

# ONKYO SERVICE MANUAL

## BLU-RAY DISC PLAYER MODEL BD-SP807(B)CDC1N



Black model



RC-730DV

B CDC1N	120 V AC, 60Hz
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### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  $\triangle$  ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

# TABLE OF CONTENTS

Specifications .....	1-1-1
Laser Beam Safety Precautions .....	1-2-1
Important Safety Precautions .....	1-3-1
Standard Notes for Servicing .....	1-4-1
Cabinet Disassembly Instructions .....	1-5-1
How to Initialize the BLU-RAY Disc Player .....	1-6-1
Firmware Renewal Mode .....	1-7-1
Block Diagrams .....	1-8-1
Schematic Diagrams / CBA and Test Points .....	1-9-1
Exploded Views .....	1-10-1
Mechanical Parts List .....	1-11-1
Electrical Parts List .....	1-12-1

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# SPECIFICATIONS

General	
Signal system	NTSC color
Power requirements	120V AC, 60Hz
Power consumption	30W (standby: 0.6W)
Dimensions (width x height x depth)	17 <sup>-1/8</sup> x 4 <sup>-1/4</sup> x 12 <sup>-5/16</sup> inches (435 x 108 x 312mm)
Weight	11.0 lbs ( 5.0kg )
Operating temperature	41°F (5°C) to 104°F (40°C)
Operating humidity	Less than 80% (no condensation)

Audio	
BD Linear Audio	4 Hz–88 kHz (196 kHz)
DVD Linear Audio	4 Hz–44 kHz (96 kHz), 4 Hz–22 kHz (48 kHz)
Audio CD	4 Hz–20 kHz (44.1 kHz)
Signal to Noise Ratio	112 dB
Audio Dynamic Range	98 dB
THD (Total Harmonic Distortion)	0.004% (1 kHz)

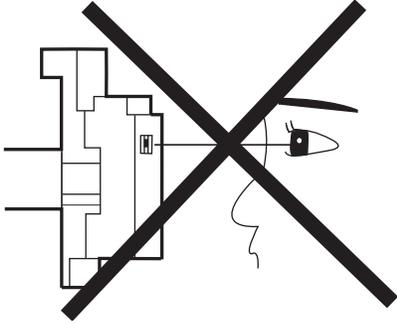
Terminals		
Rear	<b>Audio output (Analog)</b>	
	RCA jack x 2	DOWN MIX L/R: 2Vrms (output impedance: more than 1kΩ)
	RCA jack x 8	FRONT L/R, CENTER, SURR L/R, SURR BACK L/R: 2Vrms (output impedance: more than 1kΩ) SUB WOOFER: 1.1Vrms (output impedance: more than 1kΩ)
	<b>Video output</b>	
	RCA jack x 1	1Vp-p (75Ω)
	<b>Component video output</b>	
	RCA jack x 3	Y: 1Vp-p (75Ω)    Pb: 700mVp-p (75Ω)    Pr: 700mVp-p (75Ω)
	<b>Audio output (Digital)</b>	
	RCA jack x 1	500mVp-p (75Ω)
	Optical jack x 1	Digital connector
<b>HDMI output</b>		
HDMI jack x 1	Video: 480i, 480p, 720p, 1080i, 1080p, 1080p24 / Audio	
<b>ETHERNET terminal</b>	10BASE-T/100BASE-TX	

## Note

- The specifications and design of this product are subject to change without notice.

# LASER BEAM SAFETY PRECAUTIONS

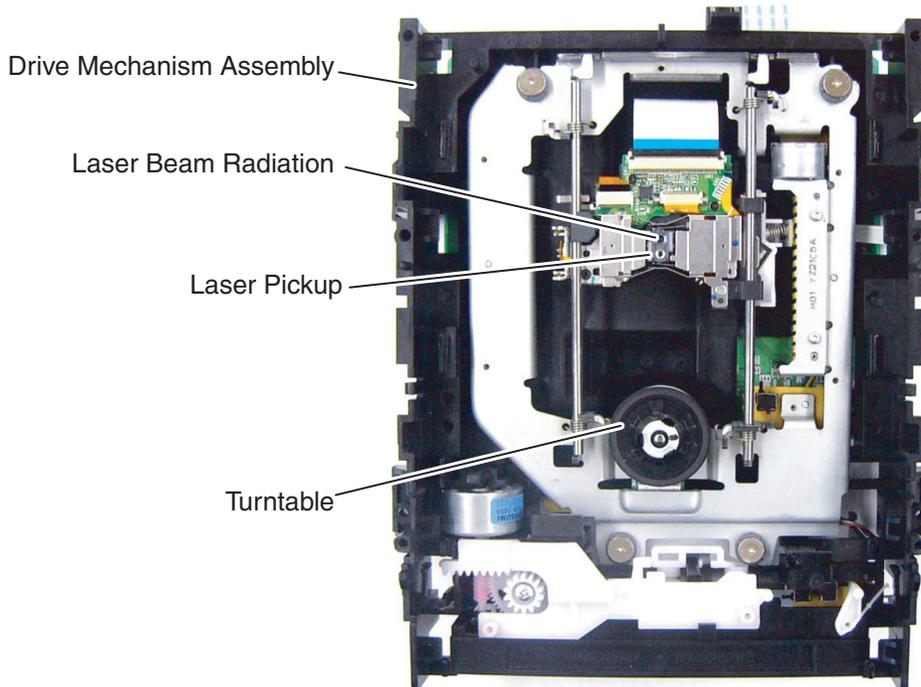
This BD player uses a pickup that emits a laser beam.



Do not look directly at the laser beam coming from the pickup or allow it to strike against your skin.

The laser beam is emitted from the location shown in the figure. When checking the laser diode, be sure to keep your eyes at least 30 cm away from the pickup lens when the diode is turned on. Do not look directly at the laser beam.

**CAUTION:** Use of controls and adjustments, or doing procedures other than those specified herein, may result in hazardous radiation exposure.



CAUTION - LASER RADIATION WHEN OPEN.  
DO NOT STARE INTO BEAM. (FDA 21CFR/Class II)

CAUTION - CLASS 2 LASER RADIATION WHEN OPEN  
DO NOT STARE INTO THE BEAM (IEC60825-1/Class 2)

ATTENTION - RAYONNEMENT LASER DE CLASSE 2 EN CAS D'OUVERTURE  
NE PAS REGARDER DANS LE FAISCEAU

注意 - ここを覗くとクラス2のレーザー放射が出る  
ビームをのぞき込まないこと

**Location: Inside Top of BD mechanism.**

# IMPORTANT SAFETY PRECAUTIONS

## Product Safety Notice

Some electrical and mechanical parts have special safety-related characteristics which are often not evident from visual inspection, nor can the protection they give necessarily be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified by a **▲** on schematics and in parts lists. Use of a substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire, and/or other hazards. The Product's Safety is under review continuously and new instructions are issued whenever appropriate. Prior to shipment from the factory, our products are carefully inspected to confirm with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

- I. Also check areas surrounding repaired locations.
- J. Be careful that foreign objects (screws, solder droplets, etc.) do not remain inside the set.
- K. When connecting or disconnecting the internal connectors, first, disconnect the AC plug from the AC outlet.

## Precautions during Servicing

- A. Parts identified by the **▲** symbol are critical for safety. Replace only with part number specified.
- B. In addition to safety, other parts and assemblies are specified for conformance with regulations applying to spurious radiation. These must also be replaced only with specified replacements. Examples: RF converters, RF cables, noise blocking capacitors, and noise blocking filters, etc.
- C. Use specified internal wiring. Note especially:
  - 1) Wires covered with PVC tubing
  - 2) Double insulated wires
  - 3) High voltage leads
- D. Use specified insulating materials for hazardous live parts. Note especially:
  - 1) Insulation tape
  - 2) PVC tubing
  - 3) Spacers
  - 4) Insulators for transistors
- E. When replacing AC primary side components (transformers, power cord, etc.), wrap ends of wires securely about the terminals before soldering.
- F. Observe that the wires do not contact heat producing parts (heat sinks, oxide metal film resistors, fusible resistors, etc.).
- G. Check that replaced wires do not contact sharp edges or pointed parts.
- H. When a power cord has been replaced, check that 5 - 6 kg of force in any direction will not loosen it.

## Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts, and wires have been returned to their original positions. Afterwards, do the following tests and confirm the specified values to verify compliance with safety standards.

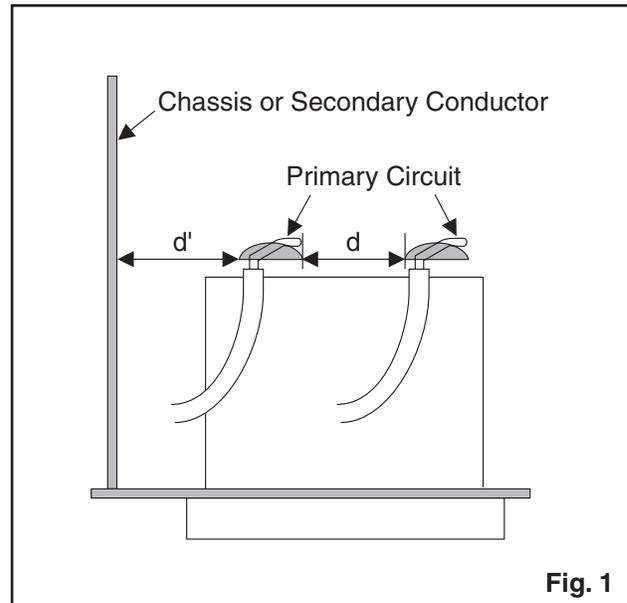
### 1. Clearance Distance

When replacing primary circuit components, confirm specified clearance distance (d) and (d') between soldered terminals, and between terminals and surrounding metallic parts. (See Fig. 1)

**Table 1: Ratings for selected area**

AC Line Voltage	Clearance Distance (d), (d')
120 V	$\geq 3\text{mm}(d)$ $\geq 4\text{mm}(d')$

**Note:** This table is unofficial and for reference only. Be sure to confirm the precise values.



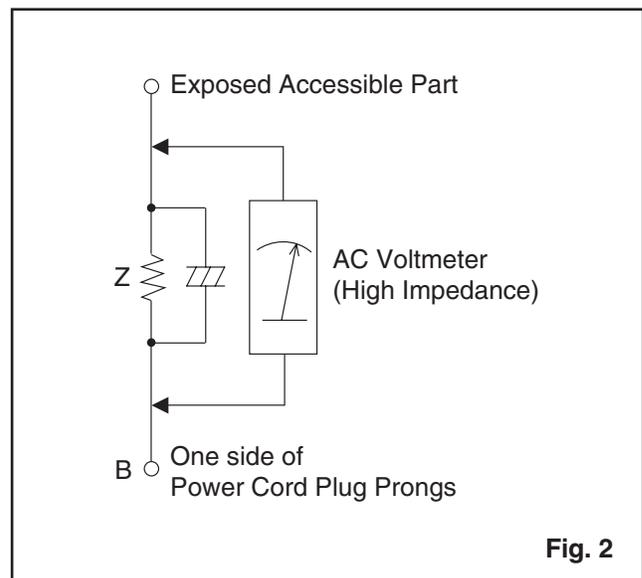
**Fig. 1**

### 2. Leakage Current Test

Confirm the specified (or lower) leakage current between B (earth ground, power cord plug prongs) and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.) is lower than or equal to the specified value in the table below.

#### Measuring Method (Power ON):

Insert load Z between B (earth ground, power cord plug prongs) and exposed accessible parts. Use an AC voltmeter to measure across the terminals of load Z. See Fig. 2 and the following table.



**Fig. 2**

**Table 2: Leakage current ratings for selected areas**

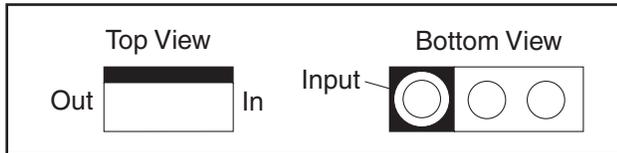
AC Line Voltage	Load Z	Leakage Current (i)	One side of power cord plug prongs (B) to:
120 V	2k $\Omega$ RES. Connected in parallel	$i \leq 0.7\text{mA AC Peak}$ $i \leq 2\text{mA DC}$	RF or Antenna terminals
	50k $\Omega$ RES. Connected in parallel	$i \leq 0.7\text{mA AC Peak}$ $i \leq 2\text{mA DC}$	A/V Input, Output

**Note:** This table is unofficial and for reference only. Be sure to confirm the precise values.

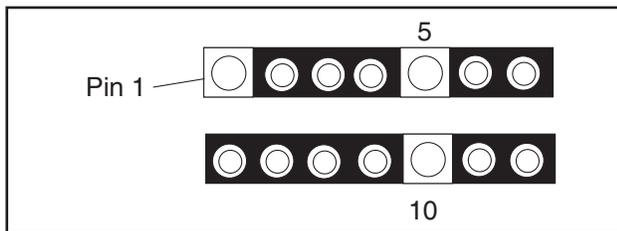
# STANDARD NOTES FOR SERVICING

## Circuit Board Indications

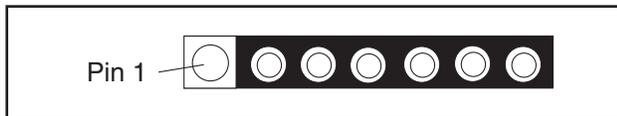
1. The output pin of the 3 pin Regulator ICs is indicated as shown.



2. For other ICs, pin 1 and every fifth pin are indicated as shown.

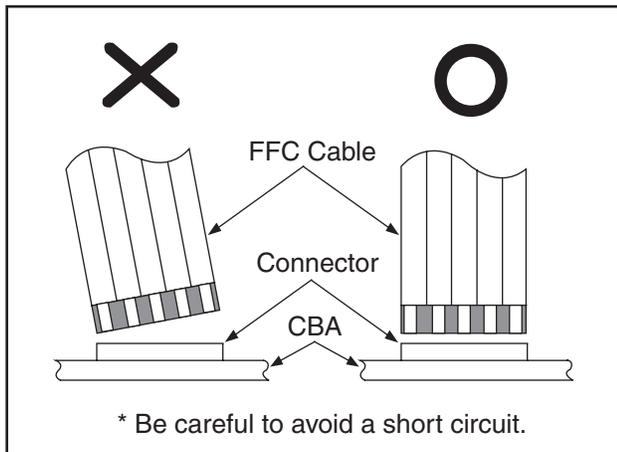


3. The 1st pin of every male connector is indicated as shown.



## Instructions for Connectors

1. When you connect or disconnect the FFC (Flexible Foil Connector) cable, be sure to first disconnect the AC cord.
2. FFC (Flexible Foil Connector) cable should be inserted parallel into the connector, not at an angle.



## Pb (Lead) Free Solder

When soldering, be sure to use the Pb free solder.

## How to Remove / Install Flat Pack-IC

### 1. Removal

With Hot-Air Flat Pack-IC Desoldering Machine:

1. Prepare the hot-air flat pack-IC desoldering machine, then apply hot air to the Flat Pack-IC (about 5 to 6 seconds). (Fig. S-1-1)

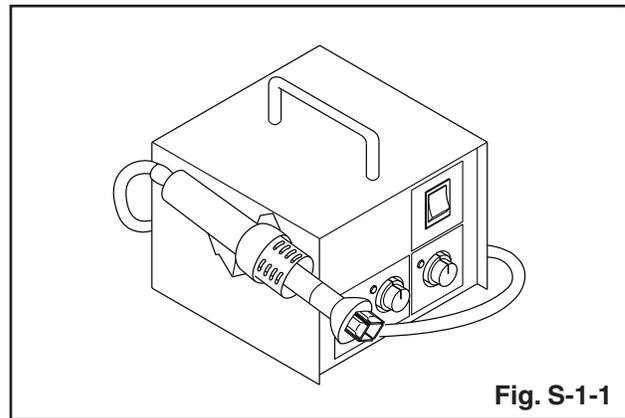


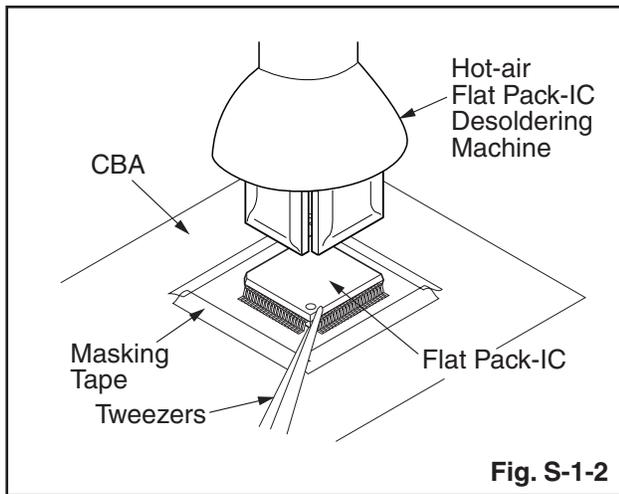
Fig. S-1-1

2. Remove the flat pack-IC with tweezers while applying the hot air.
3. Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)
4. Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

### CAUTION:

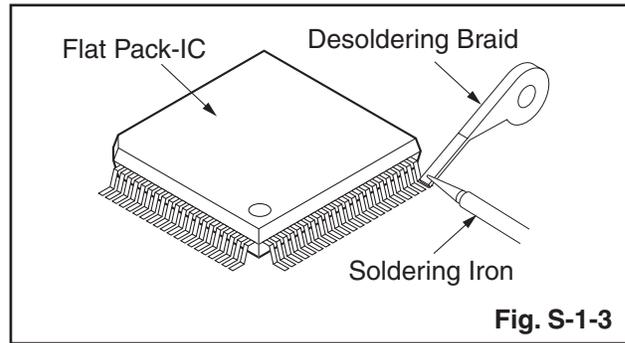
1. The Flat Pack-IC shape may differ by models. Use an appropriate hot-air flat pack-IC desoldering machine, whose shape matches that of the Flat Pack-IC.
2. Do not supply hot air to the chip parts around the flat pack-IC for over 6 seconds because damage to the chip parts may occur. Put masking tape around the flat pack-IC to protect other parts from damage. (Fig. S-1-2)

3. The flat pack-IC on the CBA is affixed with glue, so be careful not to break or damage the foil of each pin or the solder lands under the IC when removing it.

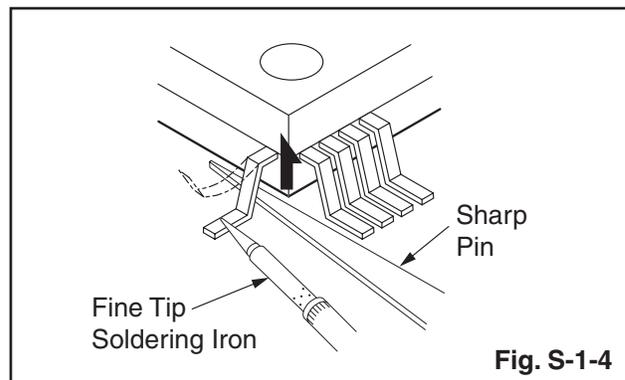


#### With Soldering Iron:

1. Using desoldering braid, remove the solder from all pins of the flat pack-IC. When you use solder flux which is applied to all pins of the flat pack-IC, you can remove it easily. (Fig. S-1-3)



2. Lift each lead of the flat pack-IC upward one by one, using a sharp pin or wire to which solder will not adhere (iron wire). When heating the pins, use a fine tip soldering iron or a hot air desoldering machine. (Fig. S-1-4)

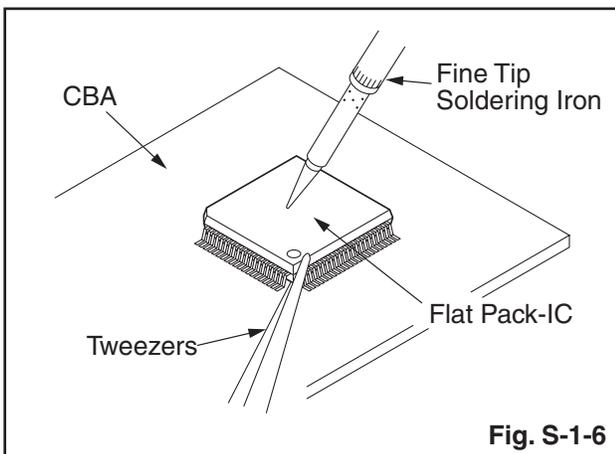
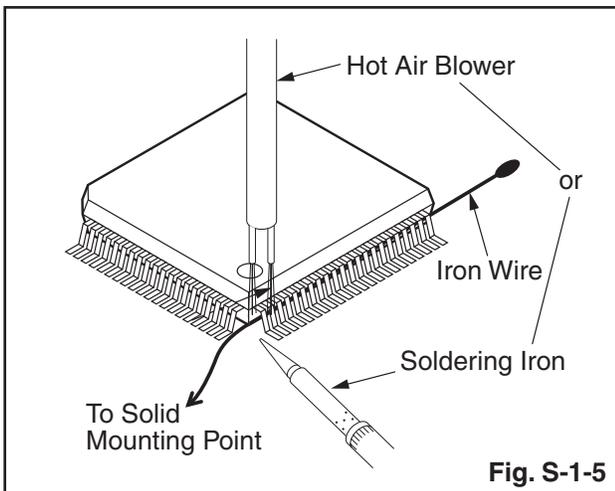


3. Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)
4. Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

### With Iron Wire:

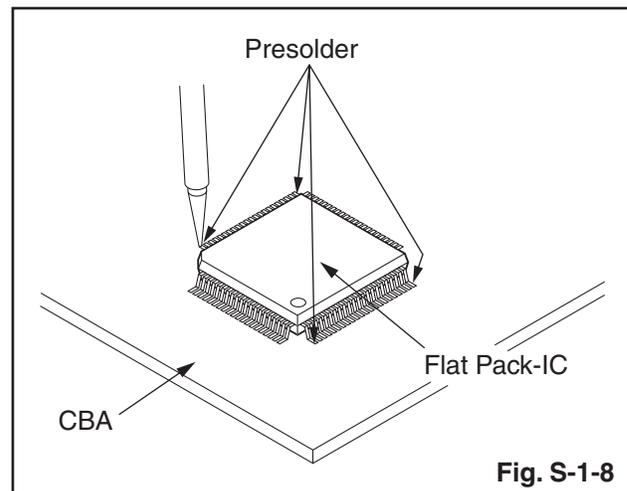
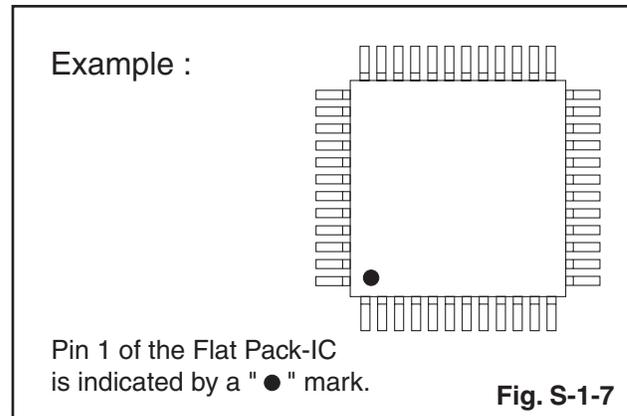
1. Using desoldering braid, remove the solder from all pins of the flat pack-IC. When you use solder flux which is applied to all pins of the flat pack-IC, you can remove it easily. (Fig. S-1-3)
2. Affix the wire to a workbench or solid mounting point, as shown in Fig. S-1-5.
3. While heating the pins using a fine tip soldering iron or hot air blower, pull up the wire as the solder melts so as to lift the IC leads from the CBA contact pads as shown in Fig. S-1-5.
4. Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)
5. Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

**Note:** When using a soldering iron, care must be taken to ensure that the flat pack-IC is not being held by glue. When the flat pack-IC is removed from the CBA, handle it gently because it may be damaged if force is applied.



## 2. Installation

1. Using desoldering braid, remove the solder from the foil of each pin of the flat pack-IC on the CBA so you can install a replacement flat pack-IC more easily.
2. The "●" mark on the flat pack-IC indicates pin 1. (See Fig. S-1-7.) Be sure this mark matches the pin 1 on the PCB when positioning for installation. Then presolder the four corners of the flat pack-IC. (See Fig. S-1-8.)
3. Solder all pins of the flat pack-IC. Be sure that none of the pins have solder bridges.



# Instructions for Handling Semi-conductors

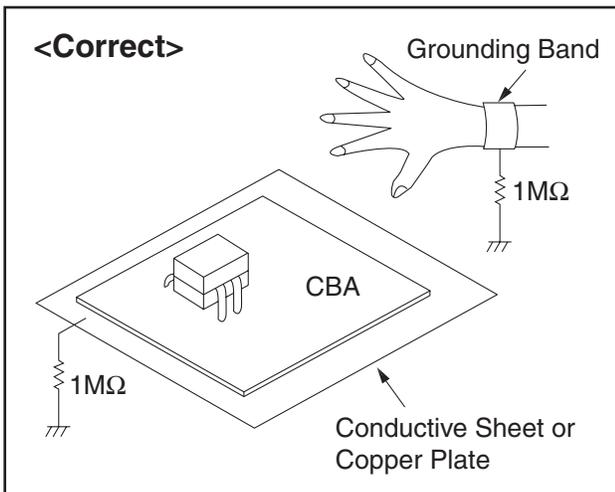
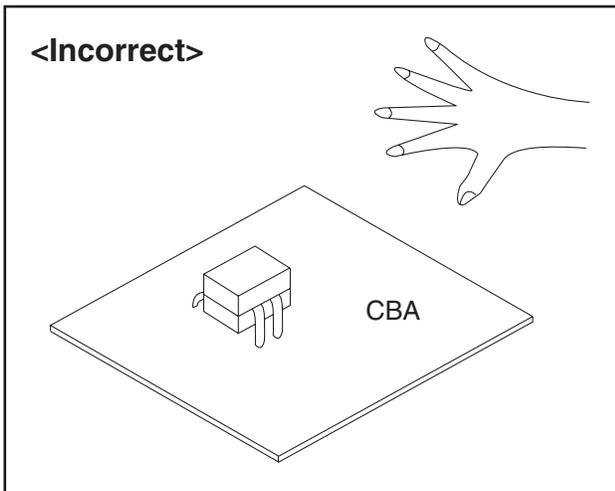
Electrostatic breakdown of the semi-conductors may occur due to a potential difference caused by electrostatic charge during unpacking or repair work.

## 1. Ground for Human Body

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

## 2. Ground for Workbench

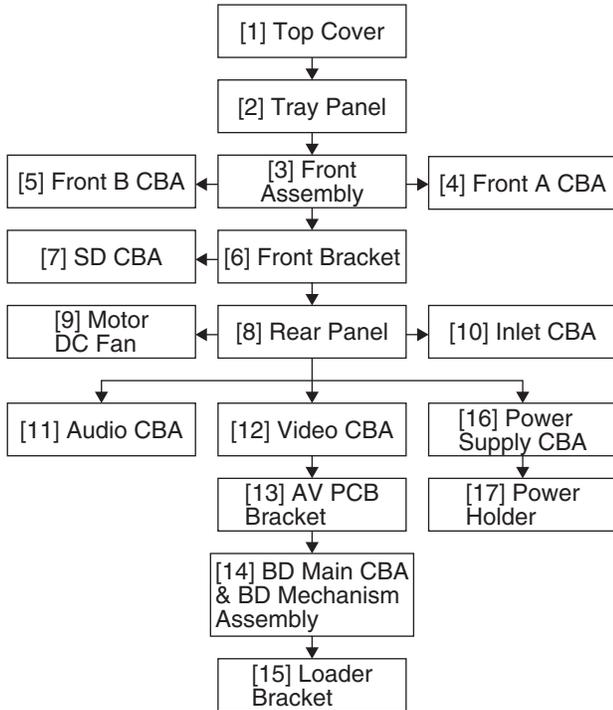
Be sure to place a conductive sheet or copper plate with proper grounding (1 MΩ) on the workbench or other surface, where the semi-conductors are to be placed. Because the static electricity charge on clothing will not escape through the body grounding band, be careful to avoid contacting semi-conductors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



# CABINET DISASSEMBLY INSTRUCTIONS

## 1. Disassembly Flowchart

This flowchart indicates the disassembly steps to gain access to item(s) to be serviced. When reassembling, follow the steps in reverse order. Bend, route, and dress the cables as they were originally.



