BDP-BX1/S350

RMT-B102A/B102P/B103A

SERVICE MANUAL

Self Diagnosis Supported model

Ver. 1.2 2008.09

US Model
Canadian Model
BDP-BX1/S350
AEP Model
UK Model
E Model
Australian Model
Chinese Model
Russian Model
Hong Kong Model
Taiwan Model
Korea Model
Thai Model
BDP-S350

Photo: BDP-S350

SPECIFICATIONS

System

Laser: Semiconductor laser

Inputs and outputs

(**Jack name:**
Jack type/Output level/Load impedance)

LINE OUT R-AUDIO-L:
Phono jack/2 Vrms/10 kilohms

DIGITAL OUT (OPTICAL):
Optical output jack/–18 dBm
(wave length 660 nm)

DIGITAL OUT (COAXIAL):
Phono jack/0.5 Vp-p/75 ohms

HDMI OUT:
HDMI 19-pin standard connector

COMPONENT VIDEO OUT
(Y, P_B, P_R) (US, Canadian):
Phono jack/Y: 1.0 Vp-p/
P_B, P_R: 0.7 Vp-p/75 ohms

(Y, P_B/C_B, P_R/C_R) (Except US, Canadian):
Phono jack/Y: 1.0 Vp-p/
P_B/C_B, P_R/C_R: 0.7Vp-p/75ohms

LINE OUT VIDEO:
Phono jack/1.0 Vp-p/75 ohms

LINE OUT S VIDEO:
4-pin mini DIN/
Y: 1.0Vp-p, C: 0.286Vp-p/75ohms
(US, Canadian, E, Chinese, Hong Kong, Taiwan, Korea, Thai)
4-pin mini DIN/
Y: 1.0Vp-p, C: 0.3Vp-p/75ohms
(AEP, UK, Australian, Russian)

LAN (100):
100BASE-TX Terminal

EXT:
External memory slot (For connecting the external memory)
DC output: 5 V 500 mA Max

General

Power requirements:
110 V AC, 60Hz (Taiwan)
110–240 V AC, 50/60Hz (E, Hong Kong, Thai)
120V AC, 60Hz (US, Canadian)
220V AC, 60Hz (Korea)
220–240 V AC, 50/60Hz
(AEP, UK, Australian, Chinese)

Power consumption:
26 W

Dimensions (approx.):
430 mm × 220 mm × 60 mm
(17 in. × 8 3/4 in. × 2 3/8 in.)
(width/depth/height) incl. projecting parts

Mass (approx.):
2.9 kg (6 3/8 lb)

Operating temperature:
5 ºC to3 5 ºC(41 °Ft o 95 °F)

Operating humidity:
25 % to 80 %

Supplied accessories

- Audio/video cable (phono plug ×3) (1)
- AC power cord (1)
- HDMI cable (1) (BDP-BX1)
- Remote commander (remote) (1)
- Size AA (R6) batteries (2)
- Plug Adaptor (1) (E)

Specifications and design are subject to change without notice.

BLU-RAY DISC/DVD PLAYER

SONY

9-883-989-13

Sony Corporation
Video Business Group

2008I0500-1

Published by Quality Assurance Dept.

SAFETY CHECK-OUT

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

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
6. Check the B+ voltage to see it is at the values specified.
7. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

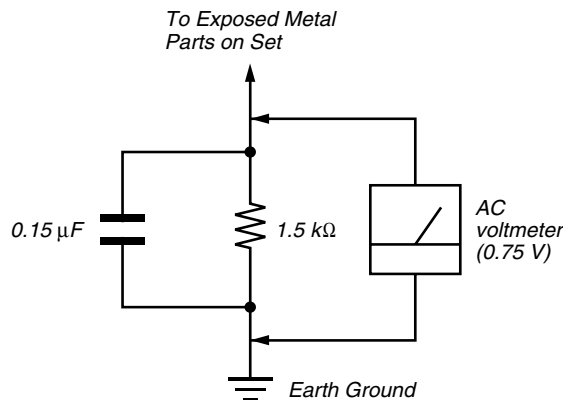


Fig. A. Using an AC voltmeter to check AC leakage.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION, BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 25 cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.

SAFETY-RELATED COMPONENT WARNING!!

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

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

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

LEAKAGE TEST

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

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

CAUTION:

The use of optical instrument with this product will increase eye hazard.

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

This label is located on the laser protective housing inside the enclosure.

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the laser protective housing inside the enclosure.
(Except US, Canadian, E)

Unleaded solder

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

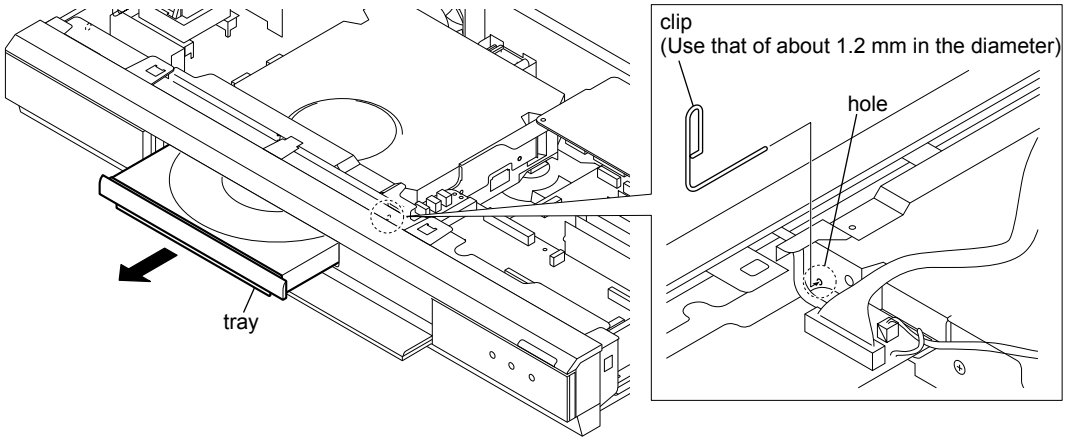
- Unleaded solder melts at a temperature about 40°C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350°C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

TABLE OF CONTENTS

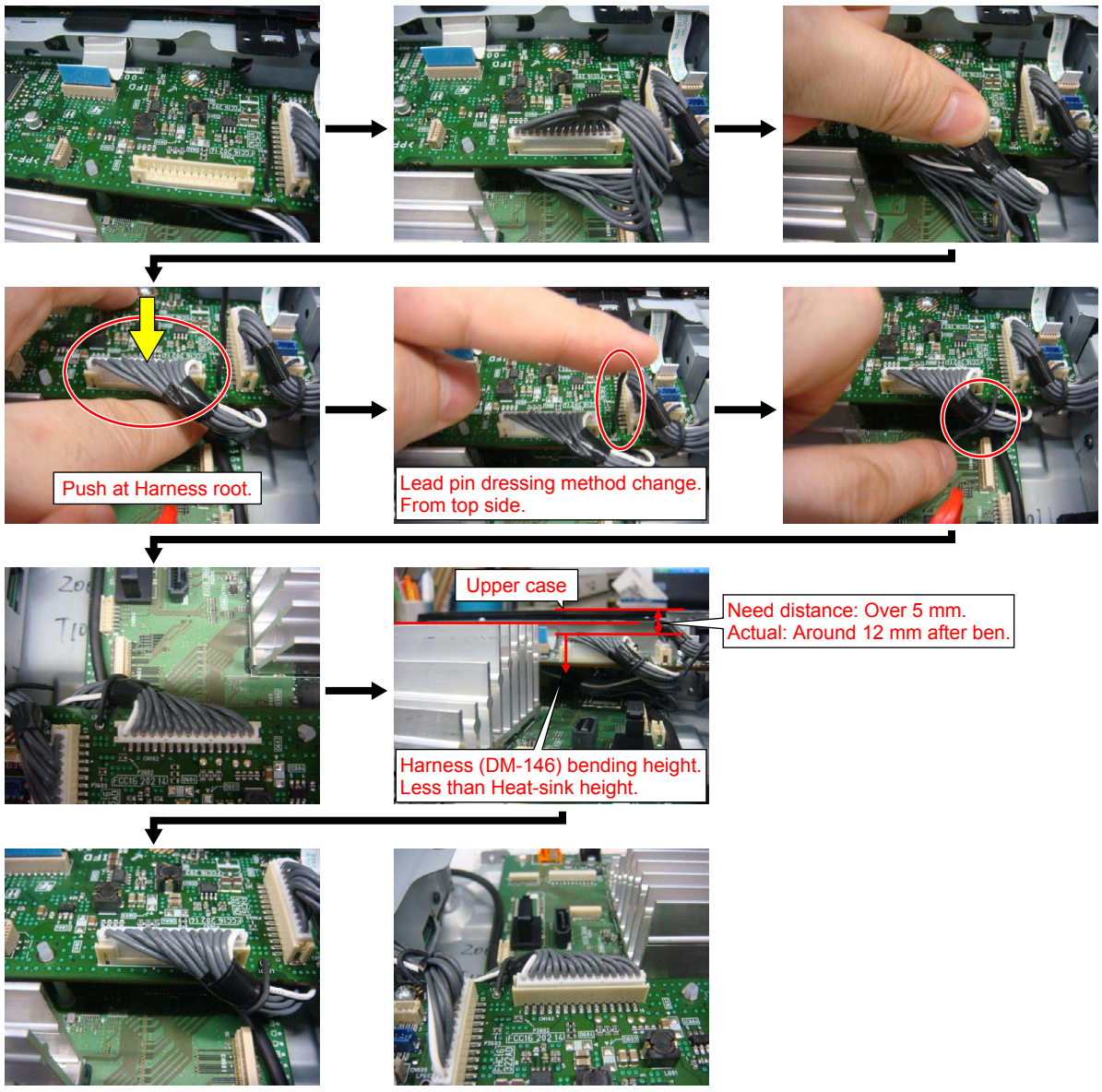
SECTION 1
SERVICE NOTE

1-1. DISC REMOVAL PROCEDURE IF THE TRAY CANNOT BE EJECTED (FORCED EJECTION)

1. Remove the upper case. (Refer to page 2-1)
2. Insert a clip in the hole of a drive and open a tray.
   Note: Use a clip of about 1.2 mm in the diameter



1-2. Attention at installation of harness (DM-146)



1-3. TEST DISC

Part No.	Description	Layer
J-6090-199-A	BLX-104	Single Layer
J-6090-200-A	BLX-204	Dual Layer
3-702-101-01	CD (YEDS-18)	
J-6090-088-A	HLX-504	Single Layer (NTSC)
J-6090-089-A	HLX-505	Dual Layer (NTSC)
J-6090-077-A	HLX-506	Single Layer (PAL)
J-6090-078-A	HLX-507	Dual Layer (PAL)

1-3-1. Operation and Display

Check Items

1) BLX-104
   1. Select 23.976Hz/1080p
   2. Play “4.Motion pictures”
   3. Check whether player can play back or not
   4. Check each outputs
      Video:
      Composite/S Video/component/HDMI
      Audio:
      Digital out (Coaxial/Optical)/Audio out/5.1Ch output

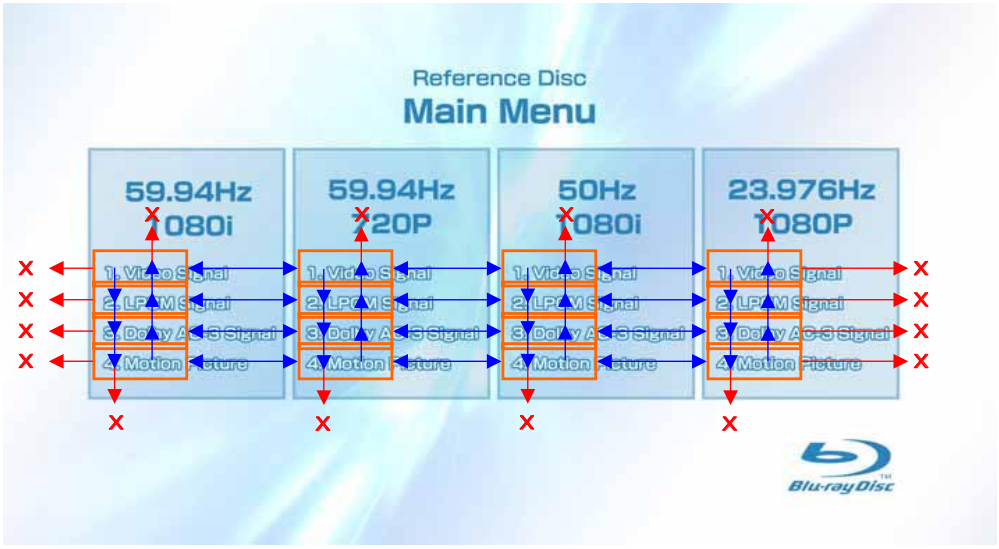
* When 1080/24p monitor is nothing, 1080i (59.94Hz or 50Hz) can use instead of 1080/24p.
However this is temporary correspondence.

2) BLX-204
   1. Select 1080i (59.94Hz or 50Hz)
   2. Play “4.Motion pictures”
   3. Check whether player can play back or not
      (Check the picture and sound output)

3) CD (YEDS-18)
   Check whether player can play back or not
   (Check the sound output)

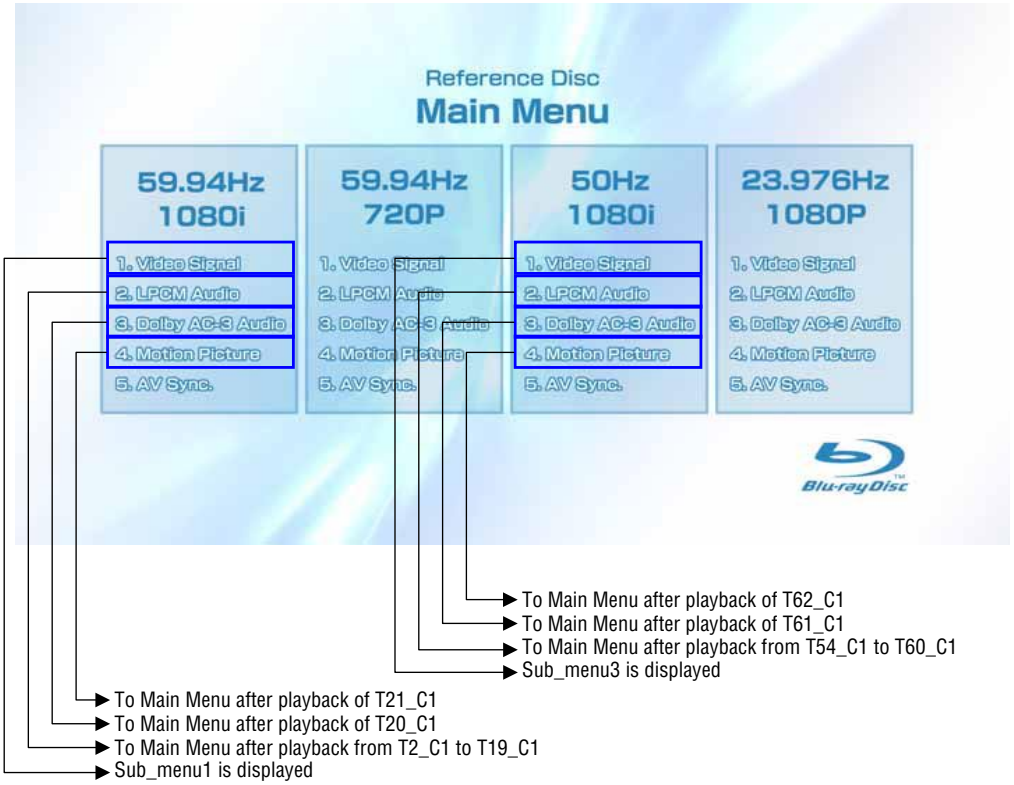
4) HLX-504/505 (NTSC), HLX-506/507 (PAL)
   1. After displayed Main Menu, select “1.Video”
   2. Play “1.Color Bar 100%”
      (Check the picture and sound output)
   3. Return to Menu
   4. Play “Demonstration 4:3” or “5.Demonstration 16:9”
      (Check the picture and sound output)

1-3-1-1. BLX-104 Menu Function (1)
Main Menu



1) When the disc is inserted, 1. Video Signal of 59.94Hz/1080i of the Main Menu is selectively displayed.

1-3-1-2. BLX-104 Menu Function (2)
Main Menu



* When returning to Main Menu after playback from each button of 59.94Hz/1080i, 1. Video Signal of 59.94Hz/1080i is selectively displayed.

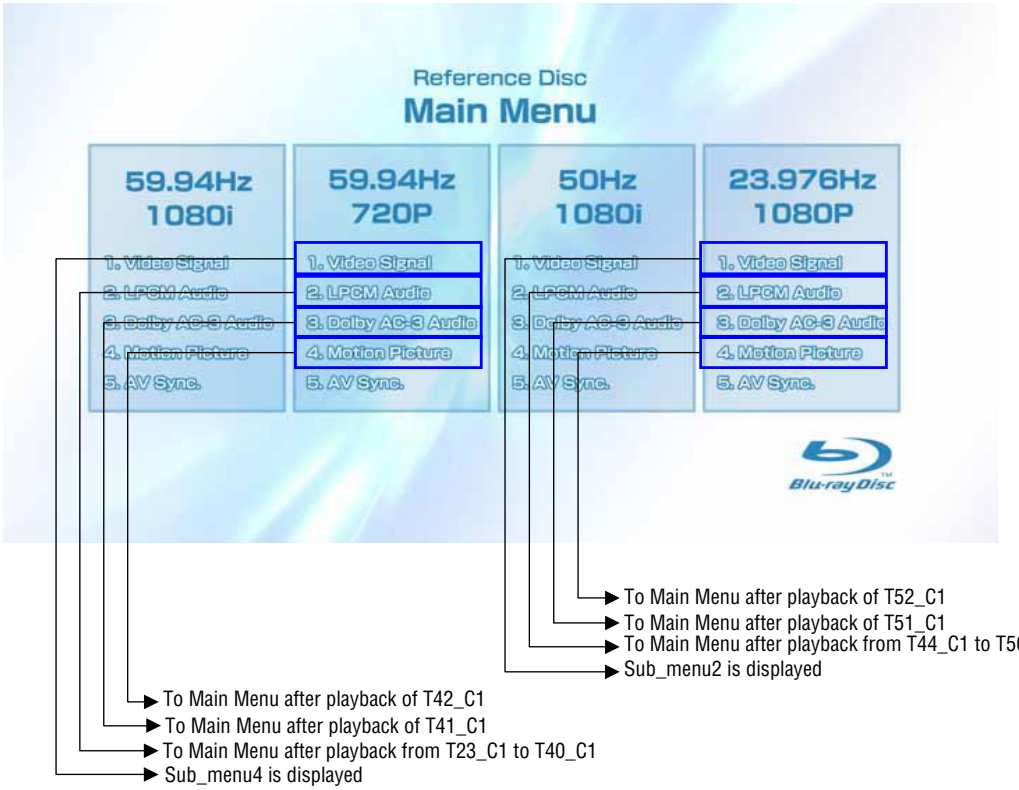
* When returning to Main Menu after playback from each button of 50Hz/1080i, 1. Video Signal of 50Hz/1080i is selectively displayed.

* 5. AV Sync does not operate.

Note:

Txx_ Cxx
- Cxx: Chapter No.
- Txx: Title No.

1-3-1-3. BLX-104 Menu Function (3)
Main Menu

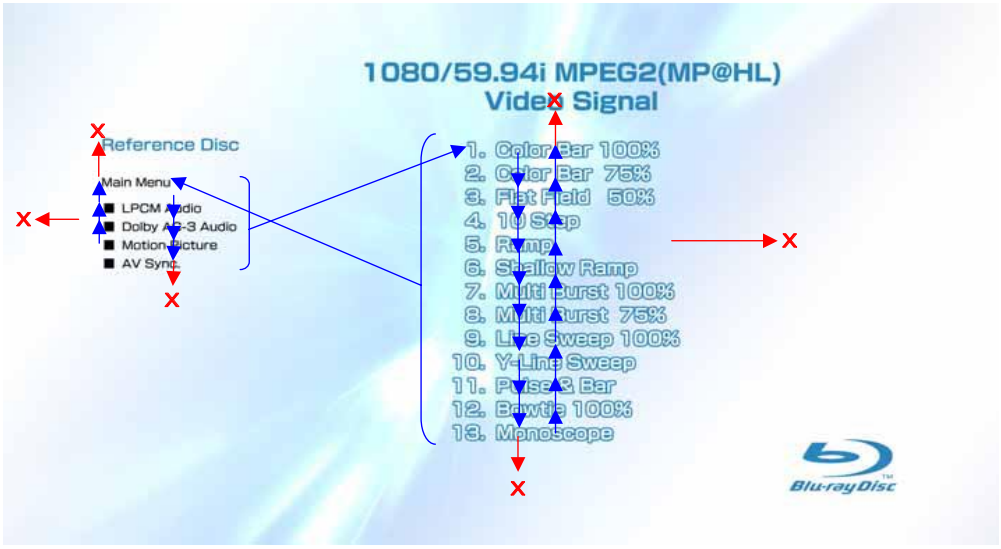


* When returning to Main Menu after playback from each button of 59.94Hz/720P, 1. Video Signal of 59.94Hz/720P is selectively displayed.

