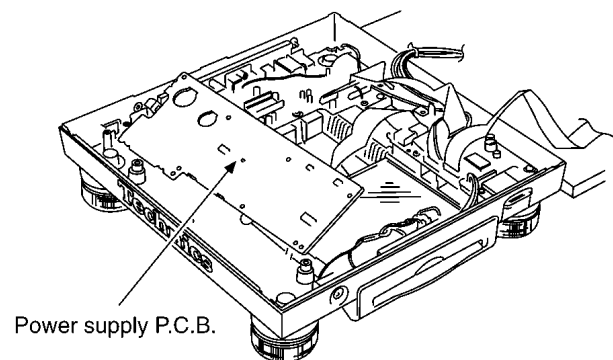


8.4. Checking for the power supply P.C.B.

- Follow the (Step 1) - (Step 3) of item 8.1.

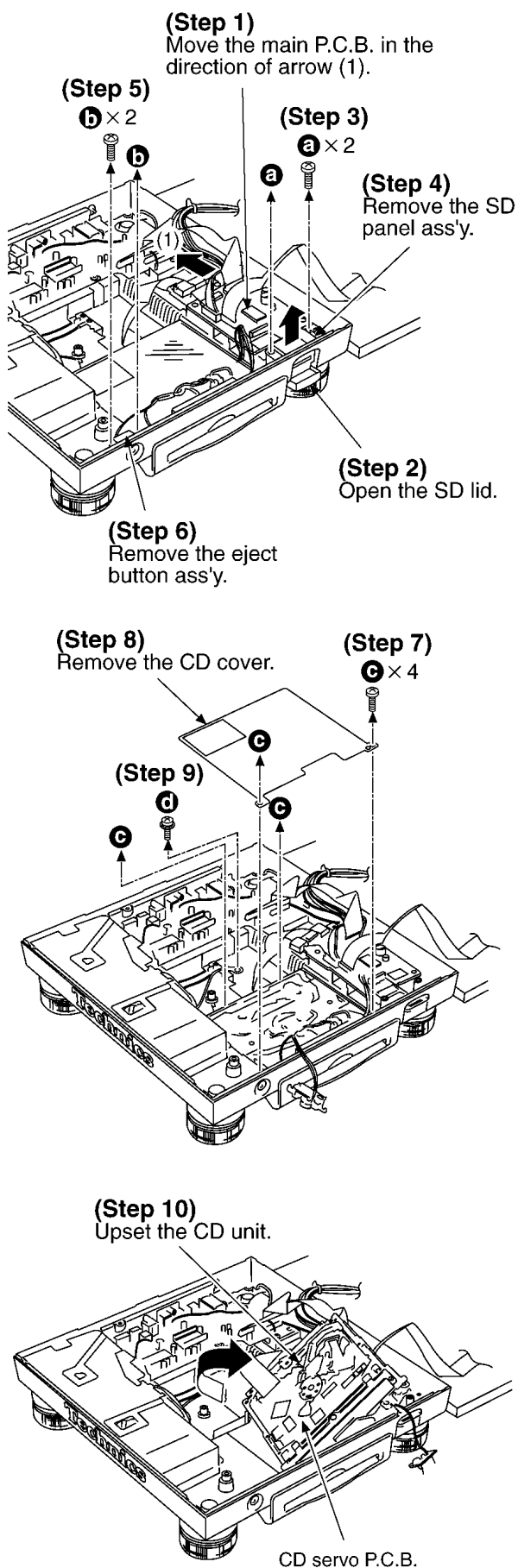


- Check the power supply P.C.B. as shown below.



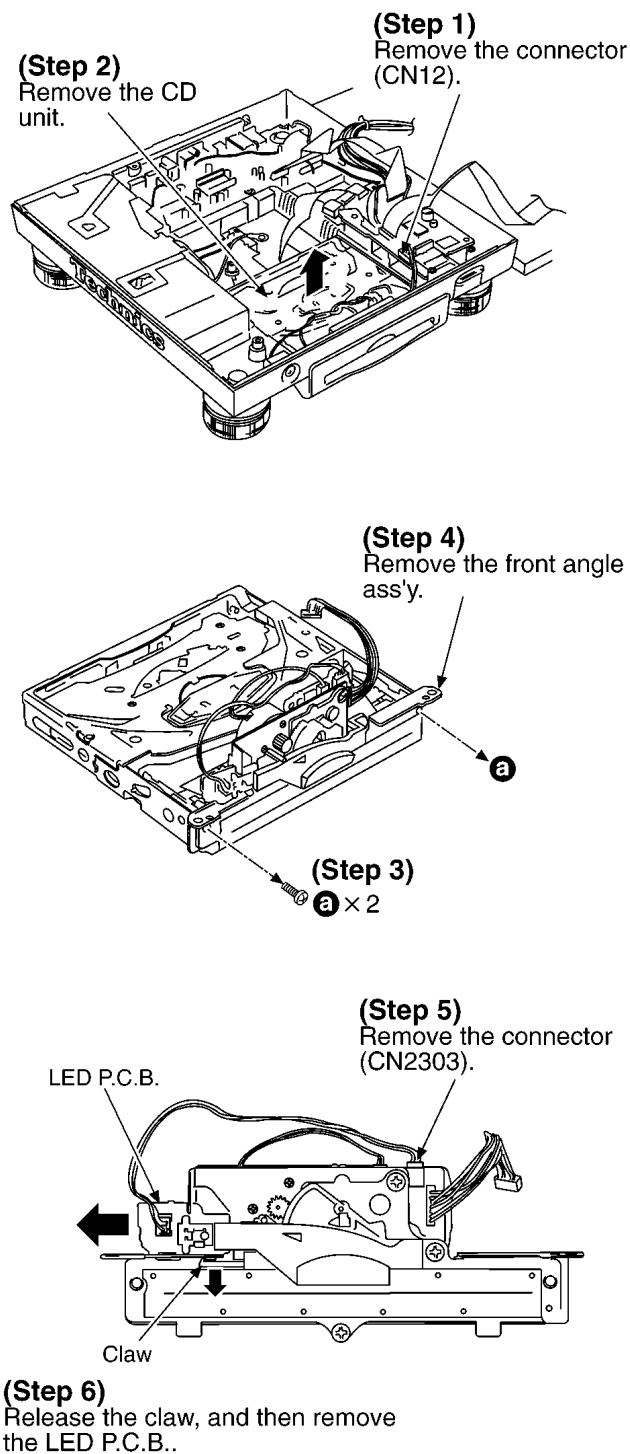
8.5. Checking for the CD servo P.C.B.

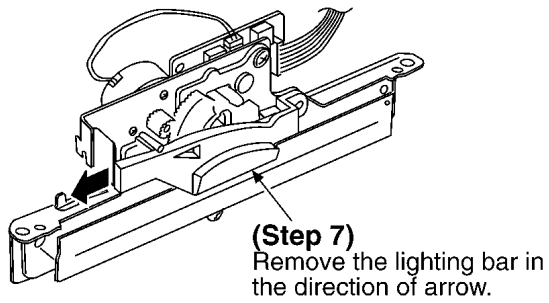
- Follow the (Step 1) - (Step 3) of item 8.1.
- Follow the (Step 1) of item 8.2.



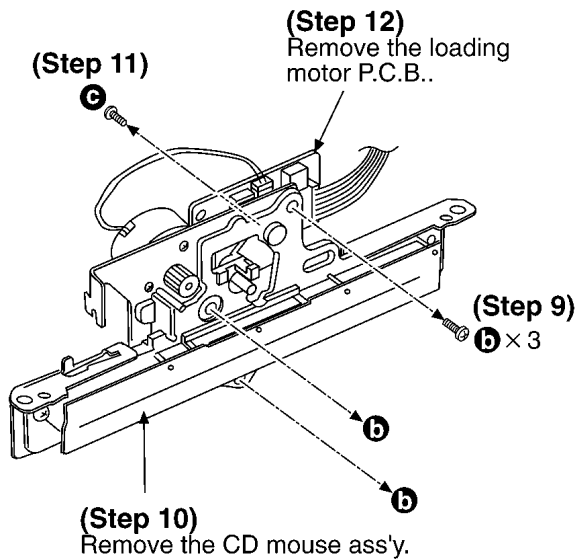
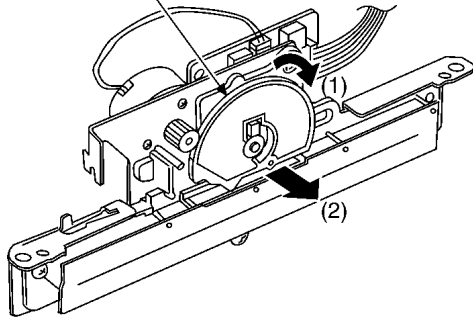
8.6. Replacement for the LED P.C.B., loading motor P.C.B., CD mouse ass'y and motor

- Follow the (Step 1) - (Step 3) of item 8.1.
- Follow the (Step 1) of item 8.2.
- Follow the (Step 1) - (Step 9) of item 8.5.

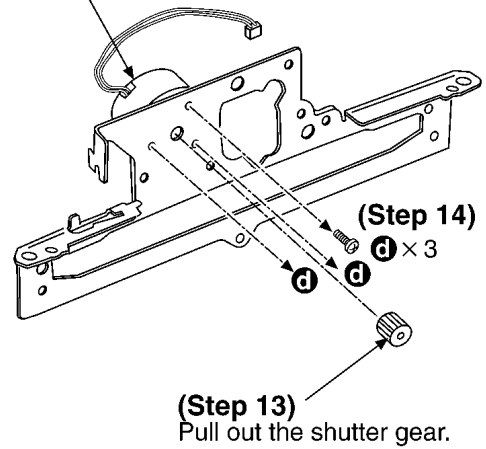




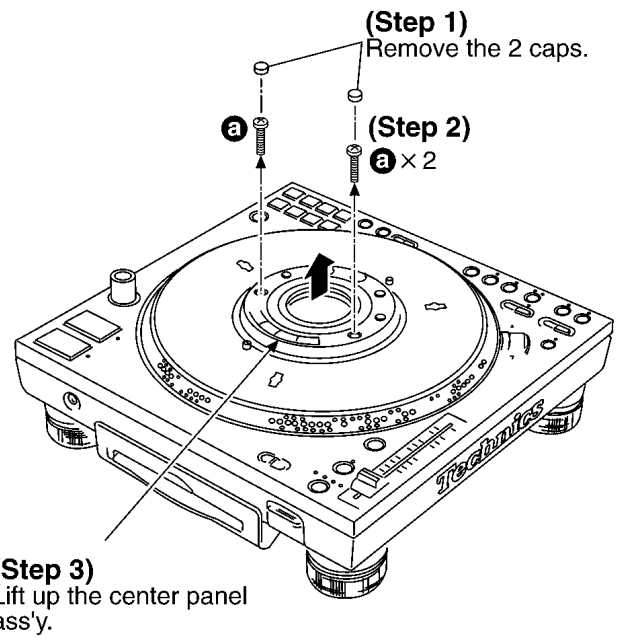
(Step 8)
Rotate the shutter in the direction of arrow(1), and then remove it.

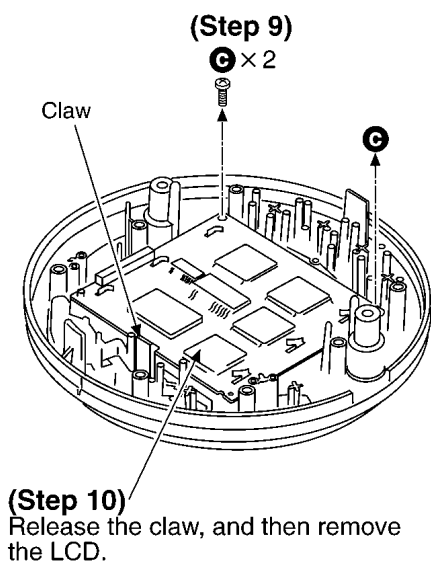
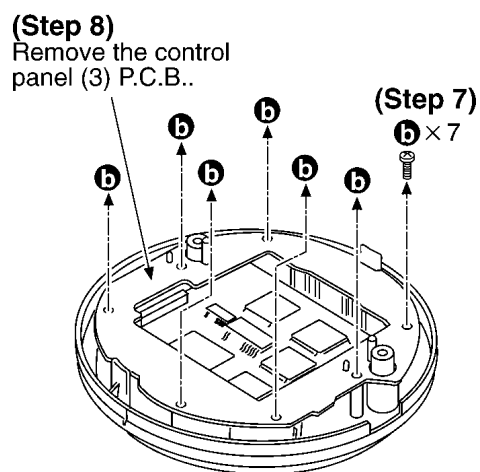
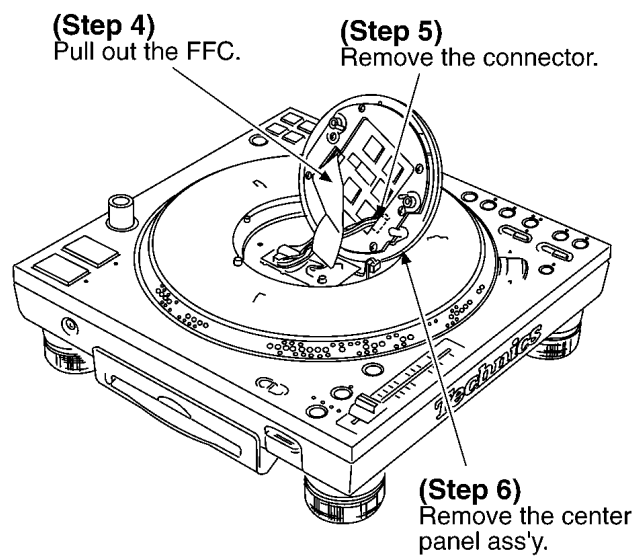


(Step 15)
Remove the motor.



8.7. Replacement for the center panel ass'y and LCD

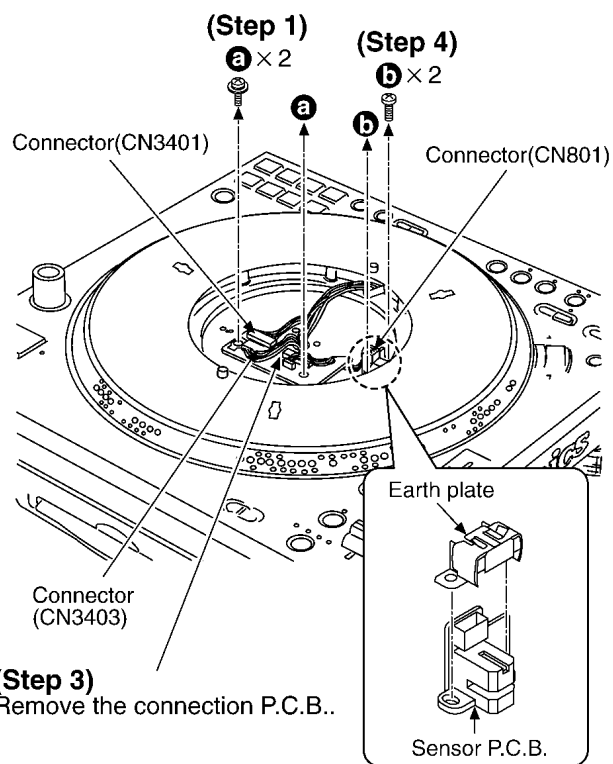




8.8. Replacement for the connection P.C.B. and sensor P.C.B.

- Follow the (Step 1) - (Step 6) of item 8.7.

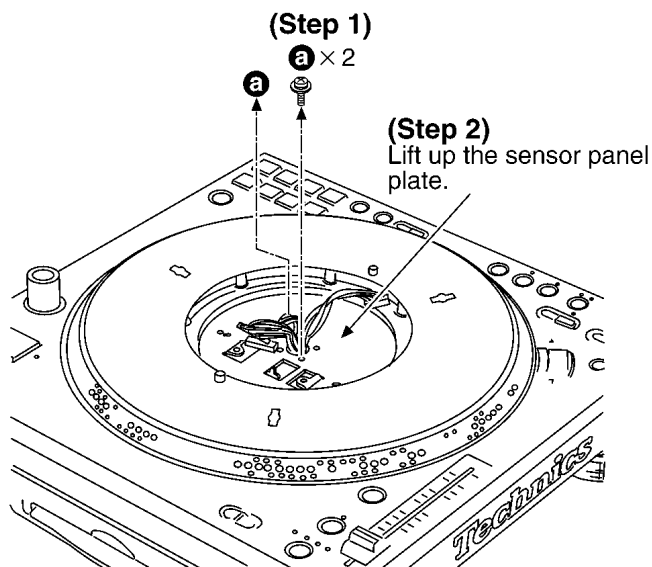
(Step 2)
Remove the 3 connectors



(Step 5)
Remove the earth plate and sensor P.C.B..

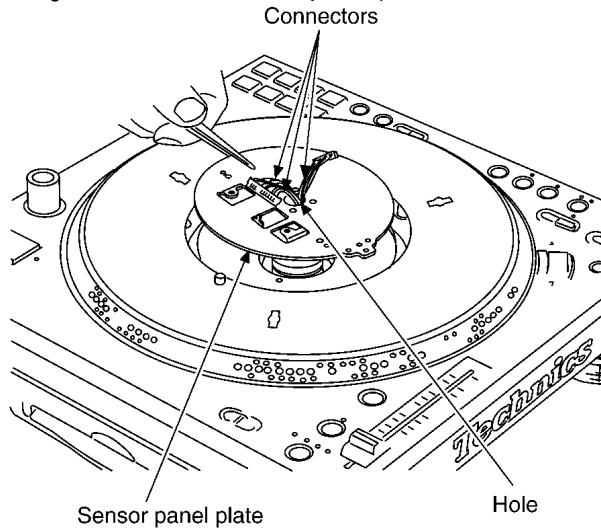
8.9. Replacement for the turntable ass'y and slip plate ass'y

- Follow the (Step 1) - (Step 6) of item 8.7.
- Follow the (Step 1) - (Step 5) of item 8.8.

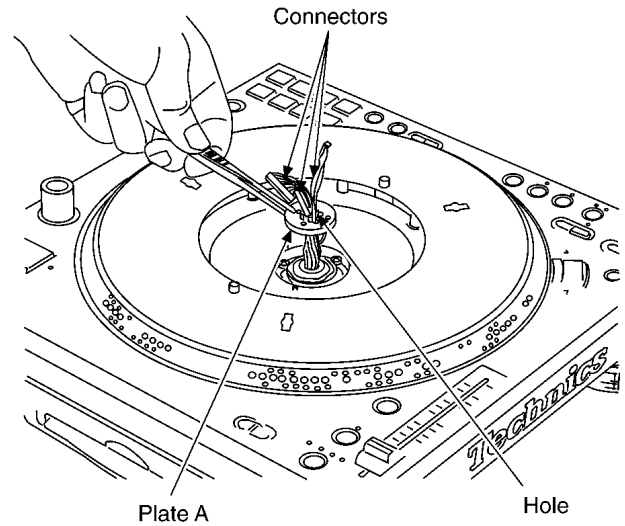


(Step 3)

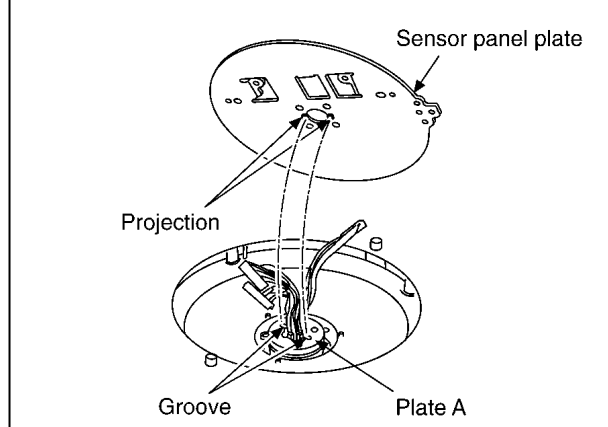
Remove the connectors one by one by leading through the holes on sensor panel plate.

**(Step 5)**

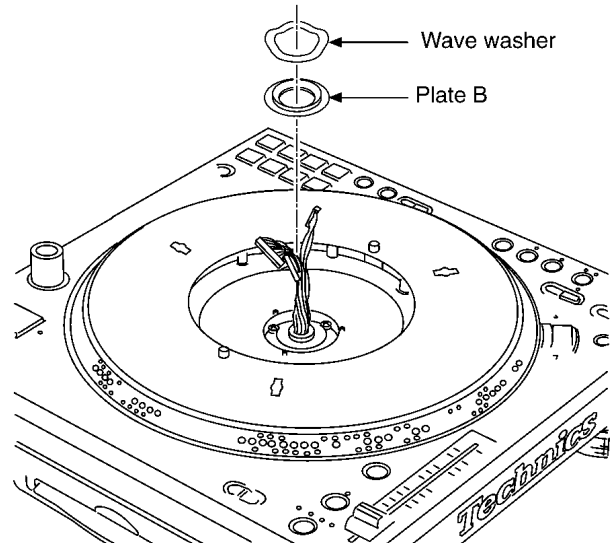
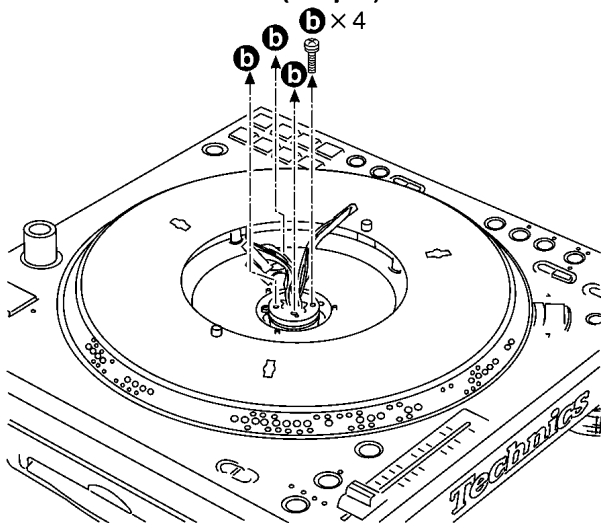
Remove the connectors one by one by leading through the holes on plate A.

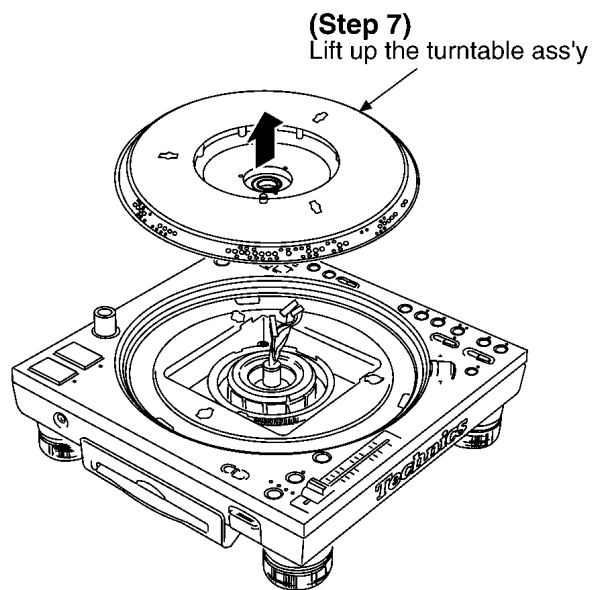
**Notice for installation of sensor panel plate**

- Make sure the projection of sensor panel plate is fit in the groove of plate.

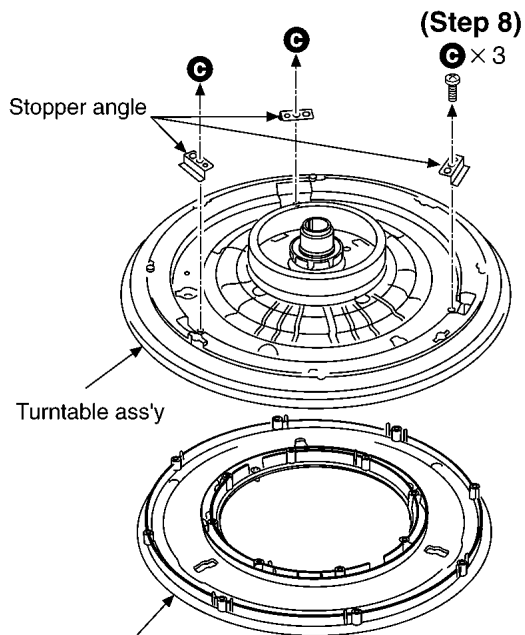
**(Step 6)**

Remove the wave washer and plate.

**(Step 4)**



(Step 9)
Remove the 3 stopper angles

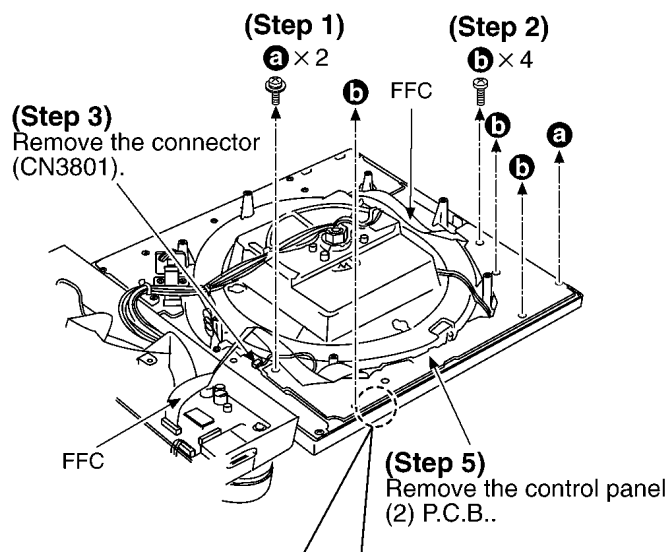


(Step 10)
Remove the slip plate ass'y

8.10. Replacement for the control panel (2) P.C.B., button base B and button base C.

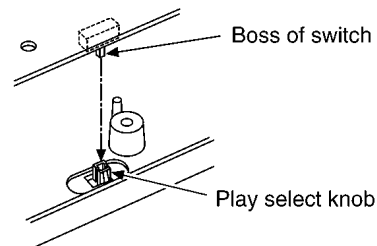
• Follow the (Step 1) - (Step 3) of item 8.1.

(Step 4)
Pull out the 2 FFCs.

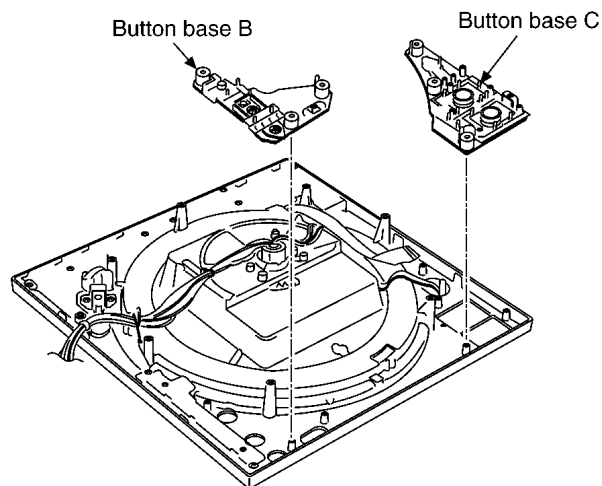


Notice for installation of control panel (2) P.C.B..

• Make sure the boss of switch is fit in the play select knob.

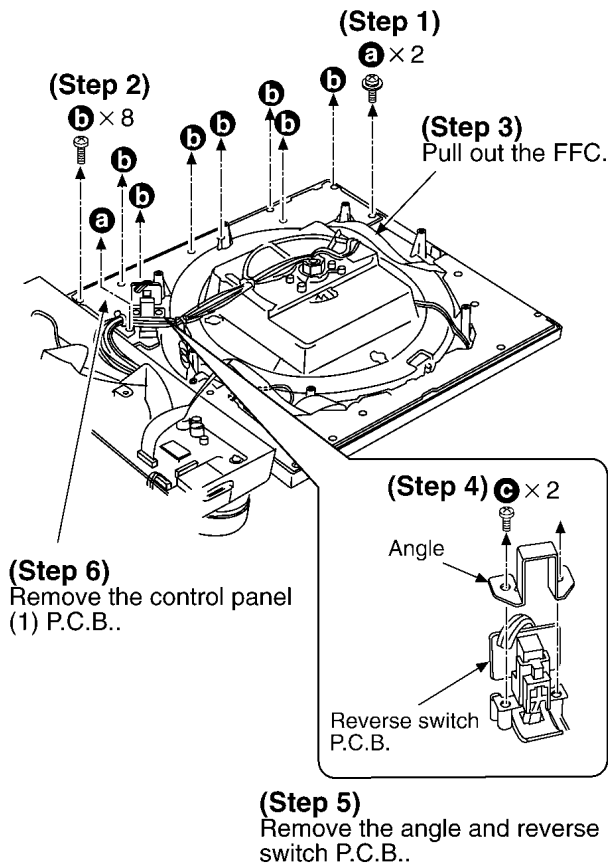


(Step 6)
Remove the button base B and button base C.

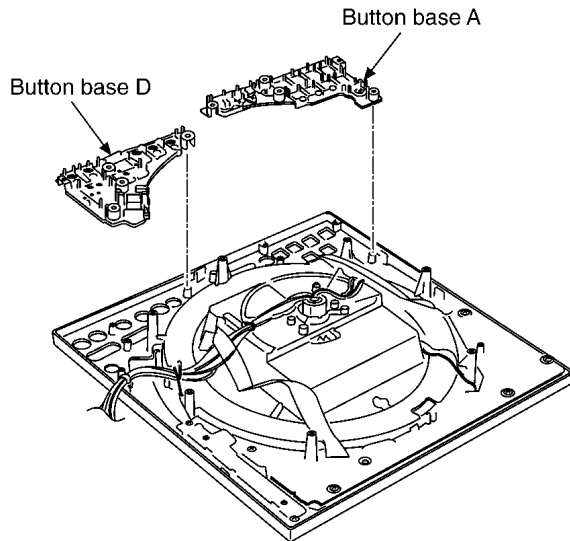


8.11. Replacement for the control panel (1) P.C.B., reverse switch P.C.B., button base A and button base D

• Follow the (Step 1) - (Step 3) of item 8.1.

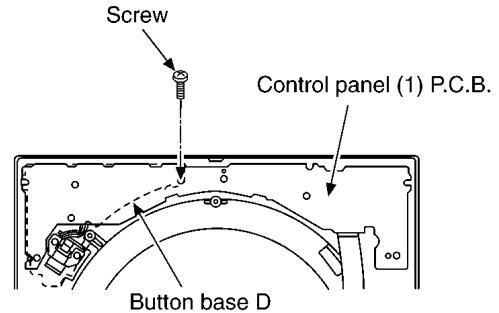


(Step 7)
Remove the button base A and button base D.



Notice for installation of control panel (1) P.C.B.

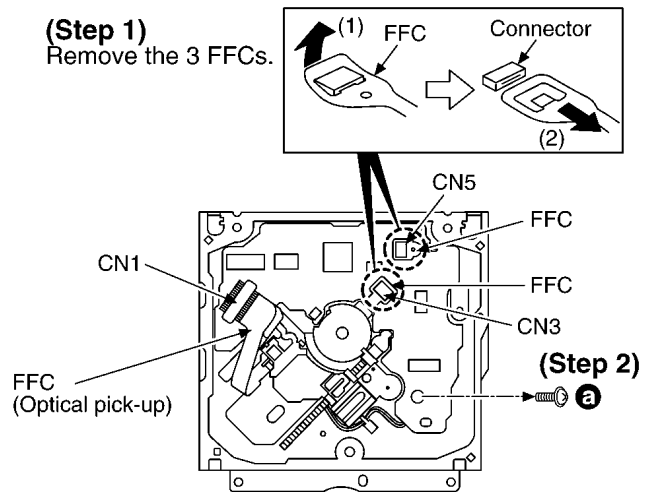
- Install the control panel (1) P.C.B. with this screw as shown below.
And then insert the other screws.
(Make sure the button base D does not float and incline.)



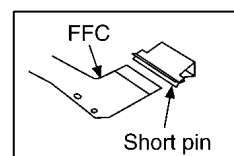
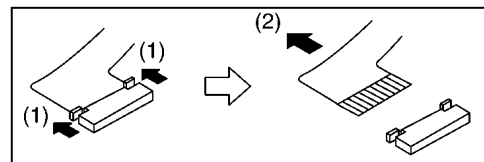
8.12. Replacement for the CD servo P.C.B.

- Follow the (Step 1) - (Step 3) of item 8.1.
- Follow the (Step 1) of item 8.2.
- Follow the (Step 1) - (Step 9) of item 8.5.
- Follow the (Step 1) - (Step 4) of item 8.6.

(Step 1)
Remove the 3 FFCs.



Installation of connector(CN1)

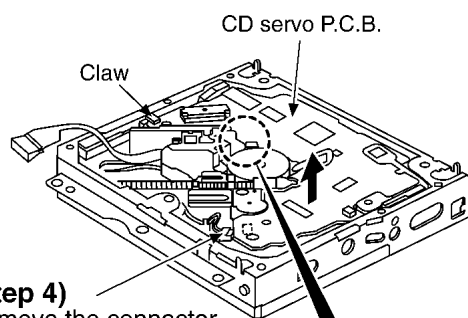


NOTE:
Insert a short pin into FFC of the optical pick-up.

(Step 3)
Release the claw and then lift up the CD servo P.C.B..

(Step 3)

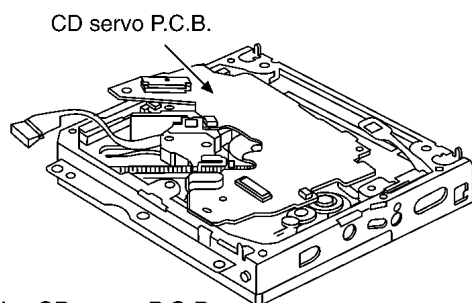
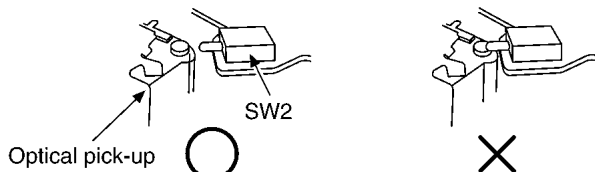
Release the claw and then lift up the CD servo P.C.B..

**(Step 4)**

Remove the connector.

Notice for installation of the CD servo P.C.B.

- Make sure the boss of switch (SW2) on main P.C.B. does not run on the optical pick-up.

**(Step 5)**

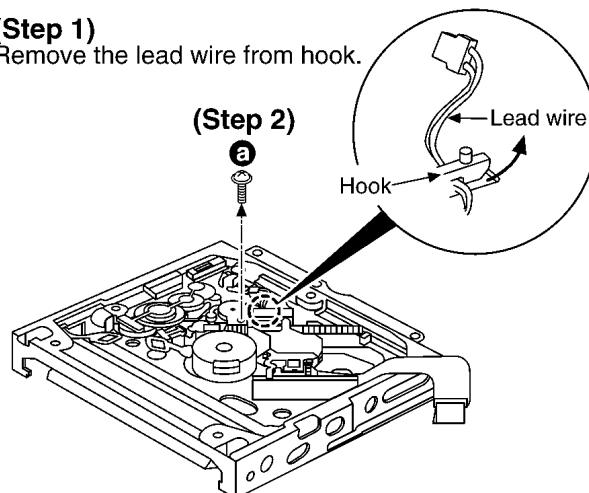
Remove the CD servo P.C.B..

8.13. Replacement for the optical pick-up

- Follow the (Step 1) - (Step 3) of item 8.1.
- Follow the (Step 1) of item 8.2.
- Follow the (Step 1) - (Step 9) of item 8.5.
- Follow the (Step 1) - (Step 4) of item 8.6.
- Follow the (Step 1) - (Step 5) of item 8.12.

(Step 1)

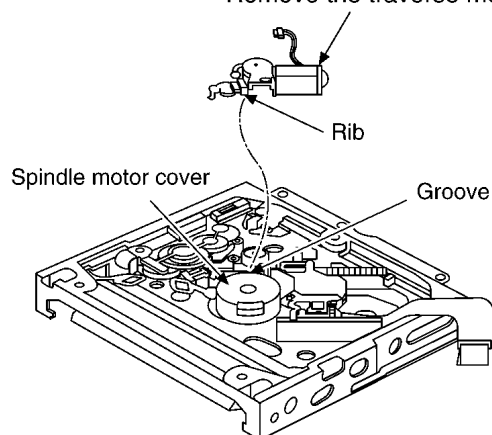
Remove the lead wire from hook.

**(Step 2)**

a

(Step 3)

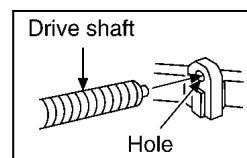
Remove the traverse motor ass'y.

**Notice for installation of traverse motor ass'y**

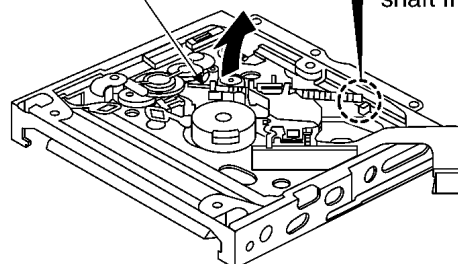
- Make sure the rib of traverse motor ass'y is fit in the groove of spindle motor cover.

(Step 4)

Lift up the drive shaft.

**(Step 5)**

Remove the drive shaft from hole.

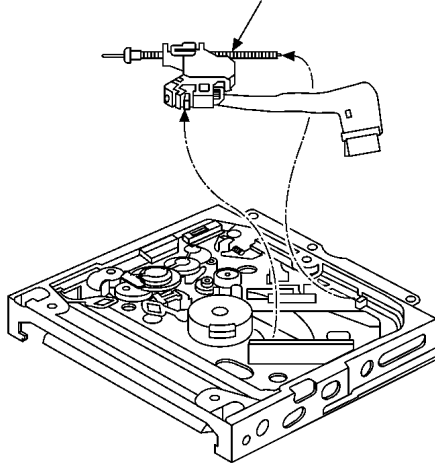


NOTE:

Do not touch the lens of the optical pick-up.

(Step 6)

Remove the optical pick-up.

**(Step 7)**

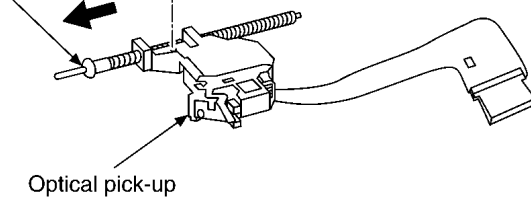
b

(Step 8)

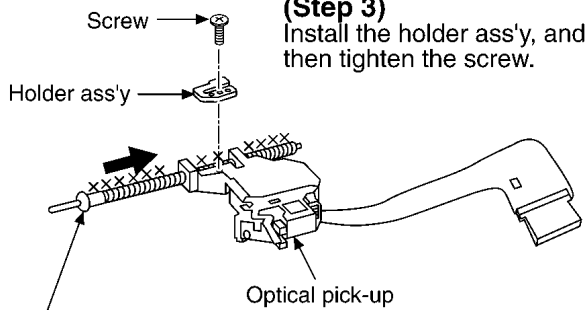
Remove the holder ass'y.

(Step 9)

Pull out the drive shaft.

**Installation of optical pick-up****(Step 1)**

Apply the specified grease to the areas marked "x x" as shown in the drawing.

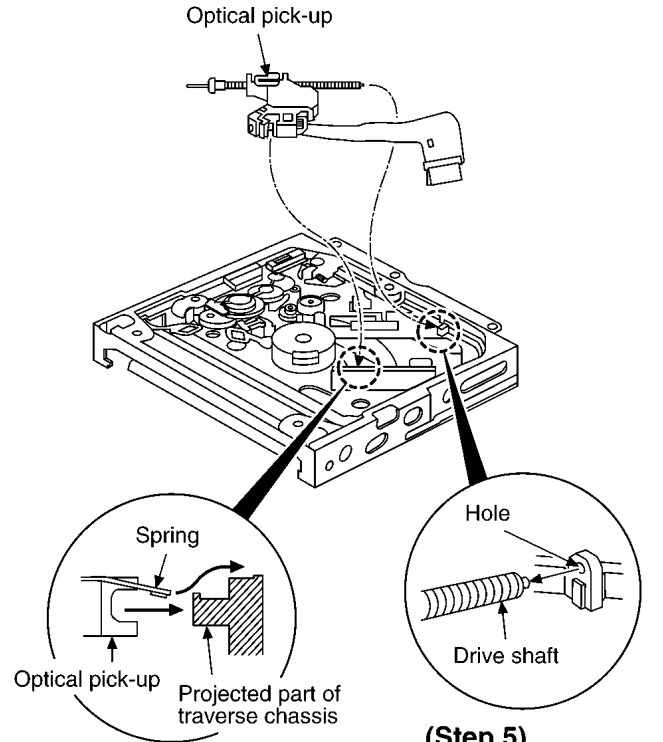
**(Step 3)**

Install the holder ass'y, and then tighten the screw.

(Step 2)

Install the drive shaft to the optical pick-up.

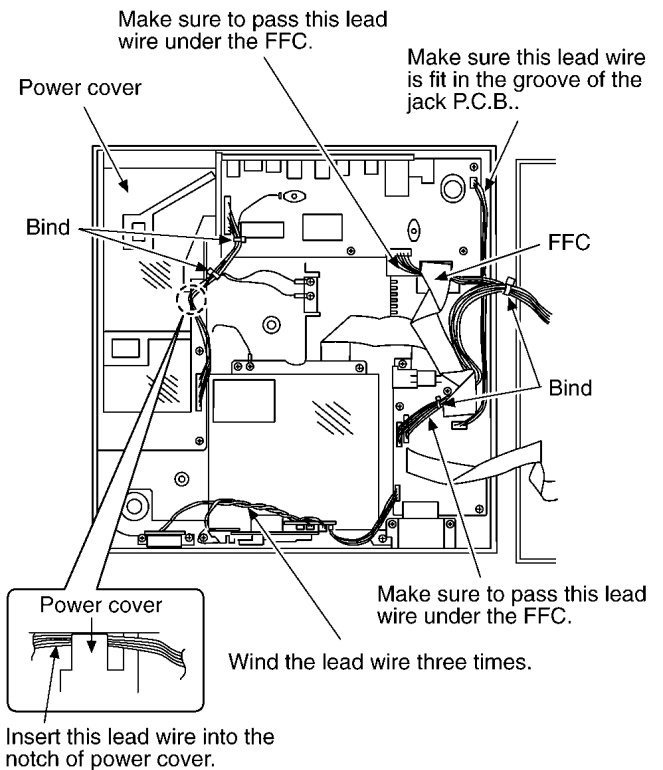
· Grease PART NO.: RFKXPG641

Optical pick-up**(Step 4)**

Install the optical pick-up into the projected part of traverse chassis.

(Step 5)

Install the drive shaft to the hole.

Line process

9 Technological Explanation of the Circuit and Signal

Composition of the parts: (Refer to the block diagram, Fig. 1)

POWER (power supply), JACK, MAIN, panel, motor (turntable), CD unit, LCD unit

Outline of the parts: (Refer to the block diagram, Fig. 1)

1. POWER (power supply) (Fig. 9)
 - SW power supply with multiple correspondence from 100 to 240 V
 - AC inlet and fuse differ according to the destination (the constants are used in common).
 - Output of +20 V, +15 V, +7 V, +5 V, +3.3 V, -15 V
 - Power supply for +20 V motor
 - Power supply for +15 V analog operation amplifier
 - Power supply for -15 V analog operation amplifier, power supply for LCD
 - Power supply for +7 V CD unit motor
 - +5 V system power supply
 - +3.3 V system power supply
 - +1.8 V system power supply (generated at the MAIN circuit board)
2. JACK
 - Composed of I/O JACK, SW, turntable drive circuit, analog circuit, etc.
 - Headphone JACK: 6.3 mm specification, stereo, 20 mW (at the time of a 32 ohm load)
 - Headphone volume: Variable
 - LINE OUT: RCA pin type, L/R ch
 - Digital output: COAXIAL
 - Control: Used with connection of stereo MINI, DZ, or MZ
 - Mode switching switch: Turntable mode (scratching is possible, turntable speed)
 - CD mode (scratching is not possible, the turntable does not turn)
 - Brake: The brake at the time of turntable mode becomes variable.
3. MAIN
 - System control is performed.
 - Composed of the three microcomputers UI, SC, and MD.
 - UI microcomputer: Control of the main panel
 - SC microcomputer: Mainly control of sound processing, LCD display, audio output
 - MD microcomputer: Mainly control of data reading, CD and SD data reading
4. Panel
 - Composed of switches, LEDs, adjustment controls, etc.
 - Panel switches, LED control, volume control
 - A/D method by resistance division, divided into 10 steps
5. Motor
 - This is the turntable motor circuit board.
 - It is composed of the motor common with SL1200.
6. CD unit
 - CD drive unit for CAR, with antivibration construction, max. 4x speed.
 - The MAIN circuit board uses an ATAPI connection.
7. LCD unit
 - This is a display LCD unit with 128 x 128 full dots and blue mode.

