

# Service Manual

## DVD Stereo System



**SA-PM86DE**  
**SA-PM86DEB**  
**SA-PM86DEG**  
**SA-PM86DEF**

Colour  
 (K)... Black Type

**Notes:** This model's mechanism unit is DLS6. Please refer to the original Service Manual (Order No. MD0801003CE) for this mechanism.

## Specifications

### ■ AMPLIFIER SECTION

RMS Output Power  
 THD 10%  
 Total RMS Dolby Digital Mode power

80 W per channel (3  $\Omega$ ), 1 kHz  
 160 W

### ■ FM/AM TUNER, TERMINALS SECTION

Preset station  
 Frequency Modulation (FM)  
 Frequency range  
 Sensitivity  
 S/N 26dB  
 Antenna terminals  
 Amplitude Modulation (AM)  
 Frequency range  
 AM Sensitivity S/N 20 dB at 999 kHz  
 Digital audio output  
 Coaxial digital output  
 Music Port (front)  
 Sensitivity  
 Terminal  
 Phone jack

FM 30 stations  
 AM 15 stations  
 87.50 to 108.00 MHz  
 (50 kHz step)  
 2.5  $\mu$ V (IHF)  
 2.2  $\mu$ V  
 75  $\Omega$  (unbalanced)  
 522 to 1629 kHz (9 kHz step)  
 1000  $\mu$ V/m  
 Pin jack  
 100 mV, 10 k $\Omega$   
 Stereo, 3.5 mm jack

Terminal  
 Output level (CD, 1 kHz, -20dB)

Stereo, 3.5 mm jack  
 32  $\Omega$

### ■ VIDEO SECTION

Video system  
 Composite video output  
 Output level  
 Terminal  
 S-video output  
 Y output level  
 C output level  
 Terminal  
 RGB video output  
 R output level  
 G output level  
 B output level  
 Terminal  
 HDMI AV output  
 Terminal  
 This unit supports "HDAVI Control 2" function

PAL625/50, PAL525/60, NTSC  
 1 Vp-p (75  $\Omega$ )  
 Scart jack (1 system)  
 1 Vp-p (75  $\Omega$ )  
 PAL; 0.3 Vp-p (75  $\Omega$ )  
 NTSC; 0.286 Vp-p (75  $\Omega$ )  
 Scart jack (1 system)  
 0.7 Vp-p (75  $\Omega$ )  
 0.7 Vp-p (75  $\Omega$ )  
 0.7 Vp-p (75  $\Omega$ )  
 Scart jack (1 system)  
 Type A connector (19 pin)

### ■ USB SECTION

USB Port  
 USB Standard

USB 2.0 full speed

|                           |                                                                     |
|---------------------------|---------------------------------------------------------------------|
| Media file format support | MP3 (*.mp3)<br>WMA (*.wma)<br>JPEG (*.jpg, *.jpeg)<br>MPEG4 (*.asf) |
| USB device file system    | FAT12, FAT16, FAT32                                                 |
| USB port power            | 500 mA (Max)                                                        |

#### ■ DISC SECTION

Discs played (8 cm or 12 cm)

- (1) DVD (DVD-Video, DivX<sup>®</sup> 6, \*7)
- (2) DVD-RAM (DVD-VR, MP3<sup>\*2, \*7</sup>, JPEG<sup>\*4, \*7</sup>, MPEG4<sup>\*5, \*7</sup>, DivX<sup>®</sup> 6, \*7)
- (3) DVD-R (DVD-Video, DVD-VR, MP3<sup>\*2, \*7</sup>, JPEG<sup>\*4, \*7</sup>, MPEG4<sup>\*5, \*7</sup>, DivX<sup>®</sup> 6, \*7)
- (4) DVD-R DL (DVD-Video, DVD-VR)
- (5) DVD-RW (DVD-Video, DVD-VR, MP3<sup>\*2, \*7</sup>, JPEG<sup>\*4, \*7</sup>, MPEG4<sup>\*5, \*7</sup>, DivX<sup>®</sup> 6, \*7)
- (6) +R/+RW (Video)
- (7) +R DL (Video)
- (8) CD, CD-R/RW (CD-DA, Video CD, SVCD<sup>\*1</sup>, MP3<sup>\*2, \*7</sup>, WMA<sup>\*3, \*7</sup>, JPEG<sup>\*4, \*7</sup>, MPEG4<sup>\*5, \*7</sup>, DivX<sup>®</sup> 6, \*7)

\*1 Conforming to IEC62107

\*2 MPEG-1 Layer 3, MPEG-2 Layer 3

\*3 Windows Media Audio Ver.9.0 L3

Not compatible with Multiple Bit Rate (MBR)

\*4 Exif Ver 2.1 JPEG Baseline files

Picture resolution: between 160 x 120 and 6144 x 4096 pixels  
(Sub sampling is 4:0:0, 4:2:0, 4:2:2 or 4:4:4). Extremely long and narrow pictures may not be displayed.

\*5 MPEG4 data recorded with Panasonic SD multi cameras or DVD video recorders

Conforming to SD VIDEO speci. cations (ASF standard)/MPEG4 (Simple Profile) video system/G.726 audio system

\*6 Plays all versions of DivX<sup>®</sup> video (including DivX<sup>®</sup> 6) with standard playback of DivX<sup>®</sup> media files. Certified to the DivX Home Theater Profile.

\*7 The total combined maximum number of recognizable audio, picture and video contents and groups: 4000 audio, picture and video contents and 400 groups.

|                      |                     |
|----------------------|---------------------|
| Pick up              |                     |
| Wavelength (DVD/CD)  | 655/785 nm          |
| Laser power (DVD/CD) | CLASS 1/CLASS 1M    |
| Audio output (Disc)  |                     |
| Number of channels   | 2 channels (FL, FR) |

#### ■ GENERAL

|                                   |                                                          |
|-----------------------------------|----------------------------------------------------------|
| Power supply                      | AC 230 to 240 V, 50 Hz (EB)<br>AC 230 V, 50 Hz (E/EG/EF) |
| Power consumption                 | 95 W                                                     |
| Dimensions (WxHxD)                | 175.0 mm x 240.0 mm x 342.3 mm                           |
| Mass                              | 4.5 kg                                                   |
| Operating temperature range       | 0°C to 40°C                                              |
| Operating humidity range          | 35% to 80% RH (no condensation)                          |
| Power consumption in standby mode | approx. 0.7 W                                            |

#### ■ SYSTEM

|              |                                                  |
|--------------|--------------------------------------------------|
| SC-PM86DE-K  | Main unit: SA-PM86DE-K<br>Speakers: SB-PM86EG-K  |
| SC-PM86DEB-K | Main unit: SA-PM86DEB-K<br>Speakers: SB-PM86EG-K |
| SC-PM86DEF-K | Main unit: SA-PM86DEF-K<br>Speakers: SB-PM86EG-K |
| SC-PM86DEG-K | Main unit: SA-PM86DEG-K<br>Speakers: SB-PM86EG-K |

#### Note:

1. Specifications are subject to change without notice. Mass and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

### WARNING

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

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# 1 Safety Precautions

## 1.1. General Guidelines

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, ensure that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, check for leakage current checks to prevent from being exposed to shock hazards.

### 1.1.1. Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Using an ohmmeter measure the resistance value, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between  $1M\Omega$  and  $5.2\Omega$ .  
When the exposed metal does not have a return path to the chassis, the reading must be  $\infty$ .

### 1.1.2. Leakage Current Hot Check

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a  $1.5k\Omega$ , 10 watts resistor, in parallel with a  $0.15\mu F$  capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. should the measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and re-checked before it is returned to the customer.

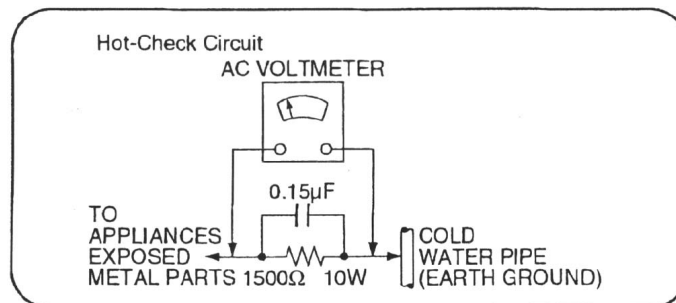


Figure 1

## 1.2. Caution for AC Cord

### (For “EB” area code model only.)

For your safety, please read the following text carefully.

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

A 5-ampere fuse is fitted in this plug.

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

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

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

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

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

#### CAUTION!

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

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

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

If in any doubt please consult a qualified electrician.

#### IMPORTANT

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

Blue: Neutral  
Brown: Live

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

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

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

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

**THIS PLUG IS NOT WATERPROOF—KEEP DRY.**

### Before use

Remove the connector cover.

### How to replace the fuse

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

Illustrations may differ from actual AC mains plug.

#### 1. Open the fuse cover with a screwdriver.

Figure A

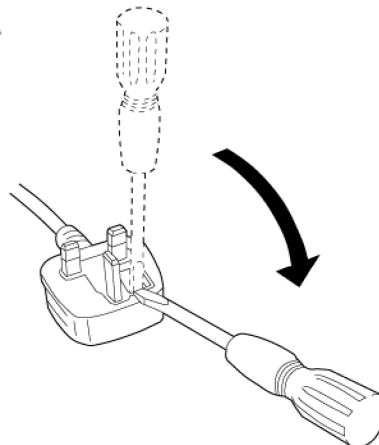
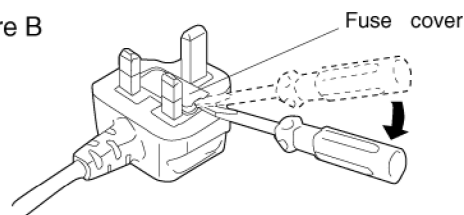


Figure B



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

Figure A

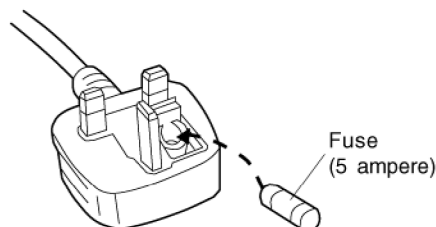
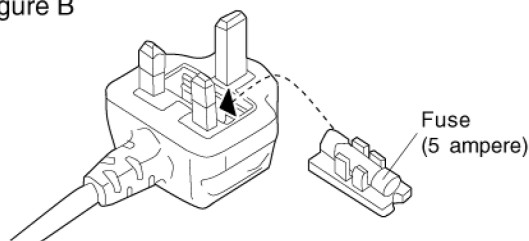


Figure B



### 1.3. Before Repair and Adjustment

Disconnect AC power, discharge Power Supply Capacitors C2207, C2210, C2211, C2212, C2742, C5105, C5106, C5916, C5917, C5938, C5562, C5954, C5979 and C5993 through a 10 $\Omega$ , 1W resistor to ground.

DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.

After repairs are completed, restore power gradually using a variac, to avoid overcurrent.

- Current consumption at AC 230 V, at 50 Hz in NO SIGNAL mode (at volume min) should be ~500 mA. (E/EG/EF)
- Current consumption at AC 230 - 240 V, at 50 Hz in NO SIGNAL mode (at volume min) should be ~500 mA. (EB)

### 1.4. Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.

If this occurs, follow the procedure outlines below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

Note:

When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

### 1.5. Safety Part Information

#### Safety Parts List:

There are special components used in this equipment which are important for safety. These parts are marked by  $\triangle$  in the Schematic Diagrams & Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

Table 1

| Reference No. | Part No.     | Part Name & Description  | Remarks                  |
|---------------|--------------|--------------------------|--------------------------|
| A2            | K2CT3CA00004 | AC CORD                  | [M]EB $\triangle$        |
| A2            | K2CQ2CA00007 | AC CORD                  | [M]E, EG, EF $\triangle$ |
| JK5970        | K2AA2B000017 | AC INLET                 | [M] $\triangle$          |
| T5900         | G5CYBYY00007 | TRANSFORMER              | [M] $\triangle$          |
| T5901         | G4C2AAJ00005 | BACKUP TRANSFORMER       | [M] $\triangle$          |
| F5970         | K5D162BLA013 | FUSE                     | [M] $\triangle$          |
| L5970         | ELF15N035AN  | LINE FILTER              | [M] $\triangle$          |
| RL5970        | K6B1AEA00003 | POWER RELAY              | [M] $\triangle$          |
| Z5970         | ERZVA5Z471   | ZENER                    | [M] $\triangle$          |
| FP5920        | K5G402A00025 | FUSE PROTECTOR           | [M] $\triangle$          |
| FP5921        | K5G102A00039 | FUSE PROTECTOR           | [M] $\triangle$          |
| FP5922        | K5G202AA0002 | FUSE PROTECTOR           | [M] $\triangle$          |
| 17            | RKSX0070-K   | REAR PANEL               | [M]E, EG, EF $\triangle$ |
| 32            | RKMX0142-K   | TOP CABINET              | [M] $\triangle$          |
| PCB4          | REPX0633D    | POWER/TRANSFORMER P.C.B. | [M]RTL $\triangle$       |
| 301           | RD-DDTX003-V | DVD MECHAN UNIT          | [M]RTL $\triangle$       |

## 2 Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices

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

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

### Caution

Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

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

### 3 Precaution of Laser Diode

**CAUTION:**

THIS PRODUCT UTILIZES A LASER.

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

**CAUTION :**

This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pickup lens.

Wavelength: 655 nm (DVD)/785 nm (CD)

Maximum output radiation power from pickup: 100  $\mu$ W/VDE

Laser radiation from the pickup unit is safety level, but be sure the followings:

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

**ACHTUNG :**

Dieses Produkt enthält eine Lasereinheit. Im eingeschalteten Zustand wird unsichtbare Laserstrahlung von der Lasereinheit abgestrahlt.

Wellenlänge: 655 nm (DVD)/785 nm (CD)

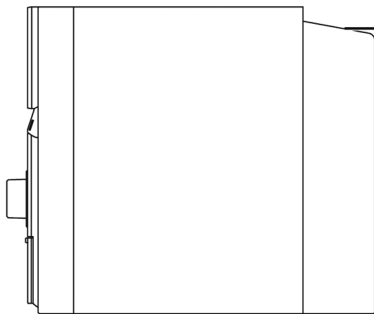
Maximale Strahlungsleistung der Lasereinheit: 100  $\mu$ W/VDE

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

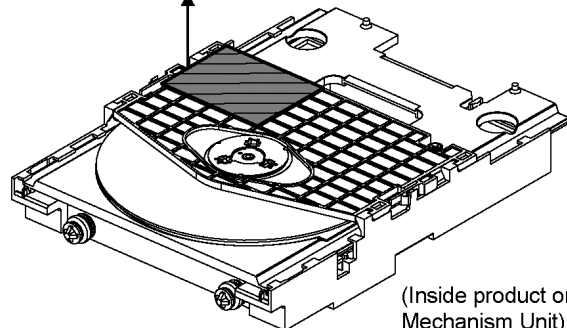
1. Die Lasereinheit nicht zerlegen, da die Strahlung an der freigelegten Lasereinheit gefährlich ist.
2. Den werksseitig justierten Einstellregler der Lasereinheit nicht verstellen.
3. Nicht mit optischen Instrumenten in die Fokussierlinse blicken.
4. Nicht über längere Zeit in die Fokussierlinse blicken.



(Back of product)


**LASER CAUTION LABEL**

|                  |                                                                                                                                          |                      |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| <b>CAUTION</b>   | - LASER RADIATION WHEN OPEN.<br>DO NOT STARE INTO BEAM.                                                                                  | FDA 21 CFR / Class 1 |
| <b>CAUTION</b>   | - CLASS 1M VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN.<br>DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. EC00025-1-A2/ Class 1M     |                      |
| <b>WARNING</b>   | - KLASSE 1M SYNÄLIK OCH ONSYNÄLIK LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD.<br>BETRÄKTA ELLER STRÅLEN DIREKT GENOM OPTISKA INSTRUMENT.     |                      |
| <b>FORSIGTIG</b> | - SYNLIG OG USYNLIG LASERSTRÅLING KLASSE 1M. VÄR LÄGTER ER<br>ØGENE. UNDSØG AT BELUGE PÅ MED OPTISKE INSTRUMENTER.                       |                      |
| <b>VARO!</b>     | - AVATTRESSA OLET ALTTIIN LUOKAN 1M NÄKYNÄÄ JA NÄKYMÄTTÖMÄ<br>LASERISÄTELYÄ. ÄLÄ KATSO OPTISELLA LAITTEILLA SUOJAAN SÄTEESSEEN.          |                      |
| <b>VORSICHT</b>  | - SICHTBARE UND UNSICHTBARE LASERSTRÄHLUNG KLASSE 1M. WENN ABDECKUNG<br>GEÖFFNET, NICHT DIREKT MIT OPTISCHEN INSTRUMENTEN BETRACHTEN.    |                      |
| <b>ATTENTION</b> | - RAYONNEMENT LASER VISIBLE ET INVISIBLE, CLASSE 1M. EN CAS D'OUVERTURE,<br>NE PAS REGARDER DIRECTEMENT À L'ŒIL D'INSTRUMENTS D'OPTIQUE. |                      |
| 注意               | - ここを覗くと可視及び不可視レーザー光が出ます。<br>ビームを見たり、触れたりしないでください。                                                                                       |                      |
| 注意               | - 打开时有可见及不可见激光辐射。避免光束照射。                                                                                                                 | GB7241.1-2001/GB 362 |



(Inside product on Mechanism Unit)

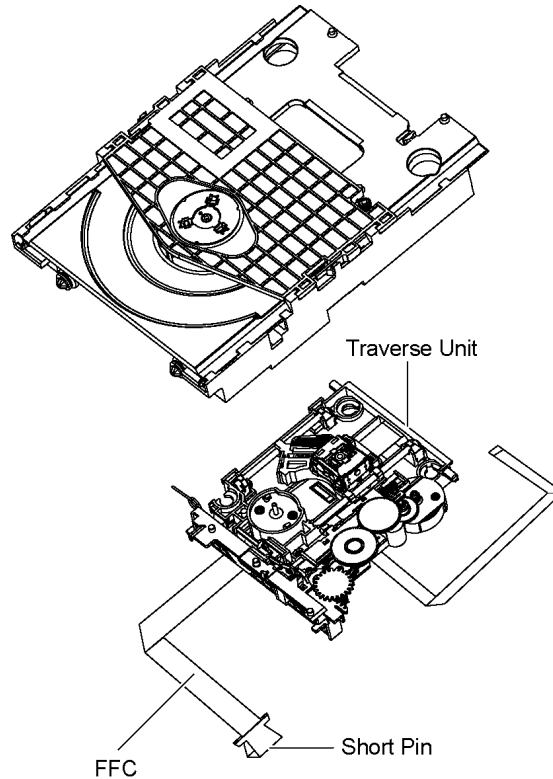
## 4 Handling Precautions for Traverse Unit

The laser diode in the optical pickup unit may break down due to static electricity of clothes or human body. Special care must be taken avoid caution to electrostatic breakdown when servicing and handling the laser diode in the traverse unit.

### 4.1. Cautions to Be Taken in Handling the Optical Pickup Unit

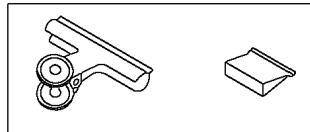
The laser diode in the optical pickup unit may be damaged due to electrostatic discharge generating from clothes or human body. Special care must be taken avoid caution to electrostatic discharge damage when servicing the laser diode.

1. Do not give a considerable shock to the optical pickup unit as it has an extremely high-precise structure.
2. To prevent the laser diode from the electrostatic discharge damage, the flexible cable of the optical pickup unit removed should be short-circuited with a short pin or a clip.
3. The flexible cable may be cut off if an excessive force is applied to it. Use caution when handling the flexible cable.
4. The antistatic FPC is connected to the new optical pickup unit. After replacing the optical pickup unit and connecting the flexible cable, cut off the antistatic FPC.



#### [Caution]

Ground the cable with a clip or a short pin.



Clip or Short Pin

### 4.2. Grounding for electrostatic breakdown prevention

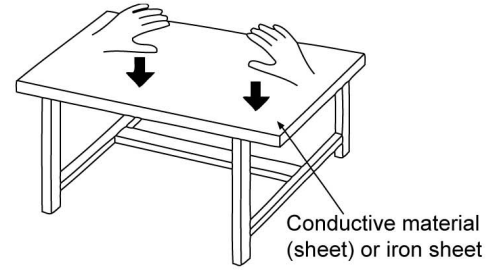
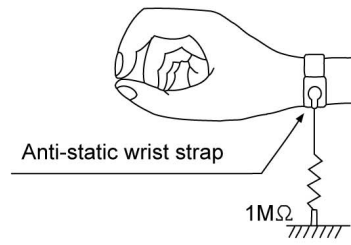
Some devices such as the DVD player use the optical pickup (laser diode) and the optical pickup will be damaged by static electricity in the working environment. Proceed servicing works under the working environment where grounding works is completed.

#### 4.2.1. Worktable grounding

1. Put a conductive material (sheet) or iron sheet on the area where the optical pickup is placed, and ground the sheet.

#### 4.2.2. Human body grounding

1. Use the anti-static wrist strap to discharge the static electricity from your body.



## 5 Handling the Lead Free Solder

### 5.1. General description about Lead Free Solder (PbF)

The lead free solder has been used in the mounting process of all electrical components on the printed circuit boards used for this equipment in considering the globally environmental conservation.

The normal solder is the alloy of tin (Sn) and lead (Pb). On the other hand, the lead free solder is the alloy mainly consists of tin (Sn), silver (Ag) and Copper (Cu), and the melting point of the lead free solder is higher approx.30 degrees C (86°F) more than that of the normal solder.

#### Definition of PCB Lead Free Solder being used

|                                                                                                                                 |     |
|---------------------------------------------------------------------------------------------------------------------------------|-----|
| The letter of "PbF" is printed either foil side or components side on the PCB using the lead free solder.<br>(See right figure) | PbF |
|---------------------------------------------------------------------------------------------------------------------------------|-----|

#### Service caution for repair work using Lead Free Solder (PbF)

- The lead free solder has to be used when repairing the equipment for which the lead free solder is used.  
(Definition: The letter of "PbF" is printed on the PCB using the lead free solder.)
- To put lead free solder, it should be well molten and mixed with the original lead free solder.
- Remove the remaining lead free solder on the PCB cleanly for soldering of the new IC.
- Since the melting point of the lead free solder is higher than that of the normal lead solder, it takes the longer time to melt the lead free solder.
- Use the soldering iron (more than 70W) equipped with the temperature control after setting the temperature at 350±30 degrees C (662±86°F).

#### Recommended Lead Free Solder (Service Parts Route.)

- The following 3 types of lead free solder are available through the service parts route.  
RFKZ03D01K----- (0.3mm 100g Reel)  
RFKZ06D01K----- (0.6mm 100g Reel)  
RFKZ10D01K----- (1.0mm 100g Reel)

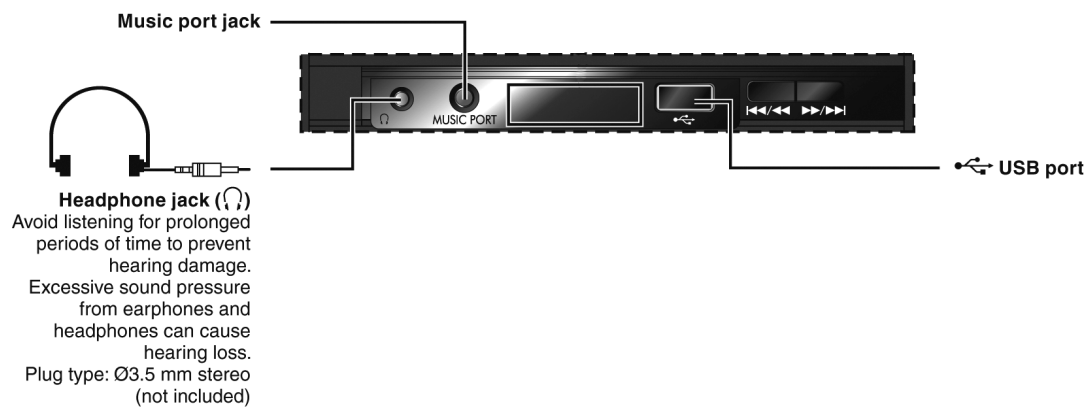
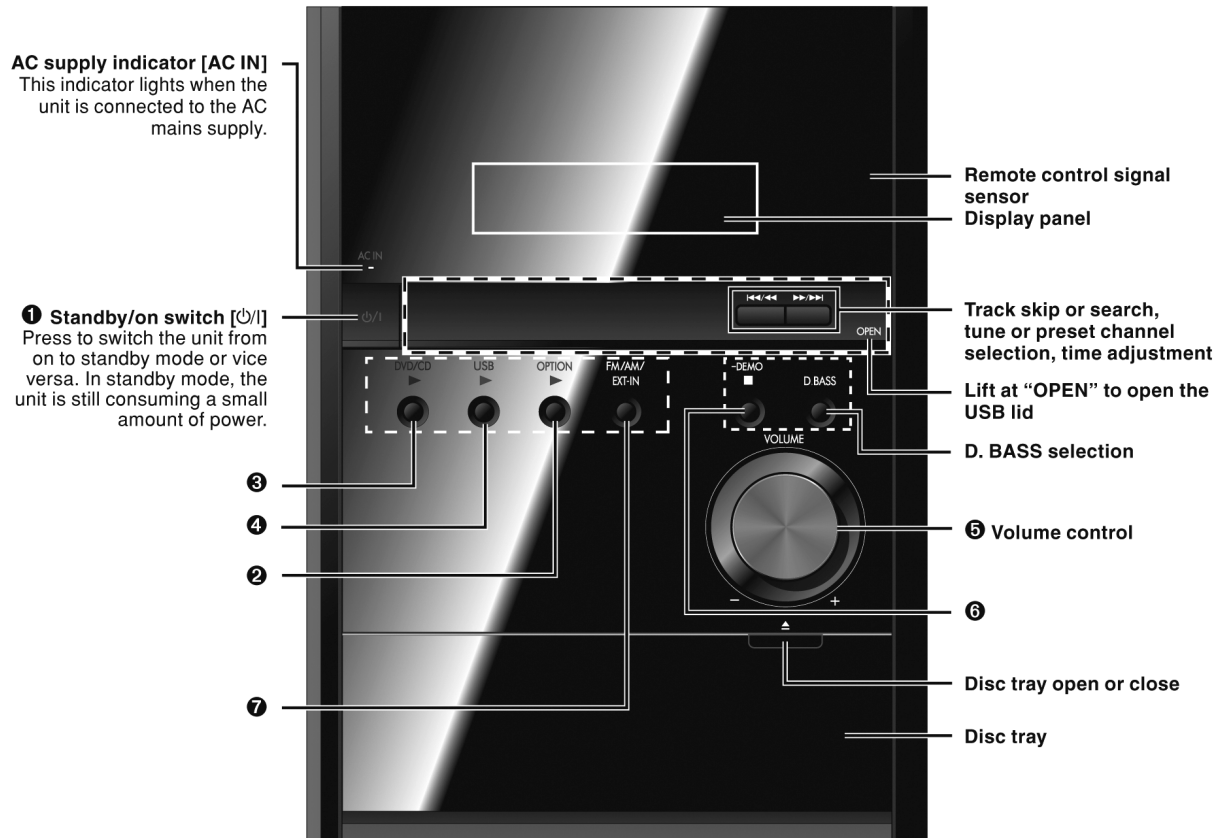
#### Note

\* Ingredient: Tin (Sn), 96.5%, Silver (Ag) 3.0%, Copper (Cu) 0.5%, Cobalt (Co) / Germanium (Ge) 0.1 to 0.3%

## 6 Operation Procedures

### 6.1. Main Unit Key Buttons Operation

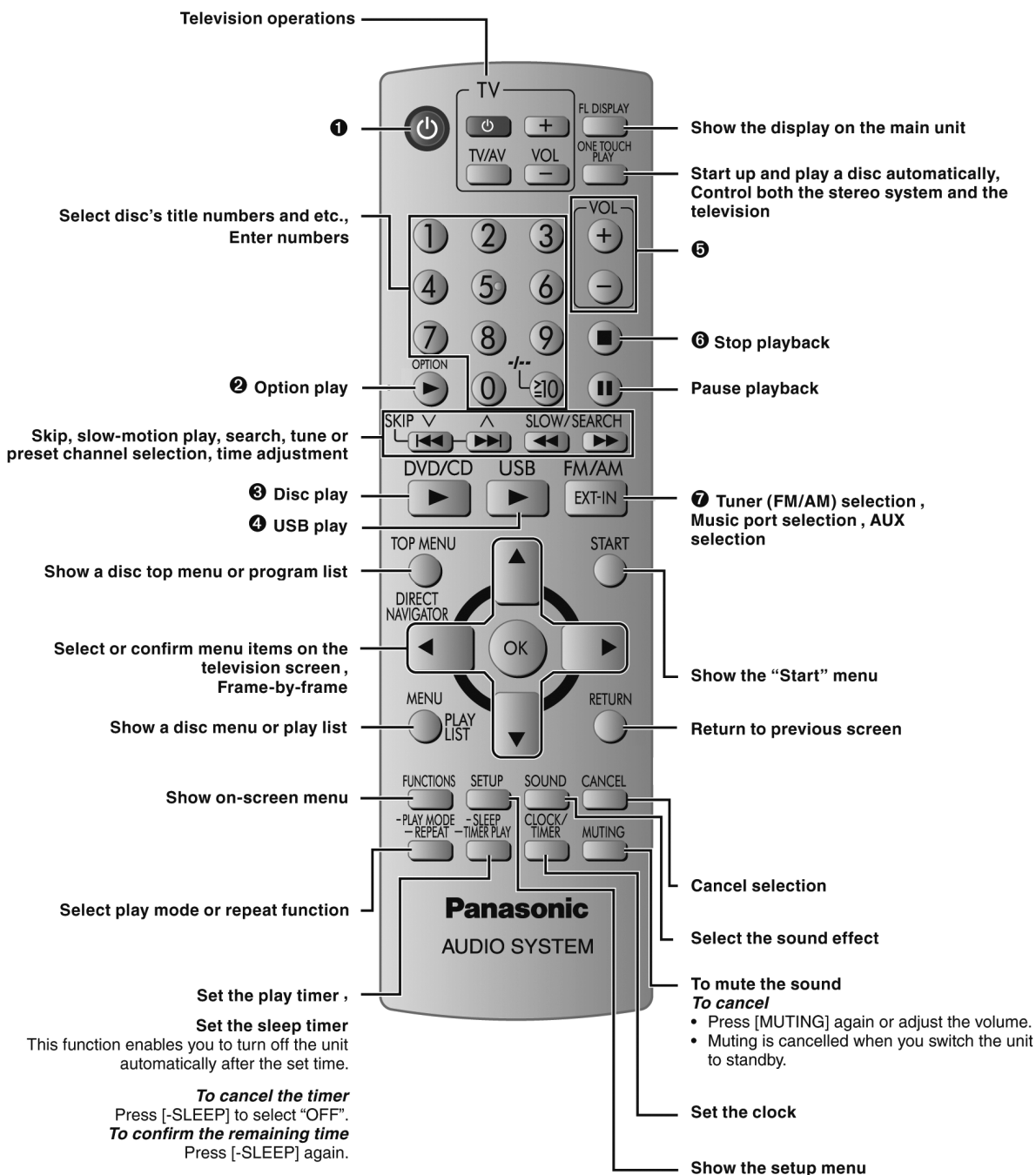
Refer to the numbers in parentheses for page reference. Buttons labelled such as ❶, function in exactly the same way as the controls on the remote control.



## 6.2. Remote Control Key Buttons Operation

### Remote control

Buttons labelled such as ❶, function in exactly the same way as the controls on the main unit.



#### Note:

- The play and sleep timer can be used together.
- The sleep timer always has priority. Be sure not to overlap the timer settings.

## 6.3. Connections

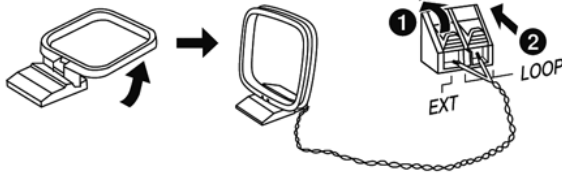
**Connect the AC mains lead only after all other connections have been made.**

### Conserving power

The main unit consumes a small amount of power, even when it is in standby mode (approx. 0.7 W). To save power when the unit is not to be used for a long time, unplug it from the household mains socket. You will need to reset some memory items after plugging in the unit.

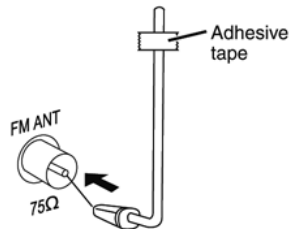
### Antenna connections

#### ■AM loop antenna



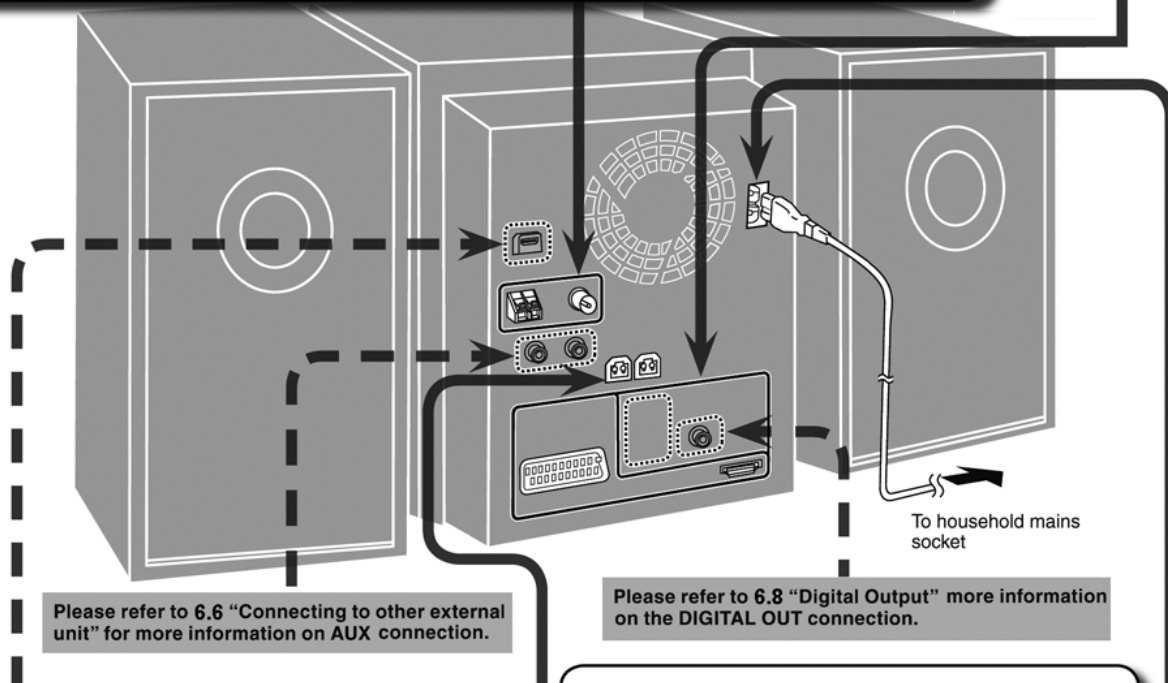
Stand the antenna up on its base.

#### ■FM indoor antenna



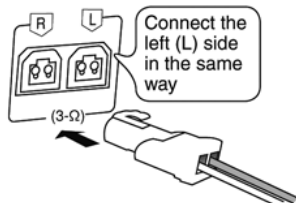
Tape the antenna where reception is best.

Please refer to 6.4 "Video Connections" for more information.



Please refer to 6.7 "Connecting the Universal Dock for iPod" and "Connecting and playing a Bluetooth device" for more information on the OPTION port connection.

### Speaker connections



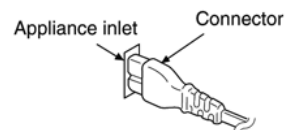
Incorrect connection can damage the unit.

### Power supply connection

**FOR THE UNITED KINGDOM ONLY  
READ THE CAUTION FOR AC MAINS LEAD  
BEFORE CONNECTION.**

#### Insertion of connector

Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing. However there is no problem using the unit.



#### Note:

- The included AC mains lead is for use with this unit only. Do not use it with other equipment.
- Do not use an AC mains lead from other equipment.

## 6.4. Video connections

- Do not connect the unit through a video cassette recorder.
- Due to copy guard protection, the picture may not be displayed correctly.
- Turn the television off before connecting, and refer to the television's operating instructions.

### ■ Television with SCART terminal



#### Using the SCART (AV) terminal

To improve picture quality, you can change the video signal output from the SCART (AV) terminal to suit the type of television you are using.

#### For Continental Europe

- Select "S-VIDEO", "RGB 1" or "RGB 2" from "VIDEO OUT - SCART" ("VIDEO" tab).

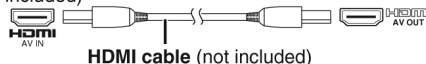
#### For the United Kingdom

- Select "VIDEO", "S-VIDEO" or "RGB 1" from "VIDEO OUT - SCART" ("VIDEO" tab).
- Set "VIDEO PRIORITY" to "OFF" ("HDMI" tab).

Do not use the HDMI cable when you use the scart cable for the connection.

### ■ Television with an HDMI terminal

#### HDMI-compatible television (not included)



Use the HDMI connection to enjoy higher quality audio and video with a single cable.

- Set "VIDEO PRIORITY" to "ON" and "AUDIO OUT" to "ON" ("HDMI" tab).
- Set "VIDEO FORMAT" .

#### VIERA Link ("HDAVI Control™")

If your Panasonic television is a VIERA Link compatible television, you can operate your television synchronising with stereo operations or vice versa (Using the VIERA Link "HDAVI Control™").

#### Note:

- It is recommended that you use Panasonic's HDMI cable. [Recommended part number: RP-CDHG15 (1.5 m), RP-CDHG30 (3.0 m), RP-CDHG50 (5.0 m), etc.]
- Non-HDMI-compliant cables cannot be utilised.

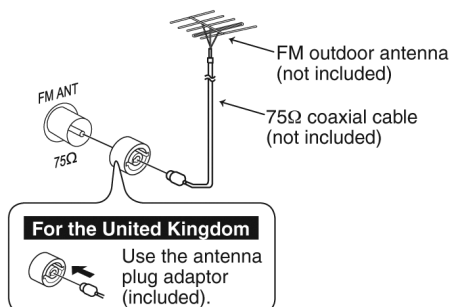
## 6.5. Optional antenna connections

Use outdoor antenna if radio reception is poor.

#### Note:

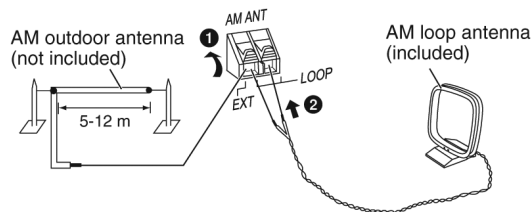
- Disconnect the outdoor antenna when the unit is not in use.
- Do not use the outdoor antenna during a lightning storm.

#### FM outdoor antenna



- Disconnect the FM indoor antenna.
- The antenna should be installed by a competent technician.

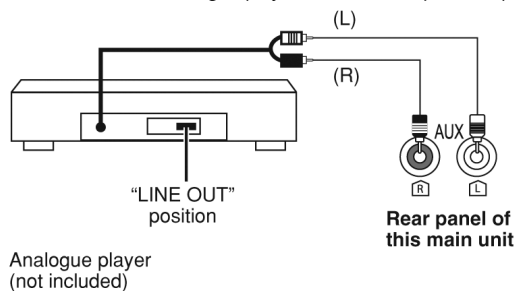
#### AM outdoor antenna



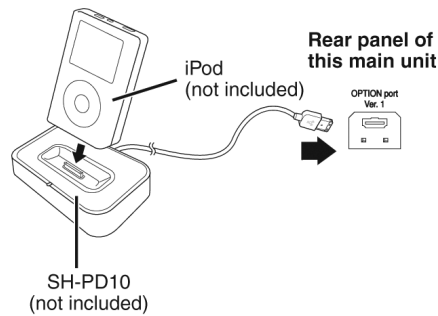
- Run a piece of vinyl wire horizontally across a window or other convenient location.
- Leave the loop antenna connected.

## 6.6. Connecting to other external unit

You can connect to an analogue player with a built-in phone equaliser.



## 6.7. Connecting the Universal Dock for iPod



## 6.8. Digital Output

Change the settings when you have connected equipment through this unit's DIGITAL OUT terminal.

### PCM OUTPUT

Select the maximum sampling frequency of "PCM OUTPUT". Check the digital input limitations of the equipment you connect.

"UP TO 48 kHz":

Signals over 48 kHz converted to 48 kHz or 44.1 kHz

"UP TO 96 kHz":

Signals over 96 kHz converted to 48 kHz or 44.1 kHz

#### Note:

- Signals from copy-protected discs are converted to 48 kHz or 44.1 kHz irrespective of the setting.
- Some equipment cannot handle sampling frequencies of 88.2 kHz, even if they can handle 96 kHz. Read your equipment's operating instructions for details.

### DOLBY DIGITAL, DTS and MPEG

"BITSTREAM" (Factory preset for "DOLBY DIGITAL" and "DTS"); Select if the equipment you connected can decode the signal.

"PCM" (Factory preset for "MPEG");

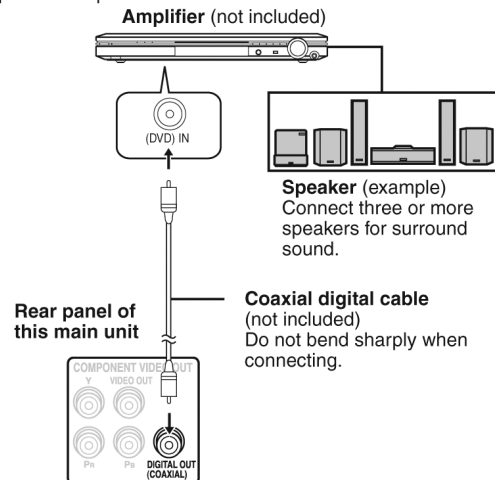
Select if the equipment you connected cannot decode the signal.

#### IMPORTANT

If the equipment you connected cannot decode the signal, the setting must be changed to "PCM". If not, signals the equipment cannot process will be output by this unit, causing high levels of noise which can damage your hearing and the speakers.

### Home Theatre—Enjoying more powerful sound

Enjoy the powerful movie theatre and hall-like sound available with multiple channel audio found on DVD-Video by connecting an amplifier and speakers.



#### Recording Output

- With DVD, the following conditions must be met:
  - a) the disc does not have protection preventing digital recording, and
  - b) the recording equipment can handle signals with a sampling frequency of 48 kHz.
- You cannot record WMA/MP3.

When recording DVDs, make the following settings.

- "PCM OUTPUT": "UP TO 48 kHz" ("AUDIO" tab).
- "DOLBY DIGITAL"/"DTS"/"MPEG": "PCM" ("AUDIO" tab).

## 6.9. Disc Information

### Discs that can be played

#### ■ Commercial discs

| Disc      | Logo                                                                              | Indicated in these instructions by | Remarks                                                             |
|-----------|-----------------------------------------------------------------------------------|------------------------------------|---------------------------------------------------------------------|
| DVD-Video |  | <b>DVD-V</b>                       | High quality movie and music discs.                                 |
| Video CD  |  | <b>VCD</b>                         | Music discs with video.<br>Including SVCD (Conforming to IEC62107). |
| CD        |  | <b>CD</b>                          | Music discs.                                                        |

#### ■ Recorded discs (○: Playable, —: Not playable)

| Disc                  | Logo                                                                              | Recorded on a DVD video recorder, etc. |                     | Recorded on a personal computer, etc. |     |      |                     |                    | Finalizing <sup>※6</sup> |
|-----------------------|-----------------------------------------------------------------------------------|----------------------------------------|---------------------|---------------------------------------|-----|------|---------------------|--------------------|--------------------------|
|                       |                                                                                   | DVD-VR <sup>※2</sup>                   | DVD-V <sup>※4</sup> | WMA                                   | MP3 | JPEG | MPEG4 <sup>※8</sup> | DivX <sup>※9</sup> |                          |
| DVD-RAM               |  | ○                                      | —                   | —                                     | ○   | ○    | ○                   | ○                  | Not necessary            |
| DVD-R/RW              |  | ○                                      | ○                   | —                                     | ○   | ○    | ○                   | ○                  | Necessary                |
| DVD-R DL              |  | ○ <sup>※3</sup>                        | ○                   | —                                     | —   | —    | —                   | —                  | Necessary                |
| +R/+RW                | —                                                                                 | —                                      | (○) <sup>※5</sup>   | —                                     | —   | —    | —                   | —                  | Necessary                |
| +R DL                 | —                                                                                 | —                                      | (○) <sup>※5</sup>   | —                                     | —   | —    | —                   | —                  | Necessary                |
| CD-R/RW <sup>※1</sup> | —                                                                                 | —                                      | —                   | ○                                     | ○   | ○    | ○                   | ○                  | Necessary <sup>※7</sup>  |

- It may not be possible to play all the above-mentioned discs in some cases due to the type of disc, the condition of the recording, the recording method, or how the files were created (Tips for making data discs).

※1 This unit can play CD-R/RW recorded with CD-DA or Video CD format.

※2 Discs recorded on DVD video recorders or DVD video cameras, etc. using Version 1.1 of the Video Recording Format (a unified video recording standard).

※3 Discs recorded on DVD video recorders or DVD video cameras using Version 1.2 of the Video Recording Format (a unified video recording standard).

※4 Discs recorded on DVD video recorders or DVD video cameras using DVD-Video Format.

※5 Recorded using a format different from DVD-Video Format, therefore, some functions cannot be used.

※6 A process that allows play on compatible equipment. To play a disc that is displayed as "Necessary" on this unit, the disc must first be finalized on the device it was recorded on.

※7 Closing the session will also work.

※8 MPEG4 data recorded with the Panasonic SD multi cameras or DVD video recorders [conforming to SD VIDEO specifications (ASF standard)/MPEG4 (Simple Profile) video system/G.726 audio system].

※9 Functions added with DivX Ultra are not supported.

**For the United Kingdom: DivX function is not applicable.**

#### Note about using a DualDisc

The digital audio content side of a DualDisc does not meet the technical specifications of the Compact Disc Digital Audio (CD-DA) format so playback may not be possible.

#### ■ Discs that cannot be played

DVD-RW version 1.0, DVD-Audio, DVD-ROM, CD-ROM, CDV, CD-G, SACD, Photo CD, DVD-RAM that cannot be removed from their cartridge, 2.6 GB and 5.2 GB DVD-RAM, and "Chaoji VCD" available on the market including CVD, DVCD and SVCD that do not conform to IEC62107.

#### ■ Video systems

- This unit can play PAL and NTSC, but your television must match the system used on the disc.
- PAL discs cannot be correctly viewed on an NTSC television.
- This unit can convert NTSC signals to PAL 60 for viewing on a PAL television ("NTSC DISC OUT" in "VIDEO" tab).

## 7 Self-Diagnosis and Special Mode Setting

### 7.1. Service Mode Summary Table

The service modes can be activated by pressing various button combination on the main unit and remote control unit.

Below is the summary for the various modes for checking:

| Main unit buttons | Remote control unit buttons                                                           | Application                                                                                                                                                                            | Note                                                                       |
|-------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| [STOP]            | [0]                                                                                   | Error code check.                                                                                                                                                                      | (Refer to the section "7.2.1. Service Mode Table 1" for more information.) |
|                   | [5]                                                                                   | Jitter checking.                                                                                                                                                                       |                                                                            |
|                   | [  ] | Initial setting of laser drive current.                                                                                                                                                |                                                                            |
|                   | [FUNCTIONS]                                                                           | DVD laser drive current check.                                                                                                                                                         | (Refer to the section "7.2.2. Service Mode Table 2" for more information.) |
|                   | [3]                                                                                   | CD laser drive current check.                                                                                                                                                          |                                                                            |
|                   | [6]                                                                                   | Region display and mode.                                                                                                                                                               |                                                                            |
|                   | [SOUND]                                                                               | CPPM/CRM keys check.                                                                                                                                                                   | (Refer to the section "7.2.3. Service Mode Table 3" for more information.) |
|                   | [7]                                                                                   | Micro-processor firmware version check.                                                                                                                                                |                                                                            |
|                   | [ $\geq 10$ ]                                                                         | Initialization of the player (factory setting is restored).<br>Used after replacement of Micro-processor (DV5 LSI) IC, FLASH ROM IC (IC8651), EEPROM IC (IC8611) and DVD Module P.C.B. |                                                                            |
|                   | [OK]                                                                                  | DVD Module P.C.B. reset.                                                                                                                                                               | (Refer to the section "7.2.4. Service Mode Table 4" for more information.) |
|                   | [8]                                                                                   | DVD Module P.C.B. firmware version check.                                                                                                                                              |                                                                            |
|                   | [  ] | Timer 1 check.                                                                                                                                                                         |                                                                            |
|                   | [  ] | Timer 1 reset.                                                                                                                                                                         |                                                                            |
|                   | [  ] | Timer 2 check.                                                                                                                                                                         |                                                                            |
|                   | [  ] | Timer 2 reset.                                                                                                                                                                         |                                                                            |

**Note:**

An error code will be canceled if a power supply is turned OFF.

\*1: CPPM is the copy guard function beforehand written in the disk for protection of copyrights.

\*2: CEC is the consumer electronic control used for high-level user control of HDMI-connected devices.

\*3: HDCP is the specification developed to control digital audio & video contents transmission for DVI or HDMI connections.

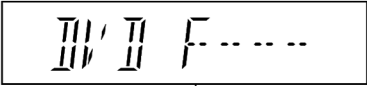
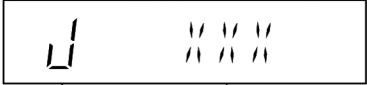
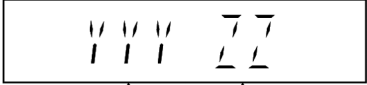
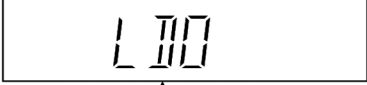
### 7.2. Service Mode Table

By pressing various button combinations on the main unit and remote control unit, you can activate the various service modes for checking.

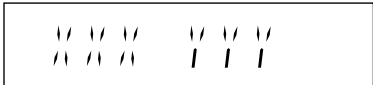
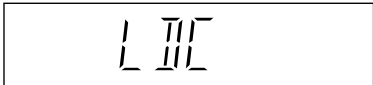
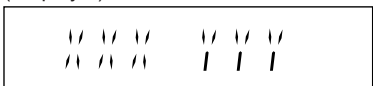
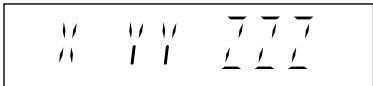
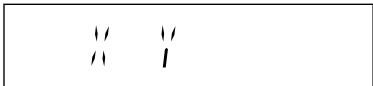
**Special Note:**

- Due to the limitations of the no. characters that can be shown on the FL Display, the "FL Display" button on the remote control unit can be used to show the two display pages. (Display 1 / Display 2).
- Refer to Section 6.2 for the section on "Remote Control Key Buttons Operations".