* When returning to Main Menu after playback from each button of 23.976Hz/1080P, 1. Video Signal of 23.976Hz/1080P is selectively displayed.

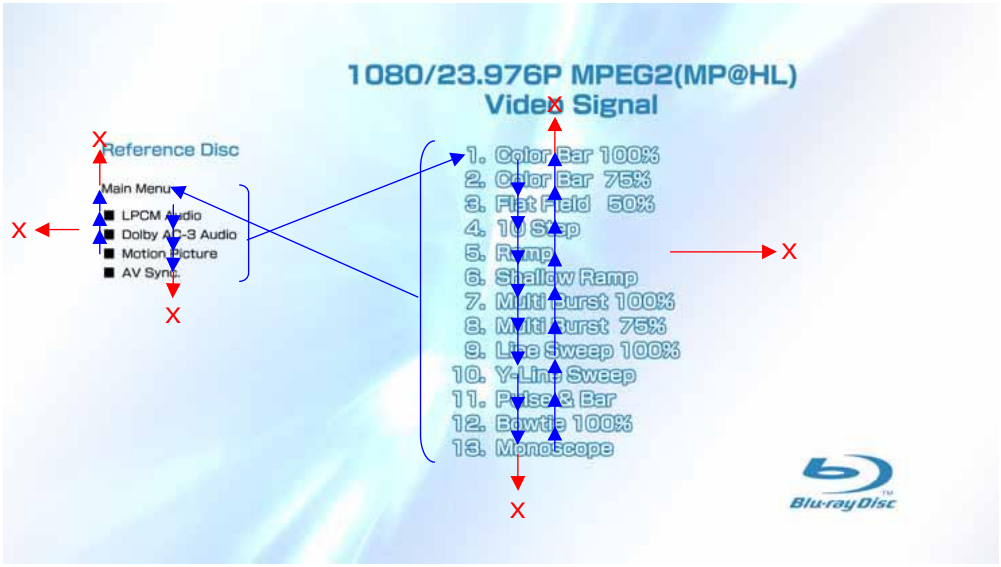
* 5. AV Sync does not operate.

1-3-1-4. BLX-104 Menu Function (4)
Sub menu1



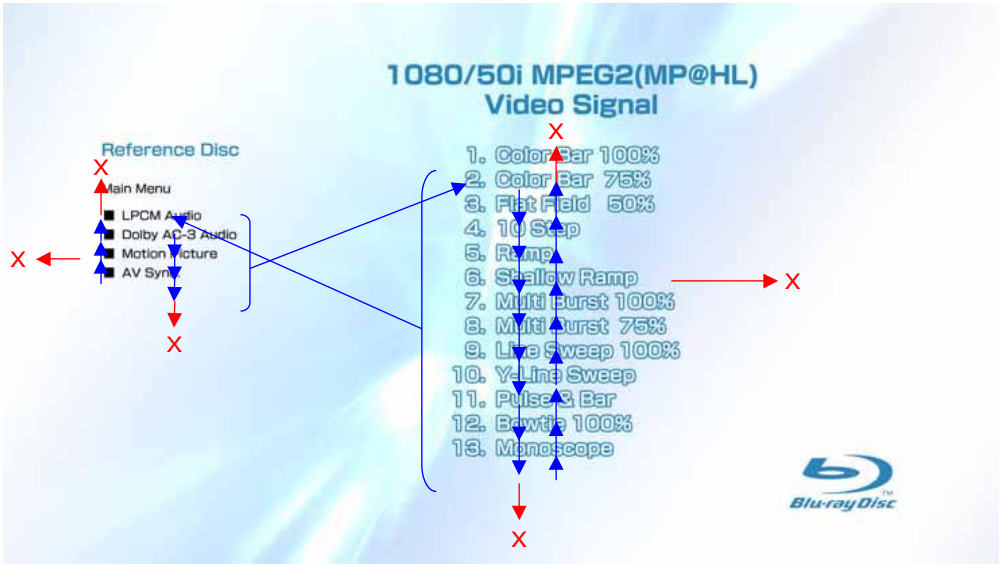
1) At the display of Sub menu1, 1. Color Bar 100% is selectively displayed.
2) Selection of 1. Color Bar 100% ⟶ Return to Sub menu1 after seamless playback from T1_C1 to T1_C13. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
3) Selection of 2. Color Bar 75% ⟶ Return to Sub menu1 after seamless playback from T1_C2 to T1_C13. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
4) At the selection of 3 - 13, item 3 mentioned above is executed as the routine.
5) At the display of Sub menu1, Main Menu is selected ⟶ Jump to Main Menu. At the display of Main Menu, 1. Video Signal of 59.94Hz/1080i is selectively displayed.
6) Selection of LPCM Audio ⟶ Playback from T2_C1 to T19_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu1 after playback. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
7) Selection of Dolby AC-3 Audio ⟶ Playback of T20_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu1 after playback. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
8) Selection of Motion Picture ⟶ Return to Sub menu1 after playback of T21_C1. 1. ColorBar 100% is selectively displayed on Sub menu1 screen.
9) At the selection of Main Menu, 1. VideoSignal of 1080/59.94i of Main Menu is selectively displayed.
10) AV Sync does not operate.

1-3-1-5. BLX-104 Menu Function (5)
Sub menu2



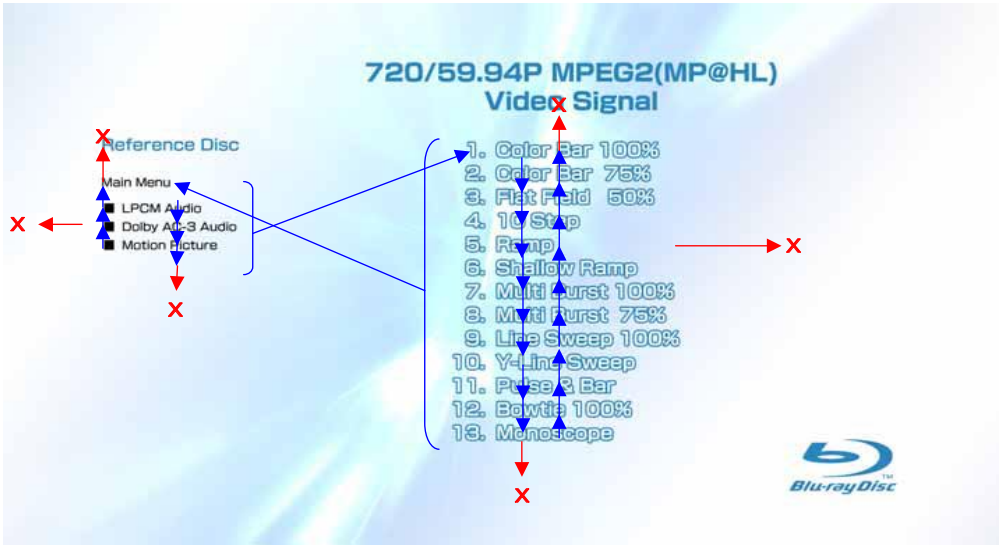
1) At the display of Sub menu2, 1. Color Bar 100% is selectively displayed.
2) Selection of 1. Color Bar 100% ⟶ Return to Sub menu2 after seamless playback from T43_C1 to T43_C13. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
3) Selection of 2. Color Bar 75% ⟶ Return to Sub menu2 after seamless playback from T43_C2 to T43_C13. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
4) At the selection of 3 - 13, item 3 mentioned above is executed as the routine.
5) At the display of Sub menu2, Main Menu is selected ⟶ Jump to Main Menu. At the display of Main Menu, 1. Video Signal of 23.976Hz/1080P is selectively displayed.
6) Selection of LPCM Audio ⟶ Playback from T44_C1 to T50_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu2 after playback. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
7) Selection of Dolby AC-3 Audio ⟶ Playback of T51_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu2 after playback. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
8) Selection of Motion Picture ⟶ Return to Sub menu2 after playback of T52_C1. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
9) At the selection of Main Menu, 1. Video Signal of 1080/23.976P of Main Menu is selectively displayed.
10) AV Sync does not operate.

1-3-1-6. BLX-104 Menu Function (6)
Sub menu3



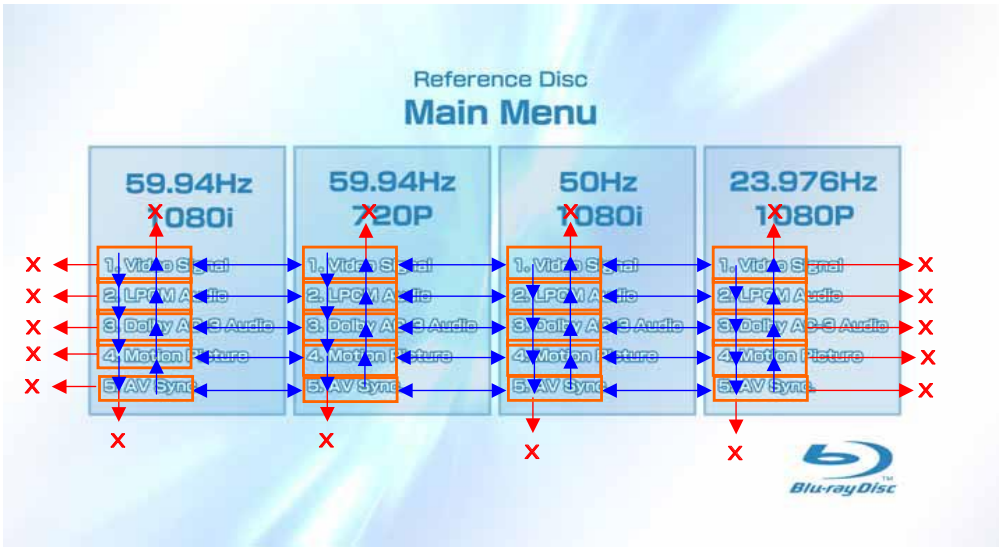
1) At the display of Sub menu3, 1. Color Bar 100% is selectively displayed.
2) Selection of 1. Color Bar 100% ⟶ Return to Sub menu3 after seamless playback from T53_C1 to T53_C13. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
3) Selection of 2. Color Bar 75% ⟶ Return to Sub menu3 after seamless playback from T53_C2 to T53_C13. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
4) At the selection of 3 - 13, item 3 mentioned above is executed as the routine.
5) At the display of Sub menu3, Main Menu is selected ⟶ Jump to Main Menu. At the display of Main Menu, 1. Video Signal of 50Hz/1080i is selectively displayed.
6) Selection of LPCM Audio ⟶ Playback from T54_C1 to T60_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu3 after playback. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
7) Selection of Dolby AC-3 Audio ⟶ Playback of T61_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu3 after playback. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
8) Selection of Motion Picture ⟶ Return to Sub menu3 after playback of T62_C1. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
9) At the selection of Main Menu, 1. Video Signal of 1080/50i of Main Menu is selectively displayed.
10) AV Sync does not operate.

1-3-1-7. BLX-104 Menu Function (7)
Sub menu4



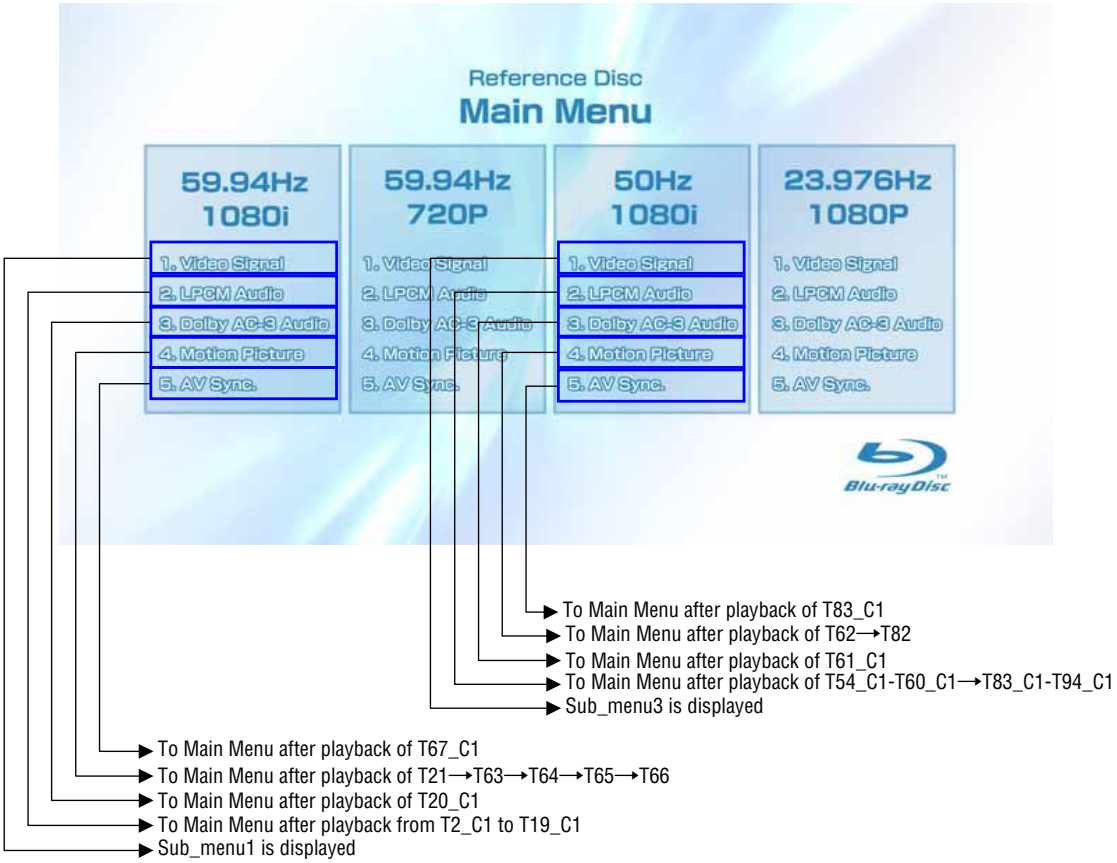
1) At the display of Sub menu4, 1. Color Bar 100% is selectively displayed.
2) Selection of 1. Color Bar 100% ⟶ Return to Sub menu4 after seamless playback from T22_C1 to T22_C13. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
3) Selection of 2. Color Bar 75% ⟶ Return to Sub menu4 after seamless playback from T22_C2 to T22_C13. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
4) At the selection of 3 - 13, item 3 mentioned above is executed as the routine.
5) At the display of Sub menu4, Main Menu is selected ⟶ Jump to Main Menu. At the display of Main Menu, 1. Video Signal of 59.94Hz/720P is selectively displayed.
6) Selection of LPCM Audio ⟶ Playback from T44_C1 to T50_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu4 after playback. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
7) Selection of Dolby AC-3 Audio ⟶ Playback of T51_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu4 after playback. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
8) Selection of Motion Picture ⟶ Return to Sub menu4 after playback of T52_C1. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
9) At the selection of Main Menu, 1. Video Signal of 720/59.94P of Main Menu is selectively displayed.
10) AV Sync does not operate.

1-3-2-1. BLX-204 Menu Function (1)
Main Menu



1) When the disc is inserted, 1. Video Signal of 59.94Hz/1080i of the Main Menu is selectively displayed.

1-3-2-2. BLX-204 Menu Function (2)
Main Menu



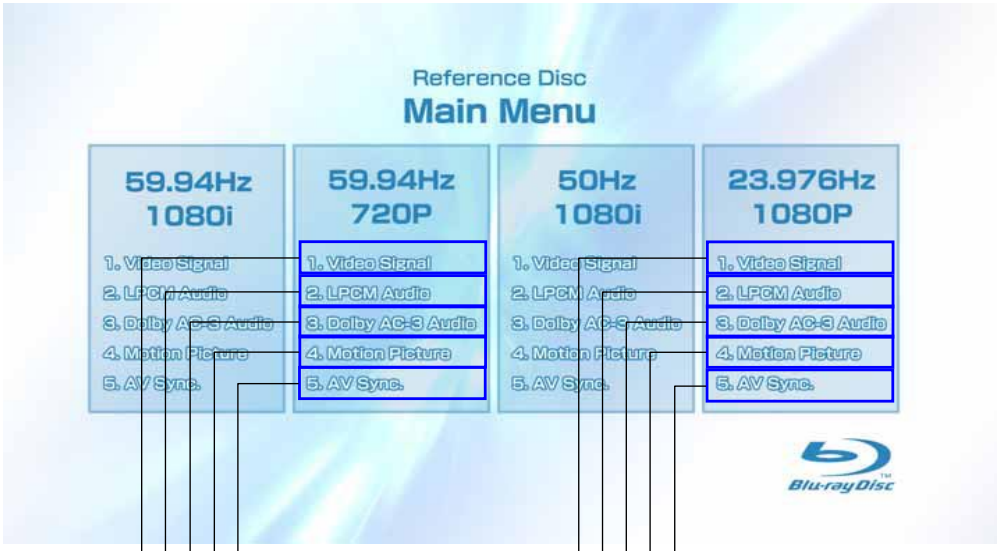
* When returning to Main Menu after playback from each button of 59.94Hz/1080i, 1. Video Signal of 59.94Hz/1080i is selectively displayed.

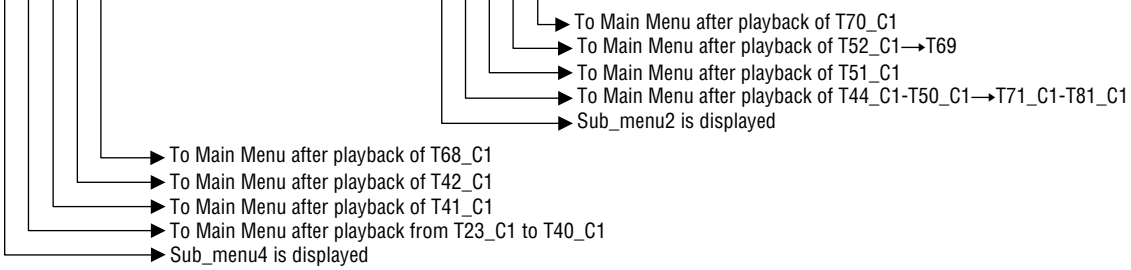
* When returning to Main Menu after playback from each button of 50Hz/1080i, 1. Video Signal of 50Hz/1080i is selectively displayed.

Note:

Txx_ Cxx
- Chapter No.
- Title No.

1-3-2-3. BLX-204 Menu Function (3)
Main Menu

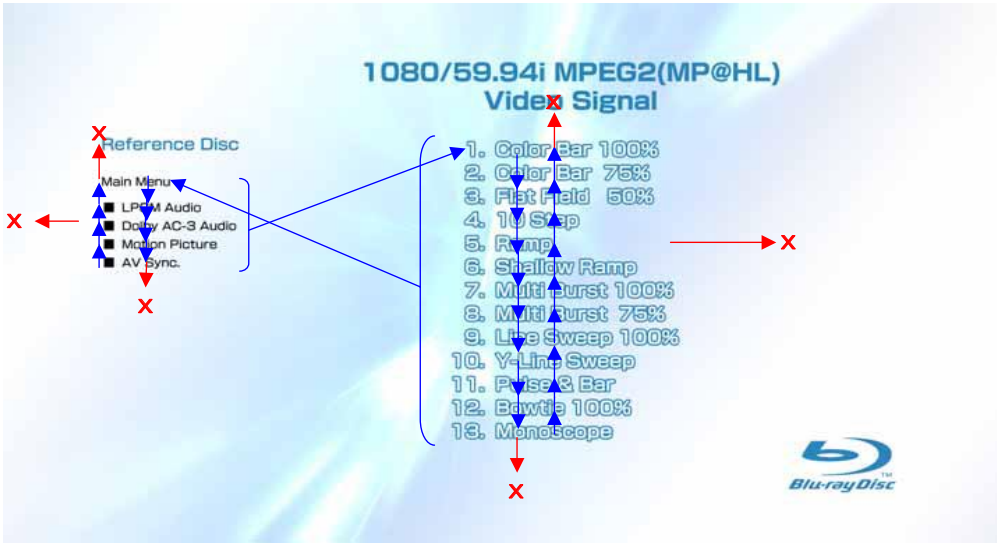




* When returning to Main Menu after playback from each button of 59.94Hz/720P, 1. Video Signal of 59.94Hz/720P is selectively displayed.

