

AVD-S50/S50ES

SERVICE MANUAL

Ver 1.1 2002. 09

US Model
Canadian Model
AVD-S50ES

AEP Model
UK Model
AVD-S50



Model Name Using Similar Mechanism	NEW
Mechanism Type	CDM66D-DVBU15
Base Unit Name	DVBU15
Optical Pick-up Name	TDP022W

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS (AVD-S50ES)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 6 ohm loads, both channels driven, from 20 – 20,000 Hz; rated 100 watts per channel minimum RMS power, with no more than 0.7 % total harmonic distortion from 250 milliwatts to rated output.

Amplifier section

Stereo mode 100 W + 100 W (6 ohms, 20 – 20,000 Hz, THD 0.7 %)
Surround mode Front: 100 W + 100 W
Center*: 100 W
Rear*: 100 W + 100 W (6 ohms, 20 – 20,000 Hz, THD 0.7 %)

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

Inputs (Analog) ANALOG IN:
Sensitivity: 150 mV
Impedance: 50 kilohms
Inputs (Digital) DIGITAL IN OPTICAL:
Sensitivity: —
DIGITAL IN COAXIAL:
Sensitivity: 0.5 V
Impedance: 75 ohms
Outputs (Analog) ANALOG OUT:
Voltage: 2 V
Impedance: 1 kilohms
SUBWOOFER ANALOG OUT:
Voltage: 3 V
Impedance: 47 kilohms
PHONES:
Accepts low- and high-impedance headphones
Outputs (Digital) DIGITAL OUT OPTICAL
Sensitivity: —

– Continued on next page –

SUPER AUDIO CD/DVD RECEIVER

9-874-154-02
2002I0400-1
© 2002. 09

Sony Corporation
Home Audio Company
Published by Sony Engineering Corporation

SONY®

Super Audio CD/DVD system

Laser	Semiconductor laser (Super Audio CD/DVD: $\lambda = 650 \text{ nm}$) (CD: $\lambda = 780 \text{ nm}$)
	Emission duration: continuous
Signal format system	AVD-S50: PAL AVD-S50ES: NTSC
Frequency response (at 2 CH STEREO mode)	DVD (PCM): 2 Hz to 22 kHz ($\pm 1.0 \text{ dB}$) CD: 2 Hz to 20 kHz ($\pm 1.0 \text{ dB}$)
Signal-to-noise ratio	More than 80 dB (VIDEO 1 (AUDIO) connectors only)
Harmonic distortion	Less than 0.03 %

FM tuner section

System	PLL quartz-locked digital synthesizer system
Tuning range	87.5 – 108.0 MHz (100 kHz step)
Antenna	FM wire antenna
Antenna terminals	75 ohms, unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

System	PLL quartz-locked digital synthesizer system
Tuning range	AVD-S50ES: 530 – 1,710 kHz (with the interval set at 10 kHz) 531 – 1,710 kHz (with the interval set at 9 kHz) AVD-S50: 531 – 1,710 kHz (with the interval set at 9 kHz)
Antenna	Loop antenna
Intermediate frequency	450 kHz

Video section (AVD-S50ES)

Inputs	S-video: Y: 1 Vp-p 75 ohms C: 0.286 Vp-p 75 ohms
Outputs	S-video: Y: 1 Vp-p 75 ohms C: 0.286 Vp-p 75 ohms

Video section (EURO AV) (AVD-S50)

Input	Video: 1 Vp-p 75 ohms
Output	Video: 1 Vp-p 75 ohms

General

Power requirements	AVD-S50ES: 120 V AC, 60 Hz AVD-S50: 230 V AC, 50/60 Hz
Power consumption	180 W 1.5 W (at the Power Saving Mode)
Dimensions (approx.)	430 x 98 x 453 mm (17 x 3 7/8 x 17 7/8 inches) (w/h/d) incl. projecting parts
Mass (approx.)	7.5 kg (16 lb. 9 oz.)
Operating temperature	5 °C to 35 °C (41 °F to 95 °F)
Operating humidity	5 % to 90 %

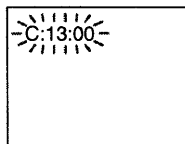
Design and specifications are subject to change without notice.

SELF DIAGNOSIS FUNCTION

Self-diagnosis Function

(When letters/numbers appear in the display)

When the self-diagnosis function is activated to prevent the receiver from malfunctioning. In this case a five-character service number (e.g., C 13 00) with a combination of a letter and digits appears on the screen and the front panel display. Refer to the following table.



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

Notes on Chip Component Replacement

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

Flexible Circuit Board Repairing

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

CAUTION

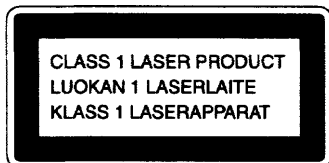
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

US, Canadian model



This label is located on the side exterior.

AEP, UK model



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

SAFETY CHECK-OUT

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

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

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes).

Leakage current can be measured by any one of three methods.

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

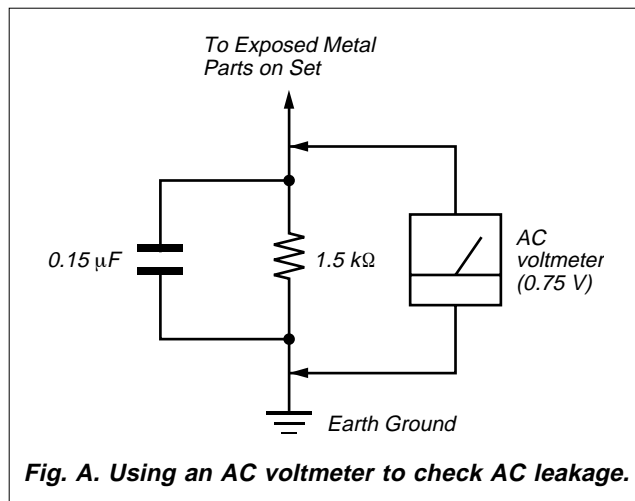


Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!!

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

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE \triangle SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

TABLE OF CONTENTS

SELF DIAGNOSIS FUNCTION	2	6. EXPLODED VIEWS	
1. SERVICING NOTES	5	6-1. Case Section	81
2. GENERAL		6-2. Front Panel Section	82
Location of Controls	6	6-3. Chassis Section	83
3. DISASSEMBLY	10	6-4. Back Panel Section	84
3-1. Case	10	6-5. CD Mechanism Deck Section	85
3-2. Loading Panel Assy	11	6-6. Base Unit Section	86
3-3. Front Panel Assy	11	7. ELECTRICAL PARTS LIST	87
3-4. Back Panel Assy, Power Sw Board	12		
3-5. Digital Amp Board, Power Board, DVD Board	12		
3-6. Mechanism Deck	13		
3-7. Pick-up Unit	13		
3-8. Belt (LD), Loading Board, Motor (L) Assy	14		
4. TEST MODE	15		
5. DIAGRAMS			
5-1. IC Pin Function Description	22		
5-2. Circuit Boards Location	40		
5-3. Note for Printed Wiring Boards and Schematic Diagrams	40		
5-4. Printed Wiring Board –RF Section–	42		
5-5. Schematic Diagram –RF Section–	43		
5-6. Printed Wiring Board –DVD Section–	44		
5-7. Schematic Diagram –DVD Section (1/10)–	46		
5-8. Schematic Diagram –DVD Section (2/10)–	47		
5-9. Schematic Diagram –DVD Section (3/10)–	48		
5-10. Schematic Diagram –DVD Section (4/10)–	49		
5-11. Schematic Diagram –DVD Section (5/10)–	50		
5-12. Schematic Diagram –DVD Section (6/10)–	51		
5-13. Schematic Diagram –DVD Section (7/10)–	52		
5-14. Schematic Diagram –DVD Section (8/10)–	53		
5-15. Schematic Diagram –DVD Section (9/10)–	54		
5-16. Schematic Diagram –DVD Section (10/10)–	55		
5-17. Printed Wiring Board –Digital Amp Section–	56		
5-18. Schematic Diagram –Digital Amp Section (1/2)–	58		
5-19. Schematic Diagram –Digital Amp Section (2/2)–	59		
5-20. Printed Wiring Board –Video Section–	60		
5-21. Schematic Diagram –Video Section–	61		
5-22. Printed Wiring Board –RGB Section–	62		
5-23. Schematic Diagram –RGB Section–	63		
5-24. Printed Wiring Boards –In/Out Section–	64		
5-25. Schematic Diagram –In/Out Section–	65		
5-26. Printed Wiring Boards –Display Section–	66		
5-27. Schematic Diagram –Display Section–	67		
5-28. Printed Wiring Board –Speaker Section–	68		
5-29. Schematic Diagram –Speaker Section–	69		
5-30. Printed Wiring Boards –Power Section–	70		
5-31. Schematic Diagram –Power Section–	71		
5-32. IC Block Diagrams	72		

SECTION 1 SERVICING NOTES

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

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.

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

NOTES ON LASER DIODE EMISSION CHECK

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

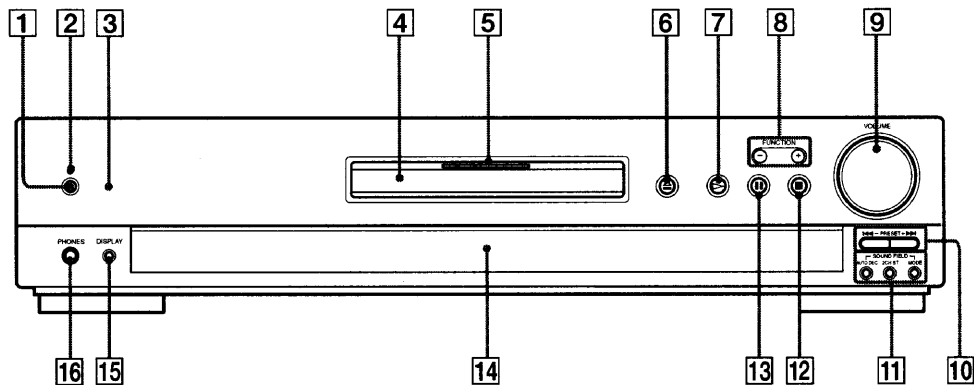
This section is extracted from instruction manual.

LOCATION OF CONTROLS

Index to Parts and Controls

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

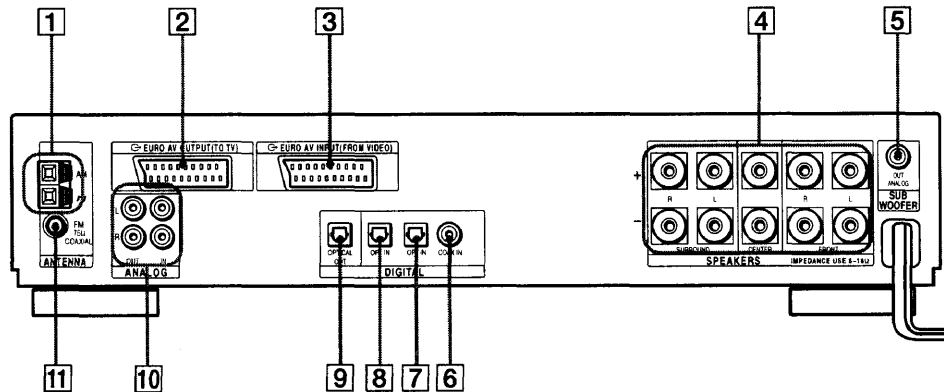
Front Panel



- | | |
|---|--|
| <ul style="list-style-type: none"> 1 POWER switch 2 STANDBY indicator 3 (remote sensor) 4 Disc tray 5 MULTI CHANNEL DECODING indicator 6 (open/close) 7 (play) 8 FUNCTION +/- | <ul style="list-style-type: none"> 9 VOLUME control 10 ◀▶, PRESET +/- 11 SOUND FIELD AUTO DEC/2CH ST/MODE 12 ■ (stop) 13 (pause) 14 Front panel display 15 DISPLAY 16 PHONES jack |
|---|--|

AVD-S50:

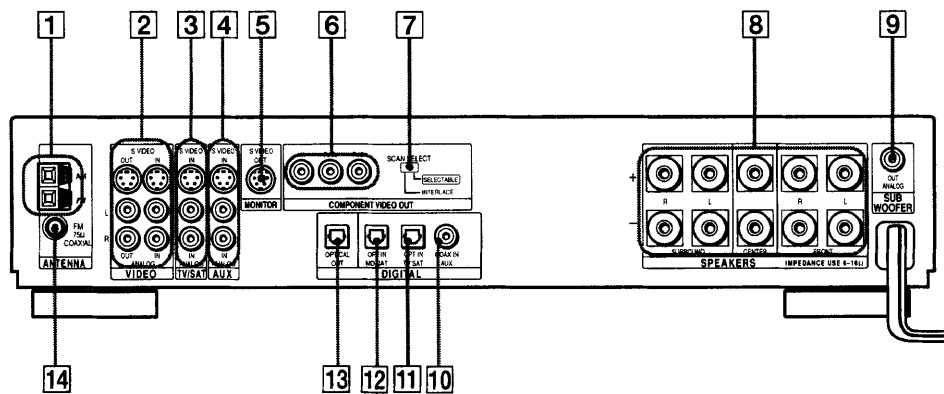
Rear Panel



- | | |
|--|---------------------------------------|
| 1 AM antenna | 6 DIGITAL (COAX IN 3) jack |
| 2 ⇨ EURO AV OUTPUT (TO TV) jack | 7 DIGITAL (OPT IN 2) jack |
| 3 ⇨ EURO AV INPUT (FROM VIDEO) jack | 8 DIGITAL (OPT IN 1) jack |
| 4 SPEAKERS jacks | 9 DIGITAL (OPTICAL OUT) jack |
| 5 SUB WOOFER (ANALOG OUT) jack | 10 ANALOG IN/OUT L/R jacks |
| | 11 FM 75Ω COAXIAL antenna jack |

AVD-S50ES:

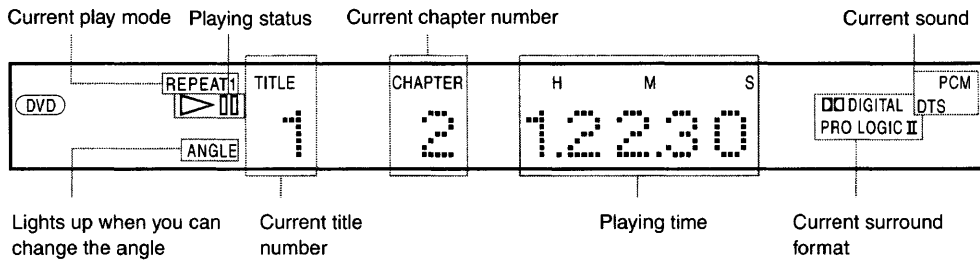
Rear Panel



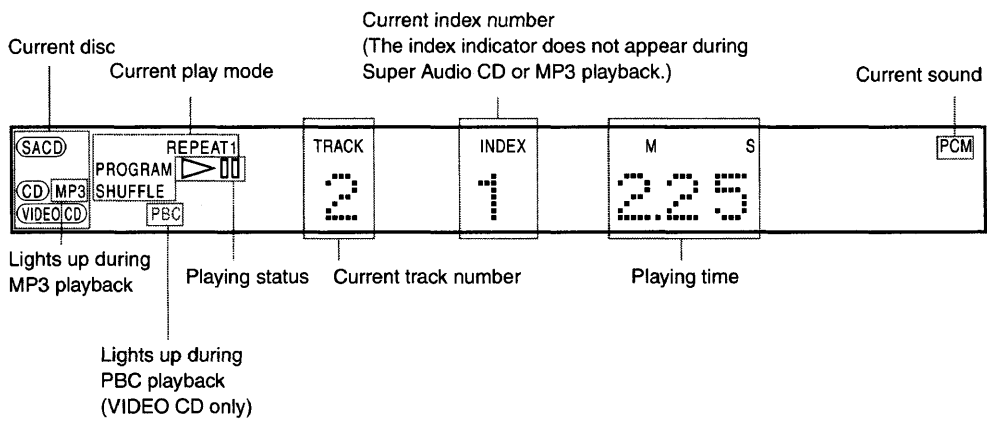
- | | |
|--|--|
| 1 AM antenna | 7 COMPONENT VIDEO OUT switch |
| 2 VIDEO (S VIDEO/ANALOG L/R IN/OUT) jacks | 8 SPEAKERS jacks |
| 3 TV/SAT (S VIDEO/ANALOG L/R IN) jacks | 9 SUB WOOFER (ANALOG OUT) jack |
| 4 AUX (S VIDEO/ANALOG L/R IN) jacks | 10 DIGITAL (AUX COAX IN) jack |
| 5 MONITOR (S VIDEO OUT) jack | 11 DIGITAL (TV/SAT OPT IN) jack |
| 6 COMPONENT VIDEO OUT jacks | 12 DIGITAL (MD/DAT OPT IN) jack |
| | 13 DIGITAL (OPTICAL OUT) jack |
| | 14 FM 75Ω COAXIAL antenna jack |

Front Panel Display

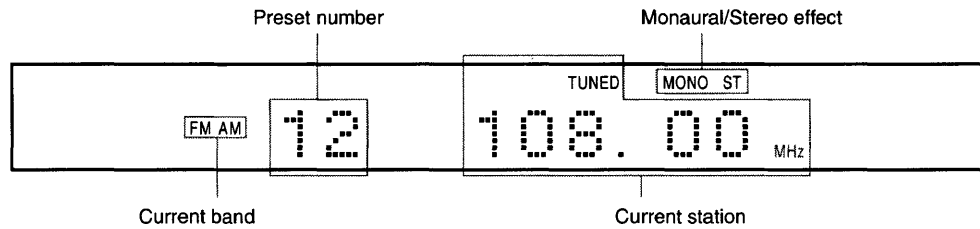
When playing back a DVD



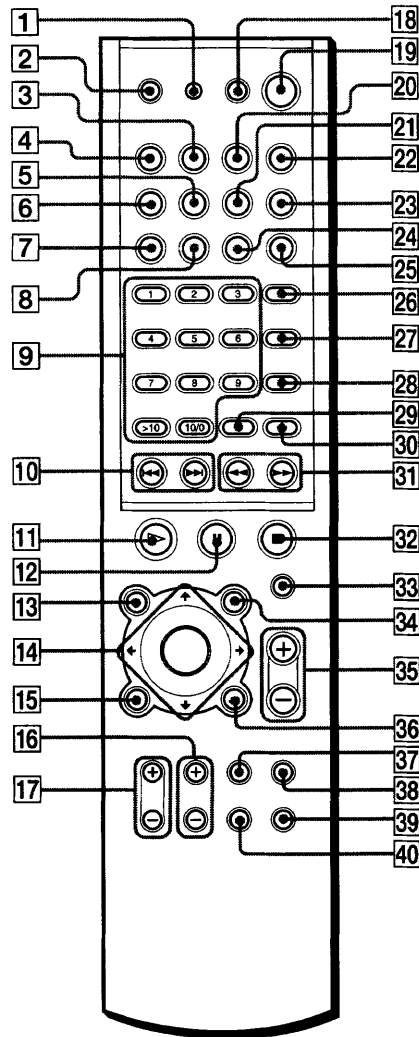
When playing back a Super Audio CD, CD, VIDEO CD, or MP3



When listening to the radio



Remote



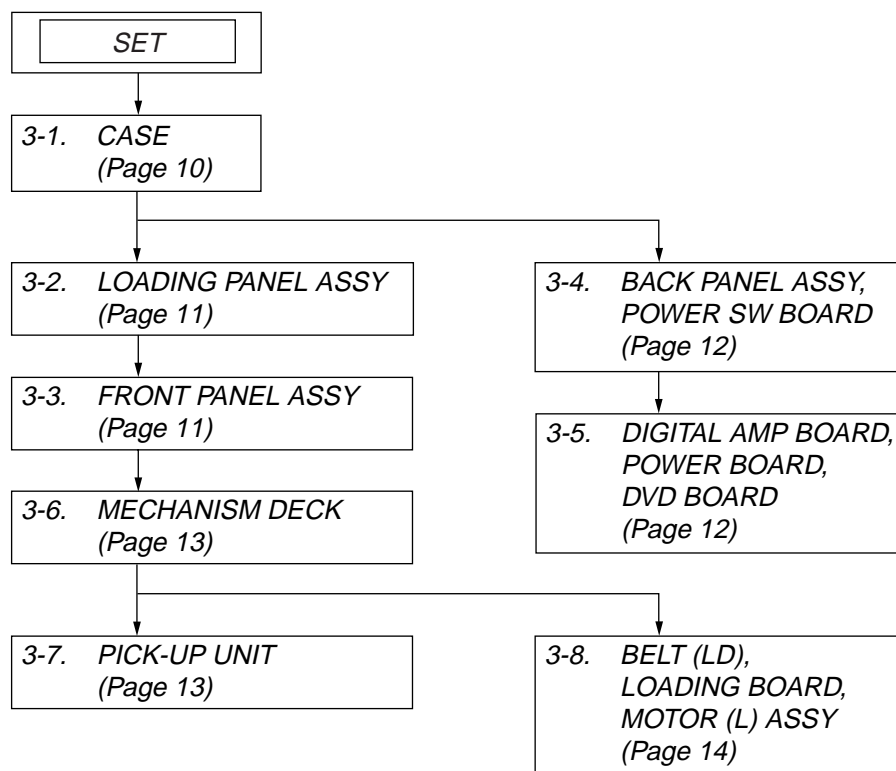
- 1 RM SET UP
- 2 TV I/⏻ (on/standby)
- 3 BAND
- 4 FUNCTION
- 5 NAME
- 6 SAT
- 7 PLAY MODE
- 8 REPEAT
- 9 Number buttons
- 10 ◀▶, CH +/-
- 11 ▷ (play)
- 12 ⏸ (pause)
- 13 TOP MENU/GUIDE
- 14 ⬅️/⬆️/⬇️/➡️/ENTER
- 15 DVD DISPLAY
- 16 TV CH +/-
- 17 TV VOL +/-
- 18 AV I/⏻ (on/standby)
- 19 I/⏻ (on/standby)
- 20 STEREO/MONO
- 21 MEMORY
- 22 SOUND FIELD
- 23 DISPLAY
- 24 TIME
- 25 DIMMER
- 26 AUDIO
- 27 ANGLE
- 28 SUBTITLE
- 29 ENTER
- 30 CLEAR
- 31 ◀▶
- 32 ■ (stop)
- 33 MUTING
- 34 AV MENU
- 35 VOLUME +/-
- 36 ↶ RETURN/EXIT
- 37 TV/VIDEO
- 38 AMP MENU
- 39 DVD SETUP
- 40 WIDE

Note

This remote control glows in the dark. However, before glowing, the remote must be exposed to light for awhile.

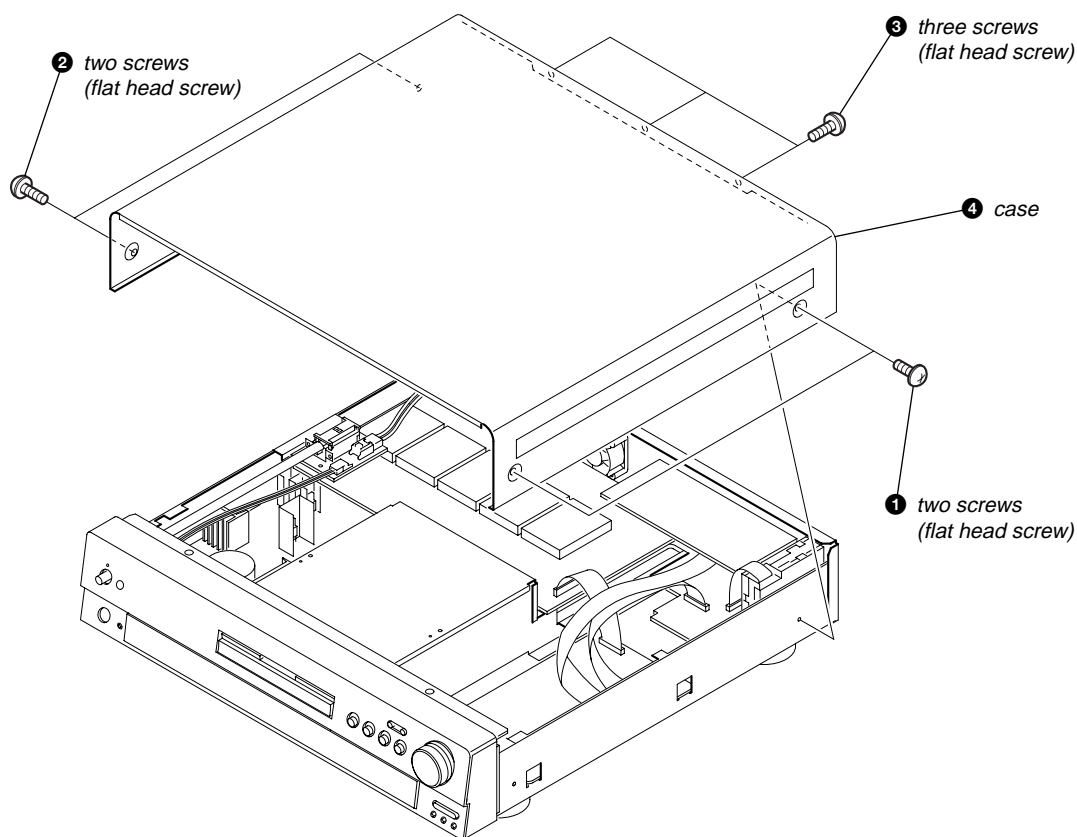
SECTION 3 DISASSEMBLY

Note: This set can be disassembled according to the following sequence.

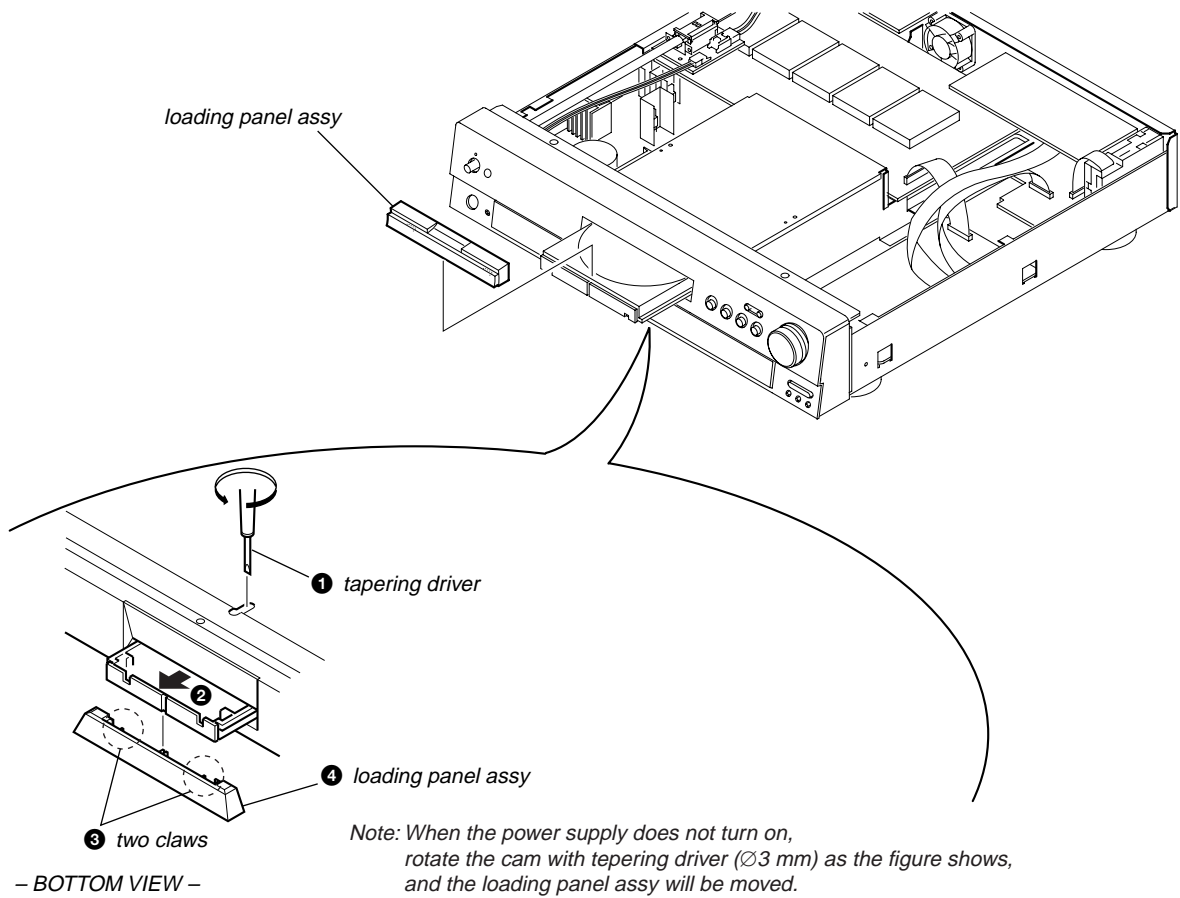


Note: Follow the disassembly procedure in the numerical order given.

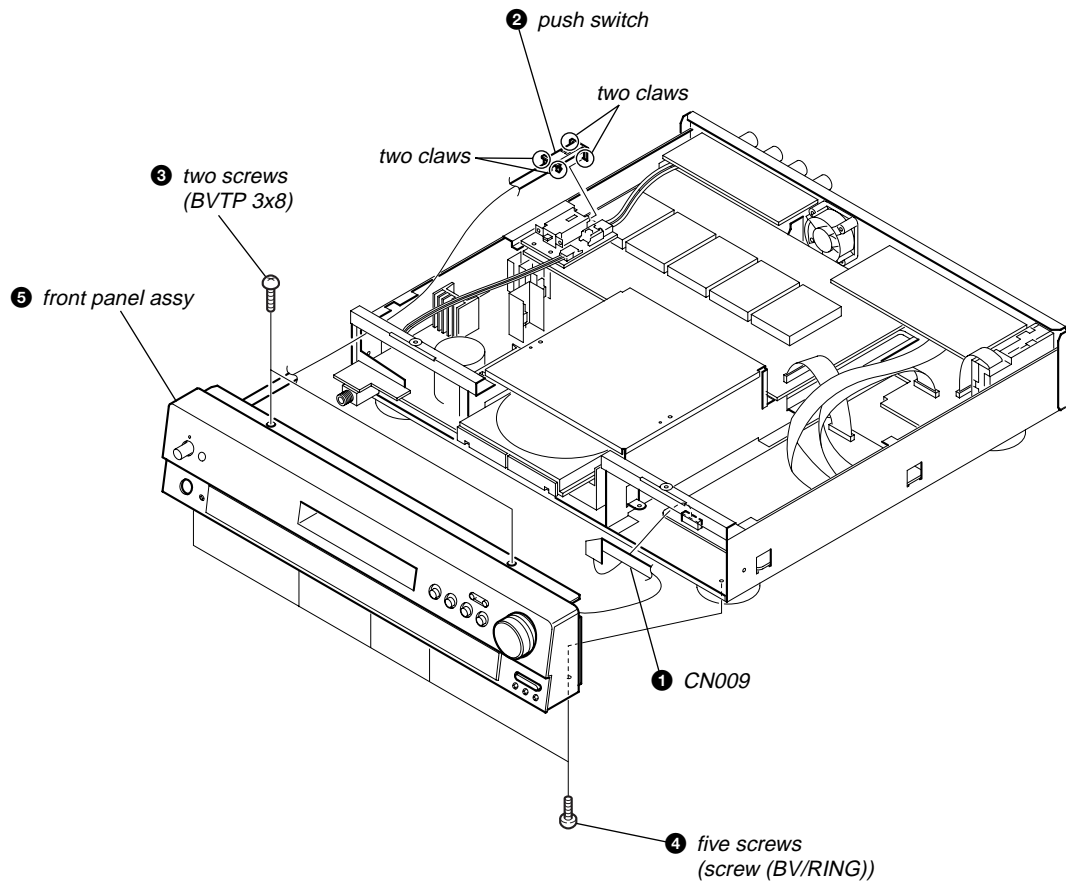
3-1. CASE



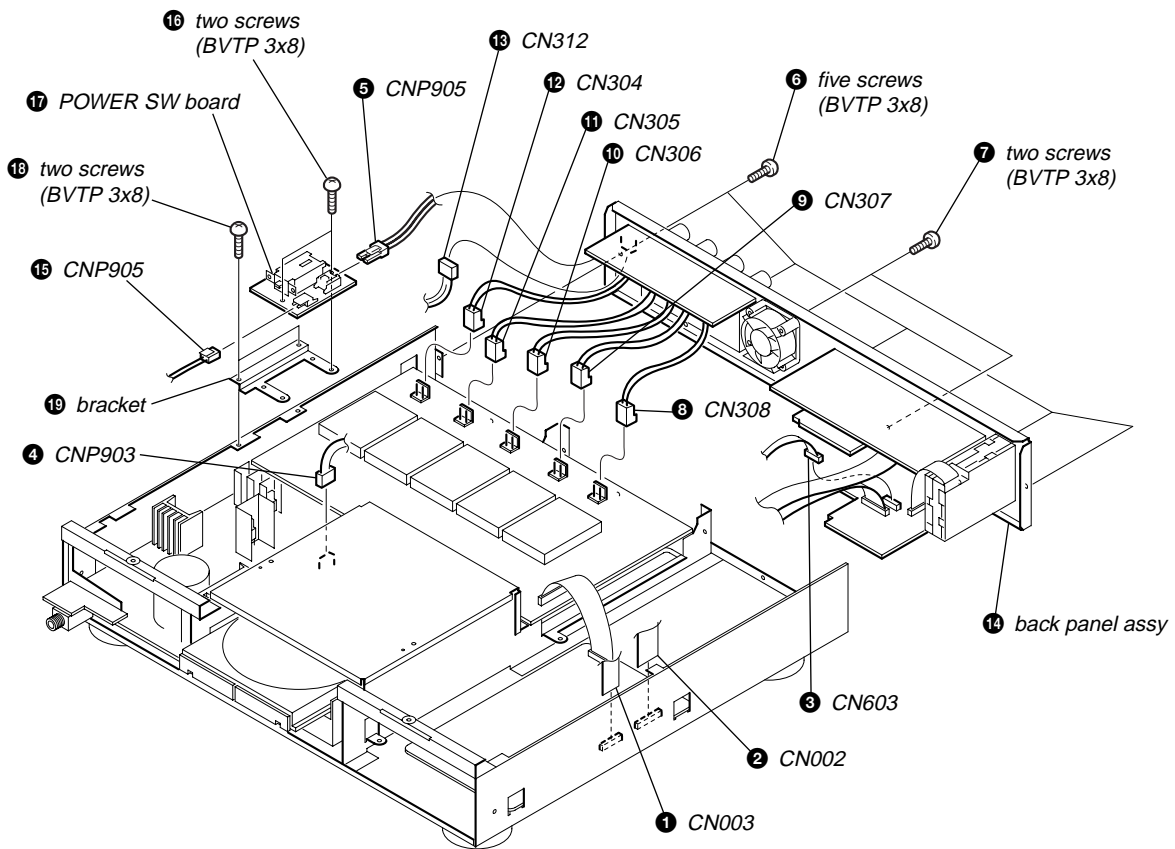
3-2. LOADING PANEL ASSY



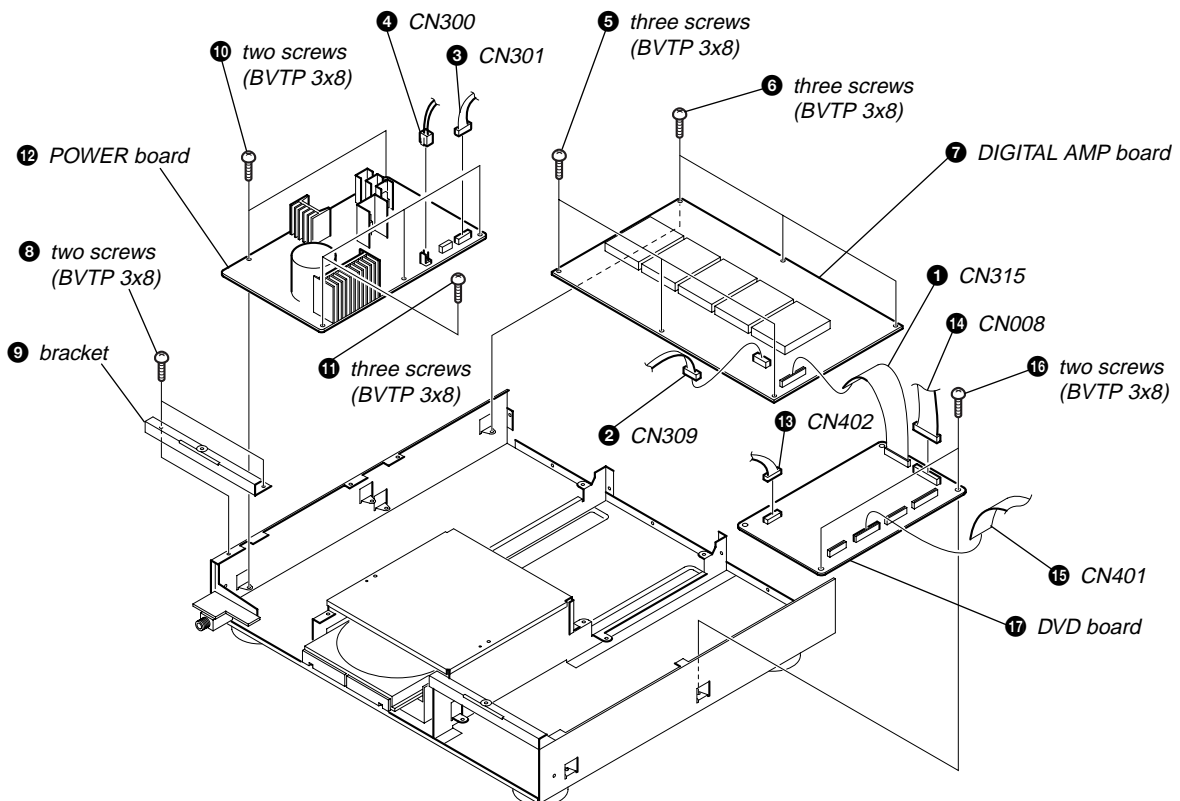
3-3. FRONT PANEL ASSY



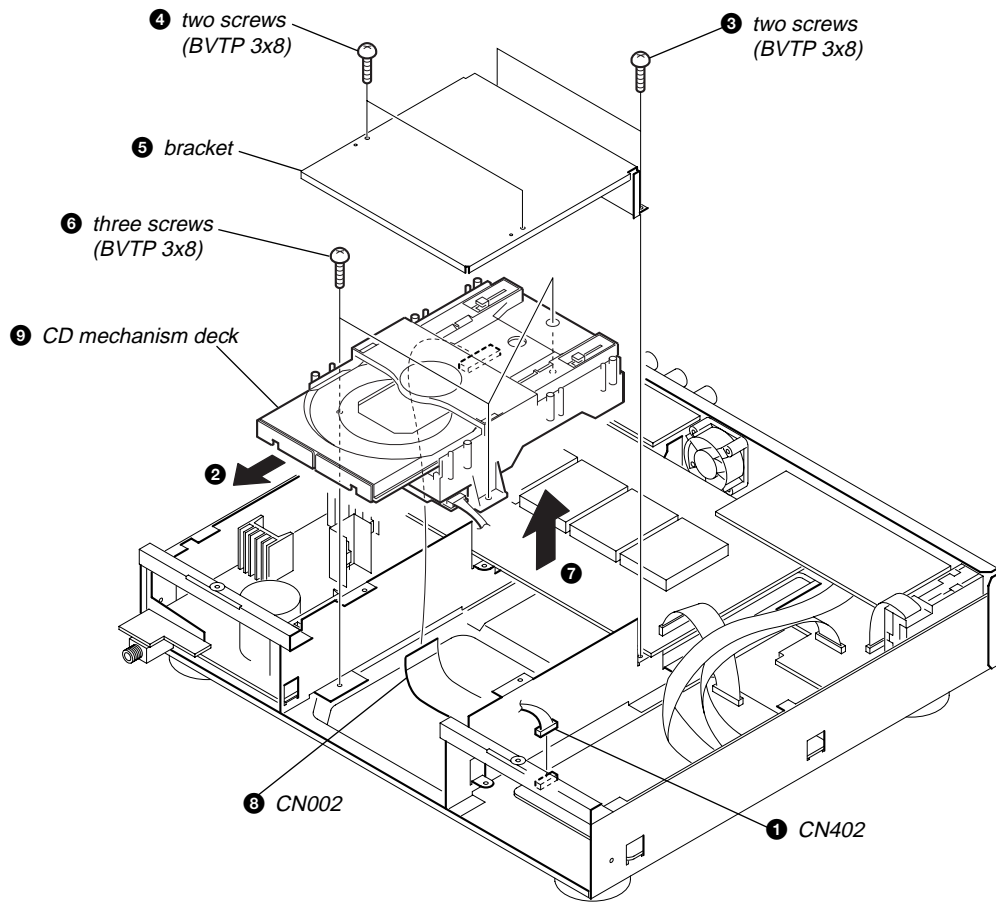
3-4. BACK PANEL ASSY, POWER SW BOARD



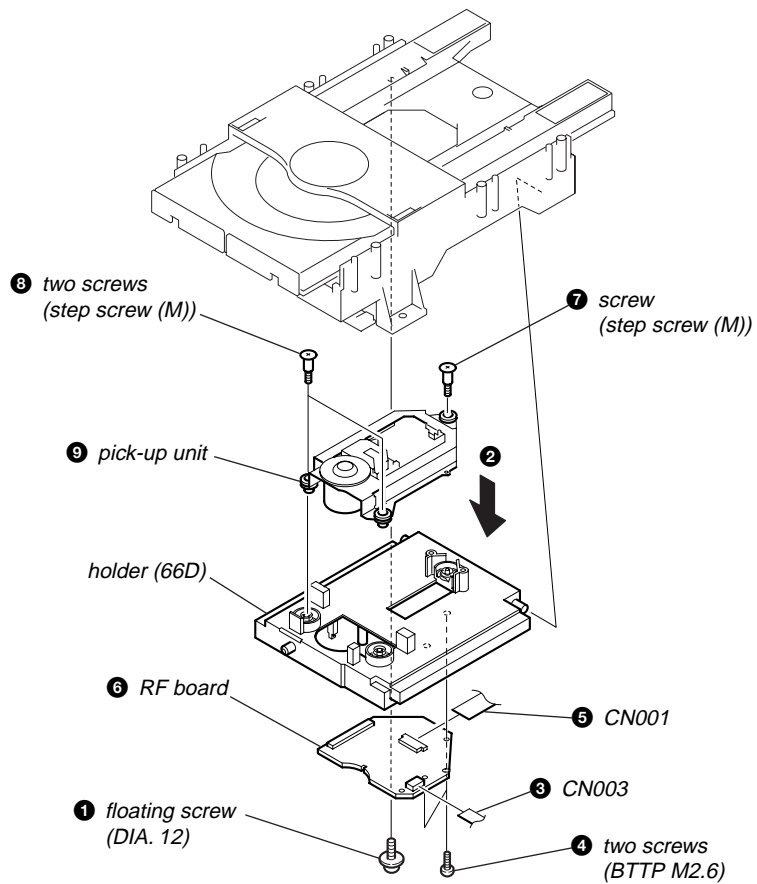
3-5. DIGITAL AMP BOARD, POWER BOARD, DVD BOARD



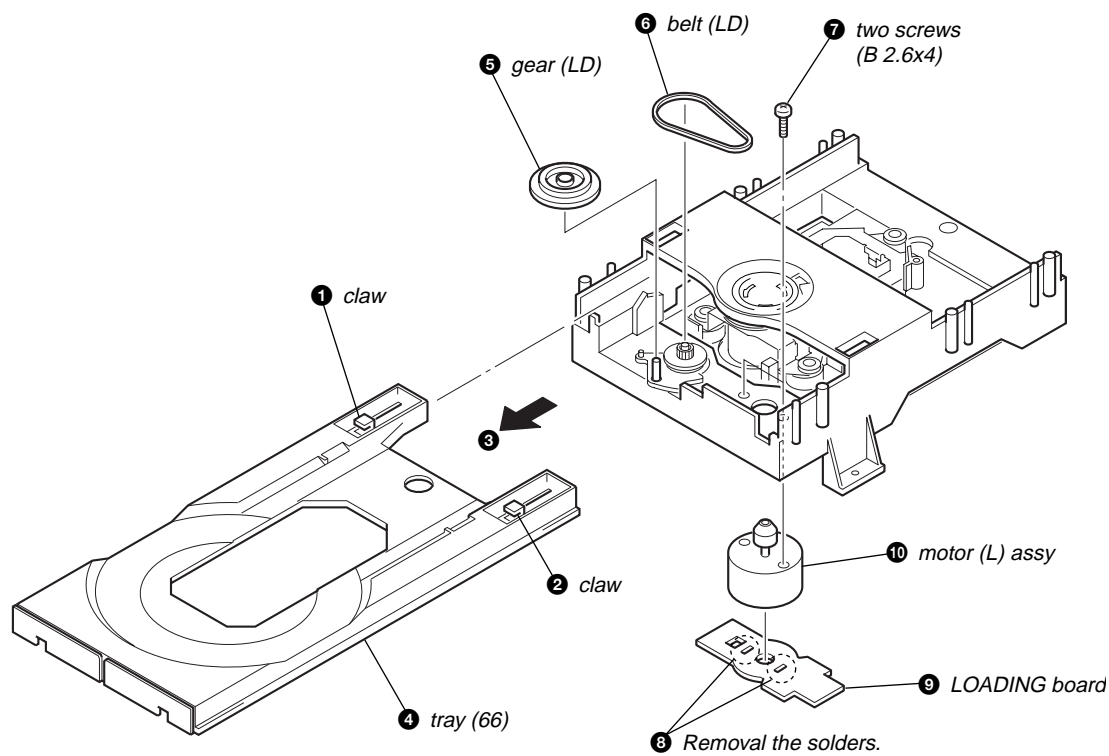
3-6. MECHANISM DECK



3-7. PICK-UP UNIT



3-8. BELT (LD), LOADING BOARD, MOTOR (L) ASSY



SECTION 4 TEST MODE

[GENERAL DESCRIPTION]

The Test Mode allows you to make diagnosis and adjustment easily using the remote commander and monitor TV. The instructions, diagnostic results, etc. are given on the on-screen display (OSD).

[STARTING TEST MODE]

1. Press the [POWER] button to turn the power on, and set the function to DVD.
2. While pressing the [MUTE] and [AUTO DEC] button, turn the [VOLUME] knob clockwise to enter the test mode.
3. It displays "TEST MODE" on the fluorescent indicator tube, and displays the Test Mode Menu on the monitor screen as follows. (At the bottom of the menu screen, the model name and revision number are displayed)

```

Test Mode Menu

0. Syscon Diagnosis
1. Drive Auto Adjustment
2. Drive Manual Operation
3. Mecha Aging
4. Emergency History
5. Version Information
6. Video Level Adjustment

Exit: POWER Key

Model      :DAV-Cxxx
Revision   :x.xxx
    
```

4. To execute each function, select the desired menu and press its number on the remote commander (RM-SS880J).
5. To release from test mode, press the [POWER] button and turn the power off.

[OPERATING TEST MODE]

0. SYSCON DIAGNOSIS

The same contents as board detail check by serial interface can be checked from the remote commander operation.

On the Test Mode Menu screen, press [10/0] key on the remote commander, and the following Check Menu will be displayed.

```

### Syscon Diagnosis ###

Check Menu

0. Quit
1. All
2. Version
3. EEPROM
4. SPIO
5. SD Bus
6. Video
7. Audio
    
```

0-0. Quit

Quit the Syscon Diagnosis and return to the Test Mode Menu.

0-1. All (All items continuous check)

This menu checks all diagnostic items continuously. Normally, all items are checked successively one after another automatically unless an error is found, but at a certain item that requires judgment through a visual check to the result, the following screen is displayed for the key entry.

• Example display

```

### Syscon Diagnosis ###

Diag All Check
No.2 Version

2-3. ROM Check Sum
Check Sum = 2320

Press NEXT Key to Continue
Press PREV Key to Repeat
    
```

For the ROM Check, the check sum calculated by the Syscon is output, and therefore you must compare it with the specified value for confirmation.

Following the message, press the [NEXT ▶▶] button to go to the next item, or press the [◀◀ PREV] button to repeat the same operation again.

To quit the diagnosis and return to Check Menu screen, press the [RETURN] key on the remote commander to display Check Menu.

• Error occurred

If an error occurred, the diagnosis is suspended and error is displayed. Press the [RETURN] key on the remote commander to quit the diagnosis, or press the [◀◀ PREV] button to repeat the same check where an error occurred, or press the [NEXT ▶▶] button to continue the check from the item next to faulty item.

General Description of Checking Method

Selecting 2 and subsequent items calls the submenu screen of each item. And selecting 2 and subsequent items executes respective menus and outputs the results.

For the contents of each submenu, see "Check Items List" as below.

Check Items List:

- 0-2. Version
 - 0-2-1. All
 - 0-2-2. Revision
 - 0-2-3. ROM Check Sum
 - 0-2-4. Model Type
 - 0-2-5. Region
- 0-3. EEPROM Check
 - 0-3-1. Sampling Check
 - 0-3-2. Detail Check
- 0-4. GP I/O Check
- 0-5. SD Bus Check
- 0-6. Video Check
- 0-7. Audio Check

0-2. Version

0-2-2. Revision

The revision number of ROM (IC204) that the program for the DVD system processor (IC206) is stored. (4 digits hexadecimal number)

0-2-3. ROM Check Sum

The revision number of ROM (IC204) that the program for the DVD system processor (IC206) is stored.

0-2-4. Model Type

Model name is displayed. (DAV-C770 or DAV-C990)

- 0-2-5. Region
Model destination code is displayed. (2 digits number)

0-3. EEPROM Check

- 0-3-1. Sampling Check
EEPROM check at every 64 words.
It compares read data with write data of each address. When there are discrepancies between two data, it displays error.

- 0-3-2. Detail Check
EEPROM check at every 1 word.
It compares read data with write data of each address. When there are discrepancies between two data, it displays error.

0-4. GP I/O Check

Pull up/down setting check of the DVD system processor (IC206) pin 150, 151 and 154 (for clock setting port).

0-5. SD Bus Check

SD bus data check between DVD decoder (IC701) and D-RAM (IC706).

0-6. Video Check

Output the color bars for video level adjustment.

0-7. Audio Check

Output the test signal (1kHz sine wave) for 5.1 CH test.

1. DRIVE AUTO ADJUSTMENT

On the Test Mode Menu screen, press the [1] key on the remote commander, and the Adjustment Menu will be displayed.

```

## Drive Auto Adjustment ##
      Adjustment Menu

0. ALL
1. DVD-SL
2. CD
3. DVD-DL

Exit: RETURN
    
```

Normally, [10/0] is selected to adjust DVD (single layer), CD and DVD (dual layer) in this order. But, individual items can be adjusted for the case where adjustment is suspended due to an error. In this mode, the adjustment can be made easily through the operation following the message displayed on the screen. The disc used for adjustment must be the one specified for adjustment.

1-0. ALL

Press the [10/0] key on the remote commander, and the servo set data in EEPROM will be initialized. Then, 1. DVD-SL disc, 2. CD disc and 3. DVD-DL disc are adjusted in this order. Each time one disc was adjusted, it is ejected. Replace it with the specified disc following the message. You can finish the adjustment by pressing the [RETURN] button on the remote commander.

Note: During adjustment of each disc, the measurement for disc type judgment is made. As automatic adjustment does not judge the disc type unlike conventional models, take care not to insert wrong type discs. Also, do not give a shock during adjustment.

1-1. DVD-SL (single layer)

Press the [1] key on the remote commander and insert a DVD single layer disc following the message. Then the adjustment will be made through the steps below, then adjusted values will be written to the EEPROM.

DVD Single Layer Disc Adjustment Steps:

1. Sled tilt reset
2. Disc check memory SL
3. Wait 300 msec
4. Set disc type SL
5. LD on
6. Spindle start
7. Wait 1 sec
8. Focus servo on 0
9. Auto track offset adjust
10. CLVA on
11. Wait 500 msec
12. Tracking on
13. Wait 1 sec
14. Sled on
15. Check CLV on
16. Auto LFO adjust
17. Auto focus offset adjust
18. Auto tilt position adjust
19. Auto focus gain adjust
20. Auto focus offset adjust
21. EQ boost adjust
22. Auto loop filter offset adjust
23. Auto track gain adjust
- Search Check
24. 32 track jump forward
25. 32 track jump reverse
26. 500 track jump forward
27. 500 track jump reverse
28. All servo stop
29. EEP copy loop filter offset

1-2. CD

Press the [2] key on the remote commander and insert a CD disc following the message. Then the adjustment will be made through the steps below, then adjusted values will be written to the EEPROM.

CD Adjustment Steps

1. Sled tilt rest
2. Disc check memory CD
3. Wait 500 msec
4. Set disc type CD
5. LD on
6. Spindle start
7. Wait 500 msec
8. Focus servo on 0
9. Auto track offset adjust
10. CLVA on
11. Wait 500 msec
12. Tracking on
13. (TC display start)
14. Wait 1 sec
15. Jitter display start
16. Sled ON
17. Check CLV on
18. Auto loop filter offset adjust
19. Auto focus offset adjust
20. Auto focus gain adjust
21. Auto focus offset adjust
22. EQ boost adjust
23. Auto LFO Adjust

- 24. Auto track gain adjust
- Search Check
 - 25. 32Tj forward
 - 26. 32Tj reverse
 - 27. 500Tj forward
 - 28. 500Tj reverse
- 29. All servo stop

1-3. DVD-DL (dual layer)

Press the [3] key on the remote commander and insert a DVD dual layer disc following the message. Then the adjustment will be made through the steps below, then adjusted values will be written to the EEPROM.

DVD Dual Layer Disc Adjustment Steps:

- 1. Sled tilt reset
- 2. Disc check memory DL
- 3. Wait 500 msec
- 4. Set disc type DL
- 5. LD on
- 6. Spindle start
- 7. Wait 1 sec
- Layer 1 Adjust
 - 8. Focus servo on 0
 - 9. Auto track offset adjust
 - 10. CLVA on
 - 11. Wait 500 msec
 - 12. Tracking on
 - 13. Wait 500 msec
 - 14. Sled on
 - 15. Check CLV lock
 - 16. Auto loop filter offset adjust, Auto focus adjust
 - 17. Auto focus gain adjust
 - 18. Auto focus offset adjust
 - 19. EQ boost adjust
 - 20. Auto loop filter offset adjust
 - 21. Auto Track Gain Adjust
- Search Check
 - 22. 32 track jump forward
 - 23. 32 track jump reverse
 - 24. 500 track jump forward
 - 25. 500 track jump reverse

Layer 0 Adjust

- 26. Focus jump (L1 → L0)
- 27. Auto track offset adjust L0
- 28. CLVA on
- 29. Wait 500 msec
- 30. Tracking on
- 31. Wait 500 msec
- 32. Sled on
- 33. Check CLV lock
- 34. Auto focus filter offset adjust
- 35. Auto Focus Adjust
- 36. Auto focus gain adjust
- 37. Auto focus offset adjust
- 38. EQ boost adjust
- 39. Auto Loop Filter Offset
- 40. Auto track gain adjust

Search Check

- 41. 32 track jump forward
- 42. 32 track jump reverse
- 43. 500 track jump forward
- 44. 500 track jump reverse

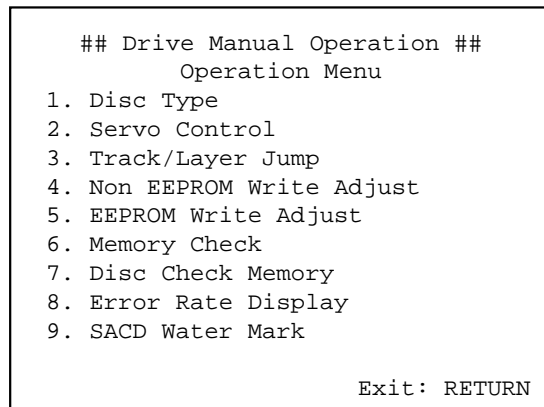
Layer Jump Check

- 45. Layer jump (L0 ? L1)
- 46. Layer jump (L1 ? L0)
- 47. All servo stop

2. DRIVE MANUAL OPERATION

Note: This mode is used for design, and not used in service fundamentally.

On the Test Mode Menu screen, press the [2] key on the remote commander, and the Operation Menu will be displayed. For the manual operation, each servo on/off control and adjustment can be executed manually.



In using the manual operation menu, take care of the following points. These commands do not provide protection, thus requiring correct operation. The sector address or time code field is displayed when a disc is loaded.

Note:

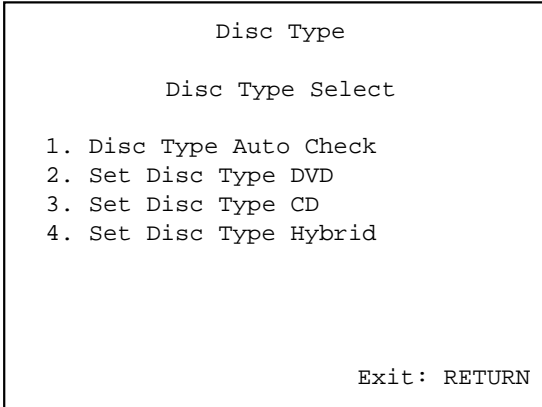
- 1. Set correctly the disc type to be used on the Disc Type screen.
- 2. In case of an alarm, immediately press the [STOP] button to stop the servo operation, and press the [POWER] button to turn the power off.

Basic operation:

(controllable from front panel or remote commander)

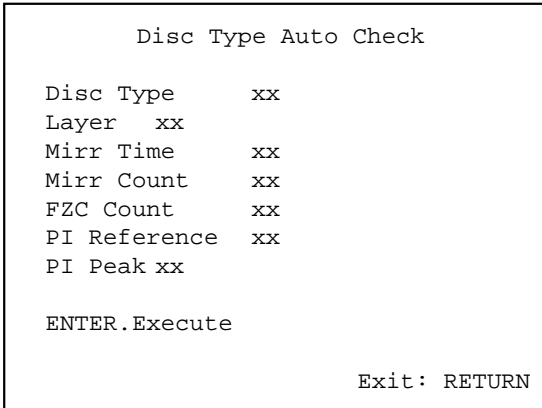
- [POWER] : Power OFF (release the Test Mode)
- [STOP] : Servo stop
- [EJECT] (DISC1 to 4) : Stop and eject/Loading
- [RETURN] : Return to Operation Menu or Test Mode Menu
- [PREV], [NEXT] : Transition between sub modes of menu
- [1] to [9], [10/0] : Selection of menu items
- Cursor [DOWN]/[UP] : Increase/Decrease in manually adjusted value

2-1. Disc Type



2-1-1. Disc Type Auto Check

- 1) Press the **[1]** key on the remote commander to display the Disc Type Auto Check screen.
- 2) Insert a disc and press the **[ENTER]** key on the remote commander.
- 3) It judges the type of inserted disc automatically and displays the disc type and so on as below.