## 2. Disassembly Method

ID/ Loc. No.	Part	Removal		
		Fig. No.	Remove/*Unhook/ Unlock/Release/ Unplug/Desolder	Note
[1]	Top Cover	D1	9(S-1)	---
[2]	Tray Panel	D2	-----	1
[3]	Front Assembly	D2	*2(L-1), *(L-2), 5(S-2), 9(S-3), *CN2002	2
[4]	Front A CBA	D2	*CN3001	---
[5]	Front B CBA	D2	-----	---
[6]	Front Bracket	D3	7(S-4), (S-5)	---
[7]	SD CBA	D3	2(S-6), *CN5001	4
[8]	Rear Panel	D4	5(S-7), (S-8), 2(S-9), (S-10), (S-11), 11(S-12), 2(S-13), *CN1006	---
[9]	Motor DC Fan	D4	-----	---

ID/ Loc. No.	Part	Removal		
		Fig. No.	Remove/*Unhook/ Unlock/Release/ Unplug/Desolder	Note
[10]	Inlet CBA	D4	*CN1001	---
[11]	Audio CBA	D5	6(S-14), *CN2005, *CN2007, *CN2008	---
[12]	Video CBA	D6	4(S-15), *CN7101	---
[13]	AV PCB Bracket	D6	4(S-16)	---
[14]	BD Main CBA & BD Mechanism Assembly	D6	4(S-17), *CN6001, *CN7601	3, 4
[15]	Loader Bracket	D6	6(S-18)	---
[16]	Power Supply CBA	D7	2(S-19), 2(S-20)	---
[17]	Power Holder	D7	3(S-21)	---

↓ (1)      ↓ (2)      ↓ (3)      ↓ (4)      ↓ (5)

### Note:

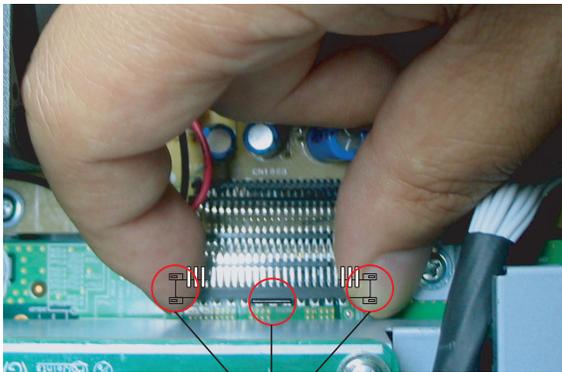
- (1) Identification (location) No. of parts in the figures
- (2) Name of the part
- (3) Figure Number for reference
- (4) Identification of parts to be removed, unhooked, unlocked, released, unplugged, unclamped, or desoldered.  
P = Spring, L = Locking Tab, S = Screw, CN = Connector  
\* = Unhook, Unlock, Release, Unplug, or Desolder  
e.g. 2(S-2) = two Screws (S-2),  
2(L-2) = two Locking Tabs (L-2)
- (5) Refer to "Reference Notes."

## Reference Note

### 1. How to remove tray panel

- 1) Connect the wall plug to an AC outlet and press the [▲] button to open the tray.
  - 2) To lift up, the tray panel is removed.
  - 3) Press the [▲] button again to close the tray.
  - 4) Press the [ON/STANDBY] button to turn the power off.
  - 5) Unplug an AC cord.
2. **CAUTION 1:** Locking Tabs (L-1) and (L-2) are fragile. Be careful not to break them.
  3. **The BD Main CBA & BD Mechanism Assembly is adjusted as a unit at factory. Therefore, do not disassemble it. Replace the BD Main CBA & BD Mechanism Assembly as a unit.**
  4. **CAUTION 2:** Connectors (CN1003 and CN6001, CN5001 and CN5003, CN5004 and CN7601) are fragile.

Make sure to hold both ends while you remove the connector. While you remove, be careful not to hold the other end too hard since this may result in damage to locking tabs.



Locking tabs

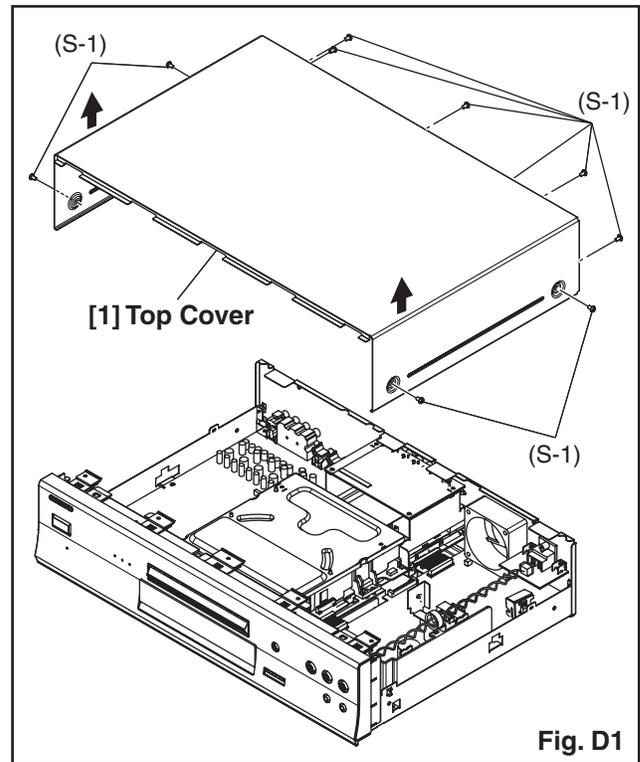


Fig. D1

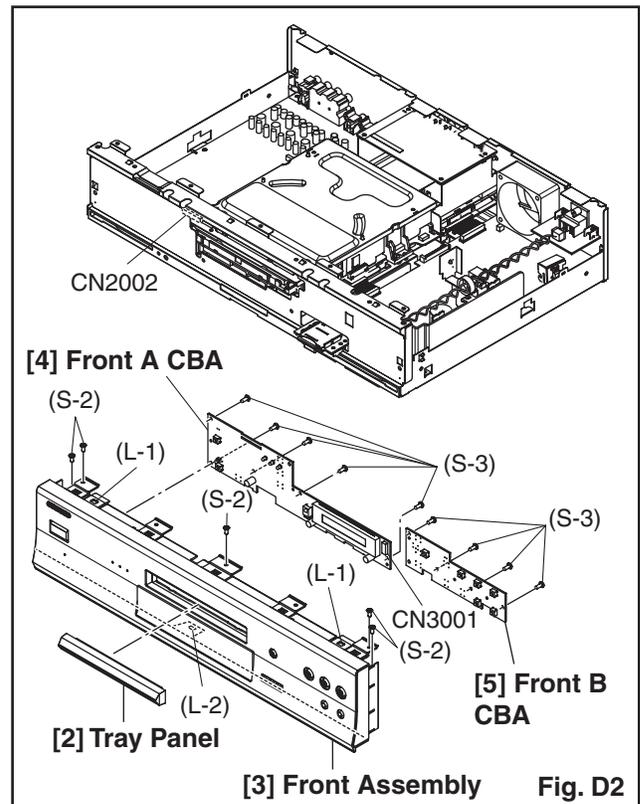
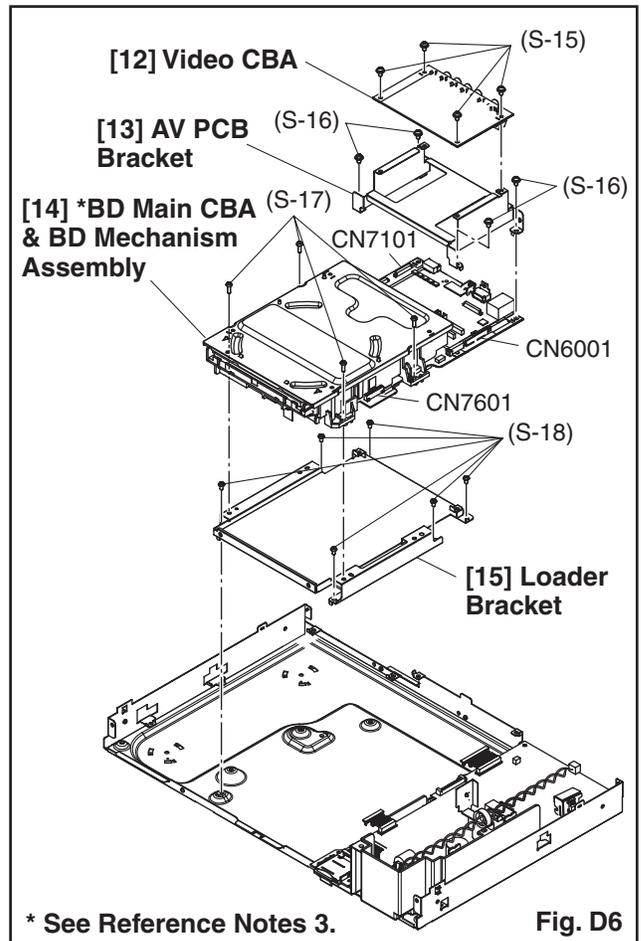
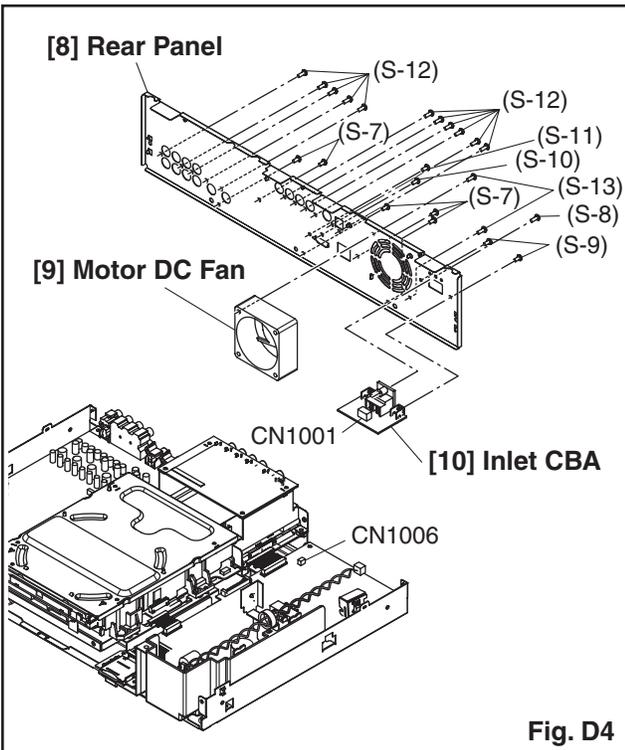
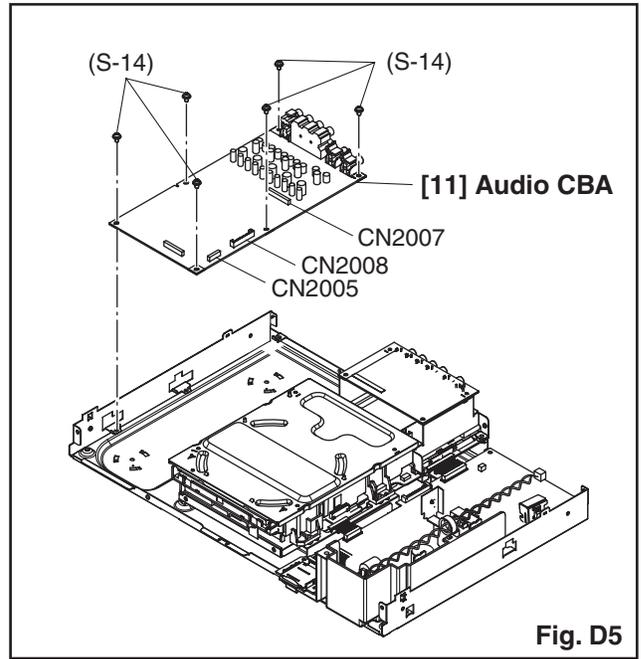
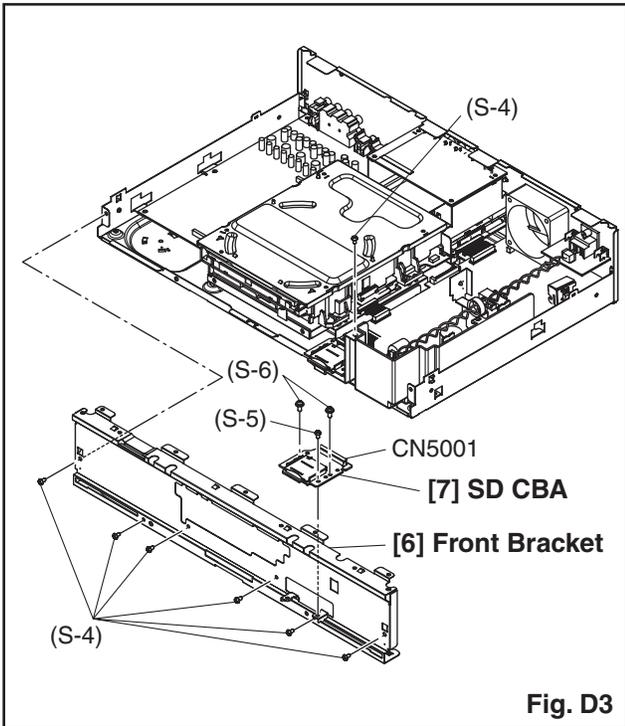
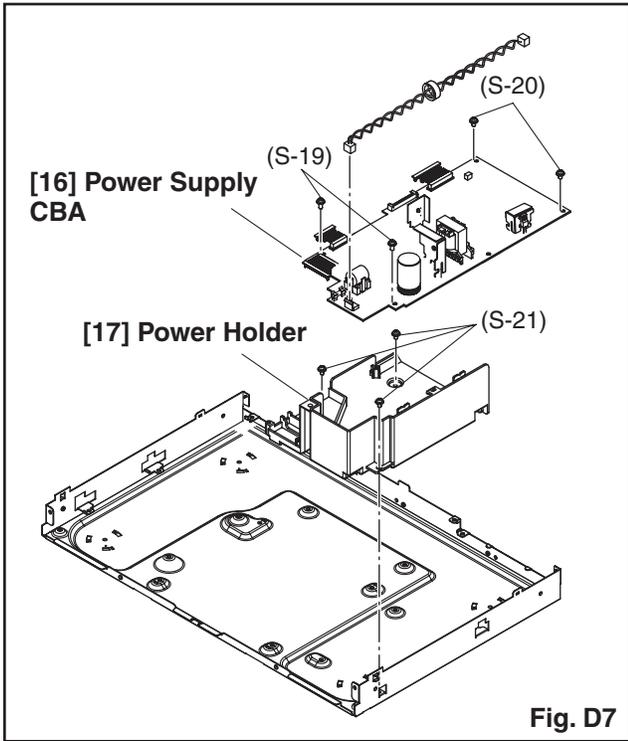


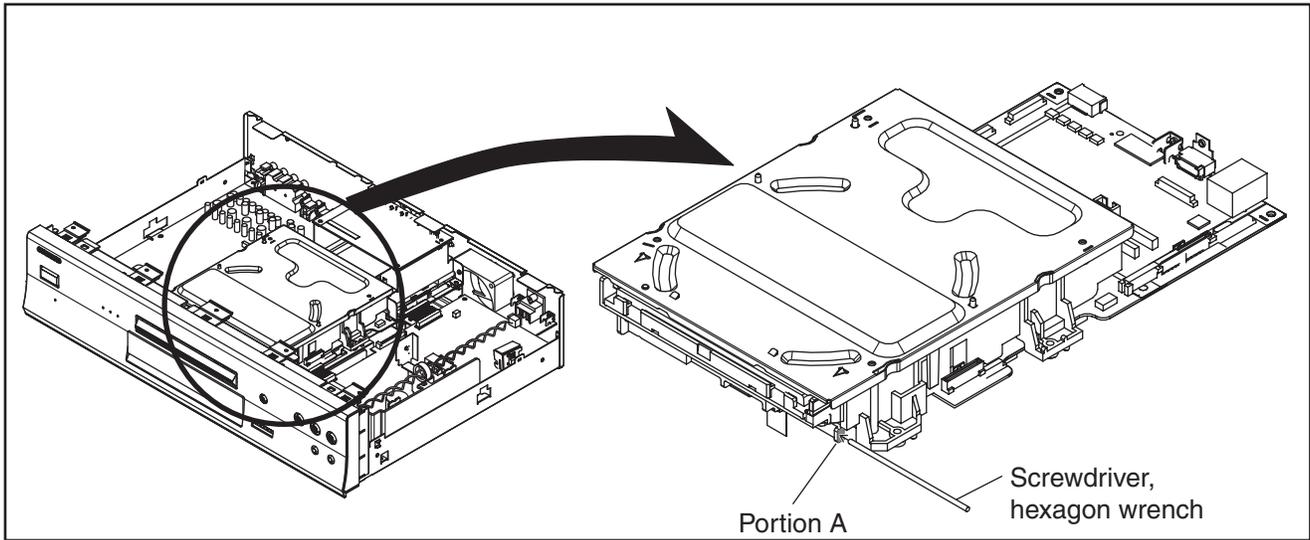
Fig. D2





### 3. How to Eject Manually

1. Remove the Top Cover.
2. Insert a screwdriver, etc. into the straightly so that the Portion A is pushed.
3. Pull the tray out manually and remove a disc.



# HOW TO INITIALIZE THE BLU-RAY DISC PLAYER

To put the program back at the factory-default, initialize the BD player as the following procedure.

1. Turn the power on.
2. Remove the disc on the tray and close the tray.
3. Press [1], [2], [3], [4], and [DISPLAY] buttons on the remote control unit in that order.

Fig. a appears on the screen.

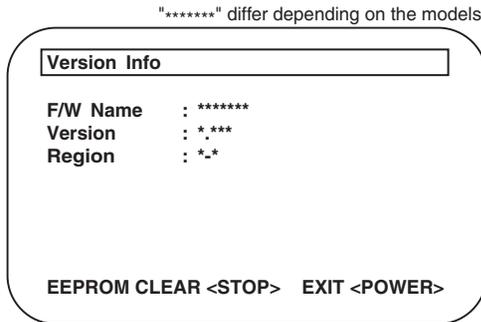


Fig. a

4. Press [■] button on the remote control unit. Fig. b appears on the screen and Fig. c appears on the VFD.

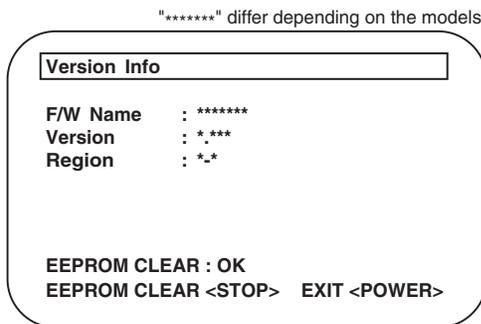


Fig. b

CLEAR

Fig. c

5. To exit this mode, press [ON/STANDBY] button.

# FIRMWARE RENEWAL MODE

**Note:** The file extension of the available firmware is "b20".

1. Turn the power on and remove the disc on the tray and close the tray.
2. To put the BD player into version up mode, press [9], [8], [7], [6], and [POP UP MENU/MENU] buttons on the remote control unit in that order. The tray will open automatically. Fig. a appears on the screen and Fig. b appears on the VFD.

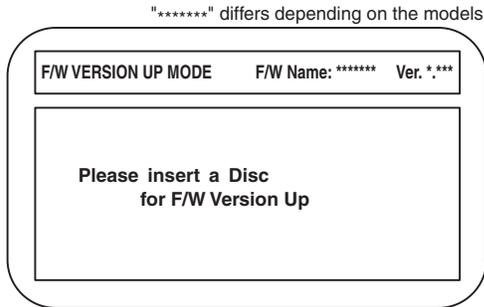


Fig. a Version Up Mode Screen

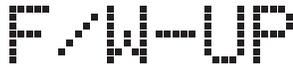


Fig. b VFD in Version Up Mode

3. Load the disc for version up.
4. The BD player enters the F/W version up mode automatically. Fig. c appears on the screen and Fig. d appears on the VFD. Make sure to insert the proper F/W for the state of this model.

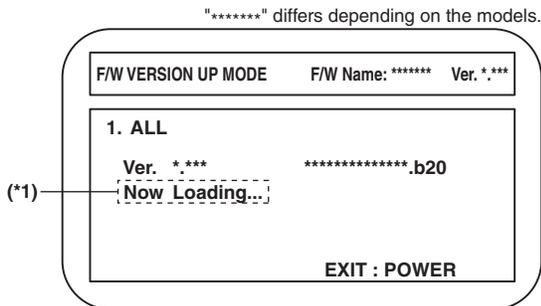


Fig. c Programming Mode Screen (Example)



Fig. d VFD in Programming Mode (Example)

The appearance shown in (\*1) of Fig. c is described as follows:

No.	Appearance	State
1	Now Loading...	Loading the disc
2	Reading...	Sending files into the memory.
3	See FL Display	Writing new version data, the progress will be displayed as shown in Fig. e.



Fig. e VFD in Version Up Mode

5. After programming is finished, the checksum on the VFD (Fig. f).



Fig. f VFD upon Finishing the Programming Mode (Example)

Checksum appears on the VFD then the tray will open automatically. Remove the disc on the tray. At this time, no button is available.

6. Unplug the AC cord from the AC outlet. Then plug it again.
7. Turn the power on.
8. Press [1], [2], [3], [4], and [DISPLAY] buttons on the remote control unit in that order. Fig. g appears on the screen.

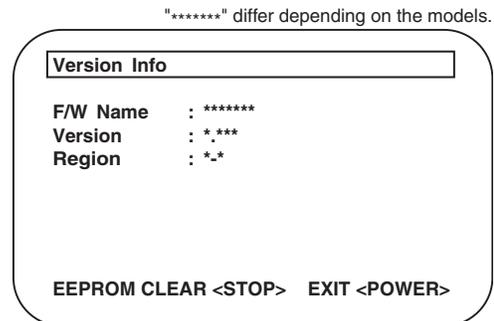


Fig. g

9. Press [ ■ ] button on the remote control unit. Fig. h appears on the screen and Fig. i appears on the VFD.

"\*\*\*\*\*" differ depending on the models.

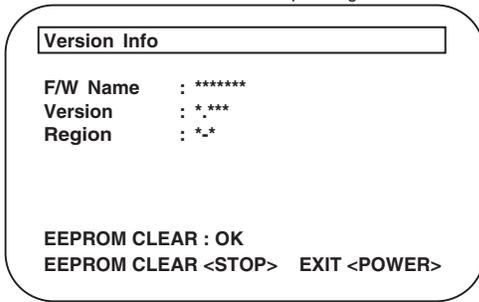


Fig. h

CLEAR

Fig. i

10. To exit this mode, press [ON/STANDBY] button.

## How to Verify the Firmware Version

1. Turn the power on.
2. Remove the disc on the tray and close the tray.
3. Press [1], [2], [3], [4], and [DISPLAY] buttons on the remote control unit in that order.

Fig. j appears on the screen.

"\*\*\*\*\*" differ depending on the models.

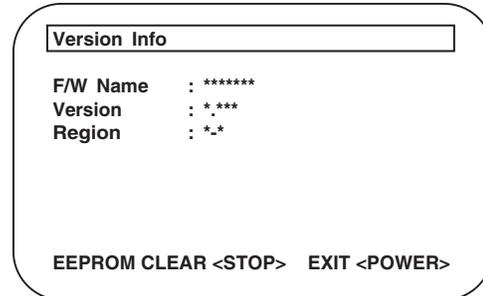
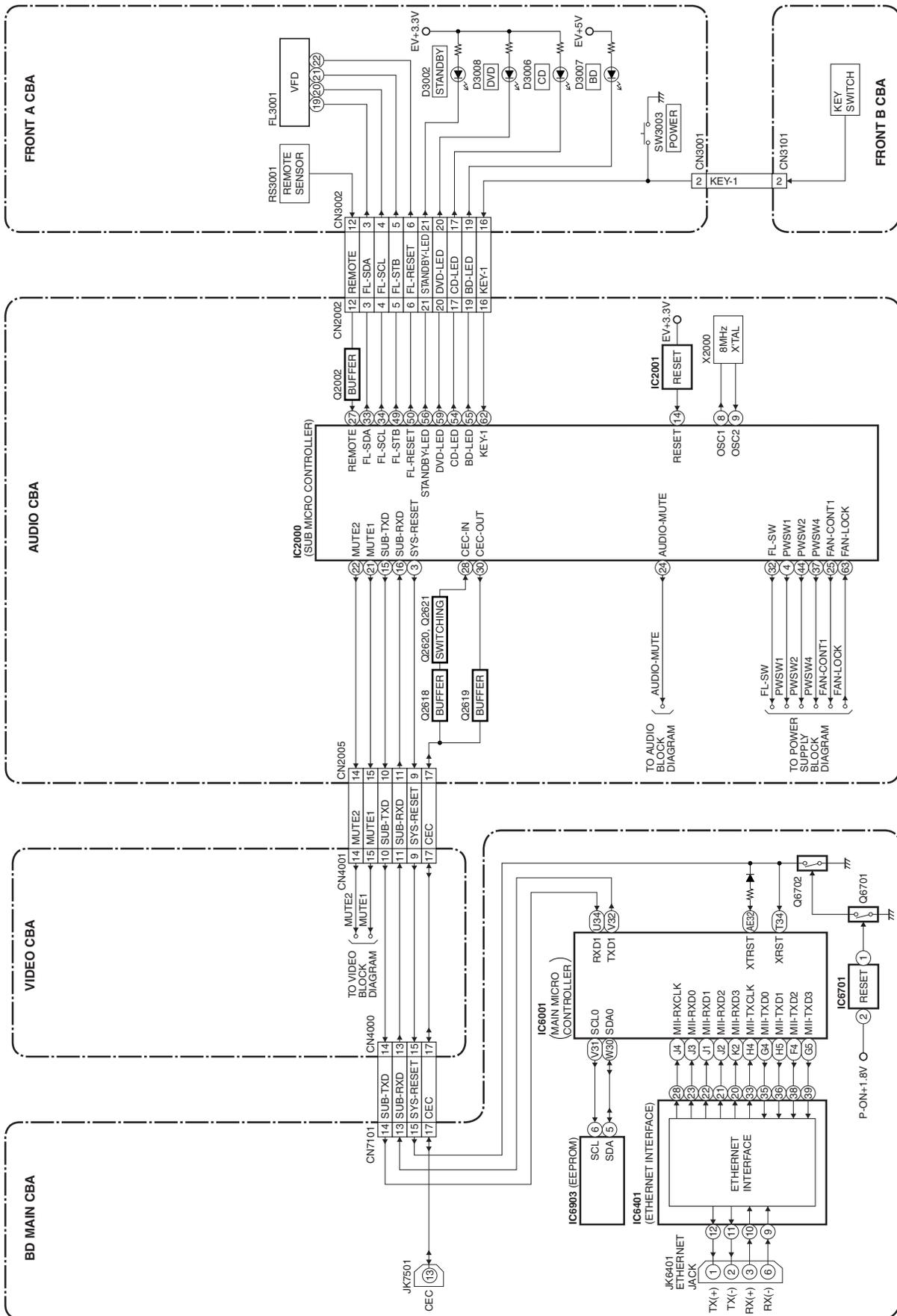


Fig. j

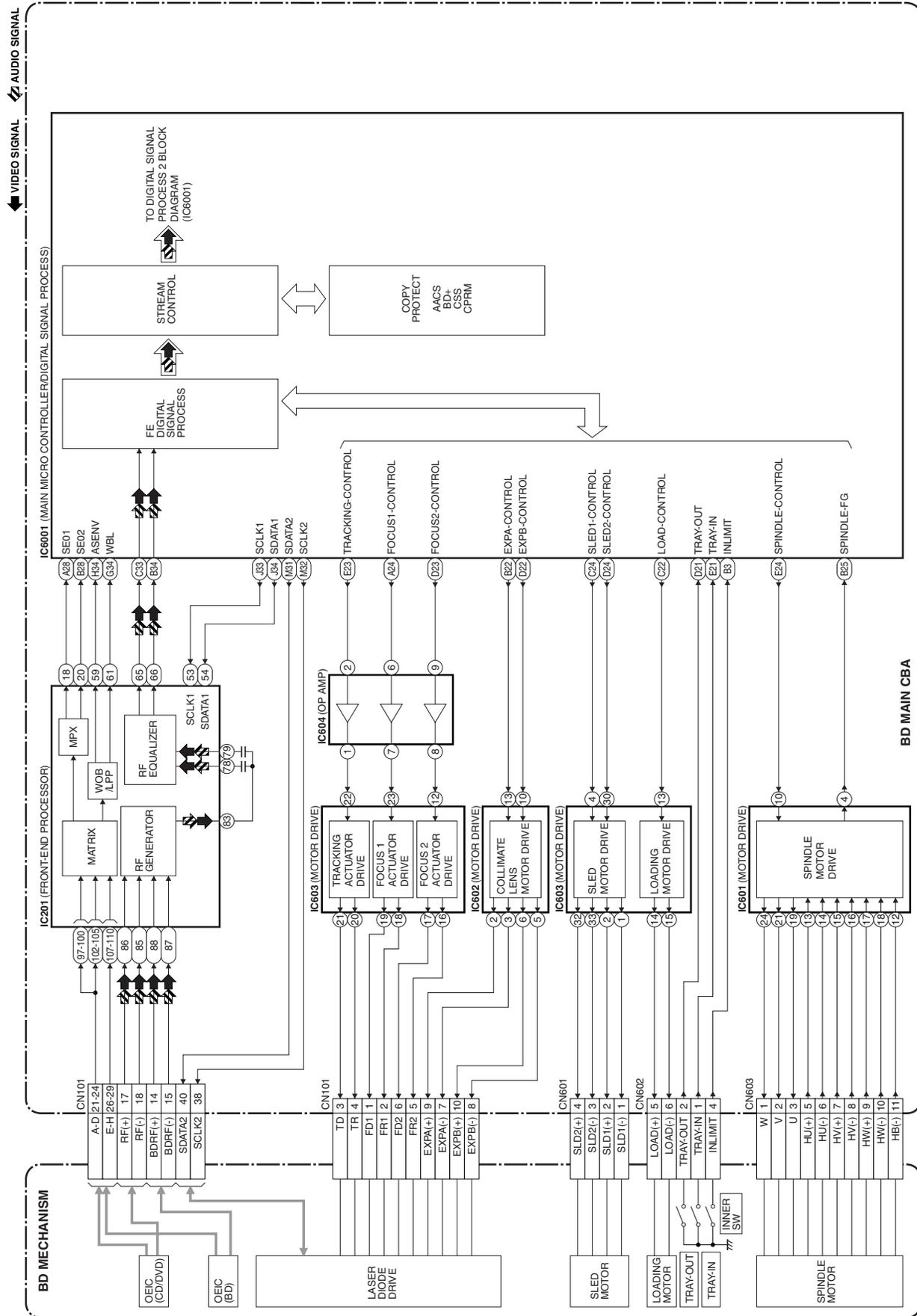
4. To exit this mode, press [ON/STANDBY] button.