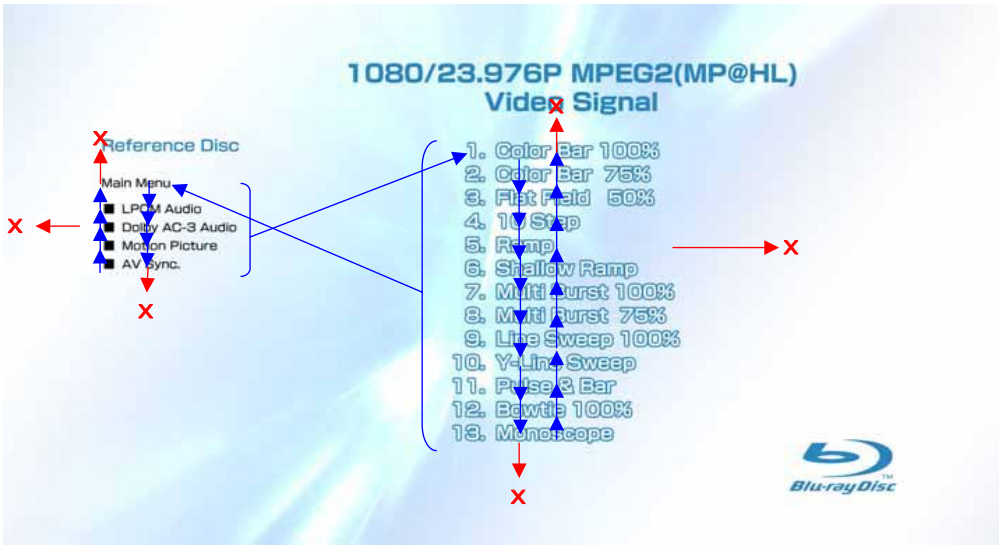
* When returning to Main Menu after playback from each button of 23.976Hz/1080P, 1. Video Signal of 23.976Hz/1080P is selectively displayed.

1-3-2-4. BLX-204 Menu Function (4)
Sub menu 1



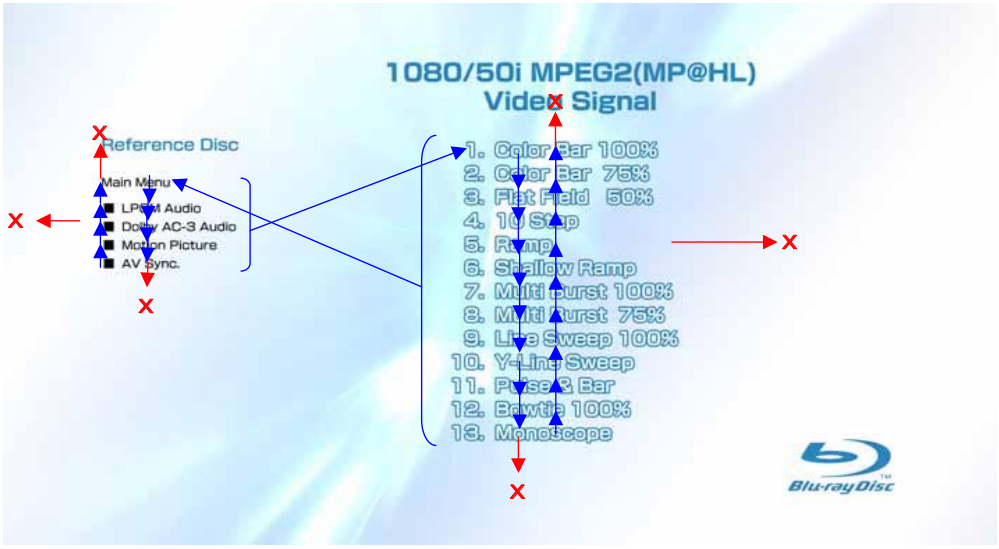
1) At the display of Sub menu1, 1. Color Bar 100% is selectively displayed.
2) Selection of 1. Color Bar 100% ⟶ Return to Sub menu1 after seamless playback from T1_C1 to T1_C13. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
3) Selection of 2. Color Bar 75% ⟶ Return to Sub menu1 after seamless playback from T1_C2 to T1_C13. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
4) At the selection of 3 - 13, item 3 mentioned above is executed as the routine.
5) At the display of Sub menu1, Main Menu is selected ⟶ Jump to Main Menu. At the display of Main Menu, 1. Video Signal of 59.94Hz/1080i is selectively displayed.
6) Selection of LPCM Audio ⟶ Playback from T2_C1 to T19_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu1 after playback. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
7) Selection of Dolby AC-3 Audio ⟶ Playback of T20_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu1 after playback. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
8) Selection of Motion Picture ⟶ Return to Sub menu1 after playback of T21_C1. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
9) Selection of AV Sync ⟶ Return to Sub menu1 after playback of T67_C1. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
10) At the selection of Main Menu, 1. Video Signal of 1080/59.94i of Main Menu is selectively displayed.

1-3-2-5. BLX-204 Menu Function (5)
Sub menu 2



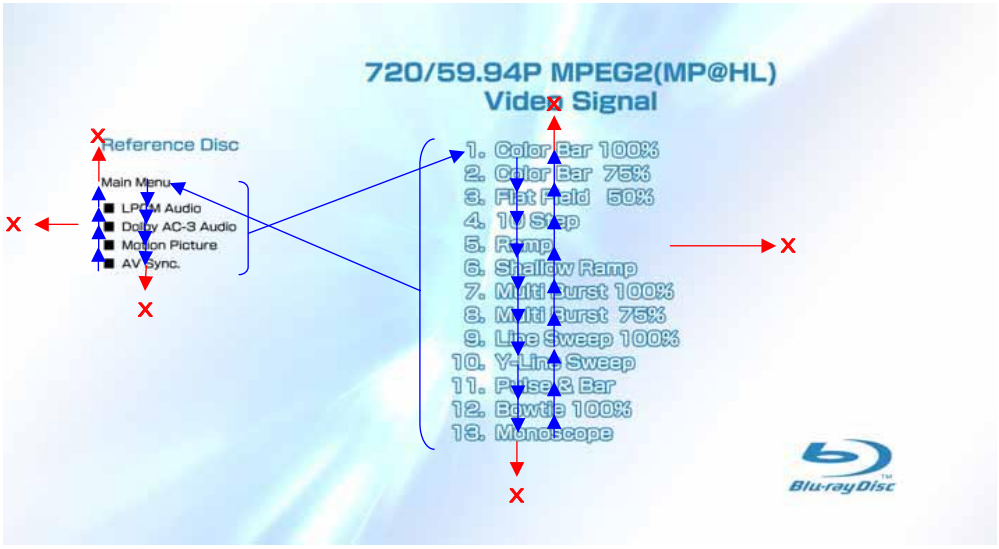
1) At the display of Sub menu2, 1. Color Bar 100% is selectively displayed.
2) Selection of 1. Color Bar 100% ⟶ Return to Sub menu2 after seamless playback from T43_C1 to T43_C13. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
3) Selection of 2. Color Bar 75% ⟶ Return to Sub menu2 after seamless playback from T43_C2 to T43_C13. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
4) At the selection of 3 - 13, item 3 mentioned above is executed as the routine.
5) At the display of Sub menu2, Main Menu is selected ⟶ Jump to Main Menu. At the display of Main Menu, 1. Video Signal of 23.976Hz/1080P is selectively displayed.
6) Selection of LPCM Audio ⟶ Playback from T44_C1 to T50_C1 and from T71_C1 to T81_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed.
   During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu2 after playback. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
7) Selection of Dolby AC-3 Audio ⟶ Playback of T51_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed.
   During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu2 after playback. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
8) Selection of Motion Picture ⟶ Return to Sub menu2 after playback of T52_C1 and T69. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
9) Selection of AV Sync ⟶ Return to Sub menu2 after playback of T70_C1. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
10) At the selection of Main Menu, 1. Video Signal of 1080/23.976P of Main Menu is selectively displayed.

1-3-2-6. BLX-204 Menu Function (6)
Sub menu 3



1) At the display of Sub menu3, 1. Color Bar 100% is selectively displayed.
2) Selection of 1. Color Bar 100% ⟶ Return to Sub menu3 after seamless playback from T53_C1 to T53_C13. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
3) Selection of 2. Color Bar 75% ⟶ Return to Sub menu3 after seamless playback from T53_C2 to T53_C13. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
4) At the selection of 3 - 13, item 3 mentioned above is executed as the routine.
5) At the display of Sub menu3, Main Menu is selected ⟶ Jump to Main Menu. At the display of Main Menu, 1. Video Signal of 50Hz/1080i is selectively displayed.
6) Selection of LPCM Audio ⟶ Playback from T54_C1 to T60_C1 and from T84_C1 to T94_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed.
   During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu3 after playback. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
7) Selection of Dolby AC-3 Audio ⟶ Playback of T61_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed.
   During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu3 after playback. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
8) Selection of Motion Picture ⟶ Return to Sub menu3 after playback of T62_C1 and T82. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
9) Selection of AV Sync ⟶ Return to Sub menu3 after playback of T83_C1. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
10) At the selection of Main Menu, 1. Video Signal of 1080/50i of Main Menu is selectively displayed.

1-3-2-7. BLX-204 Menu Function (7)
Sub menu 4

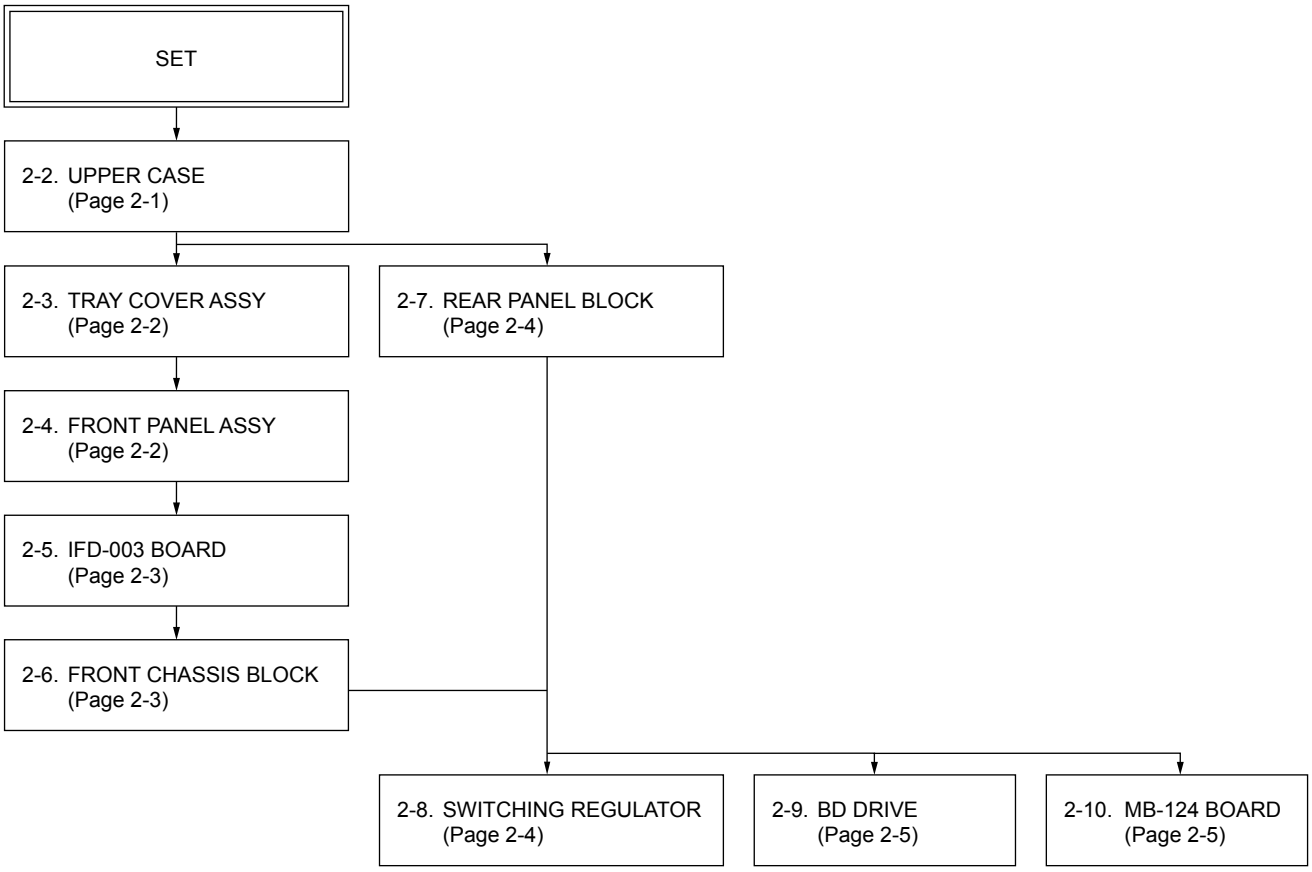


1) At the display of Sub menu4, 1. Color Bar 100% is selectively displayed.
2) Selection of 1. Color Bar 100% ⟶ Return to Sub menu4 after seamless playback from T22_C1 to T22_C13. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
3) Selection of 2. Color Bar 75% ⟶ Return to Sub menu4 after seamless playback from T22_C2 to T22_C13. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
4) At the selection of 3 - 13, item 3 mentioned above is executed as the routine.
5) At the display of Sub menu4, Main Menu is selected ⟶ Jump to Main Menu. At the display of Main Menu, 1. Video Signal of 59.94Hz/720P is selectively displayed.
6) Selection of LPCM Audio ⟶ Playback from T44_C1 to T50_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu4 after playback. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
7) Selection of Dolby AC-3 Audio ⟶ Playback of T51_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu4 after playback. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
8) Selection of Motion Picture ⟶ Return to Sub menu4 after playback of T52_C1. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
9) Selection of AV Sync ⟶ Return to Sub menu4 after playback of T68_C1. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
10) At the selection of Main Menu, 1. Video Signal of 720/59.94P of Main Menu is selectively displayed.

SECTION 2
DISASSEMBLY

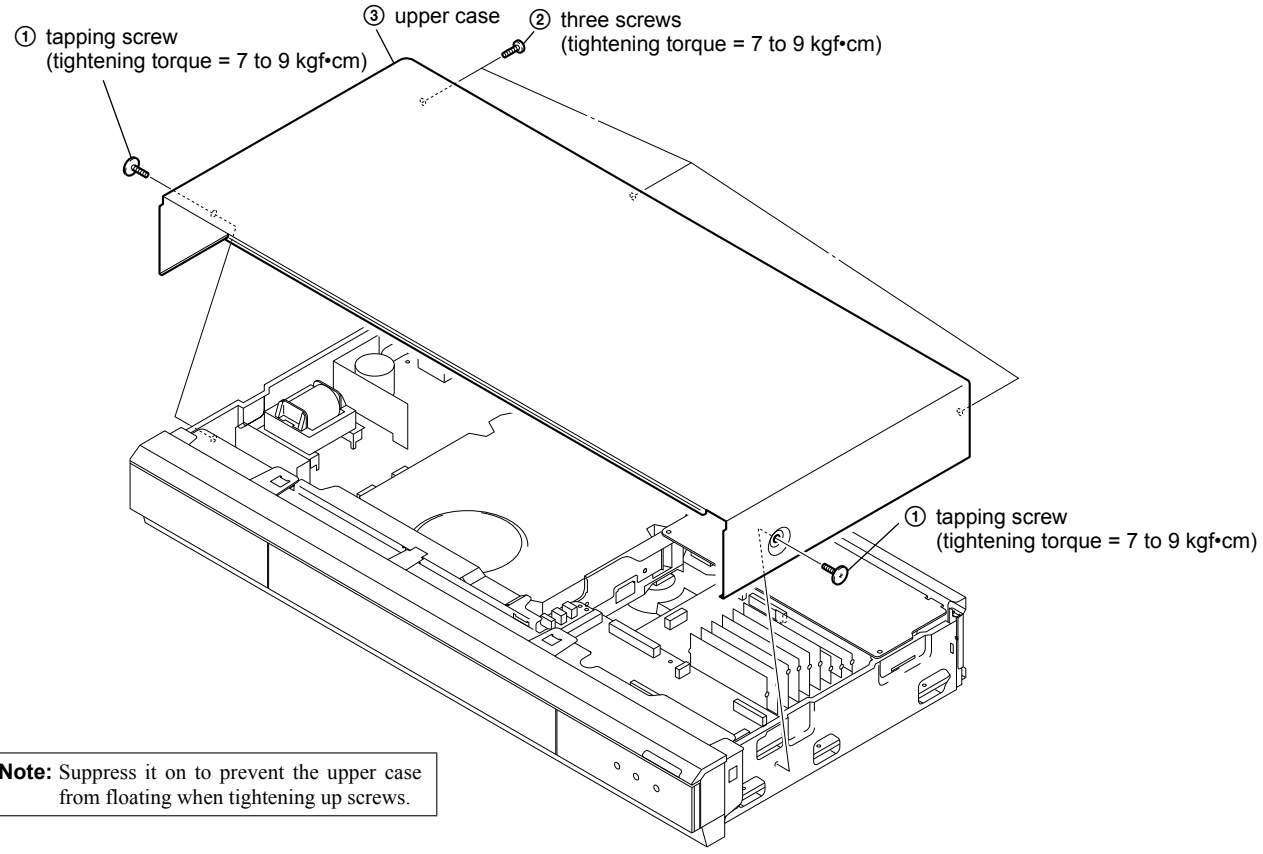
• This set can be disassembled in the order shown below.

2-1. DISASSEMBLY FLOW



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

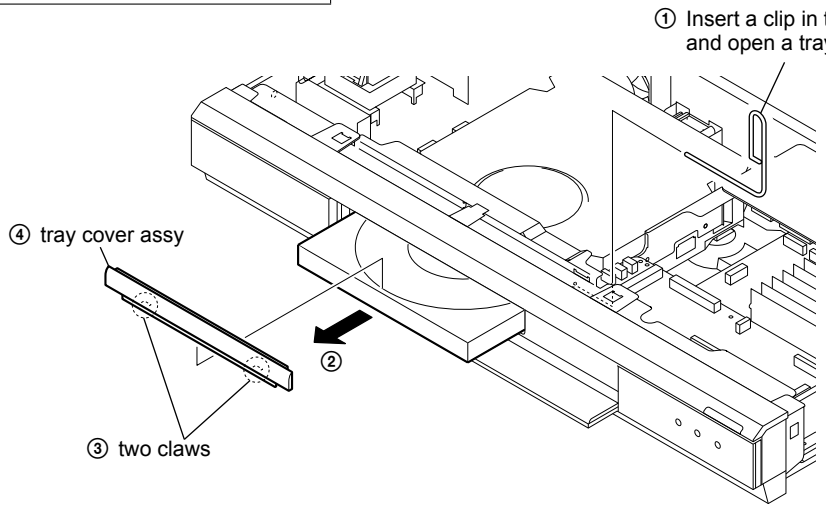
2-2. UPPER CASE



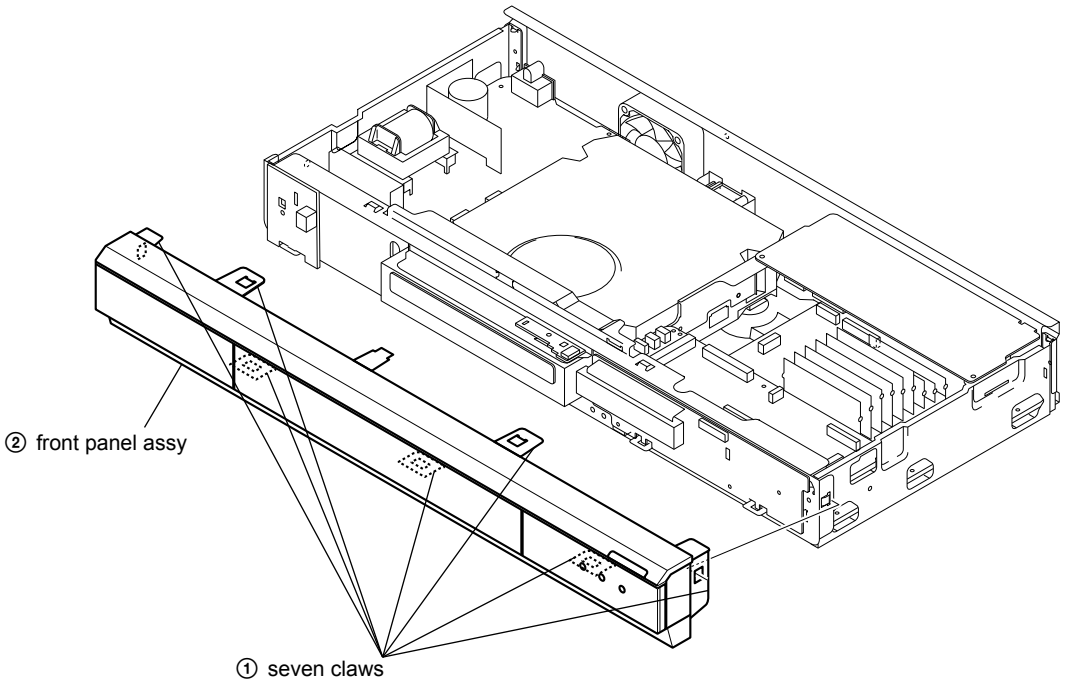
Note: Suppress it on to prevent the upper case from floating when tightening up screws.