Explanation of the main signals:

UI microcomputer

- Panel control

SW10 to 40: SW input

SW input for SD open detection, CD/turntable switching, and switches other than EJECT

CD/SD: CD/SD switching input

REV: Reverse switch input

PCON: Pitch control switch input

CP0, 1, CPLED, CPDATA, CPCLK: LED control

STROBE: Stroboscope output

5. LCD (refer to the block diagram, Fig. 7)

Switch input



UI microcomputer



SC microcomputer <-- Acquisition of display data



LCD

6. Reset circuit (refer to the block diagram, Fig. 8)

Reset circuits exist for +5 V, +3.3 V, and +1.8 V, and the operation is independent in regard to the circuit boards.

In the end, +3.3 V performs overall control.

DZ1200 system block diagram

Fig 1

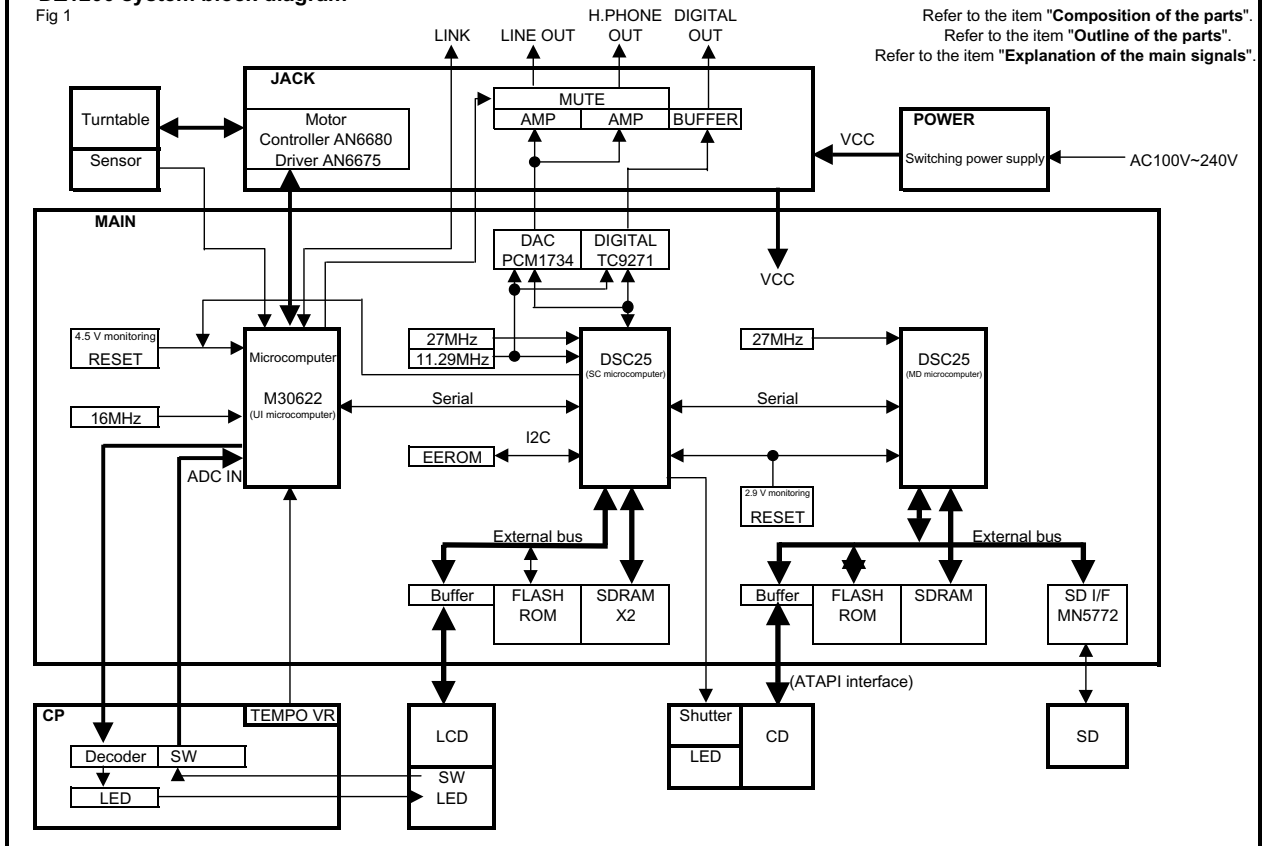
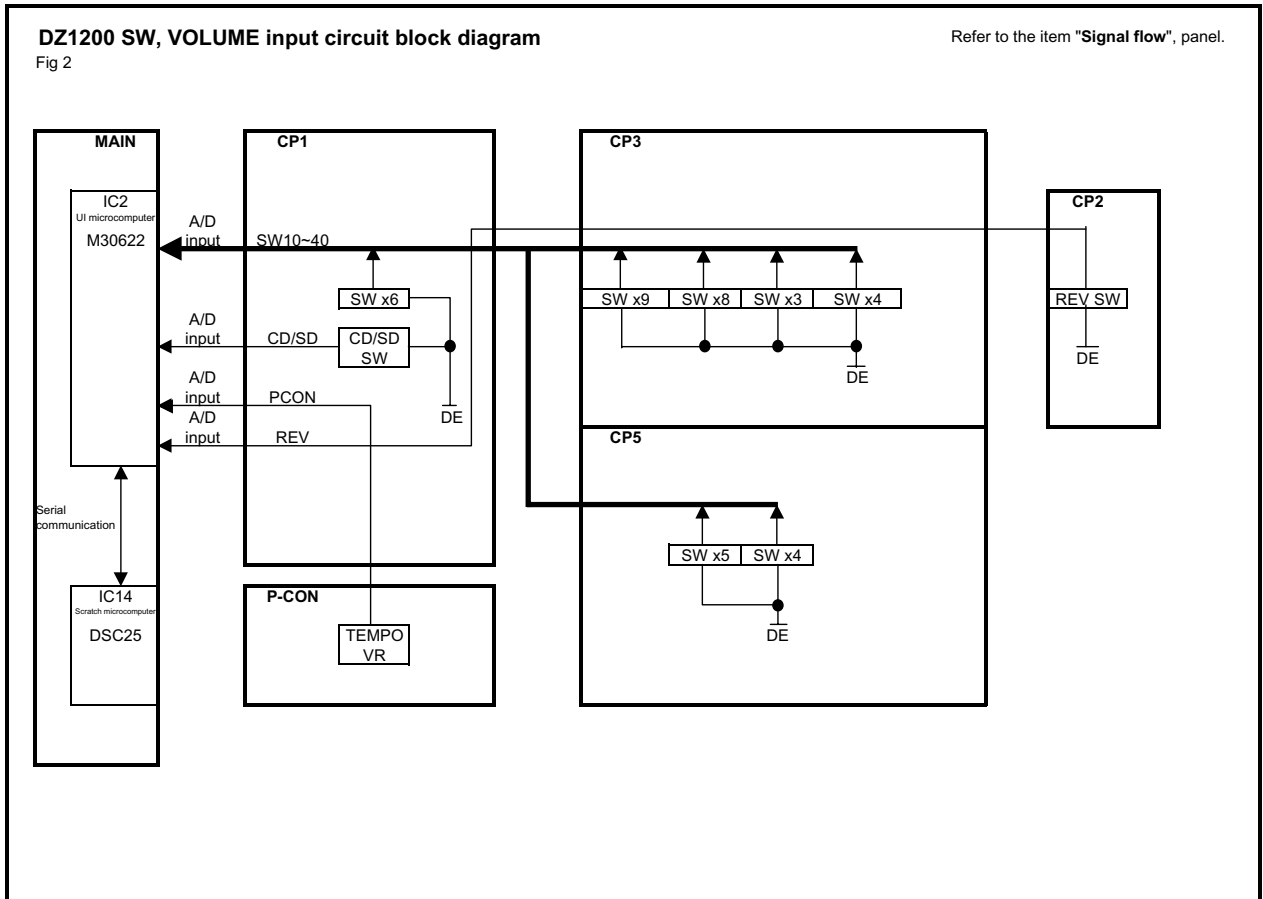
**DZ1200 SW, VOLUME input circuit block diagram**

Fig 2

Refer to the item "Signal flow", panel.



DZ1200 LED output circuit block diagram

Fig. 3

Refer to the item "Signal flow", LED.

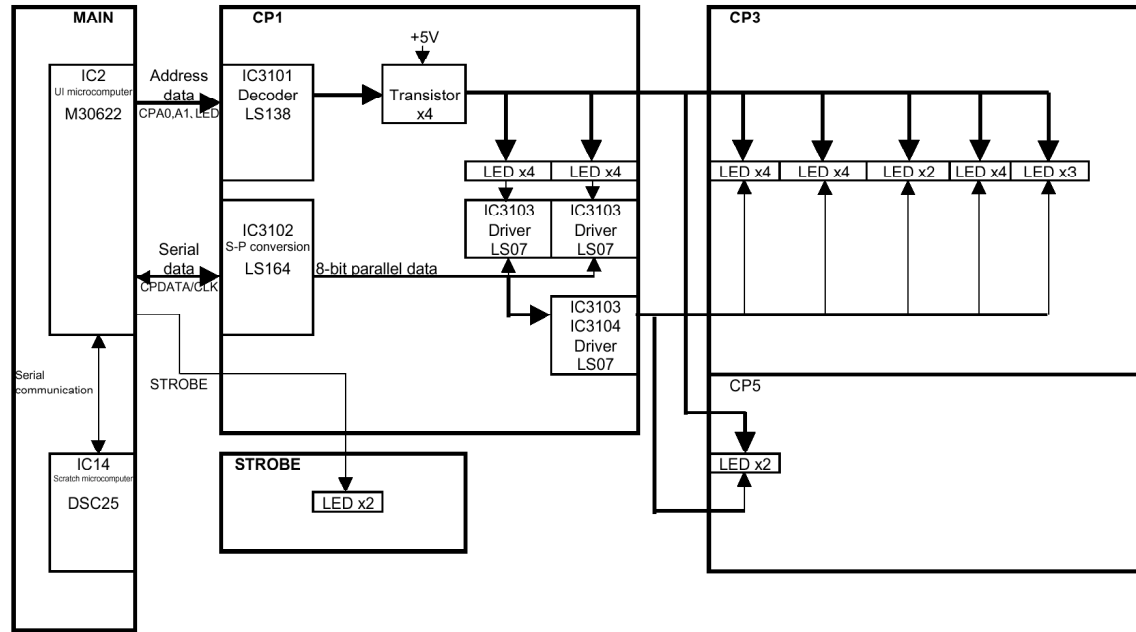
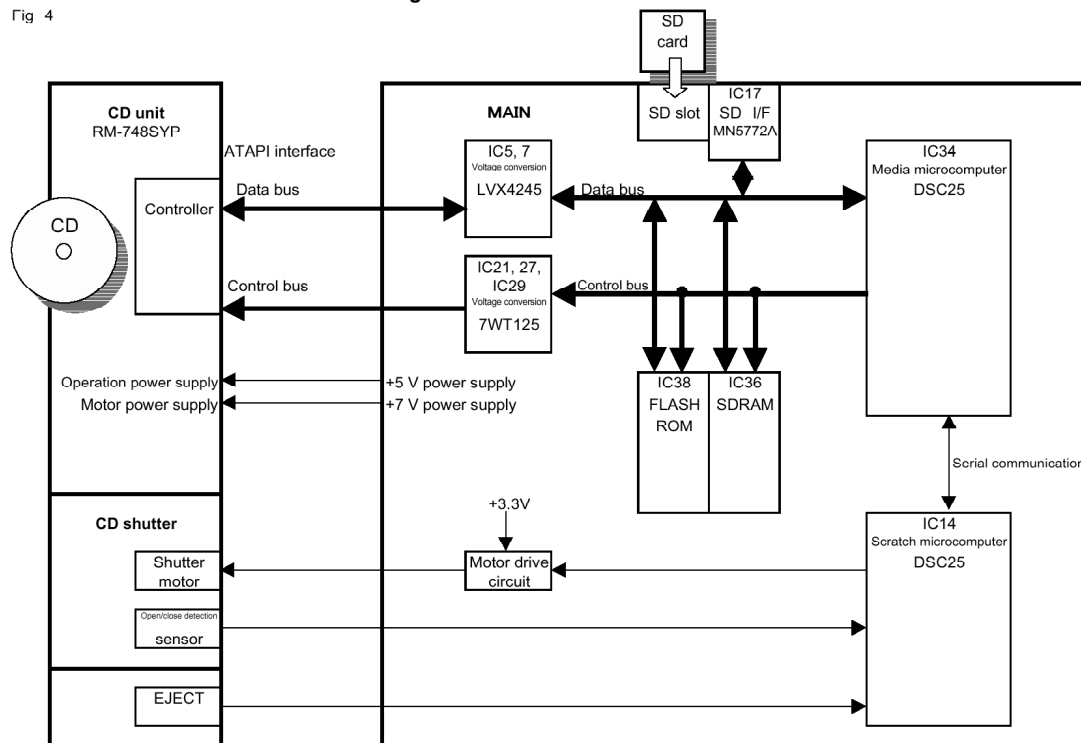
**DZ1200 CD/SD access circuit block diagram**

Fig. 4

Refer to the item "Signal flow", CD, SD audio flow.



DZ1200 audio output circuit block diagram

Fig 5

Refer to the item "Signal flow", CD, SD audio flow.

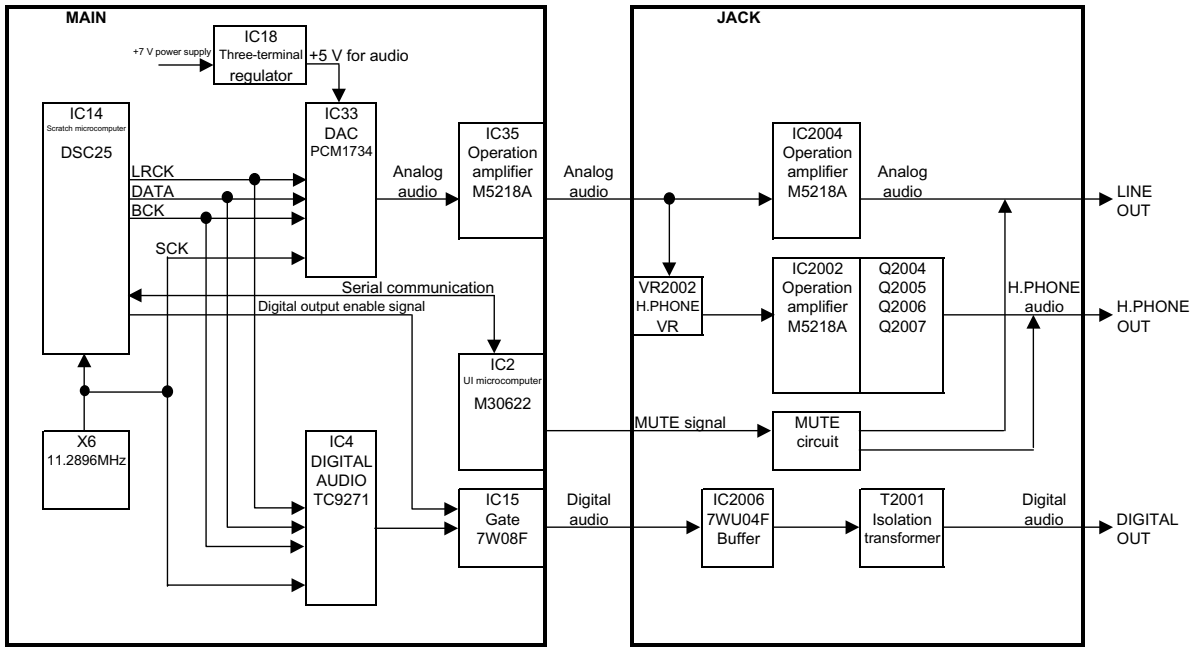
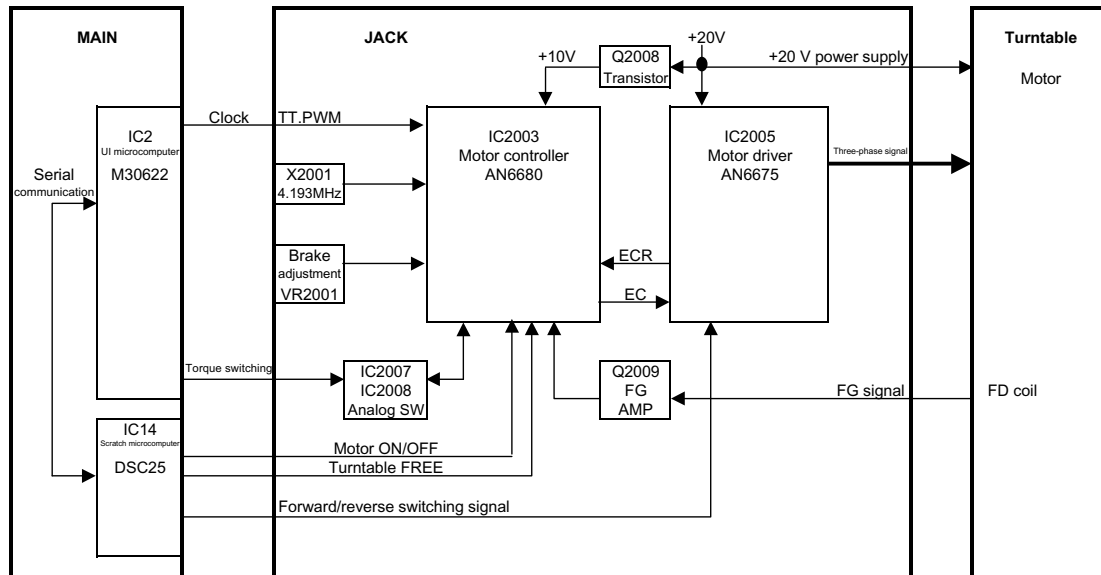
**DZ1200 turntable control circuit block diagram**

Fig 6

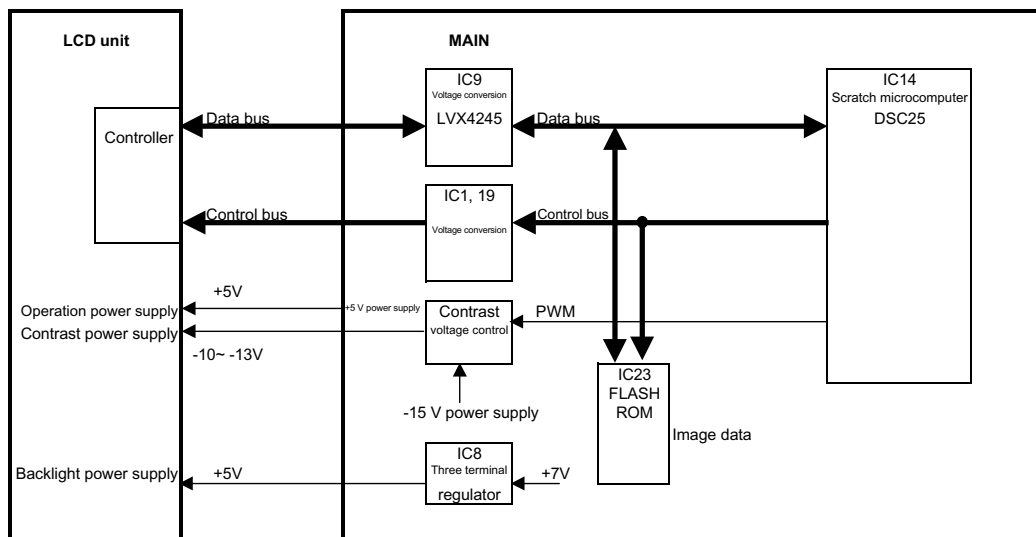
Refer to the item "Signal flow", turntable.



DZ1200 LCD access circuit block diagram

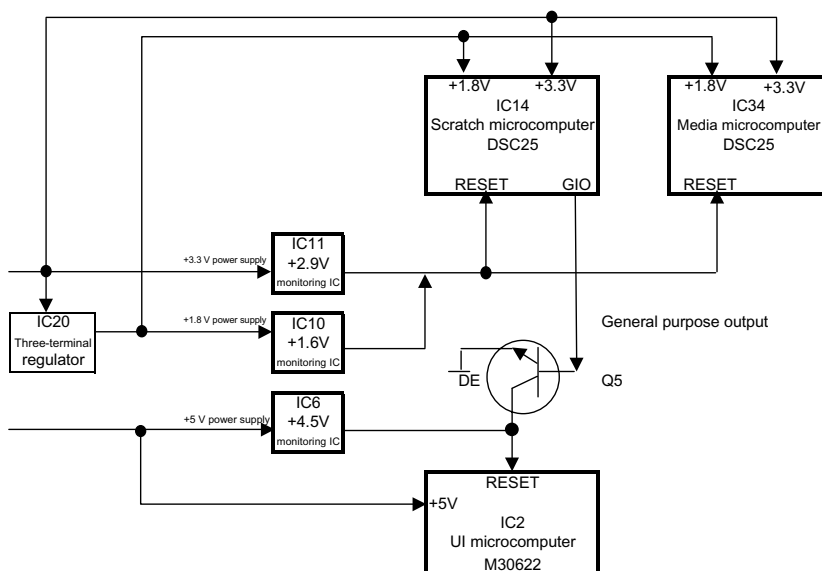
Refer to the item "Signal flow", LCD.

Fig 7

**DZ1200 reset circuit block diagram**

Refer to the item "Signal flow", reset circuit.

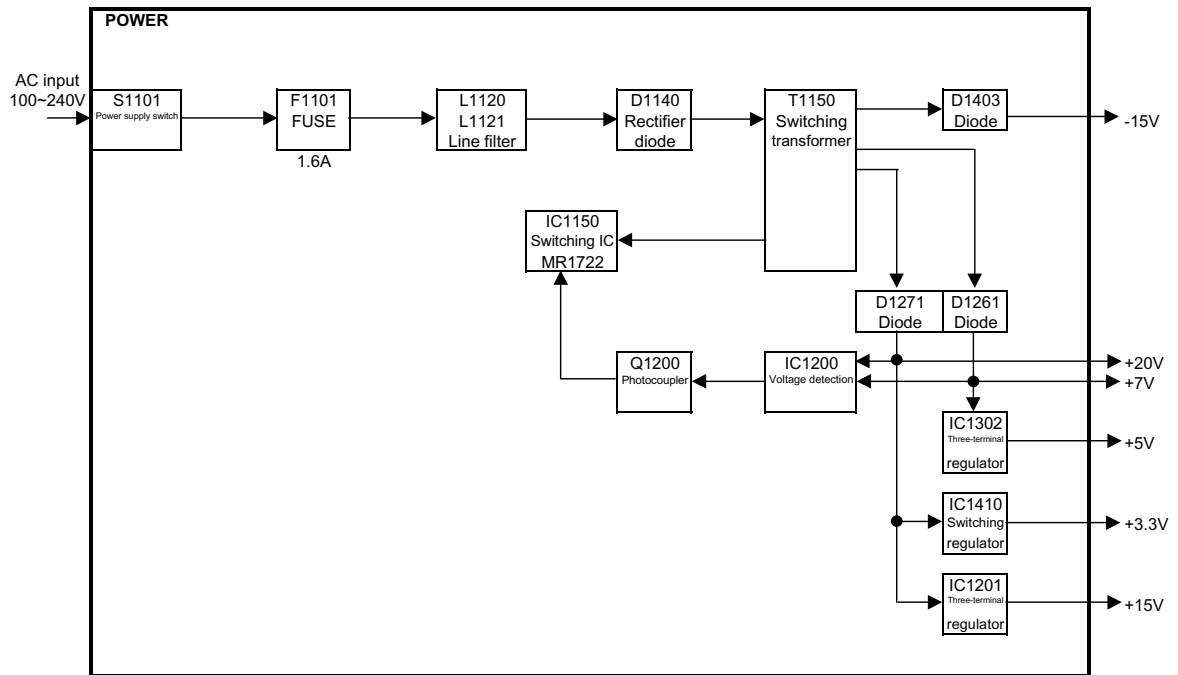
Fig 8



DZ1200 POWER circuit board power supply circuit block diagram

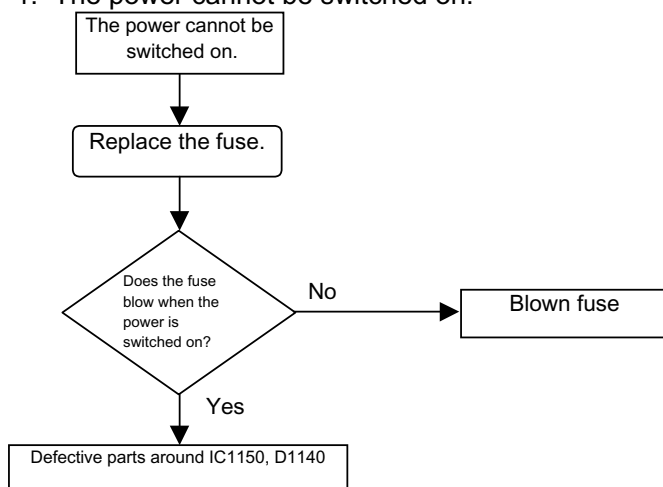
Refer to the item "Outline of the parts", POWER (power supply).

Fig 9

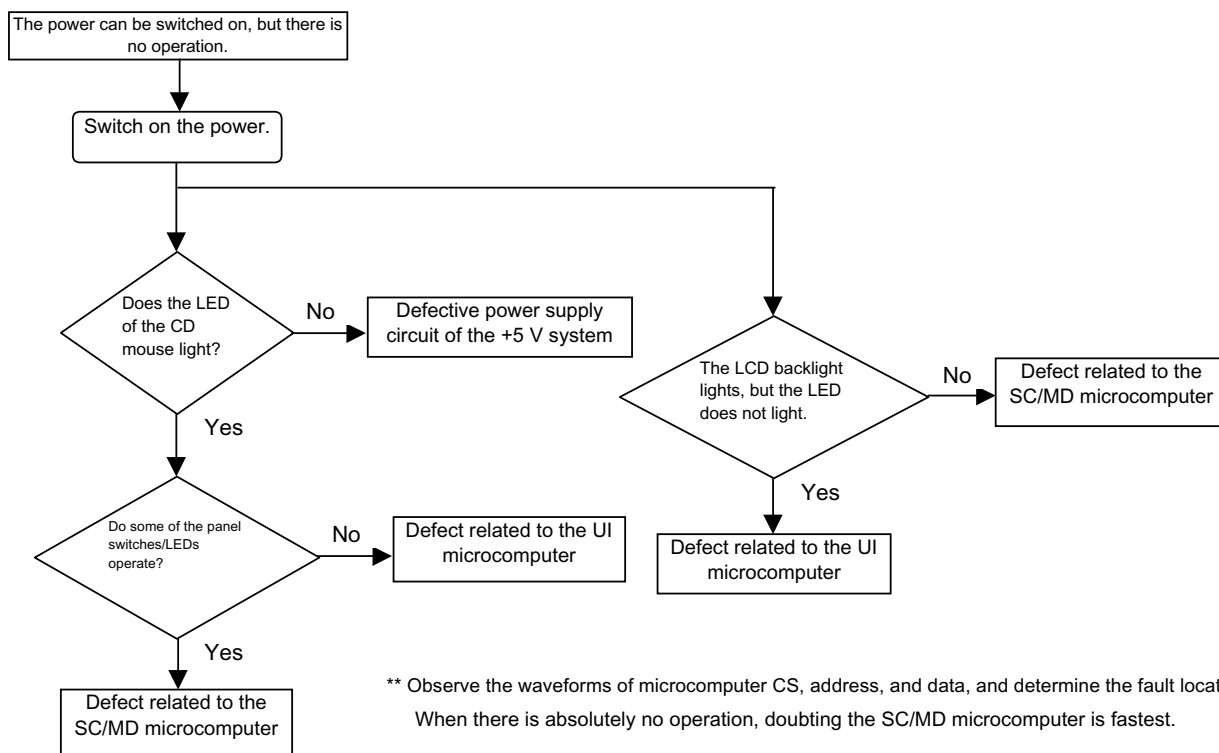


Fault mode analysis: (Refer to the table of fault symptoms and countermeasures.)

1. The power cannot be switched on.

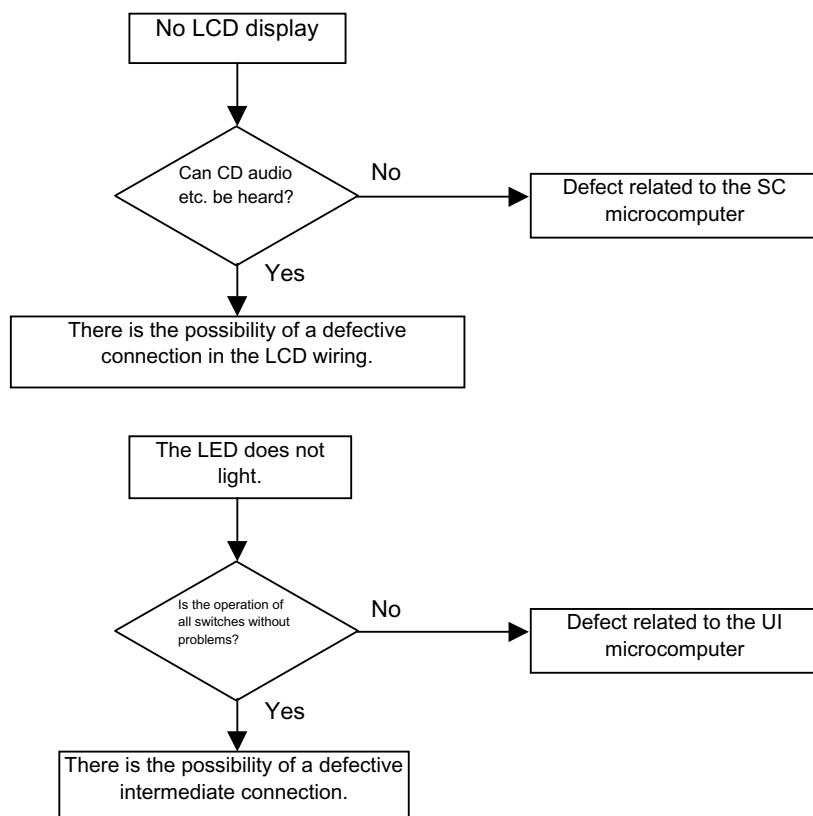


2. The power can be switched on, but there is no operation.

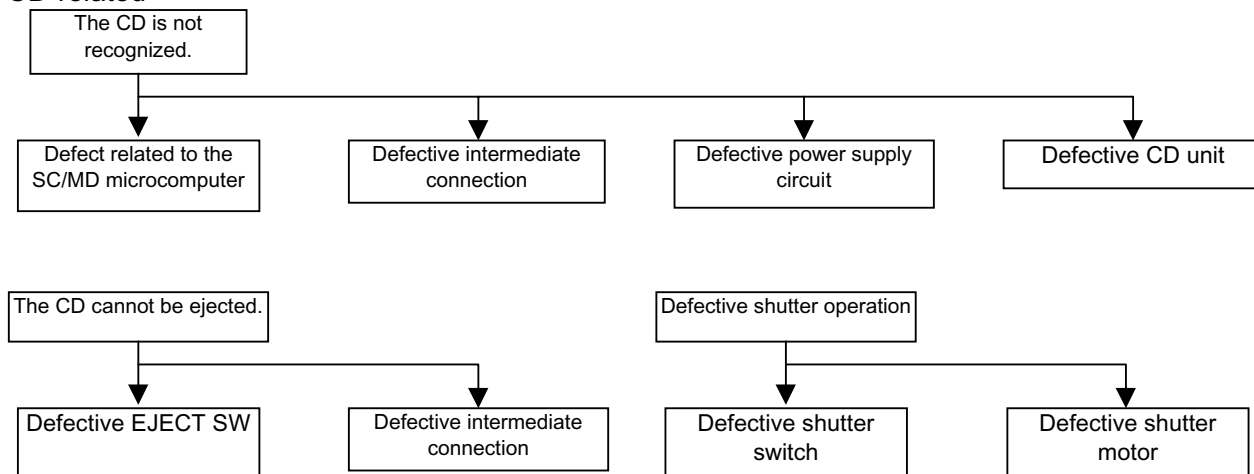


** Observe the waveforms of microcomputer CS, address, and data, and determine the fault location.
When there is absolutely no operation, doubting the SC/MD microcomputer is fastest.

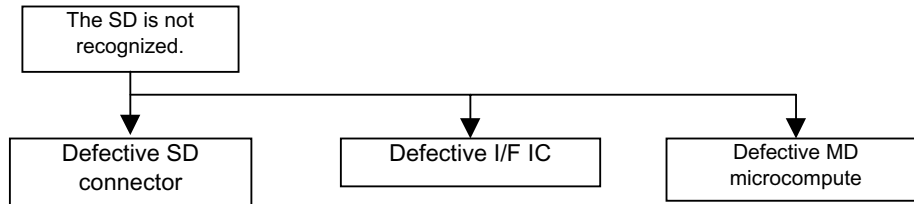
3. Display-related



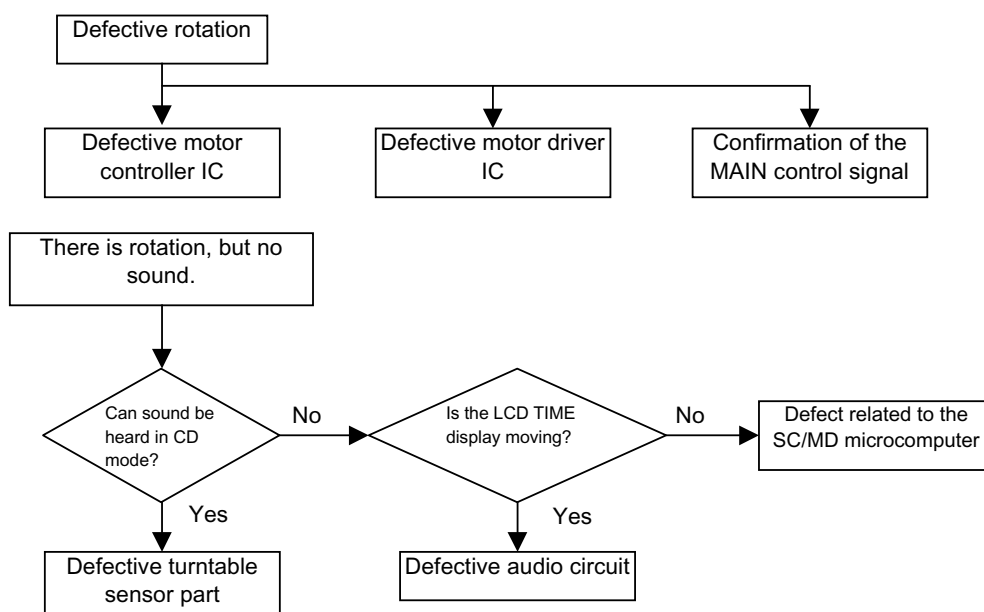
4. CD-related



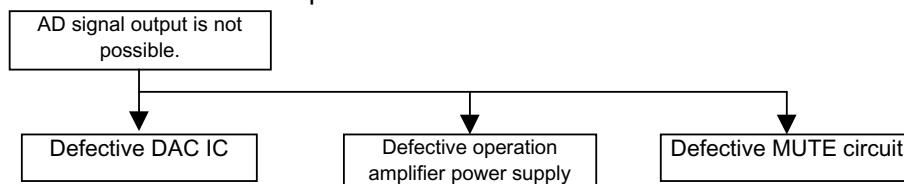
5. SD-related



6. Turntable-related



7. Related to the audio output

**Analysis points:**

1. There are three microcomputers.

The panel operates when UI is running.

When the LED of the PAD button flashes when "REALTIME REC" is pressed while the power is on, SC also is OK.

2. MD also is OK when updating from SD is possible.
3. SC/MD operation judgment and sensor judgment can be made by turntable/CD mode switching.
4. Confirm the power supply if the system is unstable.
5. Use test mode.
6. As the panels are connected in the order of CP1 --> CP5 --> CP3, confirm the preceding one.
7. For analog trouble, confirmation with a test CD (sine wave) is faster as the circuit is simple.
8. CD and SD have different connections to the MD microcomputer, but the signal flow after the input is in common.

Table of fault symptoms and countermeasures (for repair)

** The following fault symptoms assume that a product which operated perfectly at the time of shipping has become defective.

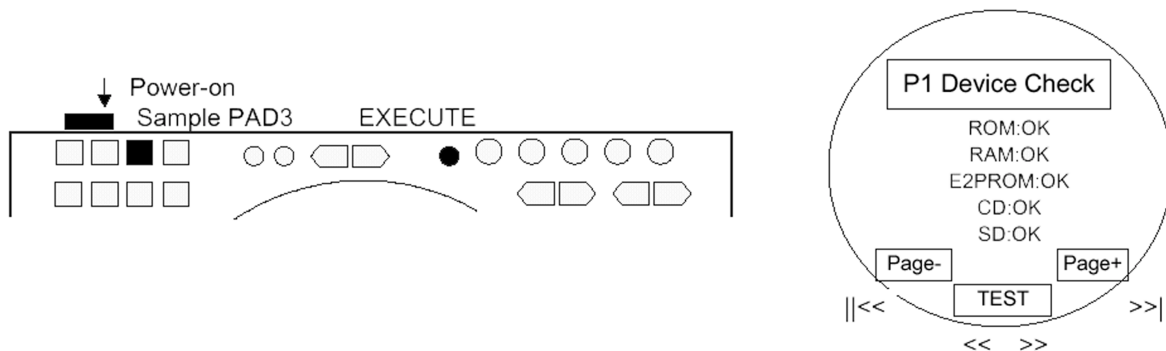
	Symptom	Individual symptom	Possible causes	Defect location, countermeasures
1	Related to the power supply	The power cannot be switched on at all.	Blown fuse	Replace the fuse on the POWER circuit board.
			None of the power supplies is put out.	IC1150 and D1140 on the POWER circuit board and their surroundings
			+1.8 V is not put out.	IC20 and D2 on the MAIN circuit board and their surroundings Check that +1.8 V is applied to C13 on the MAIN circuit board.
			The +3.3 V power supply is not put out.	IC1410 and L1271 on the POWER circuit board and their surroundings POWER circuit board fuse protector FP1400
			The +5 V power supply is not put out.	IC1302 and D1261 on the POWER circuit board and their surroundings Check that +5 V is applied to C15 on the MAIN circuit board.
			The +7 V power supply is not put out.	POWER circuit board D1261 Check that +7 V is applied to C19 on the MAIN circuit board.
			The +15 V power supply is not put out.	IC1201 on the POWER circuit board and its surroundings Power circuit board resistor R1211
			The +20 V power supply is not put out.	D1271 on the POWER circuit board and its surroundings
			The -15 V power supply is not put out.	D1403 on the POWER circuit board and its surroundings
		Each power supply is normal, but there is no operation.	Microcomputer-related defect	IC2, IC14, and IC34 on the MAIN circuit board and their surroundings
			Defective connection between MAIN-JACK circuit board and POWER-JACK circuit board	Confirmation of the connection cable Pay attention to the orientation.
			Defective oscillation circuit	X1, X3, X5 on the MAIN circuit board and their surroundings Confirm that X1 oscillates at 8 MHz and X3 and X5 at 27 MHz.
			Defective reset circuit	IC6 and IC11 on the MAIN circuit board and their surroundings Output of +5 V for the output of IC6 on the MAIN circuit board and output of +3.3 V for the output of IC11
			Memory-related defects	IC23, IC24, IC25, IC36, and IC38 on the MAIN circuit board
2	Display-related	Nothing is displayed on the LCD.	Defective connection between MAIN and LCD relay circuit board	Connection confirmation, connecting cable replacement
			Defective connection between relay circuit board and LCD	Connection confirmation, FFC cable replacement
			Defective LCD control circuit	IC1, IC9, and IC13 on the MAIN circuit board and their surroundings
			Defective contrast -15 V power supply	IC12, Q7, and Q8 on the MAIN circuit board and their surroundings Confirm that approximately -10 V to -13 V is put out to C6 on the MAIN circuit board.
			Defective LCD unit	Replacement of the LCD unit
			Defective microcomputer on the scratch side	IC14 on the MAIN circuit board and its surroundings
		Dark LCD	Defective backlight power supply	IC8 on the MAIN circuit board and its surroundings Confirm that +5 V is put out for the output of IC8.
			Defective backlight LED in the LCD	Replacement of the LCD unit
			Wire break in the FFC cable of the LCD circuit board	Replacement of the LCD unit or the FFC cable
		The LCD display shows incorrect characters.	Defective connection between relay circuit board and LCD	Connection confirmation, FFC cable replacement
			Defective LCD control circuit	IC1, IC9, and IC13 on the MAIN circuit board and their surroundings
			Defective LCD unit	Replacement of the LCD unit
		Some or all LEDs do not light.	Defective LED parts	Replacement of the respective LEDs
			Defective connection between MAIN and CP	Connection confirmation, FFC cable replacement
			Defective connection between CP1 and CP3	Connection confirmation, FFC cable replacement
			Defective connection between CP1 and CP5	Connection confirmation, cable replacement
			Defective LED decoding circuit on the CP circuit board	IC3101, IC3102, IC3103, IC3104, Q3101, Q3102, Q3103, and Q3104 on the CP circuit board and their surroundings
			Defective operation of the UI microcomputer	IC2 on the MAIN circuit board and its surroundings

	Symptom	Individual symptom	Possible causes	Defect location, countermeasures
3	CD-related	CD loading is not possible.	Defective +7 V CD motor power supply Defective CD unit	Confirmation of the +7 V power supply of the POWER circuit board Check that approx. +7 V is applied to C19 on the MAIN circuit board. CD unit replacement
		CD ejection is not possible.	Defective wiring of the CD eject button Defective wiring between MAIN and CD unit	Confirmation of the wiring between MAIN and CDOPSW circuit board Confirmation of the wiring between CDOPSW circuit board and EJECT circuit board Connection confirmation, FFC cable replacement
		The CD is not recognized correctly.	Defective wiring between MAIN and CD unit Defective CD control signal Defective media microcomputer Defective CD unit	Connection confirmation, FFC cable replacement IC3, IC5, IC21, IC22, IC27, and IC29 on the MAIN circuit board and their surroundings IC27 on the MAIN circuit board and its surroundings CD unit replacement
		The CD does not turn.	Defective +7 V CD motor power supply Defective CD unit	Confirmation of the +7 V power supply of the POWER circuit board Check that approx. +7 V is applied to C19 on the MAIN circuit board. CD unit replacement
		The shutter does not open and close.	Defective shutter motor Defective motor drive circuit Defective connection between MAIN and CDOPSW circuit board	Shutter motor and its surroundings Q2, Q3, Q10, and Q11 on the MAIN circuit board and their surroundings Confirmation of the wiring between MAIN and CDOPSW circuit board Confirmation of the wiring between CDOPSW and motor
		The shutter motor operates continuously.	Defective shutter open/close detection switch	Defective SW2301, SW2302 on the CDOPSW circuit board
		Recording of CD title information is not possible.	Defective record EEROM	IC16 on the MAIN circuit board and its surroundings
4	SD-related	No recognition	Defective SD lid open/close detection switch Defective SD I/F IC Defective SD key wiring	SW1 on the MAIN circuit board and its surroundings IC17 and CN4 on the MAIN circuit board and their surroundings SD key rewriting
		Reading is not possible.	Defective SD I/F IC Defective operation of the microcomputer on the media side	IC17, CN4, and Q4 on the MAIN circuit board and their surroundings IC34 on the MAIN circuit board and its surroundings
5	Turntable-related	No turning	Defective connection between MAIN and JACK circuit board Defective connection between JACK and MOTOR circuit board Defective motor control IC Defective rotation pulse output Defective motor start signal output Defective motor	Connection confirmation, FFC cable replacement Pay attention to the orientation. Connection confirmation, cable replacement IC2003 and IC2005 on the JACK circuit board and their surroundings IC2 and CN7 on the MAIN circuit board and their surroundings JACK circuit board IC2003 IC2 and CN7 on the MAIN circuit board and their surroundings JIC2003 and Q2010 on the JACK circuit board and their surroundings Motor circuit board replacement
			Defective +3.3 V microcomputer power supply Defective connection between MAIN and JACK circuit board	Confirmation of the +3.3 V power supply of the POWER circuit board Check that +3.3 V is applied to C14 on the MAIN circuit board. Connection confirmation, FFC cable replacement Pay attention to the orientation.
			Defective switching signal Defective connection of the forward/reverse switch	Q2003 on the JACK circuit board and its surroundings Confirmation of the connection between CP2 and CP3
			Defective motor control IC	IC2003 and IC2005 on the JACK circuit board and their surroundings
			Defective rotation detection sensor Defective connection between SENSOR and relay circuit board	SENSOR circuit board SENSOR replacement Confirm lighting of the SENSOR LED. Connection confirmation, cable replacement
			Defective rotation detection FG circuit Defective motor control IC	IC2003 and Q2009 on the JACK circuit board and their surroundings IC2003 and IC2005 on the JACK circuit board and their surroundings
		Vacillation of the stroboscope with -50% slow rotation	Defective motor torque switching circuit	IC2007, IC2008, Q2019, and Q2020 on the JACK circuit board and their surroundings
		Unwanted rotation at the time of power supply start	Defective +3.3 V microcomputer power supply Defective connection between MAIN and JACK circuit board	Confirmation of the +3.3 V power supply of the POWER circuit board Check that +3.3 V is applied to C14 on the MAIN circuit board. Connection confirmation, FFC cable replacement Pay attention to the orientation.
		Forward/reverse switching is not possible.	Defective switching signal Defective connection of the forward/reverse switch	Q2003 on the JACK circuit board and its surroundings Confirmation of the connection between CP2 and CP3
		Bad brake effectiveness	Defective motor control IC	IC2003 and IC2005 on the JACK circuit board and their surroundings

	Symptom	Individual symptom	Possible causes	Defect location, countermeasures
6	Output-related	No audio output for LINE OUT and headphone	Defective +15 V, -15 V power supply	Confirmation of +15 V and -15 V power supply on the POWER circuit board
			Defective MUTE circuit	Q2001, Q2002, Q2012, Q2013, Q2014, Q2015, Q2016, Q2017, and Q2018 on the JACK circuit board and their surroundings
			Defective audio DAC	IC33 and IC18 on the MAIN circuit board and their surroundings Confirm that +5 V is put out for the output of IC18.
			Defective audio amplifier	IC35 on the MAIN circuit board and its surroundings
			Defective audio clock circuit	X6 and IC32 on the MAIN circuit board and their surroundings Confirm that 11.2989 MHz is oscillated.
		Distorted output to LINE OUT and headphone	Defective +15 V, -15 V power supply	Confirmation of +15 V and -15 V power supply on the POWER circuit board
			Defective three-terminal regulator for the audio DAC	IC18 on the MAIN circuit board and its surroundings
		No sound from LINE OUT L, R	Defective LINE OUT amplifier	IC2004 on the JACK circuit board and its surroundings
		No sound from LINE OUT L	Defective Lch MUTE circuit Defective LINE OUT amplifier	Q2016 on the JACK circuit board and its surroundings IC2004 on the JACK circuit board and its surroundings
		No sound from LINE OUT R	Defective Rch MUTE circuit Defective LINE OUT amplifier	Q2015 on the JACK circuit board and its surroundings IC2004 on the JACK circuit board and its surroundings
		No sound from the headphone or low volume	Defective headphone amplifier	IC2002, Q2004, Q2005, Q2006, and Q2007 on the JACK circuit board and their surroundings
		No sound from the left headphone	Defective Lch MUTE circuit Defective headphone amplifier	Q2018 on the JACK circuit board and its surroundings IC2002, Q2004, and Q2005 on the JACK circuit board and their surroundings
		No sound from the right headphone	Defective Rch MUTE circuit Defective headphone amplifier	Q2017 on the JACK circuit board and its surroundings IC2002, Q2006, and Q2007 on the JACK circuit board and their surroundings
		No digital output (there is analog output)	Defective digital audio IC Defective digital output circuit system	IC4 on the MAIN circuit board and its surroundings IC15 on the MAIN circuit board and its surroundings IC2006 on the JACK circuit board and its surroundings
7	Switch- and button-related	No reaction from any switch or button	Defective operation of the UI microcomputer	IC2 on the MAIN circuit board and its surroundings
			Defective connection between MAIN and CP1	Connection confirmation, FFC cable replacement
		No reaction of LCD panel buttons	Defective operation of the UI microcomputer	IC2 on the MAIN circuit board and its surroundings
			Defective connection between MAIN and CP1	Connection confirmation, FFC cable replacement
			Defective connection between CP1 and CP3 Defective connection between CP1 and CP5	Connection confirmation, FFC cable replacement Connection confirmation, cable replacement
		No reaction by a specific button	Defective operation of the UI microcomputer	IC2 on the MAIN circuit board and its surroundings
			Defective connection between MAIN and CP1 Defective connection between CP1 and CP3 Defective connection between CP1 and CP5	Connection confirmation, FFC cable replacement Connection confirmation, cable replacement
8	Link operation	No link operation	Defective operation of the UI microcomputer	IC2 on the MAIN circuit board and its surroundings
			Defective diode parts	Replacement of D2004, D2005, D2006, and D2007 on the JACK circuit board

10 Self-diagnosis function

- Start by switching on the power while pressing EXECUTE, SAMPLE PAD3 for the finished product.
Select the following pages with the buttons (||<< and >>||) at the lower part of the LCD.