# BLOCK DIAGRAMS

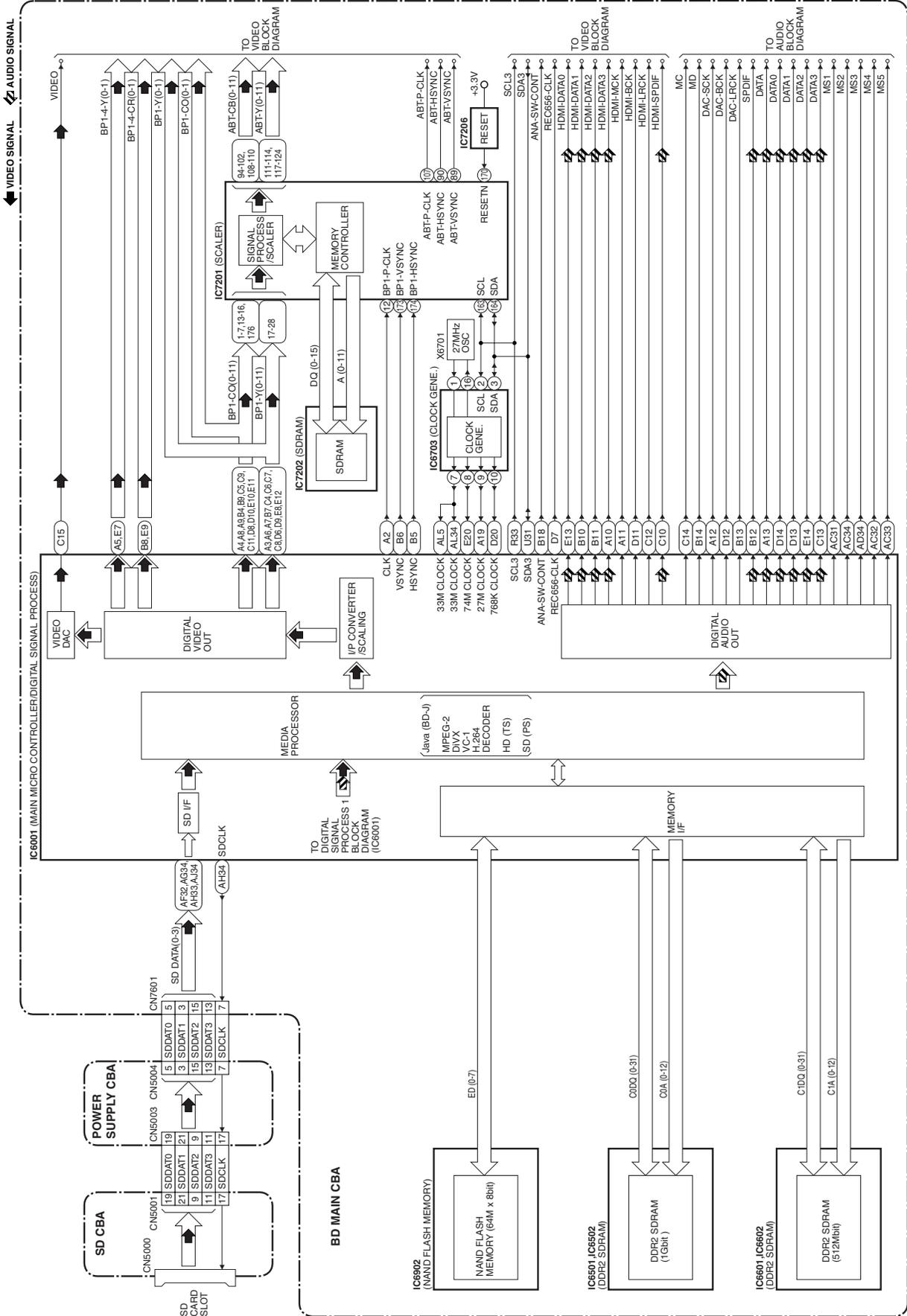
## System Control Block Diagram



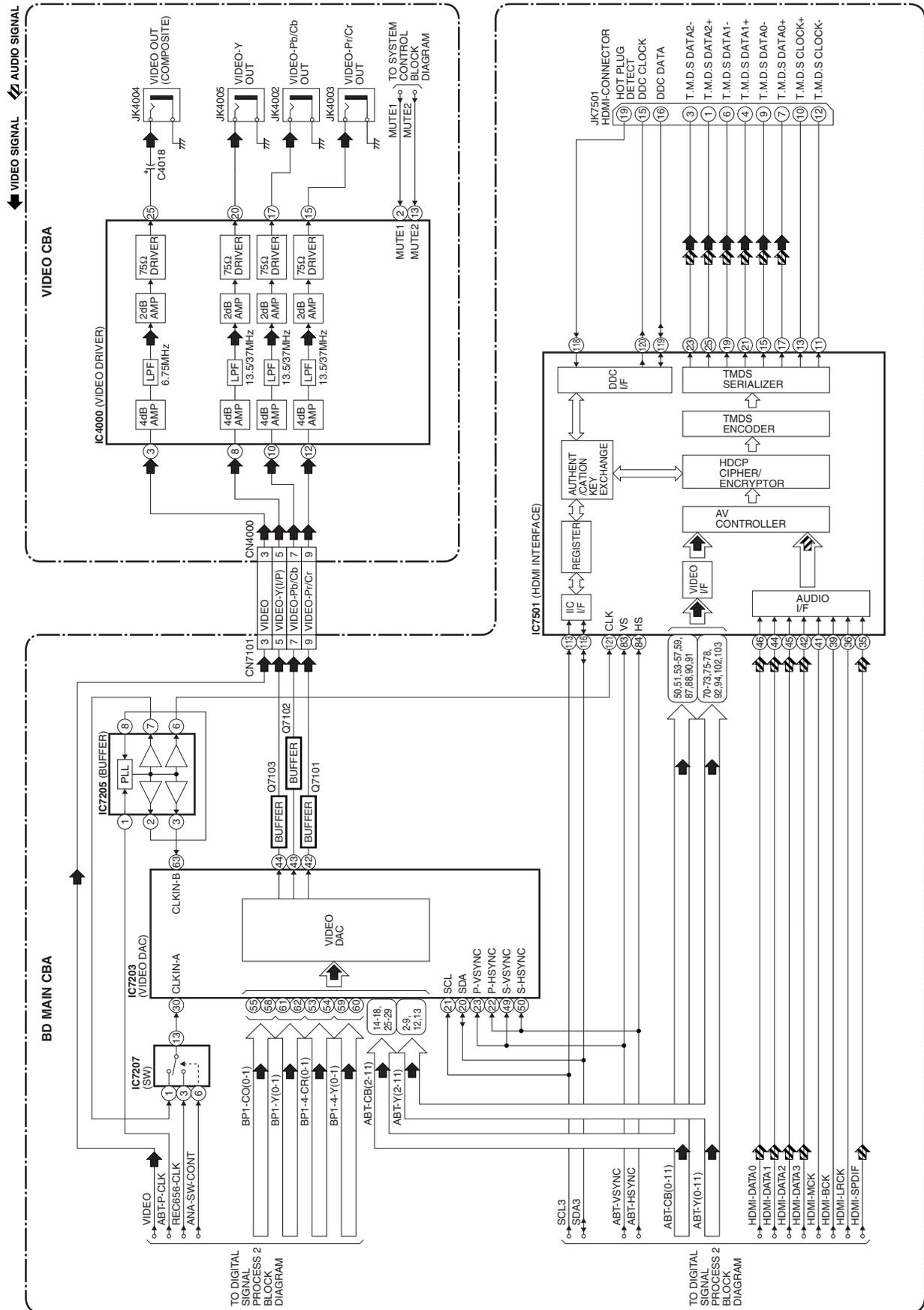
# Digital Signal Process 1 Block Diagram



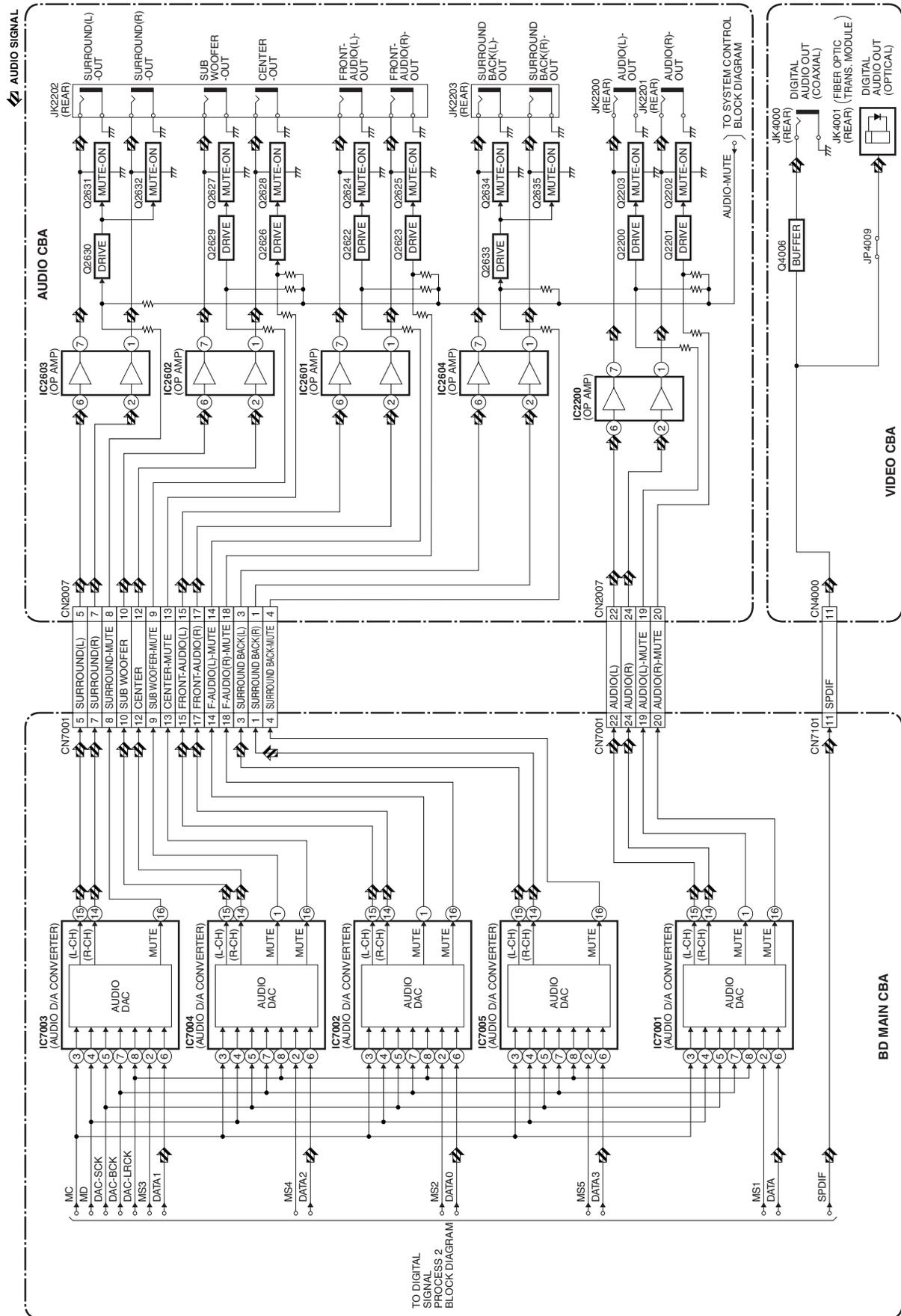
# Digital Signal Process 2 Block Diagram



# Video Block Diagram



# Audio Block Diagram



# Power Supply Block Diagram

## CAUTION !

Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.  
If Main Fuse (F1001) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.  
Otherwise it may cause some components in the power supply circuit to fail.

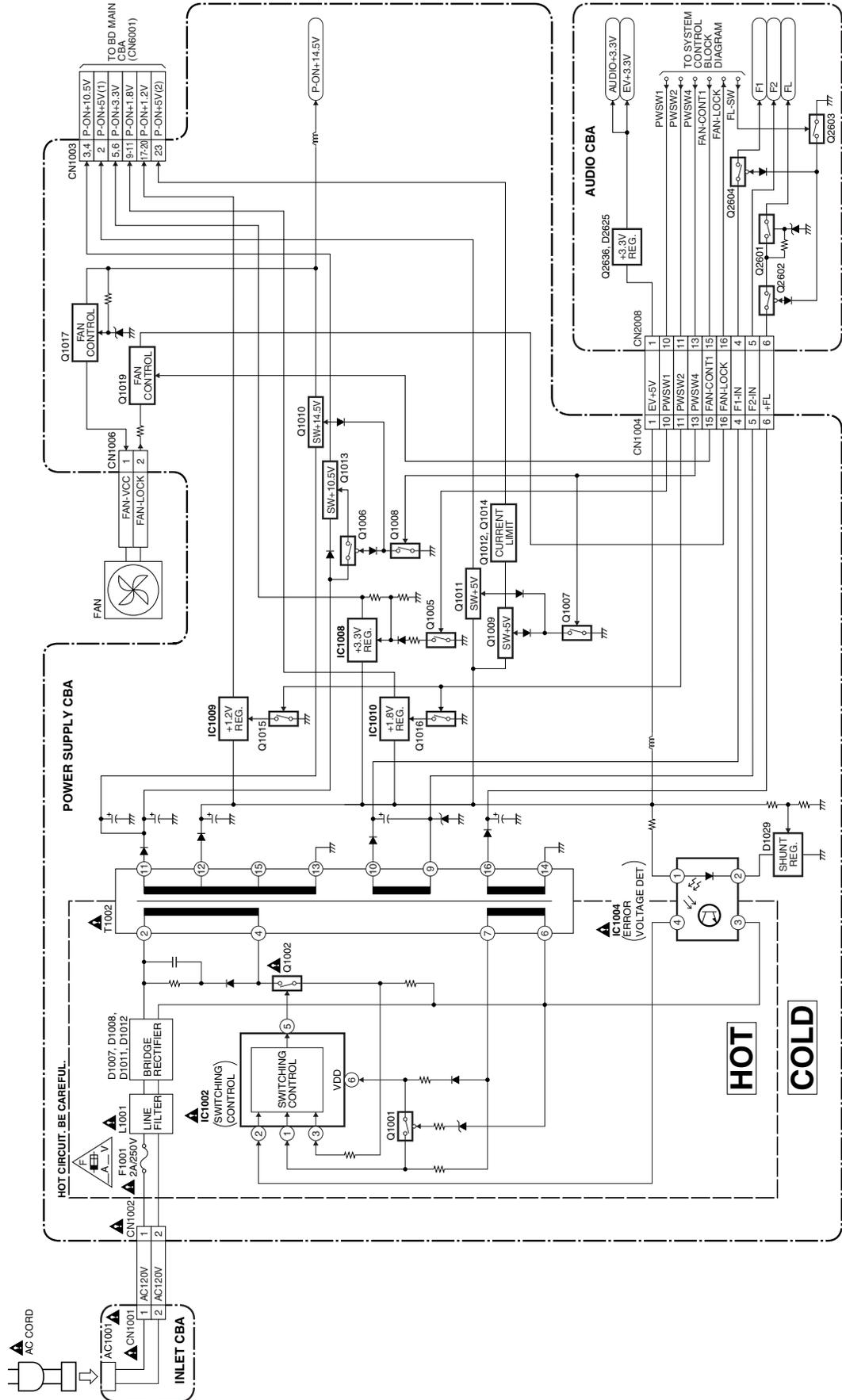
## CAUTION !

For continued protection against fire hazard,  
replace only with the same type fuse.  
ATTENTION : Pour une protection continue les risques  
d'incendie n'utiliser que des fusibles de même type.  
**Risk of fire-replace fuse as marked.**

 This symbol means fast operating fuse.  
"Ce symbole représente un fusible à fusion rapide."

## NOTE:

The voltage for parts in hot circuit is measured using hot GND as a common terminal.



# SCHEMATIC DIAGRAMS / CBA AND TEST POINTS

## Standard Notes

### WARNING

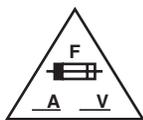
Many electrical and mechanical parts in this chassis have special characteristics. These characteristics often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the mark “▲” in the schematic diagram and the parts list. Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

### Notes:

1. Do not use the part number shown on these drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since these drawings were prepared.
2. All resistance values are indicated in ohms ( $K = 10^3$ ,  $M = 10^6$ ).
3. Resistor wattages are 1/4W or 1/6W unless otherwise specified.
4. All capacitance values are indicated in  $\mu F$  ( $P = 10^{-6} \mu F$ ).
5. All voltages are DC voltages unless otherwise specified.
6. Electrical parts such as capacitors, connectors, diodes, IC's, transistors, resistors, switches, and fuses are identified by four digits. The first two digits are not shown for each component. In each block of the diagram, there is a note such as shown below to indicate these abbreviated two digits.

# LIST OF CAUTION, NOTES, AND SYMBOLS USED IN THE SCHEMATIC DIAGRAMS ON THE FOLLOWING PAGES:

## 1. CAUTION:



FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE.  
 ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES D'INCELE N'UTILISER QUE DES FUSIBLE DE MÊME TYPE.  
 RISK OF FIRE-REPLACE FUSE AS MARKED.



This symbol means fast operating fuse.  
 Ce symbole représente un fusible à fusion rapide.

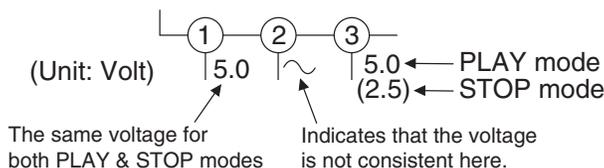
## 2. CAUTION:

Fixed Voltage (or Auto voltage selectable) power supply circuit is used in this unit.  
 If Main Fuse (F1001) is blown, first check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

## 3. Note:

- Do not use the part number shown on the drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since the drawings were prepared.
- To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list section of the service manual.

## 4. Voltage indications for PLAY and STOP mode on the schematics are as shown below:

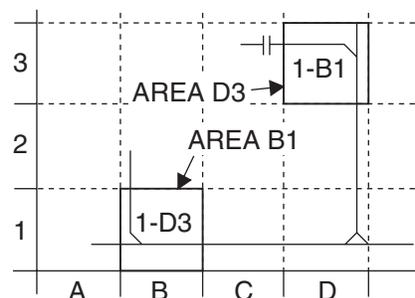


## 5. How to read converged lines

1-D3  
 ↑ Distinction Area  
 ↑ Line Number  
 (1 to 3 digits)

Examples:

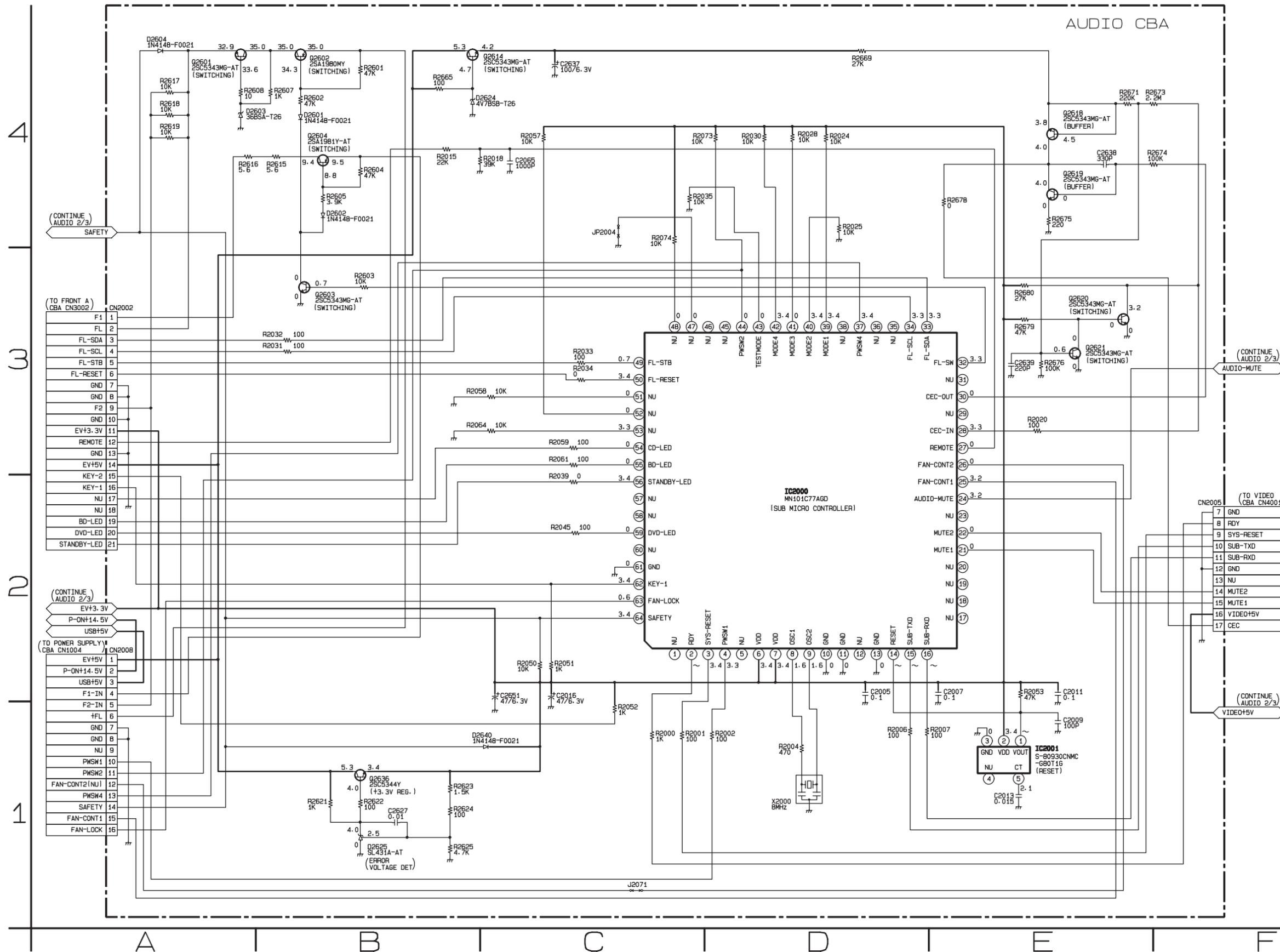
- "1-D3" means that line number "1" goes to the line number "1" of the area "D3".
- "1-B1" means that line number "1" goes to the line number "1" of the area "B1".



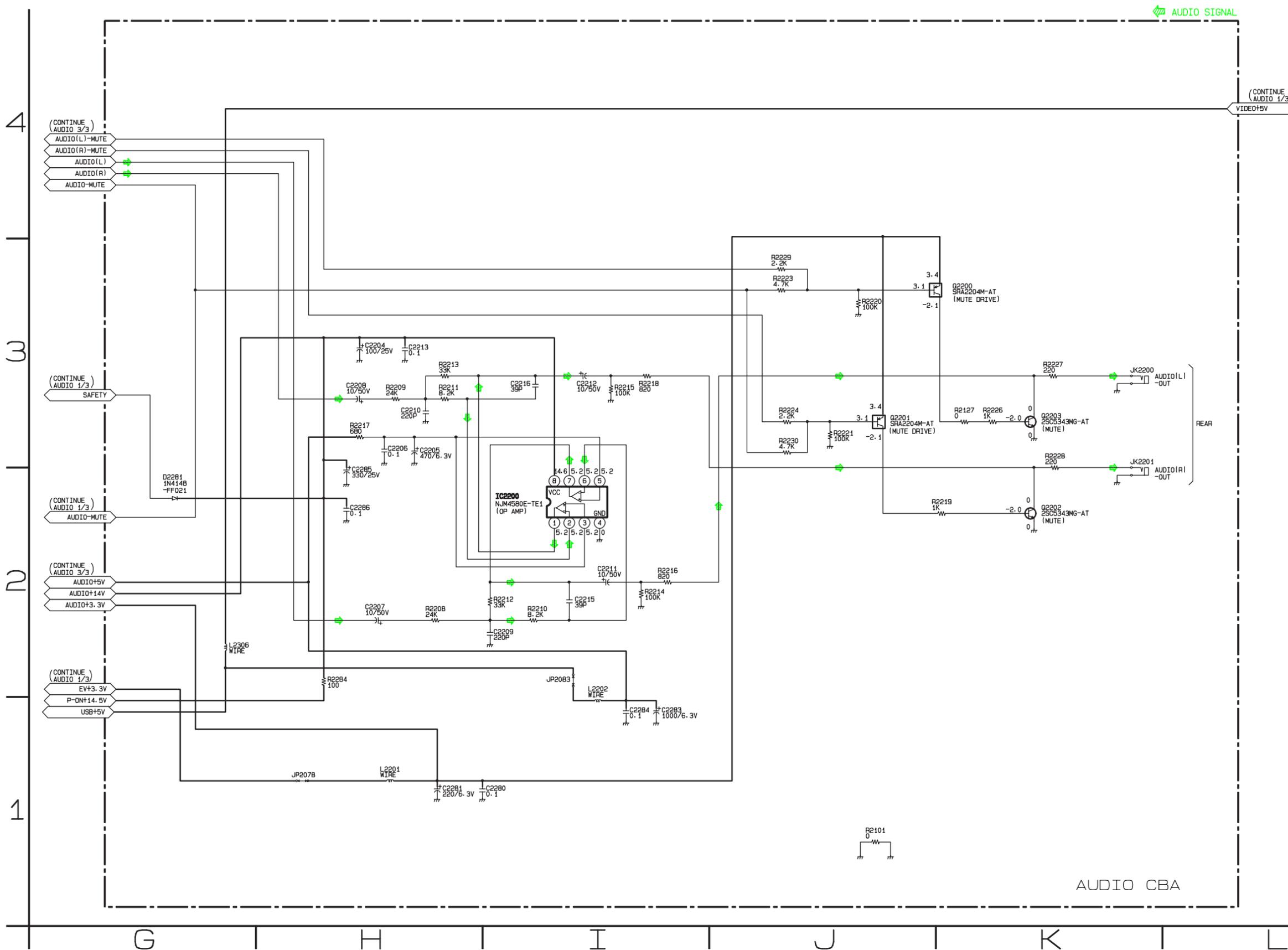
## 6. Test Point Information

- : Indicates a test point with a jumper wire across a hole in the PCB.
- : Used to indicate a test point with a component lead on foil side.
- : Used to indicate a test point with no test pin.
- : Used to indicate a test point with a test pin.