## 7.2.1. Service Mode Table 1

| Item                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | FL Display                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Key Operation                                                                                                                                                                                                                                                                                         |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mode Name                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Front Key                                                                                                                                                                                                                                                                                             |
| Error code check                       | <p>Error code check<br/>The latest error code stored in the EEPROM IC is displayed.</p> <p>Note: Refer to "Section 7.3 DVD Self Diagnostic Function-Error Code" for more detailed information on the error codes.</p>                                                                                                                                                                                                                                                                                                                                                 |  <p style="text-align: center;">↑<br/>F / H / U</p> <p>Error code (play_err) is expressed in the following convention.<br/>           Error code = 0 x DAXX is expressed: → DVDnn U12<br/>           Error code = 0 x DBXX is expressed: → DVDnn H12<br/>           Error code = 0 x DXXX is expressed: → DVDnn F123<br/>           Error code = 0 x 0000 is expressed: → DVDnn F---<br/>           * "xx" denotes the error code</p>                                                                                            | <p>In STOP (no disc) mode, press [STOP] button on the main unit, and [0] button on the remote control unit. *With pointing of cursor up and down on display.</p> <p>Cancelled automatically 5 seconds later.</p> <p>To exit, press [POWER] button on main unit or remote control.</p>                 |
| Jitter check                           | <p>Jitter check.<br/>Jitter rate is measured and displayed. Measurement is repeatedly done in the cycle of one second. Read error counter starts from zero upon mode setting.</p> <p>When target block data failed to be read out, the counter advances by one increment. When the failure is caused by minor error, it may be corrected when retried to enable successful reading.</p> <p>In this case, the counter advances by one. When the error persists even after retry, the counter may jump by two or more.</p> <p>FL Display sequence:<br/>Display 1→2.</p> | <p>(Display 1)</p>  <p style="text-align: center;">↑                      ↑<br/>Jitter check      Jitter rate<br/>mode</p> <p>Jitter rate is shown in decimal notation to one place of decimal.<br/>Focus drive value is shown in hexadecimal notation.</p> <p>(Display 2)</p>  <p style="text-align: center;">↑                      ↑<br/>Lead                  Focus Drive<br/>Error                  Value<br/>Counter</p>               | <p>In STOP (with disc inside tray) mode, press [STOP] button on the main unit, and [5] button on the remote control unit, after Display 1 appears, then press [PLAY].</p> <p>Press [POWER] or [STOP] button to exit.</p> <p>Press [FL Display] on remote control unit for next page (FL Display).</p> |
| Initial setting of laser drive current | <p>Initial setting of laser drive current.<br/>Initial current value for the DVD laser and CD laser is separately saved in the EEPROM IC.</p> <p>FL Display sequence:<br/>Display 1→2.</p>                                                                                                                                                                                                                                                                                                                                                                            | <p>(Display 1)</p>  <p style="text-align: center;">↑<br/>Laser current<br/>measurement<br/>mode</p> <p>The value denotes the current in decimal notation.</p> <p>(Display 2)</p>  <p style="text-align: center;">↑                      ↑<br/>CD                      DVD Laser<br/>Laser</p> <p>The above example shows the initial current is XXXmA and YYYmA for CD laser and DVD laser respectively when the laser is switched on.</p> | <p>In STOP (no disc) mode, press [STOP] button on the main unit, and [II] button on the remote control unit.</p> <p>Cancelled automatically 5 seconds later.</p> <p>Press [FL Display] on remote control unit for next page (FL Display) on values of laser drive current.</p>                        |

## 7.2.2. Service Mode Table 2

| Item                                |                                                                                                                                                                                                                                                                                                                                 | FL Display                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Key Operation                                                                                                                                                                                                                                                                |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mode Name                           | Description                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Front Key                                                                                                                                                                                                                                                                    |
| DVD laser drive current measurement | <p>DVD laser drive current measurement. DVD laser drive current is measured and the result is displayed together with the initial value stored in the EEPROM IC.</p> <p>After the measurement, DVD laser emission is kept on. It is turned off when POWER key is switched off.</p> <p>FL Display sequence:<br/>Display 1→2.</p> | <p>(Display 1)</p>  <p>DVD laser current measurement mode</p> <p>The value denotes the current in decimal notation.</p> <p>(Display 2)</p>  <p>DVD Laser Initial Value      DVD Laser Value</p> <p>The above example shows the initial current is XXXmA and the measured value is YYYmA.</p> | <p>In STOP (no disc) mode, press [STOP] button on the main unit, and [FUNCTIONS] button on the remote control unit. Cancelled automatically 5 seconds later.</p> <p>Press [FL Display] on remote control unit for next page (FL Display) on values of dvd drive current.</p> |
| CD laser drive current measurement  | <p>CD laser drive current measurement. CD laser drive current is measured and the result is displayed together with the initial value stored in the EEPROM IC.</p> <p>After the measurement, CD laser emission is kept on. It is turned off when POWER key is switched off.</p> <p>FL Display sequence:<br/>Display 1→2.</p>    | <p>(Display 1)</p>  <p>CD laser current measurement mode</p> <p>The value denotes the current in decimal notation.</p> <p>(Display 2)</p>  <p>CD laser initial value      CD laser value</p> <p>The above example shows the initial current is XXXmA and the measured value is YYYmA.</p>  | <p>In STOP (no disc) mode, press [STOP] button on the main unit, and [3] button on the remote control unit. Cancelled automatically 5 seconds later.</p> <p>Press [FL Display] on remote control unit for next page. (FL Display)</p>                                        |
| Region display                      | <p>Region code display, TV broadcasting system &amp; the model no. information.</p> <p>Note: Refer to Figure 7.1 for "Video Design Information".</p>                                                                                                                                                                            |  <p>Model No. Information</p> <p>N: NTSC / 6: PAL60</p> <p>N: no PAL / P: PAL</p> <p>Region No.: 0-8</p>                                                                                                                                                                                                                                                                     | <p>In STOP (no disc) mode, press [STOP] button on the main unit, and [6] button on the remote control unit. Cancelled automatically 5 seconds later.</p>                                                                                                                     |
| CPPM/CRM Keys Check                 | <p>CPPM/CRM refers to the Content Protection for Recordable Media and Pre-Recorded Media. It displays the existence of the keys as "1" or "0".</p> <p>OK: Existing of keys.</p> <p>NG: Non existing of keys.</p>                                                                                                                |  <p>0: NG    0: NG</p> <p>1: OK    1: OK</p>                                                                                                                                                                                                                                                                                                                                 | <p>In STOP (no disc) mode, press [STOP] button on the main unit, and [SOUND] button on the remote control unit. Cancelled automatically 5 seconds later.</p>                                                                                                                 |

| Model Series     | Country Region                 | Region Code | TV Broadcasting System | Product                 |                          |             |                                                                     |
|------------------|--------------------------------|-------------|------------------------|-------------------------|--------------------------|-------------|---------------------------------------------------------------------|
|                  |                                |             |                        | Signal System (Default) | Region Display (Default) | OSD Default | OSD Menu Language                                                   |
| P, PC, PX        | USA, Canada, PX                | 1           | NTSC                   | NTSC (*A)               | 1PN                      | English     | English, Spanish, Canadian, French                                  |
| (S)              | Japan                          | 2           | NTSC                   | NTSC (*A)               | 2PN                      | Japanese    | Japanese, English                                                   |
| E                | Europe                         | 2           | PAL                    | PAL (*C)                | 2P6                      | English     | English, French, German, Spanish, Polish, Russian, Czech, Hungarian |
| EB, EG           | Europe                         | 2           | PAL                    | PAL (*C)                | 2P6                      | English     | English, French, German, Italian, Spanish, Polish, Swedish, Dutch   |
| GC, GS           | Middle East                    | 2           | PAL                    | PAL (*C)                | 2P6                      | English     | English, French, German, Spanish, Polish, Russian, Czech, Hungarian |
| GCS, GD, GT, GCT | South East Asia, Korea, Taiwan | 3           | PAL<br>NTSC            | NTSC (*B)               | 3PN                      | English     | English, Traditional Chinese                                        |
| GN               | New Zealand, Australia         | 4           | PAL                    | PAL (*C)                | 4P6                      | English     | English, French, German, Italian, Spanish, Polish, Swedish, Dutch   |
| PL, GCP, LB      | Central/South/Latin America    | 4           | NTSC                   | NTSC (*D)               | 4PN                      | English     | English, Spanish, French, Brazilian Portuguese                      |
| EE               | CIS                            | 5           | SECAM                  | PAL (*C)                | 5P6                      | English     | English, French, German, Spanish, Polish, Russian, Czech, Hungarian |
| GK               | China                          | 6           | PAL                    | NTSC (*B)               | 6PN                      | English     | English, Simplified Chinese                                         |

NTSC (\*A)

| Source       | Output           |
|--------------|------------------|
| Screen Saver | NTSC             |
| NTSC disc    | NTSC             |
| PAL disc     | PAL (DVD-V)      |
|              | NTSC (DVD-A/VCD) |

NTSC (\*B)

| Source       | Output         |
|--------------|----------------|
| Screen Saver | NTSC           |
| NTSC disc    | NTSC (default) |
|              | PAL60          |
| PAL disc     | PAL            |

PAL (\*C)

| Source       | Output          |
|--------------|-----------------|
| Screen Saver | PAL             |
| NTSC disc    | PAL60 (default) |
|              | NTSC            |
| PAL disc     | PAL             |

NTSC (\*D)

| Source       | Output |
|--------------|--------|
| Screen Saver | NTSC   |
| NTSC disc    | NTSC   |
| PAL disc     | NTSC   |

Explanation of Display

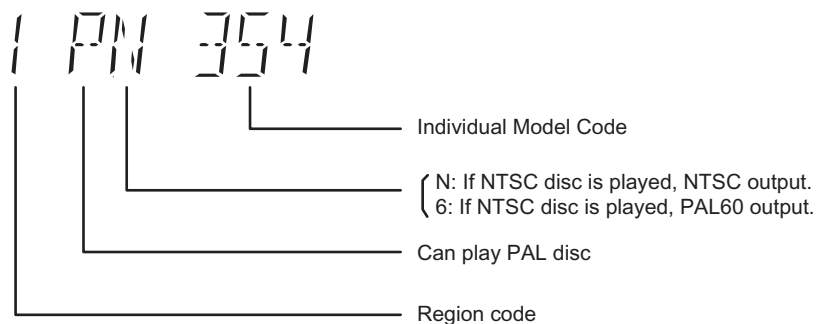
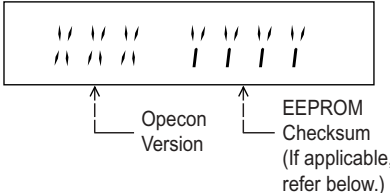
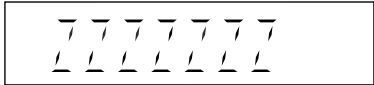
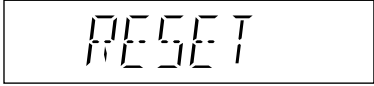
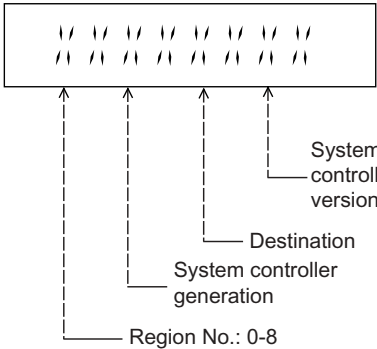
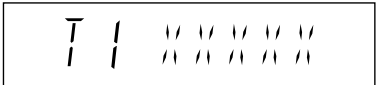
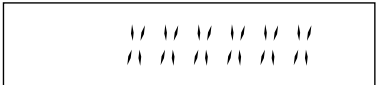
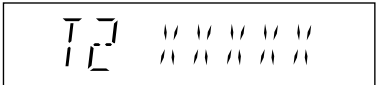


Figure 7.1 Video Design Information

### 7.2.3. Service Mode Table 3

| Item                                                                               |                                                                                                                                                                                                                                                           | FL Display                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Key Operation                                                                                                                                                                                                                                |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model Name                                                                         | Description                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Front Key                                                                                                                                                                                                                                    |
| Micro-processor<br>firmware version<br>display &<br>EEPROM<br>checksum<br>display. | <p>Micro-processor firmware version display &amp; EEPROM checksum display. EEPROM checksum is only available due to existence of EEPROM IC.</p> <p>Note: Condition 1/2/3 shows the state of EEPROM IC.</p> <p>FL Display sequence:<br/>Display 1→2→3.</p> | <p>(Display 1)</p>  <p>(Display 2)</p>  <p>(Condition 1)</p>  <p>If the version of the EEPROM does not match, [NG] is displayed.</p> <p>(Condition 2)</p>  <p>(a) If there is NO EEPROM header string<br/>OR<br/>(b) If there is no EEPROM (no data is received by Micro-processor), [NO] is displayed.</p> <p>(Condition 3)</p>  <p>If the EEPROM version matches, checksum [YYYY] is displayed.</p> <p>(Display 3)</p>  | <p>In STOP (no disc) mode, press [STOP] button on the main unit, and [7] button on the remote control unit. Cancelled automatically 5 seconds later.</p> <p>Press [FL Display] button on remote control unit for next page. (FL Display)</p> |
| Initialization                                                                     | <p>Initialization.</p> <p>User settings are cancelled and player is initialized to factory setting. It is necessary when after replacement of Micro-processor (DV5 LSI) IC, FLASH ROM IC (IC8651), EEPROM IC (IC8611) &amp; DVD Module P.C.B.</p>         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <p>In STOP (no disc) mode, press [STOP] button on the main unit, and [≥10] button on the remote control unit. Cancelled automatically 5 seconds later.</p>                                                                                   |
| DVD<br>Module P.C.B.<br>Reset                                                      | <p>To reset DVD Module P.C.B. This process is used when the DVD Module P.C.B. or FLASH ROM IC is replaced with a new one.</p>                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <p>While in initialization mode, press &amp; hold [STOP] button on the main unit for 3 seconds, follow by [OK] button on the remote control unit. Cancelled automatically 5 seconds later.</p>                                               |

## 7.2.4. Service Mode Table 4

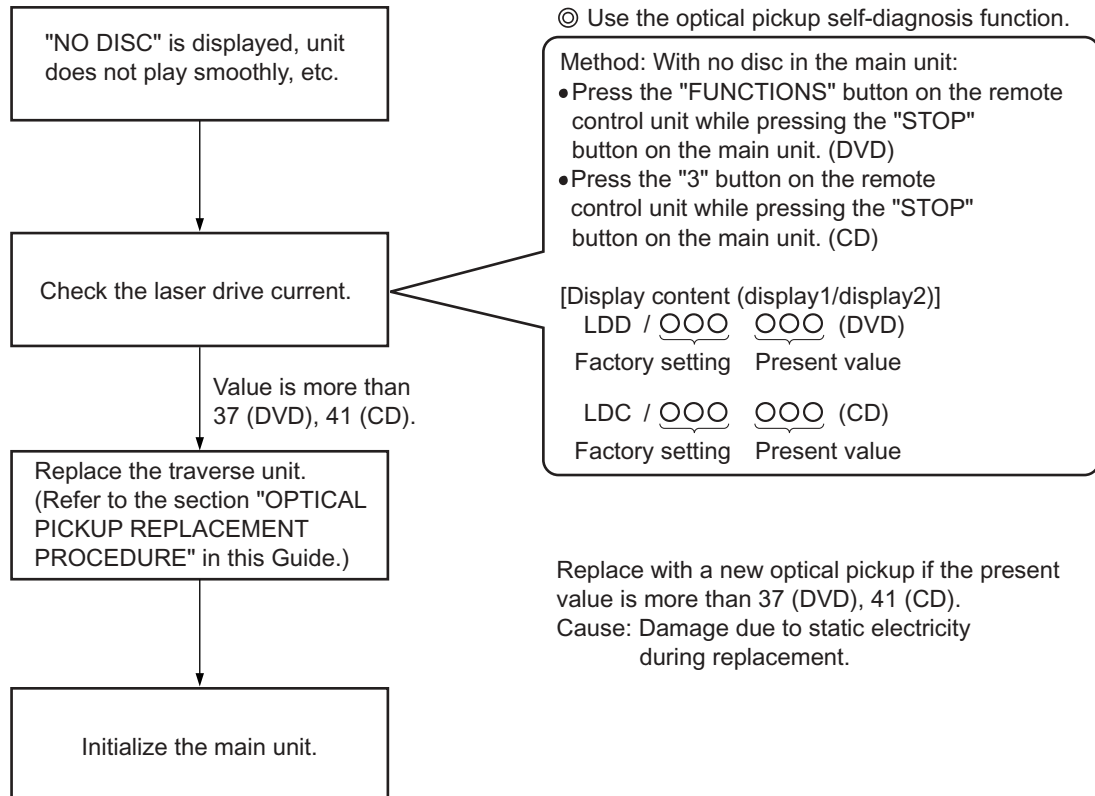
| Item                                       |                                                                                                                                                                                                                                                  | FL Display                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Key Operation                                                                                                                                                                                                          |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mode Name                                  | Description                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Front Key                                                                                                                                                                                                              |
| DVD Module P.C.B. firmware version display | <p>DVD Module P.C.B. firmware version is displayed on the FL Display. The firmware version can be updated using recovery disc.</p> <p>Note: It is necessary to check for firmware version before carrying out the version up using the disc.</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <p>In STOP (no disc) mode, press [STOP] button on the main unit, and [8] button on the remote control unit. Cancelled automatically 5 seconds later.</p>                                                               |
| Timer 1 check                              | <p>Timer 1 check<br/>Laser operation timer is measured separately for DVD laser and CD laser.</p> <p>FL Display sequence:<br/>Display 1→2.</p>                                                                                                   | <p>(Display 1)</p>  <p>Shown to the above is DVD laser usage time, and to the below is CD laser usage time.<br/>Time is shown in 5 digits of decimal notation in a unit of 10 hours.<br/>"00000" will follow "99999". (DVD laser)</p> <p>(Display 2)</p>  <p>Time is shown in 6 digits of decimal notation in a unit of 10 hours.<br/>"000000" will follow "999999". (CD laser)</p> | <p>In STOP (no disc) mode, press [STOP] button on the main unit, and [▲] button on the remote control unit. Cancelled automatically 5 seconds later.</p> <p>Press [FL Display] button for next page of FL Display.</p> |
| Timer 1 reset                              | <p>Timer 1 reset<br/>Laser operation timer of both DVD laser and CD laser is reset all at once.</p>                                                                                                                                              |  <p>Time is shown in 5 digits of decimal notation in a unit of 10 hours.<br/>It will clear to "00000" upon reset.</p>                                                                                                                                                                                                                                                                                                                                                | <p>While displaying Timer 1 data, press [STOP] button on the main unit, and [▼] button on the remote control unit. Cancelled automatically 5 seconds later</p>                                                         |
| Timer 2 check                              | <p>Timer 2 check<br/>Spindle motor operation timer</p>                                                                                                                                                                                           |  <p>Time is shown in 5 digits of decimal notation in a unit of 1 hour.<br/>"00000" will follow "99999".</p>                                                                                                                                                                                                                                                                                                                                                          | <p>In STOP (no disc) mode, press [STOP] button on the main unit, and [▶] button on the remote control unit. Cancelled automatically 5 seconds later.</p>                                                               |
| Timer 2 reset                              | <p>Timer 2 reset<br/>Spindle motor operation timer</p>                                                                                                                                                                                           |  <p>Time is shown in 5 digits of decimal notation in a unit of 1 hour.<br/>It will be cleared to "00000" upon activating this.</p>                                                                                                                                                                                                                                                                                                                                   | <p>While displaying Timer 2 data, press [STOP] button on the main unit, and [◀] button on the remote control unit. Cancelled automatically 5 seconds later.</p>                                                        |

### 7.2.5. Optical Pick-up Self-Diagnosis

The optical pickup self-diagnosis function and tilt adjustment check function have been included in this unit. When repairing, use the following procedure for effective self-diagnosis and tilt adjustment. Be sure to use the self-diagnosis function before replacing the optical pickup when "NO DISC" is displayed. As a guideline, you should replace the optical pickup when the value of the laser drive current is more than the specified value.

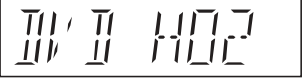
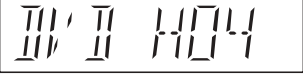
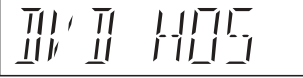
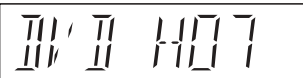
**Note:**

Press the power button to turn on the power, and check the value within three minutes before the unit warms up. (Otherwise, the result will be incorrect.)

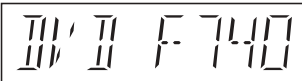
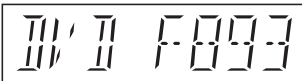
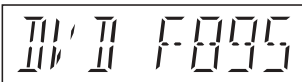
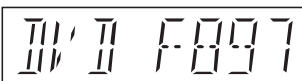
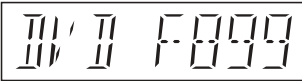


## 7.3. DVD Self Diagnostic Function-Error Code

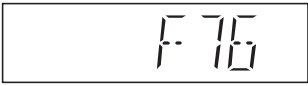
### 7.3.1. Mechanism Error Code Table

| Error Code | Diagnosis Contents          | Description of error                                                                                                                                       | Automatic FL Display                                                                 | Remarks                                                                                                                    |
|------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| H01        | Tray loading error          | The tray opening and closing is abnormal. CLOSE and OPEN of the tray cannot be carried out properly. Loading motor error, DV5 LSI IC (IC8001) error.       |    | Press [ ■ STOP ] on main unit for next error.<br>(OPEN time: OPEN → CLOSE → OPEN → H01 at CLOSE: CLOSE → OPEN → CLOSE H01) |
| H02        | Spindle servo error         | The spindle servo/motor is abnormal. The FG pulse is abnormal. CLV servo error.                                                                            |    | Press [ ■ STOP ] on main unit for next error.                                                                              |
| H03        | Traverse servo error        | The traverse is abnormal. (Traverse servo, DV5 LSI IC (IC8001), TRV motor error.)                                                                          |    | Press [ ■ STOP ] on main unit for next error.                                                                              |
| H04        | Tracking servo error        | Tracking coil NG (OPU unit abnormal), DV5 LSI IC (IC8001) error.                                                                                           |    | Press [ ■ STOP ] on main unit for next error.                                                                              |
| H05        | Seek time out error         | It is not possible to access the disc. TOC cannot read. Abnormal disc etc. Pickup abnormal or disk is dirty. (TRV motor error, DV5 LSI IC (IC8001) error.) |    | Press [ ■ STOP ] on main unit for next error.                                                                              |
| H07        | Driver IC thermal shut down | The spindle motor is abnormal. (short between brushes)                                                                                                     |  | Press [ ■ STOP ] on main unit for next error.                                                                              |
| U11        | Focus servo error           | Focus coil, FE signal error. Disc may be dirty.                                                                                                            |  | Press [ ■ STOP ] on main unit for next error.<br>(Unfinalized DVD-R is likely to become U11.)                              |

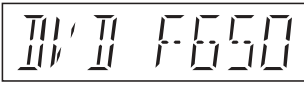
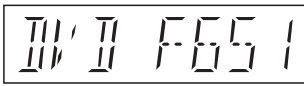
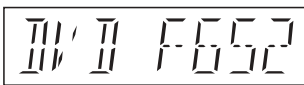
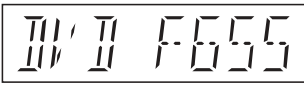
### 7.3.2. DVD Module Error Code Table

| Error Code | Diagnosis Contents                                                   | Description of error                                                                                                                                                                             | Automatic FL Display                                                                 | Remarks                                      |
|------------|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------|
| U702       | HDMI/DVI I2C communication error                                     | The communication error of I2C when connecting it with HDMI/DVI. For instance, when EDID information to which information on the TV set side has been described cannot be read, it is generated. |    | Press [ ■STOP ] on main unit for next error. |
| U703       | HDMI/DVI attestation error                                           | When attestation (HDCP) with the TV side fails when connecting it with HDMI/DVI, it is generated.                                                                                                |    | Press [ ■STOP ] on main unit for next error. |
| U704       | HDMI/DVI SRM Riborcerar                                              | It is generated at the equipment to which the TV set is Riborced when connecting it with HDMI/DVI.                                                                                               |    | Press [ ■STOP ] on main unit for next error. |
| U705       | HDMI/DVI SRM disk falsification check error                          | It is generated at the time of it is time when illegal the SRM data of the reproducing disk (verify error), when connecting it with HDMI/DVI.                                                    |    | Press [ ■STOP ] on main unit for next error. |
| F740       | HDMI device key                                                      | I2C error when writing HDMI Key device into transmitter.                                                                                                                                         |    | Press [ ■STOP ] on main unit for next error. |
| F893       | FLASH ROM IC data falsification error                                | Firmware error, DV5.0 LSI IC (IC8651) error.                                                                                                                                                     |   | Press [ ■STOP ] on main unit for next error. |
| F894       | EEPROM IC abnormality error                                          | When failing in the access to EEPROM IC located in the DVD Module P.C.B. (IC8611).                                                                                                               |  | Press [ ■STOP ] on main unit for next error. |
| F895       | Language area abnormal                                               | Firmware version agreement check for factory preset setting failure prevention.                                                                                                                  |  | Press [ ■STOP ] on main unit for next error. |
| F897       | Initialization error                                                 | Incomplete initialization after writing of new firmware (Factory preset setting failure prevention)                                                                                              |  | Press [ ■STOP ] on main unit for next error. |
| F899       | The communication specification disagreement between micro-processor | Unsuitable combination of number of system com and panel com used. (Firmware)                                                                                                                    |  | Press [ ■STOP ] on main unit for next error. |

### 7.3.3. Power Supply & Digital Amplifier Error Code Table

| Error Code | Diagnosis Contents                                                  | Description of error                                                                                                                                                                                                                                             | Automatic FL Display                                                               | Remarks                                      |
|------------|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------|
| F61        | The abnormalities in an output or power supply circuit of POWER AMP | In normal operation, when DCDET2 goes to "L" (Low) (Not during POWER OFF condition), F61 appears on FLDisplay for 1 second and PCONT goes to "L" (Low). This is due to speaker output has DC voltage or fan is not working.                                      |  | Press [ ■ STOP] on main unit for next error. |
| F76        | Abnormality in the output voltage of stabilized power supply        | In normal operation when DCDET1 is detected "L" (Low) for two consecutive times, F76 is displayed on FL for 1 second and after that PCONT will be turned to "L" (Low). This is due to any of the DC voltages (+9V, +7V, -7V, +5V, +5.3V etc.) C22 not available. |  | Press [ ■ STOP] on main unit for next error. |

### 7.3.4. USB Error Code Table

| Error Code | Diagnosis Contents                          | Description of error                                                                                                                                                                                                   | Automatic FL Display                                                                 | Remarks                                      |
|------------|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------|
| F650       | USB device: Devices other than mass storage | Devices other than the mass storage class are connected.                                                                                                                                                               |    | Press [ ■ STOP] on main unit for next error. |
| F651       | USB device: Non-Full Speed Device           | The device that the transfer rate did not correspond to Full Speed was connected.                                                                                                                                      |  | Press [ ■ STOP] on main unit for next error. |
| F652       | USB device: Interface NG                    | The device in the interface (subclass) outside correspondence was connected. (correspondence interface)<br>001b: Reduced Block Commands (RBC)<br>010b: SFF-8020i. MMC-2 (ATAPI)<br>110b: SCSI transparent command set. |  | Press [ ■ STOP] on main unit for next error. |
| F655       | USB device: Overcurrent detection           | The overcurrent of 500mA or more was detected in VDD USB, and the USB device driver function was intercepted. (To intercept the current.)                                                                              |  | Press [ ■ STOP] on main unit for next error. |

## 7.4. Sales Demonstration Lock Function

This function prevents discs from being lost when the unit is used for sales demonstrations by disabling the disc eject function. "LOCKED" is displayed on the unit, and ordinary operation is disabled.

### 7.4.1. Setting

- Prohibiting removal of disc

1. Select the DVD/CD function.
2. At POWER ON condition, press and hold down the ■ button and the power button on the main unit for at least three seconds. (The message, "LOCKED" appears when the function is activated.)

**Note:**

OPEN/CLOSE ▲ button is invalid and the main unit displays “LOCKED” while the lock function mode is entered.

- **Prohibiting operation of selector and disc**

1. Select the DVD/CD function.
2. At POWER ON condition, press and hold down the ► button and the power button on the main unit for at least three seconds. (The message, “LOCKED” appears when the function is activated.)

**Note:**

The following buttons are invalid and the main unit displays “LOCKED” while the lock function mode is entered.

|                        |                                                                                                                              |
|------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Main unit              | ▲, ■ /—DEMO, ◀◀◀/▶▶▶, ▶▶▶/▶▶▶                                                                                                |
| Remote controller unit | USB, FM/AM/EXT-IN, NUMERIC KEYS 0~9, ≥10, ◀◀◀, ▶▶▶, ◀◀◀, ▶▶▶, ■, ■, RETURN, FUNCTIONS, FL DISPLAY/—SLEEP/—TIMER PLAY, MUTING |

## 7.4.2. Cancellation

The lock can be cancelled by the same procedure as used in setting. (“UNLOCKED” is displayed on cancellation. Disconnecting the power cable from power outlet does not cancel the lock.)

## 7.5. Service Precautions

### 7.5.1. Recovery after the DVD player is repaired

- When the FLASH ROM IC or DVD Module P.C.B. is replaced, carry out the recovery processing to optimize the drive.  
Playback the recovery disk to process the recovery automatically.
- Recovery disc (Product number: RFKZD03R005) [SPG]
- Performing recovery process
  1. Load the recovery disc RFKZD03R005 on to the player and run it.
  2. Recovery is performed automatically. When it is finished, a message appears on the screen.
  3. Remove the recovery disc.
  4. Turn off the power.
  5. Initialize the player.

### 7.5.2. Firmware version-up of the DVD player

- The firmware of the DVD player may be renewed to improve the quality including operability and playability to the substandard discs.processing to optimize the drive.  
The recovery disc has also firmware version-up.
- After version-up, recovery processing is executed automatically.
- Part number of the recovery disc for version-up will be noticed when it is supplied.
- Updating firmware
  1. Load the recovery disc on to the player and run it.
  2. Firmware version of the player is automatically checked. Appropriate message appears whenever necessary.
  3. Using remote controller’s cursor key, select whether version updating is to be done or not. (Selection of Yes/No)
  4. a. If Yes is selected, version updating is performed.  
b. If No is selected, only recovery is performed.
  5. a. When updating is finished, remove the disc according to the message appearing on the screen.  
b. Remove the disc according to the message appearing on the screen.
  6. Turn off the power.

**Note:**

If the AC power supply is shut out during version-up due to a power failure, the version-up is improperly carried out. In such a case, replace the FLASH ROM IC and carry out the version-up again.

### 7.5.3. DVD Module P.C.B. Reset

- When after replacing FLASH ROM IC or DVD Module P.C.B., FL displays error code “ DVD F897”. This means the unit is not initialized properly and the following process needs to be carry out.
- Procedures:
  1. Press ≥10 on remote control while pressing “STOP” button on main unit. (To enter into initialization)

2. FL display show "INIT"
3. While still pressing "STOP" button on main unit, press "OK" on remote control. (To reset the unit)
4. FL will display "RESET" before FL display will change to TOC reading again.
5. Power off unit. Unplug the AC cord.
6. Power on the unit. It should be no problem. If problem persist check on the DVD Module P.C.B. or FLASH ROM IC.

## 8 Assembling and Disassembling

### “ATTENTION SERVICER”

Be careful when disassembling and servicing.

Some chassis components may have sharp edges.

### Special Note:

1. This model uses a mechanism unit (DLS6). In this following section does not contain the necessary assembly and disassembly information except the assembly and disassembly of the traverse unit. Kindly refer to the original service manual for the mechanism unit. (Order No. MD0801003CE).
2. This section describes the disassembly procedures for all the major printed circuit boards and main components.
3. Before the disassembly process was carried out, do take special note that all safety precautions are to be carried out. (Ensure that no AC power supply is connected during disassembling.)
4. For assembly after operation checks or replacement, reverse the respective procedures.  
Special reassembly procedures are described only when required.
5. Do take note of the locators on each printed circuit board during reassembling procedures.
6. The Switch Regulator IC may have high temperature after prolonged use.
7. Use caution when removing the top cabinet and avoid touching heat sinks located in the unit.

**CAUTION: HOT!!  
PLEASE DO NOT  
TOUCH THE HEAT SINK**

8. Select items from the following index when checks or replacement are required.

- Disassembly of Top Panel
- Disassembly of Front Panel
- Disassembly of Panel P.C.B.
- Disassembly of USB P.C.B.
- Disassembly of Rear Panel
- Disassembly of D\_Port (Option Port) P.C.B.
- Disassembly of Main P.C.B.
- Disassembly of Transformer P.C.B.
- Replacement of Transistor (Q5927)
- Replacement of Transistor (Q5921)
- Disassembly of Power P.C.B.
- Replacement of Digital Amp IC (IC5000)
- Replacement of Transistor (Q5105)
- Replacement of Transistor (Q5103)
- Replacement of Transistor (Q5100)
- Disassembly of Inner Chassis
- Disassembly of Video P.C.B.
- Replacement of DC-DC Converter IC (IC2741)
- Disassembly of DVD Module P.C.B.
- Disassembly of Mechanism Unit
- Disassembly of USB Lid
- Disassembly of DVD Lid

## CAUTION NOTE:

Please use original screw and at correct locations.

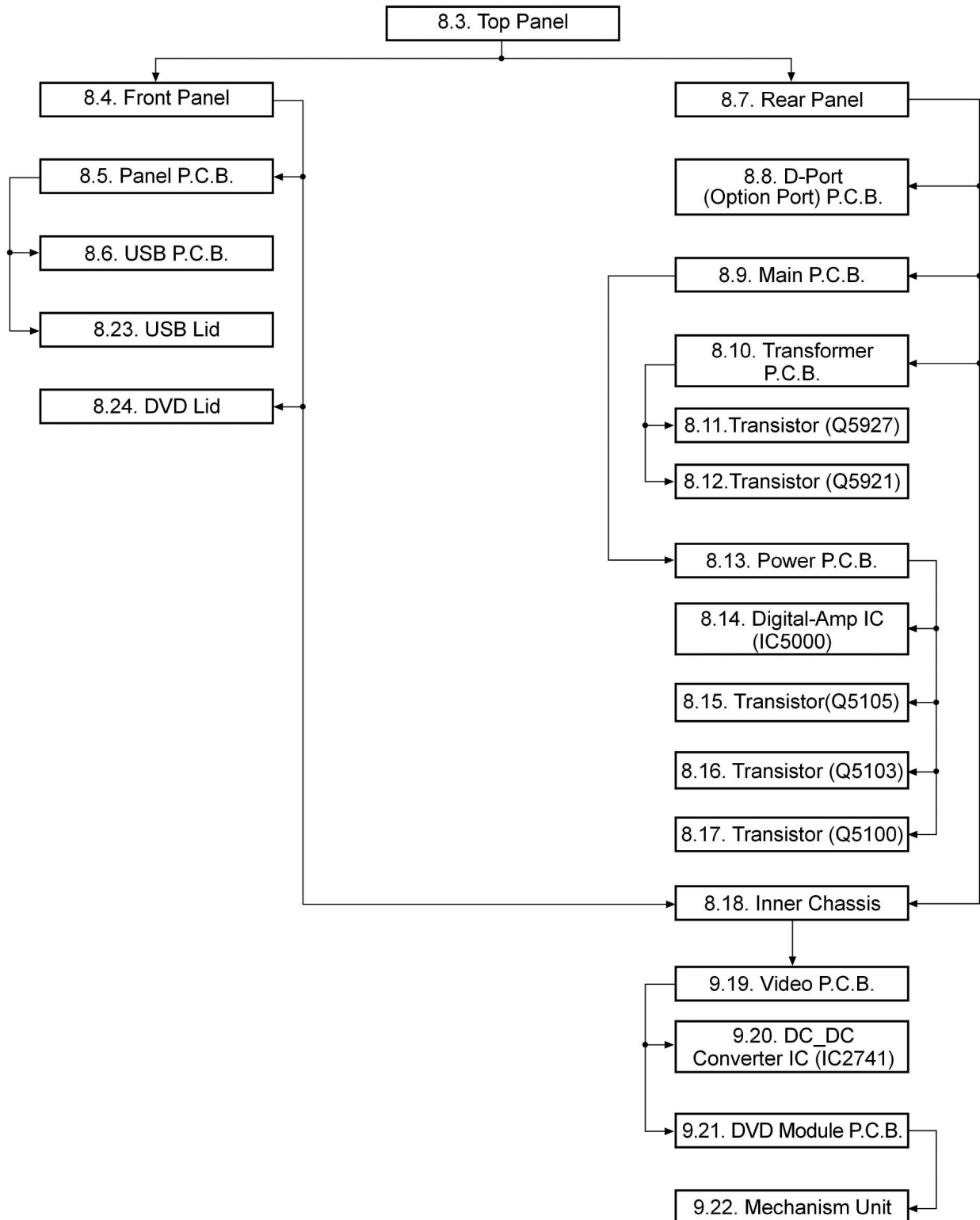
Below shown is the part no. of different screw types used:

- |                         |                       |
|-------------------------|-----------------------|
| <b>a</b> : RHD30007-K2J | <b>f</b> : XTB3+8JFJ  |
| <b>b</b> : XTB3+10JFJ   | <b>g</b> : RHDX03001  |
| <b>c</b> : RHD30092-1   | <b>h</b> : RHDV30006  |
| <b>d</b> : RHD26046-L   | <b>i</b> : RHD30083-1 |
| <b>e</b> : XSN3+6FJ     |                       |

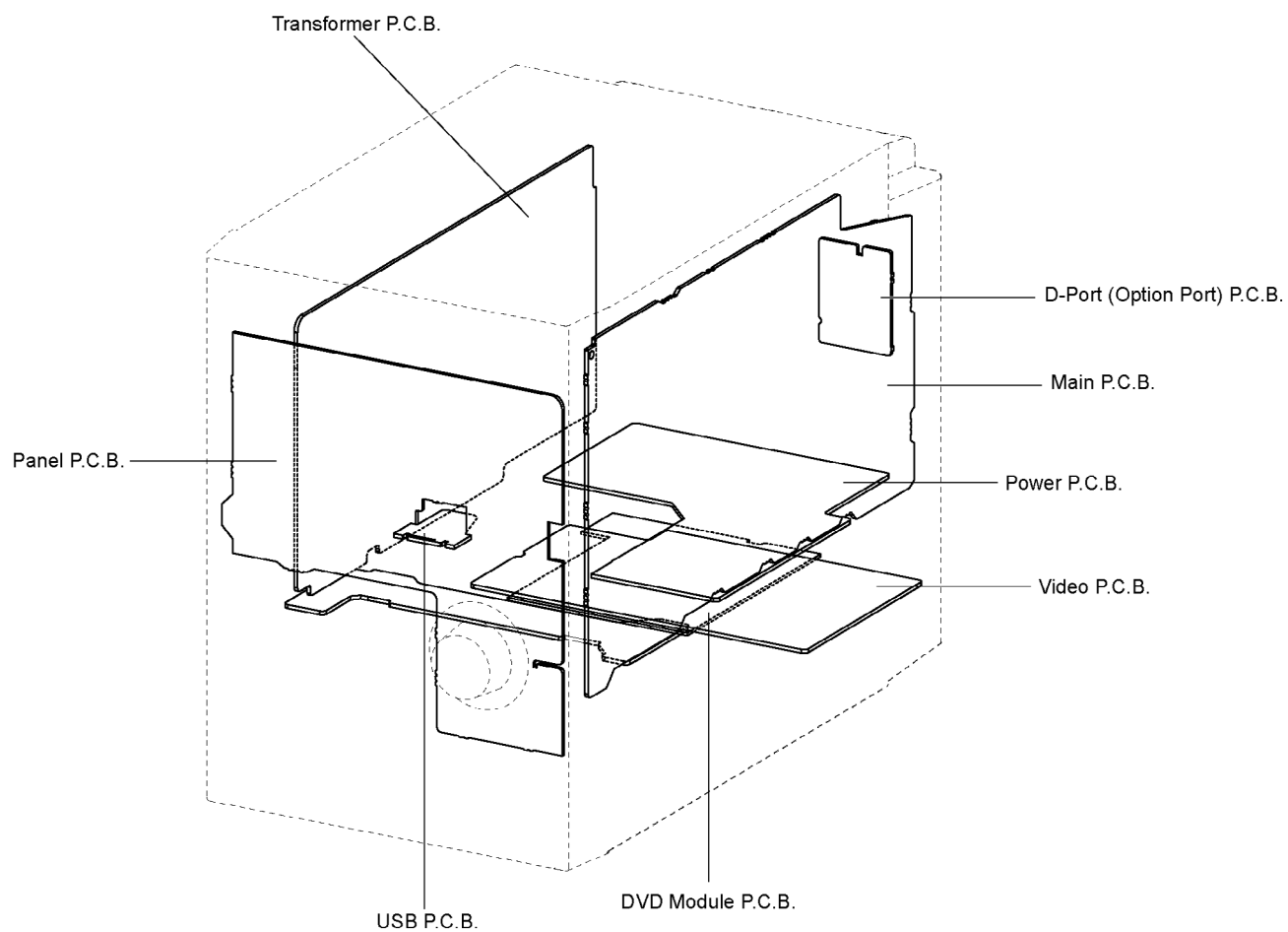
## 8.1. Disassembly flow chart

The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing.

To assemble the unit, reverse the steps shown in the chart below.

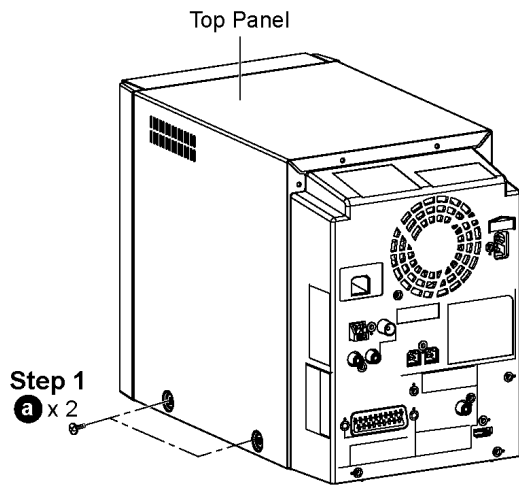


## 8.2. Main Parts Location Diagram

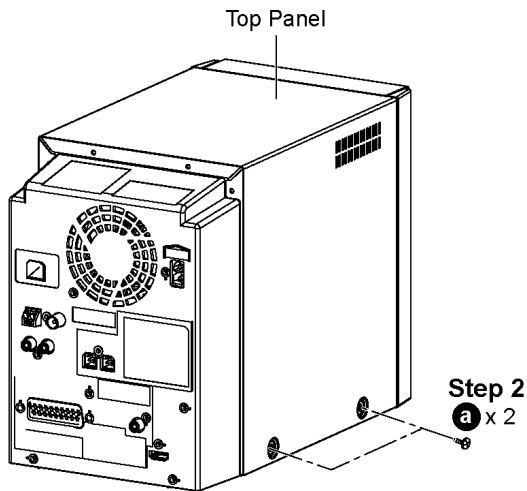


### 8.3. Disassembly of Top Panel

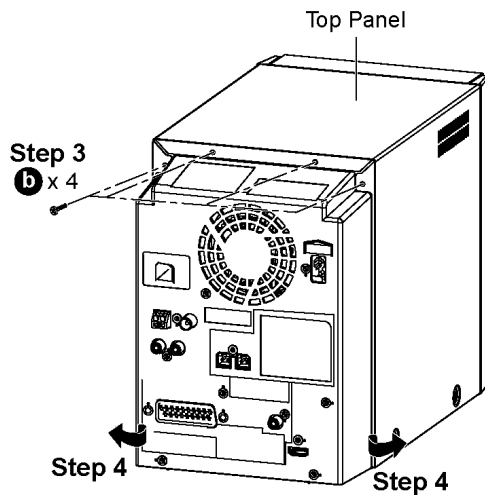
of arrow.



**Step 1 :** Remove 2 screws at the side of Top Panel (L).

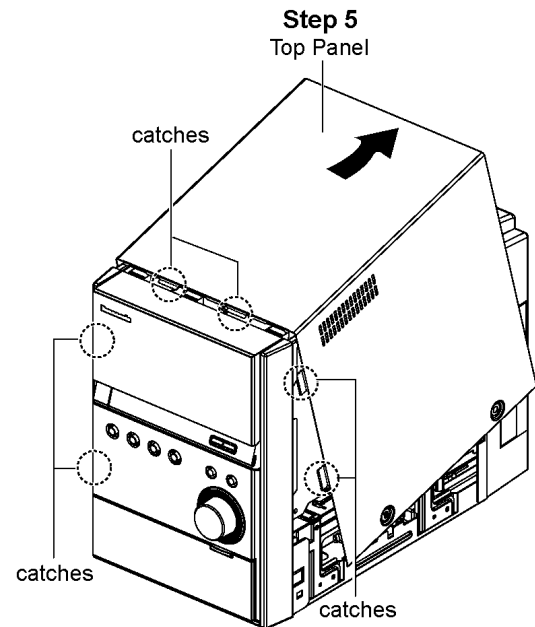


**Step 2 :** Remove 2 screws at the side of Top Panel (R).



**Step 3 :** Remove 4 screws at the rear of Top Panel.

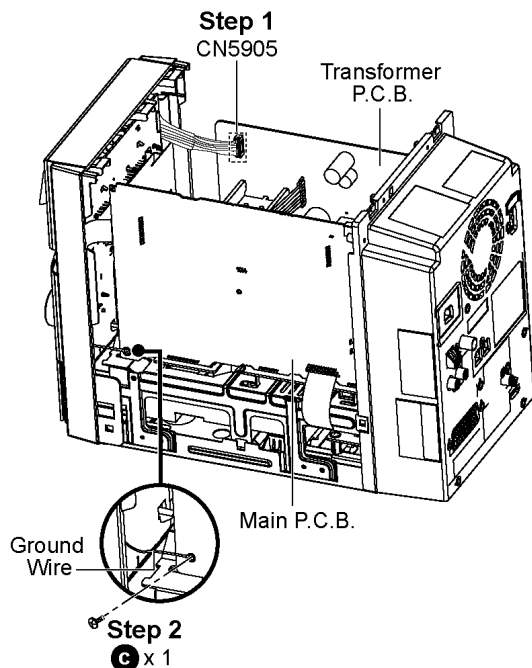
**Step 4 :** Lift both sides of Top Panel outwards in the direction



**Step 5 :** Lift up the back part of the Top Panel and remove it in the direction of arrow.

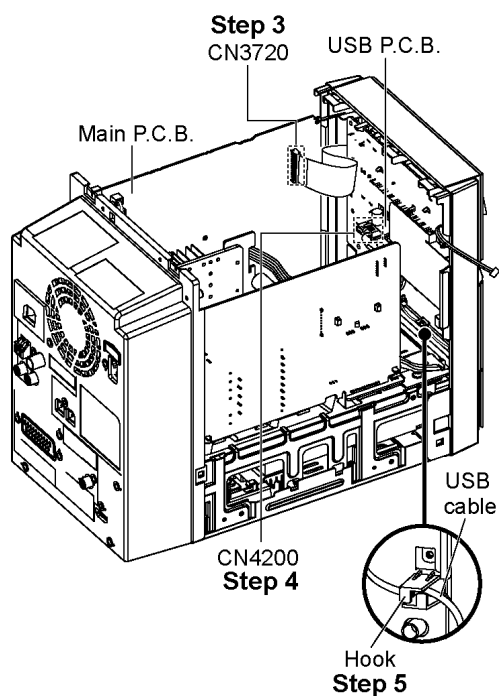
## 8.4. Disassembly of Front Panel

- Follow the (Step 1) - (Step 5) of Item 8.3



**Step 1 :** Detach 7P cable at the connector (CN5905) on Transformer P.C.B.

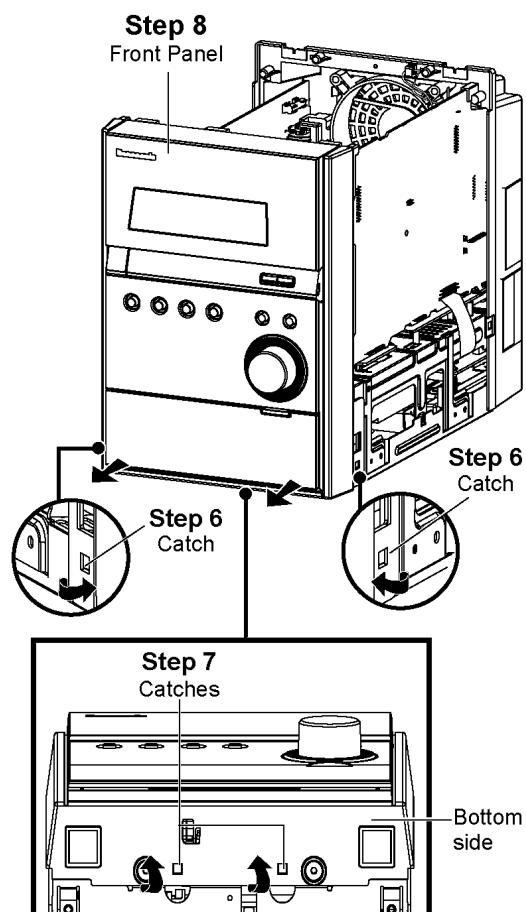
**Step 2 :** Remove 1 screw from Main P.C.B..



**Step 3 :** Detach 24P FFC cable at the connector (CN3720) on Main P.C.B.

**Step 4 :** Detach USB cable at the connector (CN4200) on USB P.C.B..

**Step 5 :** Remove USB cable from Front Panel's Hook shown.



**Caution :** Do not exert strong force when releasing the catches.

**Step 6 :** Release the catch at each side of the Front Panel in the direction of arrow.

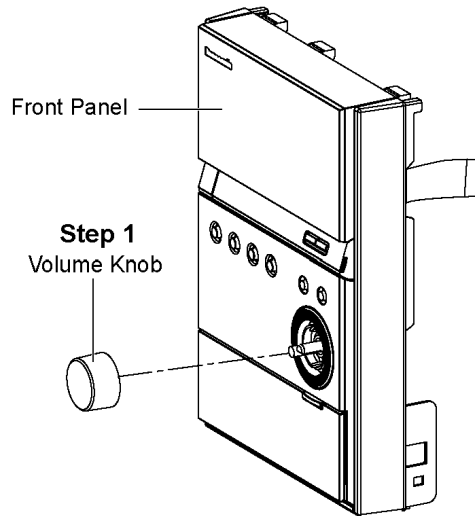
**Step 7 :** Release the catches at the bottom of the Front Panel.

**Step 8 :** Remove Front Panel.

**Note:** During reassembling procedures, ensure the USB cable is properly dressed into the Front Panel's Hook.

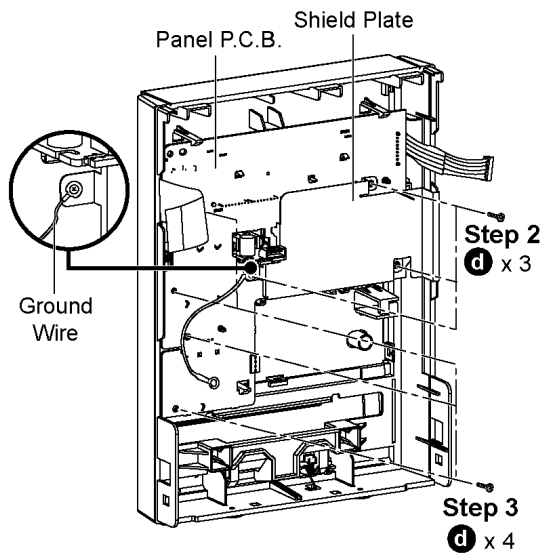
## 8.5. Disassembly of Panel P.C.B.

- Follow the (Step 1) - (Step 5) of Item 8.3
- Follow the (Step 1) - (Step 8) of Item 8.4



**Step 1 :** Remove the Volume Knob.

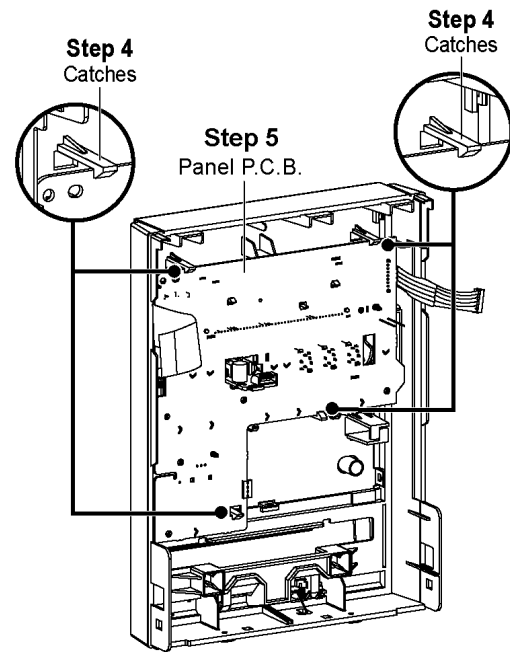
- Disassembly of Shield Plate



**Step 2 :** Remove 3 screws to remove the Shield Plate.

**Step 3 :** Remove 4 screws on the Panel P.C.B..

**Caution :** Keep the Ground Wire in safe place. Place it back during assembling.



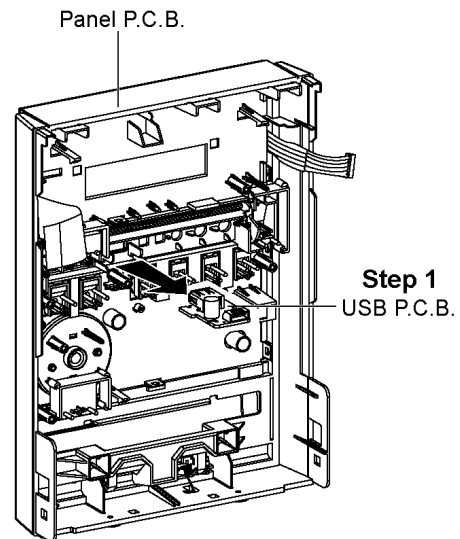
**Step 4 :** Release all the catches.

**Step 5 :** Remove Panel P.C.B..

**Note:** During reassembling procedures, ensure P.C.B. is fully caught onto Front Panel.

## 8.6. Disassembly of USB P.C.B.

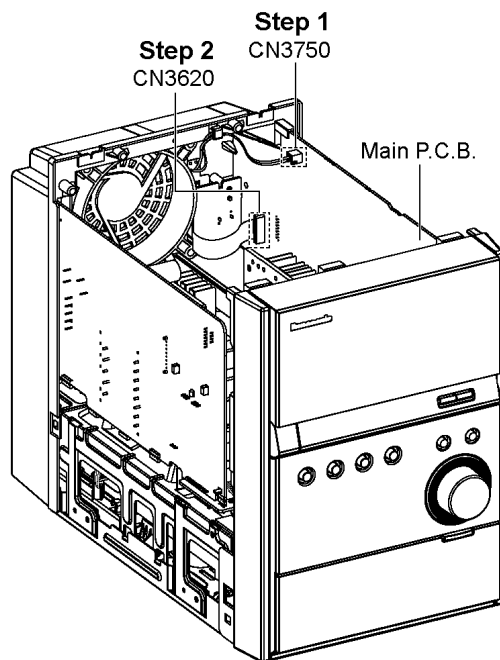
- Follow the (Step 1) - (Step 5) of Item 8.3
- Follow the (Step 1) - (Step 8) of Item 8.4
- Follow the (Step 1) - (Step 5) of Item 8.5



**Step 1 :** Remove USB P.C.B. from Panel P.C.B. in the direction of arrow.

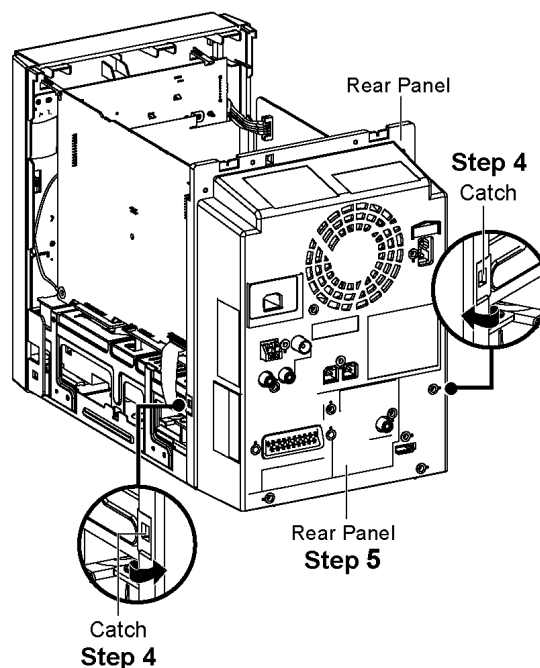
## 8.7. Disassembly of Rear Panel

- Follow the (Step 1) - (Step 5) of Item 8.3



**Step 1 :** Detach Fan cable at the connector (CN3750) on Main P.C.B..

**Step 2 :** Detach 14P FFC cable at the connector (CN3620) on Main P.C.B..

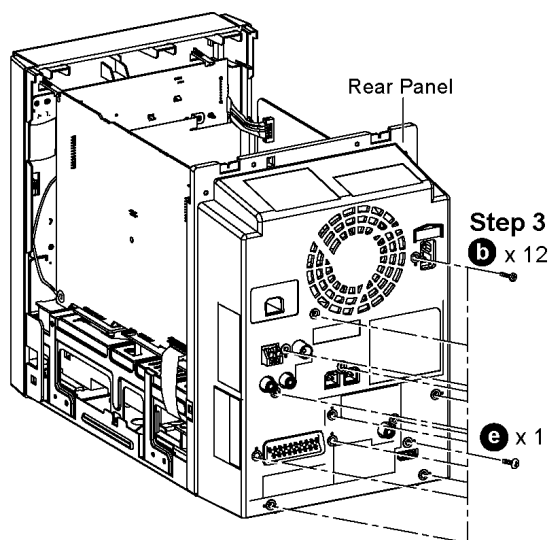


**Step 4 :** Release the catch at each side of the Rear Panel in the direction of arrow.

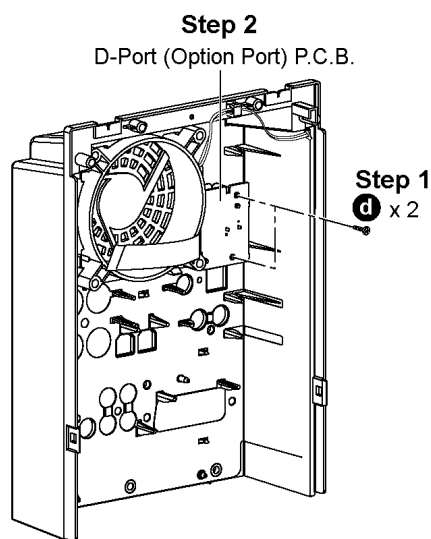
**Step 5 :** Remove Rear Panel.

## 8.8. Disassembly of D-Port (Option Port) P.C.B

- Follow the (Step 1) - (Step 5) of Item 8.3
- Follow the (Step 1) - (Step 5) of Item 8.7



**Step 2 :** Remove 13 screws from the Rear Panel.

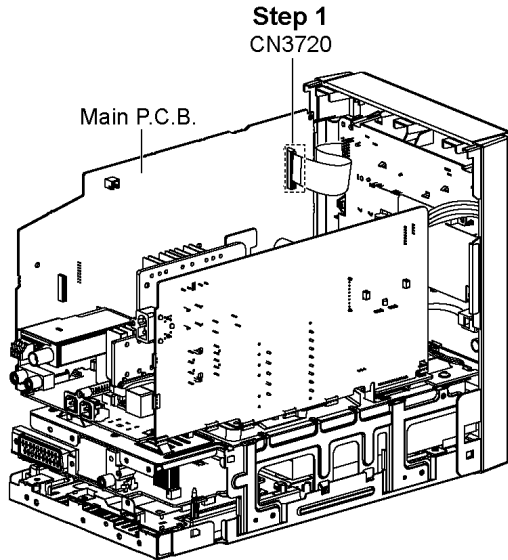


**Step 1 :** Remove 2 screws from D-Port (Option Port) P.C.B..

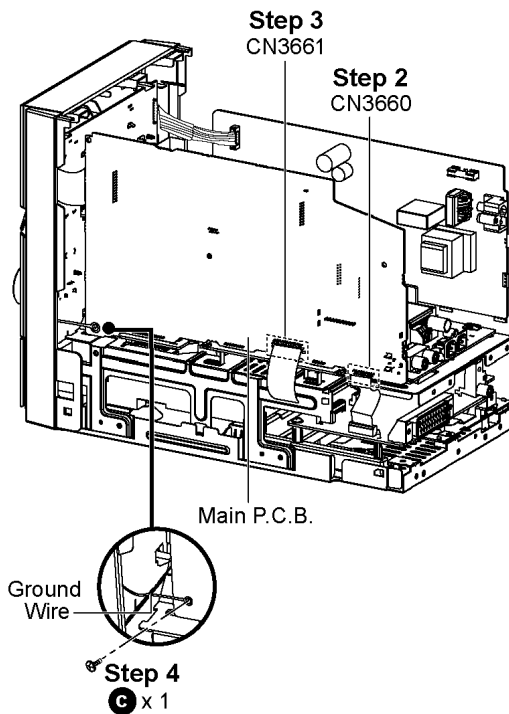
**Step 2 :** Remove D-Port (Option Port) P.C.B..

## 8.9. Disassembly of Main P.C.B

- Follow the (Step 1) - (Step 5) of Item 8.3
- Follow the (Step 1) - (Step 5) of Item 8.7



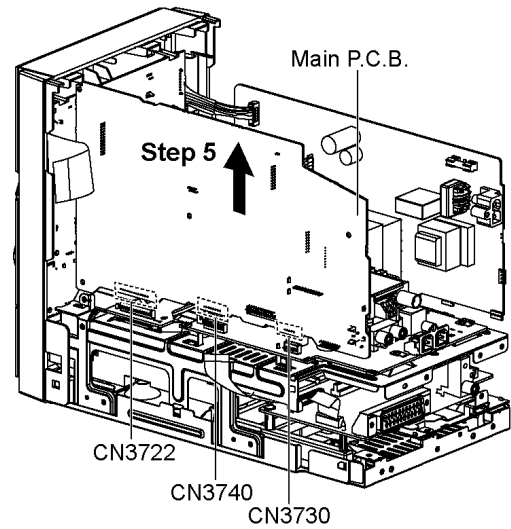
**Step 1 :** Detach 24P FFC cable at the connector (CN3720) on Main P.C.B..



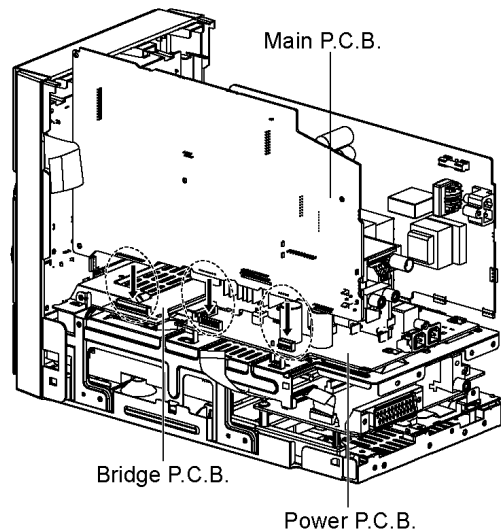
**Step 2 :** Detach 14P FFC cables at the connector (CN3660) on Main P.C.B..

**Step 3 :** Detach 25P FFC cables at the connector (CN3661) on Main P.C.B..

**Step 4 :** Remove 1 screw from Main P.C.B..



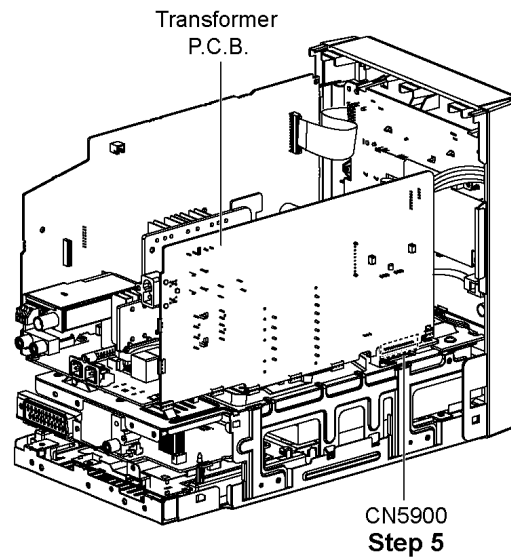
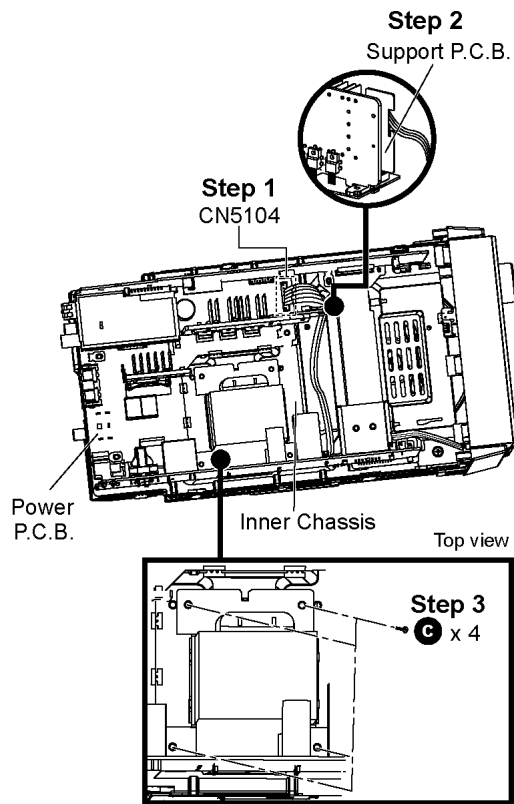
**Step 5 :** Detach connectors (CN3730, CN3740, CN3722) on Main P.C.B. in the direction of arrow.



**Note:** During reassembling procedures, ensure that Main P.C.B. is properly connected to Bridge P.C.B. and Power P.C.B..

## 8.10. Disassembly of Transformer P.C.B.

- Follow the (Step 1) - (Step 5) of Item 8.3
- Follow the (Step 1) - (Step 5) of Item 8.7



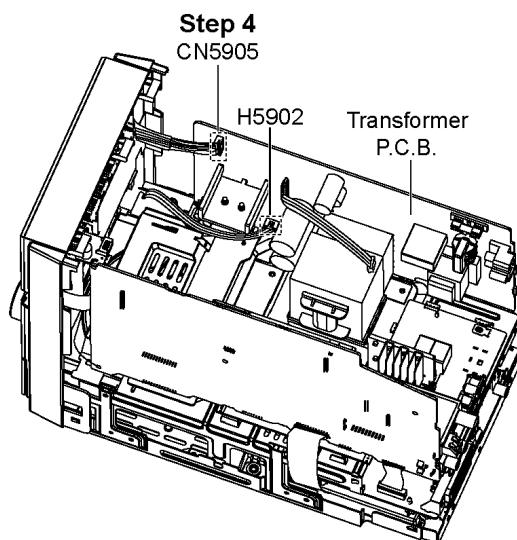
**Step 5 :** Detach connector (CN5900) on Transformer P.C.B..

**Note:** During reassembling procedures, ensure the 8P cable is properly dressed into the Support P.C.B..

**Step 1 :** Detach 8P cable at the connector (CN5104) on Power P.C.B..

**Step 2 :** Remove 8P cable from Support P.C.B..

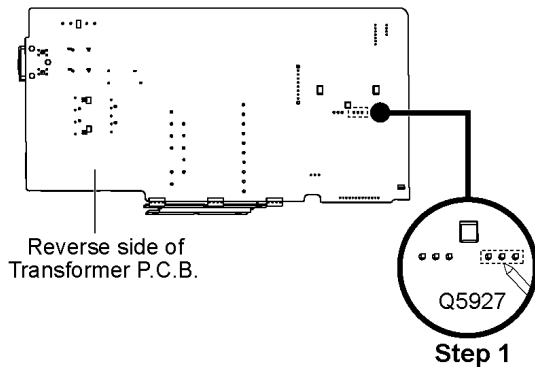
**Step 3 :** Remove 4 screws at Inner Chassis.