2-3. TRAY COVER ASSY

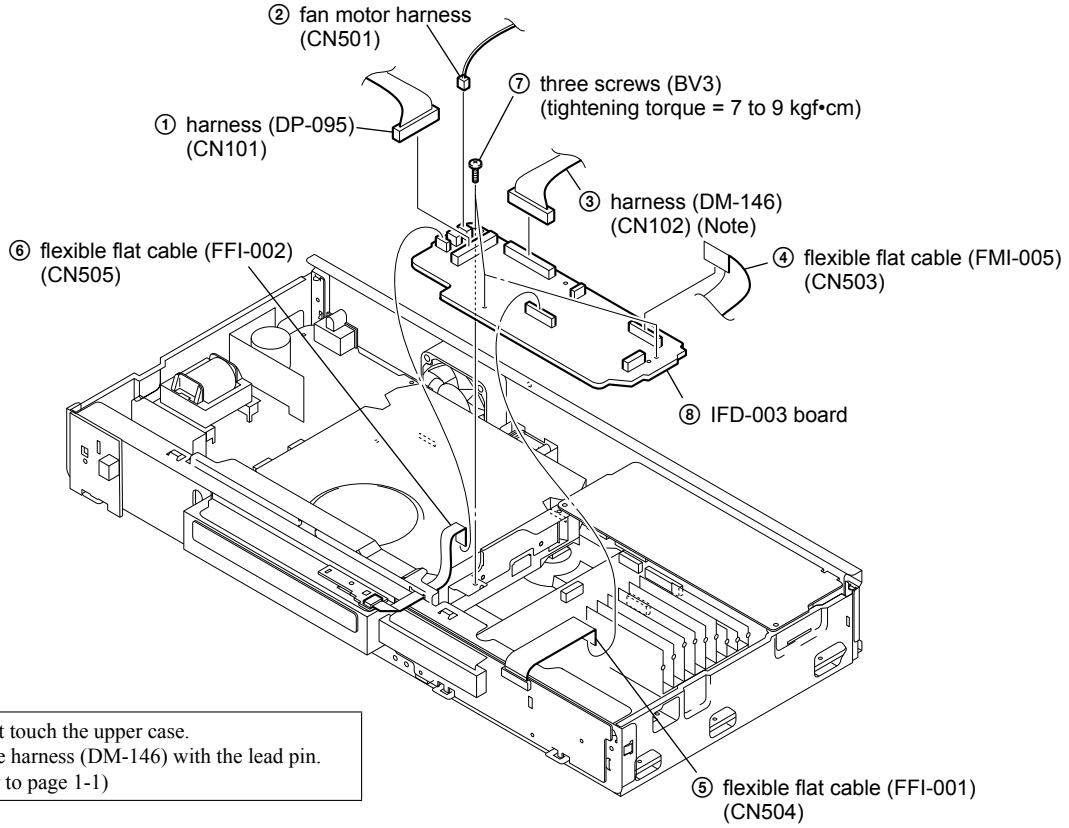
Note: If the tray cover assy or BD drive are not exchange, it need not be this work.



2-4. FRONT PANEL ASSY

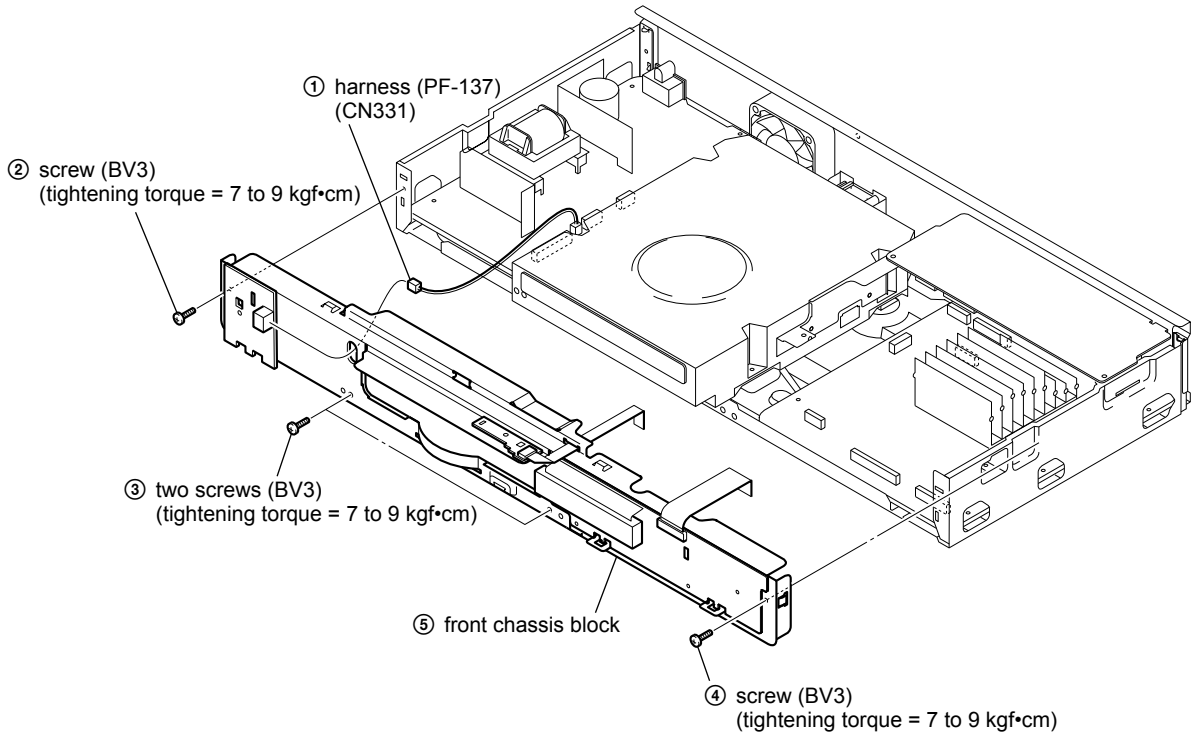


2-5. IFD-003 BOARD

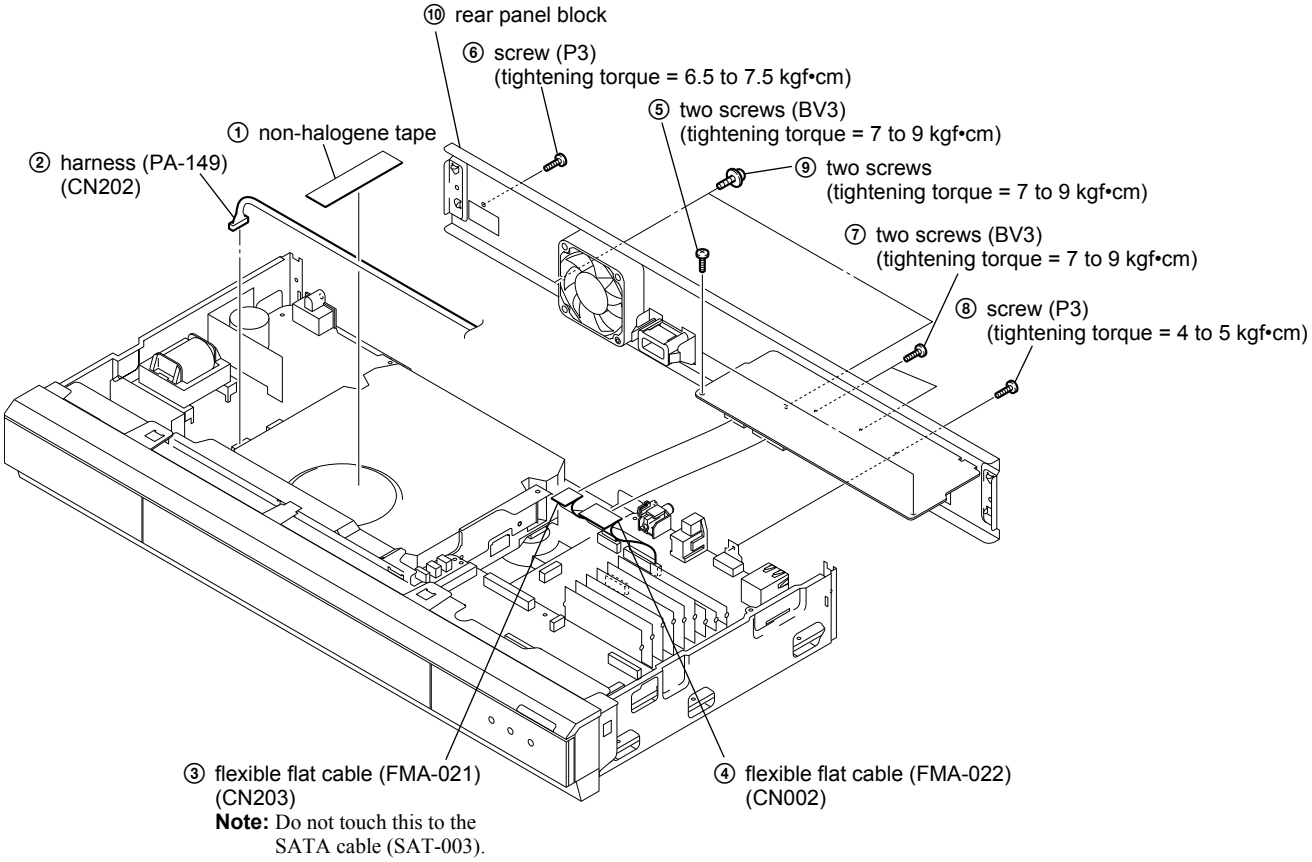


Note: Do not touch the upper case.
Fix the harness (DM-146) with the lead pin.
(Refer to page 1-1)