10.1. DEVICE TEST

- Press the [TEST] button: ROM/RAM/E2PROM diagnosis and CD/SD interface diagnosis is performed and OK/NG is displayed on the LCD.
ROM/RAM shows the ROM/RAM contents of SC&MD added outside the microcomputer. CD/SD means sending a signal to the unit and receiving an answer.
- Insert a CD: The first title of the CD automatically starts to play. →Signal confirmation at LINE OUT.
- Press the start button with a CD inserted or after inserting a CD. Perform TT forward with tempo ± 0 . →Visually confirm that the stroboscope is stopped.
- All LEDs flash with entry to this page. Return to normal condition by real-time REC button operation or escape to page 1.



10.2. TT BRAKE TEST

- Set the brake to the maximum for FAST and press the start button with a CD inserted. (Please Wait is displayed for some time.) Press the [FAST] button when steady rotation has been reached. →The TT count from pressing [FAST] until complete stop is measured and the value is displayed on the LCD.
Next, set to the maximum for SLOW, press the start button, and then press the [SLOW] button in the same way to display the respective results on the LCD. (SLOW inspection is possible only after FAST has been performed once.)
Judgment standard: [FAST] Within 80 degrees (TT count values 15858) OK, [SLOW] Angle difference from FAST within 60 degrees (count value 11894 or more) OK
- Tempo reset is done automatically with entry to this page.



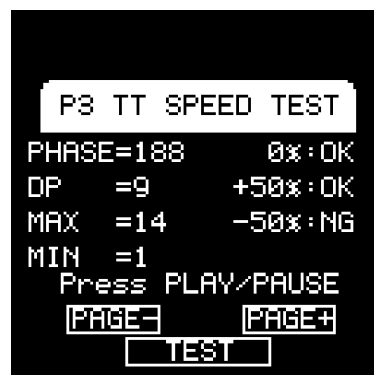
10.3. TT SPEED (Phase) TEST

- Press the start button with a CD inserted, move the tempo slider sequentially to 0, +50%, and -50%, and press [TEST].
(Perform this operation manually. This also serves for inspection of the slider itself). At this time, automatic counting is performed on the inside (a measuring time of TT 1.5 revolutions each is required), and when the upper and lower limit range set in advance is not exceeded, OK is displayed on the LCD, while NG is displayed when the range is exceeded → Phase deviation (DP value) within 12 between MAX and MIN.

Note:

- For the measuring of page 3, it is required to wait until the TT speed has stabilized before the [TEST] button is pressed.
- At the same time, the cogging deviation width also is displayed on the LCD. (OK/NG display also is performed if upper and lower limit have been decided.)
- When the tempo slider is not set to $\pm 50\%$ or 0% and if tempo reset is not in ON condition, measuring does not start even when [TEST] is pressed.

→In case of NG, a defect of the shaft in case of a mechanical fault, a defective servo constant in case of an electrical defect, or defective parts can be assumed.



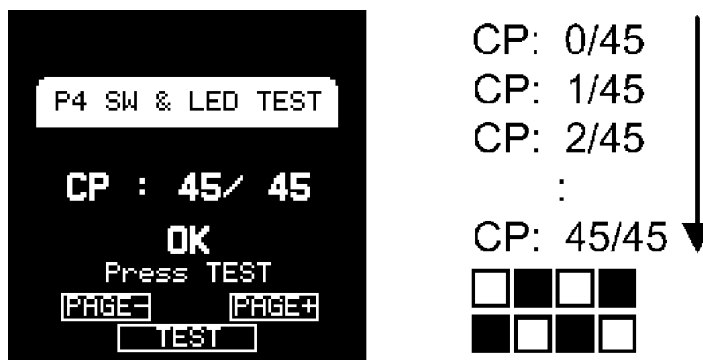
10.4. SW & LED TEST

- Press [TEST] to start the inspection.
- Each time a switch on the control panel is pressed, the LED near the switch lights, so that the operation can be confirmed.
- Each time all switches on the control panel, the mode switch on the rear, CD-EJECT at the front, or the front SD lid are operated, The inspected items are counted up on the LCD, and when all operations have been completed, the LEDs on the PAD part light as shown on the right to indicate completion.
- Lighting of all LEDs can be confirmed with the real-time REC switch.

Note:

Switches with two states become OK with operation through both states. (Play selection CD/SD, TT direction lever, SD lid). The tempo slider has to be moved only once.

The brake VOL and headphone VOL on the rear cannot be recognized by the microcomputer and are not inspection objects.



10.5. LED TEST

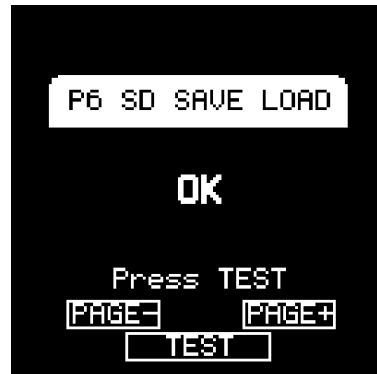
- Press [TEST] to start the inspection.
- The LCD display is changed with the two switches at the lower part of the LCD. (<< >>)
→(||<<. >>||) on both sides are switches for page switching in the sameway as for the other pages, and this should be noted.

- | | | |
|----|---|--|
| 1: | ↑ | All bits OFF (blue back) |
| 2: | ↑ | All bits ON (all white) |
| 3: | ↑ | Cross hatch (checkerboard pattern) |
| 4: | ↑ | Window (all ON, horizontal rectangular window at the center OFF) |



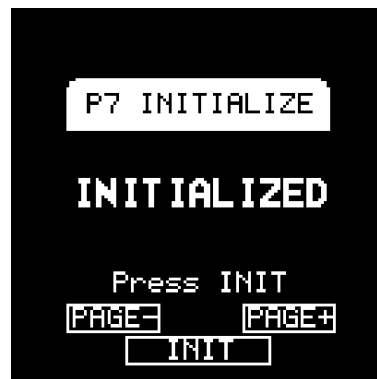
10.6. SD SAVE / LOAD

- Insert an SD card into the slot.
- Press [TEST] to start the inspection. (Root-dir: 1 KB: TEST.TET. Deleted at the end, independent of OK or NG)
- OK is displayed on the LCD when reading and writing are performed normally, while NG is displayed in case of an abnormality.



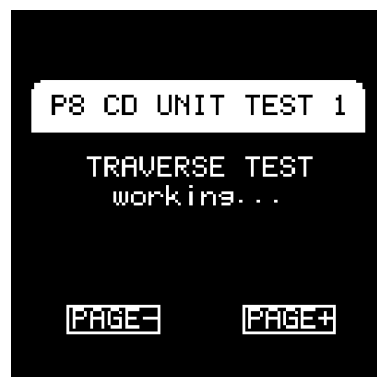
10.7. INITIAL

- When [INIT] is pressed, initialization to the factory preset values is performed, and the settings for 50 media CUEPAD, LOOP, and AUTOCUE and the LCD display angle are initialized. (The LCD contrast is changed to no change.)



10.8. CD UNIT TEST 1

- When a CD is inserted and start is performed, the first five seconds of the first title are played, the first five seconds of the last title are played, and then the CD is ejected.
- If the unit is left in this condition, automatic reloading is performed after 10 seconds, and then the operation from playing of the first five seconds of the first title on is repeated endlessly.
- Approximately the same operation as for the traverse test.



11 Cautions after Exchange of the Flash ROM (IC23)

This unit uses a flash ROM (IC23) for the program ROM. The program in the flash ROM (IC23) can be written and rewritten electrically. With this unit, an SD card with a written program is inserted in advance into the main unit, and then the program is

written to the flash ROM (IC23). When the flash ROM (IC23) has been replaced, perform this service according to the following procedure.

11.1. About obtaining the program.

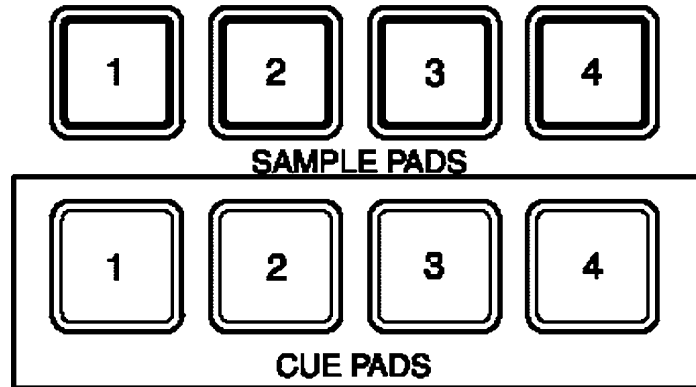
Please obtain the data through your local Panasonic service organization.

Note:

- Don't change a file name after download.
- Copy to the root directory of SD card.
- Use 64 M bytes or less of SD card.
- Format SD card in this unit. It does not format with a personal computer.

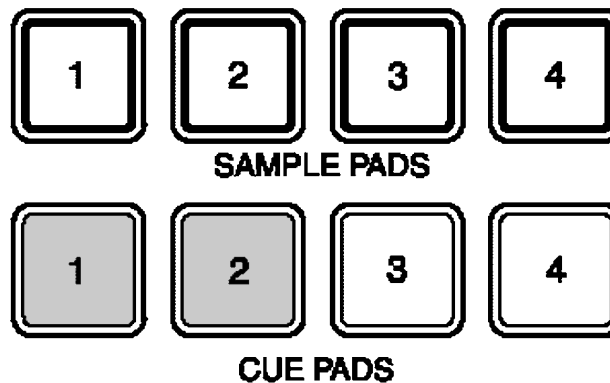
11.2. Program Writing to the Flash ROM (IC23) after Replacement

1. Insert the SD card to which the program has been written into the SD Memory card slot.
2. Switch on the power while keeping the CUE PADS buttons {1}, {2}, {3}, and {4} all pressed.



Switch on the power while holding all of these buttons pressed.

3. The lamps of the CUE PADS {1} and {2} light and writing to the flash ROM (IC23) starts.

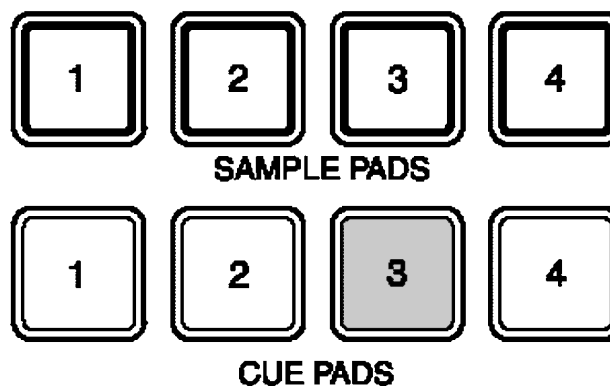


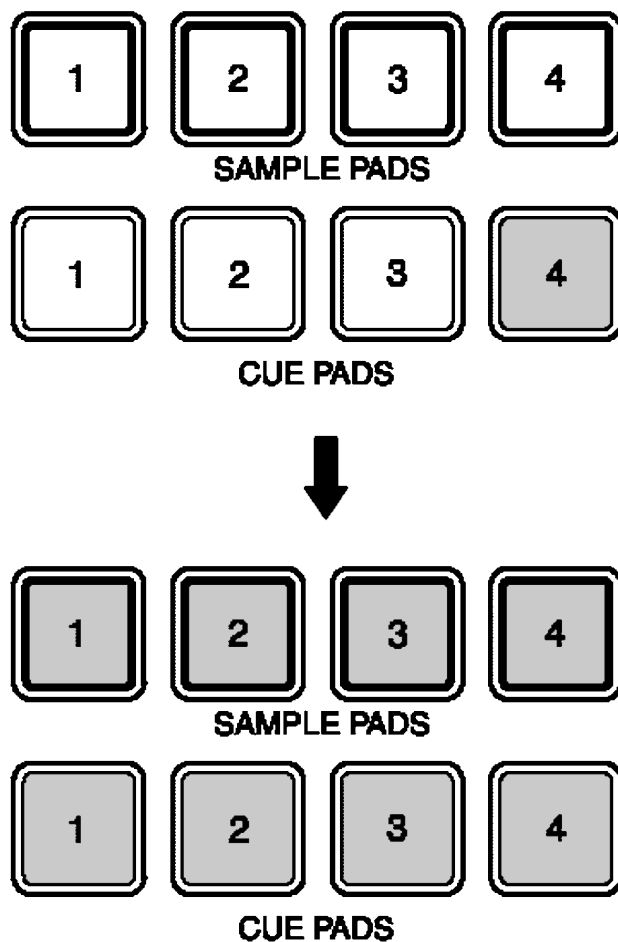
4. Afterwards, the CUE PADS {3} and {4} automatically light in sequence, and finally the lamps of all CUE PADS/SAMPLE PADS light and writing is completed.

Note:

The flash ROM can be destroyed when the power is switched off during writing. Do not switch off the power until writing has been completed.

Please wait for about 2 minutes until writing has been completed.

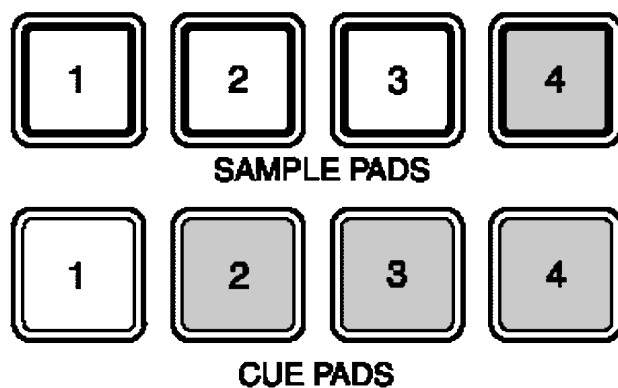




11.3. Program Confirmation

The program of the flash ROM (IC23) can be confirmed according to the following procedure.

1. Press button {1} of the SAMPLE PADS and the EXECUTE button at the same time for at least 5 seconds.
2. The CD version is displayed on the LCD as Version (Example: V 1.7). Also, the lamps of the SAMPLE PADS and the CUE PADS light as shown below.



For example

Above figure is shown as V 1.7.

SAMPLE PADS shows "0001" means that 1.0. (Binary scale)

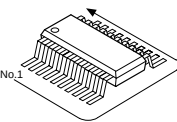
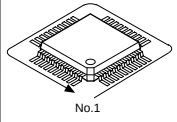
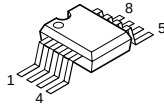
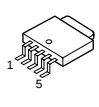
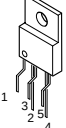
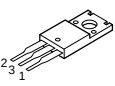
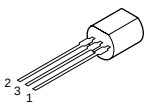
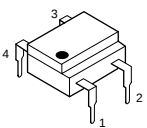
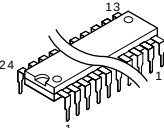
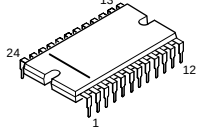
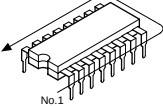
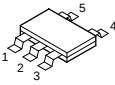
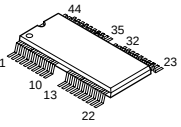
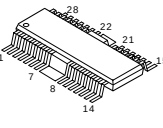
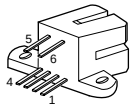
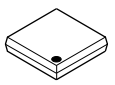
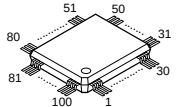
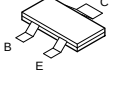
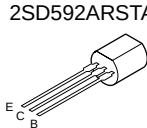
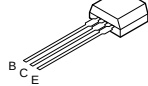
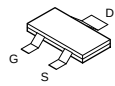
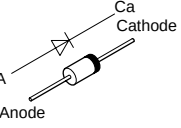
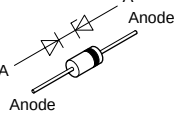
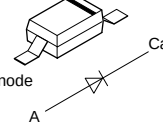
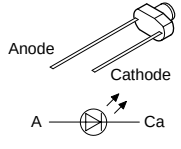
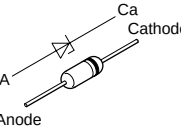
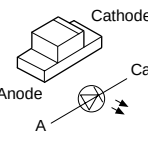
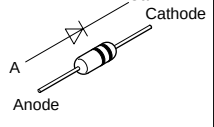
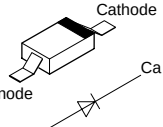
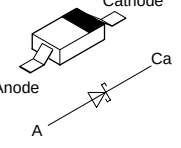
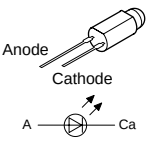
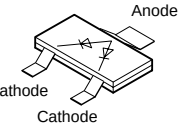
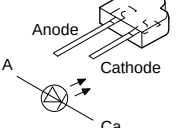
CUE PADS means 0.7 as "0111" shows. (Binary scale)

11.4. Adjusting the Display Contrast

Adjust the contrast of the LCD after replacement of IC23 if the contrast is very strong or very weak.

1. Press and hold [⌘DISPLAY ANGLE —FUNCTION] for about 2 or more seconds until the display changes
 - “CONTRAST” is selected in the display.
2. Press [- ◀◀], [+ ▶▶] to adjust the display contrast
 - Press [- ◀◀], [+ ▶▶] to change the display to the desired contrast (adjustable range: 1-100).
 - If no buttons are pressed for more than 5 seconds, the time display returns to its original state.
 - The setting remains in memory even when the power is turned off.

12 Type Illustration of IC ' s, Transistors and Diodes

	<table><tr><td>AN8882SB-E1</td><td>36PIN</td><td>C0JBAZ001166</td><td>8PIN</td><td>C3FBMD000179</td><td>48PIN</td></tr><tr><td>C0DBAJG00005</td><td>32PIN</td><td>C0JBAZ001251</td><td>20PIN</td><td>C3FBMD000180</td><td>48PIN</td></tr><tr><td>C0DBZGE00002</td><td>8PIN</td><td>C0ZBZ0000378</td><td>30PIN</td><td>M5218AFPE3</td><td>8PIN</td></tr><tr><td>C0EBH0000105</td><td>8PIN</td><td>C0ZBZ0000667</td><td>8PIN</td><td>PCM1734EB-E2</td><td>28PIN</td></tr><tr><td>C0JBAE000098</td><td>8PIN</td><td>C3ABPG000133</td><td>54PIN</td><td>TC7WU04FT12L</td><td>8PIN</td></tr><tr><td>C0JBAZ000531</td><td>24PIN</td><td>C3ABPJ000048</td><td>86PIN</td><td></td><td></td></tr></table>	AN8882SB-E1	36PIN	C0JBAZ001166	8PIN	C3FBMD000179	48PIN	C0DBAJG00005	32PIN	C0JBAZ001251	20PIN	C3FBMD000180	48PIN	C0DBZGE00002	8PIN	C0ZBZ0000378	30PIN	M5218AFPE3	8PIN	C0EBH0000105	8PIN	C0ZBZ0000667	8PIN	PCM1734EB-E2	28PIN	C0JBAE000098	8PIN	C3ABPG000133	54PIN	TC7WU04FT12L	8PIN	C0JBAZ000531	24PIN	C3ABPJ000048	86PIN				<table><tr><td>C1BB00000598</td><td>144PIN</td></tr><tr><td>C2BBGE000781</td><td>80PIN</td></tr><tr><td>MN5772AA</td><td>64PIN</td></tr><tr><td>MN6627482WA</td><td>80PIN</td></tr></table>	C1BB00000598	144PIN	C2BBGE000781	80PIN	MN5772AA	64PIN	MN6627482WA	80PIN
AN8882SB-E1	36PIN	C0JBAZ001166	8PIN	C3FBMD000179	48PIN																																										
C0DBAJG00005	32PIN	C0JBAZ001251	20PIN	C3FBMD000180	48PIN																																										
C0DBZGE00002	8PIN	C0ZBZ0000378	30PIN	M5218AFPE3	8PIN																																										
C0EBH0000105	8PIN	C0ZBZ0000667	8PIN	PCM1734EB-E2	28PIN																																										
C0JBAE000098	8PIN	C3ABPG000133	54PIN	TC7WU04FT12L	8PIN																																										
C0JBAZ000531	24PIN	C3ABPJ000048	86PIN																																												
C1BB00000598	144PIN																																														
C2BBGE000781	80PIN																																														
MN5772AA	64PIN																																														
MN6627482WA	80PIN																																														
C3EBJC000037 	C0DBZH000012 	C0DACZH00008 	C0CAALE00002 	C0DAEJC00003 	B3PBA0000078 																																										
AN6680 	AN6675 	 <table><tr><td>C0JAAN000070</td><td>16PIN</td></tr><tr><td>C0JAAQ000013</td><td>14PIN</td></tr><tr><td>C0JACB000006</td><td>14PIN</td></tr></table>		C0JAAN000070	16PIN	C0JAAQ000013	14PIN	C0JACB000006	14PIN	 <table><tr><td>C0DBZFD00015</td></tr><tr><td>C0EBE0000252</td></tr><tr><td>C0EBJ0000158</td></tr><tr><td>C0JBAA000001</td></tr><tr><td>C0JBAE000087</td></tr><tr><td>C0JBAZ000519</td></tr><tr><td>TC7S66FTE85L</td></tr></table>		C0DBZFD00015	C0EBE0000252	C0EBJ0000158	C0JBAA000001	C0JBAE000087	C0JBAZ000519	TC7S66FTE85L																													
C0JAAN000070	16PIN																																														
C0JAAQ000013	14PIN																																														
C0JACB000006	14PIN																																														
C0DBZFD00015																																															
C0EBE0000252																																															
C0EBJ0000158																																															
C0JBAA000001																																															
C0JBAE000087																																															
C0JBAZ000519																																															
TC7S66FTE85L																																															
C3ABHG000008 	XC61CN1602MR 	AN77L05M-E1 C0CBADC00042 C0CBADD00009 C0CBBLB00002 	C0GBF0000004 C0GBF0000007 	B3NAA0000083 	C0ZBZ0000910 																																										
C2CBHH000043 	 <table><tr><td>2SB709ATX</td></tr><tr><td>2SD601ATX</td></tr><tr><td>2SD0602A0L</td></tr><tr><td>B1ADCF000001</td></tr><tr><td>B1GBCFNA0010</td></tr><tr><td>B1GDCFJG0003</td></tr><tr><td>B1GDCFGH0004</td></tr><tr><td>B1GBCFQQ0005</td></tr></table>		2SB709ATX	2SD601ATX	2SD0602A0L	B1ADCF000001	B1GBCFNA0010	B1GDCFJG0003	B1GDCFGH0004	B1GBCFQQ0005	2SB621ARSTA 2SC1845EFTA 2SC2634-STU 2SD592ARSTA 	2SA830STPB 	XP151A12A2MR XP152A12C0MR 																																		
2SB709ATX																																															
2SD601ATX																																															
2SD0602A0L																																															
B1ADCF000001																																															
B1GBCFNA0010																																															
B1GDCFJG0003																																															
B1GDCFGH0004																																															
B1GBCFQQ0005																																															
B0EAMM000036 B0JAQL000005 B0HANM000024 	B0BB17000004 	B0EDKT000002 	B0HCMM000001 	 <table><tr><td>B3AAA0000530</td></tr><tr><td>SLR-325MG</td></tr><tr><td>B3AAA0000726</td></tr><tr><td>B3ADA0000148</td></tr></table>		B3AAA0000530	SLR-325MG	B3AAA0000726	B3ADA0000148																																						
B3AAA0000530																																															
SLR-325MG																																															
B3AAA0000726																																															
B3ADA0000148																																															
MAZ4120NMF 	B3EB00000009 	MA185TA 	MA111TX MA2Q73800L 	MA728TX 	B3AAA0000727 																																										
B0ADCJ000025 	SELS5223C 																																														

13 Schematic Diagram

13.1. Schematic Diagram Notes

S1:	SD cover open switch (SD OP. DET.)	S3331:	(CUE PADS4) Simulation, effect type select button (TYPE +)
S1501:	Play direction switch (REVERSE, FORWARD).	S3332:	Simulation, effect type select button (TYPE -)
S1901:	CD eject button (▲ CD EJECT)	S3333:	Sampling data record, play, and erase button (SAMPLE PADS3)
S2001:	Turntable, CD player select switch (MODE)	S3334:	Sampling data record, play, and erase button (SAMPLE PADS4)
S2108:	Display angle setting, function setting button (DISPLAY ANGLE -FUNCTION)	S3335:	Instant play select button (INSTANT CHANGE)
S2111:	Track skip, setting button (◀◀)	S3336:	Load SD Memory Card data button (LOAD)
S2112:	Track search, setting button (◀)	S3337:	Play mode and edit item select button (SAMPLE EDIT)
S2115:	Track skip, setting button (▶▶)	S3338:	Execute button (EXECUTE)
S2116:	Track search, setting button (▶)	S1101:	Power button (POWER ■ OFF ■ ON)
S2119:	Remaining time display, auto cue setting button (REMAIN -AUTO CUE)	S1A:	Media play select switch (PLAY SELECT)
S2120:	End of loop play point setting, erase button (LOOP OUT)	S1:	Loading switch
S2125:	Play or cancel loop play button (LOOP, EXIT/RELOOP)	S2:	Inner switch
S2126:	Start of loop play point setting, erase button (LOOP IN)		• Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.
S2301:	CD open detection switch (CD OP. DET.)	No mark:	CD STOP
S2302:	CD close detection switch (CD CL. DET.)	():	CD play [1kHz, L+R, 0dB]
S3101:	Cue setting, load and stop button (CUE STOP)	Important safety notice:	
S3102:	Play pause button (PLAY/PAUSE)		Components identified by △ mark have special characteristics important for safety.
S3103:	Normal tempo button (RESET)		Furthermore, special parts which have purpose of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.
S3104:	Fixed pitch play button (PITCH LOCK)	Caution!	
S3105:	Tempo variation range button (RANGE)		• IC and LSI are sensitive to static electricity.
S3139:	Platter free wheel setting button (FREE WHEEL)		• Secondary trouble can be prevented by taking care during repair.
S3306:	Sample pad play mode, edit memory button (MEMORY)		• Cover the parts boxes made of plastics with aluminum foil.
S3307:	Cue point, pad memory button (REALTIME REC)		• Ground the soldering iron.
S3309:	Cue memory, play and erase button (CUE PADS1)		• Put a conductive mat on the work table.
S3310:	Cue memory, play and erase button (CUE PADS2)		• Do not touch the legs of IC or LSI with the fingers directly.
S3313:	Sampling data record, play, and erase button (SAMPLE PADS1)		
S3314:	Sampling data record, play, and erase button (SAMPLE PADS2)		
S3317:	Modify data button (TRIM -)		
S3318:	Modify data button (TRIM +)		
S3321:	Save SD Memory Card data button (SAVE)		
S3322:	SD Memory Card save mode select button (S.PADS, PANEL)		
S3323:	Analog player simulation button (VINYL SIM)		
S3324:	Special effects button (DYNAMIC FX)		
S3327:	Cue bank, file number select button (BANK +)		
S3328:	Cue bank, file number select button (BANK -)		
S3329:	Cue memory, play and erase button (CUE PADS3)		
S3330:	Cue memory, play and erase button		

CAUTION : FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE

F1101 1.6A 125V FUSE



RISK OF FIRE-REPLACE FUSE AS MARKED.

FUSE CAUTION

These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire hazard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.



Ce symbole indique que le fusible utilisé est à rapide. Pour une protection permanente, n' utiliser que des fusibles de même type. Ce dernier est indiqué là où le présent symbole est apposé.

Voltage and signal lines

: Positive voltage line



: CD playback signal line



: Negative voltage signal line

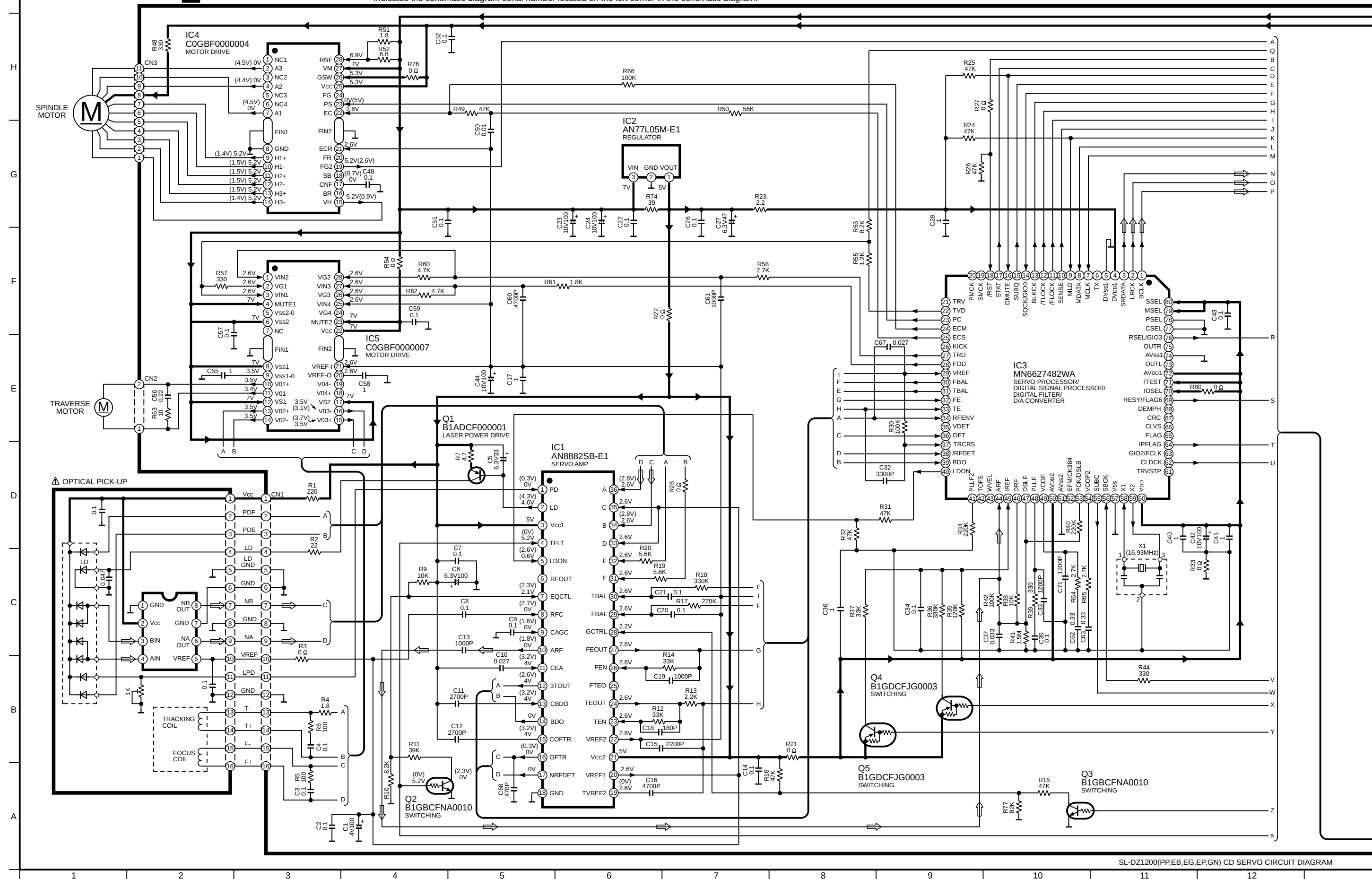
13.2. Schematic Diagram

SCHEMATIC DIAGRAM-1 A CD SERVO CIRCUIT

NOTE: The number which noted at the connectors on the schematic diagram as "SCHEMATIC DIAGRAM-1" or "SCHEMATIC DIAGRAM-2" indicates the schematic diagram serial number located on the left corner in the schematic diagram.