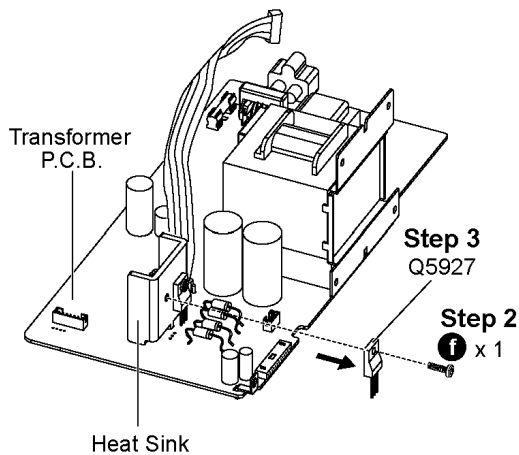
**Step 4 :** Detach 7P cable (CN5905) and 3P cable (H5902) at the connector on Transformer P.C.B..

## 8.11. Replacement of Transistor (Q5927)

- Follow the (Step 1) - (Step 5) of Item 8.3
- Follow the (Step 1) - (Step 5) of Item 8.7
- Follow the (Step 1) - (Step 5) of Item 8.10



**Step 1 :** Desolder pins of Transistor (Q5927) on reverse side of Transformer P.C.B..

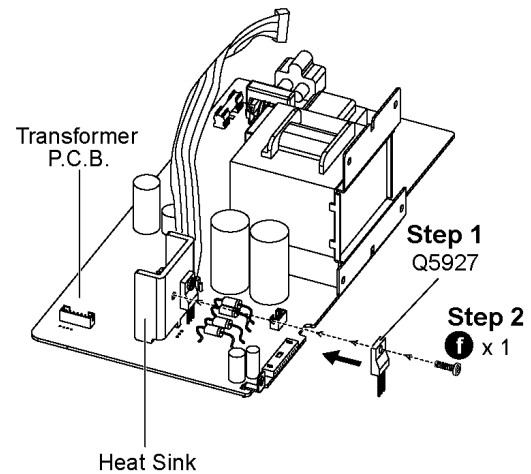


**Step 2 :** Remove 1 screw from the Transistor (Q5927) in the direction of arrow.

**Step 3 :** Remove the Transistor (Q5927) from the Heat Sink.

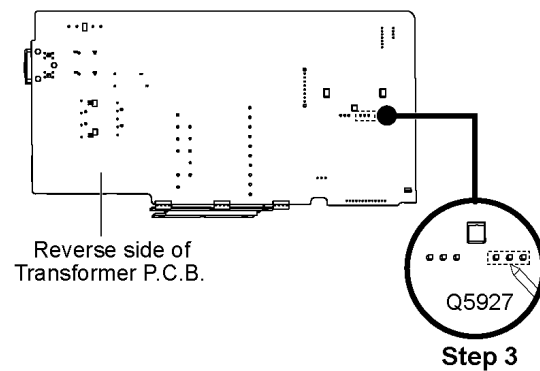
**Caution :** Handle the Heat Sink unit with caution due to its high temperature after prolonged use. Touching it may lead to injuries.

### 8.11.1. Assembly of the Transistor (Q5927)



**Step 1 :** Fix the Transistor (Q5927) to the Heat Sink.

**Step 2 :** Screw 1 screw at Transistor (Q5927) in the direction of arrows.

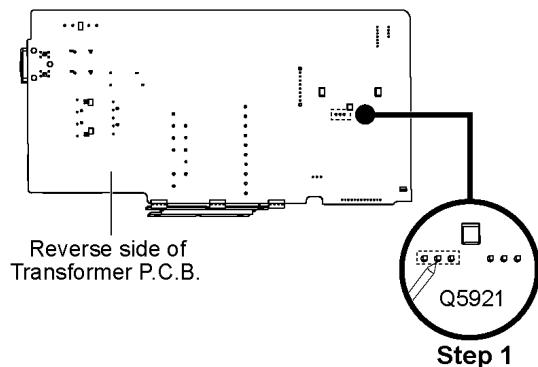


**Step 3 :** Solder pins of the Transistor (Q5927) on the reverse side of the transformer P.C.B..

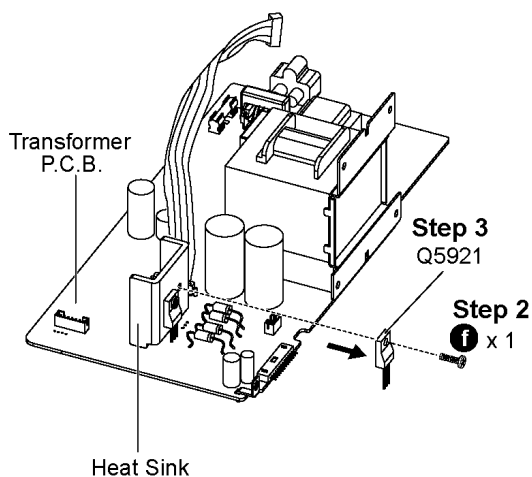
**Caution :** Ensure pins of the Transistor (Q5927) are properly seated and soldered on reverse side of Transformer P.C.B..

## 8.12. Replacement of Transistor (Q5921)

- Follow the (Step 1) - (Step 5) of Item 8.3
- Follow the (Step 1) - (Step 5) of Item 8.7
- Follow the (Step 1) - (Step 5) of Item 8.10



**Step 1 :** Desolder pins of Transistor (Q5921) on reverse side of Transformer P.C.B..

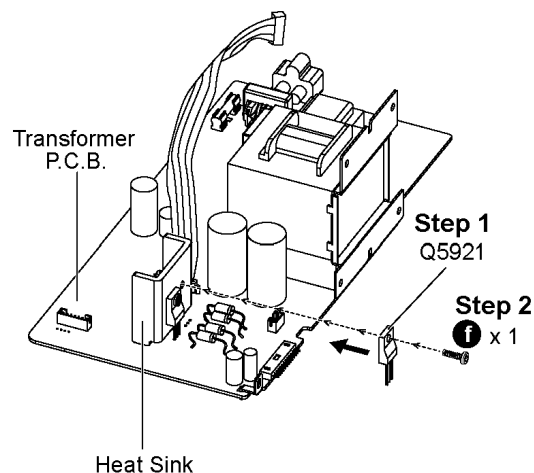


**Step 2 :** Remove 1 screw from the Transistor (Q5921) in the direction of arrow.

**Step 3 :** Remove the Transistor (Q5921) from the Heat Sink.

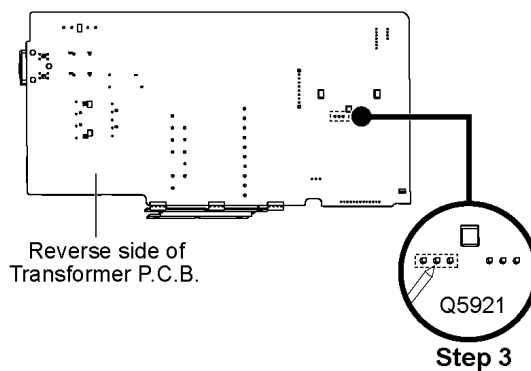
**Caution :** Handle the Heat Sink unit with caution due to its high temperature after prolonged use. Touching it may lead to injuries.

### 8.12.1. Assembly of the Transistor (Q5921)



**Step 1 :** Fix the Transistor (Q5921) to the Heat Sink.

**Step 2 :** Screw 1 screw at Transistor (Q5921) in the direction of arrow.

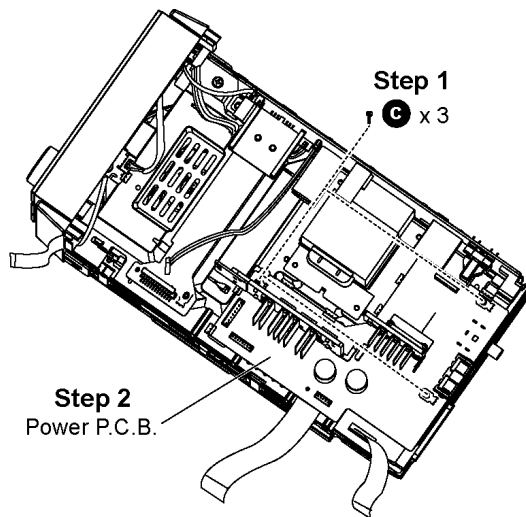


**Step 3 :** Solder pins of the Transistor (Q5921) on the reverse side of the Transformer P.C.B..

**Caution :** Ensure pins of the Transistor (Q5921) are properly seated and soldered on reverse side of Transformer P.C.B..

### 8.13. Disassembly of Power P.C.B.

- Follow the (Step 1) - (Step 5) of Item 8.3
- Follow the (Step 1) - (Step 5) of Item 8.7
- Follow the (Step 1) - (Step 5) of Item 8.9
- Follow the (Step 1) - (Step 2) of Item 8.10

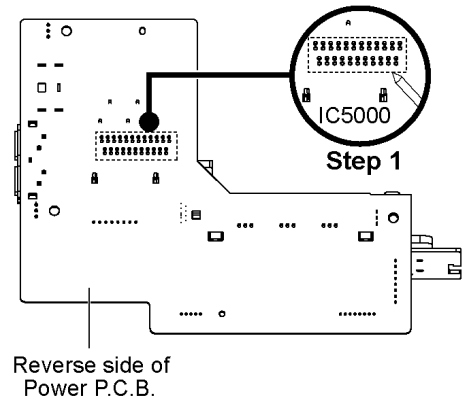


**Step 1 :** Remove 3 screws on Power P.C.B..

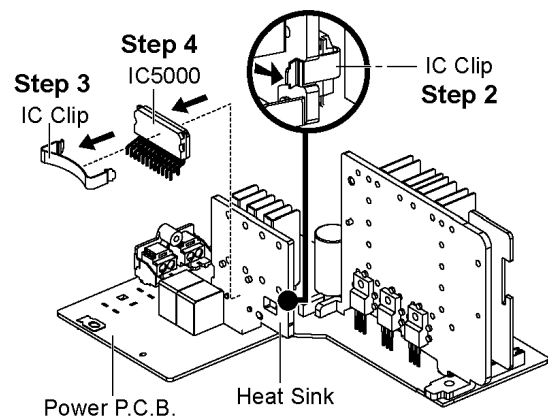
**Step 2 :** Remove Power P.C.B..

### 8.14. Replacement of Digital Amp IC (IC5000)

- Follow the (Step 1) - (Step 5) of Item 8.3
- Follow the (Step 1) - (Step 5) of Item 8.7
- Follow the (Step 1) - (Step 5) of Item 8.9
- Follow the (Step 1) - (Step 2) of Item 8.10
- Follow the (Step 1) - (Step 2) of Item 8.13



**Step 1 :** Desolder pins of Digital Amp IC (IC5000) on reverse side of Power P.C.B..



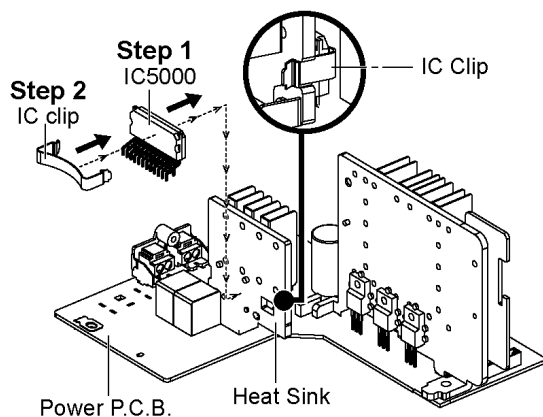
**Step 2 :** Release the IC Clip in the direction of arrow.

**Step 3 :** Remove IC Clip from the Digital Amp IC (IC5000).

**Step 4 :** Remove the Digital Amp IC (IC5000) from the Heat Sink.

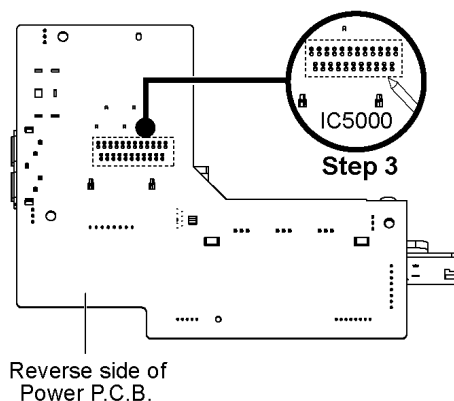
**Caution :** Handle the Heat Sink unit with caution due to its high temperature after prolonged use. Touching it may lead to injuries.

### 8.14.1. Assembly of the Digital Amp IC (IC5000)



**Step 1 :** Fix the Digital Amp IC (IC5000) to the Heat Sink.

**Step 2 :** Attach the IC clip to Digital Amp IC (IC5000).

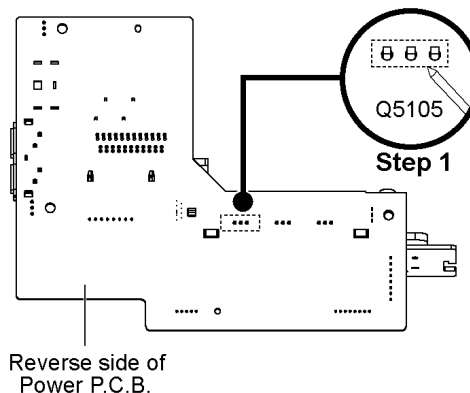


**Step 3 :** Solder pins of the Digital Amp IC (IC5000) on the reverse side of the Power P.C.B..

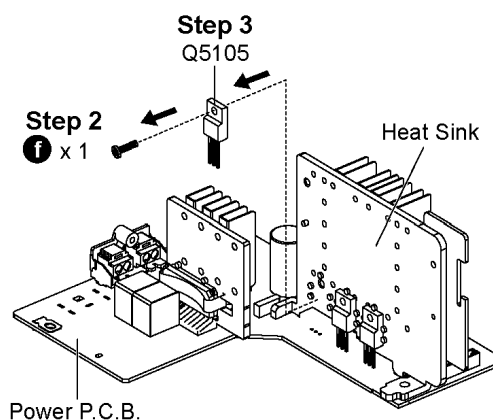
**Caution :** Ensure pins of the Digital Amp IC (IC5000) are properly seated and soldered on reverse side of power P.C.B.

### 8.15. Replacement of Transistor (Q5105)

- Follow the (Step 1) - (Step 5) of Item 8.3
- Follow the (Step 1) - (Step 5) of Item 8.7
- Follow the (Step 1) - (Step 5) of Item 8.9
- Follow the (Step 1) - (Step 2) of Item 8.10
- Follow the (Step 1) - (Step 2) of Item 8.13



**Step 1 :** Desolder pins of Transistor (Q5105) on reverse side of Power P.C.B..

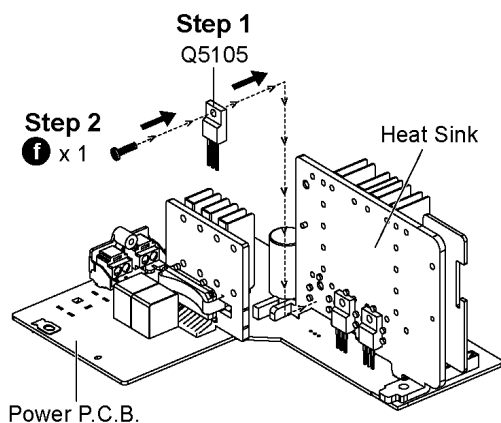


**Step 2 :** Remove 1 screw from the Transistor (Q5105) in the direction of arrows.

**Step 3 :** Remove the Transistor (Q5105) from the Heat Sink.

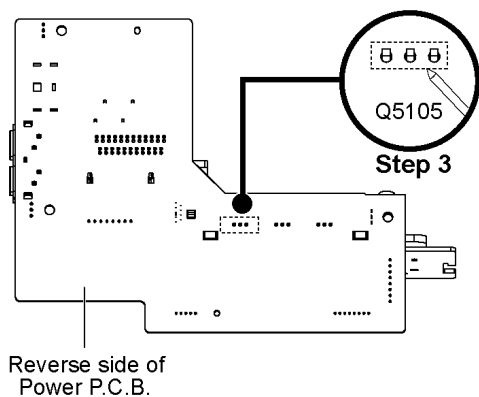
**Caution :** Handle the Heat Sink unit with caution due to its high temperature after prolonged use. Touching it may lead to injuries.

### 8.15.1. Assembly of the Transistor (Q5105)



**Step 1 :** Fix the Transistor (Q5105) to the Heat Sink.

**Step 2 :** Screw 1 screw at Transistor (Q5105) in the direction of arrows.

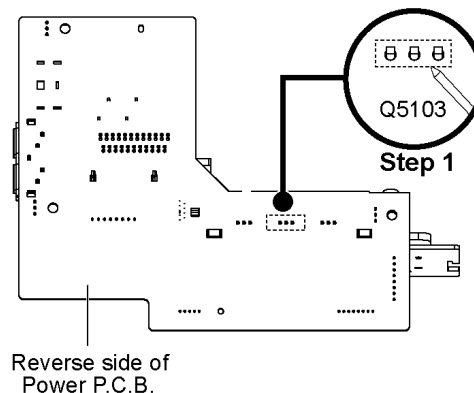


**Step 3 :** Solder pins of the Transistor (Q5105) on the reverse side of the Power P.C.B..

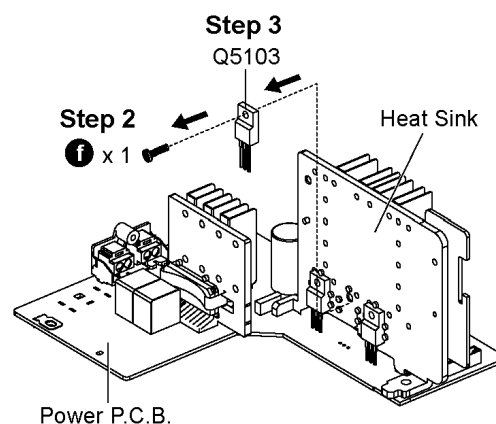
**Caution :** Ensure pins of the Transistor (Q5105) are properly seated and soldered on reverse side of Power P.C.B..

### 8.16. Replacement of Transistor (Q5103)

- Follow the (Step 1) - (Step 5) of Item 8.3
- Follow the (Step 1) - (Step 5) of Item 8.7
- Follow the (Step 1) - (Step 5) of Item 8.9
- Follow the (Step 1) - (Step 2) of Item 8.10
- Follow the (Step 1) - (Step 2) of Item 8.13



**Step 1 :** Desolder pins of Transistor (Q5103) on reverse side of Power P.C.B..

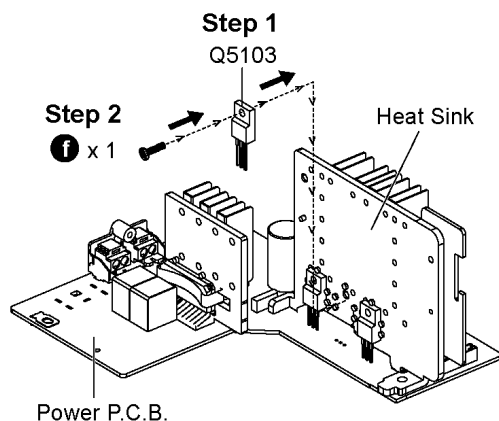


**Step 2 :** Remove 1 screw from the Transistor (Q5103) in the direction of arrows.

**Step 3 :** Remove the Transistor (Q5103) from the Heat Sink.

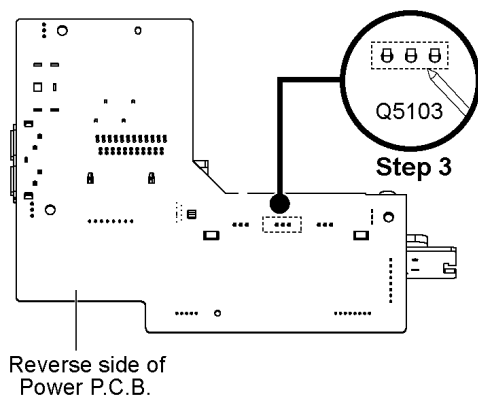
**Caution :** Handle the Heat Sink unit with caution due to its high temperature after prolonged use. Touching it may lead to injuries.

### 8.16.1. Assembly of the Transistor (Q5103)



**Step 1 :** Fix the Transistor (Q5103) to the Heat Sink.

**Step 2 :** Screw 1 screw at Transistor (Q5103) in the direction of arrows.

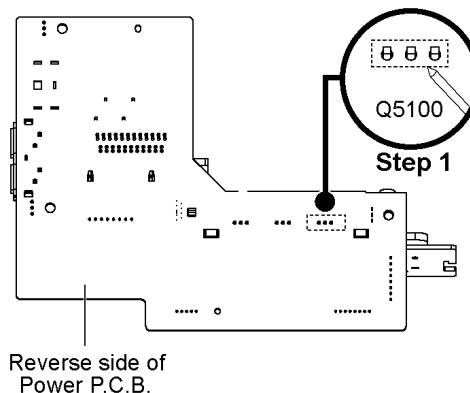


**Step 3 :** Solder pins of the Transistor (Q5103) on the reverse side of the Power P.C.B..

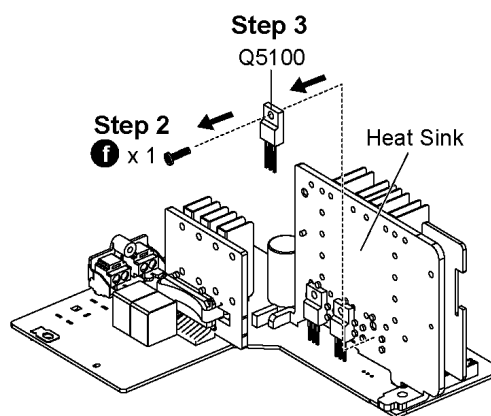
**Caution :** Ensure pins of the Transistor (Q5103) are properly seated and soldered on reverse side of Power P.C.B..

### 8.17. Replacement of Transistor (Q5100)

- Follow the (Step 1) - (Step 5) of Item 8.3
- Follow the (Step 1) - (Step 5) of Item 8.7
- Follow the (Step 1) - (Step 5) of Item 8.9
- Follow the (Step 1) - (Step 2) of Item 8.10
- Follow the (Step 1) - (Step 2) of Item 8.13



**Step 1 :** Desolder pins of Transistor (Q5100) on reverse side of Power P.C.B..

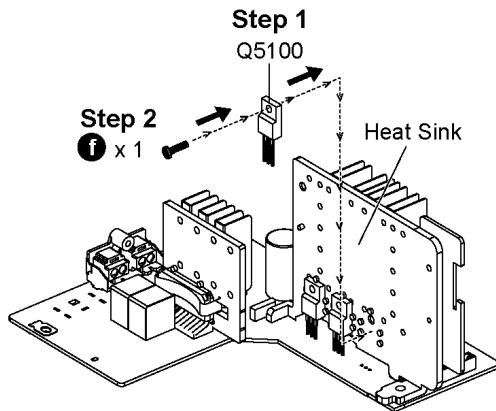


**Step 2 :** Remove 1 screw from the Transistor (Q5100) in the direction of arrows.

**Step 3 :** Remove the Transistor (Q5100) from the Heat Sink.

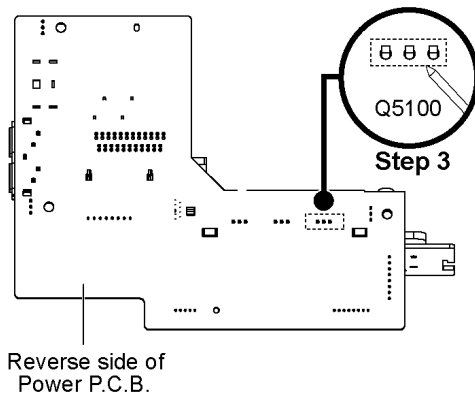
**Caution :** Handle the Heat Sink unit with caution due to its high temperature after prolonged use. Touching it may lead to injuries.

### 8.17.1. Assembly of the Transistor (Q5100)



**Step 1 :** Fix the Transistor (Q5100) to the Heat Sink.

**Step 2 :** Screw 1 screw at Transistor (Q5100) in the direction of arrows.

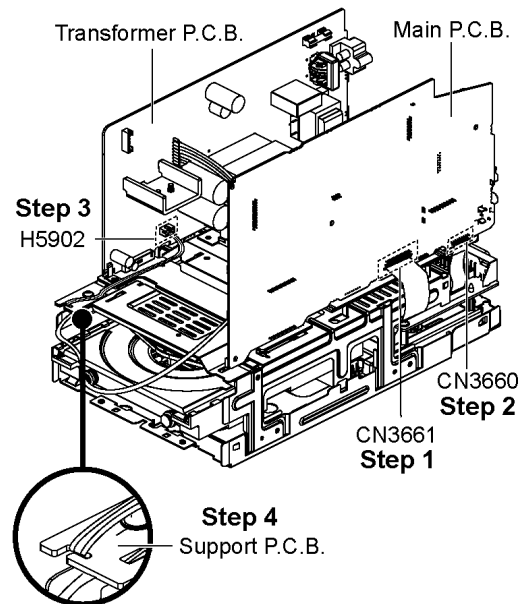


**Step 3 :** Solder pins of the Transistor (Q5100) on the reverse side of the Power P.C.B..

**Caution :** Ensure pins of the Transistor (Q5100) are properly seated and soldered on reverse side of Power P.C.B..

### 8.18. Disassembly of Inner Chassis

- Follow the (Step 1) - (Step 5) of Item 8.3
- Follow the (Step 1) - (Step 8) of Item 8.4
- Follow the (Step 1) - (Step 5) of Item 8.7

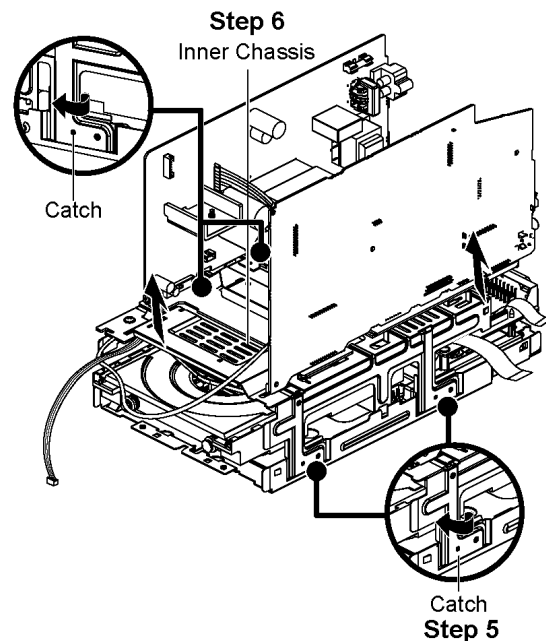


**Step 1 :** Detach 25P FFC cable (CN3661) at the connectors on Main P.C.B..

**Step 2 :** Detach 14P FFC cable (CN3660) at the connectors on Main P.C.B..

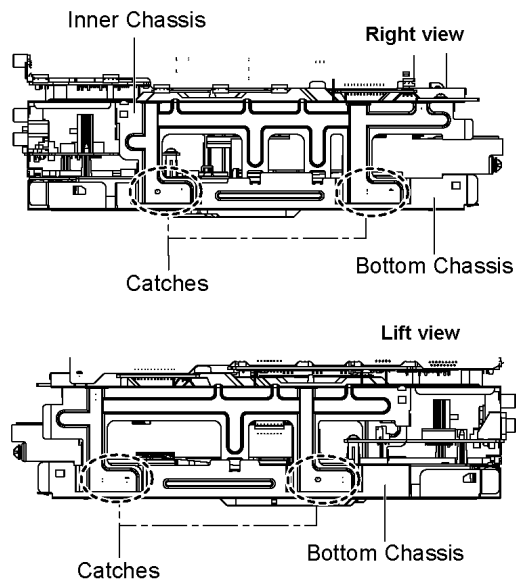
**Step 3 :** Detach 3P cable (H5902) at the connector on Transformer P.C.B..

**Step 4 :** Remove 3P cable from Support P.C.B..



**Step 5 :** Release the Catch at each side of the Inner Chassis.

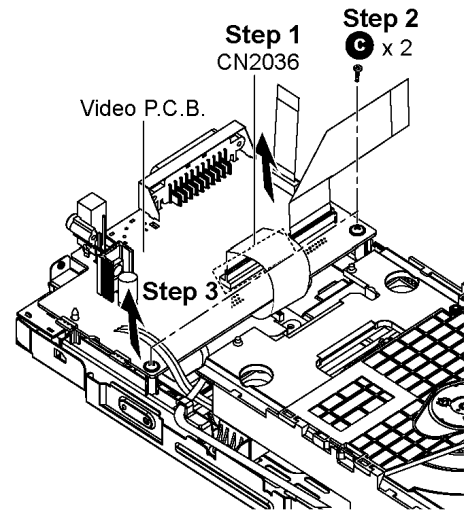
**Step 6 :** Remove Inner Chassis as arrows shown.



**Note:** During reassembling procedures, ensure Inner Chassis are properly caught onto Bottom Chassis.

## 8.19. Disassembly of Video P.C.B.

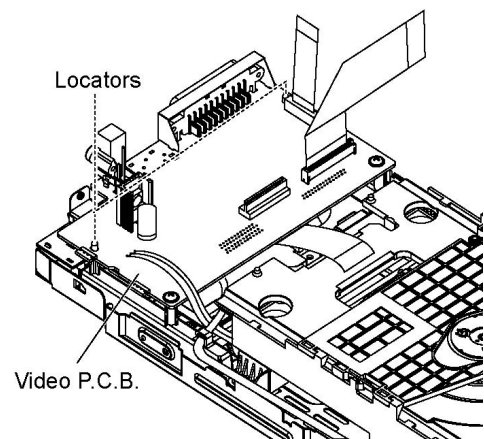
- Follow the (Step 1) - (Step 5) of Item 8.3
- Follow the (Step 1) - (Step 8) of Item 8.4
- Follow the (Step 1) - (Step 5) of Item 8.7
- Follow the (Step 1) - (Step 6) of Item 8.18



**Step 1 :** Detach 50P FFC cable at the connector (CN2036) on Video P.C.B..

**Step 2 :** Remove 2 screws on Video P.C.B..

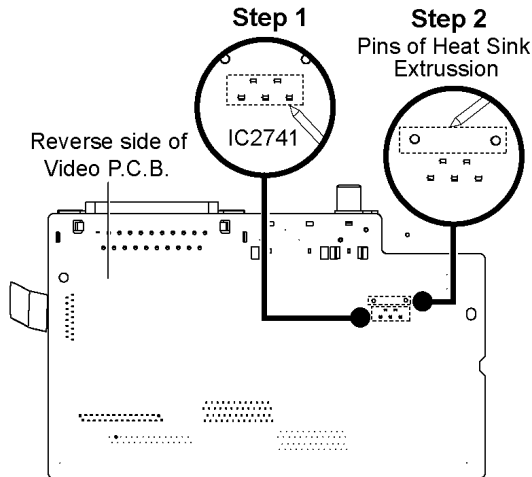
**Step 3 :** Remove Video P.C.B. as the direction of the arrows.



**Note:** During reassembly procedures, ensure the Video P.C.B. seated properly at locators.

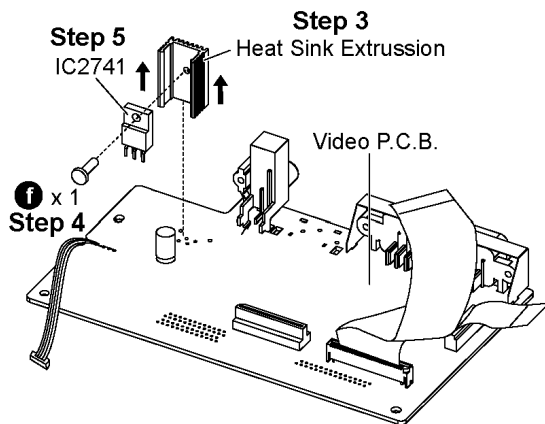
## 8.20. Replacement of DC-DC Converter IC (IC2741)

- Follow the (Step 1) - (Step 5) of Item 8.3
- Follow the (Step 1) - (Step 8) of Item 8.4
- Follow the (Step 1) - (Step 5) of Item 8.7
- Follow the (Step 1) - (Step 6) of Item 8.18
- Follow the (Step 1) - (Step 3) of Item 8.19



**Step 1 :** Desolder pins of DC-DC Converter IC (IC2741) on reverse side of Video P.C.B..

**Step 2 :** Desolder pins of the Heat Sink Extrusion.



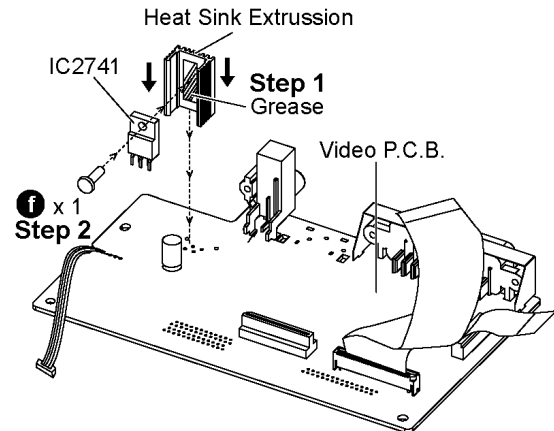
**Step 3 :** Remove the Heat Sink Extrusion in the direction of arrow.

**Step 4 :** Remove 1 screw from the DC-DC Converter IC (IC2741).

**Step 5 :** Remove the DC-DC Converter IC (IC2741) from the Heat Sink Extrusion.

**Caution :** Handle the Heat Sink Extrusion with caution due to its high temperature after prolonged use. Touching it may lead to injuries.

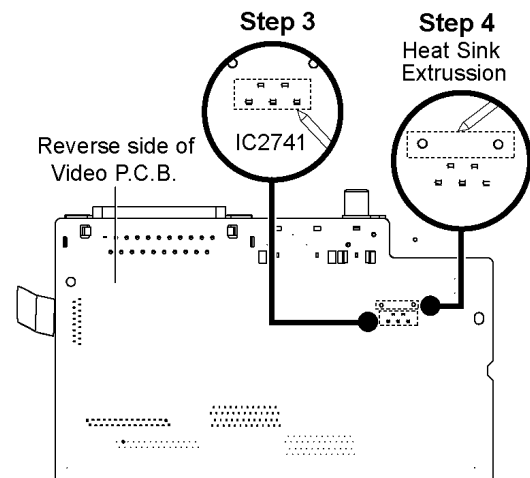
### 8.20.1. Assembly of DC-DC Converter IC (IC2741)



**Step 1 :** Apply Grease to the Heat Sink Extrusion.

**Step 2 :** Fix and screw the DC-DC Converter IC (IC2741) to the Heat Sink Extrusion.

**Special Note :** Ensure the DC-DC Converter IC (IC2741) is tightly screwed to the Heat Sink Extrusion.



**Step 3 :** Solder pins of the DC-DC Converter IC (IC2741) on the reverse side of the Video P.C.B..

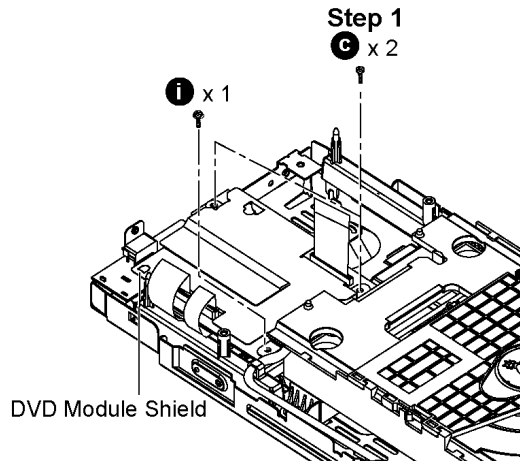
**Step 4 :** Solder pins of the Heat Sink Extrusion on the reverse side of the Video P.C.B..

**Caution :** Ensure pins of the DC-DC Converter IC (IC2741) are properly seated and soldered on reverse side of Video P.C.B..

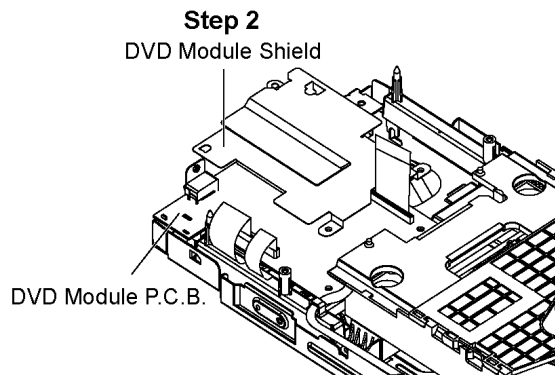
## 8.21. Disassembly of DVD Module P.C.B.

- Follow the (Step 1) - (Step 5) of Item 8.3
- Follow the (Step 1) - (Step 8) of Item 8.4
- Follow the (Step 1) - (Step 5) of Item 8.7
- Follow the (Step 1) - (Step 6) of Item 8.18
- Follow the (Step 1) - (Step 3) of Item 8.19

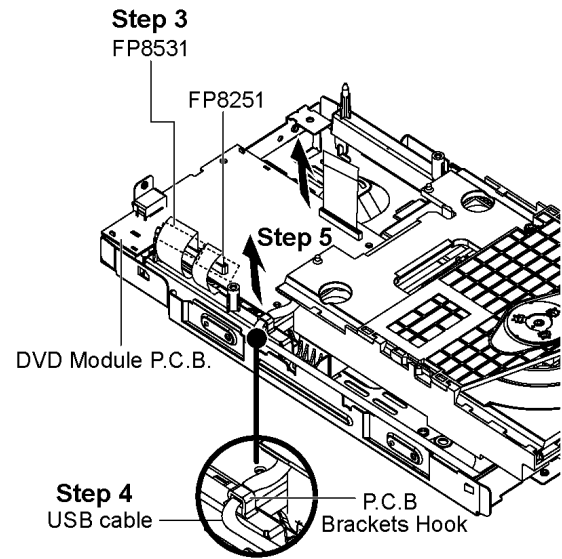
- Disassembly of DVD Module Shield



**Step 1 :** Remove 3 screws on the DVD Module Shield.



**Step 2 :** Remove DVD Module Shield.



**Step 3 :** Detach 26P FFC cable (FP8531) and 7P FFC cable (FP8251) at the connectors on DVD Module P.C.B..

**Step 4 :** Remove USB cable from P.C.B. Brackets Hook as shown.

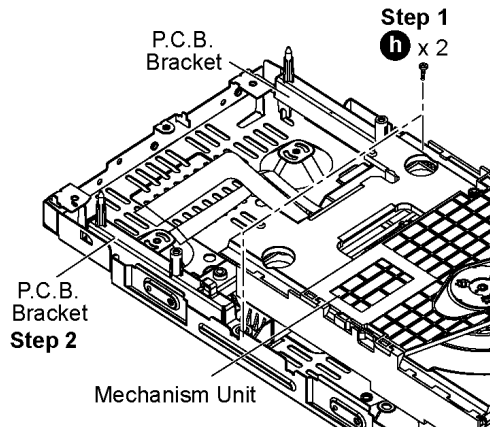
**Step 5 :** Remove DVD Module P.C.B. as the direction of the arrows.

**Note:** During reassembling procedures, ensure the DVD Module P.C.B. is seated properly at the locators and P.C.B. Bracket's Hook.

## 8.22. Disassembly of Mechanism Unit

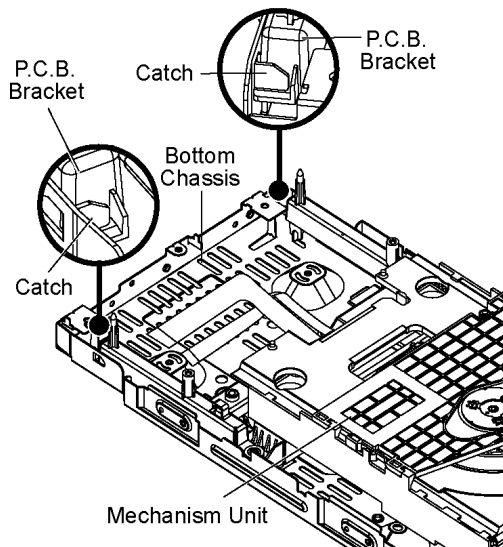
- Follow the (Step 1) - (Step 5) of Item 8.3
- Follow the (Step 1) - (Step 8) of Item 8.4
- Follow the (Step 1) - (Step 5) of Item 8.7
- Follow the (Step 1) - (Step 6) of Item 8.18
- Follow the (Step 1) - (Step 3) of Item 8.19
- Follow the (Step 1) - (Step 5) of Item 8.21

- Disassembly of P.C.B. Bracket

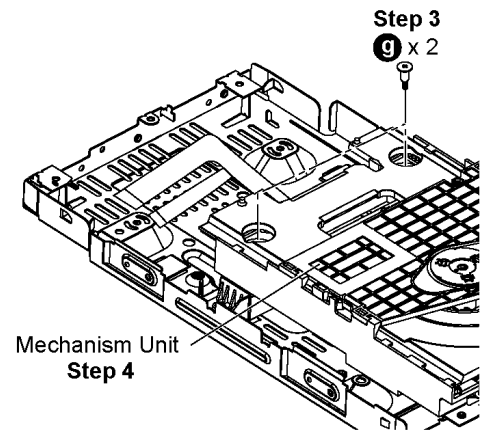


**Step 1 :** Remove 2 screws at the P.C.B. Bracket.

**Step 2 :** Remove P.C.B. Bracket.



**Note:** During reassembling procedures, ensure P.C.B. Bracket is properly caught under the Bottom Chassis's Hooks.



**Step 3 :** Remove 2 screws from the Mechanism Unit.

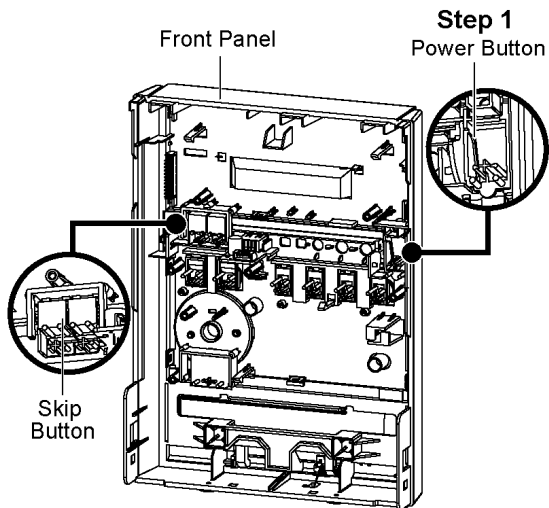
**Step 4 :** Remove Mechanism Unit.

**Note 1:** During reassembling procedures, ensure the FFC cable are underneath the P.C.B. bracket.

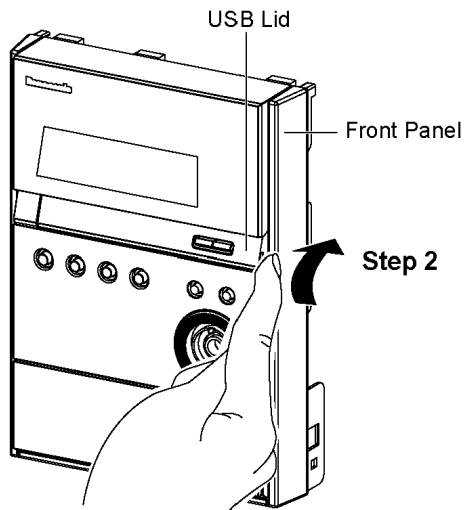
**Note 2:** For Disassembly and assembly of traverse unit, Please refer to original service manual DLS6 Order No. MD0801003CE.

## 8.23. Disassembly of USB Lid

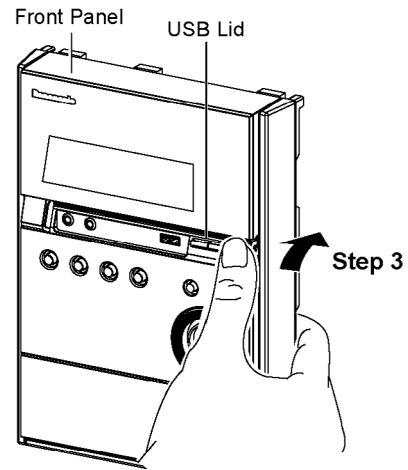
- Follow the (Step 1) - (Step 5) of Item 8.3
- Follow the (Step 1) - (Step 8) of Item 8.4
- Follow the (Step 1) - (Step 5) of Item 8.5



**Step 1 :** Remove Power Button and Skip Button from Front Panel.

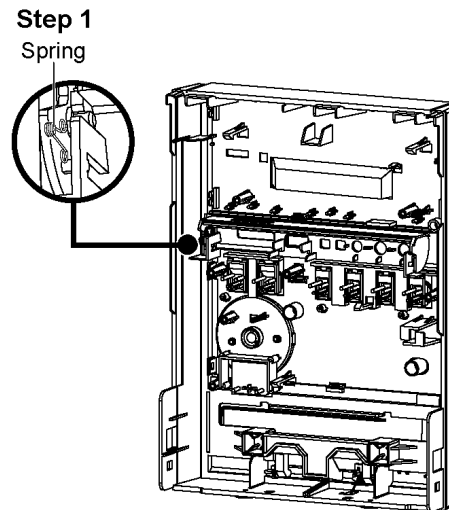


**Step 2 :** Lift up USB Lid as arrow shown.



**Step 3:** Press USB Lid at the right side as arrow shown.

- Disassembly of USB Lid Spring

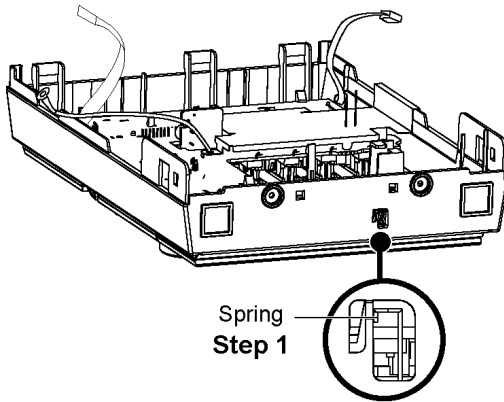


**Step 1 :** Remove the USB Lid Spring.

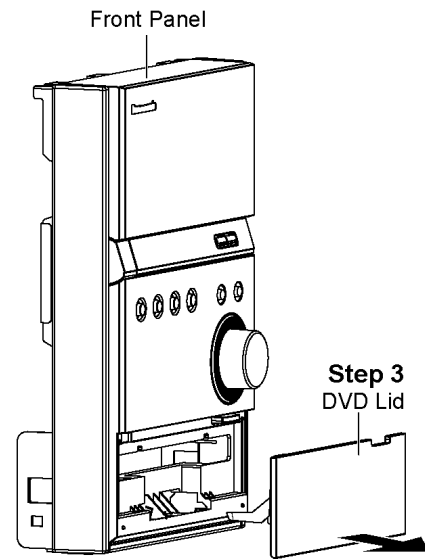
**Caution :** Keep the USB Lid Spring unit in safe place.

## 8.24. Disassembly of DVD Lid

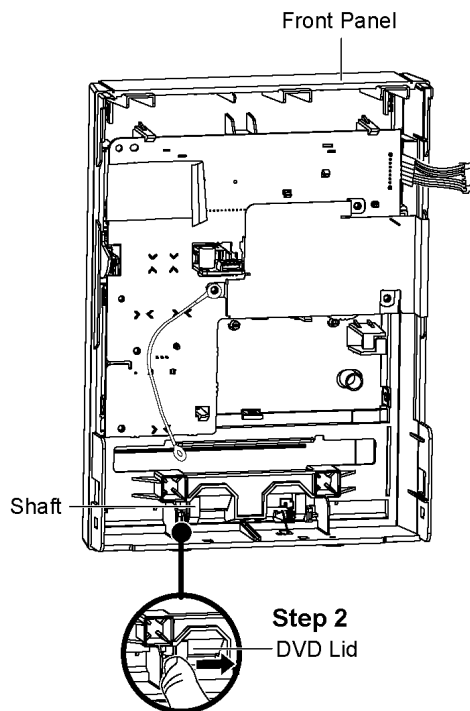
- Follow the (Step 1) - (Step 5) of Item 8.3
- Follow the (Step 1) - (Step 8) of Item 8.4



**Step 1 :** Release the Spring.



**Step 3:** Remove DVD Lid as arrow shown.

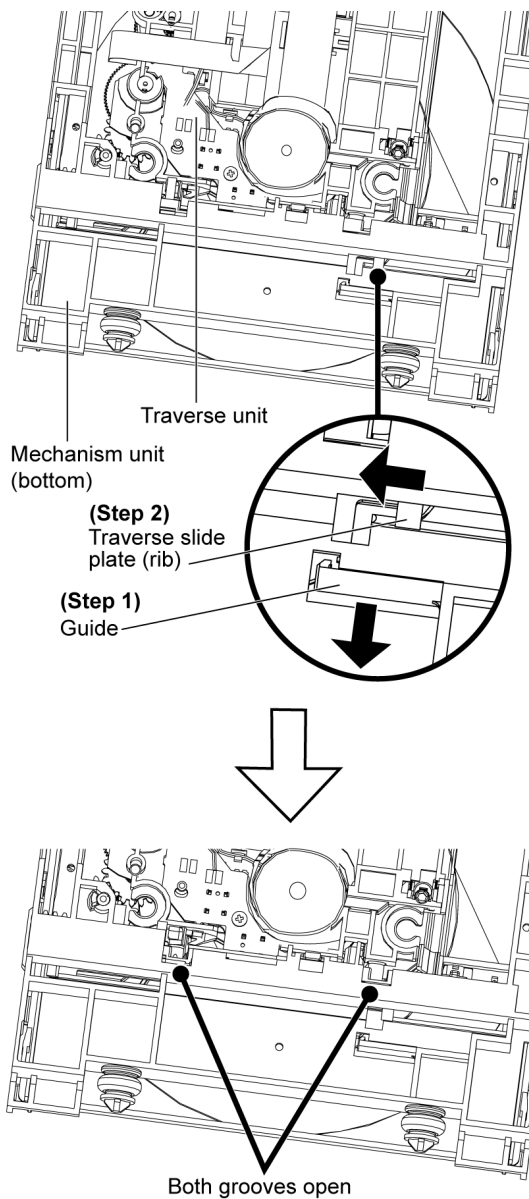


**Step 2 :** Push the Shaft of the DVD Lid in the direction of arrow.

## 9 Assembling and Disassembling of Mechanism Unit

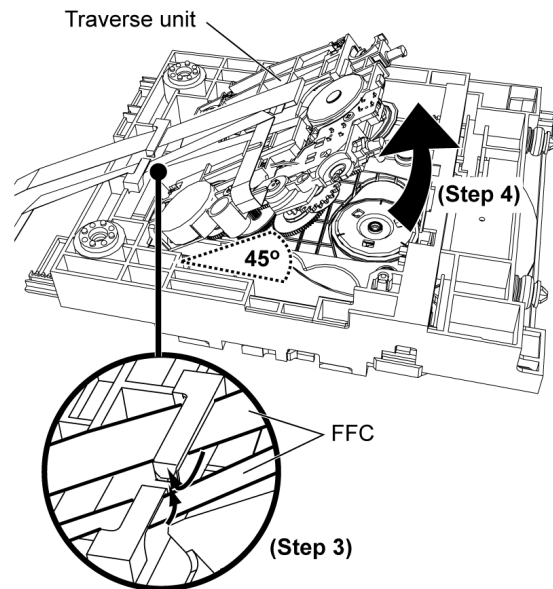
### 9.1. Disassembling Procedures

#### 9.1.1. Disassembly of traverse unit



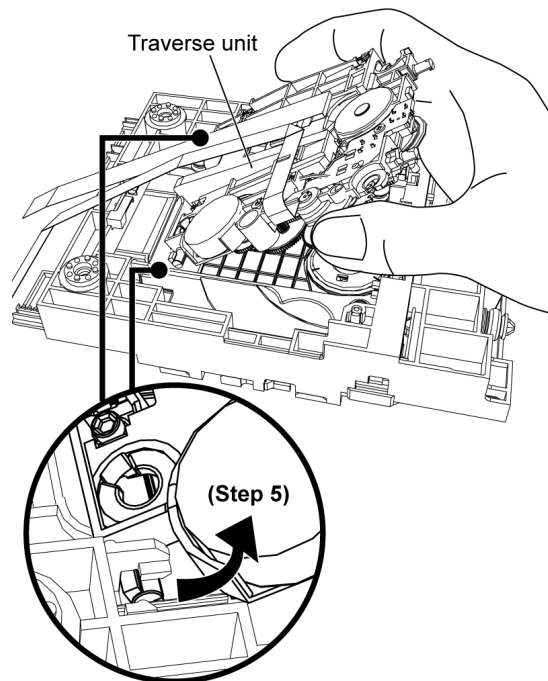
Step 1: Release the guide.

Step 2: Push the traverse slide plate (rib), ensure both grooves are opened.



Step 3: Release the FFC as arrows shown.

Step 4: Lift the traverse unit up by approximately 45° as shown.



Step 5: Slide out the traverse unit as arrow shown.

#### Caution:

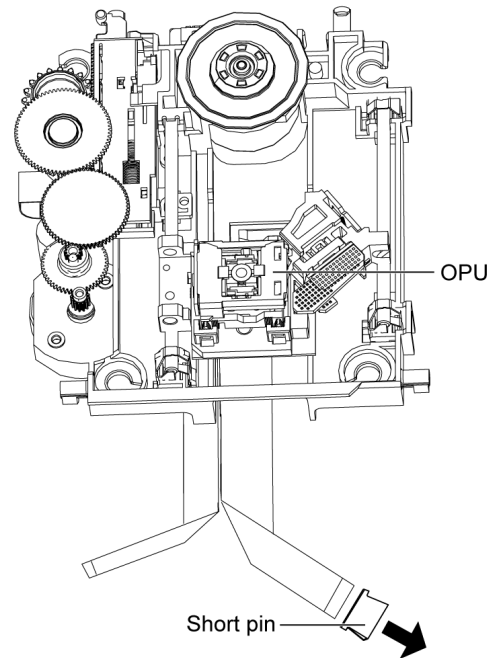
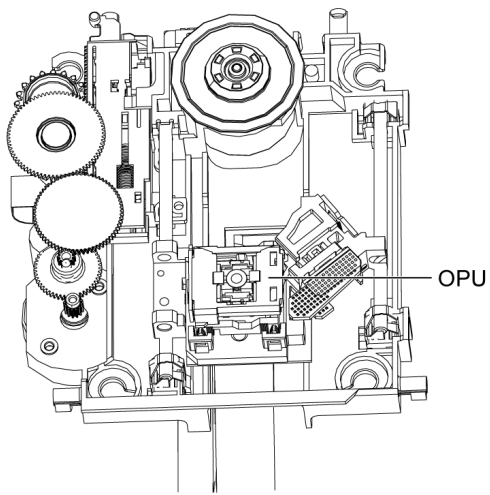
Ensure the OPU is face upwards, avoid touching the surface of the traverse unit.

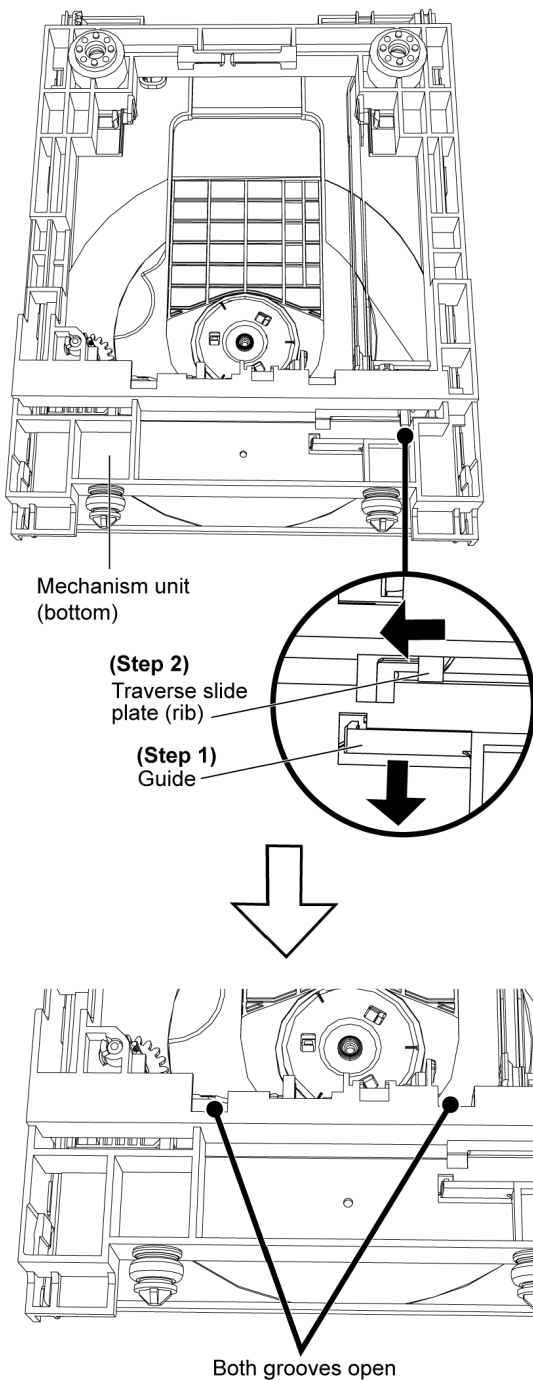
## 9.2. Assembling Procedure

### 9.2.1. Assembly of traverse unit

**Caution:**

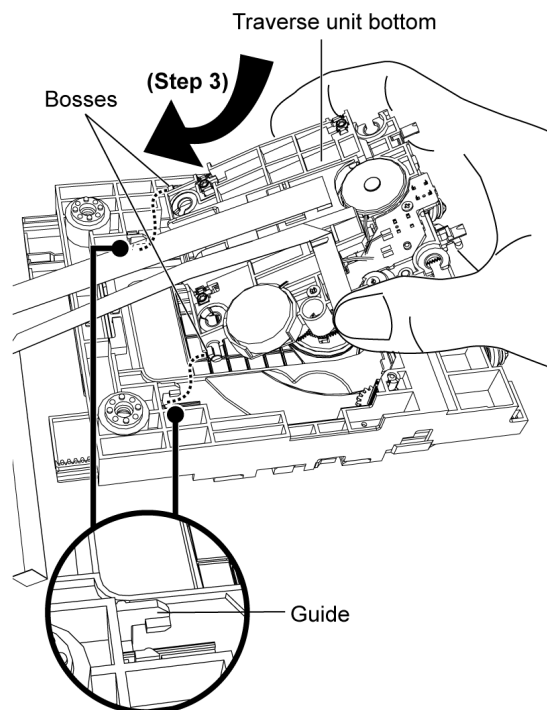
- Removal of the short pin is necessary for replacement of new traverse unit.





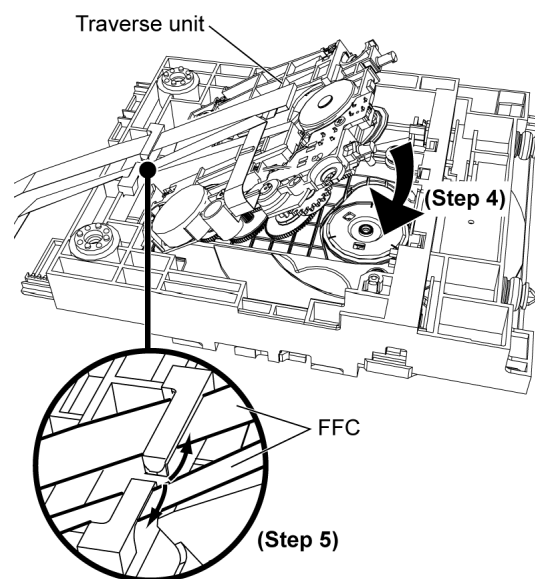
Step 1: Release the guide.