- Disc Type : CD, DVD or Hybrid (SACD)
 Layer : SINGLE, DUAL or HYBRID
 Mirr Time : Mirror time of between disc surface and record surface when disc type judgment. (hexadecimal number)
 Mirr Count : The number of times which mirror counts between disc surface and record surface when disc type judging. (hexadecimal number)
 FZC Count : The number of times which focus zero cross points of each layer when lens down. (hexadecimal number)
 PI Reference : The average of PI reference voltage. (hexadecimal number)
 PI Peak : PI peak level voltage. It performs only when disc type judgment is successful. (hexadecimal number)

2-1-2. Disc Type DVD

It sets up so that it may judge as a disc type of specification of the disc with which the set was inserted.

- [1]**: DVD single layer disc (12 cm)
- [2]**: DVD dual layer disc (0 layer, 12 cm)
- [3]**: DVD dual layer disc (1 layer, 12 cm)
- [4]**: DVD-RW disc (12 cm)
- [5]**: DVD single layer disc (8 cm)
- [6]**: DVD dual layer disc (0 layer, 8 cm)
- [7]**: DVD dual layer disc (1 layer, 8 cm)

2-1-3. Disc Type CD

It sets up so that it may judge as a disc type of specification of the disc with which the set was inserted.

- [1]**: CD disc (normal speed, 12 cm)
- [2]**: CD disc (double speed, 12 cm)
- [3]**: CD disc (normal speed, 8 cm)
- [4]**: CD disc (double speed, 8 cm)
- [5]**: CD-RW disc (normal speed, 12 cm)
- [6]**: CD-RW disc (double speed, 12 cm)
- [7]**: CD-RW disc (normal speed, 8 cm)
- [8]**: CD-RW disc (double speed, 8 cm)

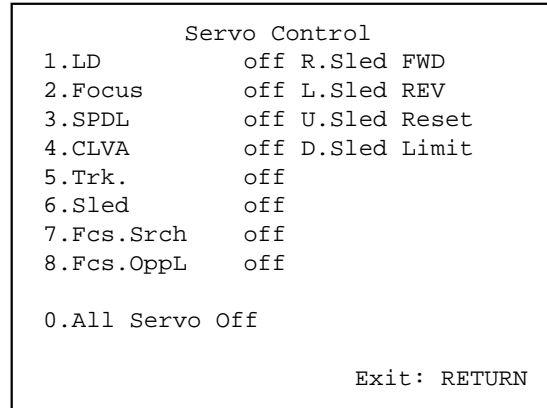
2-1-4. Disc Type Hybrid

It sets up so that it may judge as a disc type of specification of the disc with which the set was inserted.

- [1]**: SACD Hybrid disc (SACD layer, 12 cm)
- [2]**: SACD Hybrid disc (CD layer, normal speed, 12 cm)
- [3]**: SACD Hybrid disc (CD layer, double speed, 12 cm)
- [4]**: SACD Hybrid disc (SACD layer, 8 cm)
- [5]**: SACD Hybrid disc (CD layer, normal speed, 8 cm)
- [6]**: SACD Hybrid disc (CD layer, double speed, 8 cm)

2-2. Servo Control

Note: Be sure to perform the disc type setup before performing this item.

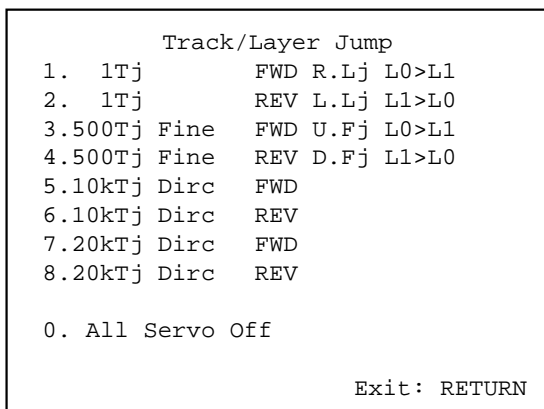


On this screen, the servo on/off control necessary for replay is executed. Normally, turn on each servo from 1 sequentially and when CLVA is turned on, the usual trace mode becomes active. In the trace mode, DVD sector address or CD time code is displayed. This is not displayed where the spindle is not locked.

The spindle could run overriding the control if the spindle system is faulty or RF is not present. In such a case, do not operate CLVA.

- [1]** LD : Turn on/off the laser.
- [2]** Focus : Search the focus and turn on the focus.
- [3]** SPDL : Turn on/off the spindle.
- [4]** CLVA : Turn on/off normal servo of spindle servo.
- [5]** Trk. : Turn on/off the tracking servo.
- [6]** Sled : Turn on/off the sled servo.
- [7]** FCS. Srch : Turn on/off the focus search.
- [8]** FCS. OppL : Turn on/off the focus search to another layer of designated layer in Disc Type setting. (dual layer disc only)
- [10/0]** : All servo off.
- [R]** Sled FWD (right cursor) : Move the sled forward.
- [L]** Sled REV (left cursor) : Move the sled reverse.
- [U]** Sled FWD (up cursor) : Reset the sled.
- [D]** Sled REV (down cursor) : Limit in the sled.

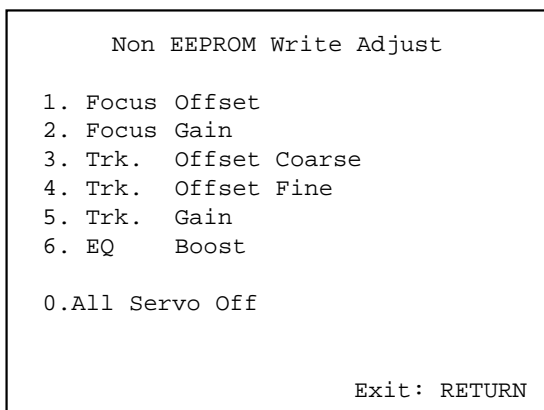
2-3. Track/Layer Jump



On this screen, track jump, etc. can be performed. Only for the DVD dual layer disc, the focus jump and layer jump are displayed in the right field

- [1] 1Tj FWD : 1 track jump forward.
- [2] 1Tj REV : 1 track jump reverse.
- [3] 500Tj FWD: 500 track jump (fine search)forward.
- [4] 500Tj REV : 500 track jump (fine search) reverse.
- [5] 10kTj FWD: 10k track jump (direct search) forward.
- [6] 10kTj REV : 10k track jump (direct search) reverse.
- [7] 20kTj FWD: 20k track jump (direct search) forward.
- [8] 20kTj REV : 20k track jump (direct search) reverse.
- [10/0] : All servo off.

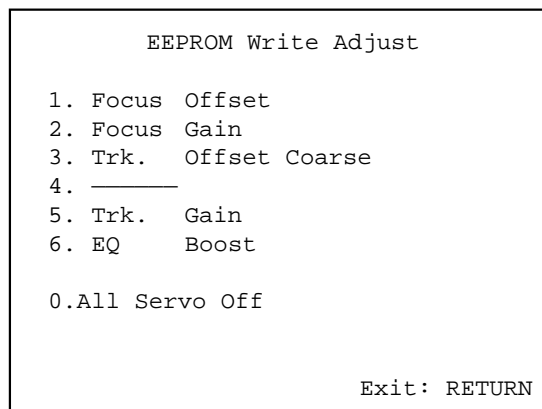
2-4. Non EEPROM Write Adjust



On this screen, each item can be adjusted manually. Select the desired number [1] to [10/0] from the remote commander, and current setting for the selected item will be displayed, then increase or decrease numeric value with the [↑] key or [↓] key. This value is stored in the EEPROM. If CLV has been applied, the jitter is displayed for reference for the adjustment.

- [1] Focus Offset : Adjusts focus offset.
- [2] Focus Gain : Adjusts focus gain.
- [3] TRK. Offset : Adjusts tracking offset of the RF amp (IC001) side.
- [4] TRK. Offset : Adjusts tracking offset of the DSP (IC401) side.
- [5] TRK. Gain : Adjusts track gain.
- [6] EQ Boost : Adjusts amount of boost of equalizer.
- [10/0] : All servo off.

2-5. EEPROM Write Adjust

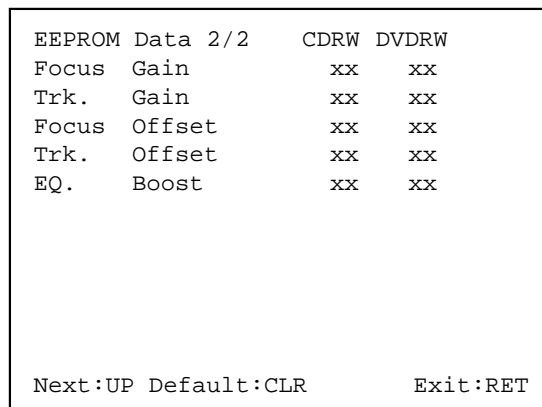
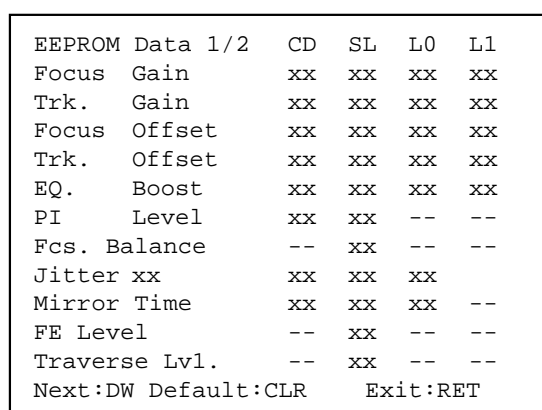


On this screen, each item can be adjusted automatically. Select the desired number [1] to [10/0] from the remote commander, and selected item is adjusted automatically.

- [1] Focus Offset : Adjusts focus offset.
- [2] Focus Gain : Adjusts focus gain.
- [3] TRK. Offset : Adjusts tracking offset of the RF amp (IC001) side.
- [5] TRK. Gain : Adjusts track gain.
- [6] EQ Boost : Adjusts amount of boost of equalizer.
- [10/0] : All servo off.

2-6. Memory Check

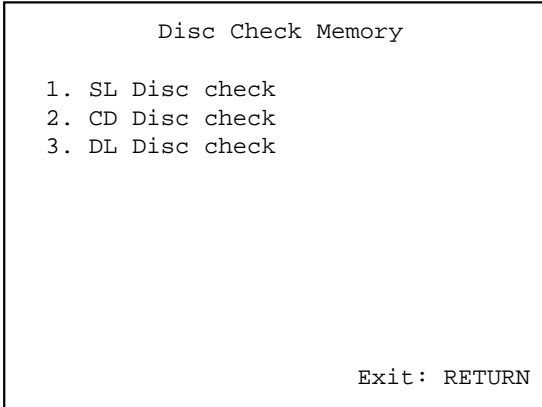
Display images are shown as follows, and all two screens are able to switch by the [↑] key (UP) or [↓] key (DW).



On this screen, current servo adjusted data stored in the EEPROM are displayed. The adjusted data are initialized by pressing the [CLEAR] key, but be careful that they are not recoverable after initialization.

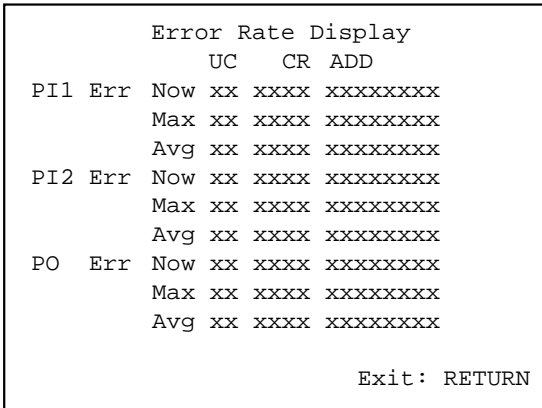
Before clearing the adjusted data, make a note of the set data. This screen will also appear if [0]-All is selected in the Drive Auto Adjustment. In this case, default setting cannot be made.

2-7. Disc Check Memory



On this screen, measure the mirror time of chucked disc, and write to the EEPROM.

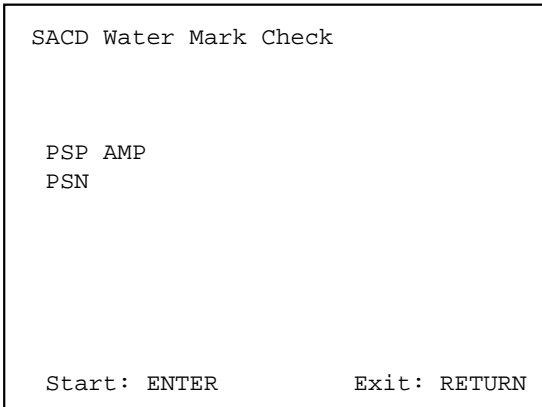
2-8. Error Rate Display



On this screen, measure and display the error rate.

UC : Incorrect value
 CR : Correct value
 Add : Address

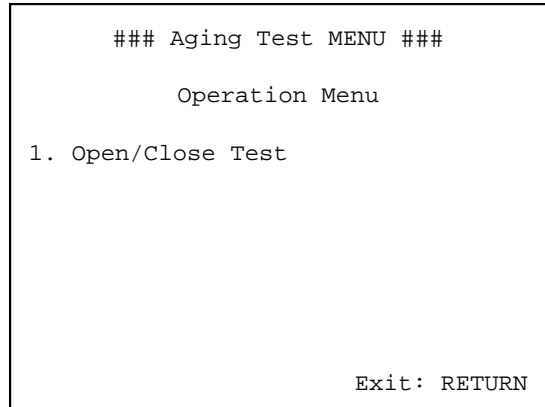
2-9. SACD Water Mark Check



On this screen, measure the PSP AMP value and PSN value of SACD water mark.

3. MECHA AGING

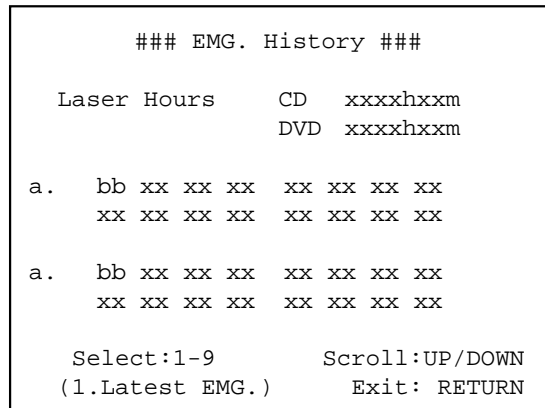
On the Test Mode Menu screen, selecting [3] executes the aging of the mechanism deck.



- 1) On the Aging Test MENU screen, press the [1] key on the remote commander to display the Open/Close Test screen.
- 2) Insert discs and press the [ENTER] key on the remote commander.
- 3) It starts the aging.
 During aging, the disc number, operating status and repeat cycle are displayed. Aging can be aborted at any time by pressing the [■] key. After the operation is stopped, press the [■] key or [RETURN] key aging to return to the Aging Test MENU.

4. EMERGENCY HISTORY

On the Test Mode Menu screen, selecting [4] displays the information such as servo emergency history. The history information from last 1 up to 10 can be scrolled with the [↑] key or [↓] key. Also, specific information can be displayed by directly entering that number with ten keys.



xxxxhxxm: The laser on total hours. Data below minutes are omitted.
 a. : Error number.
 bb : Error code.
 xx : Not used.

• Clearing History Information

Clearing laser hours:

Press the [DVD DISPLAY] and [CLEAR] keys in this order. Then both CD and DVD data are cleared.

Clearing emergency history:

Press the [DVD TOP MENU] and [CLEAR] keys in this order.

Initializing set up data:

Press [DVD MENU] and [CLEAR] keys in this order.

The data have been initialized when "Set Up Initialized" message is displayed. The EMG. History screen will be restored soon.

• Code list of Emergency History

- 10: Communication to RF AMP (IC001) failed.
- 11: Each servo for focus, tracking, and spindle is unlocked.
- 12: Check sum error of EEPROM (IC203).
- 14: Communication to servo DSP (IC401) failed, or servo DSP decoder (IC801) is faulty.
- 15: Communication to DVD decoder (IC701) failed, or DVD decoder (IC801) is faulty.
- 16: Communication to DSD decoder (IC801) failed, or DSD decoder (IC801) is faulty.
- 20: Initialization of sled servo failed. It is not placed in the initial position.
- 23: Sled servo operation error.
- 24: Made a request to move the sled servo to wrong position.
- 30: Tracking balance adjustment error.
- 31: Tracking gain adjustment error.
- 33: Focus bias adjustment error.
- 34: Focus gain adjustment error.
- 35: Equalizer adjustment error.
- 40: Focus servo does not operate.
- 41: With a DVD dual layer disc, focus jump failed.
- 50: CLV (spindle) servo does not operate.
- 51: Spindle does not stop.
- 60: Made a request to seek nonexistent address.
- 61: Seek error of retry more than regulated times.
- 70: Control data could not be read.
- 80: Disc reading failed.

5. MECHA ERROR HISTORY

On the Test Mode Menu screen, selecting **[5]** displays the information of mechanism deck error history.

The history information from last 1 up to 8 can be scrolled with the **[↑]** key or **[↓]** key. Also, specific information can be displayed by directly entering that number with ten keys.

```

### Mecha Error History ###

1. aa bb cc dd xx xx xx xx
2. aa bb cc dd xx xx xx xx
3. aa bb cc dd xx xx xx xx
4. aa bb cc dd xx xx xx xx
5. aa bb cc dd xx xx xx xx
6. aa bb cc dd xx xx xx xx
7. aa bb cc dd xx xx xx xx
8. aa bb cc dd xx xx xx xx

                                Scroll:UP/DOWN
(1.Latest Err.)                Exit: RETURN
    
```

- aa : The error in the midst of initializing the mechanism deck.
- bb : The error in the midst of loading operation.
- cc : The error in the midst of up/down the stocker.
- dd : The error in the midst of switching the mechanism deck mode.
- xx : Not used.

• Error code (aa)

- FF : Complete the initializing. (normal operation)
- 11 : Stocker movement (to chucking position) failing in the midst of initializing the mechanism deck.
- 12 : Stocker movement (to chucking position) failing in the midst of initializing the mechanism deck.
- 1x : Initializing the mechanism deck.
- 2x : Initializing the mechanism deck.
- 3x : Initializing the mechanism deck.
- 41 : Disc eject failing in the midst of initializing the mechanism deck.
- 4x : Initializing the mechanism deck.
- 50 : Disc eject failing in the midst of initializing the mechanism deck.
- 5x : Initializing the mechanism deck.
- A2 : Disc eject failing in the midst of initializing the mechanism deck.
- Ax : Initializing the mechanism deck.
- D3 : Disc eject failing in the midst of initializing the mechanism deck.
- Dx : Initializing the mechanism deck.
- Ex : Initializing the mechanism deck.

• Error code (bb)

- 00 : Initializing the mechanism deck.
- 10 : Retry over of eject and loading.
- 30 : Open operation in no disc status.
- 60 : Retry over of eject and loading.
- 70 : Disc is chucking position.
- 81 : Retry failed of disc movement from chucking position to stocker.
- 83 : Retry preparation failed of disc movement from chucking position to stocker.
- 90 : Disc is stored in the stocker.
- A1 : Retry failed of disc movement from stocker to chucking position.
- A3 : Retry preparation failed of disc movement from stocker to chucking position.
- B0 : Just before the release operation.
- B1 : Retry failed of the release operation.

• Error code (cc)

- 10 : Under a stop.
- 22 : Retry preparation failed.
- 23 : Retry failed.

• Error code (dd)

- 10 : Under a stop.
- 22 : Retry preparation failed.
- 23 : Retry failed.

SECTION 5 DIAGRAMS

5-1. IC PIN FUNCTION DESCRIPTION

• DVD BOARD IC301 CXP973064-233R (MECHANISM CONTROLLER)

Pin No.	Pin Name	I/O	Pin Description
1	EEP SO	O	Not used. (Open)
2	SDEN	O	Serial data enable signal output to DVD/CD RF amplifier
3	DOCTRL/ ISBTEST	O	Digital out on/off control signal output to the digital signal processor “L”: digital out off, “H”: digital out on
4	EEP WC	O	Not used. (Open)
5	EEP SI	I/O	Two-way data bus with the EEPROM
6	EEP RDY	I	EEPROM ready signal input from the DVD decoder
7	FCS JMP 1	O	Focus jump 1 signal output to the motor/coil driver
8	FCS JMP 2	O	Focus jump 2 signal output to the motor/coil driver
9	SENS CD	I	Internal status (SENSE) signal input from the digital signal processor
10	LOAD +	O	Loading motor drive signal (loading in direction) output terminal Not used. (Open)
11	LOAD –	O	Loading motor drive signal (loading out direction) output terminal Not used. (Open)
12	XCS DVD	O	Chip select signal output to the DVD decoder
13	VSS	—	Ground terminal (digital system)
14 to 21	D0 to D7	I/O	Two-way data bus with the DVD decoder
22	INIT0 DVD	I	Interrupt signal input from the DVD decoder
23	INIT1 DVD	I	Interrupt signal input from the DVD decoder
24	FCOMP H	O	Serial data transfer clock signal output to the DSD decoder
25	FCOMP L	O	Reset signal output to the DVD decoder “L”: reset
26	SCOR	I	Subcode sync (S0+S1) detection signal input from the digital signal processor
27	LAT CD	O	Serial data latch pulse signal output to the digital signal processor
28	LD ON	O	Laser diode on/off control signal output to the DVD/CD RF amplifier “L”: laser diode off, “H”: laser diode on
29	MIRR	I	Mirror signal input from the digital signal processor
30	COUT CD	I	Numbers of track counted signal input from the digital signal processor
31	INLIM	I	Detection signal input from limit in switch The optical pick-up is inner position when “H”
32	CS ZIVA	O	Chip select signal output to the DVD system processor
33	SI ZIVA	I	Serial data input from the DVD system processor
34	SO ZIVA	O	Serial data output to the DVD system processor
35	SCK ZIVA	O	Serial data transfer clock signal output to the DVD system processor
36	DRVIRQ	O	Interrupt request signal output to the DVD system processor
37	DRVRDY	O	Ready signal output to the DVD system processor
38	$\overline{\text{RST}}$	I	System reset signal input from the DVD system processor “L”: reset
39	VSS	—	Ground terminal (digital system)
40	XTAL	I	System clock input terminal (20 MHz)
41	EXTAL	O	System clock output terminal (20 MHz)
42	VDD	—	Power supply terminal (+3.3 V) (digital system)
43, 44	SLED A, SLED B	O	Sled motor drive signal output
45	SCK DSD	O	Output terminal for offset adjustment of APEO
46	SDOUT DSD	O	Serial data output to the DSD decoder
47	SDIN DSD	I	Serial data input from the DSD decoder
48	$\overline{\text{READY DSD}}$	I	Ready signal input from the DSD decoder “L”: ready
49	DATA CD	O	Serial data output to the digital signal processor
50	CLOK CD	O	Serial data transfer clock signal output to the digital signal processor
51	XMSLAT	O	Serial data latch pulse signal output to the DSD decoder
52	SQSO	I	Subcode Q data input from the digital signal processor

Pin No.	Pin Name	I/O	Pin Description
53	MUTE DSD	O	Muting on/off control signal output to the DSD decoder "H": muting on
54	SQCK	O	Subcode Q data reading clock signal output to the digital signal processor
55	VSS	—	Ground terminal (digital system)
56	TRAY IN	I	Disc tray in detection signal input terminal Not used. (Fixed at "L" in this set.)
57	TRAY OUT	I	Disc tray out detection signal input terminal Not used. (Fixed at "L" in this set.)
58	GFS DVD	I	Guard frame sync signal input from the DVD decoder
59	MUTE CD	O	Muting on/off control signal output to the digital signal processor "H": muting on
60	MUTE 2D	O	Muting on/off control signal output to the motor/coil driver "H": muting on
61	SLED	I	Sled motor servo drive PWM signal input terminal
62	FG	I	Spindle motor control signal input
63	SP ON	O	Muting on/off control signal output to the motor/coil driver "H": muting on
64	JIT	I	Jitter signal input
65	TE	I	Tracking error signal input from the DVD/CD RF amplifier
66	PI	I	Pull in signal input from the DVD/CD RF amplifier
67	FE	I	Focus error signal input from the DVD/CD RF amplifier
68	AVSS	—	Ground terminal (for A/D converter)
69	AVREF	I	Reference voltage input terminal (for A/D converter)
70	AVDD	—	Power supply terminal (+3.3 V) (for A/D converter)
71	GFS CD	I	Guard frame sync signal input from the digital signal processor
72	SCLK CD	O	SENSE serial data reading clock signal output to the digital signal processor
73	TSD M	O	Thermal shut down signal output to the motor/coil driver
74	FOK CD	I	Focus OK signal input from the digital signal processor
75	LOCK CD	I	GFS is sampled by 460 Hz "H" input when GFS is "H"
76	LDSEL	O	Laser diode selection signal output
77	SACD/DVD	O	SACD/DVD selection signal output "L": DVD, "H": SACD
78	I2C SIO	I/O	Communication data bus with the DVD system processor and system controller
79	I2C SCL	I/O	Communication data reading clock signal input or transfer clock signal output with the DVD system processor and system controller
80	RXD	I	Serial data input from the RS-232C (for check)
81	TXD	O	Serial data output to the RS-232C (for check)
82	SDCLK RF	O	Serial data transfer clock signal output to the DVD/CD RF amplifier
83	SDATA RF	I/O	Two-way data bus with the DVD/CD RF amplifier
84	XWR	O	Write strobe signal output to the DVD decoder
85	XRD	O	Read strobe signal output to the DVD decoder
86	(PWE)	—	Not used. (Fixed at "H" in this set.)
87	VDD	—	Power supply terminal (+3.3 V) (digital system)
88	VSS	—	Ground terminal (digital system)
89 to 96	A0 to A7	O	Address signal output to the DVD decoder
97	A8	O	Motor/coil driver power save control signal output terminal
98	XDRST	O	Reset signal output to the digital signal processor and DSD decoder "L": reset
99	EEP WP	O	Write protect signal output to the EEPROM
100	EEP CLK	O	Clock signal output to the EEPROM

• DVD BOARD IC401 CXD3068Q (DIGITAL SIGNAL PROCESSOR, DIGITAL SERVO PROCESSOR)

Pin No.	Pin Name	I/O	Pin Description
1	DVDD0	—	Power supply terminal (+3.3 V) (digital system)
2	XRST	I	Reset signal input from the mechanism controller “L”: reset
3	MUTE	I	Muting on/off control signal input from the mechanism controller “H”: muting on
4	DATA	I	Serial data input from the mechanism controller
5	XLAT	I	Serial data latch pulse signal input from the mechanism controller
6	CLOK	I	Serial data transfer clock signal input from the mechanism controller
7	SENS	O	Internal status (SENSE) signal output to the mechanism controller
8	SCLK	I	SENSE serial data reading clock signal input from the mechanism controller
9	ATSK	I/O	Input/output terminal for anti-shock Not used.
10	WFCK	O	Write frame clock signal output to the DVD decoder
11	RFCK	O	RFCK signal output terminal Not used. (Open)
12	XPCK	O	XPCK signal output terminal Not used. (Open)
13	GFS	O	Guard frame sync signal output to the mechanism controller
14	C2PO	O	C2 pointer signal output to the DVD decoder
15	SCOR	O	Subcode sync (S0+S1) detection signal output to the DVD decoder and mechanism controller
16	C4M	O	4.2336 MHz clock signal output terminal Not used. (Open)
17	WDCK	O	Guard subcode sync (S0+S1) detection signal output to the DVD decoder
18	DVSS0	—	Ground terminal (digital system)
19	COUT	O	Numbers of track counted signal output to the mechanism controller
20	MIRR	O	Mirror signal output to the mechanism controller
21	DFCT	I/O	Defect signal input/output terminal Not used.
22	FOK	O	Focus OK signal output to the mechanism controller
23	PWMI	I	Spindle motor external control signal input terminal Not used. (Fixed at “L” in this set.)
24	LOCK	O	GFS is sampled by 460 Hz “H” output when GFS is “H”.
25	MDP	O	Spindle motor servo drive signal output to the DVD decoder
26	SSTP	I	Detection signal input from limit in switch The optical pick-up is inner position when “H”
27	FSTO	O	2/3 divider output terminal Not used. (Open)
28	DVDD1	—	Power supply terminal (+3.3 V) (digital system)
29	SFDR	O	Sled servo drive PWM signal (+) output
30	SRDR	O	Sled servo drive PWM signal (-) output
31	TFDR	O	Tracking servo drive PWM signal (+) output
32	TRDR	O	Tracking servo drive PWM signal (-) output
33	FFDR	O	Focus servo drive PWM signal (+) output
34	FRDR	O	Focus servo drive PWM signal (-) output
35	DVSS1	—	Ground terminal (digital system)
36	TEST	I	Input terminal for the test
37	TES1	I	Input terminal for the test
38	VC	I	Middle point voltage (+1.65 V) input terminal
39	FE	I	Focus error signal input from the DVD/CD RF amplifier
40	SE	I	Sled error signal input from the DVD/CD RF amplifier
41	TE	I	Tracking error signal input from the DVD/CD RF amplifier
42	CE	I	Middle point servo analog signal input
43	RFDC	I	RF signal input from the DVD/CD RF amplifier
44	ADIO	O	Output terminal for the test Not used. (Open)
45	AVSS0	—	Ground terminal (analog system)
46	IGEN	I	Stabilized current input for operational amplifiers

Pin No.	Pin Name	I/O	Pin Description
47	AVDD0	—	Power supply terminal (+3.3 V) (analog system)
48	ASYO	O	EFM full-swing output terminal
49	ASYI	I	Asymmetry comparator voltage input terminal
50	RFAC	I	EFM signal input from the DVD/CD RF amplifier
51	AVSS1	—	Ground terminal (analog system)
52	CLTV	I	Internal VCO control voltage input terminal
53	FILO	O	Filter output for master PLL
54	FILI	I	Filter input for master PLL
55	PCO	O	Charge pump output for master PLL
56	AVDD1	—	Power supply terminal (+3.3 V) (analog system)
57	BIAS	I	Asymmetry circuit constant current input terminal
58	VCTL	I	VCO control voltage input terminal for the wideband EFM PLL
59	V16M	O	VCO oscillation output terminal for the wideband EFM PLL Not used. (Open)
60	VPCO	O	Charge pump output terminal for the wideband EFM PLL
61	DVDD2	—	Power supply terminal (+3.3 V) (digital system)
62	ASYE	I	Asymmetry circuit on/off control signal input terminal “L”: off, “H”: on
63	MD2	I	Digital out on/off control signal input from the mechanism controller “L”: digital out off, “H”: digital out on
64	DOUT	O	Digital audio signal output to the digital audio interface IC
65	LRCK	O	L/R sampling clock signal (44.1 kHz) output to the DVD decoder
66	PCMD	O	Serial data output to the DVD decoder
67	BCK	O	Bit clock signal (2.8224 MHz) output to the DVD decoder
68	EMPH	O	“L” is output when playback disc is emphasis off “H” is output when playback disc is emphasis on Not used. (Open)
69	XTSL	I	Input terminal for the system clock frequency setting “L”: 16.9344 MHz, “H”: 33.8688 MHz Fixed at “H” in this set.
70	DVSS2	—	Ground terminal (digital system)
71	XTAI	I	System clock input terminal (33.8688 MHz)
72	XTAO	O	System clock output terminal (33.8688 MHz) Not used. (Open)
73	SOUT	O	Serial data output terminal Not used. (Open)
74	SOCK	O	Serial data reading clock signal output terminal Not used. (Open)
75	XOLT	O	Serial data latch pulse signal output terminal Not used. (Open)
76	SQSO	O	Subcode Q data output to the mechanism controller
77	SQCK	I	Subcode Q data reading clock signal input from the mechanism controller
78	SCSY	I	Input terminal for resynchronization of guard subcode sync (S0+S1) Not used.
79	SBSO	O	Subcode serial data output to the DVD decoder
80	EXCK	I	Subcode serial data reading clock signal input to the DVD decoder

• DVD BOARD IC607 CXD9617R (AUDIO DIGITAL SIGNAL PROCESSOR)

Pin No.	Pin Name	I/O	Pin Description
1	VSS	—	Ground terminal
2	XRST	I	Reset signal input from the system controller “L”: reset
3	EXTIN	I	Master clock signal input terminal Not used. (Fixed at “L” in this set.)
4	FS2	I	Sampling frequency selection signal input terminal Not used. (Fixed at “L” in this set.)
5	VDDI	—	Power supply terminal (+2.6 V)
6	FS1	I	Sampling frequency selection signal input terminal Not used. (Fixed at “L” in this set.)
7	PLOCK	O	Internal PLL lock signal output terminal Not used. (Open)
8	VSS	—	Ground terminal
9	MCLK1	I	System clock signal input terminal (13.5 MHz)
10	VDDI	—	Power supply terminal (+2.6 V)
11	VSS	—	Ground terminal
12	MCLK2	O	System clock signal output terminal (13.5 MHz)
13	MS	I	Master/slave selection signal input terminal “L”: slave, “H”: master (fixed at “L” in this set.)
14	SCKOUT	O	Internal system clock signal output to the D/A converter and stream processor
15	LRCKI1	I	L/R sampling clock signal (44.1 kHz) input from the digital audio processor
16	VDDE	—	Power supply terminal (+3.3 V)
17	BCKI1	I	Bit clock signal (2.8224 MHz) input from the digital audio processor
18	SDI1	I	Front L-ch and R-ch audio serial data input from the digital audio processor
19	LRCKO	O	L/R sampling clock signal (44.1 kHz) output to the D/A converter and stream processor
20	BCKO	O	Bit clock signal (2.8224 MHz) output to the D/A converter and stream processor
21	VSS	—	Ground terminal
22	KFSIO	I	Audio clock signal (11.2896 MHz) input from the digital audio processor
23	SDO1	O	Front L-ch and R-ch audio serial data output to the stream processor
24	SDO2	O	Center and woofer audio serial data output to the stream processor
25	SDO3	O	Rear L-ch and R-ch audio serial data output to the stream processor
26	SDO4	O	Audio serial data output to the D/A converter
27	SPDIF	O	S/PDIF signal output terminal Not used. (Open)
28	LRCKI2	I	L/R sampling clock signal (44.1 kHz) input from the A/D converter
29	BCKI2	I	Bit clock signal (2.8224 MHz) input from the A/D converter
30	SDI2	I	Center and woofer audio serial data input from the digital audio processor
31	VSS	—	Ground terminal
32	HACN	O	Acknowledge signal output to the system controller
33	HDIN	I	Write data input from the system controller
34	HCLK	I	Clock signal input from the system controller
35	HDOU	O	Read data output to the system controller
36	HCS	I	Chip select signal input from the system controller
37	SDCLK	O	Clock signal output terminal Not used. (Open)
38	CLKEN	O	Clock enable signal output terminal Not used. (Open)
39	RAS	O	Row address strobe signal output terminal Not used. (Open)
40	VDDI	—	Power supply terminal (+2.6 V)
41	VSS	—	Ground terminal
42	CAS	O	Column address strobe signal output terminal Not used. (Open)
43	DQM	O	Output terminal of data input/output mask Not used. (Open)
44	CS0	O	Chip select signal output to the S-RAM
45	WE0	O	Write enable signal output to the S-RAM

Pin No.	Pin Name	I/O	Pin Description
46	VDDE	—	Power supply terminal (+3.3 V)
47	WMD1	I	S-RAM wait mode setting terminal Fixed at “H” in this set
48	VSS	—	Ground terminal
49	WMD0	I	S-RAM wait mode setting terminal Fixed at “L” in this set
50	PAGE2	O	Page selection signal output terminal Not used. (Open)
51	VSS	—	Ground terminal
52, 53	PAGE1, PAGE0	O	Page selection signal output terminal Not used. (Open)
54	BOOT	I	Boot mode control signal input terminal Not used. (Fixed at “L” in this set.)
55	BTACT	O	Boot mode state display signal output terminal Not used. (Open)
56	BST	I	Boot trap signal input from the system controller
57	MOD1	I	PLL input frequency selection signal input terminal “L”: 384fs, “H”: 256fs (fixed at “H” in this set)
58	MOD0	I	Mode setting terminal “L”: single chip mode, “H”: use prohibition (fixed at “L” in this set)
59	EXLOCK	I	PLL lock error and data error flag input from the digital audio interface IC
60	VDDI	—	Power supply terminal (+2.6 V)
61	VSS	—	Ground terminal
62, 63	A17, A16	O	Address signal output terminal Not used. (Open)
64 to 66	A15 to A13	O	Address signal output to the S-RAM
67	GP10	O	L/R sampling clock signal (44.1 kHz) output to the D/A converter and stream processor
68	GP9	O	Decode signal output to the system controller
69	GP8	I	Bit 1 input terminal of channel status from the digital audio interface IC
70	VDDI	—	Power supply terminal (+2.6 V)
71	VSS	—	Ground terminal
72 to 75	D15 to D12	I/O	Two-way data bus with the S-RAM
76	VDDE	—	Power supply terminal (+3.3 V)
77 to 80	D11 to D8	I/O	Two-way data bus with the S-RAM
81	VSS	—	Ground terminal
82 to 85	A9, A12 to A10	O	Address signal output to the S-RAM
86	TDO	O	Simple emulation data output terminal Not used. (Open)
87	TMS	I	Simple emulation data input start/end detection signal input terminal Not used. (Open)
88	XTRST	I	Simple emulation asynchronous break input terminal Not used. (Open)
89	TCK	I	Simple emulation clock signal input terminal Not used. (Open)
90	TDI	I	Simple emulation data input terminal Not used. (Open)
91	VSS	—	Ground terminal
92 to 97	A8 to A3	O	Address signal output to the S-RAM
98, 99	D7, D6	I/O	Two-way data bus with the S-RAM
100	VDDI	—	Power supply terminal (+2.6 V)
101	VSS	—	Ground terminal
102 to 105	D5 to D2	I/O	Two-way data bus with the S-RAM
106	VDDE	—	Power supply terminal (+3.3 V)
107, 108	D1, D0	I/O	Two-way data bus with the S-RAM
109, 110	A2, A1	O	Address signal output to the S-RAM
111	VSS	—	Ground terminal
112	A0	O	Address signal output to the S-RAM
113	PM	I	PLL reset signal input from the system controller “L”: reset
114	SDI3	I	Rear L-ch and R-ch audio serial data input from the digital audio processor

AVD-S50/S50ES

Pin No.	Pin Name	I/O	Pin Description
115	SDI4	I	Audio serial data input terminal Not used. (Fixed at “L” in this set.)
116	SYNC	I	Synchronous/asynchronous selection signal input terminal “L”: synchronous, “H”: asynchronous (fixed at “H” in this set)
117 to 119	VSS	—	Ground terminal
120	VDDI	—	Power supply terminal (+2.6 V)

• DVD BOARD IC701 CXD1882R (DVD DECODER)

Pin No.	Pin Name	I/O	Pin Description
1, 2	D5, D6	I/O	Two-way data bus with the mechanism controller
3	VSS	—	Ground terminal (digital system)
4	D7	I/O	Two-way data bus with the mechanism controller
5	A0	I	Address signal input from the mechanism controller
6	VDD	—	Power supply terminal (+3.3 V) (digital system)
7	A1	I	Address signal input from the mechanism controller
8	VDD5V	—	Power supply terminal (+5 V)
9 to 14	A2 to A7	I	Address signal input from the mechanism controller
15	VSS	—	Ground terminal (digital system)
16	XWAIT	O	Wait signal output terminal Not used. (Open)
17	XRD	I	Read strobe signal input from the mechanism controller
18	XWR	I	Write strobe signal input from the mechanism controller
19	XCS	I	Chip select signal input from the mechanism controller
20, 21	XINT0, XINT1	O	Interrupt signal output to the mechanism controller
22	VDD	—	Power supply terminal (+3.3 V) (digital system)
23	XHRS	I	Not used. (Open)
24	HDB7	O	Stream data signal output to the DSD decoder and DVD system processor
25	VSS	—	Ground terminal (digital system)
26	HDB8	O	Error flag signal output to the DSD decoder and DVD system processor
27	HDB6	O	Stream data signal output to the DSD decoder and DVD system processor
28	VDDS	—	Power supply terminal (+5 V) (digital system)
29	HDB9	O	Not used. (Open)
30	HDB5	O	Stream data signal output to the DSD decoder and DVD system processor
31	HDBA	O	Not used. (Open)
32	HDB4	O	Stream data signal output to the DSD decoder and DVD system processor
33	VSS	—	Ground terminal (digital system)
34	HDBB	O	Not used. (Open)
35	HDB3	O	Stream data signal output to the DSD decoder and DVD system processor
36	VDD	—	Power supply terminal (+3.3 V) (digital system)
37	HDBC	O	Not used. (Open)
38	VDDS	—	Power supply terminal (+5 V) (digital system)
39	HDB2	O	Stream data signal output to the DSD decoder and DVD system processor
40	HDBD	O	Not used. (Open)
41	HDB1	O	Stream data signal output to the DSD decoder and DVD system processor
42	VSS	—	Ground terminal (digital system)
43	HDBE	O	Not used. (Open)
44	HDB0	O	Stream data signal output to the DSD decoder and DVD system processor
45	HDBF	O	Not used. (Open)
46	XSAK	O	Serial data effect flag signal output to the DSD decoder and DVD system processor
47	VDDS	—	Power supply terminal (+5 V) (digital system)
48	XDCK	O	Serial data transfer clock signal output to the DSD decoder and DVD system processor
49	XSHD	O	Header flag signal output to the DSD decoder
50	VDD	—	Power supply terminal (+3.3 V) (digital system)
51	REDY	O	Not used. (Fixed at "H" in this set.)
52	VSS	—	Ground terminal (digital system)

Pin No.	Pin Name	I/O	Pin Description
53	XSRQ	I	DVD mode: Serial data request signal input from the DVD system processor SACD mode: Serial data request signal input from the DSD decoder
54	HINT	O	Not used. (Fixed at "H" in this set.)
55	XS16	O	Not used. (Fixed at "H" in this set.)
56	HA1	I	Not used. (Fixed at "H" in this set.)
57	XPDI	I/O	Not used. (Fixed at "H" in this set.)
58	VDDS	—	Power supply terminal (+5 V) (digital system)
59, 60	HA0, HA2	I	Not used. (Fixed at "H" in this set.)
61	VSS	—	Ground terminal (digital system)
62, 63	HCS0, HCS1	I	Not used. (Open)
64	VDD	—	Power supply terminal (+3.3 V) (digital system)
65	DASP	I/O	Not used. (Fixed at "H" in this set.)
66 to 69	MDB0 to MDB3	I/O	Two-way data bus with the D-RAM
70	VSS	—	Ground terminal (digital system)
71	MDB4	I/O	Two-way data bus with the D-RAM
72	VDD5V	—	Power supply terminal (+5 V)
73 to 75	MDB5 to MDB7	I/O	Two-way data bus with the D-RAM
76	XMWR	O	Write enable signal output to the D-RAM
77	VDD	—	Power supply terminal (+3.3 V) (digital system)
78	XRAS	O	Row address strobe signal output to the D-RAM
79, 80	MA0, MA1	O	Address signal output to the D-RAM
81	VSS	—	Ground terminal (digital system)
82 to 87	MA2 to MA7	O	Address signal output to the D-RAM
88	VDD	—	Power supply terminal (+3.3 V) (digital system)
89	MA8	O	Address signal output to the D-RAM
90	VSS	—	Ground terminal (digital system)
91	MA9	O	Address signal output to the D-RAM
92	MNT1	O	EEPROM ready signal output to the mechanism controller
93	MNT2	O	Operation clock signal output for PSP physical disc mark detection to DSD decoder
94	XMOE	O	Output enable signal output to the D-RAM
95	XCAS	O	Column address strobe signal output to the D-RAM
96, 97	MDB8, MDB9	I/O	Two-way data bus with the D-RAM
98	VSS	—	Ground terminal (digital system)
99	MDBA	I/O	Two-way data bus with the D-RAM
100	VDD	—	Power supply terminal (+3.3 V) (digital system)
101, 102	MDBB, MDBC	I/O	Two-way data bus with the D-RAM
103	VDD5V	—	Power supply terminal (+5 V)
104 to 106	MDBD to MDBF	I/O	Two-way data bus with the D-RAM
107	GFS	O	Guard frame sync signal output to the mechanism controller
108	VSS	—	Ground terminal (digital system)
109	APEO	O	Absolute phase error signal output
110	VDD	—	Power supply terminal (+3.3 V) (digital system)
111	DASYO	O	RF binary signal output
112	GND5	—	Ground terminal (analog system)
113, 114	ASF1, ASF2	—	Filter connected terminal for selection the constant asymmetry compensation
115	DASY1	I	Analog signal input after integrated the RF binary signal

Pin No.	Pin Name	I/O	Pin Description
116	RFDCC	I	Input terminal for adjusting DC cut high-pass filter for RF signal
117	RFIN	I	RF signal input from the DVD/CD RF amplifier
118, 119	VCCA5, VCCA4	—	Power supply terminal (+3.3 V) (analog system)
120	VCOR1	—	VCO oscillating range setting resistor connected terminal
121	VC0IN	I	VCO input terminal
122, 123	GND4, GND3	—	Ground terminal (analog system)
124	LPF5	O	Signal output from the operation amplifier from PLL loop filter
125	VC1	I	Middle point voltage (+1.65 V) input terminal
126, 127	LPF2, LPF1	I	Inverted signal input to the operation amplifier from PLL loop filter
128, 129	VCCA3, VCCA2	—	Power supply terminal (+3.3 V) (analog system)
130	PDO	O	Signal output from the charge pump for phase comparator
131	PDHVCC	I	Middle point voltage input terminal for RF PLL
132	FDO	O	Signal output from the charge pump for frequency comparator
133, 134	GND2, GND1	—	Ground terminal (analog system)
135	SPO	O	Spindle motor control signal output
136	VC2	I	Middle point voltage (+1.65 V) input terminal
137	MDIN2	I	Spindle motor servo drive signal input
138	MDIN1	I	MDP input terminal
139	VCCA1	—	Power supply terminal (+3.3 V) (analog system)
140	CLVS	O	Control signal output for selection the spindle control filter constant at CLVS
141	VSS	—	Ground terminal (digital system)
142	MDSOUT	O	Frequency error output terminal of internal CLV circuit
143	VDD	—	Power supply terminal (+3.3 V) (digital system)
144	MDPOUT	O	Phase error output terminal of internal CLV circuit
145	DFCT	I	Defect signal input terminal Not used. (Fixed at “L” in this set.)
146	GSCOR	I	Guard subcode sync (S0+S1) detection signal input from the digital signal processor
147	EXCK	O	Subcode serial data reading clock signal output to the digital signal processor
148	SBIN	I	Subcode serial data input from the digital signal processor
149	VSS	—	Ground terminal (digital system)
150	SCOR	I	Subcode sync (S0+S1) detection signal input from the digital signal processor
151	WFCK	I	Write frame clock signal input from the digital signal processor
152	VDD5V	—	Power supply terminal (+5 V)
153	XRCI	I	RAM overflow signal input terminal Not used. (Fixed at “L” in this set.)
154	VDDS	—	Power supply terminal (+5 V) (digital system)
155	C2PO	I	C2 pointer signal input from the digital signal processor
156	VDD	—	Power supply terminal (+3.3 V) (digital system)
157	DBCK	O	Bit clock signal (2.8224 MHz) output terminal Not used. (Open)
158	BCLK	I	Bit clock signal (2.8224 MHz) input from the digital signal processor
159	DDAT	O	PCM data output terminal Not used. (Open)
160	MDAT	I	Serial data input from the digital signal processor
161	VSS	—	Ground terminal (digital system)
162	DLRC	O	L/R sampling clock signal (44.1 kHz) output terminal Not used. (Open)
163	LRCK	I	L/R sampling clock signal (44.1 kHz) input from the digital signal processor
164	XRST	I	Reset signal input from the mechanism controller “L”: reset
165	IFS0	I	Interface selection signal input terminal Fixed at “L” in this set.
166	IFS1	I	Interface selection signal input terminal Fixed at “H” in this set.

AVD-S50/S50ES

Pin No.	Pin Name	I/O	Pin Description
167	XTAL	I	33.8688 MHz clock signal input terminal
168	VSS	—	Ground terminal (digital system)
169	XTL2	O	System clock output terminal (33.8688 MHz)
170	XTL1	I	System clock input terminal (33.8688 MHz)
171	VDD	—	Power supply terminal (+3.3 V) (digital system)
172 to 176	D0 to D4	I/O	Two-way data bus with the mechanism controller

• DVD BOARD IC801 CXD2752R (DSD DECODER)

Pin No.	Pin Name	I/O	Pin Description
1	VSCA0	—	Ground terminal (for core)
2	XMSLAT	I	Serial data latch pulse signal input from the mechanism controller
3	MSCK	I	Serial data transfer clock signal input from the mechanism controller
4	MSDATI	I	Serial data input from the mechanism controller
5	VDCA0	—	Power supply terminal (+2.5 V) (for core)
6	MSDATO	O	Serial data output to the mechanism controller
7	MSREADY	O	Ready signal output to the mechanism controller “L”: ready
8	XMSDOE	O	Serial data output enable signal output terminal Not used. (Open)
9	XRST	I	Reset signal input from the mechanism controller “L”: reset
10	SMUTE	I	Soft muting on/off control signal input from the mechanism controller “H”: muting on
11	MCKI	I	Master clock signal (33.8688 Mhz) input
12	VSIOA0	—	Ground terminal (for I/O)
13	EXCKO1	O	Master clock signal (33.8688 MHz) output to the digital audio processor
14	EXCKO2	O	External clock 2 signal output terminal Not used. (Open)
15	LRCK	O	L/R sampling clock signal (44.1 kHz) output terminal Not used. (Open)
16	F75HZ	O	Not used. (Open)
17	VDIOA0	—	Power supply terminal (+3.3 V) (for I/O)
18 to 25	MNT0 to MNT7	O	Monitor signal output terminal Not used. (Open)
26	TCK	I	Clock signal input from the DVD system processor
27	TDI	I	Serial data input from the DVD system processor
28	VSCA1	—	Ground terminal (for core)
29	TDO	O	Serial data output to the DVD system processor Not used. (Open)
30	TMS	I	MS signal input from the DVD system processor
31	TRST	I	Reset signal input from the DVD system processor “L”: reset
32 to 34	TEST1 to TEST3	I	Input terminal for the test (normally: fixed at “L”)
35	VDCA1	—	Power supply terminal (+2.5 V) (for core)
36	UBIT	O	Not used. (Open)
37	XBIT	O	Not used. (Open)
38 to 41	SUPDT0 to SUPDT3	O	Supplementary data output terminal Not used. (Open)
42	VSIOA1	—	Ground terminal (for I/O)
43, 44	SUPDT4, SUPDT5	O	Supplementary data output terminal Not used. (Open)
45	VDIOA1	—	Power supply terminal (+3.3 V) (for I/O)
46, 47	SUPDT6, SUPDT7	O	Supplementary data output terminal Not used. (Open)
48	SUPEN	O	Supplementary data enable signal output terminal Not used. (Open)
49	VSCA2	—	Ground terminal (for core)
50	NC	O	Not used. (Open)
51, 52	TEST4, TEST5	I	Input terminal for the test (normally: fixed at “L”)
53	NC	O	Not used. (Open)
54	VDCA2	—	Power supply terminal (+2.5 V) (for core)
55, 56	NC	O	Not used. (Open)
57	BCKASL	I	Input/output selection signal input terminal of bit clock signal (2.8224 MHz) for DSD data output “L”: input (slave), “H”: output (master) Fixed at “H” in this set.
58	VSDSD0	—	Ground terminal (for DSD data output)
59	BCKAI	I	Bit clock signal (2.8224 MHz) input terminal for DSD data output Not used. (Open)
60	BCKAO	O	Bit clock signal (2.8224 MHz) output terminal for DSD data output Not used. (Open)

Pin No.	Pin Name	I/O	Pin Description
61	PHREFI	I	Bit clock signal (2.8224 MHz) input terminal for DSD data output Not used. (Open)
62	PHREFO	O	Bit clock signal (2.8224 MHz) output to the digital audio processor
63	ZDFL	O	Front L-ch Zero data flag detection signal output terminal Not used. (Open)
64	DSAL	O	Front L-ch DSD data output to the digital audio processor
65	ZDFR	O	Front R-ch Zero data flag detection signal output terminal Not used. (Open)
66	DSAR	O	Front R-ch DSD data output to the digital audio processor
67	VDDSD0	—	Power supply terminal (+3.3 V) (for DSD data output)
68	ZDFC	O	Center zero data flag detection signal output terminal Not used. (Open)
69	DSAC	O	Center DSD data output to the digital audio processor
70	ZDFLFE	O	Woofer zero data flag detection signal output terminal Not used. (Open)
71	DSALFE	O	Woofer DSD data output to the digital audio processor
72	VSDSD1	—	Ground terminal (for DSD data output)
73	ZDFLS	O	Rear L-ch zero data flag detection signal output terminal Not used. (Open)
74	DSALS	O	Rear L-ch DSD data output to the digital audio processor
75	ZDFRS	O	Rear R-ch zero data flag detection signal output terminal Not used. (Open)
76	DSARS	O	Rear R-ch DSD data output to the digital audio processor
77	VDDSD1	—	Power supply terminal (+3.3 V) (for DSD data output)
78, 79	IOUT0, IOUT1	O	Data output terminal for IEEE 1394 link chip interface Not used. (Open)
80	VSCB0	—	Ground terminal (for core)
81, 82	IOUT2, IOUT3	O	Data output terminal for IEEE 1394 link chip interface Not used. (Open)
83	VDCB0	—	Power supply terminal (+2.5 V) (for core)
84, 85	IOUT4, IOUT5	O	Data output terminal for IEEE 1394 link chip interface Not used. (Open)
86	VSI0B0	—	Ground terminal (for I/O)
87	IANCO	O	Transmission information data output terminal for IEEE 1394 link chip interface Not used. (Open)
88	IFULL	I	Data transmission hold request signal input terminal for IEEE 1394 link chip interface Not used. (Fixed at “L” in this set.)
89	IEMPTY	I	High speed transmission request signal input terminal for IEEE 1394 link chip interface Not used. (Fixed at “L” in this set.)
90	VDIOB0	—	Power supply terminal (+3.3 V) (for I/O)
91	IFRM	O	Frame reference signal output terminal for IEEE 1394 link chip interface Not used. (Open)
92	IOUTE	O	Enable signal output terminal for IEEE 1394 link chip interface Not used. (Open)
93	IBCK	O	Data transmission clock signal output terminal for IEEE 1394 link chip interface Not used. (Open)
94	VSCB1	—	Ground terminal (for core)
95	IERR	I	Not used. (Fixed at “H” in this set.)
96	IANCI	I	Not used. (Fixed at “L” in this set.)
97	IPLAN	I	Not used. (Fixed at “H” in this set.)
98	IHOLD	O	Not used. (Open)
99	VDCB1	—	Power supply terminal (+2.5 V) (for core)
100	IVLD	I	Not used. (Fixed at “L” in this set.)
101 to 105	IDIN0 to IDIN4	I	Not used. (Fixed at “L” in this set.)
106	VSI0B1	—	Ground terminal (for I/O)
107 to 109	IDIN5 to IDIN7	I	Not used. (Fixed at “L” in this set.)
110	VDIOB1	—	Power supply terminal (+3.3 V) (for I/O)
111 to 114	WAD0 to WAD3	I	External A/D data input terminal for PSP physical disc mark detection Not used. (Open)
115	TESTI	I	Input terminal for the test (normally: fixed at “L”)
116	VSCB2	—	Ground terminal (for core)
117 to 120	WAD4 to WAD7	I	External A/D data input terminal for PSP physical disc mark detection Not used. (Open)
121	VDCB2	—	Power supply terminal (+2.5 V) (for core)

Pin No.	Pin Name	I/O	Pin Description
122	WRFD	I	Not used. (Fixed at "L" in this set.)
123	WCK	I	Operation clock signal input for PSP physical disc mark detection from the DVD decoder
124, 125	WAVDD0, WAVDD1	—	A/D power supply terminal (+2.5 V) (for PSP physical disc mark detection)
126	WARFI	I	Analog RF signal input for PSP physical disc mark detection from the DVD/CD RF amplifier
127	WAVRB	I	A/D bottom reference terminal for PSP physical disc mark detection
128, 129	WAVSS1, WAVSS0	—	A/D ground terminal (for PSP physical disc mark detection)
130	VSIOA2	—	Ground terminal (for I/O)
131 to 134	DQ7 to DQ4	I/O	Two-way data bus with the SD-RAM
135	VDIOA2	—	Power supply terminal (+3.3 V) (for I/O)
136 to 139	DQ3 to DQ0	I/O	Two-way data bus with the SD-RAM
140	VSIOA3	—	Ground terminal (for I/O)
141	DCLK	O	Clock signal output to the SD-RAM
142	DCKE	O	Clock enable signal output to the SD-RAM
143	XWE	O	Write enable signal output to the SD-RAM
144	XCAS	O	Column address strobe signal output to the SD-RAM
145	XRAS	O	Row address strobe signal output to the SD-RAM
146	VDIOA3	—	Power supply terminal (+3.3 V) (for I/O)
147	NC	O	Not used. (Open)
148, 149	A11, A10	O	Address signal output to the SD-RAM
150	VSCA3	—	Ground terminal (for core)
151, 152	A9, A8	O	Address signal output to the SD-RAM
153	VDCA3	—	Power supply terminal (+2.5 V) (for core)
154 to 157	A7 to A4	O	Address signal output to the SD-RAM
158	VSIOA4	—	Ground terminal (for I/O)
159 to 162	A3 to A0	O	Address signal output to the SD-RAM
163	VDIOA4	—	Power supply terminal (+3.3 V) (for I/O)
164	XSRQ	O	Serial data request signal output to the DVD decoder
165	XSHD	I	Header flag signal input from the DVD decoder
166	SDCK	I	Serial data transfer clock signal input from the DVD decoder
167	XSAK	I	Serial data effect flag signal input from the DVD decoder
168	SDEF	I	Error flag signal input from the DVD decoder
169 to 176	SD0 to SD7	I	Stream data signal input from the DVD decoder