# Audio 1/3 Schematic Diagram

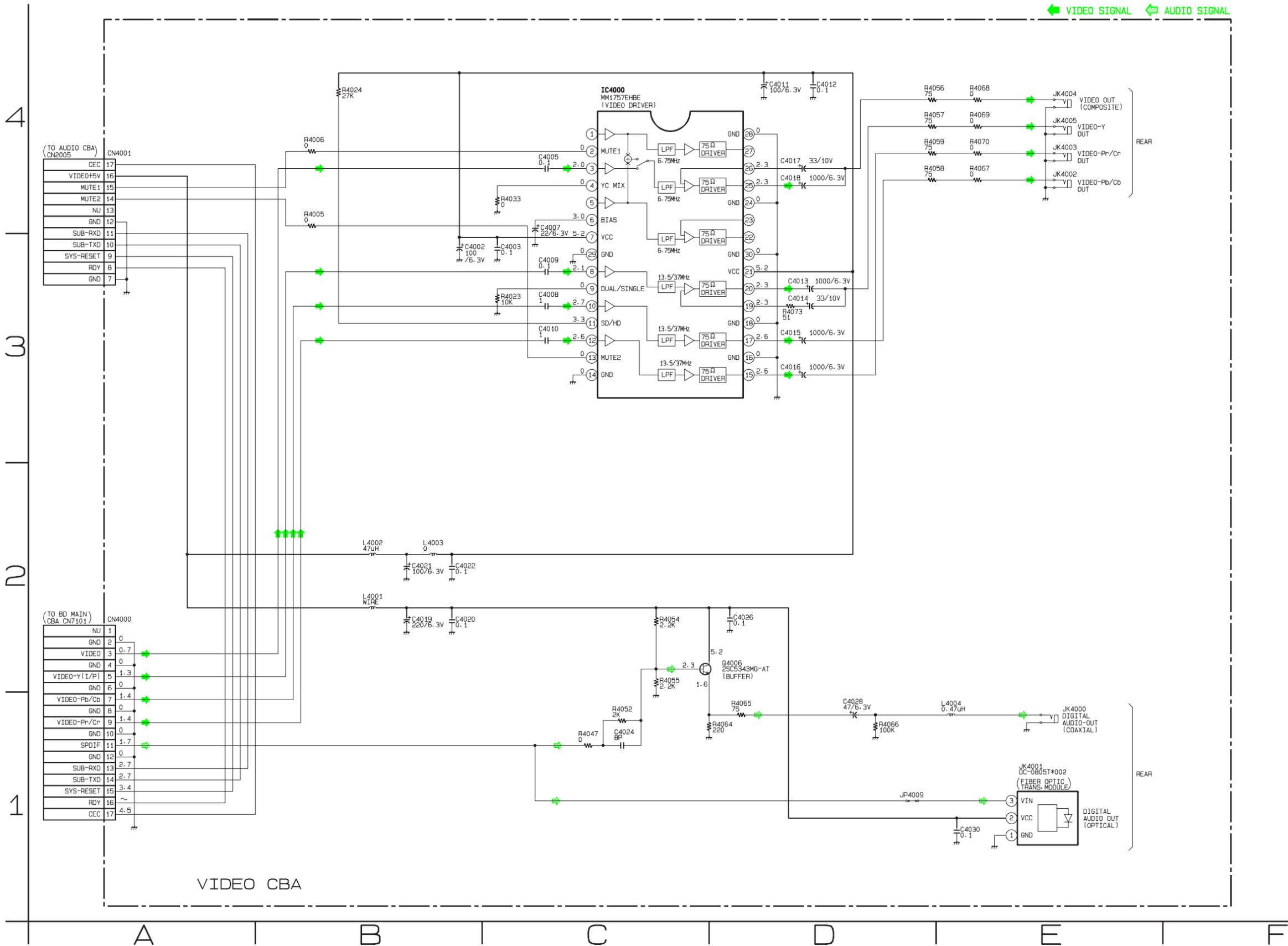


# Audio 2/3 Schematic Diagram





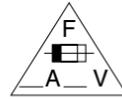
# Video Schematic Diagram



# Power Supply & Inlet Schematic Diagram

**CAUTION !**

Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.  
If Main Fuse (F1001) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.  
Otherwise it may cause some components in the power supply circuit to fail.



**CAUTION !**

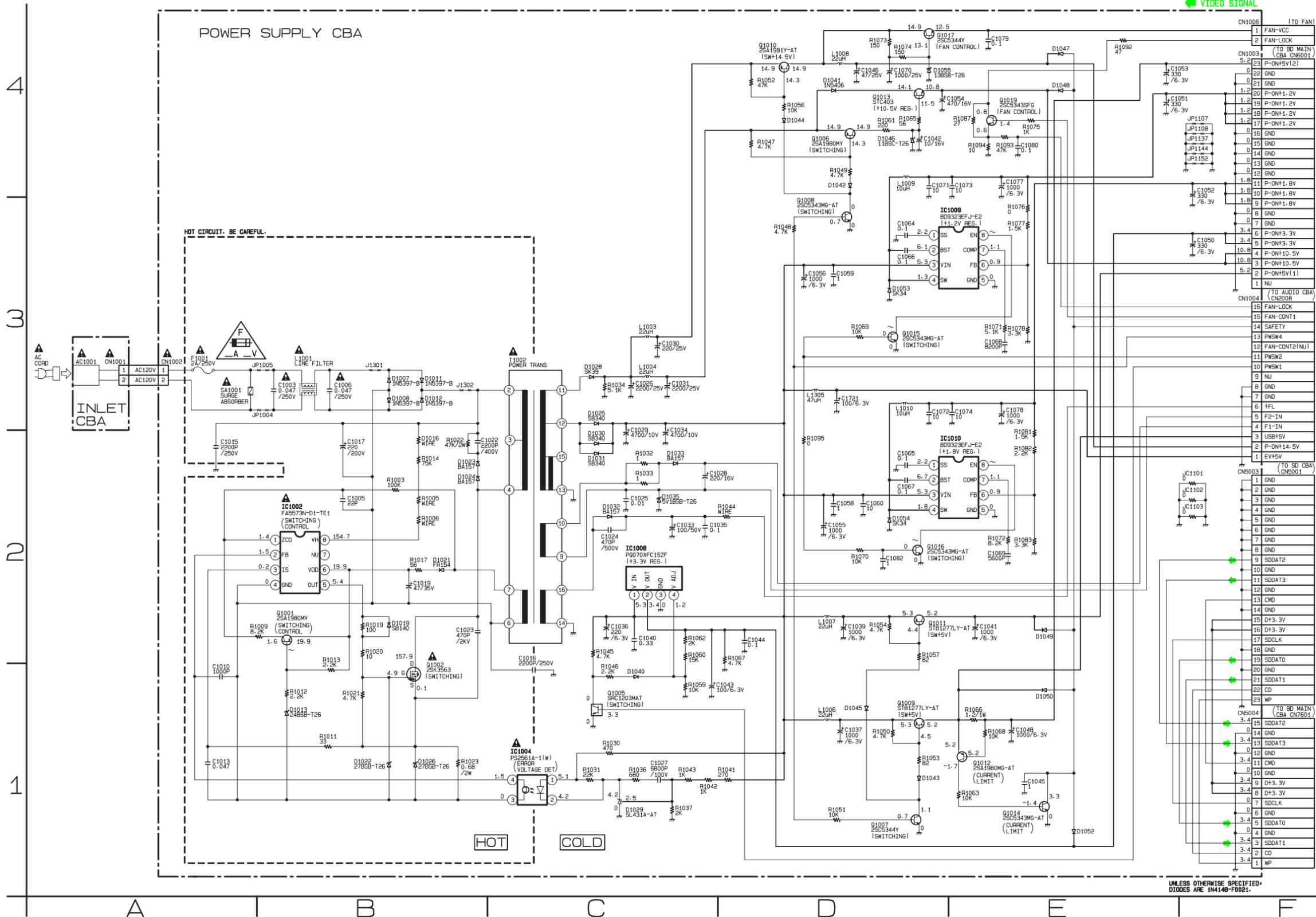
For continued protection against fire hazard, replace only with the same type fuse.  
ATTENTION : Pour une protection continue les risques d'Incele n'utiliser que des fusible de même type.

**Risk of fire-replace fuse as marked.**

■ "This symbol means fast operating fuse."  
"Ce symbole représente un fusible à fusion rapide."

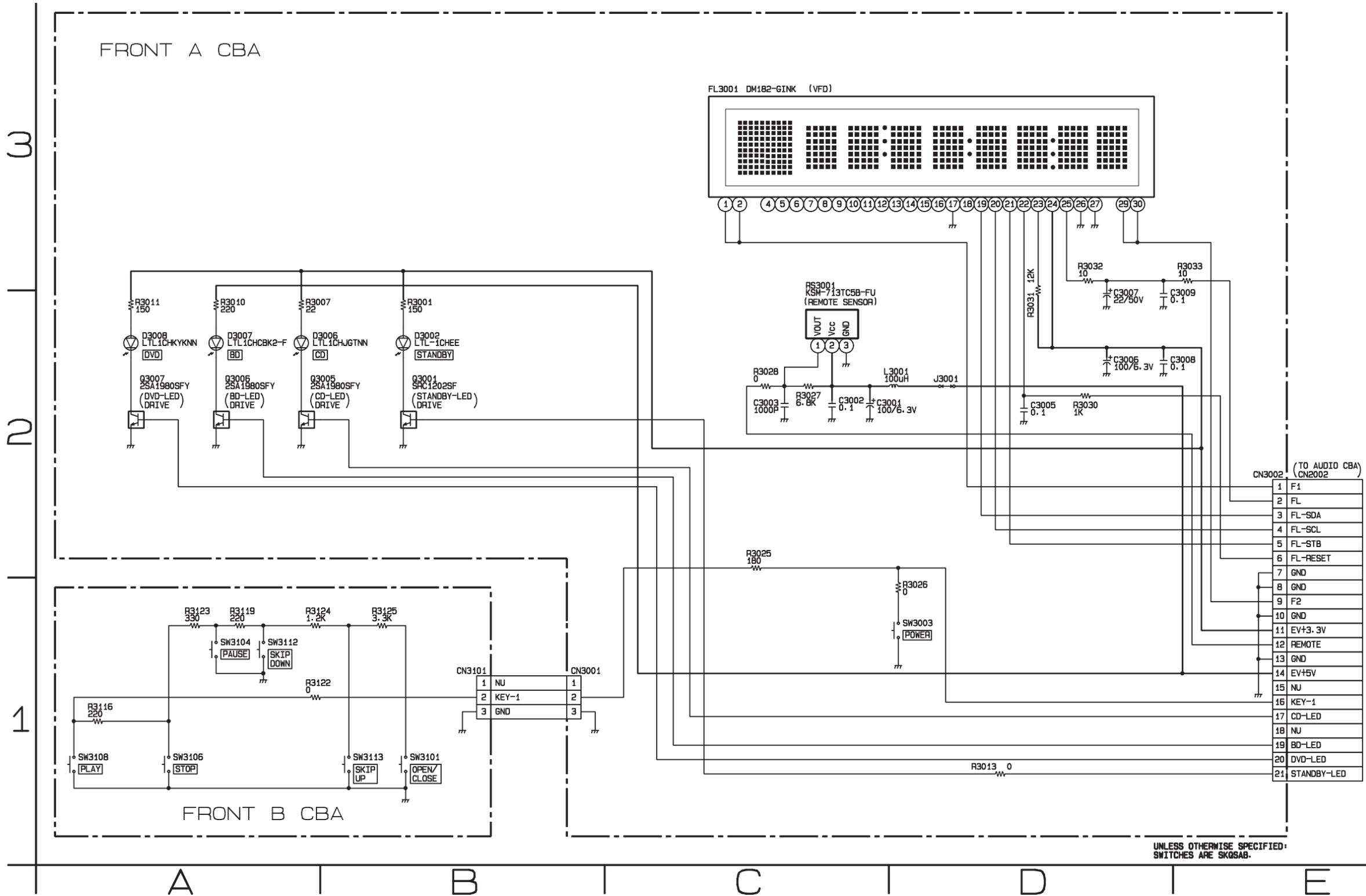
**NOTE:**

The voltage for parts in hot circuit is measured using hot GND as a common terminal.

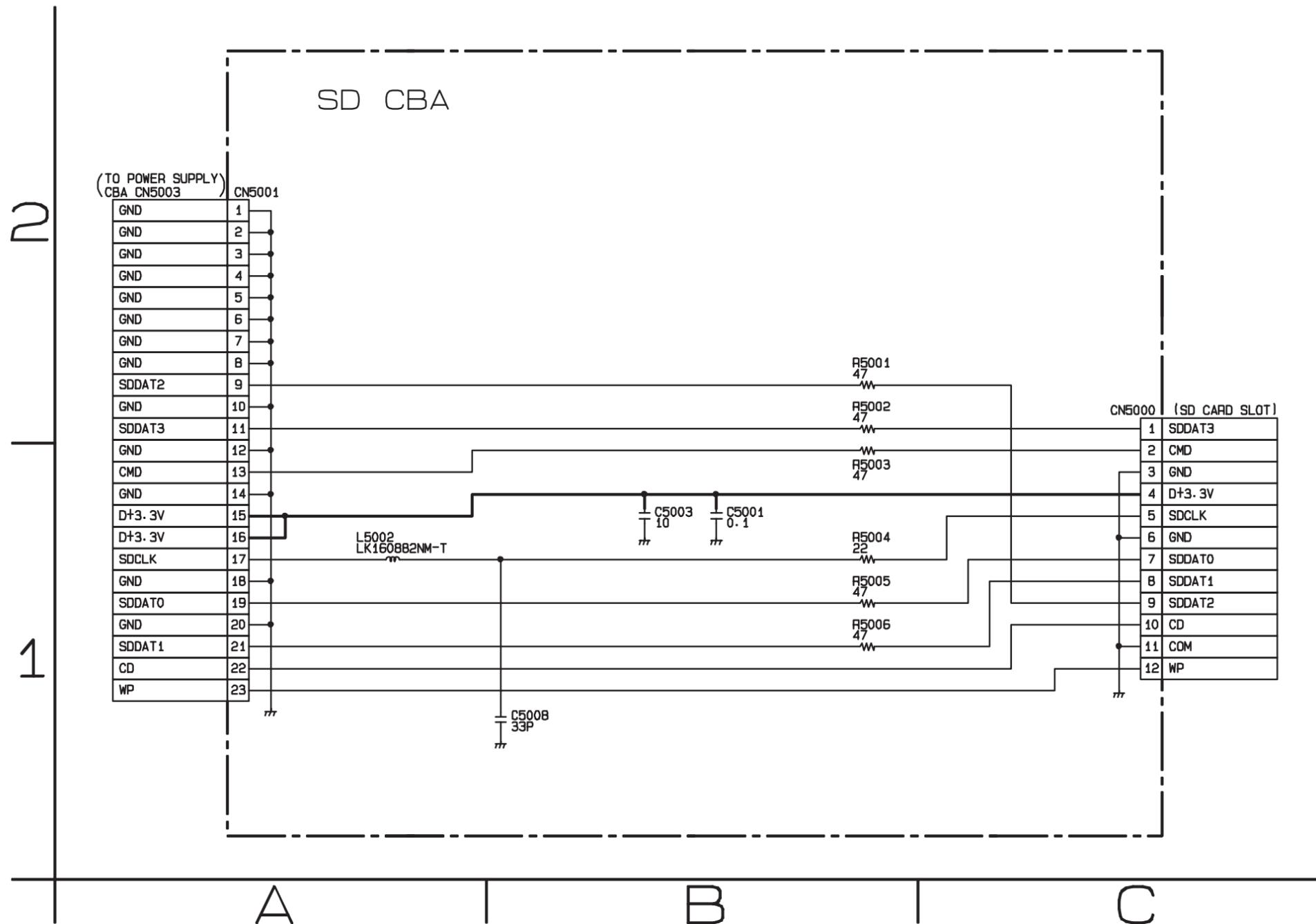


UNLESS OTHERWISE SPECIFIED, DIODES ARE 1N4148-F0021.

# Front A & Front B Schematic Diagram



# SD Schematic Diagram



2

1

A

B

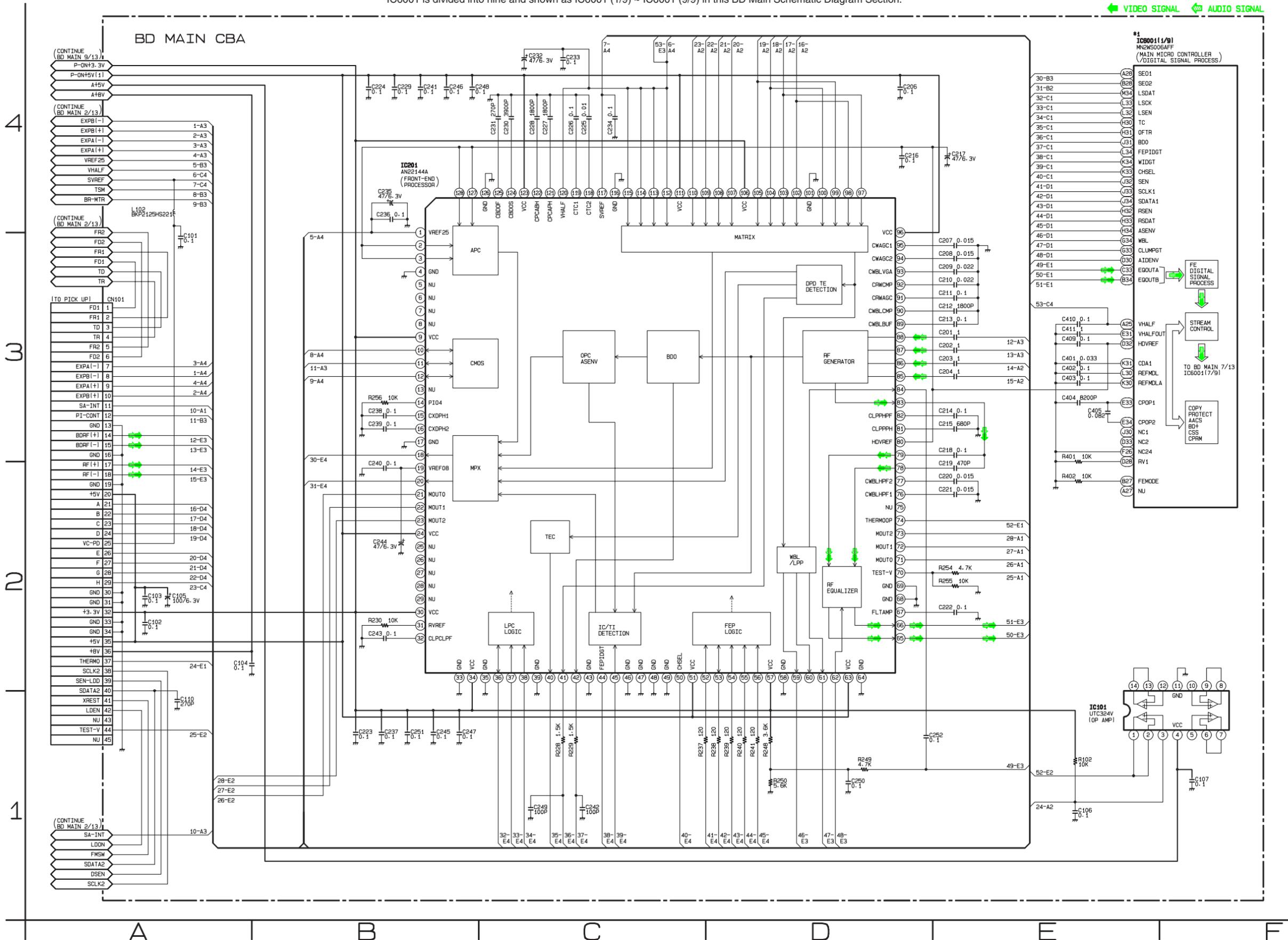
C

# BD Main 1/13 Schematic Diagram

\*1 NOTE:

The order of pins shown in this diagram is different from that of actual IC6001.  
 IC6001 is divided into nine and shown as IC6001 (1/9) ~ IC6001 (9/9) in this BD Main Schematic Diagram Section.

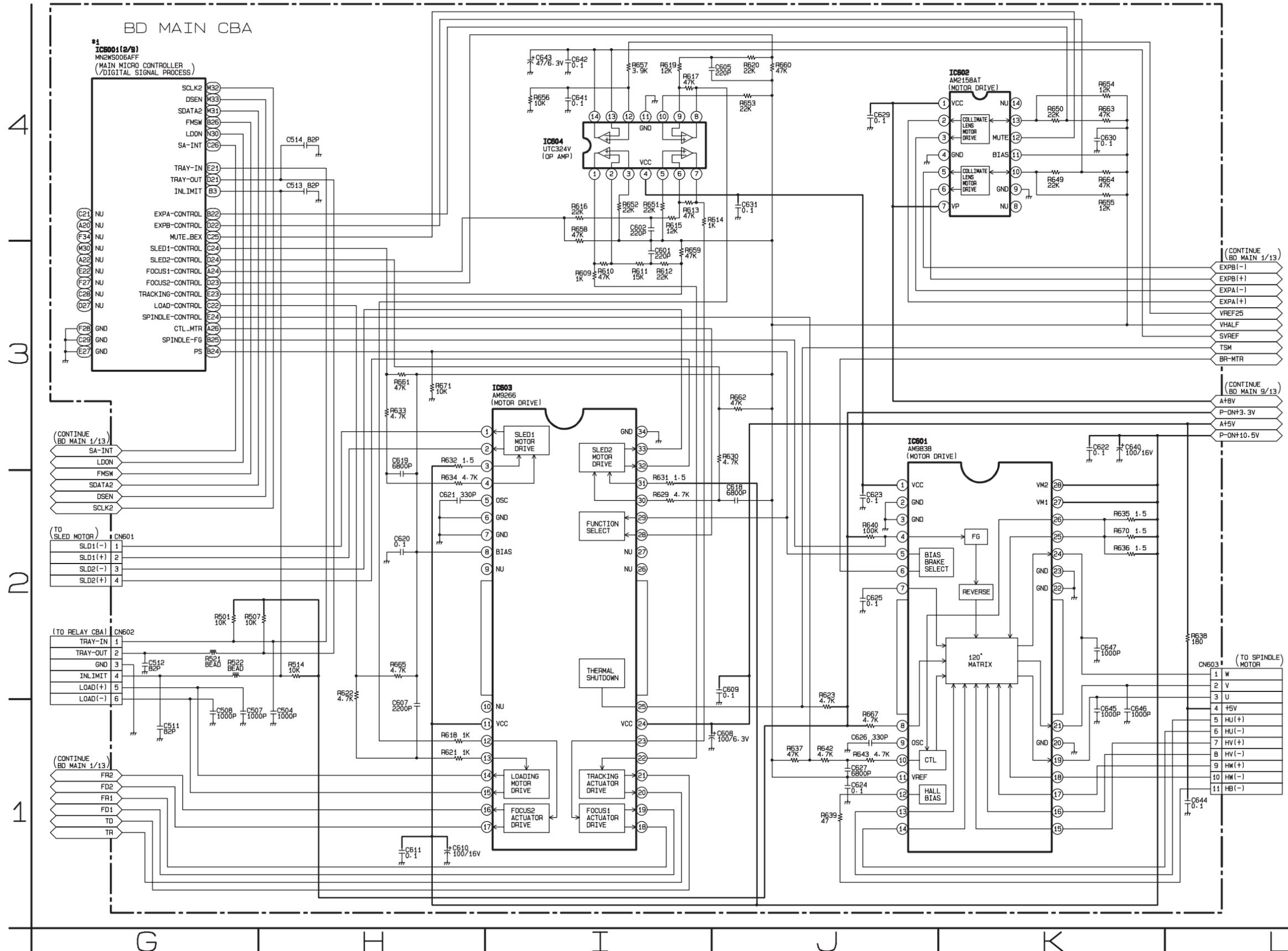
← VIDEO SIGNAL → AUDIO SIGNAL



# BD Main 2/13 Schematic Diagram

**\*1 NOTE:**

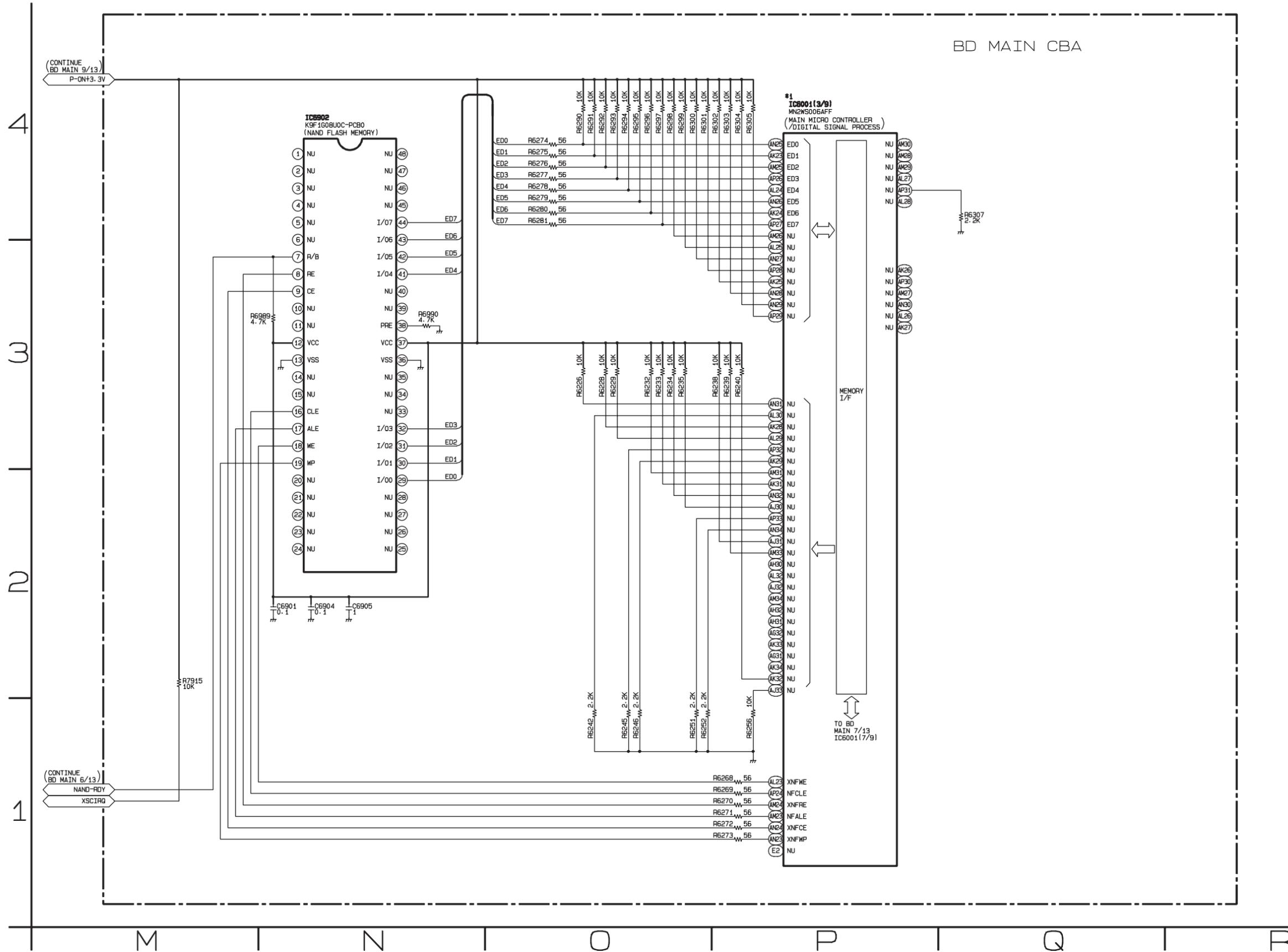
The order of pins shown in this diagram is different from that of actual IC6001.  
 IC6001 is divided into nine and shown as IC6001 (1/9) ~ IC6001 (9/9) in this BD Main Schematic Diagram Section.