Step 2: Push the traverse slide plate (rib), ensure both grooves are opened.



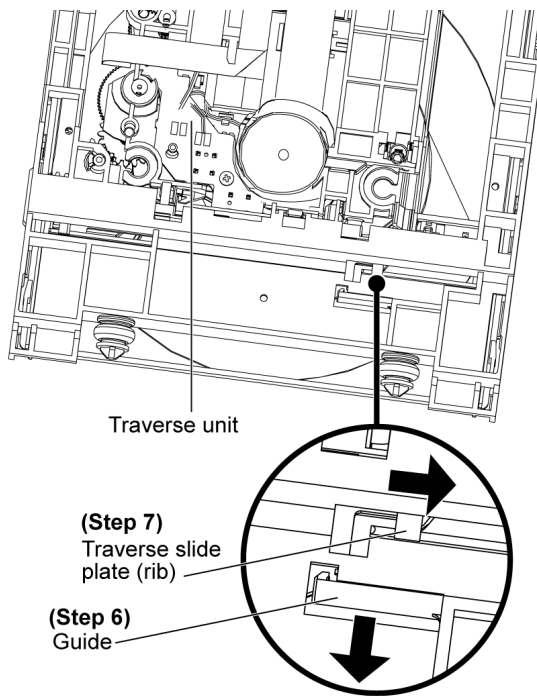
Step 3: Slot the traverse unit at approximately 45° into the mecha chassis as arrow shown.

**Note:** Ensure the bosses fix exactly onto the guides.



Step 4: Place down the traverse unit.

Step 5: Place the FFC as arrows shown.



Step 6: Release the guide.

Step 7: Push the traverse slide plate (rib) to lock the traverse unit in.

# 10 Service Fixture and Tools

Prepare service tools before process service position.

| Service Tools                                |                             | Remarks  |
|----------------------------------------------|-----------------------------|----------|
| Panel P.C.B. (CN6001) - Main P.C.B. (CN3720) | REEX0919 (24 pin FFC cable) | [M](RTL) |
| Video P.C.B. (CN2035) - Main P.C.B. (CN3661) | REEX0920 (25 pin FFC cable) | [M](RTL) |
| Video P.C.B. (CN2034) - Main P.C.B. (CN3660) | REEX0921 (14 pin FFC cable) | [M](RTL) |
| Bride P.C.B. (CN4801) - Main P.C.B. (CN3722) | REXX0695 (13 pin cable)     | [M](RTL) |

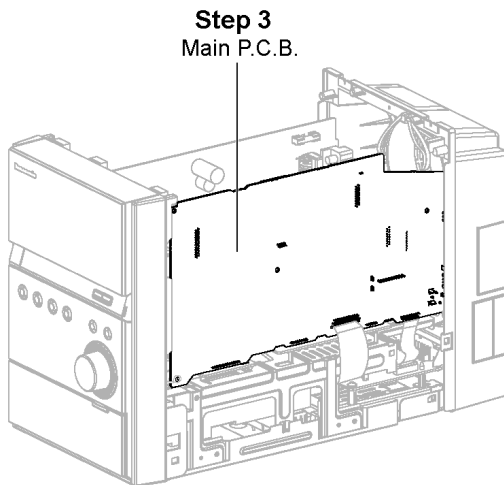
# 11 Service Position

Note: For description of the disassembly procedures, see the Section 8

## 11.1. Checking & Repairing Main P.C.B

**Step 1 :** Remove Top Panel.

**Step 2 :** Remove Rear Panel and position it according to the diagram show.

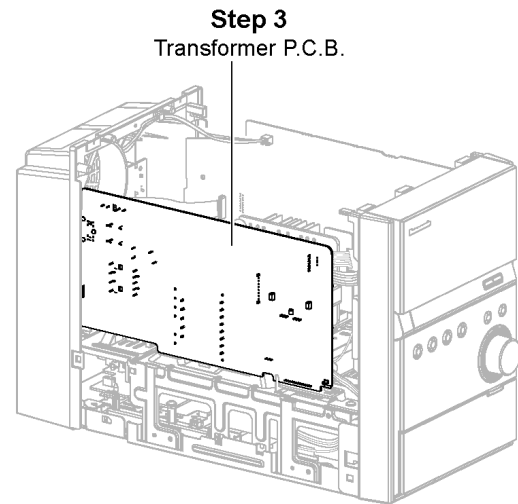


**Step 3 :** Main P.C.B. can be checked at its original position.

## 11.2. Checking & Repairing Transformer P.C.B

**Step 1 :** Remove Top Panel.

**Step 2 :** Remove Rear Panel and position it according to the diagram show.



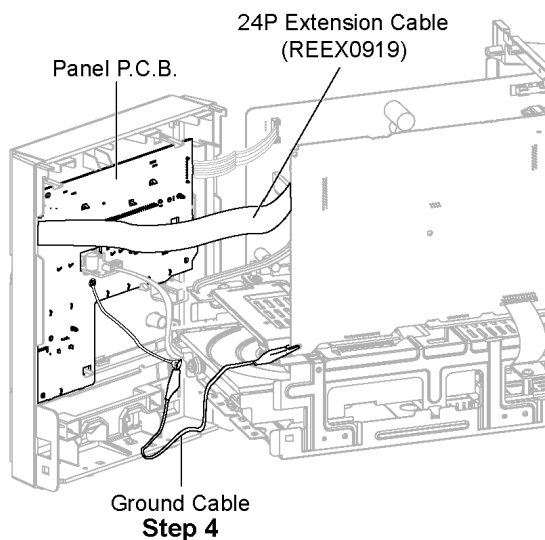
**Step 3 :** Transformer P.C.B. can be checked at its original position.

## 11.3. Checking & Repairing Panel P.C.B

**Step 1 :** Remove Top Panel.

**Step 2 :** Remove Front Panel and position it according to the diagram show.

**Step 3 :** Remove 3 screws to remove Shield Plate.



**Step 4 :** Attach original cable with Ground Cable.

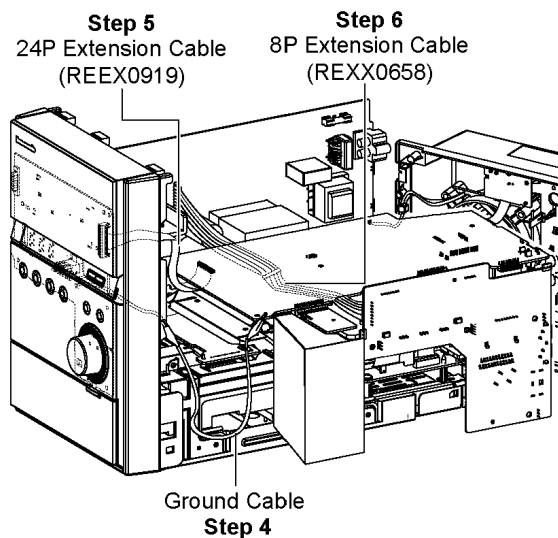
**Step 5 :** Attach extension cable REEX0919 (24P FFC cable from CN6001 to CN3720).

## 11.4. Checking & Repairing Power P.C.B

**Step 1 :** Remove Top Panel.

**Step 2 :** Remove Rear Panel.

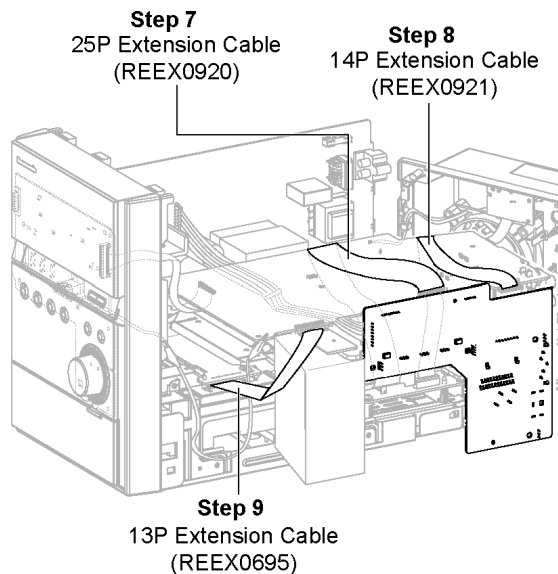
**Step 3 :** Remove 3 screws from Power P.C.B..



**Step 4 :** Attach original cable with Ground cable.

**Step 5 :** Attach extension cable REEX0919 (24P FFC cable from CN6001 to CN3720).

**Step 6 :** Attach original cable with extension cable REXX0658 (8P cable from CN5903 to CN5104).



**Step 7 :** Attach extension cable REEX0920 (25P FFC cable from CN2035 to CN3661).

**Step 8 :** Attach extension cable REEX0921 (14P FFC cable from CN2034 to CN3660).

**Step 9 :** Attach extension cable REEX0695 (13P FFC cable from CN4801 to CN3722).

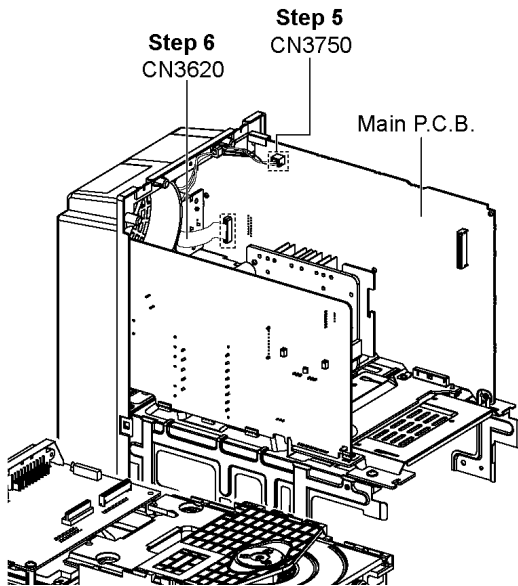
## 11.5. Checking & Repairing Video P.C.B

**Step 1 :** Remove Top Panel.

**Step 2 :** Remove Front Panel.

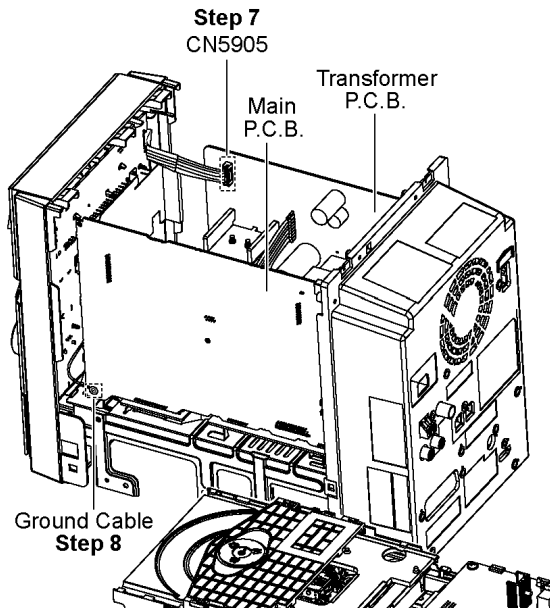
**Step 3 :** Remove Rear Panel.

**Step 4 :** Remove Inner Chassis.



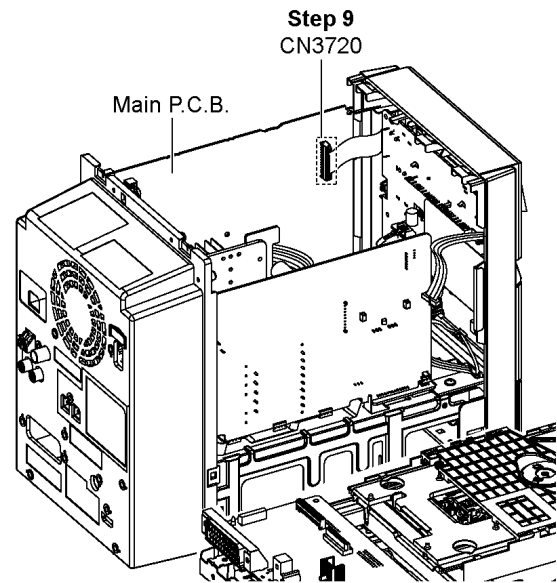
**Step 5 :** Connect 2P cable at the connector (CN3750) on Main P.C.B..

**Step 6 :** Connect 14P FFC cable at the connector (CN3620) on Main P.C.B..

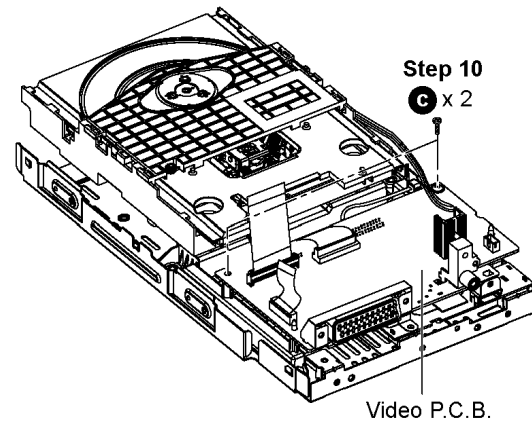


**Step 7 :** Connect 7P cable at the connector (CN5905) on Transformer P.C.B..

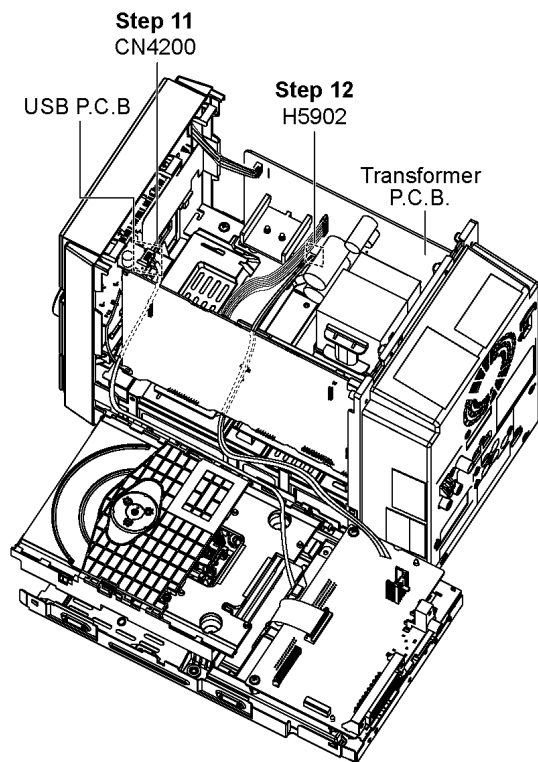
**Step 8 :** Fit Ground Cable with 1 screw to Main P.C.B..



**Step 9 :** Connect 24P FFC cable at the connector (CN3720) on Main P.C.B..

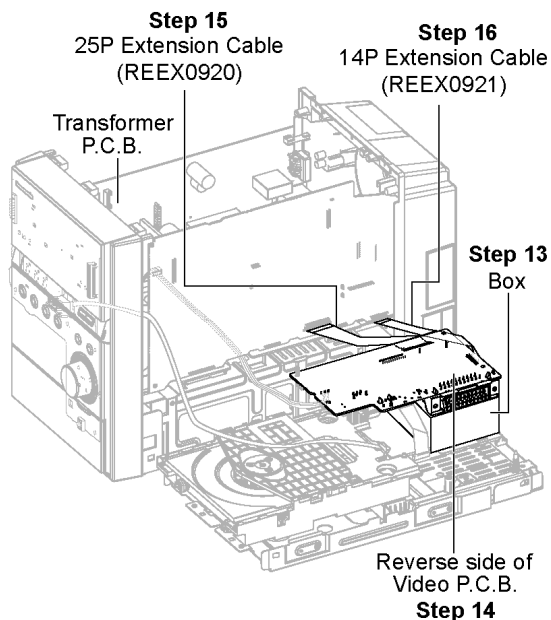


**Step 10 :** Remove 2 screws on the Video P.C.B..



**Step 11 :** Connect 5P cable at the connector (CN4200) on USB P.C.B..

**Step 12:** Connect 3P cable at the connector (H5902) on Transformer P.C.B..



**Step 13 :** Place a box underneath the Video P.C.B..

**Step 14 :** Flip over Reverse side of Video P.C.B..

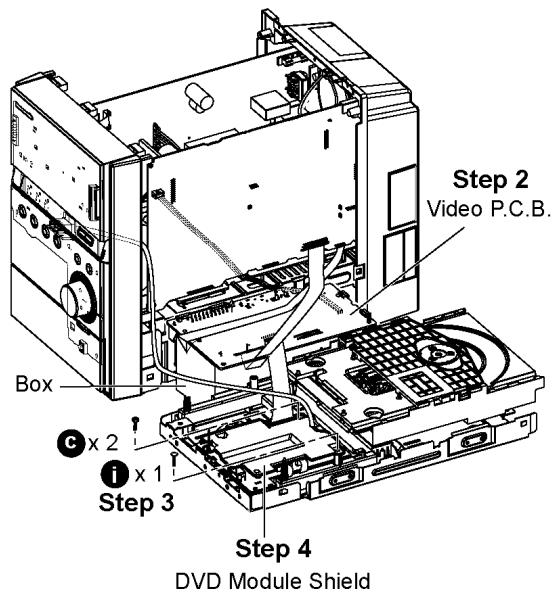
**Step 15 :** Attach extension cable REEX0920 (25P FFC cable from CN2035 to CN3661).

**Step 16 :** Attach extension cable REEX0921 (14P cable from CN2034 to CN3660).

## 11.6. Checking & Repairing DVD Module P.C.B

- Servicing Side A of DVD Module P.C.B.

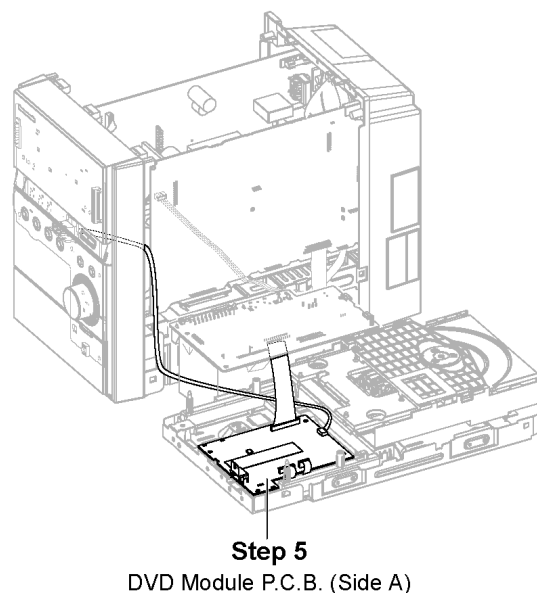
**Step 1 :** Follow step 1 - 16 of item 11.5.



**Step 2 :** Position Video P.C.B. according to the diagram shown.

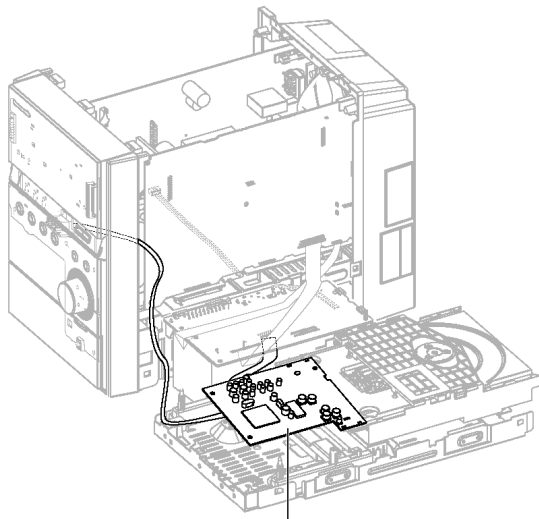
**Step 3 :** Remove 3 screws from the DVD Module Shield.

**Step 4 :** Remove DVD Module Shield.



**Step 5 :** Check and Repair side A according to the diagram shown..

- Servicing Side B of DVD Module P.C.B.



**Step 6**  
DVD Module P.C.B. (Side B)

**Step 6 :** Check and Repair side B according to the diagram shown.

# 12 Voltage Measurement & Waveform Chart

## Note:

- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard.  
Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.
- Circuit voltage and waveform described herein shall be regarded as reference information when probing defect point because it may differ from actual measuring value due to difference of Measuring instrument and its measuring condition and product itself.

## 12.1. Voltage Measurement

### 12.1.1. PANEL P.C.B.

| Ref No. | IC6000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|---------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MODE    | 1      | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    |
| CD PLAY | 0      | 0     | 0     | 0     | 0     | 1.7   | 2.0   | 3.8   | 2.1   | 2.5   | 1.4   | 0     | 5.1   | -24.5 | -24.5 | -19.8 | -22.1 | -15.0 | -22.1 | -12.8 |
| STANDBY | 0.1    | 0.1   | 0.1   | 0.1   | 0     | 0.1   | 0     | 0     | 0     | 0.1   | 0.1   | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Ref No. | IC6000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| MODE    | 21     | 22    | 23    | 24    | 25    | 26    | 27    | 28    | 29    | 30    | 31    | 32    | 33    | 34    | 35    | 36    | 37    | 38    | 39    | 40    |
| CD PLAY | -24.5  | -25.5 | -15.0 | -17.6 | -17.3 | -24.5 | -24.5 | -24.5 | -19.7 | -25.0 | -12.7 | -12.7 | -22.4 | -22.3 | -22.3 | -22.3 | -22.3 | -22.3 | -22.3 | -22.3 |
| STANDBY | 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Ref No. | IC6000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| MODE    | 41     | 42    | 43    | 44    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| CD PLAY | -22.3  | -22.2 | 5.1   | 0     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| STANDBY | 0      | 0     | 0     | 0     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |

SA-PM86DE/EB/EG/EF PANEL P.C.B.

### 12.1.2. VIDEO P.C.B.

| Ref No. | IC2200 |     |     |     |       |     |     |     |       |      |     |     |       |     |     |     |       |     |     |     |
|---------|--------|-----|-----|-----|-------|-----|-----|-----|-------|------|-----|-----|-------|-----|-----|-----|-------|-----|-----|-----|
| MODE    | 1      | 2   | 3   | 4   | 5     | 6   |     |     |       |      |     |     |       |     |     |     |       |     |     |     |
| CD PLAY | 0      | 2.7 | 5.2 | 2.6 | 0     | 2.6 |     |     |       |      |     |     |       |     |     |     |       |     |     |     |
| STANDBY | 0      | 0   | 0   | 0   | 0     | 0.1 |     |     |       |      |     |     |       |     |     |     |       |     |     |     |
| Ref No. | IC2201 |     |     |     |       |     |     |     |       |      |     |     |       |     |     |     |       |     |     |     |
| MODE    | 1      | 2   | 3   | 4   | 5     | 6   | 7   | 8   | 9     | 10   | 11  | 12  | 13    | 14  | 15  | 16  | 17    | 18  | 19  | 20  |
| CD PLAY | 5.2    | 0   | 0   | 2.3 | 5.1   | 1.5 | 0   | 1.5 | 2.3   | 5.2  | 2.3 | 0   | 2.3   | 4.8 | 2.2 | 5.2 | 2.3   | 2.3 | 0   | 2.4 |
| STANDBY | 0      | 0   | 0   | 0   | 0     | 0   | 0   | 0   | 0     | 0    | 0   | 0   | 0     | 0   | 0   | 0   | 0     | 0   | 0   | 0   |
| Ref No. | IC2201 |     |     |     |       |     |     |     |       |      |     |     |       |     |     |     |       |     |     |     |
| MODE    | 21     | 22  | 23  | 24  | 25    | 26  | 27  | 28  | 29    | 30   | 31  | 32  |       |     |     |     |       |     |     |     |
| CD PLAY | 2.4    | 0   | 2.4 | 2.4 | 0     | 1.4 | 1.4 | 0   | 1.5   | 1.5  | 0   | 2.4 |       |     |     |     |       |     |     |     |
| STANDBY | 0      | 0   | 0   | 0   | 0     | 0   | 0   | 0   | 0     | 0    | 0   | 0   |       |     |     |     |       |     |     |     |
| Ref No. | IC2741 |     |     |     |       |     |     |     |       |      |     |     |       |     |     |     |       |     |     |     |
| MODE    | 1      | 2   | 3   | 4   | 5     |     |     |     |       |      |     |     |       |     |     |     |       |     |     |     |
| CD PLAY | 17     | 5.2 | 0   | 1.0 | 4     |     |     |     |       |      |     |     |       |     |     |     |       |     |     |     |
| STANDBY | 0.5    | 0   | 0   | 0   | 0     |     |     |     |       |      |     |     |       |     |     |     |       |     |     |     |
| Ref No. | Q2041  |     |     |     | Q2200 |     |     |     | Q2201 |      |     |     | Q2202 |     |     |     | Q2203 |     |     |     |
| MODE    | E      | C   | B   |     | E     | C   | B   |     | E     | C    | B   |     | E     | C   | B   |     | E     | C   | B   |     |
| CD PLAY | 0      | 0   | 4.3 |     | 0     | 0   | 4.9 |     | 0     | 11.5 | 0   |     | 0     | 5.2 | 0   |     | 0     | 5   | 0   |     |
| STANDBY | 0      | 0   | 0   |     | 0     | 0   | 0   |     | 0     | 0    | 4.9 |     | 0     | 0   | 0   |     | 0     | 0   | 4.8 |     |
| Ref No. | Q2204  |     |     |     | Q2220 |     |     |     | Q2221 |      |     |     | Q2222 |     |     |     | Q2754 |     |     |     |
| MODE    | E      | C   | B   |     | E     | C   | B   |     | E     | C    | B   |     | E     | C   | B   |     | E     | C   | B   |     |
| CD PLAY | 0.9    | 0   | 0.8 |     | 0     | 0   | 5   |     | 0     | 11.5 | 0   |     | 11.6  | 17  | 12  |     | 2.6   | 4.6 | 3.2 |     |
| STANDBY | 0      | 0   | 0   |     | 0     | 0   | 0   |     | 0     | 0    | 0   |     | 0     | 0.4 | 0.4 |     | 0     | 0   | 0   |     |
| Ref No. | Q2771  |     |     |     | Q2772 |     |     |     | Q2852 |      |     |     | Q2853 |     |     |     | Q2980 |     |     |     |
| MODE    | E      | C   | B   |     | E     | C   | B   |     | E     | C    | B   |     | E     | C   | B   |     | E     | C   | B   |     |
| CD PLAY | 5      | 0   | 4.9 |     | 0     | 4.9 | 0   |     | 0     | 0.1  | 0.6 |     | 0     | 5.5 | 0.1 |     | 1.9   | 5.2 | 2.6 |     |
| STANDBY | 0      | 0   | 0   |     | 0     | 0.5 | 0   |     | 0     | 0    | 0.6 |     | 0     | 5.6 | 0   |     | 0     | 0   | 0   |     |

SA-PM86DE/EB/EG/EF VIDEO P.C.B.

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| REF NO. | Q8563  |     |     |  | Q8564  |   |     |  | Q8565 |     |     |  | QR8111 |   |     |   |   |     |  |
|---------|--------|-----|-----|--|--------|---|-----|--|-------|-----|-----|--|--------|---|-----|---|---|-----|--|
| MODE    | S      | D   | G   |  | S      | D | G   |  | S     | D   | G   |  | 1      | 2 | 3   | 4 | 5 | 6   |  |
| CD PLAY | 0      | 0.2 | 0.1 |  | 0      | 0 | 3.3 |  | 0     | 0.1 | 0.7 |  | 0      | 0 | 1.2 | 0 | 0 | 4.8 |  |
| REF NO. | QR8420 |     |     |  | QR9030 |   |     |  |       |     |     |  |        |   |     |   |   |     |  |
| MODE    | E      | C   | B   |  | E      | C | B   |  |       |     |     |  |        |   |     |   |   |     |  |
| CD PLAY | 0      | 4.3 | 0   |  | 3.3    | 0 | 3.3 |  |       |     |     |  |        |   |     |   |   |     |  |

SA-PM86DE/EB/EG/EF DVD MODULE P.C.B.

**12.1.4. MAIN P.C.B.**

| Ref No. | IC3050 |      |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |
|---------|--------|------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| MODE    | 1      | 2    | 3   | 4   | 5   | 6   | 7   | 8    |     |     |     |     |     |     |     |     |     |     |     |     |
| CD PLAY | 7.4    | 7.4  | 7.4 | 0   | 7.4 | 7.4 | 7.4 | 14.8 |     |     |     |     |     |     |     |     |     |     |     |     |
| STANDBY | 1.0    | 1.0  | 0.2 | 0   | 0   | 0.5 | 0.5 | 0.1  |     |     |     |     |     |     |     |     |     |     |     |     |
| Ref No. | IC3200 |      |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |
| MODE    | 1      | 2    | 3   | 4   | 5   | 6   | 7   | 8    | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  |
| CD PLAY | 0      | 4.6  | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6  | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 0   | 4.9 | 4.9 |
| STANDBY | 0      | 0.4  | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0    | 0   | 0   | 0   | 0   | 0.1 | 0.3 | 0.3 | 0.3 | 0.3 | 0   | 0   | 0.1 |
| Ref No. | IC3200 |      |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |
| MODE    | 21     | 22   | 23  | 24  | 25  | 26  | 27  | 28   | 29  | 30  | 31  | 32  | 33  | 34  | 35  | 36  | 37  | 38  | 39  | 40  |
| CD PLAY | 9.2    | 4.6  | 4.6 | 4.6 | 0.9 | 1.6 | 4.6 | 4.6  | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 0   | 4.6 |
| STANDBY | 0      | 0    | 0.3 | 0.3 | 0.3 | 0   | 0.3 | 0.2  | 0   | 0   | 0   | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0   | 0.3 |
| Ref No. | IC3200 |      |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |
| MODE    | 41     | 42   | 43  | 44  | 45  | 46  | 47  | 48   | 49  | 50  | 51  | 52  |     |     |     |     |     |     |     |     |
| CD PLAY | 0      | 4.6  | 0   | 4.6 | 4.6 | 4.6 | 4.6 | 0    | 0   | 4.6 | 0   | 4.6 |     |     |     |     |     |     |     |     |
| STANDBY | 0      | 0.3  | 0   | 0.3 | 0.5 | 0.2 | 0.2 | 0    | 0   | 0.2 | 0   | 0.2 |     |     |     |     |     |     |     |     |
| Ref No. | IC3251 |      |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |
| MODE    | 1      | 2    | 3   | 4   | 5   | 6   | 7   | 8    |     |     |     |     |     |     |     |     |     |     |     |     |
| CD PLAY | 7.4    | 7.4  | 7.4 | 0   | 7.4 | 7.4 | 7.4 | 14.8 |     |     |     |     |     |     |     |     |     |     |     |     |
| STANDBY | 0.4    | 0.4  | 0   | 0   | 0   | 0.4 | 0.4 | 0.1  |     |     |     |     |     |     |     |     |     |     |     |     |
| Ref No. | IC3655 |      |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |
| MODE    | 1      | 2    | 3   | 4   | 5   |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |
| CD PLAY | 0      | 5.8  | 0   | 0   | 0   |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |
| STANDBY | 0      | -0.2 | 0   | 0   | 0   |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |
| Ref No. | IC3700 |      |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |
| MODE    | 1      | 2    | 3   | 4   | 5   | 6   | 7   | 8    | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  |     |     |     |     |
| CD PLAY | 2.8    | 2.6  | 2.6 | 2.6 | 5.1 | 0   | 2.6 | 2.6  | 0   | 0   | 0   | 5.1 | 2.6 | 2.6 | 0   | 2.6 |     |     |     |     |
| STANDBY | 0.5    | 0.2  | 0.5 | 0.1 | 0.5 | 0   | 0.2 | 0.6  | 0   | 0   | 0   | 0.6 | 0.1 | 0.2 | 0   | 0.5 |     |     |     |     |
| Ref No. | IC3800 |      |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |
| MODE    | 1      | 2    | 3   | 4   | 5   | 6   | 7   | 8    | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  |
| CD PLAY | 0      | 0    | 4.9 | 4.9 | 0   | 0   | 0   | 0    | 0   | 0.7 | 0.7 | 4.9 | 2.4 | 0   | 2.4 | 4.9 | 4.9 | 4.9 | 3.6 | 0   |
| STANDBY | 0      | 0    | 4.9 | 4.9 | 0   | 0   | 0   | 0    | 0   | 0.7 | 0.7 | 4.8 | 2.4 | 0   | 2.3 | 4.9 | 4.9 | 4.8 | 3.5 | 0   |
| Ref No. | IC3800 |      |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |
| MODE    | 21     | 22   | 23  | 24  | 25  | 26  | 27  | 28   | 29  | 30  | 31  | 32  | 33  | 34  | 35  | 36  | 37  | 38  | 39  | 40  |
| CD PLAY | 0      | 4.9  | 0   | 0   | 0   | 4.3 | 0   | 4.5  | 4.2 | 1.7 | 0   | 0   | 0   | 0   | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 |
| STANDBY | 0      | 4.9  | 0   | 0   | 0   | 2   | 0   | 0    | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 4.9 | 0   | 0   |
| Ref No. | IC3800 |      |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |
| MODE    | 41     | 42   | 43  | 44  | 45  | 46  | 47  | 48   | 49  | 50  | 51  | 52  | 53  | 54  | 55  | 56  | 57  | 58  | 59  | 60  |
| CD PLAY | 0      | 4.9  | 4.9 | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.2 | 0   | 4.9 |
| STANDBY | 0      | 3.4  | 4.5 | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 4.9 | 0.3 | 0   | 4.9 |
| Ref No. | IC3800 |      |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |
| MODE    | 61     | 62   | 63  | 64  | 65  | 66  | 67  | 68   | 69  | 70  | 71  | 72  | 73  | 74  | 75  | 76  | 77  | 78  | 79  | 80  |
| CD PLAY | 4.5    | 4.9  | 4.9 | 0   | 0   | 0   | 0   | 0    | 0   | 4.9 | 4.9 | 4.9 | 0   | 4.9 | 5.5 | 0   | 0   | 0   | 0   | 4.9 |
| STANDBY | 4.9    | 4.9  | 0.5 | 0   | 0   | 0.1 | 0   | 0    | 0   | 0   | 0   | 0   | 0   | 4.9 | 5.4 | 0   | 0   | 0   | 0   | 0   |
| Ref No. | IC3800 |      |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |
| MODE    | 81     | 82   | 83  | 84  | 85  | 86  | 87  | 88   | 89  | 90  | 91  | 92  | 93  | 94  | 95  | 96  | 97  | 98  | 99  | 100 |
| CD PLAY | 2.6    | 4.9  | 0   | 0   | 3.8 | 2.1 | 2   | 0    | 1.2 | 0.4 | 4.6 | 0   | 0.2 | 0.2 | 1.6 | 0   | 4.9 | 4.9 | 4.9 | 4.8 |
| STANDBY | 0      | 4.9  | 0   | 0   | 0   | 0   | 0   | 0    | 1.2 | 0.4 | 4.5 | 0   | 0.3 | 0.3 | 1.6 | 0   | 4.9 | 4.9 | 4.9 | 4.8 |

|         |        |      |     |       |      |      |       |     |      |       |      |      |       |     |     |     |     |     |     |  |
|---------|--------|------|-----|-------|------|------|-------|-----|------|-------|------|------|-------|-----|-----|-----|-----|-----|-----|--|
| Ref No. | IC3801 |      |     |       |      |      |       |     |      |       |      |      |       |     |     |     |     |     |     |  |
| MODE    | 1      | 2    | 3   | 4     | 5    | 6    | 7     | 8   |      |       |      |      |       |     |     |     |     |     |     |  |
| CD PLAY | 0      | 0    | 0   | 0     | 0    | 0.4  | 0     | 4.9 |      |       |      |      |       |     |     |     |     |     |     |  |
| STANDBY | 0      | 0    | 0   | 0     | 0    | 0.1  | 0     | 4.9 |      |       |      |      |       |     |     |     |     |     |     |  |
| Ref No. | IC3802 |      |     |       |      |      |       |     |      |       |      |      |       |     |     |     |     |     |     |  |
| MODE    | 1      | 2    | 3   | 4     | 5    |      |       |     |      |       |      |      |       |     |     |     |     |     |     |  |
| CD PLAY | 0      | 0.1  | 0   | 4.9   | 4.9  |      |       |     |      |       |      |      |       |     |     |     |     |     |     |  |
| STANDBY | 0      | 0.4  | 0   | 4.9   | 4.9  |      |       |     |      |       |      |      |       |     |     |     |     |     |     |  |
| Ref No. | IC3803 |      |     |       |      |      |       |     |      |       |      |      |       |     |     |     |     |     |     |  |
| MODE    | 1      | 2    | 3   | 4     | 5    |      |       |     |      |       |      |      |       |     |     |     |     |     |     |  |
| CD PLAY | 5.8    | 0    | 4.6 | 0     | 3.3  |      |       |     |      |       |      |      |       |     |     |     |     |     |     |  |
| STANDBY | 0      | 0    | 0   | 0     | 0    |      |       |     |      |       |      |      |       |     |     |     |     |     |     |  |
| Ref No. | Q3060  |      |     |       |      |      | Q3065 |     |      |       |      |      | Q3160 |     |     |     |     |     |     |  |
| MODE    | 1      | 2    | 3   | 4     | 5    | 6    |       | E   | C    | B     |      | 1    | 2     | 3   | 4   | 5   | 6   |     |     |  |
| CD PLAY | 0      | 0.6  | 0   | 0     | 0.6  | 0    |       | 0   | 0    | 0.6   |      | 0    | 0.6   | 0   | 0   | 0.6 | 0   |     |     |  |
| STANDBY | 0      | 0    | 0   | 0     | 0    | 0    |       | 0   | 0    | 0     |      | 0    | 0     | 0   | 0   | 0   | 0   |     |     |  |
| Ref No. | Q3165  |      |     | Q3406 |      |      | Q3611 |     |      | Q3620 |      |      | Q3621 |     |     |     |     |     |     |  |
| MODE    | E      | C    | B   |       | E    | C    | B     |     | E    | C     | B    |      | E     | C   | B   |     | E   | C   | B   |  |
| CD PLAY | 0      | 0    | 0.6 |       | 2.3  | 0    | 0     |     | 8.8  | 13    | 9.4  |      | 0     | 0   | 4.6 |     | 0   | 0   | 0   |  |
| STANDBY | 0      | 0    | 0   |       | 0    | 0    | 0     |     | 0.5  | 0.1   | 0.1  |      | 0     | 2.9 | 0   |     | 3.8 | 0   | 3.8 |  |
| Ref No. | Q3660  |      |     |       |      |      | Q3661 |     |      |       |      |      | Q3750 |     |     |     |     |     |     |  |
| MODE    | 1      | 2    | 3   | 4     | 5    | 6    |       | 1   | 2    | 3     | 4    | 5    | 6     |     | E   | C   | B   |     |     |  |
| CD PLAY | 0      | -0.6 | 0   | 0     | -0.6 | 0    |       | 0   | -0.6 | 0     | 0    | -0.6 | 0     |     | 0   | 4.9 | 0   |     |     |  |
| STANDBY | 0      | 0.6  | 0   | 0     | 0.6  | 0    |       | 0   | 0.6  | 0     | 0    | 0.6  | 0     |     | 0   | 4.9 | 0   |     |     |  |
| Ref No. | Q3751  |      |     | Q3753 |      |      | Q3754 |     |      | Q3800 |      |      | Q3801 |     |     |     |     |     |     |  |
| MODE    | E      | C    | B   |       | E    | C    | B     |     | E    | C     | B    |      | E     | C   | B   |     | E   | C   | B   |  |
| CD PLAY | 0      | 0    | 0.2 |       | 0    | 12.2 | 0.1   |     | 12.2 | 0     | 12.2 |      |       |     |     |     | 3.3 | 1.6 | 4.9 |  |
| STANDBY | 0      | 0    | 0   |       | 0    | 0.2  | 0     |     | 0.2  | 0     | 0.2  |      |       |     |     |     | 0   | 0   | 4.9 |  |
| Ref No. | Q3802  |      |     | Q3803 |      |      | Q3804 |     |      | Q3805 |      |      | Q3806 |     |     |     |     |     |     |  |
| MODE    | E      | C    | B   |       | E    | C    | B     |     | E    | C     | B    |      | E     | C   | B   |     | E   | C   | B   |  |
| CD PLAY | 0      | 1.6  | 0   |       | 0    | 4.9  | 0     |     | 4.9  | 0     | 4.5  |      |       |     |     |     |     |     |     |  |
| STANDBY | 0      | 0    | 0   |       | 0    | 4.9  | 0     |     | 4.9  | 0     | 5.1  |      |       |     |     |     |     |     |     |  |
| Ref No. | Q3807  |      |     | Q3808 |      |      | Q3809 |     |      | Q3810 |      |      | Q3811 |     |     |     |     |     |     |  |
| MODE    | E      | C    | B   |       | E    | C    | B     |     | E    | C     | B    |      | E     | C   | B   |     | E   | C   | B   |  |
| CD PLAY | 0      | 4.8  | 0   |       | 0    | 1.7  | 0     |     | 0    | 1.2   | 0    |      | 0     | 0.9 | 0   |     | 0   | 1.8 | 0   |  |
| STANDBY | 0      | 4.8  | 0   |       | 0    | 3.7  | 0     |     | 0    | 3.8   | 0    |      | 0     | 3.5 | 0   |     | 0   | 3.9 | 0   |  |
| Ref No. | Q3812  |      |     | Q3813 |      |      | Q3814 |     |      |       |      |      |       |     |     |     |     |     |     |  |
| MODE    | E      | C    | B   |       | E    | C    | B     |     | E    | C     | B    |      |       |     |     |     |     |     |     |  |
| CD PLAY | 0      | -1.1 | 0   |       |      |      |       |     | 3.6  | 4.3   | 4    |      |       |     |     |     |     |     |     |  |
| STANDBY | 2.5    | 2.5  | 0   |       |      |      |       |     | 0.8  | 2     | 2    |      |       |     |     |     |     |     |     |  |

SA-PM86DE/EB/EG/EF MAIN P.C.B.

## 12.1.5. POWER P.C.B.

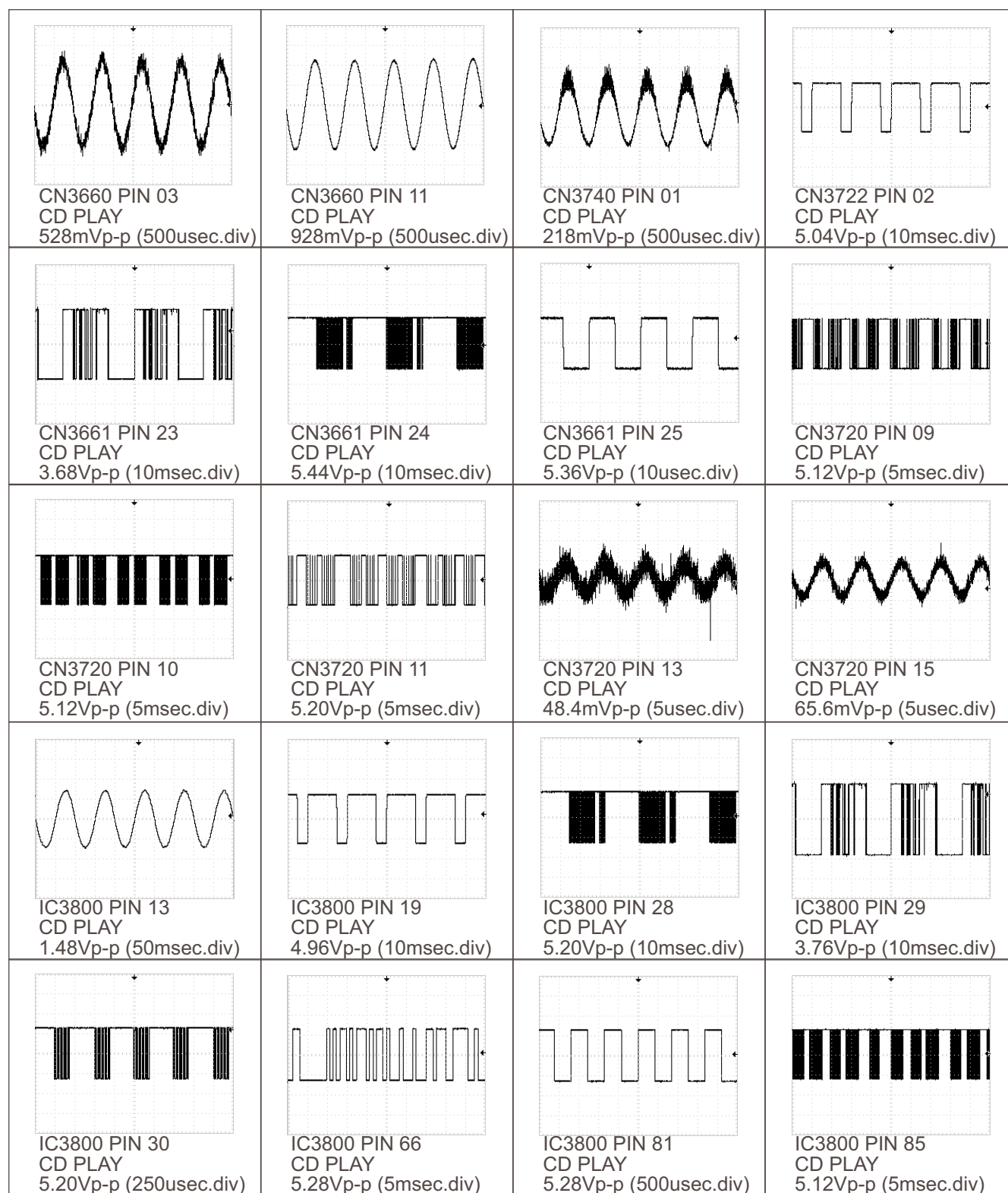
|         |        |      |      |       |      |       |       |      |       |       |       |       |       |      |       |      |       |       |       |      |
|---------|--------|------|------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|------|-------|-------|-------|------|
| Ref No. | IC5000 |      |      |       |      |       |       |      |       |       |       |       |       |      |       |      |       |       |       |      |
| MODE    | 1      | 2    | 3    | 4     | 5    | 6     | 7     | 8    | 9     | 10    | 11    | 12    | 13    | 14   | 15    | 16   | 17    | 18    | 19    | 20   |
| CD PLAY | -24.7  | 0    | 0    | 29.3  | 0    | -27.9 | -18.8 | 29.6 | 11.1  | -0.1  | -28.1 | -15.3 | -28.1 | -0.1 | 11.0  | 29.6 | -27.9 | -27.9 | 0     | 29.3 |
| STANDBY | 0      | 0    | 0    | 0     | 0    | 0     | 0.1   | 0    | 0     | 0     | 0     | 0     | 0     | 0    | 0     | 0    | 0     | 0     | 0     | 0    |
| Ref No. | IC5000 |      |      |       |      |       |       |      |       |       |       |       |       |      |       |      |       |       |       |      |
| MODE    | 21     | 22   | 23   |       |      |       |       |      |       |       |       |       |       |      |       |      |       |       |       |      |
| CD PLAY | 0      | 0    | 5.1  |       |      |       |       |      |       |       |       |       |       |      |       |      |       |       |       |      |
| STANDBY | 0      | 0    | 0    |       |      |       |       |      |       |       |       |       |       |      |       |      |       |       |       |      |
| Ref No. | Q5100  |      |      | Q5103 |      |       | Q5105 |      |       | Q5104 |       |       | Q5102 |      |       |      |       |       |       |      |
| MODE    | E      | C    | B    |       | E    | C     | B     |      | E     | C     | B     |       | E     | C    | B     |      | E     | C     | B     |      |
| CD PLAY | 15.4   | 29.1 | 14.7 |       | 33.9 | 45.7  | 29.6  |      | -42.8 | -28.1 | -46.2 |       | 0     | 0    | 4.3   |      | 0     | 0     | 4.9   |      |
| STANDBY | 0.1    | 0    | 0    |       | 0    | 0     | 0     |      | 0     | 0     | 0     |       | 0.1   | 0    | 0     |      | 0     | 4.9   | 0     |      |
| Ref No. | Q5101  |      |      | Q5604 |      |       | Q5603 |      |       | Q5601 |       |       | Q5503 |      |       |      |       |       |       |      |
| MODE    | E      | C    | B    |       | E    | C     | B     |      | E     | C     | B     |       | E     | C    | B     |      | E     | C     | B     |      |
| CD PLAY | 0      | 0    | 4.9  |       | 0.7  | 0     | 0     |      | 4.5   | 5.2   | 5.2   |       | 0     | 0    | 5.1   |      | -27.3 | -27.9 | -27.9 |      |
| STANDBY | 0      | 4.9  | 0    |       | 0    | 0.1   | 0     |      | 0     | 0     | 0     |       | 0     | 0    | 0     |      | 0     | 0     | 0     |      |
| Ref No. | Q5501  |      |      | Q5109 |      |       | Q5108 |      |       | Q5106 |       |       | Q5107 |      |       |      |       |       |       |      |
| MODE    | E      | C    | B    |       | E    | C     | B     |      | E     | C     | B     |       | E     | C    | B     |      | E     | C     | B     |      |
| CD PLAY | 0      | -1.2 | 5.2  |       | 0.1  | 0     | 4.9   |      | 0     | 0.1   | 4.9   |       | -6.1  | -5.6 | -32.0 |      | -45.6 | -46.3 | -42.7 |      |
| STANDBY | 0      | 0    | 0    |       | 0    | 4.9   | 0     |      | 0     | 4.9   | 0     |       | -0.1  | -0.1 | 0     |      | -0.1  | 0     | -0.1  |      |

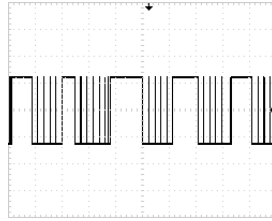
SA-PM86DE/EB/EG/EF POWER P.C.B.

## 12.1.6. TRANSFORMER P.C.B.

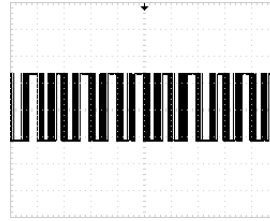
| Ref No.                               | Q5910 |       |       |  | Q5911 |       |       |  | Q5912 |      |      |  | Q5921 |      |      |  | Q5922 |      |      |  |
|---------------------------------------|-------|-------|-------|--|-------|-------|-------|--|-------|------|------|--|-------|------|------|--|-------|------|------|--|
| MODE                                  | E     | C     | B     |  | E     | C     | B     |  | E     | C    | B    |  | E     | C    | B    |  | E     | C    | B    |  |
| CD PLAY                               | -0.3  | 4.9   | 0     |  | 0     | 4.9   | -0.3  |  | 0     | 4.9  | -0.7 |  | 17.5  | 12.2 | 16.9 |  | 11.5  | 16.9 | 12.1 |  |
| STANDBY                               | -0.1  | 0.5   | 0     |  | 0     | 0.5   | -0.2  |  | 0     | -0.5 | -3.9 |  | 0.5   | 0.2  | 0.2  |  | 0     | 0.1  | 0.5  |  |
| Ref No.                               | Q5927 |       |       |  | Q5950 |       |       |  | Q5970 |      |      |  | Q5971 |      |      |  | Q5972 |      |      |  |
| MODE                                  | E     | C     | B     |  | E     | C     | B     |  | E     | C    | B    |  | E     | C    | B    |  | E     | C    | B    |  |
| CD PLAY                               | 13.7  | 5.8   | 13.1  |  | 5.1   | 13.1  | 5.6   |  | 0     | 3.6  | 0.7  |  | 5.6   | 12.7 | 6.2  |  | 0     | 0.2  | 2.7  |  |
| STANDBY                               | 0.5   | -0.1  | 0.3   |  | 0     | 0.3   | 0.4   |  | 0     | 3.5  | 0.7  |  | 5.6   | 11.6 | 6.2  |  | 0     | 5.6  | 0    |  |
| Ref No.                               | Q5990 |       |       |  | Q5991 |       |       |  |       |      |      |  |       |      |      |  |       |      |      |  |
| MODE                                  | E     | C     | B     |  | E     | C     | B     |  |       |      |      |  |       |      |      |  |       |      |      |  |
| CD PLAY                               | -25   | -46.1 | -25.6 |  | -19.6 | -17.9 | -18.6 |  |       |      |      |  |       |      |      |  |       |      |      |  |
| STANDBY                               | -0.2  | -0.5  | -0.5  |  | 0     | 0.3   | 0.3   |  |       |      |      |  |       |      |      |  |       |      |      |  |
| SA-PM86DE/EB/EG/EF TRANSFORMER P.C.B. |       |       |       |  |       |       |       |  |       |      |      |  |       |      |      |  |       |      |      |  |

## 12.2. Waveform Chart





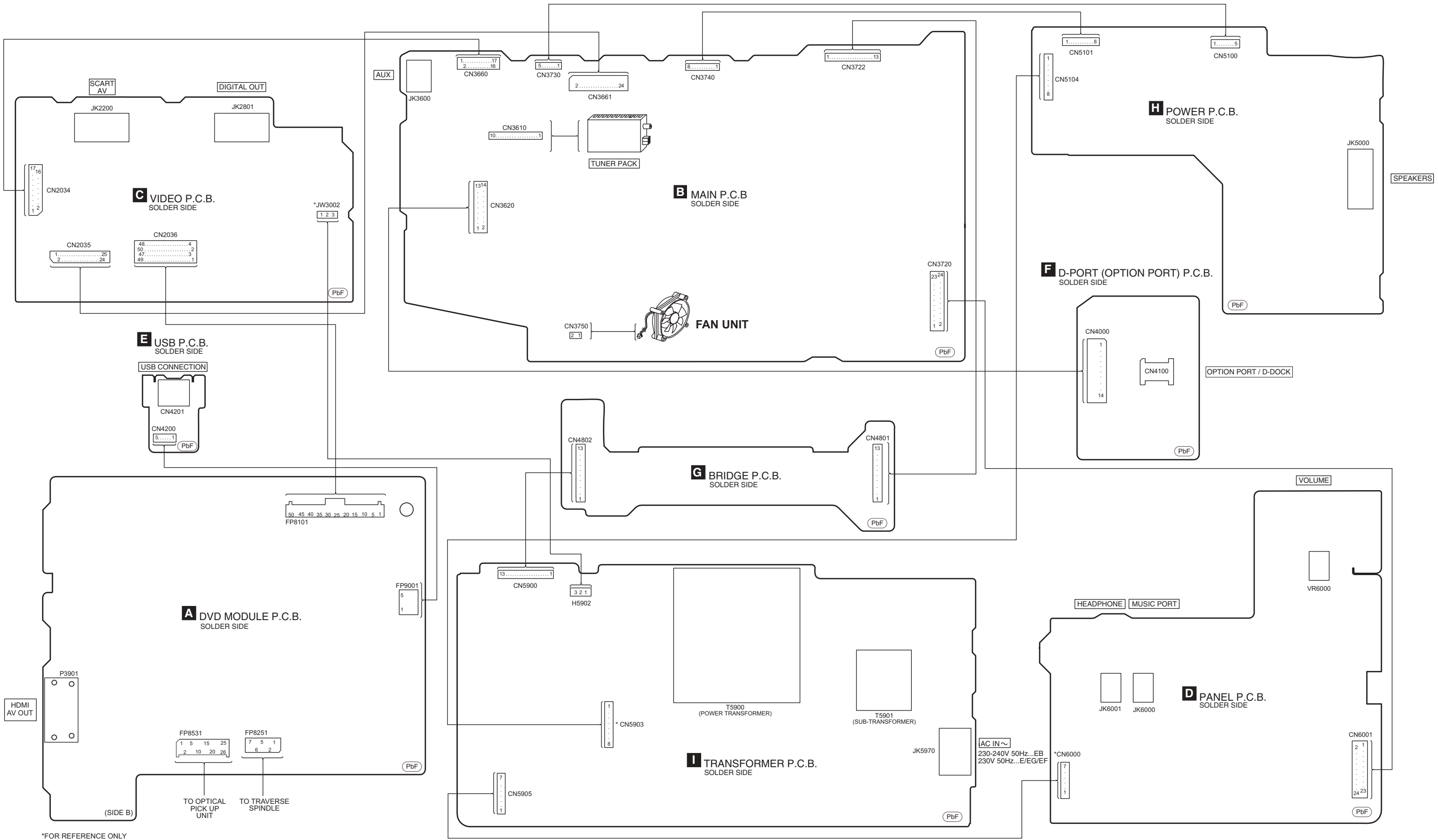
IC3800 PIN86  
CD PLAY  
5.04Vp-p (2.5msec.div)



IC3800 PIN 87  
CD PLAY  
5.04Vp-p (10msec.div)