• DVD BOARD IC901 μ PD703033BYGF-M03-3BA (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Pin Description
1	DAMP-DATA	O	Serial data output to the stream processors
2	DAMP-CLK	O	Serial data transfer clock signal output to the stream processors
3	I2C-DATA	I/O	Communication data bus with the DVD system processor and mechanism controller
4	$\overline{\text{CQ-RST}}$	O	Reset signal output to the DVD system processor "L": reset
5	I2C-CLK	I/O	Communication data reading clock signal input or transfer clock signal output with the DVD system processor and mechanism controller
6	DSP-DO	I	Write data input from the audio digital signal processor
7	DIG-DI	O	Read data output to the digital audio interface IC, audio digital signal processor and D/A converter
8	DIG-CLK	O	Clock signal output to the digital audio interface IC, audio digital signal processor and D/A converter
9	EVDD	—	Power supply terminal (+5 V)
10	EVSS	—	Ground terminal
11	P-PWM	O	PWM voltage control signal output
12	$\overline{\text{DSP-RST}}$	O	Reset signal output to the audio digital signal processor "L": reset
13	$\overline{\text{DSP-PM}}$	O	PLL reset signal output to the audio digital signal processor "L": reset
14	DSP-CS	O	Chip select signal output to the audio digital signal processor
15	DSP-HACN	I	Acknowledge signal input from to the audio digital signal processor
16	DSP-BST	O	Boot trap signal output to the audio digital signal processor
17	DSP-GP9	I	Decode signal input from to the audio digital signal processor
18	DIR-ZERO	I	Audio serial data input from the digital audio interface IC
19	DIR-ERR	I	PLL lock error and data error flag input from the digital audio interface IC
20	DIR-CE	O	Chip enable signal output to the digital audio interface IC
21	VPP	—	Power supply terminal (for programming)
22	DIR-XST	I	Source clock switching monitor input from the digital audio interface IC
23	DIR-AD	O	Source clock switching monitor input from the digital audio interface IC Not used. (Open)
24	DIR-XMODE	I	System reset signal input from the digital audio interface IC "L": reset
25	DIRDO	I	Write data input from the digital audio interface IC
26	$\overline{\text{DAMP-RST}}$	O	Reset signal output to the stream processors "L": reset
27	DAMP-MUTEG	O	Muting on/off control signal output to the stream processors "H": muting on
28	DAMP-MUTEN	O	Muting on/off control signal output to the stream processors "H": muting on
29	CS1	O	Chip select signal output to the stream processor (for front L-ch and R-ch)
30	CS2	O	Chip select signal output to the stream processor (for center and woofer)
31	CS3	O	Chip select signal output to the stream processor (for rear L-ch and R-ch)
32	DAC-CS	O	Chip select signal output to the D/A converter
33	$\overline{\text{AD-RST}}$	O	Reset signal output to the A/D converter and D/A converter "L": reset
34	$\overline{\text{RESET}}$	I	System reset signal input "L": reset For several hundreds msec. after the power supply rises, "L" is input, then it changes to "H"
35	XT1	I	Sub system clock input terminal Not used. (Open)
36	XT2	O	Sub system clock output terminal Not used. (Open)
37	REG0	—	Not used. (Open)
38	X2	O	Main system clock output terminal (20 MHz)
39	X1	I	Main system clock input terminal (20 MHz)
40	VSS	—	Ground terminal
41	VDD	—	Power supply terminal (+5 V)
42	CLKOUT	O	Clock signal output terminal Not used. (Open)

Pin No.	Pin Name	I/O	Pin Description
43	$\overline{\text{DRI-RST}}$	O	Reset signal output to the power amplifier “L”: reset
44	DRI-OCF	I	Protect signal input from the power amplifier
45	ST-POWER	O	System power on/off control signal output “H”: power on
46	$\overline{\text{HP-MUTE}}$	O	Headphone muting on/off control signal output “L”: muting on Not used. (Open)
47	$\overline{\text{AU-MUTE}}$	O	Audio line muting on/off control signal output “L”: muting on
48	VIDEO MUTE	O	Audio/video selection signal output
49	COMP MUTE	I	SCAN SELECT switch input terminal “L”: SELECTABLE, “H”: INTERLACE
50	TU-ON	O	Power supply for tuner pack on/off control signal output
51	$\overline{\text{TUNED}}$	I	Tuning detection signal input from the tuner unit “L”: tuned
52	TUN-DI	I	Serial data input from the tuner unit
53	TUN-CE	O	Chip enable signal output to the tuner unit
54	TUN-DO	O	Serial data output to the tuner unit
55	TUN-CLK	O	Serial data transfer clock signal output to the tuner unit
56	FL-MUTE	O	Reset signal output to the fluorescent indicator tube driver “L”: reset
57	FL-CLK	O	Serial data transfer clock signal output to the LED driver and fluorescent indicator tube driver
58	BVDD	—	Power supply terminal (+5 V) (for bus interface)
59	BVSS	—	Ground terminal (for bus interface)
60	FL-DATA	O	Serial data output to the LED driver and fluorescent indicator tube driver
61	$\overline{\text{FL-CS}}$	O	Chip select signal output to the fluorescent indicator tube driver “L”: active
62	$\overline{\text{LED-CS}}$	O	Standby signal output to the LED driver “L”: standby
63	$\overline{\text{LED-CLR}}$	O	Reset signal output to the LED driver “L”: reset
64	HPSW	I	Connection detection signal input of the headphone jack “L”: no connected, “H”: headphone connected
65	DA CLK	O	Reset signal output to the digital audio processor “L”: reset
66	SP RELAY	O	Relay drive signal output terminal for the speaker protect
67	CKMP	I	Serial data input from the changer controller (rotary encoder)
68	$\overline{\text{PARA-RST}}$	O	Reset signal output to the changer controller (motor, switch) and changer controller (rotary encoder) “L”: reset
69	PARA-LT1	O	Serial data latch pulse signal output to the changer controller (motor, switch)
70	CKMM	O	Serial data latch pulse signal output terminal
71	PARA-CLK	O	Serial data transfer clock signal output to the changer controller (motor, switch)
72	PARA-DATA	O	Serial data output to the changer controller (motor, switch)
73	PARA-DO1	I	Serial data input terminal
74	AVDD	—	Power supply terminal (+5 V) (analog system)
75	AVSS	—	Ground terminal (analog system)
76	AVREF	I	Reference voltage (+5 V) input terminal (analog system)
77	S0	—	CDM tray position detect 0 signal input
78	S1	I	CDM tray position detect 1 signal input
79	S2	I	CDM tray position detect 2 signal input
80	AREA1	I	Destination setting terminal
81	AREA1	I	Destination setting terminal
82 to 84	KEY0 to KEY2	I	Key input terminal (A/D input)
85	EN-A	I	Jog dial pulse input from the rotary encoder (A phase input)
86	EN-B	I	Jog dial pulse input from the rotary encoder (B phase input)
87	MODEL	I	Model setting terminal
88	RDS-DATA	I	RDS serial data input from the RDS decoder
89	DVD-POWER	O	DVD power on/off control signal output “H”: power on
90	STOP	I	System stop signal input

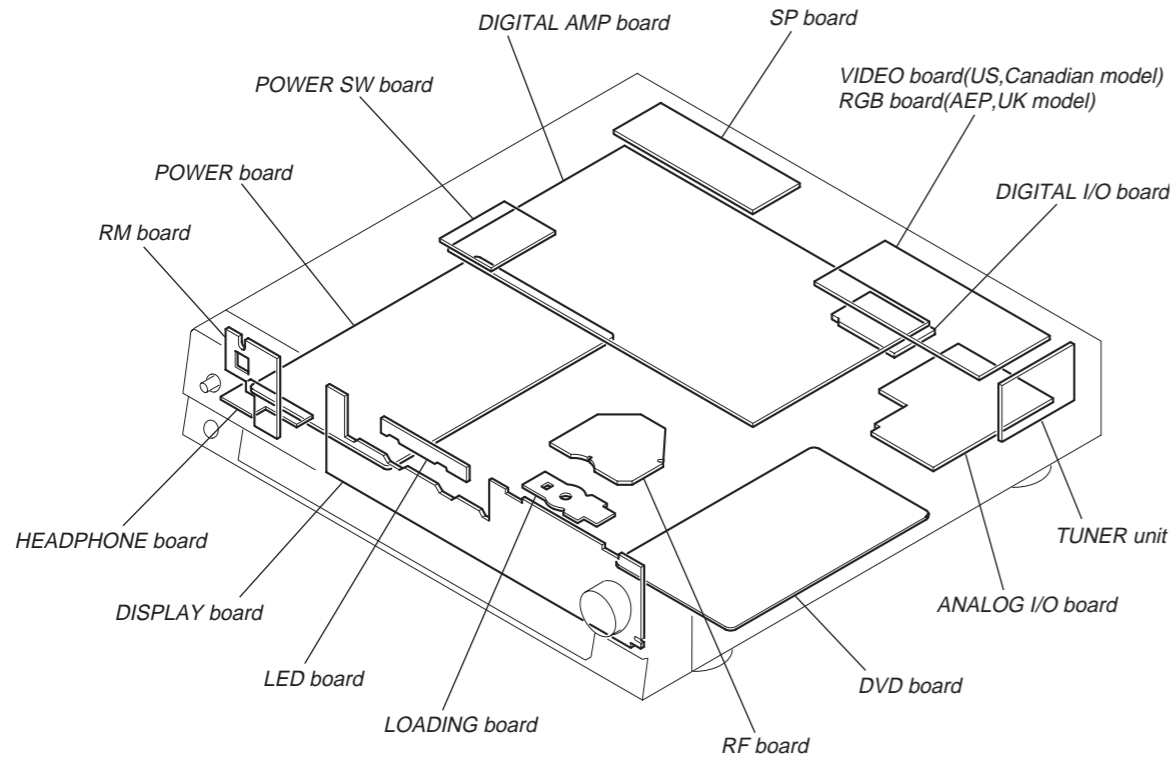
AVD-S50/S50ES

Pin No.	Pin Name	I/O	Pin Description
91	POWER-SW	I	System power on/off control signal input "H": power on
92	SIRCS	I	Remote control signal input
93	WAKE	I	System wake up signal input by pressing any key on the front panel or remote commander or disc insert detect sensor
94	RDS-CLK	I	RDS serial data transfer clock signal input from the RDS decoder
95	DSSENS	O	CDM disc detect signal output
96	TSSENS	O	CDM slit edge interruption signal output
97	DF-SW	O	Selection signal output to the digital audio processor
98	DF-SYNC	O	Sync signal output to the digital audio processor
99	DF-RST	O	Reset signal output for the digital audio processor "L": reset
100	I2HLP	I/O	Busy signal input/output for the I2C bus Not used. (Open)

• DVD BOARD IC902 PT8300 (CHANGER CONTROLLER (MOTOR, SWITCH))

Pin No.	Pin Name	I/O	Pin Description
1	VSS	—	Ground terminal
2	RESET B	I	Reset signal input from the system controller “L”: reset
3	CLK	I	Serial data transfer clock signal input from the system controller
4	LATCH	I	Serial data latch pulse signal input from the system controller
5	OUTSW	I	CDM tray open detect switch input terminal “L”: active
6	INSW	I	CDM tray close detect switch input terminal “L”: active
7	P13	I	Disc in (8/12cm) detect switch input terminal “L”: play position Not used. (Open)
8	P12	I	Disc in (12cm) detect switch input terminal “L”: play position Not used. (Open)
9	P11	I	Stocker in/out detect switch input terminal “L”: in the midst disc is moving between play position and stocker except the moment disc in/out from stocker Not used. (Open)
10	P10	I	Disc position detect switch input terminal Not used. (Open) “L”: disc is play position side in the midst disc is moving between play position and stocker “H”: disc is stocker side in the midst disc is moving between play position and stocker
11	P9	I	Disc out detect switch input terminal “H”: disc out from play position Not used. (Open)
12	P8	I	Stocking detect switch input terminal Not used. (Open) “H”: in the midst disc is moving between play position and stocker
13	LATCHO	O	Serial data latch pulse signal output to the changer controller (rotary encoder) Not used. (Open)
14	CLKO	O	Serial data transfer clock signal output to the changer controller (rotary encoder) Not used. (Open)
15	DO1	O	Serial data output to the changer controller (rotary encoder) Not used. (Open)
16	DI2	I	Serial data input terminal Not used. (Fixed at “L” in this set.)
17	TRMP	O	CDM tray left-roulette signal output “H”: active
18	TRMM	O	CDM tray right-roulette signal output “H”: active
19	V SEL2	O	Video select 2 signal output
20	V SEL1	O	Video select 1 signal output
21	V SEL0	O	Video select 0 signal output
22	A SEL2	O	Audio select 2 signal output
23	A SEL1	O	Audio select 1 signal output
24	A SEL0	O	Audio select 0 signal output
25	DO2	O	Serial data output to the changer controller (rotary encoder)
26	DI1	I	Serial data input from the system controller
27	PULLUP	—	Connected to power supply (+5 V)
28	VCC	—	Power supply terminal (+5 V)

5-2. CIRCUIT BOARDS LOCATION



5-3. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

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

For schematic diagrams.

Note:

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

Note:

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

Note:

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- : B+ Line.
- : B- Line.
- : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark : DVD PLAY
- () : CD PLAY
- [] : SACD PLAY
- * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- : CD PLAY
- : DVD PLAY
- : SACD PLAY
- : AUX IN
- : OPTICAL DIGITAL IN
- : TUNER
- : AUDIO
- : VIDEO
- : Y
- : CHROMA
- : COMPONENT VIDEO
- Abbreviation
- CND : Canadian model.

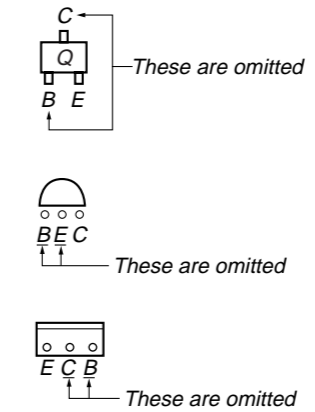
For printed wiring boards.

Note:

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

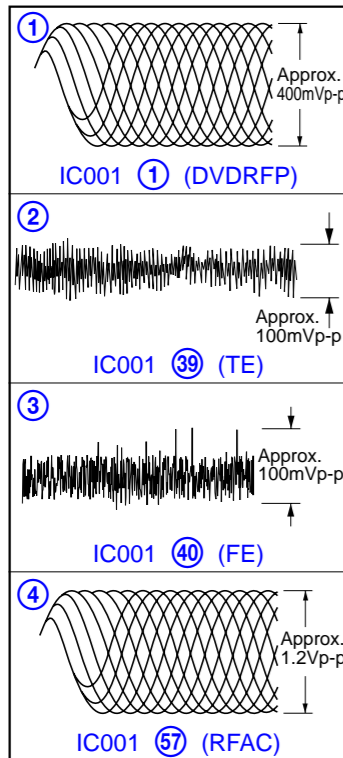
Caution:

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

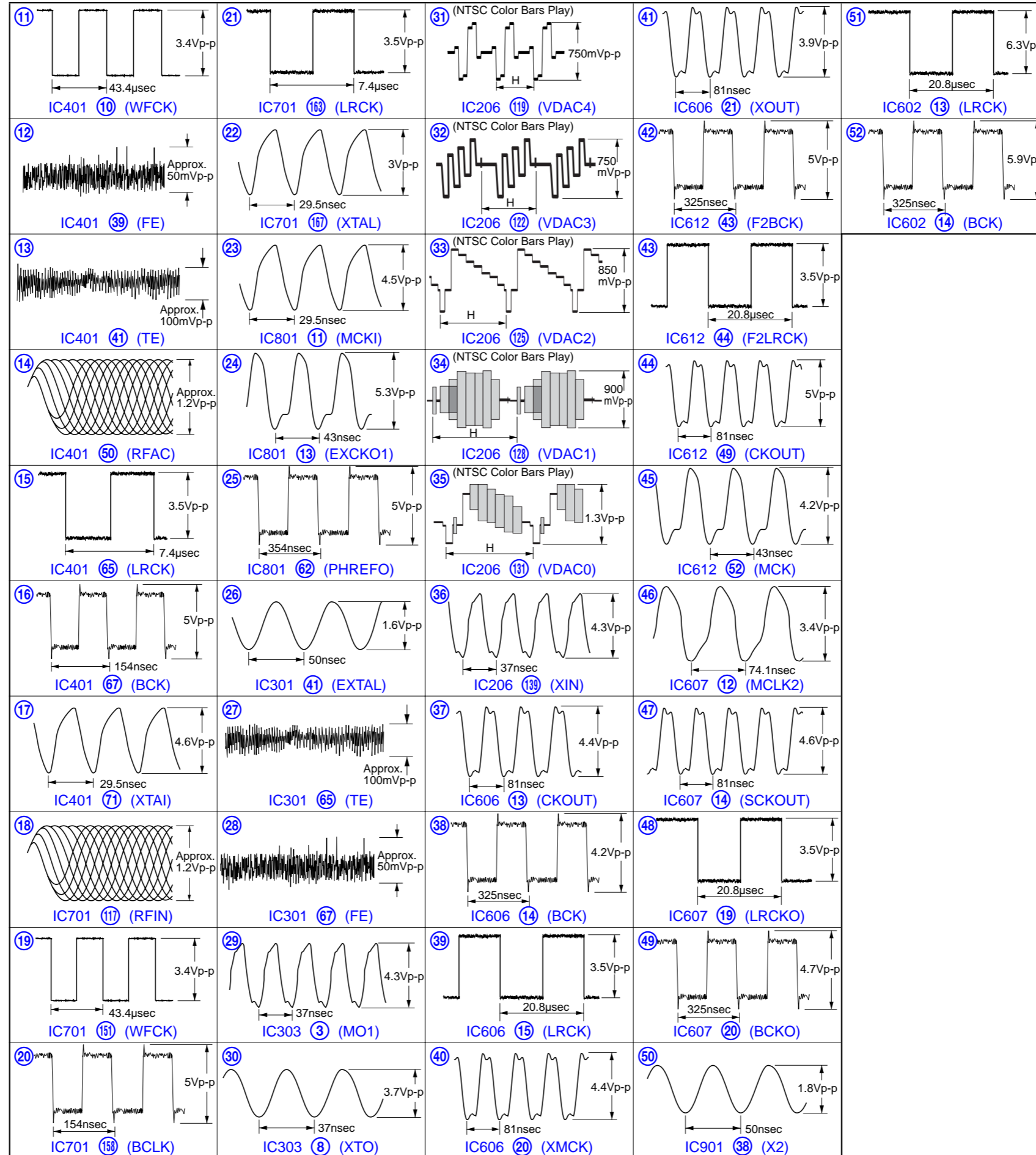


- Abbreviation
- CND : Canadian model.

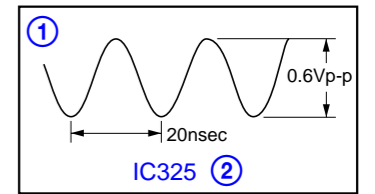
• Waveforms
- RF Board -



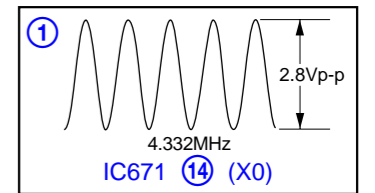
- DVD Board -



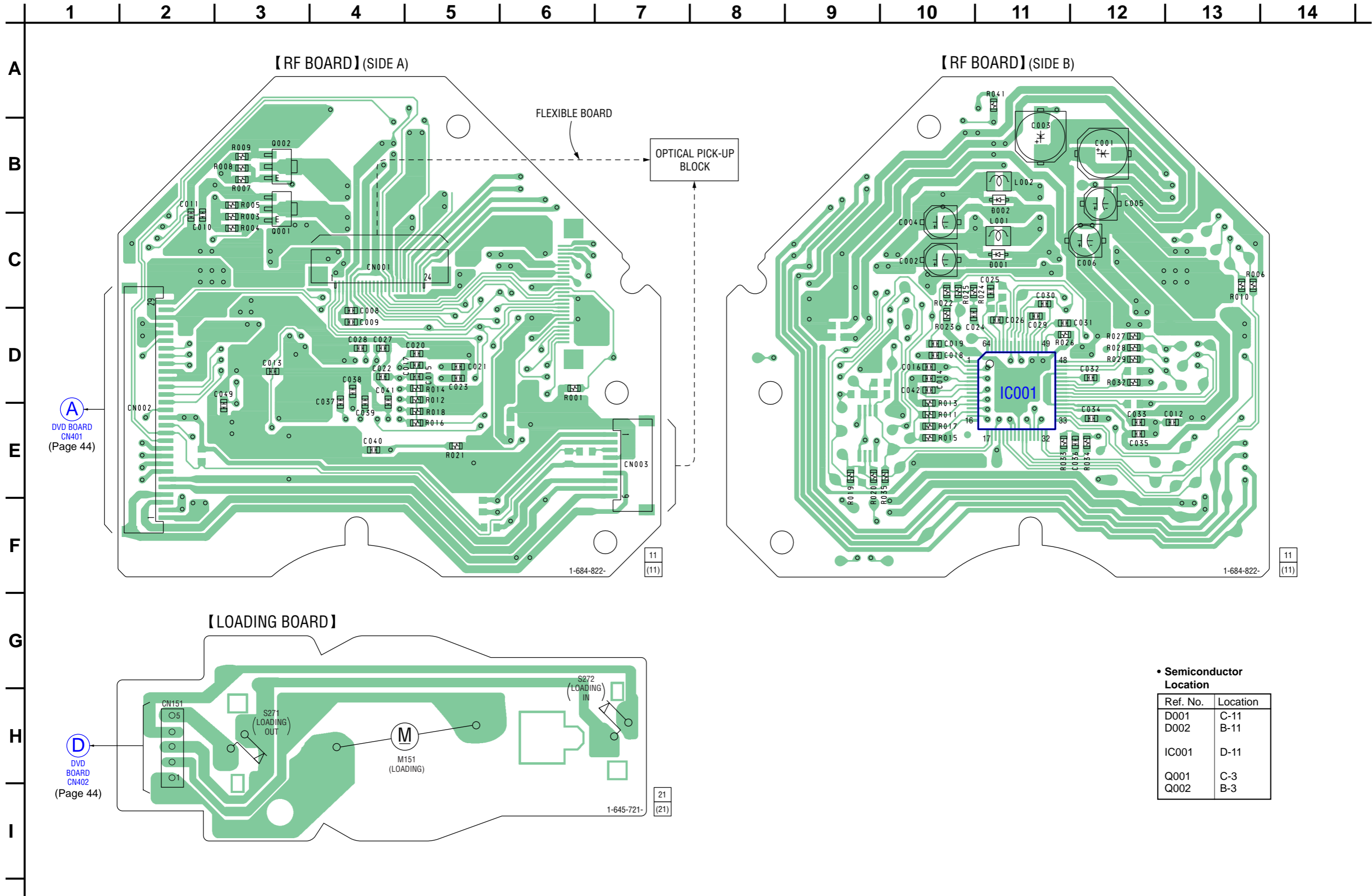
- DIGITAL AMP Board -



- ANALOG I/O Board -



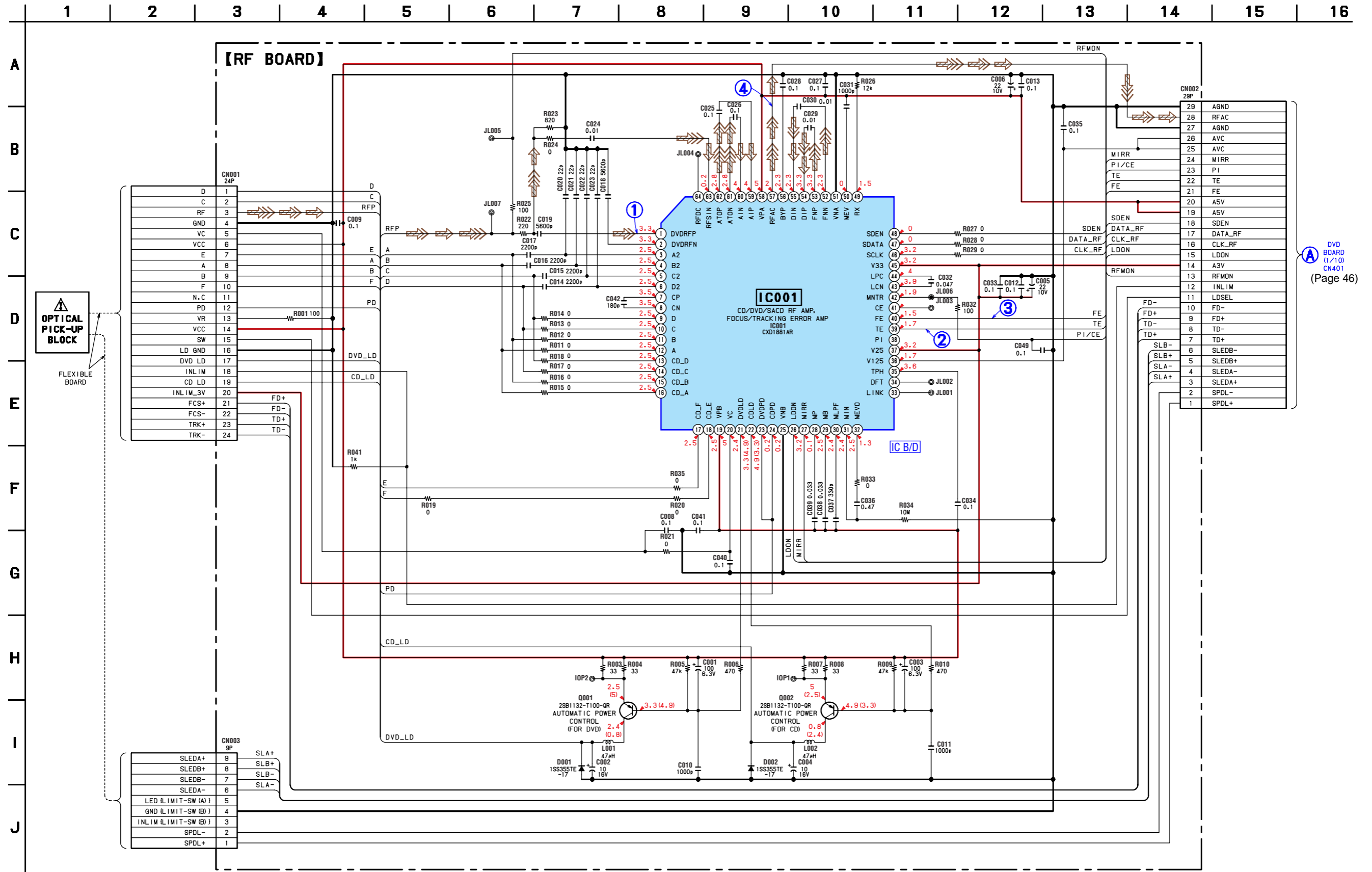
5-4. PRINTED WIRING BOARD — RF SECTION — • Refer to page 40 for Circuit Boards Location.



• Semiconductor Location

Ref. No.	Location
D001	C-11
D002	B-11
IC001	D-11
Q001	C-3
Q002	B-3

5-5. SCHEMATIC DIAGRAM — RF SECTION — • Refer to page 41 for Waveforms. • Refer to page 72 for IC Block Diagram.



14

13

12

11

10

9

8

7

6

5

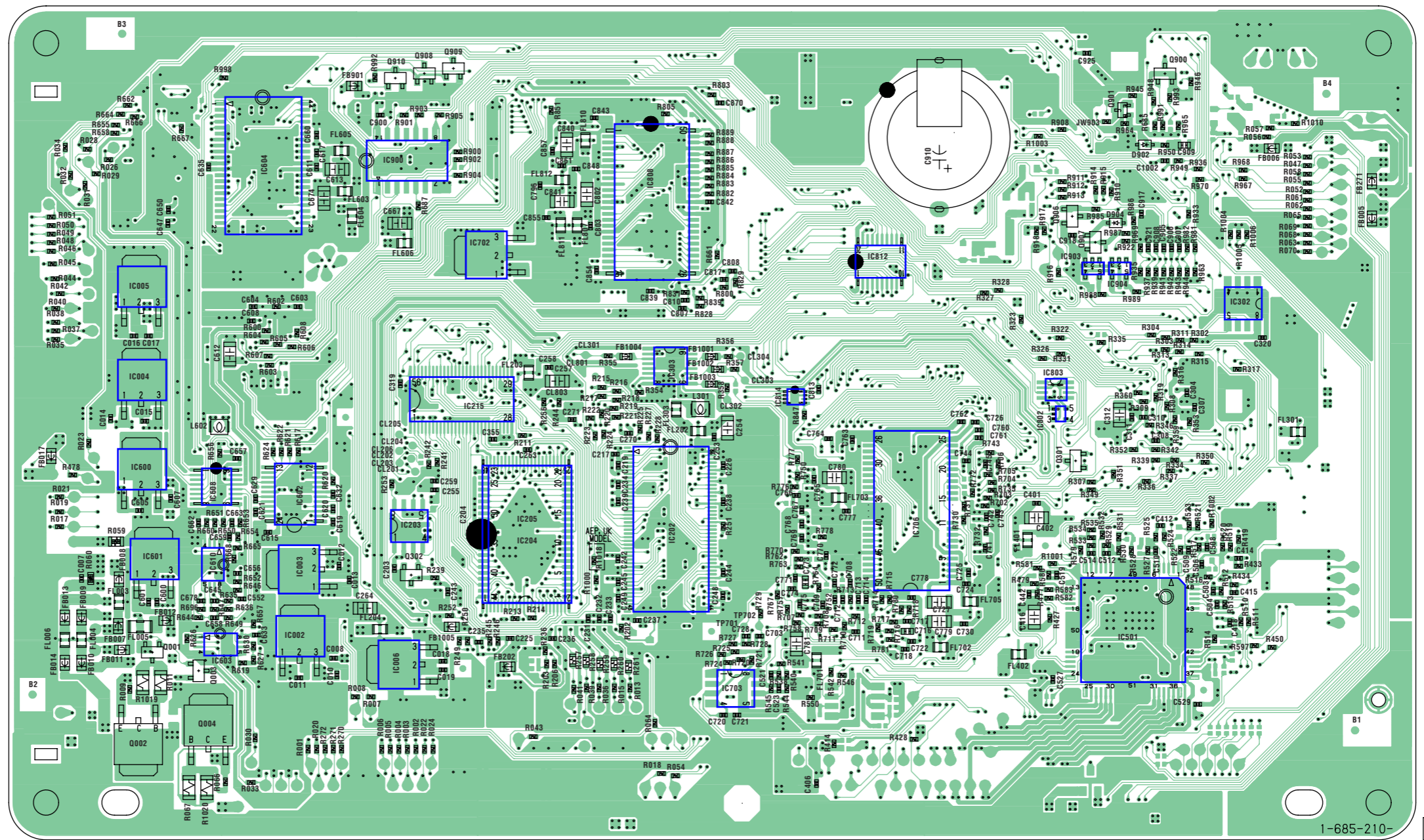
4

3

2

1

【DVD BOARD】(SIDE B)

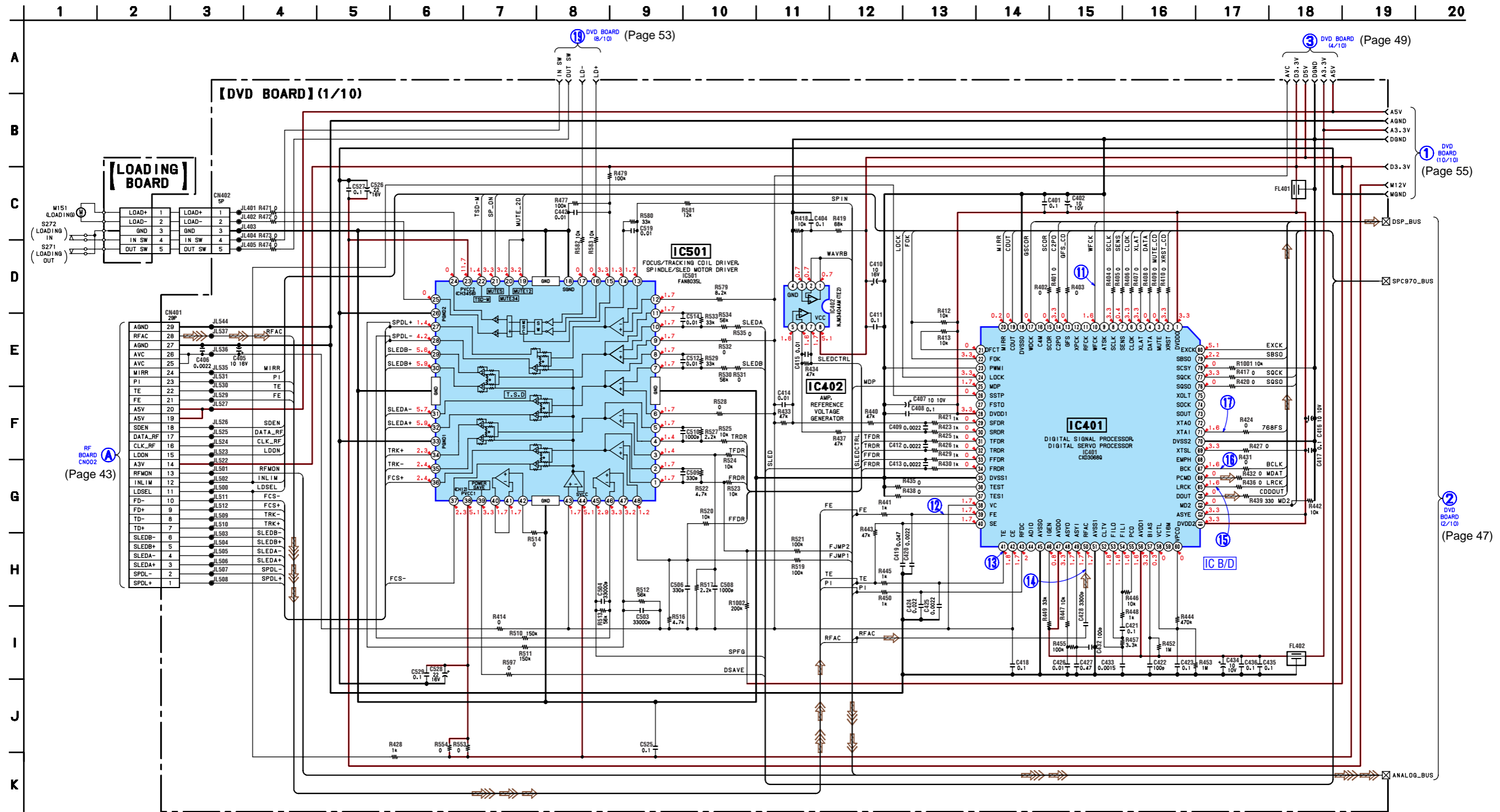


• Semiconductor Location

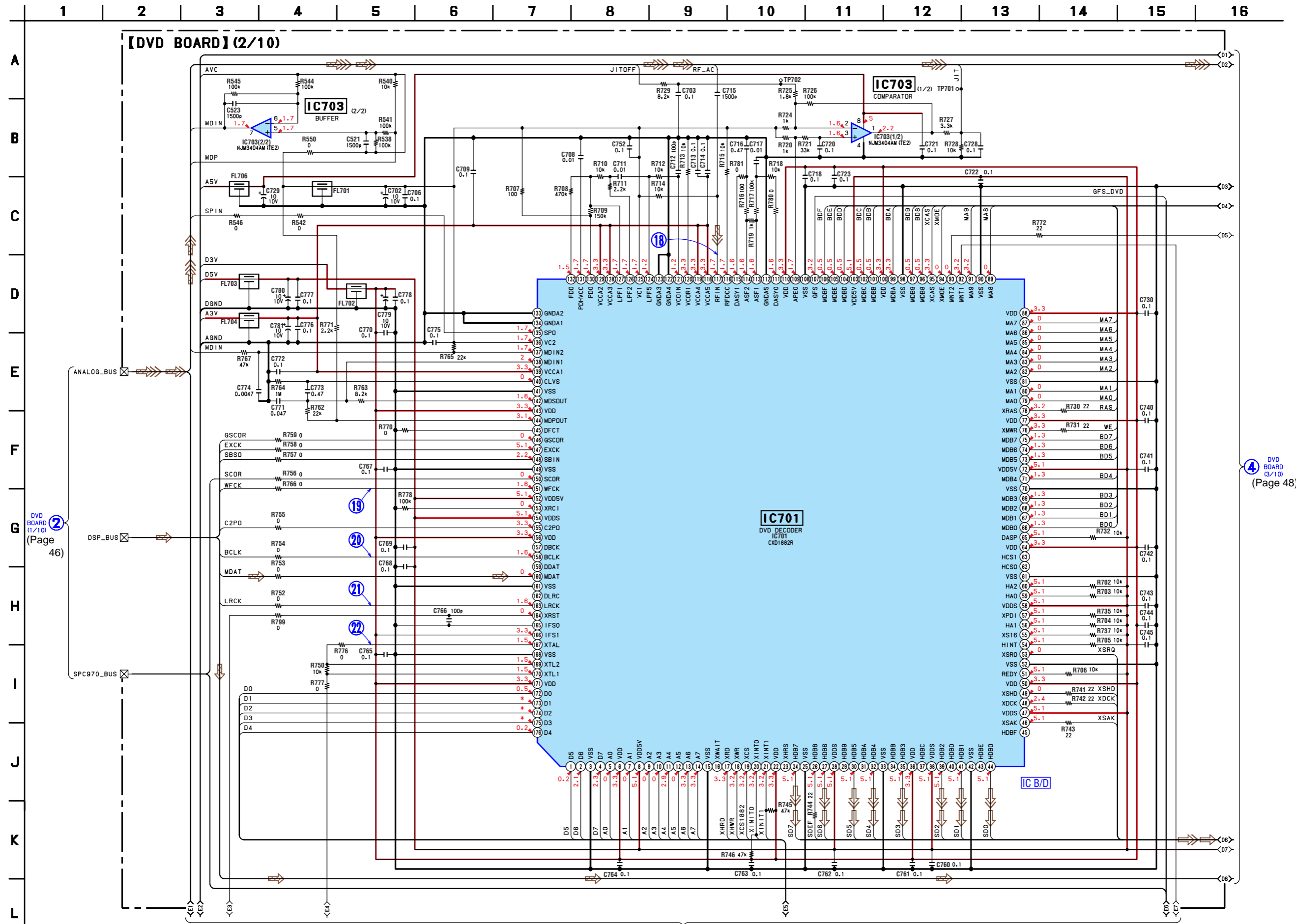
Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D900	C-3	(IC006)	G-10	IC402	F-3	(IC610)	F-11	IC813	C-6	(Q004)	G-11
D901	C-5	(IC202)	F-8	(IC501)	F-4	IC612	B-10	(IC814)	D-7	(Q301)	E-4
(D902)	B-4	(IC203)	E-10	(IC600)	E-12	IC701	E-6	(IC900)	C-10	(Q302)	F-10
(D904)	C-4	(IC204)	F-9	(IC601)	F-12	(IC702)	C-9	IC901	C-4	(Q900)	B-4
D1001	C-5	(IC205)	E-9	(IC602)	E-11	(IC703)	G-7	IC902	B-6	(Q901)	B-4
		IC206	E-9	(IC603)	G-11	(IC706)	F-6	(IC903)	C-4	(Q906)	C-4
IC001	F-11	(IC215)	E-9	(IC604)	C-11	IC801	C-8	(IC904)	C-4	(Q907)	C-4
(IC002)	F-11	IC301	D-4	IC605	D-12	(IC802)	E-5			(Q908)	B-10
(IC003)	F-11	(IC302)	D-3	IC606	D-11	(IC803)	D-5	(Q001)	F-12	(Q909)	B-9
(IC004)	D-12	(IC303)	D-8	IC607	C-11	(IC808)	C-8	(Q002)	G-12	(Q910)	B-10
(IC005)	D-12	IC401	F-4	(IC608)	E-11	(IC812)	C-6	(Q003)	G-11		

() : SIDE B

5-7. SCHEMATIC DIAGRAM — DVD SECTION (1/10) — • Refer to page 41 for Waveforms. • Refer to page 72 for IC Block Diagram.



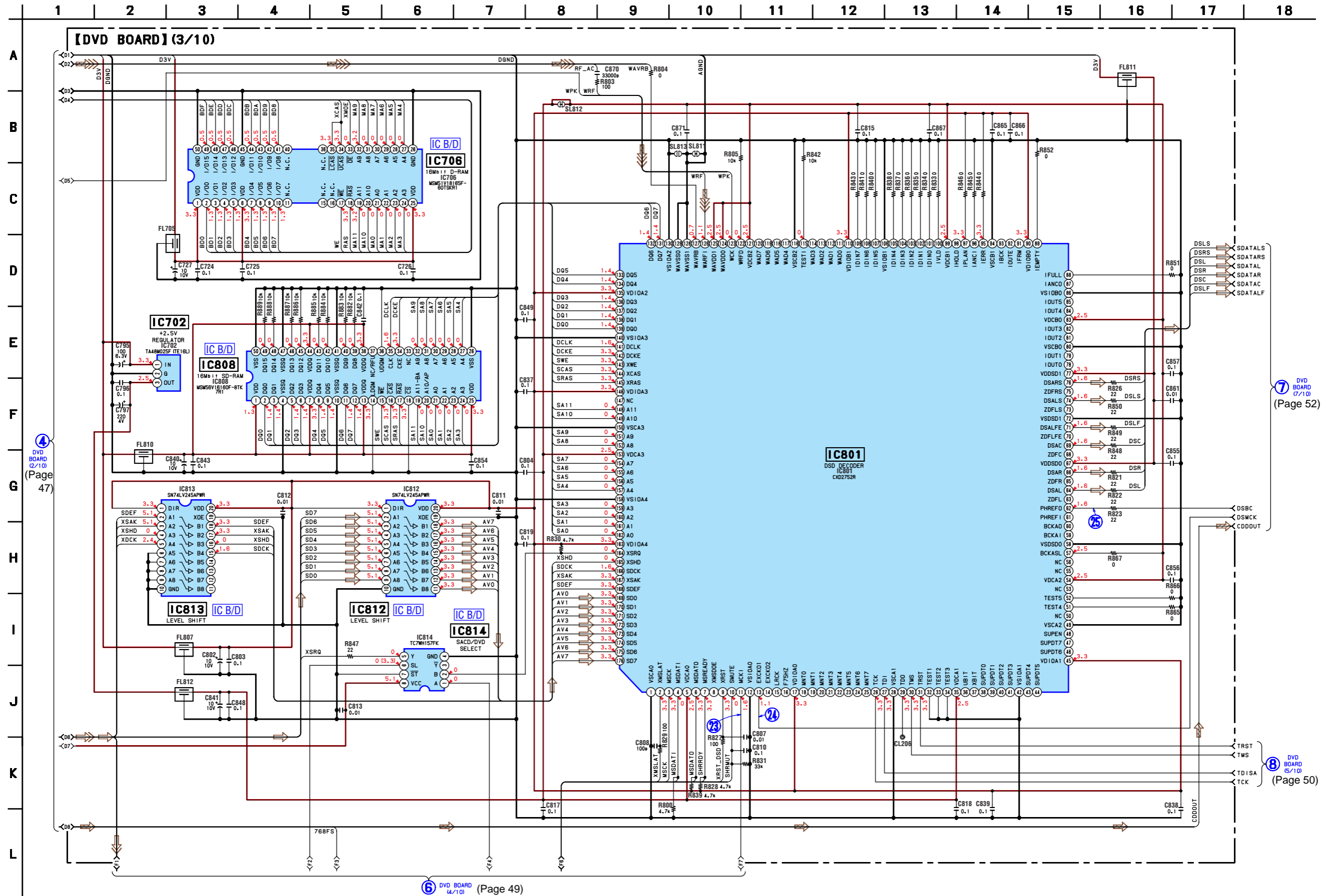
5-8. SCHEMATIC DIAGRAM — DVD SECTION (2/10) — • Refer to page 41 for Waveforms. • Refer to page 73 for IC Block Diagram.



4 DVD BOARD (3/10) (Page 48)

5 DVD BOARD (4/10) (Page 49)

5-9. SCHEMATIC DIAGRAM — DVD SECTION (3/10) — Refer to page 41 for Waveforms. Refer to page 72 for IC Block Diagrams.



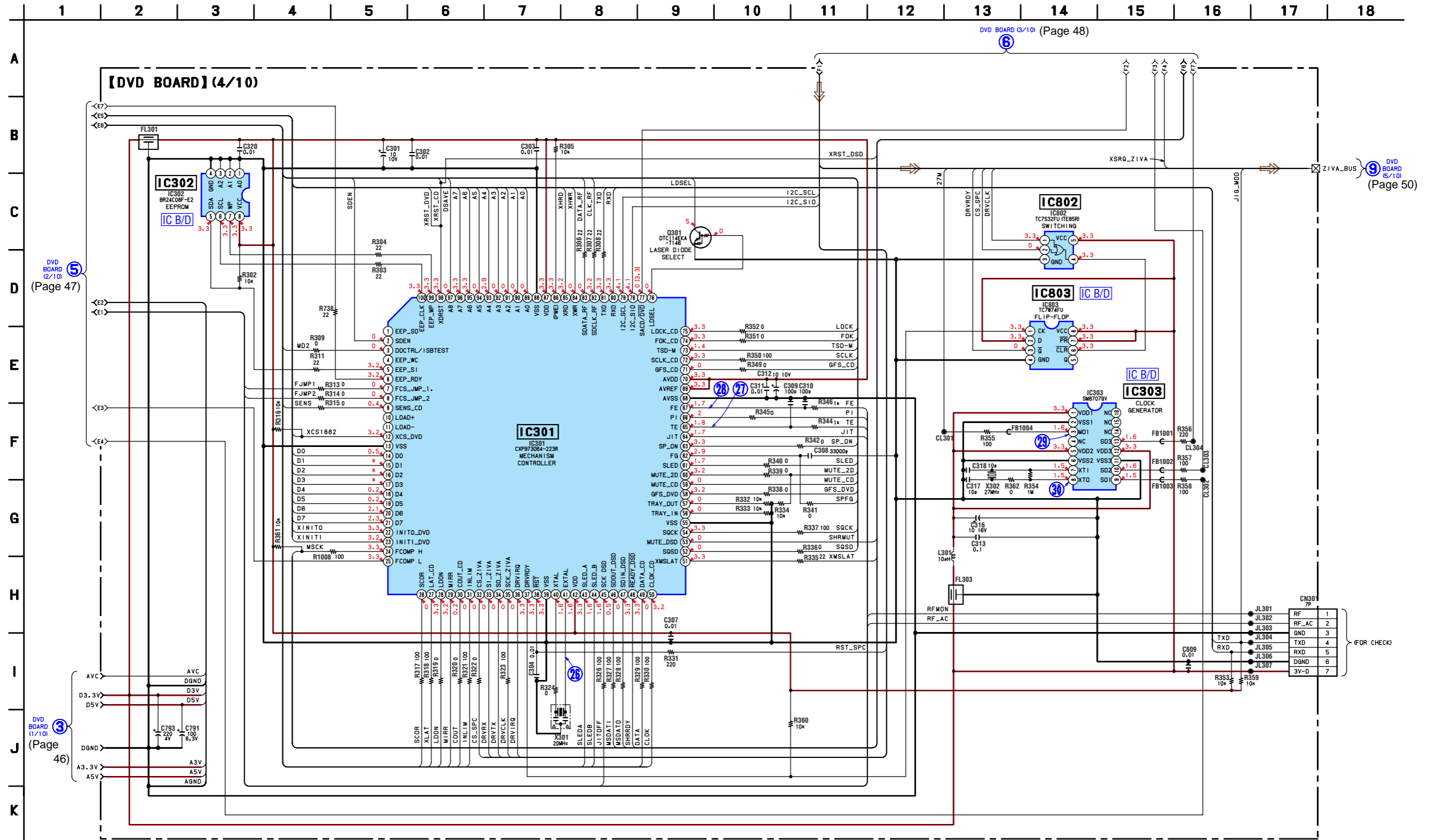
4 DVD BOARD (2/10) (Page 47)

7 DVD BOARD (7/10) (Page 52)

8 DVD BOARD (5/10) (Page 50)

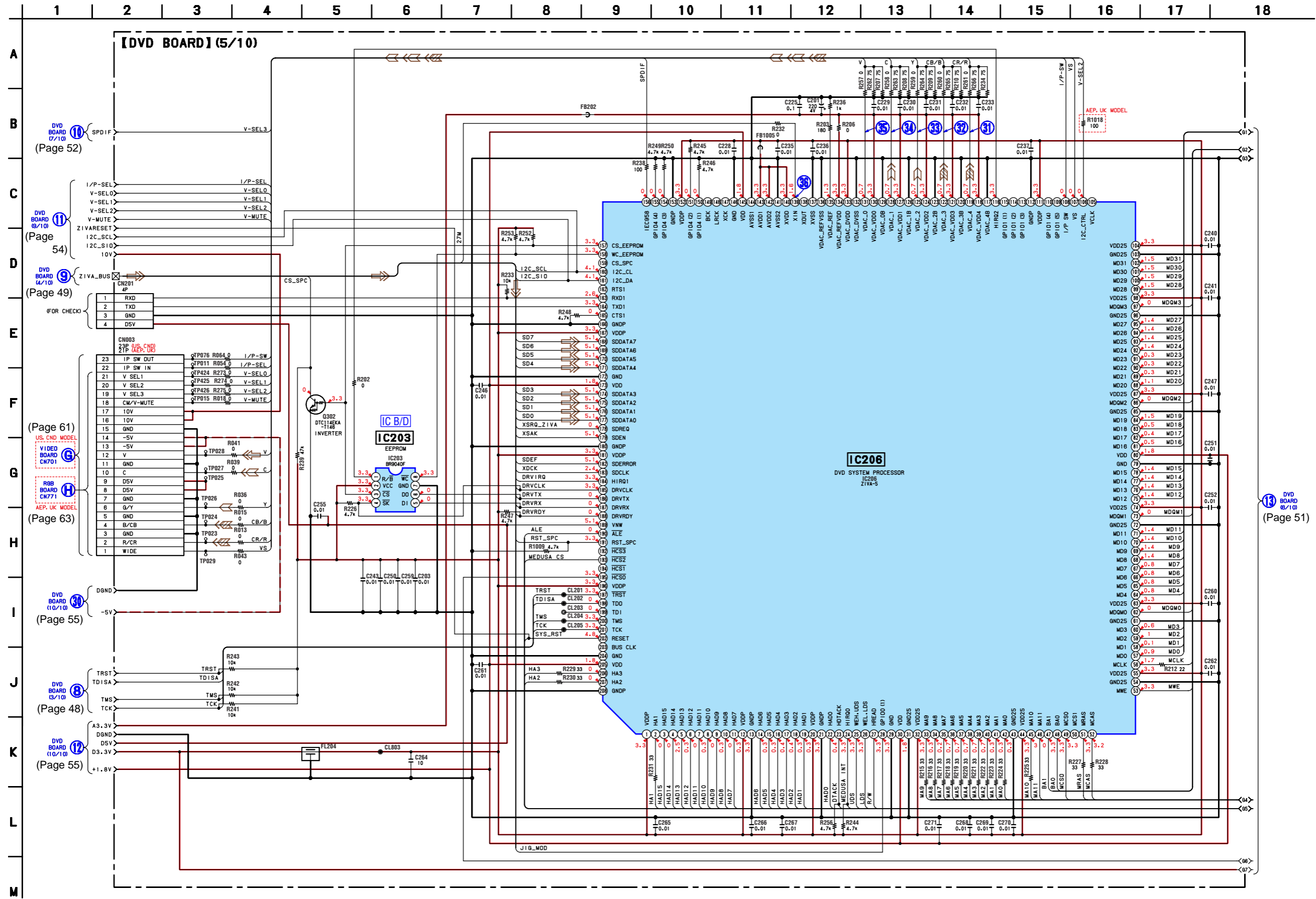
6 DVD BOARD (4/10) (Page 49)

5-10. SCHEMATIC DIAGRAM — DVD SECTION (4/10) — Refer to page 41 for Waveforms. Refer to page 75 for IC Block Diagrams.

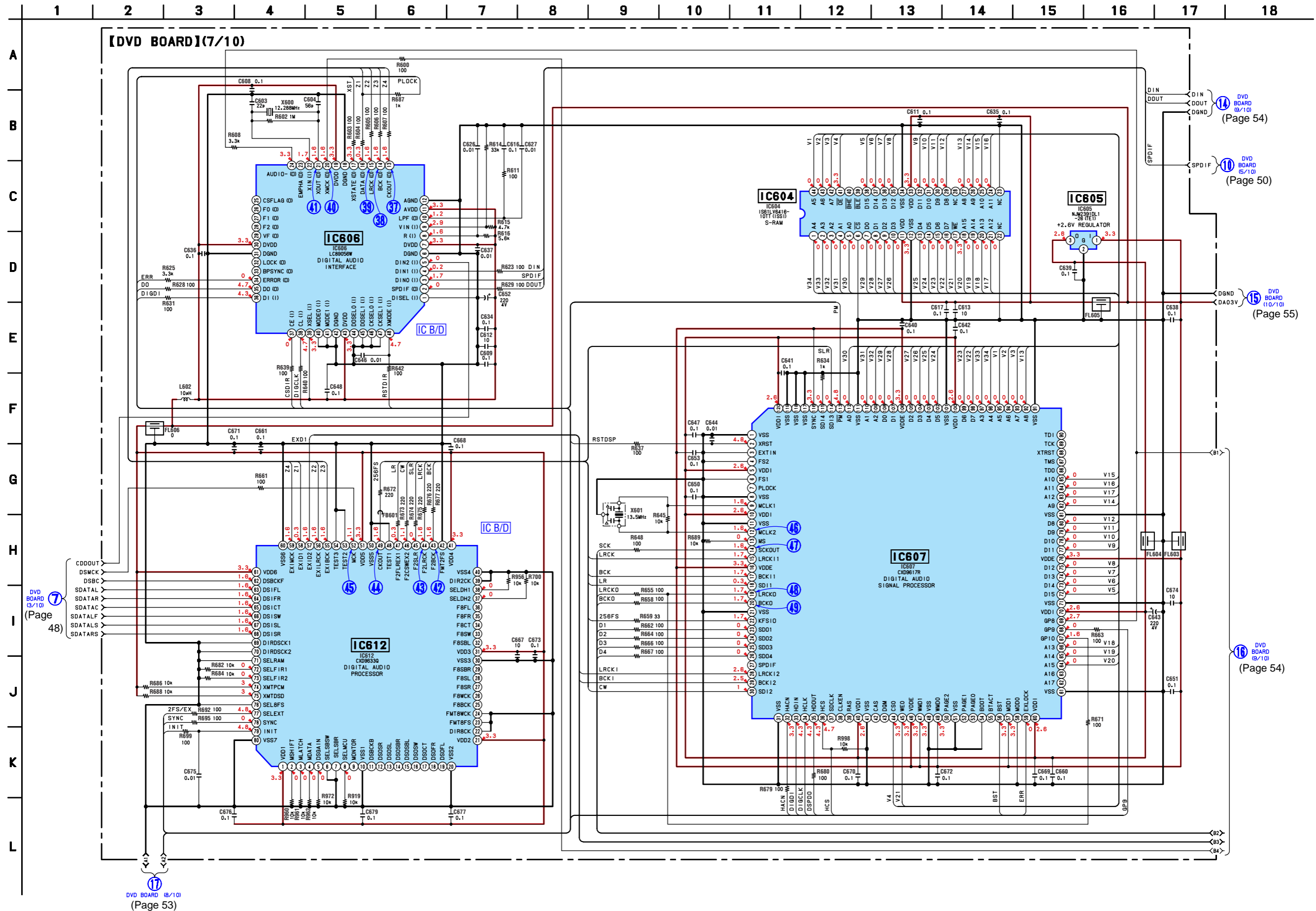


• Refer to page 41 for Waveforms.
• Refer to page 75 for IC Block Diagram.