# BD Main 3/13 Schematic Diagram

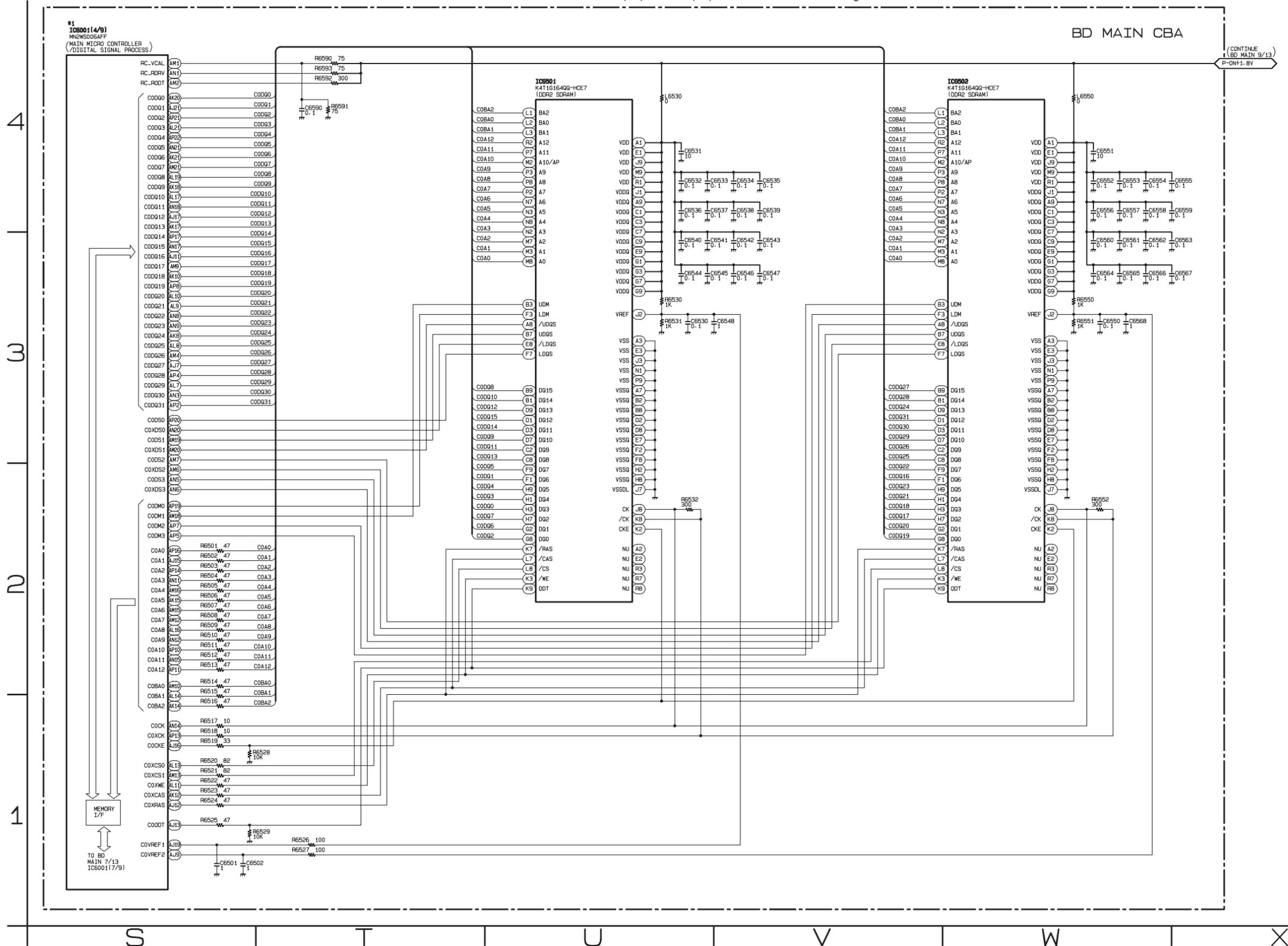
**\*1 NOTE:**

The order of pins shown in this diagram is different from that of actual IC6001.  
 IC6001 is divided into nine and shown as IC6001 (1/9) ~ IC6001 (9/9) in this BD Main Schematic Diagram Section.



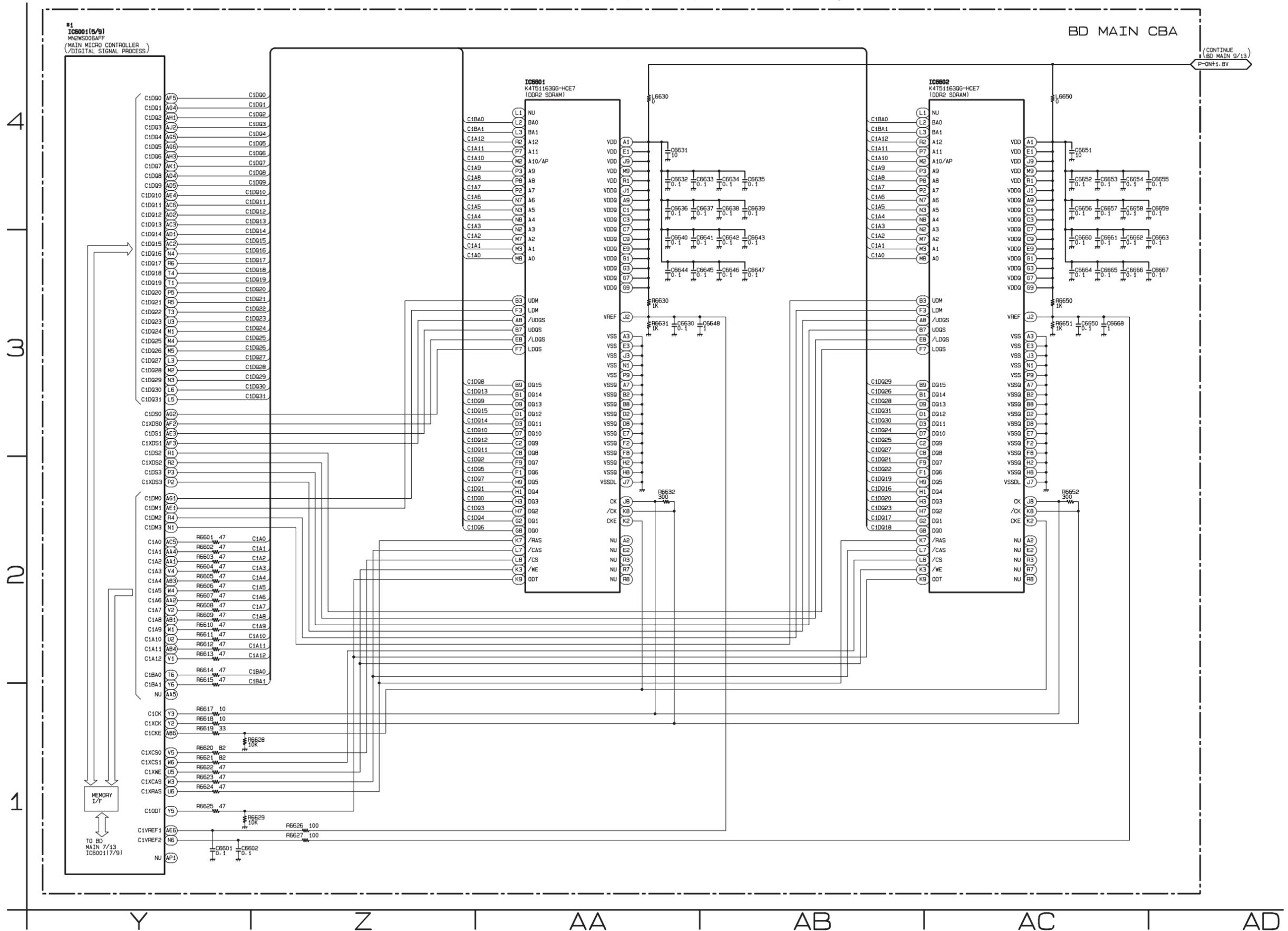
# BD Main 4/13 Schematic Diagram

\*1 NOTE:  
The order of pins shown in this diagram is different from that of actual IC6001.  
IC6001 is divided into nine and shown as IC6001 (1/9) ~ IC6001 (9/9) in this BD Main Schematic Diagram Section.



# BD Main 5/13 Schematic Diagram

\*1 NOTE:  
 The order of pins shown in this diagram is different from that of actual IC6001.  
 IC6001 is divided into nine and shown as IC6001 (1/9) ~ IC6001 (9/9) in this BD Main Schematic Diagram Section.

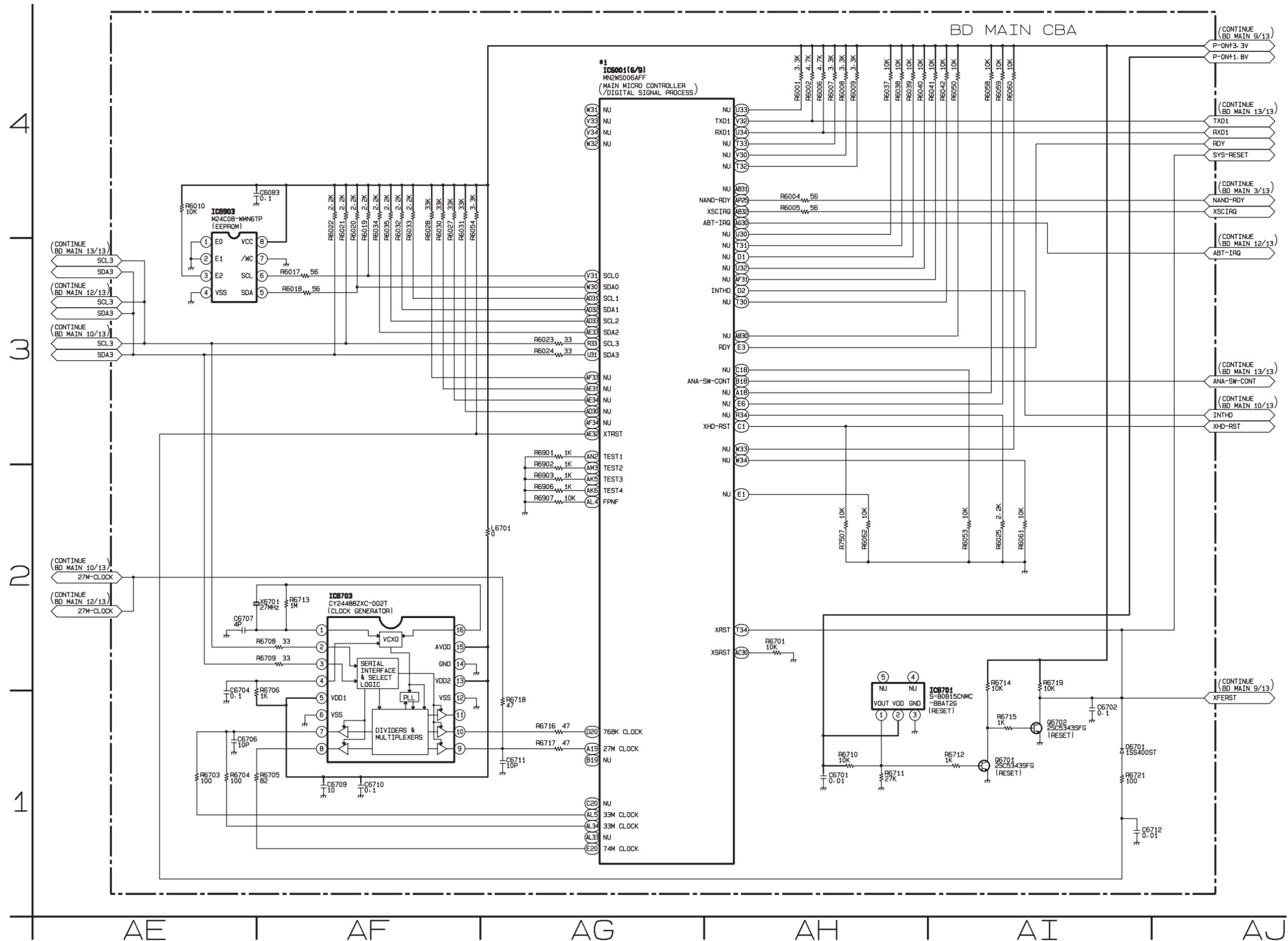


(CONTINUE  
 1. BD MAIN 9/13)  
 P-ON1.5V

# BD Main 6/13 Schematic Diagram

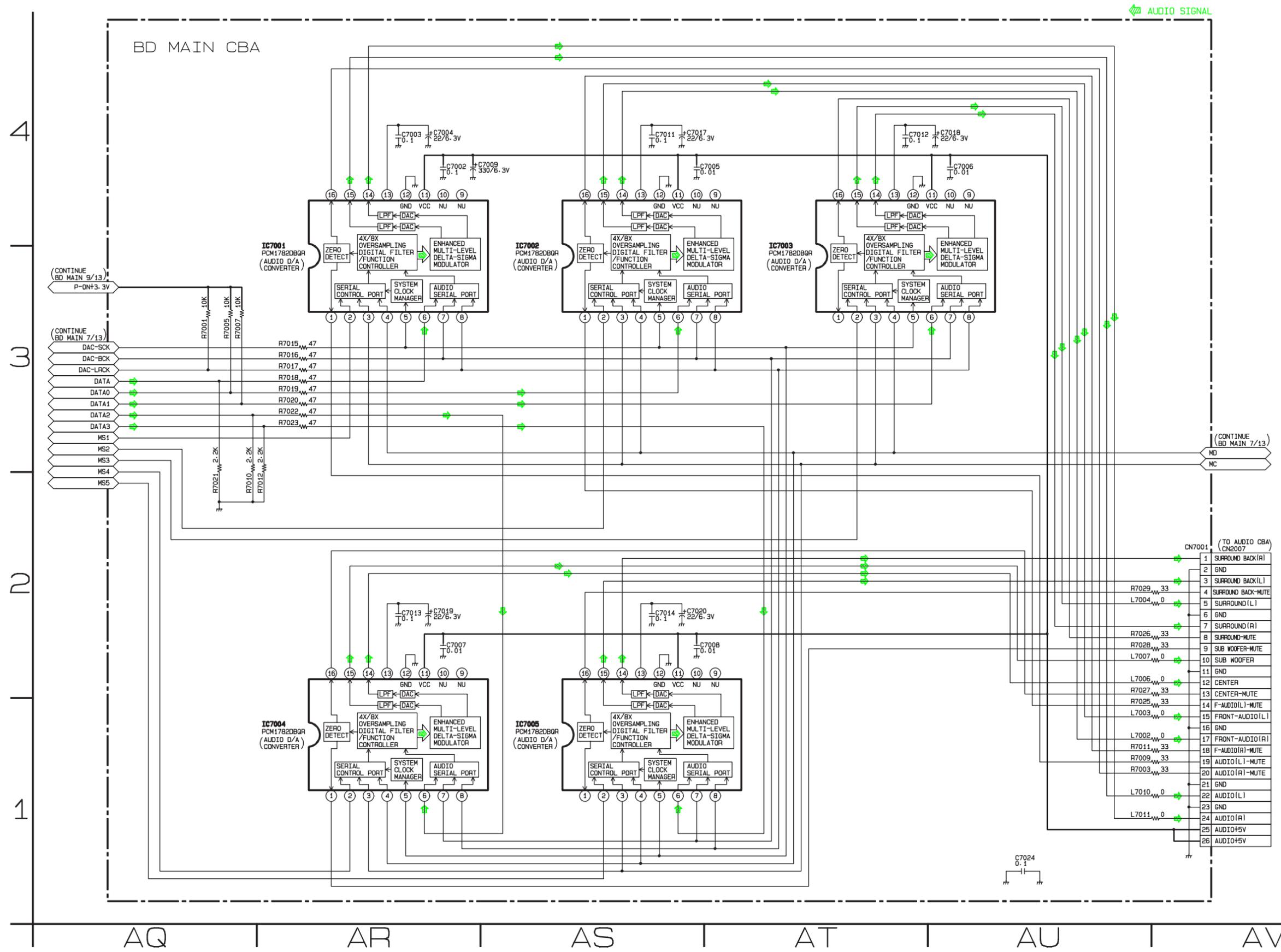
**\*1 NOTE:**

The order of pins shown in this diagram is different from that of actual IC6001.  
 IC6001 is divided into nine and shown as IC6001 (1/9) ~ IC6001 (9/9) in this BD Main Schematic Diagram Section.



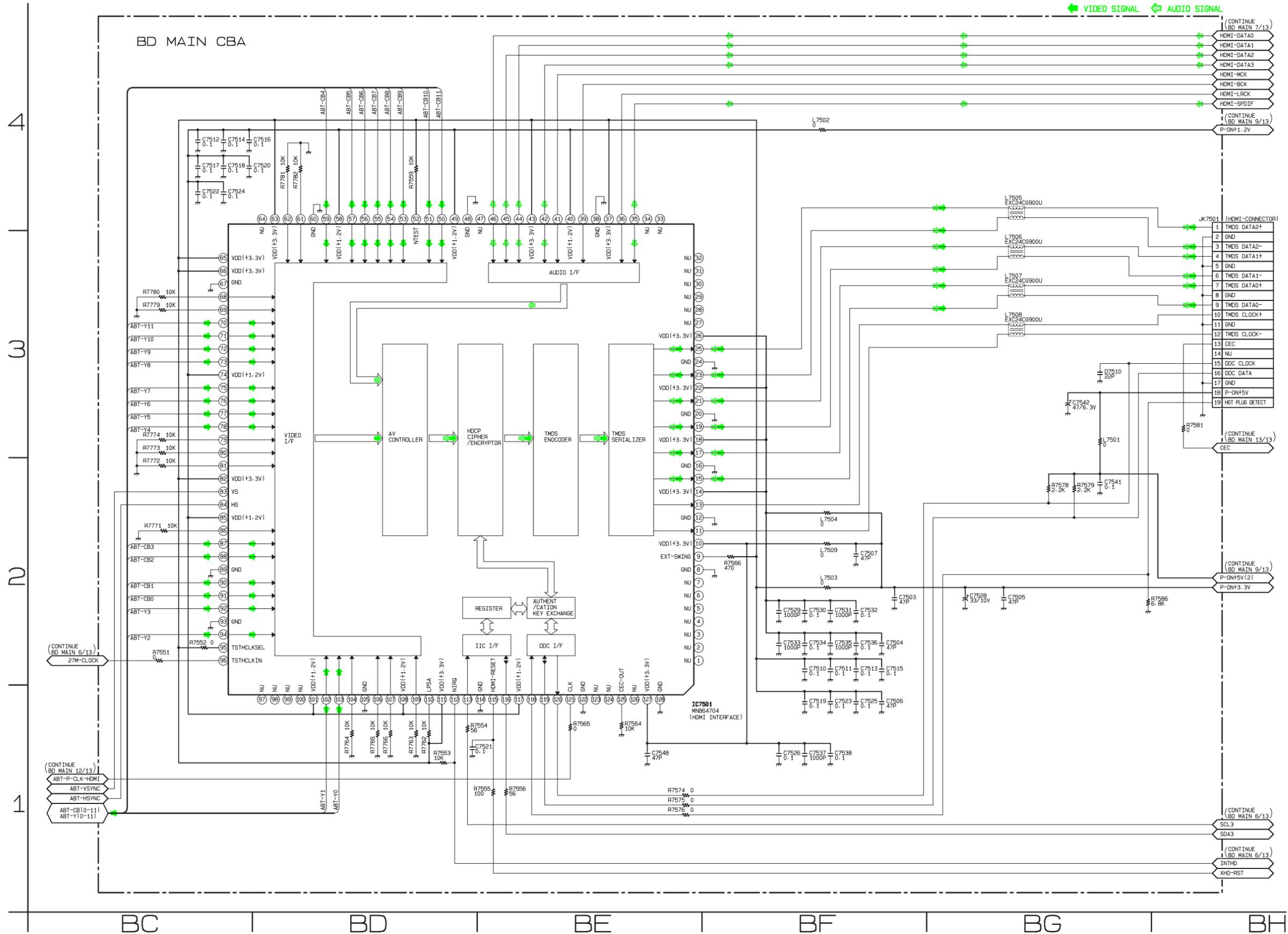


# BD Main 8/13 Schematic Diagram



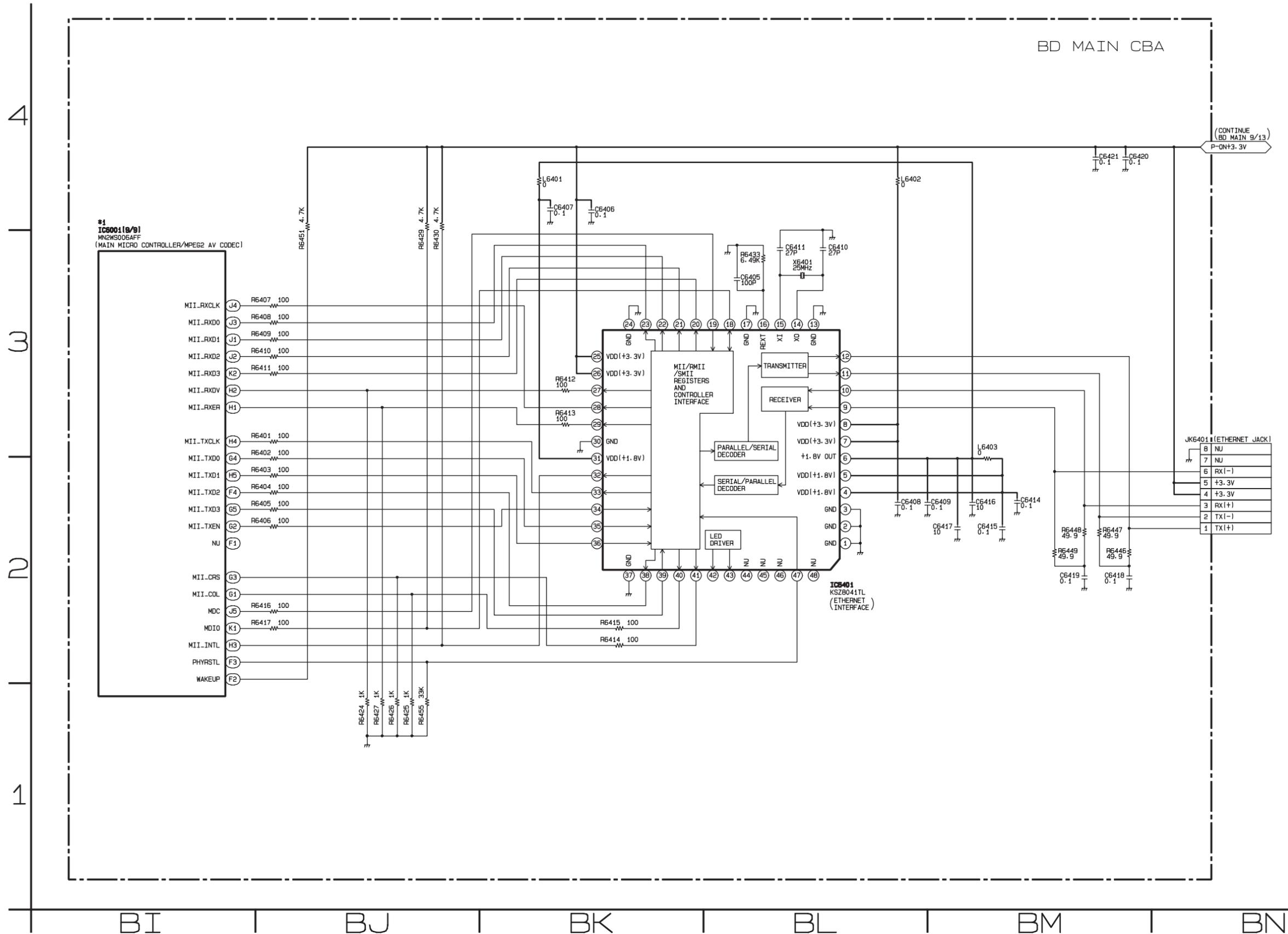


# BD Main 10/13 Schematic Diagram

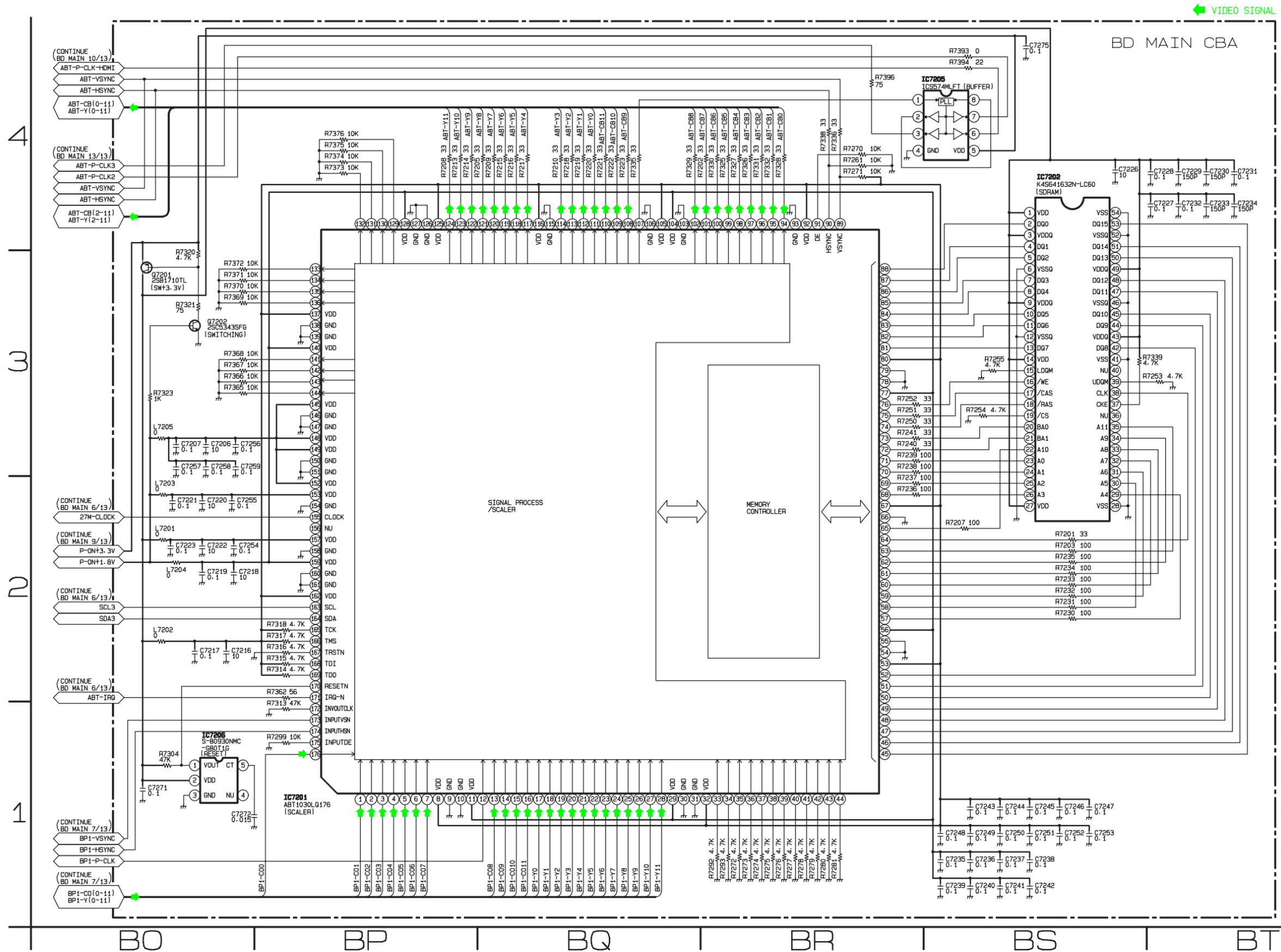


# BD Main 11/13 Schematic Diagram

\*1 NOTE:  
 The order of pins shown in this diagram is different from that of actual IC6001.  
 IC6001 is divided into nine and shown as IC6001 (1/9) ~ IC6001 (9/9) in this BD Main Schematic Diagram Section.