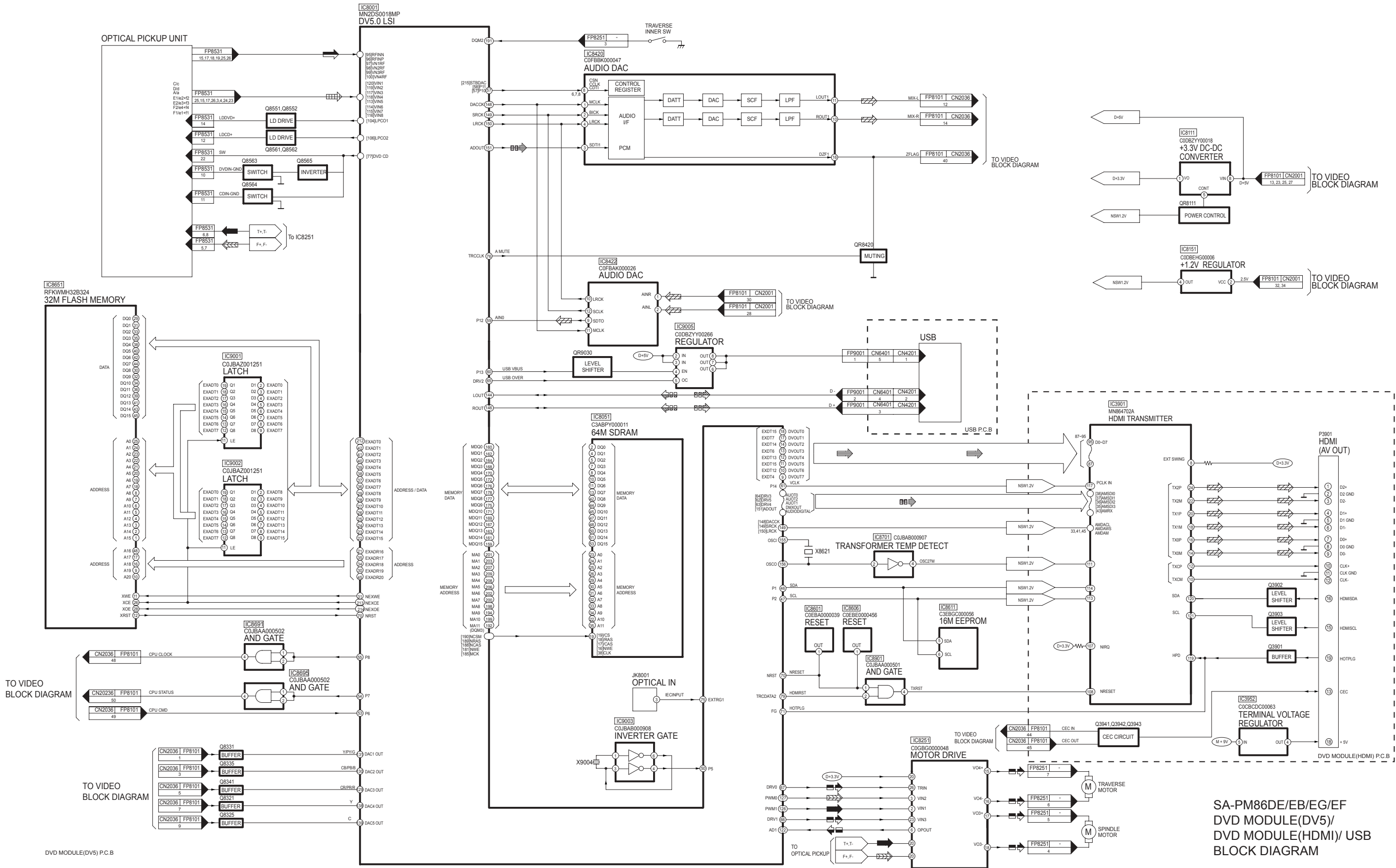
13 Wiring Connection Diagram



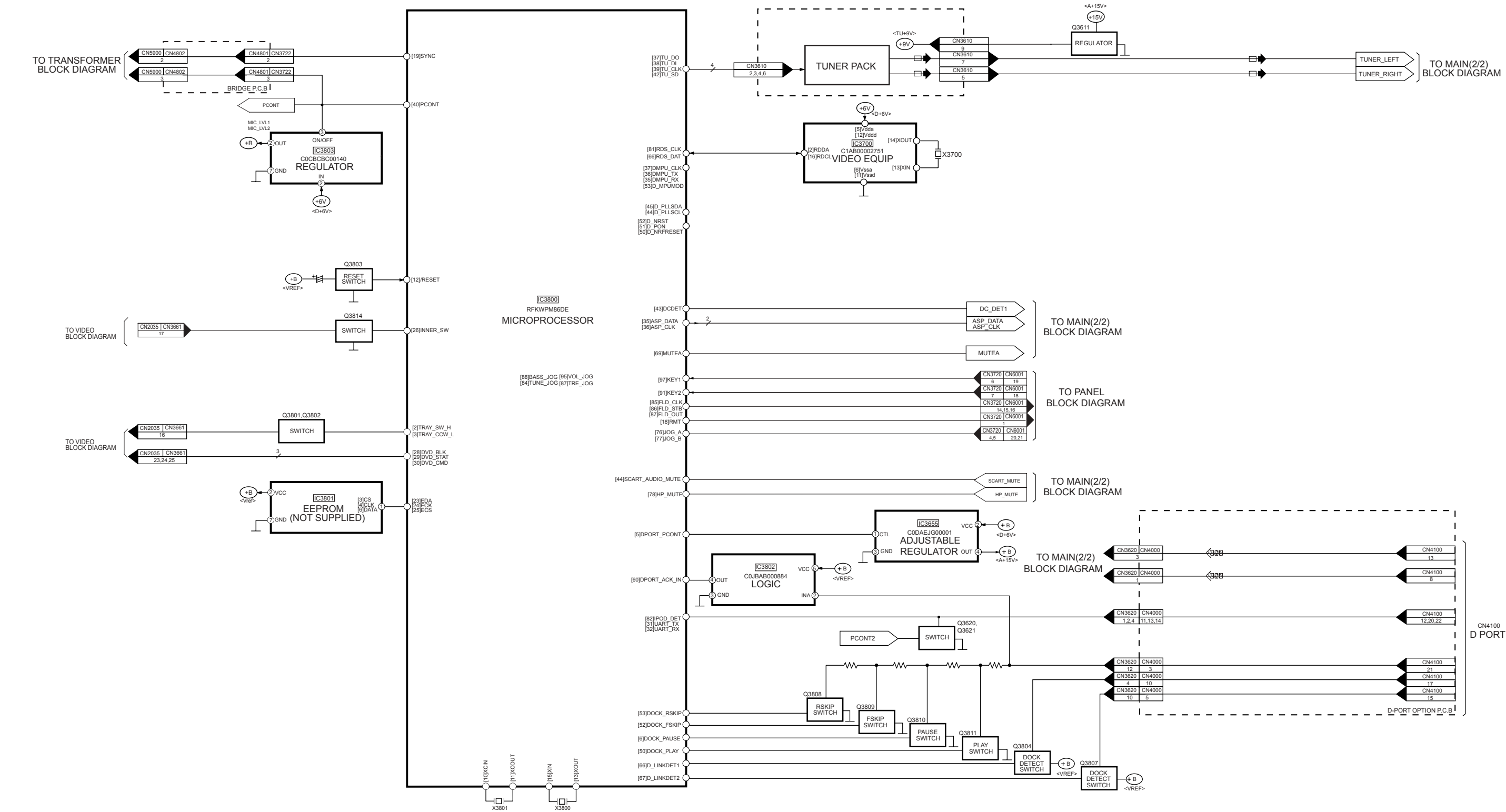


14 Block Diagram

14.1. DVD MODULE(DV5)/DVD MODULE(HDMI)/ USB

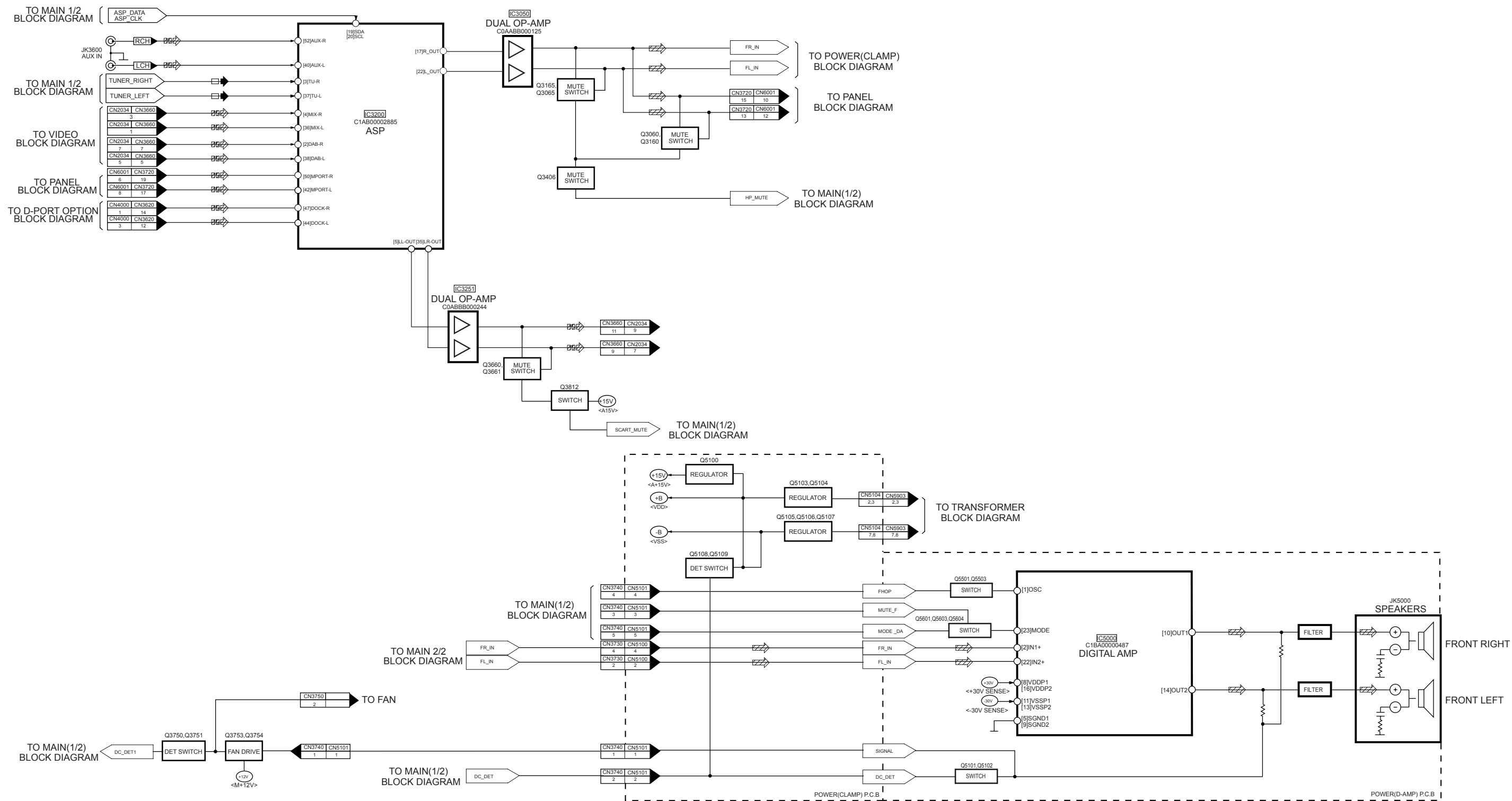


14.2. MAIN1/2 / D-PORT OPTION/BRIDGE

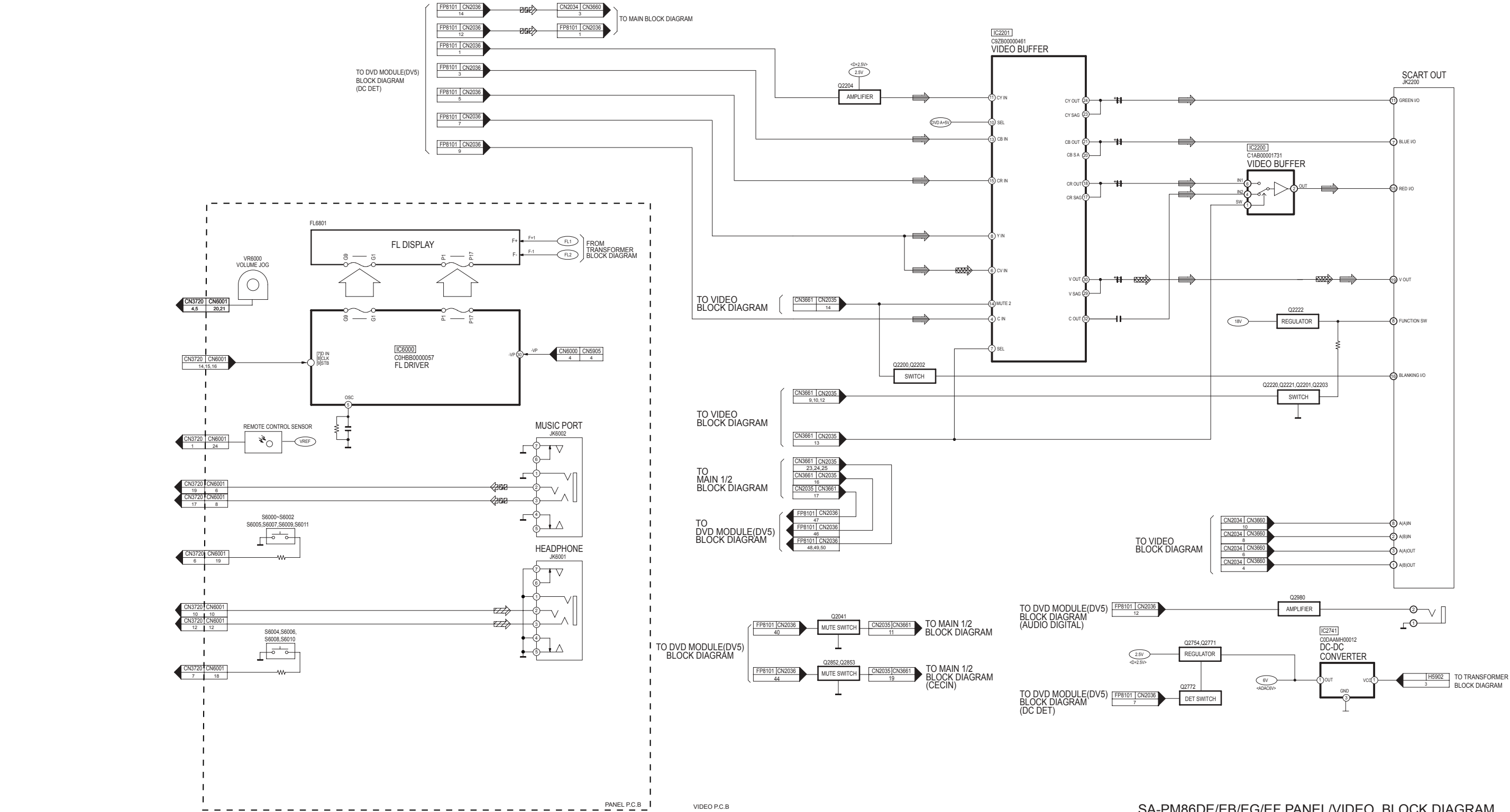


SA-PM86DE/EB/EG/EF MAIN1/2 / D-PORT OPTION/BRIDGE BLOCK DIAGRAM

14.3. MAIN 2/2 / POWER(CLAMP)/POWER(D-AMP)

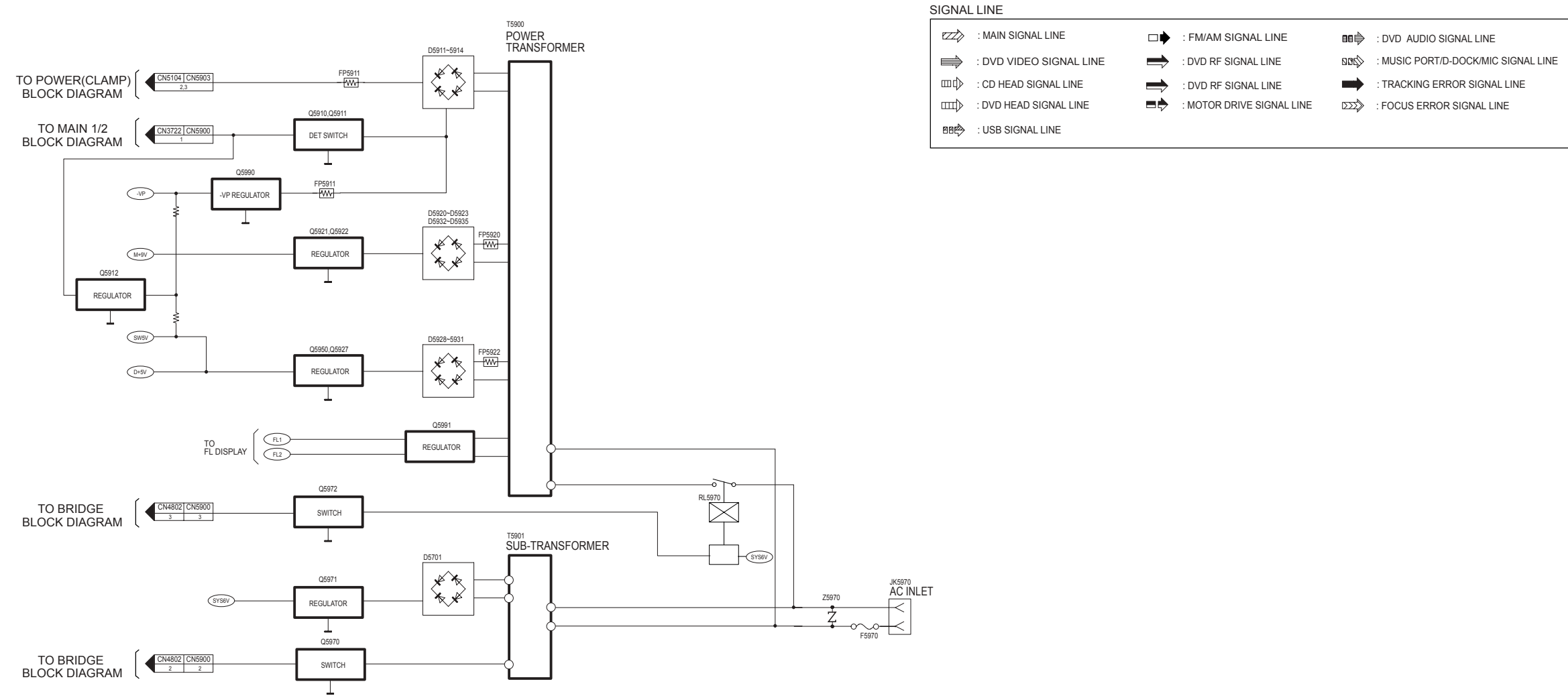


14.4. PANEL/VIDEO



SA-PM86DE/EB/EG/EF PANEL/VIDEO BLOCK DIAGRAM

14.5. TRANSFORMER





# 15 Notes Of Schematic Diagram

(All schematic diagrams may be modified at any time with the development of new technology)

## Notes:

|                |                             |
|----------------|-----------------------------|
| <b>S6002:</b>  | FM/AM/EXT-IN switch.        |
| <b>S6004:</b>  | Open/Close switch. (OPEN)   |
| <b>S6005:</b>  | Option switch. (OPTION ►)   |
| <b>S6006:</b>  | D.Bass switch. (D.BASS)     |
| <b>S6007:</b>  | USB switch. (USB ►)         |
| <b>S6008:</b>  | REW switch. (◀◀/▶▶)         |
| <b>S6009:</b>  | DVD switch. ( DVD/CD ►)     |
| <b>S6010:</b>  | FF switch. (▶▶/▶▶)          |
| <b>S6011:</b>  | Power switch. (⏻/⏻)         |
| <b>S6012:</b>  | Stop/Demo switch. (■/-DEMO) |
| <b>VR6000:</b> | VR Volume jog.              |

## • Importance safety notice :

Components identified by  mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

## • Resistor

Unit of resistance is OHM [ $\Omega$ ] (K=1,000,000).

## • Capacitor

Unit of resistance is  $\mu$ F, unless otherwise noted. F=Farad, pF=Pico-Farad

## • Coil

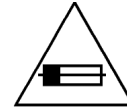
Unit of inductance is H, unless otherwise noted.

## • \*For Indication only.

## • Voltage and Signal lines:

|                                                                                     |                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------|
|  | : +B Signal line                              |
|  | : -B Signal line                              |
|  | : CD HEAD signal line                         |
|  | : DVD HEAD signal line                        |
|  | : DVD RF signal line                          |
|  | : MOTOR DRIVE signal line                     |
|  | : DVD VIDEO signal line                       |
|  | : DVD AUDIO signal line                       |
|  | : FOCUS ERROR signal line                     |
|  | : TRACKING ERROR signal line                  |
|  | : MAIN signal line                            |
|  | : USB signal line                             |
|  | : FM/AM signal line                           |
|  | : AUX / MUSIC PORT / D-DOCK / MIC signal line |

**CAUTION:** FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE F5970 T1.6AL, 250V FUSE



RISK OF FIRE-REPLACE FUSE AS MARKED.

## FUSE CAUTION



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

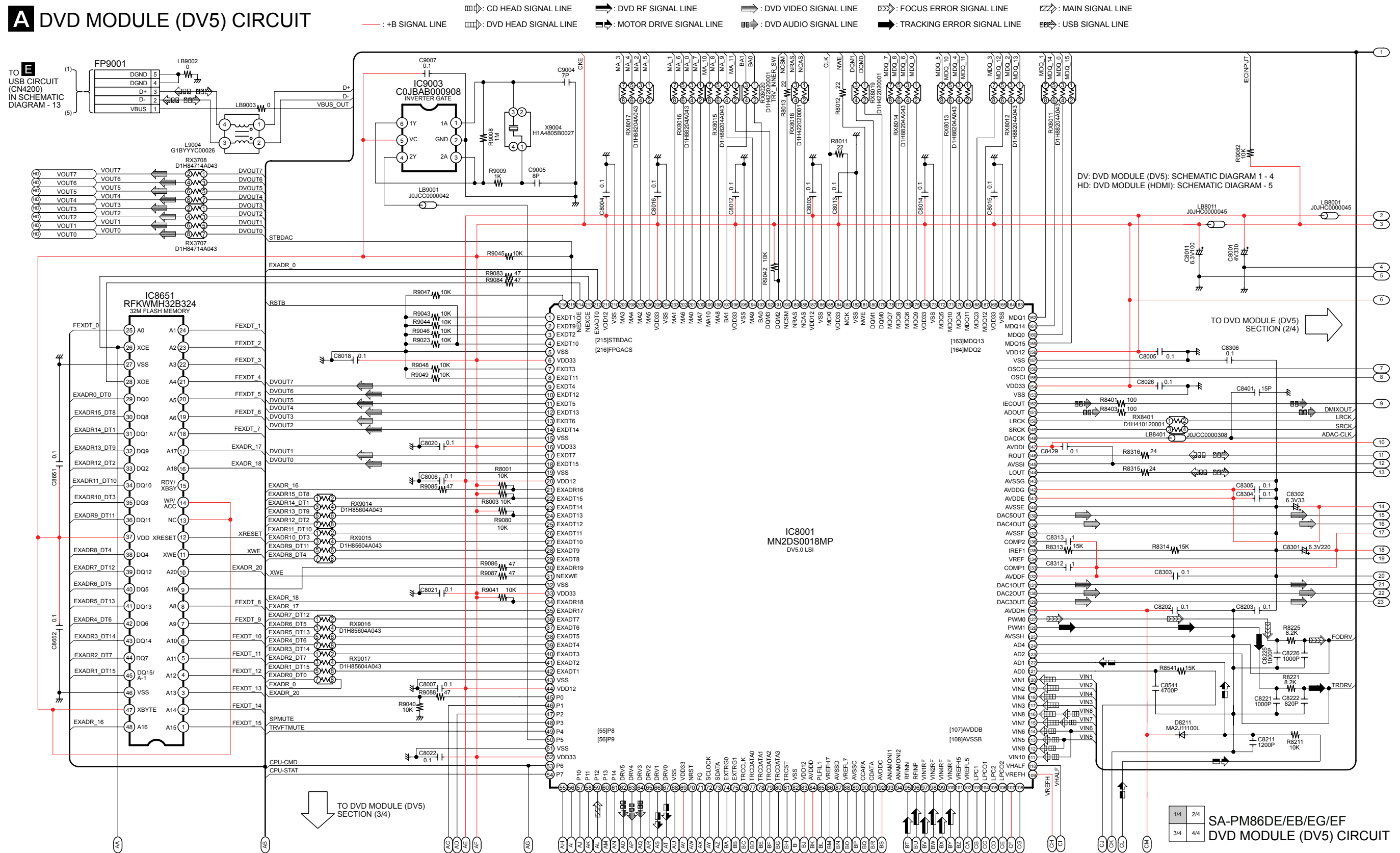


# 16 Schematic Diagram

## 16.1. DVD MODULE (DV5) CIRCUIT

SCHEMATIC DIAGRAM - 1

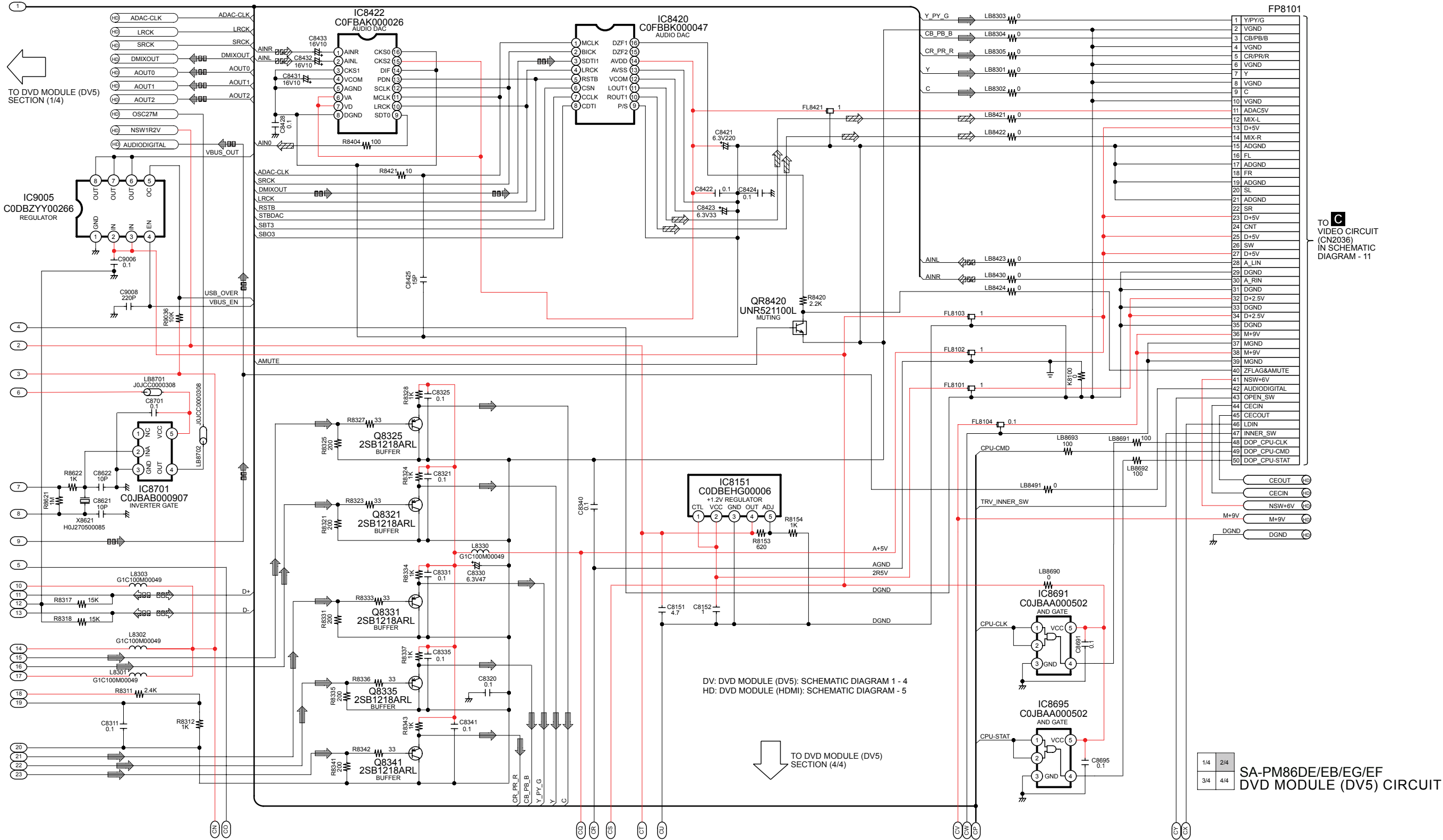
### A DVD MODULE (DV5) CIRCUIT



SCHEMATIC DIAGRAM - 2

**A** DVD MODULE (DV5) CIRCUIT

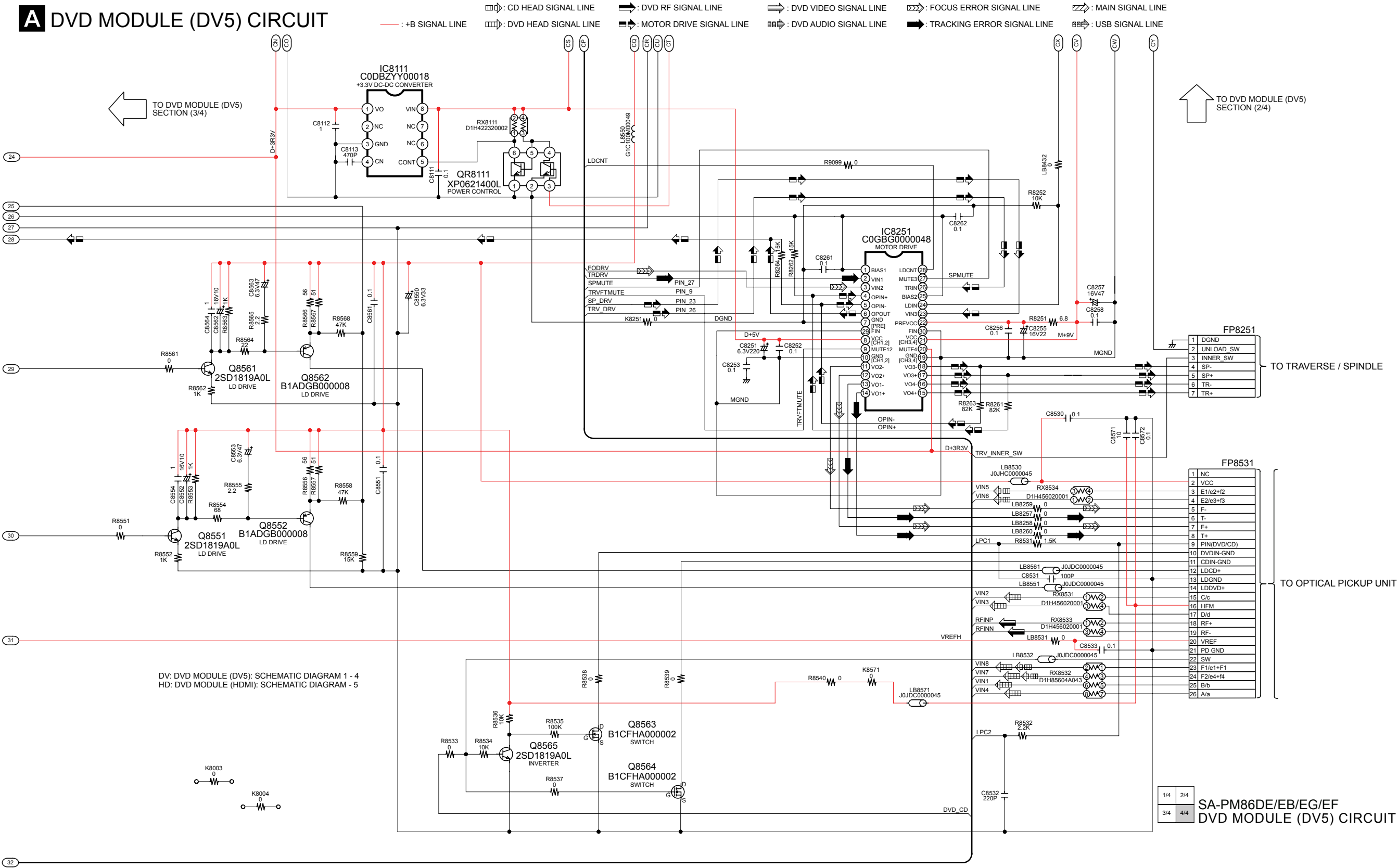
CD HEAD SIGNAL LINE DVD RF SIGNAL LINE DVD VIDEO SIGNAL LINE FOCUS ERROR SIGNAL LINE MAIN SIGNAL LINE  
+B SIGNAL LINE DVD HEAD SIGNAL LINE MOTOR DRIVE SIGNAL LINE DVD AUDIO SIGNAL LINE TRACKING ERROR SIGNAL LINE USB SIGNAL LINE AUX SIGNAL LINE





SCHEMATIC DIAGRAM - 4

**A** DVD MODULE (DV5) CIRCUIT

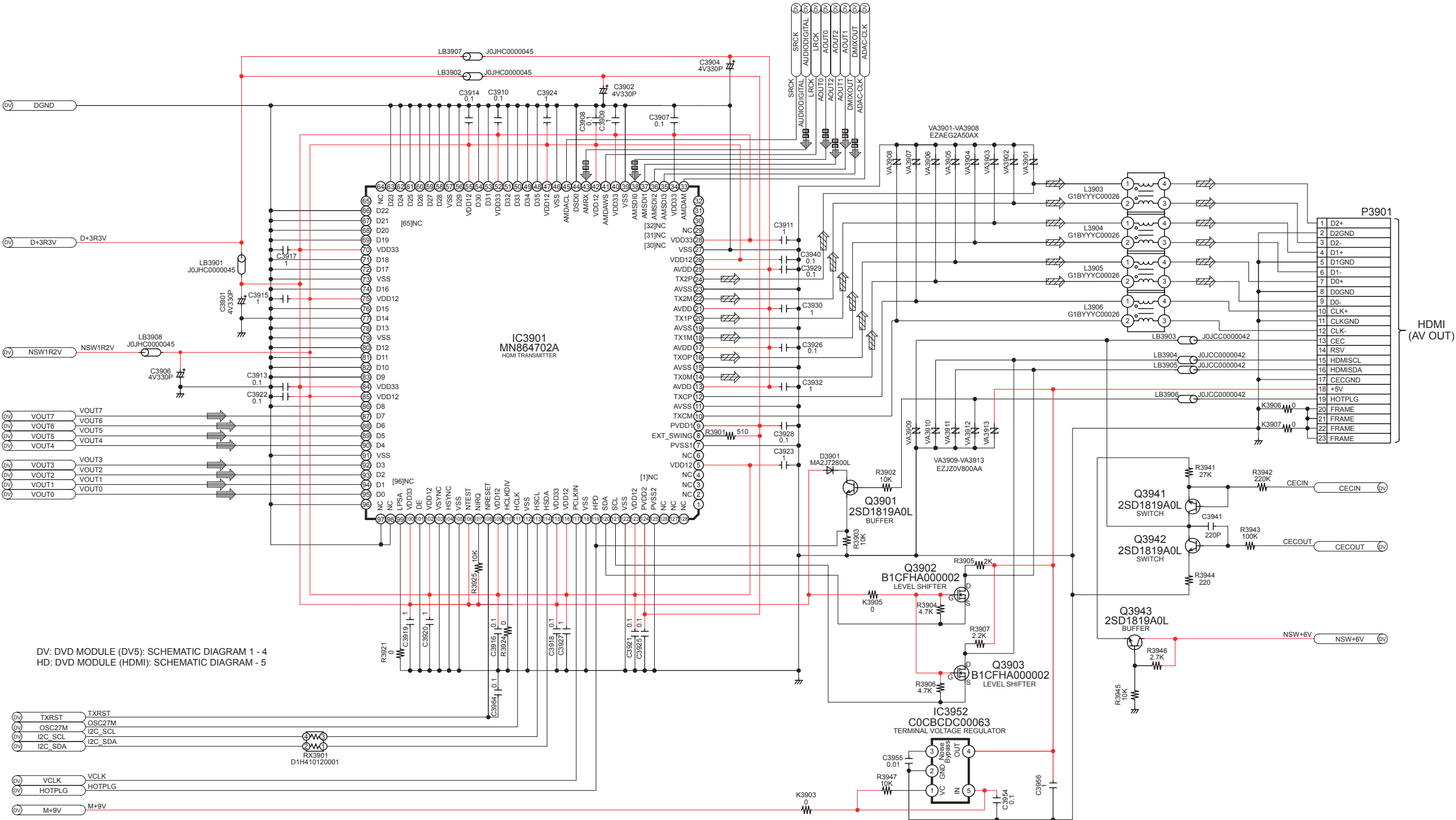


16.2. DVD MODULE (HDMI) CIRCUIT

SCHEMATIC DIAGRAM - 5

**A** DVD MODULE (HDMI) CIRCUIT

— : +B SIGNAL LINE     : DVD AUDIO SIGNAL LINE     : DVD VIDEO SIGNAL LINE     : MAIN SIGNAL LINE



DV: DVD MODULE (DV5): SCHEMATIC DIAGRAM 1 - 4  
HD: DVD MODULE (HDMI): SCHEMATIC DIAGRAM - 5

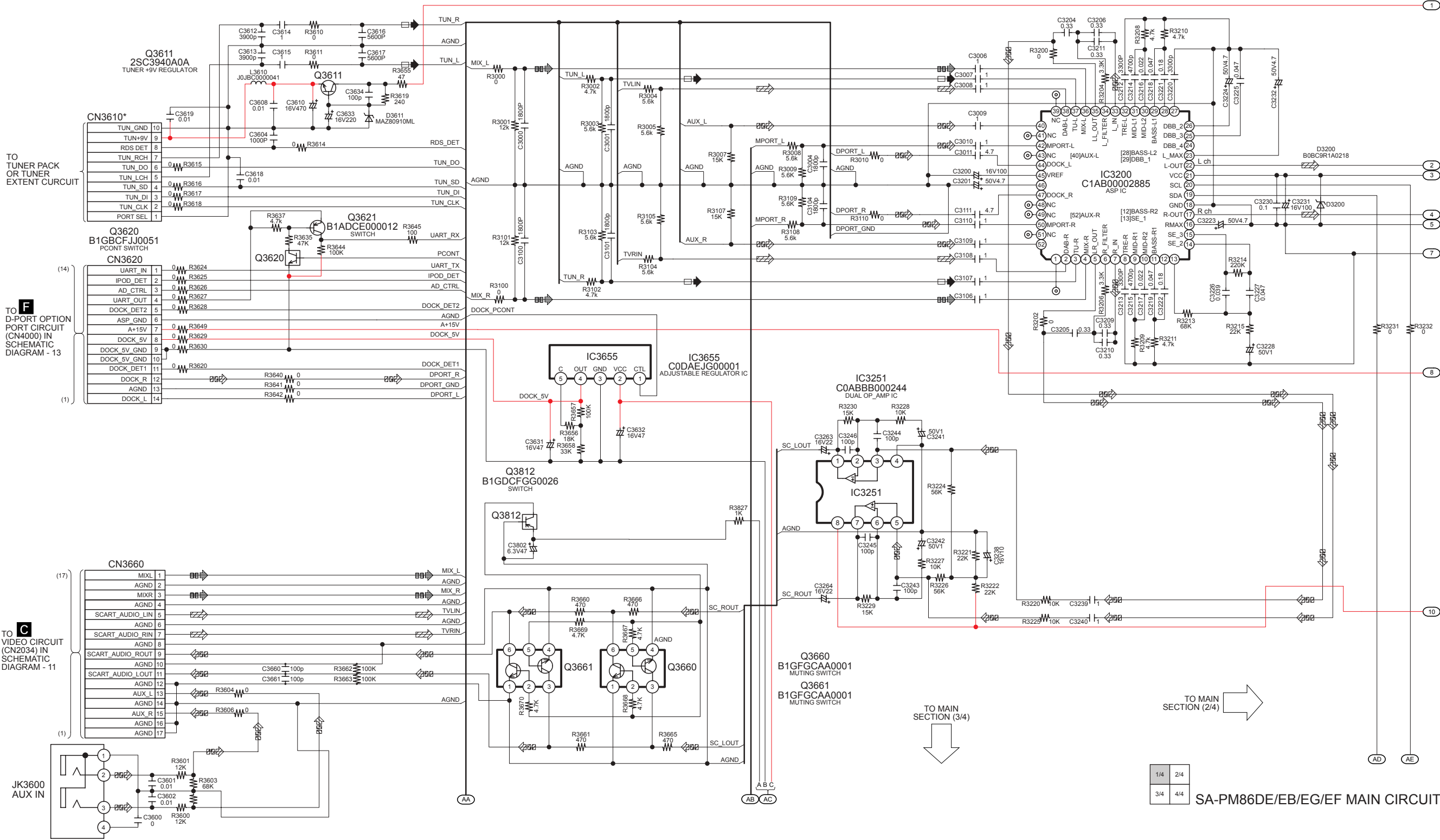
16.3. MAIN CIRCUIT

A  
B  
C  
D  
E  
F  
G  
H

SCHEMATIC DIAGRAM-6

B MAIN CIRCUIT

—+ : +B SIGNAL LINE    —- : -B SIGNAL LINE    ≡ : MAIN SIGNAL LINE    □▶ : FM/AM SIGNAL LINE    ≡≡ : AUX/MUSIC PORT/D-DOCK/MIC SIGNAL LINE    ≡≡≡ : DVD AUDIO SIGNAL LINE

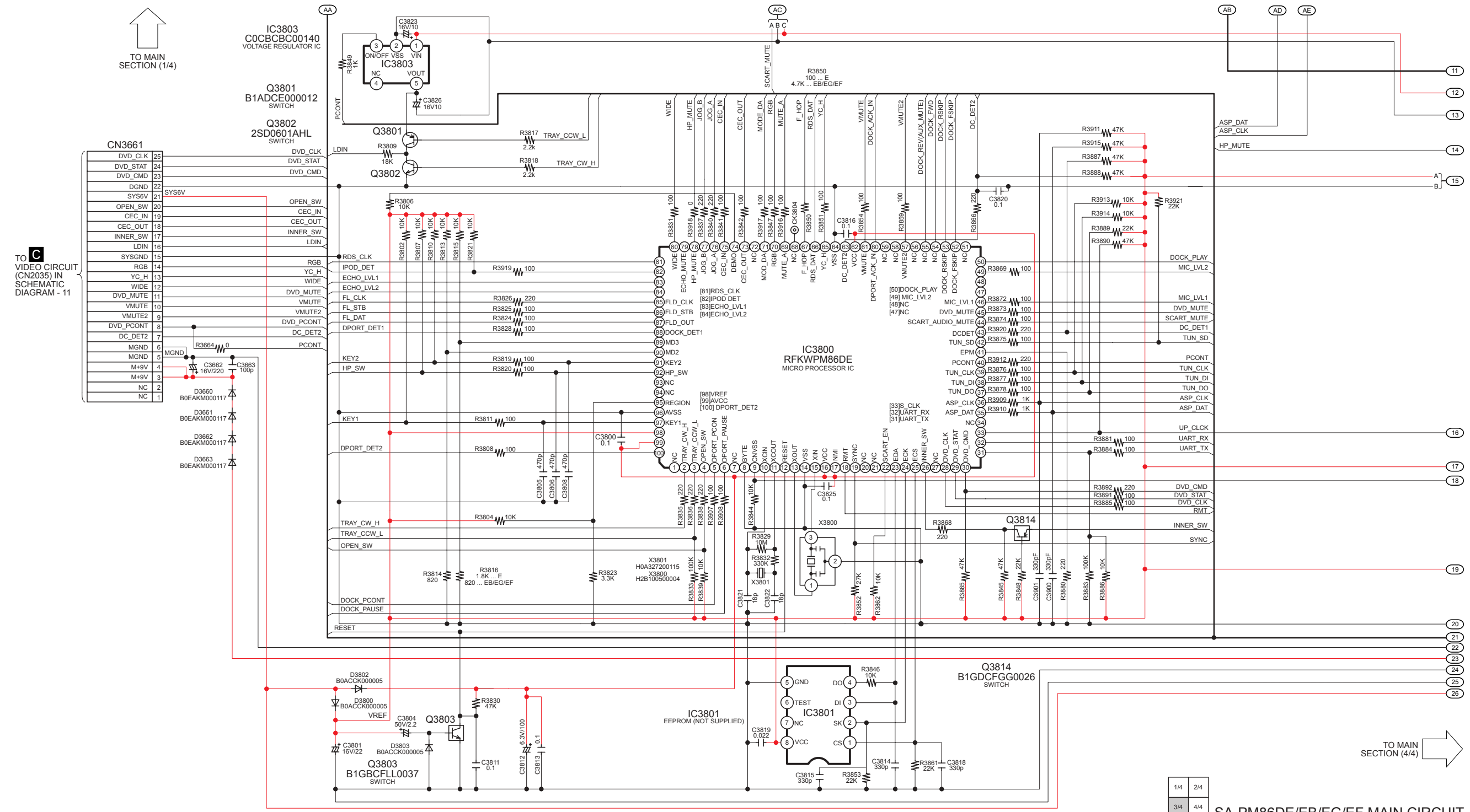




SCHEMATIC DIAGRAM-8

B MAIN CIRCUIT

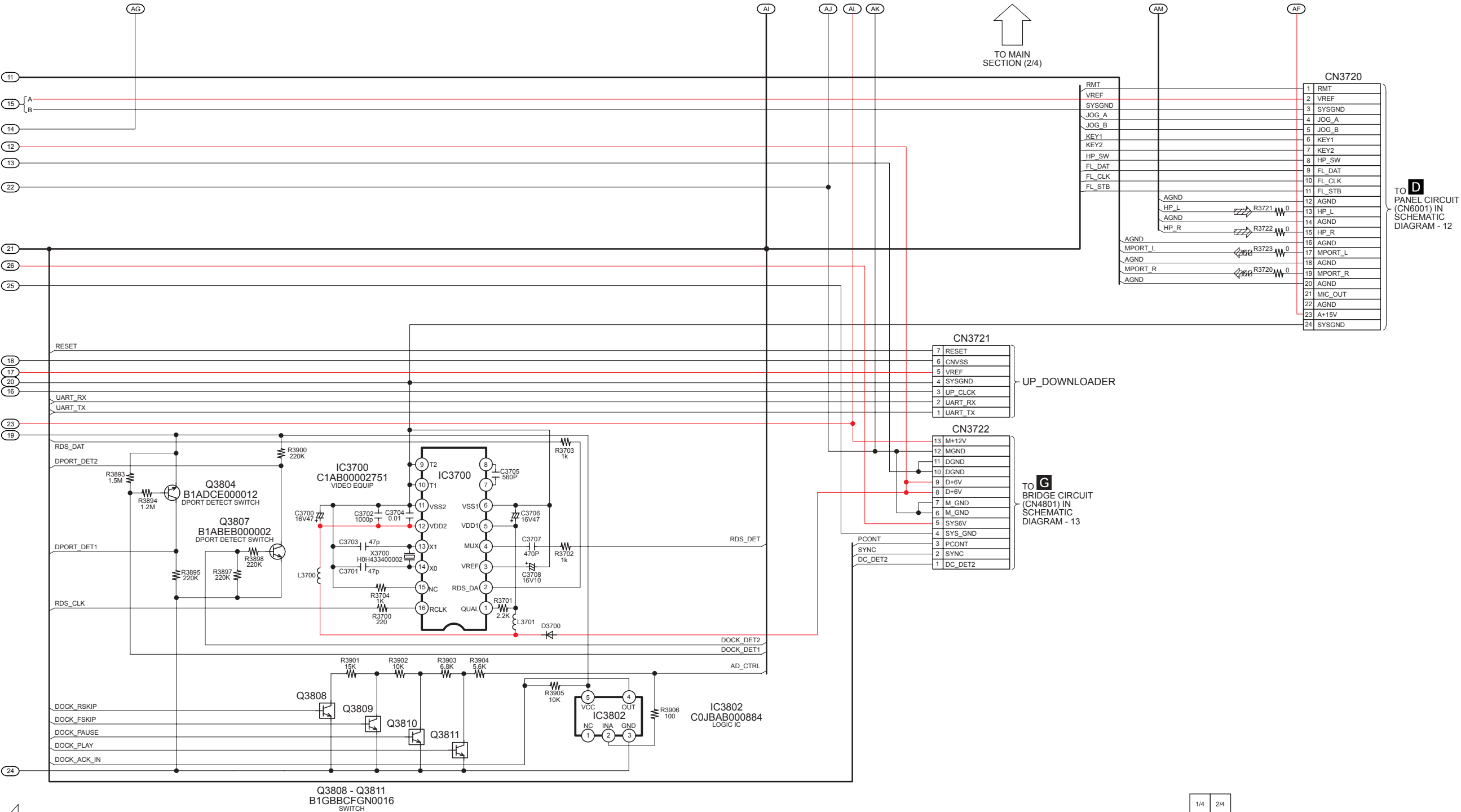
— : +B SIGNAL LINE — : -B SIGNAL LINE



SCHEMATIC DIAGRAM-9

**B** MAIN CIRCUIT

— : +B SIGNAL LINE    — : -B SIGNAL LINE    ≡ : MAIN SIGNAL LINE    ≡ : MUSIC PORT/MIC SIGNAL LINE    ≡ : DVD AUDIO SIGNAL LINE



TO **D** PANEL CIRCUIT (CN6001) IN SCHEMATIC DIAGRAM - 12

UP\_DOWNLOADER

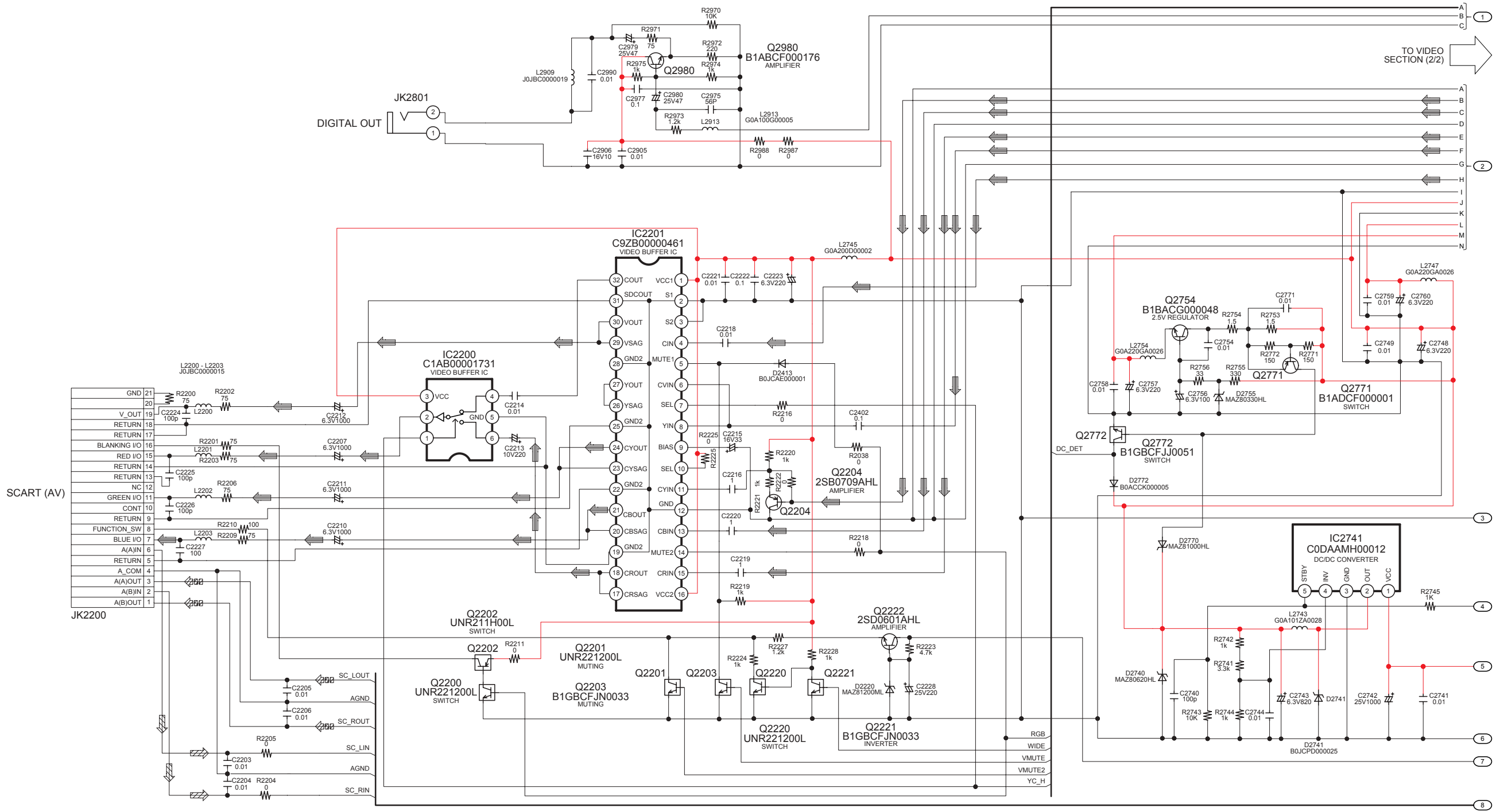
TO **G** BRIDGE CIRCUIT (CN4801) IN SCHEMATIC DIAGRAM - 13

16.4. VIDEO CIRCUIT

SCHEMATIC DIAGRAM-10

VIDEO CIRCUIT

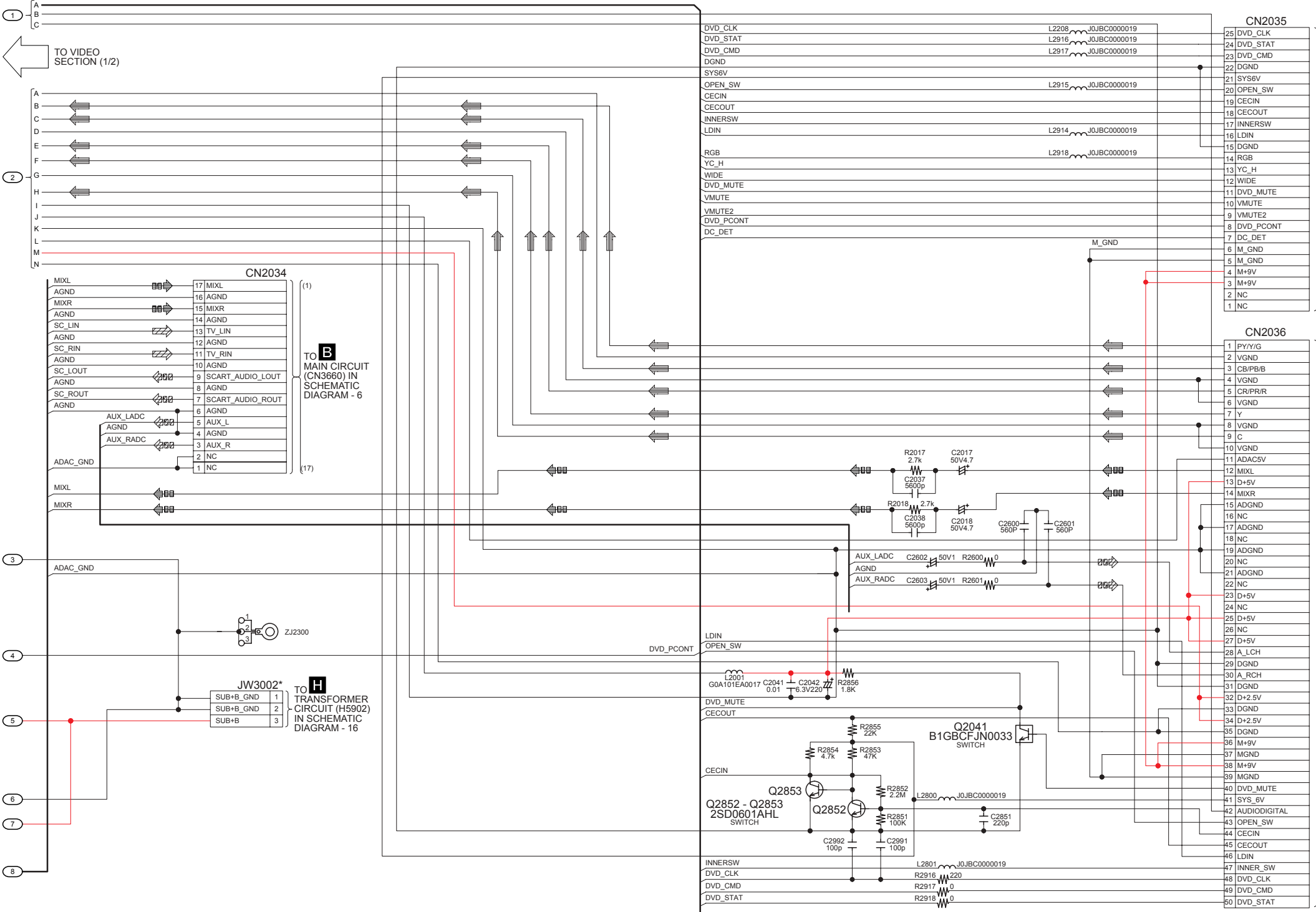
— : +B SIGNAL LINE    — : -B SIGNAL LINE    ≡ : MAIN SIGNAL LINE    ≡ : DVD VIDEO SIGNAL LINE    ≡ : MIC SIGNAL LINE



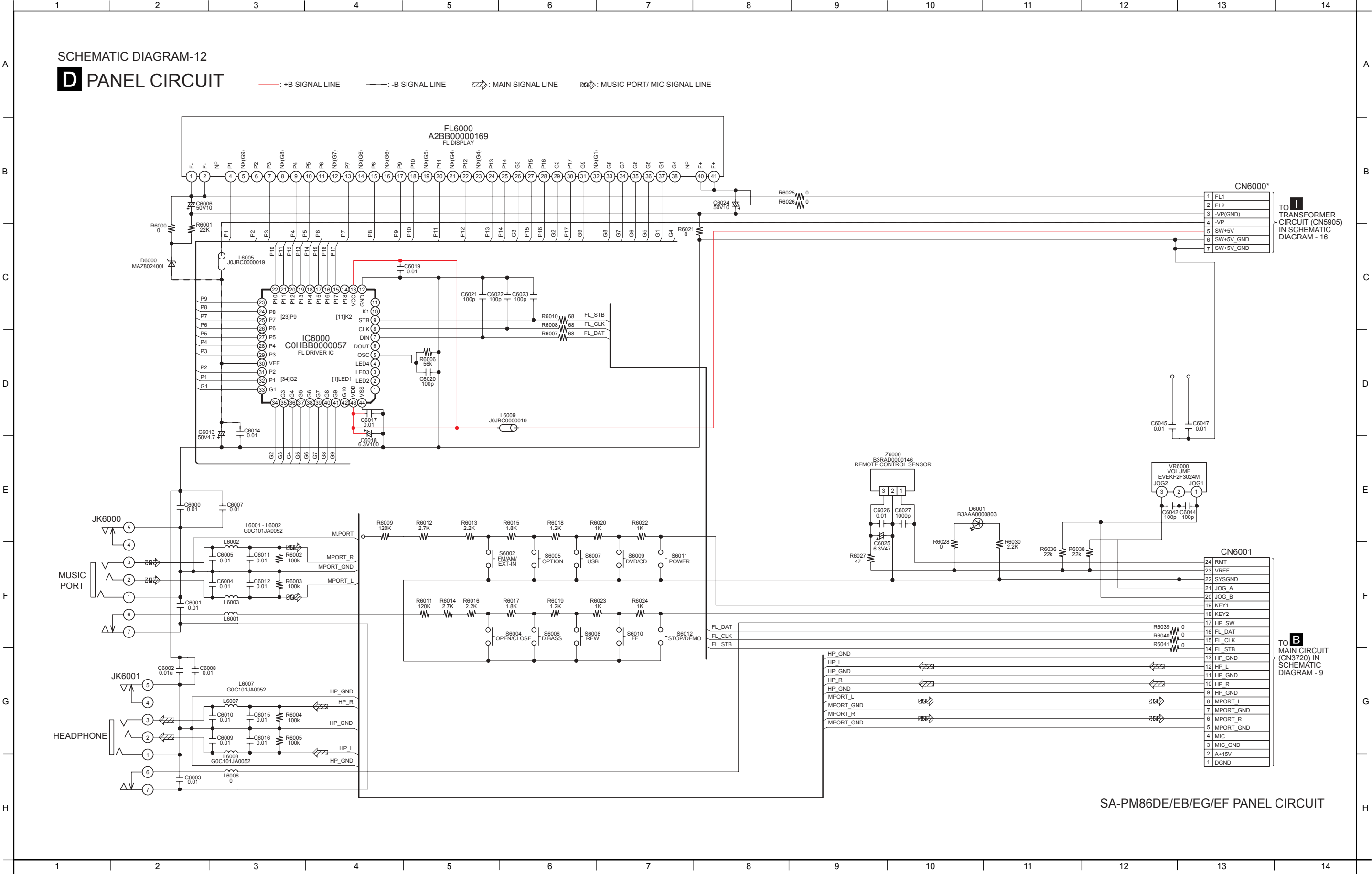
SCHEMATIC DIAGRAM-11

C VIDEO CIRCUIT

—+B SIGNAL LINE —-B SIGNAL LINE —MAIN SIGNAL LINE —DVD AUDIO SIGNAL LINE —DVD VIDEO SIGNAL LINE —MIC SIGNAL LINE —AUX SIGNAL LINE