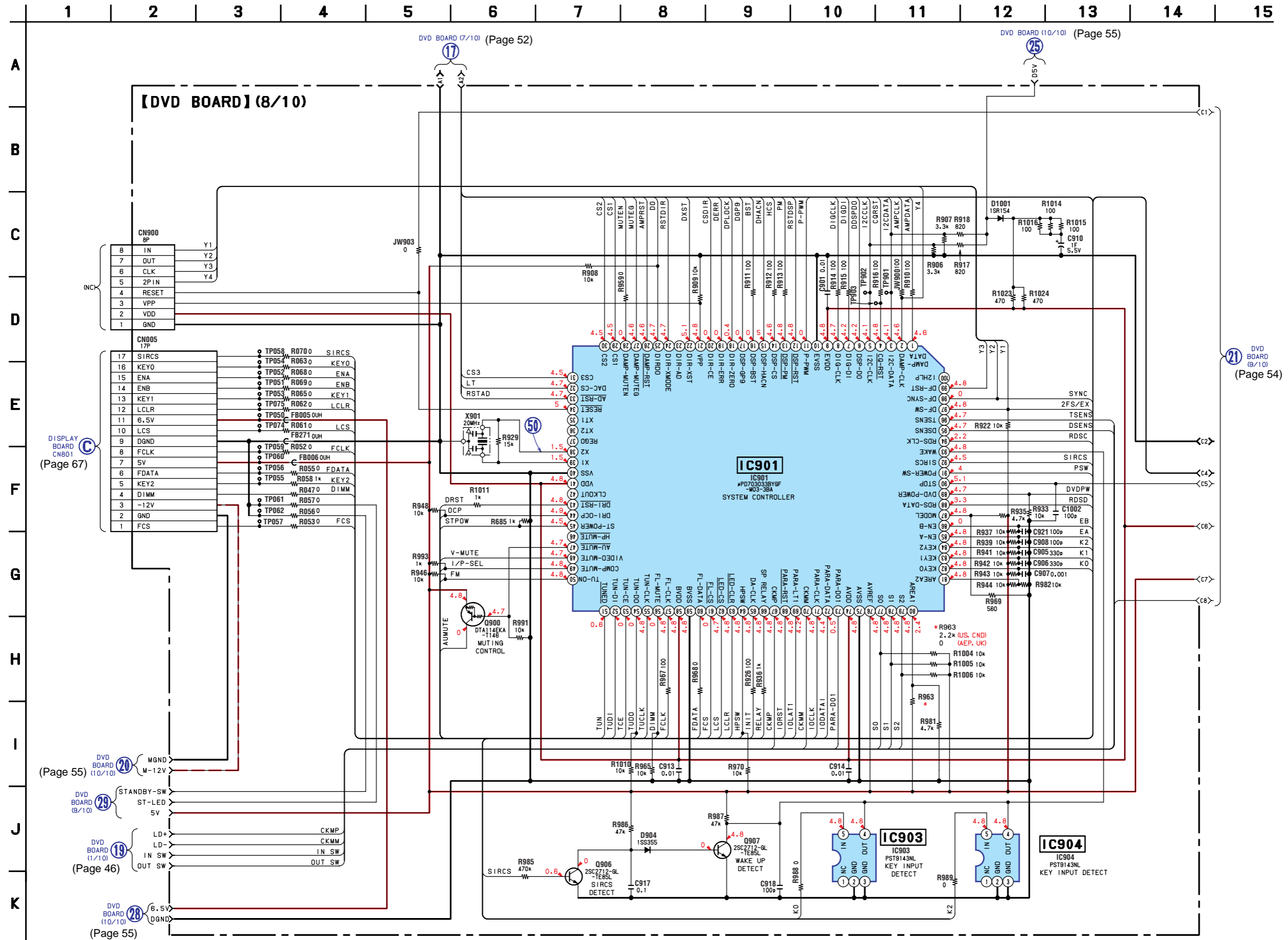
5-11. SCHEMATIC DIAGRAM — DVD SECTION (5/10) —



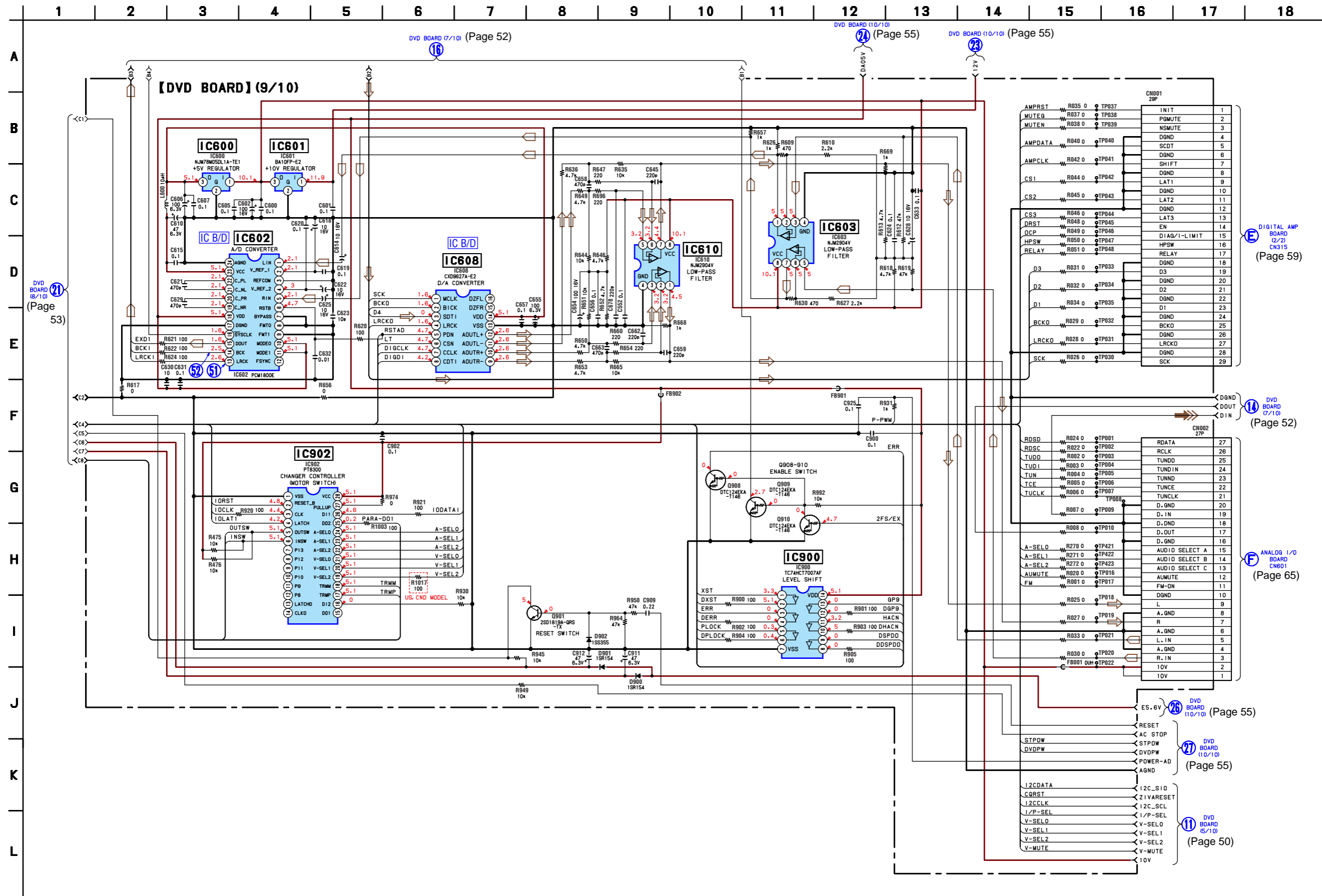
5-13. SCHEMATIC DIAGRAM — DVD SECTION (7/10) — Refer to page 41 for Waveforms. Refer to page 76 for IC Block Diagrams.



5-14. SCHEMATIC DIAGRAM — DVD SECTION (8/10) — • Refer to page 41 for Waveform.



5-15. SCHEMATIC DIAGRAM — DVD SECTION (9/10) — Refer to page 41 for Waveforms. Refer to page 76 for IC Block Diagrams.



DIGITAL AMP BOARD (2/2) CN315 (Page 59)

DVD BOARD (7/10) (Page 52)

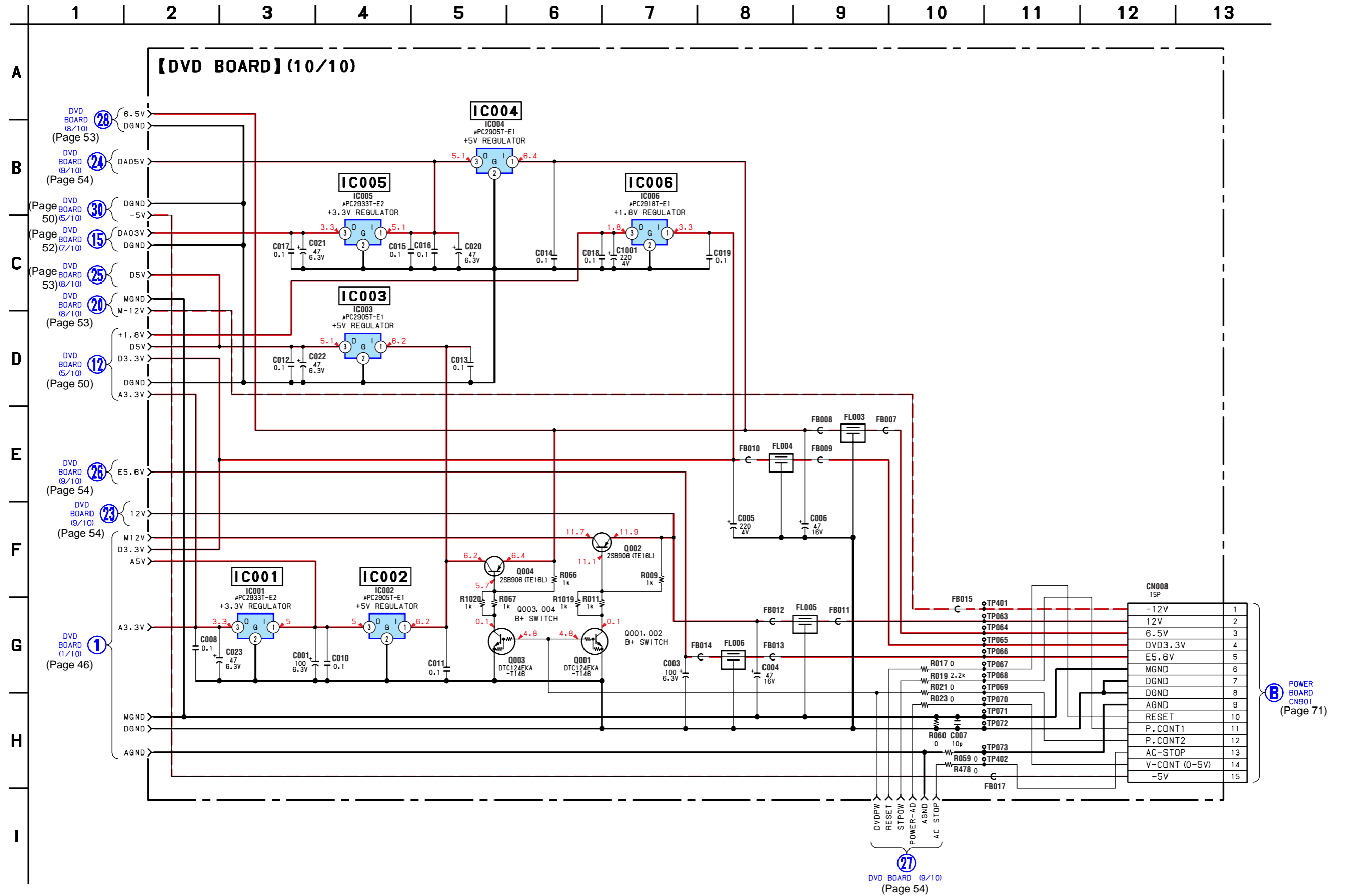
ANALOG I/O BOARD CN801 (Page 65)

DVD BOARD (10/10) (Page 55)

DVD BOARD (10/10) (Page 55)

DVD BOARD (5/10) (Page 50)

5-16. SCHEMATIC DIAGRAM — DVD SECTION (10/10) —

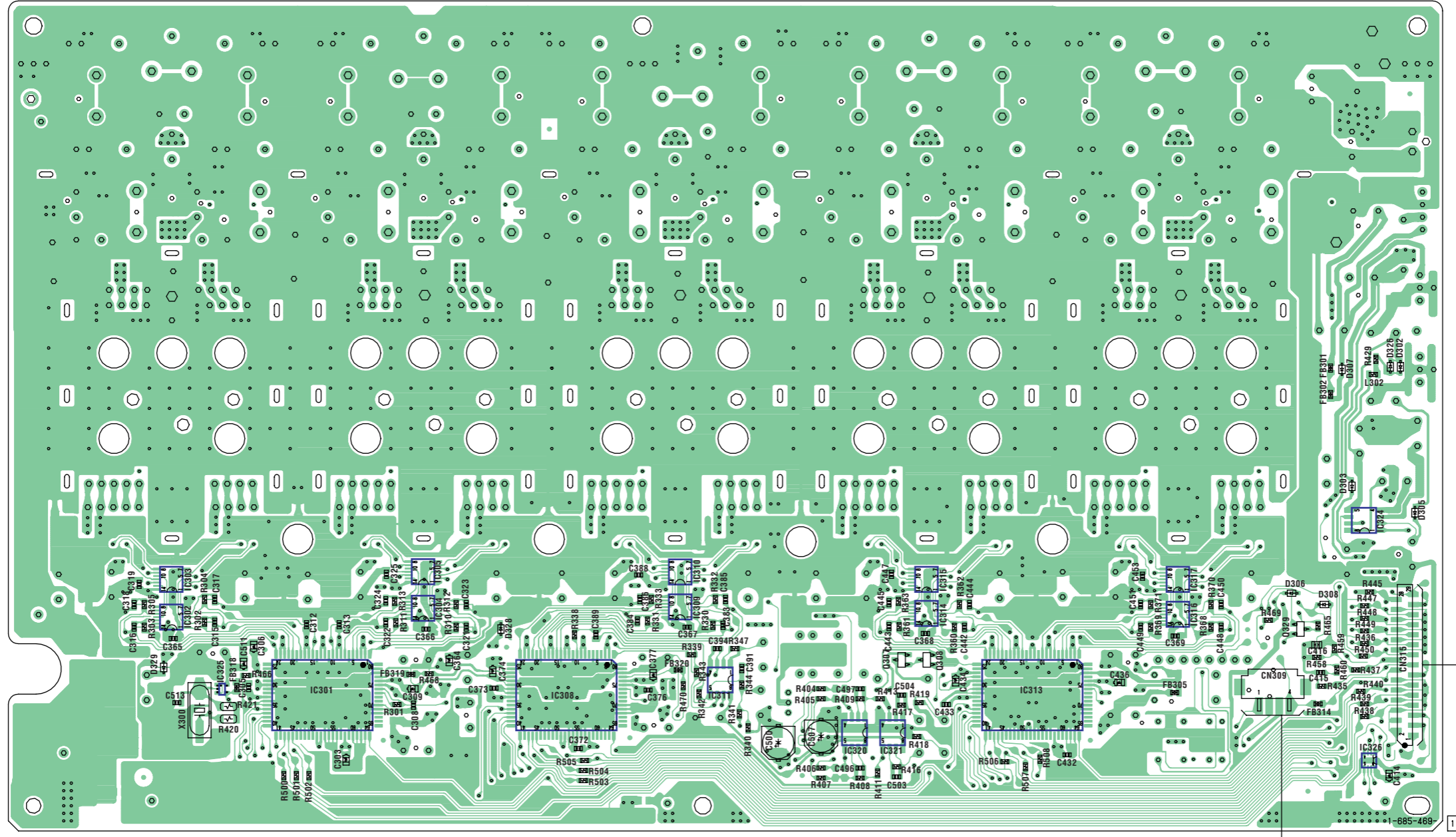


5-17. PRINTED WIRING BOARD — DIGITAL AMP SECTION — • Refer to page 40 for Circuit Boards Location.

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14

A
B
C
D
E
F
G
H
I

【DIGITAL AMP BOARD】(SIDE A)



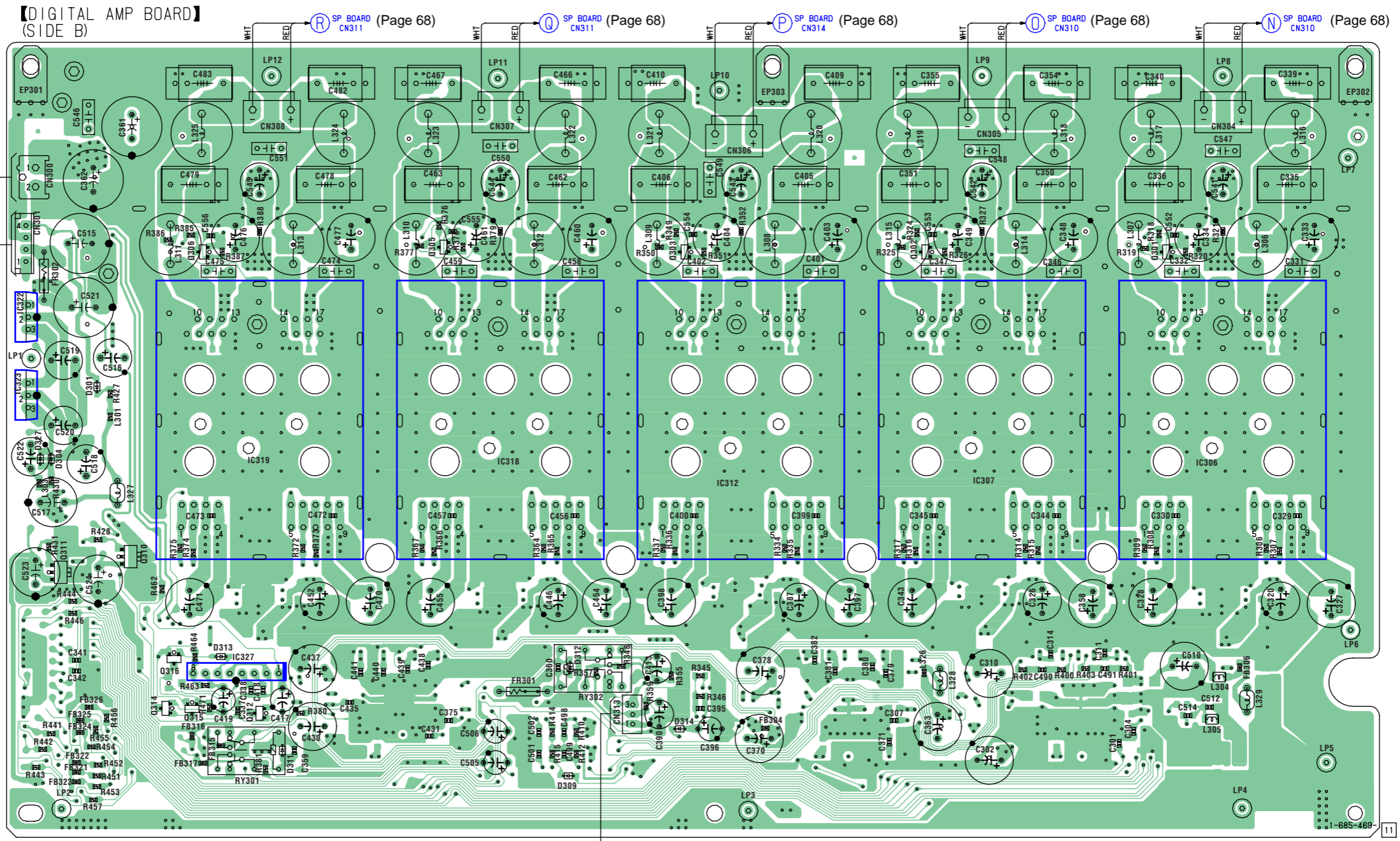
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
(D301)	E-12	(D312)	G-8	IC303	F-3	IC313	G-10	(IC323)	E-13	(Q306)	C-11
D302	E-13	(D313)	G-11	IC304	G-5	IC314	G-9	IC324	F-12	Q307	G-9
D303	F-12	(D314)	G-7	IC305	F-5	IC315	F-9	IC325	G-3	Q308	G-9
(D304)	E-13	D326	E-13	(IC306)	E-3	IC316	G-11	IC326	H-12	(Q310)	F-12
D305	F-13	(D327)	E-13	(IC307)	E-5	IC317	F-11	(IC327)	G-11	(Q311)	F-13
D306	F-12	D328	G-6	IC308	G-6	(IC318)	E-9			(Q312)	G-11
D307	E-12	D329	G-3	IC309	G-7	(IC319)	E-11	(Q301)	C-3	(Q314)	G-12
D308	G-12			IC310	F-7	IC320	H-8	(Q302)	C-5	(Q315)	G-11
(D309)	H-8	IC301	G-4	IC311	G-7	IC321	H-9	(Q303)	C-7	(Q316)	G-12
(D311)	H-11	IC302	G-3	(IC312)	E-7	(IC322)	D-13	(Q305)	C-9	Q329	G-12

(): SIDE B

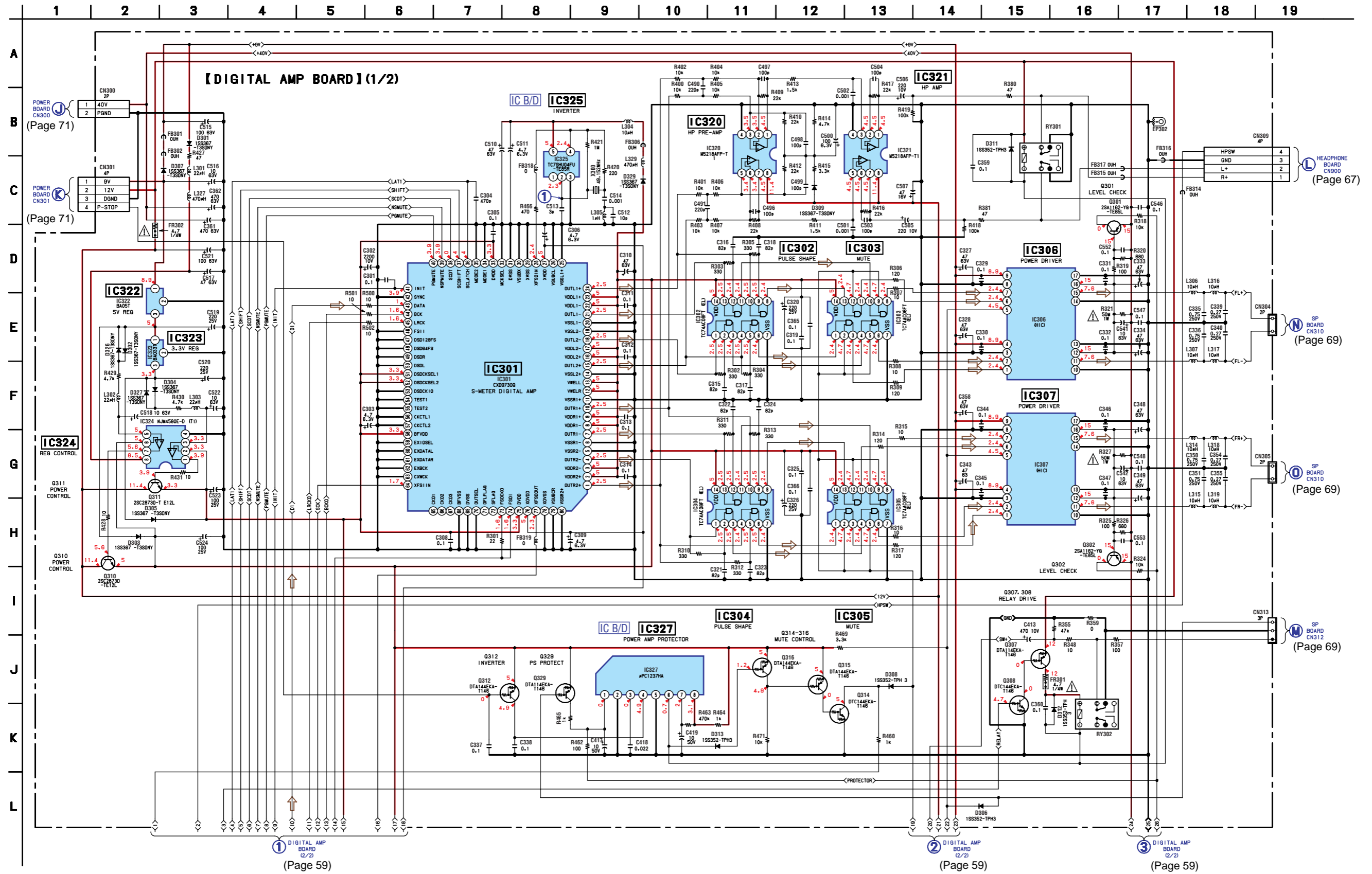
14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1

A
B
C
D
E
F
G
H
I

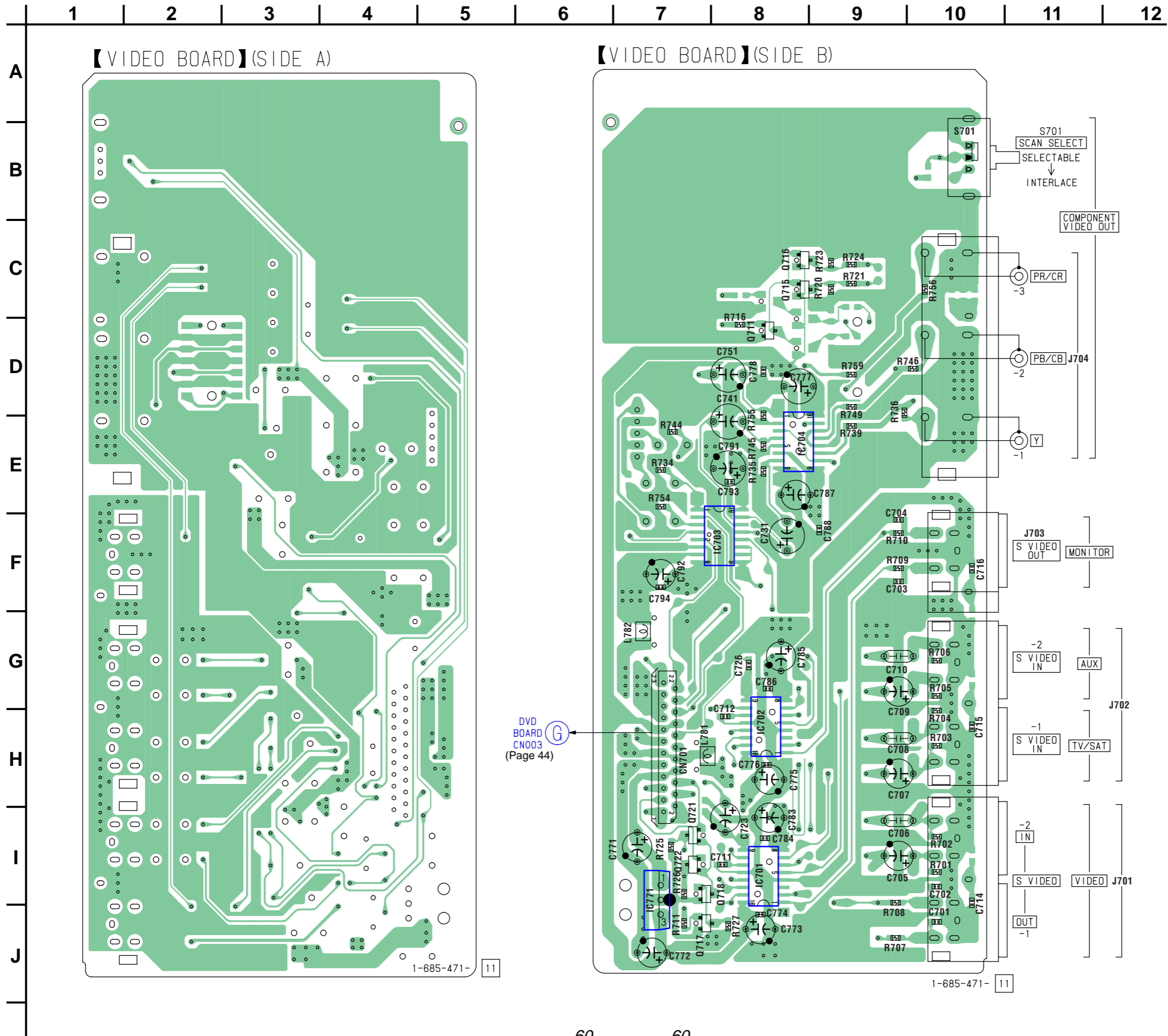


• Refer to page 41 for Waveform.

5-18. SCHEMATIC DIAGRAM — DIGITAL AMP SECTION (1/2) — • Refer to page 78 for IC Block Diagrams.



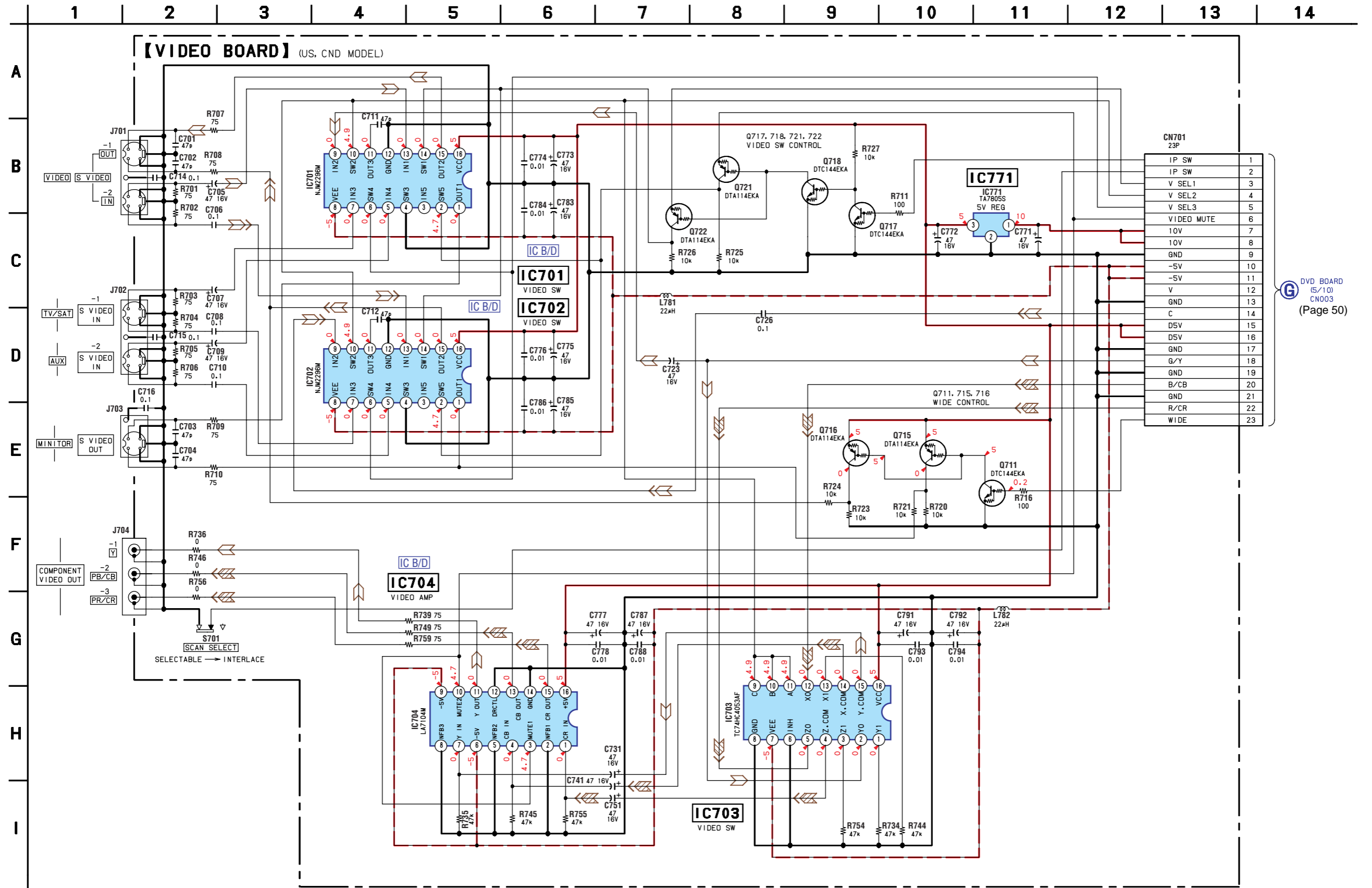
5-20. PRINTED WIRING BOARD — VIDEO SECTION — • Refer to page 40 for Circuit Boards Location.



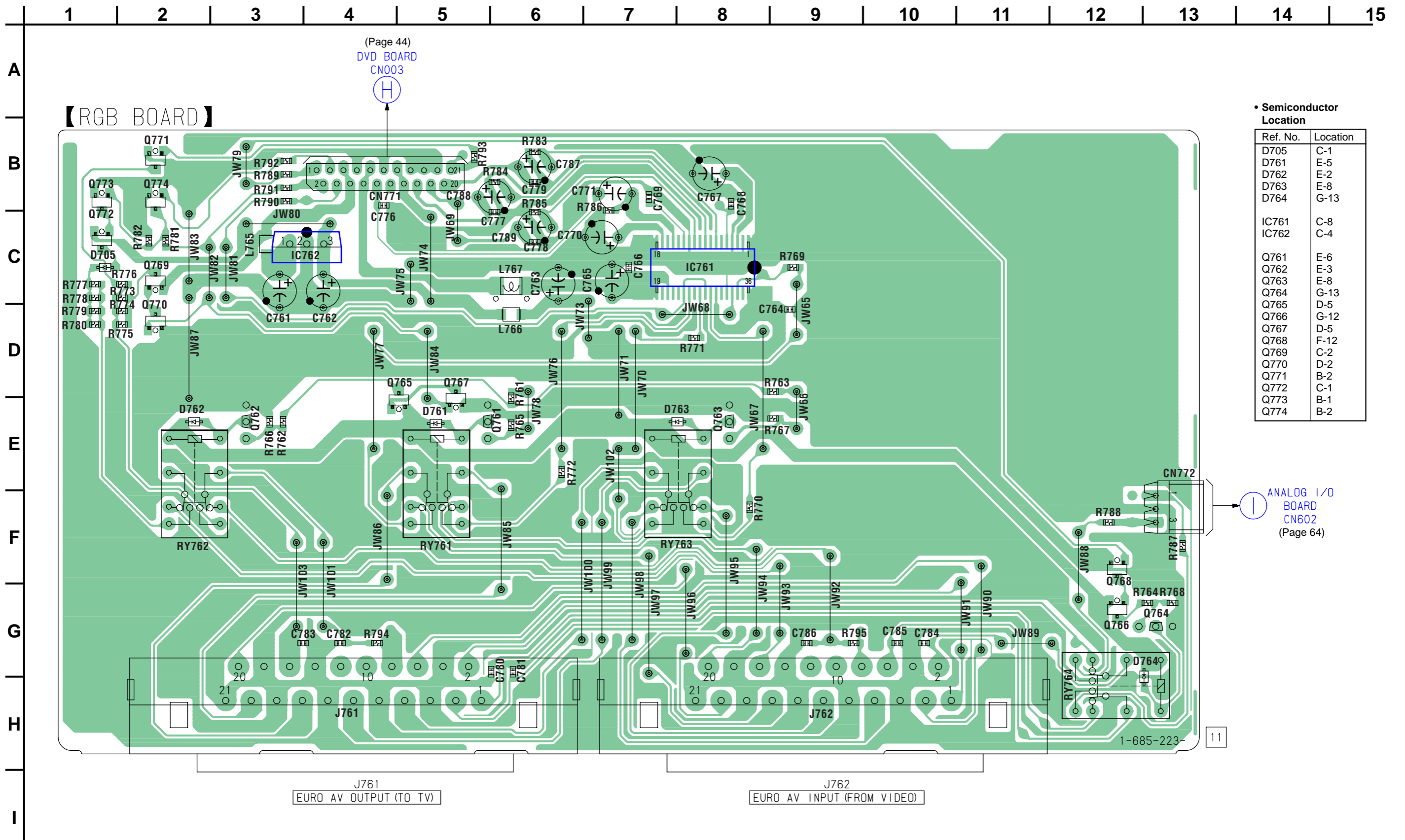
• Semiconductor Location

Ref. No.	Location
IC701	I-8
IC702	H-8
IC703	F-8
IC704	E-8
IC771	I-7
Q711	D-8
Q715	C-8
Q716	C-8
Q717	J-7
Q718	I-8
Q721	I-7
Q722	I-7

5-21. SCHEMATIC DIAGRAM — VIDEO SECTION — • Refer to page 78 for IC Block Diagrams.



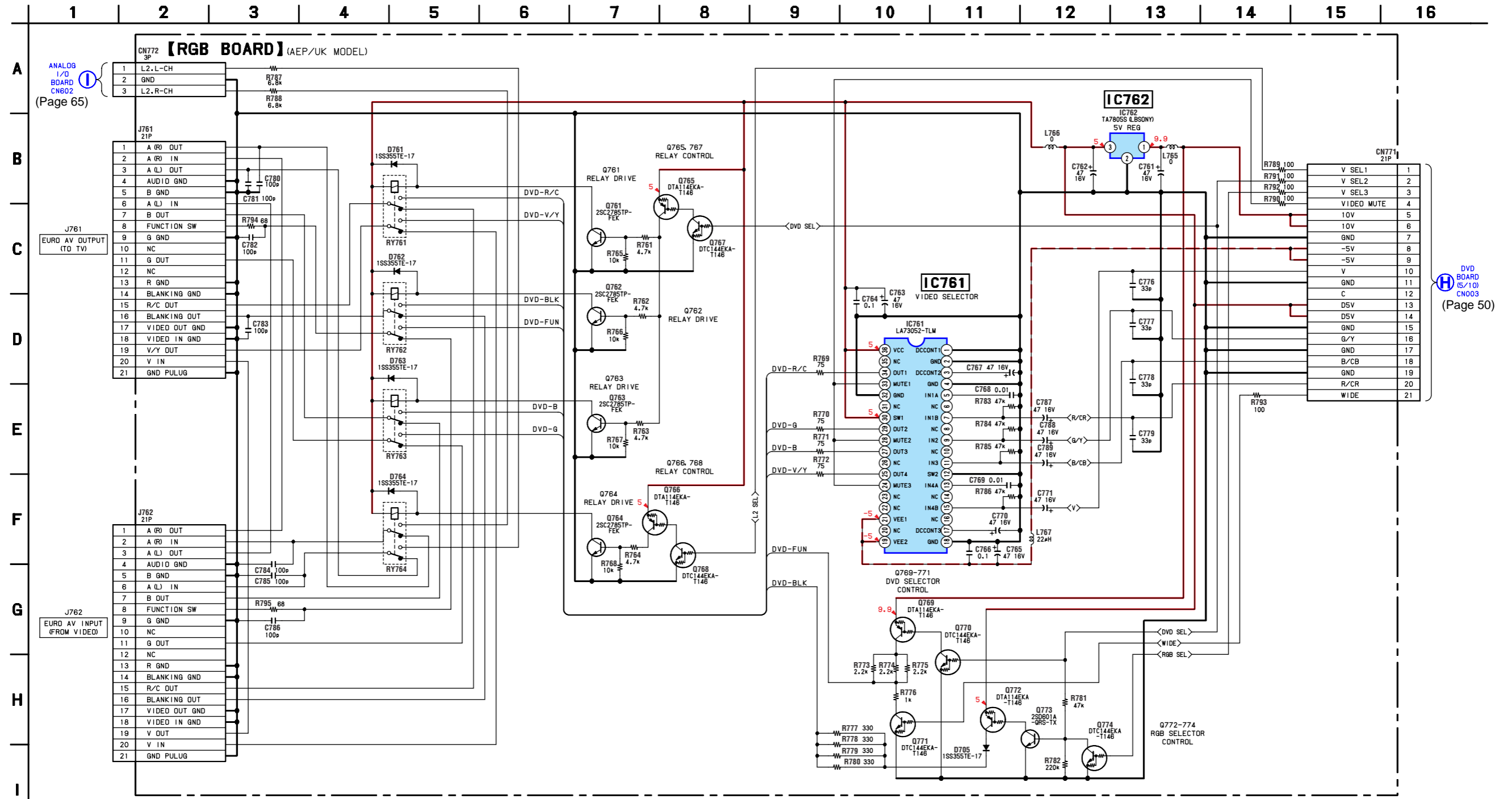
5-22. PRINTED WIRING BOARD — RGB SECTION — • Refer to page 40 for Circuit Boards Location.



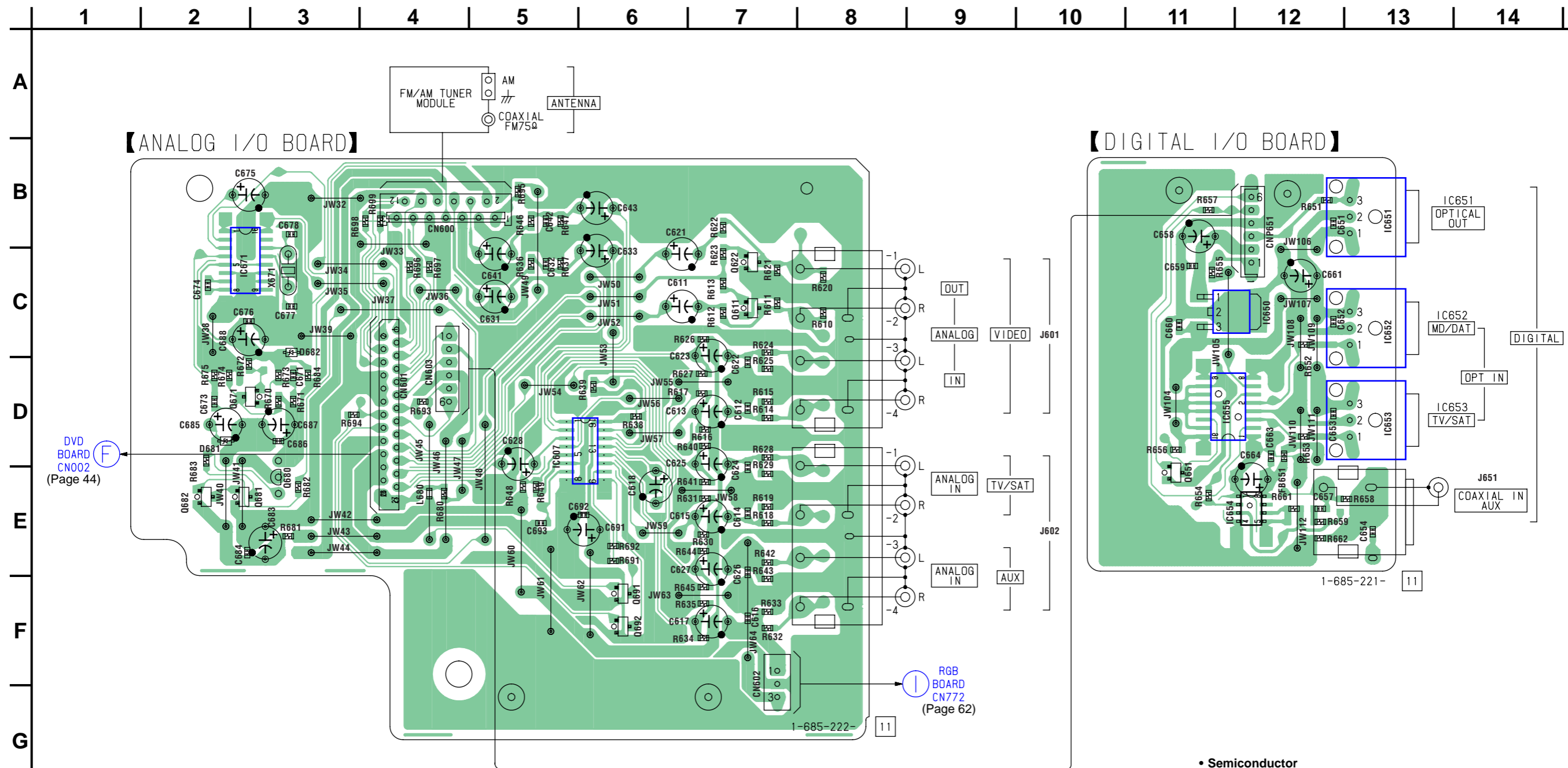
• Semiconductor Location

Ref. No.	Location
D705	C-1
D761	E-5
D762	E-2
D763	E-8
D764	G-13
IC761	C-8
IC762	C-4
Q761	E-6
Q762	E-3
Q763	E-8
Q764	G-13
Q765	D-5
Q766	G-12
Q767	D-5
Q768	F-12
Q769	C-2
Q770	D-2
Q771	B-2
Q772	C-1
Q773	B-1
Q774	B-2

5-23. SCHEMATIC DIAGRAM — RGB SECTION —



5-24. PRINTED WIRING BOARDS — IN/OUT SECTION — • Refer to page 40 for Circuit Boards Location.



• Semiconductor Location

Ref. No.	Location
D681	D-2
D682	C-3
IC607	D-5
IC650	C-12
IC651	B-13
IC652	C-13
IC653	D-13
IC654	E-12
IC655	D-11
IC671	C-2
Q611	C-7
Q622	C-7
Q651	E-11
Q671	D-2
Q680	E-3
Q681	E-2
Q682	E-2
Q691	F-6
Q692	F-6

5-26. PRINTED WIRING BOARDS — DISPLAY SECTION — • Refer to page 40 for Circuit Boards Location.

1 2 3 4 5 6 7 8 9 10 11 12 13

A

B

C

D

E

F

G

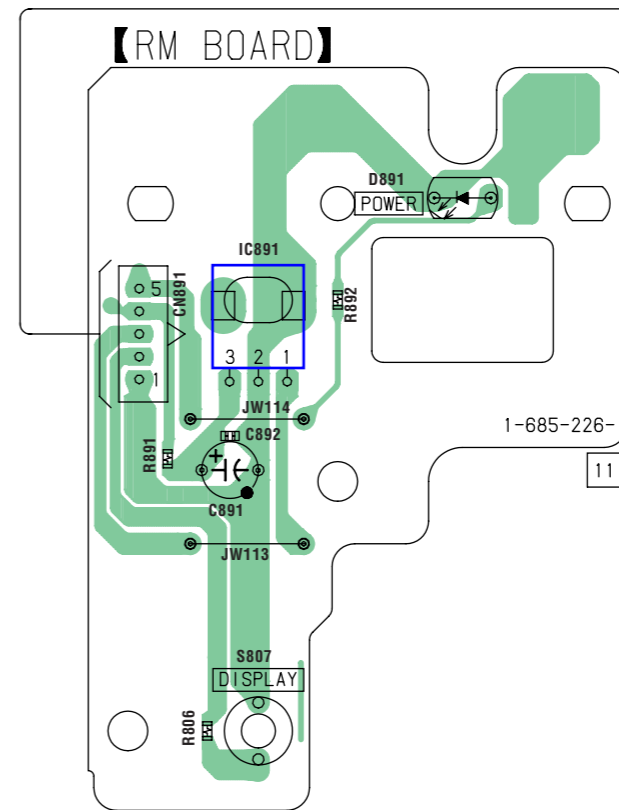
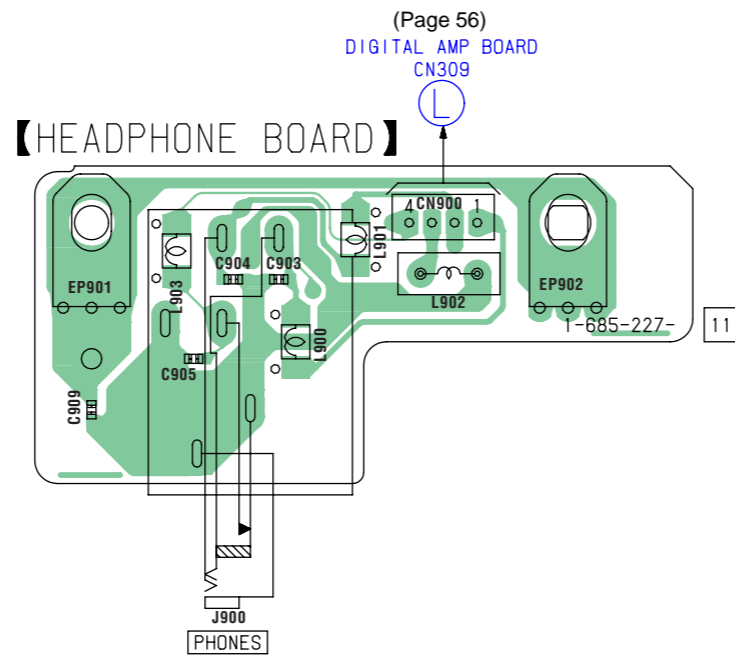
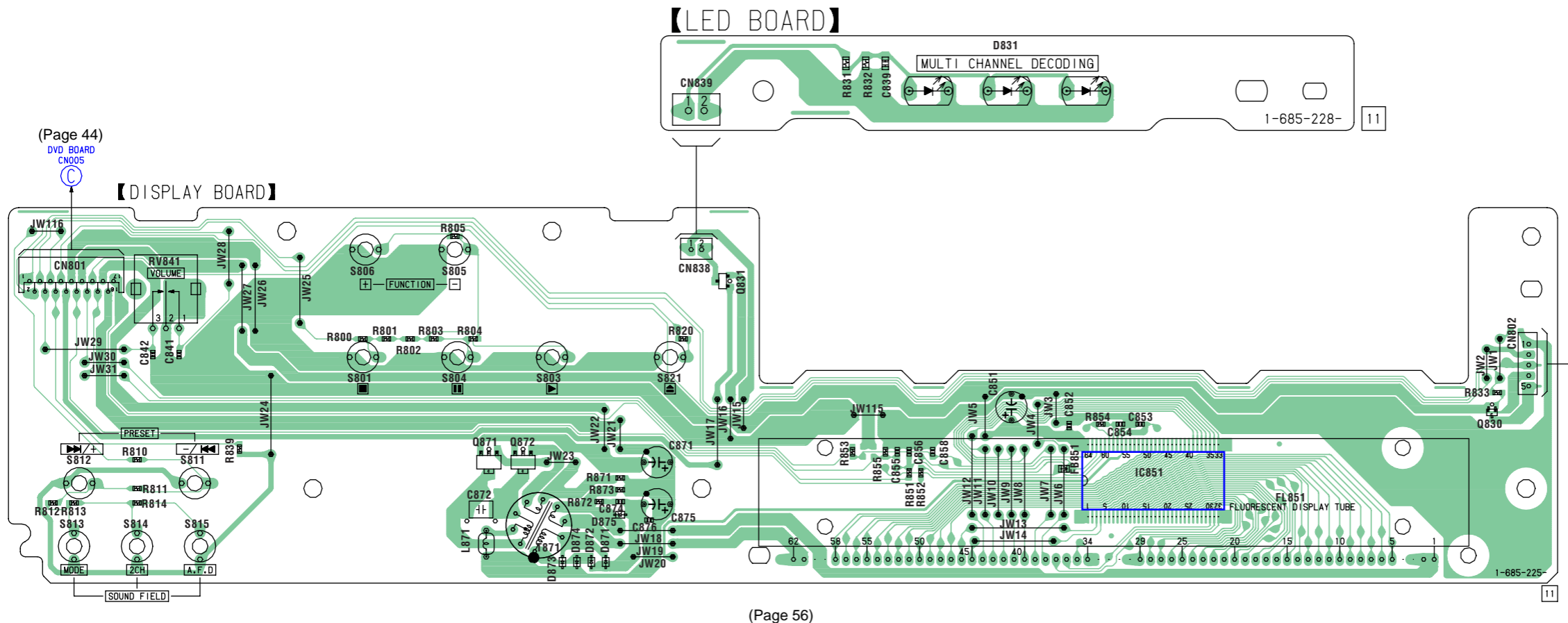
H

I

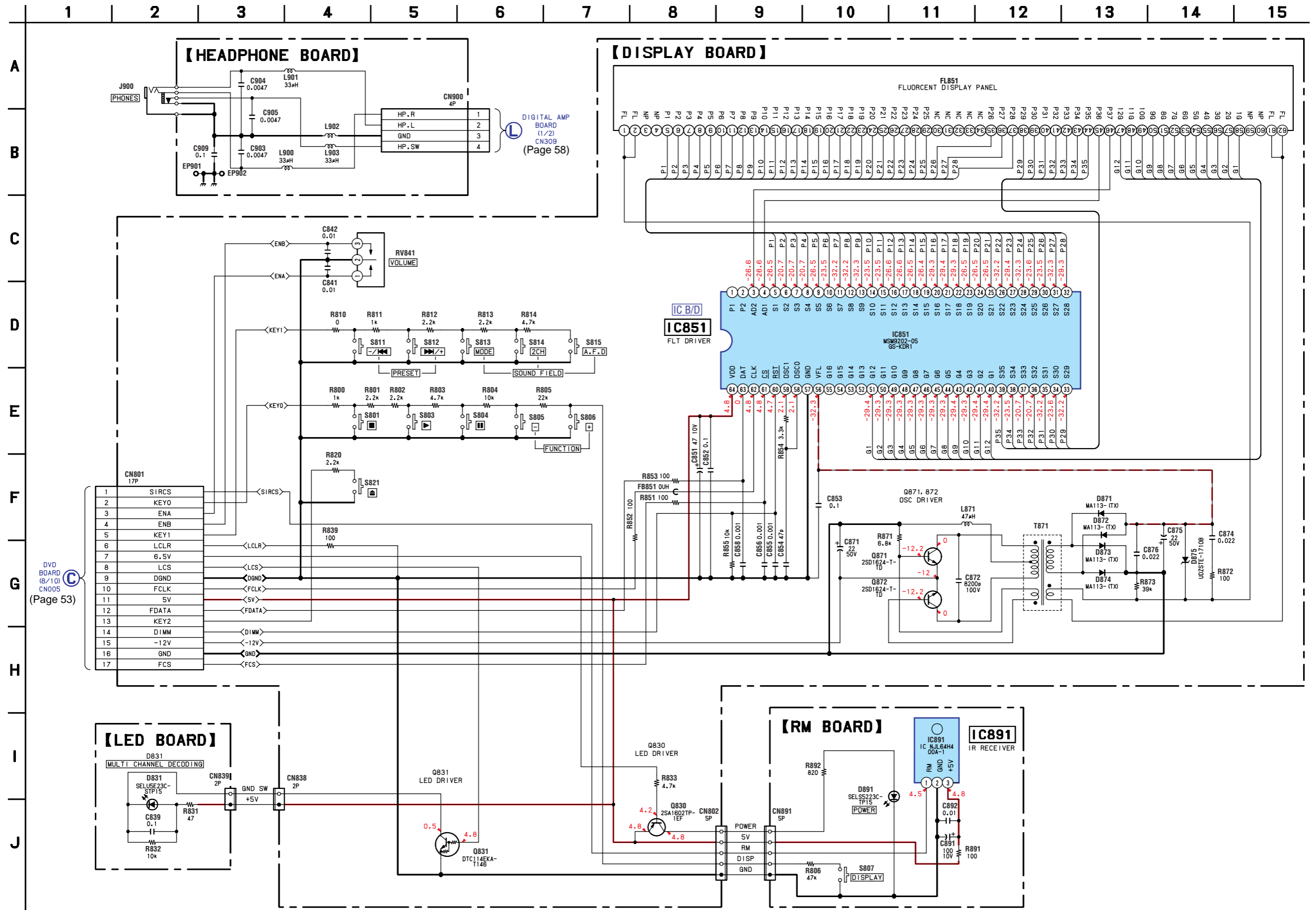
J

• Semiconductor Location

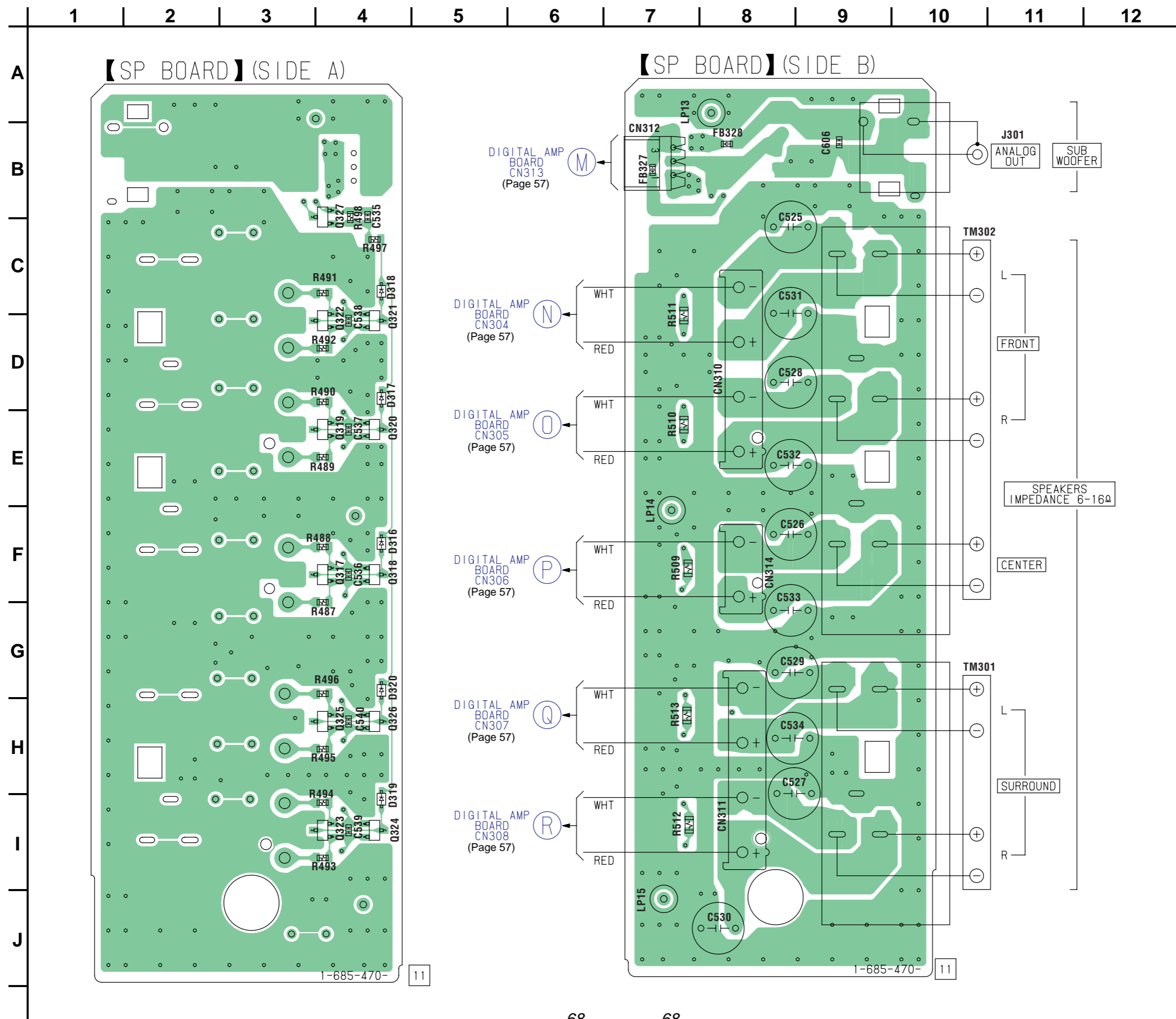
Ref. No.	Location
D831	A-9
D871	E-5
D872	E-5
D873	E-5
D874	E-5
D875	E-6
D891	G-11
IC851	E-10
IC891	G-10
Q830	D-12
Q831	C-6
Q871	D-5
Q872	D-5



5-27. SCHEMATIC DIAGRAM — DISPLAY SECTION — • Refer to page 79 for IC Block Diagram.