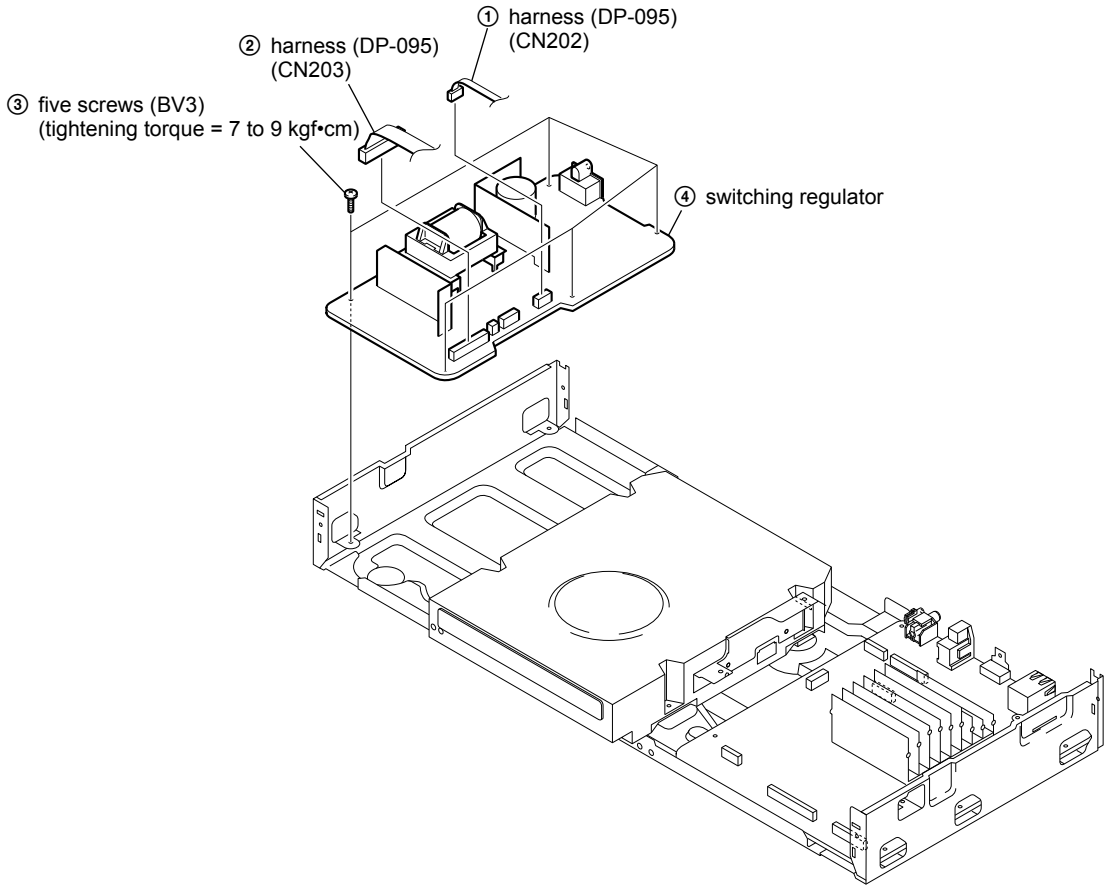
2-6. FRONT CHASSIS BLOCK



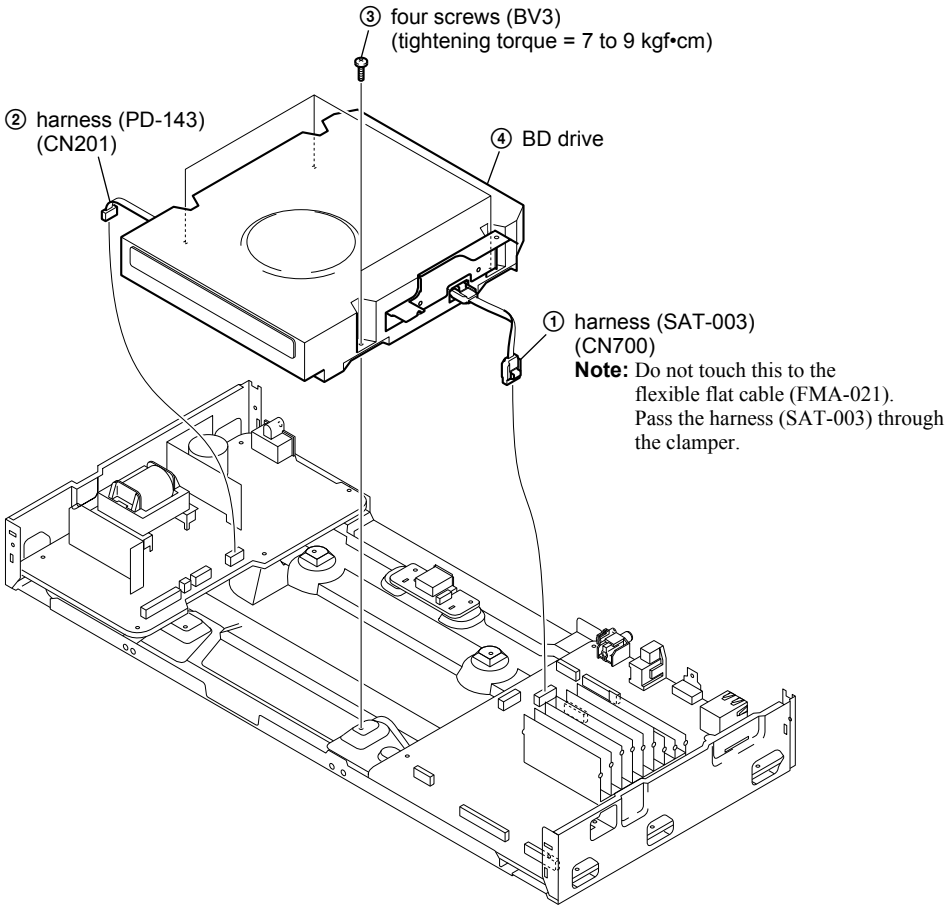
2-7. REAR PANEL BLOCK



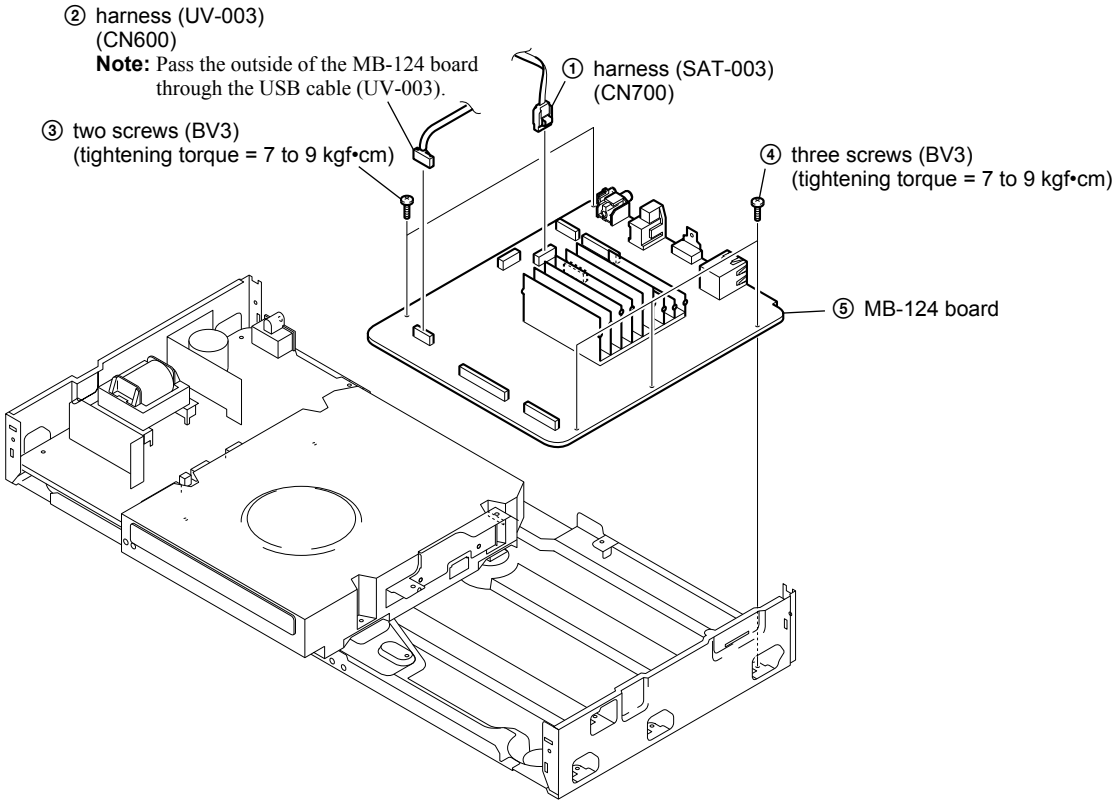
2-8. SWITCHING REGULATOR



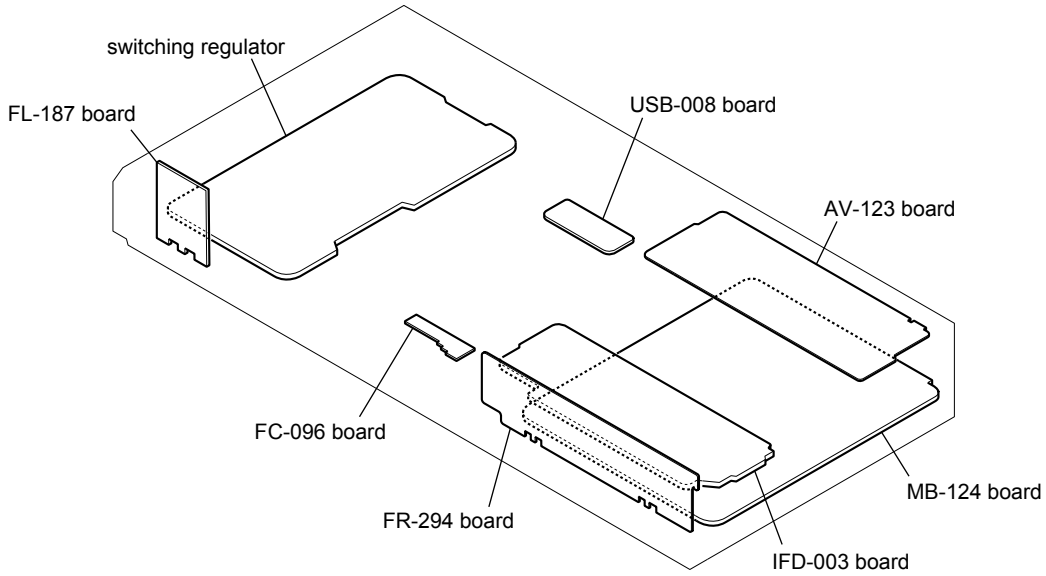
2-9. BD DRIVE



2-10. MB-124 BOARD

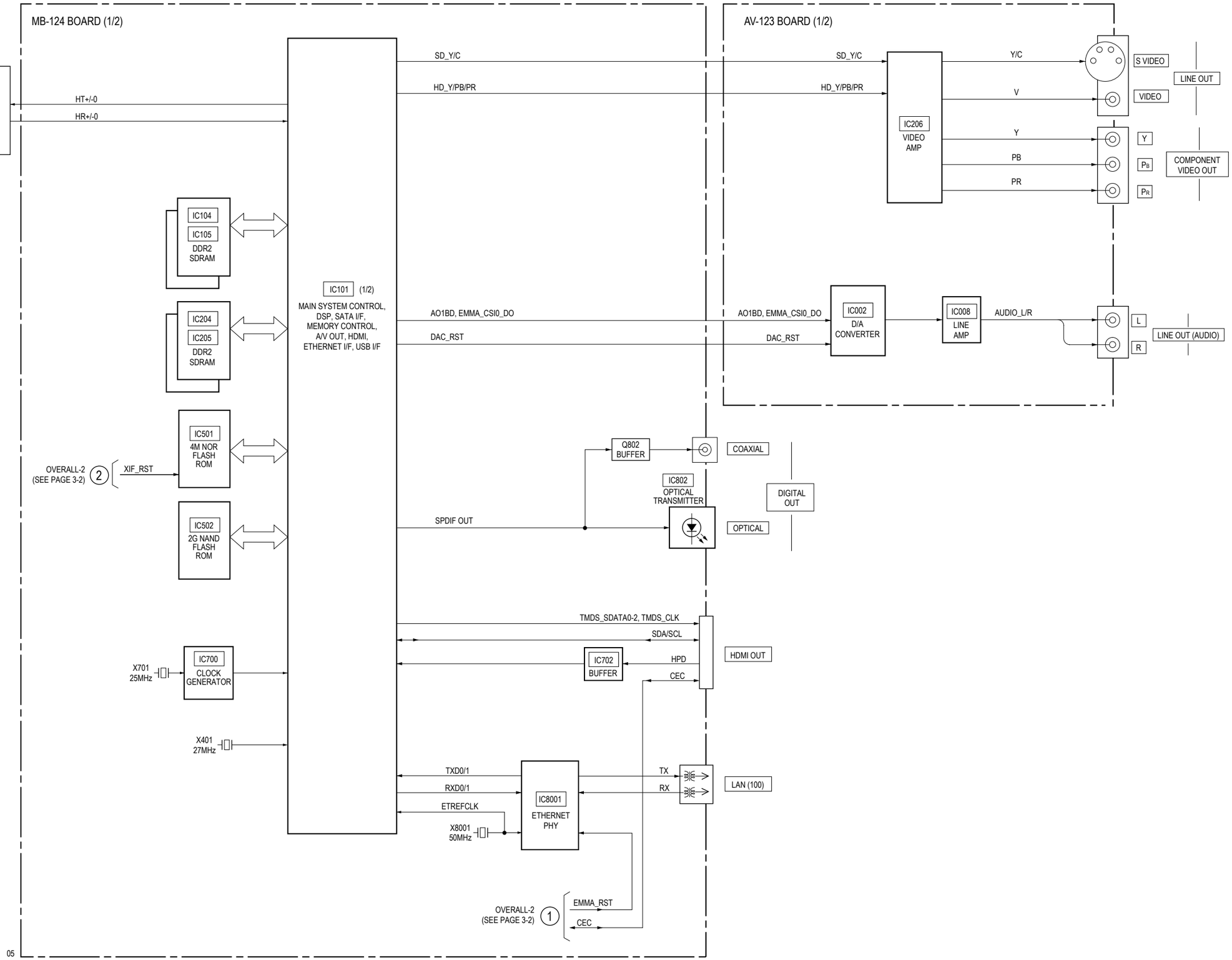


2-11. CIRCUIT BOARDS LOCATION

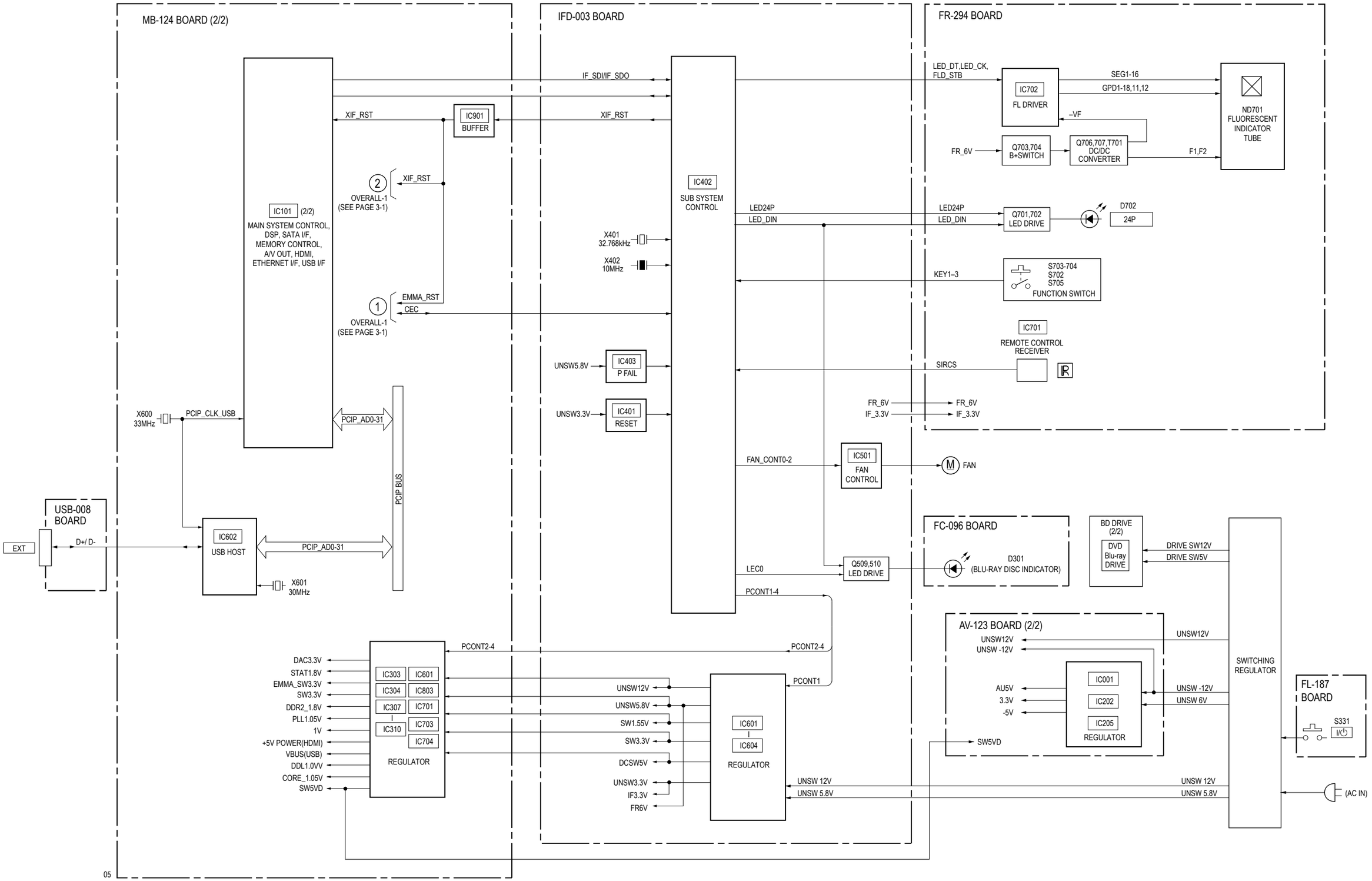


SECTION 3
BLOCK DIAGRAMS

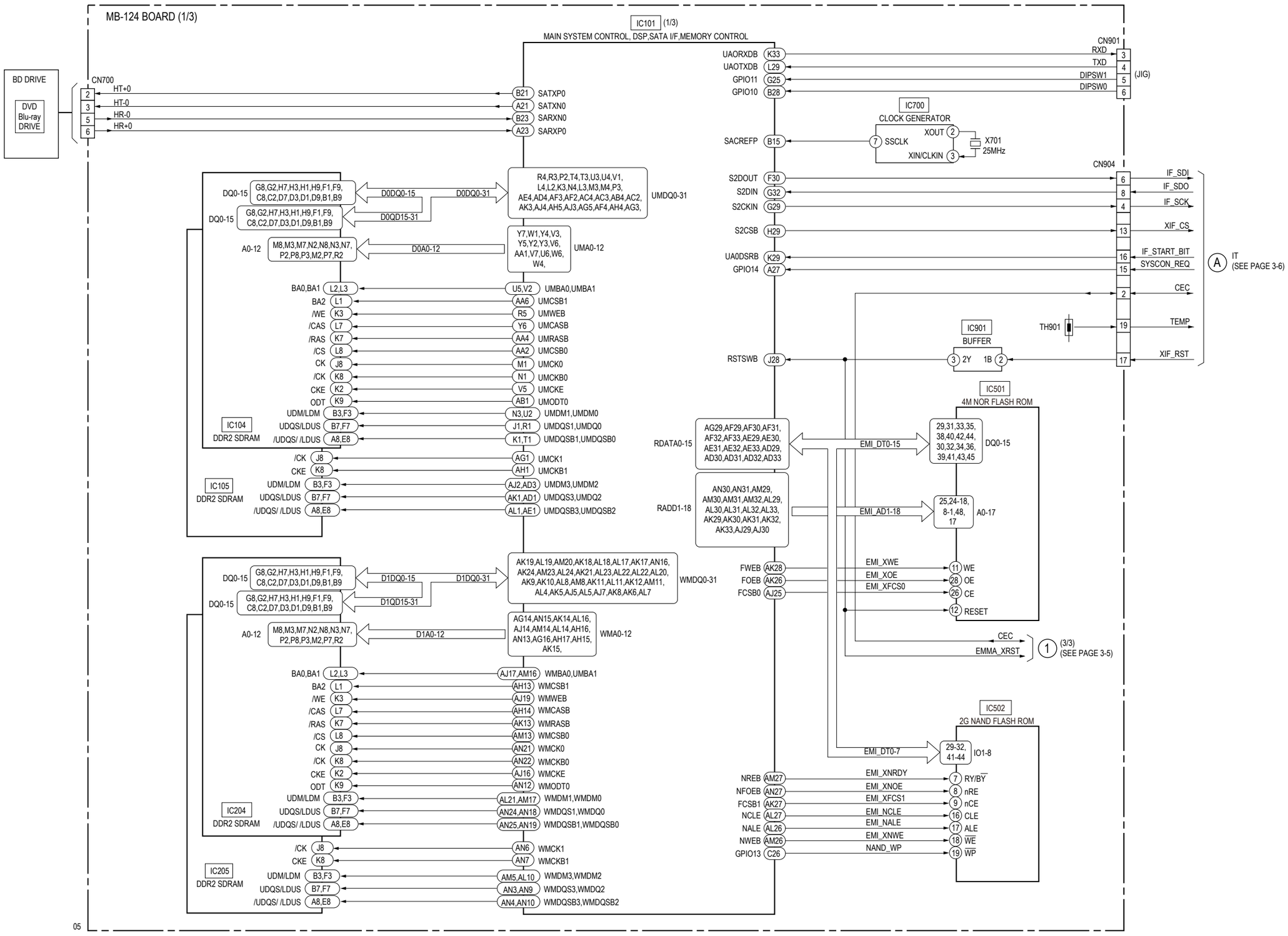
3-1. OVERALL BLOCK DIAGRAM (1/2)



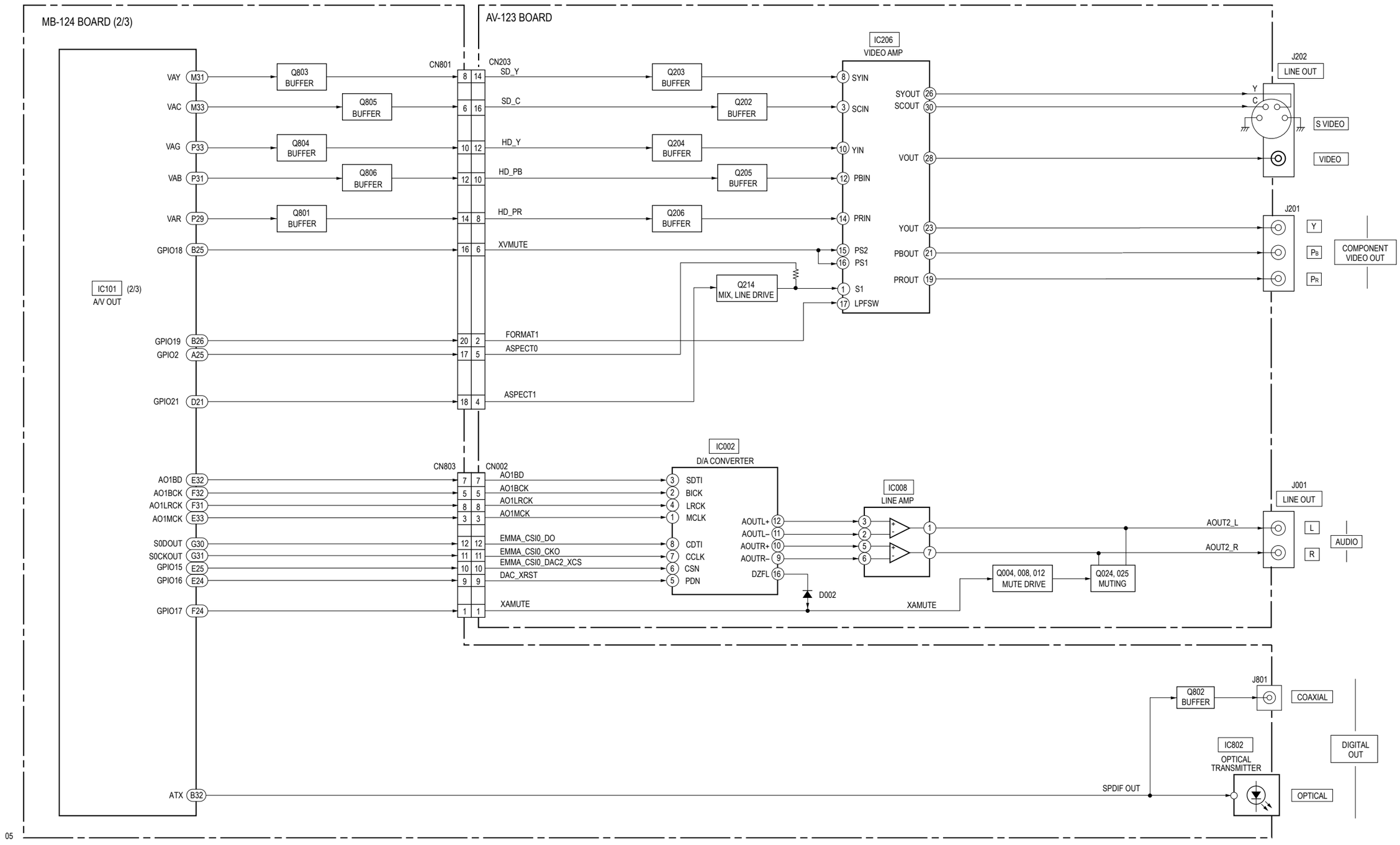
3-2. OVERALL BLOCK DIAGRAM (2/2)