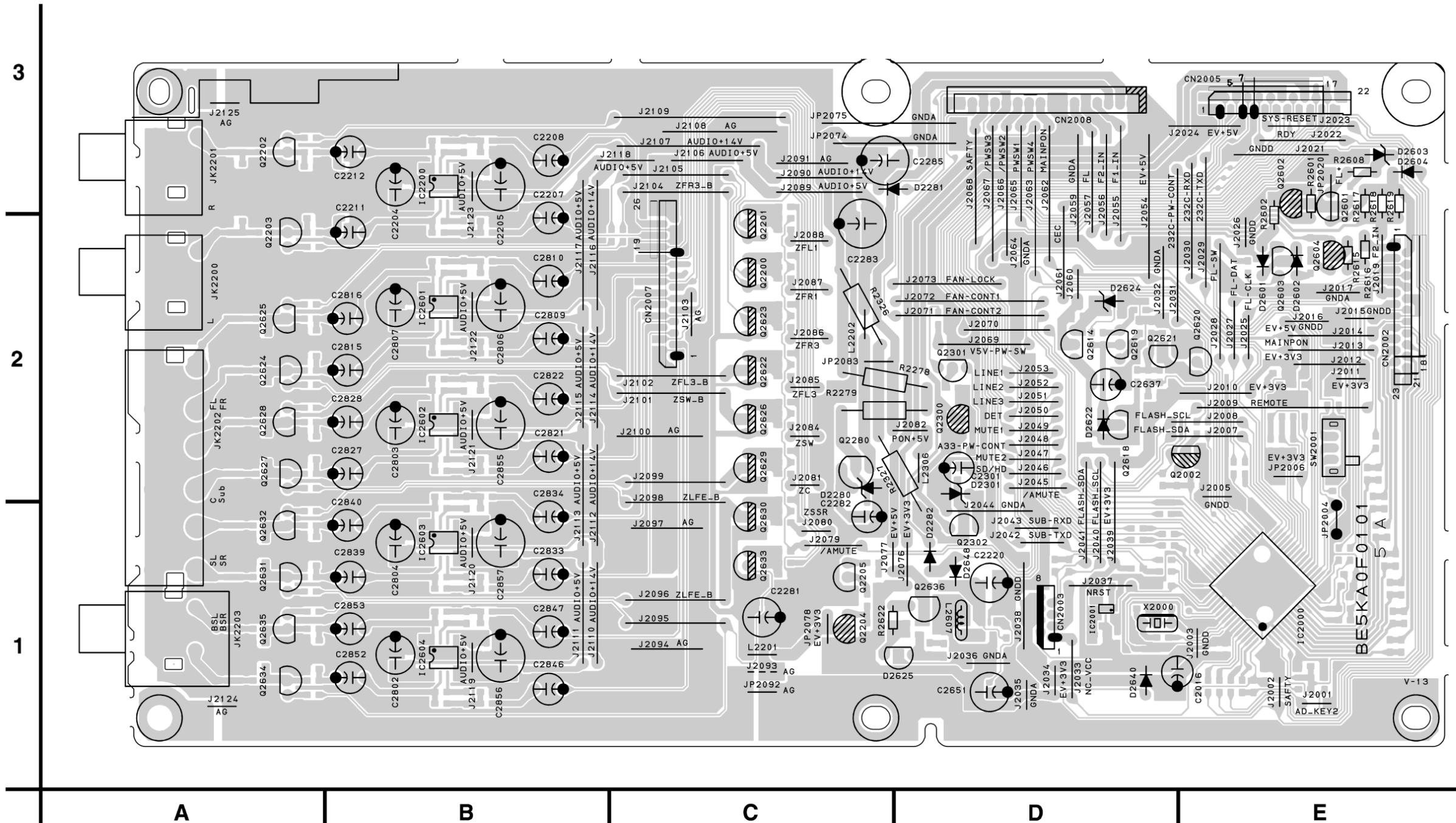


# BD Main 12/13 Schematic Diagram





# Audio CBA Top View



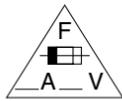




# Power Supply CBA Top View

**CAUTION !**

Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit. If Main Fuse (F1001) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.



**CAUTION !**

For continued protection against fire hazard, replace only with the same type fuse.  
**ATTENTION :** Pour une protection continue les risques d'Incele n'utiliser que des fusible de même type.

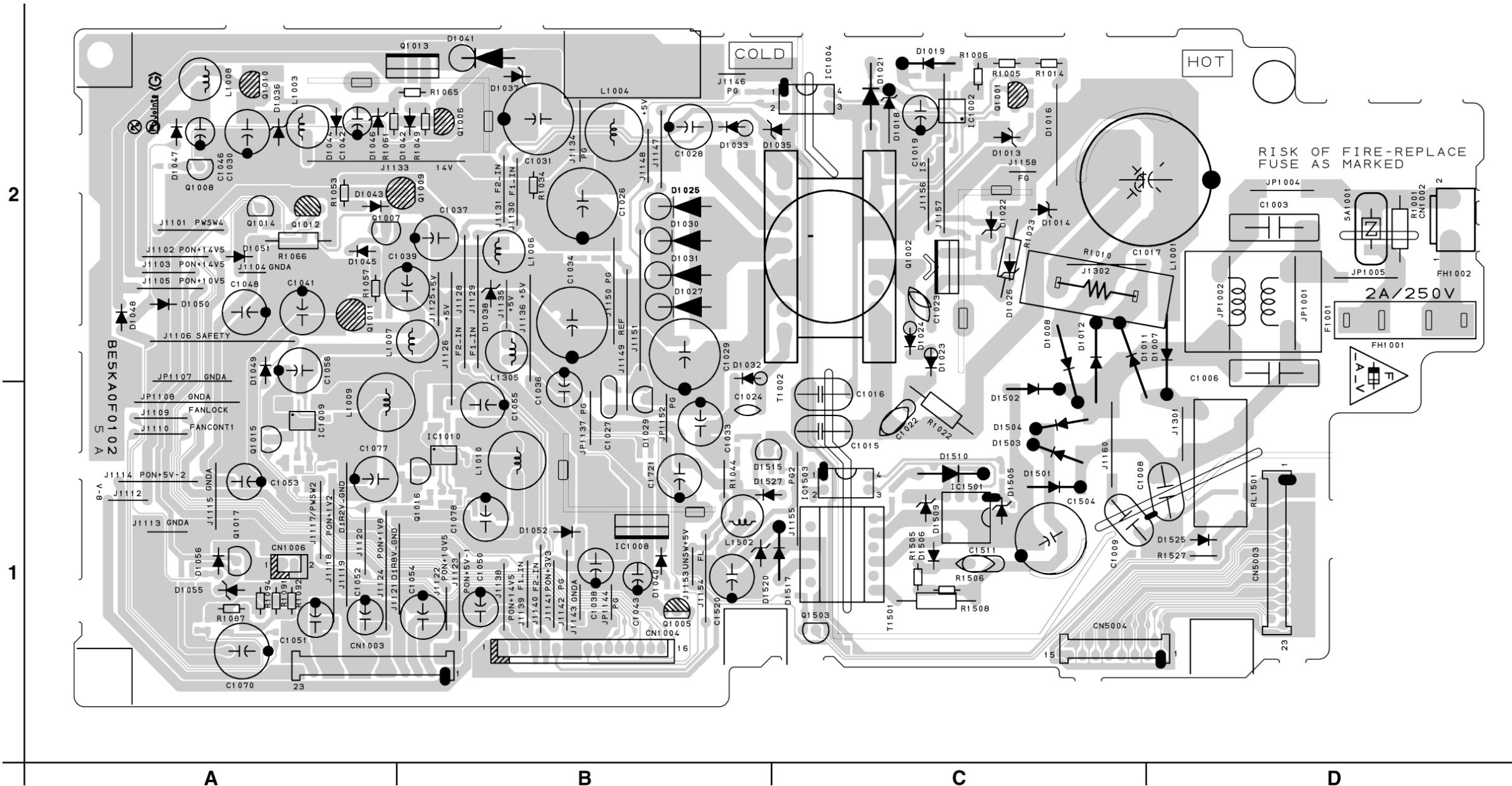
**Risk of fire-replace fuse as marked.**

"This symbol means fast operating fuse."  
 "Ce symbole représente un fusible à fusion rapide."

Because a hot chassis ground is present in the power supply circuit, an isolation transformer must be used when repairing. Also, in order to have the ability to increase the input slowly, when troubleshooting this type of power supply circuit, a variable isolation transformer is required.

**NOTE:**

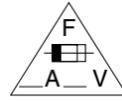
The voltage for parts in hot circuit is measured using hot GND as a common terminal.



# Power Supply CBA Bottom View

**CAUTION !**

Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit. If Main Fuse (F1001) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.



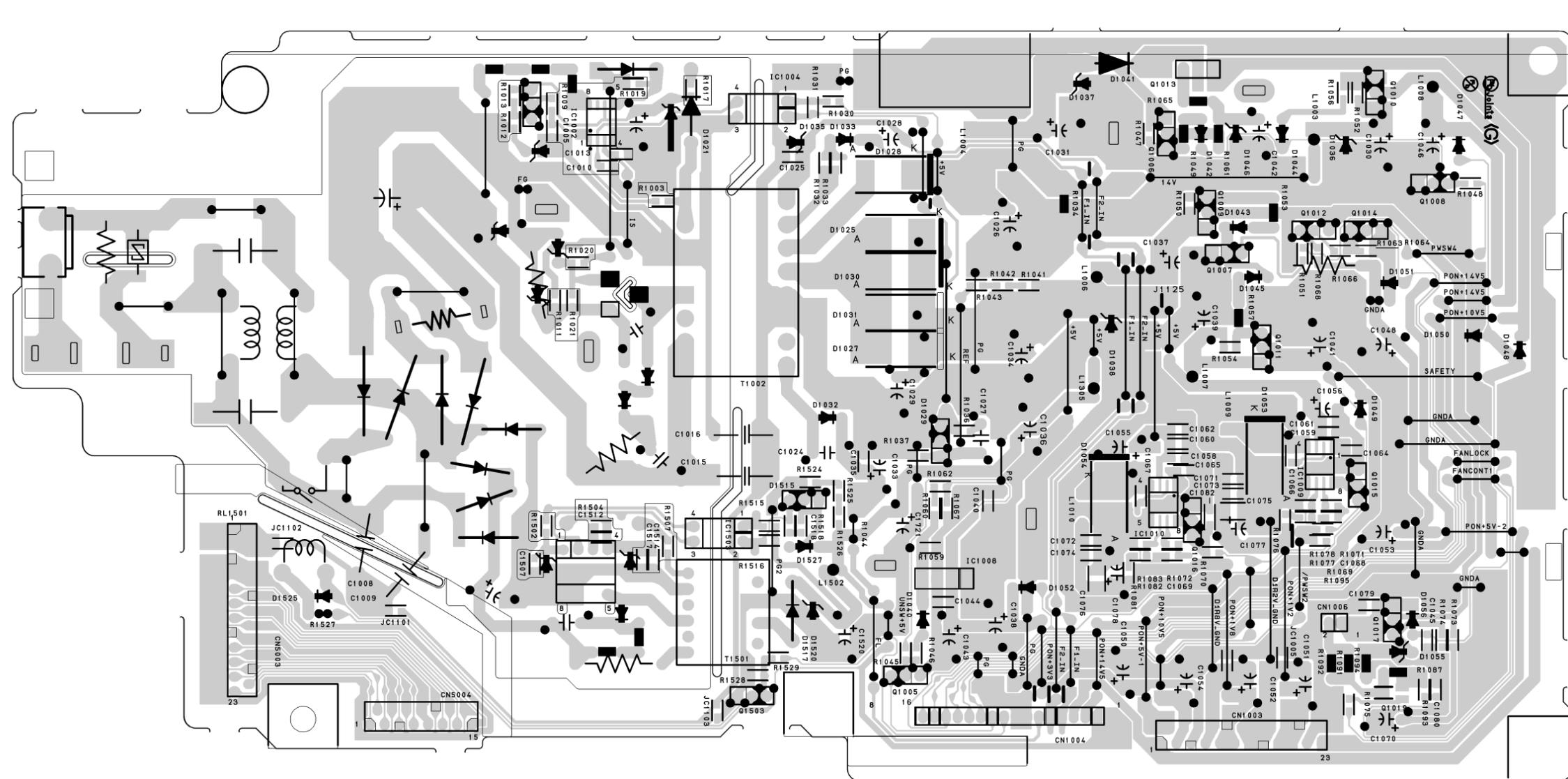
**CAUTION !**

For continued protection against fire hazard, replace only with the same type fuse.  
 ATTENTION : Pour une protection continue les risques d'Inceles n'utiliser que des fusibles de même type.  
**Risk of fire-replace fuse as marked.**  
 "This symbol means fast operating fuse."  
 "Ce symbole représente un fusible à fusion rapide."

Because a hot chassis ground is present in the power supply circuit, an isolation transformer must be used when repairing. Also, in order to have the ability to increase the input slowly, when troubleshooting this type of power supply circuit, a variable isolation transformer is required.

**NOTE:**

The voltage for parts in hot circuit is measured using hot GND as a common terminal.



D

C

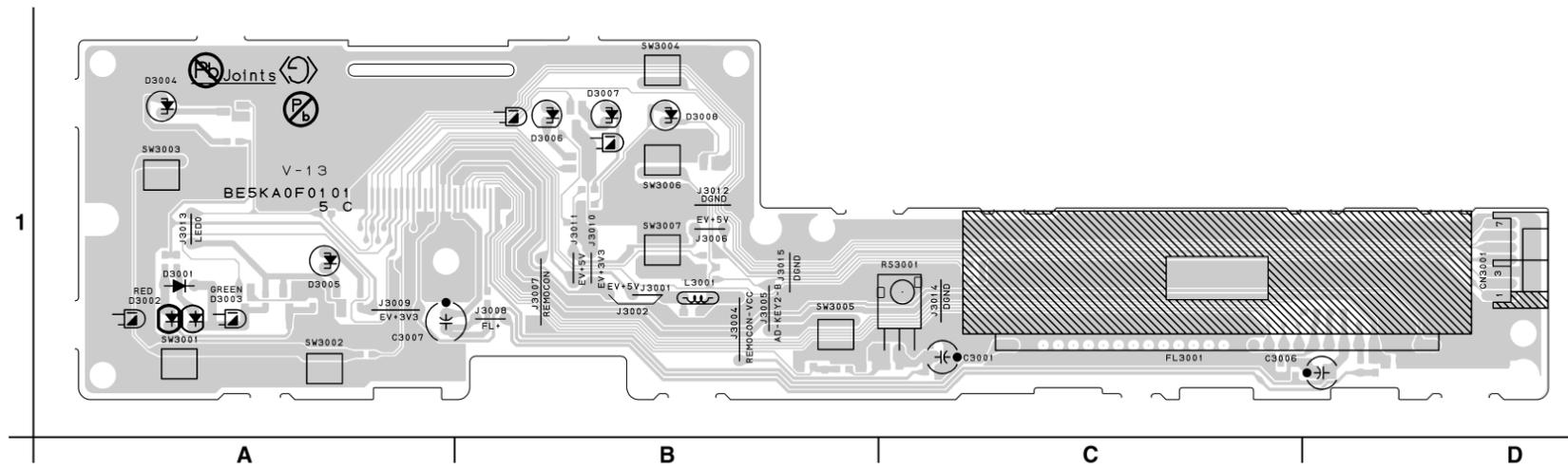
B

A

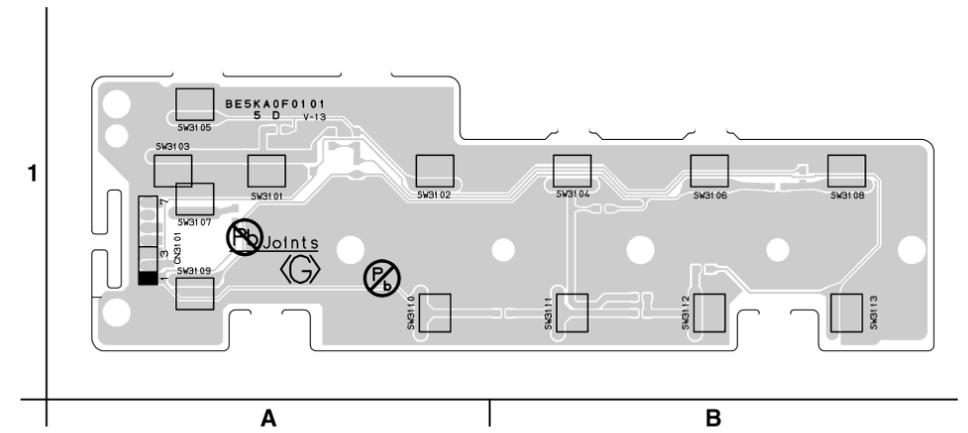
2

1

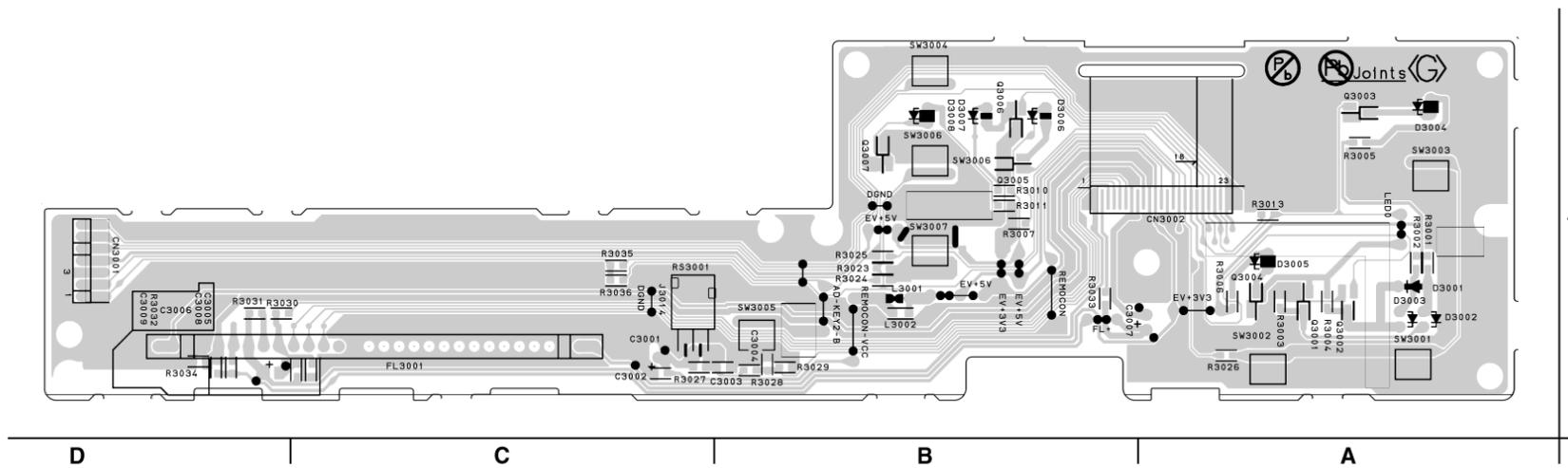
Front A CBA Top View



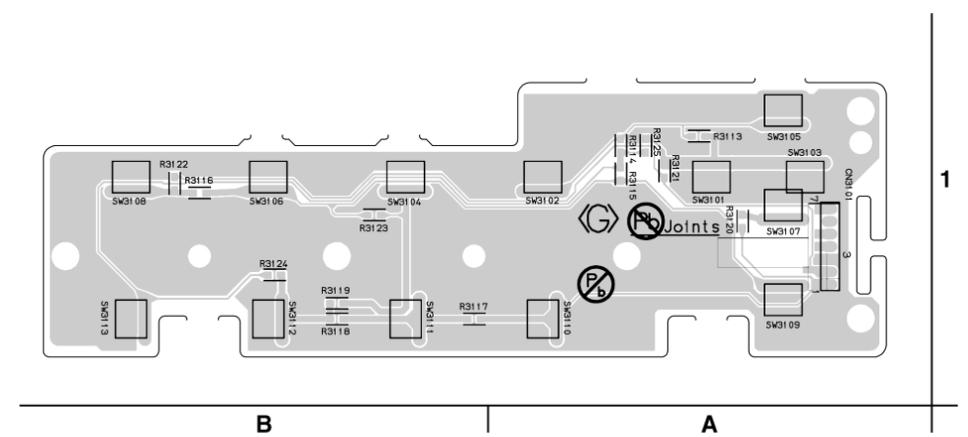
Front B CBA Top View



Front A CBA Bottom View



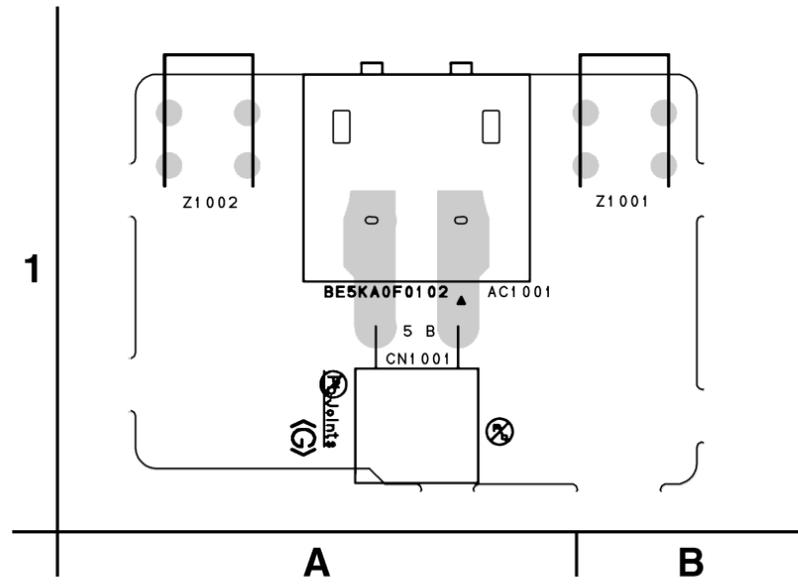
Front B CBA Bottom View



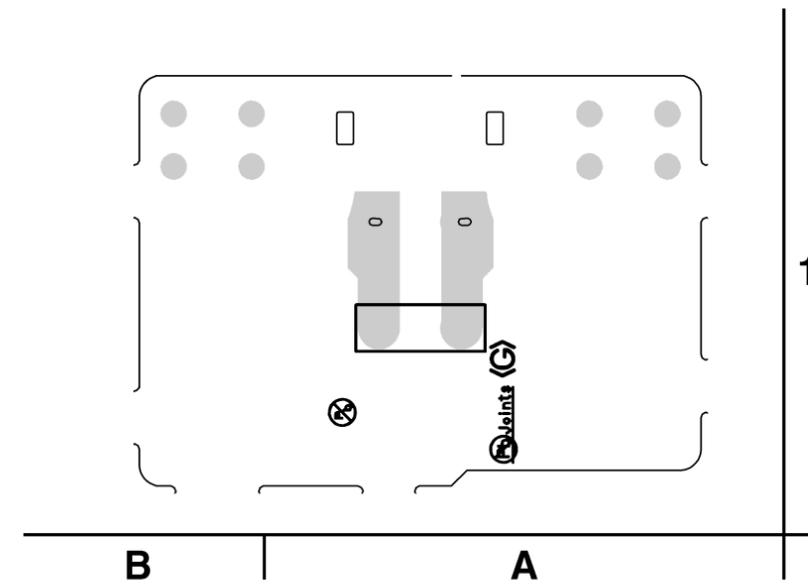
BE5KA0F01015C

BE5KA0F01015D

INLET CBA Top View

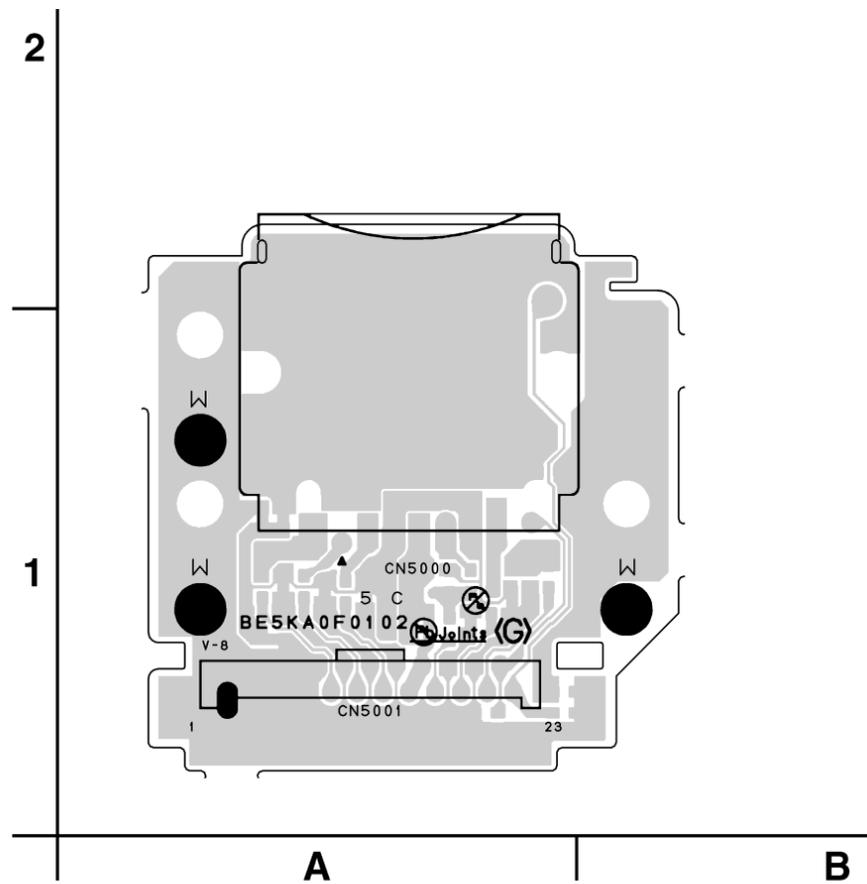


INLET CBA Bottom View

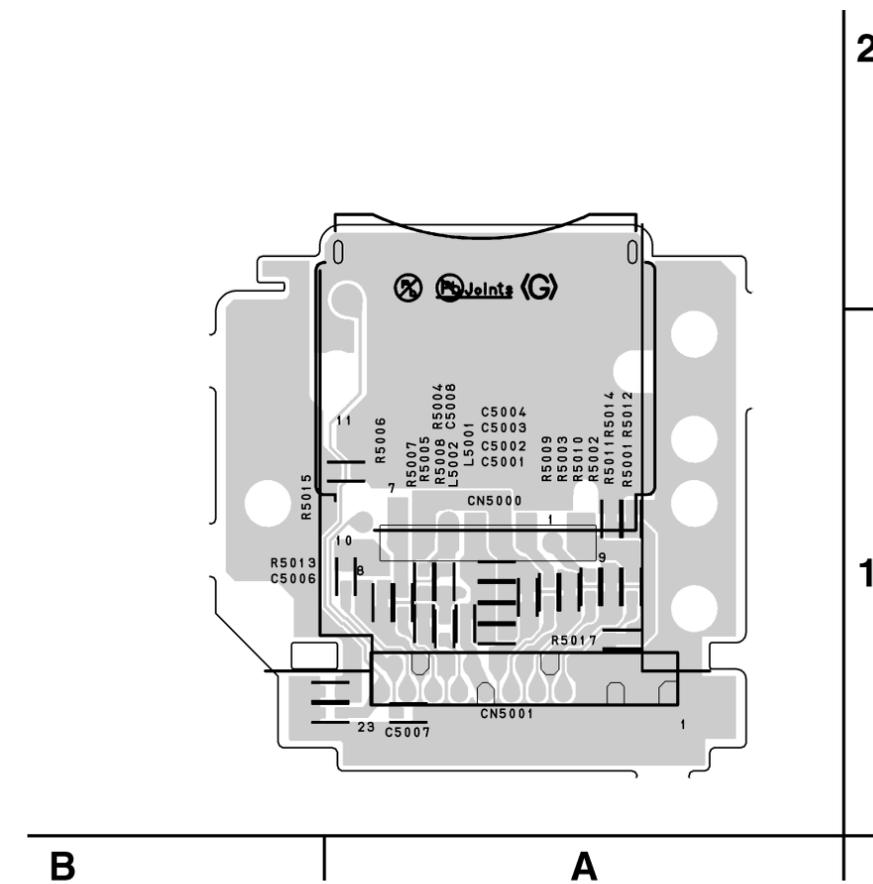


BE5KA0F01025B

SD CBA Top View



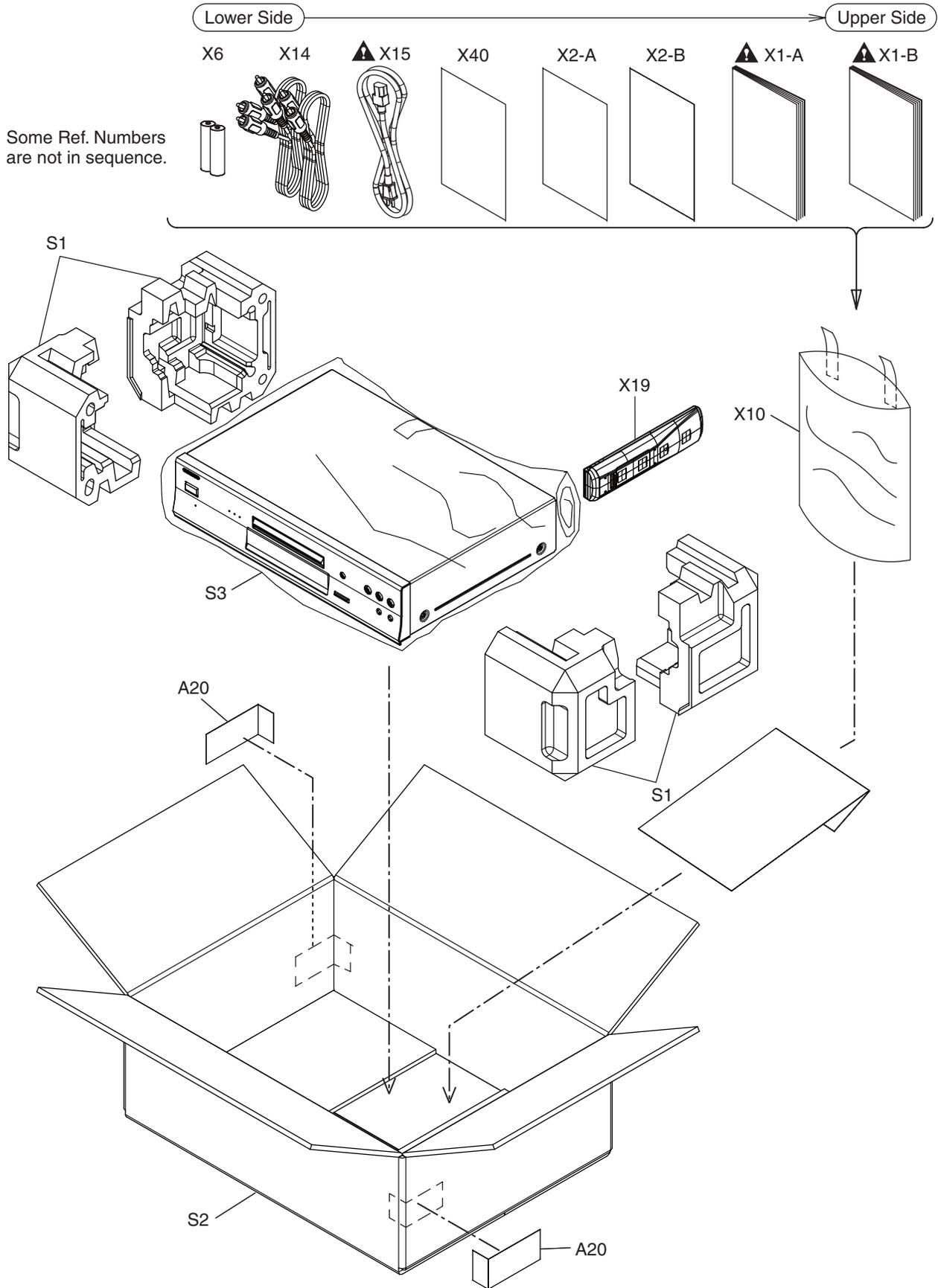
SD CBA Bottom View



BE5KA0F01025C



# Packing



# MECHANICAL PARTS LIST

**PRODUCT SAFETY NOTE:** Products marked with a  have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice in this service manual. Don't degrade the safety of the product through improper servicing.