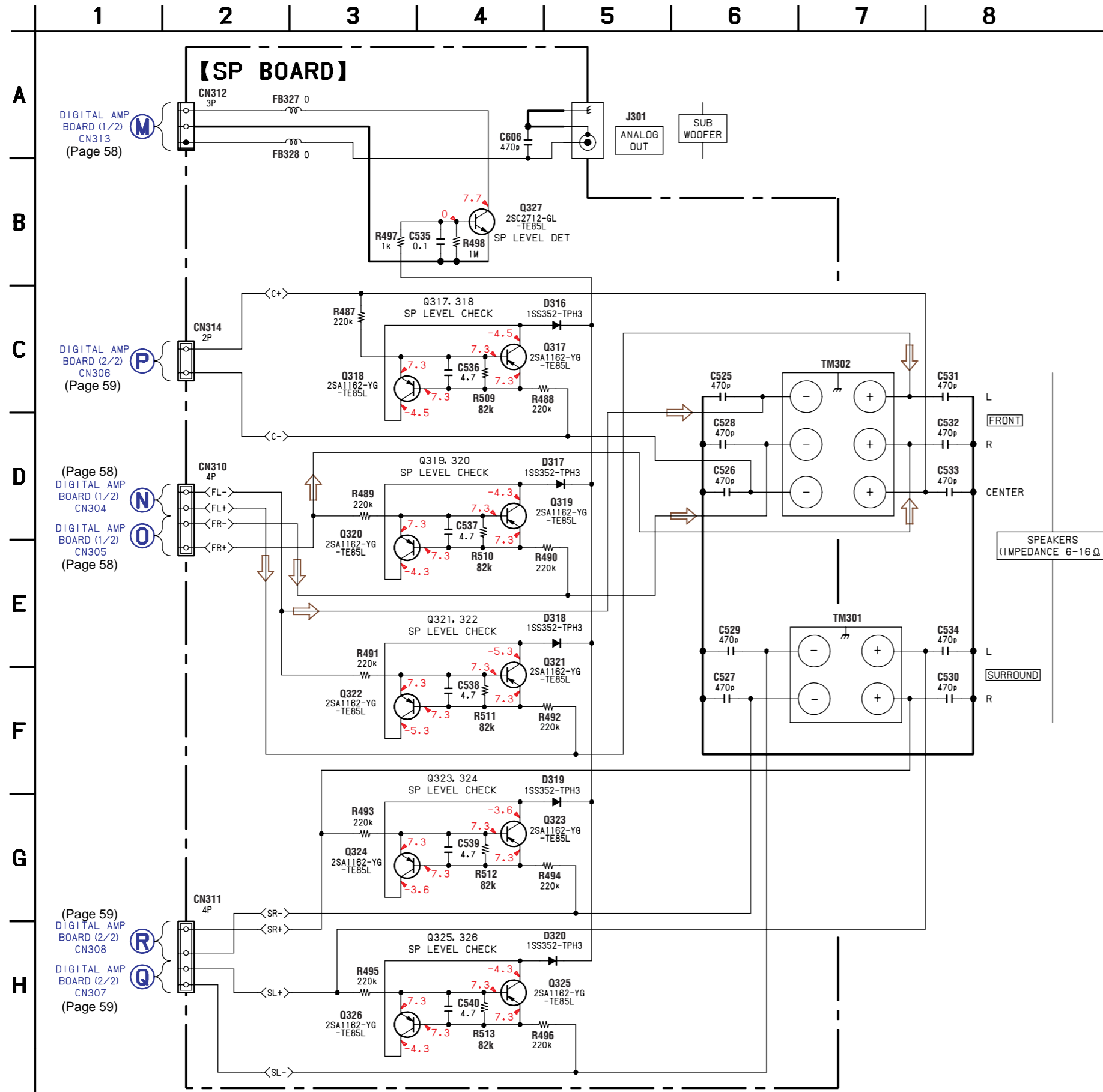
5-28. PRINTED WIRING BOARD — SPEAKER SECTION — • Refer to page 40 for Circuit Boards Location.



• Semiconductor Location

Ref. No.	Location
D316	F-4
D317	D-4
D318	C-4
D319	I-4
D320	G-4
Q317	F-4
Q318	F-4
Q319	E-4
Q320	E-4
Q321	D-4
Q322	D-4
Q323	I-4
Q324	I-4
Q325	H-4
Q326	H-4
Q327	B-4

5-29. SCHEMATIC DIAGRAM — SPEAKER SECTION —

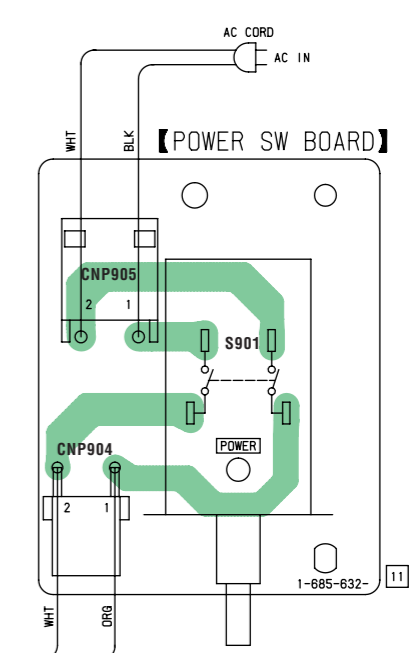
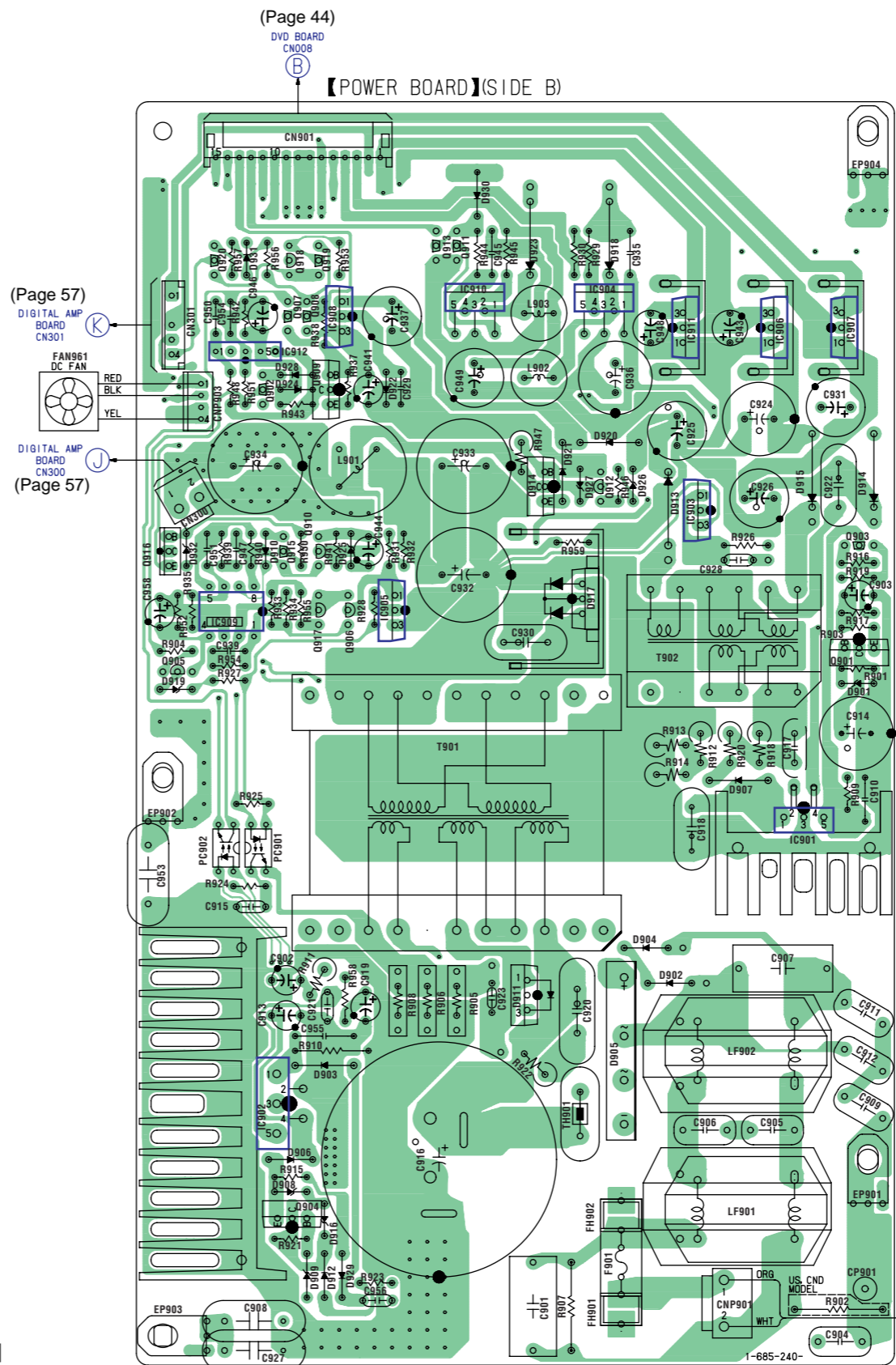
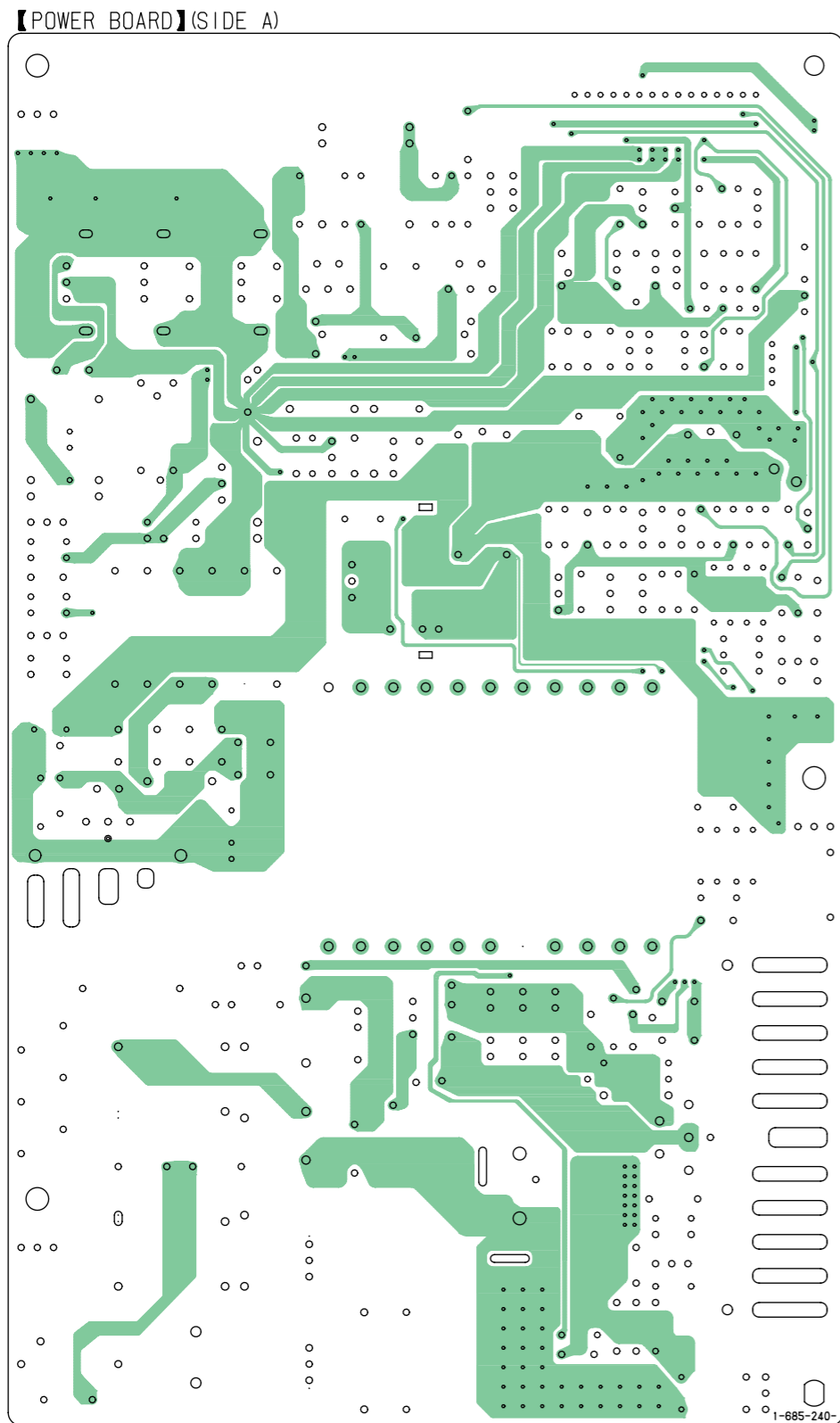


• Refer to page 71 for Semiconductor Location.

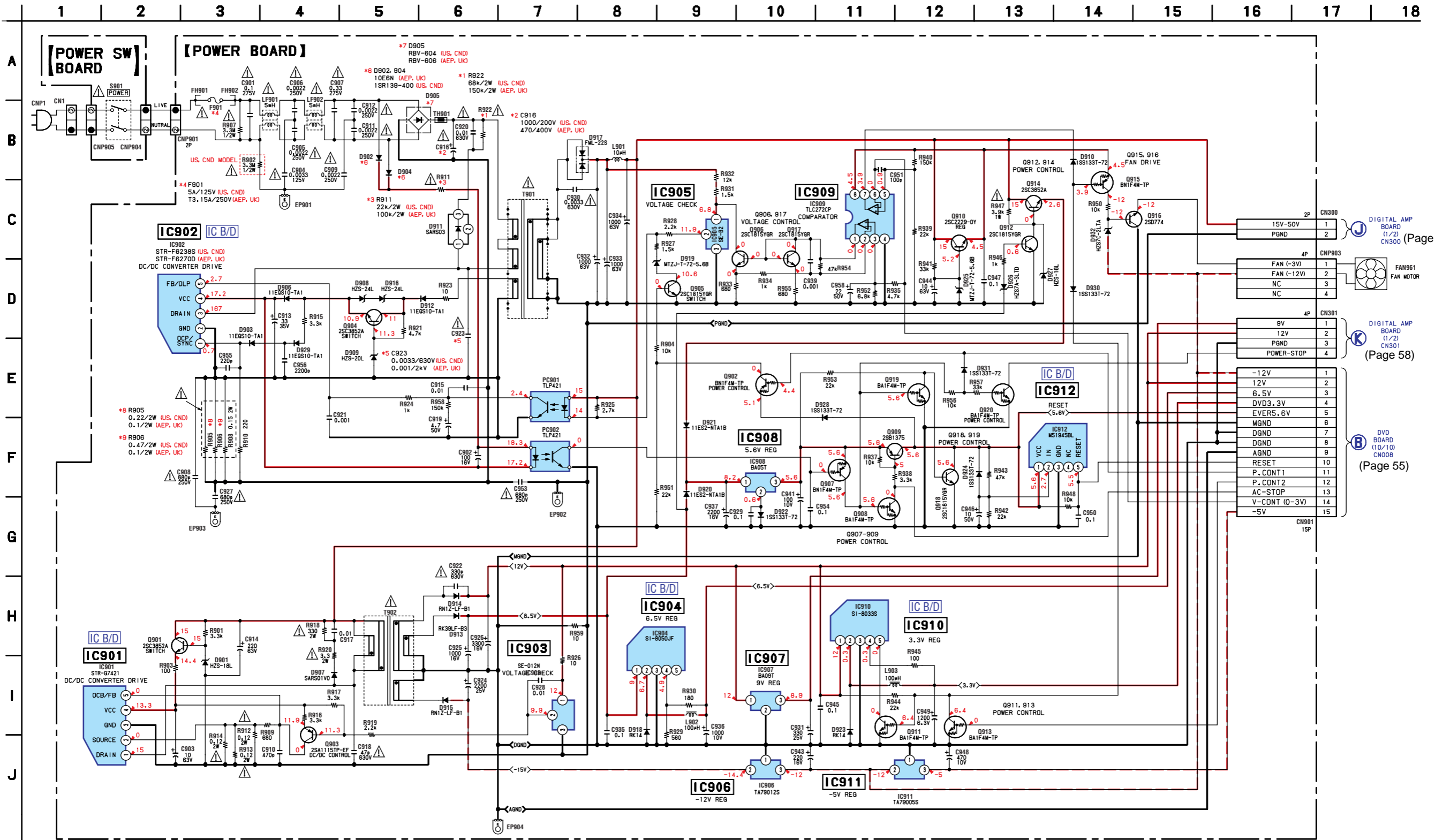
5-30. PRINTED WIRING BOARDS — POWER SECTION — • Refer to page 40 for Circuit Boards Location.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
--	---	---	---	---	---	---	---	---	---	----	----	----	----	----

A
B
C
D
E
F
G
H
I



5-31. SCHEMATIC DIAGRAM — POWER SECTION — • Refer to page 80 for IC Block Diagrams.

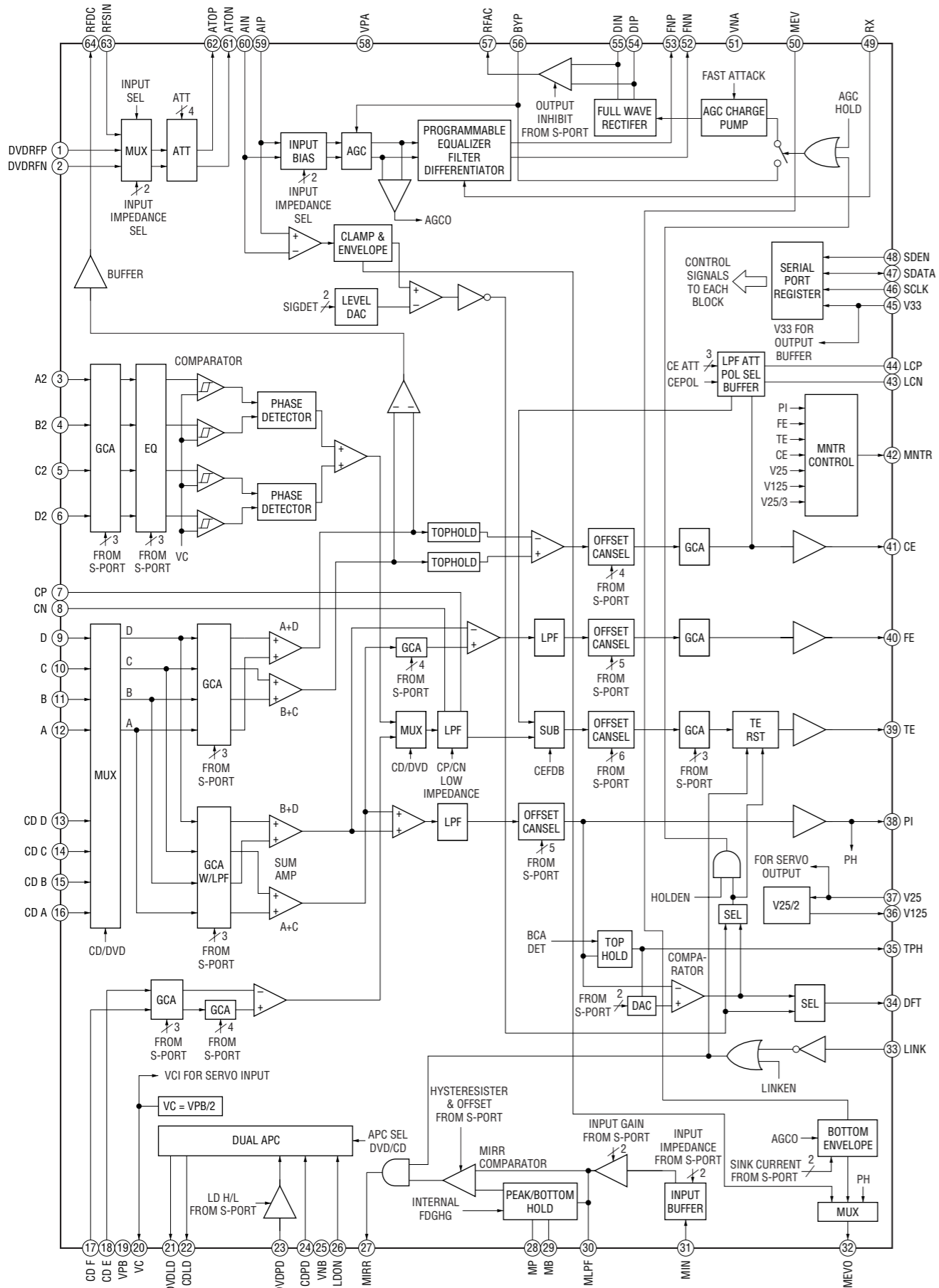


• Semiconductor Location

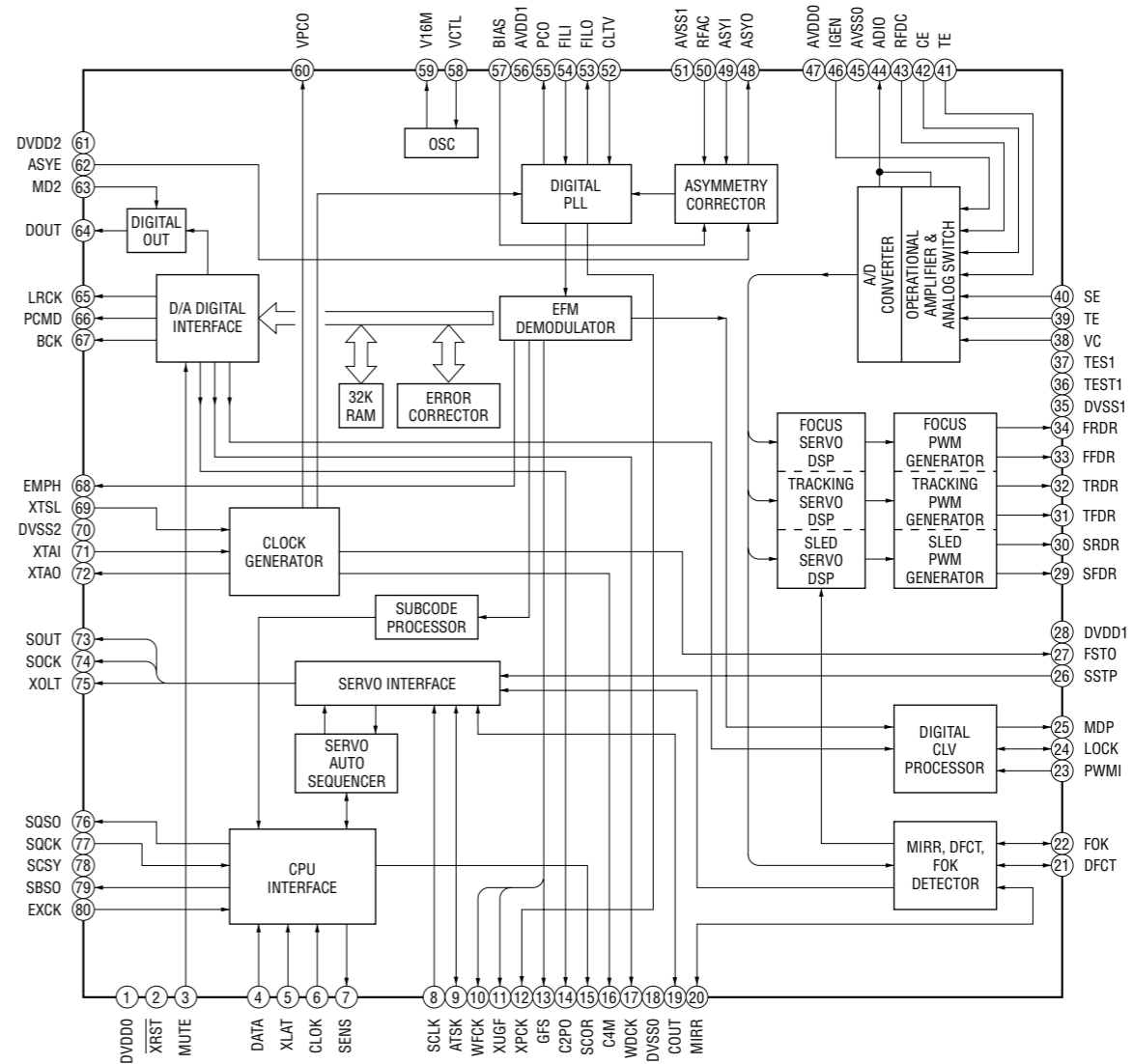
Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D901	E-12	D911	G-9	D921	D-10	D931	B-8	IC908	C-8	Q902	C-8	Q912	D-10
D902	G-10	D912	I-8	D922	C-9	D932	D-7	IC909	E-7	Q903	D-12	Q913	B-9
D903	H-8	D913	D-10	D923	B-9			IC910	C-9	Q904	I-8	Q914	D-10
D904	G-10	D914	D-12	D924	C-8	IC901	F-11	IC911	C-11	Q905	E-7	Q915	D-8
D905	H-10	D915	D-11	D925	D-8	IC902	H-8	IC912	C-8	Q906	E-8	Q916	D-7
D906	H-8	D916	I-8	D926	D-10	IC903	D-11			Q907	C-8	Q917	E-8
D907	F-11	D917	E-10	D927	D-10	IC904	C-10	PC901	F-8	Q908	C-8	Q918	B-8
D908	H-8	D918	B-10	D928	C-8	IC905	E-9	PC902	F-7	Q909	C-8	Q919	B-8
D909	I-8	D919	E-7	D929	I-8	IC906	C-11			Q910	D-8	Q920	B-7
D910	D-8	D920	C-10	D930	B-9	IC907	C-12	Q901	E-12	Q911	B-9		

5-32. IC BLOCK DIAGRAMS

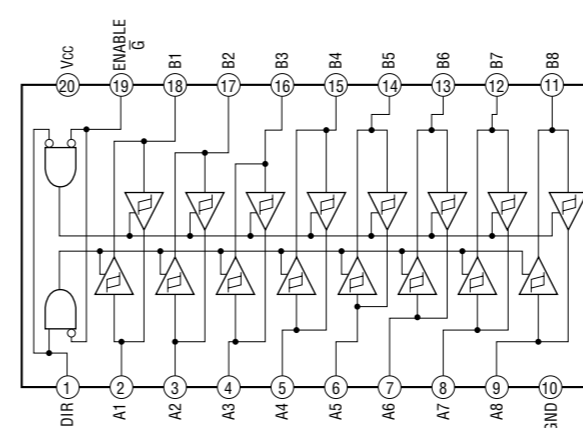
IC001 CXD1881AR (RF Board)



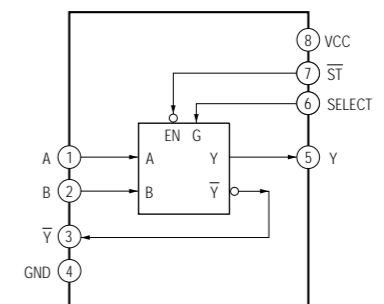
IC401 CXD3068Q (DVD Board)



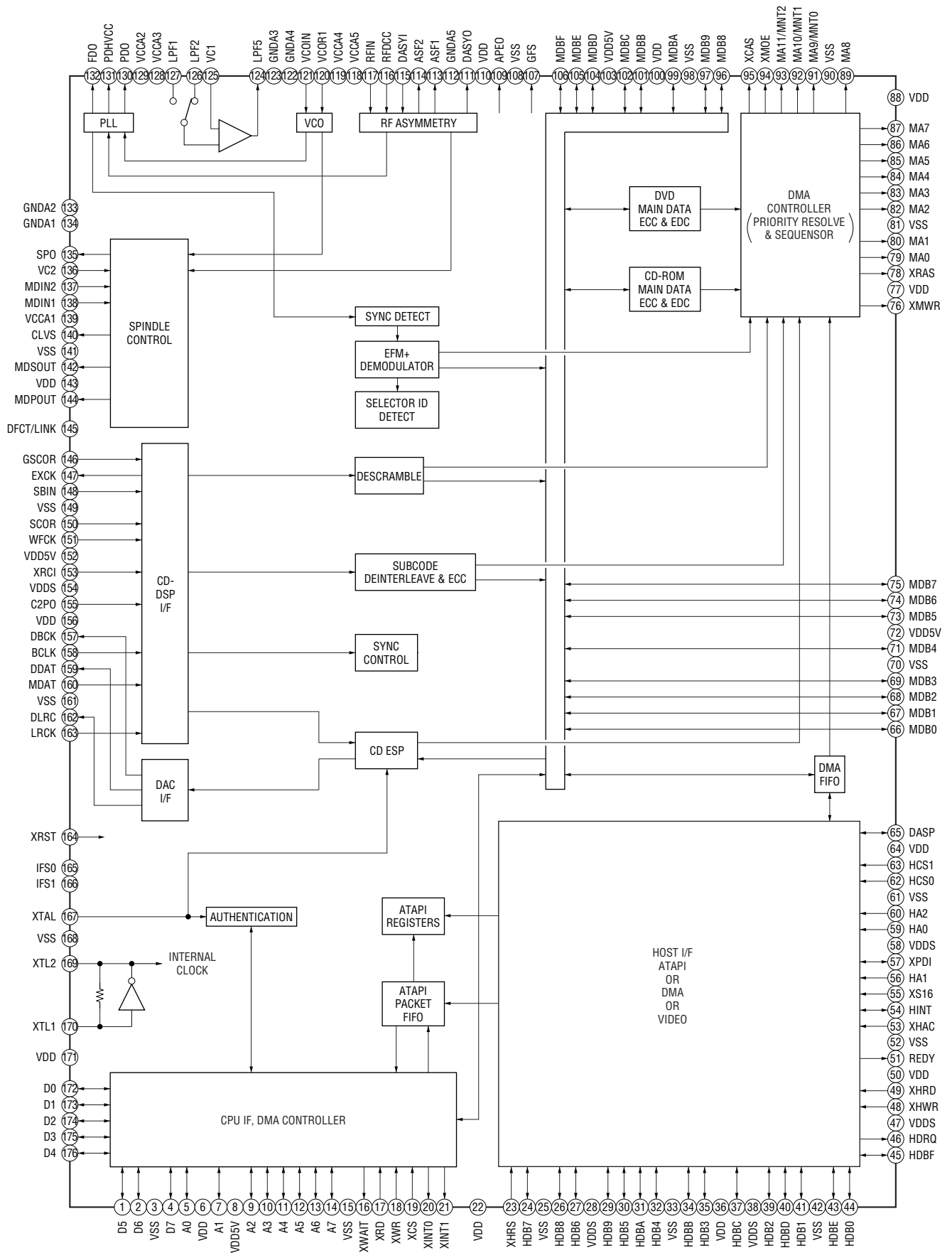
IC812 SN74LV245APWR (DVD Board)
IC813 SN74LV245APWR (DVD Board)



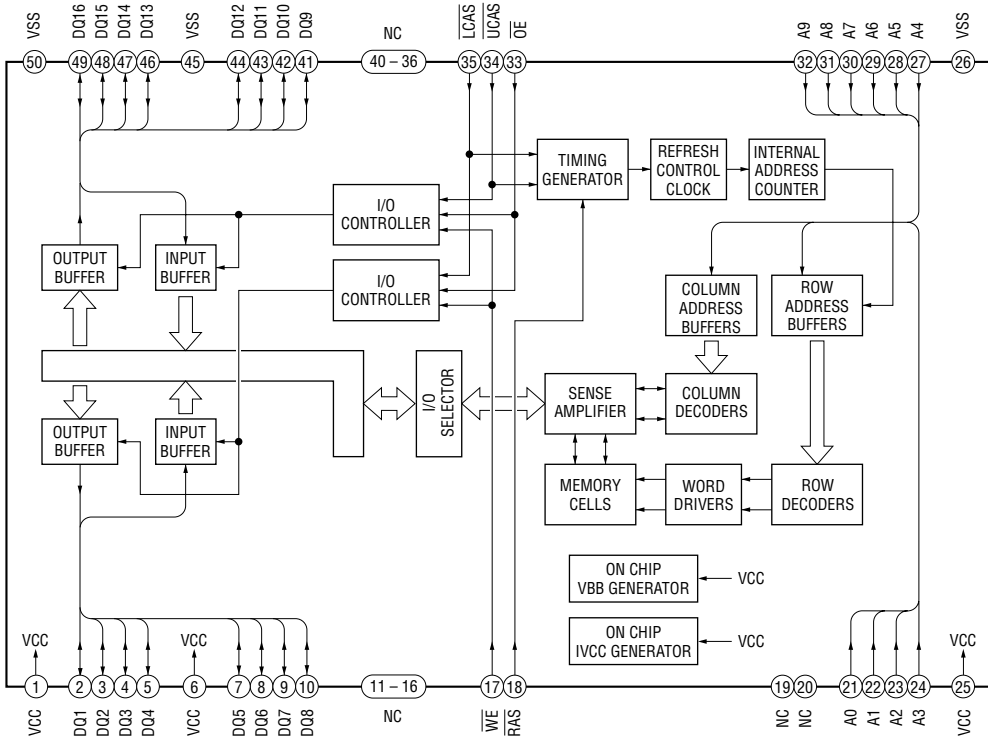
IC814 TC7WH157FK (DVD Board)



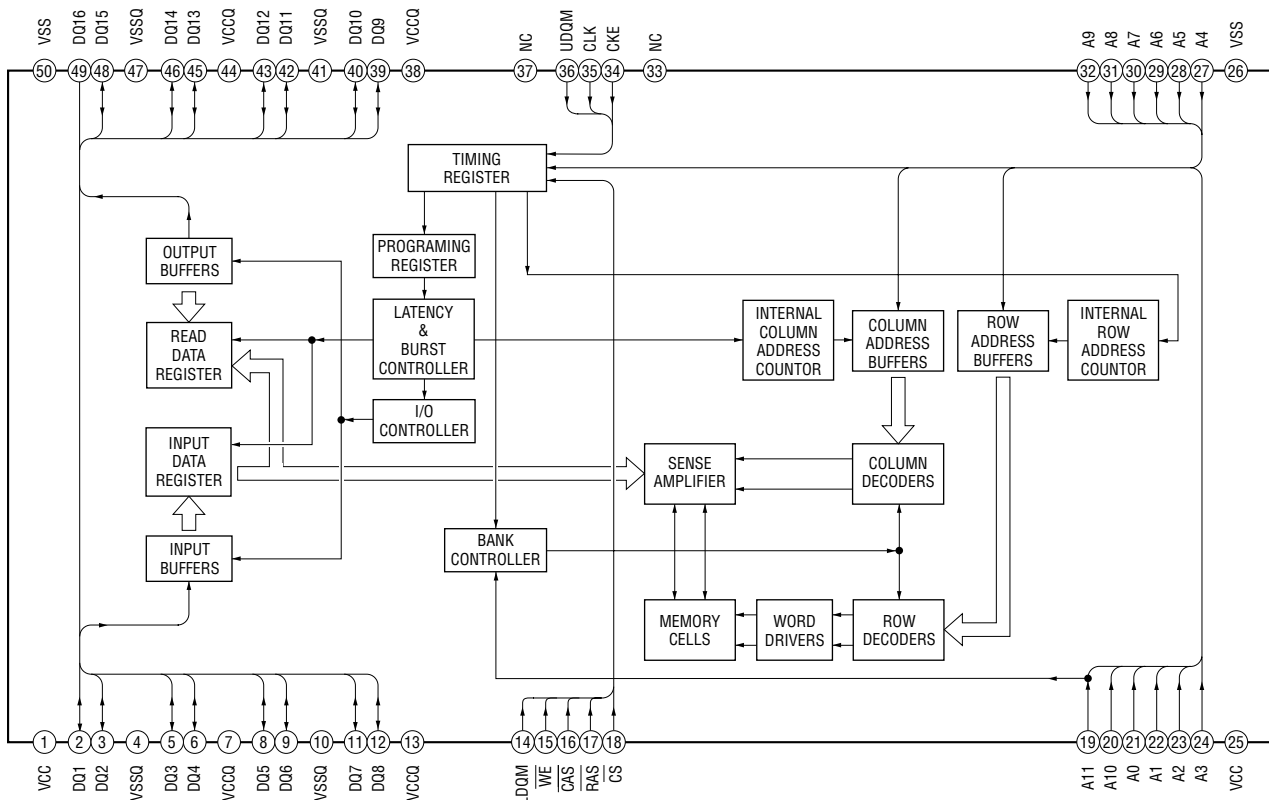
IC701 CXD1882R (DVD Board)



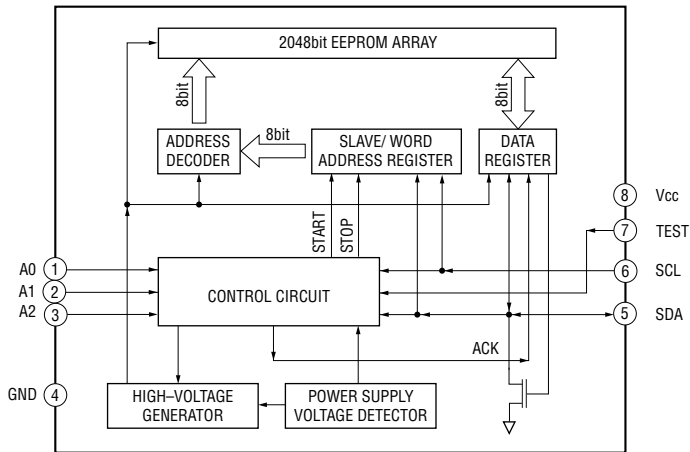
IC706 MSM51V18165F-60TSKR1 (DVD Board)



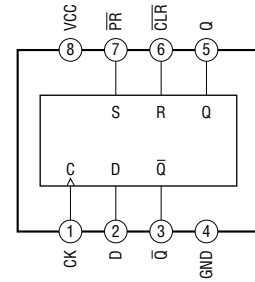
IC808 MSM56V16160F-8TK7R1 (DVD Board)



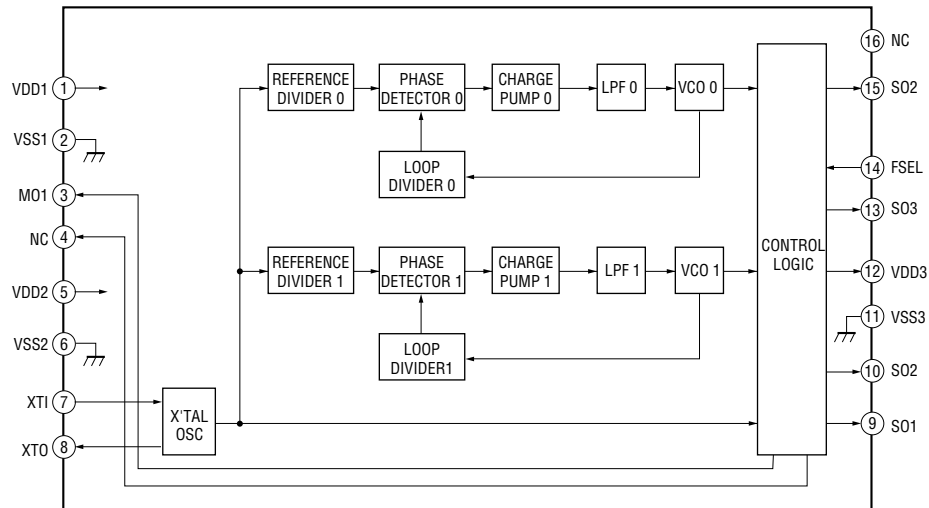
IC302 BR24C08F-E2 (DVD Board)



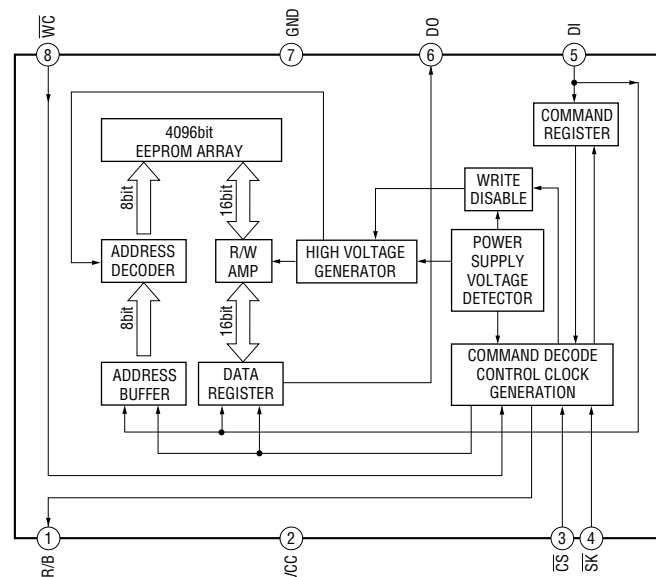
IC803 TC7W74FU (DVD Board)



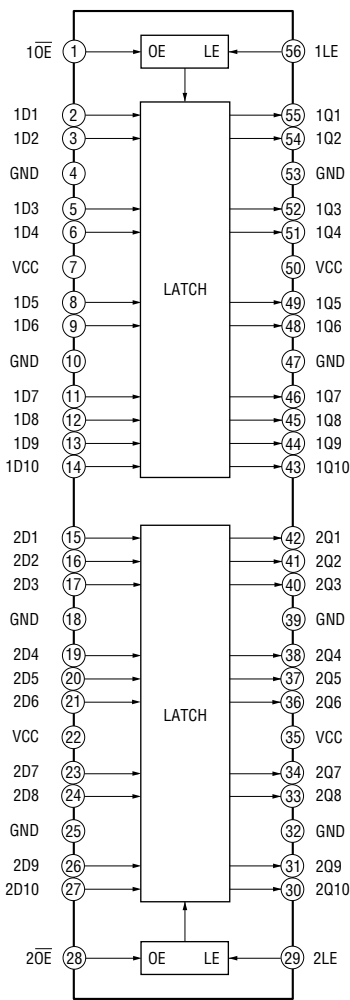
IC303 SM8707GV (DVD Board)



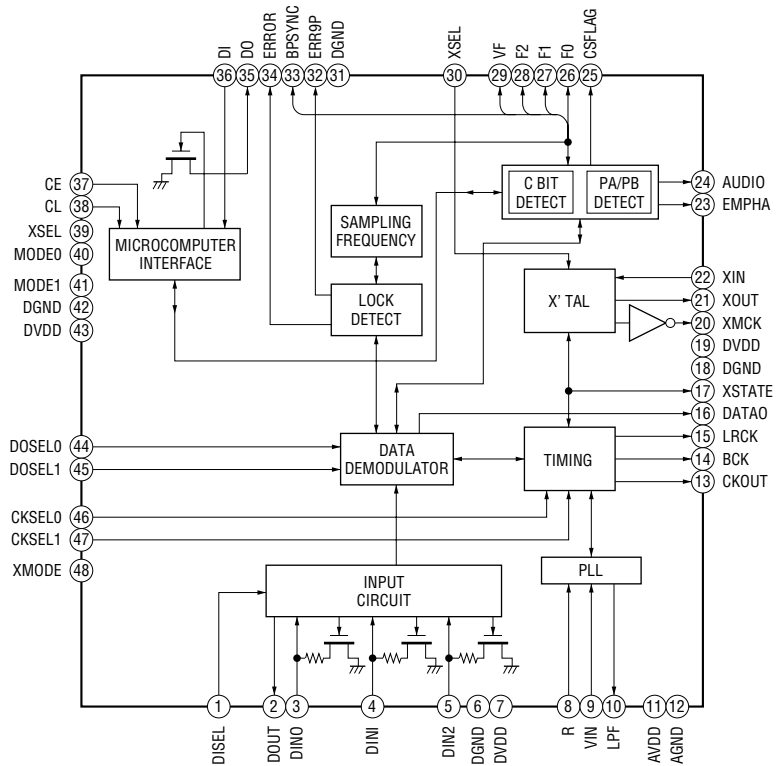
IC203 BR9040F (DVD Board)



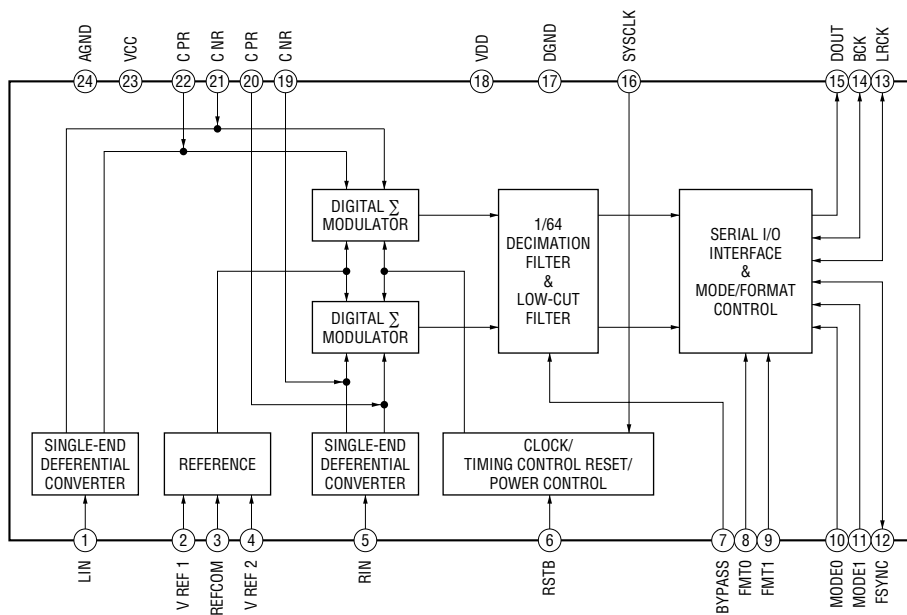
IC215 SN74ALVCH16841 (DVD Board)



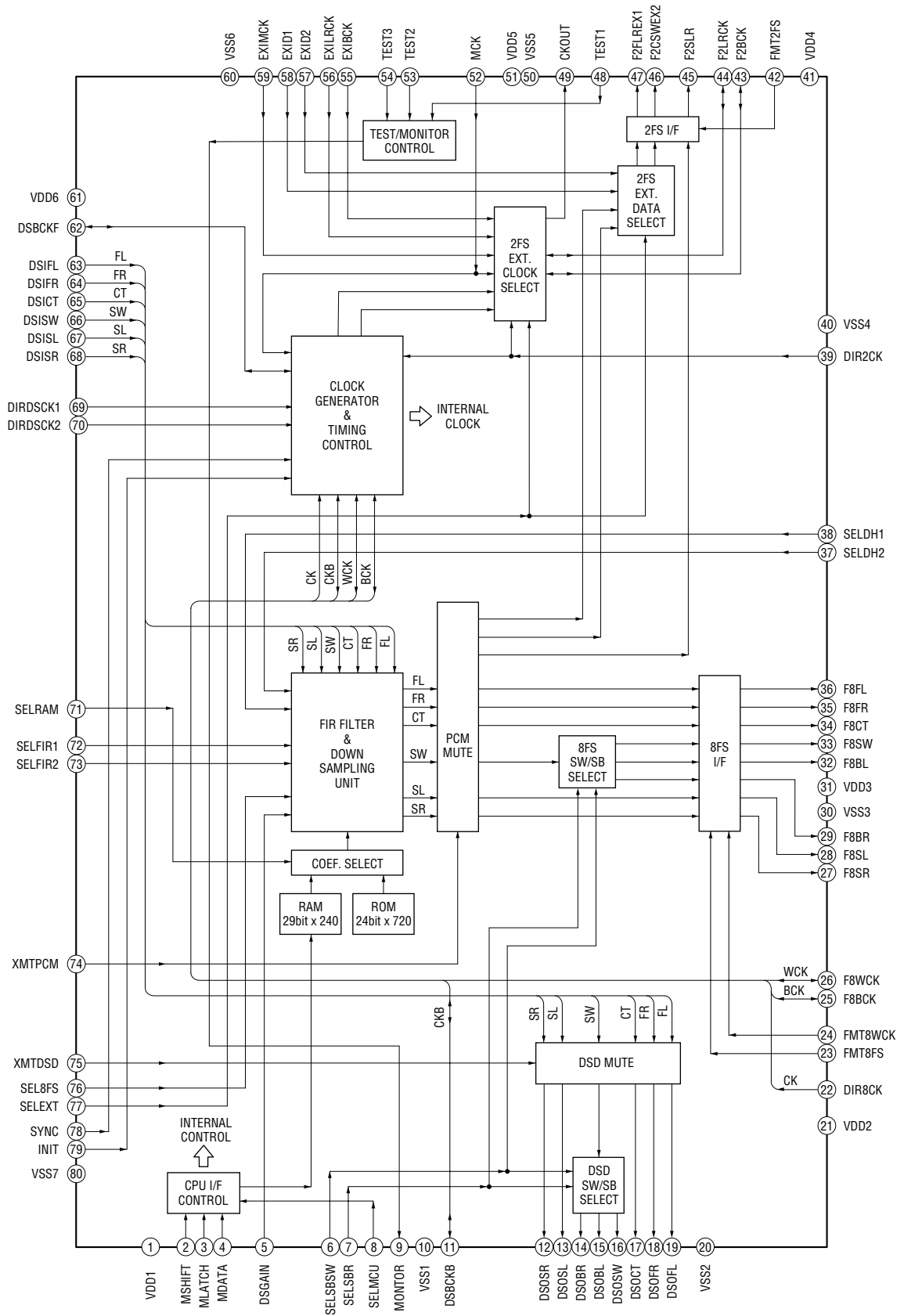
IC606 LC89056W (DVD Board)



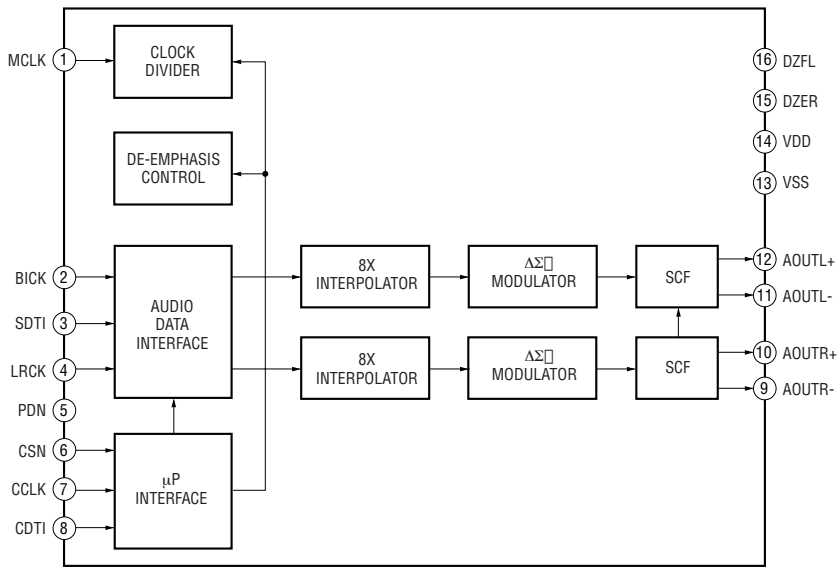
IC602 PCM1800 (DVD Board)



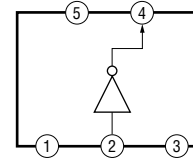
IC612 CXD9633Q (DVD Board)



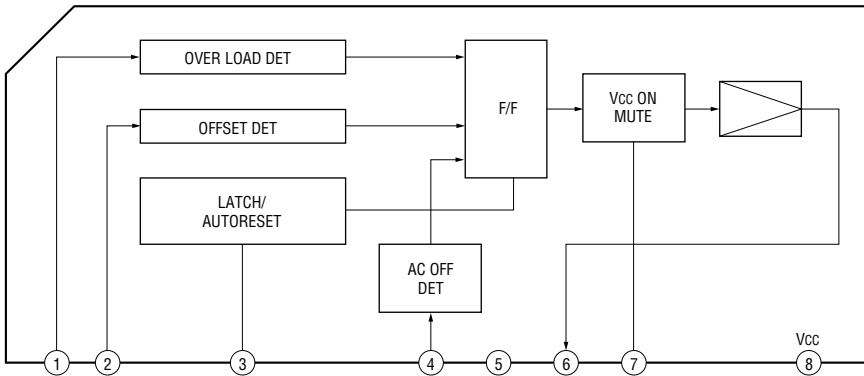
IC608 CXD9627A-E2 (DVD Board)



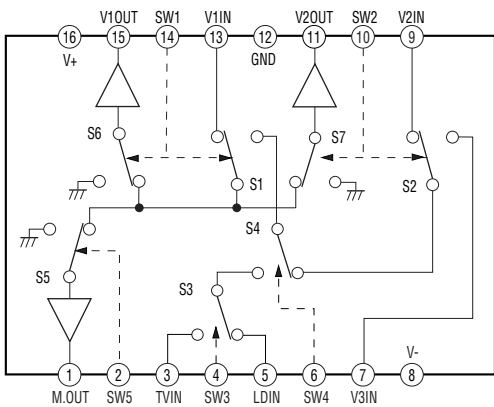
IC325 TC7SHU04FU-TE85R (DIGITAL AMP Board)



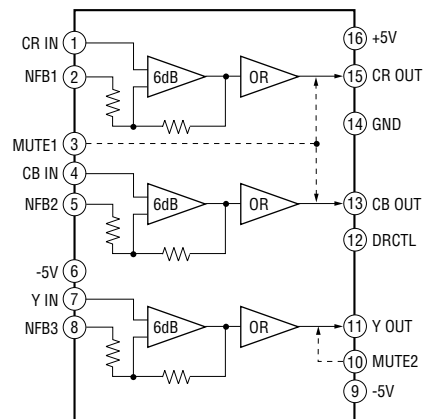
IC327 μ PC1237HA (DIGITAL AMP Board)



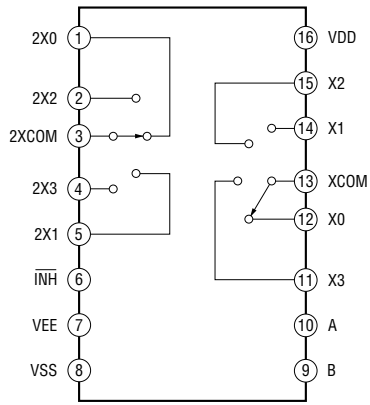
IC701 NJM2296M (VIDEO Board)
IC702 NJM2296M (VIDEO Board)



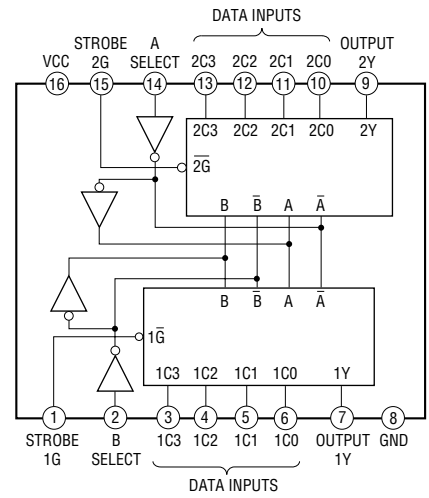
IC704 LA7104M (VIDEO Board)



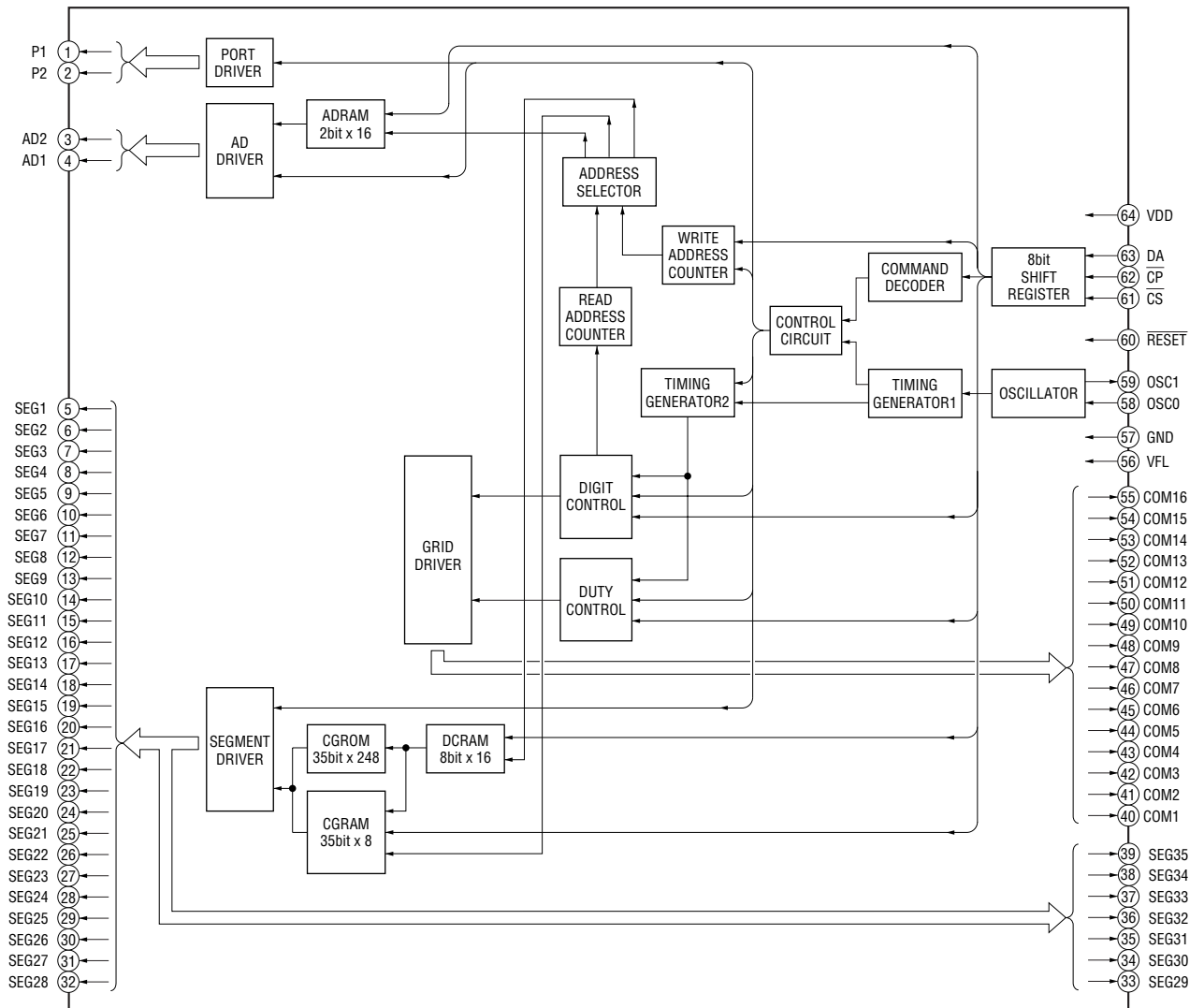
IC607 MC14052BDR2 (ANALOG I/O Board)



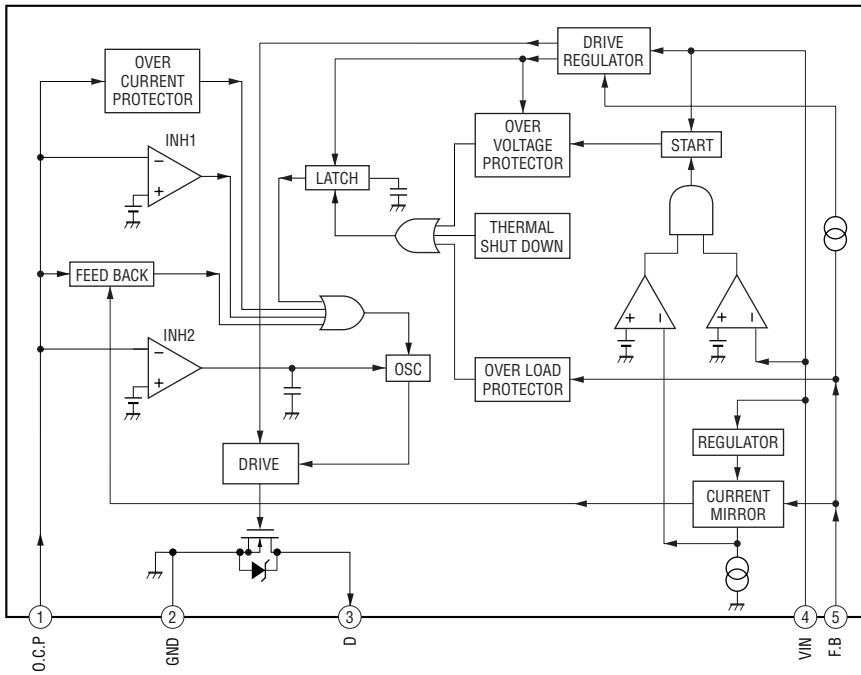
IC655 SN74HC153ANS-E05 (DIGITAL I/O Board)