→: POSITIVE VOLTAGE LINE

⇨: CD PLAYBACK SIGNAL LINE

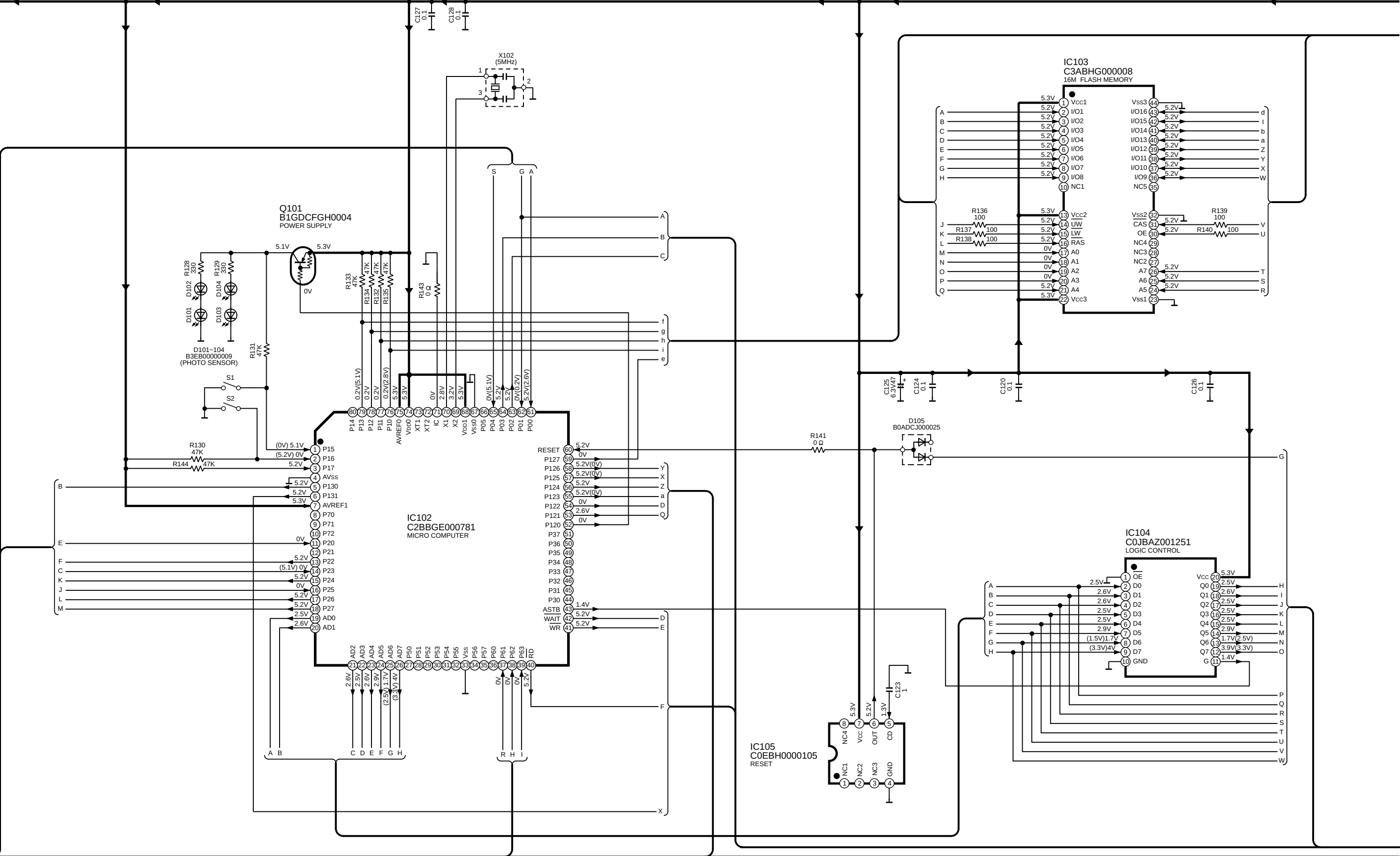


SCHEMATIC DIAGRAM-2

A CD SERVO CIRCUIT

→ : POSITIVE VOLTAGE LINE

⇨ : CD PLAYBACK SIGNAL LINE

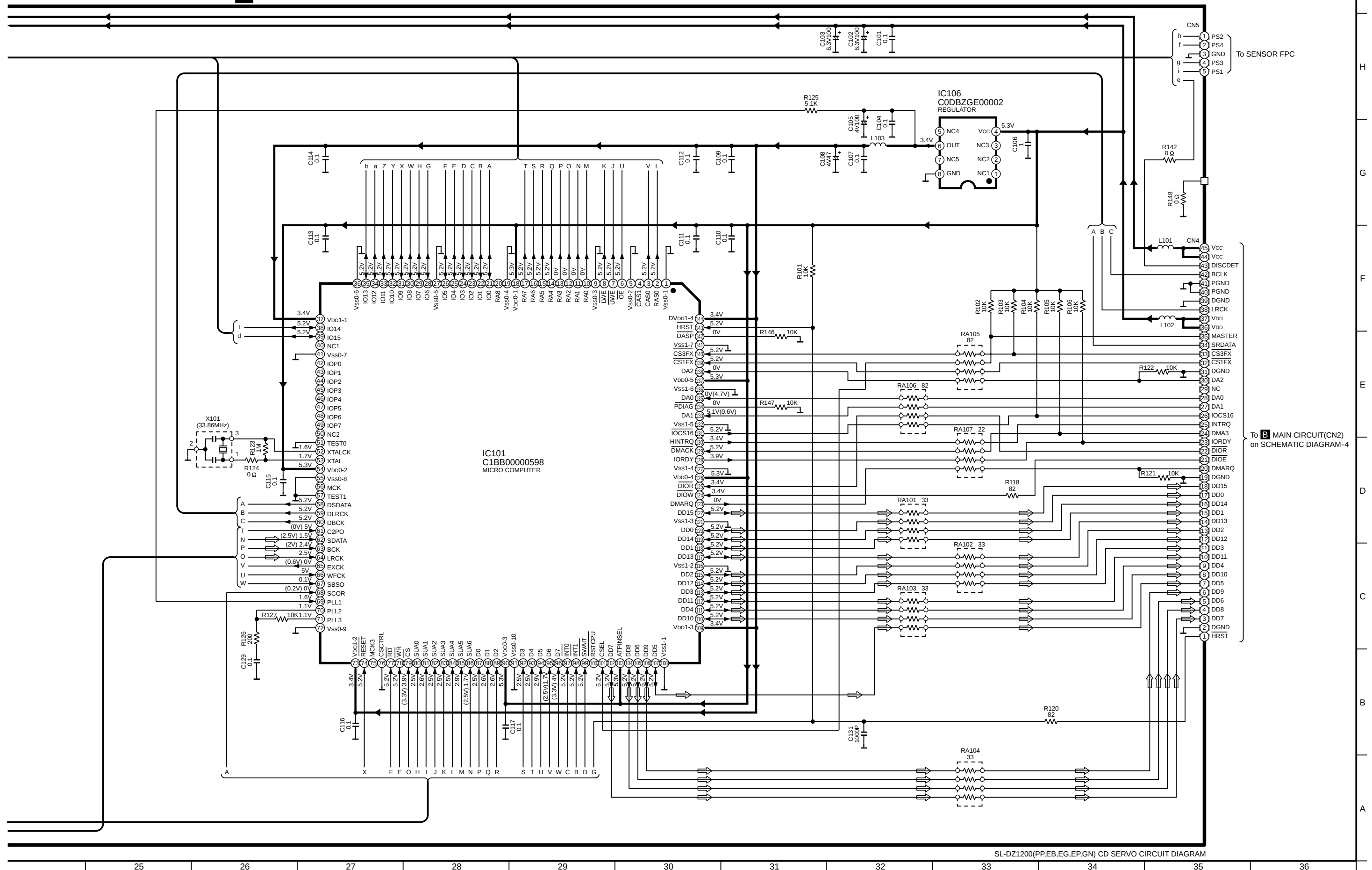


SCHEMATIC DIAGRAM-3

A CD SERVO CIRCUIT

→ : POSITIVE VOLTAGE LINE

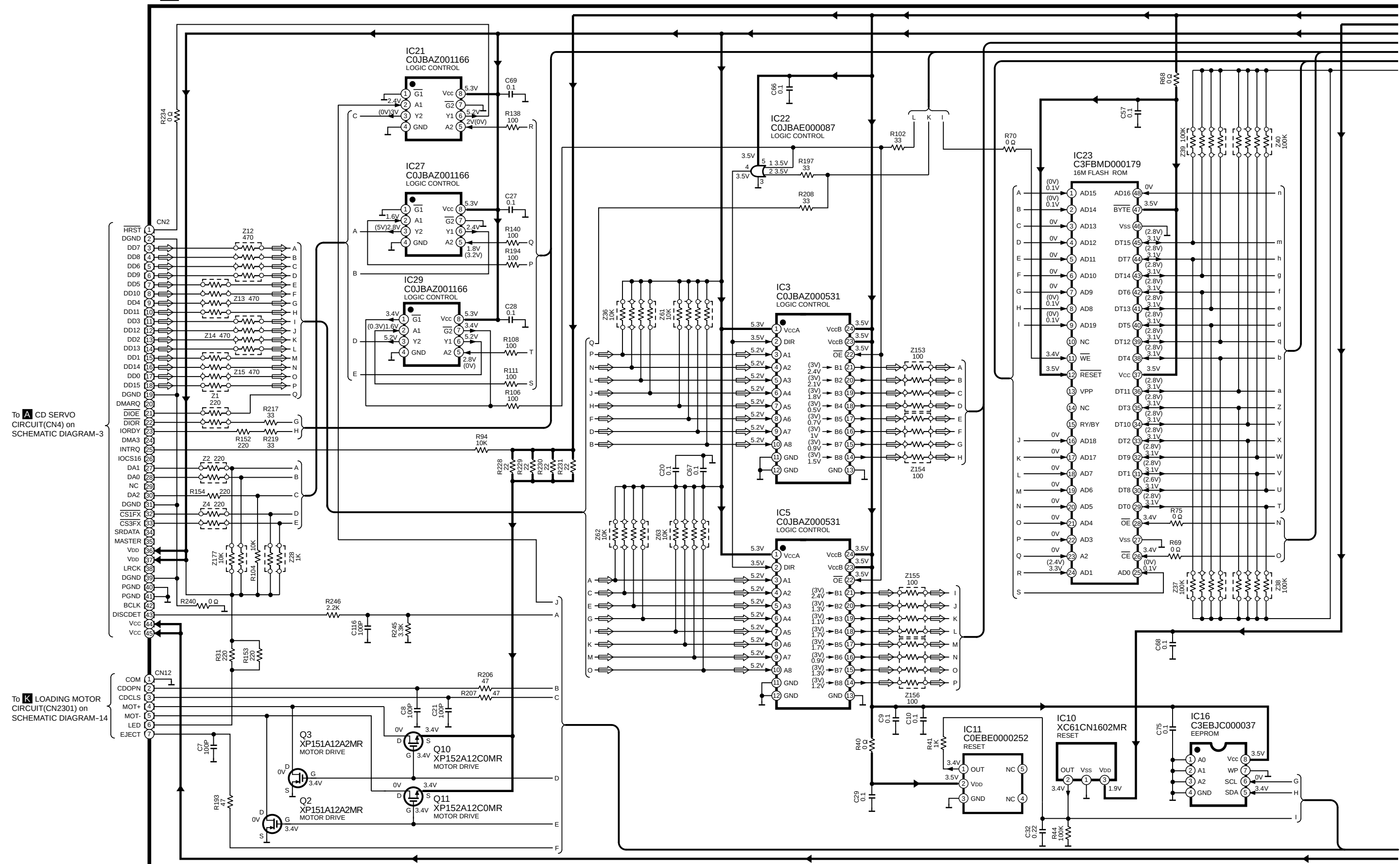
⇨ : CD PLAYBACK SIGNAL LINE

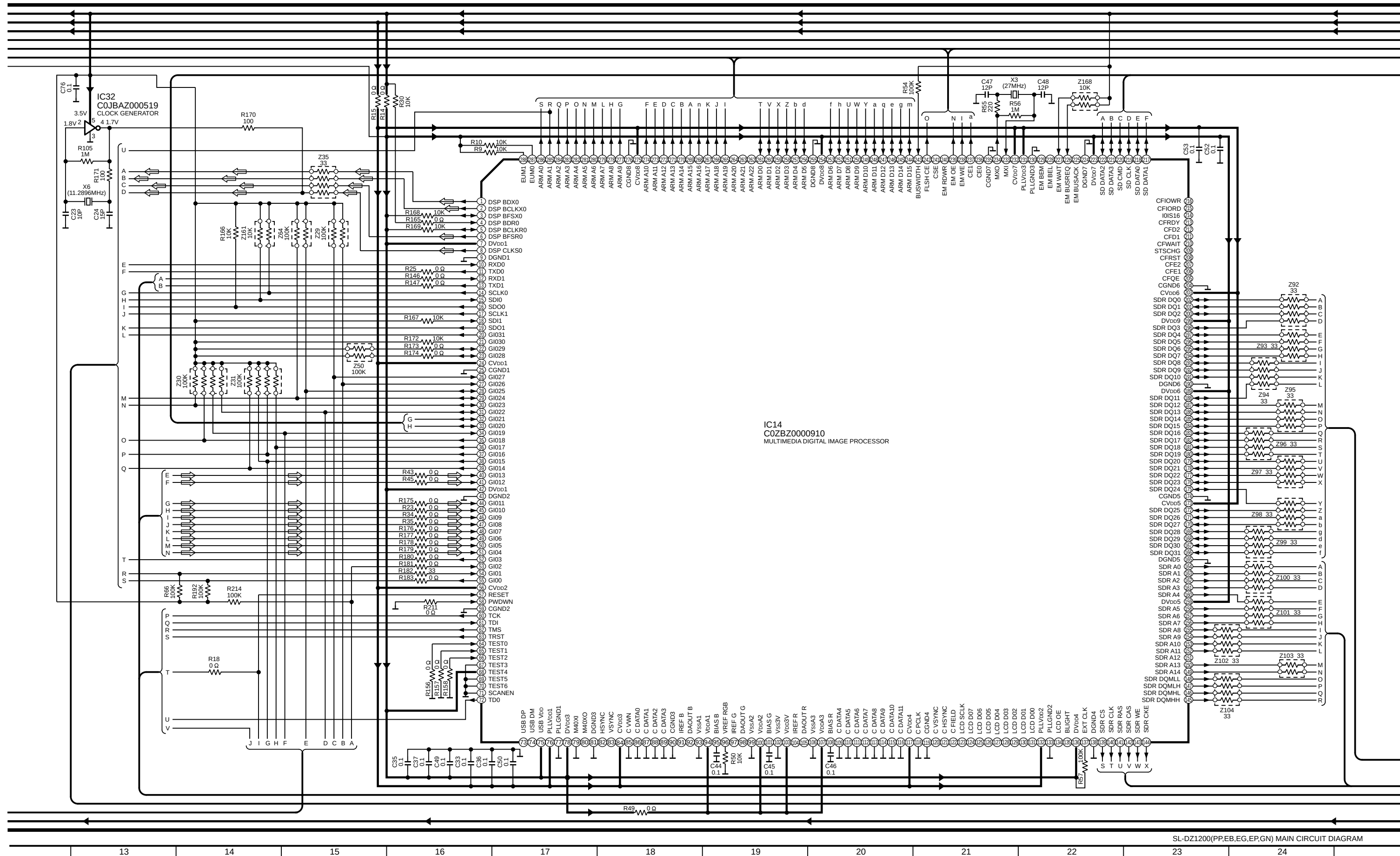


SL-DZ1200(PP,EB,EG,EP,GN) CD SERVO CIRCUIT DIAGRAM

SCHEMATIC DIAGRAM-4 **B** MAIN CIRCUIT

→: POSITIVE VOLTAGE LINE ⇨: CD PLAYBACK SIGNAL LINE



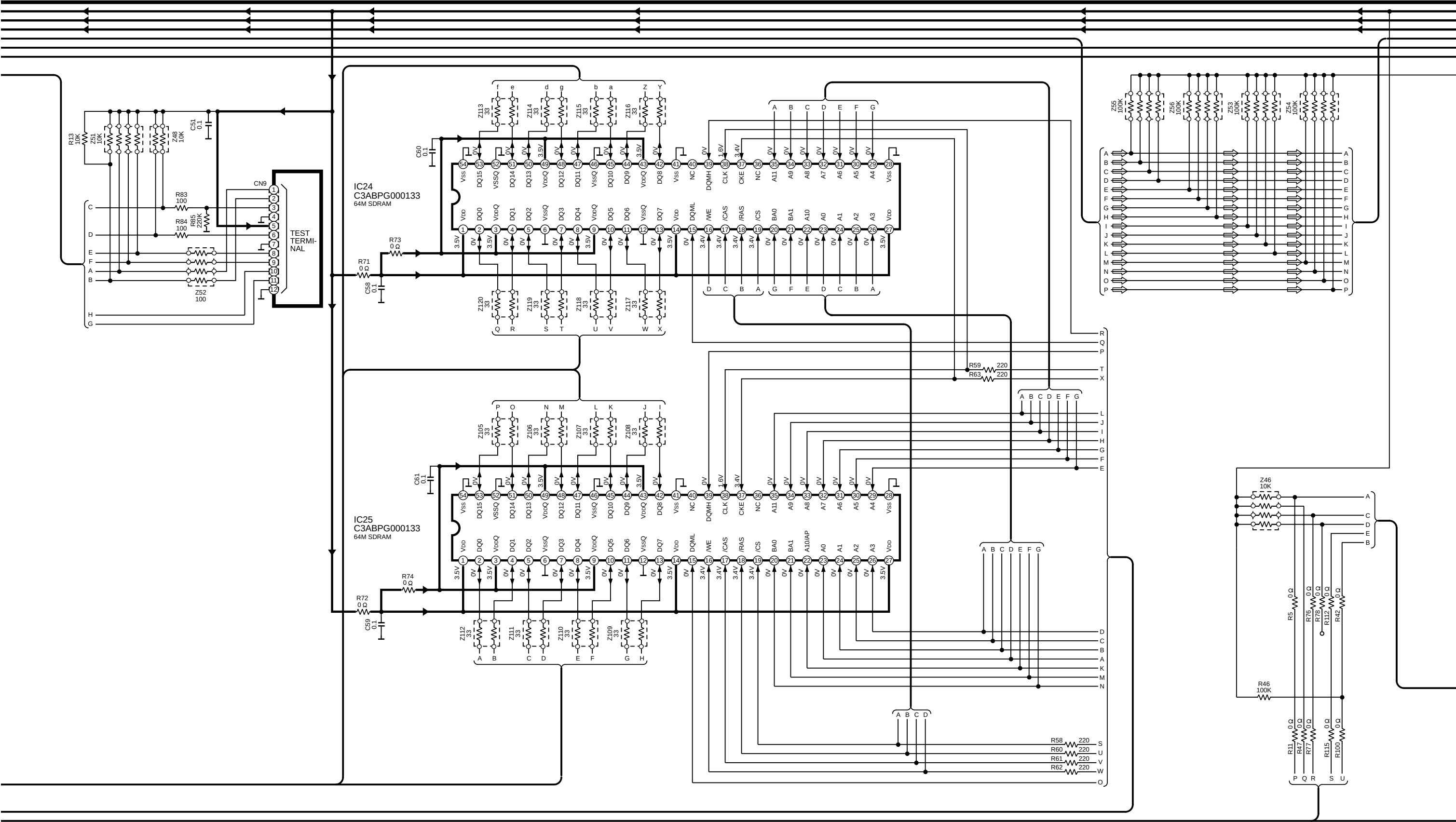


SCHEMATIC DIAGRAM-6

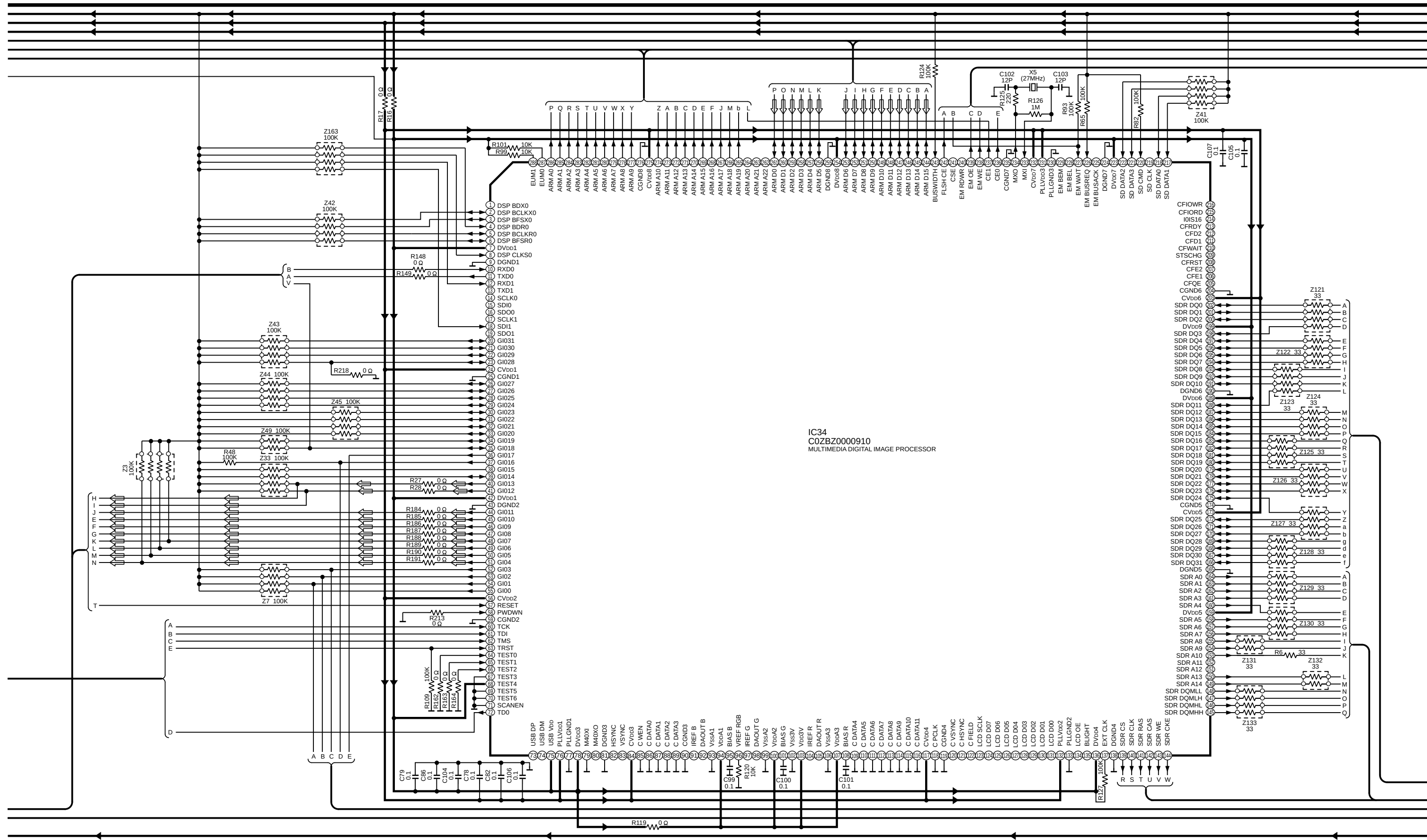
B MAIN CIRCUIT

➡ : POSITIVE VOLTAGE LINE

⇨ : CD PLAYBACK SIGNAL LINE



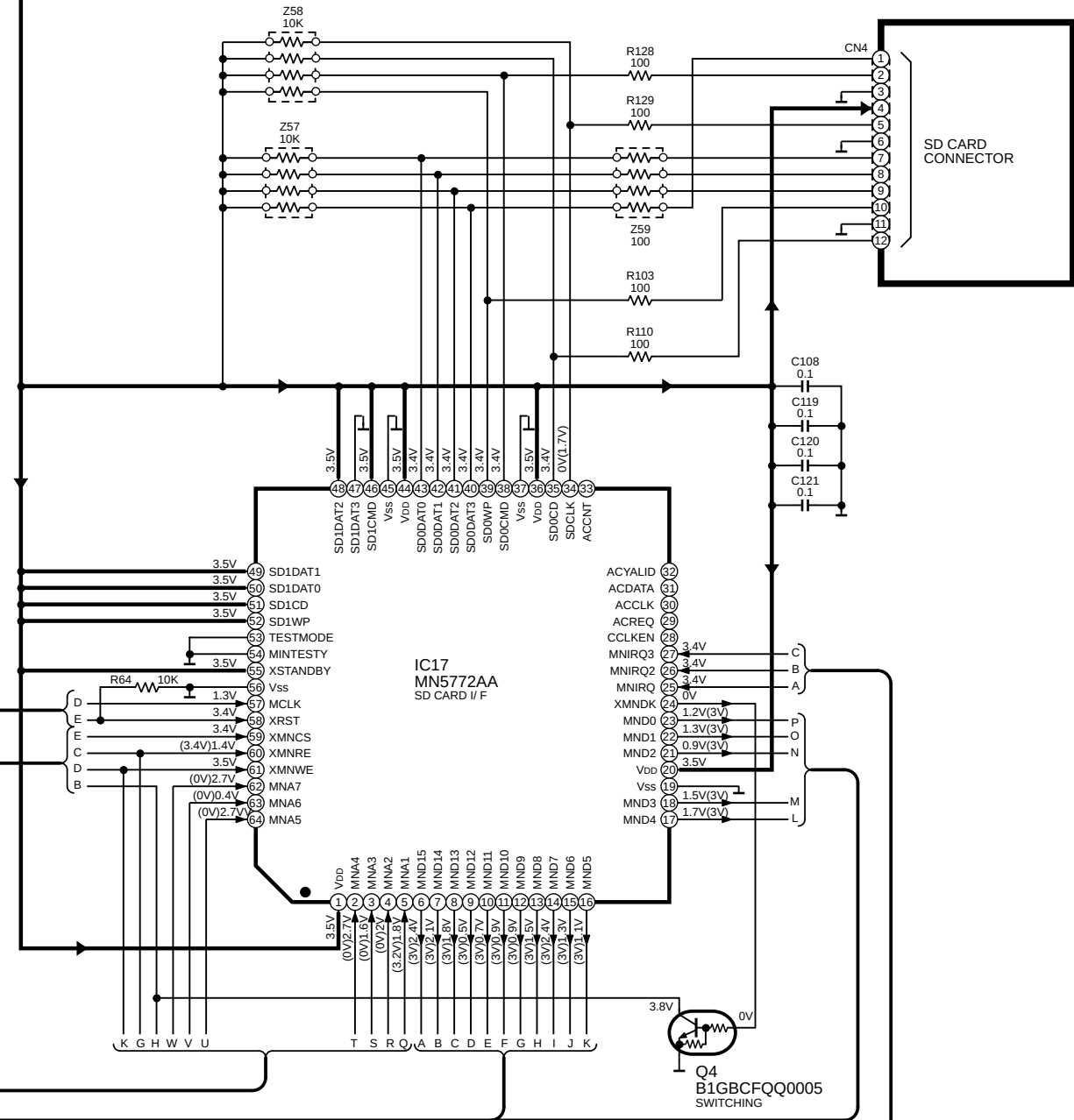
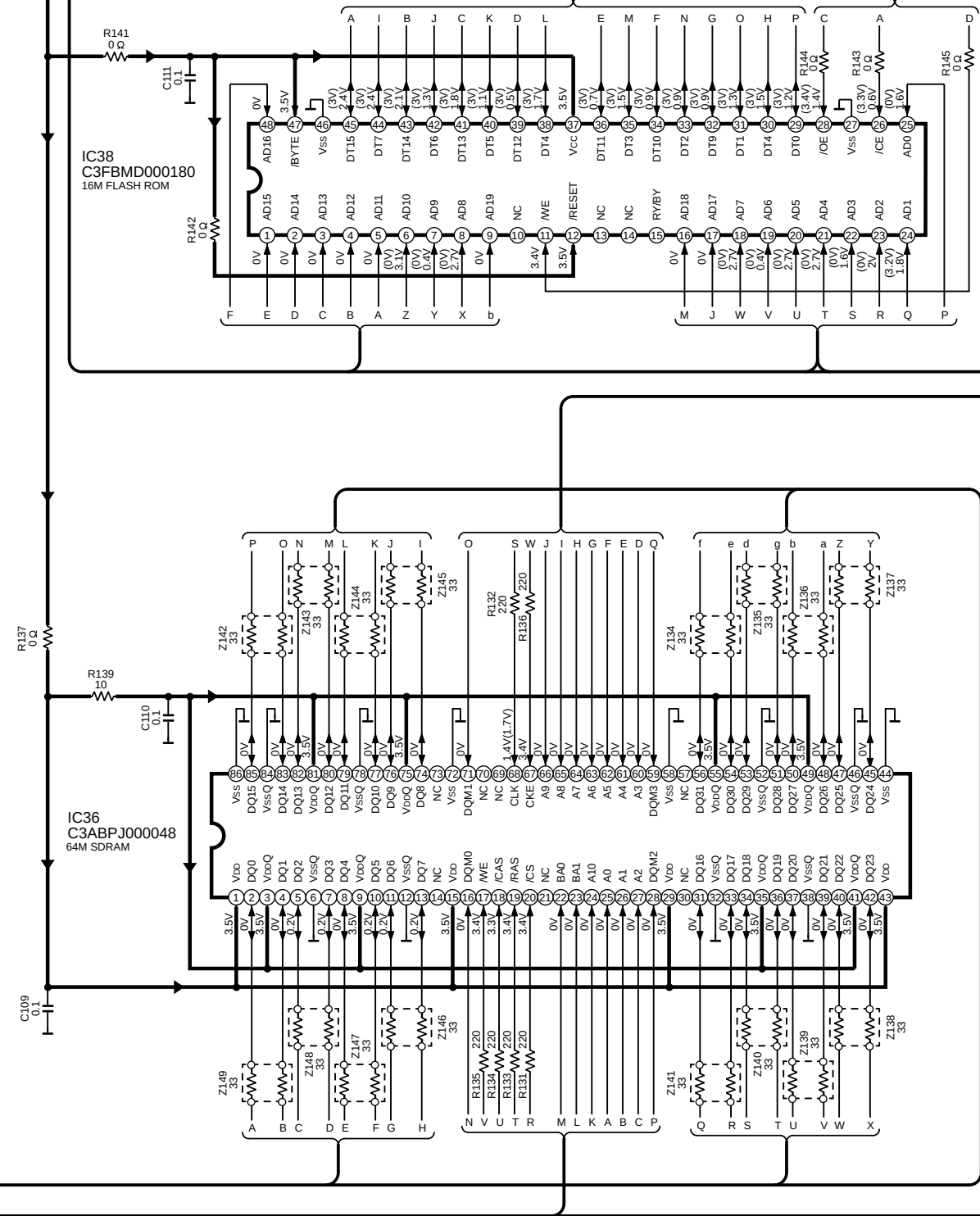
⇒ :CD PLAYBACK SIGNAL LINE



SCHEMATIC DIAGRAM-8

B MAIN CIRCUIT

→: POSITIVE VOLTAGE LINE

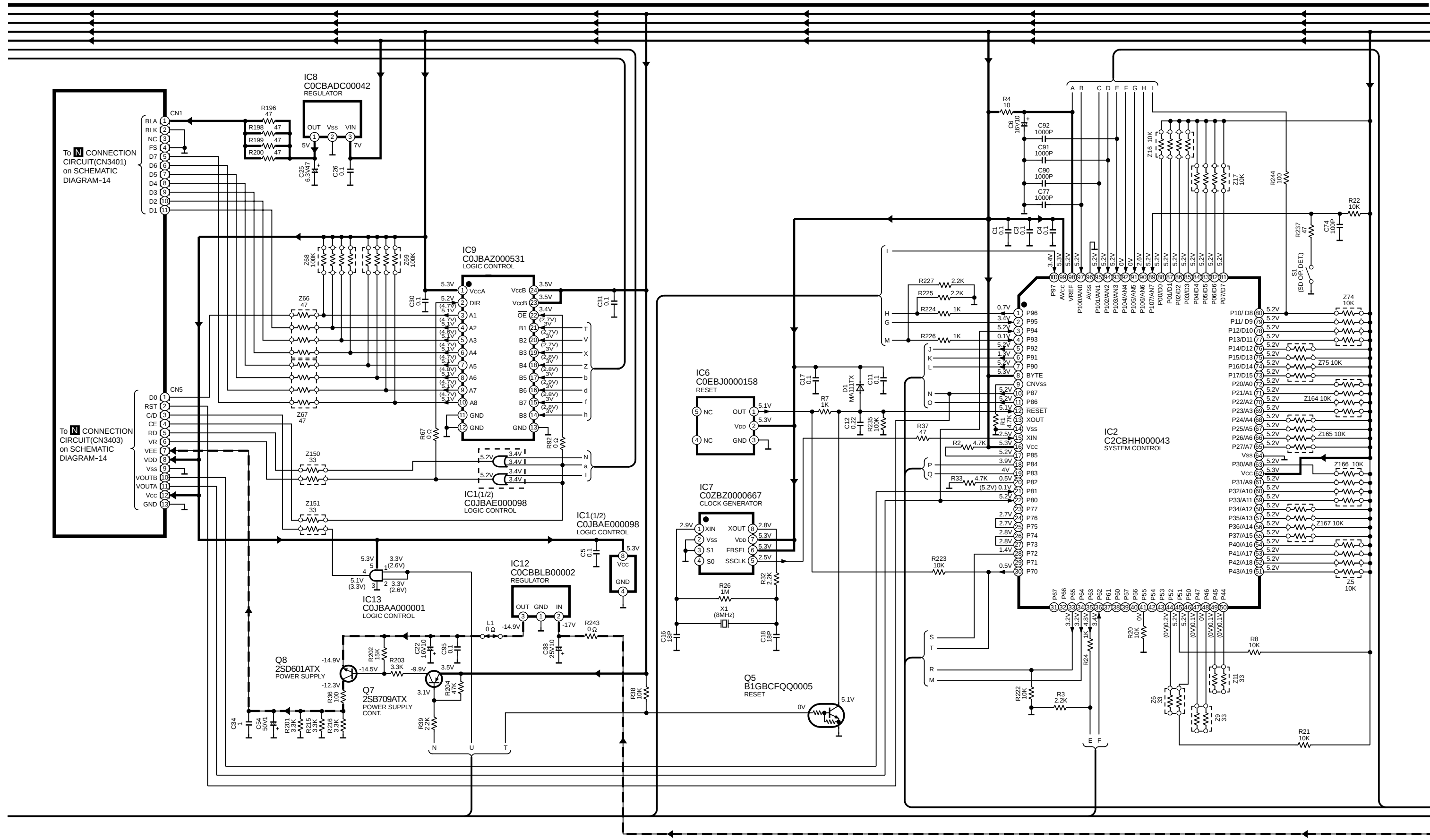


SCHEMATIC DIAGRAM-9

B MAIN CIRCUIT

→ POSITIVE VOLTAGE LINE

→ NEGATIVE VOLTAGE LINE



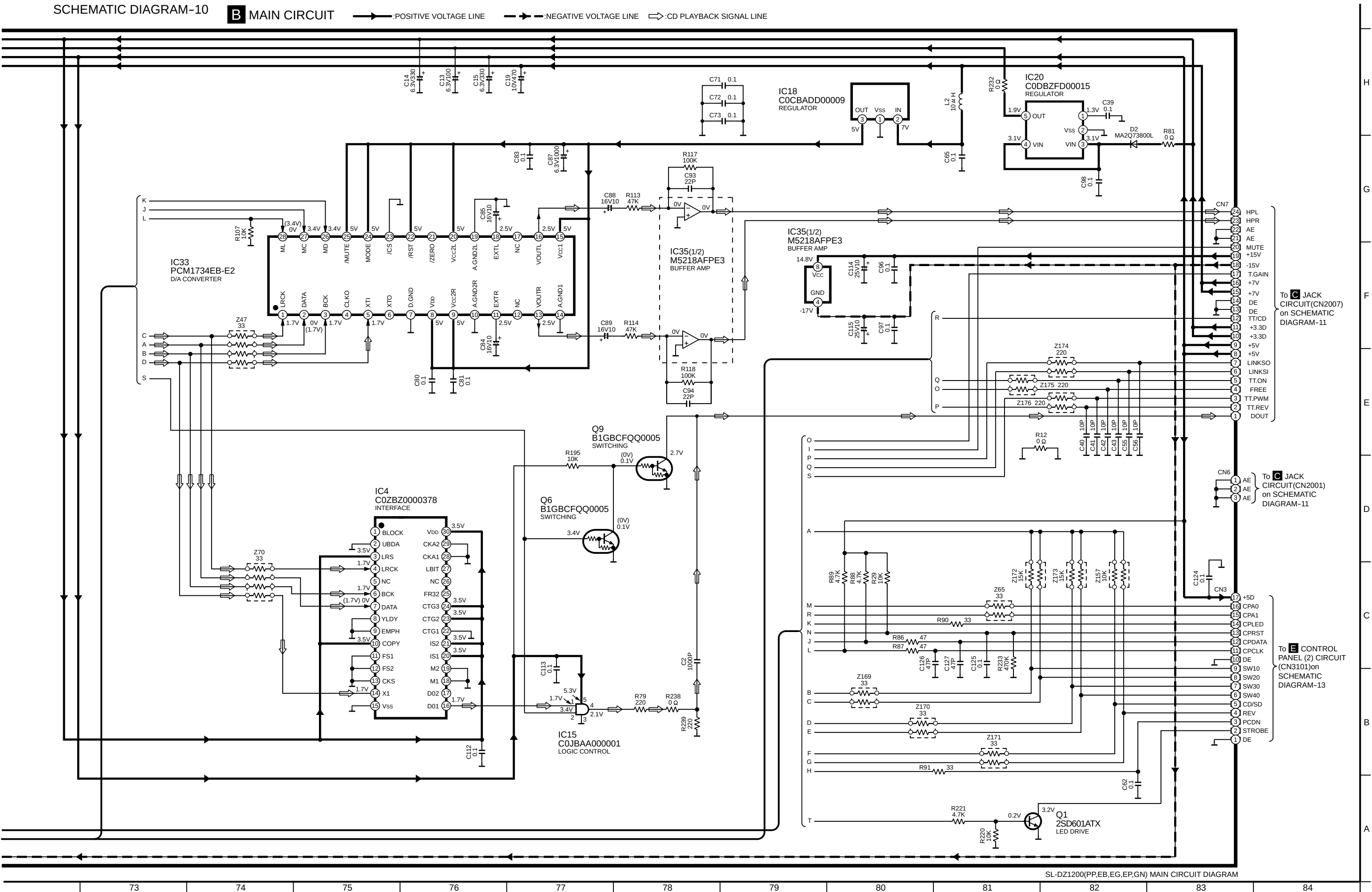
SCHEMATIC DIAGRAM-10

B MAIN CIRCUIT

:- POSITIVE VOLTAGE LINE

—▶—:NEGATIVE VOLTAGE LINE ⇨:CD PLAYBACK SIGNAL LINE

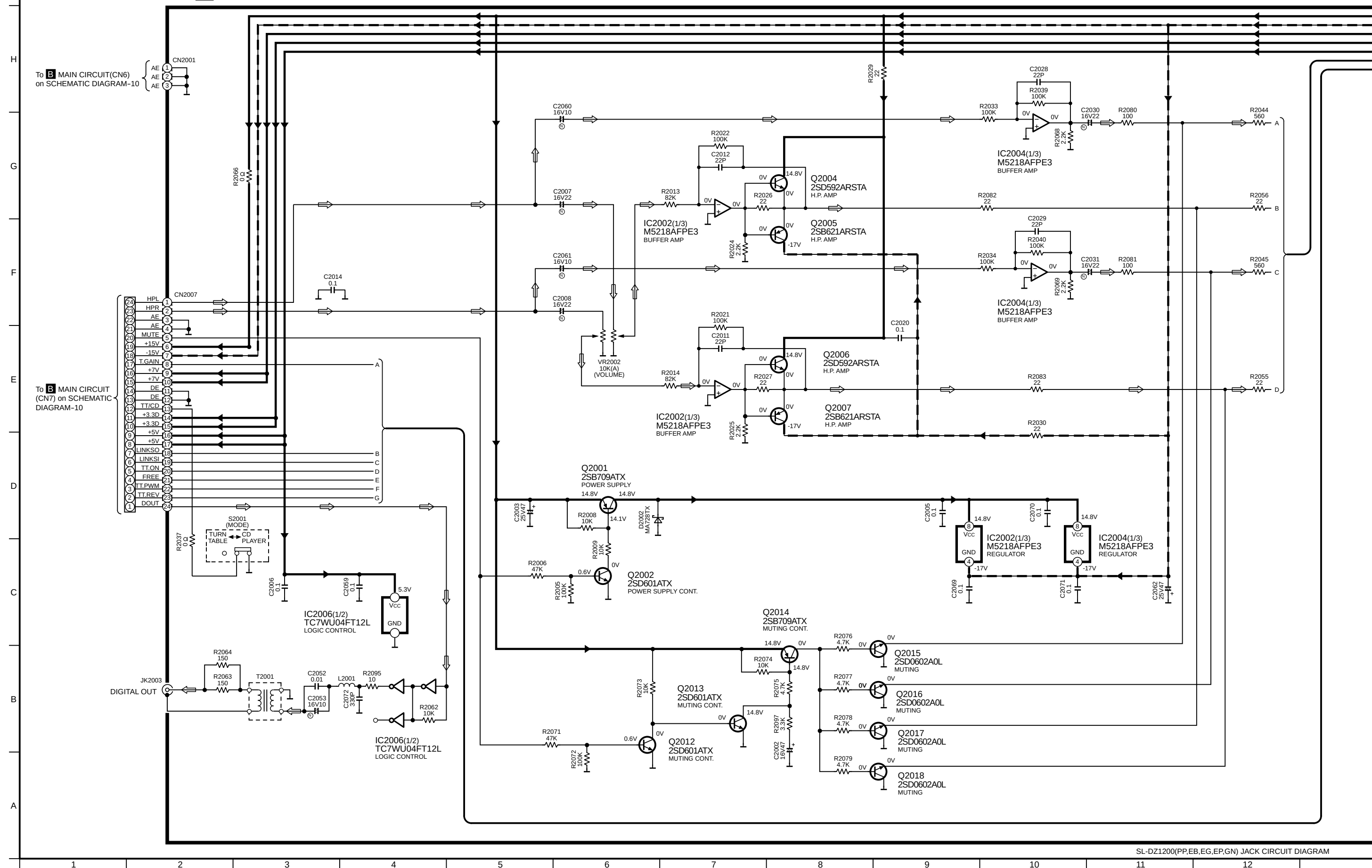
⇒:CD PLAYBACK SIGNAL LINE



SCHEMATIC DIAGRAM-11

C JACK CIRCUIT

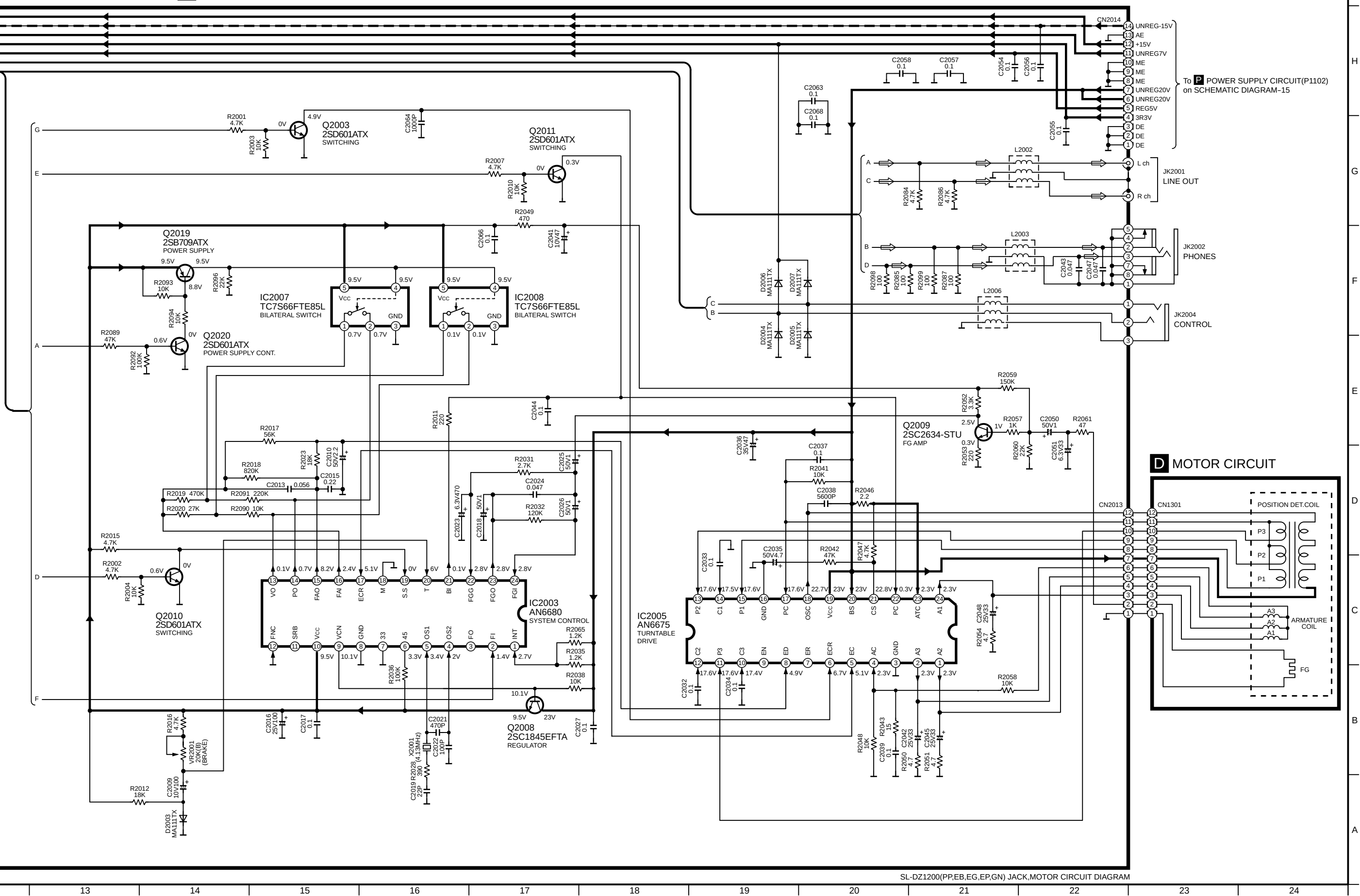
→ : POSITIVE VOLTAGE LINE → : NEGATIVE VOLTAGE LINE ⇨ : CD PLAYBACK SIGNAL LINE



SCHEMATIC DIAGRAM-12

JACK CIRCUIT

→: POSITIVE VOLTAGE LINE →: NEGATIVE VOLTAGE LINE ⇨: CD PLAYBACK SIGNAL LINE

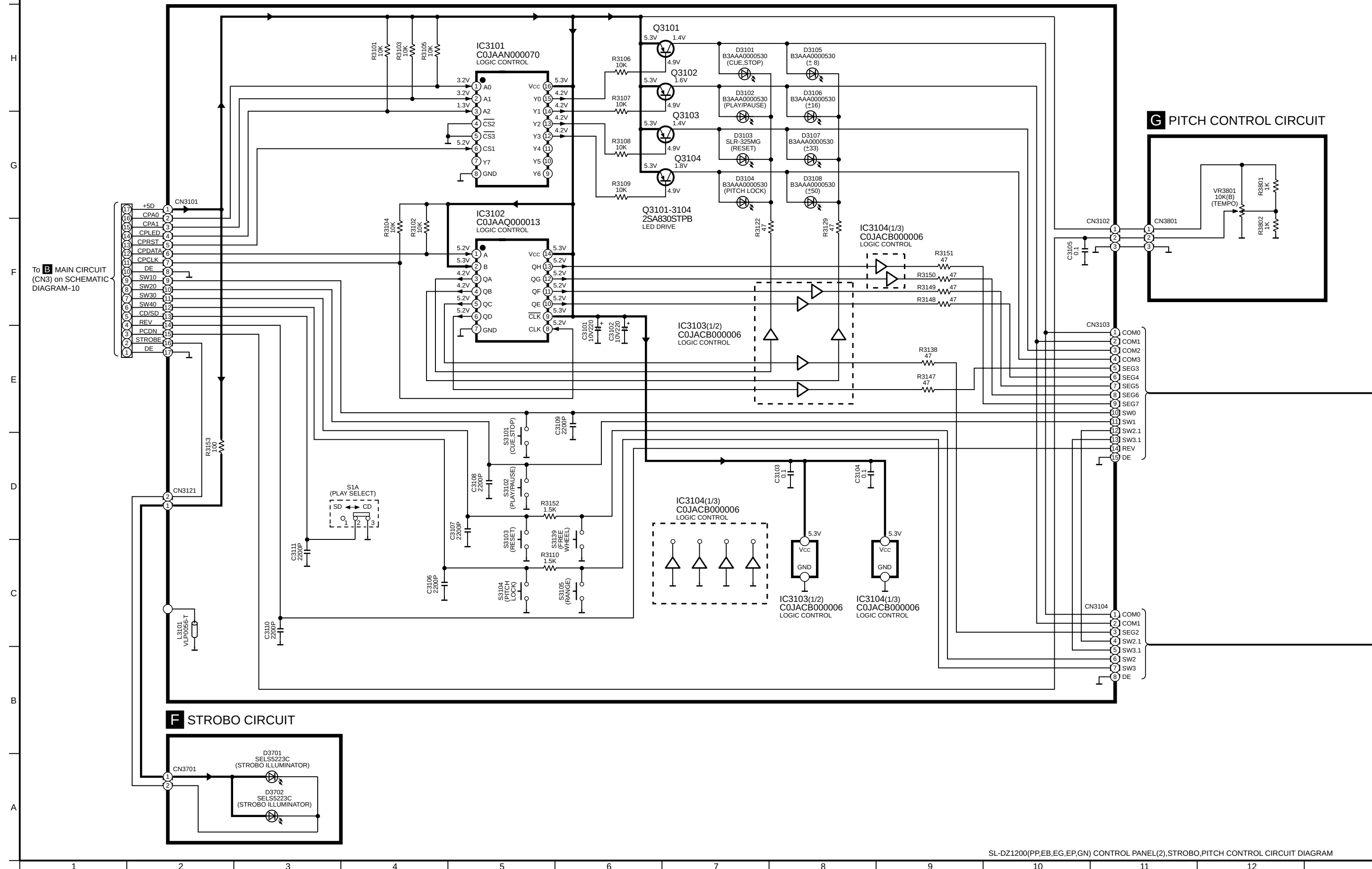


SL-DZ1200(PP,EB,EG,EP,GN) JACK, MOTOR CIRCUIT DIAGRAM

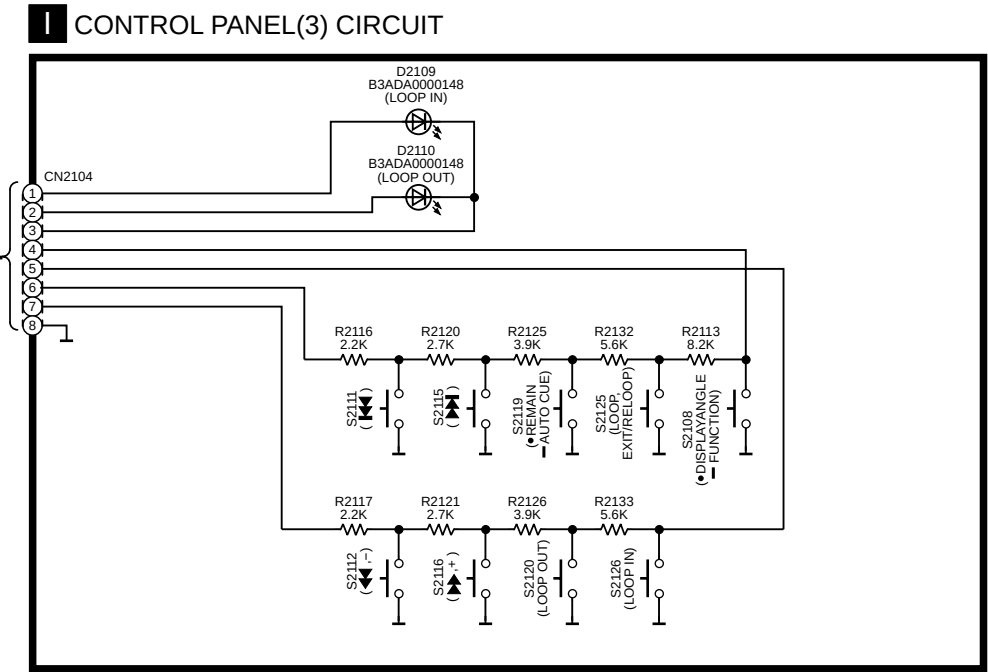
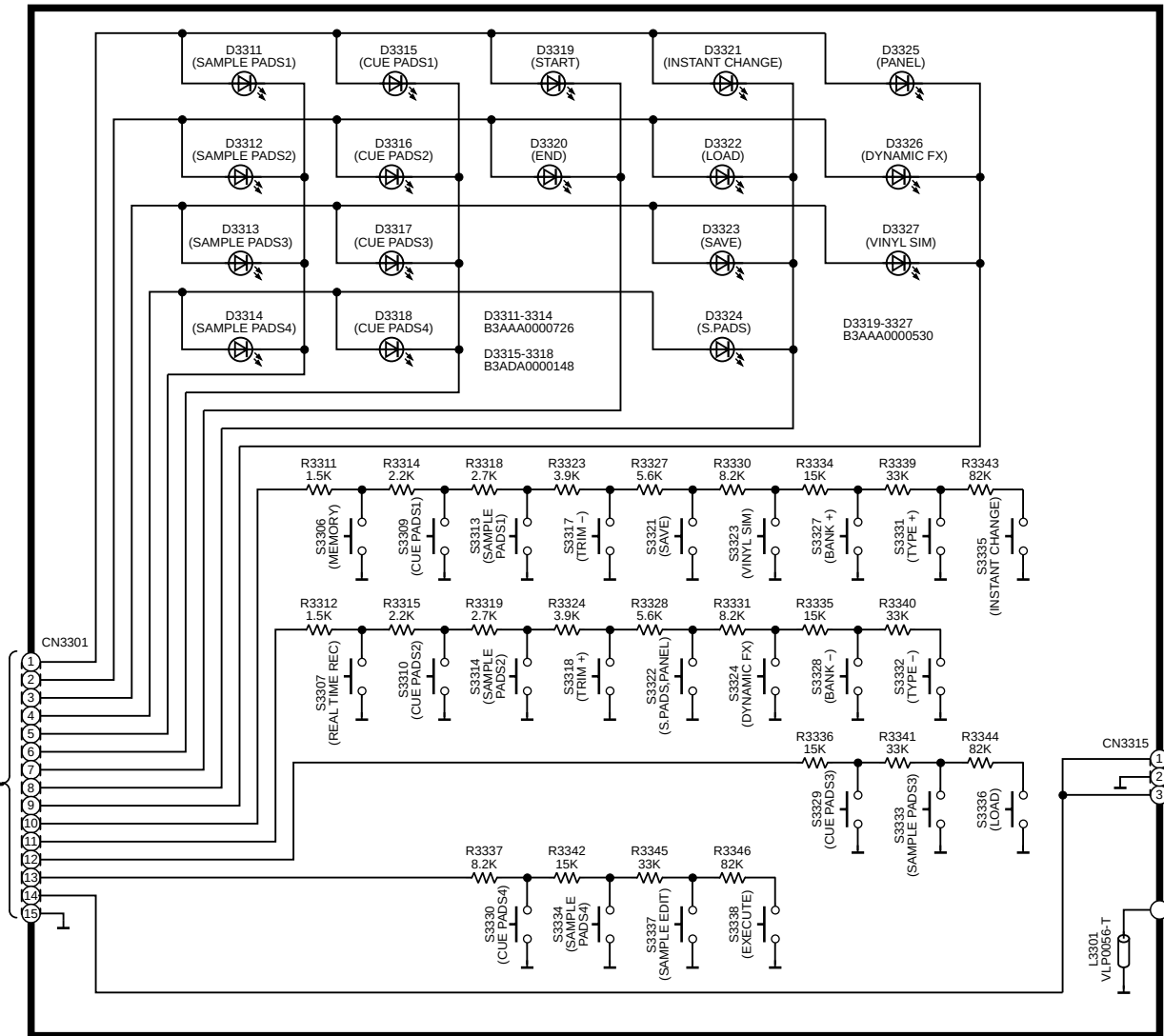
SCHEMATIC DIAGRAM-13