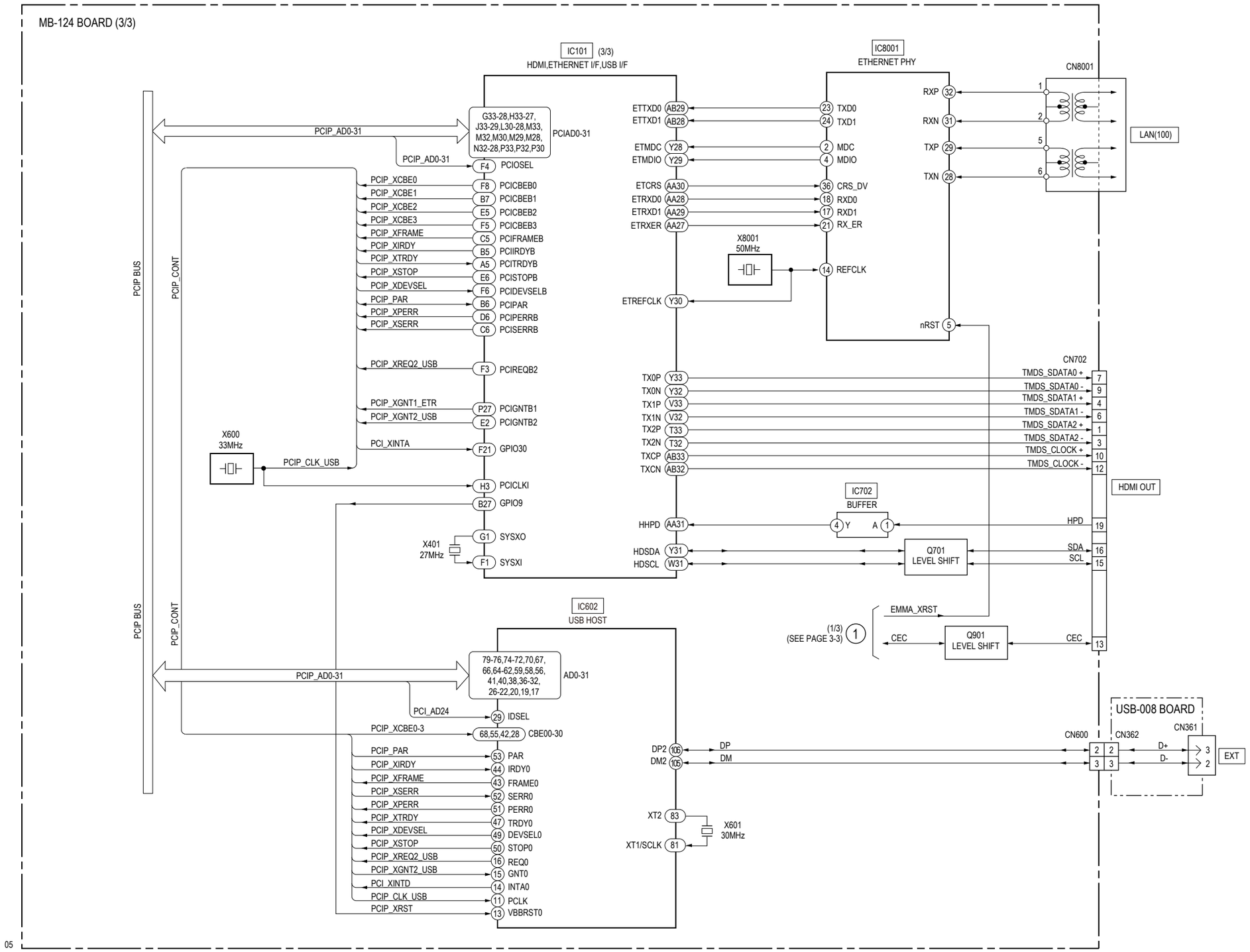
3-3. DSP BLOCK DIAGRAM



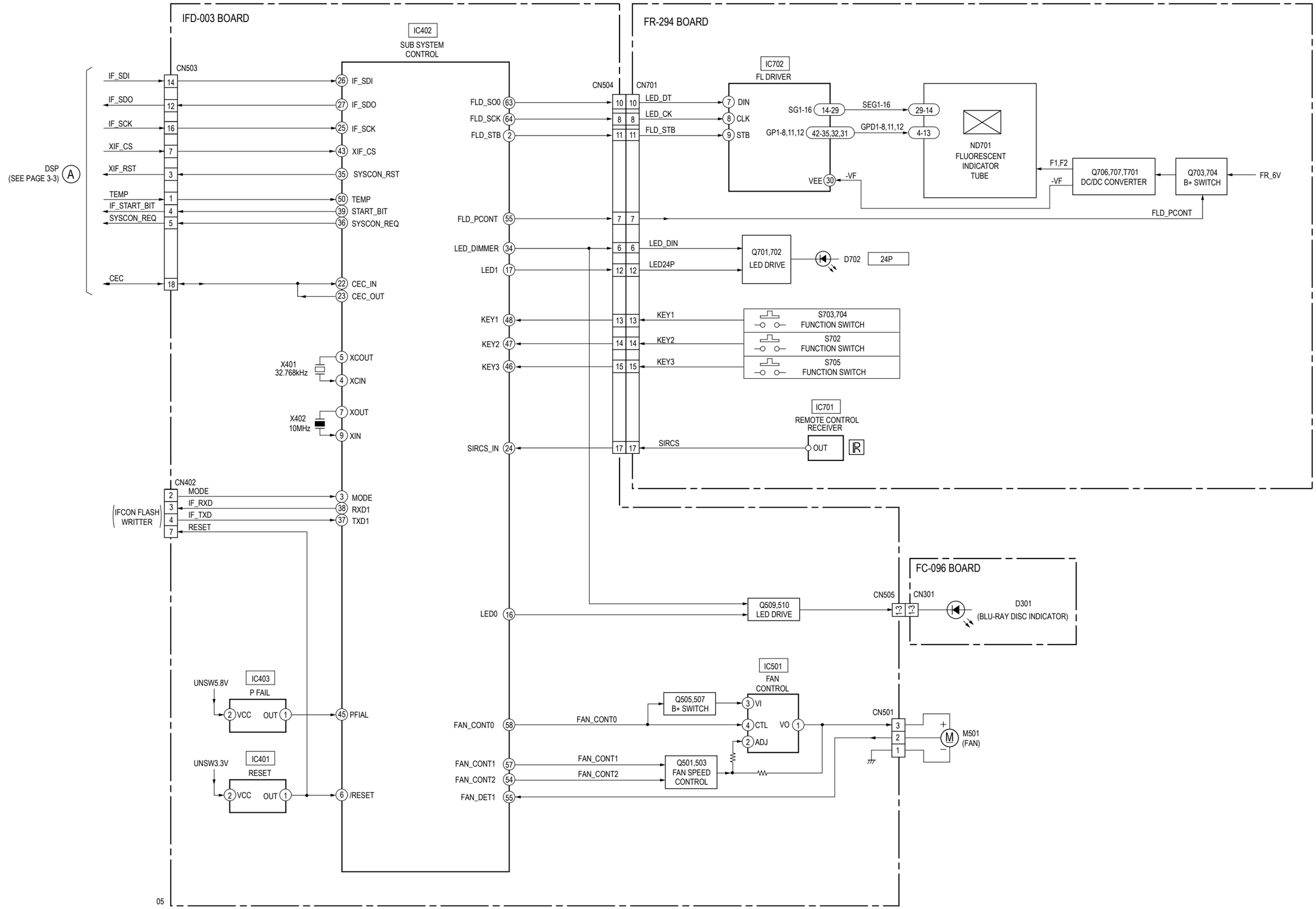
3-4. A/V OUT BLOCK DIAGRAM



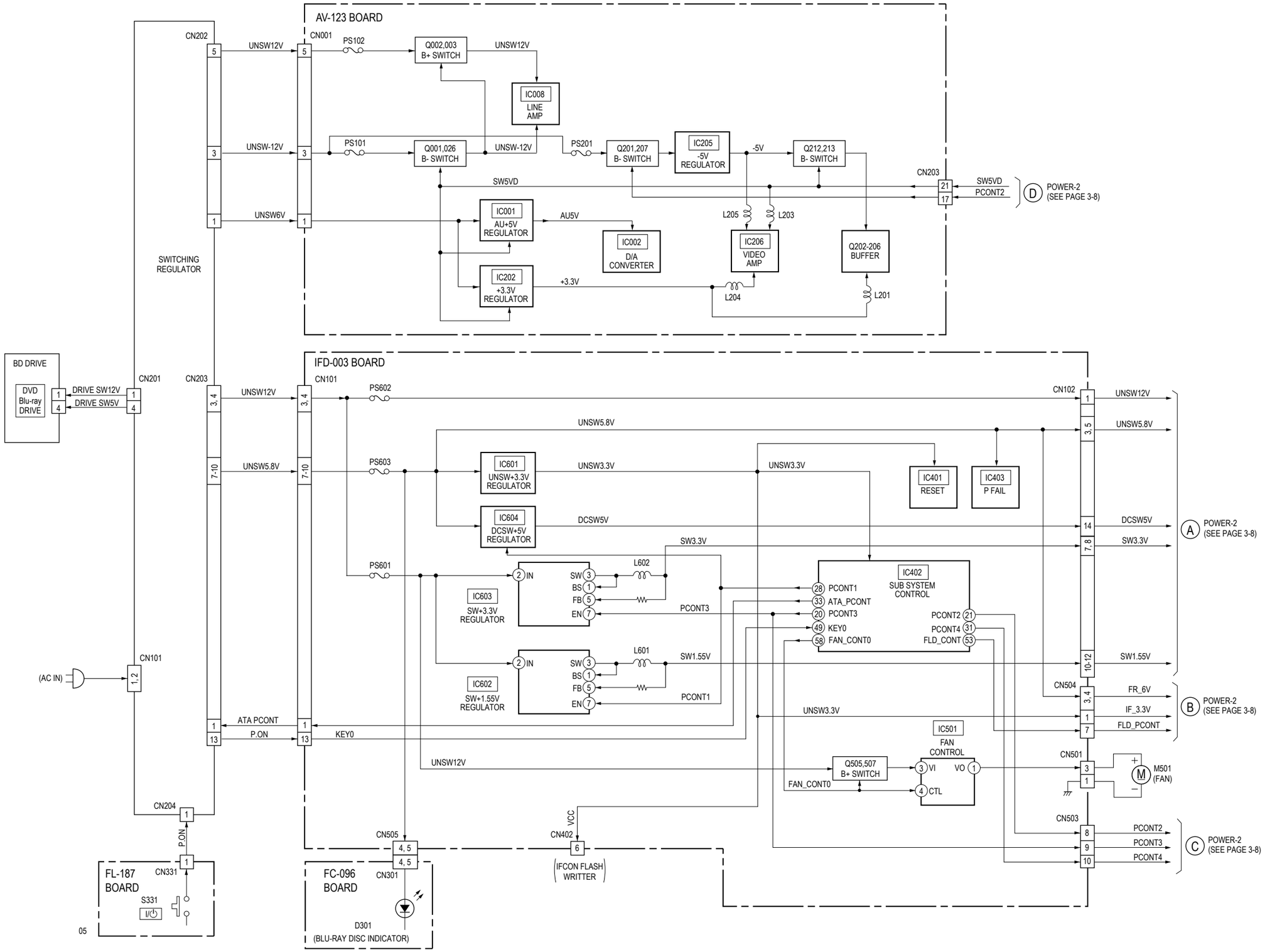
3-5. USB/ETHER BLOCK DIAGRAM



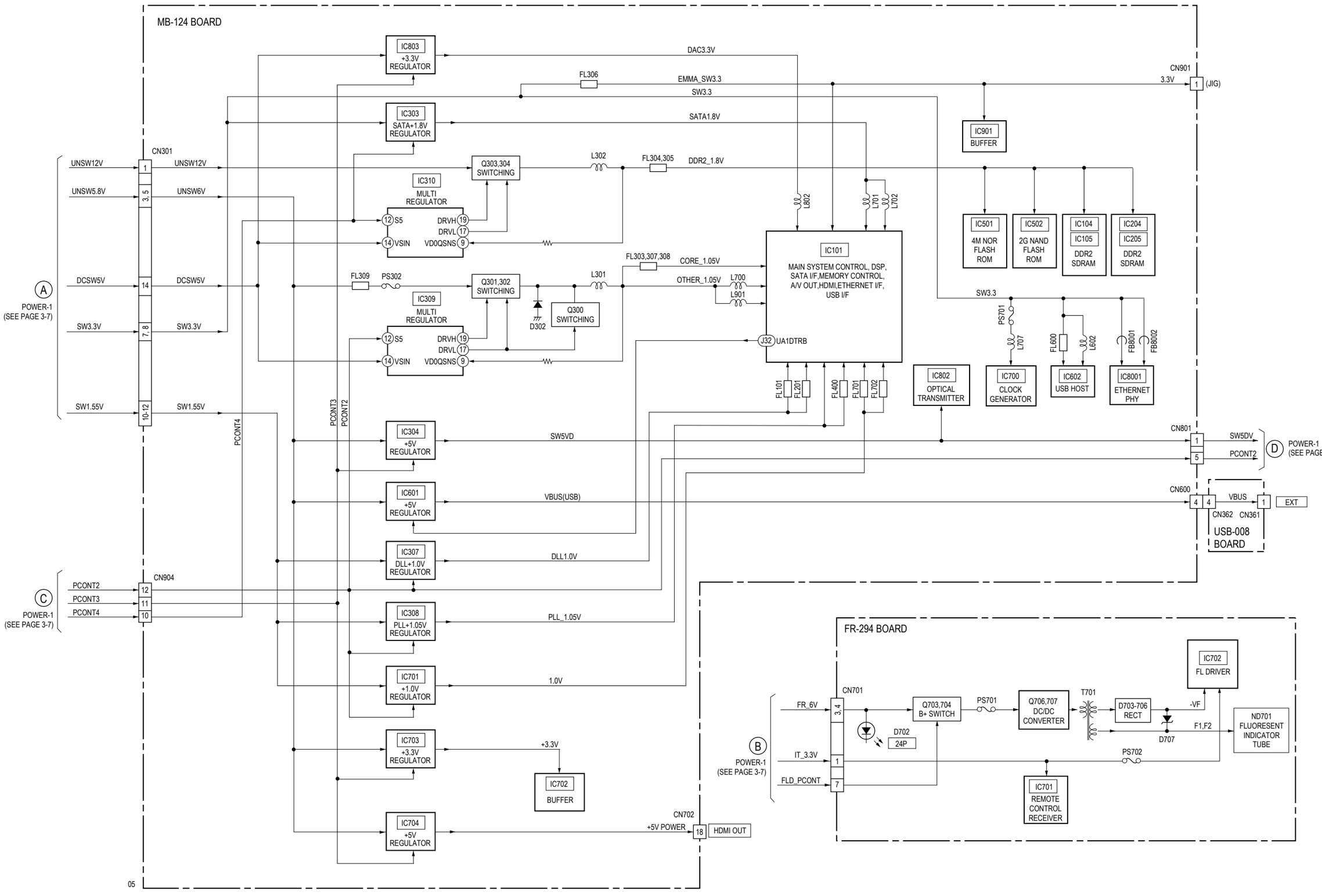
3-6. IT BLOCK DIAGRAM



3-7. POWER BLOCK DIAGRAM (1/2)



3-8. POWER BLOCK DIAGRAM (2/2)



SECTION 4
SCHEMATIC DIAGRAMS

4-1. THIS NOTE IS COMMON FOR SCHEMATIC DIAGRAMS

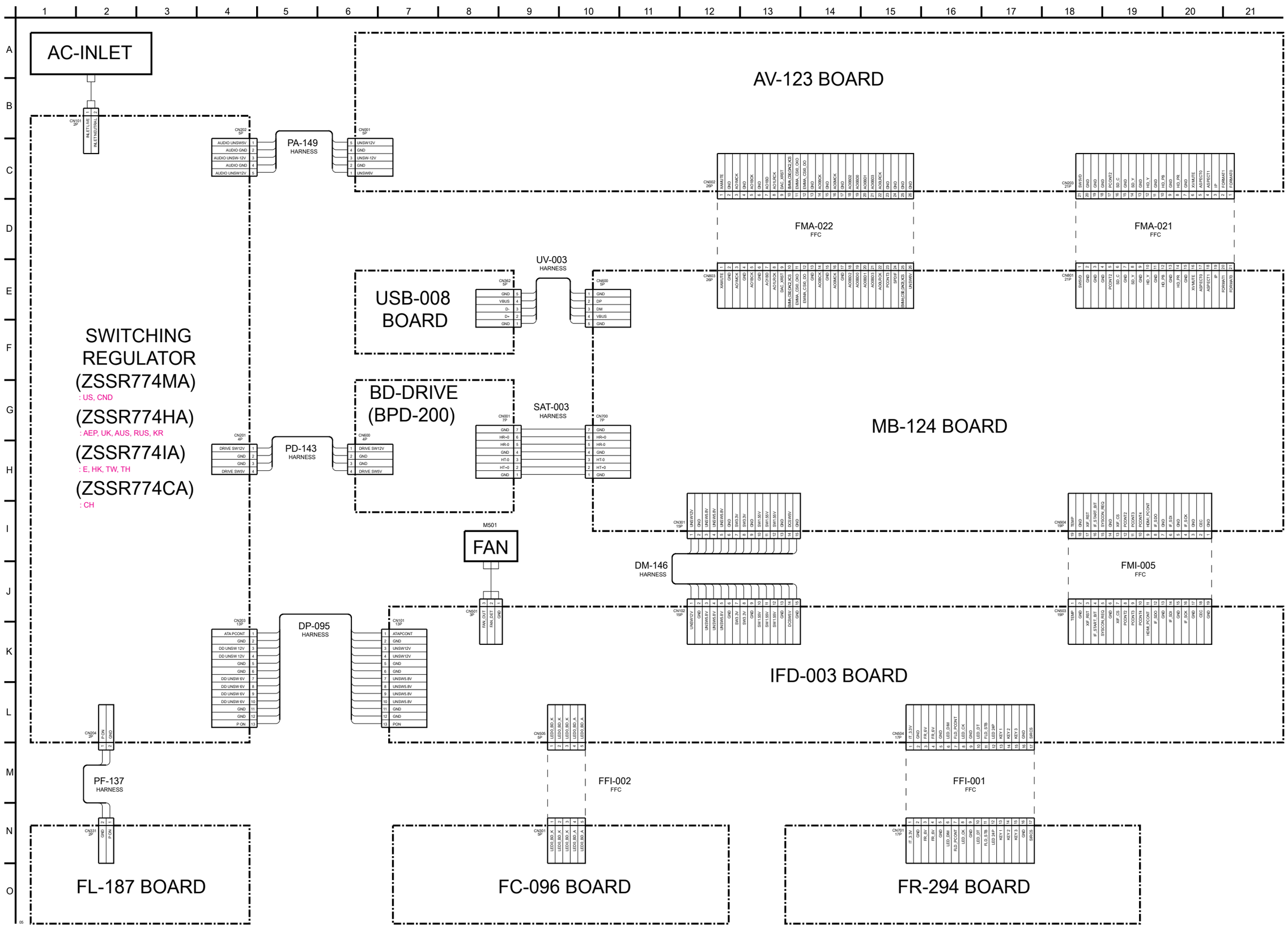
- All capacitors are in μF unless otherwise noted. pF : μμF. 50V or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, 1/4 W (Chip resistors : 1 /10 W) un-less otherwise specified.
  kΩ=1000Ω, MΩ=1000kΩ.
- % : indicates tolerance.
- Caution when replacing chip parts.
  New parts must be attached after removal of chip.
  Be careful not to heat the minus side of tantalum capacitor, because it is damaged by the heat.
- Constants of resistors, capacitors, ICs and etc with XX indicate that they are not used.
  In such cases, the unused circuits may be indicated.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : nonflammable resistor
- : fusible resistor
- : panel designation
- △ : internal component.
- : adjustment for repair.
- : B+ Line
- : B– Line
- Circled numbers refer to waveforms.
- Voltages are dc between measurement point.
- Readings are taken with a color-bar signals on Blu-ray disc.
- Readings are taken with a digital multimeter (DC 10MΩ).
- Voltage variations may be noted due to normal production tolerances.

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

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

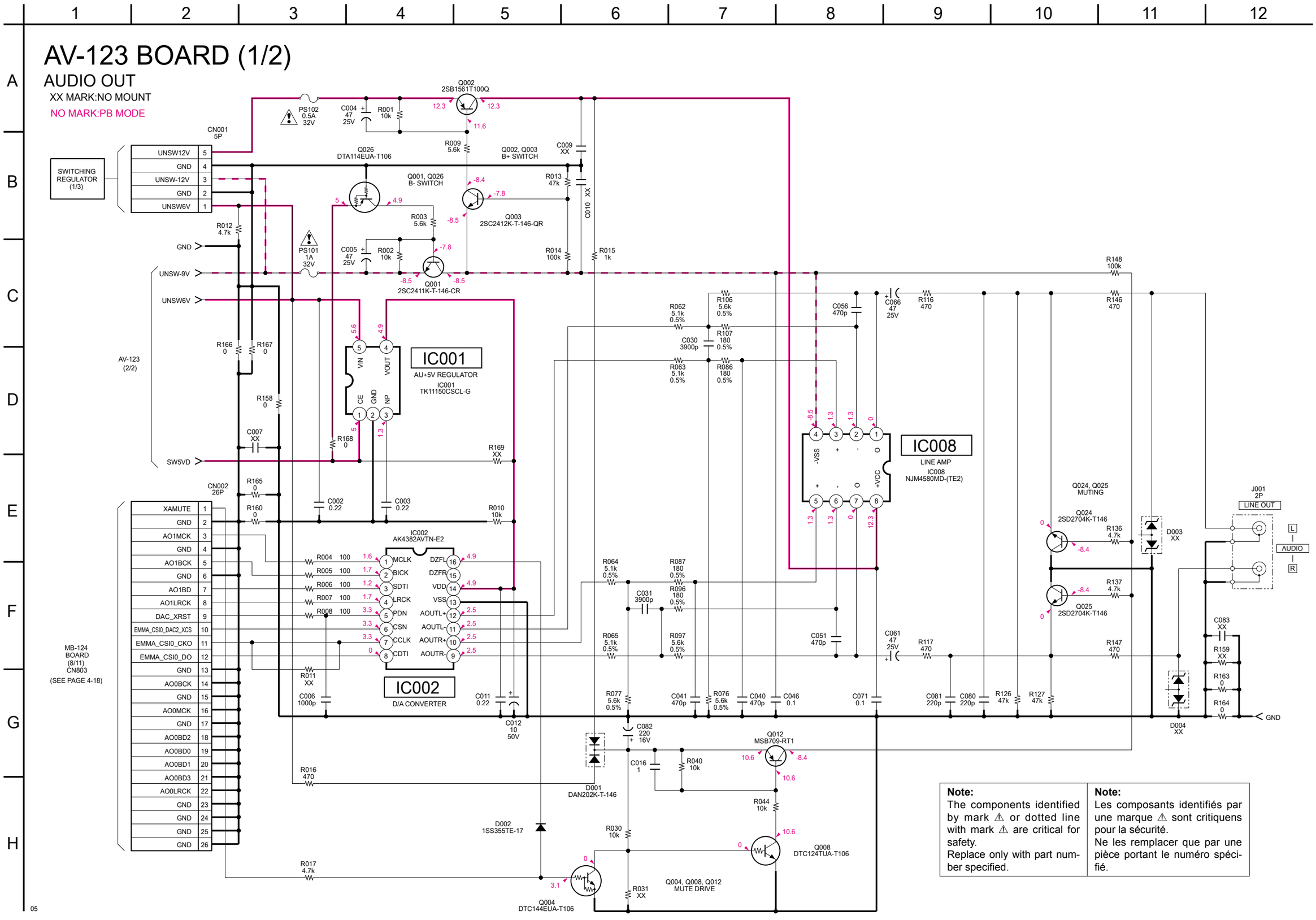
- Abbreviation
  AUS : Australian model
  CH : Chinese model
  CND : Canadian model
  HK : Hong Kong model
  KR : Korea model
  RUS : Russian model
  TH : Thai model
  TW : Taiwan model