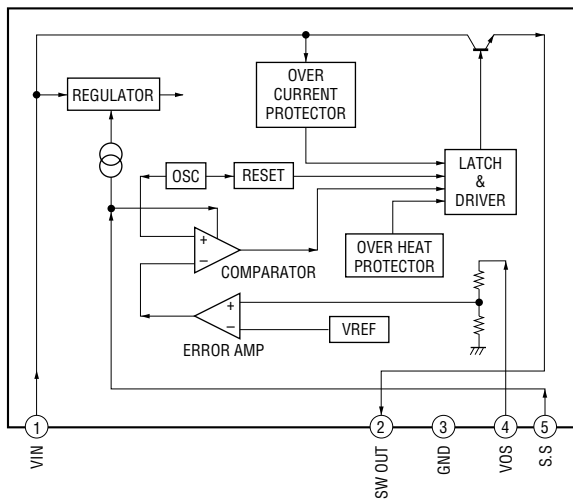
IC851 MSM9202-05GS-KDR1 (DISPLAY Board)



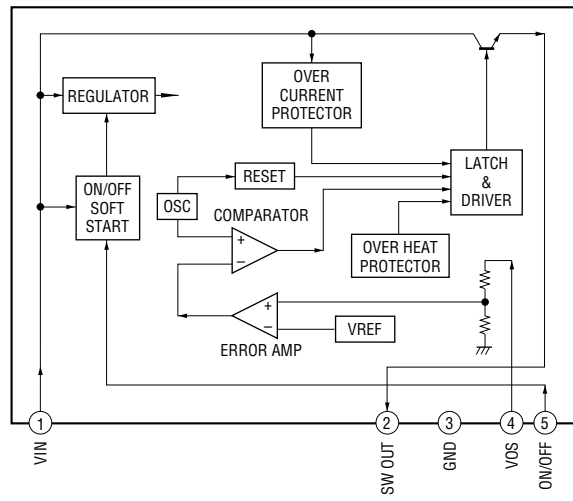
IC902 STR-F6238S (POWER Board) (US, CND Model)
 IC902 STR-F6270D (POWER Board) (AEP, UK Model)



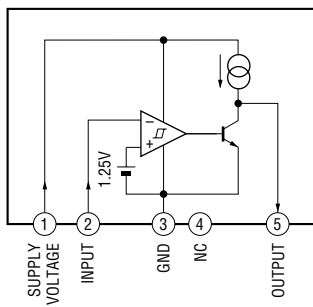
IC904 SI-8050JF (POWER Board)



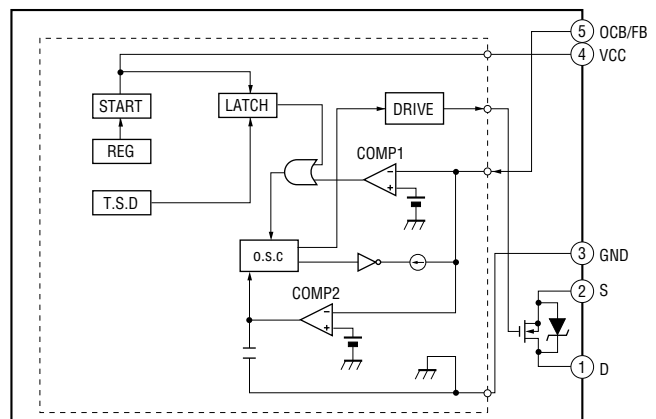
IC910 SI-8033S (POWER Board)



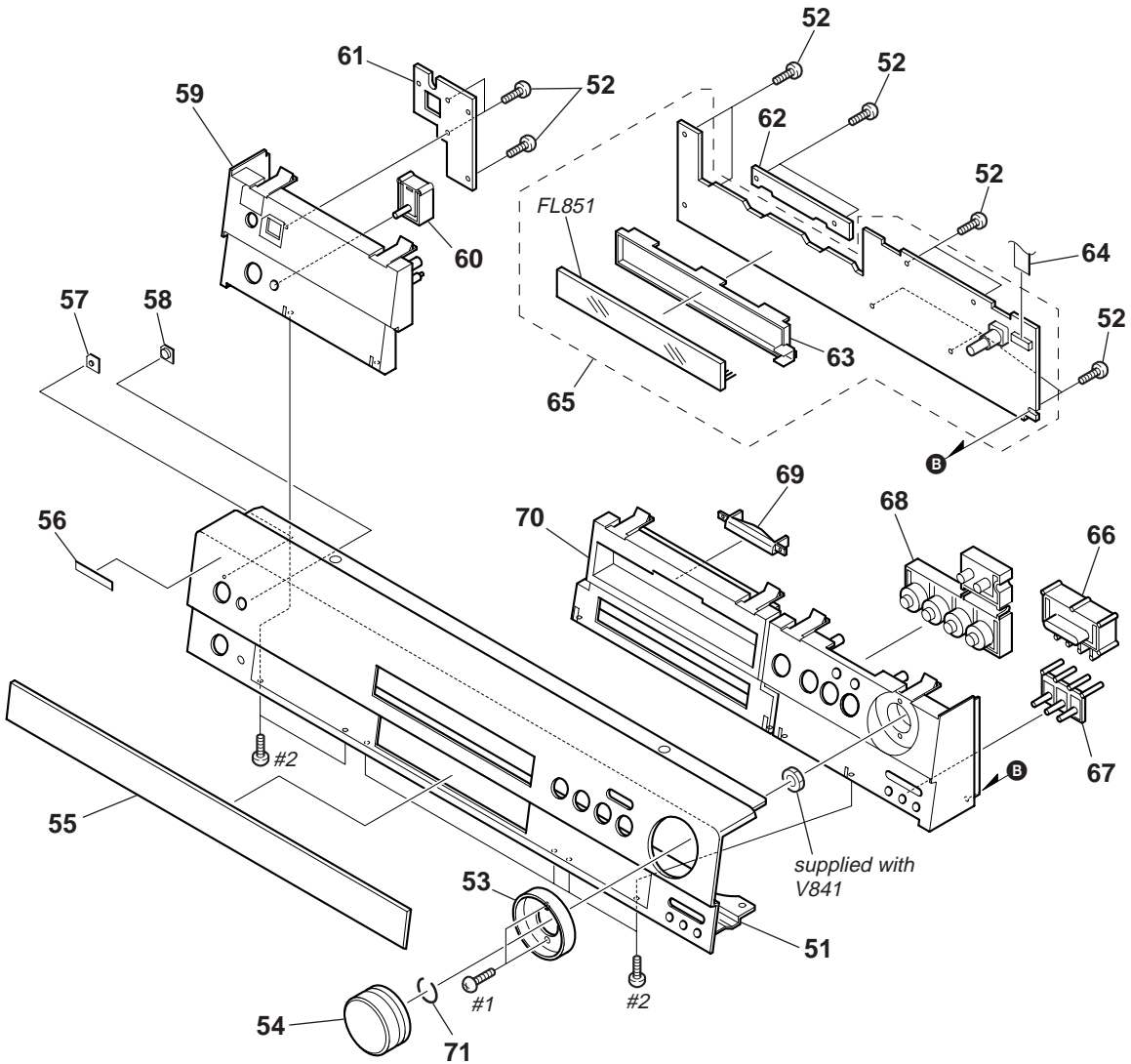
IC912 M51945BL (POWER Board)



IC901 STR-G7421 (POWER Board)

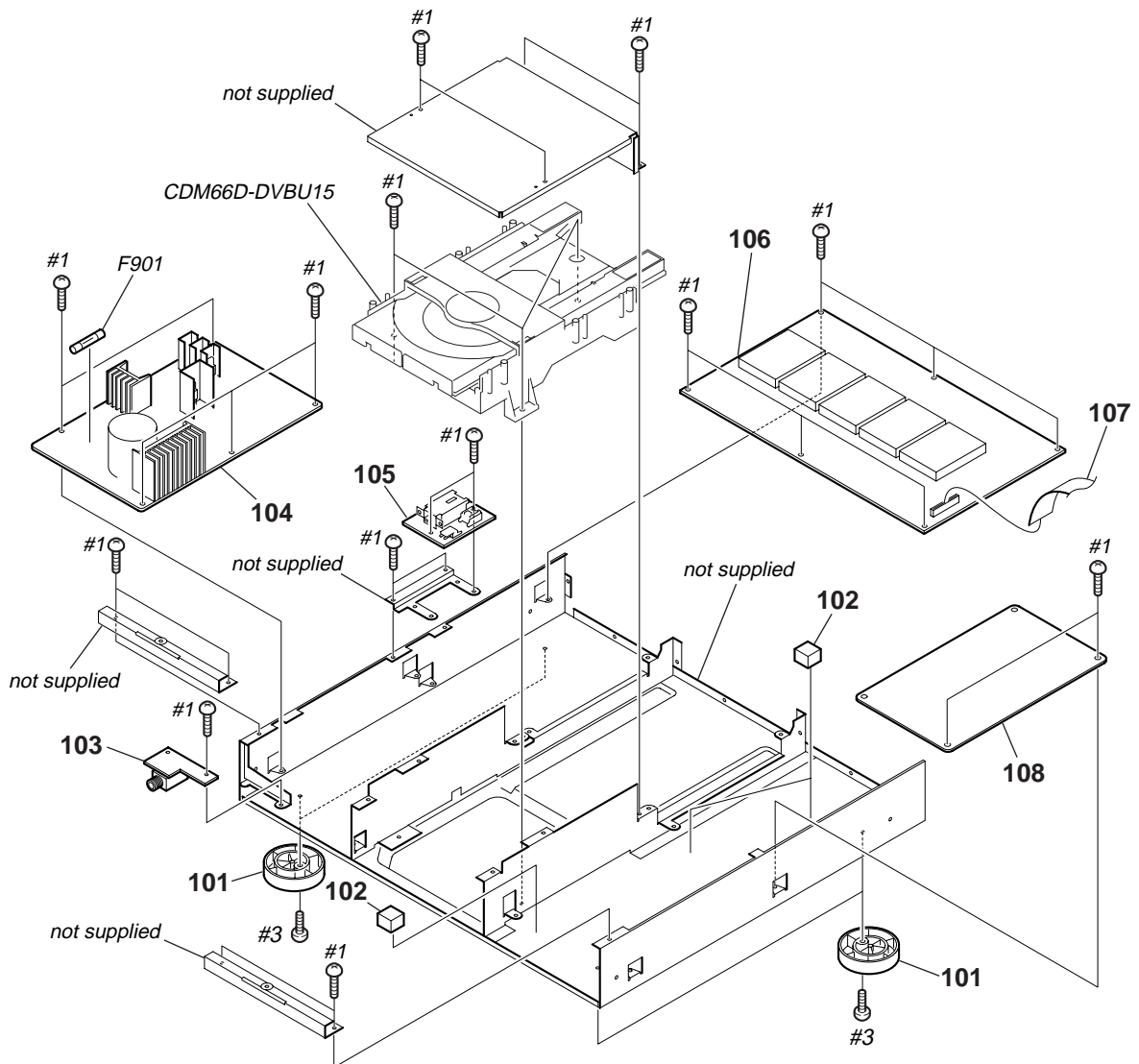


6-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	4-239-840-01	PANEL, FRONT (AEP,UK)		63	4-240-061-01	HOLDER (FL)	
51	4-239-840-11	PANEL, FRONT (US,CND)		64	1-783-175-11	WIRE (FLAT TYPE) (17 CORE)	
52	4-951-620-01	SCREW (2.6X8), +BVTP		65	A-4729-229-A	DISPLAY BOARD, COMPLETE (AEP,UK)	
53	4-239-851-01	RING (VOL)		65	A-4729-245-A	DISPLAY BOARD, COMPLETE (US,CND)	
54	X-4954-669-1	KNOB (VOL) ASSY		66	4-239-847-01	BUTTON (PRESET)	
55	4-239-849-01	WINDOW (FL), INDICATION (AEP,UK)		67	4-239-844-01	BUTTON (S.F)	
55	4-239-849-11	WINDOW (FL), INDICATION (US,CND)		68	X-4954-668-1	BUTTON (PLAY) ASSY	
56	4-942-568-61	EMBLEM (NO.5), SONY		69	4-239-850-01	INDICATOR (LOADING)	
57	4-239-528-01	INDICATOR		70	4-239-841-01	BASE (R), PANEL	
58	4-239-529-01	WINDOW (REMOTE CONTROL)		71	3-354-981-01	SPRING (SUS), RING	
59	4-239-842-01	BASE (L), PANEL		FL851	1-518-821-21	INDICATOR TUBE, FLUORESCENT	
60	4-239-848-01	BUTTON (DISPLAY)		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
61	1-685-226-11	RM BOARD		#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	
62	1-685-228-11	LED BOARD					

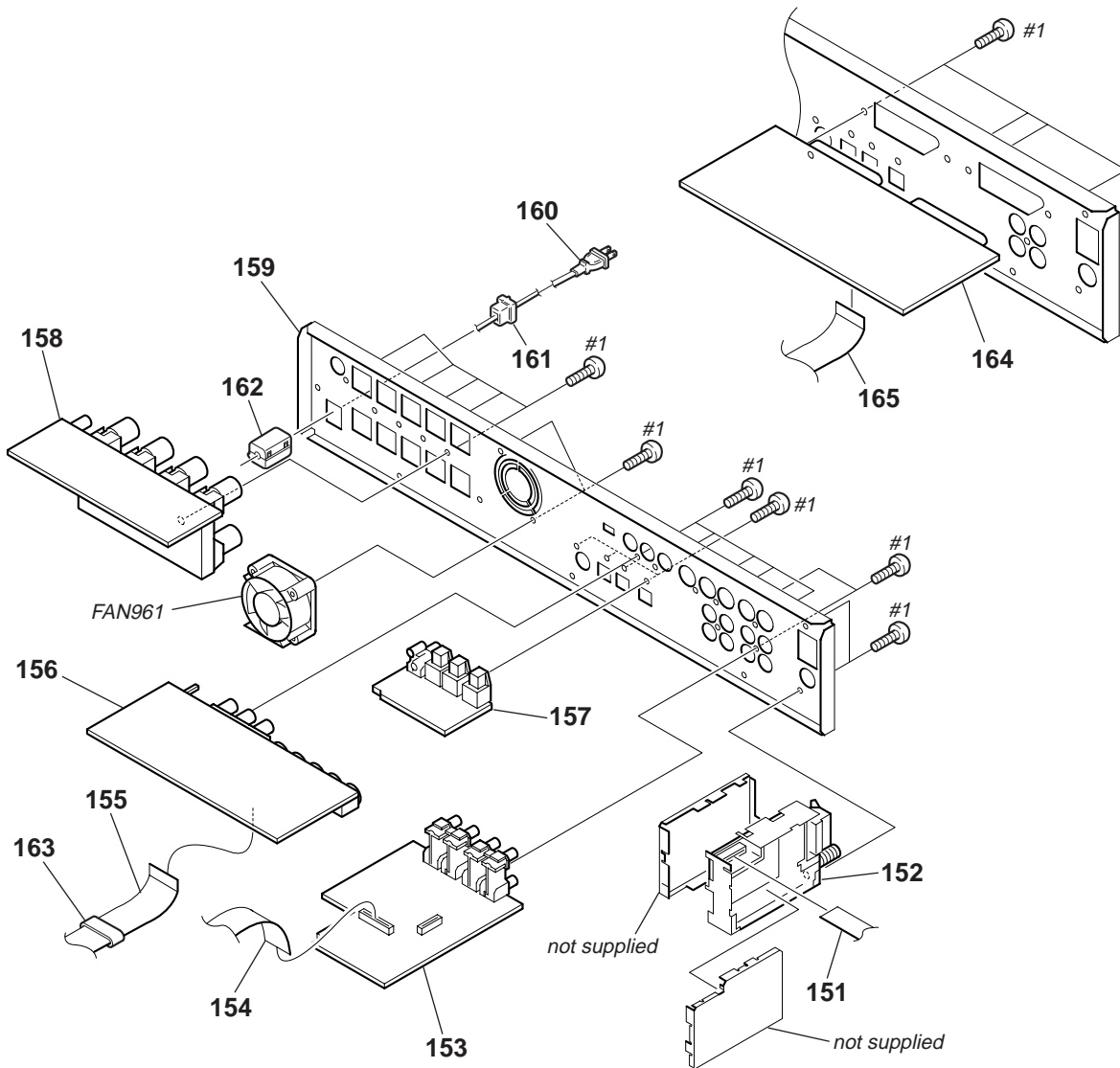
6-3. CHASSIS SECTION



<p>The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.</p>	<p>Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
---	---

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	X-4953-882-2	FOOT ASSY		107	1-775-257-11	WIRE (FLAT TYPE) (29 CORE)	
* 102	3-703-353-05	SUPPORT, PC BOARD		108	A-4729-240-A	DVD BOARD, COMPLETE (AEP,UK)	
103	1-685-227-11	HEADPHONE BOARD		108	A-4729-257-A	DVD BOARD, COMPLETE (US,CND)	
104	A-4729-233-A	POWER BOARD, COMPLETE (AEP,UK)		Δ F901	1-533-420-11	FUSE, GLASS CYLINDRICAL (DIA.5) (5A/125V) (US,CND)	
104	A-4729-249-A	POWER BOARD, COMPLETE (US)		Δ F901	1-576-230-11	FUSE, H.B.C. (T3.15AL/250V) (AEP,UK)	
104	A-4729-274-A	POWER BOARD, COMPLETE (CND)		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
105	1-685-632-11	POWER SW BOARD		#3	7-685-885-09	SCREW +BVTT 4X16 (S)	
106	A-4729-236-A	DIGITAL AMP BOARD, COMPLETE (AEP,UK)					
106	A-4729-252-A	DIGITAL AMP BOARD, COMPLETE (US,CND)					

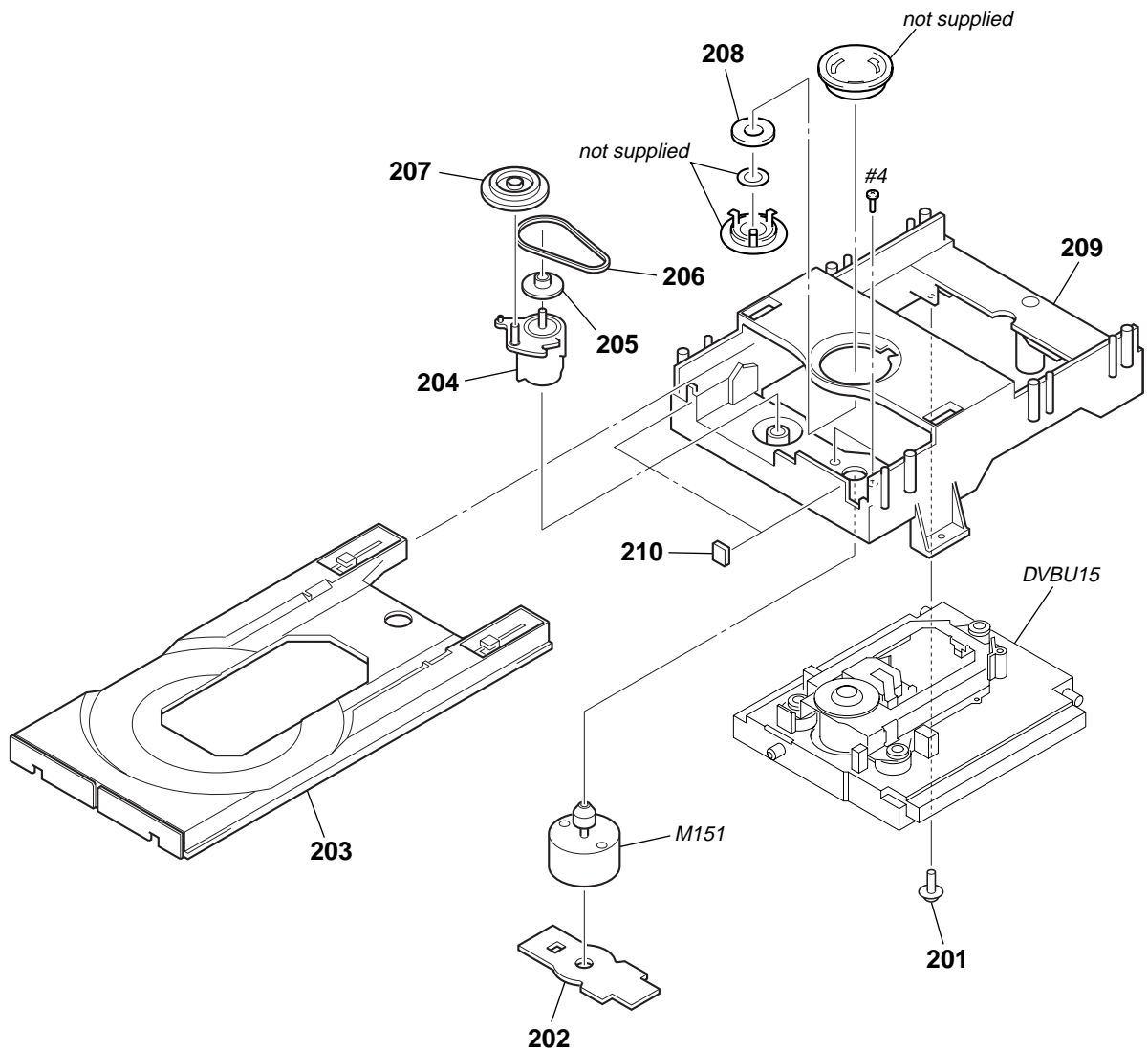
6-4. BACK PANEL SECTION



<p>The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.</p>	<p>Les composants identifiés par une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
---	--

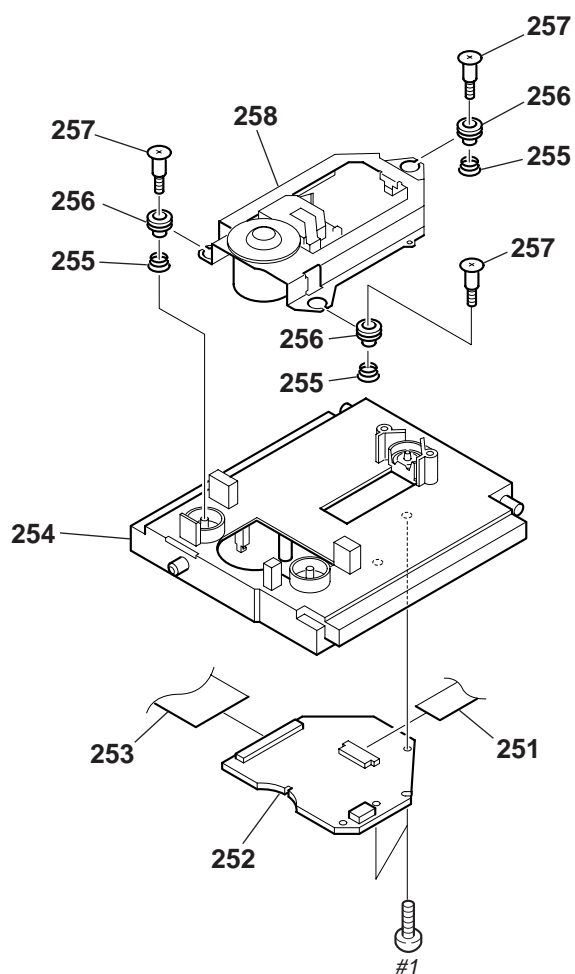
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	1-769-972-11	WIRE (FLAT TYPE) (13 CORE)		159	4-239-860-01	PANEL, BACK (US,CND)	
152	A-4726-404-A	TUNER UNIT (US,CND)		159	4-239-860-21	PANEL, BACK (AEP,UK)	
152	A-4726-588-A	TUNER UNIT (AEP,UK)		\triangle 160	1-575-651-91	CORD, POWER (AEP,UK)	
153	A-4729-227-A	ANALOG I/O BOARD, COMPLETE (AEP,UK)		\triangle 160	1-783-820-21	CORD, POWER (US,CND)	
153	A-4729-244-A	ANALOG I/O BOARD, COMPLETE (US,CND)		161	4-966-267-04	BUSHING (FBS001), CORD	
154	1-775-251-11	WIRE (FLAT TYPE) (27 CORE)		162	1-500-435-11	FILTER, CLAMP (FERRITE CORE)	
155	1-824-708-11	WIRE (FLAT TYPE) (23 CORE)		163	1-500-764-11	CORE, FERRITE	
156	A-4729-256-A	VIDEO BOARD, COMPLETE (US,CND)		164	A-4729-228-A	RGB BOARD, COMPLETE (AEP,UK)	
157	1-685-221-11	DIGITAL I/O BOARD		165	1-824-616-11	WIRE (FLAT TYPE) (21 CORE)	
158	A-4729-238-A	SP BOARD, COMPLETE (AEP,UK)		FAN961	1-763-561-31	FAN, D.C.	
158	A-4729-254-A	SP BOARD, COMPLETE (US,CND)		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	

6-5. CD MECHANISM DECK SECTION
(CDM66D-DVBU15)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	4-227-899-01	SCREW (DIA.12), FLOATING		207	4-232-711-01	GEAR (LD)	
202	1-645-721-11	LOADING BOARD		208	3-053-844-01	YOKE	
203	4-231-530-12	TRAY (66)		209	4-231-529-04	CHASSIS (66)	
204	4-232-712-01	CAM (66)		210	4-232-682-01	CUSHION (66)	
205	4-232-710-01	PULLEY (LD)		M151	A-4604-363-A	MOTOR (L) ASSY (LOADING)	
206	4-232-713-01	BELT (LD)		#4	7-621-775-10	SCREW +B 2.6X4	

6-6. BASE UNIT SECTION
(DVBU15)



The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
--	--

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
251	1-824-106-12	CABLE, FLEXIBLE FLAT (24 CORE)		256	3-053-847-31	INSULATOR	
252	A-4728-690-A	RF BOARD, COMPLETE		257	4-981-923-01	SCREW (M), STEP	
253	1-824-104-11	WIRE (FLAT TYPE) (29 CORE)		\triangle 258	1-477-263-11	PICK-UP UNIT (TDP022W)	
254	4-240-953-02	HOLDER (66D)		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
255	4-959-996-11	SPRING (932), COMPRESSION					

AVD-S50/S50ES

ANALOG I/O	DIGITAL AMP
-------------------	--------------------

Ref. No.	Part No.	Description	Remark
R620	1-216-845-11	METAL CHIP 100K	5% 1/10W
R621	1-216-833-11	METAL CHIP 10K	5% 1/10W
R622	1-216-821-11	METAL CHIP 1K	5% 1/10W
R623	1-216-821-11	METAL CHIP 1K	5% 1/10W
R624	1-218-867-11	METAL CHIP 6.8K	5% 1/10W
R625	1-216-841-11	METAL CHIP 47K	5% 1/10W
R626	1-216-833-11	METAL CHIP 10K	5% 1/10W
R627	1-216-833-11	METAL CHIP 10K	5% 1/10W
R628	1-218-867-11	METAL CHIP 6.8K	5% 1/10W
R629	1-216-841-11	METAL CHIP 47K	5% 1/10W
R630	1-216-833-11	METAL CHIP 10K	5% 1/10W
R631	1-216-833-11	METAL CHIP 10K	5% 1/10W
R632	1-218-867-11	METAL CHIP 6.8K	5% 1/10W
R633	1-216-841-11	METAL CHIP 47K	5% 1/10W
R634	1-216-833-11	METAL CHIP 10K	5% 1/10W
R635	1-216-833-11	METAL CHIP 10K	5% 1/10W
R636	1-218-272-11	METAL CHIP 5.1K	5% 1/10W
R637	1-216-845-11	METAL CHIP 100K	5% 1/10W
R638	1-216-839-11	METAL CHIP 33K	5% 1/10W
R639	1-216-839-11	METAL CHIP 33K	5% 1/10W
R640	1-216-833-11	METAL CHIP 10K	5% 1/10W
R641	1-216-833-11	METAL CHIP 10K	5% 1/10W
R642	1-218-867-11	METAL CHIP 6.8K	5% 1/10W
R643	1-216-841-11	METAL CHIP 47K	5% 1/10W
R644	1-216-833-11	METAL CHIP 10K	5% 1/10W
R645	1-216-833-11	METAL CHIP 10K	5% 1/10W
R646	1-218-272-11	METAL CHIP 5.1K	5% 1/10W
R647	1-216-845-11	METAL CHIP 100K	5% 1/10W
R648	1-216-839-11	METAL CHIP 33K	5% 1/10W
R649	1-216-839-11	METAL CHIP 33K	5% 1/10W
R670	1-216-829-11	METAL CHIP 4.7K	5% 1/10W
R671	1-216-853-11	METAL CHIP 470K	5% 1/10W
R672	1-216-821-11	METAL CHIP 1K	5% 1/10W
R673	1-216-845-11	METAL CHIP 100K	5% 1/10W
R674	1-216-841-11	METAL CHIP 47K	5% 1/10W
R675	1-216-843-11	METAL CHIP 68K	5% 1/10W
R680	1-216-864-11	METAL CHIP 0	5% 1/10W
R681	1-216-864-11	METAL CHIP 0	5% 1/10W
R682	1-216-809-11	METAL CHIP 100	5% 1/10W
R683	1-216-823-11	METAL CHIP 1.5K	5% 1/10W
R684	1-216-814-11	METAL CHIP 270	5% 1/10W
R691	1-216-833-11	METAL CHIP 10K	5% 1/10W
R692	1-216-833-11	METAL CHIP 10K	5% 1/10W
R693	1-216-809-11	METAL CHIP 100	5% 1/10W
R694	1-216-809-11	METAL CHIP 100	5% 1/10W
R695	1-216-813-11	METAL CHIP 220	5% 1/10W
R696	1-216-813-11	METAL CHIP 220	5% 1/10W
R697	1-216-813-11	METAL CHIP 220	5% 1/10W
R698	1-216-813-11	METAL CHIP 220	5% 1/10W
R699	1-216-813-11	METAL CHIP 220	5% 1/10W

< VIBRATOR >

X671 1-579-242-41 VIBRATOR, CRYSTAL (4.332MHz)

Ref. No.	Part No.	Description	Remark
	A-4729-236-A	DIGITAL AMP BOARD, COMPLETE (AEP,UK)	
	A-4729-252-A	DIGITAL AMP BOARD, COMPLETE (US,CND)	

		< CAPACITOR >	
C301	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C302	1-135-671-11	ELECT 2200uF	10V
C303	1-125-926-11	TANTAL. CHIP 4.7uF	20% 6.3V
C304	1-162-962-11	CERAMIC CHIP 470PF	10% 50V
C305	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C306	1-125-926-11	TANTAL. CHIP 4.7uF	20% 6.3V
C307	1-162-962-11	CERAMIC CHIP 470PF	10% 50V
C308	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C309	1-125-926-11	TANTAL. CHIP 4.7uF	20% 6.3V
C310	1-109-857-11	ELECT 47uF	20% 63V
C311	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C312	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C313	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C314	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C315	1-162-926-11	CERAMIC CHIP 82PF	5% 50V
C316	1-162-926-11	CERAMIC CHIP 82PF	5% 50V
C317	1-162-926-11	CERAMIC CHIP 82PF	5% 50V
C318	1-162-926-11	CERAMIC CHIP 82PF	5% 50V
C319	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C320	1-135-682-11	ELECT 220uF	25V
C321	1-162-926-11	CERAMIC CHIP 82PF	5% 50V
C322	1-162-926-11	CERAMIC CHIP 82PF	5% 50V
C323	1-162-926-11	CERAMIC CHIP 82PF	5% 50V
C324	1-162-926-11	CERAMIC CHIP 82PF	5% 50V
C325	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C326	1-135-682-11	ELECT 220uF	25V
C327	1-109-857-11	ELECT 47uF	20% 63V
C328	1-109-857-11	ELECT 47uF	20% 63V
C329	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C330	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C331	1-136-850-11	MYLAR 0.1uF	5% 63V
C332	1-136-850-11	MYLAR 0.1uF	5% 63V
C333	1-109-857-11	ELECT 47uF	20% 63V
C334	1-109-857-11	ELECT 47uF	20% 63V
C335	1-100-188-11	FILM 0.75uF	250V
C336	1-100-188-11	FILM 0.75uF	250V
C337	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C338	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C339	1-100-187-11	FILM 0.27uF	250V
C340	1-100-187-11	FILM 0.27uF	250V
C341	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C342	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C343	1-109-857-11	ELECT 47uF	20% 63V
C344	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C345	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C346	1-136-850-11	MYLAR 0.1uF	5% 63V
C347	1-136-850-11	MYLAR 0.1uF	5% 63V
C348	1-109-857-11	ELECT 47uF	20% 63V
C349	1-109-857-11	ELECT 47uF	20% 63V
C350	1-100-188-11	FILM 0.75uF	250V
C351	1-100-188-11	FILM 0.75uF	250V
C354	1-100-187-11	FILM 0.27uF	250V
C355	1-100-187-11	FILM 0.27uF	250V

DIGITAL AMP

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
C358	1-109-857-11	ELECT	47uF	20%	63V	C432	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C359	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C433	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C360	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C434	1-125-926-11	TANTAL. CHIP	4.7uF	20%	6.3V
C361	1-135-774-51	ELECT	470uF		63V	C435	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C362	1-135-774-51	ELECT	470uF		63V	C436	1-125-926-11	TANTAL. CHIP	4.7uF	20%	6.3V
C363	1-109-857-11	ELECT	47uF	20%	63V	C437	1-109-857-11	ELECT	47uF	20%	63V
C364	1-125-926-11	TANTAL. CHIP	4.7uF	20%	6.3V	C438	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C365	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C439	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C366	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C440	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C367	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C441	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C368	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C442	1-162-926-11	CERAMIC CHIP	82PF	5%	50V
C369	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C443	1-162-926-11	CERAMIC CHIP	82PF	5%	50V
C370	1-135-671-11	ELECT	2200uF		10V	C444	1-162-926-11	CERAMIC CHIP	82PF	5%	50V
C371	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C445	1-162-926-11	CERAMIC CHIP	82PF	5%	50V
C372	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C446	1-135-682-11	ELECT	220uF		25V
C373	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C447	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C374	1-125-926-11	TANTAL. CHIP	4.7uF	20%	6.3V	C448	1-162-926-11	CERAMIC CHIP	82PF	5%	50V
C375	1-162-962-11	CERAMIC CHIP	470PF	10%	50V	C449	1-162-926-11	CERAMIC CHIP	82PF	5%	50V
C376	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C450	1-162-926-11	CERAMIC CHIP	82PF	5%	50V
C377	1-125-926-11	TANTAL. CHIP	4.7uF	20%	6.3V	C451	1-162-926-11	CERAMIC CHIP	82PF	5%	50V
C378	1-109-857-11	ELECT	47uF	20%	63V	C452	1-135-682-11	ELECT	220uF		25V
C379	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C453	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C380	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C454	1-135-682-11	ELECT	220uF		25V
C381	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C455	1-135-682-11	ELECT	220uF		25V
C382	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C456	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C383	1-162-926-11	CERAMIC CHIP	82PF	5%	50V	C457	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C384	1-162-926-11	CERAMIC CHIP	82PF	5%	50V	C458	1-136-850-11	MYLAR	0.1uF	5%	63V
C385	1-162-926-11	CERAMIC CHIP	82PF	5%	50V	C459	1-136-850-11	MYLAR	0.1uF	5%	63V
C386	1-162-926-11	CERAMIC CHIP	82PF	5%	50V	C460	1-135-771-51	ELECT	100uF		63V
C387	1-135-682-11	ELECT	220uF		25V	C461	1-135-771-51	ELECT	100uF		63V
C388	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C462	1-100-188-11	FILM	0.75uF		250V
C389	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V	C463	1-100-188-11	FILM	0.75uF		250V
C390	1-135-681-11	ELECT	100uF		25V	C466	1-100-187-11	FILM	0.27uF		250V
C391	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	C467	1-100-187-11	FILM	0.27uF		250V
C394	1-162-971-11	CERAMIC CHIP	0.001uF	10%	50V	C470	1-135-682-11	ELECT	220uF		25V
C395	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	C471	1-135-682-11	ELECT	220uF		25V
C396	1-119-799-11	ELECT	47uF	20%	25V	C472	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C397	1-109-857-11	ELECT	47uF	20%	63V	C473	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C398	1-109-857-11	ELECT	47uF	20%	63V	C474	1-136-850-11	MYLAR	0.1uF	5%	63V
C399	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C475	1-136-850-11	MYLAR	0.1uF	5%	63V
C400	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C476	1-135-771-51	ELECT	100uF		63V
C401	1-136-850-11	MYLAR	0.1uF	5%	63V	C477	1-135-771-51	ELECT	100uF		63V
C402	1-136-850-11	MYLAR	0.1uF	5%	63V	C478	1-100-188-11	FILM	0.75uF		250V
C403	1-109-857-11	ELECT	47uF	20%	63V	C479	1-100-188-11	FILM	0.75uF		250V
C404	1-109-857-11	ELECT	47uF	20%	63V	C482	1-100-187-11	FILM	0.27uF		250V
C405	1-100-188-11	FILM	0.75uF		250V	C483	1-100-187-11	FILM	0.27uF		250V
C406	1-100-188-11	FILM	0.75uF		250V	C490	1-162-957-11	CERAMIC CHIP	220PF	5%	50V
C409	1-100-187-11	FILM	0.27uF		250V	C491	1-162-957-11	CERAMIC CHIP	220PF	5%	50V
C410	1-100-187-11	FILM	0.27uF		250V	C496	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C413	1-128-834-11	ELECT	470uF	20%	10V	C497	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C414	1-125-926-11	TANTAL. CHIP	4.7uF	20%	6.3V	C498	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C415	1-162-971-11	CERAMIC CHIP	0.001uF	10%	50V	C499	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C416	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C500	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C417	1-126-964-11	ELECT	10uF	20%	50V	C501	1-162-971-11	CERAMIC CHIP	0.001uF	10%	50V
C418	1-162-995-11	CERAMIC CHIP	0.022uF		50V	C502	1-162-971-11	CERAMIC CHIP	0.001uF	10%	50V
C419	1-126-964-11	ELECT	10uF	20%	50V	C503	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C430	1-135-671-11	ELECT	2200uF		10V	C504	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C431	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C505	1-128-832-11	ELECT	220uF	20%	10V

DIGITAL AMP

Ref. No.	Part No.	Description	Remark
C506	1-128-832-11	ELECT 220uF 20% 10V	
C507	1-126-204-11	ELECT CHIP 47uF 20% 16V	
C510	1-109-857-11	ELECT 47uF 20% 63V	
C511	1-125-926-11	TANTAL. CHIP 4.7uF 20% 6.3V	
C512	1-162-915-11	CERAMIC CHIP 10PF 0.5PF 50V	
C513	1-162-908-11	CERAMIC CHIP 3PF 0.25PF 50V	
C514	1-162-971-11	CERAMIC CHIP 0.001uF 10% 50V	
C515	1-128-201-11	ELECT 100uF 20% 63V	
C516	1-128-197-11	ELECT 10uF 20% 63V	
C517	1-109-857-11	ELECT 47uF 20% 63V	
C518	1-128-197-11	ELECT 10uF 20% 63V	
C519	1-135-682-11	ELECT 220uF 25V	
C520	1-135-682-11	ELECT 220uF 25V	
C521	1-128-201-11	ELECT 100uF 20% 63V	
C522	1-128-197-11	ELECT 10uF 20% 63V	
C523	1-115-197-11	ELECT 100uF 20% 25V	
C524	1-115-197-11	ELECT 100uF 20% 25V	
C541	1-128-197-11	ELECT 10uF 20% 63V	
C542	1-128-197-11	ELECT 10uF 20% 63V	
C543	1-128-197-11	ELECT 10uF 20% 63V	
C544	1-128-197-11	ELECT 10uF 20% 63V	
C545	1-128-197-11	ELECT 10uF 20% 63V	
C546	1-136-850-11	MYLAR 0.1uF 5% 63V	
C547	1-136-850-11	MYLAR 0.1uF 5% 63V	
C548	1-136-850-11	MYLAR 0.1uF 5% 63V	
C549	1-136-850-11	MYLAR 0.1uF 5% 63V	
C550	1-136-850-11	MYLAR 0.1uF 5% 63V	
C551	1-136-850-11	MYLAR 0.1uF 5% 63V	
C552	1-165-319-11	CERAMIC CHIP 0.1uF 50V	
C553	1-165-319-11	CERAMIC CHIP 0.1uF 50V	
C554	1-165-319-11	CERAMIC CHIP 0.1uF 50V	
C555	1-165-319-11	CERAMIC CHIP 0.1uF 50V	
C556	1-165-319-11	CERAMIC CHIP 0.1uF 50V	
< CONNECTOR >			
CN301	1-564-507-11	PLUG, CONNECTOR 4P	
CN304	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P	
* CN305	1-564-321-21	PIN, CONNECTOR (3.96mm PITCH) 2P	
CN306	1-770-128-11	PIN, CONNECTOR (3.96mm PITCH) 2P	
CN307	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P	
* CN308	1-564-321-21	PIN, CONNECTOR (3.96mm PITCH) 2P	
CN309	1-778-063-11	PIN, CONNECTOR (PC BOARD) 4P	
CN315	1-778-957-11	CONNECTOR, FFC/FPC 29P	
< DIODE >			
D301	8-719-049-09	DIODE 1SS367-T3SONY	
D302	8-719-049-09	DIODE 1SS367-T3SONY	
D303	8-719-049-09	DIODE 1SS367-T3SONY	
D304	8-719-049-09	DIODE 1SS367-T3SONY	
D305	8-719-049-09	DIODE 1SS367-T3SONY	
D306	8-719-016-74	DIODE 1SS352	
D307	8-719-049-09	DIODE 1SS367-T3SONY	
D308	8-719-016-74	DIODE 1SS352	
D309	8-719-049-09	DIODE 1SS367-T3SONY	
D311	8-719-016-74	DIODE 1SS352	
D312	8-719-016-74	DIODE 1SS352	
D313	8-719-016-74	DIODE 1SS352	
D314	8-719-049-09	DIODE 1SS367-T3SONY	

Ref. No.	Part No.	Description	Remark
D326	8-719-049-09	DIODE 1SS367-T3SONY	
D327	8-719-049-09	DIODE 1SS367-T3SONY	
D328	8-719-049-09	DIODE 1SS367-T3SONY	
D329	8-719-049-09	DIODE 1SS367-T3SONY	
< EARTH TERMINAL >			
* EP301	1-537-738-21	TERMINAL, EARTH	
* EP302	1-537-738-21	TERMINAL, EARTH	
* EP303	1-537-738-21	TERMINAL, EARTH	
< FERRITE BEAD >			
FB301	1-469-835-21	INDUCTOR, FERRITE BEAD	
FB302	1-469-835-21	INDUCTOR, FERRITE BEAD	
FB304	1-469-760-21	FERRITE, EMI (SMD)	
FB305	1-469-760-21	FERRITE, EMI (SMD)	
FB306	1-469-760-21	FERRITE, EMI (SMD)	
FB314	1-500-283-11	INDUCTOR, FERRITE BEAD	
FB315	1-500-283-11	INDUCTOR, FERRITE BEAD	
FB316	1-500-283-11	INDUCTOR, FERRITE BEAD	
FB317	1-500-283-11	INDUCTOR, FERRITE BEAD	
FB318	1-500-283-11	INDUCTOR, FERRITE BEAD	
FB319	1-500-283-11	INDUCTOR, FERRITE BEAD	
FB320	1-500-283-11	INDUCTOR, FERRITE BEAD	
FB321	1-500-283-11	INDUCTOR, FERRITE BEAD	
FB322	1-500-283-11	INDUCTOR, FERRITE BEAD	
FB323	1-500-283-11	INDUCTOR, FERRITE BEAD	
FB324	1-500-283-11	INDUCTOR, FERRITE BEAD	
FB325	1-500-283-11	INDUCTOR, FERRITE BEAD	
FB326	1-500-283-11	INDUCTOR, FERRITE BEAD	
< RESISTOR >			
△ FR301	1-212-849-00	FUSIBLE 4.7 5% 1/4W F	
△ FR302	1-212-849-00	FUSIBLE 4.7 5% 1/4W F	
< IC >			
IC301	6-702-673-01	IC CXD9730Q	
IC302	8-759-523-08	IC TC74AC08FT(EL)	
IC303	8-759-523-08	IC TC74AC08FT(EL)	
IC304	8-759-523-08	IC TC74AC08FT(EL)	
IC305	8-759-523-08	IC TC74AC08FT(EL)	
IC306	1-804-522-11	MODULE	
IC307	1-804-522-11	MODULE	
IC308	6-702-673-01	IC CXD9730Q	
IC309	8-759-523-08	IC TC74AC08FT(EL)	
IC310	8-759-523-08	IC TC74AC08FT(EL)	
IC311	8-759-636-55	IC M5218AFP	
IC312	1-804-522-11	MODULE	
IC313	6-702-673-01	IC CXD9730Q	
IC314	8-759-523-08	IC TC74AC08FT(EL)	
IC315	8-759-523-08	IC TC74AC08FT(EL)	
IC316	8-759-523-08	IC TC74AC08FT(EL)	
IC317	8-759-523-08	IC TC74AC08FT(EL)	
IC318	1-804-522-11	MODULE	
IC319	1-804-522-11	MODULE	
IC320	8-759-636-55	IC M5218AFP	
IC321	8-759-636-55	IC M5218AFP	
IC322	8-759-450-47	IC BA05T	
IC323	8-759-445-59	IC BA03T	

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

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

DIGITAL AMP

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
IC324	8-759-711-85	IC NJM4580E-D		R306	1-216-810-11	METAL CHIP 120	5% 1/10W
IC325	8-759-271-88	IC TC7SHU04FU		R307	1-216-797-11	METAL CHIP 10	5% 1/10W
IC326	8-759-679-05	IC TC7WH34FU(TE12R)		R308	1-216-797-11	METAL CHIP 10	5% 1/10W
IC327	8-759-111-68	IC uPC1237HA		R309	1-216-810-11	METAL CHIP 120	5% 1/10W
		< COIL >		R310	1-216-815-11	METAL CHIP 330	5% 1/10W
L301	1-412-010-41	INDUCTOR CHIP 22uH		R311	1-216-815-11	METAL CHIP 330	5% 1/10W
L302	1-412-010-41	INDUCTOR CHIP 22uH		R312	1-216-815-11	METAL CHIP 330	5% 1/10W
L303	1-412-010-41	INDUCTOR CHIP 22uH		R313	1-216-815-11	METAL CHIP 330	5% 1/10W
L304	1-412-006-31	INDUCTOR CHIP 10uH		R314	1-216-810-11	METAL CHIP 120	5% 1/10W
L305	1-410-993-42	INDUCTOR CHIP 1uH		R315	1-216-797-11	METAL CHIP 10	5% 1/10W
L306	1-428-923-11	COIL, CHOKE 10uH		R316	1-216-797-11	METAL CHIP 10	5% 1/10W
L307	1-428-923-11	COIL, CHOKE 10uH		R317	1-216-810-11	METAL CHIP 120	5% 1/10W
L308	1-428-923-11	COIL, CHOKE 10uH		R318	1-216-833-11	METAL CHIP 10K	5% 1/10W
L309	1-428-923-11	COIL, CHOKE 10uH		R319	1-216-809-11	METAL CHIP 100	5% 1/10W
L310	1-428-923-11	COIL, CHOKE 10uH		R320	1-216-819-11	METAL CHIP 680	5% 1/10W
L311	1-428-923-11	COIL, CHOKE 10uH		△ R321	1-245-274-21	RES-CHIP 50M	1% 1W F
L312	1-428-923-11	COIL, CHOKE 10uH		R324	1-216-833-11	METAL CHIP 10K	5% 1/10W
L313	1-428-923-11	COIL, CHOKE 10uH		R325	1-216-809-11	METAL CHIP 100	5% 1/10W
L314	1-428-923-11	COIL, CHOKE 10uH		R326	1-216-819-11	METAL CHIP 680	5% 1/10W
L315	1-428-923-11	COIL, CHOKE 10uH		△ R327	1-245-274-21	RES-CHIP 50M	1% 1W F
L316	1-428-923-11	COIL, CHOKE 10uH		R330	1-216-815-11	METAL CHIP 330	5% 1/10W
L317	1-428-923-11	COIL, CHOKE 10uH		R331	1-216-815-11	METAL CHIP 330	5% 1/10W
L318	1-428-923-11	COIL, CHOKE 10uH		R332	1-216-815-11	METAL CHIP 330	5% 1/10W
L319	1-428-923-11	COIL, CHOKE 10uH		R333	1-216-815-11	METAL CHIP 330	5% 1/10W
L320	1-428-923-11	COIL, CHOKE 10uH		R334	1-216-810-11	METAL CHIP 120	5% 1/10W
L321	1-428-923-11	COIL, CHOKE 10uH		R335	1-216-797-11	METAL CHIP 10	5% 1/10W
L322	1-428-923-11	COIL, CHOKE 10uH		R336	1-216-797-11	METAL CHIP 10	5% 1/10W
L323	1-428-923-11	COIL, CHOKE 10uH		R337	1-216-810-11	METAL CHIP 120	5% 1/10W
L324	1-428-923-11	COIL, CHOKE 10uH		R338	1-216-833-11	METAL CHIP 10K	5% 1/10W
L325	1-428-923-11	COIL, CHOKE 10uH		R339	1-216-833-11	METAL CHIP 10K	5% 1/10W
L326	1-412-006-31	INDUCTOR CHIP 10uH		R340	1-216-829-11	METAL CHIP 4.7K	5% 1/10W
L327	1-410-682-31	INDUCTOR 470uH		R341	1-216-827-11	METAL CHIP 3.3K	5% 1/10W
L328	1-410-682-31	INDUCTOR 470uH		R342	1-216-833-11	METAL CHIP 10K	5% 1/10W
L329	1-410-682-31	INDUCTOR 470uH		R343	1-216-833-11	METAL CHIP 10K	5% 1/10W
		< TRANSISTOR >		R344	1-216-837-11	METAL CHIP 22K	5% 1/10W
Q301	8-729-216-22	TRANSISTOR 2SA1162-G		R345	1-216-823-11	METAL CHIP 1.5K	5% 1/10W
Q302	8-729-216-22	TRANSISTOR 2SA1162-G		R346	1-216-837-11	METAL CHIP 22K	5% 1/10W
Q303	8-729-216-22	TRANSISTOR 2SA1162-G		R347	1-216-829-11	METAL CHIP 4.7K	5% 1/10W
Q305	8-729-216-22	TRANSISTOR 2SA1162-G		R348	1-216-797-11	METAL CHIP 10	5% 1/10W
Q306	8-729-216-22	TRANSISTOR 2SA1162-G		R349	1-216-833-11	METAL CHIP 10K	5% 1/10W
Q307	8-729-027-23	TRANSISTOR DTA114EKA-T146		R350	1-216-809-11	METAL CHIP 100	5% 1/10W
Q308	1-801-806-11	TRANSISTOR DTC144EKA		R351	1-216-819-11	METAL CHIP 680	5% 1/10W
Q310	8-729-202-05	TRANSISTOR 2SC2873-O		△ R352	1-245-274-21	RES-CHIP 50M	1% 1W F
Q311	8-729-202-05	TRANSISTOR 2SC2873-O		R355	1-216-845-11	METAL CHIP 100K	5% 1/10W
Q312	8-729-027-38	TRANSISTOR DTA144EKA-T146		R357	1-216-809-11	METAL CHIP 100	5% 1/10W
Q314	1-801-806-11	TRANSISTOR DTC144EKA		R359	1-216-864-11	METAL CHIP 0	5% 1/10W
Q315	8-729-027-38	TRANSISTOR DTA144EKA-T146		R360	1-216-815-11	METAL CHIP 330	5% 1/10W
Q316	8-729-027-38	TRANSISTOR DTA144EKA-T146		R361	1-216-815-11	METAL CHIP 330	5% 1/10W
Q329	8-729-027-23	TRANSISTOR DTA114EKA-T146		R362	1-216-815-11	METAL CHIP 330	5% 1/10W
		< RESISTOR >		R363	1-216-815-11	METAL CHIP 330	5% 1/10W
R301	1-216-801-11	METAL CHIP 22	5% 1/10W	R364	1-216-810-11	METAL CHIP 120	5% 1/10W
R302	1-216-815-11	METAL CHIP 330	5% 1/10W	R365	1-216-797-11	METAL CHIP 10	5% 1/10W
R303	1-216-815-11	METAL CHIP 330	5% 1/10W	R366	1-216-797-11	METAL CHIP 10	5% 1/10W
R304	1-216-815-11	METAL CHIP 330	5% 1/10W	R367	1-216-810-11	METAL CHIP 120	5% 1/10W
R305	1-216-815-11	METAL CHIP 330	5% 1/10W	R368	1-216-815-11	METAL CHIP 330	5% 1/10W
				R369	1-216-815-11	METAL CHIP 330	5% 1/10W
				R370	1-216-815-11	METAL CHIP 330	5% 1/10W
				R371	1-216-815-11	METAL CHIP 330	5% 1/10W

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

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

AVD-S50/S50ES

DIGITAL AMP	DIGITAL I/O
--------------------	--------------------

Ref. No.	Part No.	Description	Quantity	Power	Remark
R372	1-216-810-11	METAL CHIP	120	5%	1/10W
R373	1-216-797-11	METAL CHIP	10	5%	1/10W
R374	1-216-797-11	METAL CHIP	10	5%	1/10W
R375	1-216-810-11	METAL CHIP	120	5%	1/10W
R376	1-216-833-11	METAL CHIP	10K	5%	1/10W
R377	1-216-809-11	METAL CHIP	100	5%	1/10W
R378	1-216-819-11	METAL CHIP	680	5%	1/10W
△ R379	1-245-274-21	RES-CHIP	50M	1%	1W F
R380	1-216-805-11	METAL CHIP	47	5%	1/10W
R381	1-216-805-11	METAL CHIP	47	5%	1/10W
R385	1-216-833-11	METAL CHIP	10K	5%	1/10W
R386	1-216-809-11	METAL CHIP	100	5%	1/10W
R387	1-216-819-11	METAL CHIP	680	5%	1/10W
△ R388	1-245-274-21	RES-CHIP	50M	1%	1W F
R400	1-216-833-11	METAL CHIP	10K	5%	1/10W
R401	1-216-833-11	METAL CHIP	10K	5%	1/10W
R402	1-216-833-11	METAL CHIP	10K	5%	1/10W
R403	1-216-833-11	METAL CHIP	10K	5%	1/10W
R404	1-216-833-11	METAL CHIP	10K	5%	1/10W
R405	1-216-833-11	METAL CHIP	10K	5%	1/10W
R406	1-216-833-11	METAL CHIP	10K	5%	1/10W
R407	1-216-833-11	METAL CHIP	10K	5%	1/10W
R408	1-216-837-11	METAL CHIP	22K	5%	1/10W
R409	1-216-837-11	METAL CHIP	22K	5%	1/10W
R410	1-216-837-11	METAL CHIP	22K	5%	1/10W
R411	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R412	1-216-837-11	METAL CHIP	22K	5%	1/10W
R413	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R414	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R415	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R416	1-216-837-11	METAL CHIP	22K	5%	1/10W
R417	1-216-837-11	METAL CHIP	22K	5%	1/10W
R418	1-216-845-11	METAL CHIP	100K	5%	1/10W
R419	1-216-845-11	METAL CHIP	100K	5%	1/10W
R420	1-259-987-11	CARBON MELF	220	2%	1/8W
R421	1-260-032-11	CARBON MELF	1M	2%	1/8W
R427	1-216-805-11	METAL CHIP	47	5%	1/10W
R428	1-216-797-11	METAL CHIP	10	5%	1/10W
R429	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R430	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R431	1-216-797-11	METAL CHIP	10	5%	1/10W
R435	1-216-864-11	METAL CHIP	0	5%	1/10W
R436	1-216-814-11	METAL CHIP	270	5%	1/10W
R437	1-216-864-11	METAL CHIP	0	5%	1/10W
R438	1-216-809-11	METAL CHIP	100	5%	1/10W
R439	1-216-809-11	METAL CHIP	100	5%	1/10W
R440	1-216-809-11	METAL CHIP	100	5%	1/10W
R441	1-216-803-11	METAL CHIP	33	5%	1/10W
R442	1-216-803-11	METAL CHIP	33	5%	1/10W
R443	1-216-803-11	METAL CHIP	33	5%	1/10W
R444	1-216-820-11	METAL CHIP	820	5%	1/10W
R445	1-216-820-11	METAL CHIP	820	5%	1/10W
R446	1-216-820-11	METAL CHIP	820	5%	1/10W
R447	1-216-814-11	METAL CHIP	270	5%	1/10W
R448	1-216-814-11	METAL CHIP	270	5%	1/10W
R449	1-216-814-11	METAL CHIP	270	5%	1/10W
R450	1-216-814-11	METAL CHIP	270	5%	1/10W
R451	1-216-815-11	METAL CHIP	330	5%	1/10W

Ref. No.	Part No.	Description	Quantity	Power	Remark
R452	1-216-813-11	METAL CHIP	220	5%	1/10W
R453	1-216-811-11	METAL CHIP	150	5%	1/10W
R454	1-216-811-11	METAL CHIP	150	5%	1/10W
R455	1-216-813-11	METAL CHIP	220	5%	1/10W
R456	1-216-815-11	METAL CHIP	330	5%	1/10W
R457	1-216-803-11	METAL CHIP	33	5%	1/10W
R458	1-216-833-11	METAL CHIP	10K	5%	1/10W
R459	1-216-821-11	METAL CHIP	1K	5%	1/10W
R460	1-216-821-11	METAL CHIP	1K	5%	1/10W
R462	1-216-809-11	METAL CHIP	100	5%	1/10W
R463	1-216-853-11	METAL CHIP	470K	5%	1/10W
R464	1-216-821-11	METAL CHIP	1K	5%	1/10W
R465	1-216-821-11	METAL CHIP	1K	5%	1/10W
R466	1-216-817-11	METAL CHIP	470	5%	1/10W
R468	1-216-801-11	METAL CHIP	22	5%	1/10W
R469	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R470	1-216-805-11	METAL CHIP	47	5%	1/10W
R471	1-216-833-11	METAL CHIP	10K	5%	1/10W
R500	1-216-797-11	METAL CHIP	10	5%	1/10W
R501	1-216-797-11	METAL CHIP	10	5%	1/10W
R502	1-216-797-11	METAL CHIP	10	5%	1/10W
R503	1-216-797-11	METAL CHIP	10	5%	1/10W
R504	1-216-797-11	METAL CHIP	10	5%	1/10W
R505	1-216-797-11	METAL CHIP	10	5%	1/10W
R506	1-216-797-11	METAL CHIP	10	5%	1/10W
R507	1-216-797-11	METAL CHIP	10	5%	1/10W
R508	1-216-797-11	METAL CHIP	10	5%	1/10W
< RELAY >					
RY301	1-515-614-11	RELAY			
RY302	1-515-614-11	RELAY			
< QUARTZ CRYSTAL UNIT >					
X300	1-795-660-21	CRYSTAL UNIT, QUARTZ (49.152MHz)			