16.5. PANEL CIRCUIT

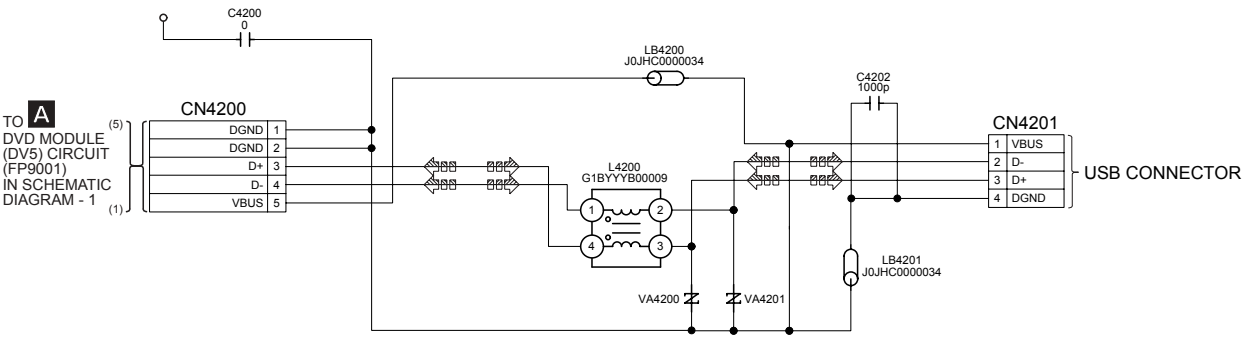


16.6. USB/D-PORT (OPTION PORT)/BRIDGE CIRCUIT

SCHEMATIC DIAGRAM-13

**E** USB CIRCUIT

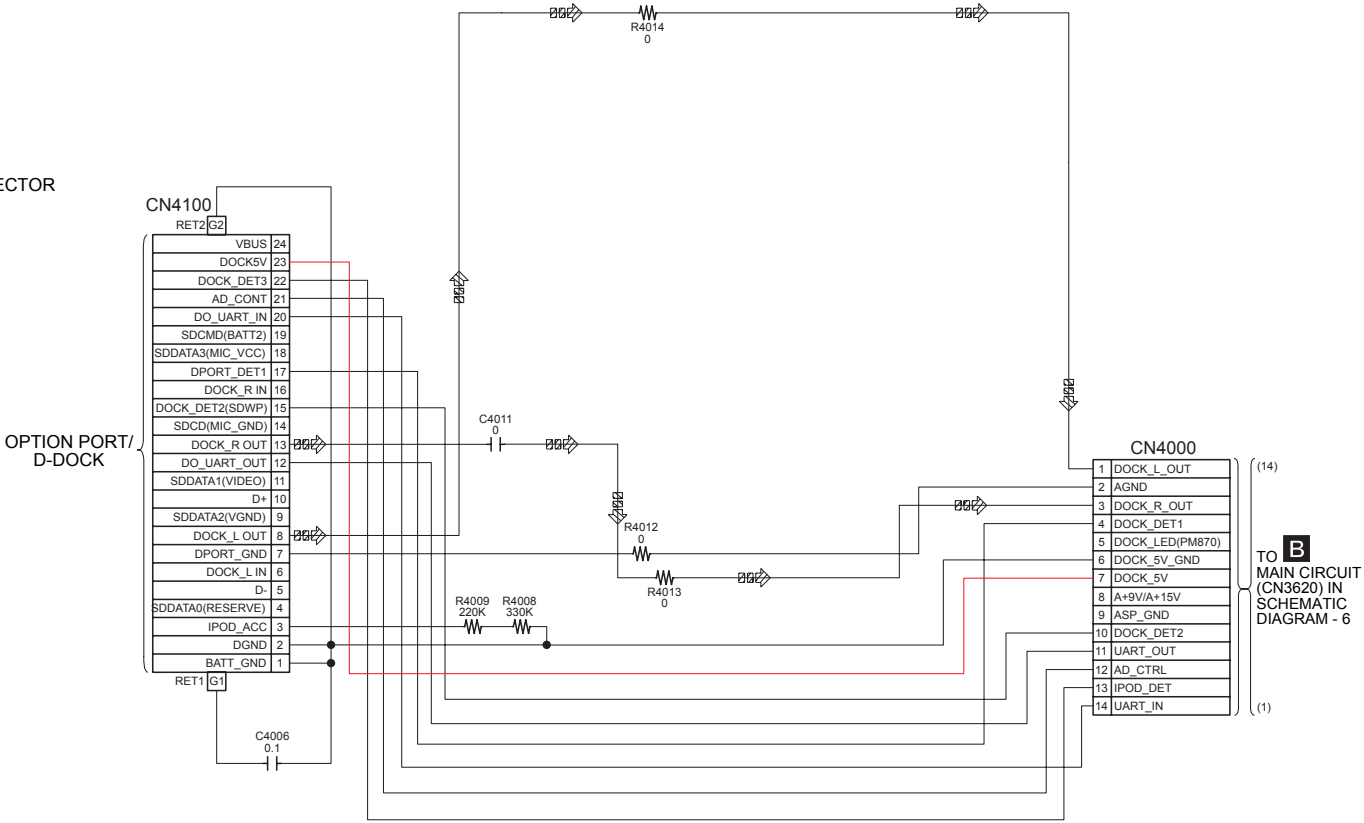
⚡ : USB SIGNAL LINE



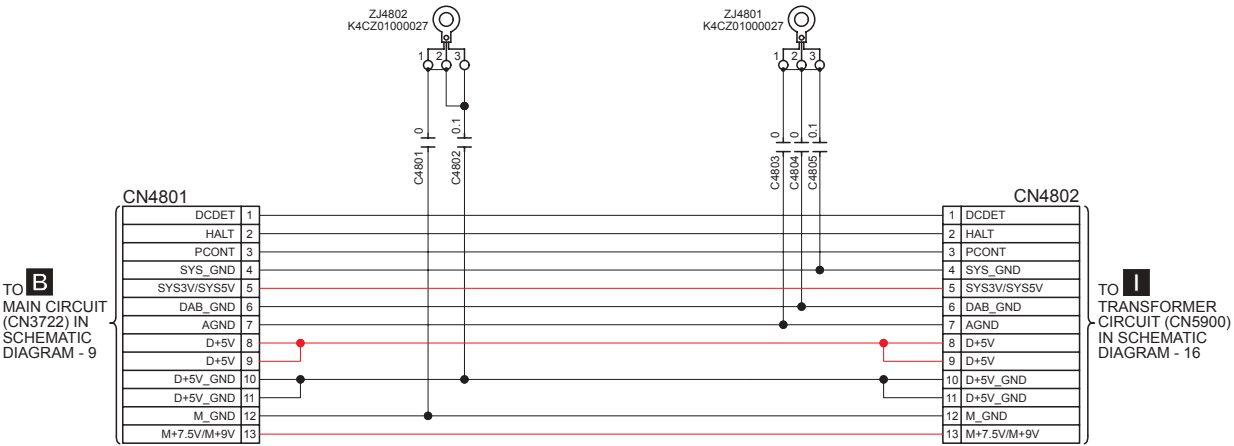
**F** D-PORT (OPTION PORT) CIRCUIT

— : +B SIGNAL LINE

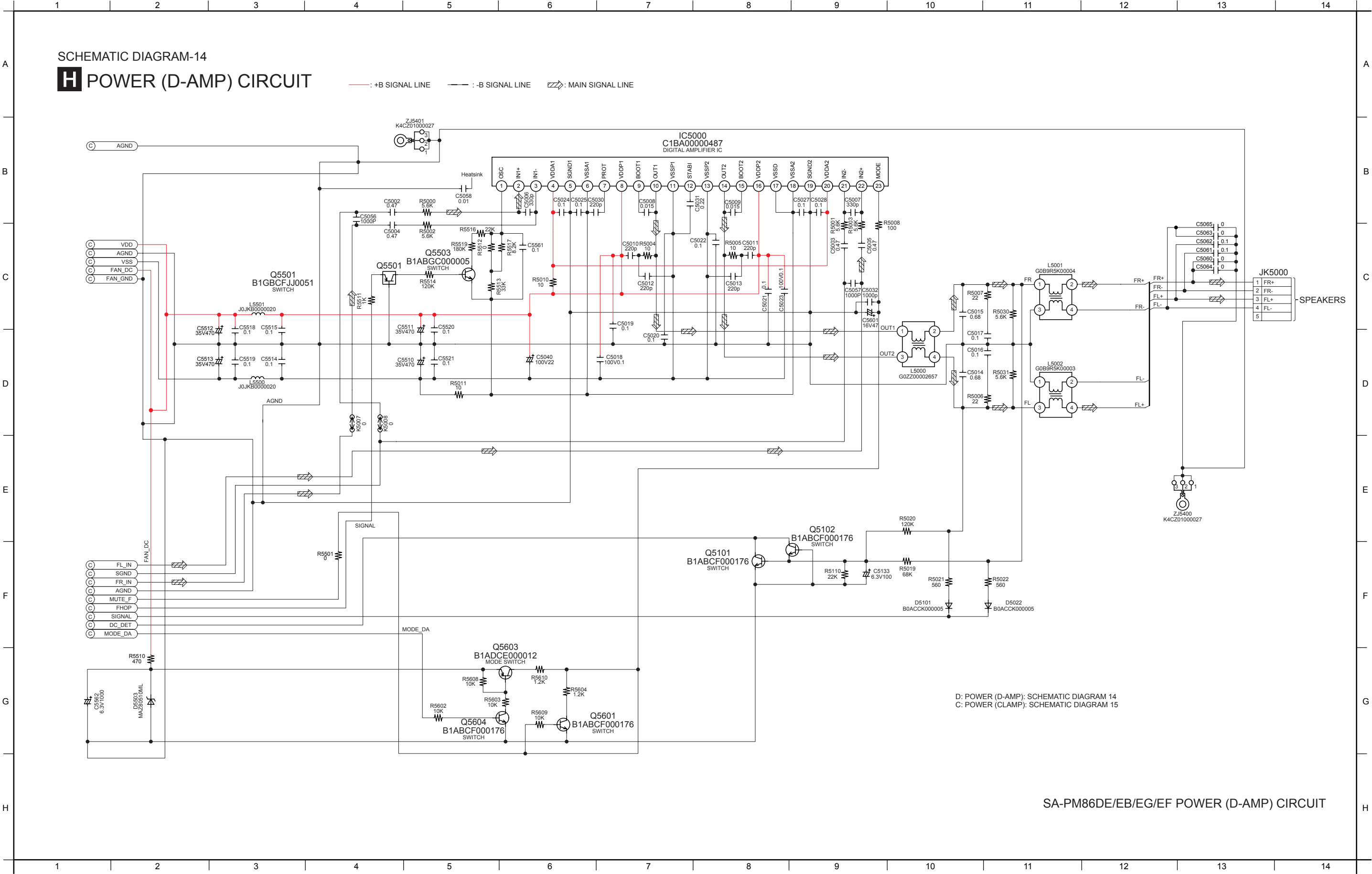
⚡ : D-DOCK SIGNAL LINE



**G** BRIDGE CIRCUIT



16.7. POWER (D-AMP) CIRCUIT

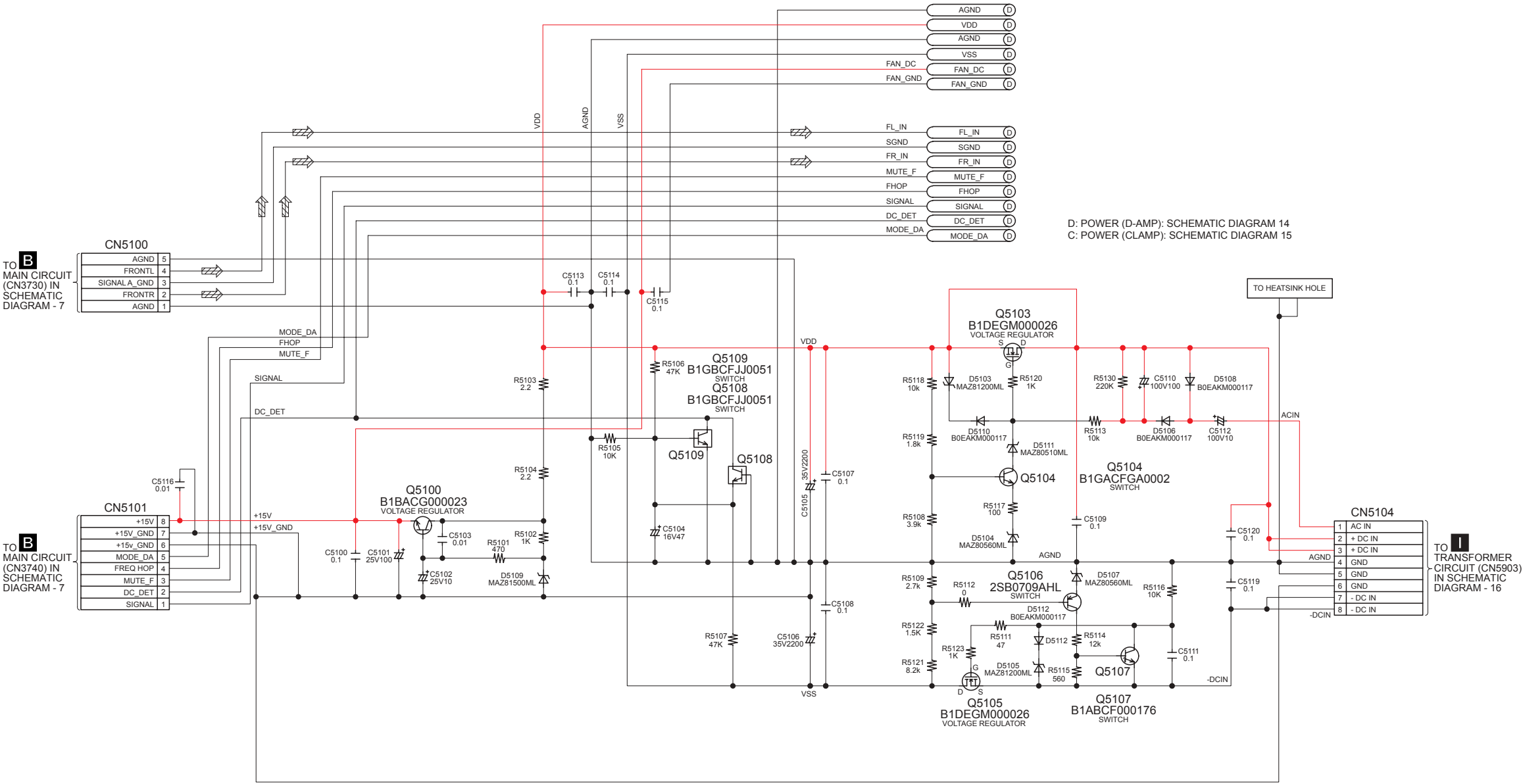


16.8. POWER (CLAMP) CIRCUIT

SCHEMATIC DIAGRAM-15

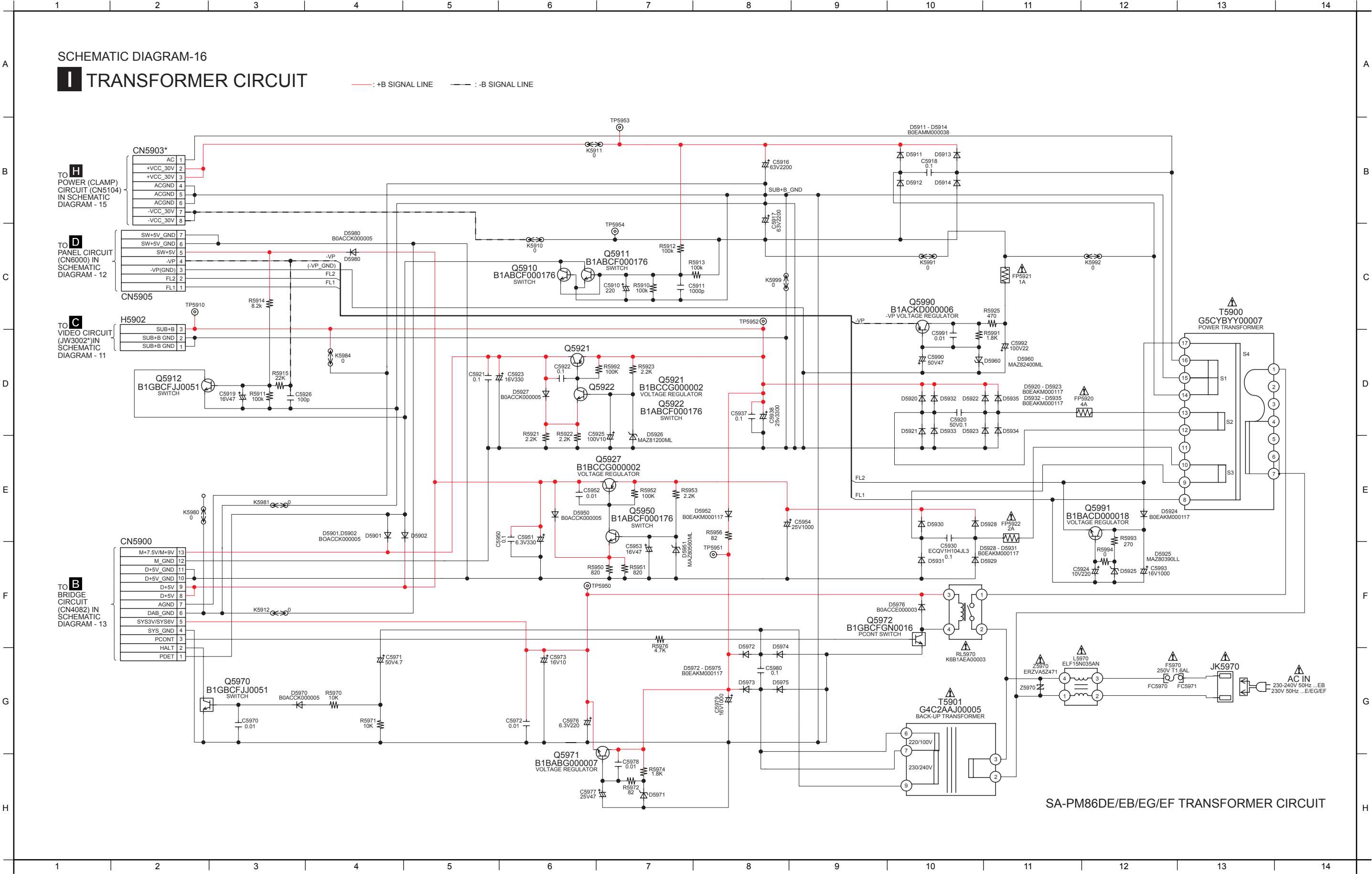
**H** POWER (CLAMP) CIRCUIT

— : +B SIGNAL LINE    — : -B SIGNAL LINE    ⇨ : MAIN SIGNAL LINE



SA-PM86DE/EB/EG/EF POWER (CLAMP) CIRCUIT

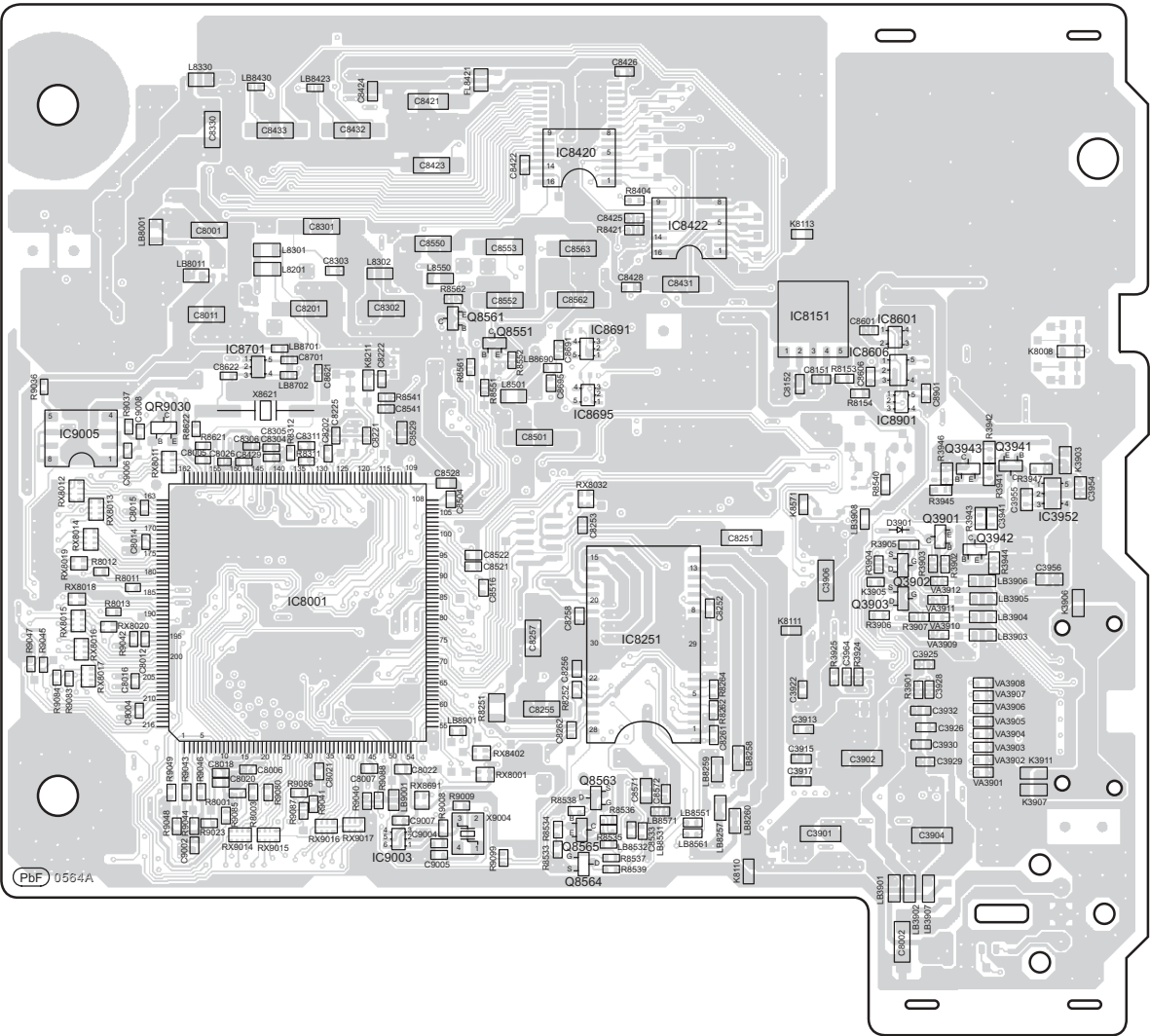
16.9. TRANSFORMER CIRCUIT



17 Printed Circuit Board

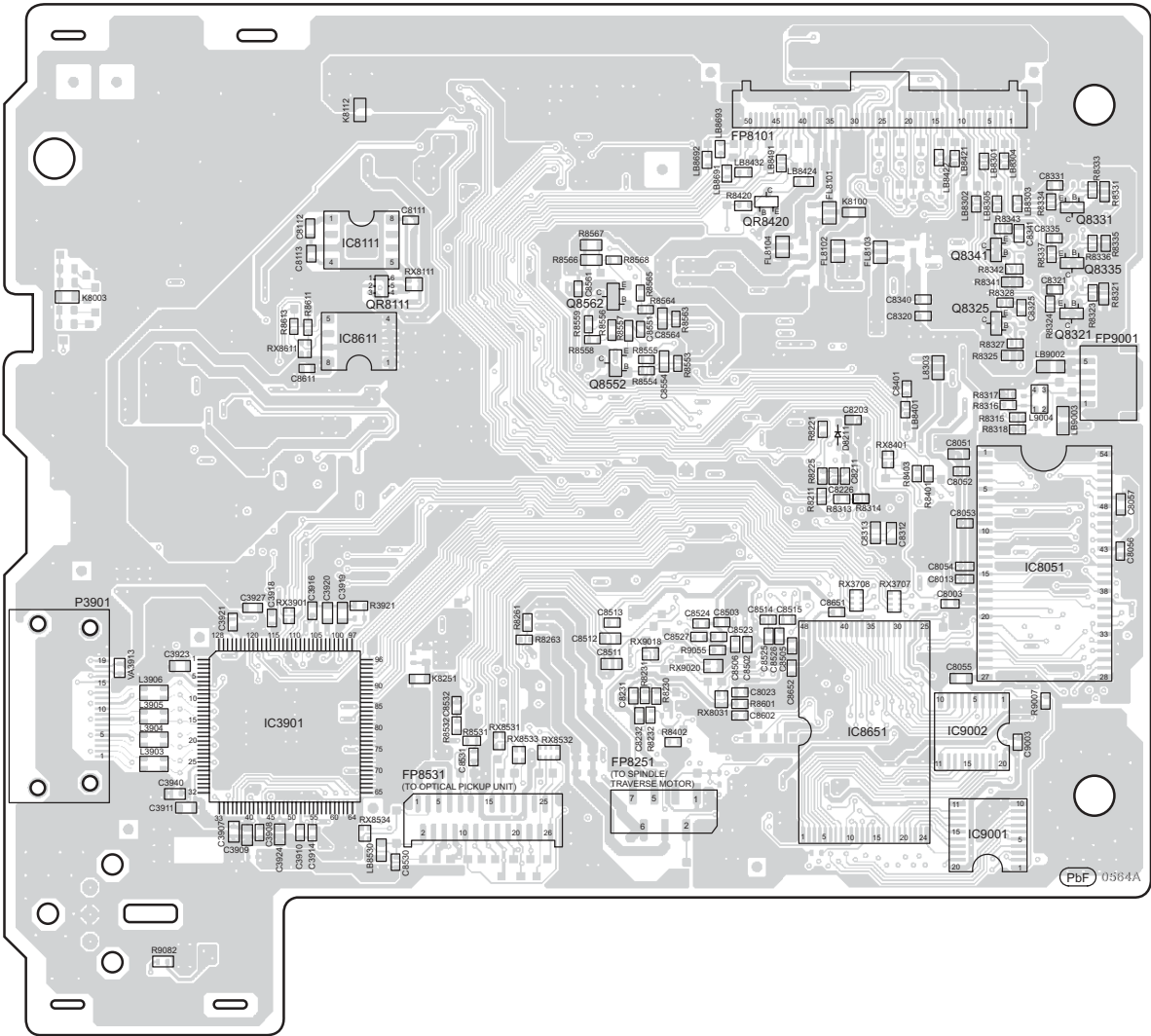
17.1. DVD MODULE P.C.B.

**A** DVD MODULE P.C.B. (REPX0620D)



(SIDE A)

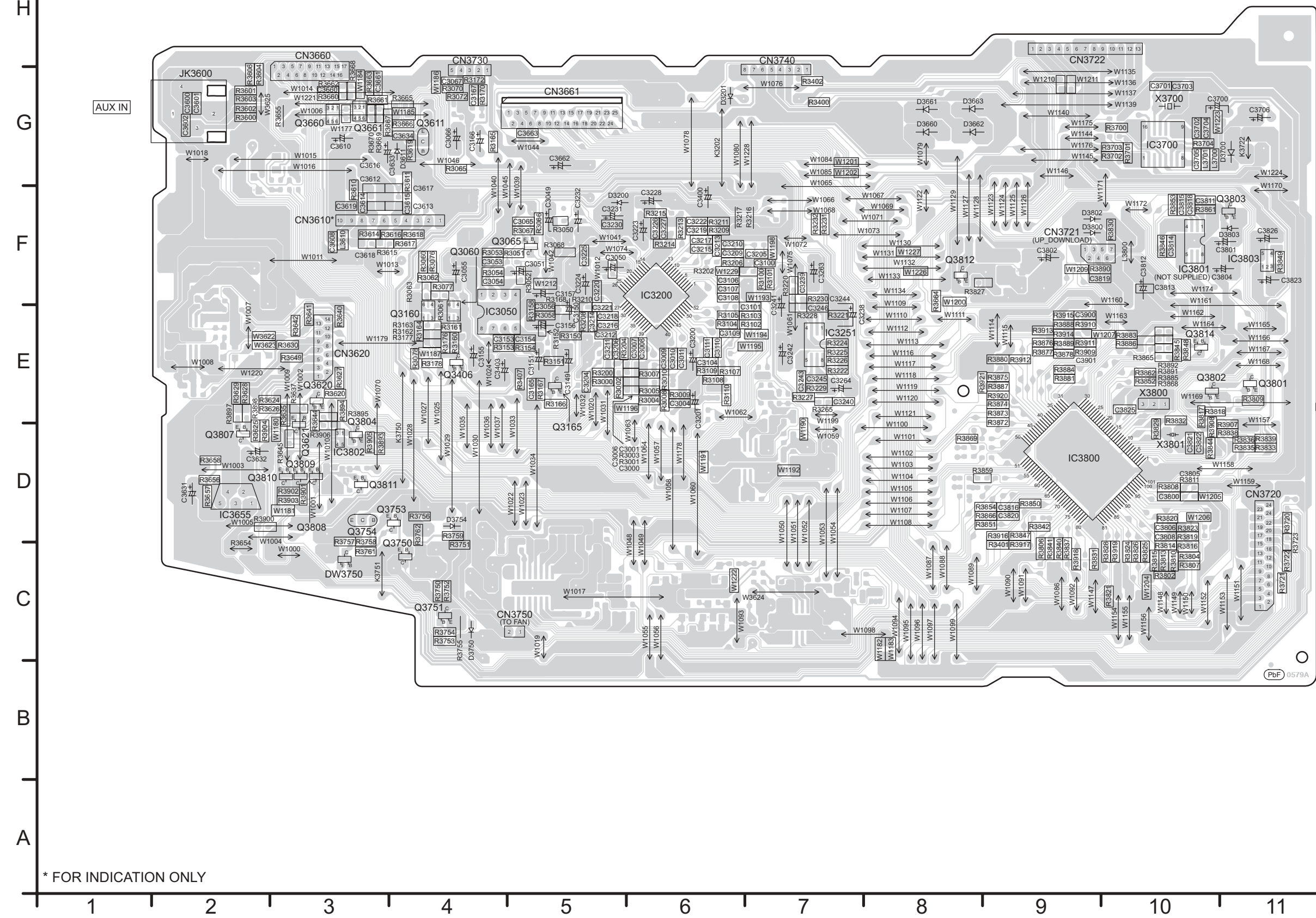
HDMI  
AV OUT



(SIDE B)

17.2. MAIN P.C.B.

**B** MAIN P.C.B. (REPX0650A...EG/EB/EF)  
(REPX0650B...E)



\* FOR INDICATION ONLY

SA-PM86DE/EB/EG/EF  
MAIN P.C.B.

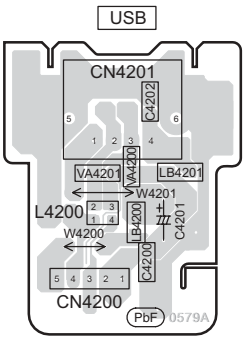
SA-PM86DE/EB/EG/EF  
VIDEO P.C.B.

## 17.4. PANEL P.C.B.

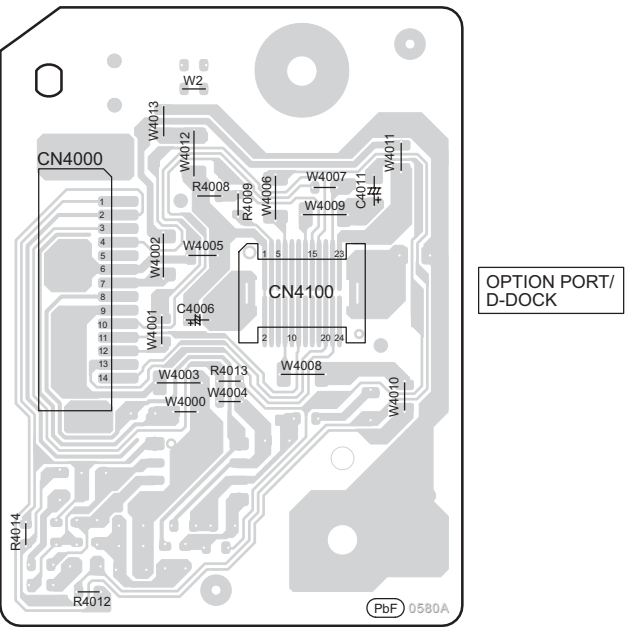
SA-PM86DE/EB/EG/EF  
PANEL P.C.B.

17.5. USB P.C.B. / D-PORT (OPTION PORT) P.C.B. / BRIDGE P.C.B.

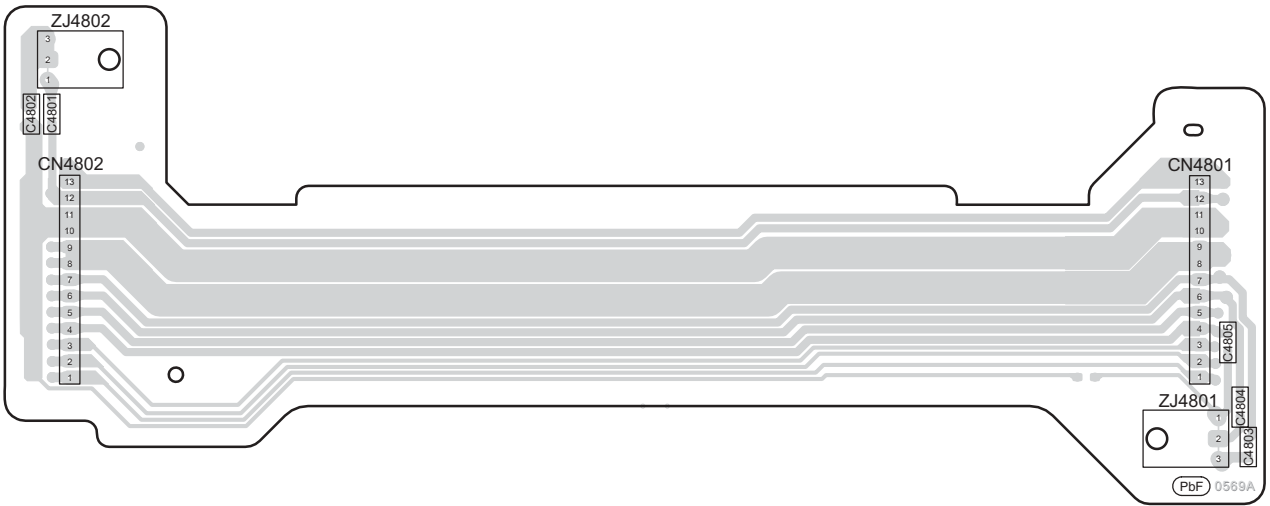
**E** USB P.C.B. (REPX0650A...EB/EG/EF)  
(REPX0650B...E)



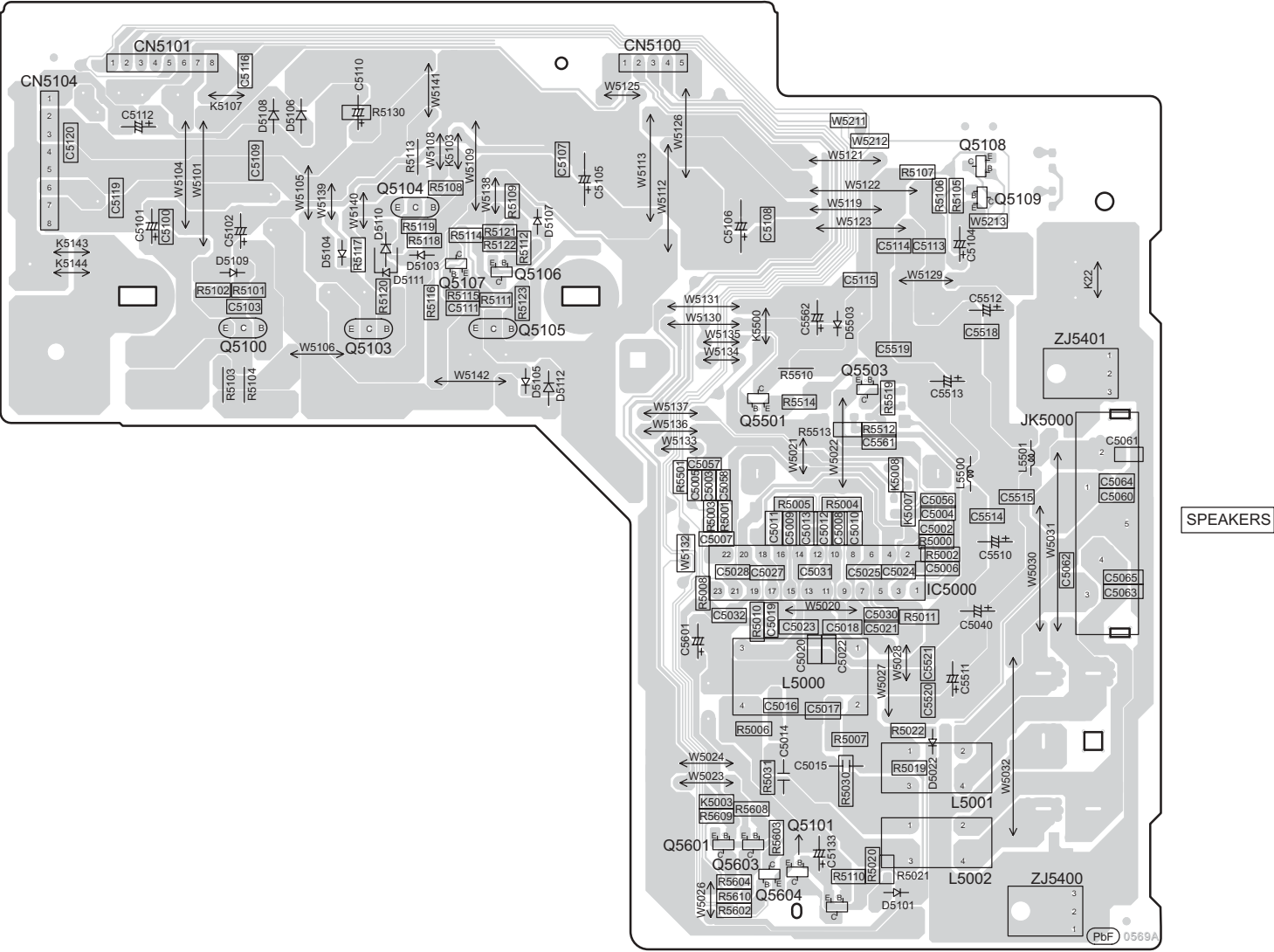
**F** D-PORT (OPTION PORT) P.C.B. (REPX0651B)



**G** BRIDGE P.C.B. (REPX0633D)

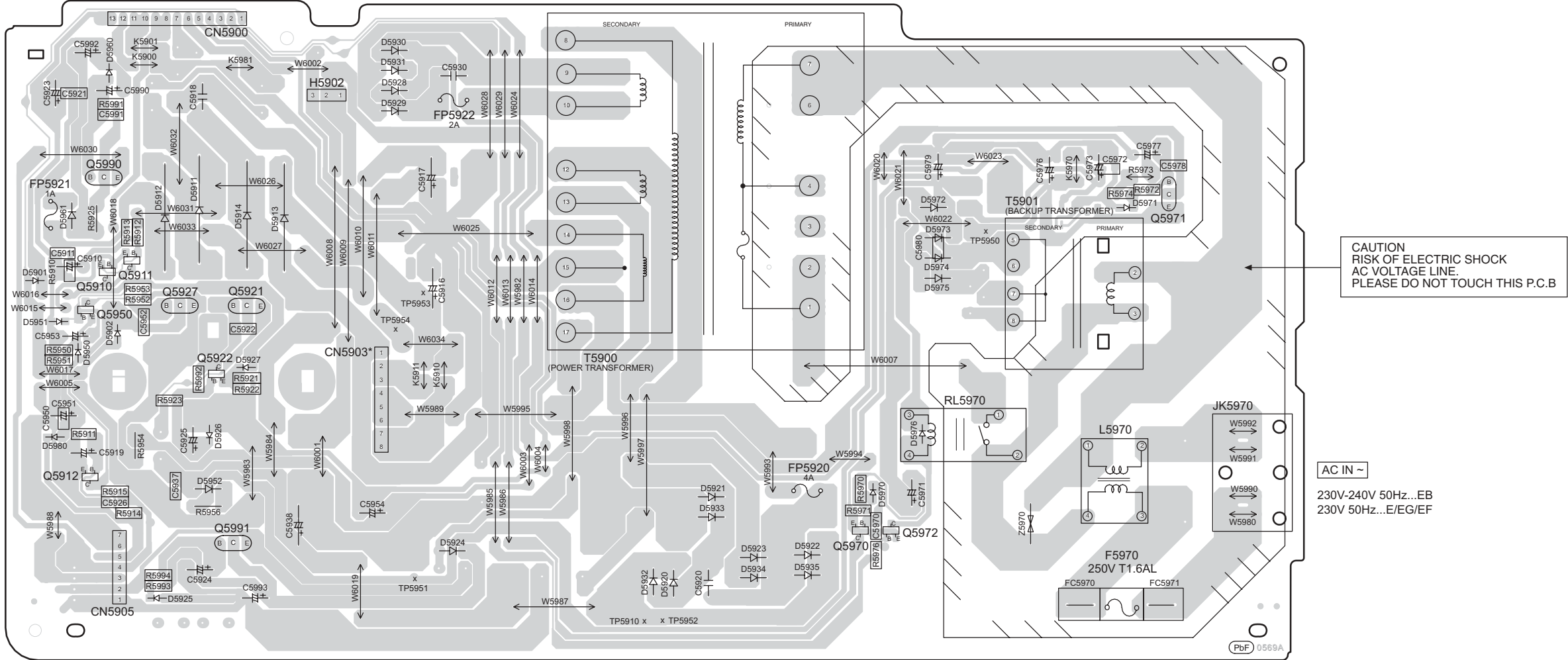


## H POWER P.C.B. (REPX0633D)



17.7. TRANSFORMER P.C.B.

**I** TRANSFORMER P.C.B. (REPX0633D)

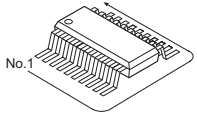
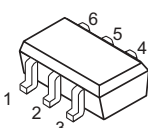
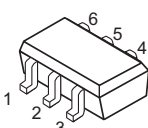
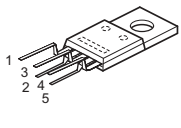
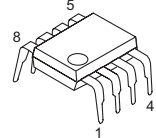
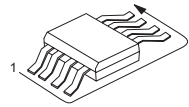
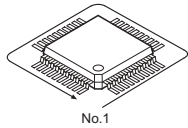
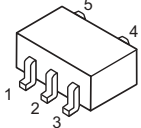
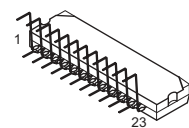
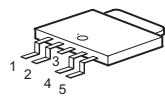
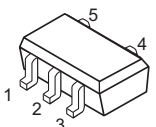
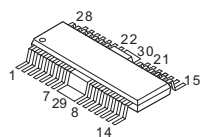
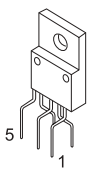
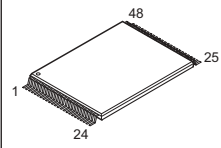
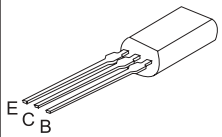
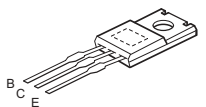
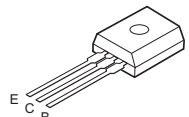
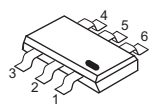
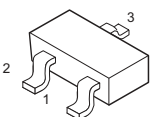
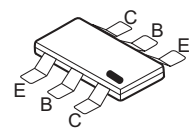
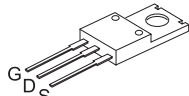
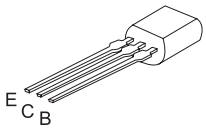
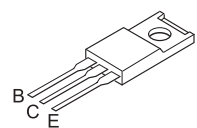
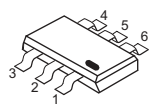
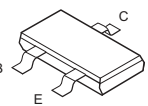
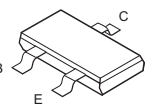
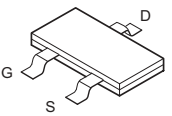
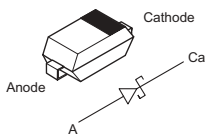
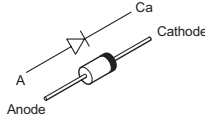
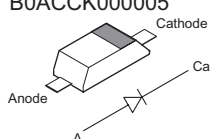
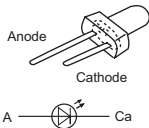
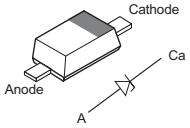
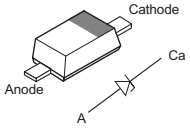
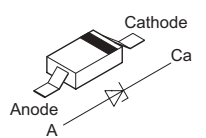
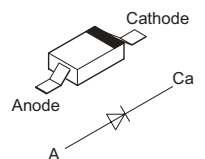
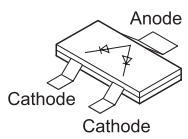
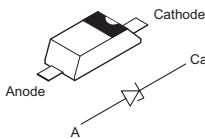


\* FOR INDICATION ONLY

SA-PM86DE/EB/EG/EF  
TRANSFORMER P.C.B.



# 18 Illustration of IC's, Transistors and Diodes

|                                                                                                                                                                                                                                                            |                                                                                                                                                                     |                                                                                                                                                                                                         |                                                                                                                                                                                                                |                                                                                                                                                                                     |                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| C9ZB00000461 (32P)<br>C3ABPY000011 (54P)<br>C0DBZY00018 (8P)<br>C0FBAK000026 (16P)<br>C0JBAZ001251 (20P)<br>C0DBZY00266 (8P)<br>C0FBBK000047 (16P)<br>C1AB00002751 (16P)  | C3EBGC000056 (8P)                                                                  | C1AB00001731 (6P)<br>C0JBAB000908 (6P)                                                                                 | C0DAAMH00012 (5P)                                                                                                            | C0AABB000125 (8P)                                                                                | C0ABBB000244 (8P)           |
| RFKWPM86DE (100P)<br>MN864702A (128P)<br>C0HBB0000057 (44P)<br>MN2DS0018MP (216P)<br>C1AB00002885 (52P)                                                                   | C0CBCBC00140 (5P)<br>C0CBCDC00063 (5P)<br>C0EBA0000039 (5P)<br>C0EBE0000456 (5P)  | C1BA00000487 (23P)                                                                                                   | C0DBEHG000006 (5P)                                                                                                          |                                                                                                                                                                                     |                                                                                                                |
| C0JBAA000502 (5P)<br>C0JBAB000907 (5P)<br>C0JBAA000501 (5P)<br>C0JBAB000884 (5P)                                                                                          | C0GBG0000048 (28P)                                                                 | C0DAEJG00001 (5P)                                                                                                      | RFKWMH32B324 (48P)                                                                                                          | 2SC3940A0A                                                                                       |                                                                                                                |
| B1BACG000023<br>B1BCCG000002                                                                                                                                             | B1BACD000018<br>B1BABG000007                                                      | XP0621400L                                                                                                            | B1GDCFJJ0002                                                                                                                | B1GFGCAA0001                                                                                    | B1DEGM000026                |
| B1ACKD000006                                                                                                                                                            | B1BACG000048                                                                     | B1GBCFJN0033<br>UNR221200L<br>UNR211H00L<br>2SB0709AHL<br>2SD0601AHL<br>B1ADCF000001<br>B1GBCFJJ0051<br>B1ABCF000176  | B1ABGC000005<br>B1ADCE000012<br>B1GBCFLL0037<br>2SD1819A0L<br>2SB1218ARL<br>B1ADGB000008<br>B1GDCFGG0026<br>B1GBCFGN0016  | B1ABEB000002<br>B1GACFGA0002<br>UNR521100L                                                     | B1CFHA000002              |
| B0JCAE000001<br>B0JCPD000025                                                                                                                                            | B0EAKM000117<br>B0EAMM000038                                                     | MA2J72800L<br>MA2J11100L<br>B0ACCK000005                                                                             | B3AAA0000803                                                                                                               | MAZ80330HL<br>MAZ80910ML<br>MAZ81500ML<br>MAZ80390LL<br>MAZ802400L<br>MAZ81200ML<br>MAZ8100HL  | MAZ80510ML<br>MAZ82400ML  |
| MAZ80560ML                                                                                                                                                              | B0ACCE000003                                                                     | B0ADCJ000020                                                                                                         | B0BC9R1A0218                                                                                                               |                                                                                                                                                                                     |                                                                                                                |

# 19 Terminal Function of IC's

## 19.1. IC3800 (RFKWPM86DE): IC Micro Processor

| Pin No. | Terminal Name    | I/O | Function                                      |
|---------|------------------|-----|-----------------------------------------------|
| 1       | NC               | I   | iPhone Detect Control Signal                  |
| 2       | TRAY_CW_H        | O   | Tray Control Signal 1                         |
| 3       | TRAY_CCW_L       | O   | Tray Control Signal 2                         |
| 4       | OPEN_SW          | I   | Open/Unload Signal                            |
| 5       | DPORT_PCON       | -   | No Connection                                 |
| 6       | DPORT_PAUSE      | O   | MIC Volume Level Control Signal 1             |
| 7       | NC               | -   | No Connection                                 |
| 8       | BYTE             | I   | VSS (GND)                                     |
| 9       | CNVSS            | I   | VSS (GND)                                     |
| 10      | XCIN             | -   | No Connection                                 |
| 11      | XCOUT            | I   | RDS Enable (H: Enable L: Disable)             |
| 12      | RESET            | I   | System Reset Input                            |
| 13      | XOUT             | -   | Main Clock Output (10MHz)                     |
| 14      | VSS              | -   | GND (0V)                                      |
| 15      | XIN              | -   | Main Clock Input (10MHz)                      |
| 16      | VCC              | -   | Power Supply (+5V)                            |
| 17      | NMI              | I   | Connect to VCC External Interrupt I/P         |
| 18      | RMT              | I   | Remote Control Input                          |
| 19      | SYNC             | I   | AC Failure Detect Input                       |
| 20      | NC               | O   | iPhone Reset Output                           |
| 21      | NC               | O   | iPhone Enable Output                          |
| 22      | SCART_EN         | I   | Scart TV Selector Enable Signal Input         |
| 23      | EDA              | O   | Data Signal for EEPROM IC                     |
| 24      | ECK              | O   | Clock Signal for EEPROM IC                    |
| 25      | ECS              | O   | Latch Signal for EEPROM IC                    |
| 26      | INNER_SW         | O   | Control Signal                                |
| 27      | NC               | -   | No Connection                                 |
| 28      | DVD_CLK          | O   | Clock Signal for DVD                          |
| 29      | DVD_STAT         | I   | Status Signal for DVD                         |
| 30      | DVD_CMD          | O   | Command Signal for DVD                        |
| 31      | UART_TX          | O   | UART Transmitter Output Signal (For Software) |
| 32      | UART_RX          | I   | UART Receiver Input Signal (For Software)     |
| 33      | S_CLK            | O   | Wireless Output Clock (For Software)          |
| 34      | NC               | I   | Wireless Detect Signal                        |
| 35      | ASP_DAT          | O   | Video Muting Control Signal                   |
| 36      | ASP_CLK          | I   | MIC Volume Up Control Signal                  |
| 37      | TUN_DO           | O   | Tuner Stereo Detect Signal                    |
| 38      | TUN_DI           | O   | Tuner I2C Data Signal                         |
| 39      | TUN_CLK          | O   | Tuner I2C Clock Output Signal                 |
| 40      | PCONT            | O   | System Power Control                          |
| 41      | EPM              | I   | For Flash Programming                         |
| 42      | TUN_SD           | I   | DVD Muting Control Signal                     |
| 43      | DCDET            | I   | DC Detect Signal 1                            |
| 44      | SCART_AUDIO_MUTE | O   | Scart Muting Control Signal (Line-Out)        |
| 45      | DVD_MUTE         | I   | Wide Sound Surround Enable Signal             |
| 46      | MIC_LVL1         | O   | Video Muting Control Signal                   |
| 47      | XM_RX            | O   | Clock Signal for ASP IC                       |
| 48      | XM_TX            | O   | Data Signal for ASP IC                        |
| 49      | MIC_LVL2         | I   | Tuner Station Detect Signal                   |
| 50      | DOCK_PLAY        | O   | Mic Volume Down Control Signal                |
| 51      | CATER            | I   | Wide1                                         |
| 52      | DOCK_FSKIP       | O   | Harmonic Bass Control Signal                  |

| Pin No. | Terminal Name | I/O | Function                             |
|---------|---------------|-----|--------------------------------------|
| 53      | DOCK_RSKIP    | O   | AM Beatproof                         |
| 54      | CATER         | O   | Multi Level Control Signal 1         |
| 55      | CATER         | O   | Multi Level Control Signal 2         |
| 56      | CATER         | I   | MIC Enable Input Signal              |
| 57      | VMUTE2        | O   | iPod Video Selector Signal           |
| 58      | CATER         | -   | No Connection                        |
| 59      | NC            | O   | Echo Muting Control Signal           |
| 60      | DPORT_ACK_IN  | I   | iPod Power Supply Control Signal     |
| 61      | VMUTE         | I   | Optical Enable Input Signal          |
| 62      | VCC           | -   | Voltage Supply (+5V)                 |
| 63      | DC_DET2       | I   | DC Detect Signal 2                   |
| 64      | VSS           | -   | GND (0V)                             |
| 65      | YC_H          | O   | Video Mixing Signal                  |
| 66      | RDS_DAT       | O   | RDS Decoder Data Signal              |
| 67      | F_HOP         | O   | Frequency Hopping for Digital-Amp    |
| 68      | NC            | O   | Muting Control for Center & Surround |
| 69      | MUTE_A        | O   | Muting Control for Front & Subwoofer |
| 70      | RGB           | O   | Video Output Muting Signal           |
| 71      | MOD_DA        | O   | Mode Control for D-Amp               |
| 72      | CATER         | -   | No Connection                        |
| 73      | CEC_OUT       | O   | HDMI/CEC Output Control              |
| 74      | DEMO          | O   | ACS Muting Control                   |
| 75      | CEC_IN        | I   | HDMI/CEC Input Control               |
| 76      | JOG_A         | I   | Volume Jog Signal A                  |
| 77      | JOG_B         | I   | Volume Jog Signal B                  |
| 78      | HP_MUTE       | O   | Headphone Muting Control Signal      |
| 79      | ECHO_MUTE     | O   | Battery Power Control for IPOD       |
| 80      | WIDE          | O   | Power Control Signal for DVD         |
| 81      | RDS_CLK       | I   | RDS Clock Signal (For Decoder)       |
| 82      | IPOD_DET      | I   | iPod Detect Signal                   |
| 83      | ECHO_LVL1     | -   | No Connection                        |
| 84      | ECHO_LVL2     | -   | No Connection                        |
| 85      | FLD_CLK       | O   | FL Driver Strobe Signal              |
| 86      | FLD_STB       | O   | FL Driver Standby Signal             |
| 87      | FLD_OUT       | O   | FL Driver Data Out                   |
| 88      | DOCK_DET1     | O   | Control Signal                       |
| 89      | MD3           | I   | Model Code 3                         |
| 90      | MD2           | I   | Model Code 2                         |
| 91      | KEY2          | I   | Key 2 Line Input                     |
| 92      | HP_SW         | -   | No Connection                        |
| 93      | NC            | I   | D-Amp Sense Input Signal 1           |
| 94      | CATER         | I   | DVD Region Setting                   |
| 95      | REGION        | I   | Tuner Region Setting                 |
| 96      | AVSS          | -   | GND (0V)                             |
| 97      | KEY1          | I   | Key 1 Line Input                     |
| 98      | VREF          | -   | Voltage Supply (+5V)                 |
| 99      | AVCC          | -   | Voltage Supply (+5V)                 |
| 100     | DPORT_DET2    | -   | No Connection                        |