4-2. FRAME SCHEMATIC DIAGRAM



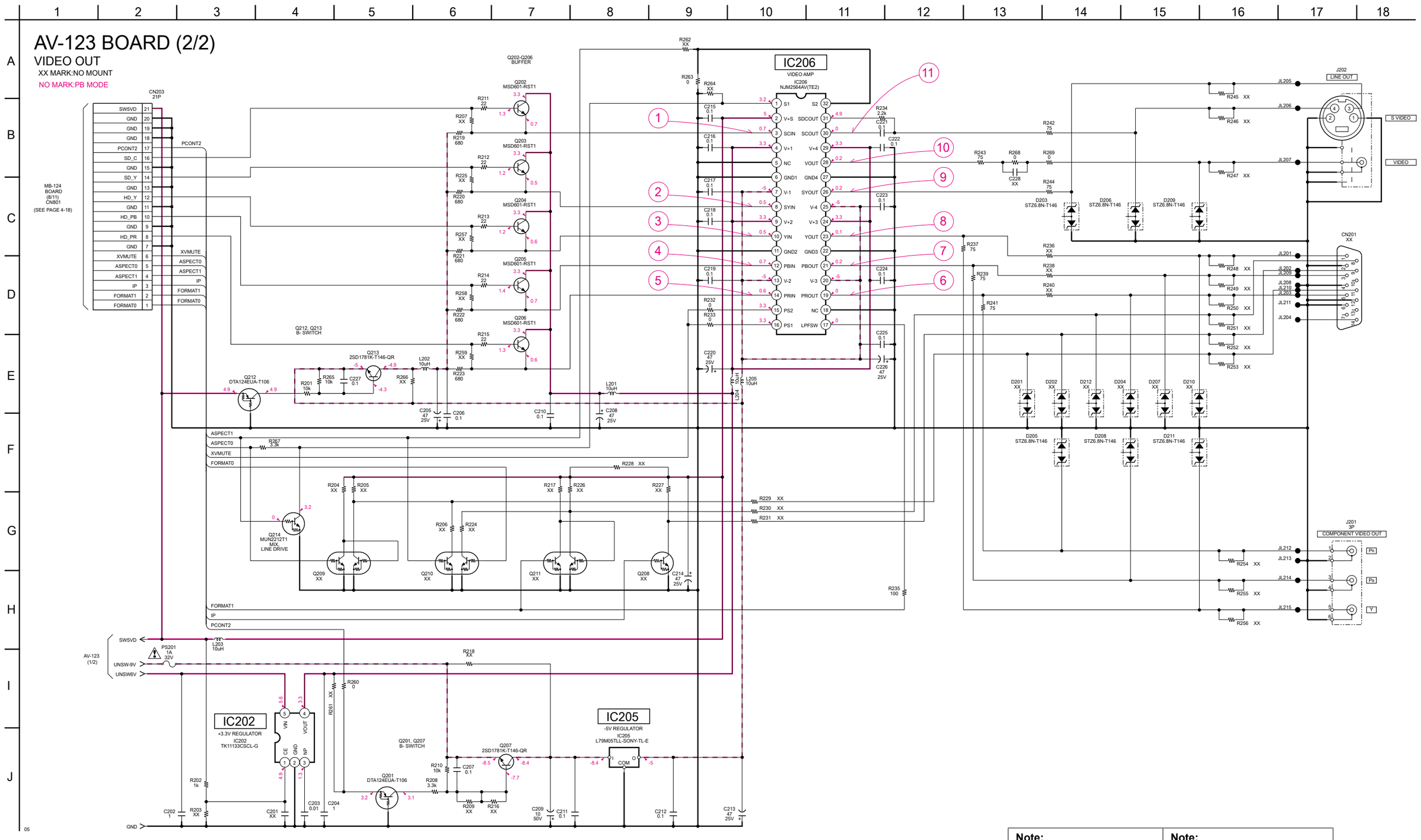
4-3. AV-123 BOARD (AUDIO OUT) SCHEMATIC DIAGRAM (1/2) • See page 5-2 for printed wiring board.

- Ref. No.: AV-123 board; 20,000 series -



4-4. AV-123 BOARD (VIDEO OUT) SCHEMATIC DIAGRAM (2/2) • See page 5-2 for printed wiring board.

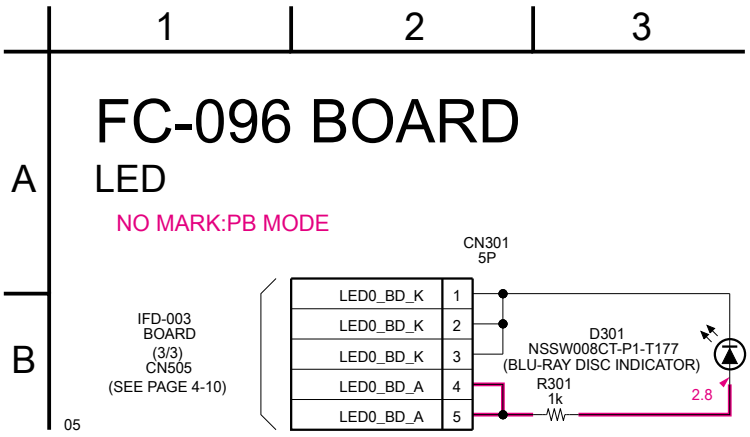
- Ref. No.: AV-123 board; 20,000 series -



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

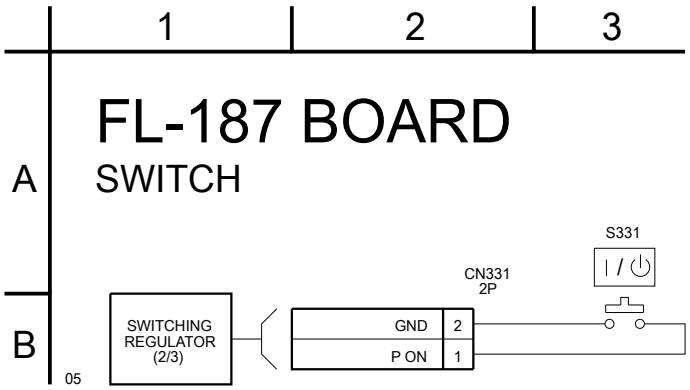
4-5. FC-096 BOARD (LED) SCHEMATIC DIAGRAM • See page 5-4 for printed wiring board.

- Ref. No.: FC-096 board; 20,000 series -



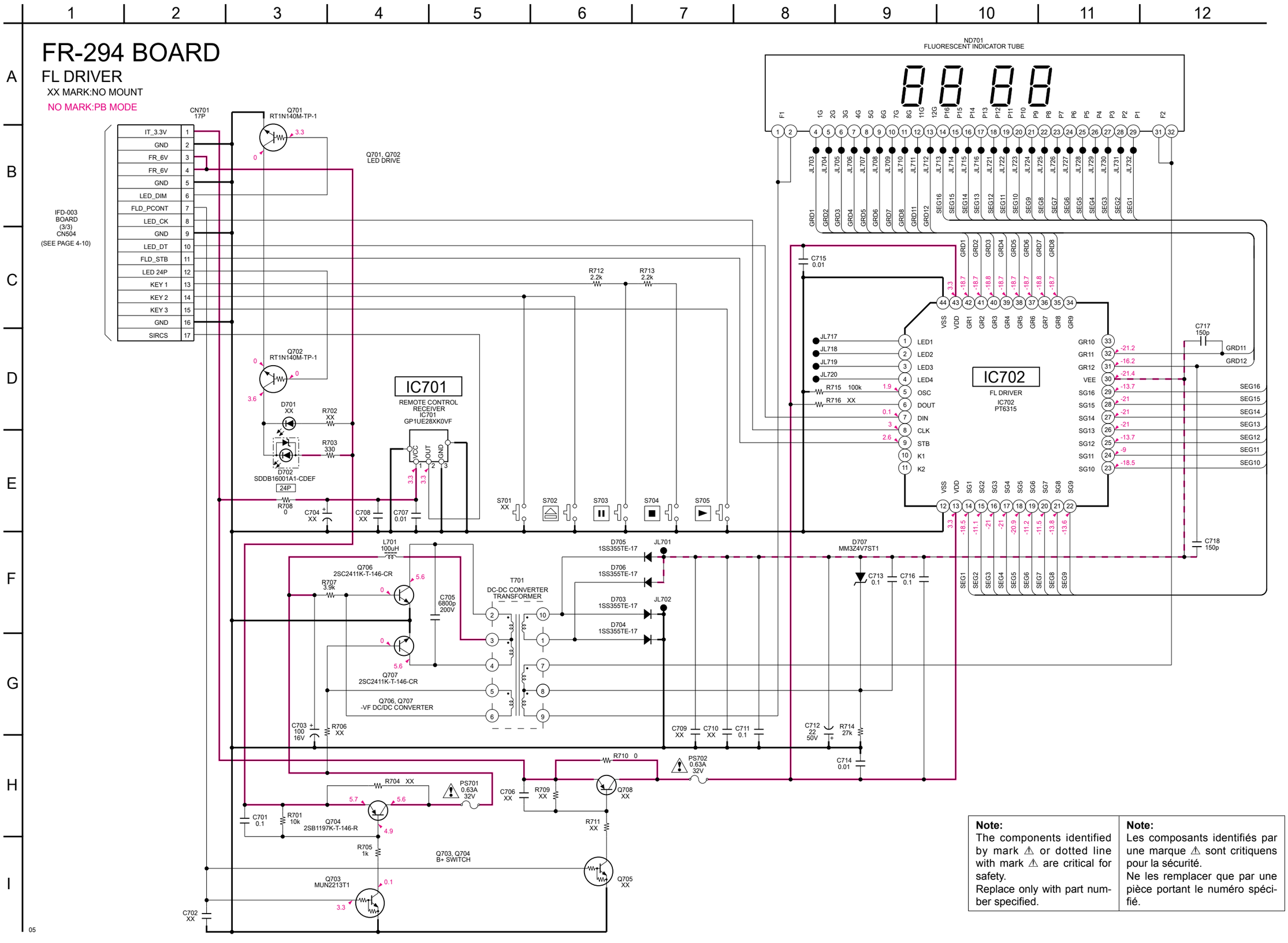
4-6. FL-187 BOARD (SWITCH) SCHEMATIC DIAGRAM **• See page 5-5 for printed wiring board.**

- Ref. No.: FL-187 board; 20,000 series -



4-7. FR-294 BOARD (FL DRIVER) SCHEMATIC DIAGRAM • See page 5-6 for printed wiring board.

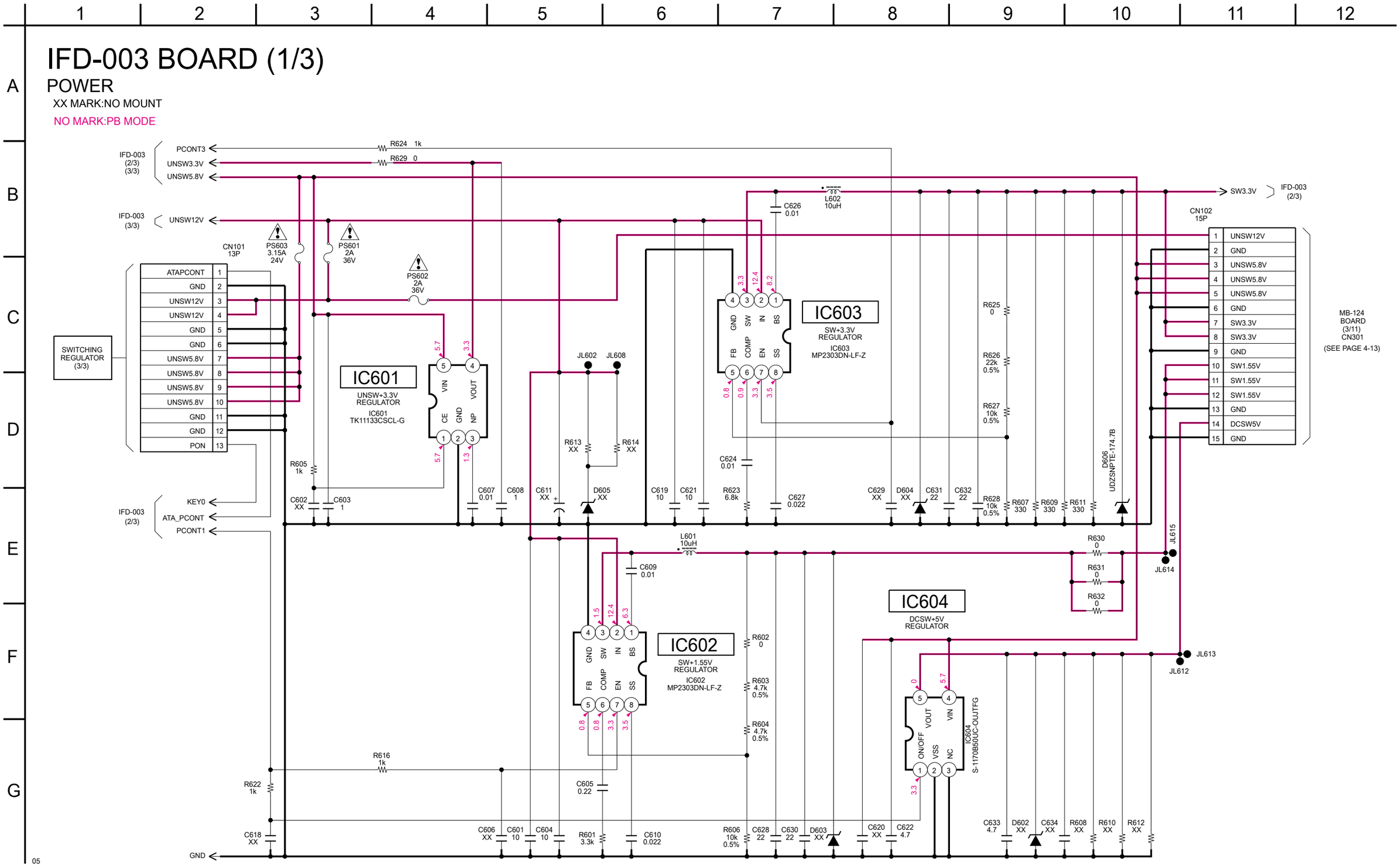
- Ref. No.: FR-294 board; 20,000 series -



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

4-8. IFD-003 BOARD (POWER) SCHEMATIC DIAGRAM (1/3) • See page 5-8 for printed wiring board.

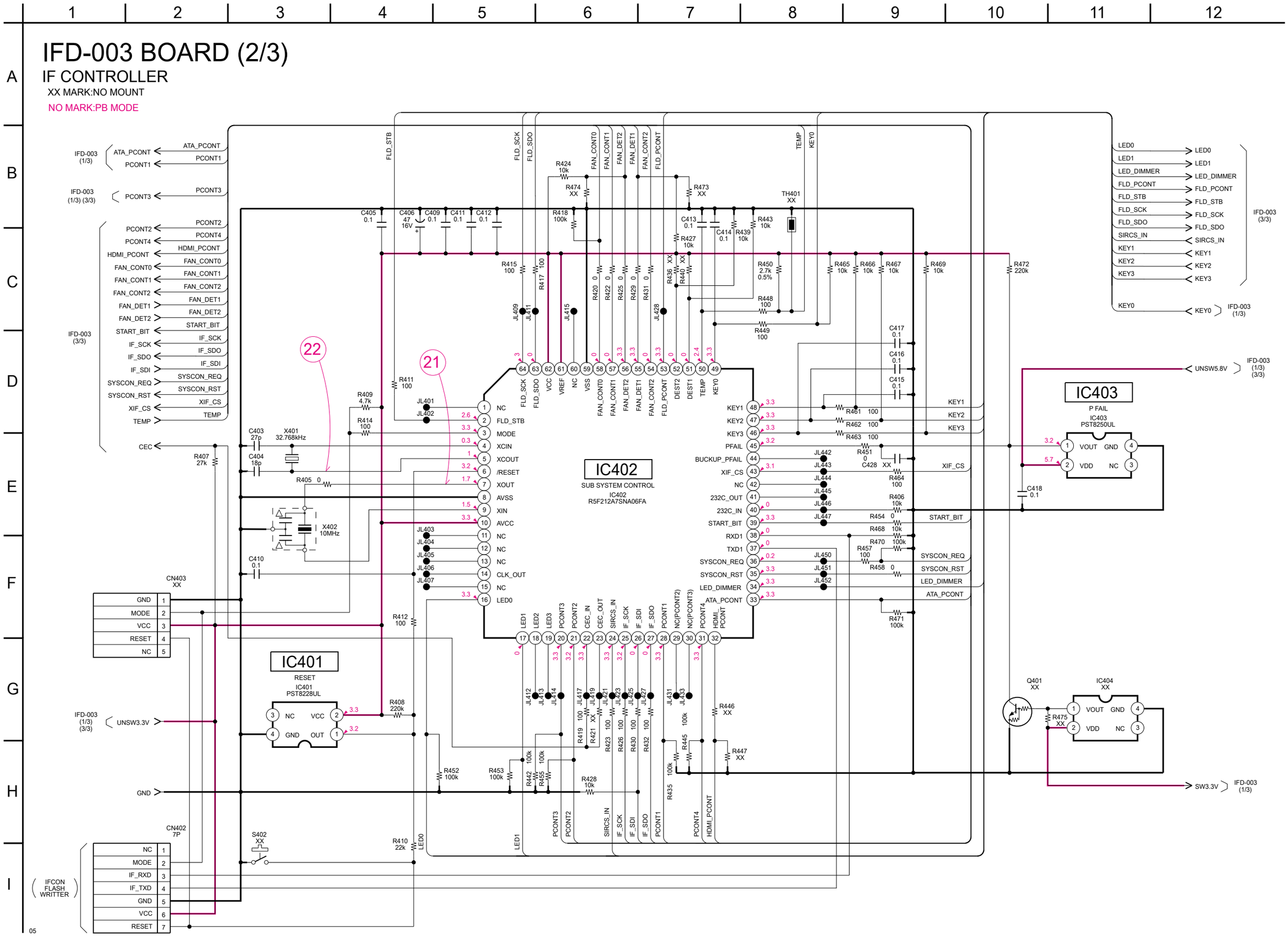
- Ref. No.: IFD-003 board; 20,000 series -



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

4-9. IFD-003 BOARD (IF CONTROLLER) SCHEMATIC DIAGRAM (2/3) • See page 5-8 for printed wiring board.