**NOTE:** Parts that are not assigned part numbers (-----) are not available.

Ref. No.	Description	Part No.
A1X	FRONT ASSEMBLY E5KE0UD	1VM124219
A2	CHASSIS E5KA0UD	1VM021192F
A3	TOP COVER ASSEMBLY (B)	0P87
A4	REAR PANEL E5KE0UD	1VM229036
A6	FOOT ASSEMBLY E5KE0UD	1VM433859
A8	TRAY PANEL ASSEMBLY E5KE0UD	1VM228837
A14	TOP PLATE E5KE0UD	1VM228897
A20	BAR CODE LABEL E5KE0UD	-----
A22	LICENSE LABEL E5KE0UD	-----
A26	DOUBLE SIDE TAPE E5KA0UD	1VM329678
A30	MODEL NO. LABEL E5KE0UD	-----
2L015	SCREW TAP TIGHT WASHER+ P-TIGHT	GCJP3080
2L018	SCREW P-TIGHT M3X8 BIND HEAD+	GBJP3080
2L026	SCREW S-TIGHT M3X6 E5E10UD	1VM429667
2L027	SCREW S-TIGHT M3X6 E5E10UD	1VM429667
2L028	SCREW S-TIGHT M3X10 E5E10UD	0VM412936A
2L032	SCREW S-TIGHT M3X6 E5E10UD	1VM429667
2L034	SCREW S-TIGHT M3X6 E5E10UD	1VM429667
2L036	SCREW S-TIGHT M3X6 BIND HEAD+	GBJS3060
2L040	SCREW P-TIGHT M3X8 BIND HEAD+	GBJP3080
2L051	SCREW TAP TIGHT WASHER+ P-TIGHT	GCJP3080
2L054	SCREW C-TIGHT M3X6 E5E10UD	0VM412937A
2L056	SCREW S-TIGHT M3X6 E5E10UD	1VM429667
2L057	SCREW S-TIGHT M3X6 BIND HEAD+	GBJS3060
2L064	SCREW S-TIGHT M3X8 DISH HEAD+	GDHS3080
2L070	B-TIGHT SCREW M3X8 E5E00UD	1VM428563
2L072	B-TIGHT SCREW M3X8 E5E00UD	1VM428563
2L073	B-TIGHT SCREW M3X8 E5E00UD	1VM428563
2L079	S-TIGHT SCREW M3X6 E5E00UD	1VM428564
2L081	S-TIGHT SCREW M3X6 E5E00UD	1VM428564
2L082	S-TIGHT SCREW M3X6 E5E00UD	1VM428564
2L083	S-TIGHT SCREW M3X6 E5E00UD	1VM428564
2L089	S-TIGHT SCREW M3X6 E5E00UD	1VM428564
B2	FRONT BRACKET E5KA0UD	1VM122941J
B4	POWER HOLDER E5KA0UD	1VM122880
B39	LEAD CLAMPER 100MM	1790356
B70	HIMELON TAPE(5X40) E5KA0UD	1VM431686
B72	AV PCB BRACKET E5KA0UD	1VM226905B
B73	LOADER BRACKET E5KA0UD	1VM122901
FM1001	MOTOR DC FAN 2D65BL100190	MMEZR12XNR08
W006	WIRE ASSEMBLY FFC 26/169/1.0	WX1E5KA0-006
W007	WIRE ASSEMBLY VH 2/265/AWG20	WX1E5KA0-007
W009	WIRE ASSEMBLY PH 16/290/AWG24	WX1E5KA0-010
<b>PACKING</b>		
S1	SIDE PAD E5KE0UD	1VM124119
S2	GIFT BOX CARTON E5KE0UD	1VM332219
S3	SET BAG E5KB0UD	1VM433842B

Ref. No.	Description	Part No.
<b>ACCESSORIES</b>		
X1-A 	OWNERS MANUAL(EN) E5KE0UD	1VMN28736
X1-B 	OWNERS MANUAL(ES/FR) E5KE0UD	1VMN28737
X-2A	QUICK GUIDE(EN) E5KE0UD	1VMN28738
X-2B	QUICK GUIDE(ES/FR) E5KE0UD	1VMN28739
X6	MANGANESE DRY BATTERY R6UWC/2STA	XB0M311MS003
X10	ACCESSORY BAG E5795ED	0VM416059
X14	AV CORD 1000/BLACK	WPZ0102TM018
X15 	CORD W/O A GND WIRE UL/CSA/ 162/NO/BLACK	WAV0162LW001
X19	REMOTE CONTROL UNIT NB821UD	NB821UD
X40	WARRANTY CARD E5H50UD	1VMN26325

# ELECTRICAL PARTS LIST

**PRODUCT SAFETY NOTE:** Products marked with a **▲** have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice in this service manual. Don't degrade the safety of the product through improper servicing.

**NOTES:**

- Parts that are not assigned part numbers (-----) are not available.
- Tolerance of Capacitors and Resistors are noted with the following symbols.

C.....±0.25%    D.....±0.5%    F.....±1%  
 G.....±2%    J.....±5%    K.....±10%  
 M.....±20%    N.....±30%    Z.....+80/-20%

## BD MAIN CBA & BD MECHANISM ASSEMBLY

Ref. No.	Description	Part No.
1B1	BD MAIN CBA & BD MECHANISM ASSEMBLY	N77RABUN

## AV ASSEMBLY

Ref. No.	Description	Part No.
	AV ASSEMBLY Consists of the following:	1VSA23609
	VIDEO CBA	-----
	AUDIO CBA	-----
	FRONT A CBA	-----
	FRONT B CBA	-----

## VIDEO CBA

Ref. No.	Description	Part No.
	VIDEO CBA Consists of the following:	-----
<b>CAPACITORS</b>		
C4002	ELECTROLYTIC CAP. 100µF/6.3V/M	CEA101ENW016
C4003	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C4005	CHIP CERAMIC CAP.(1608) B K 0.1µF/50V	CHD1JK30B104
C4007	ELECTROLYTIC CAP. 22µF/6.3V/M	CEA22RENW016
C4008	CHIP CERAMIC CAP.(1608) B K 1µF/10V	CHD1AK30B105
C4009	CHIP CERAMIC CAP.(1608) B K 0.1µF/50V	CHD1JK30B104
C4010	CHIP CERAMIC CAP.(1608) B K 1µF/10V	CHD1AK30B105
C4011	ELECTROLYTIC CAP. 100µF/6.3V/M	CEA101ENW016
C4012	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C4013	ELECTROLYTIC CAP. 1000µF/6.3V/M	CEA102ENW016
C4014	ELECTROLYTIC CAP. 33µF/10V/M	CEB33RENW016
C4015	ELECTROLYTIC CAP. 1000µF/6.3V/M	CEA102ENW016
C4016	ELECTROLYTIC CAP. 1000µF/6.3V/M	CEA102ENW016
C4017	ELECTROLYTIC CAP. 33µF/10V/M	CEB33RENW016
C4018	ELECTROLYTIC CAP. 1000µF/6.3V/M	CEA102ENW016
C4019	ELECTROLYTIC CAP. 220µF/6.3V/M	CEA221ENW016
C4020	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C4021	ELECTROLYTIC CAP. 100µF/6.3V/M	CEA101ENW016
C4022	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C4024	CHIP CERAMIC CAP. CH D 8pF/50V	CHD1JD3CH8R0
C4026	CHIP CERAMIC CAP.(1608) B K 0.1µF/25V	CHD1EK30B104

Ref. No.	Description	Part No.
C4028	ELECTROLYTIC CAP. 47µF/6.3V/M	CEA47RENW016
C4030	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
<b>CONNECTORS</b>		
CN4000	WIRE ASSEMBLY FFC DIRECT 17/65/1.0	WX1E5KA0-005
CN4001	WIRE ASSEMBLY FFC DIRECT 11/279/1.0	WX1E5KE0-002
<b>IC</b>		
IC4000	IC VIDEO DRIVER MM1757EHBE	QSCA0T0MM001
<b>COILS</b>		
L4001	WIRE CP STP-S-0.60	XZ40F0REN002
L4002	RADIAL TYPE CHOKE COIL CW68-470K-841040NP	LLBD00PKV023
L4003	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
L4004	INDUCTOR(0.47µH K) LAP02TAR47K	LLAXKATTUR47
<b>TRANSISTOR</b>		
Q4006	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
<b>RESISTORS</b>		
R4005	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R4006	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R4023	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R4024	CHIP RES. 1/10W J 27k Ω	RRXAJR5Z0273
R4033	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R4047	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R4052	CHIP RES. 1/10W J 2k Ω	RRXAJR5Z0202
R4054	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R4055	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R4056	CHIP RES. 1/10W J 75 Ω	RRXAJR5Z0750
R4057	CHIP RES. 1/10W J 75 Ω	RRXAJR5Z0750
R4058	CHIP RES. 1/10W J 75 Ω	RRXAJR5Z0750
R4059	CHIP RES. 1/10W J 75 Ω	RRXAJR5Z0750
R4064	CHIP RES. 1/10W J 220 Ω	RRXAJR5Z0221
R4065	CHIP RES. 1/10W J 75 Ω	RRXAJR5Z0750
R4066	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R4067	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R4068	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R4069	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R4070	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R4073	CHIP RES. 1/10W J 51 Ω	RRXAJR5Z0510
<b>MISCELLANEOUS</b>		
JK4000	RCA JACK MSP-251V-10 GILT LF	JXRL010LY143
JK4001	FIBER OPTIC TRANS.MODULE 0C-0805T*002	JWVHA00JD002
JK4002	RCA JACK 1PIN(BLUE) MSP-251V-31-GILT(B11)	JXRL010LY179
JK4003	RCA JACK 1PIN(RED) MSP-251V-12-GILT(B11)	JXRL010LY176
JK4004	RCA JACK(YELLOW) MSD-251V-11 GILT FE	JXRL010LY110
JK4005	RCA JACK 1PIN(GREEN) MSP-251V-16-GILT(B11)	JXRL010LY178
JP4009	WIRE CP STP-S-0.60	XZ40F0REN002

## AUDIO CBA

Ref. No.	Description	Part No.
	AUDIO CBA Consists of the following:	-----
<b>CAPACITORS</b>		
C2005	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C2007	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C2009	CHIP CERAMIC CAP.(1608) CH J 100pF/50V	CHD1JJ3CH101
C2011	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C2013	CHIP CERAMIC CAP.(1608) B K 0.015µF/50V	CHD1JK30B153
C2016	ELECTROLYTIC CAP. 47µF/6.3V/M	CEA47RENW016
C2065	CHIP CERAMIC CAP.(1608) B K 1000pF/50V	CHD1JK30B102

Ref. No.	Description	Part No.
C2204	ELECTROLYTIC CAP. 100µF/25V (RFO T2)	CED101ELN004
C2205	ELECTROLYTIC CAP. 470µF/6.3V (RFO T2)	CEA471ELN004
C2206	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C2207	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2208	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2209	CHIP CERAMIC CAP. CH J 220pF/50V	CHD1JJ3CH221
C2210	CHIP CERAMIC CAP. CH J 220pF/50V	CHD1JJ3CH221
C2211	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2212	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2213	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C2215	CHIP CERAMIC CAP. CH J 39pF/50V	CHD1JJ3CH390
C2216	CHIP CERAMIC CAP. CH J 39pF/50V	CHD1JJ3CH390
C2280	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C2281	ELECTROLYTIC CAP. 220µF/6.3V/M	CEA221ENW016
C2283	ELECTROLYTIC CAP. 1000µF/6.3V/M	CEA102ENW016
C2284	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C2285	ELECTROLYTIC CAP. 330µF/25V/M	CED331ENW016
C2286	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C2627	CHIP CERAMIC CAP.(1608) B K 0.01µF/50V	CHD1JK30B103
C2637	ELECTROLYTIC CAP. 100µF/6.3V/M	CEA101ENW016
C2638	CHIP CERAMIC CAP. CH J 330pF/50V	CHD1JJ3CH331
C2639	CHIP CERAMIC CAP. CH J 220pF/50V	CHD1JJ3CH221
C2651	ELECTROLYTIC CAP. 47µF/6.3V/M	CEA47RENW016
C2802	ELECTROLYTIC CAP. 100µF/25V (RFO T2)	CED101ELN004
C2803	ELECTROLYTIC CAP. 100µF/25V (RFO T2)	CED101ELN004
C2804	ELECTROLYTIC CAP. 100µF/25V (RFO T2)	CED101ELN004
C2805	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C2806	ELECTROLYTIC CAP. 470µF/6.3V (RFO T2)	CEA471ELN004
C2807	ELECTROLYTIC CAP. 100µF/25V (RFO T2)	CED101ELN004
C2808	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C2809	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2810	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2811	CHIP CERAMIC CAP. CH J 220pF/50V	CHD1JJ3CH221
C2812	CHIP CERAMIC CAP. CH J 220pF/50V	CHD1JJ3CH221
C2813	CHIP CERAMIC CAP. CH J 39pF/50V	CHD1JJ3CH390
C2814	CHIP CERAMIC CAP. CH J 39pF/50V	CHD1JJ3CH390
C2815	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2816	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2819	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C2820	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C2821	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2822	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2823	CHIP CERAMIC CAP. CH J 220pF/50V	CHD1JJ3CH221
C2824	CHIP CERAMIC CAP. CH J 220pF/50V	CHD1JJ3CH221
C2825	CHIP CERAMIC CAP. CH J 39pF/50V	CHD1JJ3CH390
C2826	CHIP CERAMIC CAP. CH J 39pF/50V	CHD1JJ3CH390
C2827	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2828	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2831	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C2832	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C2833	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2834	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2835	CHIP CERAMIC CAP. CH J 220pF/50V	CHD1JJ3CH221
C2836	CHIP CERAMIC CAP. CH J 220pF/50V	CHD1JJ3CH221
C2837	CHIP CERAMIC CAP. CH J 39pF/50V	CHD1JJ3CH390
C2838	CHIP CERAMIC CAP. CH J 39pF/50V	CHD1JJ3CH390
C2839	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2840	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2843	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C2845	CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V	CHD1JZ30F104
C2846	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2847	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2848	CHIP CERAMIC CAP. CH J 220pF/50V	CHD1JJ3CH221

Ref. No.	Description	Part No.
C2849	CHIP CERAMIC CAP. CH J 220pF/50V	CHD1JJ3CH221
C2850	CHIP CERAMIC CAP. CH J 39pF/50V	CHD1JJ3CH390
C2851	CHIP CERAMIC CAP. CH J 39pF/50V	CHD1JJ3CH390
C2852	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2853	ELECTROLYTIC CAP. 10µF/50V (RFO T2)	CEF100ELN004
C2855	ELECTROLYTIC CAP. 470µF/6.3V (RFO T2)	CEA471ELN004
C2856	ELECTROLYTIC CAP. 470µF/6.3V (RFO T2)	CEA471ELN004
C2857	ELECTROLYTIC CAP. 470µF/6.3V (RFO T2)	CEA471ELN004
CONNECTORS		
CN2002	FFC CONNECTOR 21PIN IMSA-9615S-21A-PP-A	JC96J21ER007
CN2005	FFC CONNECTOR IMSA-9615S-11A-PP-A	JC96J11ER007
CN2007	FFC CONNECTOR IMSA-9615S-26A-PP-A	JC96J26ER007
CN2008	CONNECTOR PRINT OSU B16B-PH-K-S(LF)(SN)	J3PHC16JG029
DIODES		
D2281	DIODE SWITCHING 1N4148-F0021	NDTZ01N4148F
D2601	DIODE SWITCHING 1N4148-F0021	NDTZ01N4148F
D2602	DIODE SWITCHING 1N4148-F0021	NDTZ01N4148F
D2603	DIODE ZENER 36BSA-T26	NDTA036BST26
D2604	DIODE SWITCHING 1N4148-F0021	NDTZ01N4148F
D2624	DIODE ZENER 4V7BSB-T26	NDTB4R7BST26
D2625	IC SHUNT REGULATOR SL431A-AT	NSZBA0TAJK01
D2640	DIODE SWITCHING 1N4148-F0021	NDTZ01N4148F
ICS		
IC2000	IC SUB MICON MN101C77AGD	QSAAR0MS011
IC2001	RESET IC S-80930CNMC-G80T1G	QSCA0T0SK402
IC2200	IC OP AMP NJM4580E-TE1	QSCA0T0JR002
IC2601	IC OP AMP NJM4580E-TE1	QSCA0T0JR002
IC2602	IC OP AMP NJM4580E-TE1	QSCA0T0JR002
IC2603	IC OP AMP NJM4580E-TE1	QSCA0T0JR002
IC2604	IC OP AMP NJM4580E-TE1	QSCA0T0JR002
COILS		
L2201	WIRE CP STP-S-0.60	XZ40F0REN002
L2202	WIRE CP STP-S-0.60	XZ40F0REN002
L2306	WIRE CP STP-S-0.60	XZ40F0REN002
TRANSISTORS		
Q2200	PNP TRANSISTOR RES.-IN SRA2204M-AT	NQSZSRA2204M
Q2201	PNP TRANSISTOR RES.-IN SRA2204M-AT	NQSZSRA2204M
Q2202	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q2203	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q2601	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q2602	PNP TRANSISTOR 2SA1980M Y	NQSY2SA1980M
Q2603	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q2604	PNP TRANSISTOR 2SA1981Y-AT	NQSY02SA1981
Q2614	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q2618	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q2619	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q2620	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q2621	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q2622	PNP TRANSISTOR RES.-IN SRA2204M-AT	NQSZSRA2204M
Q2623	PNP TRANSISTOR RES.-IN SRA2204M-AT	NQSZSRA2204M
Q2624	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q2625	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q2626	PNP TRANSISTOR RES.-IN SRA2204M-AT	NQSZSRA2204M
Q2627	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q2628	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q2629	PNP TRANSISTOR RES.-IN SRA2204M-AT	NQSZSRA2204M
Q2630	PNP TRANSISTOR RES.-IN SRA2204M-AT	NQSZSRA2204M
Q2631	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q2632	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q2633	PNP TRANSISTOR RES.-IN SRA2204M-AT	NQSZSRA2204M
Q2634	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M

Ref. No.	Description	Part No.
Q2635	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q2636	NPN TRANSISTOR 2SC5344 Y	NQSY02SC5344
<b>RESISTORS</b>		
R2000	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R2001	CHIP RES. 1/10W J 100 Ω	RRXAJR5Z0101
R2002	CHIP RES. 1/10W J 100 Ω	RRXAJR5Z0101
R2004	CHIP RES. 1/10W J 470 Ω	RRXAJR5Z0471
R2006	CHIP RES. 1/10W J 100 Ω	RRXAJR5Z0101
R2007	CHIP RES. 1/10W J 100 Ω	RRXAJR5Z0101
R2015	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R2018	CHIP RES. 1/10W J 39k Ω	RRXAJR5Z0393
R2020	CHIP RES. 1/10W J 100 Ω	RRXAJR5Z0101
R2024	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R2025	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R2028	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R2030	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R2031	CHIP RES. 1/10W J 100 Ω	RRXAJR5Z0101
R2032	CHIP RES. 1/10W J 100 Ω	RRXAJR5Z0101
R2033	CHIP RES. 1/10W J 100 Ω	RRXAJR5Z0101
R2034	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R2035	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R2039	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R2045	CHIP RES. 1/10W J 100 Ω	RRXAJR5Z0101
R2050	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R2051	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R2052	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R2053	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R2057	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R2058	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R2059	CHIP RES. 1/10W J 100 Ω	RRXAJR5Z0101
R2061	CHIP RES. 1/10W J 100 Ω	RRXAJR5Z0101
R2064	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R2073	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R2074	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R2101	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R2126	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R2127	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R2208	CHIP RES. 1/10W F 24k Ω	RRXAFR5H2402
R2209	CHIP RES. 1/10W F 24k Ω	RRXAFR5H2402
R2210	CHIP RES. 1/10W J 8.2k Ω	RRXAJR5Z0822
R2211	CHIP RES. 1/10W J 8.2k Ω	RRXAJR5Z0822
R2212	CHIP RES. 1/10W F 33.0k Ω	RRXAFR5H3302
R2213	CHIP RES. 1/10W F 33.0k Ω	RRXAFR5H3302
R2214	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2215	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2216	CHIP RES. 1/10W J 820 Ω	RRXAJR5Z0821
R2217	CHIP RES. 1/10W J 680 Ω	RRXAJR5Z0681
R2218	CHIP RES. 1/10W J 820 Ω	RRXAJR5Z0821
R2219	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R2220	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2221	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2223	CHIP RES. 1/10W J 4.7k Ω	RRXAJR5Z0472
R2224	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R2226	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R2227	CHIP RES. 1/10W J 220 Ω	RRXAJR5Z0221
R2228	CHIP RES. 1/10W J 220 Ω	RRXAJR5Z0221
R2229	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R2230	CHIP RES. 1/10W J 4.7k Ω	RRXAJR5Z0472
R2284	CHIP RES. 1/10W J 100 Ω	RRXAJR5Z0101
R2601	CARBON RES. 1/4W J 47k Ω	RCX4JATZ0473
R2602	CARBON RES. 1/4W J 47k Ω	RCX4JATZ0473
R2603	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103

Ref. No.	Description	Part No.
R2604	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R2605	CHIP RES. 1/10W J 3.9k Ω	RRXAJR5Z0392
R2607	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R2608	CARBON RES. 1/4W J 10 Ω	RCX4JATZ0100
R2615	CARBON RES. 1/4W J 5.6 Ω	RCX4JATZ05R6
R2616	CARBON RES. 1/4W J 5.6 Ω	RCX4JATZ05R6
R2617	CARBON RES. 1/4W J 10k Ω	RCX4JATZ0103
R2618	CARBON RES. 1/4W J 10k Ω	RCX4JATZ0103
R2619	CARBON RES. 1/4W J 10k Ω	RCX4JATZ0103
R2621	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R2622	CARBON RES. 1/4W J 100 Ω	RCX4JATZ0101
R2623	CHIP RES. 1/10W F 1.5k Ω	RRXAFR5H1501
R2624	CHIP RES. 1/10W F 100 Ω	RRXAFR5H1000
R2625	CHIP RES. 1/10W F 4.7k Ω	RRXAFR5H4701
R2665	CHIP RES. 1/10W J 100 Ω	RRXAJR5Z0101
R2669	CHIP RES. 1/10W J 27k Ω	RRXAJR5Z0273
R2671	CHIP RES. 1/10W J 220k Ω	RRXAJR5Z0224
R2673	CHIP RES. 1/10W J 2.2M Ω	RRXAJR5Z0225
R2674	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2675	CHIP RES. 1/10W J 220 Ω	RRXAJR5Z0221
R2676	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2678	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R2679	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R2680	CHIP RES. 1/10W J 27k Ω	RRXAJR5Z0273
R2903	CHIP RES. 1/10W F 24k Ω	RRXAFR5H2402
R2904	CHIP RES. 1/10W F 24k Ω	RRXAFR5H2402
R2905	CHIP RES. 1/10W F 24k Ω	RRXAFR5H2402
R2906	CHIP RES. 1/10W F 24k Ω	RRXAFR5H2402
R2907	CHIP RES. 1/10W F 24k Ω	RRXAFR5H2402
R2908	CHIP RES. 1/10W F 24k Ω	RRXAFR5H2402
R2909	CHIP RES. 1/10W F 24k Ω	RRXAFR5H2402
R2916	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2917	CHIP RES. 1/10W J 4.7k Ω	RRXAJR5Z0472
R2918	CHIP RES. 1/10W J 4.7k Ω	RRXAJR5Z0472
R2919	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R2920	CHIP RES. 1/10W F 24k Ω	RRXAFR5H2402
R2921	CHIP RES. 1/10W J 8.2k Ω	RRXAJR5Z0822
R2922	CHIP RES. 1/10W J 8.2k Ω	RRXAJR5Z0822
R2923	CHIP RES. 1/10W F 33.0k Ω	RRXAFR5H3302
R2924	CHIP RES. 1/10W F 33.0k Ω	RRXAFR5H3302
R2925	CHIP RES. 1/10W F 33.0k Ω	RRXAFR5H3302
R2926	CHIP RES. 1/10W F 33.0k Ω	RRXAFR5H3302
R2927	CHIP RES. 1/10W F 33.0k Ω	RRXAFR5H3302
R2928	CHIP RES. 1/10W F 33.0k Ω	RRXAFR5H3302
R2929	CHIP RES. 1/10W F 33.0k Ω	RRXAFR5H3302
R2930	CHIP RES. 1/10W F 33.0k Ω	RRXAFR5H3302
R2931	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2932	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2933	CHIP RES. 1/10W J 820 Ω	RRXAJR5Z0821
R2934	CHIP RES. 1/10W J 820 Ω	RRXAJR5Z0821
R2935	CHIP RES. 1/10W J 220 Ω	RRXAJR5Z0221
R2936	CHIP RES. 1/10W J 220 Ω	RRXAJR5Z0221
R2937	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R2938	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R2939	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R2940	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2941	CHIP RES. 1/10W J 680 Ω	RRXAJR5Z0681
R2942	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R2943	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R2944	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2945	CHIP RES. 1/10W J 4.7k Ω	RRXAJR5Z0472
R2946	CHIP RES. 1/10W J 8.2k Ω	RRXAJR5Z0822
R2947	CHIP RES. 1/10W J 8.2k Ω	RRXAJR5Z0822