E CONTROL PANEL(2) CIRCUIT

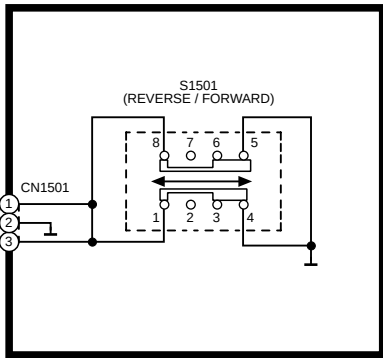
→: POSITIVE VOLTAGE LINE



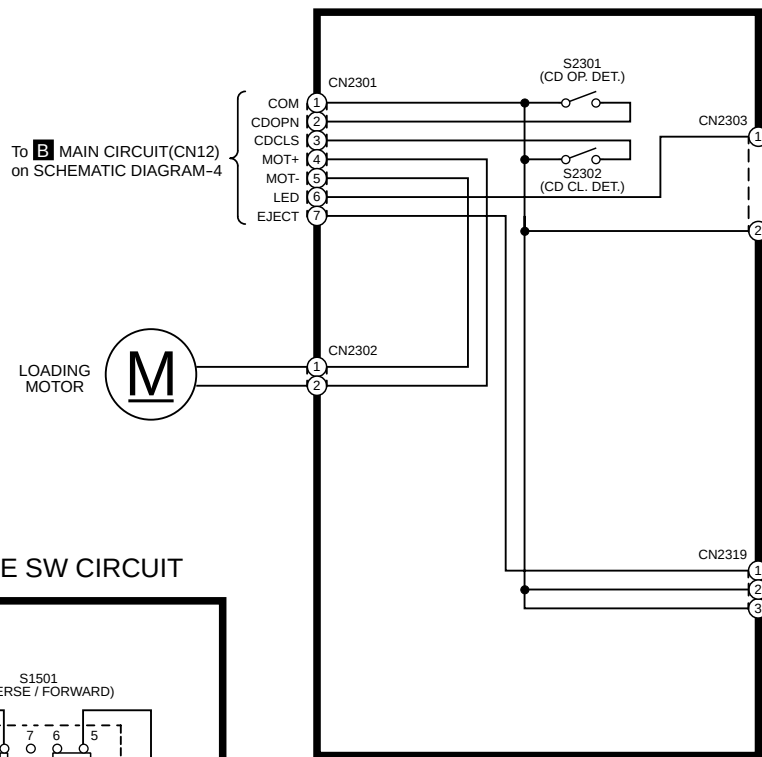
SCHEMATIC DIAGRAM-14 **H** CONTROL PANEL(1) CIRCUIT :POSITIVE VOLTAGE LINE :NEGATIVE VOLTAGE LINE



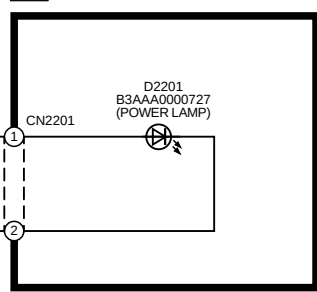
J REVERSE SW CIRCUIT



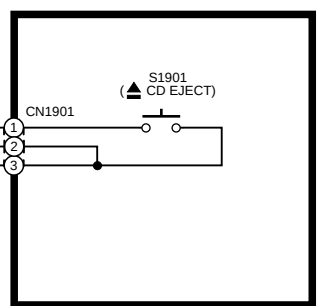
K LOADING MOTOR CIRCUIT



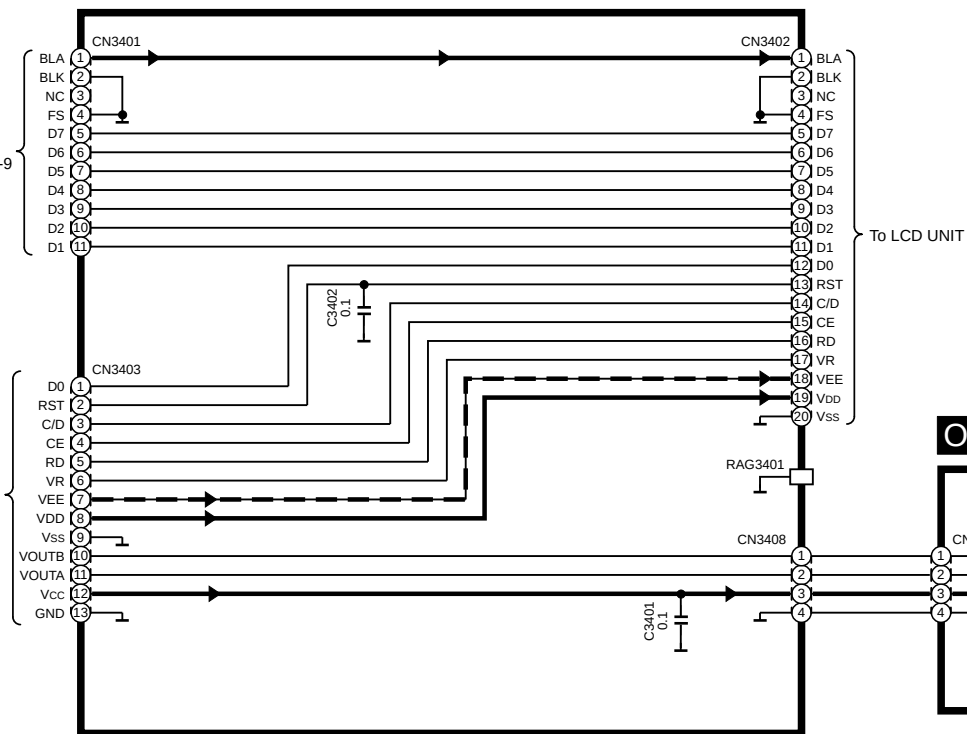
L LED CIRCUIT



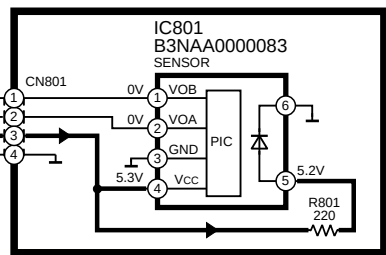
M EJECT SW CIRCUIT



N CONNECTION CIRCUIT



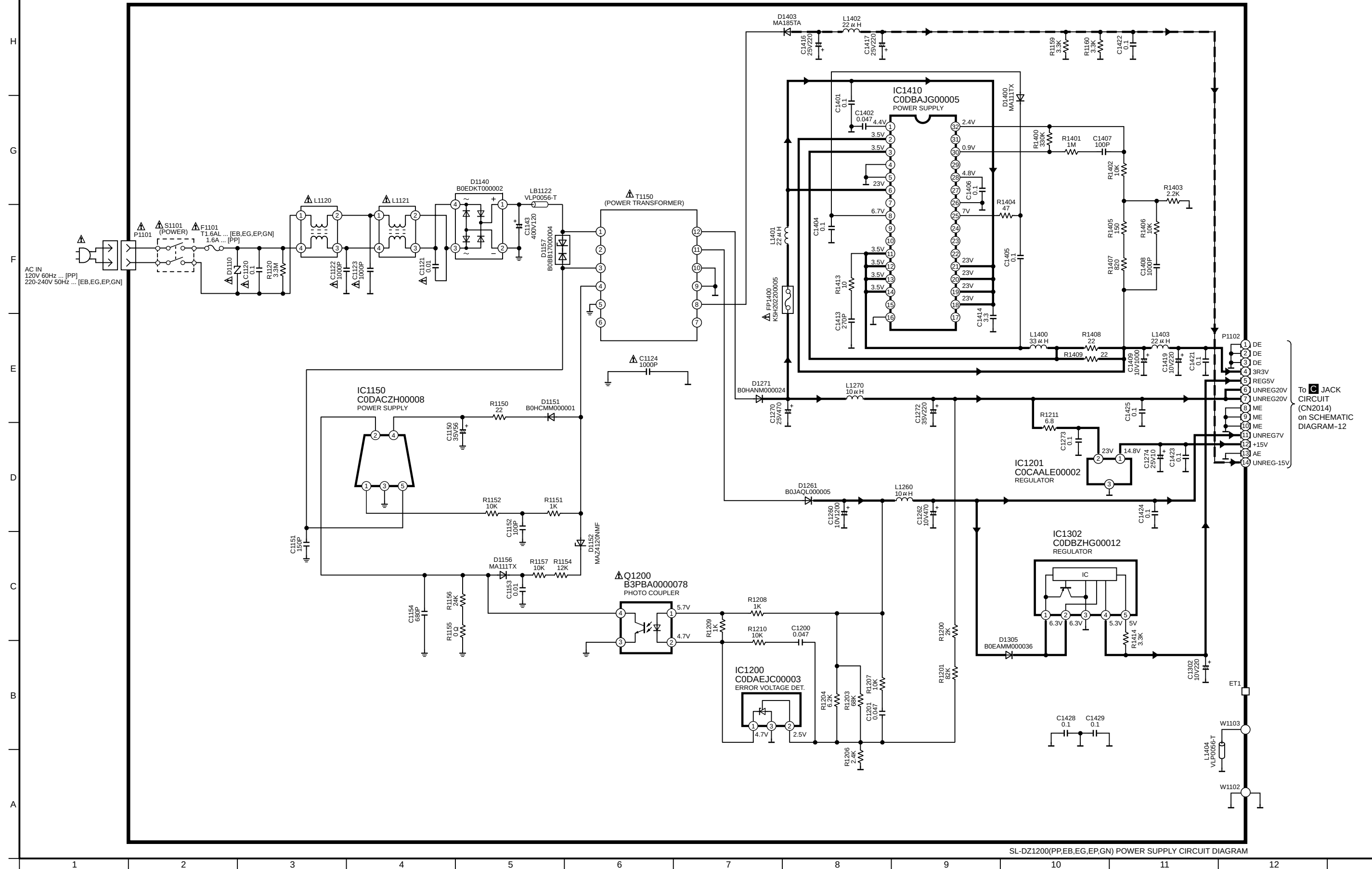
O SENSOR CIRCUIT



SCHEMATIC DIAGRAM-15

P POWER SUPPLY CIRCUIT

→ POSITIVE VOLTAGE LINE → NEGATIVE VOLTAGE LINE

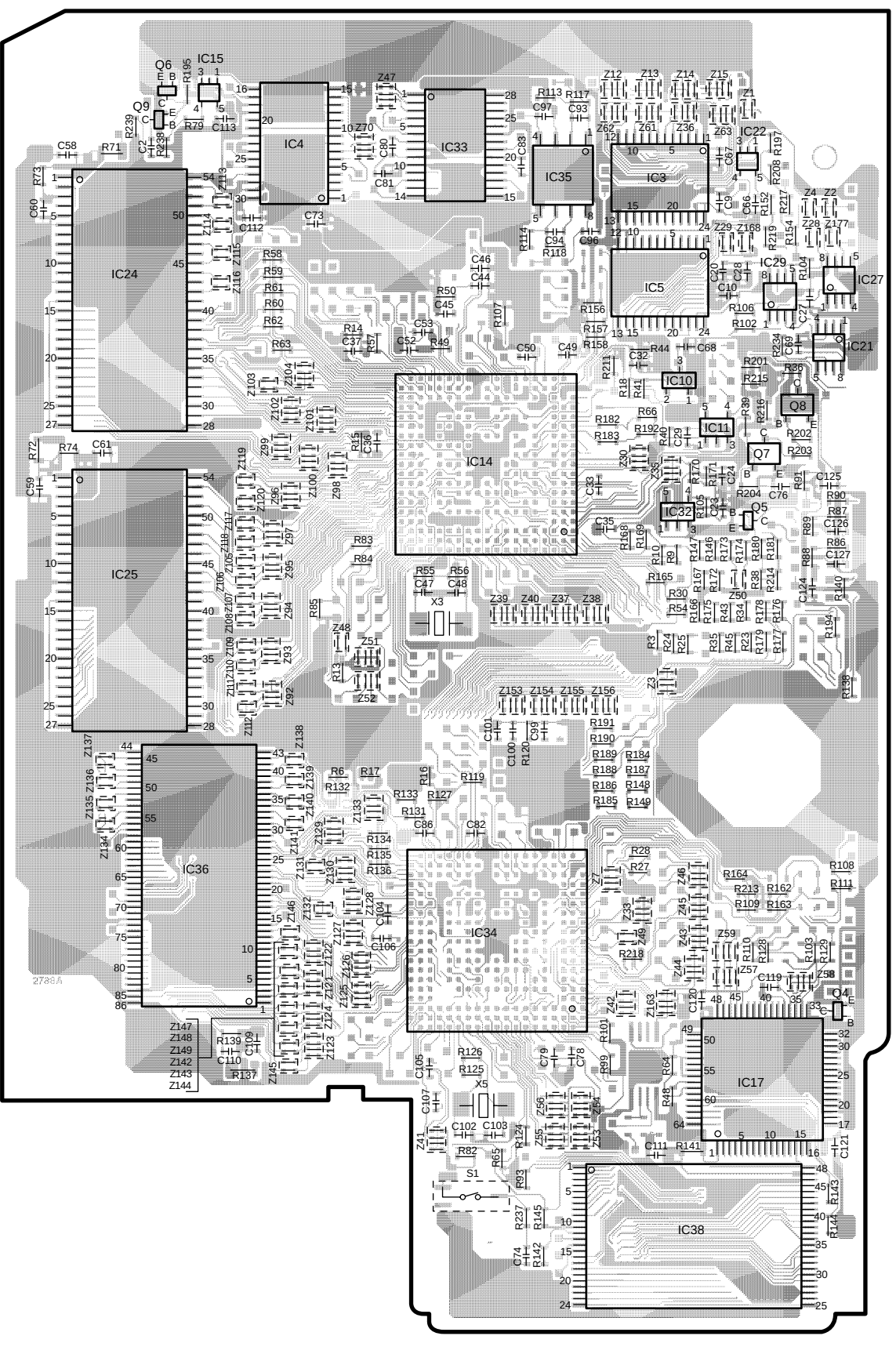


14 Printed Circuit Board

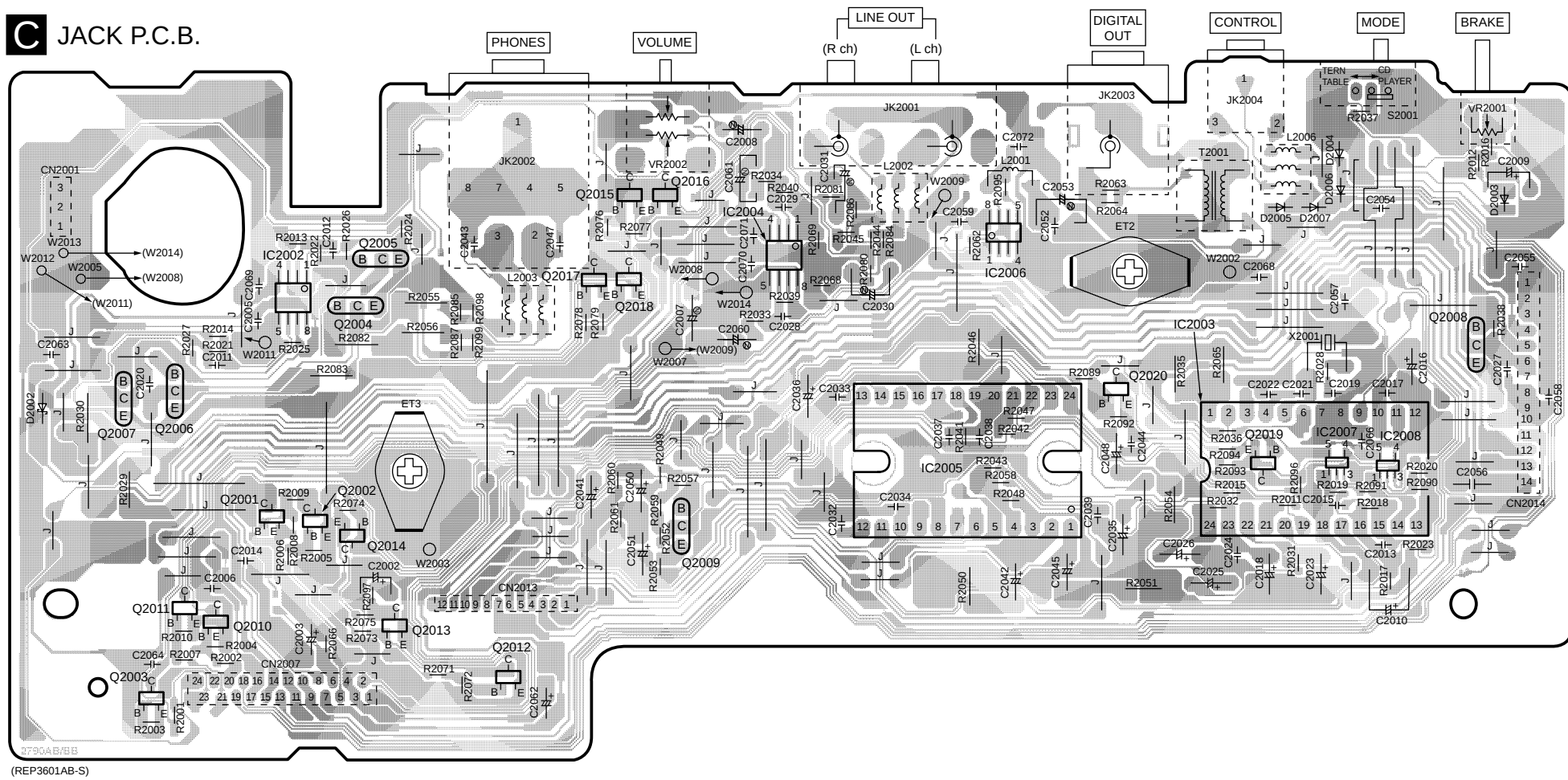
14.1. CD SERVO P.C.B. test point table

Test point	IC Pin No. etc.
TPS 2	Q1 : E
TPS35	IC4 : Pin No.22
TPS44	IC3 : Pin No.36
TPS45	IC3 : Pin No.39
TPS48	IC3 : Pin No.35
TPS101	IC102 : Pin No.3
TPS105	IC102 : Pin No.44
TPS106	IC102 : Pin No.45
TPS107	IC102 : Pin No.46
TPS129	IC102 : Pin No.71
TPS130	+B
TPS131	GND
V _{CC}	+B
GND	GND
VREF	VREF
SL +	IC5 : Pin No.10
SL -	IC5 : Pin No.11
F +	IC5 : Pin No.16
F -	IC5 : Pin No.15
T +	IC5 : Pin No.14
T -	IC5 : Pin No.13
FE	IC3 : Pin No.32
TE	IC3 : Pin No.33
RF	IC1 : Pin No.6
ARF	IC3 : Pin No.44
TRD	IC3 : Pin No.27
FOD	IC3 : Pin No.28
IPFLAG	IC3 : Pin No.64

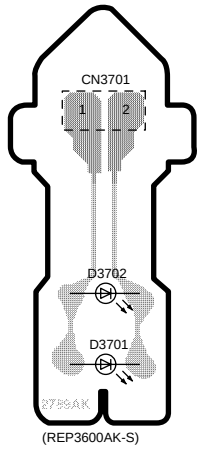
(SIDE:B)



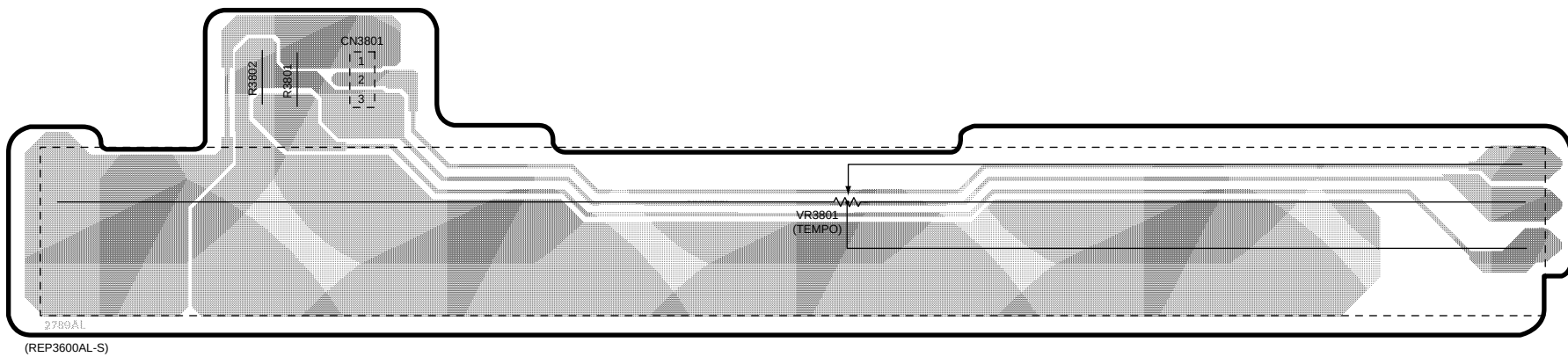
C JACK P.C.B.



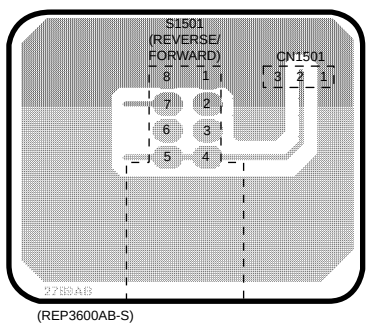
F STROBO P.C.B.



G PITCH CONTROL P.C.B.

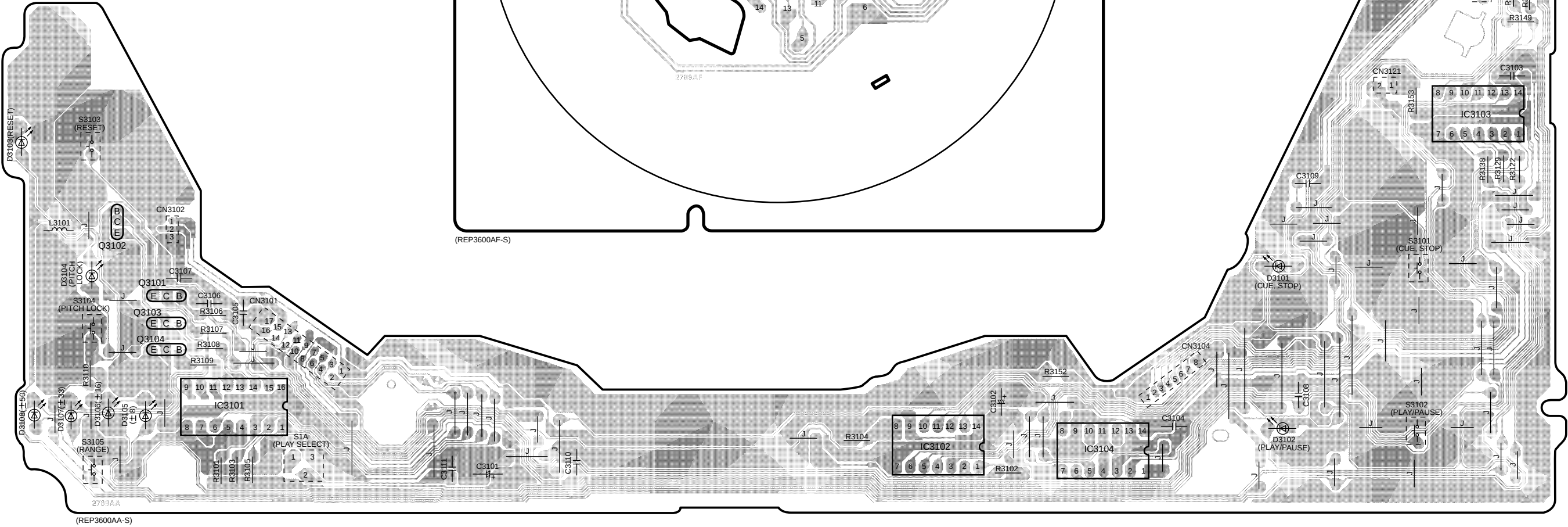


J REVERSE SW P.C.B.

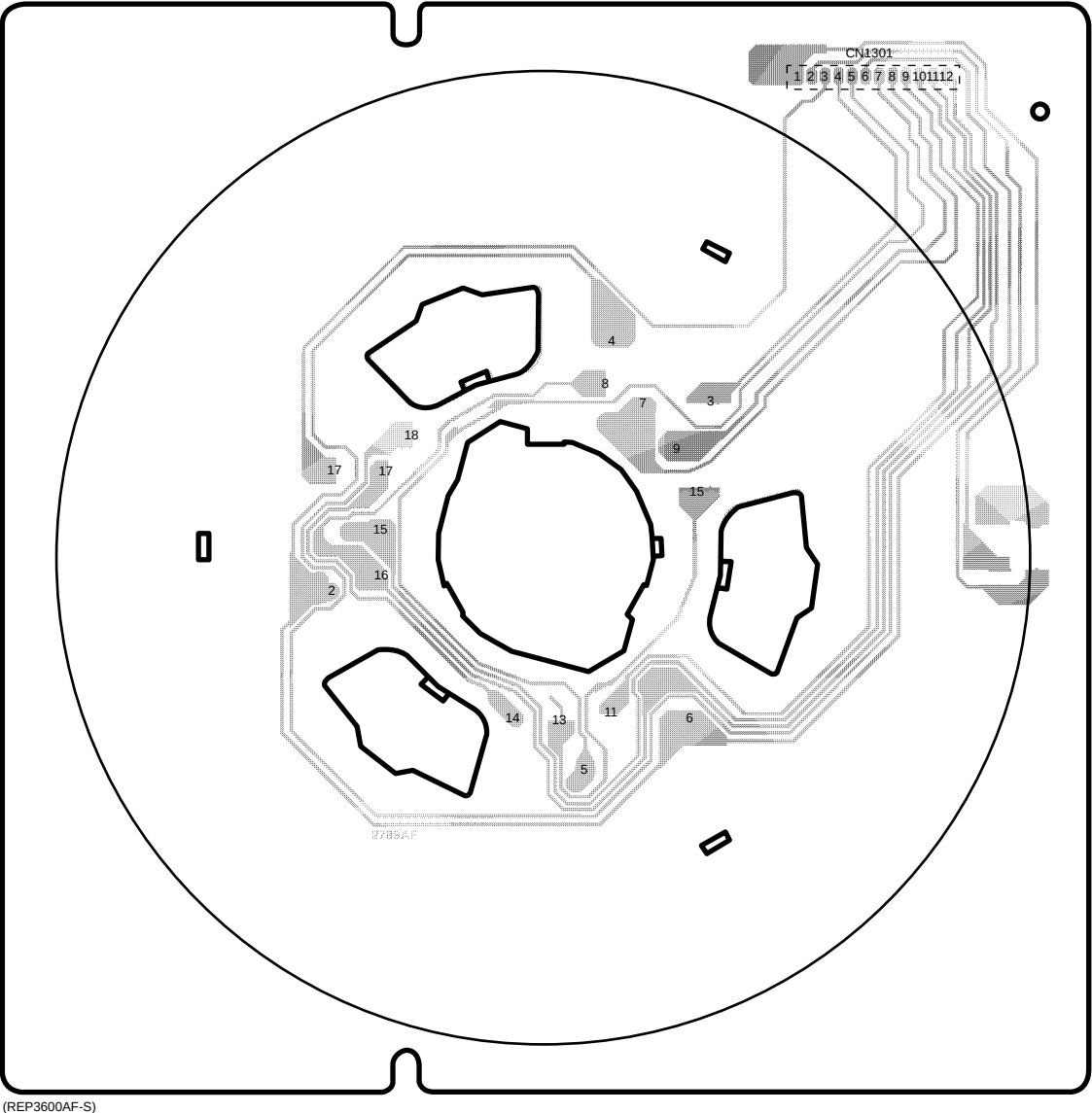


H
G
F
E
D
C
B
A

E CONTROL PANEL(2) P.C.B.



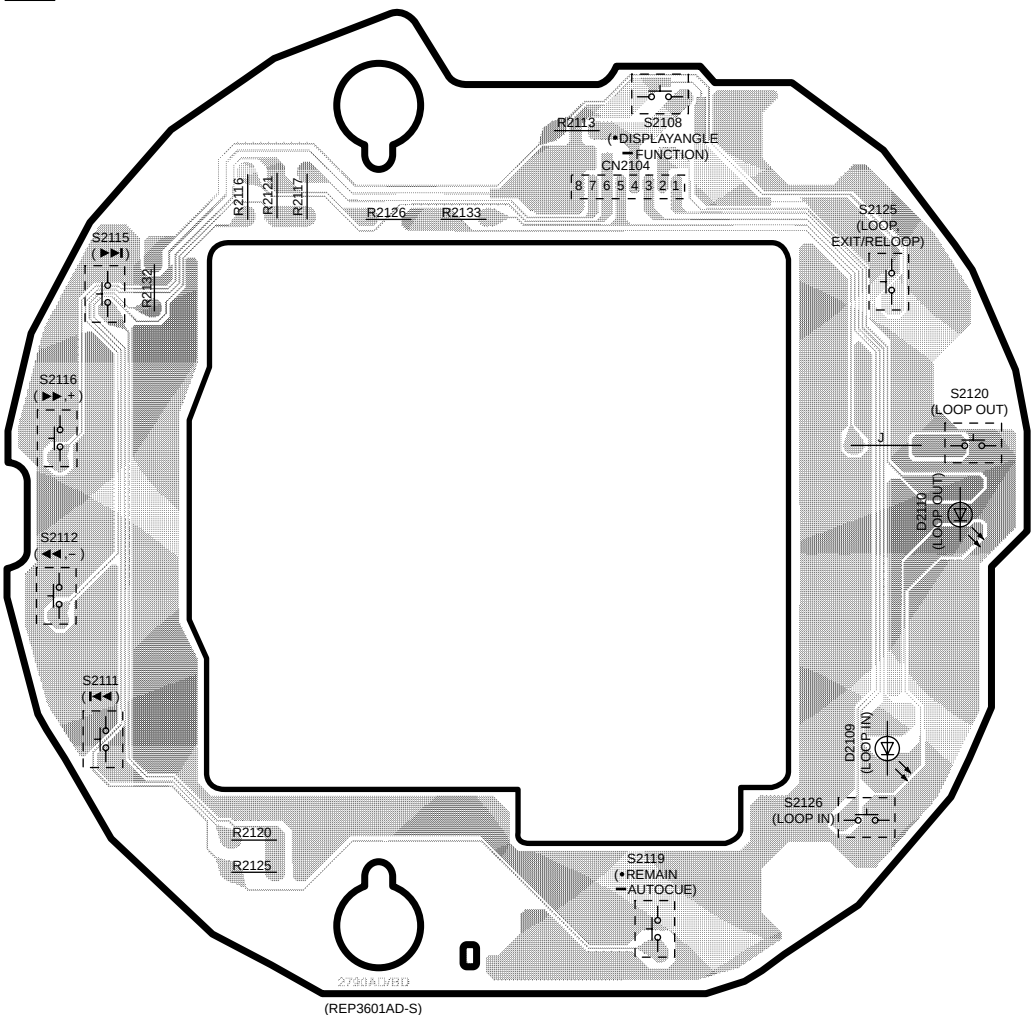
D MOTOR P.C.B.



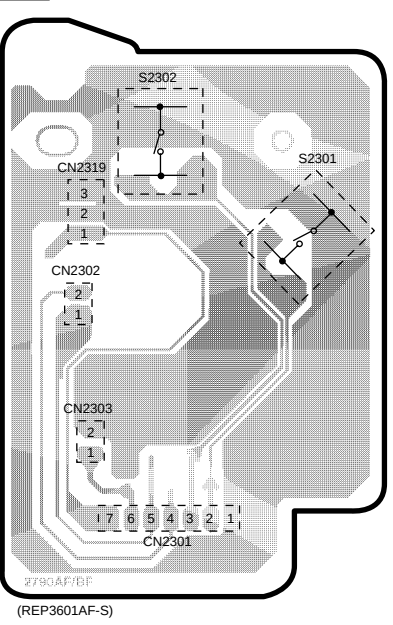
H CONTROL PANEL(1) P.C.B.



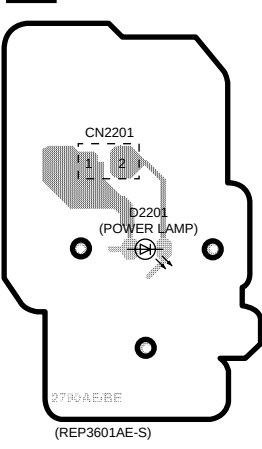
I CONTROL PANEL(3) P.C.B.



K LOADING MOTOR P.C.B.



L LED P.C.B.



(REP3601AG-S)

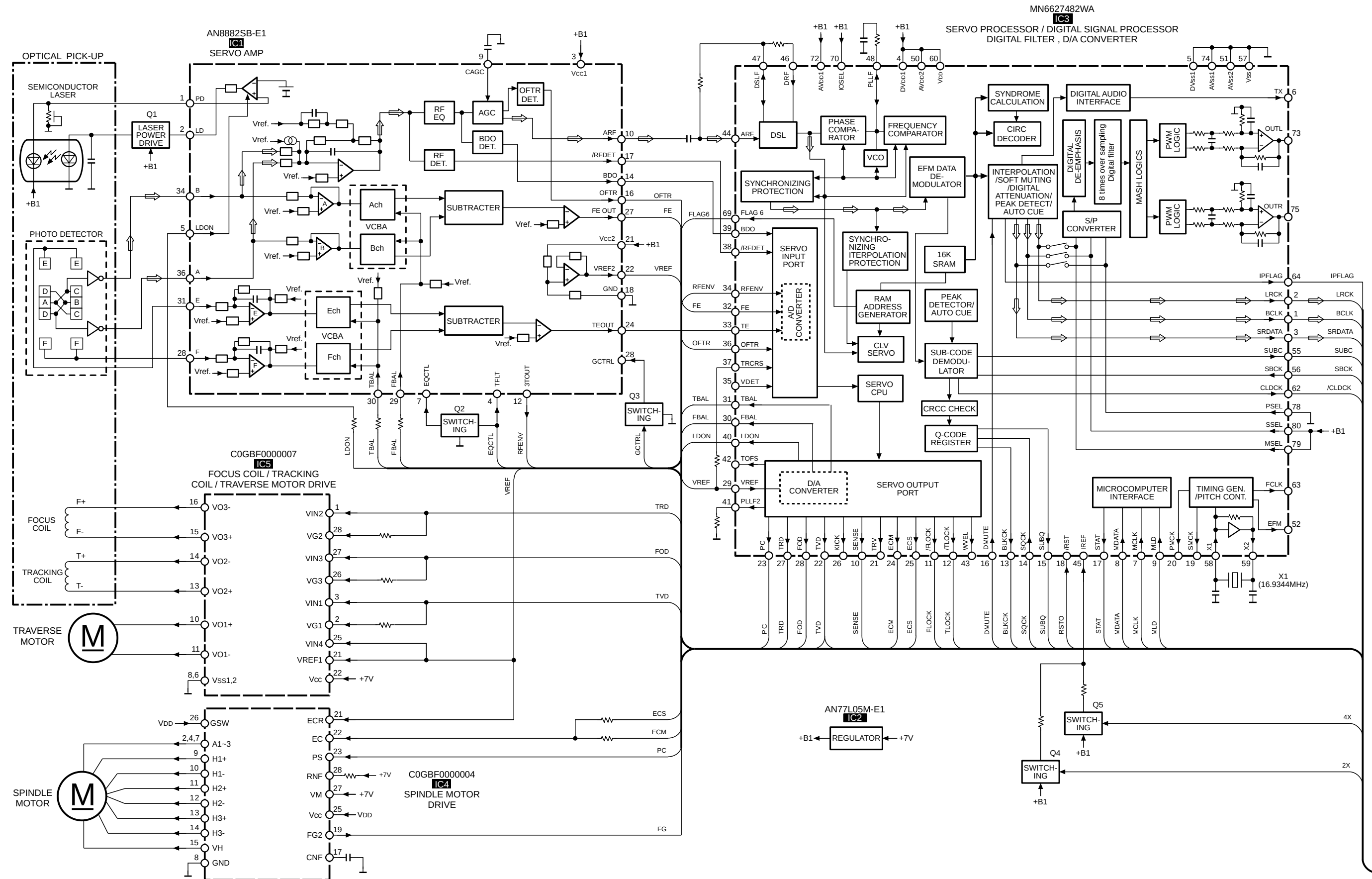
(REP3600AD-S)

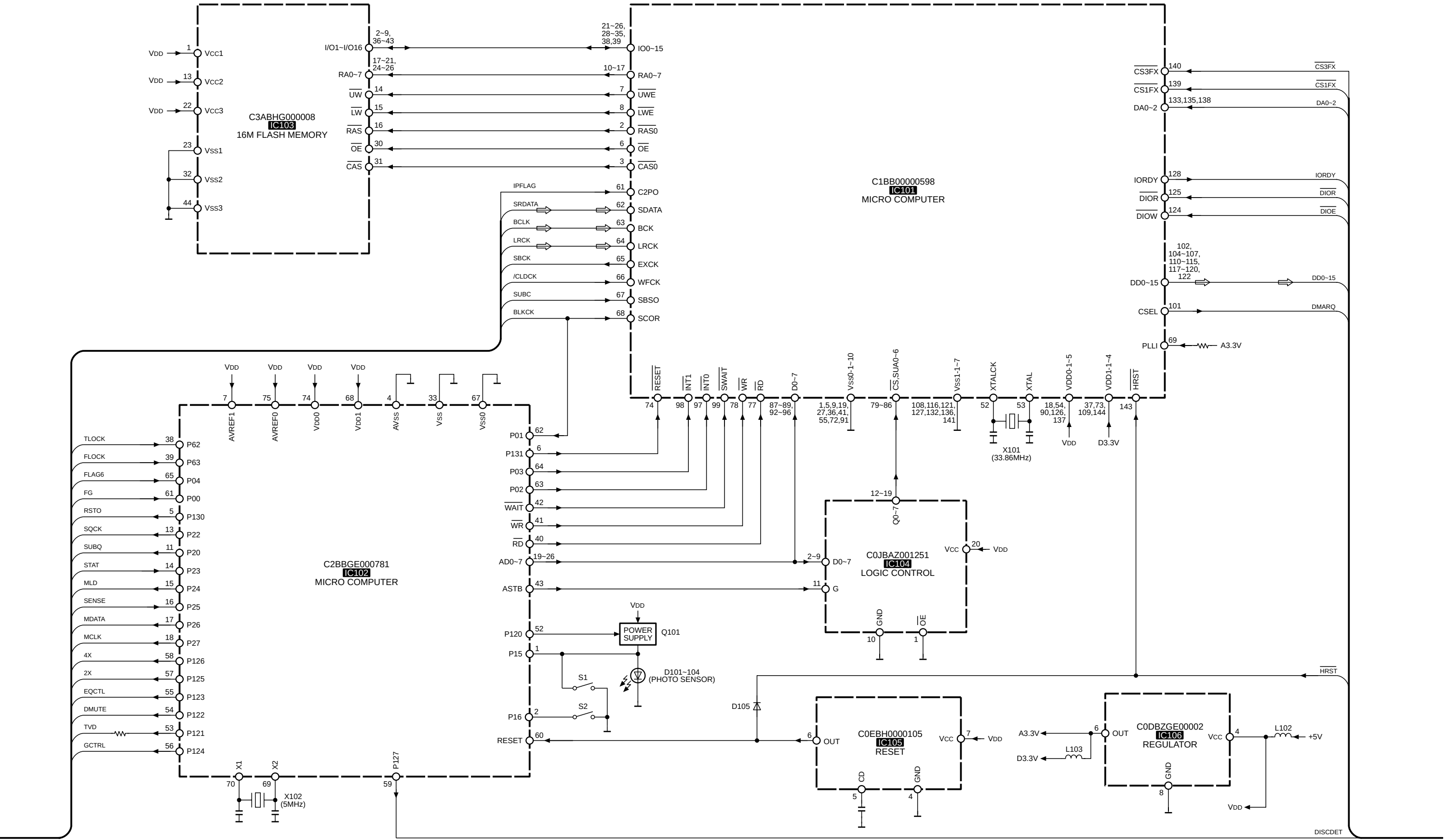
(REP3600AJ-S)

$$\left(\begin{array}{l} \text{REP3601BA-S} \dots [\text{PP}] \\ \text{REP3601CA-S} \dots [\text{EB,EG,EP,GN}] \end{array} \right)$$