## 19.2. IC6000 (C0HBB0000057): IC FL Driver

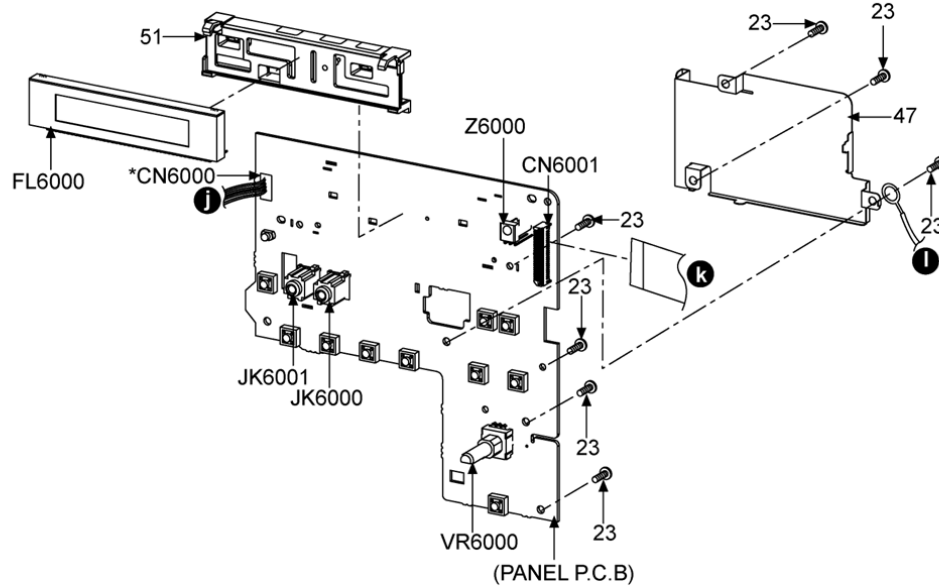
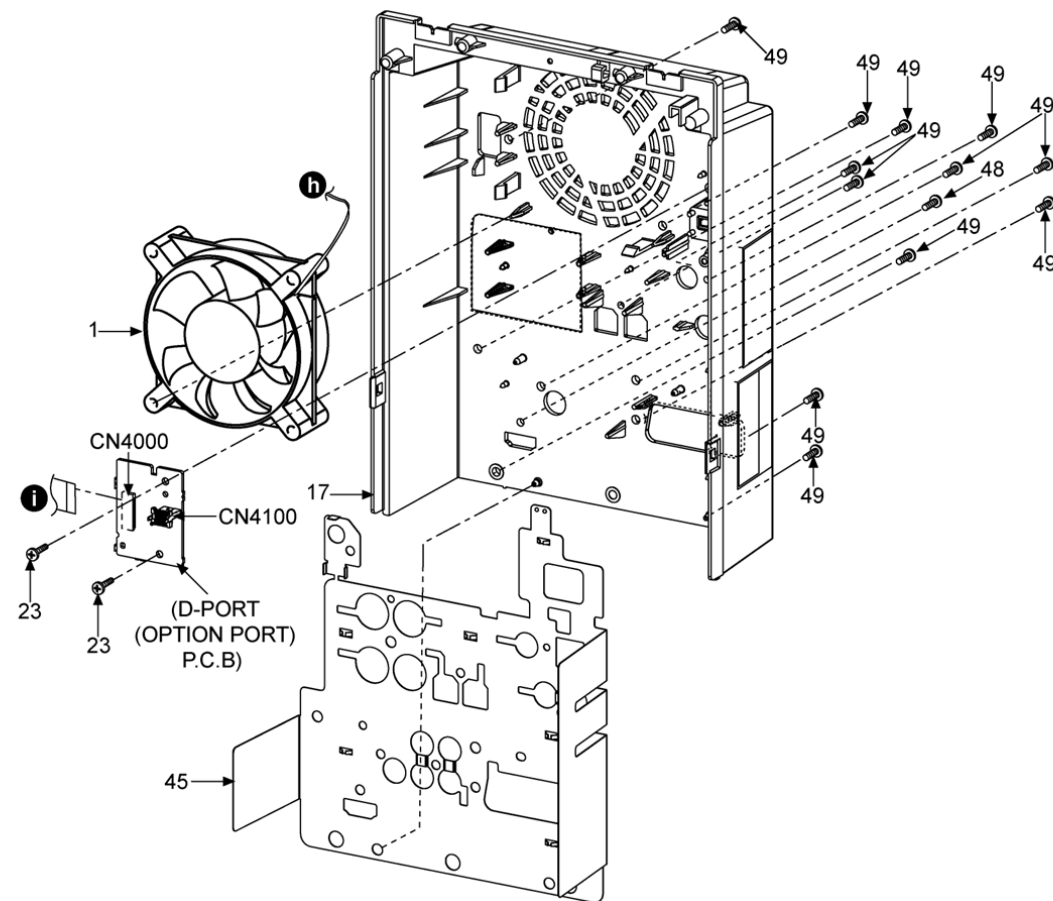
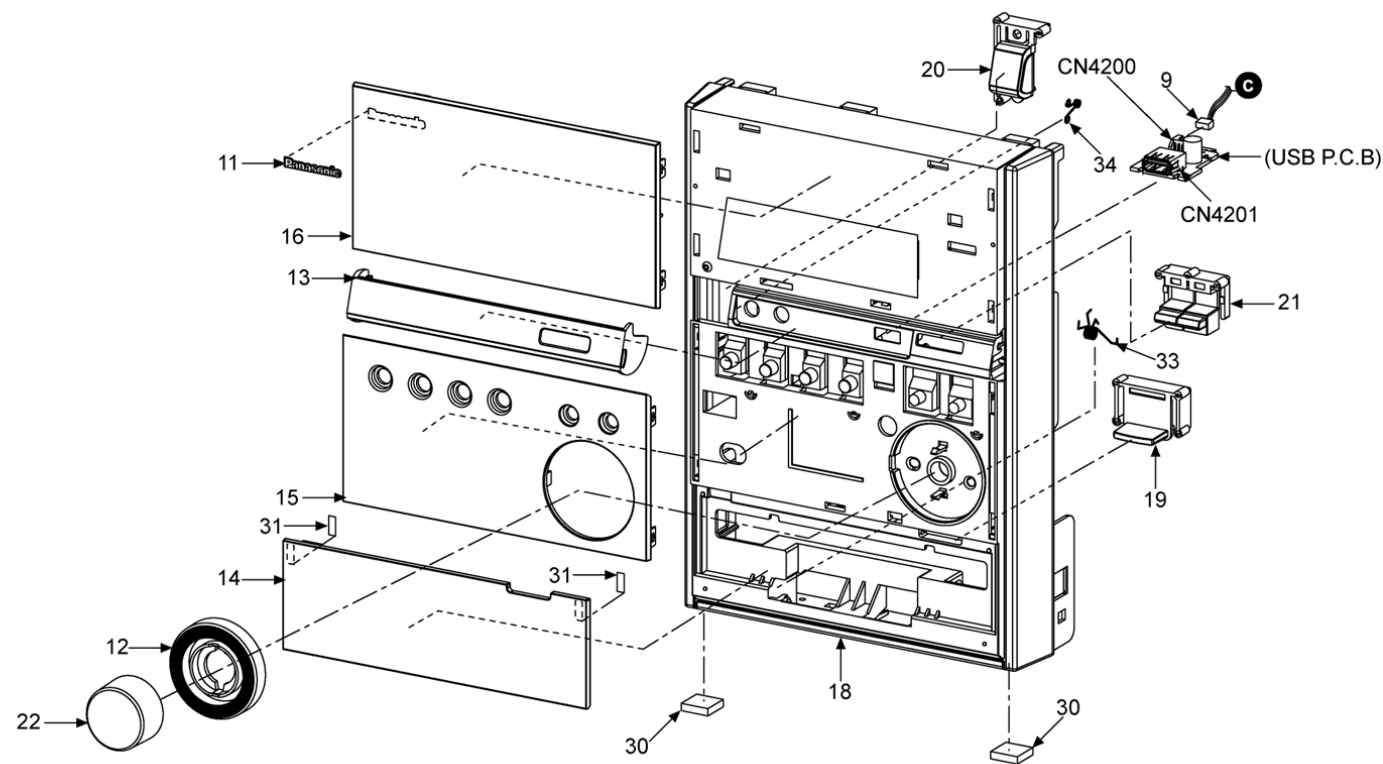
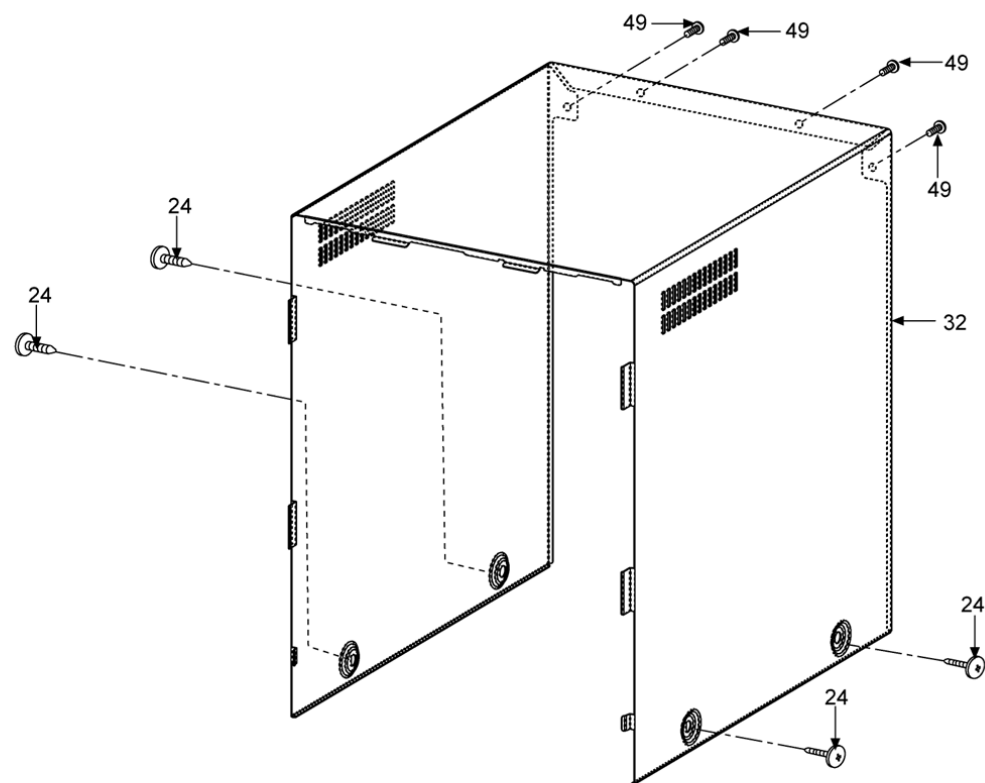
| Pin No. | Terminal Name | I/O | Function         |
|---------|---------------|-----|------------------|
| 1       | LED1          | O   | Led Drive Output |
| 2       | LED2          | -   | Led Drive Output |
| 3       | LED3          | -   | Led Drive Output |
| 4       | LED4          | -   | Led Drive Output |

| Pin No. | Terminal Name | I/O | Function                         |
|---------|---------------|-----|----------------------------------|
| 5       | OSC           | I   | Oscillator Input                 |
| 6       | DOUT          | -   | Data Output                      |
| 7       | DIN           | I   | Data Input                       |
| 8       | CLK           | I   | Clock Input                      |
| 9       | STB           | I   | Serial Interface Strobe          |
| 10      | K1            | -   | Key Data Input 1 (No Connection) |
| 11      | K2            | -   | Key Data Input 2 (No Connection) |
| 12      | GND           | -   | GND                              |
| 13      | VCC           | -   | Power Supply (+5V)               |
| 14      | P18           | O   | Segment Output 18                |
| 15      | P17           | O   | Segment Output 17                |
| 16      | P16           | O   | Segment Output 16                |
| 17      | P15           | O   | Segment Output 15                |
| 18      | P14           | O   | Segment Output 14                |
| 19      | P13           | O   | Segment Output 13                |
| 20      | P12           | O   | Segment Output 12                |
| 21      | P11           | O   | Segment Output 11                |
| 22      | P10           | O   | Segment Output 10                |
| 23      | P9            | O   | Segment Output 9                 |
| 24      | P8            | O   | Segment Output 8                 |
| 25      | P7            | O   | Segment Output 7                 |
| 26      | P6            | O   | Segment Output 6                 |
| 27      | P5            | O   | Segment Output 5                 |
| 28      | P4            | O   | Segment Output 4                 |
| 29      | P3            | O   | Segment Output 3                 |
| 30      | VEE           | -   | Voltage Supply                   |
| 31      | P2            | O   | Segment Output 2                 |
| 32      | P1            | O   | Segment Output 1                 |
| 33      | G1            | O   | Grid Segment Output 1            |
| 34      | G2            | O   | Grid Segment Output 2            |
| 35      | G3            | O   | Grid Segment Output 3            |
| 36      | G4            | O   | Grid Segment Output 4            |
| 37      | G5            | O   | Grid Segment Output 5            |
| 38      | G6            | O   | Grid Segment Output 6            |
| 39      | G7            | O   | Grid Segment Output 7            |
| 40      | G8            | O   | Grid Segment Output 8            |
| 41      | G9            | O   | Grid Segment Output 9            |
| 42      | G10           | O   | Grid Segment Output 10           |
| 43      | VDD           | -   | Voltage Supply (+5V)             |
| 44      | VSS           | -   | GND                              |





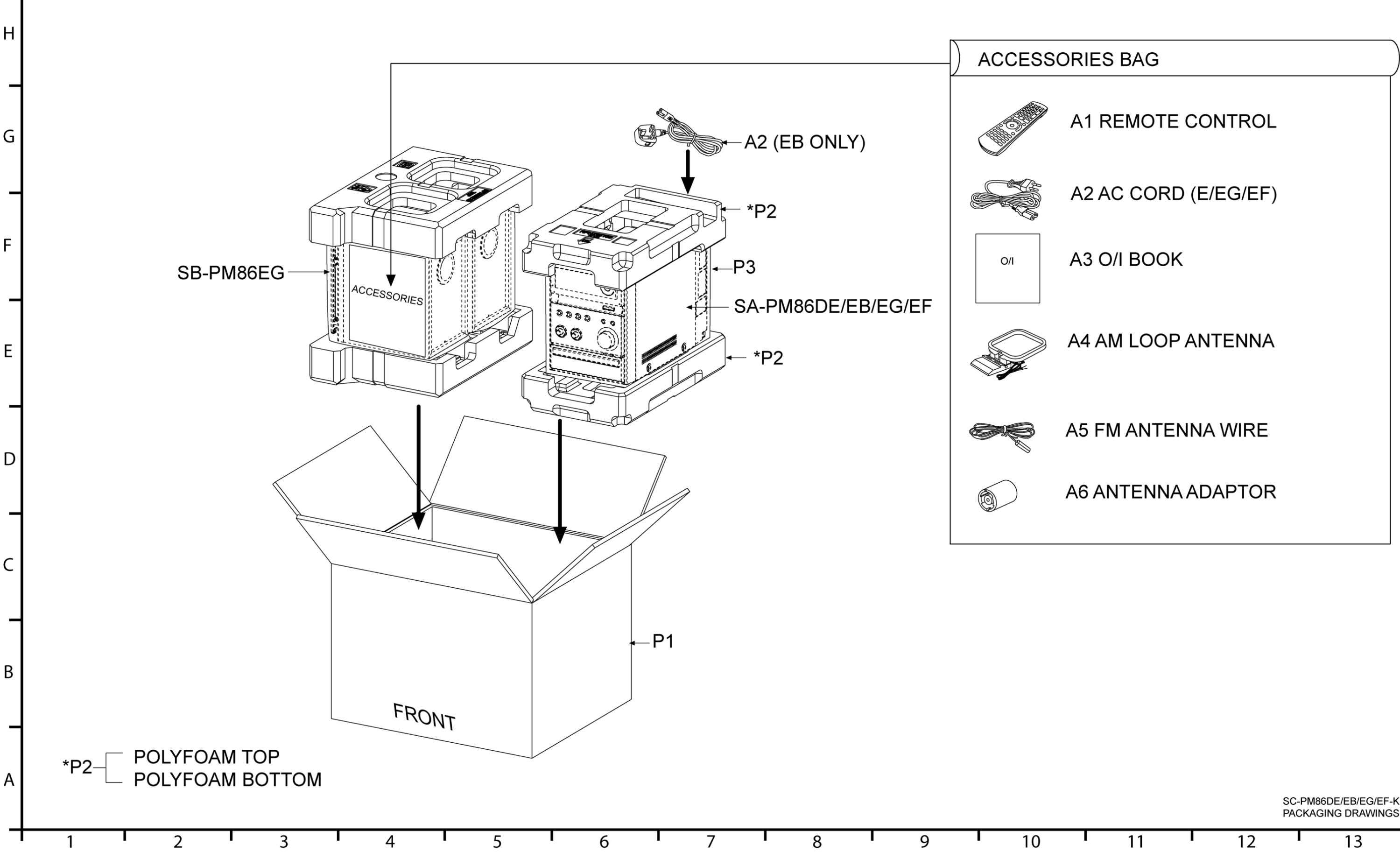
H  
G  
F  
E  
D  
C  
B  
A



NOTE " \* " PARTS ARE INDICATIONS ONLY

SA-PM86DE/EB/EG/EF-K  
CABINET DRAWINGS

20.2. Packaging





# 21 Replacement Parts List

## Notes:

- Important safety notice:

Components identified by  $\triangle$  mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low noise (resistors), etc are used.

When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.

- The parenthesized indications in the Remarks columns specify the areas or colour. (Refer to the cover page for area or colour)  
Parts without these indications can be used for all areas.
- Warning: This product uses a laser diode. Refer to "Precaution of Laser Diode".
- Capacitor values are in microfarads ( $\mu$ F) unless specified otherwise, P= Pico-farads (pF), F= Farads.
- Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM).
- The marking (RTL) indicates that the Retention Time is limited for this items. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of a availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.
- [M] Indicates in the Remarks columns indicates parts supplied by PAVCSG.
- Reference for O/I book languages are as follows:

|     |                 |     |         |     |            |     |                     |
|-----|-----------------|-----|---------|-----|------------|-----|---------------------|
| Ar: | Arabic          | Du: | Dutch   | It: | Italian    | Sp: | Spanish             |
| Cf: | Canadian French | En: | English | Ko: | Korean     | Sw: | Swedish             |
| Cz: | Czech           | Fr: | French  | Po: | Polish     | Co: | Traditional Chinese |
| Da: | Danish          | Ge: | German  | Ru: | Russian    | Cn: | Simplified Chinese  |
| Pe: | Persian         | Ur: | Ukraine | Pr: | Portuguese |     |                     |

## 21.1. Component Parts List

| Ref. No. | Part No.     | Part Name & Description        | Remarks                       |
|----------|--------------|--------------------------------|-------------------------------|
|          |              | CABINET AND CHASSIS            |                               |
| 1        | L6FALEFH0030 | FAN UNIT                       | [M]                           |
| 2        | REEX0845     | 7P FFC CABLE (BACK END-HDMI)   | [M]                           |
| 3        | REEX0847     | 50P FFC CABLE (BACK END-VIDEO) | [M]                           |
| 4        | REEX0848     | 25P FFC CABLE (VIDEO-MAIN)     | [M]                           |
| 5        | REEX0849     | 14P FFC CABLE (VIDEO-MAIN)     | [M]                           |
| 6        | REEX0851     | 24P FFC CABLE (PANEL-MAIN)     | [M]                           |
| 7        | REEX0853     | 14P FFC CABLE (D-PORT-MAIN)    | [M]                           |
| 8        | REXX0658     | 8P WIRE (POWER -TRANS)         | [M]                           |
| 9        | REXX0677     | 14P FFC CABLE (VIDEO-MAIN)     | [M]                           |
| 11       | RGBV0016-S   | PANASONIC BADGE                | [M]                           |
| 12       | RGKV0161-1S  | VOLUME RING                    | [M]                           |
| 13       | RGKX0460-K   | USB LID                        | [M]                           |
| 14       | RGKX0464-K   | DVD LID                        | [M]<br>E/EF/EG                |
| 14       | RGKX0464A-K  | DVD LID                        | [M] EB                        |
| 15       | RGKX0466-K   | CENTER ORNAMENT                | [M]                           |
| 16       | RGKX0468-R   | FL WINDOW                      | [M]<br>E/EG/EF                |
| 16       | RGKX0468A-R  | FL WINDOW                      | [M] EB                        |
| 17       | RKSX0070-K   | REAR PANEL                     | [M]<br>E/EG/EF<br>$\triangle$ |
| 17       | RFKHAPM86DEB | REAR CABINET ASS'Y             | [M] EB                        |
| 18       | RGFX0342-K   | FRONT PANEL                    | [M]                           |
| 19       | RGUX0755-H   | DVD EJECT BUTTON               | [M]                           |
| 20       | RGUX0758-K   | POWER BUTTON BASE              | [M]                           |
| 21       | RGUX0759-K   | SKIP BUTTON                    | [M]                           |
| 22       | RGWV0047-1S  | VOLUME KNOB                    | [M]                           |
| 23       | RHD26046-L   | SCREW                          | [M]                           |
| 24       | RHD30007-K2J | SCREW                          | [M]                           |
| 25       | RHD30083-1   | SCREW                          | [M]                           |
| 26       | RHD30092-1   | SCREW                          | [M]                           |
| 27       | RHDV30006    | SCREW                          | [M]                           |
| 29       | RHDX03001    | SCREW                          | [M]                           |

| Ref. No. | Part No.    | Part Name & Description    | Remarks             |
|----------|-------------|----------------------------|---------------------|
| 30       | RHGV0008    | LEG CUSHION                | [M]                 |
| 31       | RMG0547-K   | CUSHION                    | [M]                 |
| 32       | RKMX0142-K  | TOP CABINET                | [M] $\triangle$     |
| 33       | RMBX0074    | DVD LID SPRING             | [M]                 |
| 34       | RMBX0082    | USB LID SPRING             | [M]                 |
| 35       | RMXX0035    | HEATSINK CLIP A            | [M]                 |
| 37       | RMXX0146    | BOTTOM CHASSIS             | [M]                 |
| 38       | RMXX0147    | INNER CHASSIS              | [M]                 |
| 39       | RMNX0266-K  | MECHANISM BRACKET          | [M]                 |
| 40       | RMNX0278    | PCB BRACKET                | [M]                 |
| 41       | RXQX0084    | HDMI SHIELD PLATE UNIT     | [M]                 |
| 42       | RMXX0355    | HEATSINK                   | [M]                 |
| 43       | RXXX0108    | HEATSINK UNIT              | [M]                 |
| 44       | RMXX0191    | HEATSINK EXTRUSION         | [M]                 |
| 45       | RSCX0178    | REAR SHIELD                | [M]                 |
| 47       | RSCX0183    | FL SHIELD                  | [M]                 |
| 48       | XSN3+6FJ    | SCREW                      | [M]                 |
| 49       | XTB3+10JFJ  | SCREW                      | [M]                 |
| 50       | XTB3+8JFJ   | SCREW                      | [M]                 |
| 51       | RMNX0260    | FL HOLDER                  | [M]                 |
| 52       | ENG07823QRF | TUNER PACK                 | [M] E               |
| 52       | ENG06836QRF | TUNER PACK                 | [M]<br>EG/EF/E<br>B |
| 53       | REXX0661    | 7P WIRE (FL PANEL-TRANS)   | [M]                 |
| 54       | REXX0662    | 3P WIRE (VIDEO-TRANS)      | [M]                 |
| 55       | REXX0019    | WIRE (PANEL-INNER CHASSIS) | [M]                 |
| 56       | RXXX0106    | HEAT SINK                  | [M]                 |
|          |             | PACKING MATERIALS          |                     |
| P1       | RPGX1838    | PACKING CASE               | [M] EG              |
| P1       | RPGX1839    | PACKING CASE               | [M] E               |
| P1       | RPGX1840    | PACKING CASE               | [M] EB              |
| P1       | RPGX1931    | PACKING CASE               | [M] EF              |
| P2       | RPNX0521    | POLYFOAM                   | [M]                 |
| P3       | RPHV0001-1  | MIRAMAT SHEET              | [M]                 |
|          |             | ACCESSORIES                |                     |

| Ref. No. | Part No.     | Part Name & Description         | Remarks                      |
|----------|--------------|---------------------------------|------------------------------|
| A1       | N2QAYB000252 | REMOTE CONTROL                  | [M]                          |
| A1-1     | RKK-HTR0051K | R/C BATTERY COVER               | [M]                          |
| A2       | K2CQ2CA00007 | AC CORD                         | [M]<br>E/EG/EF<br>△          |
| A2       | K2CT3CA00004 | AC CORD                         | [M] EB<br>△                  |
| A3       | RQTV0263-1D  | O/I BOOK (Ge/It/Fr)             | [M]<br>EF/EG                 |
| A3       | RQTV0264-1H  | O/I BOOK (Du/Da/Sw)             | [M] EG                       |
| A3       | RQTV0265-1B  | O/I BOOK (En)                   | [M]<br>E/EB                  |
| A3       | RQTV0266-1E  | O/I BOOK (Sp/Po/Cz)             | [M] E                        |
| A4       | N1DAAAA00001 | AM LOOP ANTENNA                 | [M]                          |
| A5       | RSA0007-L1   | FM INDOOR ANTENNA               | [M]                          |
| A6       | K1YZ02000013 | ANTENNA ADAPTER                 | [M] EB                       |
|          |              |                                 |                              |
|          |              | PRINTED CIRCUIT BOARDS          |                              |
|          |              |                                 |                              |
| PCB1     | REPX0650A    | MAIN P.C.B                      | [M]<br>(RTL)<br>EF/EG/E<br>B |
|          | REPX0650B    | MAIN P.C.B                      | [M]<br>(RTL) E               |
| PCB2     | REPX0650A    | VIDEO P.C.B                     | [M]<br>(RTL)<br>EF/EG/E<br>B |
|          | REPX0650B    | VIDEO P.C.B                     | [M]<br>(RTL) E               |
| PCB3     | REPX0650A    | PANEL P.C.B                     | [M]<br>(RTL)<br>EF/EG/E<br>B |
|          | REPX0650B    | PANEL P.C.B                     | [M]<br>(RTL) E               |
| PCB4     | REPX0650A    | USB P.C.B                       | [M]<br>(RTL)<br>EF/EG/E<br>B |
|          | REPX0650B    | USB P.C.B                       | [M]<br>(RTL) E               |
| PCB5     | REPX0651B    | D-PORT P.C.B                    | [M]<br>(RTL)                 |
| PCB6     | REPX0620D    | DVD MODULE P.C.B                | [M]<br>(RTL)                 |
| PCB7     | REPX0633D    | POWER (D-AMP) P.C.B             | [M]<br>(RTL)                 |
| PCB8     | REPX0633D    | TRANSFORMER P.C.B               | [M]<br>(RTL)<br>△            |
| PCB9     | REPX0633D    | BRIDGE P.C.B                    | [M]<br>(RTL)                 |
|          |              |                                 |                              |
|          |              | INTERGRATED CIRCUITS            |                              |
|          |              |                                 |                              |
| IC2200   | C1AB00001731 | IC VIDEO BUFFER                 | [M]                          |
| IC2201   | C9ZB00000461 | IC VIDEO BUFFER                 | [M]                          |
| IC2741   | C0DAAMH00012 | IC DC DC CONVERTER              | [M]                          |
| IC3050   | C0AABB000125 | IC DUAL OP-AMP                  | [M]                          |
| IC3200   | C1AB00002885 | IC ASP                          | [M]                          |
| IC3251   | C0ABBB000244 | IC DUAL OP-AMP                  | [M]                          |
| IC3655   | C0DAEJG00001 | IC ADJUSTABLE VOLTAGE REGULATOR | [M]                          |
| IC3700   | C1AB00002751 | IC VIDEO                        | [M]                          |
| IC3800   | REFKWM86DE   | IC MICRO-PROCESSOR              | [M]                          |
| IC3802   | C0JBAB000884 | IC LOGIC                        | [M]                          |
| IC3803   | C0CBCBC00140 | IC VOLTAGE REGULATOR            | [M]                          |
| IC3901   | MN864702A    | IC HDMI TRANSMITTER             | [M]                          |
| IC3952   | C0CBCDC00063 | IC TERMINAL VOLTAGE REGULATOR   | [M]                          |
| IC5000   | C1BA00000487 | IC DIGITAL POWER-AMP            | [M]                          |
| IC6000   | COHBB0000057 | IC FL DRIVER                    | [M]                          |
| IC8001   | MN2DS0018MP  | IC DV5.0 LSI                    | [M]                          |
| IC8051   | C3ABPY000011 | IC SDRAM                        | [M]                          |
| IC8111   | C0DBZYY00018 | IC +3.3V DC DC CONVERTER        | [M]                          |
| IC8151   | C0DBEHG00006 | IC +1.2V REGULATOR              | [M]                          |
| IC8251   | COGBG0000048 | IC MOTOR DRIVE                  | [M]                          |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| IC8420   | C0FBBK000047 | IC AUDIO DAC            | [M]     |
| IC8422   | C0FBAK000026 | IC AUDIO DAC            | [M]     |
| IC8601   | C0EBA0000039 | IC RESET                | [M]     |
| IC8606   | C0EBE0000456 | IC RESET                | [M]     |
| IC8611   | C3EBGC000056 | IC EEPROM               | [M]     |
| IC8651   | RFKWMH32B324 | IC FLASH ROM            | [SPG]   |
| IC8691   | C0JBAA000502 | IC AND GATE             | [M]     |
| IC8695   | C0JBAA000502 | IC AND GATE             | [M]     |
| IC8701   | C0JBAB000907 | IC INVERTER GATE        | [M]     |
| IC8901   | C0JBAA000501 | IC AND GATE             | [M]     |
| IC9001   | C0JBAZ001251 | IC LATCH                | [M]     |
| IC9002   | C0JBAZ001251 | IC LATCH                | [M]     |
| IC9003   | C0JBAB000908 | IC INVERTER GATE        | [M]     |
| IC9005   | C0DBZYY00266 | IC REGULATOR            | [M]     |
|          |              |                         |         |
|          |              | TRANSISTORS             |         |
|          |              |                         |         |
| Q2041    | B1GBCFJN0033 | TRANSISTOR              | [M]     |
| Q2200    | UNR221200L   | TRANSISTOR              | [M]     |
| Q2201    | UNR221200L   | TRANSISTOR              | [M]     |
| Q2202    | UNR211H00L   | TRANSISTOR              | [M]     |
| Q2203    | B1GBCFJN0033 | TRANSISTOR              | [M]     |
| Q2204    | 2SB0709AHL   | TRANSISTOR              | [M]     |
| Q2220    | UNR221200L   | TRANSISTOR              | [M]     |
| Q2221    | B1GBCFJN0033 | TRANSISTOR              | [M]     |
| Q2222    | 2SD0601AHL   | TRANSISTOR              | [M]     |
| Q2754    | B1BACG000048 | TRANSISTOR              | [M]     |
| Q2771    | B1ADCF000001 | TRANSISTOR              | [M]     |
| Q2772    | B1GBCFJJ0051 | TRANSISTOR              | [M]     |
| Q2852    | 2SD0601AHL   | TRANSISTOR              | [M]     |
| Q2853    | 2SD0601AHL   | TRANSISTOR              | [M]     |
| Q2980    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q3060    | B1GFGCAA0001 | TRANSISTOR              | [M]     |
| Q3065    | B1ABGC000005 | TRANSISTOR              | [M]     |
| Q3160    | B1GFGCAA0001 | TRANSISTOR              | [M]     |
| Q3165    | B1ABGC000005 | TRANSISTOR              | [M]     |
| Q3406    | B1GDCFGG0026 | TRANSISTOR              | [M]     |
| Q3611    | 2SC3940A0A   | TRANSISTOR              | [M]     |
| Q3620    | B1GBCFJJ0051 | TRANSISTOR              | [M]     |
| Q3621    | B1ADCE000012 | TRANSISTOR              | [M]     |
| Q3660    | B1GFGCAA0001 | TRANSISTOR              | [M]     |
| Q3661    | B1GFGCAA0001 | TRANSISTOR              | [M]     |
| Q3750    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q3751    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q3753    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q3754    | B1ACKD000006 | TRANSISTOR              | [M]     |
| Q3801    | B1ADCE000012 | TRANSISTOR              | [M]     |
| Q3802    | 2SD0601AHL   | TRANSISTOR              | [M]     |
| Q3803    | B1GBCFLL0037 | TRANSISTOR              | [M]     |
| Q3804    | B1ADCE000012 | TRANSISTOR              | [M]     |
| Q3807    | B1ABEB000002 | TRANSISTOR              | [M]     |
| Q3808    | B1GBCFGN0016 | TRANSISTOR              | [M]     |
| Q3809    | B1GBCFGN0016 | TRANSISTOR              | [M]     |
| Q3810    | B1GBCFGN0016 | TRANSISTOR              | [M]     |
| Q3811    | B1GBCFGN0016 | TRANSISTOR              | [M]     |
| Q3812    | B1GDCFGG0026 | TRANSISTOR              | [M]     |
| Q3814    | B1GDCFGG0026 | TRANSISTOR              | [M]     |
| Q3901    | 2SD1819A0L   | TRANSISTOR              | [M]     |
| Q3902    | B1CFHA000002 | TRANSISTOR              | [M]     |
| Q3903    | B1CFHA000002 | TRANSISTOR              | [M]     |
| Q3941    | 2SD1819A0L   | TRANSISTOR              | [M]     |
| Q3942    | 2SD1819A0L   | TRANSISTOR              | [M]     |
| Q3943    | 2SD1819A0L   | TRANSISTOR              | [M]     |
| Q5100    | B1BACG000023 | TRANSISTOR              | [M]     |
| Q5101    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q5102    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q5103    | B1DEGM000026 | TRANSISTOR              | [M]     |
| Q5104    | B1GACFGA0002 | TRANSISTOR              | [M]     |
| Q5105    | B1DEGM000026 | TRANSISTOR              | [M]     |
| Q5106    | 2SB0709AHL   | TRANSISTOR              | [M]     |
| Q5107    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q5108    | B1GBCFJJ0051 | TRANSISTOR              | [M]     |
| Q5109    | B1GBCFJJ0051 | TRANSISTOR              | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| Q5501    | B1GBCFJJ0051 | TRANSISTOR              | [M]     |
| Q5503    | B1ABGC000005 | TRANSISTOR              | [M]     |
| Q5601    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q5603    | B1ADCE000012 | TRANSISTOR              | [M]     |
| Q5604    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q5910    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q5911    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q5912    | B1GBCFJJ0051 | TRANSISTOR              | [M]     |
| Q5921    | B1BCCG000002 | TRANSISTOR              | [M]     |
| Q5922    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q5927    | B1BCCG000002 | TRANSISTOR              | [M]     |
| Q5950    | B1ABCF000176 | TRANSISTOR              | [M]     |
| Q5970    | B1GBCFJJ0051 | TRANSISTOR              | [M]     |
| Q5971    | B1BABG000007 | TRANSISTOR              | [M]     |
| Q5972    | B1GBCFGN0016 | TRANSISTOR              | [M]     |
| Q5990    | B1ACKD000006 | TRANSISTOR              | [M]     |
| Q5991    | B1BACD000018 | TRANSISTOR              | [M]     |
| Q8321    | 2SB1218ARL   | TRANSISTOR              | [M]     |
| Q8325    | 2SB1218ARL   | TRANSISTOR              | [M]     |
| Q8331    | 2SB1218ARL   | TRANSISTOR              | [M]     |
| Q8335    | 2SB1218ARL   | TRANSISTOR              | [M]     |
| Q8341    | 2SB1218ARL   | TRANSISTOR              | [M]     |
| Q8551    | 2SD1819AOL   | TRANSISTOR              | [M]     |
| Q8552    | B1ADGB000008 | TRANSISTOR              | [M]     |
| Q8561    | 2SD1819AOL   | TRANSISTOR              | [M]     |
| Q8562    | B1ADGB000008 | TRANSISTOR              | [M]     |
| Q8563    | B1CFHA000002 | TRANSISTOR              | [M]     |
| Q8564    | B1CFHA000002 | TRANSISTOR              | [M]     |
| Q8565    | 2SD1819AOL   | TRANSISTOR              | [M]     |
| QR8111   | XP0621400L   | TRANSISTOR              | [M]     |
| QR8420   | UNR521100L   | TRANSISTOR              | [M]     |
| QR9030   | B1GDCFJJ0002 | TRANSISTOR              | [M]     |
|          |              |                         |         |
|          |              | DIODES                  |         |
|          |              |                         |         |
| D2220    | MAZ81200ML   | DIODE                   | [M]     |
| D2413    | B0JCAE000001 | DIODE                   | [M]     |
| D2740    | MAZ80620HL   | DIODE                   | [M]     |
| D2741    | B0JCPD000025 | DIODE                   | [M]     |
| D2755    | MAZ80330HL   | DIODE                   | [M]     |
| D2770    | MAZ81000HL   | DIODE                   | [M]     |
| D2772    | B0ACCK000005 | DIODE                   | [M]     |
| D3200    | B0BC9R1A0218 | DIODE                   | [M]     |
| D3201    | B0ACCK000005 | DIODE                   | [M]     |
| D3611    | MAZ80910ML   | DIODE                   | [M]     |
| D3660    | B0EAKM000117 | DIODE                   | [M]     |
| D3661    | B0EAKM000117 | DIODE                   | [M]     |
| D3662    | B0EAKM000117 | DIODE                   | [M]     |
| D3663    | B0EAKM000117 | DIODE                   | [M]     |
| D3700    | B0EAKM000117 | DIODE                   | [M]     |
| D3750    | MAZ80560ML   | DIODE                   | [M]     |
| D3754    | B0ACCK000005 | DIODE                   | [M]     |
| D3800    | B0ACCK000005 | DIODE                   | [M]     |
| D3802    | B0ACCK000005 | DIODE                   | [M]     |
| D3803    | B0ACCK000005 | DIODE                   | [M]     |
| D3901    | MA2J72800L   | DIODE                   | [M]     |
| D5022    | B0ACCK000005 | DIODE                   | [M]     |
| D5101    | B0ACCK000005 | DIODE                   | [M]     |
| D5103    | MAZ81200ML   | DIODE                   | [M]     |
| D5104    | MAZ80560ML   | DIODE                   | [M]     |
| D5105    | MAZ81200ML   | DIODE                   | [M]     |
| D5106    | B0EAKM000117 | DIODE                   | [M]     |
| D5107    | MAZ80560ML   | DIODE                   | [M]     |
| D5108    | B0EAKM000117 | DIODE                   | [M]     |
| D5109    | MAZ81500ML   | DIODE                   | [M]     |
| D5110    | B0EAKM000117 | DIODE                   | [M]     |
| D5111    | MAZ80510ML   | DIODE                   | [M]     |
| D5112    | B0EAKM000117 | DIODE                   | [M]     |
| D5503    | MAZ80510ML   | DIODE                   | [M]     |
| D5901    | B0ACCK000005 | DIODE                   | [M]     |
| D5902    | B0ACCK000005 | DIODE                   | [M]     |
| D5911    | B0EAMM000038 | DIODE                   | [M]     |
| D5912    | B0EAMM000038 | DIODE                   | [M]     |

| Ref. No. | Part No.      | Part Name & Description | Remarks |
|----------|---------------|-------------------------|---------|
| D5913    | B0EAMM000038  | DIODE                   | [M]     |
| D5914    | B0EAMM000038  | DIODE                   | [M]     |
| D5920    | B0EAKM000117  | DIODE                   | [M]     |
| D5921    | B0EAKM000117  | DIODE                   | [M]     |
| D5922    | B0EAKM000117  | DIODE                   | [M]     |
| D5923    | B0EAKM000117  | DIODE                   | [M]     |
| D5924    | B0EAKM000117  | DIODE                   | [M]     |
| D5925    | MAZ80390LL    | DIODE                   | [M]     |
| D5926    | MAZ81200ML    | DIODE                   | [M]     |
| D5927    | B0ACCK000005  | DIODE                   | [M]     |
| D5928    | B0EAKM000117  | DIODE                   | [M]     |
| D5929    | B0EAKM000117  | DIODE                   | [M]     |
| D5930    | B0EAKM000117  | DIODE                   | [M]     |
| D5931    | B0EAKM000117  | DIODE                   | [M]     |
| D5932    | B0EAKM000117  | DIODE                   | [M]     |
| D5933    | B0EAKM000117  | DIODE                   | [M]     |
| D5934    | B0EAKM000117  | DIODE                   | [M]     |
| D5935    | B0EAKM000117  | DIODE                   | [M]     |
| D5950    | B0ACCK000005  | DIODE                   | [M]     |
| D5951    | MAZ80560ML    | DIODE                   | [M]     |
| D5952    | B0EAKM000117  | DIODE                   | [M]     |
| D5960    | MAZ82400ML    | DIODE                   | [M]     |
| D5970    | B0ACCK000005  | DIODE                   | [M]     |
| D5971    | MAZ80620HL    | DIODE                   | [M]     |
| D5972    | B0EAKM000117  | DIODE                   | [M]     |
| D5973    | B0EAKM000117  | DIODE                   | [M]     |
| D5974    | B0EAKM000117  | DIODE                   | [M]     |
| D5975    | B0EAKM000117  | DIODE                   | [M]     |
| D5976    | B0ACCE000003  | DIODE                   | [M]     |
| D5980    | B0ACCK000005  | DIODE                   | [M]     |
| D6000    | MAZ802400L    | DIODE                   | [M]     |
| D6001    | B3AAA0000803  | DIODE                   | [M]     |
| D8211    | MA2J11100L    | DIODE                   | [M]     |
| DW3750   | B0ADCCJ000020 | DIODE                   | [M]     |
|          |               |                         |         |
|          |               | VARISTORS               |         |
|          |               |                         |         |
| VA3901   | EZAEG2A50AX   | ESD SUPPRESSOR          | [M]     |
| VA3902   | EZAEG2A50AX   | ESD SUPPRESSOR          | [M]     |
| VA3903   | EZAEG2A50AX   | ESD SUPPRESSOR          | [M]     |
| VA3904   | EZAEG2A50AX   | ESD SUPPRESSOR          | [M]     |
| VA3905   | EZAEG2A50AX   | ESD SUPPRESSOR          | [M]     |
| VA3906   | EZAEG2A50AX   | ESD SUPPRESSOR          | [M]     |
| VA3907   | EZAEG2A50AX   | ESD SUPPRESSOR          | [M]     |
| VA3908   | EZAEG2A50AX   | ESD SUPPRESSOR          | [M]     |
| VA3909   | EZJZ0V800AA   | VARISTOR                | [M]     |
| VA3910   | EZJZ0V800AA   | VARISTOR                | [M]     |
| VA3911   | EZJZ0V800AA   | VARISTOR                | [M]     |
| VA3912   | EZJZ0V800AA   | VARISTOR                | [M]     |
| VA3913   | EZJZ0V800AA   | VARISTOR                | [M]     |
| VA4200   | EZJZ1V171AA   | VARISTOR                | [M]     |
| VA4201   | EZJZ1V171AA   | VARISTOR                | [M]     |
|          |               |                         |         |
|          |               | VARIABLE RESISTOR       |         |
|          |               |                         |         |
| VR6000   | EVEKF2F3024M  | ENCODER                 | [M]     |
|          |               |                         |         |
|          |               | SWITCHES                |         |
|          |               |                         |         |
| S6002    | EVQ21405RJ    | SW FM/AM/EXT-IN         | [M]     |
| S6004    | EVQ21405RJ    | SW OPEN/CLOSE           | [M]     |
| S6005    | EVQ21405RJ    | SW OPTION               | [M]     |
| S6006    | EVQ21405RJ    | SW D.BASS               | [M]     |
| S6007    | EVQ21405RJ    | SW USB                  | [M]     |
| S6008    | EVQ21405RJ    | SW REW                  | [M]     |
| S6009    | EVQ21405RJ    | SW DVD/CD               | [M]     |
| S6010    | EVQ21405RJ    | SW FF                   | [M]     |
| S6011    | EVQ21405RJ    | SW POWER                | [M]     |
| S6012    | EVQ21405RJ    | SW STOP/DEMO            | [M]     |
|          |               |                         |         |
|          |               | CONNECTORS              |         |
|          |               |                         |         |
| CN2034   | K1MN17AA0004  | 17P CONNECTOR           | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| CN2035   | K1MN25AA0004 | 25P FFC CONNECTOR       | [M]     |
| CN2036   | K1MY50AA0029 | 50P CONNECTOR           | [M]     |
| CN3620   | K1MN14AA0003 | 14P CONNECTOR           | [M]     |
| CN3660   | K1MN17BA0005 | 17P FFC CONNECTOR       | [M]     |
| CN3661   | K1MN25C00002 | 25P CONNECTOR           | [M]     |
| CN3720   | K1MN24AA0004 | 24P CONNECTOR           | [M]     |
| CN3721   | K1MN07AA0003 | 7P FFC CONNECTOR        | [M]     |
| CN3722   | K1KB13B00017 | 13P CONNECTOR           | [M]     |
| CN3730   | K1KB05B00022 | 5P CONNECTOR            | [M]     |
| CN3740   | K1KB08B00041 | 8P CONNECTOR            | [M]     |
| CN3750   | K1KA02AA0186 | 2P CONNECTOR            | [M]     |
| CN4000   | K1MN14BA0147 | 14P FFC CONNECTOR       | [M]     |
| CN4100   | K1FY124DA001 | CONNECTOR               | [M]     |
| CN4200   | K1KA05BA0061 | 5P CONNECTOR            | [M]     |
| CN4201   | K1FY104B0011 | USB CONNECTOR           | [M]     |
| CN4801   | K1KA13AA0031 | 13P CONNECTOR           | [M]     |
| CN4802   | K1KA13AA0031 | 13P CONNECTOR           | [M]     |
| CN5100   | K1KA05AA0031 | 5P CONNECTOR            | [M]     |
| CN5101   | K1KA08AA0031 | 8P CONNECTOR            | [M]     |
| CN5104   | K1KA08AA0319 | 8P CONNECTOR            | [M]     |
| CN5900   | K1KB13B00017 | 13P CONNECTOR           | [M]     |
| CN5905   | K1KA07AA0193 | 7P CONNECTOR            | [M]     |
| CN6001   | K1MN24BA0005 | 24P FFC CONNECTOR       | [M]     |
| FP8101   | K1MN50AA0082 | 50P CONNECTOR           | [M]     |
| FP8251   | K1MN07AA0076 | 7P CONNECTOR            | [M]     |
| FP8531   | K1MY26AA0021 | 26P CONNECTOR           | [M]     |
| FP9001   | K1KA05BA0014 | 5P CONNECTOR            | [M]     |
| P3901    | K1FY119E0002 | HDMI CONNECTOR          | [M]     |
| H5902    | K1KA03AA0301 | 3P CONNECTOR            | [M]     |
|          |              |                         |         |
|          |              | COILS & INDUCTORS       |         |
|          |              |                         |         |
| L2001    | G0A101EA0017 | CHOKE COIL              | [M]     |
| L2200    | J0JBC0000015 | INDUCTOR                | [M]     |
| L2201    | J0JBC0000015 | INDUCTOR                | [M]     |
| L2202    | J0JBC0000015 | INDUCTOR                | [M]     |
| L2203    | J0JBC0000015 | INDUCTOR                | [M]     |
| L2208    | J0JBC0000019 | INDUCTOR                | [M] E   |
| L2743    | G0A101ZA0028 | CHOKE COIL              | [M]     |
| L2745    | G0A200D00002 | CHOKE COIL              | [M]     |
| L2747    | G0A220GA0026 | CHOKE COIL              | [M]     |
| L2754    | G0A220GA0026 | CHOKE COIL              | [M]     |
| L2800    | J0JBC0000019 | INDUCTOR                | [M]     |
| L2801    | J0JBC0000019 | INDUCTOR                | [M]     |
| L2909    | J0JBC0000019 | INDUCTOR                | [M]     |
| L2913    | G0A100G00005 | CHOKE COIL              | [M]     |
| L2914    | J0JBC0000019 | INDUCTOR                | [M]     |
| L2915    | J0JBC0000019 | INDUCTOR                | [M]     |
| L2916    | J0JBC0000019 | INDUCTOR                | [M]     |
| L2917    | J0JBC0000019 | INDUCTOR                | [M]     |
| L2918    | J0JBC0000019 | INDUCTOR                | [M]     |
| L3610    | J0JBC0000041 | INDUCTOR                | [M]     |
| L3700    | J0JBC0000015 | INDUCTOR                | [M]     |
| L3701    | J0JBC0000015 | INDUCTOR                | [M]     |
| L3903    | G1BYYC000026 | COMMON MODE EMI FILTER  | [M]     |
| L3904    | G1BYYC000026 | COMMON MODE EMI FILTER  | [M]     |
| L3905    | G1BYYC000026 | COMMON MODE EMI FILTER  | [M]     |
| L3906    | G1BYYC000026 | COMMON MODE EMI FILTER  | [M]     |
| L4200    | G1BYYB000009 | MODE CHOKE COIL         | [M]     |
| L5000    | G0ZZ00002657 | COIL                    | [M]     |
| L5001    | G0B9R5K00004 | LINE FILTER             | [M]     |
| L5002    | G0B9R5K00003 | LINE FILTER             | [M]     |
| L5500    | J0JKB0000020 | INDUCTOR                | [M]     |
| L5501    | J0JKB0000020 | INDUCTOR                | [M]     |
| L5970    | ELF15N035AN  | LINE FILTER             | [M] △   |
| L6001    | G0C100JA0052 | FIXED INDUCTOR          | [M]     |
| L6002    | G0C101JA0052 | FIXED INDUCTOR          | [M]     |
| L6003    | G0C101JA0052 | FIXED INDUCTOR          | [M]     |
| L6005    | J0JBC0000019 | INDUCTOR                | [M]     |
| L6007    | G0C101JA0052 | FIXED INDUCTOR          | [M]     |
| L6008    | G0C101JA0052 | FIXED INDUCTOR          | [M]     |
| L6009    | J0JBC0000019 | INDUCTOR                | [M]     |
| L8201    | G1C100M00049 | INDUCTOR                | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| L8301    | G1C100M00049 | INDUCTOR                | [M]     |
| L8302    | G1C100M00049 | INDUCTOR                | [M]     |
| L8303    | G1C100M00049 | INDUCTOR                | [M]     |
| L8330    | G1C100M00049 | INDUCTOR                | [M]     |
| L8501    | G1C100M00049 | INDUCTOR                | [M]     |
| L8550    | G1C100M00049 | INDUCTOR                | [M]     |
| L9004    | G1BYYC000026 | COMMON MODE EMI FILTER  | [M]     |
| LB3901   | J0JHC0000045 | INDUCTOR                | [M]     |
| LB3902   | J0JHC0000045 | INDUCTOR                | [M]     |
| LB3903   | J0JCC0000042 | INDUCTOR                | [M]     |
| LB3904   | J0JCC0000042 | INDUCTOR                | [M]     |
| LB3905   | J0JCC0000042 | INDUCTOR                | [M]     |
| LB3906   | J0JCC0000042 | INDUCTOR                | [M]     |
| LB3907   | J0JHC0000045 | INDUCTOR                | [M]     |
| LB3908   | J0JHC0000045 | INDUCTOR                | [M]     |
| LB4200   | J0JHC0000034 | INDUCTOR                | [M]     |
| LB4201   | J0JHC0000034 | INDUCTOR                | [M]     |
| LB8001   | J0JHC0000045 | INDUCTOR                | [M]     |
| LB8011   | J0JHC0000045 | INDUCTOR                | [M]     |
| LB8401   | J0JCC0000308 | INDUCTOR                | [M]     |
| LB8530   | J0JHC0000045 | INDUCTOR                | [M]     |
| LB8532   | J0JDC0000045 | INDUCTOR                | [M]     |
| LB8551   | J0JDC0000045 | INDUCTOR                | [M]     |
| LB8561   | J0JDC0000045 | INDUCTOR                | [M]     |
| LB8571   | J0JDC0000045 | INDUCTOR                | [M]     |
| LB8701   | J0JCC0000308 | INDUCTOR                | [M]     |
| LB8702   | J0JCC0000308 | INDUCTOR                | [M]     |
| LB8901   | J0JCC0000308 | INDUCTOR                | [M]     |
| LB9001   | J0JCC0000042 | INDUCTOR                | [M]     |
|          |              |                         |         |
|          |              | TRANSFORMERS            |         |
|          |              |                         |         |
| T5900    | G5CYBY00007  | SWITCHING TRANSFORMER   | [M] △   |
| T5901    | G4C2AAJ00005 | SWITCHING TRANSFORMER   | [M] △   |
|          |              |                         |         |
|          |              | COMPONENT COMBINATION   |         |
|          |              |                         |         |
| Z5970    | ERZVA5Z471   | ZENER                   | [M] △   |
| Z6000    | B3RAD0000146 | REMOTE SENSOR           | [M]     |
| ZJ4801   | K4CZ01000027 | TERMINAL                | [M]     |
| ZJ4802   | K4CZ01000027 | TERMINAL                | [M]     |
| ZJ5400   | K4CZ01000027 | TERMINAL                | [M]     |
| ZJ5401   | K4CZ01000027 | TERMINAL                | [M]     |
|          |              |                         |         |
|          |              | OSCILLATORS             |         |
|          |              |                         |         |
| X3700    | H0H433400002 | OSCILLATOR              | [M]     |
| X3800    | H2B100500004 | OSCILLATOR              | [M]     |
| X3801    | H0A327200115 | OSCILLATOR              | [M]     |
| X8621    | H0J270500085 | OSCILLATOR              | [M]     |
| X9004    | H1A4805B0027 | OSCILLATOR              | [M]     |
|          |              |                         |         |
|          |              | FL DISPLAY              |         |
|          |              |                         |         |
| FL6000   | A2BB00000169 | FL DISPLAY              | [M]     |
|          |              |                         |         |
|          |              | FUSE                    |         |
|          |              |                         |         |
| F5970    | K5D162BLA013 | FUSE                    | [M] △   |
|          |              |                         |         |
|          |              | RELAY                   |         |
|          |              |                         |         |
| RL5970   | K6B1AEA00003 | POWER RELAY             | [M] △   |
|          |              |                         |         |
|          |              | FUSE HOLDERS            |         |
|          |              |                         |         |
| FC5970   | EYF52BCY     | FUSE HOLDER             | [M]     |
| FC5971   | EYF52BCY     | FUSE HOLDER             | [M]     |
|          |              |                         |         |
|          |              | FUSE PROTECTORS         |         |
|          |              |                         |         |
| FP5920   | K5G402A00025 | FUSE PROTECTOR          | [M] △   |
| FP5921   | K5G102A00039 | FUSE PROTECTOR          | [M] △   |