	1-685-221-11	DIGITAL I/O BOARD			

< CAPACITOR >					
C651	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C652	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C653	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C654	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C657	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C658	1-124-589-11	ELECT	47uF	20%	16V
C659	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C660	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C661	1-124-589-11	ELECT	47uF	20%	16V
C663	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C664	1-124-589-11	ELECT	47uF	20%	16V
< CONNECTOR >					
CNP651	1-568-955-11	PIN, CONNECTOR 6P			
< JUMPER RESISTOR >					
FB651	1-216-864-11	METAL CHIP	0	5%	1/10W

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
--	--

DIGITAL I/O

DISPLAY

Ref. No.	Part No.	Description	Remark
		< IC >	
IC650	8-759-533-85	IC L88M05T-FA-TL	
IC651	8-749-017-31	IC GP1FA550TZ (OPTICAL OUT)	
IC652	6-600-006-01	IC GP1FA551RZ (MD/DAT OPTICAL IN)	
IC653	6-600-006-01	IC GP1FA551RZ (TV/SAT OPTICAL IN)	
IC654	8-759-242-70	IC TC7WU04F	
IC655	8-759-926-17	IC SN74HC153ANS	
		< JACK >	
J651	1-770-905-21	JACK, PIN 1P (COAXIAL IN AUX)	
		< TRANSISTOR >	
Q651	8-729-901-00	TRANSISTOR DTC124EK	
		< RESISTOR >	
R651	1-216-809-11	METAL CHIP 100 5% 1/10W	
R652	1-216-809-11	METAL CHIP 100 5% 1/10W	
R653	1-216-809-11	METAL CHIP 100 5% 1/10W	
R654	1-216-809-11	METAL CHIP 100 5% 1/10W	
R655	1-216-809-11	METAL CHIP 100 5% 1/10W	
R656	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R657	1-216-809-11	METAL CHIP 100 5% 1/10W	
R658	1-218-285-11	METAL CHIP 75 5% 1/10W	
R659	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R661	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R662	1-216-864-11	METAL CHIP 0 5% 1/10W	

	A-4729-229-A	DISPLAY BOARD, COMPLETE (AEP,UK)	
	A-4729-245-A	DISPLAY BOARD, COMPLETE (US,CND)	

	4-240-061-01	HOLDER (FL)	
		< CAPACITOR >	
C841	1-162-974-11	CERAMIC CHIP 0.01uF 50V	
C842	1-162-974-11	CERAMIC CHIP 0.01uF 50V	
C851	1-126-785-11	ELECT 47uF 20% 10V	
C852	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C853	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C854	1-162-923-11	CERAMIC CHIP 47PF 5% 50V	
C855	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C856	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C858	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C871	1-126-796-11	ELECT 22uF 20% 50V	
C872	1-100-422-11	CERAMIC CHIP 0.0082uF 100V	
C874	1-162-995-11	CERAMIC CHIP 0.022uF 50V	
C875	1-126-796-11	ELECT 22uF 20% 50V	
C876	1-162-995-11	CERAMIC CHIP 0.022uF 50V	
		< CONNECTOR >	
CN801	1-779-554-21	CONNECTOR, FFC (LIF(NON-ZIF)) 17P	
* CN802	1-568-954-11	PIN, CONNECTOR 5P	
		< DIODE >	
D871	8-719-041-97	DIODE MA113-(TX)	
D872	8-719-041-97	DIODE MA113-(TX)	

Ref. No.	Part No.	Description	Remark
D873	8-719-041-97	DIODE MA113-(TX)	
D874	8-719-041-97	DIODE MA113-(TX)	
D875	8-719-977-28	DIODE DTZ10B	
		< FERRITE BEAD >	
FB851	1-414-813-11	FERRITE, EMI (SMD)	
		< FLUORESCENT INDICATOR >	
FL851	1-518-821-21	INDICATOR TUBE, FLUORESCENT	
		< IC >	
IC851	6-700-112-01	IC MSM9202-05GS-KDR1	
		< COIL >	
L871	1-408-978-21	INDUCTOR 47uH	
		< TRANSISTOR >	
Q830	8-729-602-36	TRANSISTOR 2SA1602-F	
Q831	8-729-900-53	TRANSISTOR DTC114EK	
Q871	8-729-808-42	TRANSISTOR 2SD1624-T	
Q872	8-729-808-42	TRANSISTOR 2SD1624-T	
		< RESISTOR >	
R800	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R801	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R802	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R803	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
R804	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R805	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R810	1-216-864-11	METAL CHIP 0 5% 1/10W	
R811	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R812	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R813	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R814	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
R820	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R833	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
R839	1-216-809-11	METAL CHIP 100 5% 1/10W	
R851	1-216-809-11	METAL CHIP 100 5% 1/10W	
R852	1-216-809-11	METAL CHIP 100 5% 1/10W	
R853	1-216-809-11	METAL CHIP 100 5% 1/10W	
R854	1-216-827-11	METAL CHIP 3.3K 5% 1/10W	
R855	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R871	1-218-867-11	METAL CHIP 6.8K 5% 1/10W	
R872	1-216-809-11	METAL CHIP 100 5% 1/10W	
R873	1-216-840-11	METAL CHIP 39K 5% 1/10W	
		< ROTARY ENCODER >	
RV841	1-418-725-41	ENCODER, ROTARY (12 TYPE) (VOLUME)	
		< SWITCH >	
S801	1-762-875-21	SWITCH, KEYBOARD (■)	
S803	1-762-875-21	SWITCH, KEYBOARD (▶)	
S804	1-762-875-21	SWITCH, KEYBOARD (■)	
S805	1-762-875-21	SWITCH, KEYBOARD (FUNCTION -)	
S806	1-762-875-21	SWITCH, KEYBOARD (FUNCTION +)	
S811	1-762-875-21	SWITCH, KEYBOARD (PRESET -/I◀◀)	

AVD-S50/S50ES

DISPLAY **DVD**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
S812	1-762-875-21	SWITCH, KEYBOARD (PRESET +/▶▶▶)		C244	1-164-947-11	CERAMIC CHIP 0.01uF	50V
S813	1-762-875-21	SWITCH, KEYBOARD (MODE)		C245	1-164-947-11	CERAMIC CHIP 0.01uF	50V
S814	1-762-875-21	SWITCH, KEYBOARD (2CH)		C246	1-164-947-11	CERAMIC CHIP 0.01uF	50V
S815	1-762-875-21	SWITCH, KEYBOARD (A.F.D.)		C247	1-164-947-11	CERAMIC CHIP 0.01uF	50V
S821	1-762-875-21	SWITCH, KEYBOARD (▲)		C248	1-164-947-11	CERAMIC CHIP 0.01uF	50V
< TRANSFORMER >				C249	1-164-947-11	CERAMIC CHIP 0.01uF	50V
T871	1-437-884-11	TRANSFORMER, DC-DC CONVERTER		C250	1-164-947-11	CERAMIC CHIP 0.01uF	50V
*****				C251	1-164-947-11	CERAMIC CHIP 0.01uF	50V
A-4729-240-A	DVD BOARD, COMPLETE (AEP,UK)			C252	1-164-947-11	CERAMIC CHIP 0.01uF	50V
A-4729-257-A	DVD BOARD, COMPLETE (US,CND)			C253	1-164-947-11	CERAMIC CHIP 0.01uF	50V
*****				C254	1-117-370-11	CERAMIC CHIP 10uF	10V
< CAPACITOR >				C255	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C001	1-126-206-11	ELECT CHIP 100uF	20% 6.3V	C257	1-117-370-11	CERAMIC CHIP 10uF	10V
C003	1-126-206-11	ELECT CHIP 100uF	20% 6.3V	C258	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C004	1-126-204-11	ELECT CHIP 47uF	20% 16V	C259	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C005	1-126-246-11	ELECT CHIP 220uF	20% 4V	C260	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C006	1-126-204-11	ELECT CHIP 47uF	20% 16V	C261	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C007	1-164-850-11	CERAMIC CHIP 10PF	0.5PF 50V	C262	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C008	1-107-820-11	CERAMIC CHIP 0.1uF	16V	C263	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C010	1-107-820-11	CERAMIC CHIP 0.1uF	16V	C264	1-117-370-11	CERAMIC CHIP 10uF	10V
C011	1-107-820-11	CERAMIC CHIP 0.1uF	16V	C265	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C012	1-107-820-11	CERAMIC CHIP 0.1uF	16V	C266	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C013	1-107-820-11	CERAMIC CHIP 0.1uF	16V	C267	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C014	1-107-820-11	CERAMIC CHIP 0.1uF	16V	C268	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C015	1-107-820-11	CERAMIC CHIP 0.1uF	16V	C269	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C016	1-107-820-11	CERAMIC CHIP 0.1uF	16V	C270	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C017	1-107-820-11	CERAMIC CHIP 0.1uF	16V	C271	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C018	1-107-820-11	CERAMIC CHIP 0.1uF	16V	C274	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C019	1-107-820-11	CERAMIC CHIP 0.1uF	16V	C301	1-117-370-11	CERAMIC CHIP 10uF	10V
C020	1-126-205-11	ELECT CHIP 47uF	20% 6.3V	C302	1-164-943-11	CERAMIC CHIP 0.01uF	10% 16V
C021	1-126-205-11	ELECT CHIP 47uF	20% 6.3V	C303	1-164-943-11	CERAMIC CHIP 0.01uF	10% 16V
C022	1-126-205-11	ELECT CHIP 47uF	20% 6.3V	C304	1-164-943-11	CERAMIC CHIP 0.01uF	10% 16V
C023	1-126-205-11	ELECT CHIP 47uF	20% 6.3V	C307	1-164-943-11	CERAMIC CHIP 0.01uF	10% 16V
C201	1-126-246-11	ELECT CHIP 220uF	20% 4V	C308	1-127-772-81	CERAMIC CHIP 0.033uF	10% 10V
C203	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C309	1-164-874-11	CERAMIC CHIP 100PF	5% 50V
C204	1-164-943-11	CERAMIC CHIP 0.01uF	10% 16V	C310	1-164-874-11	CERAMIC CHIP 100PF	5% 50V
C217	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C311	1-164-943-11	CERAMIC CHIP 0.01uF	10% 16V
C219	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C312	1-117-370-11	CERAMIC CHIP 10uF	10V
C225	1-107-820-11	CERAMIC CHIP 0.1uF	16V	C313	1-107-820-11	CERAMIC CHIP 0.1uF	16V
C226	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C314	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C228	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C315	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C229	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C316	1-124-779-00	ELECT CHIP 10uF	20% 16V
C230	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C317	1-164-850-11	CERAMIC CHIP 10PF	0.5PF 50V
C231	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C318	1-164-850-11	CERAMIC CHIP 10PF	0.5PF 50V
C232	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C319	1-164-862-11	CERAMIC CHIP 33PF	5% 50V
C233	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C320	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C234	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C355	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C235	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C356	1-164-947-11	CERAMIC CHIP 0.01uF	50V
C236	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C401	1-125-777-11	CERAMIC CHIP 0.1uF	10% 10V
C237	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C402	1-117-370-11	CERAMIC CHIP 10uF	10V
C238	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C404	1-125-777-11	CERAMIC CHIP 0.1uF	10% 10V
C239	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C405	1-124-779-00	ELECT CHIP 10uF	20% 16V
C240	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C406	1-164-939-11	CERAMIC CHIP 0.0022uF	10% 50V
C241	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C407	1-117-370-11	CERAMIC CHIP 10uF	10V
C242	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C408	1-125-777-11	CERAMIC CHIP 0.1uF	10% 10V
C243	1-164-947-11	CERAMIC CHIP 0.01uF	50V	C409	1-164-939-11	CERAMIC CHIP 0.0022uF	10% 50V
				C410	1-124-779-00	ELECT CHIP 10uF	20% 16V
				C411	1-125-777-11	CERAMIC CHIP 0.1uF	10% 10V

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C412	1-164-939-11	CERAMIC CHIP	0.0022uF 10% 50V	C618	1-124-779-00	ELECT CHIP	10uF 20% 16V
C413	1-164-939-11	CERAMIC CHIP	0.0022uF 10% 50V	C619	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C414	1-164-943-11	CERAMIC CHIP	0.01uF 10% 16V	C620	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C415	1-164-943-11	CERAMIC CHIP	0.01uF 10% 16V	C621	1-164-935-11	CERAMIC CHIP	470PF 10% 50V
C416	1-117-370-11	CERAMIC CHIP	10uF 10V	C622	1-124-779-00	ELECT CHIP	10uF 20% 16V
C417	1-125-777-11	CERAMIC CHIP	0.1uF 10% 10V	C623	1-164-850-11	CERAMIC CHIP	10PF 0.5PF 50V
C418	1-125-777-11	CERAMIC CHIP	0.1uF 10% 10V	C624	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C419	1-119-923-81	CERAMIC CHIP	0.047uF 10% 10V	C625	1-124-779-00	ELECT CHIP	10uF 20% 16V
C420	1-164-939-11	CERAMIC CHIP	0.0022uF 10% 50V	C626	1-164-947-11	CERAMIC CHIP	0.01uF 50V
C421	1-125-777-11	CERAMIC CHIP	0.1uF 10% 10V	C627	1-164-947-11	CERAMIC CHIP	0.01uF 50V
C422	1-164-874-11	CERAMIC CHIP	100PF 5% 50V	C628	1-124-779-00	ELECT CHIP	10uF 20% 16V
C423	1-125-777-11	CERAMIC CHIP	0.1uF 10% 10V	C629	1-164-935-11	CERAMIC CHIP	470PF 10% 50V
C424	1-107-819-11	CERAMIC CHIP	0.022uF 10% 16V	C630	1-117-370-11	CERAMIC CHIP	10uF 10V
C425	1-164-939-11	CERAMIC CHIP	0.0022uF 10% 50V	C631	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C426	1-164-943-11	CERAMIC CHIP	0.01uF 10% 16V	C632	1-164-947-11	CERAMIC CHIP	0.01uF 50V
C427	1-125-891-11	CERAMIC CHIP	0.47uF 10% 10V	C633	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C428	1-164-940-11	CERAMIC CHIP	0.0033uF 10% 16V	C634	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C432	1-164-874-11	CERAMIC CHIP	100PF 5% 50V	C635	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C433	1-164-938-11	CERAMIC CHIP	0.0015uF 10% 50V	C636	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C434	1-117-370-11	CERAMIC CHIP	10uF 10V	C637	1-164-947-11	CERAMIC CHIP	0.01uF 50V
C435	1-125-777-11	CERAMIC CHIP	0.1uF 10% 10V	C638	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C436	1-125-777-11	CERAMIC CHIP	0.1uF 10% 10V	C639	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C442	1-164-943-11	CERAMIC CHIP	0.01uF 10% 16V	C640	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C503	1-127-772-81	CERAMIC CHIP	0.033uF 10% 10V	C641	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C504	1-127-772-81	CERAMIC CHIP	0.033uF 10% 10V	C642	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C506	1-164-934-11	CERAMIC CHIP	330PF 10% 50V	C643	1-126-246-11	ELECT CHIP	220uF 20% 4V
C508	1-164-937-11	CERAMIC CHIP	0.001uF 10% 50V	C644	1-164-947-11	CERAMIC CHIP	0.01uF 50V
C509	1-164-934-11	CERAMIC CHIP	330PF 10% 50V	C645	1-164-882-11	CERAMIC CHIP	220PF 5% 16V
C510	1-164-937-11	CERAMIC CHIP	0.001uF 10% 50V	C646	1-164-947-11	CERAMIC CHIP	0.01uF 50V
C512	1-164-943-11	CERAMIC CHIP	0.01uF 10% 16V	C647	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C514	1-164-943-11	CERAMIC CHIP	0.01uF 10% 16V	C648	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C519	1-164-943-11	CERAMIC CHIP	0.01uF 10% 16V	C650	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C521	1-164-938-11	CERAMIC CHIP	0.0015uF 10% 50V	C651	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C523	1-164-938-11	CERAMIC CHIP	0.0015uF 10% 50V	C652	1-126-246-11	ELECT CHIP	220uF 20% 4V
C525	1-125-777-11	CERAMIC CHIP	0.1uF 10% 10V	C653	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C526	1-126-395-11	ELECT	22uF 20% 16V	C654	1-117-681-11	ELECT CHIP	100uF 20% 16V
C527	1-125-777-11	CERAMIC CHIP	0.1uF 10% 10V	C655	1-126-206-11	ELECT CHIP	100uF 20% 6.3V
C528	1-126-395-11	ELECT	22uF 20% 16V	C656	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C529	1-107-820-11	CERAMIC CHIP	0.1uF 16V	C657	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C552	1-107-820-11	CERAMIC CHIP	0.1uF 16V	C658	1-164-935-11	CERAMIC CHIP	470PF 10% 50V
C600	1-107-820-11	CERAMIC CHIP	0.1uF 16V	C659	1-164-882-11	CERAMIC CHIP	220PF 5% 16V
C601	1-107-820-11	CERAMIC CHIP	0.1uF 16V	C660	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C602	1-117-681-11	ELECT CHIP	100uF 20% 16V	C661	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C603	1-164-858-11	CERAMIC CHIP	22PF 5% 50V	C662	1-164-882-11	CERAMIC CHIP	220PF 5% 16V
C604	1-164-868-11	CERAMIC CHIP	56PF 5% 50V	C663	1-164-935-11	CERAMIC CHIP	470PF 10% 50V
C605	1-107-820-11	CERAMIC CHIP	0.1uF 16V	C667	1-117-370-11	CERAMIC CHIP	10uF 10V
C606	1-126-206-11	ELECT CHIP	100uF 20% 6.3V	C668	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C607	1-107-820-11	CERAMIC CHIP	0.1uF 16V	C669	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C608	1-107-820-11	CERAMIC CHIP	0.1uF 16V	C670	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C609	1-107-820-11	CERAMIC CHIP	0.1uF 16V	C671	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C610	1-126-205-11	ELECT CHIP	47uF 20% 6.3V	C672	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C611	1-107-820-11	CERAMIC CHIP	0.1uF 16V	C673	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C612	1-117-370-11	CERAMIC CHIP	10uF 10V	C674	1-117-370-11	CERAMIC CHIP	10uF 10V
C613	1-117-370-11	CERAMIC CHIP	10uF 10V	C675	1-164-947-11	CERAMIC CHIP	0.01uF 50V
C614	1-124-779-00	ELECT CHIP	10uF 20% 16V	C676	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C615	1-107-820-11	CERAMIC CHIP	0.1uF 16V	C677	1-107-820-11	CERAMIC CHIP	0.1uF 16V
C616	1-107-820-11	CERAMIC CHIP	0.1uF 16V	C678	1-164-882-11	CERAMIC CHIP	220PF 5% 16V
C617	1-107-820-11	CERAMIC CHIP	0.1uF 16V	C679	1-107-820-11	CERAMIC CHIP	0.1uF 16V

AVD-S50/S50ES

DVD

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description		Remark		
C702	1-117-370-11	CERAMIC CHIP	10uF	10V	C802	1-117-370-11	CERAMIC CHIP	10uF	10V		
C703	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C803	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C706	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C804	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C708	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	C807	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C709	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C808	1-164-874-11	CERAMIC CHIP	100PF	5%	50V	
C711	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	C809	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C712	1-164-874-11	CERAMIC CHIP	100PF	5%	50V	C810	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C713	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C811	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	
C714	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C812	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	
C715	1-164-938-11	CERAMIC CHIP	0.0015uF	10%	50V	C813	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C716	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V	C815	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C717	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	C817	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C718	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C818	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C720	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	C819	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C721	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	C837	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C722	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C838	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C723	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C839	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C724	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C840	1-117-370-11	CERAMIC CHIP	10uF	10V		
C725	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C841	1-117-370-11	CERAMIC CHIP	10uF	10V		
C726	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C842	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C727	1-117-370-11	CERAMIC CHIP	10uF	10V	C843	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C728	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	C848	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C729	1-117-370-11	CERAMIC CHIP	10uF	10V	C849	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C730	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C854	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C740	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C855	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C741	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C856	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C742	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C857	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C743	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C861	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C744	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C865	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C745	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C866	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C752	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C867	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C760	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C870	1-127-772-81	CERAMIC CHIP	0.033uF	10%	10V	
C761	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C871	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V	
C762	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C900	1-107-820-11	CERAMIC CHIP	0.1uF	16V		
C763	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C901	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V	
C764	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C902	1-107-820-11	CERAMIC CHIP	0.1uF	16V		
C765	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C905	1-164-934-11	CERAMIC CHIP	330PF	10%	50V	
C766	1-164-874-11	CERAMIC CHIP	100PF	5%	50V	C906	1-164-934-11	CERAMIC CHIP	330PF	10%	50V
C767	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C907	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V	
C768	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C908	1-164-874-11	CERAMIC CHIP	100PF	5%	50V	
C769	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C909	1-164-222-11	CERAMIC CHIP	0.22uF	25V		
C770	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C910	1-107-818-11	DOUBLE LAYERS	1F	5.5V		
C771	1-119-923-81	CERAMIC CHIP	0.047uF	10%	10V	C911	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C772	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C912	1-126-205-11	ELECT CHIP	47uF	20%	6.3V	
C773	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V	C913	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C774	1-164-941-11	CERAMIC CHIP	0.0047uF	10%	16V	C914	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C775	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C917	1-107-820-11	CERAMIC CHIP	0.1uF	16V		
C776	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C918	1-164-874-11	CERAMIC CHIP	100PF	5%	50V	
C777	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C921	1-164-874-11	CERAMIC CHIP	100PF	5%	50V	
C778	1-107-820-11	CERAMIC CHIP	0.1uF	16V	C925	1-107-820-11	CERAMIC CHIP	0.1uF	16V		
C779	1-117-370-11	CERAMIC CHIP	10uF	10V	C1001	1-126-246-11	ELECT CHIP	220uF	20%	4V	
C780	1-117-370-11	CERAMIC CHIP	10uF	10V	C1002	1-164-874-11	CERAMIC CHIP	100PF	5%	50V	
C781	1-117-370-11	CERAMIC CHIP	10uF	10V	< CONNECTOR >						
C791	1-126-206-11	ELECT CHIP	100uF	20%	6.3V	CN001	1-778-957-11	CONNECTOR, FFC/FPC 29P			
C793	1-126-246-11	ELECT CHIP	220uF	20%	4V	CN002	1-784-384-11	CONNECTOR, FFC/FPC 27P			
C795	1-126-206-11	ELECT CHIP	100uF	20%	6.3V	CN003	1-778-692-11	CONNECTOR, FFC/FPC 21P (AEP,UK)			
C796	1-107-820-11	CERAMIC CHIP	0.1uF	16V	CN003	1-793-991-11	CONNECTOR, FFC/FPC 23P (US,CND)				
C797	1-126-246-11	ELECT CHIP	220uF	20%	4V						

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
CN005	1-784-376-11	CONNECTOR, FFC/FPC 17P		FL703	1-234-177-21	FILTER, CHIP EMI	
CN008	1-816-587-21	PIN, CONNECTOR (PC BOARD) 15P		FL704	1-234-177-21	FILTER, CHIP EMI	
CN201	1-784-364-21	CONNECTOR, FFC/FPC 4P		FL705	1-234-177-21	FILTER, CHIP EMI	
* CN301	1-764-177-11	PIN, CONNECTOR (SMD) (1.5mm) 7P		FL706	1-234-177-21	FILTER, CHIP EMI	
CN401	1-778-957-11	CONNECTOR, FFC/FPC 29P		FL807	1-234-177-21	FILTER, CHIP EMI	
CN402	1-793-687-11	PIN, CONNECTOR (SMD) (1.5mm) 5P		FL810	1-234-177-21	FILTER, CHIP EMI	
CN900	1-784-367-31	CONNECTOR, FFC/FPC 8P		FL811	1-234-177-21	FILTER, CHIP EMI	
		< DIODE >		FL812	1-234-177-21	FILTER, CHIP EMI	
D900	8-719-053-18	DIODE 1SR154-400TE-25				< IC >	
D901	8-719-053-18	DIODE 1SR154-400TE-25		IC001	8-759-583-47	IC uPC2933T-E2	
D902	8-719-988-61	DIODE 1SS355TE-17		IC002	8-759-473-95	IC uPC2905T-E1	
D904	8-719-988-61	DIODE 1SS355TE-17		IC003	8-759-473-95	IC uPC2905T-E1	
D1001	8-719-053-18	DIODE 1SR154-400TE-25		IC004	8-759-473-95	IC uPC2905T-E1	
		< FERRITE BEAD >		IC005	8-759-583-47	IC uPC2933T-E2	
FB001	1-469-324-21	FERRITE, EMI (SMD)		IC006	6-700-398-01	IC uPC2918T-E1	
FB005	1-469-324-21	FERRITE, EMI (SMD)		IC202	6-702-368-01	IC MT48LC4M32B2-7	
FB006	1-469-324-21	FERRITE, EMI (SMD)		IC203	8-759-668-01	IC BR9040F-D-E2	
FB007	1-469-324-21	FERRITE, EMI (SMD)		IC204	6-802-300-01	IC MR27V3202F-DLTPZ020 (NEW TYPE)	
FB008	1-469-324-21	FERRITE, EMI (SMD)		IC205	8-759-692-08	IC MBM29DL324BE-90PFTN (FORMER TYPE)	
FB009	1-469-324-21	FERRITE, EMI (SMD)		IC206	6-700-404-01	IC ZIVA-5P-B0	
FB010	1-469-324-21	FERRITE, EMI (SMD)		IC215	6-700-437-01	IC SN74ALVCH16841DGGR	
FB011	1-469-324-21	FERRITE, EMI (SMD)		IC301	8-752-914-59	IC CXP973064-223R	
FB012	1-469-324-21	FERRITE, EMI (SMD)		IC302	8-759-640-41	IC BR24C08F-E2	
FB013	1-469-324-21	FERRITE, EMI (SMD)		IC303	6-700-407-01	IC SM8707GV-G-E2	
FB014	1-469-324-21	FERRITE, EMI (SMD)		IC401	8-752-408-73	IC CXD3068Q	
FB015	1-469-324-21	FERRITE, EMI (SMD)		IC402	8-759-701-40	IC NJM3404AM-T1	
FB017	1-469-324-21	FERRITE, EMI (SMD)		IC501	6-702-157-01	IC FAN8035L	
FB202	1-469-324-21	FERRITE, EMI (SMD)		IC600	8-759-052-52	IC L78M05T-FA	
FB271	1-469-324-21	FERRITE, EMI (SMD)		IC601	8-759-460-80	IC BA10FP-E2	
FB601	1-414-595-11	INDUCTOR, FERRITE BEAD		IC602	8-759-560-56	IC PCM1800E/2K	
FB901	1-469-324-21	FERRITE, EMI (SMD)		IC603	8-759-337-40	IC NJM2904V(TE2)	
FB902	1-469-324-21	FERRITE, EMI (SMD)		IC604	8-759-538-16	IC IS61LV6416-10TT(ISSI)	
FB1001	1-500-284-21	INDUCTOR, FERRITE BEAD		IC605	8-759-835-63	IC NJM2391DL1-26(TE1)	
FB1002	1-500-284-21	INDUCTOR, FERRITE BEAD		IC606	8-759-825-15	IC LC89056W-E	
FB1003	1-216-864-11	METAL CHIP 0	5%	IC607	8-759-698-76	IC CXD9617R	
FB1004	1-500-283-11	INDUCTOR, FERRITE BEAD		IC608	6-701-565-01	IC CXD9627A-E2	
FB1005	1-469-324-21	FERRITE, EMI (SMD)		IC610	8-759-337-40	IC NJM2904V(TE2)	
		< FILTER >		IC612	6-700-278-01	IC CXD9633Q	
FL003	1-234-177-21	FILTER, CHIP EMI		IC701	8-752-412-43	IC CXD1882R	
FL004	1-234-177-21	FILTER, CHIP EMI		IC702	8-759-637-50	IC TA48M025F(TE16L)	
FL005	1-233-893-21	FILTER, CHIP EMI		IC703	8-759-701-40	IC NJM3404AM-T1	
FL006	1-234-177-21	FILTER, CHIP EMI		IC706	8-759-564-30	IC MSM51V18165B-60	
FL202	1-234-177-21	FILTER, CHIP EMI		IC801	8-752-407-50	IC CXD2752R	
FL203	1-234-177-21	FILTER, CHIP EMI		IC802	8-759-058-64	IC TC7S32FU(TE85R)	
FL204	1-234-177-21	FILTER, CHIP EMI		IC803	8-759-083-94	IC TC7W74FU	
FL301	1-234-177-21	FILTER, CHIP EMI		IC808	6-702-336-01	IC MSM56V16160F-8TK7R1	
FL303	1-234-177-21	FILTER, CHIP EMI		IC812	8-759-549-15	IC SN74LV245APWR	
FL401	1-234-177-21	FILTER, CHIP EMI		IC813	8-759-549-15	IC SN74LV245APWR	
FL402	1-234-177-21	FILTER, CHIP EMI		IC814	8-759-680-48	IC TC7WH157FK(TE85R)	
FL603	1-234-177-21	FILTER, CHIP EMI		IC900	8-759-238-47	IC TC74HCT7007AF(EL)	
FL604	1-234-177-21	FILTER, CHIP EMI		IC901	6-802-204-01	IC uPD703033BYGF-M03-3BA	
FL605	1-234-177-21	FILTER, CHIP EMI		IC902	8-759-828-32	IC PT8300	
FL606	1-234-177-21	FILTER, CHIP EMI		IC903	8-759-352-91	IC PST9143NL	
FL701	1-234-177-21	FILTER, CHIP EMI		IC904	8-759-352-91	IC PST9143NL	
FL702	1-234-177-21	FILTER, CHIP EMI				< JUMPER RESISTOR >	
				JW900	1-218-941-81	RES-CHIP	100 5% 1/16W

AVD-S50/S50ES

DVD

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
JW903	1-218-990-11	SHORT CHIP	0	R040	1-218-990-11	SHORT CHIP	0
		< COIL >		R041	1-218-990-11	SHORT CHIP	0
L301	1-414-754-11	INDUCTOR	10uH	R042	1-218-990-11	SHORT CHIP	0
L600	1-414-754-11	INDUCTOR	10uH	R043	1-218-990-11	SHORT CHIP	0
L602	1-414-754-11	INDUCTOR	10uH	R044	1-218-990-11	SHORT CHIP	0
		< TRANSISTOR >		R045	1-218-990-11	SHORT CHIP	0
Q001	8-729-901-00	TRANSISTOR	DTC124EK	R046	1-218-990-11	SHORT CHIP	0
Q002	6-550-220-01	TRANSISTOR	2SB906(TE16L)	R047	1-218-990-11	SHORT CHIP	0
Q003	8-729-901-00	TRANSISTOR	DTC124EK	R048	1-218-990-11	SHORT CHIP	0
Q004	6-550-220-01	TRANSISTOR	2SB906(TE16L)	R049	1-218-990-11	SHORT CHIP	0
Q301	8-729-900-53	TRANSISTOR	DTC114EK	R050	1-218-990-11	SHORT CHIP	0
Q302	8-729-900-53	TRANSISTOR	DTC114EK	R051	1-218-990-11	SHORT CHIP	0
Q900	8-729-027-23	TRANSISTOR	DTA114EKA-T146	R052	1-218-990-11	SHORT CHIP	0
Q901	8-729-230-63	TRANSISTOR	2SC4116-YG	R053	1-218-990-11	SHORT CHIP	0
Q906	8-729-024-91	TRANSISTOR	2SC2712-GL-TE85L	R054	1-218-990-11	SHORT CHIP	0
Q907	8-729-024-91	TRANSISTOR	2SC2712-GL-TE85L	R055	1-218-990-11	SHORT CHIP	0
Q908	8-729-901-00	TRANSISTOR	DTC124EK	R056	1-218-990-11	SHORT CHIP	0
Q909	8-729-901-00	TRANSISTOR	DTC124EK	R057	1-218-990-11	SHORT CHIP	0
Q910	8-729-901-00	TRANSISTOR	DTC124EK	R058	1-218-953-11	RES-CHIP	1K 5% 1/16W
		< RESISTOR >		R059	1-216-864-11	METAL CHIP	0 5% 1/10W
R001	1-218-990-11	SHORT CHIP	0	R060	1-216-864-11	METAL CHIP	0 5% 1/10W
R002	1-218-990-11	SHORT CHIP	0	R061	1-218-990-11	SHORT CHIP	0
R003	1-218-990-11	SHORT CHIP	0	R062	1-218-990-11	SHORT CHIP	0
R004	1-218-990-11	SHORT CHIP	0	R063	1-218-990-11	SHORT CHIP	0
R005	1-218-990-11	SHORT CHIP	0	R064	1-218-990-11	SHORT CHIP	0
R006	1-218-990-11	SHORT CHIP	0	R065	1-218-990-11	SHORT CHIP	0
R007	1-218-990-11	SHORT CHIP	0	R066	1-218-953-11	RES-CHIP	1K 5% 1/16W
R008	1-218-990-11	SHORT CHIP	0	R067	1-216-198-11	RES-CHIP	1K 5% 1/8W
R009	1-218-953-11	RES-CHIP	1K 5% 1/16W	R068	1-218-990-11	SHORT CHIP	0
R011	1-216-198-11	RES-CHIP	1K 5% 1/8W	R069	1-218-990-11	SHORT CHIP	0
R013	1-218-990-11	SHORT CHIP	0	R070	1-218-990-11	SHORT CHIP	0
R015	1-218-990-11	SHORT CHIP	0	R202	1-218-990-11	SHORT CHIP	0
R017	1-218-990-11	SHORT CHIP	0	R203	1-208-869-11	METAL CHIP	180 0.5% 1/16W
R018	1-218-990-11	SHORT CHIP	0	R206	1-218-990-11	SHORT CHIP	0
R019	1-218-957-11	RES-CHIP	2.2K 5% 1/16W	R207	1-218-285-11	METAL CHIP	75 5% 1/10W
R020	1-218-990-11	SHORT CHIP	0	R208	1-218-285-11	METAL CHIP	75 5% 1/10W
R021	1-218-990-11	SHORT CHIP	0	R209	1-218-285-11	METAL CHIP	75 5% 1/10W
R022	1-218-990-11	SHORT CHIP	0	R210	1-218-285-11	METAL CHIP	75 5% 1/10W
R023	1-218-990-11	SHORT CHIP	0	R211	1-218-990-11	SHORT CHIP	0
R024	1-218-990-11	SHORT CHIP	0	R212	1-208-643-11	RES-CHIP	22 5% 1/16W
R025	1-218-990-11	SHORT CHIP	0	R213	1-218-990-11	SHORT CHIP	0
R026	1-218-990-11	SHORT CHIP	0	R214	1-218-990-11	SHORT CHIP	0
R027	1-218-990-11	SHORT CHIP	0	R215	1-218-935-11	RES-CHIP	33 5% 1/16W
R028	1-218-990-11	SHORT CHIP	0	R216	1-218-935-11	RES-CHIP	33 5% 1/16W
R029	1-218-990-11	SHORT CHIP	0	R217	1-218-935-11	RES-CHIP	33 5% 1/16W
R030	1-218-990-11	SHORT CHIP	0	R218	1-218-935-11	RES-CHIP	33 5% 1/16W
R031	1-218-990-11	SHORT CHIP	0	R219	1-218-935-11	RES-CHIP	33 5% 1/16W
R032	1-218-990-11	SHORT CHIP	0	R220	1-218-935-11	RES-CHIP	33 5% 1/16W
R033	1-218-990-11	SHORT CHIP	0	R221	1-218-935-11	RES-CHIP	33 5% 1/16W
R034	1-218-990-11	SHORT CHIP	0	R222	1-218-935-11	RES-CHIP	33 5% 1/16W
R035	1-218-990-11	SHORT CHIP	0	R223	1-218-935-11	RES-CHIP	33 5% 1/16W
R036	1-218-990-11	SHORT CHIP	0	R224	1-218-935-11	RES-CHIP	33 5% 1/16W
R037	1-218-990-11	SHORT CHIP	0	R225	1-218-935-11	RES-CHIP	33 5% 1/16W
R038	1-218-990-11	SHORT CHIP	0	R226	1-218-961-11	RES-CHIP	4.7K 5% 1/16W
R039	1-218-990-11	SHORT CHIP	0	R227	1-218-935-11	RES-CHIP	33 5% 1/16W
				R228	1-218-935-11	RES-CHIP	33 5% 1/16W
				R229	1-218-935-11	RES-CHIP	33 5% 1/16W
				R230	1-218-935-11	RES-CHIP	33 5% 1/16W

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R231	1-218-935-11	RES-CHIP	33	5%	1/16W	R326	1-218-941-81	RES-CHIP	100	5%	1/16W
R232	1-218-990-11	SHORT CHIP	0			R327	1-218-941-81	RES-CHIP	100	5%	1/16W
R233	1-218-965-11	RES-CHIP	10K	5%	1/16W	R328	1-218-941-81	RES-CHIP	100	5%	1/16W
R234	1-218-285-11	METAL CHIP	75	5%	1/10W	R329	1-218-941-81	RES-CHIP	100	5%	1/16W
R236	1-208-683-11	METAL CHIP	1K	0.5%	1/16W	R330	1-218-941-81	RES-CHIP	100	5%	1/16W
R238	1-218-941-81	RES-CHIP	100	5%	1/16W	R331	1-218-945-11	RES-CHIP	220	5%	1/16W
R239	1-218-973-11	RES-CHIP	47K	5%	1/16W	R332	1-218-965-11	RES-CHIP	10K	5%	1/16W
R241	1-218-965-11	RES-CHIP	10K	5%	1/16W	R333	1-218-965-11	RES-CHIP	10K	5%	1/16W
R242	1-218-965-11	RES-CHIP	10K	5%	1/16W	R334	1-218-965-11	RES-CHIP	10K	5%	1/16W
R243	1-218-965-11	RES-CHIP	10K	5%	1/16W	R335	1-208-643-11	RES-CHIP	22	5%	1/16W
R244	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R336	1-218-990-11	SHORT CHIP	0		
R245	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R337	1-218-941-81	RES-CHIP	100	5%	1/16W
R246	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R338	1-218-990-11	SHORT CHIP	0		
R247	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R339	1-218-990-11	SHORT CHIP	0		
R248	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R340	1-218-990-11	SHORT CHIP	0		
R249	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R341	1-218-990-11	SHORT CHIP	0		
R250	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R342	1-218-990-11	SHORT CHIP	0		
R251	1-218-965-11	RES-CHIP	10K	5%	1/16W	R344	1-218-953-11	RES-CHIP	1K	5%	1/16W
R252	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R345	1-218-990-11	SHORT CHIP	0		
R253	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R346	1-218-953-11	RES-CHIP	1K	5%	1/16W
R256	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R349	1-218-990-11	SHORT CHIP	0		
R257	1-216-864-11	METAL CHIP	0	5%	1/10W	R350	1-218-941-81	RES-CHIP	100	5%	1/16W
R258	1-216-864-11	METAL CHIP	0	5%	1/10W	R351	1-218-990-11	SHORT CHIP	0		
R259	1-216-864-11	METAL CHIP	0	5%	1/10W	R352	1-218-990-11	SHORT CHIP	0		
R260	1-216-864-11	METAL CHIP	0	5%	1/10W	R353	1-218-965-11	RES-CHIP	10K	5%	1/16W
R261	1-216-864-11	METAL CHIP	0	5%	1/10W	R354	1-218-989-11	RES-CHIP	1M	5%	1/16W
R262	1-218-285-11	METAL CHIP	75	5%	1/10W	R355	1-218-973-11	RES-CHIP	47K	5%	1/16W
R263	1-218-285-11	METAL CHIP	75	5%	1/10W	R356	1-218-945-11	RES-CHIP	220	5%	1/16W
R264	1-218-285-11	METAL CHIP	75	5%	1/10W	R357	1-218-941-81	RES-CHIP	100	5%	1/16W
R265	1-218-285-11	METAL CHIP	75	5%	1/10W	R358	1-218-941-81	RES-CHIP	100	5%	1/16W
R266	1-218-285-11	METAL CHIP	75	5%	1/10W	R359	1-218-965-11	RES-CHIP	10K	5%	1/16W
R270	1-218-990-11	SHORT CHIP	0			R360	1-218-965-11	RES-CHIP	10K	5%	1/16W
R271	1-218-990-11	SHORT CHIP	0			R361	1-218-965-11	RES-CHIP	10K	5%	1/16W
R272	1-218-990-11	SHORT CHIP	0			R362	1-218-990-11	SHORT CHIP	0		
R273	1-218-990-11	SHORT CHIP	0			R401	1-218-990-11	SHORT CHIP	0		
R274	1-218-990-11	SHORT CHIP	0			R402	1-218-990-11	SHORT CHIP	0		
R275	1-218-990-11	SHORT CHIP	0			R403	1-218-990-11	SHORT CHIP	0		
R302	1-218-965-11	RES-CHIP	10K	5%	1/16W	R404	1-218-990-11	SHORT CHIP	0		
R303	1-208-643-11	RES-CHIP	22	5%	1/16W	R405	1-218-990-11	SHORT CHIP	0		
R304	1-208-643-11	RES-CHIP	22	5%	1/16W	R406	1-218-990-11	SHORT CHIP	0		
R305	1-218-965-11	RES-CHIP	10K	5%	1/16W	R407	1-218-990-11	SHORT CHIP	0		
R306	1-208-643-11	RES-CHIP	22	5%	1/16W	R408	1-218-990-11	SHORT CHIP	0		
R307	1-208-643-11	RES-CHIP	22	5%	1/16W	R409	1-218-990-11	SHORT CHIP	0		
R308	1-208-643-11	RES-CHIP	22	5%	1/16W	R410	1-218-990-11	SHORT CHIP	0		
R309	1-218-990-11	SHORT CHIP	0			R412	1-218-965-11	RES-CHIP	10K	5%	1/16W
R311	1-208-643-11	RES-CHIP	22	5%	1/16W	R413	1-218-965-11	RES-CHIP	10K	5%	1/16W
R313	1-218-990-11	SHORT CHIP	0			R414	1-218-990-11	SHORT CHIP	0		
R314	1-218-990-11	SHORT CHIP	0			R417	1-218-990-11	SHORT CHIP	0		
R315	1-218-990-11	SHORT CHIP	0			R418	1-218-965-11	RES-CHIP	10K	5%	1/16W
R316	1-218-965-11	RES-CHIP	10K	5%	1/16W	R419	1-218-975-11	RES-CHIP	68K	5%	1/16W
R317	1-218-941-81	RES-CHIP	100	5%	1/16W	R420	1-218-990-11	SHORT CHIP	0		
R318	1-218-941-81	RES-CHIP	100	5%	1/16W	R421	1-218-953-11	RES-CHIP	1K	5%	1/16W
R319	1-218-990-11	SHORT CHIP	0			R423	1-218-953-11	RES-CHIP	1K	5%	1/16W
R320	1-218-990-11	SHORT CHIP	0			R424	1-218-990-11	SHORT CHIP	0		
R321	1-218-941-81	RES-CHIP	100	5%	1/16W	R425	1-218-953-11	RES-CHIP	1K	5%	1/16W
R322	1-218-990-11	SHORT CHIP	0			R426	1-218-953-11	RES-CHIP	1K	5%	1/16W
R323	1-218-941-81	RES-CHIP	100	5%	1/16W	R427	1-218-990-11	SHORT CHIP	0		
R324	1-218-990-11	SHORT CHIP	0			R428	1-218-953-11	RES-CHIP	1K	5%	1/16W

AVD-S50/S50ES

DVD

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R429	1-218-953-11	RES-CHIP	1K	5%	1/16W	R538	1-218-977-11	RES-CHIP	100K	5%	1/16W
R430	1-218-953-11	RES-CHIP	1K	5%	1/16W	R540	1-218-965-11	RES-CHIP	10K	5%	1/16W
R431	1-218-990-11	SHORT CHIP	0			R541	1-218-977-11	RES-CHIP	100K	5%	1/16W
R432	1-218-990-11	SHORT CHIP	0			R542	1-218-990-11	SHORT CHIP	0		
R433	1-218-973-11	RES-CHIP	47K	5%	1/16W	R544	1-218-977-11	RES-CHIP	100K	5%	1/16W
R434	1-218-973-11	RES-CHIP	47K	5%	1/16W	R545	1-218-977-11	RES-CHIP	100K	5%	1/16W
R435	1-218-990-11	SHORT CHIP	0			R546	1-218-990-11	SHORT CHIP	0		
R436	1-218-990-11	SHORT CHIP	0			R550	1-218-990-11	SHORT CHIP	0		
R437	1-218-973-11	RES-CHIP	47K	5%	1/16W	R553	1-218-990-11	SHORT CHIP	0		
R438	1-218-990-11	SHORT CHIP	0			R554	1-218-990-11	SHORT CHIP	0		
R439	1-218-947-11	RES-CHIP	330	5%	1/16W	R579	1-218-964-11	RES-CHIP	8.2K	5%	1/16W
R440	1-218-973-11	RES-CHIP	47K	5%	1/16W	R580	1-218-971-11	RES-CHIP	33K	5%	1/16W
R441	1-218-953-11	RES-CHIP	1K	5%	1/16W	R581	1-218-966-11	RES-CHIP	12K	5%	1/16W
R442	1-218-965-11	RES-CHIP	10K	5%	1/16W	R582	1-218-965-11	RES-CHIP	10K	5%	1/16W
R443	1-218-973-11	RES-CHIP	47K	5%	1/16W	R583	1-218-965-11	RES-CHIP	10K	5%	1/16W
R444	1-218-985-11	RES-CHIP	470K	5%	1/16W	R597	1-218-990-11	SHORT CHIP	0		
R445	1-218-953-11	RES-CHIP	1K	5%	1/16W	R600	1-218-941-81	RES-CHIP	100	5%	1/16W
R446	1-218-965-11	RES-CHIP	10K	5%	1/16W	R602	1-218-989-11	RES-CHIP	1M	5%	1/16W
R447	1-218-965-11	RES-CHIP	10K	5%	1/16W	R603	1-218-941-81	RES-CHIP	100	5%	1/16W
R448	1-218-953-11	RES-CHIP	1K	5%	1/16W	R604	1-218-941-81	RES-CHIP	100	5%	1/16W
R449	1-218-971-11	RES-CHIP	33K	5%	1/16W	R605	1-218-941-81	RES-CHIP	100	5%	1/16W
R450	1-218-953-11	RES-CHIP	1K	5%	1/16W	R606	1-218-941-81	RES-CHIP	100	5%	1/16W
R452	1-218-989-11	RES-CHIP	1M	5%	1/16W	R607	1-218-941-81	RES-CHIP	100	5%	1/16W
R453	1-218-989-11	RES-CHIP	1M	5%	1/16W	R608	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R455	1-218-977-11	RES-CHIP	100K	5%	1/16W	R609	1-218-949-11	RES-CHIP	470	5%	1/16W
R457	1-218-959-11	RES-CHIP	3.3K	5%	1/16W	R610	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R471	1-218-990-11	SHORT CHIP	0			R611	1-218-941-81	RES-CHIP	100	5%	1/16W
R472	1-218-990-11	SHORT CHIP	0			R612	1-218-973-11	RES-CHIP	47K	5%	1/16W
R473	1-218-990-11	SHORT CHIP	0			R613	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R474	1-218-990-11	SHORT CHIP	0			R614	1-218-971-11	RES-CHIP	33K	5%	1/16W
R475	1-218-965-11	RES-CHIP	10K	5%	1/16W	R615	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R476	1-218-965-11	RES-CHIP	10K	5%	1/16W	R616	1-218-962-11	RES-CHIP	5.6K	5%	1/16W
R477	1-218-977-11	RES-CHIP	100K	5%	1/16W	R617	1-218-990-11	SHORT CHIP	0		
R478	1-218-990-11	SHORT CHIP	0			R618	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R479	1-218-977-11	RES-CHIP	100K	5%	1/16W	R619	1-218-973-11	RES-CHIP	47K	5%	1/16W
R510	1-208-939-11	METAL CHIP	150K	0.5%	1/16W	R620	1-218-941-81	RES-CHIP	100	5%	1/16W
R511	1-208-939-11	METAL CHIP	150K	0.5%	1/16W	R621	1-218-941-81	RES-CHIP	100	5%	1/16W
R512	1-218-974-11	METAL CHIP	56K	0.5%	1/16W	R622	1-218-941-81	RES-CHIP	100	5%	1/16W
R513	1-218-974-11	METAL CHIP	56K	0.5%	1/16W	R623	1-218-941-81	RES-CHIP	100	5%	1/16W
R514	1-218-990-11	SHORT CHIP	0			R624	1-218-941-81	RES-CHIP	100	5%	1/16W
R516	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R625	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R517	1-218-957-11	RES-CHIP	2.2K	5%	1/16W	R626	1-218-953-11	RES-CHIP	1K	5%	1/16W
R519	1-218-977-11	RES-CHIP	100K	5%	1/16W	R627	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R520	1-218-965-11	RES-CHIP	10K	5%	1/16W	R628	1-218-941-81	RES-CHIP	100	5%	1/16W
R521	1-218-977-11	RES-CHIP	100K	5%	1/16W	R629	1-218-941-81	RES-CHIP	100	5%	1/16W
R522	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R630	1-218-949-11	RES-CHIP	470	5%	1/16W
R523	1-218-965-11	RES-CHIP	10K	5%	1/16W	R631	1-218-941-81	RES-CHIP	100	5%	1/16W
R524	1-218-965-11	RES-CHIP	10K	5%	1/16W	R634	1-218-953-11	RES-CHIP	1K	5%	1/16W
R525	1-218-965-11	RES-CHIP	10K	5%	1/16W	R635	1-218-965-11	RES-CHIP	10K	5%	1/16W
R527	1-218-957-11	RES-CHIP	2.2K	5%	1/16W	R636	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R528	1-218-990-11	SHORT CHIP	0			R637	1-218-941-81	RES-CHIP	100	5%	1/16W
R529	1-218-971-11	RES-CHIP	33K	5%	1/16W	R639	1-218-941-81	RES-CHIP	100	5%	1/16W
R530	1-218-974-11	RES-CHIP	56K	5%	1/16W	R640	1-218-941-81	RES-CHIP	100	5%	1/16W
R531	1-218-990-11	SHORT CHIP	0			R642	1-218-941-81	RES-CHIP	100	5%	1/16W
R532	1-218-990-11	SHORT CHIP	0			R644	1-218-965-11	RES-CHIP	10K	5%	1/16W
R533	1-218-971-11	RES-CHIP	33K	5%	1/16W	R645	1-218-965-11	RES-CHIP	10K	5%	1/16W
R534	1-218-974-11	RES-CHIP	56K	5%	1/16W	R646	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R535	1-218-990-11	SHORT CHIP	0			R647	1-218-945-11	RES-CHIP	220	5%	1/16W

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R648	1-218-941-81	RES-CHIP	100	5%	1/16W	R717	1-218-977-11	RES-CHIP	100K	5%	1/16W
R649	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R718	1-218-965-11	RES-CHIP	10K	5%	1/16W
R650	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R719	1-218-953-11	RES-CHIP	1K	5%	1/16W
R651	1-218-965-11	RES-CHIP	10K	5%	1/16W	R720	1-218-953-11	RES-CHIP	1K	5%	1/16W
R652	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R721	1-208-719-11	METAL CHIP	33K	0.5%	1/16W
R653	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R724	1-208-683-11	METAL CHIP	1K	0.5%	1/16W
R654	1-218-945-11	RES-CHIP	220	5%	1/16W	R725	1-218-956-11	RES-CHIP	1.8K	5%	1/16W
R655	1-218-941-81	RES-CHIP	100	5%	1/16W	R726	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R656	1-218-990-11	SHORT CHIP	0			R727	1-208-695-11	METAL CHIP	3.3K	0.5%	1/16W
R657	1-218-953-11	RES-CHIP	1K	5%	1/16W	R728	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R658	1-218-941-81	RES-CHIP	100	5%	1/16W	R729	1-218-964-11	RES-CHIP	8.2K	5%	1/16W
R659	1-218-935-11	RES-CHIP	33	5%	1/16W	R730	1-208-643-11	RES-CHIP	22	5%	1/16W
R660	1-218-945-11	RES-CHIP	220	5%	1/16W	R731	1-208-643-11	RES-CHIP	22	5%	1/16W
R661	1-218-941-81	RES-CHIP	100	5%	1/16W	R732	1-218-965-11	RES-CHIP	10K	5%	1/16W
R662	1-218-941-81	RES-CHIP	100	5%	1/16W	R735	1-218-965-11	RES-CHIP	10K	5%	1/16W
R663	1-218-941-81	RES-CHIP	100	5%	1/16W	R737	1-218-965-11	RES-CHIP	10K	5%	1/16W
R664	1-218-941-81	RES-CHIP	100	5%	1/16W	R738	1-208-643-11	RES-CHIP	22	5%	1/16W
R665	1-218-965-11	RES-CHIP	10K	5%	1/16W	R741	1-208-643-11	RES-CHIP	22	5%	1/16W
R666	1-218-941-81	RES-CHIP	100	5%	1/16W	R742	1-208-643-11	RES-CHIP	22	5%	1/16W
R667	1-218-941-81	RES-CHIP	100	5%	1/16W	R743	1-208-643-11	RES-CHIP	22	5%	1/16W
R668	1-218-953-11	RES-CHIP	1K	5%	1/16W	R744	1-208-643-11	RES-CHIP	22	5%	1/16W
R669	1-218-953-11	RES-CHIP	1K	5%	1/16W	R745	1-218-973-11	RES-CHIP	47K	5%	1/16W
R671	1-218-941-81	RES-CHIP	100	5%	1/16W	R746	1-218-973-11	RES-CHIP	47K	5%	1/16W
R672	1-218-945-11	RES-CHIP	220	5%	1/16W	R750	1-218-965-11	RES-CHIP	10K	5%	1/16W
R673	1-218-945-11	RES-CHIP	220	5%	1/16W	R752	1-218-990-11	SHORT CHIP	0		
R674	1-218-945-11	RES-CHIP	220	5%	1/16W	R753	1-218-990-11	SHORT CHIP	0		
R675	1-218-945-11	RES-CHIP	220	5%	1/16W	R754	1-218-990-11	SHORT CHIP	0		
R676	1-218-945-11	RES-CHIP	220	5%	1/16W	R755	1-218-990-11	SHORT CHIP	0		
R677	1-218-945-11	RES-CHIP	220	5%	1/16W	R756	1-218-990-11	SHORT CHIP	0		
R679	1-218-941-81	RES-CHIP	100	5%	1/16W	R757	1-218-990-11	SHORT CHIP	0		
R680	1-218-941-81	RES-CHIP	100	5%	1/16W	R758	1-218-990-11	SHORT CHIP	0		
R682	1-218-965-11	RES-CHIP	10K	5%	1/16W	R759	1-218-990-11	SHORT CHIP	0		
R684	1-218-965-11	RES-CHIP	10K	5%	1/16W	R762	1-218-969-11	RES-CHIP	22K	5%	1/16W
R685	1-218-953-11	RES-CHIP	1K	5%	1/16W	R763	1-218-964-11	RES-CHIP	8.2K	5%	1/16W
R686	1-218-965-11	RES-CHIP	10K	5%	1/16W	R764	1-218-989-11	RES-CHIP	1M	5%	1/16W
R687	1-218-953-11	RES-CHIP	1K	5%	1/16W	R765	1-218-969-11	RES-CHIP	22K	5%	1/16W
R688	1-218-965-11	RES-CHIP	10K	5%	1/16W	R766	1-218-990-11	SHORT CHIP	0		
R689	1-218-965-11	RES-CHIP	10K	5%	1/16W	R767	1-218-973-11	RES-CHIP	47K	5%	1/16W
R692	1-218-941-81	RES-CHIP	100	5%	1/16W	R770	1-218-990-11	SHORT CHIP	0		
R695	1-218-941-81	RES-CHIP	100	5%	1/16W	R771	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R696	1-218-945-11	RES-CHIP	220	5%	1/16W	R772	1-208-643-11	RES-CHIP	22	5%	1/16W
R699	1-218-941-81	RES-CHIP	100	5%	1/16W	R776	1-218-990-11	SHORT CHIP	0		
R700	1-218-965-11	RES-CHIP	10K	5%	1/16W	R777	1-218-990-11	SHORT CHIP	0		
R702	1-218-965-11	RES-CHIP	10K	5%	1/16W	R778	1-218-977-11	RES-CHIP	100K	5%	1/16W
R703	1-218-965-11	RES-CHIP	10K	5%	1/16W	R780	1-218-990-11	SHORT CHIP	0		
R704	1-218-965-11	RES-CHIP	10K	5%	1/16W	R781	1-218-990-11	SHORT CHIP	0		
R705	1-218-965-11	RES-CHIP	10K	5%	1/16W	R799	1-218-990-11	SHORT CHIP	0		
R706	1-218-965-11	RES-CHIP	10K	5%	1/16W	R800	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R707	1-218-941-81	RES-CHIP	100	5%	1/16W	R803	1-218-941-81	RES-CHIP	100	5%	1/16W
R708	1-218-985-11	RES-CHIP	470K	5%	1/16W	R804	1-218-990-11	SHORT CHIP	0		
R709	1-218-979-11	RES-CHIP	150K	5%	1/16W	R805	1-218-965-11	RES-CHIP	10K	5%	1/16W
R710	1-218-965-11	RES-CHIP	10K	5%	1/16W	R821	1-208-643-11	RES-CHIP	22	5%	1/16W
R711	1-218-957-11	RES-CHIP	2.2K	5%	1/16W	R822	1-208-643-11	RES-CHIP	22	5%	1/16W
R712	1-218-965-11	RES-CHIP	10K	5%	1/16W	R823	1-208-643-11	RES-CHIP	22	5%	1/16W
R713	1-218-965-11	RES-CHIP	10K	5%	1/16W	R826	1-208-643-11	RES-CHIP	22	5%	1/16W
R714	1-218-965-11	RES-CHIP	10K	5%	1/16W	R827	1-218-941-81	RES-CHIP	100	5%	1/16W
R715	1-218-965-11	RES-CHIP	10K	5%	1/16W	R828	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R716	1-218-941-81	RES-CHIP	100	5%	1/16W	R829	1-218-941-81	RES-CHIP	100	5%	1/16W