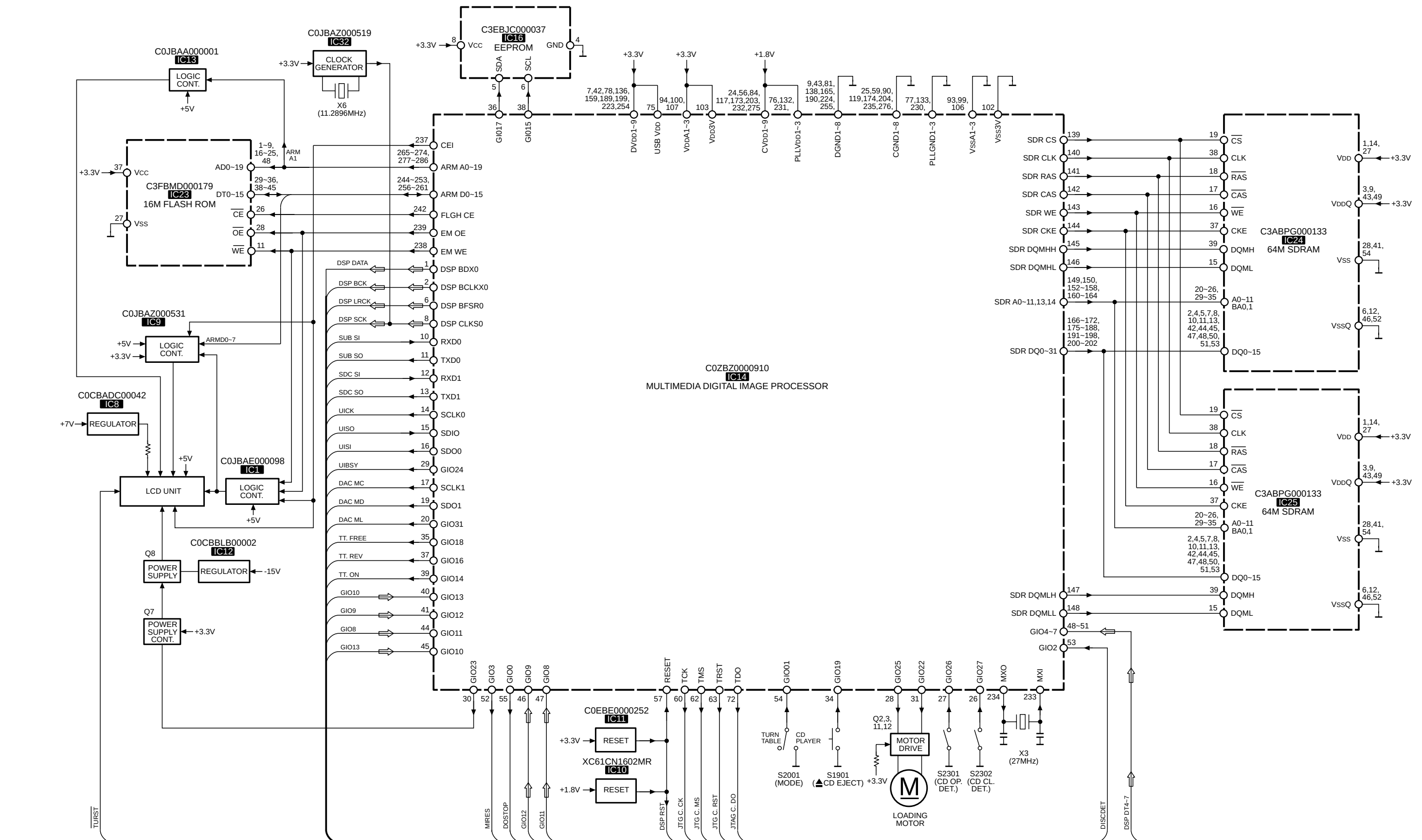
68

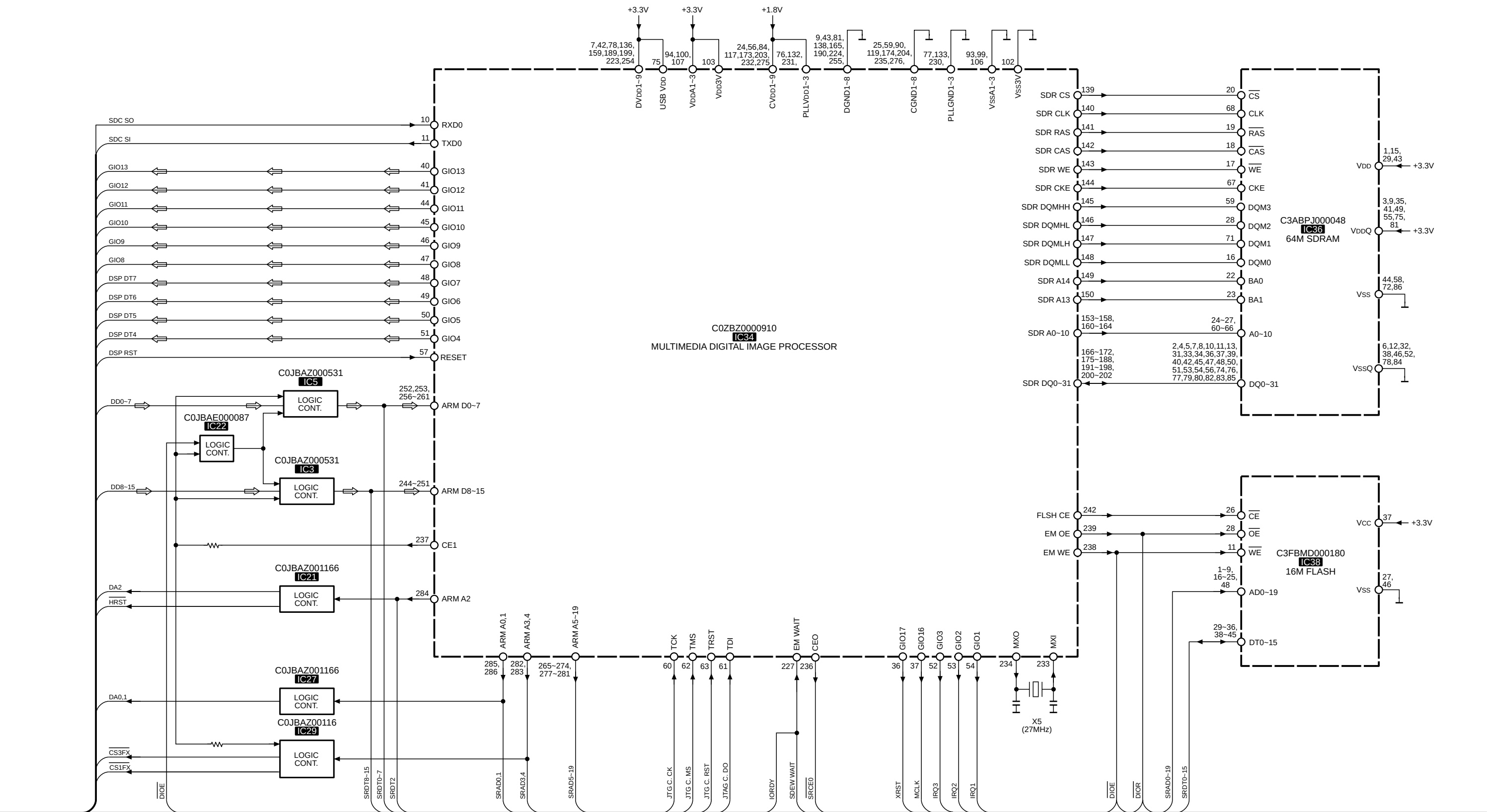
15 Block Diagram



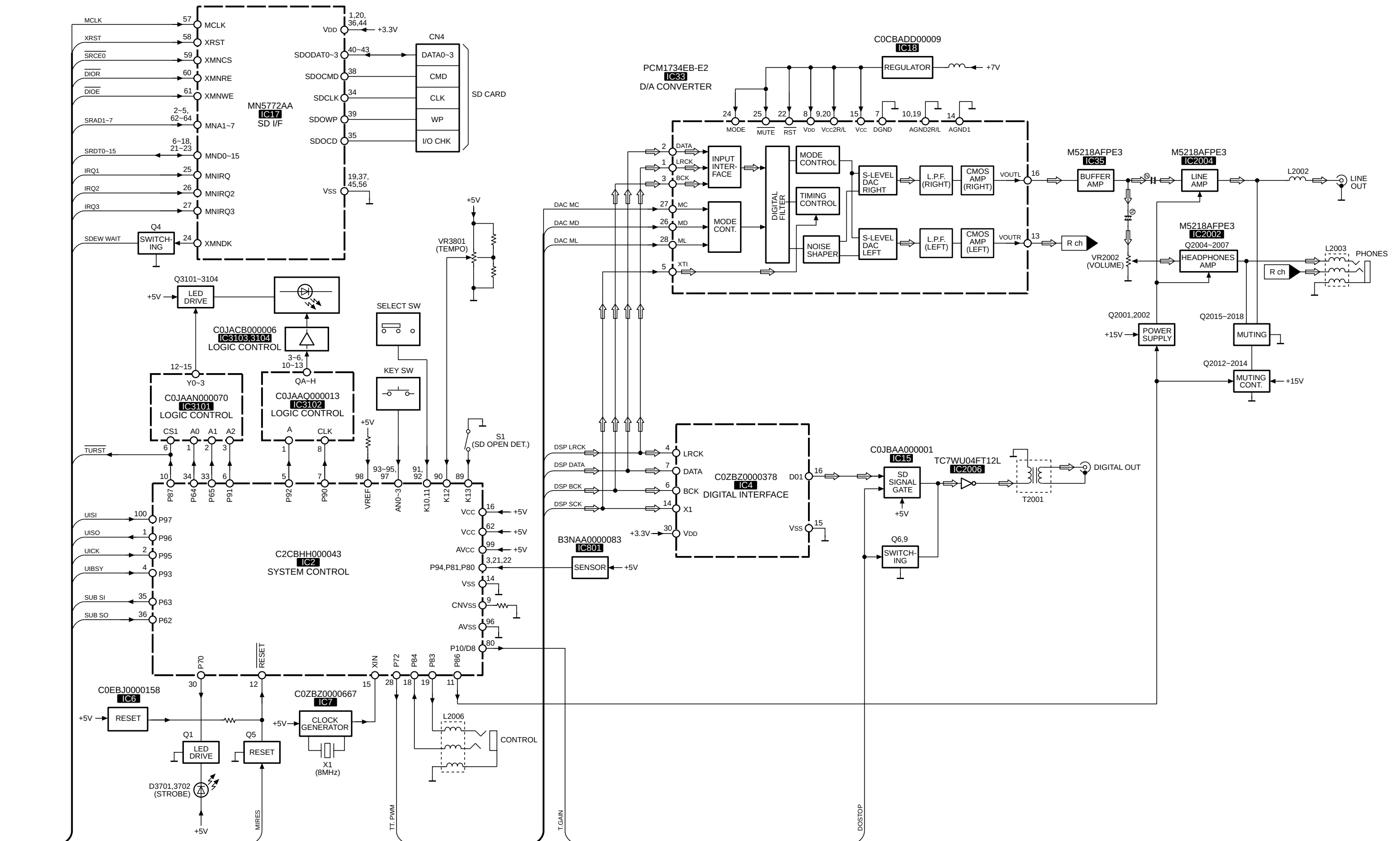


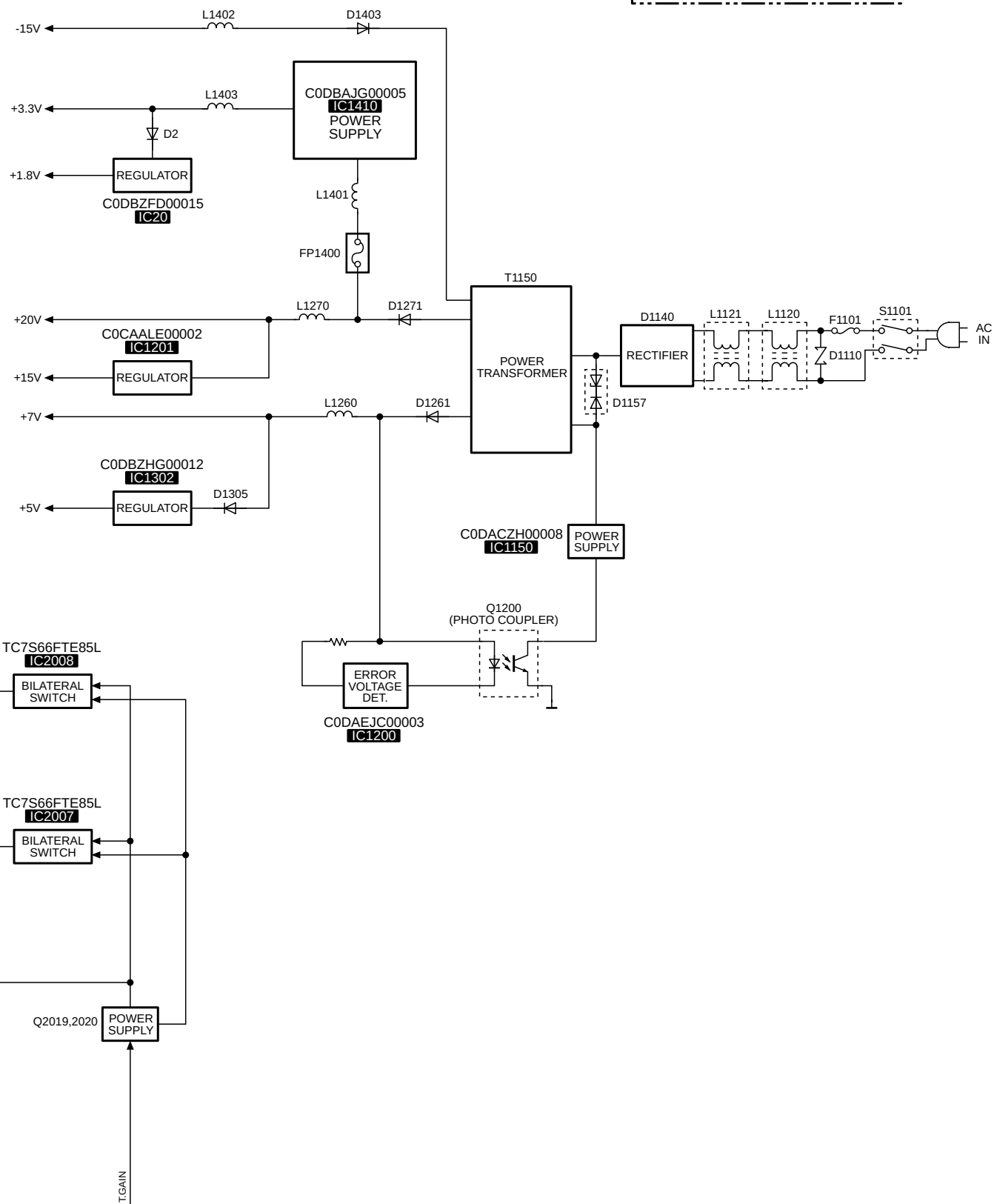
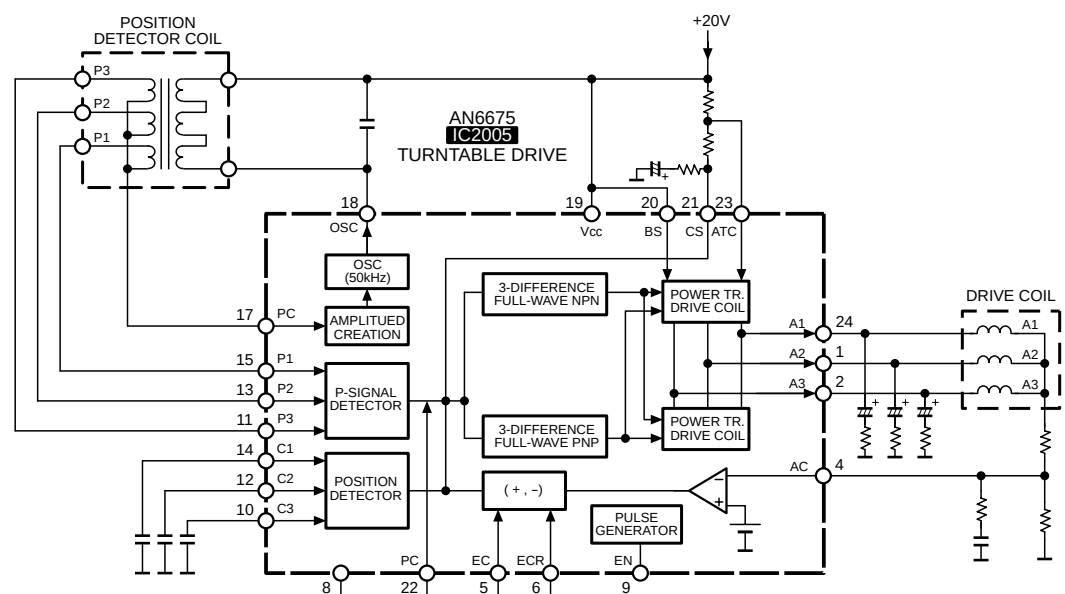
SL-DZ1200(PP,EB,EG,EP,GN) BLOCK DIAGRAM



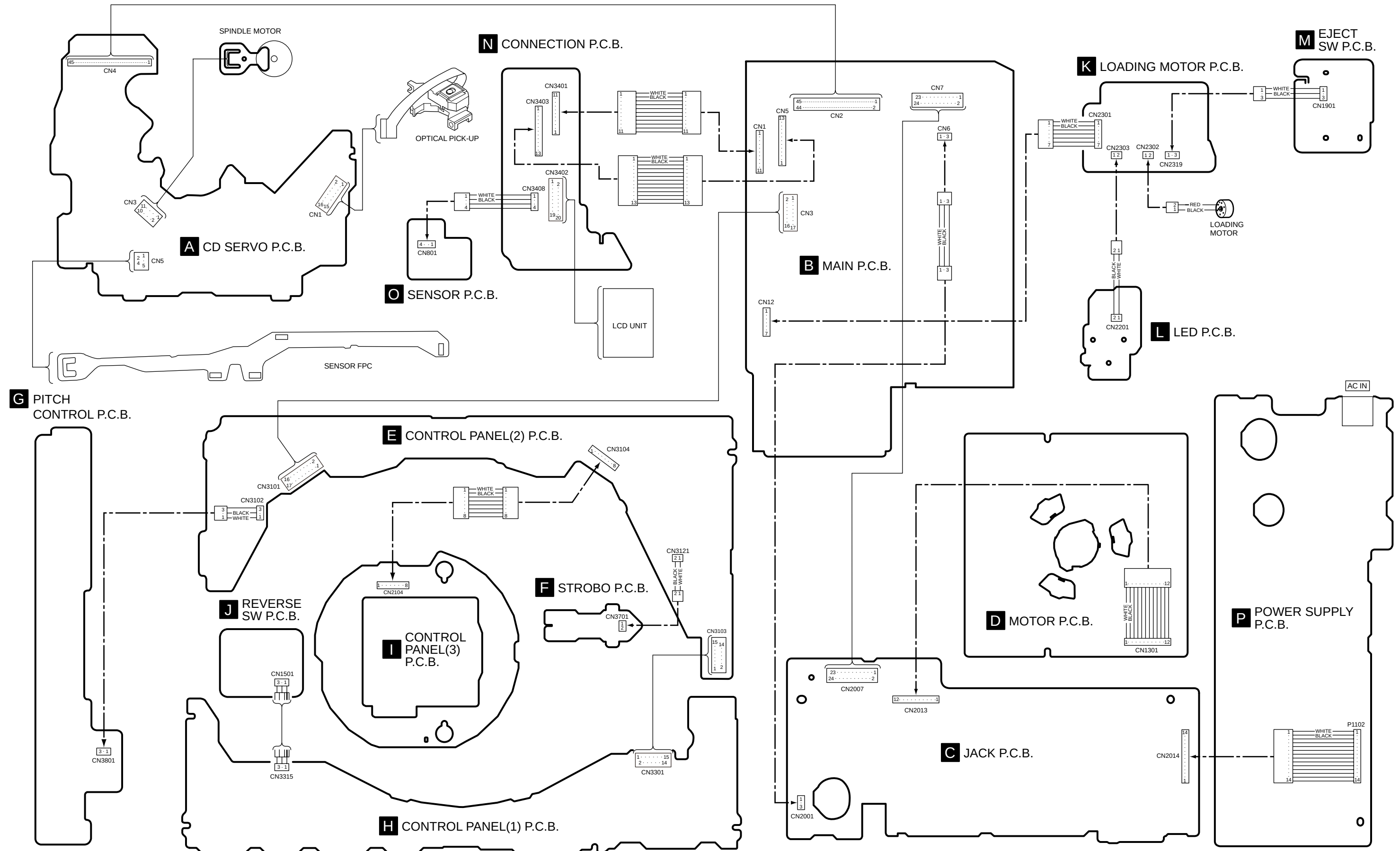


SL-DZ1200(PP,EB,EG,EP,GN) BLOCK DIAGRAM





16 Wiring Connection Diagram



17 Terminal Function of ICs

17.1. IC2(C2CBHH000043): SYSTEM CONTROL (UI Microcomputer)

Pin No.	Terminal Name	I/O	Function
1	P96	O	Transmitting data for SC DSC25 (reserve)
2	P95	I	Communication clock for SC DSC25 (reserve)
3	P94	I	Platter pulse A (for time measurement)
4	P93	I	SC DSC25 communication (reserve)
5	P92	O	CP data
6	P91	O	CP Light Emitting Diode control
7	P90	O	CP clock output
8	BYTE	I	External data bus width setup ('H' 8-bit width)
9	CNV _{SS}	I	Processor mode change (for Flash writing)
10	P87	O	IO RESET
11	P86	O	MUTE
12	/RESET	I	Reset signal input
13	XOUT	-	Not used. (Open)
14	VSS	P	Power supply
15	XIN	I	Clock input
16	VCC	P	Power supply
17	P85	I	Not used. ('H')
18	P84	I/O	CONTROL terminal
19	P83	I/O	CONTROL terminal
20	P82	I/O	Not used. ('H')
21	P81	I	Platter pulse B (count)
22	P80	I	Platter pulse A (count)
23	P77	-	Not used. (Open)
24	P76	O	It connects with Pin No.25.
25	P75	I	It connects with Pin No.24.
26	P74	I	It connects with Pin No.27.
27	P73	I	It connects with Pin No.26.
28	P72	I/O	The rotation pulse output for turntables
29	P71	-	Not used. (Open)
30	P70	O	The stroboscope output for turntables
31	P67	-	Not used. (Open)
32	P66	-	Not used. (Open)
33	P65	O	CP Light Emitting Diode address 1
34	P64	O	CP Light Emitting Diode address 0
35	P63	O	Receiving data for SC DSC25
36	P62	I	Transmitting data for SC DSC25
37	P61	-	Not used. (Open)
38	P60	-	Not used. (Open)
39	P57	-	Not used. (Open)
40	P56	-	Not used. (Open)
41	P55	I	Not used. ('L')
42	P54	-	Not used. (Open)
43	P53	-	Not used. (Open)
44	P52	O	RD signal output for external bus
45	P51	O	UB signal output for SRAM
46	P50	O	WR signal output for external bus
47	P47	I/O	Not used. (Open)
48	P46	I/O	Not used. (Open)
49	P45	I/O	Not used. (Open)
50	P44	O	Not used. (Open)
51	P43/A19	O	The address bus signal for external bus

Pin No.	Terminal Name	I/O	Function
52	P42/A18	O	The address bus signal for external bus
53	P41/A17	O	The address bus signal for external bus
54	P40/A16	O	The address bus signal for external bus
55	P37/A15	O	The address bus signal for external bus
56	P36/A14	O	The address bus signal for external bus
57	P35/A13	O	The address bus signal for external bus
58	P34/A12	O	The address bus signal for external bus
59	P33/A11	O	The address bus signal for external bus
60	P32/A10	O	The address bus signal for external bus
61	P31/A9	O	The address bus signal for external bus
62	V _{CC}	P	Power supply
63	P30/A8	O	The address bus signal for external bus
64	V _{SS}	P	Power supply
65	P27/A7	O	The address bus signal for external bus
66	P26/A6	O	The address bus signal for external bus
67	P25/A5	O	The address bus signal for external bus
68	P24/A4	O	The address bus signal for external bus
69	P23/A3	O	The address bus signal for external bus
70	P22/A2	O	The address bus signal for external bus
71	P21/A1	O	The address bus signal for external bus
72	P20/A0	O	The address bus signal for external bus
73	P17/D15	I/O	The data bus signal for external bus
74	P16/D14	I/O	The data bus signal for external bus
75	P15/D13	I/O	The data bus signal for external bus
76	P14/D12	I/O	The data bus signal for external bus
77	P13/D11	I/O	The data bus signal for external bus
78	P12/D10	I/O	The data bus signal for external bus
79	P11/D9	I/O	The data bus signal for external bus
80	P10/D8	O	Servo filter (change)
81	P07/D7	I/O	The data bus signal for external bus
82	P06/D6	I/O	The data bus signal for external bus
83	P05/D5	I/O	The data bus signal for external bus
84	P04/D4	I/O	The data bus signal for external bus
85	P03/D3	I/O	The data bus signal for external bus
86	P02/D2	I/O	The data bus signal for external bus
87	P01/D1	I/O	The data bus signal for external bus
88	P00/D0	I/O	The data bus signal for external bus
89	P107/AN7	I	SD LID open signal input
90	P106/AN6	I	Pitch control input
91	P105/AN5	I	REVERSE change input
92	P104/AN4	I	CD/SD change input
93	P103/AN3	I	CPSW input
94	P102/AN2	I	CPSW input
95	P101/AN1	I	CPSW input
96	AV _{SS}	P	Power supply
97	P100/AN0	I	CPSW input
98	VREF	I	Analog standard voltage input
99	AV _{CC}	P	Power supply

Pin No.	Terminal Name	I/O	Function
100	P97	I	Receiving data for SC DSC25 (reserve)

17.2. IC14(C0ZBZ0000910): MULTIMEDIA DIGITAL IMAGE PROCESSOR (SC Microcomputer)

Pin No.	Terminal Name	I/O	Function
1	DSP_BDX0	O	DSP transmitting data
2	DSP_BCLKX0	O	DSP transmitting clock
3	DSP_BFSX0	I/O	Not used. ('H')
4	DSP_BDR0	I	Not used. ('H')
5	DSP_BCLKR0	I/O	Not used. ('H')
6	DSP_BFSR0	O	DSP LR selection (LR clock input for PCM1734 and TC9271)
7	DV _{DD} 1	P	Power supply
8	DSP_CLKS0	O	DSP clock input
9	DGND1	P	DE
10	RXD0	I	UI microcomputer receiving data
11	TXD0	O	UI microcomputer transmitting data
12	RXD1	I	MD DSC25 receiving data
13	TXD1	O	MD DSC25 transmitting data
14	SCLK0	O	UI microcomputer communication clock (reserve)
15	SDI0	I	UI microcomputer receiving data (reserve)
16	SDO0	O	UI microcomputer transmitting data (reserve)
17	SCLK1	O	DAC setup (PCM1734 MC)
18	SDI1	I	Not used. ('H')
19	SDO1	O	DAC setup (PCM1734 MD)
20	GIO31	O	DAC setup (PCM1734 ML)
21	GIO30	I/O	For soft debugging ("H")
22	GIO29	I/O	MD DSC25 communication DT9
23	GIO28	I/O	MD DSC25 communication DT8
24	CV _{DD} 1	P	Power supply
25	CGND1	P	DE
26	GIO27	I	CD shutter closing
27	GIO26	I	CD shutter opening
28	GIO25	I/O	CD shutter motor control
29	GIO24	I/O	UI microcomputer BUSY signal
30	GIO23	I/O	The PWM output for LCD contrast
31	GIO22	I/O	CD shutter motor control
32	GIO21	I/O	SD insertion signal input (for test) ('L' Insertion)
33	GIO20	I/O	SD WRITE PROTECT input (for test) ('L' WRITE PROTECT)
34	GIO19	I	EJECT SW input ('L' SW ON)
35	GIO18	O	FREE WHEEL control
36	GIO17	O	I2C DATA (EEROM I2C DATA)
37	GIO16	O	Turntable reverse signal output
38	GIO15	O	I2C CLOCK (EEROM I2C CLOCK)
39	GIO14	O	Turntable motor ON signal output
40	GIO13	I	MD DSC25 communication data bus
41	GIO12	I	MD DSC25 communication data bus
42	DV _{DD} 1	P	Power supply
43	DGND2	P	DE
44	GIO11	I	MD DSC25 communication data bus
45	GIO10	I	MD DSC25 communication data bus
46	GIO9	I	MD DSC25 communication data bus
47	GIO8	I	MD DSC25 communication data bus
48	GIO7	I	MD DSC25 communication data bus (It is the 'L' output if it is SD load discontinuation.)

Pin No.	Terminal Name	I/O	Function
49	GIO6	I	MD DSC25 communication data bus (It is 'L' if MD is busy (under a read).)
50	GIO5	I	MD DSC25 communication data bus ('L' when a shutter may be shut)
51	GIO4	I	Process inspection setup
52	GIO3	O	UI microcomputer reset ('H': reset 'L': O.K.)
53	GIO2	I	DSKDET ('H': LOADING/EJECT)
54	GIO1	I	Player mode
55	GIO0	O	Digital audio output (prohibition)
56	CV _{DD} 2	P	Power supply
57	RESET	I	Reset signal input (It is 'L' at the time not more than VCC=2.9V)
58	PWDWN	I	Power down signal input ('L')
59	CGND2	P	DE
60	TCK	I	For JTAG (10K PULL UP)
61	TDI	I	For JTAG (10K PULL UP)
62	TMS	O	For JTAG (10K PULL UP)
63	TRST	O	For JTAG (10K PULL DOWN)
64	TEST0	I	DSC25 test mode 0 ('L')
65	TEST1	I	DSC25 test mode 1 ('L')
66	TEST2	I	MXI clock selection ('L')
67	TEST3	I	('L')
68	TEST4	I	('H')
69	TEST5	I	('L')
70	TEST6	I	('L')
71	SCANEN	I	Not used. ('L')
72	TDO	O	For JTAG (10K PULL UP)
73	USB_DP	-	Not used. (Open)
74	USB_DM	-	Not used. (Open)
75	USB_V _{DD}	P	USB power supply
76	PLL _V _{DD} 1	P	Power supply
77	PLL _{GND} 1	P	DE
78	DV _{DD} 3	P	Power supply
79	M40XI	I	Not used. ('L')
80	M40XO	-	Not used. ('Open')
81	DGND3	P	DE
82	HSYNC	-	Not used. ('Open')
83	VSYNC	-	Not used. ('Open')
84	CV _{DD} 3	P	Power supply
85	C_VWN	I	Not used. ('L')
86	C_DATA0	I	Not used. ('L')
87	C_DATA1	I	Not used. ('L')
88	C_DATA2	I	Not used. ('L')
89	C_DATA3	I	Not used. ('L')
90	CGND3	P	DE
91	IREF_B	-	Not used.
92	DAOUT_B	-	Not used. ('Open')
93	V _{SS} A1	P	AE
94	V _{DD} A1	P	Power supply
95	BIAS_B	I	VIDEO bias voltage (it is GND connection at 0.1μF)
96	VREF_RGB	I	Not used.
97	IREF_G	-	Not used.
98	DAOUT_G	-	Not used. ('Open')
99	V _{SS} A2	P	AE
100	V _{DD} A2	P	Power supply
101	BIAS_G	I	VIDEO bias voltage (it is GND connection at 0.1μF)
102	V _{SS} 3V	P	Power supply
103	V _{DD} 3V	P	Power supply
104	IREF_R	-	Not used.
105	DAOUT_R	-	Not used. (Open)
106	V _{SS} A3	P	AE
107	V _{DD} A3	P	Power supply
108	BIAS_R	I	VIDEO bias voltage (it is GND connection at 0.1μF)

Pin No.	Terminal Name	I/O	Function
109	C_DATA4	I	Not used. ('L')
110	C_DATA5	I	Not used. ('L')
111	C_DATA6	I	Not used. ('L')
112	C_DATA7	I	Not used. ('L')
113	C_DATA8	I	Not used. ('L')
114	C_DATA9	I	Not used. ('L')
115	C_DATA10	I	Not used. ('L')
116	C_DATA11	I	Not used. ('L')
117	CV _{DD} 4	P	Power supply
118	C_PCLK	I	Not used. ('L')
119	CGND4	P	DE
120	C_VSYNC	-	Not used. ('H')
121	C_HSYNC	-	Not used. ('H')
122	C_FIELD	-	Not used. ('H')
123	LCD_SCLK	-	Not used. (Open)
124	LCD_DO7	-	Not used. (Open)
125	LCD_DO6	-	Not used. (Open)
126	LCD_DO5	-	Not used. (Open)
127	LCD_DO4	-	Not used. (Open)
128	LCD_DO3	-	Not used. (Open)
129	LCD_DO2	-	Not used. (Open)
130	LCD_DO1	-	Not used. (Open)
131	LCD_DO0	-	Not used. (Open)
132	PLL _{VDD} 2	P	Power supply
133	PLLGND2	P	DE
134	LCD_OE	-	Not used. (Open)
135	BLIGHT	-	Not used. (Open)
136	DV _{DD} 4	P	Power supply
137	EXTCLK	I	Not used. (PULL UP(100K))
138	DGND4	P	DE
139	SDR_CS	O	SDRAM chip selection
140	SDR_CLK	O	SDRAM clock
141	SDR_RAS	O	SDRAM RAS
142	SDR_CAS	O	SDRAM CAS
143	SDR_WE	O	SDRAM Write Enable
144	SDR_CKE	O	SDRAM Clock Enable
145	SDR_DQMHH	O	SDRAM DQ signal
146	SDR_DQMLH	O	SDRAM DQ signal
147	SDR_DQMLH	O	SDRAM DQ signal
148	SDR_DQMLL	O	SDRAM DQ signal
149	SDR_A14	O	SDRAM address bus (SDRAM bank selection)
150	SDR_A13	O	SDRAM address bus (SDRAM bank selection)
151	SDR_A12	O	SDRAM address bus
152	SDR_A11	O	SDRAM address bus
153	SDR_A10	O	SDRAM address bus
154	SDR_A9	O	SDRAM address bus
155	SDR_A8	O	SDRAM address bus
156	SDR_A7	O	SDRAM address bus
157	SDR_A6	O	SDRAM address bus
158	SDR_A5	O	SDRAM address bus
159	DV _{DD} 5	P	Power supply
160	SDR_A4	O	SDRAM address bus
161	SDR_A3	O	SDRAM address bus
162	SDR_A2	O	SDRAM address bus
163	SDR_A1	O	SDRAM address bus
164	SDR_A0	P	SDRAM address bus
165	DGND5	P	DE
166	SDR_DQ31	I/O	SDRAM data bus
167	SDR_DQ30	I/O	SDRAM data bus
168	SDR_DQ29	I/O	SDRAM data bus
169	SDR_DQ28	I/O	SDRAM data bus
170	SDR_DQ27	I/O	SDRAM data bus
171	SDR_DQ26	I/O	SDRAM data bus
172	SDR_DQ25	I/O	SDRAM data bus
173	CV _{DD} 5	P	Power supply

Pin No.	Terminal Name	I/O	Function
174	CGND5	P	DE
175	SDR_DQ24	I/O	SDRAM data bus
176	SDR_DQ23	I/O	SDRAM data bus
177	SDR_DQ22	I/O	SDRAM data bus
178	SDR_DQ21	I/O	SDRAM data bus
179	SDR_DQ20	I/O	SDRAM data bus
180	SDR_DQ19	I/O	SDRAM data bus
181	SDR_DQ18	I/O	SDRAM data bus
182	SDR_DQ17	I/O	SDRAM data bus
183	SDR_DQ16	I/O	SDRAM data bus
184	SDR_DQ15	I/O	SDRAM data bus
185	SDR_DQ14	I/O	SDRAM data bus
186	SDR_DQ13	I/O	SDRAM data bus
187	SDR_DQ12	I/O	SDRAM data bus
188	SDR_DQ11	I/O	SDRAM data bus
189	DV _{DD} 6	P	Power supply
190	DGND6	P	DE
191	SDR_DQ10	I/O	SDRAM data bus
192	SDR_DQ9	I/O	SDRAM data bus
193	SDR_DQ8	I/O	SDRAM data bus
194	SDR_DQ7	I/O	SDRAM data bus
195	SDR_DQ6	I/O	SDRAM data bus
196	SDR_DQ5	I/O	SDRAM data bus
197	SDR_DQ4	I/O	SDRAM data bus
198	SDR_DQ3	I/O	SDRAM data bus
199	DV _{DD} 9	P	Power supply
200	SDR_DQ2	I/O	SDRAM data bus
201	SDR_DQ1	I/O	SDRAM data bus
202	SDR_DQ0	I/O	SDRAM data bus
203	CV _{DD} 6	P	Power supply
204	CGND6	P	DE
205	CFQE	-	Not used. (Open)
206	CFE1	-	Not used. (Open)
207	CFE2	-	Not used. (Open)
208	CFRST	-	Not used. (Open)
209	STSCHG	-	Not used. (Open)
210	CFWAIT	-	Not used. (Open)
211	CFD1	-	Not used. (Open)
212	CFD2	-	Not used. (Open)
213	CFRDY	-	Not used. (Open)
214	IOIS16	-	Not used. (Open)
215	CFIORD	-	Not used. (Open)
216	CFIOWR	-	Not used. (Open)
217	SD_DATA1	I/O	SD card data 1 (for test)
218	SD_DATA0	I/O	SD card data 0 (for test)
219	SD_CLK	I/O	SD card clock (for test)
220	SD_CMD	I/O	SD card command (for test)
221	SD_DATA3	I/O	SD card data 3 (for test)
222	SD_DATA2	I/O	SD card data 2 (for test)
223	DV _{DD} 7	P	Power supply
224	DGND7	P	DE
225	EM_BUSACK	-	Not used. (Open)
226	EM_BUSREQ	I	Not used. ('H')
227	EM_WAIT	I	Not used. ('H')
228	EM_BEL	-	Not used. (Open)
229	EM_BEM	-	Not used. (Open)
230	PLLGND3	P	DE
231	PLL _{VDD} 3	P	Power supply
232	CV _{DD} 7	P	Power supply
233	MXI	I	27MHz clock input (core clock 27MHz oscillator input)
234	MXO	O	27MHz clock output (core clock 27MHz oscillator output)
235	CGND7	P	DE
236	CE0	-	Not used. (Open)
237	CE1	O	LCD chip selection (CE signal for LCD)

Pin No.	Terminal Name	I/O	Function
238	EM_WE	O	Write enable (WE signal for external bus)
239	EM_OE	O	Read enable (OE signal for external bus)
240	EM_RDWR	-	Not used. (Open)
241	CSE	-	Not used. (Open)
242	FLSH_CE	O	ROM#0 chip selection (CE signal for 16M FLASH ROM)
243	BUSWIDTH	I	External bus width setup ('H' 16bit)
244	ARM_D15	I/O	External data bus (data bus signal for external bus)
245	ARM_D14	I/O	External data bus (data bus signal for external bus)
246	ARM_D13	I/O	External data bus (data bus signal for external bus)
247	ARM_D12	I/O	External data bus (data bus signal for external bus)
248	ARM_D11	I/O	External data bus (data bus signal for external bus)
249	ARM_D10	I/O	External data bus (data bus signal for external bus)
250	ARM_D9	I/O	External data bus (data bus signal for external bus)
251	ARM_D8	I/O	External data bus (data bus signal for external bus)
252	ARM_D7	I/O	External data bus (data bus signal for external bus)
253	ARM_D6	I/O	External data bus (data bus signal for external bus)
254	DV _{DD} 8	P	Power supply
255	DGND8	P	DE
256	ARM_D5	I/O	External data bus (data bus signal for external bus)
257	ARM_D4	I/O	External data bus (data bus signal for external bus)
258	ARM_D3	I/O	External data bus (data bus signal for external bus)
259	ARM_D2	I/O	External data bus (data bus signal for external bus)
260	ARM_D1	I/O	External data bus (data bus signal for external bus)
261	ARM_D0	I/O	External data bus (data bus signal for external bus)
262	ARM_A22	-	Not used. (Open)
263	ARM_A21	-	Not used. (Open)
264	ARM_A20	-	Not used. (Open)
265	ARM_A19	O	External address bus (address bus signal for external bus)
266	ARM_A18	O	External address bus (address bus signal for external bus)
267	ARM_A17	O	External address bus (address bus signal for external bus)
268	ARM_A16	O	External address bus (address bus signal for external bus)
269	ARM_A15	O	External address bus (address bus signal for external bus)
270	ARM_A14	O	External address bus (address bus signal for external bus)
271	ARM_A13	O	External address bus (address bus signal for external bus)
272	ARM_A12	O	External address bus (address bus signal for external bus)
273	ARM_A11	O	External address bus (address bus signal for external bus)
274	ARM_A10	O	External address bus (address bus signal for external bus)
275	CV _{DD} 8	P	Power supply
276	CGND8	P	DE
277	ARM_A9	O	External address bus (address bus signal for external bus)
278	ARM_A8	O	External address bus (address bus signal for external bus)

Pin No.	Terminal Name	I/O	Function
279	ARM_A7	O	External address bus (address bus signal for external bus)
280	ARM_A6	O	External address bus (address bus signal for external bus)
281	ARM_A5	O	External address bus (address bus signal for external bus)
282	ARM_A4	O	External address bus (address bus signal for external bus)
283	ARM_A3	O	External address bus (address bus signal for external bus)
284	ARM_A2	O	External address bus (address bus signal for external bus)
285	ARM_A1	O	External address bus (address bus signal for external bus)
286	ARM_A0	O	External address bus (address bus signal for external bus)
287	EUM0	I/O	Not used. ('H')
288	EUM1	I/O	Not used. ('H')

17.3. IC34(C0ZBZ0000910): MULTIMEDIA DIGITAL IMAGE PROCESSOR (MD Microcomputer)

Pin No.	Terminal Name	I/O	Function
1	DSP_BDX0	-	Not used. (Open)
2	DSP_BCLKX0	I/O	Not used. ('H')
3	DSP_BFSX0	I/O	Not used. ('H')
4	DSP_BDR0	I	Not used. ('H')
5	DSP_BCLKR0	I/O	Not used. ('H')
6	DSP_BFSR0	I/O	Not used. ('H')
7	DV _{DD} 1	P	Power supply
8	DSP_CLKS0	I	Not used. ('H')
9	DGND1	P	DE
10	RXD0	I	SC DSC25 receiving data
11	TXD0	O	SC DSC25 transmitting data
12	RXD1	I	Not used. ('H')
13	TXD1	-	Not used. ('Open')
14	SCLK0	-	Not used. ('L')
15	SDI0	-	Not used. ('L')
16	SDO0	-	Not used. ('L')
17	SCLK1	-	Not used. ('Open')
18	SDI1	I	Not used. ('H')
19	SDO1	-	Not used. ('Open')
20	GIO31	I/O	Not used. ('H')
21	GIO30	I/O	Not used. ('H')
22	GIO29	I/O	Not used. ('H')
23	GIO28	I/O	Debugging use ('L')
24	CV _{DD} 1	P	Power supply
25	CGND1	P	DE
26	GIO27	I/O	Not used. ('H')
27	GIO26	I/O	Not used. ('H')
28	GIO25	I/O	Not used. ('H')
29	GIO24	I/O	Not used. ('H')
30	GIO23	I/O	Not used. ('H')
31	GIO22	I/O	Not used. ('H')
32	GIO21	I/O	Not used. ('H')
33	GIO20	I/O	Not used. ('H')
34	GIO19	I/O	Not used. ('H')
35	GIO18	I/O	CD reset ('L' reset)
36	GIO17	O	Reset for MN5772
37	GIO16	O	The clock for MN5772
38	GIO15	I/O	Not used. ('H')
39	GIO14	I/O	Not used. ('H')
40	GIO13	O	SC DSC25 communication data bus (DSP_BDX1:transmitting data)

Pin No.	Terminal Name	I/O	Function
41	GIO12	O	SC DSC25 communication data bus (DSP_BCLKX1:transmitting clock)
42	DV _{DD} 1	P	Power supply
43	DGND2	P	DE
44	GIO11	O	SC DSC25 communication data bus (DSP_BSF1:transmitting frame)
45	GIO10	O	SC DSC25 communication data bus (DSP_BDR1:receiving data)
46	GIO9	O	SC DSC25 communication data bus (DSP_BCLKR1:receiving clock)
47	GIO8	O	SC DSC25 communication data bus (DSP_BFSR1:receiving frame)
48	GIO7	O	SC DSC25 communication data bus (it is 'L' at the time of SD load discontinuation)
49	GIO6	O	SC DSC25 communication data bus ('L':Reading)
50	GIO5	O	SC DSC25 communication data bus ('L' when a shutter may be shut)
51	GIO4	O	MAIN DSC25 communication data bus
52	GIO3	O	MN5772 IRQ3
53	GIO2	O	MN5772 IRQ2
54	GIO1	O	MN5772 IRQ
55	GIO0	O	DSKDET ('H': Loading/ejecting)
56	CVDD2	P	Power supply
57	RESET	I	Reset signal input (It is 'L' at the time not more than VCC=2.9V)
58	PWDWN	I	Power down signal input ('L')
59	CGND2	P	DE
60	TCK	I	For JTAG
61	TDI	I	For JTAG
62	TMS	I	For JTAG
63	TRST	I	For JTAG
64	TEST0	I	DSC25 test mode 0 ('L')
65	TEST1	I	DSC25 test mode 1 ('L')
66	TEST2	I	MXI clock selection ('L')
67	TEST3	I	('L')
68	TEST4	I	('H')
69	TEST5	I	('L')
70	TEST6	I	('L')
71	SCANEN	I	Not used. ('L')
72	TDO	O	For JTAG
73	USB_DP	-	Not used. (Open)
74	USB_DM	-	Not used. (Open)
75	USB_V _{DD}	P	USB power supply
76	PLL _{VDD} 1	P	Power supply
77	PLLGND1	P	DE
78	DV _{DD} 3	P	Power supply
79	M40XI	I	Not used. ('H')
80	M40XO	-	Not used. ('H')
81	DGND3	P	DE
82	HSYNC	-	Not used. ('Open')
83	VSYNC	-	Not used. ('Open')
84	CV _{DD} 3	P	Power supply
85	C_WEN	I	Not used. ('L')
86	C_DATA0	I	Not used. ('L')
87	C_DATA1	I	Not used. ('L')
88	C_DATA2	I	Not used. ('L')
89	C_DATA3	I	Not used. ('L')
90	CGND3	P	DE
91	IREF_B	-	Not used.
92	DAOUT_B	-	Not used. ('Open')
93	V _{SS} A1	P	AE
94	V _{DD} A1	P	Power supply
95	BIAS_B	I	VIDEO bias voltage (it is GND connection at 0.1μF)
96	VREF_RGB	I	Not used.
97	IREF_G	-	Not used.