| Ref. No. | Part No.     | Part Name & Description | Remarks       |
|----------|--------------|-------------------------|---------------|
| FP5922   | K5G202AA0002 | FUSE PROTECTOR          | [M] △         |
|          |              | JACKS                   |               |
| JK2200   | K1FY121B0002 | SCART CONNECTOR         | [M]           |
| JK2801   | K2HA1YYB0004 | JK DIGITAL OUT          | [M]           |
| JK3600   | K2HA204B0133 | JK AUX IN               | [M]           |
| JK5000   | K4AL04B00002 | JK SPEAKER              | [M]           |
| JK5970   | K2AA2B000017 | AC INLET                | [M] △         |
| JK6000   | K2HC1YYA0005 | JK MUSIC PORT           | [M]           |
| JK6001   | K2HC1YYA0009 | JK HEADPHONE            | [M]           |
|          |              | CHIP JUMPERS            |               |
| K1101    | ERJ3GEY0R00V | 0 1/10W                 | [M] EF/EG/E B |
| K1102    | ERJ3GEY0R00V | 0 1/10W                 | [M] E         |
| K3903    | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| K3905    | ERJ2GE0R00X  | 0 1/16W                 | [M]           |
| K3906    | D0GBR00JA008 | 0 1/16W                 | [M]           |
| K3907    | D0GBR00JA008 | 0 1/16W                 | [M]           |
| K5007    | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| K5008    | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| K8003    | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| K8008    | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| K8100    | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| K8251    | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| K8571    | D0GBR00JA008 | 0 1/16W                 | [M]           |
| L6006    | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| LB8257   | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| LB8258   | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| LB8259   | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| LB8260   | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| LB8301   | ERJ2GE0R00X  | 0 1/16W                 | [M]           |
| LB8302   | ERJ2GE0R00X  | 0 1/16W                 | [M]           |
| LB8303   | ERJ2GE0R00X  | 0 1/16W                 | [M]           |
| LB8304   | ERJ2GE0R00X  | 0 1/16W                 | [M]           |
| LB8305   | ERJ2GE0R00X  | 0 1/16W                 | [M]           |
| LB8421   | ERJ2GE0R00X  | 0 1/16W                 | [M]           |
| LB8422   | ERJ2GE0R00X  | 0 1/16W                 | [M]           |
| LB8423   | ERJ2GE0R00X  | 0 1/16W                 | [M]           |
| LB8424   | ERJ2GE0R00X  | 0 1/16W                 | [M]           |
| LB8430   | ERJ2GE0R00X  | 0 1/16W                 | [M]           |
| LB8432   | ERJ2GE0R00X  | 0 1/16W                 | [M]           |
| LB8491   | ERJ2GE0R00X  | 0 1/16W                 | [M]           |
| LB8531   | ERJ2GE0R00X  | 0 1/16W                 | [M]           |
| LB8690   | ERJ2GE0R00X  | 0 1/16W                 | [M]           |
| LB9002   | D0GBR00JA008 | 0 1/16W                 | [M]           |
| LB9003   | D0GBR00JA008 | 0 1/16W                 | [M]           |
| W2       | D0GBR00JA008 | 0 1/16W                 | [M]           |
| W1012    | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| W1081    | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| W1177    | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| W1180    | ERJ8GEY0R00V | 0 1/4W                  | [M]           |
| W1181    | ERJ6GEY0R00V | 0 1/8W                  | [M]           |
| W1182    | ERJ6GEY0R00V | 0 1/8W                  | [M]           |
| W1183    | ERJ6GEY0R00V | 0 1/8W                  | [M]           |
| W1184    | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| W1185    | ERJ6GEY0R00V | 0 1/8W                  | [M]           |
| W1186    | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| W1187    | ERJ6GEY0R00V | 0 1/8W                  | [M]           |
| W1190    | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| W1191    | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| W1192    | ERJ6GEY0R00V | 0 1/8W                  | [M]           |
| W1193    | ERJ8GEY0R00V | 0 1/4W                  | [M]           |
| W1194    | ERJ6GEY0R00V | 0 1/8W                  | [M]           |
| W1195    | ERJ8GEY0R00V | 0 1/4W                  | [M]           |
| W1196    | ERJ8GEY0R00V | 0 1/4W                  | [M]           |
| W1198    | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| W1199    | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| W1200    | ERJ3GEY0R00V | 0 1/10W                 | [M]           |
| W1201    | ERJ8GEY0R00V | 0 1/4W                  | [M]           |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| W1202    | ERJ8GEY0R00V | 0 1/4W                  | [M]     |
| W1202    | ERJ8GEY0R00V | 0 1/4W                  | [M]     |
| W1205    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W1206    | ERJ8GEY0R00V | 0 1/4W                  | [M]     |
| W1207    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W1209    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W1210    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W1211    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W1212    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W1222    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W1223    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W1226    | ERJ8GEY0R00V | 0 1/4W                  | [M]     |
| W1227    | ERJ8GEY0R00V | 0 1/4W                  | [M]     |
| W1229    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2016    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2017    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W2021    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W2202    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W3622    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W3623    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W4000    | D0GBR00JA008 | 0 1/16W                 | [M]     |
| W4001    | D0GDR00JA017 | 0 1/10W                 | [M]     |
| W4002    | ERJ8GEY0R00V | 0 1/4W                  | [M]     |
| W4003    | ERJ8GEY0R00V | 0 1/4W                  | [M]     |
| W4004    | D0GBR00JA008 | 0 1/16W                 | [M]     |
| W4005    | D0GDR00JA017 | 0 1/10W                 | [M]     |
| W4006    | ERJ8GEY0R00V | 0 1/4W                  | [M]     |
| W4007    | D0GBR00JA008 | 0 1/16W                 | [M]     |
| W4008    | ERJ8GEY0R00V | 0 1/4W                  | [M]     |
| W4009    | ERJ8GEY0R00V | 0 1/4W                  | [M]     |
| W4010    | D0GDR00JA017 | 0 1/10W                 | [M]     |
| W4011    | D0GDR00JA017 | 0 1/10W                 | [M]     |
| W4012    | ERJ8GEY0R00V | 0 1/4W                  | [M]     |
| W4013    | D0GDR00JA017 | 0 1/10W                 | [M]     |
| W5132    | ERJ6GEY0R00V | 0 1/8W                  | [M]     |
| W5211    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W5212    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| W5213    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
|          |              | RESISTORS               |         |
| LB8691   | ERJ2GEJ101X  | 100 1/16W               | [M]     |
| LB8692   | ERJ2GEJ101X  | 100 1/16W               | [M]     |
| LB8693   | ERJ2GEJ101X  | 100 1/16W               | [M]     |
| R2017    | ERJ3GEYJ272V | 2.7K 1/10W              | [M]     |
| R2018    | ERJ3GEYJ272V | 2.7K 1/10W              | [M]     |
| R2038    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R2200    | ERJ3GEYF750V | 75 1/10W                | [M]     |
| R2201    | ERJ3GEYF750V | 75 1/10W                | [M]     |
| R2202    | ERJ3GEYF750V | 75 1/10W                | [M]     |
| R2203    | ERJ3GEYF750V | 75 1/10W                | [M]     |
| R2204    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R2205    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R2206    | ERJ3GEYF750V | 75 1/10W                | [M]     |
| R2209    | ERJ3GEYF750V | 75 1/10W                | [M]     |
| R2210    | D0GB101JA008 | 100 1/16W               | [M]     |
| R2211    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R2216    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R2218    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R2219    | D0GB102JA008 | 1K 1/16W                | [M]     |
| R2220    | D0GB102JA008 | 1K 1/16W                | [M]     |
| R2221    | D0GB102JA008 | 1K 1/16W                | [M]     |
| R2222    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R2223    | D0GB472JA008 | 4.7K 1/16W              | [M]     |
| R2224    | D0GB102JA008 | 1K 1/16W                | [M]     |
| R2225    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R2227    | D0GB122JA008 | 1.2K 1/16W              | [M]     |
| R2228    | D0GB102JA008 | 1K 1/16W                | [M]     |
| R2600    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R2601    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R2741    | D0GB332JA008 | 3.3K 1/16W              | [M]     |
| R2742    | D0GB102JA008 | 1K 1/16W                | [M]     |
| R2743    | D0GB103JA008 | 10K 1/16W               | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| R2744    | D0GB102JA008 | 1K 1/16W                | [M]     |
| R2745    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R2753    | ERX2SJ1R5E   | 1.5 2W                  | [M]     |
| R2754    | ERX2SJ1R5E   | 1.5 2W                  | [M]     |
| R2755    | D0GB331JA008 | 330 1/16W               | [M]     |
| R2756    | D0GB330JA008 | 33 1/16W                | [M]     |
| R2771    | D0GB151JA008 | 150 1/16W               | [M]     |
| R2772    | D0GB151JA008 | 150 1/16W               | [M]     |
| R2851    | D0GB104JA008 | 100K 1/16W              | [M]     |
| R2852    | ERJ3GEYJ225V | 2.2M 1/10W              | [M]     |
| R2853    | D0GB473JA008 | 47K 1/16W               | [M]     |
| R2854    | D0GB472JA008 | 4.7K 1/16W              | [M]     |
| R2855    | D0GB223JA008 | 22K 1/16W               | [M]     |
| R2856    | D0GB182JA008 | 1.8K 1/16W              | [M]     |
| R2916    | ERJ3GEYJ221V | 220 1/10W               | [M]     |
| R2917    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R2918    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R2970    | D0GB103JA008 | 10K 1/16W               | [M]     |
| R2971    | ERJ3GEYF750V | 75 1/10W                | [M]     |
| R2972    | D0GB221JA008 | 220 1/16W               | [M]     |
| R2973    | D0GB122JA008 | 1.2K 1/16W              | [M]     |
| R2974    | D0GB102JA008 | 1K 1/16W                | [M]     |
| R2975    | D0GB102JA008 | 1K 1/16W                | [M]     |
| R2987    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R2988    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3000    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3001    | ERJ3GEYJ123V | 12K 1/10W               | [M]     |
| R3002    | D0GB472JA008 | 4.7K 1/16W              | [M]     |
| R3003    | D0GB562JA008 | 5.6K 1/16W              | [M]     |
| R3004    | D0GB562JA008 | 5.6K 1/16W              | [M]     |
| R3005    | D0GB562JA008 | 5.6K 1/16W              | [M]     |
| R3007    | ERJ3GEYJ153V | 15K 1/10W               | [M]     |
| R3008    | D0GB562JA008 | 5.6K 1/16W              | [M]     |
| R3009    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R3010    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3050    | ERJ3GEYJ222V | 2.2K 1/10W              | [M]     |
| R3051    | ERJ3GEYJ471V | 470 1/10W               | [M]     |
| R3052    | D0GB273JA008 | 27K 1/16W               | [M]     |
| R3053    | ERJ3GEYJ333V | 33K 1/10W               | [M]     |
| R3054    | D0GB103JA008 | 10K 1/16W               | [M]     |
| R3058    | D0GB102JA008 | 1K 1/16W                | [M]     |
| R3060    | D0GB330JA008 | 33 1/16W                | [M]     |
| R3061    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R3062    | D0GB330JA008 | 33 1/16W                | [M]     |
| R3063    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R3065    | D0GB222JA008 | 2.2K 1/16W              | [M]     |
| R3066    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R3067    | D0GB184JA008 | 180K 1/16W              | [M]     |
| R3068    | ERJ3GEYJ104V | 100K 1/10W              | [M]     |
| R3070    | D0GB822JA008 | 8.2K 1/16W              | [M]     |
| R3072    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R3076    | D0GB330JA008 | 33 1/16W                | [M]     |
| R3077    | D0GB330JA008 | 33 1/16W                | [M]     |
| R3078    | D0GB1R0JA008 | 1.0 1/16W               | [M]     |
| R3100    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3101    | ERJ3GEYJ123V | 12K 1/10W               | [M]     |
| R3102    | D0GB472JA008 | 4.7K 1/16W              | [M]     |
| R3103    | D0GB562JA008 | 5.6K 1/16W              | [M]     |
| R3104    | D0GB562JA008 | 5.6K 1/16W              | [M]     |
| R3105    | D0GB562JA008 | 5.6K 1/16W              | [M]     |
| R3107    | ERJ3GEYJ153V | 15K 1/10W               | [M]     |
| R3108    | D0GB562JA008 | 5.6K 1/16W              | [M]     |
| R3109    | ERJ3GEYJ562V | 5.6K 1/10W              | [M]     |
| R3110    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3150    | ERJ3GEYJ222V | 2.2K 1/10W              | [M]     |
| R3151    | ERJ3GEYJ471V | 470 1/10W               | [M]     |
| R3152    | D0GB273JA008 | 27K 1/16W               | [M]     |
| R3153    | ERJ3GEYJ333V | 33K 1/10W               | [M]     |
| R3154    | D0GB103JA008 | 10K 1/16W               | [M]     |
| R3158    | D0GB102JA008 | 1K 1/16W                | [M]     |
| R3160    | D0GB330JA008 | 33 1/16W                | [M]     |
| R3161    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R3162    | D0GB330JA008 | 33 1/16W                | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| R3163    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R3165    | D0GB222JA008 | 2.2K 1/16W              | [M]     |
| R3166    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R3167    | D0GB184JA008 | 180K 1/16W              | [M]     |
| R3168    | ERJ3GEYJ104V | 100K 1/10W              | [M]     |
| R3170    | D0GB822JA008 | 8.2K 1/16W              | [M]     |
| R3172    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R3176    | D0GB330JA008 | 33 1/16W                | [M]     |
| R3177    | D0GB330JA008 | 33 1/16W                | [M]     |
| R3178    | D0GB1R0JA008 | 1.0 1/16W               | [M]     |
| R3200    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3202    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3204    | ERJ3GEYJ332V | 3.3K 1/10W              | [M]     |
| R3206    | ERJ3GEYJ332V | 3.3K 1/10W              | [M]     |
| R3208    | D0GB472JA008 | 4.7K 1/16W              | [M]     |
| R3209    | D0GB472JA008 | 4.7K 1/16W              | [M]     |
| R3210    | D0GB472JA008 | 4.7K 1/16W              | [M]     |
| R3211    | D0GB472JA008 | 4.7K 1/16W              | [M]     |
| R3213    | ERJ3GEYJ683V | 68K 1/10W               | [M]     |
| R3214    | ERJ3GEYJ224V | 220K 1/10W              | [M]     |
| R3215    | ERJ3GEYJ223V | 22K 1/10W               | [M]     |
| R3216    | D0AF471JA039 | 470 1/2W                | [M]     |
| R3217    | D0AF471JA039 | 470 1/2W                | [M]     |
| R3220    | D0GB103JA008 | 10K 1/16W               | [M]     |
| R3221    | D0GB223JA008 | 22K 1/16W               | [M]     |
| R3222    | D0GB223JA008 | 22K 1/16W               | [M]     |
| R3224    | D0GB563JA008 | 56K 1/16W               | [M]     |
| R3225    | D0GB103JA008 | 10K 1/16W               | [M]     |
| R3226    | D0GB563JA008 | 56K 1/16W               | [M]     |
| R3227    | D0GB103JA008 | 10K 1/16W               | [M]     |
| R3228    | D0GB103JA008 | 10K 1/16W               | [M]     |
| R3229    | D0GB153JA008 | 15K 1/16W               | [M]     |
| R3230    | D0GB153JA008 | 15K 1/16W               | [M]     |
| R3231    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3232    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3400    | D0GB101JA008 | 100 1/16W               | [M]     |
| R3401    | D0GB101JA008 | 100 1/16W               | [M]     |
| R3402    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3407    | ERJ3GEYJ102V | 1K 1/10W                | [M]     |
| R3600    | D0GB123JA007 | 12K 1/10W               | [M]     |
| R3601    | D0GB123JA007 | 12K 1/10W               | [M]     |
| R3602    | D0GB683JA008 | 68K 1/16W               | [M]     |
| R3603    | D0GB683JA008 | 68K 1/16W               | [M]     |
| R3604    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3606    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3610    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3611    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3614    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3615    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3616    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3617    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3618    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3619    | D0GB241JA008 | 240 1/16W               | [M]     |
| R3620    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3624    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3625    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3626    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3627    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3628    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3629    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3630    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3635    | D0GB473JA008 | 47K 1/16W               | [M]     |
| R3637    | D0GB472JA008 | 4.7K 1/16W              | [M]     |
| R3640    | ERJ8GEY0R00V | 0 1/4W                  | [M]     |
| R3641    | ERJ8GEY0R00V | 0 1/4W                  | [M]     |
| R3642    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3644    | D0GB104JA008 | 100K 1/16W              | [M]     |
| R3645    | D0GB101JA008 | 100 1/16W               | [M]     |
| R3649    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R3655    | ERG2SJ470E   | 47 2W                   | [M]     |
| R3656    | D0GB183JA008 | 18K 1/16W               | [M]     |
| R3657    | D0GB104JA008 | 100K 1/16W              | [M]     |
| R3658    | D0GB333JA008 | 33K 1/16W               | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks             |
|----------|--------------|-------------------------|---------------------|
| R3660    | ERJ3GEYJ471V | 470 1/10W               | [M]                 |
| R3661    | ERJ3GEYJ471V | 470 1/10W               | [M]                 |
| R3662    | D0GB104JA008 | 100K 1/16W              | [M]                 |
| R3663    | D0GB104JA008 | 100K 1/16W              | [M]                 |
| R3664    | ERJ3GEY0R00V | 0 1/10W                 | [M]                 |
| R3665    | D0GB471JA008 | 470 1/16W               | [M]                 |
| R3666    | D0GB471JA008 | 470 1/16W               | [M]                 |
| R3667    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]                 |
| R3668    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]                 |
| R3669    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]                 |
| R3670    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]                 |
| R3700    | D0GB221JA008 | 220 1/16W               | [M]                 |
| R3701    | D0GB222JA008 | 2.2K 1/16W              | [M]                 |
| R3702    | D0GB102JA008 | 1K 1/16W                | [M]                 |
| R3703    | D0GB102JA008 | 1K 1/16W                | [M]                 |
| R3704    | D0GB102JA008 | 1K 1/16W                | [M]                 |
| R3720    | ERJ3GEY0R00V | 0 1/10W                 | [M]                 |
| R3721    | ERJ3GEY0R00V | 0 1/10W                 | [M]                 |
| R3722    | ERJ3GEY0R00V | 0 1/10W                 | [M]                 |
| R3723    | ERJ3GEY0R00V | 0 1/10W                 | [M]                 |
| R3750    | D0GB563JA008 | 56K 1/16W               | [M]                 |
| R3751    | D0GB824JA008 | 820K 1/16W              | [M]                 |
| R3752    | D0GB563JA008 | 56K 1/16W               | [M]                 |
| R3753    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3754    | D0GB563JA008 | 56K 1/16W               | [M]                 |
| R3755    | D0AF270JA039 | 27 1/2W                 | [M]                 |
| R3756    | D0GB103JA008 | 10K 1/16W               | [M]                 |
| R3757    | D0GB103JA008 | 10K 1/16W               | [M]                 |
| R3758    | D0GB472JA008 | 4.7K 1/16W              | [M]                 |
| R3759    | D0GB103JA008 | 10K 1/16W               | [M]                 |
| R3761    | D0GB562JA008 | 5.6K 1/16W              | [M]                 |
| R3762    | D0GB104JA008 | 100K 1/16W              | [M]                 |
| R3802    | D0GB103JA008 | 10K 1/16W               | [M]                 |
| R3804    | D0GB103JA008 | 10K 1/16W               | [M]                 |
| R3806    | D0GB103JA008 | 10K 1/16W               | [M]                 |
| R3807    | D0GB103JA008 | 10K 1/16W               | [M]                 |
| R3808    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3809    | ERJ3GEYJ183V | 18K 1/10W               | [M]                 |
| R3810    | D0GB103JA008 | 10K 1/16W               | [M]                 |
| R3811    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3813    | D0GB103JA008 | 10K 1/16W               | [M]                 |
| R3814    | ERJ3GEYJ821V | 820 1/10W               | [M]                 |
| R3815    | D0GB103JA008 | 10K 1/16W               | [M]                 |
| R3816    | ERJ6GEYJ182V | 1.8K 1/8W               | [M] E               |
| R3816    | ERJ6GEYJ821V | 820 1/8W                | [M]<br>EG/EF/E<br>B |
| R3817    | D0GB222JA008 | 2.2K 1/16W              | [M]                 |
| R3818    | D0GB222JA008 | 2.2K 1/16W              | [M]                 |
| R3819    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3820    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3821    | D0GB103JA008 | 10K 1/16W               | [M]                 |
| R3823    | D0GB332JA008 | 3.3K 1/16W              | [M]                 |
| R3824    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3825    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3826    | D0GB221JA008 | 220 1/16W               | [M]                 |
| R3827    | ERJ3GEYJ102V | 1K 1/10W                | [M]                 |
| R3828    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3829    | D0GB106JA008 | 10M 1/16W               | [M]                 |
| R3830    | D0GB473JA008 | 47K 1/16W               | [M]                 |
| R3831    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3832    | D0GB334JA008 | 330K 1/16W              | [M]                 |
| R3833    | D0GB104JA008 | 100K 1/16W              | [M]                 |
| R3835    | D0GB221JA008 | 220 1/16W               | [M]                 |
| R3836    | D0GB221JA008 | 220 1/16W               | [M]                 |
| R3837    | D0GB221JA008 | 220 1/16W               | [M]                 |
| R3838    | D0GB221JA008 | 220 1/16W               | [M]                 |
| R3839    | D0GB103JA008 | 10K 1/16W               | [M]                 |
| R3840    | D0GB221JA008 | 220 1/16W               | [M]                 |
| R3841    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3842    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3844    | ERJ3GEYJ103V | 10K 1/10W               | [M]                 |
| R3845    | D0GB473JA008 | 47K 1/16W               | [M]                 |

| Ref. No. | Part No.     | Part Name & Description | Remarks             |
|----------|--------------|-------------------------|---------------------|
| R3846    | D0GB103JA008 | 10K 1/16W               | [M]                 |
| R3847    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3848    | D0GB223JA008 | 22K 1/16W               | [M]                 |
| R3849    | D0GB102JA008 | 1K 1/16W                | [M]                 |
| R3850    | D0GB101JA008 | 100 1/16W               | [M] E               |
| R3850    | D0GB472JA008 | 4.7K 1/16W              | [M]<br>EF/EG/E<br>B |
| R3851    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3852    | D0GB273JA008 | 27K 1/16W               | [M]                 |
| R3853    | D0GB223JA008 | 22K 1/16W               | [M]                 |
| R3854    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3859    | ERJ3GEYJ101V | 100 1/10W               | [M]                 |
| R3861    | D0GB223JA008 | 22K 1/16W               | [M]                 |
| R3862    | D0GB103JA008 | 10K 1/16W               | [M]                 |
| R3865    | D0GB473JA008 | 47K 1/16W               | [M]                 |
| R3866    | D0GB221JA008 | 220 1/16W               | [M]                 |
| R3868    | D0GB221JA008 | 220 1/16W               | [M]                 |
| R3869    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3872    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3873    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3874    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3875    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3876    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3877    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3878    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3880    | D0GB221JA008 | 220 1/16W               | [M]                 |
| R3881    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3883    | D0GB104JA008 | 100K 1/16W              | [M]                 |
| R3884    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3885    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3886    | D0GB103JA008 | 10K 1/16W               | [M]                 |
| R3887    | D0GB473JA008 | 47K 1/16W               | [M]                 |
| R3888    | D0GB473JA008 | 47K 1/16W               | [M]                 |
| R3889    | D0GB223JA008 | 22K 1/16W               | [M]                 |
| R3890    | D0GB473JA008 | 47K 1/16W               | [M]                 |
| R3891    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3892    | D0GB221JA008 | 220 1/16W               | [M]                 |
| R3893    | ERJ3GEYJ155V | 1.5M 1/10W              | [M]                 |
| R3894    | ERJ3GEYJ125V | 1.2M 1/10W              | [M]                 |
| R3895    | D0GB224JA008 | 220K 1/16W              | [M]                 |
| R3897    | D0GB224JA008 | 220K 1/16W              | [M]                 |
| R3898    | D0GB224JA008 | 220K 1/16W              | [M]                 |
| R3900    | D0GB224JA008 | 220K 1/16W              | [M]                 |
| R3901    | D0GB153JA008 | 15K 1/16W               | [M]                 |
| R3901    | ERJ2GEJ511X  | 510 1/16W               | [M]                 |
| R3902    | D0GB103JA008 | 10K 1/16W               | [M]                 |
| R3902    | ERJ2GEJ103X  | 10K 1/16W               | [M]                 |
| R3903    | D0GB682JA008 | 6.8K 1/16W              | [M]                 |
| R3903    | ERJ2GEJ103X  | 10K 1/16W               | [M]                 |
| R3904    | D0GB562JA008 | 5.6K 1/16W              | [M]                 |
| R3904    | ERJ2GEJ472X  | 4.7K 1/16W              | [M]                 |
| R3905    | D0GB103JA008 | 10K 1/16W               | [M]                 |
| R3905    | ERJ2GEJ202X  | 2.0K 1/16W              | [M]                 |
| R3906    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3906    | ERJ2GEJ472X  | 4.7K 1/16W              | [M]                 |
| R3907    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3907    | ERJ2GEJ222X  | 2.2K 1/16W              | [M]                 |
| R3908    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3909    | D0GB102JA008 | 1K 1/16W                | [M]                 |
| R3910    | D0GB102JA008 | 1K 1/16W                | [M]                 |
| R3911    | D0GB473JA008 | 47K 1/16W               | [M]                 |
| R3912    | ERJ3GEYJ221V | 220 1/10W               | [M]                 |
| R3913    | D0GB103JA008 | 10K 1/16W               | [M]                 |
| R3914    | D0GB103JA008 | 10K 1/16W               | [M]                 |
| R3915    | D0GB473JA008 | 47K 1/16W               | [M]                 |
| R3916    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3917    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3918    | ERJ3GEY0R00V | 0 1/10W                 | [M]                 |
| R3919    | D0GB101JA008 | 100 1/16W               | [M]                 |
| R3920    | D0GB221JA008 | 220 1/16W               | [M]                 |
| R3921    | D0GB223JA008 | 22K 1/16W               | [M]                 |
| R3921    | ERJ2GE0R00X  | 0 1/16W                 | [M]                 |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| R3924    | ERJ2GE0R00X  | 0 1/16W                 | [M]     |
| R3925    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R3941    | ERJ2GEJ273X  | 27K 1/16W               | [M]     |
| R3942    | ERJ2GEJ224X  | 220K 1/16W              | [M]     |
| R3943    | ERJ2GEJ104X  | 100K 1/16W              | [M]     |
| R3944    | ERJ2GEJ221X  | 220 1/16W               | [M]     |
| R3945    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R3946    | ERJ2GEJ272X  | 2.7K 1/16W              | [M]     |
| R3947    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R4008    | ERJ3RED334V  | 330K 1/16W              | [M]     |
| R4009    | ERJ3RED224V  | 220K 1/16W              | [M]     |
| R4012    | D0GBR00JA008 | 0 1/16W                 | [M]     |
| R4013    | D0GBR00JA008 | 0 1/16W                 | [M]     |
| R4014    | D0GBR00JA008 | 0 1/16W                 | [M]     |
| R5000    | D0GB562JA008 | 5.6K 1/16W              | [M]     |
| R5001    | D0GB562JA008 | 5.6K 1/16W              | [M]     |
| R5002    | D0GB562JA008 | 5.6K 1/16W              | [M]     |
| R5003    | D0GB562JA008 | 5.6K 1/16W              | [M]     |
| R5004    | ERJ8GEYJ100V | 10 1/4W                 | [M]     |
| R5005    | ERJ8GEYJ100V | 10 1/4W                 | [M]     |
| R5006    | ERJ1TYJ220U  | 22 1W                   | [M]     |
| R5007    | ERJ1TYJ220U  | 22 1W                   | [M]     |
| R5008    | ERJ3GEYJ101V | 100 1/10W               | [M]     |
| R5010    | ERJ8GEYJ100V | 10 1/4W                 | [M]     |
| R5011    | ERJ8GEYJ100V | 10 1/4W                 | [M]     |
| R5019    | D0GB683JA008 | 68K 1/16W               | [M]     |
| R5020    | D0GB124JA008 | 120K 1/16W              | [M]     |
| R5021    | ERJ3GEYJ561V | 560 1/10W               | [M]     |
| R5022    | ERJ3GEYJ561V | 560 1/10W               | [M]     |
| R5030    | D0GB562JA008 | 5.6K 1/16W              | [M]     |
| R5031    | D0GB562JA008 | 5.6K 1/16W              | [M]     |
| R5101    | D0GB471JA008 | 470 1/16W               | [M]     |
| R5102    | D0GB102JA008 | 1K 1/16W                | [M]     |
| R5103    | D0AF2R2JA039 | 2.2 1/2W                | [M]     |
| R5104    | D0AF2R2JA039 | 2.2 1/2W                | [M]     |
| R5105    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R5106    | D0GB473JA008 | 47K 1/16W               | [M]     |
| R5107    | D0GB473JA008 | 47K 1/16W               | [M]     |
| R5108    | ERJ3RBD392V  | 3.9K 1/16W              | [M]     |
| R5109    | ERJ3RBD272V  | 2.7K 1/16W              | [M]     |
| R5110    | D0GB223JA008 | 22K 1/16W               | [M]     |
| R5111    | D0GB470JA008 | 47 1/16W                | [M]     |
| R5112    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R5113    | DOC1103JA020 | 10K 1W                  | [M]     |
| R5114    | ERJ3GEYJ123V | 12K 1/10W               | [M]     |
| R5115    | D0GB561JA008 | 560 1/16W               | [M]     |
| R5116    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R5117    | ERJ3GEYJ101V | 100 1/10W               | [M]     |
| R5118    | ERJ3RBD103V  | 10K 1/16W               | [M]     |
| R5119    | D0GB182JA008 | 1.8K 1/16W              | [M]     |
| R5120    | D0GB102JA008 | 1K 1/16W                | [M]     |
| R5121    | ERJ3RBD822V  | 8.2K 1/16W              | [M]     |
| R5122    | ERJ3GEYJ152V | 1.5K 1/10W              | [M]     |
| R5123    | D0GB102JA008 | 1K 1/16W                | [M]     |
| R5130    | ERJ3GEYJ224V | 220K 1/10W              | [M]     |
| R5501    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R5510    | ERDS1FVJ471T | 1/2W                    | [M]     |
| R5512    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R5513    | ERJ3RBD333V  | 33K 1/16W               | [M]     |
| R5514    | D0GB124JA008 | 120K 1/16W              | [M]     |
| R5517    | D0GB822JA008 | 8.2K 1/16W              | [M]     |
| R5519    | ERJ3GEYJ184V | 180K 1/10W              | [M]     |
| R5602    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R5603    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R5604    | D0GB122JA008 | 1.2K 1/16W              | [M]     |
| R5608    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R5609    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R5610    | D0GB122JA008 | 1.2K 1/16W              | [M]     |
| R5910    | D0GB104JA008 | 100K 1/16W              | [M]     |
| R5911    | D0GB104JA008 | 100K 1/16W              | [M]     |
| R5912    | D0GB104JA008 | 100K 1/16W              | [M]     |
| R5913    | D0GB104JA008 | 100K 1/16W              | [M]     |
| R5914    | D0GB822JA008 | 8.2K 1/16W              | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| R5915    | D0GB223JA008 | 22K 1/16W               | [M]     |
| R5921    | D0GB222JA008 | 2.2K 1/16W              | [M]     |
| R5922    | D0GB222JA008 | 2.2K 1/16W              | [M]     |
| R5923    | D0GB222JA008 | 2.2K 1/16W              | [M]     |
| R5925    | D0AF471JA039 | 470 1/2W                | [M]     |
| R5950    | D0GB821JA008 | 820 1/16W               | [M]     |
| R5951    | D0GB821JA008 | 820 1/16W               | [M]     |
| R5952    | D0GB104JA008 | 100K 1/16W              | [M]     |
| R5953    | D0GB222JA008 | 2.2K 1/16W              | [M]     |
| R5956    | D0AF820JA039 | 82 1/2W                 | [M]     |
| R5970    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R5971    | ERJ3GEYJ103V | 10K 1/10W               | [M]     |
| R5972    | D0GB820JA008 | 82 1/16W                | [M]     |
| R5974    | D0GB182JA008 | 1.8K 1/16W              | [M]     |
| R5976    | ERJ3GEYJ472V | 4.7K 1/10W              | [M]     |
| R5991    | ERJ3GEYJ182V | 1.8K 1/10W              | [M]     |
| R5992    | D0GB104JA008 | 100K 1/16W              | [M]     |
| R5993    | D0GB271JA008 | 270 1/16W               | [M]     |
| R5994    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R6000    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R6001    | D0GB223JA008 | 22K 1/16W               | [M]     |
| R6002    | D0GB104JA008 | 100K 1/16W              | [M]     |
| R6003    | D0GB104JA008 | 100K 1/16W              | [M]     |
| R6004    | D0GB104JA008 | 100K 1/16W              | [M]     |
| R6005    | D0GB104JA008 | 100K 1/16W              | [M]     |
| R6006    | D0GB563JA008 | 56K 1/16W               | [M]     |
| R6007    | D0GB680JA008 | 68 1/16W                | [M]     |
| R6008    | D0GB680JA008 | 68 1/16W                | [M]     |
| R6009    | D0GB124JA008 | 120K 1/16W              | [M]     |
| R6010    | D0GB680JA008 | 68 1/16W                | [M]     |
| R6011    | D0GB124JA008 | 120K 1/16W              | [M]     |
| R6012    | D0GB272JA008 | 2.7K 1/16W              | [M]     |
| R6013    | D0GB222JA008 | 2.2K 1/16W              | [M]     |
| R6014    | D0GB272JA008 | 2.7K 1/16W              | [M]     |
| R6015    | D0GB182JA008 | 1.8K 1/16W              | [M]     |
| R6016    | D0GB222JA008 | 2.2K 1/16W              | [M]     |
| R6017    | D0GB182JA008 | 1.8K 1/16W              | [M]     |
| R6018    | D0GB122JA008 | 1.2K 1/16W              | [M]     |
| R6019    | D0GB122JA008 | 1.2K 1/16W              | [M]     |
| R6020    | D0GB102JA008 | 1K 1/16W                | [M]     |
| R6021    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R6022    | D0GB102JA008 | 1K 1/16W                | [M]     |
| R6023    | D0GB102JA008 | 1K 1/16W                | [M]     |
| R6024    | D0GB102JA008 | 1K 1/16W                | [M]     |
| R6025    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R6026    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R6027    | D0GB470JA008 | 47 1/16W                | [M]     |
| R6028    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R6030    | D0GB222JA008 | 2.2K 1/16W              | [M]     |
| R6036    | D0GB223JA008 | 22K 1/16W               | [M]     |
| R6038    | D0GB223JA008 | 22K 1/16W               | [M]     |
| R6039    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R6040    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R6041    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R8001    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R8003    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R8011    | ERJ2GEJ220X  | 22 1/16W                | [M]     |
| R8012    | ERJ2GEJ220X  | 22 1/16W                | [M]     |
| R8013    | ERJ2GEJ220X  | 22 1/16W                | [M]     |
| R8153    | ERJ2RHD621X  | 620 1/16W               | [M]     |
| R8154    | ERJ2RHD102X  | 1K 1/16W                | [M]     |
| R8211    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R8221    | ERJ2GEJ822X  | 8.2K 1/16W              | [M]     |
| R8225    | ERJ2GEJ822X  | 8.2K 1/16W              | [M]     |
| R8230    | ERJ2GEJ222X  | 2.2K 1/16W              | [M]     |
| R8231    | ERJ2GEJ752X  | 7.5K 1/16W              | [M]     |
| R8232    | ERJ2GEJ752X  | 7.5K 1/16W              | [M]     |
| R8251    | ERJ6GEYJ6R8V | 6.8 1/8W                | [M]     |
| R8252    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R8261    | ERJ2GEJ823X  | 82K 1/16W               | [M]     |
| R8262    | ERJ2GEJ153X  | 15K 1/16W               | [M]     |
| R8263    | ERJ2GEJ823X  | 82K 1/16W               | [M]     |
| R8264    | ERJ2GEJ153X  | 15K 1/16W               | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| R8311    | ERJ2RHD242X  | 2.4K 1/16W              | [M]     |
| R8312    | ERJ2RHD102X  | 1K 1/16W                | [M]     |
| R8313    | ERJ2RHD153X  | 15K 1/16W               | [M]     |
| R8314    | ERJ2RHD153X  | 15K 1/16W               | [M]     |
| R8315    | ERJ2RKD240X  | 24 1/16W                | [M]     |
| R8316    | ERJ2RKD240X  | 24 1/16W                | [M]     |
| R8317    | ERJ2GEJ153X  | 15K 1/16W               | [M]     |
| R8318    | ERJ2GEJ153X  | 15K 1/16W               | [M]     |
| R8321    | ERJ3RBD201V  | 200 1/16W               | [M]     |
| R8323    | ERJ2GEJ330X  | 33 1/16W                | [M]     |
| R8324    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R8325    | ERJ3RBD201V  | 200 1/16W               | [M]     |
| R8327    | ERJ2GEJ330X  | 33 1/16W                | [M]     |
| R8328    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R8331    | ERJ3RBD201V  | 200 1/16W               | [M]     |
| R8333    | ERJ2GEJ330X  | 33 1/16W                | [M]     |
| R8334    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R8335    | ERJ3RBD201V  | 200 1/16W               | [M]     |
| R8336    | ERJ2GEJ330X  | 33 1/16W                | [M]     |
| R8337    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R8341    | ERJ3RBD201V  | 200 1/16W               | [M]     |
| R8342    | ERJ2GEJ330X  | 33 1/16W                | [M]     |
| R8343    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R8401    | ERJ2GEJ101X  | 100 1/16W               | [M]     |
| R8402    | ERJ2GEJ101X  | 100 1/16W               | [M]     |
| R8403    | ERJ2GEJ101X  | 100 1/16W               | [M]     |
| R8404    | ERJ2GEJ101X  | 100 1/16W               | [M]     |
| R8420    | ERJ2GEJ222X  | 2.2K 1/16W              | [M]     |
| R8421    | ERJ2GEJ100X  | 10 1/16W                | [M]     |
| R8531    | ERJ2GEJ152X  | 1.5K 1/16W              | [M]     |
| R8532    | ERJ2GEJ222X  | 2.2K 1/16W              | [M]     |
| R8533    | ERJ2GE0R00X  | 0 1/16W                 | [M]     |
| R8534    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R8535    | ERJ2GEJ104X  | 100K 1/16W              | [M]     |
| R8536    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R8537    | ERJ2GE0R00X  | 0 1/16W                 | [M]     |
| R8538    | ERJ2GE0R00X  | 0 1/16W                 | [M]     |
| R8539    | ERJ2GE0R00X  | 0 1/16W                 | [M]     |
| R8540    | ERJ3GEY0R00V | 0 1/10W                 | [M]     |
| R8541    | ERJ2GEJ153X  | 15K 1/16W               | [M]     |
| R8551    | ERJ2GE0R00X  | 0 1/16W                 | [M]     |
| R8552    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R8553    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R8554    | ERJ2GEJ680X  | 68 1/16W                | [M]     |
| R8555    | ERJ2GEJ2R2X  | 2.2 1/16W               | [M]     |
| R8556    | ERJ3GEYJ560V | 56 1/10W                | [M]     |
| R8557    | ERJ3GEYJ510V | 51 1/10W                | [M]     |
| R8558    | ERJ2GEJ473X  | 47K 1/16W               | [M]     |
| R8559    | ERJ2GEJ153X  | 15K 1/16W               | [M]     |
| R8561    | ERJ2GE0R00X  | 0 1/16W                 | [M]     |
| R8562    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R8563    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R8564    | ERJ2GEJ220X  | 22 1/16W                | [M]     |
| R8565    | ERJ2GEJ2R2X  | 2.2 1/16W               | [M]     |
| R8566    | ERJ3GEYJ560V | 56 1/10W                | [M]     |
| R8567    | ERJ3GEYJ510V | 51 1/10W                | [M]     |
| R8568    | ERJ2GEJ473X  | 47K 1/16W               | [M]     |
| R8601    | ERJ2GEJ104X  | 100K 1/16W              | [M]     |
| R8611    | ERJ2GEJ101X  | 100 1/16W               | [M]     |
| R8613    | ERJ2GEJ101X  | 100 1/16W               | [M]     |
| R8621    | ERJ2GEJ105X  | 1M 1/16W                | [M]     |
| R8622    | ERJ2RHD102X  | 1K 1/16W                | [M]     |
| R9007    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9008    | ERJ2GEJ105X  | 1M 1/16W                | [M]     |
| R9009    | ERJ2GEJ102X  | 1K 1/16W                | [M]     |
| R9023    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9036    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9037    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9040    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9041    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9042    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9043    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9044    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| R9045    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9046    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9047    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9048    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9049    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9055    | ERJ2GEJ472X  | 4.7K 1/16W              | [M]     |
| R9080    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9082    | ERJ2GEJ103X  | 10K 1/16W               | [M]     |
| R9083    | ERJ2GEJ470X  | 47 1/16W                | [M]     |
| R9084    | ERJ2GEJ470X  | 47 1/16W                | [M]     |
| R9085    | ERJ2GEJ470X  | 47 1/16W                | [M]     |
| R9086    | ERJ2GEJ470X  | 47 1/16W                | [M]     |
| R9087    | ERJ2GEJ470X  | 47 1/16W                | [M]     |
| R9088    | ERJ2GEJ470X  | 47 1/16W                | [M]     |
| R9099    | ERJ2GE0R00X  | 0 1/16W                 | [M]     |
| RX3707   | D1H84714A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX3708   | D1H84714A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX3901   | D1H410120001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8001   | D1H410320002 | CHIP RESISTOR NETWORK   | [M]     |
| RX8011   | D1H88204A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX8012   | D1H88204A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX8013   | D1H88204A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX8014   | D1H88204A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX8015   | D1H88204A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX8016   | D1H88204A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX8017   | D1H88204A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX8018   | D1H422020001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8019   | D1H422020001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8020   | D1H422020001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8031   | D1H447220001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8032   | D1H447220001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8111   | D1H422320002 | CHIP RESISTOR NETWORK   | [M]     |
| RX8401   | D1H410120001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8402   | D1H410120001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8531   | D1H456020001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8532   | D1H85604A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX8533   | D1H456020001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8534   | D1H456020001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8611   | D1H447220001 | CHIP RESISTOR NETWORK   | [M]     |
| RX8691   | D1H410320002 | CHIP RESISTOR NETWORK   | [M]     |
| RX9014   | D1H85604A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX9015   | D1H85604A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX9016   | D1H85604A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX9017   | D1H85604A043 | CHIP RESISTOR NETWORK   | [M]     |
| RX9018   | D1H447220001 | CHIP RESISTOR NETWORK   | [M]     |
| RX9020   | D1H447220001 | CHIP RESISTOR NETWORK   | [M]     |
|          |              |                         |         |
|          |              |                         |         |
|          |              | CAPACITORS              |         |
|          |              |                         |         |
| C2017    | ECEA1HKA4R7B | 4.7uF 50V               | [M]     |
| C2018    | ECEA1HKA4R7B | 4.7uF 50V               | [M]     |
| C2037    | ECJ1VB1H562K | 560pF 50V               | [M]     |
| C2038    | ECJ1VB1H562K | 560pF 50V               | [M]     |
| C2041    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2042    | ECEA0JKA221B | 220uF 6.3V              | [M]     |
| C2203    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2204    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2205    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2206    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2207    | ECA0JM102B   | 1000uF 6.3V             | [M]     |
| C2210    | ECA0JM102B   | 1000uF 6.3V             | [M]     |
| C2211    | ECA0JM102B   | 1000uF 6.3V             | [M]     |
| C2212    | ECA0JM102B   | 1000uF 6.3V             | [M]     |
| C2213    | ECA1AM221B   | 220uF 10V               | [M]     |
| C2214    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2215    | ECA1CAK330XB | 33uF 16V                | [M]     |
| C2216    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2218    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2219    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2220    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C2221    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2222    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| C2223    | ECEA0JKA221B | 220uF 6.3V              | [M]     |
| C2224    | F1H1H101A720 | 100pF 50V               | [M]     |
| C2225    | F1H1H101A720 | 100pF 50V               | [M]     |
| C2226    | F1H1H101A720 | 100pF 50V               | [M]     |
| C2227    | F1H1H101A720 | 100pF 50V               | [M]     |
| C2228    | ECA1EM221B   | 220uF 25V               | [M]     |
| C2402    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2600    | F1H1H561A013 | 560pF 50V               | [M]     |
| C2601    | F1H1H561A013 | 560pF 50V               | [M]     |
| C2602    | ECEA1HKA010B | 1uF 50V                 | [M]     |
| C2603    | ECEA1HKA010B | 1uF 50V                 | [M]     |
| C2740    | F1H1H101A720 | 100pF 50V               | [M]     |
| C2741    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2742    | ECA1EM102B   | 1000uF 25V              | [M]     |
| C2743    | EEUFC0J821B  | 820uF 6.3V              | [M]     |
| C2744    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2748    | ECEA0JKA221B | 220uF 6.3V              | [M]     |
| C2749    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2754    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2756    | ECA0JM101B   | 100uF 6.3V              | [M]     |
| C2757    | ECEA0JKA221B | 220uF 6.3V              | [M]     |
| C2758    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2759    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2760    | ECEA0JKA221B | 220uF 6.3V              | [M]     |
| C2771    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2851    | ECJ1VB1H221K | 220pF 50V               | [M]     |
| C2905    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2906    | F2A1C100A234 | 10uF 16V                | [M]     |
| C2975    | ECJ1VC1H560J | 56pF 50V                | [M]     |
| C2977    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C2979    | ECA1CAK470XB | 47uF 16V                | [M]     |
| C2980    | ECA1CAK470XB | 47uF 16V                | [M]     |
| C2990    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C2991    | F1H1H101A720 | 100pF 50V               | [M]     |
| C2992    | F1H1H101A720 | 100pF 50V               | [M]     |
| C3000    | ECJ1VB1H182K | 1800pF 50V              | [M]     |
| C3001    | ECJ1VB1H182K | 1800pF 50V              | [M]     |
| C3004    | ECJ1VB1H182K | 1800pF 50V              | [M]     |
| C3006    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C3007    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C3008    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C3009    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C3010    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C3011    | ECJ1VB0J475K | 4.7uF 6.3V              | [M]     |
| C3049    | F2A1H1R0A234 | 1.0uF 50V               | [M]     |
| C3050    | F2A1H1R0A234 | 1.0uF 50V               | [M]     |
| C3051    | F2A1H4R7A213 | 4.7uF 50V               | [M]     |
| C3053    | ECJ1VC1H101K | 100pF 50V               | [M]     |
| C3054    | F1H1H101A720 | 100pF 50V               | [M]     |
| C3055    | ECA1CAK220XB | 22uF 16V                | [M]     |
| C3056    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C3064    | ECJ1VB1H102K | 0.001uF 50V             | [M]     |
| C3065    | ECJ1VB1C474K | 0.47uF 16V              | [M]     |
| C3066    | F2A1C100A234 | 10uF 16V                | [M]     |
| C3067    | ECJ1VB1H272K | 2700pF 50V              | [M]     |
| C3100    | ECJ1VB1H182K | 1800pF 50V              | [M]     |
| C3101    | ECJ1VB1H182K | 1800pF 50V              | [M]     |
| C3104    | ECJ1VB1H182K | 1800pF 50V              | [M]     |
| C3106    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C3107    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C3108    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C3109    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C3110    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C3111    | ECJ1VB0J475K | 4.7uF 6.3V              | [M]     |
| C3149    | F2A1H1R0A234 | 1.0uF 50V               | [M]     |
| C3150    | F2A1H1R0A234 | 1.0uF 50V               | [M]     |
| C3151    | F2A1H4R7A213 | 4.7uF 50V               | [M]     |
| C3153    | ECJ1VC1H101K | 100pF 50V               | [M]     |
| C3154    | F1H1H101A720 | 100pF 50V               | [M]     |
| C3155    | ECA1CAK220XB | 22uF 16V                | [M]     |
| C3156    | ECA1CAK101XB | 100uF 16V               | [M]     |
| C3157    | ECA1CAK101XB | 100uF 16V               | [M]     |
| C3165    | ECJ1VB1C474K | 0.47uF 16V              | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| C3166    | F2A1C100A234 | 10uF 16V                | [M]     |
| C3167    | ECJ1VB1H272K | 2700pF 50V              | [M]     |
| C3200    | ECA1CAK101XB | 100uF 16V               | [M]     |
| C3201    | ECEA1HKA4R7B | 4.7uF 50V               | [M]     |
| C3204    | ECJ1VB1A334K | 0.33uF 10V              | [M]     |
| C3205    | ECJ1VB1A334K | 0.33uF 10V              | [M]     |
| C3206    | ECJ1VB1A334K | 0.33uF 10V              | [M]     |
| C3209    | ECJ1VB1A334K | 0.33uF 10V              | [M]     |
| C3210    | ECJ1VB1A334K | 0.33uF 10V              | [M]     |
| C3211    | ECJ1VB1A334K | 0.33uF 10V              | [M]     |
| C3212    | ECJ1VB1H332K | 3300pF 50V              | [M]     |
| C3213    | ECJ1VB1H332K | 3300pF 50V              | [M]     |
| C3214    | ECJ1VB1H472K | 4700pF 50V              | [M]     |
| C3215    | ECJ1VB1H472K | 4700pF 50V              | [M]     |
| C3216    | ECJ1VB1H223K | 0.022uF 50V             | [M]     |
| C3217    | ECJ1VB1H223K | 0.022uF 50V             | [M]     |
| C3218    | ECJ1VB1C473K | 0.047uF 16V             | [M]     |
| C3219    | ECJ1VB1C473K | 0.047uF 16V             | [M]     |
| C3220    | ECJ1VB1H332K | 3300pF 50V              | [M]     |
| C3221    | ECJ1VB1A184K | 0.18uF 10V              | [M]     |
| C3222    | ECJ1VB1A184K | 0.18uF 10V              | [M]     |
| C3223    | F2A1H4R7A213 | 4.7uF 50V               | [M]     |
| C3224    | F2A1H4R7A213 | 4.7uF 50V               | [M]     |
| C3225    | ECJ1VB1C473K | 0.047uF 16V             | [M]     |
| C3226    | ECJ1VB1C393K | 0.039uF 16V             | [M]     |
| C3227    | ECJ1VB1C473K | 0.047uF 16V             | [M]     |
| C3228    | ECEA1HKA010B | 1uF 50V                 | [M]     |
| C3230    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C3231    | ECA1CAK101XB | 100uF 16V               | [M]     |
| C3232    | F2A1H4R7A213 | 4.7uF 50V               | [M]     |
| C3238    | F2A1C100A234 | 10uF 16V                | [M]     |
| C3239    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C3240    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C3241    | F2A1H1R0A234 | 1.0uF 50V               | [M]     |
| C3242    | F2A1H1R0A234 | 1.0uF 50V               | [M]     |
| C3243    | F1H1H101A720 | 100pF 50V               | [M]     |
| C3244    | F1H1H101A720 | 100pF 50V               | [M]     |
| C3245    | F1H1H101A720 | 100pF 50V               | [M]     |
| C3246    | F1H1H101A720 | 100pF 50V               | [M]     |
| C3263    | ECA1CAK220XB | 22uF 16V                | [M]     |
| C3264    | ECA1CAK220XB | 22uF 16V                | [M]     |
| C3400    | ECEA1CKA221B | 220uF 16V               | [M]     |
| C3403    | ECEA1HKA4R7B | 4.7uF 50V               | [M]     |
| C3600    | DOGBR00JA008 | 0 1/16W                 | [M]     |
| C3601    | F1H1H103A219 | 0.01uF 50V              | [M]     |
| C3602    | F1H1H103A219 | 0.01uF 50V              | [M]     |
| C3608    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C3610    | ECA1CM471B   | 470uF 16V               | [M]     |
| C3612    | ECJ1VB1H392K | 3900pF 50V              | [M]     |
| C3613    | ECJ1VB1H392K | 3900pF 50V              | [M]     |
| C3614    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C3615    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C3616    | ECJ1VB1H562K | 5600pF 50V              | [M]     |
| C3617    | ECJ1VB1H562K | 5600pF 50V              | [M]     |
| C3618    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C3619    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C3631    | ECA1CM470B   | 47uF 16V                | [M]     |
| C3632    | ECA1CM470B   | 47uF 16V                | [M]     |
| C3633    | F2A1C221A019 | 220uF 16V               | [M]     |
| C3634    | F1H1H101A720 | 100pF 50V               | [M]     |
| C3660    | F1H1H101A720 | 100pF 50V               | [M]     |
| C3661    | F1H1H101A720 | 100pF 50V               | [M]     |
| C3662    | ECEA1CKA221B | 220uF 16V               | [M]     |
| C3663    | F1H1H101A720 | 100pF 50V               | [M]     |
| C3700    | ECA1CM470B   | 47uF 16V                | [M]     |
| C3701    | ECJ1VC1H470J | 47pF 50V                | [M]     |
| C3702    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C3703    | ECJ1VC1H470J | 47pF 50V                | [M]     |
| C3704    | F1H1H103A219 | 0.01uF 50V              | [M]     |
| C3705    | ECJ1VB1H561K | 560pF 50V               | [M]     |
| C3706    | ECA1CM470B   | 47uF 16V                | [M]     |
| C3707    | ECJ1VB1H471K | 470pF 50V               | [M]     |
| C3708    | F2A1C100A234 | 10uF 16V                | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| C3750    | ECEA0JKA221B | 220uF 6.3V              | [M]     |
| C3751    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C3752    | ECA1CAK101XB | 100uF 16V               | [M]     |
| C3753    | ECA1CAK330XB | 33uF 16V                | [M]     |
| C3800    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C3801    | ECA1CAK220XB | 22uF 16V                | [M]     |
| C3802    | F2A0J470A167 | 47uF 6.3V               | [M]     |
| C3804    | ECEA1HKA2R2B | 2.2uF 50V               | [M]     |
| C3805    | ECJ1VB1H471K | 470pF 50V               | [M]     |
| C3806    | ECJ1VB1H471K | 470pF 50V               | [M]     |
| C3808    | ECJ1VB1H471K | 470pF 50V               | [M]     |
| C3811    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C3812    | ECA0JM101B   | 100uF 6.3V              | [M]     |
| C3813    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C3814    | ECJ1VB1H331K | 330pF 50V               | [M]     |
| C3815    | ECJ1VB1H331K | 330pF 50V               | [M]     |
| C3816    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C3818    | ECJ1VB1H331K | 330pF 50V               | [M]     |
| C3819    | ECJ1VB1H223K | 0.022uF 50V             | [M]     |
| C3820    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C3821    | ECJ1VC1H180J | 18pF 50V                | [M]     |
| C3822    | ECJ1VC1H180J | 18pF 50V                | [M]     |
| C3823    | F2A1C100A234 | 10uF 16V                | [M]     |
| C3825    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C3826    | F2A1C100A234 | 10uF 16V                | [M]     |
| C3900    | ECJ1VB1H331K | 330pF 50V               | [M]     |
| C3901    | ECJ1VB1H331K | 330pF 50V               | [M]     |
| C3901    | EEE0GA331WP  | 330uF 4V                | [M]     |
| C3902    | EEE0GA331WP  | 330uF 4V                | [M]     |
| C3904    | EEE0GA331WP  | 330uF 4V                | [M]     |
| C3906    | EEE0GA331WP  | 330uF 4V                | [M]     |
| C3907    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3908    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3909    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3910    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3911    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3913    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3914    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3915    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3916    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3917    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3918    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3919    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3920    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3921    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3922    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3923    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3924    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3925    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3926    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3927    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3928    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3929    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3930    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3932    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3940    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C3941    | F1G1H221A444 | 220pF 50V               | [M]     |
| C3954    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C3955    | ECJ0EB1C103K | 0.01uF 16V              | [M]     |
| C3956    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C3964    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C4006    | F1H1H104A013 | 0.1uF 50V               | [M]     |
| C4011    | DOGDR00JA017 | 0 1/10W                 | [M]     |
| C4200    | DOGBR00JA008 | 0 1/16W                 | [M]     |
| C4202    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C4801    | ERJ3GEY0R00V | 0 1/16W                 | [M]     |
| C4802    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C4803    | ERJ3GEY0R00V | 0 1/16W                 | [M]     |
| C4804    | ERJ3GEY0R00V | 0 1/16W                 | [M]     |
| C4805    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5002    | ECJ1VB1C474K | 0.47uF 16V              | [M]     |
| C5003    | ECJ1VB1C474K | 0.47uF 16V              | [M]     |
| C5004    | ECJ1VB1C474K | 0.47uF 16V              | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| C5005    | ECJ1VB1C474K | 0.47uF 16V              | [M]     |
| C5006    | ECJ1VB1H331K | 330pF 50V               | [M]     |
| C5007    | ECJ1VB1H331K | 330pF 50V               | [M]     |
| C5008    | ECJ1VB1H153K | 0.015uF 50V             | [M]     |
| C5009    | ECJ1VB1H153K | 0.015uF 50V             | [M]     |
| C5010    | ECJ2VC2A221J | 220pF 100V              | [M]     |
| C5011    | ECJ2VC2A221J | 220pF 100V              | [M]     |
| C5012    | ECJ2VC2A221J | 220pF 100V              | [M]     |
| C5013    | ECJ2VC2A221J | 220pF 100V              | [M]     |
| C5014    | F0C1H684A013 | 0.68uF 50V              | [M]     |
| C5015    | F0C1H684A013 | 0.68uF 50V              | [M]     |
| C5016    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5017    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5018    | ECJ3YB2A104K | 0.1uF 100V              | [M]     |
| C5019    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5020    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5021    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5022    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5023    | ECJ3YB2A104K | 0.1uF 100V              | [M]     |
| C5024    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5025    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5027    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5028    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5030    | ECJ1VC1H221J | 220pF 50V               | [M]     |
| C5031    | ECJ1VB1C224K | 0.22uF 16V              | [M]     |
| C5032    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C5040    | F2A2A2200035 | 22uF 100V               | [M]     |
| C5056    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C5057    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C5058    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C5060    | ERJ3GEY0R00V | 0 1/16W                 | [M]     |
| C5061    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5062    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5063    | ERJ3GEY0R00V | 0 1/16W                 | [M]     |
| C5064    | ERJ3GEY0R00V | 0 1/16W                 | [M]     |
| C5065    | ERJ3GEY0R00V | 0 1/16W                 | [M]     |
| C5100    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5101    | ECA1EM101B   | 100uF 25V               | [M]     |
| C5102    | ECEA1HKA100B | 10uF 50V                | [M]     |
| C5103    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C5104    | ECA1CAK470XB | 47uF 16V                | [M]     |
| C5105    | ECA1VM222B   | 2200uF 35V              | [M]     |
| C5106    | ECA1VM222B   | 2200uF 35V              | [M]     |
| C5107    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5108    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5109    | ECJ3YB2A104K | 0.1uF 100V              | [M]     |
| C5110    | ECA2AM101B   | 100uF 100V              | [M]     |
| C5111    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5112    | ECA2AM100B   | 10uF 100V               | [M]     |
| C5113    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5114    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5115    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5116    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C5119    | ECJ3YB2A104K | 0.1uF 100V              | [M]     |
| C5120    | ECJ3YB2A104K | 0.1uF 100V              | [M]     |
| C5133    | ECA0JM101B   | 100uF 6.3V              | [M]     |
| C5510    | F2A1V4710036 | 470uF 35V               | [M]     |
| C5511    | F2A1V4710036 | 470uF 35V               | [M]     |
| C5512    | F2A1V4710036 | 470uF 35V               | [M]     |
| C5513    | F2A1V4710036 | 470uF 35V               | [M]     |
| C5514    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5515    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5518    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5519    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5520    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5521    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5561    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5562    | ECA0JM102B   | 1000uF 6.3V             | [M]     |
| C5601    | F2A1C470A234 | 47uF 16V                | [M]     |
| C5910    | ECA1AAK221XB | 220uF 10V               | [M]     |
| C5911    | F1H1H102A219 | 1000pF 50V              | [M]     |
| C5916    | ECA1JM222B   | 2200uF 63V              | [M]     |
| C5917    | ECA1JM222B   | 2200uF 63V              | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| C5918    | ECQE2104KF3  | 0.1uF 100V              | [M]     |
| C5919    | ECEA1AKN470B | 47uF 10V                | [M]     |
| C5920    | ECQV1H104JL3 | 0.1uF 50V               | [M]     |
| C5921    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5922    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5923    | ECA1CM331B   | 330uF 16V               | [M]     |
| C5924    | ECA1AAK221XB | 220uF 10V               | [M]     |
| C5925    | F2A2A100A057 | 10uF 100V               | [M]     |
| C5926    | F1H1H101A720 | 100pF 50V               | [M]     |
| C5930    | ECQV1H104JL3 | 0.1uF 50V               | [M]     |
| C5937    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5938    | ECA1EM332B   | 330uF 25V               | [M]     |
| C5950    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5951    | ECA0JM331B   | 330uF 6.3V              | [M]     |
| C5952    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C5953    | F2A1C470A234 | 47uF 16V                | [M]     |
| C5954    | ECA1EM102B   | 1000uF 25V              | [M]     |
| C5970    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C5971    | ECA1HAK4R7XB | 4.7uF 50V               | [M]     |
| C5972    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C5973    | ECA1CM100B   | 10uF 16V                | [M]     |
| C5976    | F2A0J221A245 | 220uF 6.3V              | [M]     |
| C5977    | ECA1EM470B   | 47uF 25V                | [M]     |
| C5978    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C5979    | ECA1CAM102XB | 1000uF 16V              | [M]     |
| C5980    | ECJ1VB1H104K | 0.1uF 50V               | [M]     |
| C5990    | ECA1HM470B   | 47uF 50V                | [M]     |
| C5991    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C5992    | ECA2AM220B   | 22uF 100V               | [M]     |
| C5993    | ECA1CAM102XB | 1000uF 16V              | [M]     |
| C6000    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6001    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6002    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6003    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6004    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6005    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6006    | ECEA1HKA100B | 10uF 50V                | [M]     |
| C6007    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6008    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6009    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6010    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6011    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6012    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6013    | F2A1H4R7A213 | 4.7uF 50V               | [M]     |
| C6014    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6015    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6016    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6017    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6018    | ECA0JM101B   | 100uF 6.3V              | [M]     |
| C6019    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6020    | F1H1H101A720 | 100pF 50V               | [M]     |
| C6021    | F1H1H101A720 | 100pF 50V               | [M]     |
| C6022    | F1H1H101A720 | 100pF 50V               | [M]     |
| C6023    | F1H1H101A720 | 100pF 50V               | [M]     |
| C6024    | ECEA1HKA100B | 10uF 50V                | [M]     |
| C6025    | ECEA0JKA470B | 47uF 6.3V               | [M]     |
| C6026    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6027    | ECJ1VB1H102K | 1000pF 50V              | [M]     |
| C6042    | F1H1H101A720 | 100pF 50V               | [M]     |
| C6044    | F1H1H101A720 | 100pF 50V               | [M]     |
| C6045    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C6047    | ECJ1VB1H103K | 0.01uF 50V              | [M]     |
| C8001    | EEE0GA331WP  | 330uF 4V                | [M]     |
| C8003    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8004    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8005    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8006    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8007    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8011    | F2G0J101A031 | 100uF 6.3V              | [M]     |
| C8012    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8013    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8014    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8015    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| C8016    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8018    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8020    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8021    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8022    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8023    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8026    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8051    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8052    | ECJOEB1A104K | 0.1uF 10V               | [M]     |
| C8053    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8054    | F1G1H221A444 | 220pF 50V               | [M]     |
| C8055    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8056    | ECJOEB1E222K | 2200pF 25V              | [M]     |
| C8057    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8111    | ECJOEB1A104K | 0.1uF 10V               | [M]     |
| C8112    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8113    | ECJOEB1E471K | 470pF 25V               | [M]     |
| C8151    | ECJ1VB0J475K | 4.7uF 6.3V              | [M]     |
| C8152    | ECJ1VB1C105K | 1uF 16V                 | [M]     |
| C8201    | F2G0J101A031 | 100uF 6.3V              | [M]     |
| C8202    | ECJOEB1A104K | 0.1uF 10V               | [M]     |
| C8203    | ECJOEB1A104K | 0.1uF 10V               | [M]     |
| C8211    | F1G1E1220001 | 1200pF 25V              | [M]     |
| C8221    | ECJOEB1E102K | 1000pF 25V              | [M]     |
| C8222    | F1G1E8210002 | 820pF 25V               | [M]     |
| C8225    | ECJOEB1E102K | 1000pF 25V              | [M]     |
| C8226    | ECJOEB1E102K | 1000pF 25V              | [M]     |
| C8231    | ECJOEB1A104K | 0.1uF 10V               | [M]     |
| C8232    | ECJOEB1A104K | 0.1uF 10V               | [M]     |
| C8251    | F2G0J221A031 | 220uF 6.3V              | [M]     |
| C8252    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8253    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8255    | F2G1C220A037 | 22uF 16V                | [M]     |
| C8256    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8257    | F2G1C470A076 | 47uF 16V                | [M]     |
| C8258    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8261    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8262    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8301    | F2G0J221A031 | 220uF 6.3V              | [M]     |
| C8302    | F2G0J330A031 | 33uF 6.3V               | [M]     |
| C8303    | ECJOEB1A104K | 0.1uF 10V               | [M]     |
| C8304    | ECJOEB1A104K | 0.1uF 10V               | [M]     |
| C8305    | ECJOEB1A104K | 0.1uF 10V               | [M]     |
| C8306    | ECJOEB1A104K | 0.1uF 10V               | [M]     |
| C8311    | ECJOEB1A104K | 0.1uF 10V               | [M]     |
| C8312    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8313    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8320    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8321    | ECJOEB1A104K | 0.1uF 10V               | [M]     |
| C8325    | ECJOEB1A104K | 0.1uF 10V               | [M]     |
| C8330    | F2G0J470A031 | 47uF 6.3V               | [M]     |
| C8331    | ECJOEB1A104K | 0.1uF 10V               | [M]     |
| C8335    | ECJOEB1A104K | 0.1uF 10V               | [M]     |
| C8340    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8341    | ECJOEB1A104K | 0.1uF 10V               | [M]     |
| C8401    | ECJOEC1H150J | 15pF 50V                | [M]     |
| C8421    | F2G0J221A031 | 220uF 6.3V              | [M]     |
| C8422    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8423    | F2G0J330A031 | 33uF 6.3V               | [M]     |
| C8424    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8425    | ECJOEC1H150J | 15pF 50V                | [M]     |
| C8428    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8429    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8431    | F2G1C100A072 | 10uF 16V                | [M]     |
| C8432    | F2G1C100A072 | 10uF 16V                | [M]     |
| C8433    | F2G1C100A072 | 10uF 16V                | [M]     |
| C8501    | F2G0J101A031 | 100uF 6.3V              | [M]     |
| C8502    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8503    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8504    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8505    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8506    | ECJOEF1C104Z | 0.1uF 16V               | [M]     |
| C8511    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |

| Ref. No. | Part No.     | Part Name & Description | Remarks |
|----------|--------------|-------------------------|---------|
| C8512    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8513    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8514    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8515    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8516    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8521    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8522    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8523    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8524    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8525    | ECJ0EB1C562K | 5600pF 16V              | [M]     |
| C8526    | F1G1C183A039 | 0.018uF 16V             | [M]     |
| C8527    | ECJ0EB1A333K | 0.033uF 10V             | [M]     |
| C8528    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8529    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8530    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8531    | ECJ0EC1H101J | 100pF 50V               | [M]     |
| C8532    | F1G1H221A444 | 220pF 50V               | [M]     |
| C8533    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8541    | ECJ0EB1E472K | 4700pF 25V              | [M]     |
| C8550    | F2G0J330A031 | 33uF 6.3V               | [M]     |
| C8551    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8552    | F2G1C100A072 | 10uF 16V                | [M]     |
| C8553    | F2G0J470A031 | 47uF 6.3V               | [M]     |
| C8554    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8561    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8562    | F2G1C100A072 | 10uF 16V                | [M]     |
| C8563    | F2G0J470A031 | 47uF 6.3V               | [M]     |
| C8564    | ECJ1VB0J105K | 1uF 6.3V                | [M]     |
| C8571    | F1J1A106A043 | 10uF 10V                | [M]     |
| C8572    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8601    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8602    | ECJ0EB1C153K | 0.015uF 16V             | [M]     |
| C8606    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8611    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8621    | ECJ0EC1H100D | 10pF 50V                | [M]     |
| C8622    | ECJ0EC1H100D | 10pF 50V                | [M]     |
| C8651    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8652    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8691    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8695    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C8701    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C8901    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C9002    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C9003    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C9004    | F1G1H7R0A445 | 7.0pF 50V               | [M]     |
| C9005    | ECJ0EC1H080D | 8pF 50V                 | [M]     |
| C9006    | ECJ0EB1A104K | 0.1uF 10V               | [M]     |
| C9007    | ECJ0EF1C104Z | 0.1uF 16V               | [M]     |
| C9008    | F1G1H221A444 | 220pF 50V               | [M]     |
| FL8101   | F1H0J1050018 | 1uF 6.3V                | [M]     |
| FL8102   | F1H0J1050018 | 1uF 6.3V                | [M]     |
| FL8103   | F1H0J1050018 | 1uF 6.3V                | [M]     |
| FL8104   | F1J1E1040022 | 0.1uF 25V               | [M]     |
| FL8421   | F1H0J1050018 | 1uF 6.3V                | [M]     |