Ref. No.	Description	Part No.
R2950	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2951	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2952	CHIP RES. 1/10W J 820 Ω	RRXAJR5Z0821
R2953	CHIP RES. 1/10W J 820 Ω	RRXAJR5Z0821
R2954	CHIP RES. 1/10W J 220 Ω	RRXAJR5Z0221
R2955	CHIP RES. 1/10W J 220 Ω	RRXAJR5Z0221
R2956	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R2957	CHIP RES. 1/10W J 4.7k Ω	RRXAJR5Z0472
R2958	CHIP RES. 1/10W J 4.7k Ω	RRXAJR5Z0472
R2959	CHIP RES. 1/10W J 8.2k Ω	RRXAJR5Z0822
R2960	CHIP RES. 1/10W J 8.2k Ω	RRXAJR5Z0822
R2963	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2964	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2965	CHIP RES. 1/10W J 820 Ω	RRXAJR5Z0821
R2966	CHIP RES. 1/10W J 820 Ω	RRXAJR5Z0821
R2967	CHIP RES. 1/10W J 220 Ω	RRXAJR5Z0221
R2968	CHIP RES. 1/10W J 220 Ω	RRXAJR5Z0221
R2969	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R2970	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R2971	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R2972	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R2973	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2974	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2975	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R2976	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R2977	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R2978	CHIP RES. 1/10W J 820 Ω	RRXAJR5Z0821
R2979	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2980	CHIP RES. 1/10W J 4.7k Ω	RRXAJR5Z0472
R2981	CHIP RES. 1/10W J 8.2k Ω	RRXAJR5Z0822
R2982	CHIP RES. 1/10W J 8.2k Ω	RRXAJR5Z0822
R2985	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2986	CHIP RES. 1/10W J 100k Ω	RRXAJR5Z0104
R2987	CHIP RES. 1/10W J 820 Ω	RRXAJR5Z0821
R2988	CHIP RES. 1/10W J 220 Ω	RRXAJR5Z0221
R2989	CHIP RES. 1/10W J 220 Ω	RRXAJR5Z0221
R2992	CHIP RES. 1/10W J 680 Ω	RRXAJR5Z0681
R2993	CHIP RES. 1/10W J 680 Ω	RRXAJR5Z0681
R2994	CHIP RES. 1/10W J 680 Ω	RRXAJR5Z0681
<b>MISCELLANEOUS</b>		
JK2200	RCA JACK 1PIN(WHITE) MSP-251V-13-GILT(B11)	JXRL010LY177
JK2201	RCA JACK 1PIN(RED) MSP-251V-12-GILT(B11)	JXRL010LY176
JK2202	RCA JACK 6PIN MSD-246V-184-GILT(B1)	JXRL060LY181
JK2203	RCA JACK 2PIN MSD-242V-03-GILT(B11)	JXRL020LY180
JP2004	WIRE CP STP-S-0.60	XZ40FOREN002
JP2078	WIRE CP STP-S-0.60	XZ40FOREN002
JP2083	WIRE CP STP-S-0.60	XZ40FOREN002
X2000	CERAMIC RESONATOR ZTT8.00MT47	FY0805PLN004

## FRONT A CBA

Ref. No.	Description	Part No.
	FRONT A CBA Consists of the following:	-----
<b>CAPACITORS</b>		
C3001	ELECTROLYTIC CAP. 100μF/6.3V/MH7	CEA101ENW025
C3002	CHIP CERAMIC CAP(1608) F Z 0.1μF/50V	CHD1JZ30F104
C3003	CHIP CERAMIC CAP(1608) B K 1000pF/50V	CHD1JK30B102
C3005	CHIP CERAMIC CAP(1608) F Z 0.1μF/50V	CHD1JZ30F104
C3006	ELECTROLYTIC CAP. 100μF/6.3V/MH7	CEA101ENW025
C3007	ELECTROLYTIC CAP. 22μF/50V/MH7	CEF22RENW025
C3008	CHIP CERAMIC CAP(1608) F Z 0.1μF/50V	CHD1JZ30F104

Ref. No.	Description	Part No.
C3009	CHIP CERAMIC CAP(1608) F Z 0.1μF/50V	CHD1JZ30F104
<b>CONNECTORS</b>		
CN3001	CONNECTOR PRINT OSU S3B-PH-K-S(LF)(SN)	J3PHC03JG030
CN3002	WIRE ASSEMBLY FFC DIRECT 21/150/1.0	WX1E5KE0-001
<b>DIODES</b>		
D3002	LED(RED) LTL-1CHEE	NPQZLTL1CHEE
D3006	LED(GREEN) LTL1CHJGTNN	NPQZ1CHJGTNN
D3007	LED(BLUE) LTL1CHCBK2-F	NPQ3L1CHCBK2
D3008	LED(AMBER YELLOW) LTL1CHKYKNN	NPQZ1CHKYKNN
<b>COIL</b>		
L3001	INDUCTOR(100μH K) LAP02TA101K	LLAXKATTU101
<b>TRANSISTORS</b>		
Q3001	NPN TRANSISTOR RES-IN SRC1202SF	NQ1ZSRC1202S
Q3005	PNP TRANSISTOR SMD 2SA1980SFY	NQ1Y2SA1980S
Q3006	PNP TRANSISTOR SMD 2SA1980SFY	NQ1Y2SA1980S
Q3007	PNP TRANSISTOR SMD 2SA1980SFY	NQ1Y2SA1980S
<b>RESISTORS</b>		
R3001	CHIP RES. 1/10W J 150 Ω	RRXAJR5Z0151
R3007	CHIP RES. 1/10W J 22 Ω	RRXAJR5Z0220
R3010	CHIP RES. 1/10W J 220 Ω	RRXAJR5Z0221
R3011	CHIP RES. 1/10W J 150 Ω	RRXAJR5Z0151
R3013	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R3025	CHIP RES. 1/10W J 180 Ω	RRXAJR5Z0181
R3026	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R3027	CHIP RES. 1/10W J 6.8k Ω	RRXAJR5Z0682
R3028	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R3030	CHIP RES. 1/10W J 1k Ω	RRXAJR5Z0102
R3031	CHIP RES. 1/10W J 12k Ω	RRXAJR5Z0123
R3032	CHIP RES. 1/10W J 10 Ω	RRXAJR5Z0100
R3033	CHIP RES. 1/10W J 10 Ω	RRXAJR5Z0100
<b>SWITCH</b>		
SW3003	TACT SWITCH SKQSAB	SST0101AL038
<b>MISCELLANEOUS</b>		
FL3001	FL DM182-GINK	TVFD150FT018
RS3001	SENSOR REMOTE RECEIVER KSM-713TC5B-FU	USEJRS0KK007

## FRONT B CBA

Ref. No.	Description	Part No.
	FRONT B CBA Consists of the following:	-----
<b>CONNECTOR</b>		
CN3101	WIRE ASSEMBLY PH DIRECT 3/35/AWG26	WX1E5KA0-002
<b>RESISTORS</b>		
R3116	CHIP RES. 1/10W J 220 Ω	RRXAJR5Z0221
R3119	CHIP RES. 1/10W J 560 Ω	RRXAJR5Z0561
R3122	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R3123	CHIP RES. 1/10W J 330 Ω	RRXAJR5Z0331
R3124	CHIP RES. 1/10W J 1.2k Ω	RRXAJR5Z0122
R3125	CHIP RES. 1/10W J 3.3k Ω	RRXAJR5Z0332
<b>SWITCHES</b>		
SW3101	TACT SWITCH SKQSAB	SST0101AL038
SW3104	TACT SWITCH SKQSAB	SST0101AL038
SW3106	TACT SWITCH SKQSAB	SST0101AL038
SW3108	TACT SWITCH SKQSAB	SST0101AL038
SW3112	TACT SWITCH SKQSAB	SST0101AL038
SW3113	TACT SWITCH SKQSAB	SST0101AL038

# POWER ASSEMBLY

Ref. No.	Description	Part No.
	POWER ASSEMBLY Consists of the following:	1VSA23605
	POWER SUPPLY CBA SD CBA INLET CBA	----- ----- -----

# POWER SUPPLY CBA

Ref. No.	Description	Part No.
	POWER SUPPLY CBA Consists of the following:	-----
<b>CAPACITORS</b>		
C1003▲	LINE ACROSS CAP. 0.047μF/250V K	CT2E473DC016
C1005	CHIP CERAMIC CAP.(1608) CH J 22pF/50V	CHD1JJ3CH220
C1006▲	LINE ACROSS CAP. 0.047μF/250V K	CT2E473DC016
C1010	CHIP CERAMIC CAP.(1608) B K 1000pF/50V	CHD1JK30B102
C1013	CHIP CERAMIC CAP.(1608) B K 0.047μF/50V	CHD1JK30B473
C1015	SAFETY CAP. 2200pF/250V	CCG2EMA0F222
C1016	SAFETY CAP. 2200pF/250V	CCG2EMA0F222
C1017	ELECTROLYTIC CAPACITOR ZR200TA221K18EB	CA2D221DYG04
C1019	ELECTROLYTIC CAP. 47μF/35V/M	CEE47RENW016
C1022	METALIZED FILM CAP. 0.0022μF/400V K	CT2H222DT034
C1023	CAP CERAMIC 470pF/2KV/K	CA3D471PAN17
C1024	CERAMIC CAP. B K 470pF/500V	CCD2JKS0B471
C1025	CHIP CERAMIC CAP.(1608) B K 0.01μF/50V	CHD1JK30B103
C1026	ELECTROLYTIC CAP 2200μF/25V/M	CED222ENW009
C1027	POLYESTER FILM CAP. (PB FREE) 0.0068μF/ 100V J	CA2A682DT018
C1028	ELECTROLYTIC CAP. 220μF/16V/M	CEC221ENW016
C1029	ELECTROLYTIC CAP 4700μF/10V/M	CEB472ENW009
C1030	ELECTROLYTIC CAP. 220μF/25V/M	CED221ENW016
C1031	ELECTROLYTIC CAP 2200μF/25V/M	CED222ENW009
C1033	ELECTROLYTIC CAP. 100μF/50V/M	CEF101ENW016
C1034	ELECTROLYTIC CAP 4700μF/10V/M	CEB472ENW009
C1035	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C1036	ELECTROLYTIC CAP. 220μF/6.3V/M	CEA221ENW016
C1037	ELECTROLYTIC CAP. 1000μF/6.3V/M	CEA102ENW016
C1039	ELECTROLYTIC CAP. 1000μF/6.3V/M	CEA102ENW016
C1040	CHIP CERAMIC CAP.(1608) B K 0.33μF/10V	CHD1AK30B334
C1041	ELECTROLYTIC CAP. 1000μF/6.3V/M	CEA102ENW016
C1042	ELECTROLYTIC CAP. 10μF/16V/M	CEC10RENW016
C1043	ELECTROLYTIC CAP. 100μF/6.3V/M	CEA101ENW016
C1044	CHIP CERAMIC CAP.(1608) B K 0.1μF/25V	CHD1EK30B104
C1045	CHIP CERAMIC CAP.(1608) B K 1μF/10V	CHD1AK30B105
C1046	ELECTROLYTIC CAP. 47μF/25V/M	CED47RENW016
C1048	ELECTROLYTIC CAP. 1000μF/6.3V/M	CEA102ENW016
C1050	ELECTROLYTIC CAP. 330μF/6.3V/M	CEA331ENW016
C1051	ELECTROLYTIC CAP. 330μF/6.3V/M	CEA331ENW016
C1052	ELECTROLYTIC CAP. 330μF/6.3V/M	CEA331ENW016
C1053	ELECTROLYTIC CAP. 330μF/6.3V/M	CEA331ENW016
C1054	ELECTROLYTIC CAP. 470μF/16V/M	CEC471ENW016
C1055	ELECTROLYTIC CAP. 1000μF/6.3V/M	CEA102ENW016
C1056	ELECTROLYTIC CAP. 1000μF/6.3V/M	CEA102ENW016
C1058	CHIP CERAMIC CAP.(1608) B K 1μF/10V	CHD1AK30B105
C1059	CHIP CERAMIC CAP.(1608) B K 1μF/10V	CHD1AK30B105
C1060	CHIP CERAMIC CAP. B K 10μF/10V	CHE1AK30B106
C1064	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C1065	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C1066	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C1067	CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V	CHD1JZ30F104
C1068	CHIP CERAMIC CAP. B K 8200pF/50V	CHD1JK30B822
C1069	CHIP CERAMIC CAP.(1608) B K 5600pF/50V	CHD1JK30B562

Ref. No.	Description	Part No.
C1070	ELECTROLYTIC CAP. 1000μF/25V/M	CED102ENW016
C1071	CHIP CERAMIC CAP. B K 10μF/10V	CHE1AK30B106
C1072	CHIP CERAMIC CAP. B K 10μF/10V	CHE1AK30B106
C1073	CHIP CERAMIC CAP. B K 10μF/10V	CHE1AK30B106
C1074	CHIP CERAMIC CAP. B K 10μF/10V	CHE1AK30B106
C1077	ELECTROLYTIC CAP. 1000μF/6.3V/M	CEA102ENW016
C1078	ELECTROLYTIC CAP. 1000μF/6.3V/M	CEA102ENW016
C1079	CHIP CERAMIC CAP.(1608) B K 0.1μF/25V	CHD1EK30B104
C1080	CHIP CERAMIC CAP.(1608) B K 0.1μF/25V	CHD1EK30B104
C1082	CHIP CERAMIC CAP.(1608) B K 1μF/10V	CHD1AK30B105
C1721	ELECTROLYTIC CAP. 100μF/6.3V/M	CEA101ENW016
<b>CONNECTORS</b>		
CN1002▲	CONNECTOR PRINT OSU B2P3-VH-B (LF)(SN)	J3VH030JG014
CN1003	TWG CONNECTOR 23P TWG-P23P-A1	J3TWA23TG001
CN1004	CONNECTOR PRINT OSU B16B-PH-K- S(LF)(SN)	J3PHC16JG029
CN1006	PH CONNECTOR TOP 2P B2B-PH-K-S (LF)(SN)	J3PHC02JG029
CN5003	TWG CONNECTOR 23P TWG-P23P-A1	J3TWA23TG001
CN5004	TWG CONNECTOR 15P TWG-P15P-A1	J3TWA15TG001
<b>DIODES</b>		
D1007	DIODE 1N5397-B	NDLZ001N5397
D1008	DIODE 1N5397-B	NDLZ001N5397
D1011	DIODE 1N5397-B	NDLZ001N5397
D1012	DIODE 1N5397-B	NDLZ001N5397
D1013	DIODE ZENER 24BSB-T26	NDTB024BST26
D1016	WIRE CP STP-S-0.60	XZ40FOREN002
D1019	SCHOTTKY BARRIER DIODE SB140	NDQZ000SB140
D1021	DIODE FR154	NDLZ000FR154
D1022	DIODE ZENER 27BSB-T26	NDTB027BST26
D1023	RECTIFIER DIODE BA157	NDQZ000BA157
D1024	RECTIFIER DIODE BA157	NDQZ000BA157
D1025	SCHOTTKY BARRIER DIODE SB340	NDQZ000SB340
D1026	DIODE ZENER 27BSB-T26	NDTB027BST26
D1028	SCHOTTKY BARRIER DIODE SMD SK39	ND1Z0000SK39
D1029	IC SHUNT REGULATOR SL431A-AT	NSZBA0TAJK01
D1030	SCHOTTKY BARRIER DIODE SB340	NDQZ000SB340
D1031	SCHOTTKY BARRIER DIODE SB340	NDQZ000SB340
D1032	RECTIFIER DIODE BA157	NDQZ000BA157
D1033	RECTIFIER DIODE BA157	NDQZ000BA157
D1035	DIODE ZENER 5V1BSB-T26	NDTB5R1BST26
D1040	DIODE SWITCHING 1N4148-F0021	NDTZ01N4148F
D1041	DIODE 1N5406	NDLZ001N5406
D1042	DIODE SWITCHING 1N4148-F0021	NDTZ01N4148F
D1043	DIODE SWITCHING 1N4148-F0021	NDTZ01N4148F
D1044	DIODE SWITCHING 1N4148-F0021	NDTZ01N4148F
D1045	DIODE SWITCHING 1N4148-F0021	NDTZ01N4148F
D1046	DIODE ZENER 11BSC-T26	NDTC011BST26
D1047	DIODE SWITCHING 1N4148-F0021	NDTZ01N4148F
D1048	DIODE SWITCHING 1N4148-F0021	NDTZ01N4148F
D1049	DIODE SWITCHING 1N4148-F0021	NDTZ01N4148F
D1050	DIODE SWITCHING 1N4148-F0021	NDTZ01N4148F
D1052	DIODE SWITCHING 1N4148-F0021	NDTZ01N4148F
D1053	SCHOTTKY BARRIER DIODE SMD SK34	ND1Z0000SK34
D1054	SCHOTTKY BARRIER DIODE SMD SK34	ND1Z0000SK34
D1055	DIODE ZENER 13BSB-T26	NDTB013BST26
<b>ICS</b>		
IC1002▲	IC SWITCHING FA5573N-D1-TE1 SOP8	QSCA0T0FD002
IC1004▲	PHOTOCOUPLER PS2561A-1(W)	QPEWPS2561A1
IC1008	IC VOLTAGE REGULATOR PQ070XFC1SZF / 4PIN	QSZBA0RSH083
IC1009	IC DC-DC CONVERTER BD9323EFJ-E2	QSCA0T0RM002
IC1010	IC DC-DC CONVERTER BD9323EFJ-E2	QSCA0T0RM002

Ref. No.	Description	Part No.
<b>COILS</b>		
L1001▲	COIL LINE FILTER ST0603FT20-009 0.027	LLEB020Y2001
L1003	CHOKE COIL 22μH-K	LLBD00PKV021
L1004	POWER INDUCTORS CWKBNP-220K	LLF2200KV002
L1006	CHOKE COIL 22μH-K	LLBD00PKV021
L1007	CHOKE COIL 22μH-K	LLBD00PKV021
L1008	CHOKE COIL 22μH-K	LLBD00PKV021
L1009	POWER INDUCTORS CWKBNP-100K	LLF1000KV002
L1010	POWER INDUCTORS CWKBNP-100K	LLF1000KV002
L1305	RADIAL TYPE CHOKE COIL CW68-470K-841040NP	LLBD00PKV023
<b>TRANSISTORS</b>		
Q1001	PNP TRANSISTOR 2SA1980M Y	NQSY2SA1980M
Q1002▲	FET MOS 2SK3563(Q.M)	QFQZSK3563QM
Q1005	NPN TRANSISTOR RES-IN SRC1203MAT	NQSZSRC1203M
Q1006	PNP TRANSISTOR 2SA1980M Y	NQSY2SA1980M
Q1007	NPN TRANSISTOR 2SC5344 Y	NQSY02SC5344
Q1008	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q1009	PNP TRANSISTOR STB1277LY-AT	NQSYSTB1277L
Q1010	PNP TRANSISTOR 2SA1981Y-AT	NQSY02SA1981
Q1011	PNP TRANSISTOR STB1277LY-AT	NQSYSTB1277L
Q1012	PNP TRANSISTOR 2SA1980MG-AT	NQSG2SA1980M
Q1013	NPN TRANSISTOR STC403	NQEZ00STC403
Q1014	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q1015	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q1016	NPN TRANSISTOR 2SC5343MG-AT	NQSG2SC5343M
Q1017	NPN TRANSISTOR 2SC5344 Y	NQSY02SC5344
Q1019	NPN TRANSISTOR SMD 2SC5343SFG	NQ1G2SC5343S
<b>RESISTORS</b>		
R1003	CHIP RES. 1/10W F 100k Ω	RRXAFR5H1003
R1005	WIRE CP STP-S-0.60	XZ40FOREN002
R1006	WIRE CP STP-S-0.60	XZ40FOREN002
R1009	CHIP RES. 1/10W J 8.2k Ω	RRXAJR5Z0822
R1011	CHIP RES. 1/10W J 33 Ω	RRXAJR5Z0330
R1012	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R1013	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R1014	CARBON RES. 1/4W J 75k Ω	RCX4JATZ0753
R1017	CHIP RES. 1/10W J 56 Ω	RRXAJR5Z0560
R1019	CHIP RES. 1/10W J 100 Ω	RRXAJR5Z0101
R1020	CHIP RES. 1/10W J 10 Ω	RRXAJR5Z0100
R1021	CHIP RES. 1/10W J 4.7k Ω	RRXAJR5Z0472
R1022	METAL OXIDE FILM RES. 2W J 47k Ω	RN02473ZU001
R1023	METAL OXIDE FILM RES. 2W J 0.68 Ω	RN02R68ZU001
R1030	CHIP RES. 1/10W J 470 Ω	RRXAJR5Z0471
R1031	CHIP RES. 1/10W J 22k Ω	RRXAJR5Z0223
R1032	CHIP RES. 1/10W J 1 Ω	RRXAJR5Z01R0
R1033	CHIP RES. 1/10W J 1 Ω	RRXAJR5Z01R0
R1034	CARBON RES. 1/4W J 5.1k Ω	RCX4JATZ0512
R1036	CHIP RES. 1/10W J 680 Ω	RRXAJR5Z0681
R1037	CHIP RES. 1/10W F 2k Ω	RRXAFR5H2001
R1041	CHIP RES. 1/10W F 270 Ω	RRXAFR5H2700
R1042	CHIP RES. 1/10W F 1.0k Ω	RRXAFR5H1001
R1043	CHIP RES. 1/10W F 1.0k Ω	RRXAFR5H1001
R1044	WIRE CP STP-S-0.60	XZ40FOREN002
R1045	CHIP RES. 1/10W J 4.7k Ω	RRXAJR5Z0472
R1046	CHIP RES. 1/10W J 2.2k Ω	RRXAJR5Z0222
R1047	CHIP RES. 1/10W J 4.7k Ω	RRXAJR5Z0472
R1048	CHIP RES. 1/10W J 4.7k Ω	RRXAJR5Z0472
R1049	CARBON RES. 1/4W J 4.7k Ω	RCX4JATZ0472
R1050	CHIP RES. 1/10W J 4.7k Ω	RRXAJR5Z0472
R1051	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1052	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R1053	CARBON RES. 1/4W J 82 Ω	RCX4JATZ0820

Ref. No.	Description	Part No.
R1054	CHIP RES. 1/10W J 4.7k Ω	RRXAJR5Z0472
R1056	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1057	CARBON RES. 1/4W J 82 Ω	RCX4JATZ0820
R1059	CHIP RES. 1/10W F 10k Ω	RRXAFR5H1002
R1060	CHIP RES. 1/10W F 15k Ω	RRXAFR5H1502
R1061	CARBON RES. 1/4W J 220 Ω	RCX4JATZ0221
R1062	CHIP RES. 1/10W F 2k Ω	RRXAFR5H2001
R1063	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1065	CARBON RES. 1/4W J 56 Ω	RCX4JATZ0560
R1066	METAL OXIDE FILM RES. 1W J 1.2 Ω	RN011R2ZU001
R1067	CHIP RES. 1/10W J 4.7k Ω	RRXAJR5Z0472
R1068	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1069	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1070	CHIP RES. 1/10W J 10k Ω	RRXAJR5Z0103
R1071	CHIP RES. 1/10W J 5.1k Ω	RRXAJR5Z0512
R1072	CHIP RES. 1/10W J 8.2k Ω	RRXAJR5Z0822
R1073	CHIP RES. 1/10W J 150 Ω	RRXAJR5Z0151
R1074	CHIP RES. 1/10W J 150 Ω	RRXAJR5Z0151
R1075	CHIP RES. 1/10W F 1.0k Ω	RRXAFR5H1001
R1076	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R1077	CHIP RES. 1/10W F 1.5k Ω	RRXAFR5H1501
R1078	CHIP RES. 1/10W F 3.3k Ω	RRXAFR5H3301
R1081	CHIP RES. 1/10W F 1.5k Ω	RRXAFR5H1501
R1082	CHIP RES. 1/10W F 2.2k Ω	RRXAFR5H2201
R1083	CHIP RES. 1/10W F 3.3k Ω	RRXAFR5H3301
R1087	CARBON RES. 1/4W J 27 Ω	RCX4JATZ0270
R1092	CARBON RES. 1/4W J 47 Ω	RCX4JATZ0470
R1093	CHIP RES. 1/10W J 47k Ω	RRXAJR5Z0473
R1094	CARBON RES. 1/4W J 10 Ω	RCX4JATZ0100
R1095	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
<b>MISCELLANEOUS</b>		
2L058	SCREW S-TIGHT M3X8 BIND HEAD+	GBJS3080
B49	POWER HEATSINK E4340UD	1VM422057E
B74	POWER HEATSINK E3BH0JD	1VM323816
B75	HEAT SINK E2A00JD	1VM424636E
F1001▲	FUSE TIME RAG FSL 250V 2A(EM)	PDGJAB0NG202
FH1001	FUSE HOLDER MSF-015 LF (B110)	XH01Z00LY002
FH1002	FUSE HOLDER MSF-015 LF (B110)	XH01Z00LY002
JC1101	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
JC1102	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
JC1103	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
JP1004	WIRE CP STP-S-0.60	XZ40FOREN002
JP1005	WIRE CP STP-S-0.60	XZ40FOREN002
JP1107	WIRE CP STP-S-0.60	XZ40FOREN002
JP1108	WIRE CP STP-S-0.60	XZ40FOREN002
JP1137	WIRE CP STP-S-0.60	XZ40FOREN002
JP1144	WIRE CP STP-S-0.60	XZ40FOREN002
JP1152	WIRE CP STP-S-0.60	XZ40FOREN002
SA1001▲	SURGE ABSORBER 470V+-10PER	NVQZ10D471KB
T1002▲	TRANS POWER 8733	LTT2PCOKT050

## SD CBA

Ref. No.	Description	Part No.
	SD CBA Consists of the following:	-----
<b>CAPACITORS</b>		
C5001	CHIP CERAMIC CAP.(1608) B K 0.1μF/16V	CHD1CK30B104
C5003	CHIP CERAMIC CAP.(2125) B K 10μF/6.3V	CHE0KK30B106
C5008	CHIP CERAMIC CAP.(1608) CH J 33pF/50V	CHD1JJ3CH330
<b>CONNECTORS</b>		
CN5000	CONNECTOR IC CARD MES 9PIN 1903572	JF19090AP001

Ref. No.	Description	Part No.
CN5001	BOARD CONNECTOR 23P(PB FREE) 127301123K2	JCTWA23TG004
<b>COIL</b>		
L5002	CHIP INDUCTOR LK160882NM-T	LLACMB3TU82N
<b>RESISTORS</b>		
R5001	CHIP RES. 1/10W J 47 $\Omega$	RRXAJR5Z0470
R5002	CHIP RES. 1/10W J 47 $\Omega$	RRXAJR5Z0470
R5003	CHIP RES. 1/10W J 47 $\Omega$	RRXAJR5Z0470
R5004	CHIP RES. 1/10W J 22 $\Omega$	RRXAJR5Z0220
R5005	CHIP RES. 1/10W J 47 $\Omega$	RRXAJR5Z0470
R5006	CHIP RES. 1/10W J 47 $\Omega$	RRXAJR5Z0470

## INLET CBA

Ref. No.	Description	Part No.
	INLET CBA Consists of the following:	-----
<b>CONNECTOR</b>		
CN1001▲	VH CONNECTOR PRINT OSU B2P3S- VH(LF)(SN)	J3VH030JG002
<b>MISCELLANEOUS</b>		
AC1001▲	TERMINAL ACPLUG RESEPTAL AC IN 0 P ST- 02G-ACBP	JTDC0P0SLT02



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