Pin No.	Terminal Name	I/O	Function
98	DAOUT_G	-	Not used. ('Open')
99	V _{SS} A2	P	AE
100	V _{DD} A2	P	Power supply
101	BIAS_G	I	VIDEO bias voltage (it is GND connection at 0.1μF)
102	V _{SS} 3V	P	Power supply
103	V _{DD} 3V	P	Power supply
104	IREF_R	-	Not used.
105	DAOUT_R	-	Not used. (Open)
106	V _{SS} A3		AE
107	V _{DD} A3	P	Power supply
108	BIAS_R	I	VIDEO bias voltage (it is GND connection at 0.1μF)
109	C_DATA4	I	Not used. ('L')
110	C_DATA5	I	Not used. ('L')
111	C_DATA6	I	Not used. ('L')
112	C_DATA7	I	Not used. ('L')
113	C_DATA8	I	Not used. ('L')
114	C_DATA9	I	Not used. ('L')
115	C_DATA10	I	Not used. ('L')
116	C_DATA11	I	Not used. ('L')
117	CV _{DD} 4	P	Power supply
118	C_PCLK	I	Not used. ('L')
119	CGND4	P	DE
120	C_VSYNC	-	Not used. ('H')
121	C_HSYNC	-	Not used. ('H')
122	C_FIELD	-	Not used. ('H')
123	LCD_SCLK	-	Not used. (Open)
124	LCD_DO7	-	Not used. (Open)
125	LCD_DO6	-	Not used. (Open)
126	LCD_DO5	-	Not used. (Open)
127	LCD_DO4	-	Not used. (Open)
128	LCD_DO3	-	Not used. (Open)
129	LCD_DO2	-	Not used. (Open)
130	LCD_DO1	-	Not used. (Open)
131	LCD_DO0	-	Not used. (Open)
132	PLL _{VDD} 2	P	Power supply
133	PLLGND2	P	DE
134	LCD_OE	-	Not used. (Open)
135	BLIGHT	-	Not used. (Open)
136	DV _{DD} 4	P	Power supply
137	EXTCLK	I	Not used. (PULL UP(100K))
138	DGND4	P	DE
139	SDR_CS	O	SDRAM chip selection
140	SDR_CLK	O	SDRAM clock
141	SDR_RAS	O	SDRAM RAS
142	SDR_CAS	O	SDRAM CAS
143	SDR_WE	O	SDRAM Write Enable
144	SDR_CKE	O	SDRAM Clock Enable
145	SDR_DQMHH	O	SDRAM DQ signal
146	SDR_DQMLH	O	SDRAM DQ signal
147	SDR_DQMLH	O	SDRAM DQ signal
148	SDR_DQMLL	O	SDRAM DQ signal
149	SDR_A14	O	SDRAM address bus
150	SDR_A13	O	SDRAM address bus
151	SDR_A12	-	Not used.
152	SDR_A11	-	Not used.
153	SDR_A10	O	SDRAM address bus
154	SDR_A9	O	SDRAM address bus
155	SDR_A8	O	SDRAM address bus
156	SDR_A7	O	SDRAM address bus
157	SDR_A6	O	SDRAM address bus
158	SDR_A5	O	SDRAM address bus
159	DV _{DD} 5	P	Power supply
160	SDR_A4	O	SDRAM address bus
161	SDR_A3	O	SDRAM address bus
162	SDR_A2	O	SDRAM address bus

Pin No.	Terminal Name	I/O	Function
163	SDR_A1	O	SDRAM address bus
164	SDR_A0	O	SDRAM address bus
165	DGND5	P	DE
166	SDR_DQ31	I/O	SDRAM data bus
167	SDR_DQ30	I/O	SDRAM data bus
168	SDR_DQ29	I/O	SDRAM data bus
169	SDR_DQ28	I/O	SDRAM data bus
170	SDR_DQ27	I/O	SDRAM data bus
171	SDR_DQ26	I/O	SDRAM data bus
172	SDR_DQ25	I/O	SDRAM data bus
173	CV _{DD} 5	P	Power supply
174	CGND5	P	DE
175	SDR_DQ24	I/O	SDRAM data bus
176	SDR_DQ23	I/O	SDRAM data bus
177	SDR_DQ22	I/O	SDRAM data bus
178	SDR_DQ21	I/O	SDRAM data bus
179	SDR_DQ20	I/O	SDRAM data bus
180	SDR_DQ19	I/O	SDRAM data bus
181	SDR_DQ18	I/O	SDRAM data bus
182	SDR_DQ17	I/O	SDRAM data bus
183	SDR_DQ16	I/O	SDRAM data bus
184	SDR_DQ15	I/O	SDRAM data bus
185	SDR_DQ14	I/O	SDRAM data bus
186	SDR_DQ13	I/O	SDRAM data bus
187	SDR_DQ12	I/O	SDRAM data bus
188	SDR_DQ11	I/O	SDRAM data bus
189	DV _{DD} 6	P	Power supply
190	DGND6	P	DE
191	SDR_DQ10	I/O	SDRAM data bus
192	SDR_DQ9	I/O	SDRAM data bus
193	SDR_DQ8	I/O	SDRAM data bus
194	SDR_DQ7	I/O	SDRAM data bus
195	SDR_DQ6	I/O	SDRAM data bus
196	SDR_DQ5	I/O	SDRAM data bus
197	SDR_DQ4	I/O	SDRAM data bus
198	SDR_DQ3	I/O	SDRAM data bus
199	DVDD9	P	Power supply
200	SDR_DQ2	I/O	SDRAM data bus
201	SDR_DQ1	I/O	SDRAM data bus
202	SDR_DQ0	I/O	SDRAM data bus
203	CV _{DD} 6	P	Power supply
204	CGND6	P	DE
205	CFQE	-	Not used. (Open)
206	CFE1	-	Not used. (Open)
207	CFE2	-	Not used. (Open)
208	CFRST	-	Not used. (Open)
209	STSCHG	-	Not used. (Open)
210	CFWAIT	-	Not used. (Open)
211	CFD1	-	Not used. (Open)
212	CFD2	-	Not used. (Open)
213	CFRDY	-	Not used. (Open)
214	IOIS16	-	Not used. (Open)
215	CFIORD	-	Not used. (Open)
216	CDIOWR	-	Not used. (Open)
217	SD_DATA1	I	Not used. (Open)
218	SD_DATA0	I	Not used. (Open)
219	SD_CLK	-	Not used. (Open)
220	SD_CMD	I	Not used. (Open)
221	SD_DATA3	I	Not used. (Open)
222	SD_DATA2	I	Not used. (Open)
223	DV _{DD} 7	P	Power supply
224	DGND7	P	DE
225	EM_BUSACK	-	Not used. (Open)
226	EM_BUSREQ	I	Not used. ('H')
227	EM_WAIT	I	CD ROM WAIT
228	EM_BEL	-	Not used. (Open)
229	EM_BEM	-	Not used. (Open)

Pin No.	Terminal Name	I/O	Function
230	PLL _{GND} 3	P	DE
231	PLL _{V_{DD}} 3	P	Power supply
232	CV _{DD} 7	P	Power supply
233	MXI	I	27MHz clock input (core clock 27MHz oscillator input)
234	MXO	O	27MHz clock output (core clock 27MHz oscillator output)
235	CGND7	P	DE
236	CE0	O	SD I/F chip selection (CE signal for SD I/F (MN5772))
237	CE1	O	CD chip selection (CE signal for CD)
238	EM_WE	O	Write enable (WE signal for external bus)
239	EM_OE	O	Read enable (OE signal for external bus)
240	EM_RDWR	-	Not used. (Open)
241	SCE	-	Not used. (Open)
242	FLSH_CE	O	ROM#0 chip selection (CE signal for 16M FLASH/MASK ROM)
243	BUSWIDTH	I	External bus width setup ('H' 16bit)
244	ARM_D15	I/O	External data bus (data bus signal for external bus)
245	ARM_D14	I/O	External data bus (data bus signal for external bus)
246	ARM_D13	I/O	External data bus (data bus signal for external bus)
247	ARM_D12	I/O	External data bus (data bus signal for external bus)
248	ARM_D11	I/O	External data bus (data bus signal for external bus)
249	ARM_D10	I/O	External data bus (data bus signal for external bus)
250	ARM_D9	I/O	External data bus (data bus signal for external bus)
251	ARM_D8	I/O	External data bus (data bus signal for external bus)
252	ARM_D7	I/O	External data bus (data bus signal for external bus)
253	ARM_D6	I/O	External data bus (data bus signal for external bus)
254	DV _{DD} 8	P	Power supply
255	DGND8	P	DE
256	ARM_D5	I/O	External data bus (data bus signal for external bus)
257	ARM_D4	I/O	External data bus (data bus signal for external bus)
258	ARM_D3	I/O	External data bus (data bus signal for external bus)
259	ARM_D2	I/O	External data bus (data bus signal for external bus)
260	ARM_D1	I/O	External data bus (data bus signal for external bus)
261	ARM_D0	I/O	External data bus (data bus signal for external bus)
262	ARM_A22	-	Not used. (Open)
263	ARM_A21	-	Not used. (Open)
264	ARM_A20	-	Not used. (Open)
265	ARM_A19	O	External address bus (address bus signal for external bus)
266	ARM_A18	O	External address bus (address bus signal for external bus)
267	ARM_A17	O	External address bus (address bus signal for external bus)
268	ARM_A16	O	External address bus (address bus signal for external bus)
269	ARM_A15	O	External address bus (address bus signal for external bus)
270	ARM_A14	O	External address bus (address bus signal for external bus)
271	ARM_A13	O	External address bus (address bus signal for external bus)

Pin No.	Terminal Name	I/O	Function
272	ARM_A12	O	External address bus (address bus signal for external bus)
273	ARM_A11	O	External address bus (address bus signal for external bus)
274	ARM_A10	O	External address bus (address bus signal for external bus)
275	CV _{DD} 8	P	Power supply
276	CGND8	P	DE
277	ARM_A9	O	External address bus (address bus signal for external bus)
278	ARM_A8	O	External address bus (address bus signal for external bus)
279	ARM_A7	O	External address bus (address bus signal for external bus)
280	ARM_A6	O	External address bus (address bus signal for external bus)
281	ARM_A5	O	External address bus (address bus signal for external bus)
282	ARM_A4	O	External address bus (address bus signal for external bus)
283	ARM_A3	O	External address bus (address bus signal for external bus)
284	ARM_A2	O	External address bus (address bus signal for external bus)
285	ARM_A1	O	External address bus (address bus signal for external bus)
286	ARM_A0	O	External address bus (address bus signal for external bus)
287	EUM0	I/O	Not used. ('H')
288	EUM1	I/O	Not used. ('H')

17.4. IC1(AN8882SB-E1): SERVO AMP.

Pin No.	Terminal Name	I/O	Function
1	PD	I	APC Amp. input terminal
2	LD	O	APC Amp. output terminal
3	V _{CC} 1	I	Power supply terminal 1
4	TFLT	I	TE Amp. analog SW & VREF2 Buffer control terminal
5	LDON	I	APC & STANDBY control terminal
6	RFOUT	-	Not used, open
7	EQCTL	I	EQ characteristic control terminal
8	RFC	I	The capacity connection terminal for the AGC input HPF
9	CAGC	I	AGC loop filter connection terminal
10	ARF	O	AGC output terminal
11	CEA	I	The capacity connection terminal for HPF-Amp.
12	3TOUT	O	3 TENV Output Terminal
13	CBDO	I	The capacity connection terminal for RF - side envelope detection
14	BDO	O	BDO output terminal
15	COFTR	I	The capacity connection terminal for RF + side envelope detection
16	OFTR	O	OFTR output terminal
17	NRFDET	O	NRFDET output terminal
18	GND	-	GND
19	TVREF2	O	VREF2 Buffer output terminal
20	VREF1	O	VREF1 output terminal
21	V _{CC} 2	I	Power supply terminal 2
22	VREF2	O	VREF2 output terminal
23	TEN	O	TE Amp. reversal input terminal
24	TEOUT	O	TE Amp. output terminal
25	FTEO	-	Not used, open.
26	FEN	I	FE Amp. reversal input terminal
27	FEOUT	O	FE Amp. output terminal
28	GCTRL	I	GCTL terminal

Pin No.	Terminal Name	I/O	Function
29	FBAL	I	FBAL control terminal
30	TBAL	I	TBAL control terminal
31	E	I	Tracking signal input terminal 1
32	F	I	Tracking signal input terminal 2
33	D	I	Focus Signal input terminal 4
34	B	I	Focus Signal input terminal 2
35	C	I	Focus Signal input terminal 3
36	A	I	Focus Signal input terminal 1

17.5. IC102 (C2BBGE000781): SYSTEM CONTROL

Pin No.	Terminal Name	I/O	Function
1	P15	I	Loading switch detected signal
2	P16	I	Inner switch detected signal
3	P17	I	Ejection switch detected signal (for debugging)
4	AV _{SS}	-	GND for A/D converter and D/A converter
5	P130	O	Reset output terminal to DSP IC
6	P131	O	Reset output terminal to Decoder I/F IC
7	AVREF1	I	Power supply for D/A converter
8	P70	-	Not used, open
9	P71	-	Not used, open
10	P72	-	Not used, open
11	P20	I	DSP sub code Q data input signal
12	P21	-	Not used, open
13	P22	O	Clock output signal for DSP sub code Q register
14	P23	I	DSP status input signal
15	P24	O	DSP command load output signal
16	P25	I	DSP sense input signal
17	P26	O	DSP command data output signal
18	P27	O	DSP command clock output signal
19	AD0	O	External memory low-rank address / data bus: AD0
20	AD1	O	External memory low-rank address / data bus: AD1
21	AD2	O	External memory low-rank address / data bus: AD2
22	AD3	O	External memory low-rank address / data bus: AD3
23	AD4	O	External memory low-rank address / data bus: AD4
24	AD5	O	External memory low-rank address / data bus: AD5
25	AD6	O	External memory low-rank address / data bus: AD6
26	AD7	O	External memory low-rank address / data bus: AD7
27	P50	-	Not used, open
28	P51	-	Not used, open
29	P52	-	Not used, open
30	P53	-	Not used, open
31	P54	-	Not used, open
32	P55	-	Not used, open
33	V _{SS}	-	GND
34	P56	-	Not used, open
35	P57	-	Not used, open
36	P60	-	Not used, open
37	P61	I	TEXT data read-out permission signal
38	P62	I	Tracking servo drawing-in signal
39	P63	I	Focus servo drawing-in signal
40	/RD	O	Signal for external memory reading operation

Pin No.	Terminal Name	I/O	Function
41	/WR	O	Signal for external memory writing operation
42	/WAIT	O	Waiting signal at the time of external memory access
43	ASTB	O	Address clutch signal at the time of external memory access
44	P30	-	Not used, open
45	P31	-	Not used, open
46	P32	-	Not used, open
47	P33	-	Not used, open
48	P34	-	Not used, open
49	P35	-	Not used, open
50	P36	-	Not used, open
51	P37	-	Not used, open
52	P120	O	Mechanism control Sensor LED control output signal
53	P121	O	Thread forcible move output
54	P122	O	DSP MUTE
55	P123	O	RF Amp EQ characteristic control output
56	P124	O	Gain up for CD-RW
57	P125	O	DSP IREF current change output
58	P126	O	DSP IREF current change output
59	P127	O	DISC detection output signal
60	RESET	I	System reset input terminal
61	P00	I	Spindle rotation capture trigger signal
62	P01	I	DSP sub code block clock interruption signal
63	P02	O	Interruption signal 0 from Decoder I/F IC
64	P03	O	Interruption signal 1 from Decoder I/F IC
65	P04	I	Sound jump detection at the time of audio playing.
66	P05	-	Not used, open
67	V _{SS} 0	-	GND
68	V _{DD} 1	I	Power supply
69	X2	I	Oscillator connection for a main system clock oscillation
70	X1	O	Oscillator connection for a main system clock oscillation
71	IC	-	It is a direct connected to Vss0 or Vss1.
72	XT2	-	Not used, open
73	XT1	-	Not used, open
74	V _{DD} 0	I	Power supply
75	AVREF0	I	Power supply for A/D converter
76	P10	I	Mechanism control control sensor detected signal 1: PS1
77	P11	I	Mechanism control control sensor detected signal 2: PS2
78	P12	I	Mechanism control control sensor detected signal 3: PS3
79	P13	I	Mechanism control control sensor detected signal 4: PS4
80	P14	-	Not used, open

18 Replacement Parts List

Note:

- (PAS) indicates in the Remarks columns indicates parts supplied by **PAS (Panasonic Automotive Systems company)**.
- Important safety notice:
- Components identified by $\triangle$ mark have special characteristics important for safety.
- Furthermore, special parts which have purposes of fireretardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
- When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.
- The parenthesized indications in the Remarks columns specify the areas.
Parts without these indications can be used for all areas.
 - (EB): SL-DZ1200EB
 - (EG): SL-DZ1200EG
 - (EP): SL-DZ1200EP
 - (GN): SL-DZ1200GN
 - (PP): SL-DZ1200PP
- Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF) F=Farads (F)
- Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM), 1M=1,000k (OHM)
- The marking <RTL> indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

18.1. Component, Accessory, and Packaging Parts

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	REX1171	CONNECTOR WIRE(13P)	1	
2	REX1172	CONNECTOR WIRE(11P)	1	
3	REX1178	CONNECTOR WIRE(8P)	1	
4	REX1200	CONNECTOR WIRE(3P)	1	
5	REZ1590A	FFC	1	$\triangle$
6	RGN2544-K	NAME PLATE	1	(PP) $\triangle$
6	RGN2548-K	NAME PLATE	1	(EG) (EB) (EP) $\triangle$
6	RGN2547-K	NAME PLATE	1	(GN) $\triangle$
7	RGQ0383-H	CAP	2	
8	RHD30092	SCREW	6	
9	RHD30117	SCREW	7	
10	RHN12002	NUT	1	
11	RMA1677	PLATE, CENTER PANEL	1	
12	RMA1682	STOPPER ANGLE	3	
13	RMA1864	EARTH PLATE	1	
14	RM0596	WAVE WASHER	1	
15	RMQ1314	BIND	2	
16	RMS0808	SHAFT, CENTER PANEL	1	
17	RMV0269	SHEET	1	
18	RMX0277	SHEET D	3	
19	RMX0293	PLATE	1	
20	RMX0294	PLATE	1	
21	RPQ1611	LOCK LEVER	3	
22	RQLS0284	CAUTION LABEL, HHS	1	(PP)
23	RQLS0302	CAUTION LABEL, FCC	1	(PP)

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
24	RQLS0311	CAUTION LABEL, LASER	1	
25	RXQ1080	SLIP PLATE ASS'Y	1	
25-1	RMQ1224	SENSOR SHEET	1	
25-2	XTWS3+8T	SCREW	8	
26	J0KD00000014	FERRITE CORE	1	$\triangle$
27	QGUG1040AA	BUTTON, POWER	1	
28	REZ1638	EARTH WIRE(W2002)	1	
29	REZ1639	EARTH WIRE(W2003)	1	
36	XTB3+8F	SCREW	3	
37	RMN0619	LED HOLDER	1	
38	REX1174	WIRE(14P)(P1102)	1	
39	REZ1637	EARTH WIRE(W1102)	1	
40	REZ1640	EARTH WIRE(W1103)	1	
41	SNE1004-2	EARTH TERMINAL(ET1/2/3)	3	
43	REZ1589	FFC(45P)	1	
44	RGP1038-H	SD PANEL	1	
45	RGU2245-S	EJECT BUTTON	1	
46	RGW0098-K	KNOB, VR	1	
48	RHN90001	NUT	1	
49	RKF0679-H	SD LID	1	
50	RYK1408-H	BOTTOM CASE ASS'Y	1	
51	RMA1681	JACK ANGLE	1	
52	RMA1789	SHIELD PLATE A	1	
53	RMA1790	SHIELD PLATE B	1	
54	RMA1791	SHIELD PLATE	1	
55	RMB0754	SPRING, SD LID	1	
57	RMN0783	CORE HOLDER	2	
58	RMQ1262	CUSSTION, SD LID	2	
59	RMV0266	COVER, POWER	1	
60	RMV0267	COVER, CD	1	
61	RMZ0750	PROTECTION SHEET	1	
62	L6AAEBFD0001	SMALL DC MOTORS	1	
63	RDG0577	SHUTTER GEAR	1	
64	RGL0642-Q	LIGHTING BAR	1	
65	RMA1678	CD ATTACHMENT PLATE, FRONT	1	
66	RMA1679	CD ATTACHMENT PLATE, REAR	1	
67	RMQ1225	SHUTTER	1	
68	RMQ1308	SHUTTER STOPPER CUSHION	2	
69	RMR1562-K	CD MOUSE	1	
70	RMV0254	COVER	1	
71	RMZ0733	REFLECTIVE SHEET	1	
72	XQN17+CF3FN	SCREW	3	
73	XTBS26+8J	SCREW	14	
74	XTN26+6F	SCREW	4	
75	RYQ0459-K	INSULATOR ASS'Y	4	
76	SHR301	CLAMPER	4	
77	XNSS12	NUT	1	
78	XTB3+10JFZ	SCREW	43	
79	XTBS3+8J1	SCREW	6	
80	L5DAZG600001	LCD(LCD1)	1	
81	RGU2236-S	BUTTON, CD	1	
82	RGU2238-W	BUTTON, PAD	1	
83	RGU2241-S	BUTTON, DISPLAY	2	
84	RGU2246-S	BUTTON, RELOOP	1	
85	RMV0280	BLIND SHEET	1	
86	RMV0288	SHADING SHEET	1	
87	XTN23+8G	SCREW	2	
89	RYP1263-S	CENTER PANEL ASS'Y	1	
90	VJR0978	TERMINAL(RAG3401)	1	K9ZZ00000424
91	REZ1592	FFC(17P)	1	
92	REZ1593	FFC(15P)	1	
93	RGK1706-S	ORNAMENT, PITCH CONTROL	1	
94	RGK1714-S	ORNAMENT, MOTOR STOP BUTTO	1	
95	RGL0641-Q	LIGHTING SHIP	1	
96	RGL0643-Q	LED LIGHT(1)	6	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
97	RGL0644-Q	LED LIGHT(2)	1	
98	RGL0645-Q	LED LIGHT(3)	2	
99	RGL0646-Q	LED LIGHT(4)	1	
100	RGQ0375-S	BUTTON BASE A	1	
101	RGQ0376-S	BUTTON BASE B	1	
102	RGQ0377-S	BUTTON BASE C	1	
103	RGQ0378-S	BUTTON BASE D	1	
104	RGU2233-S	MEMORY BUTTON	1	
105	RGU2234-S	SELECT BUTTON	1	
106	RGU2235-S	SD CARD BUTTON	1	
107	RGU2237-W	PAD BUTTON	2	
108	RGU2239-S	START BUTTON	1	
109	RGU2239A-S	CUE BUTTON	1	
110	RGU2240-S	REC BUTTON	1	
111	RGU2242-S	TEMPO RESET BUTTON	1	
112	RGU2243-S	VIRTUAL REVERS BUTTON	1	
113	RGU2244-S	MASTER TEMPO BUTTON	1	
114	RGU2247-S	SAMPLE BUTTON	1	
115	RGU2251-X	MOTOR STOP BUTTON	1	
116	RGV0319-S	KNOB,SLIDE	1	
117	RGV0320-S	KNOB,REVERS	1	
118	RYP1264-S	CONTROL PANEL ASS'Y	1	
119	RKW0738-Q	STROBO WINDOW	1	
120	RMA1684	BRACKET,SLIDE VR	1	
121	RMA1785	ANGLE	1	
123	RMB0771	SPRING	2	
124	RMB0797	SPRING	1	
125	RMF0348	SHEET	1	
126	RMQ1290	SHEET A	1	
127	RMQ1291	SHEET	1	
128	RMQ1315	SPACER	1	
129	RMQ1371	SHEET	1	
130	RMV0270	BLIND SHEET A	1	
131	RMV0271	BLIND SHEET B	1	
132	RMV0272	BLIND SHEET C	1	
133	SFKT122-02	KNOB,PITCH CONTROL	1	
134	SFMG520-31A	DRIVE COIL ASS'Y	1	
135	SFMGQ20-01	DRIVE COIL COVER	1	
136	RXQ1245	FG COIL ASS'Y	1	
137	XSS3+6FXS	SCREW	2	
139	XTBS26+8J	SCREW	2	
140	XTN26+6J	SCREW	3	
141	XYA3+FJ10	SCREW	4	
142	RYQ0456-S	TURNABLE ASS'Y	1	
142-1	RMX0273	SHEET B	3	
142-2	RMX0276	SHEET C	4	
143	SFXGQ20-021	SCREW	3	
144	XTB26+6F	SCREW	2	
145	XTB3+16JFZ	SCREW	2	
146	XTB3+8J	SCREW	3	
147	XWH12H26	WASHER	1	
148	XYN2+C6	SCREW	4	
149	XYN3+F6	SCREW	2	
A1	REZ1619	AC POWER SUPPLY CORD	1	(PP) △
A1	REZ1496	AC POWER SUPPLY CORD	1	(EB) △
A1	REZ1495	AC POWER SUPPLY CORD	1	(EG)(EP) △
A1	REZ1620	AC POWER SUPPLY CORD	1	(GN) △
A2	RGK1704-S2	SLIP SURFACE	1	
A3	RQCA1255	NOTE SHEET	1	
A4	RQCA1256	NOTE SHEET	1	
A5	RQT7114-Y	O/I BOOK	1	(PP)English, Canadian French
A5	RQT7115-B	O/I BOOK	1	(EP)(EB)(GN) English

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
A5	RQT7116-D	O/I BOOK	1	(EG)Spanish, French, German, Dutch, Swedish, Italian, Danish
A5	RQT7117-Q	O/I BOOK	1	(EP)Polish, Czech
A6	SFDHBD2N01	STEREO CONNECTION CABLE	1	
C1	ECJ1VF1C104Z	16V 0.1U	1	
C2	ECJ1VG1H102J	50V 1000P	1	
C3-C5	ECJ1VF1C104Z	16V 0.1U	3	
C6	EEEB1C100R	16V 10P	1	
C7, C8	ECJ1VC1H101J	50V 100P	2	
C9-11	ECJ1VF1C104Z	16V 0.1U	3	
C12	ECJ1VB1A224K	10V 0.22U	1	
C13	EEEB0J101P	6.3V 100U	1	
C14,15	EEE0JA331XP	6.3V 330U	2	
C16	ECJ1VC1H180J	50V 18P	1	
C17	ECJ1VF1C104Z	16V 0.1U	1	
C18	ECJ1VC1H180J	50V 18P	1	
C19	EEEB1A471P	10V 470U	1	
C20	ECJ1VF1C104Z	16V 0.1U	1	
C21	ECJ1VC1H101J	50V 100P	1	
C22	EEEB1C100R	16V 10U	1	
C23	ECJ1VC1H100C	50V 10P	1	
C24	ECJ1VC1H150J	50V 15P	1	
C25	EEEB0J470R	6.3V 47U	1	
C26-31	ECJ1VF1C104Z	16V 0.1U	6	
C32	ECJ1VB1A224K	10V 0.22U	1	
C33	ECJ1VF1C104Z	16V 0.1U	1	
C34	ECJ1VB1A105K	10V 1U	1	
C35-37	ECJ1VF1C104Z	16V 0.1U	3	
C38	EEE1EA100SR	25V 10U	1	
C39	ECJ1VF1C104Z	16V 0.1U	1	
C40-43	ECJ1VC1H100C	50V 10P	4	
C44-46	ECJ1VF1C104Z	16V 0.1U	3	
C47, 48	ECJ1VC1H120J	50V 12P	2	
C49-53	ECJ1VF1C104Z	16V 0.1U	5	
C54	EEE1HA010SR	50V 1U	1	
C55, 56	ECJ1VC1H100C	50V 10P	2	
C57-62	ECJ1VF1C104Z	16V 0.1U	6	
C65-69	ECJ1VF1C104Z	16V 0.1U	5	
C71-73	ECJ1VF1C104Z	16V 0.1U	3	
C74	ECJ1VC1H101J	50V 100P	1	
C75, 76	ECJ1VF1C104Z	16V 0.1U	2	
C77	ECJ1VG1H102J	50V 1000P	1	
C78-83	ECJ1VF1C104Z	16V 0.1U	6	
C84, 85	EEEB1C100R	16V 10U	2	
C86	ECJ1VF1C104Z	16V 0.1U	1	
C87	EEEFK0J102P	6.3V 1000U	1	
C88, 89	EEEB1C100R	16V 10U	2	
C90-92	ECJ1VG1H102J	50V 1000P	3	
C93, 94	ECJ1VC1H220J	50V 22P	2	
C95-01	ECJ1VF1C104Z	16V 0.1U	7	
C102, 03	ECJ1VC1H120J	50V 12P	2	
C104-13	ECJ1VF1C104Z	16V 0.1U	10	
C114, 15	EEE1EA100SR	25V 10U	2	
C116	ECJ1VC1H101J	50V 100P	1	
C119-21	ECJ1VF1C104Z	16V 0.1U	3	
C124, 25	ECJ1VF1C104Z	16V 0.1U	2	
C126, 27	ECJ1VC1H470J	50V 47P	2	
C1120	ECQU2A104ML	100V 0.1U	1	△
C1121	ECQU2A103ML	100V 0.01U	1	△
C1122-24	F1BAF1020020	250V 1000P	3	△
C1143	ECEC2GB121EL	400V 120U	1	
C1150	F2A1V5600013	35V 56U	1	
C1151	F1B3A151A009	10V 150P	1	
C1152	ECJ1VC1H101J	50V 100P	1	
C1153	ECJ1VB1H103K	50V 0.01U	1	
C1154	ECJ1XC1H681J	50V 680P	1	ECJ1VC1H681J
C1200	ECQV1H473JM3	50V 0.047U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C1201	ECJ1XB1C473K	16V 0.047U	1	
C1260	F2A1A1220008	10V 1200U	1	
C1262	F2A1A4710038	10V 470U	1	
C1270	ECA1EHG471	25V 470U	1	
C1272	ECA1VAM221X	35V 220U	1	
C1273	ECQV1H104JL	50V 0.1U	1	
C1274	ECA1EAK100XB	25V 10U	1	
C1302	ECA1AHG221	10V 220U	1	
C1401	ECJ1VF1C104Z	16V 0.1U	1	
C1402	ECJ1XB1C473K	16V 0.047	1	
C1404-06	ECJ1VF1C104Z	16V 0.1U	3	
C1407	F1H1H101A736	10V 100P	1	
C1408	ECJ1VB1H102K	50V 1000P	1	
C1409	F2A1A1020054	10V 1000U	1	
C1413	ECUV1H271JCV	50V 270P	1	ECJ1VC1H271J
C1414	F1K1C3350002	16V 3.3U	1	
C1416, 17	VCEA1EJC221B	25V 220U	2	F2A1E2210008
C1419	ECA1AHG221	10V 220U	1	
C1421	ECJ1VF1C104Z	16V 0.1U	1	
C1422, 23	F1D1H1040002	50V 0.1U	2	
C1424	ECJ1VF1C104Z	16V 0.1U	1	
C1425	F1D1H1040002	50V 0.1U	1	
C1428, 29	ECJ1VF1C104Z	16V 0.1U	2	
C2002	ECEA1CKA470	16V 47U	1	
C2003	ECA1EAK470XB	25V 47U	1	
C2005, 06	ECJ1VF1C104Z	16V 0.1U	2	
C2007, 08	ECEA1CKN220B	16V 22U	2	
C2009	ECEA1AKS101	10V 100U	1	
C2010	ECEA1HKS2R2	50V 2.2U	1	
C2011, 12	ECJ1VC1H220J	50V 22P	2	
C2013	ECJ1VB1C563K	16V 0.056U	1	
C2014	ECJ1VF1C104Z	16V 0.1U	1	
C2015	ECJ1VB1A224K	10V 0.22U	1	
C2016	ECEA1EKA101B	25V 100U	1	
C2017	ECJ1VF1C104Z	16V 0.1U	1	
C2018	ECEA1HKS010	50V 1U	1	
C2019	ECJ1VC1H220J	50V 22P	1	
C2020	ECJ1VF1C104Z	16V 0.1U	1	
C2021	ECJ1VC1H471J	50V 470P	1	
C2022	ECJ1VC1H101J	50V 100P	1	
C2023	ECA0JM471G	6.3V 470U	1	
C2024	ECJ1XB1C473K	16V 0.047	1	
C2025, 26	ECEA1HKS010	50V 1U	2	
C2027	ECJ1VF1C104Z	16V 0.1U	1	
C2028, 29	ECJ1VC1H220J	50V 22P	2	
C2030, 31	ECEA1CKN220B	16V 22U	2	
C2032-34	F1H1H104A783	50V 0.1U	3	
C2035	ECEA1HKA47R	50V 4.7U	1	
C2036	ECEA1VKS470	35V 47U	1	
C2037	F1H1H104A783	50V 0.1U	1	
C2038	ECJ1VB1H562K	50V 5600P	1	
C2039	F1H1H104A783	50V 0.1U	1	
C2041	ECEA1AKS470	10V 47U	1	
C2042	ECEA1EKA330B	25V 33U	1	
C2043	ECJ1XB1C473K	16V 0.047	1	
C2044	F1H1H104A783	50V 0.1U	1	
C2045	ECEA1EKA330B	25V 33U	1	
C2047	ECJ1XB1C473K	16V 0.047	1	
C2048	ECEA1EKA330B	25V 33U	1	
C2050	ECEA1HKS010	50V 1U	1	
C2051	ECEA0JKA330B	6.3V 33U	1	
C2052	ECJ1VB1H103K	50V 0.01U	1	
C2053	ECEA1CKN100	16V 10U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C2054, 55	ECJ1VF1C104Z	16V 0.1U	2	
C2056	F1D1H1040002	50V 0.1U	1	
C2057-59	ECJ1VF1C104Z	16V 0.1U	3	
C2060, 61	ECEA1CKN100	16V 10U	2	
C2062	ECA1EAK470XB	25V 47U	1	
C2063	ECJ1VF1C104Z	16V 0.1U	1	
C2064	ECJ1VB1H102K	50V 1000P	1	
C2066	ECJ1VF1C104Z	16V 0.1U	1	
C2068-71	ECJ1VF1C104Z	16V 0.1U	4	
C2072	ECJ1VC1H331J	50V 330P	1	
C3101, 02	ECEA1AKS221	10V 220U	2	
C3103-05	F1D1H1040002	50V 0.1U	3	
C3106-11	ECBT1C222MR5	16V 2200P	6	F1D1C222A002
C3401, 02	F1D1H1040002	50V 0.1U	2	
CN1	K1KA11A00156	CONNECTOR (11P)	1	
CN2	K1MN45B00013	CONNECTOR (45P)	1	
CN3	K1MN17A00041	CONNECTOR (17P)	1	
CN4	K1NA09E00028	CONNECTOR, SD CARD	1	
CN5	K1KA13A00122	CONNECTOR (13P)	1	
CN6	K1KA03A00176	CONNECTOR (3P)	1	
CN7	K1MN24A00055	CONNECTOR (24P)	1	
CN9	K1KA12A00312	CONNECTOR (12P)	1	
CN12	K1KA07A00190	CONNECTOR (7P)	1	
CN801	VJP3331B004	CONNECTOR (4P)	1	K1KA04B00079
CN1301	REX1176	CONNECTOR (12P) (WITH WIRE)	1	
CN1901	REX1177	CONNECTOR (3P) (WITH WIRE)	1	
CN2001	K1KA03A00213	PLUG (3P)	1	
CN2007	RJS2A5624	CONNECTOR (24P)	1	K1MN24A00030
CN2013	TJSF26112	CONNECTOR (12P)	1	K1KA12A00068
CN2014	RJP14G18ZA	PLUG (14P)	1	K1KA14A00051
CN2104	VJP3331B008	CONNECTOR (8P)	1	K1KA08B00128
CN2201	REX1180	CONNECTOR (2P) (WITH WIRE)	1	
CN2301	REX1175	CONNECTOR (7P) (WITH WIRE)	1	
CN2302	VJP3331B002	CONNECTOR (2P)	1	K1KA02B00049
CN2303	K1KA02B00045	CONNECTOR (2P)	1	
CN2319	K1KA03B00049	CONNECTOR (3P)	1	
CN3101	K1MN17B00037	CONNECTOR (17P)	1	
CN3102	REX1179	CONNECTOR (3P) (WITH WIRE)	1	
CN3103	K1MN15B00057	CONNECTOR (15P)	1	
CN3104	VJP3331B008	CONNECTOR (8P)	1	K1KA08B00128
CN3121	REX1181	CONNECTOR (2P) (WITH WIRE)	1	
CN3301	K1MN15B00057	CONNECTOR (15P)	1	
CN3315	REZ1598	WIRE (3P)	1	
CN3401	K1KA11B00018	CONNECTOR (11P)	1	
CN3402	K1MN20B00053	CONNECTOR (20P)	1	
CN3403	K1KA13B00012	CONNECTOR (13P)	1	
CN3408	REX1173	CONNECTOR (4P) (WITH WIRE)	1	
CN3701	VJP3331B002	CONNECTOR (2P)	1	K1KA02B00049
CN3801	K1KA03B00049	CONNECTOR (3P)	1	
D1	MA2J11100L	DIODE	1	
D2	MA2Q73800L	DIODE	1	
D1110	ERZV10V511CS	ZNR	1	△
D1140	B0EDKT000002	DIODE	1	
D1151	B0HCM0000001	DIODE	1	
D1152	MAZ4120NMF	DIODE	1	
D1156	MA2J11100L	DIODE	1	
D1157	B0BB17000004	DIODE	1	
D1261	31DQ10-FC9	DIODE	1	B0JAQL000005
D1271	B0HANM000024	DIODE	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D1305	B0EAMM000036	DIODE	1	
D1400	MA2J11100L	DIODE	1	
D1403	MA2C18500E	DIODE	1	
D2002	MA2J72800L	DIODE	1	
D2003-07	MA2J11100L	DIODE	5	
D2109,10	B3ADA0000148	LED	2	
D2201	B3AAA0000727	LED	1	
D3101,02	B3AAA0000530	LED	2	
D3103	SLR-325MG	LED	1	B3ABA0000109
D3104-08	B3AAA0000530	LED	5	
D3311-14	B3AAA0000726	LED	4	
D3315-18	B3ADA0000148	LED	4	
D3319-27	B3AAA0000530	LED	9	
D3701,02	SELS5223C	LED	2	B3AAA0000486
F1101	K5D162AQ0004	FUSE	1	(PP) △
F1101	K5D162BK0005	FUSE	1	(EG) (EB) (EP) (GN) △
FP1400	K5H202200005	FUSE	1	
IC1	C0JBAE000098	IC	1	
IC2	C2CBHH000043	IC	1	
IC3	C0JBAZ000531	IC	1	
IC4	TC9271FSEL	IC	1	C0ZBZ0000378
IC5	C0JBAZ000531	IC	1	
IC6	C0EBJ0000158	IC	1	
IC7	C0ZBZ0000667	IC	1	
IC8	C0CBADC00042	IC	1	
IC9	C0JBAZ000531	IC	1	
IC10	XC61CN1802MR	IC	1	C0EBC0000036
IC11	C0EBE0000252	IC	1	
IC12	C0CBBLB00002	IC	1	
IC13	C0JBAA000001	IC	1	
IC14	C0ZBZ0000910	IC	1	
IC15	C0JBAA000001	IC	1	
IC16	C3EBJC000037	IC	1	
IC17	MN5772AA	IC	1	
IC18	C0CBADD00009	IC	1	
IC20	C0DBZF000015	IC	1	
IC21	C0JBAZ001166	IC	1	
IC22	C0JBAE000087	IC	1	
IC23	C3FBMD000179	IC	1	
IC24,25	C3ABPG000133	IC	2	
IC27	C0JBAZ001166	IC	1	
IC29	C0JBAZ001166	IC	1	
IC32	C0JBAZ000519	IC	1	
IC33	PCM1716ET2	IC	1	C0FBBK000009
IC34	C0ZBZ0000910	IC	1	
IC35	M5218AFPE3	IC	1	C0ABBB000163
IC36	C3ABPJ000048	IC	1	
IC38	REP3599A-M	IC	1	
IC801	B3NAA0000083	IC	1	
IC1150	C0DACZH00008	IC	1	
IC1200	UPC1093J	IC	1	C0DAEMC00002
IC1201	C0CAALE00002	IC	1	
IC1302	C0DBZH000012	IC	1	
IC1410	C0DBAJG00005	IC	1	
IC2002	M5218AFPE3	IC	1	C0ABBB000163
IC2003	AN6680	IC	1	
IC2004	M5218AFPE3	IC	1	C0ABBB000163
IC2005	AN6675	IC	1	
IC2006	TC7WU04FT12L	IC	1	C0JBAZ000527
IC2007,08	C0JBAS000061	IC	2	
IC3101	C0JAAN000078	IC	1	
IC3102	C0JAAQ000013	IC	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC3103,04	HD74LS07P	IC	2	C0JACB000006
JK2001	TJB13662	JK	1	K2HA206B0002
JK2002	SJJG100A	JK	1	K2HB103J0056
JK2003	K2HA102B0071	JK	1	
JK2004	SJJ130-3	JK, CONTROL	1	K2HC103B0064
P1101	K2AB2B000002	JK, AC IN	1	(PP) △
P1101	K2AA2B000004	JK, AC IN	1	(EG) (EB) (EP) (GN) △
L1	ERJ6GEY0R00V	1/8W 0	1	
L2	VLQ0780K100	COIL	1	G1C100KA0004
L1120,21	G0B123E00001	COIL	2	△
L1260	G0A100H00014	COIL	1	
L1270	G0A100H00014	COIL	1	
L1400	G0A330G00011	COIL	1	
L1401-03	G0A220G00018	COIL	3	
L1404	J0JKB0000003	COIL	1	
L2001	ELELN100KA	COIL	1	
L2002,03	G0BYYYY00016	COIL	2	
L2006	G0BYYYY00016	COIL	1	
L3101	J0JKB0000003	COIL	1	
L3301	J0JKB0000003	COIL	1	
LB1122	J0JKB0000003	COIL	1	
P1	RP66709	PACKING CASE	1	(PP)
P1	RP66713	PACKING CASE	1	(EG) (EB)
P1	RP66710	PACKING CASE	1	(EP)
P1	RP66712	PACKING CASE	1	(GN)
P2	RPN1645	CUSHION	2	
P3	RPQ1607	PAD	1	
P4	RPF0378	PROTECTION BAG	1	
P5	XZB10X30C03Z	PROTECTION BAG	2	
P6	XZB25X34C03X	PROTECTION BAG	1	
P7	SPP723-1	PROTECTION BAG	1	
PCB1	REP3599A-M	MAIN P.C.B. ASS'Y	1	[RTL]
PCB2	REP3601BA-S	POWER P.C.B. ASS'Y	1	[RTL] (PP)
PCB2	REP3601CA-S	POWER P.C.B. ASS'Y	1	[RTL] (EG) (EB) (EP) (GN)
PCB3	REP3601AB-S	JACK P.C.B. ASS'Y	1	[RTL]
PCB4	REP3601AD-S	CP5 P.C.B. ASS'Y	1	[RTL]
PCB5	REP3601AE-S	CD LIGHT P.C.B. ASS'Y	1	[RTL]
PCB6	REP3601AF-S	CD OP SW P.C.B. ASS'Y	1	[RTL]
PCB7	REP3601AG-S	EJECT P.C.B. ASS'Y	1	[RTL]
PCB8	REP3600AA-S	CP1 P.C.B. ASS'Y	1	[RTL]
PCB9	REP3600AB-S	CP2 P.C.B. ASS'Y	1	[RTL]
PCB10	REP3600AC-S	CP3 P.C.B. ASS'Y	1	[RTL]
PCB11	REP3600AD-S	LCD CN P.C.B. ASS'Y	1	[RTL]
PCB12	REP3600AF-S	MOTOR P.C.B. ASS'Y	1	[RTL]
PCB13	REP3600AJ-S	SENSOR P.C.B. ASS'Y	1	[RTL]
PCB14	REP3600AK-S	STROBE P.C.B ASS'Y	1	[RTL]
PCB15	REP3600AL-S	PC ON P.C.B. ASS'Y	1	[RTL]
Q1	2SD0601A	TRANSISTOR	1	
Q2, Q3	XP151A12A2MR	FET	2	B1DFBC000002
Q4-Q6	B1GBCFQQ0005	TRANSISTOR	3	
Q7	2SB0709ARL	TRANSISTOR	1	
Q8	2SD0601A	TRANSISTOR	1	
Q9	B1GBCFQQ0005	TRANSISTOR	1	
Q10,11	B1DHAC000002	TRANSISTOR	2	
Q1200	PC123ZY2	PHOTO COUPLER	1	B3PBA0000078 △
Q2001	2SB0709ARL	TRANSISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q2002, 03	2SD0601A	TRANSISTOR	2	
Q2004	2SD592AR	TRANSISTOR	1	2SD0592AR
Q2005	2SB621A-R	TRANSISTOR	1	2SB0621AH
Q2006	2SD592AR	TRANSISTOR	1	2SD0592AR
Q2007	2SB621A-R	TRANSISTOR	1	2SB0621AH
Q2008	2SC1845EFTA	TRANSISTOR	1	B1AABL000015
Q2009	2SC2458GR	TRANSISTOR	1	2SC26340V
Q2010-13	2SD0601A	TRANSISTOR	4	
Q2014	2SB0709ARL	TRANSISTOR	1	
Q2015-18	2SD602ATX	TRANSISTOR	4	2SD0602A0L
Q2019	2SB0709ARL	TRANSISTOR	1	
Q2020	2SD0601A	TRANSISTOR	1	
Q3101-04	2SA830SB	TRANSISTOR	4	
R1, R2	ERJ3GEYJ472V	1/10W 4.7K	2	
R3	ERJ3GEYJ222V	1/10W 2.2K	1	
R4	ERJ3GEYJ100	1/10W 10	1	
R5	ERJ3GEY0R00V	1/10W 0	1	
R6	ERJ3GEYJ330V	1/10W 33	1	D0GB330JA002
R7	ERJ3GEYJ102V	1/10W 1K	1	
R8-10	ERJ3GEYJ103V	1/10W 10K	3	D0GB103JA002
R11	ERJ3GEY0R00V	1/10W 0	1	
R12	ERJ6GEY0R00V	1/8W 0	1	
R13	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R14-18	ERJ3GEY0R00V	1/10W 0	5	
R20-22	ERJ3GEYJ103V	1/10W 10K	3	D0GB103JA002
R23	ERJ3GEY0R00V	1/10W 0	1	
R24	ERJ3GEYJ102V	1/10W 1K	1	
R25	ERJ3GEY0R00V	1/10W 0	1	
R26	ERJ3GEYJ105V	1/10W 1M	1	
R27, 28	ERJ3GEY0R00V	1/10W 0	2	
R29, 30	ERJ3GEYJ103V	1/10W 10K	2	D0GB103JA002
R31	ERJ3GEYJ221V	1/10W 220	1	
R32	ERJ3GEYJ222V	1/10W 2.2K	1	
R33	ERJ3GEYJ472V	1/10W 4.7K	1	
R34, 35	ERJ3GEY0R00V	1/10W 0	2	
R36	ERJ3GEYJ101	1/10W 100	1	D0GB101JA002
R37	ERJ3GEYJ470V	1/10W 47	1	
R38	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R39	ERJ3GEYJ222V	1/10W 2.2K	1	
R40	ERJ3GEY0R00V	1/10W 0	1	
R41	ERJ3GEYJ102V	1/10W 1K	1	
R42, 43	ERJ3GEY0R00V	1/10W 0	2	
R44	ERJ3GEYJ104	1/10W 100K	1	
R45	ERJ3GEY0R00V	1/10W 0	1	
R46	ERJ3GEYJ104	1/10W 100K	1	
R47	ERJ3GEY0R00V	1/10W 0	1	
R48	ERJ3GEYJ104	1/10W 100K	1	
R49	ERJ3GEY0R00V	1/10W 0	1	
R50	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R54	ERJ3GEYJ104	1/10W 100K	1	
R55	ERJ3GEYJ221V	1/10W 220	1	
R56	ERJ3GEYJ105V	1/10W 1M	1	
R57	ERJ3GEYJ104	1/10W 100K	1	
R58-63	ERJ3GEYJ221V	1/10W 220	6	
R64	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R65, 66	ERJ3GEYJ104	1/10W 100K	2	
R67	ERJ3GEY0R00V	1/10W 0	1	
R68	ERJ6GEY0R00V	1/8W 0	1	
R69, 70	ERJ3GEY0R00V	1/10W 0	2	
R71, 72	ERJ6GEY0R00V	1/8W 0	2	
R73-78	ERJ3GEY0R00V	1/10W 0	6	
R79	ERJ3GEYJ221V	1/10W 220	1	
R81	ERJ3GEY0R00V	1/10W 0	1	
R82	ERJ3GEYJ104	1/10W 100K	1	
R83, 84	ERJ3GEYJ101	1/10W 100	2	D0GB101JA002
R85	ERJ3GEYJ224V	1/10W 220K	1	D0GB224JA002
R86, 87	ERJ3GEYJ470V	1/10W 47	2	
R88, 89	ERJ3GEYJ472V	1/10W 4.7K	2	
R90, 91	ERJ3GEYJ330V	1/10W 33	2	D0GB330JA002