AVD-S50/S50ES

DVD

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R830	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R930	1-218-965-11	RES-CHIP	10K	5%	1/16W
R831	1-218-971-11	RES-CHIP	33K	5%	1/16W	R931	1-218-953-11	RES-CHIP	1K	5%	1/16W
R833	1-218-990-11	SHORT CHIP	0			R933	1-218-965-11	RES-CHIP	10K	5%	1/16W
R834	1-218-990-11	SHORT CHIP	0			R935	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R835	1-218-990-11	SHORT CHIP	0			R936	1-218-953-11	RES-CHIP	1K	5%	1/16W
R836	1-218-990-11	SHORT CHIP	0			R937	1-218-965-11	RES-CHIP	10K	5%	1/16W
R837	1-218-990-11	SHORT CHIP	0			R939	1-218-965-11	RES-CHIP	10K	5%	1/16W
R838	1-218-990-11	SHORT CHIP	0			R941	1-218-965-11	RES-CHIP	10K	5%	1/16W
R839	1-218-961-11	RES-CHIP	4.7K	5%	1/16W	R942	1-218-965-11	RES-CHIP	10K	5%	1/16W
R840	1-218-990-11	SHORT CHIP	0			R943	1-218-965-11	RES-CHIP	10K	5%	1/16W
R841	1-218-990-11	SHORT CHIP	0			R944	1-218-965-11	RES-CHIP	10K	5%	1/16W
R842	1-218-965-11	RES-CHIP	10K	5%	1/16W	R945	1-218-965-11	RES-CHIP	10K	5%	1/16W
R843	1-218-990-11	SHORT CHIP	0			R946	1-218-965-11	RES-CHIP	10K	5%	1/16W
R844	1-218-990-11	SHORT CHIP	0			R948	1-218-965-11	RES-CHIP	10K	5%	1/16W
R845	1-218-990-11	SHORT CHIP	0			R949	1-218-965-11	RES-CHIP	10K	5%	1/16W
R846	1-218-990-11	SHORT CHIP	0			R950	1-218-973-11	RES-CHIP	47K	5%	1/16W
R847	1-208-643-11	RES-CHIP	22	5%	1/16W	R956	1-218-965-11	RES-CHIP	10K	5%	1/16W
R848	1-208-643-11	RES-CHIP	22	5%	1/16W	R959	1-218-990-11	SHORT CHIP	0		
R849	1-208-643-11	RES-CHIP	22	5%	1/16W	R960	1-218-965-11	RES-CHIP	10K	5%	1/16W
R850	1-208-643-11	RES-CHIP	22	5%	1/16W	R961	1-218-965-11	RES-CHIP	10K	5%	1/16W
R851	1-218-990-11	SHORT CHIP	0			R962	1-218-965-11	RES-CHIP	10K	5%	1/16W
R852	1-218-990-11	SHORT CHIP	0			R963	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R865	1-218-990-11	SHORT CHIP	0								(US,CND)
R866	1-218-990-11	SHORT CHIP	0			R963	1-218-990-11	SHORT CHIP	0		(AEP,UK)
R867	1-218-990-11	SHORT CHIP	0			R964	1-218-973-11	RES-CHIP	47K	5%	1/16W
R882	1-218-965-11	RES-CHIP	10K	5%	1/16W	R965	1-218-965-11	RES-CHIP	10K	5%	1/16W
R883	1-218-965-11	RES-CHIP	10K	5%	1/16W	R967	1-218-941-81	RES-CHIP	100	5%	1/16W
R884	1-218-965-11	RES-CHIP	10K	5%	1/16W	R968	1-218-990-11	SHORT CHIP	0		
R885	1-218-965-11	RES-CHIP	10K	5%	1/16W	R969	1-218-950-11	RES-CHIP	560	5%	1/16W
R886	1-218-965-11	RES-CHIP	10K	5%	1/16W	R970	1-218-965-11	RES-CHIP	10K	5%	1/16W
R887	1-218-965-11	RES-CHIP	10K	5%	1/16W	R972	1-218-965-11	RES-CHIP	10K	5%	1/16W
R888	1-218-965-11	RES-CHIP	10K	5%	1/16W	R974	1-218-990-11	SHORT CHIP	0		
R889	1-218-965-11	RES-CHIP	10K	5%	1/16W	R981	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R900	1-218-941-81	RES-CHIP	100	5%	1/16W	R982	1-218-965-11	RES-CHIP	10K	5%	1/16W
R901	1-218-941-81	RES-CHIP	100	5%	1/16W	R985	1-218-985-11	RES-CHIP	470K	5%	1/16W
R902	1-218-941-81	RES-CHIP	100	5%	1/16W	R986	1-218-973-11	RES-CHIP	47K	5%	1/16W
R903	1-218-941-81	RES-CHIP	100	5%	1/16W	R987	1-218-973-11	RES-CHIP	47K	5%	1/16W
R904	1-218-941-81	RES-CHIP	100	5%	1/16W	R988	1-218-990-11	SHORT CHIP	0		
R905	1-218-941-81	RES-CHIP	100	5%	1/16W	R989	1-218-990-11	SHORT CHIP	0		
R906	1-218-959-11	RES-CHIP	3.3K	5%	1/16W	R991	1-218-965-11	RES-CHIP	10K	5%	1/16W
R907	1-218-959-11	RES-CHIP	3.3K	5%	1/16W	R992	1-218-965-11	RES-CHIP	10K	5%	1/16W
R908	1-218-965-11	RES-CHIP	10K	5%	1/16W	R993	1-218-953-11	RES-CHIP	1K	5%	1/16W
R909	1-218-965-11	RES-CHIP	10K	5%	1/16W	R998	1-218-965-11	RES-CHIP	10K	5%	1/16W
R910	1-218-941-81	RES-CHIP	100	5%	1/16W	R1000	1-218-965-11	RES-CHIP	10K	5%	1/16W
R911	1-218-941-81	RES-CHIP	100	5%	1/16W	R1001	1-218-965-11	RES-CHIP	10K	5%	1/16W
R912	1-218-941-81	RES-CHIP	100	5%	1/16W	R1002	1-220-210-11	RES-CHIP	200K	5%	1/16W
R913	1-218-941-81	RES-CHIP	100	5%	1/16W	R1003	1-218-941-81	RES-CHIP	100	5%	1/16W
R914	1-218-941-81	RES-CHIP	100	5%	1/16W	R1004	1-218-965-11	RES-CHIP	10K	5%	1/16W
R915	1-218-941-81	RES-CHIP	100	5%	1/16W	R1005	1-218-965-11	RES-CHIP	10K	5%	1/16W
R916	1-218-941-81	RES-CHIP	100	5%	1/16W	R1006	1-218-965-11	RES-CHIP	10K	5%	1/16W
R917	1-218-952-11	RES-CHIP	820	5%	1/16W	R1008	1-218-941-81	RES-CHIP	100	5%	1/16W
R918	1-218-952-11	RES-CHIP	820	5%	1/16W	R1009	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R919	1-218-965-11	RES-CHIP	10K	5%	1/16W	R1010	1-218-965-11	RES-CHIP	10K	5%	1/16W
R920	1-218-941-81	RES-CHIP	100	5%	1/16W	R1011	1-218-953-11	RES-CHIP	1K	5%	1/16W
R921	1-218-941-81	RES-CHIP	100	5%	1/16W	R1014	1-216-174-00	RES-CHIP	100	5%	1/8W
R922	1-218-965-11	RES-CHIP	10K	5%	1/16W	R1015	1-216-174-00	RES-CHIP	100	5%	1/8W
R926	1-218-941-81	RES-CHIP	100	5%	1/16W	R1016	1-216-174-00	RES-CHIP	100	5%	1/8W
R929	1-218-967-11	RES-CHIP	15K	5%	1/16W						

AVD-S50/S50ES

POWER

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description	Remark
C933	1-110-622-11	ELECT	1000uF	20%	63V	D926	8-719-935-48	DIODE HZS7A3LTD
C934	1-110-622-11	ELECT	1000uF	20%	63V	D927	8-719-110-44	DIODE RD16ES-B1
C935	1-127-888-21	CERAMIC	0.1uF	10%	50V	D928	8-719-991-33	DIODE 1SS133T-77
C936	1-124-579-51	ELECT	1000uF	20%	16V	D929	8-719-200-91	DIODE 11EQS10
C937	1-126-768-11	ELECT	2200uF	20%	16V	D930	8-719-991-33	DIODE 1SS133T-77
C939	1-162-294-31	CERAMIC	0.001uF	10%	50V	D931	8-719-991-33	DIODE 1SS133T-77
C941	1-104-665-11	ELECT	100uF	20%	10V	D932	8-719-986-01	DIODE HZS7C2LTA
C943	1-126-934-11	ELECT	220uF	20%	16V			< EARTH TERMINAL >
C944	1-128-582-11	ELECT	10uF	20%	63V			
C945	1-127-888-21	CERAMIC	0.1uF	10%	50V			
C946	1-126-946-11	ELECT	10uF	20%	50V	* EP901	1-537-738-21	TERMINAL, EARTH
C947	1-127-888-21	CERAMIC	0.1uF	10%	50V	* EP902	1-537-738-21	TERMINAL, EARTH
C948	1-126-935-11	ELECT	470uF	20%	10V	* EP903	1-537-738-21	TERMINAL, EARTH
C949	1-126-237-11	ELECT	1200uF	20%	6.3V	* EP904	1-537-738-21	TERMINAL, EARTH
C950	1-127-888-21	CERAMIC	0.1uF	10%	50V			< IC >
C951	1-162-282-31	CERAMIC	100PF	10%	50V	IC901	6-702-386-01	IC STR-G7421
△ C953	1-113-902-51	CERAMIC	680PF	20%	250V	IC902	6-702-338-01	IC STR-F6238S (US,CND)
C954	1-127-888-21	CERAMIC	0.1uF	10%	50V	IC902	6-703-098-01	IC STR-F6267D (AEP,UK)
C955	1-162-286-21	CERAMIC	220PF	10%	50V	IC903	8-749-920-44	IC SE-012N
C956	1-130-475-00	MYLAR	0.0022uF	5%	50V	IC904	6-700-812-01	IC SI-8050JF
C958	1-126-965-11	ELECT	22uF	20%	50V	IC905	6-700-388-01	IC SE-B2
		< CONNECTOR >				IC906	8-759-245-86	IC TA79012S
CN300	1-564-320-00	PIN, CONNECTOR (3.96mm PITCH) 2P				IC907	8-759-394-36	IC BA09T
CN301	1-691-766-11	PLUG (MICRO CONNECTOR) 4P				IC908	8-759-450-47	IC BA05T
* CN901	1-564-731-11	PIN, CONNECTOR (SMALL TYPE) 15P				IC909	8-759-932-23	IC TLC272CP
CNP901	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P				IC910	8-759-659-28	IC SI-8033S
* CNP903	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P				IC911	8-759-245-79	IC TA79005S
		< DIODE >				IC912	8-759-332-29	IC M51945BL
D901	8-719-935-94	DIODE HZS18-1LTD						< COIL >
D902	8-719-084-21	DIODE 10E6N-TA1B2 (AEP,UK)			L901	1-419-505-11	COIL, CHOKE	10uH
D902	8-719-970-02	DIODE 1SR139-400 (US,CND)			L902	1-419-253-11	COIL, CHOKE	100uH
D903	8-719-200-91	DIODE 11EQS10			L903	1-419-253-11	COIL, CHOKE	100uH
D904	8-719-084-21	DIODE 10E6N-TA1B2 (AEP,UK)						< LINE FILTER >
D904	8-719-970-02	DIODE 1SR139-400 (US,CND)			△ LF901	1-428-905-11	COIL, LINE FILTER (AEP,UK)	
D905	6-500-391-01	DIODE RBV-604-01 (US,CND)			△ LF901	1-456-206-11	COIL, LINE FILTER (US,CND)	
D905	6-500-392-01	DIODE RBV-606-01 (AEP,UK)			△ LF902	1-428-905-11	COIL, LINE FILTER (AEP,UK)	
D906	8-719-200-91	DIODE 11EQS10			△ LF902	1-456-206-11	COIL, LINE FILTER (US,CND)	
D907	8-719-080-26	DIODE SARS01V0						< PHOTO COUPLER >
D908	8-719-934-13	DIODE HZS24-1L			PC901	8-749-019-04	PHOTO COUPLER TLP421	
D909	8-719-935-99	DIODE HZS20-2LTD			PC902	8-749-019-04	PHOTO COUPLER TLP421	
D910	8-719-991-33	DIODE 1SS133T-77						< TRANSISTOR >
D911	6-500-241-01	DIODE SARS03			Q901	8-729-025-04	TRANSISTOR 2SC3852A	
D912	8-719-200-91	DIODE 11EQS10			Q902	8-729-900-63	TRANSISTOR DTA124ES	
D913	8-719-080-54	DIODE RK39LF-B3			Q903	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D914	8-719-064-47	DIODE RN1Z-LF-B1			Q904	8-729-025-04	TRANSISTOR 2SC3852A	
D915	8-719-064-47	DIODE RN1Z-LF-B1			Q905	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D916	8-719-934-13	DIODE HZS24-1L			Q906	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D917	8-719-313-14	DIODE FML-22S			Q907	8-729-900-63	TRANSISTOR DTA124ES	
D918	8-719-301-45	DIODE RK14			Q908	8-729-900-36	TRANSISTOR DTC124ES	
D919	8-719-109-89	DIODE RD5.6ES-B2			Q909	8-729-018-59	TRANSISTOR 2SB1375(LB-SONY)	
D920	8-719-200-82	DIODE 11ES2			Q910	8-729-021-73	TRANSISTOR 2SC2229-OY	
D921	8-719-200-82	DIODE 11ES2			Q911	8-729-900-36	TRANSISTOR DTC124ES	
D922	8-719-991-33	DIODE 1SS133T-77			Q912	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D923	8-719-301-45	DIODE RK14			Q913	8-729-900-36	TRANSISTOR DTC124ES	
D924	8-719-991-33	DIODE 1SS133T-77						
D925	8-719-109-89	DIODE RD5.6ES-B2						

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

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

AVD-S50/S50ES

RF **RGB**

Ref. No.	Part No.	Description	Remark
C016	1-162-966-11	CERAMIC CHIP 0.0022uF 10%	50V
C017	1-162-966-11	CERAMIC CHIP 0.0022uF 10%	50V
C018	1-164-172-11	CERAMIC CHIP 0.0056uF 10%	25V
C019	1-164-172-11	CERAMIC CHIP 0.0056uF 10%	25V
C020	1-162-919-11	CERAMIC CHIP 22PF 5%	50V
C021	1-162-919-11	CERAMIC CHIP 22PF 5%	50V
C022	1-162-919-11	CERAMIC CHIP 22PF 5%	50V
C023	1-162-919-11	CERAMIC CHIP 22PF 5%	50V
C024	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C025	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C026	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C027	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C028	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C029	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C030	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C031	1-115-416-11	CERAMIC CHIP 0.001uF 5%	25V
C032	1-165-176-11	CERAMIC CHIP 0.047uF 10%	16V
C033	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C034	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C035	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C036	1-125-891-11	CERAMIC CHIP 0.47uF 10%	10V
C037	1-162-959-11	CERAMIC CHIP 330PF 5%	50V
C038	1-164-677-11	CERAMIC CHIP 0.033uF 10%	16V
C039	1-164-677-11	CERAMIC CHIP 0.033uF 10%	16V
C040	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C041	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C042	1-164-218-11	CERAMIC CHIP 180PF 0.25PF	50V
C049	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
< CONNECTOR >			
CN001	1-815-031-11	CONNECTOR, FFC/FPC (ZIF) 24P	
CN002	1-784-836-21	CONNECTOR, FFC (LIF(NON-ZIF)) 29P	
CN003	1-784-861-21	CONNECTOR, FFC (LIF(NON-ZIF)) 9P	
< DIODE >			
D001	8-719-988-61	DIODE 1SS355TE-17	
D002	8-719-988-61	DIODE 1SS355TE-17	
< IC >			
IC001	8-752-417-53	IC CXD1881AR	
< COIL >			
L001	1-412-031-11	INDUCTOR CHIP 47uH	
L002	1-412-031-11	INDUCTOR CHIP 47uH	
< TRANSISTOR >			
Q001	8-729-903-46	TRANSISTOR 2SB1132-P	
Q002	8-729-903-46	TRANSISTOR 2SB1132-P	
< RESISTOR >			
R001	1-218-668-11	METAL CHIP 100 0.5%	1/16W
R003	1-216-803-11	METAL CHIP 33 5%	1/10W
R004	1-216-803-11	METAL CHIP 33 5%	1/10W
R005	1-216-841-11	METAL CHIP 47K 5%	1/10W
R006	1-216-817-11	METAL CHIP 470 5%	1/10W
R007	1-216-803-11	METAL CHIP 33 5%	1/10W
R008	1-216-803-11	METAL CHIP 33 5%	1/10W

Ref. No.	Part No.	Description	Remark
R009	1-216-841-11	METAL CHIP 47K 5%	1/10W
R010	1-216-817-11	METAL CHIP 470 5%	1/10W
R011	1-216-864-11	METAL CHIP 0 5%	1/10W
R012	1-216-864-11	METAL CHIP 0 5%	1/10W
R013	1-216-864-11	METAL CHIP 0 5%	1/10W
R014	1-216-864-11	METAL CHIP 0 5%	1/10W
R015	1-216-864-11	METAL CHIP 0 5%	1/10W
R016	1-216-864-11	METAL CHIP 0 5%	1/10W
R017	1-216-864-11	METAL CHIP 0 5%	1/10W
R018	1-216-864-11	METAL CHIP 0 5%	1/10W
R019	1-216-864-11	METAL CHIP 0 5%	1/10W
R020	1-216-864-11	METAL CHIP 0 5%	1/10W
R021	1-216-864-11	METAL CHIP 0 5%	1/10W
R022	1-216-813-11	METAL CHIP 220 5%	1/10W
R023	1-216-820-11	METAL CHIP 820 5%	1/10W
R024	1-216-864-11	METAL CHIP 0 5%	1/10W
R025	1-216-809-11	METAL CHIP 100 5%	1/10W
R026	1-218-718-11	METAL CHIP 12K 0.5%	1/16W
R027	1-216-864-11	METAL CHIP 0 5%	1/10W
R028	1-216-864-11	METAL CHIP 0 5%	1/10W
R029	1-216-864-11	METAL CHIP 0 5%	1/10W
R032	1-216-809-11	METAL CHIP 100 5%	1/10W
R033	1-216-864-11	METAL CHIP 0 5%	1/10W
R034	1-219-570-11	METAL CHIP 10M 5%	1/10W
R035	1-216-864-11	METAL CHIP 0 5%	1/10W
R041	1-216-821-11	METAL CHIP 1K 5%	1/10W

A-4729-228-A		RGB BOARD, COMPLETE (AEP,UK)	

< CAPACITOR >			
C761	1-126-947-11	ELECT 47uF 20%	16V (AEP,UK)
C762	1-126-947-11	ELECT 47uF 20%	16V (AEP,UK)
C763	1-126-947-11	ELECT 47uF 20%	16V (AEP,UK)
C764	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V (AEP,UK)
C765	1-126-947-11	ELECT 47uF 20%	16V (AEP,UK)
C766	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V (AEP,UK)
C767	1-126-947-11	ELECT 47uF 20%	16V (AEP,UK)
C768	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V (AEP,UK)
C769	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V (AEP,UK)
C770	1-126-947-11	ELECT 47uF 20%	16V (AEP,UK)
C771	1-126-947-11	ELECT 47uF 20%	16V (AEP,UK)
C776	1-162-921-11	CERAMIC CHIP 33PF 5%	50V (AEP,UK)
C777	1-162-921-11	CERAMIC CHIP 33PF 5%	50V (AEP,UK)
C778	1-162-921-11	CERAMIC CHIP 33PF 5%	50V (AEP,UK)

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C779	1-162-921-11	CERAMIC CHIP 33PF 5%	50V (AEP,UK)	Q768	1-801-806-11	TRANSISTOR DTC144EKA (AEP,UK)	
C780	1-162-927-11	CERAMIC CHIP 100PF 5%	50V (AEP,UK)	Q769	8-729-027-23	TRANSISTOR DTA114EKA-T146 (AEP,UK)	
C781	1-162-927-11	CERAMIC CHIP 100PF 5%	50V (AEP,UK)	Q770	1-801-806-11	TRANSISTOR DTC144EKA (AEP,UK)	
C782	1-162-927-11	CERAMIC CHIP 100PF 5%	50V (AEP,UK)	Q771	1-801-806-11	TRANSISTOR DTC144EKA (AEP,UK)	
C783	1-162-927-11	CERAMIC CHIP 100PF 5%	50V (AEP,UK)	Q772	8-729-027-23	TRANSISTOR DTA114EKA-T146 (AEP,UK)	
C784	1-162-927-11	CERAMIC CHIP 100PF 5%	50V (AEP,UK)	Q773	8-729-422-27	TRANSISTOR 2SD601A-Q (AEP,UK)	
C785	1-162-927-11	CERAMIC CHIP 100PF 5%	50V (AEP,UK)	Q774	1-801-806-11	TRANSISTOR DTC144EKA (AEP,UK)	
C786	1-162-927-11	CERAMIC CHIP 100PF 5%	50V (AEP,UK)	< RESISTOR >			
C787	1-126-947-11	ELECT 47uF 20%	16V (AEP,UK)	R761	1-216-829-11	METAL CHIP 4.7K 5%	1/10W (AEP,UK)
C788	1-126-947-11	ELECT 47uF 20%	16V (AEP,UK)	R762	1-216-829-11	METAL CHIP 4.7K 5%	1/10W (AEP,UK)
C789	1-126-947-11	ELECT 47uF 20%	16V (AEP,UK)	R763	1-216-829-11	METAL CHIP 4.7K 5%	1/10W (AEP,UK)
< CONNECTOR >				R764	1-216-829-11	METAL CHIP 4.7K 5%	1/10W (AEP,UK)
CN771	1-779-289-11	CONNECTOR, FFC (LIF(NON-ZIF)) 21P	(AEP,UK)	R765	1-216-833-11	METAL CHIP 10K 5%	1/10W (AEP,UK)
* CN772	1-568-941-11	PIN, CONNECTOR 3P (AEP,UK)		R766	1-216-833-11	METAL CHIP 10K 5%	1/10W (AEP,UK)
< DIODE >				R767	1-216-833-11	METAL CHIP 10K 5%	1/10W (AEP,UK)
D705	8-719-988-61	DIODE 1SS355TE-17 (AEP,UK)		R768	1-216-833-11	METAL CHIP 10K 5%	1/10W (AEP,UK)
D761	8-719-988-61	DIODE 1SS355TE-17 (AEP,UK)		R769	1-218-285-11	METAL CHIP 75 5%	1/10W (AEP,UK)
D762	8-719-988-61	DIODE 1SS355TE-17 (AEP,UK)		R770	1-218-285-11	METAL CHIP 75 5%	1/10W (AEP,UK)
D763	8-719-988-61	DIODE 1SS355TE-17 (AEP,UK)		R771	1-218-285-11	METAL CHIP 75 5%	1/10W (AEP,UK)
D764	8-719-988-61	DIODE 1SS355TE-17 (AEP,UK)		R772	1-218-285-11	METAL CHIP 75 5%	1/10W (AEP,UK)
< IC >				R773	1-216-825-11	METAL CHIP 2.2K 5%	1/10W (AEP,UK)
IC761	8-759-826-47	IC LA73052-TLM (AEP,UK)		R774	1-216-825-11	METAL CHIP 2.2K 5%	1/10W (AEP,UK)
IC762	8-759-094-53	IC TA7805S(LBSONY) (AEP,UK)		R775	1-216-825-11	METAL CHIP 2.2K 5%	1/10W (AEP,UK)
< JACK >				R776	1-216-821-11	METAL CHIP 1K 5%	1/10W (AEP,UK)
J761	1-815-911-11	CONNECTOR, SQUARE TYPE 21P (EURO AV OUTPUT (TO TV))	(AEP,UK)	R777	1-216-815-11	METAL CHIP 330 5%	1/10W (AEP,UK)
J762	1-815-911-11	CONNECTOR, SQUARE TYPE 21P (EURO AV INPUT (FROM VIDEO))	(AEP,UK)	R778	1-216-815-11	METAL CHIP 330 5%	1/10W (AEP,UK)
< COIL >				R779	1-216-815-11	METAL CHIP 330 5%	1/10W (AEP,UK)
L765	1-216-296-11	SHORT CHIP 0 (AEP,UK)		R780	1-216-815-11	METAL CHIP 330 5%	1/10W (AEP,UK)
L766	1-216-296-11	SHORT CHIP 0 (AEP,UK)		R781	1-216-841-11	METAL CHIP 47K 5%	1/10W (AEP,UK)
L767	1-412-060-11	INDUCTOR 22uH (AEP,UK)		R782	1-216-849-11	METAL CHIP 220K 5%	1/10W (AEP,UK)
< TRANSISTOR >				R783	1-216-841-11	METAL CHIP 47K 5%	1/10W (AEP,UK)
Q761	8-729-119-79	TRANSISTOR 2SC2785-FEK (AEP,UK)		R784	1-216-841-11	METAL CHIP 47K 5%	1/10W (AEP,UK)
Q762	8-729-119-79	TRANSISTOR 2SC2785-FEK (AEP,UK)		R785	1-216-841-11	METAL CHIP 47K 5%	1/10W (AEP,UK)
Q763	8-729-119-79	TRANSISTOR 2SC2785-FEK (AEP,UK)		R786	1-216-841-11	METAL CHIP 47K 5%	1/10W (AEP,UK)
Q764	8-729-119-79	TRANSISTOR 2SC2785-FEK (AEP,UK)					
Q765	8-729-027-23	TRANSISTOR DTA114EKA-T146 (AEP,UK)					
Q766	8-729-027-23	TRANSISTOR DTA114EKA-T146 (AEP,UK)					
Q767	1-801-806-11	TRANSISTOR DTC144EKA (AEP,UK)					

AVD-S50/S50ES

RGB **RM** **SP**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R787	1-218-867-11	METAL CHIP	6.8K 5%	1/10W (AEP,UK)	C532	1-125-853-21 FILM	470PF 5% 50V
R788	1-218-867-11	METAL CHIP	6.8K 5%	1/10W (AEP,UK)	C533	1-125-853-21 FILM	470PF 5% 50V
R789	1-216-809-11	METAL CHIP	100 5%	1/10W (AEP,UK)	C534	1-136-356-11 FILM	470PF 5% 100V
R790	1-216-809-11	METAL CHIP	100 5%	1/10W (AEP,UK)	C535	1-164-156-11 CERAMIC CHIP	0.1uF 25V
R791	1-216-809-11	METAL CHIP	100 5%	1/10W (AEP,UK)	C536	1-117-720-11 CERAMIC CHIP	4.7uF 10V
R792	1-216-809-11	METAL CHIP	100 5%	1/10W (AEP,UK)	C537	1-117-720-11 CERAMIC CHIP	4.7uF 10V
R793	1-216-809-11	METAL CHIP	100 5%	1/10W (AEP,UK)	C538	1-117-720-11 CERAMIC CHIP	4.7uF 10V
R794	1-216-807-11	METAL CHIP	68 5%	1/10W (AEP,UK)	C539	1-117-720-11 CERAMIC CHIP	4.7uF 10V
R795	1-216-807-11	METAL CHIP	68 5%	1/10W (AEP,UK)	C540	1-117-720-11 CERAMIC CHIP	4.7uF 10V
		< RELAY >			C606	1-162-962-11 CERAMIC CHIP	470PF 10% 50V
RY761	1-515-622-11	RELAY (AEP,UK)				< CONNECTOR >	
RY762	1-515-622-11	RELAY (AEP,UK)			* CN312	1-568-941-11 PIN, CONNECTOR 3P	
RY763	1-515-622-11	RELAY (AEP,UK)				< DIODE >	
RY764	1-515-622-11	RELAY (AEP,UK)			D316	8-719-016-74 DIODE	1SS352
		*****			D317	8-719-016-74 DIODE	1SS352
		1-685-226-11 RM BOARD			D318	8-719-016-74 DIODE	1SS352
		*****			D319	8-719-016-74 DIODE	1SS352
		< CAPACITOR >			D320	8-719-016-74 DIODE	1SS352
C891	1-104-665-11	ELECT	100uF 20%	10V		< FERRITE BEAD >	
C892	1-162-974-11	CERAMIC CHIP	0.01uF	50V	FB327	1-500-283-11 INDUCTOR, FERRITE BEAD	
		< DIODE >			FB328	1-500-283-11 INDUCTOR, FERRITE BEAD	
D891	8-719-071-44	LED SELS5223C-TP15 (POWER)				< JACK >	
		< IC >			J301	1-816-917-11 JACK, PIN 1P (SUB WOOFER ANALOG OUT)	
IC891	8-759-827-70	IC NJL64H400A-1				< TRANSISTOR >	
		< RESISTOR >			Q317	8-729-216-22 TRANSISTOR	2SA1162-G
R806	1-216-841-11	METAL CHIP	47K 5%	1/10W	Q318	8-729-216-22 TRANSISTOR	2SA1162-G
R891	1-216-809-11	METAL CHIP	100 5%	1/10W	Q319	8-729-216-22 TRANSISTOR	2SA1162-G
R892	1-216-820-11	METAL CHIP	820 5%	1/10W	Q320	8-729-216-22 TRANSISTOR	2SA1162-G
		< SWITCH >			Q321	8-729-216-22 TRANSISTOR	2SA1162-G
S807	1-762-875-21	SWITCH, KEYBOARD (DISPLAY)			Q322	8-729-216-22 TRANSISTOR	2SA1162-G
		*****			Q323	8-729-216-22 TRANSISTOR	2SA1162-G
		A-4729-238-A SP BOARD, COMPLETE (AEP,UK)			Q324	8-729-216-22 TRANSISTOR	2SA1162-G
		A-4729-254-A SP BOARD, COMPLETE (US,CND)			Q325	8-729-216-22 TRANSISTOR	2SA1162-G
		*****			Q326	8-729-216-22 TRANSISTOR	2SA1162-G
		< CAPACITOR >			Q327	8-729-024-91 TRANSISTOR	2SC2712-GL-TE85L
C525	1-125-853-21	FILM	470PF 5%	50V		< RESISTOR >	
C526	1-125-853-21	FILM	470PF 5%	50V	R487	1-216-849-11 METAL CHIP	220K 5% 1/10W
C527	1-136-356-11	FILM	470PF 5%	100V	R488	1-216-849-11 METAL CHIP	220K 5% 1/10W
C528	1-125-853-21	FILM	470PF 5%	50V	R489	1-216-849-11 METAL CHIP	220K 5% 1/10W
C529	1-136-356-11	FILM	470PF 5%	100V	R490	1-216-849-11 METAL CHIP	220K 5% 1/10W
C530	1-136-356-11	FILM	470PF 5%	100V	R491	1-216-849-11 METAL CHIP	220K 5% 1/10W
C531	1-125-853-21	FILM	470PF 5%	50V	R492	1-216-849-11 METAL CHIP	220K 5% 1/10W
					R493	1-216-849-11 METAL CHIP	220K 5% 1/10W
					R494	1-216-849-11 METAL CHIP	220K 5% 1/10W
					R495	1-216-849-11 METAL CHIP	220K 5% 1/10W
					R496	1-216-849-11 METAL CHIP	220K 5% 1/10W
					R497	1-216-821-11 METAL CHIP	1K 5% 1/10W
					R498	1-216-857-11 METAL CHIP	1M 5% 1/10W
					R509	1-216-844-11 METAL CHIP	82K 5% 1/10W
					R510	1-216-844-11 METAL CHIP	82K 5% 1/10W
					R511	1-216-844-11 METAL CHIP	82K 5% 1/10W

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R512	1-216-844-11	METAL CHIP	82K 5% 1/10W	C776	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (US,CND)
R513	1-216-844-11	METAL CHIP	82K 5% 1/10W	C777	1-124-589-11	ELECT	47uF 20% 16V (US,CND)
< TERMINAL >				C778	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (US,CND)
TM301	1-694-842-11	TERMINAL BOARD (SPEAKERS SURROUND)		C783	1-126-947-11	ELECT	47uF 20% 16V (US,CND)
TM302	1-694-840-11	TERMINAL BOARD (SPEAKERS FRONT/CENTER)		C784	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (US,CND)
*****				C785	1-126-947-11	ELECT	47uF 20% 16V (US,CND)
A-4729-256-A	VIDEO BOARD, COMPLETE (US,CND)			C786	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (US,CND)
*****				C787	1-126-947-11	ELECT	47uF 20% 16V (US,CND)
< CAPACITOR >				C788	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (US,CND)
C701	1-162-923-11	CERAMIC CHIP	47PF 5% 50V (US,CND)	C791	1-124-589-11	ELECT	47uF 20% 16V (US,CND)
C702	1-162-923-11	CERAMIC CHIP	47PF 5% 50V (US,CND)	C792	1-126-947-11	ELECT	47uF 20% 16V (US,CND)
C703	1-162-923-11	CERAMIC CHIP	47PF 5% 50V (US,CND)	C793	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (US,CND)
C704	1-162-923-11	CERAMIC CHIP	47PF 5% 50V (US,CND)	C794	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (US,CND)
C705	1-126-947-11	ELECT	47uF 20% 16V (US,CND)	< CONNECTOR >			
C706	1-136-165-00	MYLAR	0.1uF 5% 50V (US,CND)	CN701	1-779-291-11	CONNECTOR, FFC (LIF(NON-ZIF)) 23P	(US,CND)
C707	1-126-947-11	ELECT	47uF 20% 16V (US,CND)	< IC >			
C708	1-136-165-00	MYLAR	0.1uF 5% 50V (US,CND)	IC701	8-759-536-24	IC NJM2296M-TE2 (US,CND)	
C709	1-126-947-11	ELECT	47uF 20% 16V (US,CND)	IC702	8-759-536-24	IC NJM2296M-TE2 (US,CND)	
C710	1-136-165-00	MYLAR	0.1uF 5% 50V (US,CND)	IC703	8-759-671-94	IC MC74HC4053AFEL (US,CND)	
C711	1-162-923-11	CERAMIC CHIP	47PF 5% 50V (US,CND)	IC704	8-759-684-20	IC LA7104M-TLM (US,CND)	
C712	1-162-923-11	CERAMIC CHIP	47PF 5% 50V (US,CND)	IC771	8-759-094-53	IC TA7805S(LBSONY) (US,CND)	
C714	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V (US,CND)	< CONNECTOR >			
C715	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V (US,CND)	J701	1-779-801-11	CONNECTOR (ROUND TYPE) (S-VIDEO IN/OUT)	(US,CND)
C716	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V (US,CND)	J702	1-779-801-11	CONNECTOR (ROUND TYPE) (TV/SAT S-VIDEO IN,AUX S-VIDEO IN)	(US,CND)
C723	1-126-947-11	ELECT	47uF 20% 16V (US,CND)	< S TERMINAL >			
C726	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V (US,CND)	J703	1-779-800-11	TERMINAL, S (MONITOR S-VIDEO OUT)	(US,CND)
C731	1-124-589-11	ELECT	47uF 20% 16V (US,CND)	< JACK >			
C741	1-124-589-11	ELECT	47uF 20% 16V (US,CND)	J704	1-816-548-11	JACK, PIN 3P (COMPONENT VIDEO OUT)	(US,CND)
C751	1-124-589-11	ELECT	47uF 20% 16V (US,CND)	< COIL >			
C771	1-126-947-11	ELECT	47uF 20% 16V (US,CND)	L781	1-412-060-11	INDUCTOR	22uH (US,CND)
C772	1-126-947-11	ELECT	47uF 20% 16V (US,CND)	L782	1-412-060-11	INDUCTOR	22uH (US,CND)
C773	1-126-947-11	ELECT	47uF 20% 16V (US,CND)	< TRANSISTOR >			
C774	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (US,CND)	Q711	1-801-806-11	TRANSISTOR	DTC144EKA (US,CND)
C775	1-126-947-11	ELECT	47uF 20% 16V (US,CND)	Q715	8-729-027-23	TRANSISTOR	DTA114EKA-T146 (US,CND)

VIDEO

Ref. No.	Part No.	Description	Remark
Q716	8-729-027-23	TRANSISTOR DTA114EKA-T146 (US,CND)	
Q717	1-801-806-11	TRANSISTOR DTC144EKA (US,CND)	
Q718	1-801-806-11	TRANSISTOR DTC144EKA (US,CND)	
Q721	8-729-027-23	TRANSISTOR DTA114EKA-T146 (US,CND)	
Q722	8-729-027-23	TRANSISTOR DTA114EKA-T146 (US,CND)	
< RESISTOR >			
R701	1-218-285-11	METAL CHIP 75 5%	1/10W (US,CND)
R702	1-218-285-11	METAL CHIP 75 5%	1/10W (US,CND)
R703	1-218-285-11	METAL CHIP 75 5%	1/10W (US,CND)
R704	1-218-285-11	METAL CHIP 75 5%	1/10W (US,CND)
R705	1-218-285-11	METAL CHIP 75 5%	1/10W (US,CND)
R706	1-218-285-11	METAL CHIP 75 5%	1/10W (US,CND)
R707	1-218-285-11	METAL CHIP 75 5%	1/10W (US,CND)
R708	1-218-285-11	METAL CHIP 75 5%	1/10W (US,CND)
R709	1-218-285-11	METAL CHIP 75 5%	1/10W (US,CND)
R710	1-218-285-11	METAL CHIP 75 5%	1/10W (US,CND)
R711	1-216-809-11	METAL CHIP 100 5%	1/10W (US,CND)
R716	1-216-809-11	METAL CHIP 100 5%	1/10W (US,CND)
R720	1-216-833-11	METAL CHIP 10K 5%	1/10W (US,CND)
R721	1-216-833-11	METAL CHIP 10K 5%	1/10W (US,CND)
R723	1-216-833-11	METAL CHIP 10K 5%	1/10W (US,CND)
R724	1-216-833-11	METAL CHIP 10K 5%	1/10W (US,CND)
R725	1-216-833-11	METAL CHIP 10K 5%	1/10W (US,CND)
R726	1-216-833-11	METAL CHIP 10K 5%	1/10W (US,CND)
R727	1-216-833-11	METAL CHIP 10K 5%	1/10W (US,CND)
R734	1-216-841-11	METAL CHIP 47K 5%	1/10W (US,CND)
R735	1-216-841-11	METAL CHIP 47K 5%	1/10W (US,CND)
R736	1-216-864-11	METAL CHIP 0 5%	1/10W (US,CND)
R739	1-218-285-11	METAL CHIP 75 5%	1/10W (US,CND)
R744	1-216-841-11	METAL CHIP 47K 5%	1/10W (US,CND)
R745	1-216-841-11	METAL CHIP 47K 5%	1/10W (US,CND)
R746	1-216-864-11	METAL CHIP 0 5%	1/10W (US,CND)
R749	1-218-285-11	METAL CHIP 75 5%	1/10W (US,CND)
R754	1-216-841-11	METAL CHIP 47K 5%	1/10W (US,CND)

Ref. No.	Part No.	Description	Remark
R755	1-216-841-11	METAL CHIP 47K 5%	1/10W (US,CND)
R756	1-216-864-11	METAL CHIP 0 5%	1/10W (US,CND)
R759	1-218-285-11	METAL CHIP 75 5%	1/10W (US,CND)
< SWITCH >			
S701	1-572-903-51	SWITCH, SLIDE (SCAN SELECT) (US,CND)	

MISCELLANEOUS			

6	1-786-391-11	SWITCH, PUSH (1 KEY)	
7	1-771-685-11	SWITCH, PUSH (CONTROL BLOCK)	
64	1-783-175-11	WIRE (FLAT TYPE) (17 CORE)	
107	1-775-257-11	WIRE (FLAT TYPE) (29 CORE)	
151	1-769-972-11	WIRE (FLAT TYPE) (13 CORE)	
152	A-4726-404-A	TUNER UNIT (US,CND)	
152	A-4726-588-A	TUNER UNIT (AEP,UK)	
154	1-775-251-11	WIRE (FLAT TYPE) (27 CORE)	
155	1-824-708-11	WIRE (FLAT TYPE) (23 CORE)	
△ 160	1-575-651-91	CORD, POWER (AEP,UK)	
△ 160	1-783-820-21	CORD, POWER (US,CND)	
162	1-500-435-11	FILTER, CLAMP (FERRITE CORE)	
163	1-500-764-11	CORE, FERRITE	
165	1-824-616-11	WIRE (FLAT TYPE) (21 CORE)	
251	1-824-106-12	CABLE, FLEXIBLE FLAT (24 CORE)	
253	1-824-104-11	WIRE (FLAT TYPE) (29 CORE)	
△ 258	1-477-263-11	PICK-UP UNIT (TDPO22W)	
△ F901	1-533-420-11	FUSE, GLASS CYLINDRICAL (DIA.5) (5A/125V) (US,CND)	
△ F901	1-576-230-11	FUSE, H.B.C. (T3.15AL/250V) (AEP,UK)	
FAN961	1-763-561-31	FAN, D.C.	
M151	A-4604-363-A	MOTOR (L) ASSY (LOADING)	

<p>The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.</p>	<p>Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
---	---

Ref. No.	Part No.	Description	Remark
		ACCESSORIES *****	
	1-477-441-11	REMOTE COMMANDER (RM-SP50)	
	1-501-594-14	ANTENNA (FM) (AEP,UK)	
	1-754-149-11	ANTENNA, LOOP (AM)	
△	1-770-019-51	ADAPTOR, CONVERSION PLUG (UK)	
	1-793-184-22	CONNECTOR (F TYPE ADAPTOR) (FM ANTENNA) (US,CND)	
	1-823-364-21	CORD, CONNECTION (US,CND)	
	1-824-180-11	CORD, CONNECTION (AEP,UK)	
	3-071-119-21	COVER, BATTERY (for RM-SP50)	
	4-240-933-11	MANUAL, INSTRUCTION (ENGLISH,FRENCH) (US,CND)	
	4-240-933-21	MANUAL, INSTRUCTION (ENGLISH,FRENCH) (AEP,UK)	
	4-240-933-31	MANUAL, INSTRUCTION (GERMAN,SPANISH, DUTCH) (AEP)	
	4-240-933-41	MANUAL, INSTRUCTION (ITALIAN,SWEDISH, POLISH) (AEP)	
	4-240-933-51	MANUAL, INSTRUCTION (DANISH,FINNISH) (AEP)	
	4-243-634-11	MANUAL, INSTRUCTION (GREEK) (AEP)	
	4-243-634-21	MANUAL, INSTRUCTION (HUNGARIAN,CZECH) (AEP)	
	4-243-634-31	MANUAL, INSTRUCTION (TURKISH) (AEP)	
	4-243-634-41	MANUAL, INSTRUCTION (SLOVAKIAN) (AEP)	

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

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

MEMO

AVD-S50/S50ES

SONY[®]

SERVICE MANUAL

Ver 1.1 2002.09

US Model
Canadian Model
AVD-S50ES

AEP Model
UK Model
AVD-S50

SUPPLEMENT-1

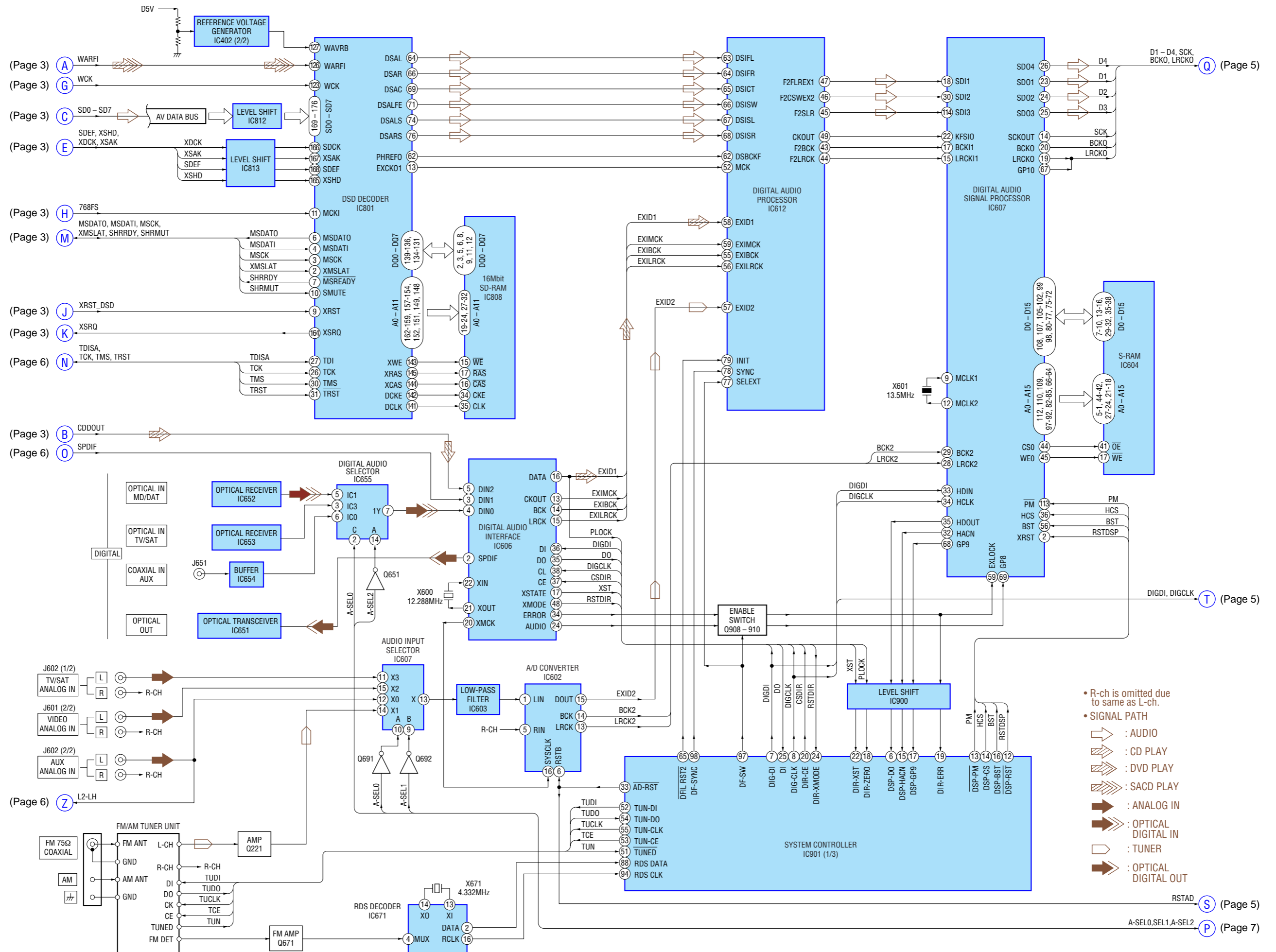
File this supplement with the service manual.

Subject : Addition of Block Diagrams.

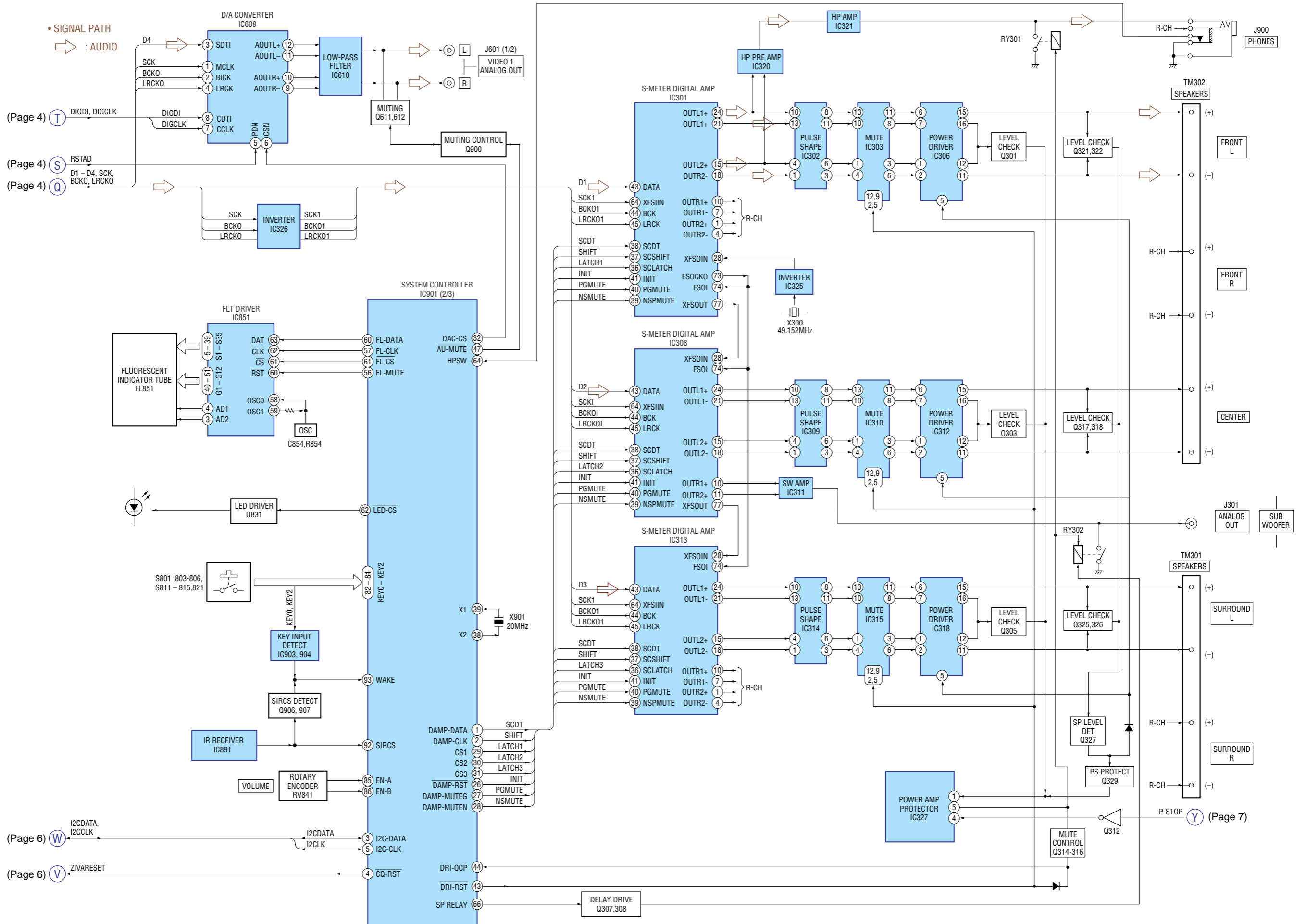
TABLE OF CONTENTS

1. Block Diagram –RF Section–	3
2. Block Diagram –Audio (DSP) Section–	4
3. Block Diagram –Audio Out, Panel Section–	5
4. Block Diagram –Video Section–	6
5. Block Diagram –Changer, Power Supply Section–	7

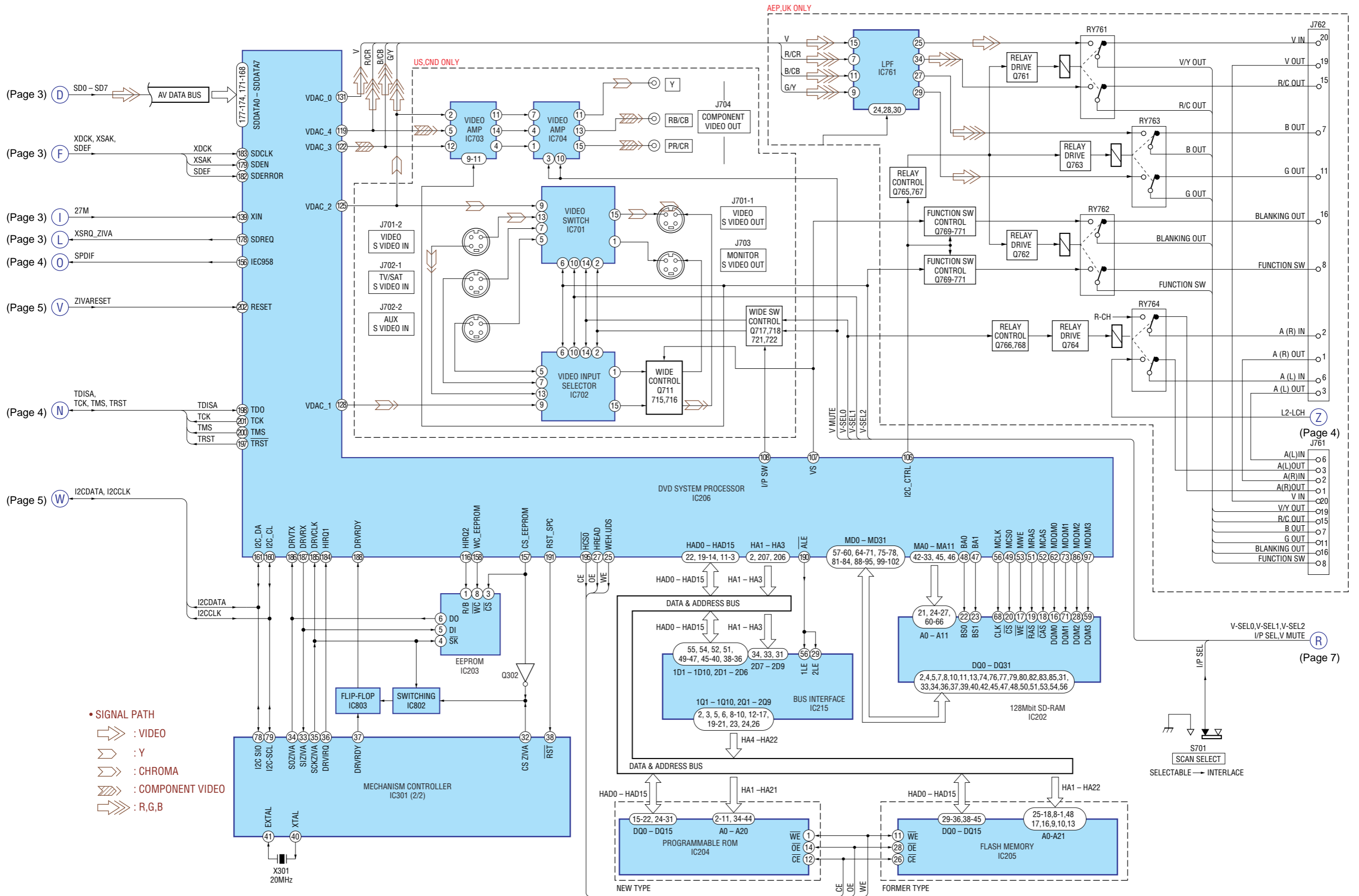
2. BLOCK DIAGRAM — AUDIO (DSP) SECTION —



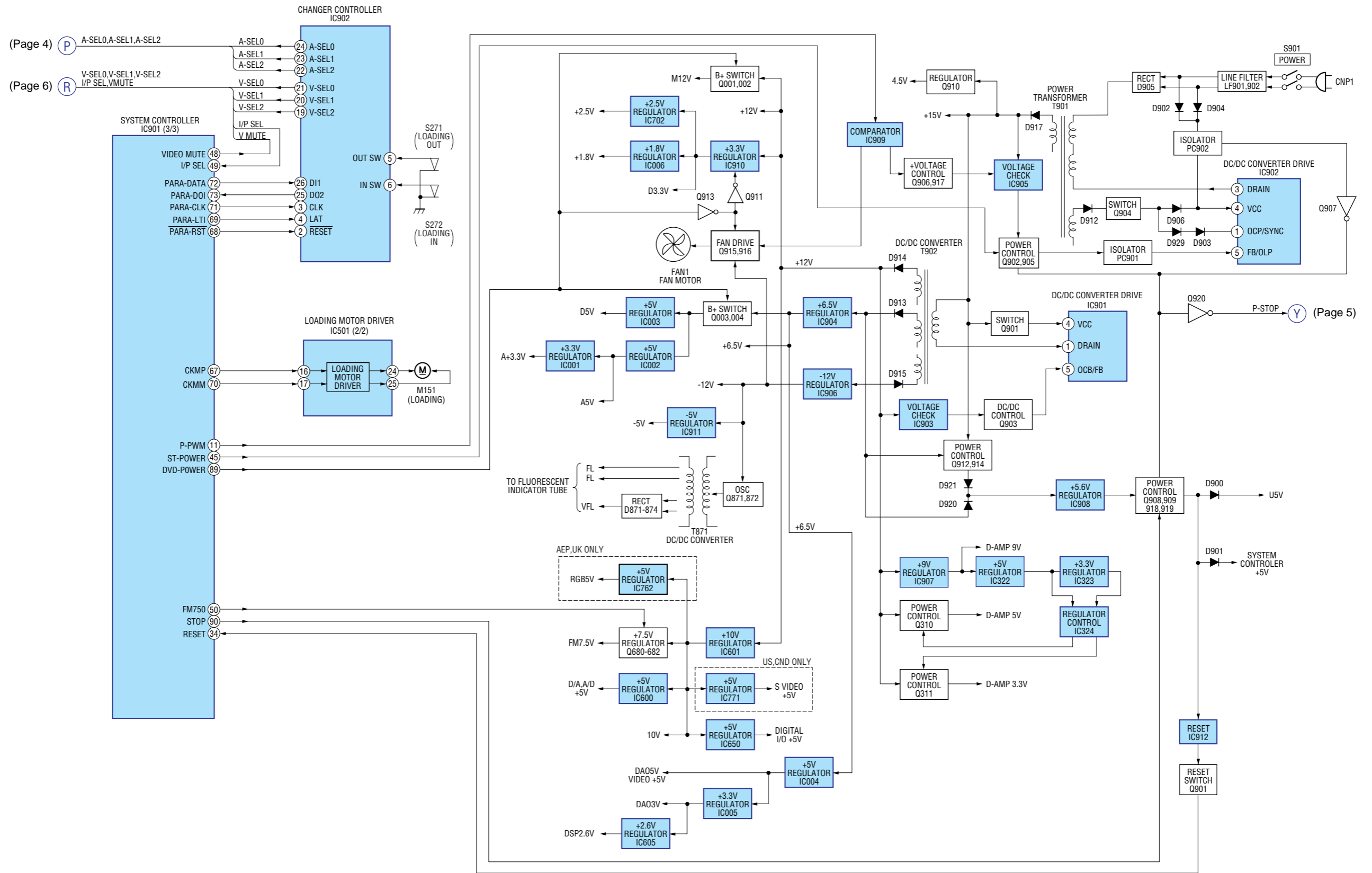
3. BLOCK DIAGRAM — AUDIO OUT, PANEL SECTION —



4. BLOCK DIAGRAM — VIDEO SECTION —



5. BLOCK DIAGRAM — CHANGER, POWER SUPPLY SECTION —



MEMO

MEMO