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R92	ERJ3GEY0R00V	1/10W 0	1	
R93	ERJ3GEYJ104	1/10W 100K	1	
R94	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R99	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R100	ERJ3GEY0R00V	1/10W 0	1	
R101	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R102	ERJ3GEYJ330V	1/10W 33	1	D0GB330JA002
R103	ERJ3GEYJ101	1/10W 100	1	D0GB101JA002
R104	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R105	ERJ3GEYJ105V	1/10W 1M	1	
R106	ERJ3GEYJ101	1/10W 100	1	D0GB101JA002
R107	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R108	ERJ3GEYJ101	1/10W 100	1	D0GB101JA002
R109	ERJ3GEYJ104	1/10W 100K	1	
R110, 11	ERJ3GEYJ101	1/10W 100	2	D0GB101JA002
R112	ERJ3GEY0R00V	1/10W 0	1	
R113, 14	ERJ3GEYJ473V	1/10W 47K	2	D0GB473JA002
R115	ERJ3GEY0R00V	1/10W 0	1	
R117, 18	ERJ3GEYJ104	1/10W 100K	2	
R119	ERJ3GEY0R00V	1/10W 0	1	
R120	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R124	ERJ3GEYJ104	1/10W 100K	1	
R125	ERJ3GEYJ221V	1/10W 220	1	
R126	ERJ3GEYJ105V	1/10W 1M	1	
R127	ERJ3GEYJ104	1/10W 100K	1	
R128, 29	ERJ3GEYJ101	1/10W 100	2	D0GB101JA002
R131-36	ERJ3GEYJ221V	1/10W 220	6	
R137	ERJ6GEY0R00V	1/8W 0	1	
R138	ERJ3GEYJ101	1/10W 100	1	D0GB101JA002
R139	ERJ3GEYJ100	1/10W 10	1	
R140	ERJ3GEYJ101	1/10W 100	1	D0GB101JA002
R141	ERJ6GEY0R00V	1/8W 0	1	
R142-49	ERJ3GEY0R00V	1/10W 0	8	
R152-54	ERJ3GEYJ221V	1/10W 220	3	
R156-58	ERJ3GEY0R00V	1/10W 0	3	
R162-65	ERJ3GEY0R00V	1/10W 0	4	
R166-69	ERJ3GEYJ103V	1/10W 10K	4	D0GB103JA002
R170, 71	ERJ3GEYJ101	1/10W 100	2	D0GB101JA002
R172	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R173-81	ERJ3GEY0R00V	1/10W 0	9	
R182	ERJ3GEYJ330V	1/10W 33	1	D0GB330JA002
R183-91	ERJ3GEY0R00V	1/10W 0	9	
R192	ERJ3GEYJ104	1/10W 100K	1	
R193	ERJ3GEYJ470V	1/10W 47	1	
R194	ERJ3GEYJ101	1/10W 100	1	D0GB101JA002
R195	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R196	ERJ6GEYJ470V	1/8W 47	1	
R197	ERJ3GEYJ330V	1/10W 33	1	D0GB330JA002
R198-00	ERJ6GEYJ470V	1/8W 47	3	
R201	ERJ3GEYJ332V	1/10W 3.3K	1	D0GB332JA002
R202	ERJ3GEYD153V	1/10W 15K	1	D0HB153ZA002
R203	ERJ3GEYJ332V	1/10W 3.3K	1	D0GB332JA002
R204	ERJ3GEYJ473V	1/10W 47K	1	D0GB473JA002
R206, 07	ERJ3GEYJ470V	1/10W 47	2	
R208	ERJ3GEYJ330V	1/10W 33	1	D0GB330JA002
R211	ERJ3GEY0R00V	1/10W 0	1	
R213	ERJ3GEY0R00V	1/10W 0	1	
R214	ERJ3GEYJ104	1/10W 100K	1	
R215, 16	ERJ3GEYJ332V	1/10W 3.3K	2	D0GB332JA002
R217	ERJ3GEYJ330V	1/10W 33	1	D0GB330JA002
R218	ERJ3GEY0R00V	1/10W 0	1	
R219	ERJ3GEYJ330V	1/10W 33	1	D0GB330JA002
R220	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R221	ERJ3GEYJ472V	1/10W 4.7K	1	
R222, 23	ERJ3GEYJ103V	1/10W 10K	2	D0GB103JA002
R224	ERJ3GEYJ102V	1/10W 1K	1	
R225	ERJ3GEYJ222V	1/10W 2.2K	1	
R226	ERJ3GEYJ102V	1/10W 1K	1	
R227	ERJ3GEYJ222V	1/10W 2.2K	1	
R228-31	ERJ3GEYJ220V	1/10W 22	4	
R232	ERJ3GEY0R00V	1/10W 0	1	
R233	ERJ3GEYJ474V	1/10W 470K	1	
R234	ERJ3GEY0R00V	1/10W 0	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R235	ERJ3GEYJ104	1/10W 100K	1	
R237	ERJ3GEYJ470V	1/10W 47	1	
R238	ERJ3GEY0R00V	1/10W 0	1	
R239	ERJ3GEYJ221V	1/10W 220	1	
R240	ERJ3GEY0R00V	1/10W 0	1	
R243	ERJ6GEY0R00V	1/8W 0	1	
R244	ERJ3GEYJ101	1/10W 100	1	D0GB101JA002
R245	ERJ3GEYJ332V	1/10W 3.3K	1	D0GB332JA002
R246	ERJ3GEYJ222V	1/10W 2.2K	1	
R801	ERDS2FJ221	1/4W 220	1	
R1120	ERC12UGK335D	1/2W 3.3M	1	
R1150	ERDS1TJ220	22	1	
R1151	ERJ3GEYJ102V	1/10W 1K	1	
R1152	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R1154	ERJ3EKF1202	12K	1	
R1155	ERJ3GEY0R00V	1/10W 0	1	
R1156	ERJ3EKF2402	24K	1	
R1157	ERJ3EKF1002	10K	1	
R1159, 6 0	ERDS1TJ332	1/2W 3.3K	2	
R1200	ERJ3EKF2001	2K	1	
R1201	ERJ3EKF8202	82K	1	
R1203	ERJ3EKF6802V	68K	1	
R1204	ERJ3EKF6201	6.2K	1	
R1206	ERJ3EKF2401	2.4K	1	
R1207	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R1208	ERJ3EKF1001	1K	1	
R1209	ERJ3GEYJ102V	1/10W 1K	1	
R1210	ERJ3EKF1002	10K	1	
R1211	ERD2FCJ6R8	1/4W 6.8	1	
R1400	ERJ3GEYJ334V	1/10W 330K	1	
R1401	ERJ3GEYJ105V	1/10W 1M	1	
R1402	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R1403	ERJ3EKF2201	2.2K	1	
R1404	ERJ3GEYJ470V	1/10W 47	1	
R1405	ERJ3GEYJ151V	1/10W 150	1	
R1406	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R1407	ERJ3GEYF821	1/10W 820	1	
R1408, 0 9	D1BDR2200001	1/4W 22	2	
R1413	ERJ3GEYJ100	1/10W 10	1	
R1414	ERJ3GEYJ332V	1/10W 3.3K	1	D0GB332JA002
R2001, 0 2	ERJ3GEYJ472V	1/10W 4.7K	2	
R2003, 0 4	ERJ3GEYJ103V	1/10W 10K	2	D0GB103JA002
R2005	ERJ3GEYJ104	1/10W 100K	1	
R2006	ERJ3GEYJ473V	1/10W 47K	1	D0GB473JA002
R2007	ERJ3GEYJ472V	1/10W 4.7K	1	
R2008 - 10	ERJ3GEYJ103V	1/10W 10K	3	D0GB103JA002
R2011	ERJ3GEYJ221V	1/10W 220	1	
R2012	ERJ3GEYJ183V	1/10W 18K	1	D0GB183JA002
R2013, 1 4	ERJ3GEYJ823V	1/10W 82K	2	D0GB823JA002
R2015, 1 6	ERJ3GEYJ472V	1/10W 4.7K	2	
R2017	ERJ3GEYJ563V	1/10W 56K	1	
R2018	ERJ3GEYJ824V	1/10W 820K	1	D0GB824JA002
R2019	ERJ3GEYJ474V	1/10W 470K	1	
R2020	ERJ3GEYJ273V	1/10W 27K	1	D0GB273JA002
R2021, 2 2	ERJ3GEYJ104	1/10W 100K	2	
R2023	ERJ3GEYJ183V	1/10W 18K	1	D0GB183JA002
R2024, 2 5	ERJ3GEYJ222V	1/10W 2.2K	2	
R2026, 2 7	ERJ3GEYJ220V	1/10W 22	2	
R2028	ERJ3GEYJ391V	1/10W 390	1	
R2029, 3 0	ERD2FCG220	2W 22	2	
R2031	ERJ3GEYJ272V	1/10W 2.7K	1	
R2032	ERJ3GEYJ124V	1/10W 120K	1	D0GB124JA002
R2033, 3 4	ERJ3GEYJ104	1/10W 100K	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R2035	ERG1SJ122	1.2K	1	
R2036	ERJ3GEYJ104	1/10W 100K	1	
R2037	ERJ3GEY0R00V	1/10W 0	1	
R2038	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R2039, 4 0	ERJ3GEYJ104	1/10W 100K	2	
R2041	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R2042	ERJ3GEYJ473V	1/10W 47K	1	D0GB473JA002
R2043	ERJ3GEYJ150V	1/10W 15	1	
R2044, 4 5	MCR03PZHJ561	1/16W 560	2	
R2046	ERDS1FJ2R2	1/2W 2.2	1	
R2047	ERJ3GEYJ472V	1/10W 4.7K	1	
R2048	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R2049	ERJ3GEYJ471V	1/10W 470	1	
R2050, 5 1	ERX1SJ4R7	4.7	2	
R2052	ERJ3GEYJ332V	1/10W 3.3K	1	D0GB332JA002
R2053	ERJ3GEYJ221V	1/10W 220	1	
R2054	ERX1SJ4R7	1W 4.7	1	
R2055, 5 6	ERDS1FJ220	1/2W 22	2	
R2057	ERJ3GEYJ102V	1/10W 1K	1	
R2058	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R2059	ERJ3GEYJ154V	1/10W 150K	1	
R2060	ERJ3GEYJ223V	1/10W 22K	1	D0GB223JA002
R2061	ERJ3GEYJ470V	1/10W 47	1	
R2062	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R2063, 6 4	ERJ3GEYJ151V	1/10W 150	2	
R2065	ERG1SJ122	1.2K	1	
R2066	ERJ3GEY0R00V	1/10W 0	1	
R2068, 6 9	ERJ3GEYJ222V	1/10W 2.2K	2	
R2071	ERJ3GEYJ473V	1/10W 47K	1	D0GB473JA002
R2072	ERJ3GEYJ104	1/10W 100K	1	
R2073, 7 4	ERJ3GEYJ103V	1/10W 10K	2	D0GB103JA002
R2075 - 79	ERJ3GEYJ472V	1/10W 4.7K	5	
R2080, 8 1	ERJ3GEYJ101	1/10W 100	2	D0GB101JA002
R2082, 8 3	ERDS1FJ220	1/2W 22	2	
R2084	ERJ3GEYJ472V	1/10W 4.7K	1	
R2085	ERJ3GEYJ101	1/10W 100	1	D0GB101JA002
R2086	ERJ3GEYJ472V	1/10W 4.7K	1	
R2087	ERJ3GEYJ101	1/10W 100	1	D0GB101JA002
R2089	ERJ3GEYJ473V	1/10W 47K	1	D0GB473JA002
R2090	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R2091	ERJ3GEYJ224V	1/10W 220K	1	D0GB224JA002
R2092	ERJ3GEYJ104	1/10W 100K	1	
R2093, 9 4	ERJ3GEYJ103V	1/10W 10K	2	D0GB103JA002
R2095	ERJ3GEYJ100	1/10W 10	1	
R2096	ERJ3GEYJ223V	1/10W 22K	1	D0GB223JA002
R2097	ERJ3GEYJ332V	1/10W 3.3K	1	D0GB332JA002
R2098, 9 9	ERJ3GEYJ101	1/10W 100	2	D0GB101JA002
R2113	ERDS2FJ822	1/4W 8.2K	1	
R2116, 1 7	ERDS2FJ222	1/4W 2.2K	2	
R2120, 2 1	ERDS2FJ272	1/4W 2.7K	2	
R2125, 2 6	ERDS2TJ392	1/4W 3.9K	2	
R2132, 3 3	ERDS2FJ562	1/4W 5.6K	2	
R3101 - 09	ERDS2FJ103	1/4W 10K	9	
R3110	ERDS2FJ152	1/4W 1.5K	1	
R3122	ERDS2FJ470	1/4W 47	1	
R3129	ERDS2FJ470	1/4W 47	1	
R3138	ERDS2FJ470	1/4W 47	1	
R3147 - 51	ERDS2FJ470	1/4W 47	5	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3152	ERDS2FJ152	1/4W 1.5K	1	
R3153	ERDS2FJ101	1/4W 100	1	
R3311, 12	ERDS2FJ152	1/4W 1.5K	2	
R3314, 15	ERDS2FJ222	1/4W 2.2K	2	
R3318, 19	ERDS2FJ272	1/4W 2.7K	2	
R3323, 24	ERDS2TJ392	1/4W 3.9K	2	
R3327, 28	ERDS2FJ562	1/4W 5.6K	2	
R3330, 31	ERDS2FJ822	1/4W 8.2K	2	
R3334-36	ERDS2FJ153	1/4W 15K	3	
R3337	ERDS2FJ822	1/4W 8.2K	1	
R3339-41	ERDS2FJ333	1/4W 33K	3	
R3342	ERDS2FJ153	1/4W 15K	1	
R3343, 44	ERDS2TJ823	1/4W 82K	2	
R3345	ERDS2FJ333	1/4W 33K	1	
R3346	ERDS2TJ823	1/4W 82K	1	
R3801, 02	ERDS2FJ102	1/4W 1K	2	
S1A	ESD170202	SW	1	
S1	ESE2121BT	SW	1	
S1101	K0ADKB000005	SW	1	⚠
S1501	RST2B001-H	SW	1	K0E122A00019
S1901	EVQ11G05R	SW	1	
S2001	QSSGT016AA	SW	1	K0D112B00112
S2108	EVQ11G05R	SW	1	
S2111, 12	EVQ11G05R	SW	2	
S2115, 16	EVQ11G05R	SW	2	
S2119, 20	EVQ11G05R	SW	2	
S2125, 26	EVQ11G05R	SW	2	
S2301, 02	K0L1BA000078	SW	2	
S3101-05	EVQ11G05R	SW	5	
S3139	EVQ11G05R	SW	1	
S3306, 07	EVQ11G05R	SW	2	
S3309, 10	EVQ11G05R	SW	2	
S3313, 14	EVQ11G05R	SW	2	
S3317, 18	EVQ11G05R	SW	2	
S3321-24	EVQ11G05R	SW	4	
S3327-38	EVQ11G05R	SW	12	
T1150	G4D2A0000181	POWER TRANSFORMER	1	⚠
T2001	G4B1B0000005	TRANSFORMER	1	
VR2001	D2BCB24B0003	VR, BRAKE	1	
VR2002	D2BDD14A0001	VR, VOLUME	1	
VR3801	EVAJQWC14B14	VR, TEMPO	1	
X1	H0J800400015	CRYSTAL OSCILLATOR	1	
X3	H0J270500024	CRYSTAL OSCILLATOR	1	
X5	H0J270500024	CRYSTAL OSCILLATOR	1	
X6	H0J112500003	CRYSTAL OSCILLATOR	1	
X2001	RSXB4M13J01	CRYSTAL OSCILLATOR	1	H0H419400004
Z1, Z2	EXB24V221JX	220	2	
Z3	D1H81044A024	100K	1	
Z4	EXB24V221JX	220	1	
Z5	D1H81034A024	10K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Z6	D1H433020001	33	1	
Z7	D1H81044A024	100K	1	
Z9	D1H433020001	33	1	
Z11	D1H433020001	33	1	
Z12-15	D1H84714A024	470	4	
Z16, 17	D1H81034A024	10K	2	
Z28	D1H410220001	1K	1	
Z29	D1H410420002	100K	1	
Z30, 31	D1H81044A024	100K	2	
Z33	D1H81044A024	100K	1	
Z35	D1H83304A024	33	1	
Z36	D1H81034A024	10K	1	
Z37-45	D1H81044A024	100K	9	
Z46	D1H81034A024	10K	1	
Z47	D1H83304A024	33	1	
Z48	D1H410320002	10K	1	
Z49, 50	D1H410420002	100K	2	
Z51	D1H81034A024	10K	1	
Z52	D1H81014A024	100	1	
Z53-56	D1H81044A024	100K	4	
Z57, 58	D1H81034A024	10K	2	
Z59	D1H81014A024	100	1	
Z61-63	D1H81034A024	10K	3	
Z64	D1H410420002	100K	1	
Z65	D1H433020001	33	1	
Z66, 67	D1H84704A024	47	2	
Z68, 69	D1H81044A024	100K	2	
Z70	D1H83304A024	33	1	
Z74, 75	D1H81034A024	10K	2	
Z92-02	D1H83304A024	33	11	
Z103	D1H433020001	33	1	
Z104	D1H83304A024	33	1	
Z105-20	D1H433020001	33	16	
Z121-30	D1H83304A024	33	10	
Z131, 32	D1H433020001	33	2	
Z133	D1H83304A024	33	1	
Z134-51	D1H433020001	33	18	
Z153-56	D1H81014A024	100	4	
Z157	D1H410320002	10K	1	
Z161	D1H410320002	10K	1	
Z163	D1H81044A024	100K	1	
Z164-67	D1H81034A024	10K	4	
Z168	D1H410320002	10K	1	
Z169-71	D1H433020001	33	3	
Z172, 73	EXB24V153JX	15K	2	
Z174-76	EXB24V221JX	220	3	
Z177	D1H410320002	10K	1	

18.2. CD Mechanism Parts

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	VEP62121B			
201	VXB0129	HOLDER	1	(PAS)
202	VXJ0226	DRIVE SHAFT	1	(PAS)
203	VEM0746	SPINDLE MOTOR ASS'Y	1	(PAS)
204	VEM0705	DRIVE MOTOR	1	(PAS)
205	VXK1518	TRAVERSE CHASSIS	1	(PAS)
206	VXL2930	ROLLER SHAFT	1	(PAS)
207	VHD1313	SCREW	1	(PAS)
208	VMB3368	FLOATING SPRING F	2	(PAS)
209	VMB3369	FLOATING SPRING R	1	(PAS)
210	VMB3370	BALANCE SPRING	2	(PAS)
211	VMB3666	SPRING	1	(PAS)
212	VMG1325	INSULATOR R	1	(PAS)
213	VMG1256	INSULATOR F	2	(PAS)
214	VMK0490	MAIN FRAME	1	(PAS)
215	VMK0491	UPPER FRAME	1	(PAS)
216	XQN2+AM3	SCREW	2	(PAS)

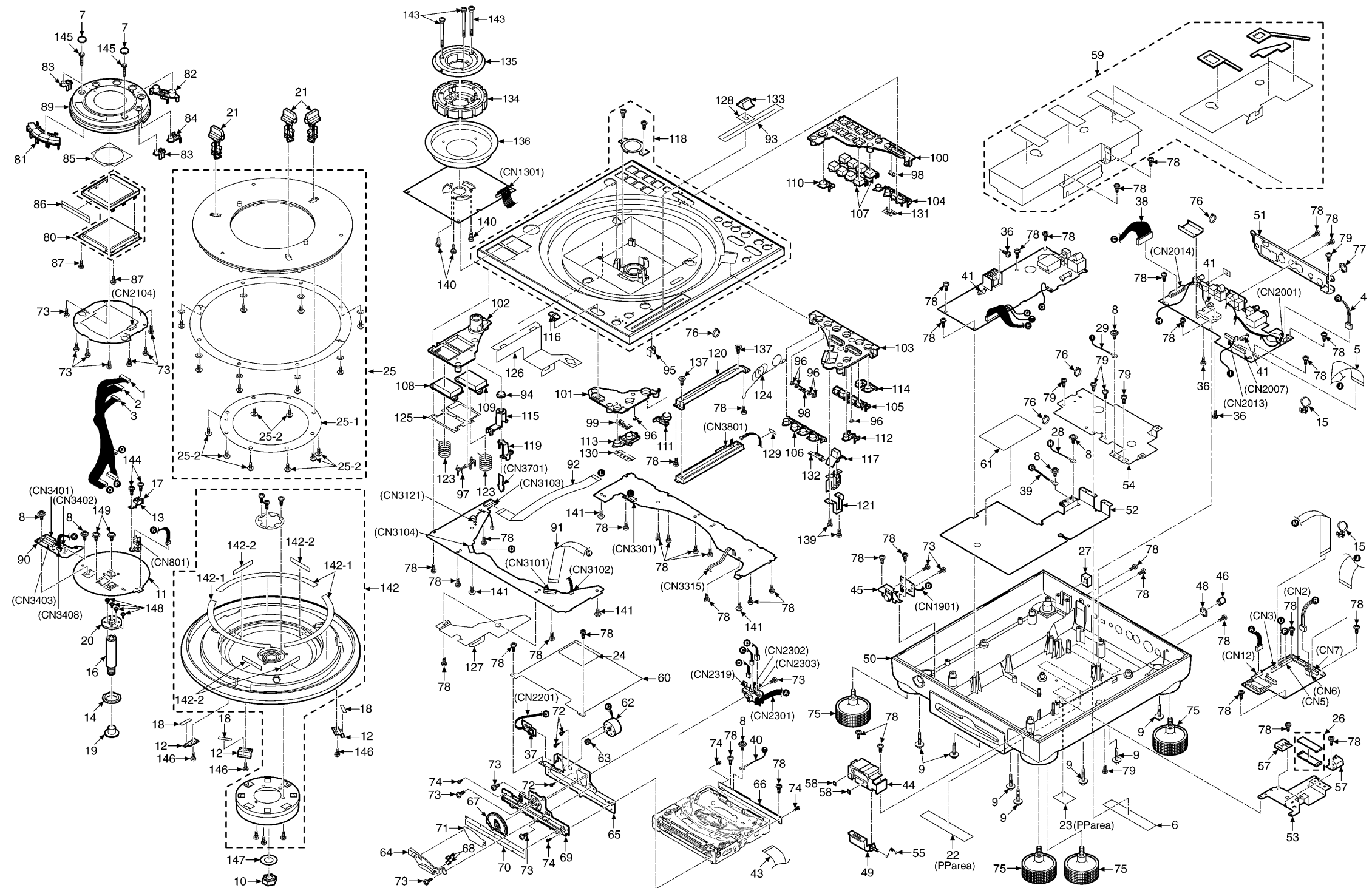
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
217	RMC0294	SPRING	1	(PAS)
218	RAF0143A-Z	OPTICAL PICK-UP	1	(PAS) ⚠
219	XQN17+BG45	SCREW	1	(PAS)
220	VDG1384	GEAR	1	(PAS)
221	VDG1387	WHEEL	1	(PAS)
222	VDG1388	CHANGE GEAR	1	(PAS)
223	VDG1389	CHANGE LEVER GEAR	1	(PAS)
224	VDG1390	SLOWDOWN GEAR A	1	(PAS)
225	VDG1391	SLOWDOWN GEAR B	1	(PAS)
226	VDG1392	SLOWDOWN GEAR C	1	(PAS)
227	VDG1393	GEAR	1	(PAS)
228	VDG1394	ROLLER TRANSFER GEAR A	1	(PAS)
229	VDG1395	ROLLER TRANSFER GEAR B	1	(PAS)
230	VDG1397	GEAR	1	(PAS)
231	VDK0162	LOCK CUM L	1	(PAS)
232	VHD1304	SCREW	2	(PAS)
233	VHD1331	SCREW	1	(PAS)
234	VMA0D36	PLATE	1	(PAS)
235	VMB3667	SPRING	1	(PAS)
236	VMB3372	SPRING	1	(PAS)
237	VMB3375	SPRING L	1	(PAS)
238	VMB3376	SPRING R	1	(PAS)
239	VMC1555	PLATE	1	(PAS)
240	VML3449	CHANGE LEVER	1	(PAS)
241	VML3450	LEVER	1	(PAS)
242	VML3452	TRAVERSE HOOK	1	(PAS)
243	VML3453	LOADING HOOK	1	(PAS)
244	VML3457	SIDE ARM R	1	(PAS)
245	VML3458	SIDE ARM L	1	(PAS)
246	VMM0438	SIDE LINK	1	(PAS)
247	VMZ2961	PROTECTION SHEET	1	(PAS)
248	XTW2+6S	SCREW	1	(PAS)
249	VHD1305	SCREW	2	(PAS)
250	VMA0D35	DRIVE MOTOR ANGLE	1	(PAS)
251	VEE0J05	LEAD WIRE ASS'Y	1	(PAS)
252	VJB62104	FFC	1	(PAS)
253	VMD3709	DISC GUIDE	1	(PAS)
254	VML3455	SELECT LEVER	2	(PAS)
255	VMA0D34	RACK BASE	1	(PAS)
256	VMB3373	RACK SPRING	1	(PAS)
257	VMD3708	CONTROL ARM	1	(PAS)
258	VML3447	CLAMP ARM	1	(PAS)
259	VML3454	TRIGGER ARM	1	(PAS)
260	VMT1087	CUSHION	1	(PAS)
261	VDR0352	CLAMP	1	(PAS)
262	VMC1557	PLATE	1	(PAS)
263	VMG1179	TRAVERSE CUSHION	2	(PAS)
C1	F2G0G1010003	4V 100U	1	(PAS)
C2	F1H1C104A009	16V 0.1U	1	(PAS)
C3, C4	F1H1C104A042	16V 0.1U	2	
C5	RCSX0JX336RE	6.3V 33U	1	F3G0J336A001
C6	F2G0J1010005	6.3V 100U	1	(PAS)
C7	F1H1C104A009	16V 0.1U	1	(PAS)
C8, C9	F1H1C104A042	16V 0.1U	2	
C10	ECUV1E273KB	25V 0.027U	1	
C11, 12	F1H1H272A238	50V 2700P	2	(PAS)
C13	ECJ1VB1H102K	35V 1000P	1	F1H1H102A009
C14	F1H1C104A009	16V 0.1U	1	(PAS)
C15	F1H1H222A238	50V 2200P	1	(PAS)
C16	F1H1H472A238	50V 4700P	1	(PAS)
C17	F1H1A1050029	10V 1U	1	(PAS)
C18	F1H1H181A792	50V 180P	1	(PAS)
C19	ECJ1VB1H102K	35V 1000P	1	F1H1H102A009
C20, 21	F1H1C104A042	16V 0.1U	2	
C22	F1H1C104A009	16V 0.1U	1	(PAS)
C23, 24	F2G1A1010006	10V 100U	2	(PAS)
C26	F1H1C104A009	16V 0.1U	1	(PAS)
C27	F2G0J4700005	6.3V 47U	1	(PAS)
C28	F1H1A1050029	10V 1U	1	(PAS)
C32	F1H1H332A238	50V 3300P	1	(PAS)

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C33	ECJ1VB1H122K	50V 1200P	1	
C34	F1H1C104A042	16V 0.1U	1	
C35	F1J1C104A078	16V 0.1U	1	(PAS)
C36	F1H1A1050029	10V 1U	1	(PAS)
C37	F1H1C333A059	16V 0.033U	1	(PAS)
C40, 41	F1H1A1050029	10V 1U	2	(PAS)
C42	F2G1A1010006	10V 100U	1	(PAS)
C43	F1H1C104A009	16V 0.1U	1	(PAS)
C44	F2G1A1010006	10V 100U	1	(PAS)
C48	F1H1C104A042	16V 0.1U	1	
C50	F1H1H103A238	50V 0.01U	1	
C51	F1H1C104A009	16V 0.1U	1	(PAS)
C52	F1H1C104A042	16V 0.1U	1	
C55	F1H1A1050029	10V 1U	1	(PAS)
C56	ECJ2VB1C224K	16V 0.22U	1	
C57	F1H1C104A009	16V 0.1U	1	(PAS)
C58	F1H1A1050029	10V 1U	1	(PAS)
C59	F1H1C104A009	16V 0.1U	1	(PAS)
C60	F1H1H472A238	50V 4700P	1	(PAS)
C61	ECJ1VB1H102K	50V 1000P	1	F1H1H102A009
C62, 63	F1J1C3340005	16V 0.33U	2	(PAS)
C67	ECUV1E273KB	25V 0.027U	1	
C68	F1H1H471A190	50V 470P	1	(PAS)
C71	ECJ1VB1H122K	50V 1200P	1	
C101	F1H1C104A009	16V 0.1U	1	(PAS)
C102, 03	F2G0J1010005	6.3V 100U	2	(PAS)
C104	F1H1C104A009	16V 0.1U	1	(PAS)
C105	F2G0G1010003	4V 100U	1	(PAS)
C106	F1H1A1050029	10V 1U	1	(PAS)
C107	F1H1C104A009	16V 0.1U	1	(PAS)
C108	F2G0G4700003	4V 47U	1	(PAS)
C109-17	F1H1C104A009	16V 0.1U	9	(PAS)
C120	F1H1C104A009	16V 0.1U	1	(PAS)
C123	F1H1A1050029	10V 1U	1	(PAS)
C124	F1H1C104A009	16V 0.1U	1	(PAS)
C125	F2G0J4700005	6.3V 47U	1	(PAS)
C126-28	F1H1C104A009	16V 0.1U	3	(PAS)
C129	F1H1C104A042	16V 0.1U	1	
C131	ECJ1VB1H102K	50V 1000P	1	F1H1H102A009
CN1	K1MN16B00036	CONNECTOR(16P)	1	(PAS)
CN2	K1KA02B00051	CONNECTOR(2P)	1	
CN3	K1MN11B00051	CONNECTOR(11P)	1	(PAS)
CN4	RJS2A5945T	CONNECTOR(45P)	1	K1MN45B00004
CN5	K1MN05B00035	CONNECTOR(5P)	1	(PAS)
D101-04	B3EB00000009	PHOTO SENSOR	4	(PAS)
D105	DAP202U	DIODE	1	
IC1	AN8882SB-E1	IC	1	(PAS)
IC2	AN77L05M	IC	1	
IC3	MN6627482WA	IC	1	(PAS)
IC4	C0GBF0000004	IC	1	
IC5	C0GBF0000007	IC	1	(PAS)
IC101	C1BB00000598	IC	1	(PAS)
IC102	C2BBGE000781	IC	1	
IC103	C3ABHG000008	IC	1	(PAS)
IC104	C0JBAZ001251	IC	1	
IC105	C0EBH0000105	IC	1	(PAS)
IC106	C0DBZGE00002	IC	1	(PAS)
L101-03	J0JJC0000011	COIL	3	
PCB100	VEP62121B	SERVO P.C.B. ASS'Y	1	[RTL]
Q1	2SA1037AKTXR	TRANSISTOR	1	B1ADCF000001
Q2, Q3	B1GBCFNA0010	TRANSISTOR	2	
Q4, Q5	B1GDCFJG0003	TRANSISTOR	2	(PAS)
Q101	DTA143XU	TRANSISTOR	1	
R1	ERJ3GEYJ221V	1/10W 220	1	
R2	ERJ3GEYJ220V	1/10W 22	1	
R3	ERJ3GEY0R00V	1/10W 0	1	

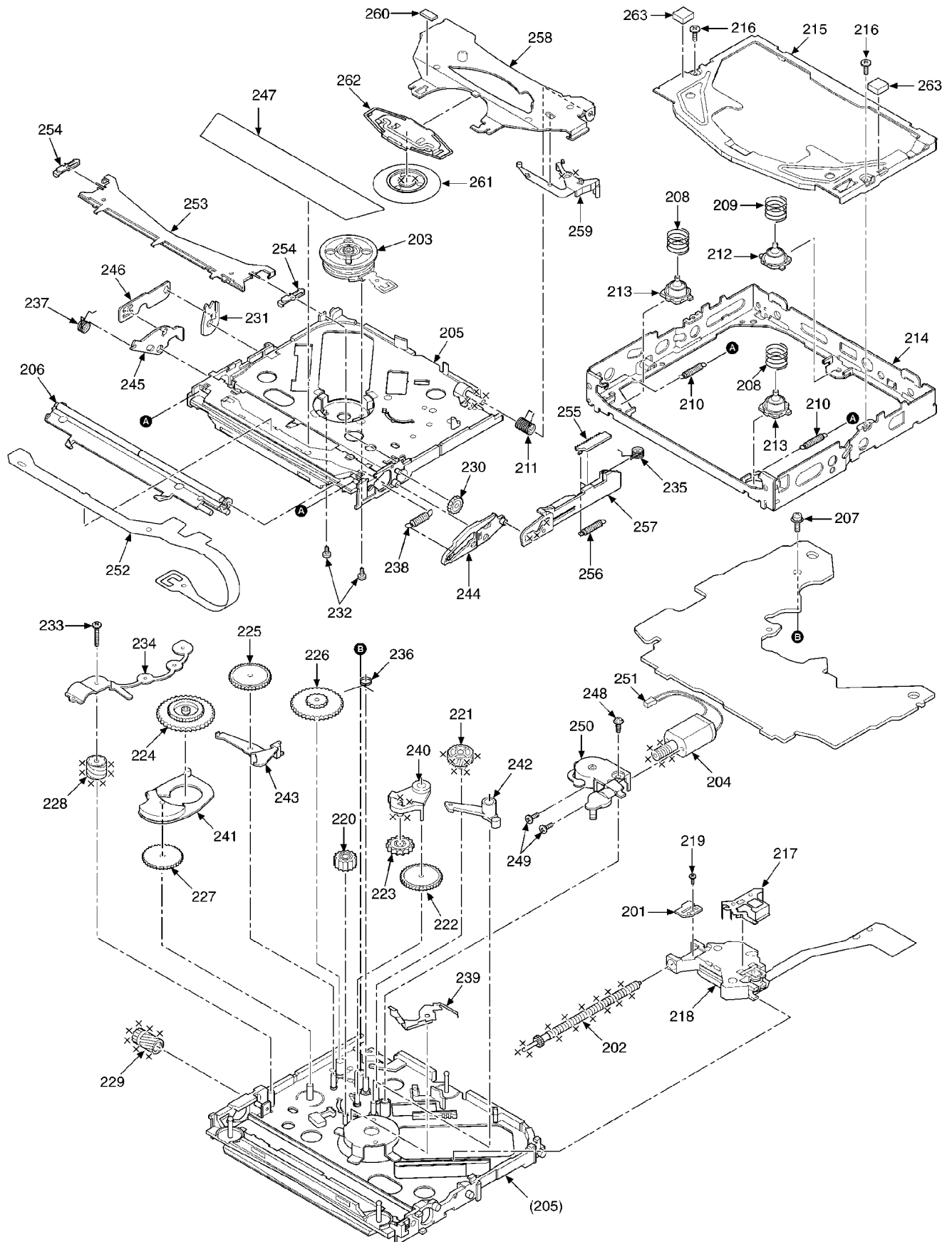
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4	ERJ3GEYJ1R8V	1/10W 1.8	1	
R5,R6	ERJ3GEYJ101	1/10W 100	2	D0GB101JA002
R7	ERJ3GEYJ4R7V	1/10W 4.7	1	
R9	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R10	ERJ3GEYJ822V	1/10W 8.2K	1	D0GB822JA002
R11	ERJ3GEYJ393V	1/10W 39K	1	D0GB393JA002
R12	ERJ3GEYJ333V	1/10W 33K	1	D0GB333JA002
R13	ERJ3GEYJ222V	1/10W 2.2K	1	
R14	ERJ3GEYJ333V	1/10W 33K	1	D0GB333JA002
R15,16	ERJ3GEYJ473V	1/10W 47K	2	D0GB473JA002
R17	ERJ3GEYJ224V	1/10W 220K	1	D0GB224JA002
R18	ERJ3GEYJ334V	1/10W 330K	1	
R19,20	ERJ3GEYJ562V	1/10W 5.6K	2	D0GB562JA002
R21,22	ERJ3GEY0R00V	1/10W 0	2	
R23	ERJ3GEYJ2R2V	1/10W 2.2	1	D0GB2R2JA002
R24-26	ERJ3GEYJ473V	1/10W 47K	3	D0GB473JA002
R27,28	ERJ3GEY0R00V	1/10W 0	2	
R30	ERJ3GEYJ104	1/10W 100K	1	
R31,32	ERJ3GEYJ473V	1/10W 47K	2	D0GB473JA002
R33	ERJ3GEY0R00V	1/10W 0	1	
R34	ERJ3GEYJ224V	1/10W 220K	1	D0GB224JA002
R35	ERJ3GEYJ124V	1/10W 120K	1	D0GB124JA002
R36	ERJ3GEYJ334V	1/10W 330K	1	
R37	ERJ3GEYJ333V	1/10W 33K	1	D0GB333JA002
R38	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R39	ERJ3GEYJ331V	1/10W 330	1	
R40	ERJ3GEYJ224V	1/10W 220K	1	D0GB224JA002
R41	ERJ3GEYJ155V	1/10W 1.5M	1	
R42	ERJ3GEYJ104	1/10W 100	1	
R44	ERJ3GEYJ331V	1/10W 330	1	
R48	ERJ3GEYJ331V	1/10W 330	1	
R49	ERJ3GEYJ473V	1/10W 47K	1	D0GB473JA002
R50	ERJ3GEYJ563V	1/10W 56K	1	
R51	ERJ6GEYJ1R8V	1/8W 1.8	1	
R52	ERJ6GEYJ6R8V	1/8W 6.8	1	
R53	ERJ3GEYJ822V	1/10W 8.2K	1	D0GB822JA002
R54	ERJ3GEY0R00V	1/10W 0	1	
R55	ERJ3GEYJ122	1/10W 1.2K	1	
R57	ERJ3GEYJ331V	1/10W 330	1	
R58	ERJ3GEYJ272V	1/10W 2.7K	1	
R60	ERJ3GEYJ472V	1/10W 4.7K	1	
R61	ERJ3GEYJ182V	1/10W 1.8K	1	
R62	ERJ3GEYJ472V	1/10W 4.7K	1	
R63	ERJ3GEYJ100	1/10W 10	1	
R64,65	ERJ3GEYJ272V	1/10W 2.7K	2	
R66	ERJ3GEYJ104	1/10W 100K	1	
R74	ERJ6GEYJ390	1/8W 39	1	D0GD390JA003
R76	ERJ3GEY0R00V	1/10W 0	1	
R77	ERJ3GEYJ823V	1/10W 82K	1	D0GB823JA002
R80	ERJ3GEY0R00V	1/10W 0	1	
R101-06	ERJ3GEYJ103V	1/10W 10K	6	D0GB103JA002
R118	ERJ3GEYJ820V	1/10W 82	1	
R120	ERJ3GEYJ820V	1/10W 82	1	
R121,22	ERJ3GEYJ103V	1/10W 10K	2	D0GB103JA002
R123	ERJ3GEYJ105V	1/10W 1M	1	
R124	ERJ3GEY0R00V	1/10W 0	1	
R125	ERJ3GEYD512V	1/10W 5.1	1	
R126	ERJ3GEYJ201V	1/10W 200	1	
R127	ERJ3GEYJ103V	1/10W 10K	1	D0GB103JA002
R128,29	ERJ3GEYJ331V	1/10W 330	2	
R130-35	ERJ3GEYJ473V	1/10W 47K	6	D0GB473JA002
R136-40	ERJ3GEYJ101	1/10W 100	5	D0GB101JA002
R141-43	ERJ3GEY0R00V	1/10W 0	3	
R144	ERJ3GEYJ473V	1/10W 47K	1	D0GB473JA002
R146,47	ERJ3GEYJ103V	1/10W 10K	2	D0GB103JA002
R148	ERJ3GEY0R00V	1/10W 0	1	
RA101-04	EXBV8V330JV	RESISTOR, 33	4	
RA105,06	VRE0219A820	RESISTOR, 82	2	D1H88204A008
RA107	EXBV8V220JV	RESISTOR, 22	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
S1	K0L1BA000015	SW	1	
S2	RSP1A015-A	SW	1	K0L1BA000019
X1	H2D169300002	OSC	1	(PAS)
X101	H2D338600001	OSC	1	(PAS)
X102	H2D500400002	OSC	1	(PAS)

19 Cabinet Parts Location



20 CD Mechanism Parts Location



NOTE: When changing Traverse parts, apply the specified grease to the areas marked "XX" as shown in the drawing.

PART NO: RFKXPG641

Although the color of grease turns into cream color, there is no problem on use.

21 Packaging