- Ref. No.: IFD-003 board; 20,000 series -



4-10. IFD-003 BOARD (FAN) SCHEMATIC DIAGRAM (3/3) • **See page 5-8 for printed wiring board.**

- Ref. No.: IFD-003 board; 20,000 series -

IFD-003 BOARD (3/3)

FAN

XX MARK:NO MOUNT

NO MARK:PB MODE

*:IMPOSSIBLE TO MEASURE

M501 (FAN)

CN501 3P
- FAN_OUT 3
- FAN_DET 2
- GND 1

JL502

C505 100p

IC501
FAN CONTROL
IC501
TK11100CSCB-G
VI ADJ VO CTL GND NP

UNSW12V > IFD-003 (1/3)

FAN_DET1

FAN_CONT0

Q505
2SA1832F-Y/GR(TPL3)

R513 4.7k

R511 4.7k

Q505, Q507
B+ SWITCH

Q507
DTC114EUA-T106

JL503

R501 150k 0.5%

R502 20k 0.5%

R503 6.8k 0.5%

Q503
MUN2213T1

FAN_CONT2

FAN_CONT1

C503 1

C501 1

C507 0.01

R504 5.6k 0.5%

Q501
MUN2213T1

Q501, Q503
FAN SPEED CONTROL

IFD-003 (2/3)

CN502 XX
- FAN_OUT 3
- FAN_DET 2
- GND 1

JL501

C506 XX

FAN_DET2

IC502 XX
VI ADJ VO CTL GND NP

Q506 XX

R514 XX

R512 XX

Q508 XX

JL504

R505 XX

R506 XX

R507 XX

Q504 XX

C504 XX

C502 XX

C508 XX

R508 XX

Q502 XX

GND

CN504 17P

IFD-003 (1/3) (2/3)
- UNSW3.3V
- UNSW5.8V

IFD-003 (2/3)
- LED_DIMMER
- FLD_PCONT
- FLD_SCK
- FLD_SDO
- FLD_STB
- LED1
- KEY1
- KEY2
- KEY3
- SIRCS_IN

1	IT_3.3V
2	GND
3	FR_6V
4	FR_6V
5	GND
6	LED_DIM
7	FLD_PCONT
8	LED_CK
9	GND
10	LED_DT
11	FLD_STB
12	LED 24P
13	KEY 1
14	KEY 2
15	KEY 3
16	GND
17	SIRCS

FR-294 BOARD CN701 (SEE PAGE 4-7)

Q510 RT1N140M-TP-1

CN505 5P

1	LED0_BD_K
2	LED0_BD_K
3	LED0_BD_K
4	LED0_BD_A
5	LED0_BD_A

FC-096 BOARD CN301 (SEE PAGE 4-5)

LED0

R509 0

Q509 RT1N140M-TP-1

GND

Q509, Q510
LED DRIVE

CN503 19P

IFD-003 (2/3)
- TEMP
- SYSCON_RST
- START_BIT
- SYSCON_REQ
- XIF_CS
- PCONT2
- PCONT4
- HDMI_PCONT
- IF_SDO
- IF_SDI
- IF_SCK
- CEC

IFD-003 (1/3) (2/3)
- PCONT3

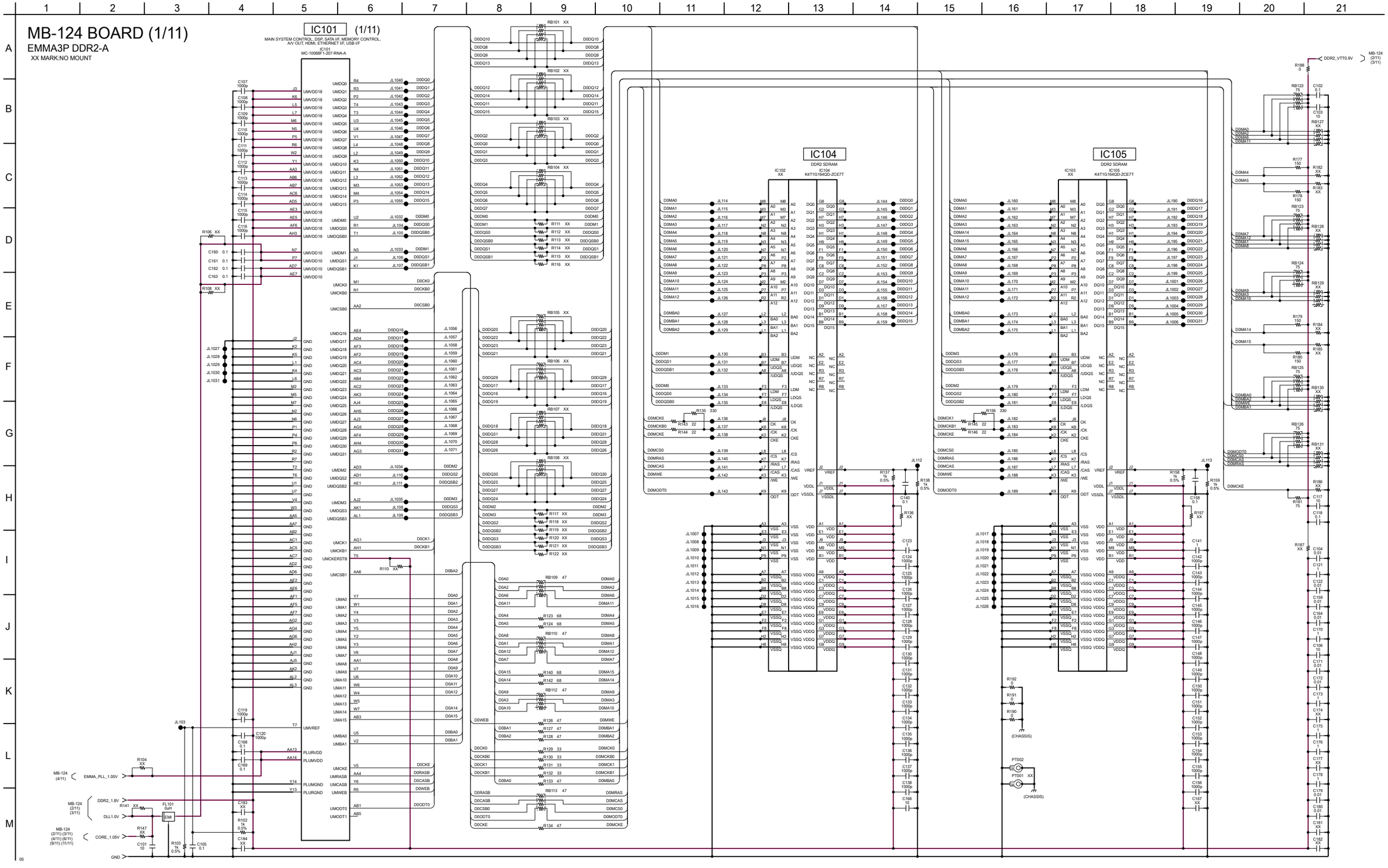
1	TEMP
2	GND
3	XIF_RST
4	IF_START_BIT
5	SYSCON_REQ
6	GND
7	XIF_CS
8	PCONT2
9	PCONT3
10	PCONT4
11	HDMI_PCONT
12	IF_SDO
13	GND
14	IF_SDI
15	GND
16	IF_SCK
17	GND
18	CEC
19	GND

GND

MB-124 BOARD (9/11) CN904 (SEE PAGE 4-19)

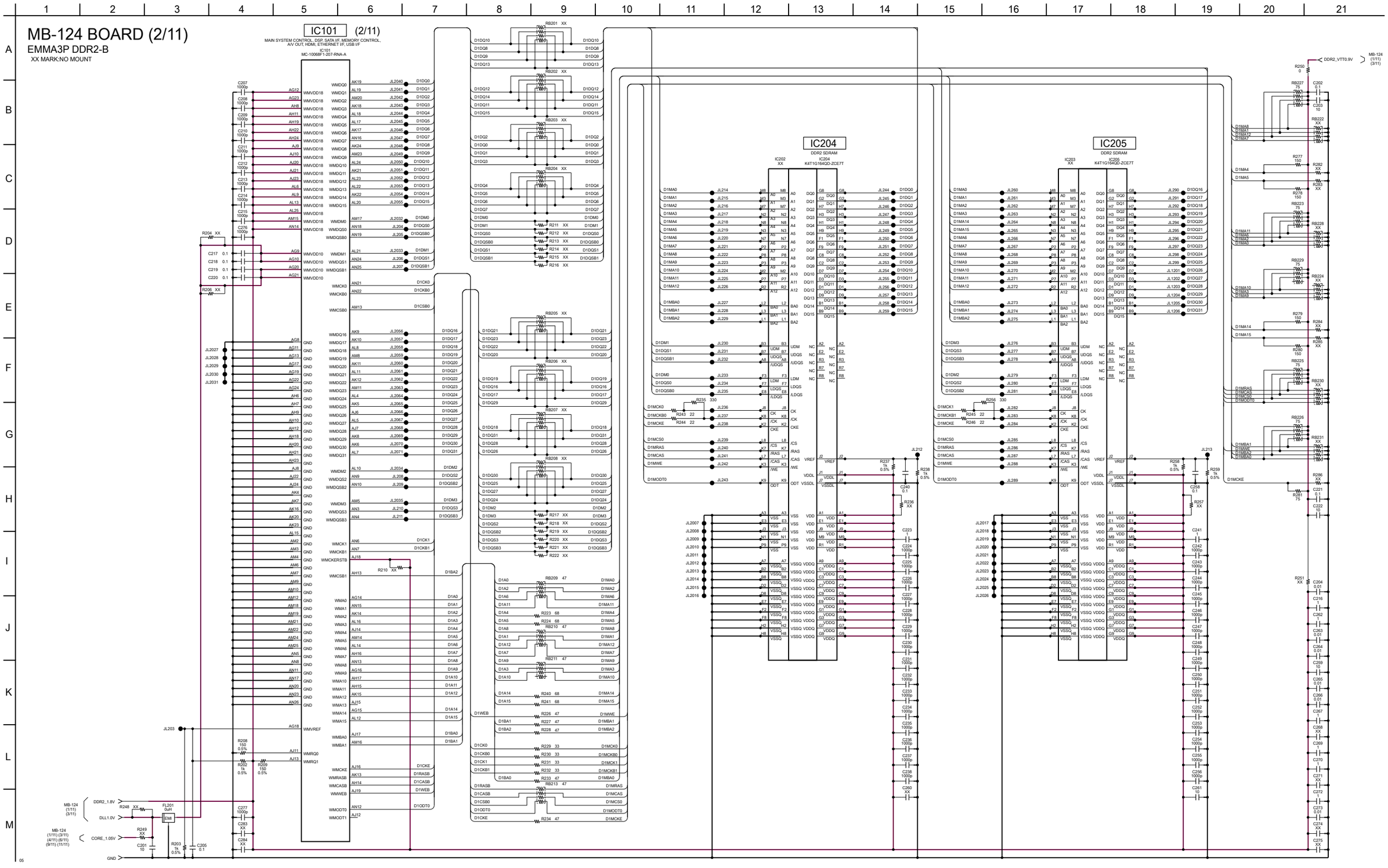
4-11. MB-124 BOARD (EMMA3P DDR2-A) SCHEMATIC DIAGRAM (1/11) • See page 5-10 for printed wiring board.

- Ref. No.: MB-124 board; 10,000 series -



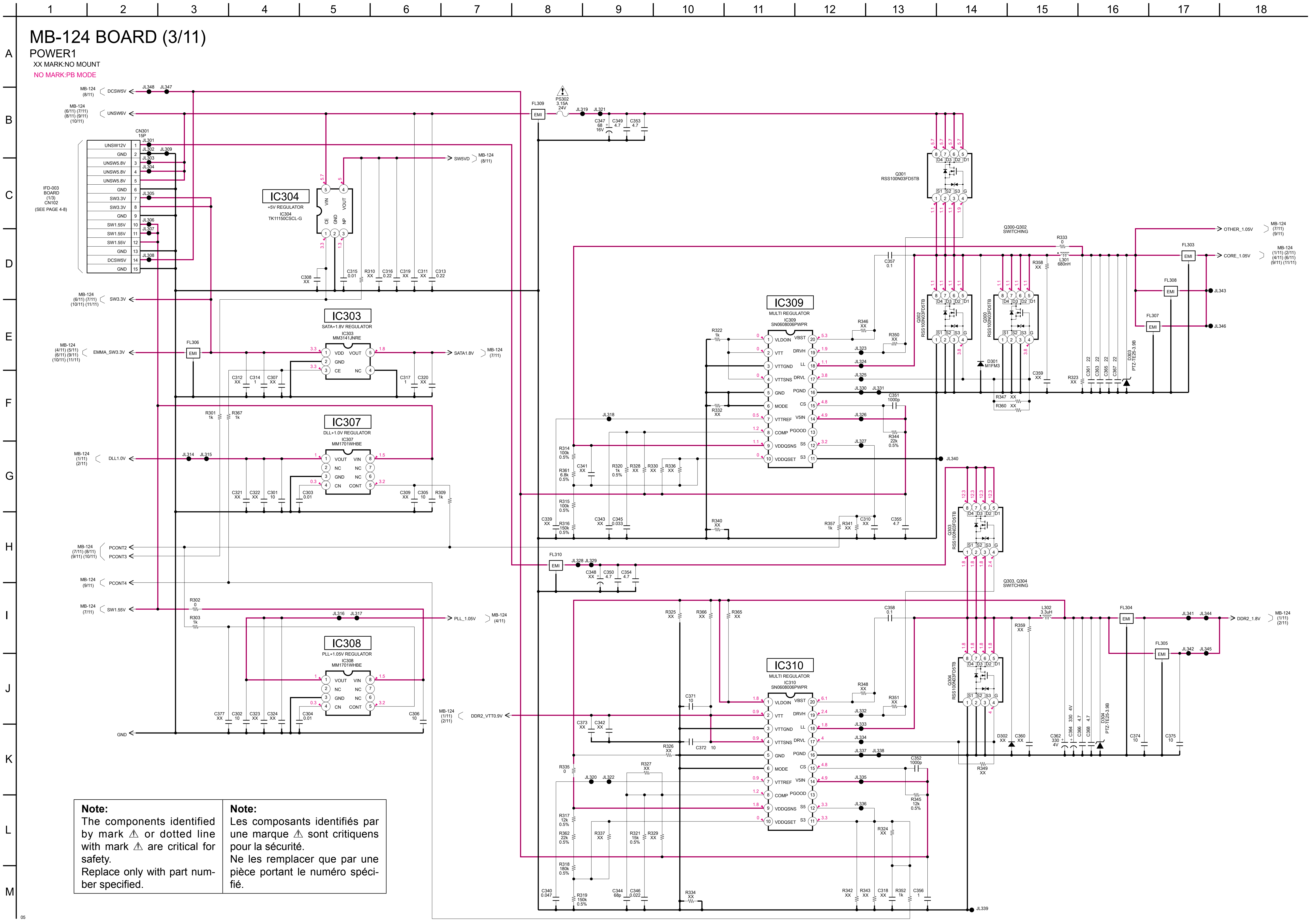
4-12. MB-124 BOARD (EMMA3P DDR2-B) SCHEMATIC DIAGRAM (2/11) • See page 5-10 for printed wiring board.

- Ref. No.: MB-124 board; 10,000 series -



4-13. MB-124 BOARD (POWER1) SCHEMATIC DIAGRAM (3/11) • See page 5-10 for printed wiring board.

- Ref. No.: MB-124 board; 10,000 series -

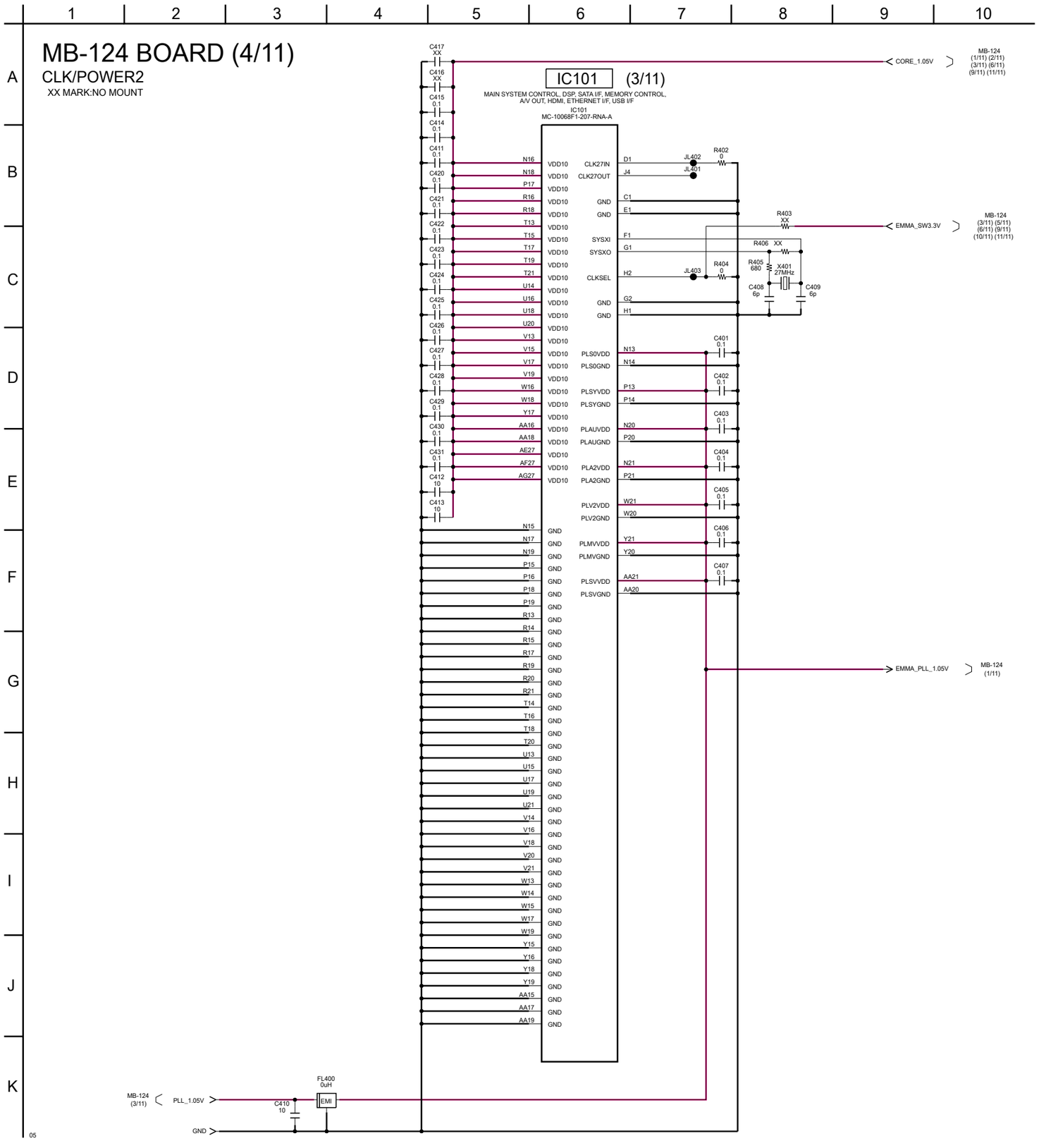


Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Note:
Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

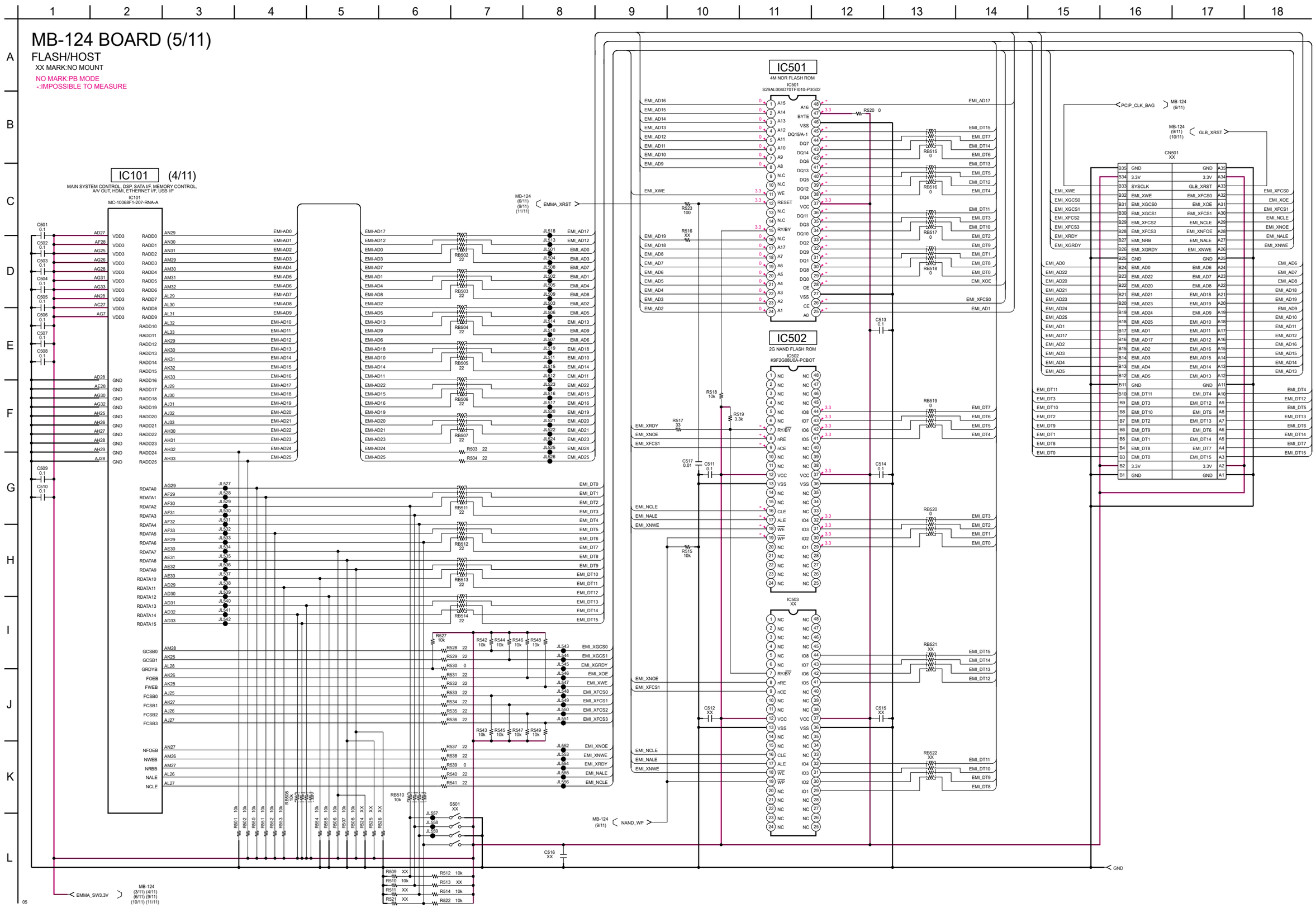
4-14. MB-124 BOARD (CLK/POWER2) SCHEMATIC DIAGRAM (4/11) **• See page 5-10 for printed wiring board.**

- Ref. No.: MB-124 board; 10,000 series -



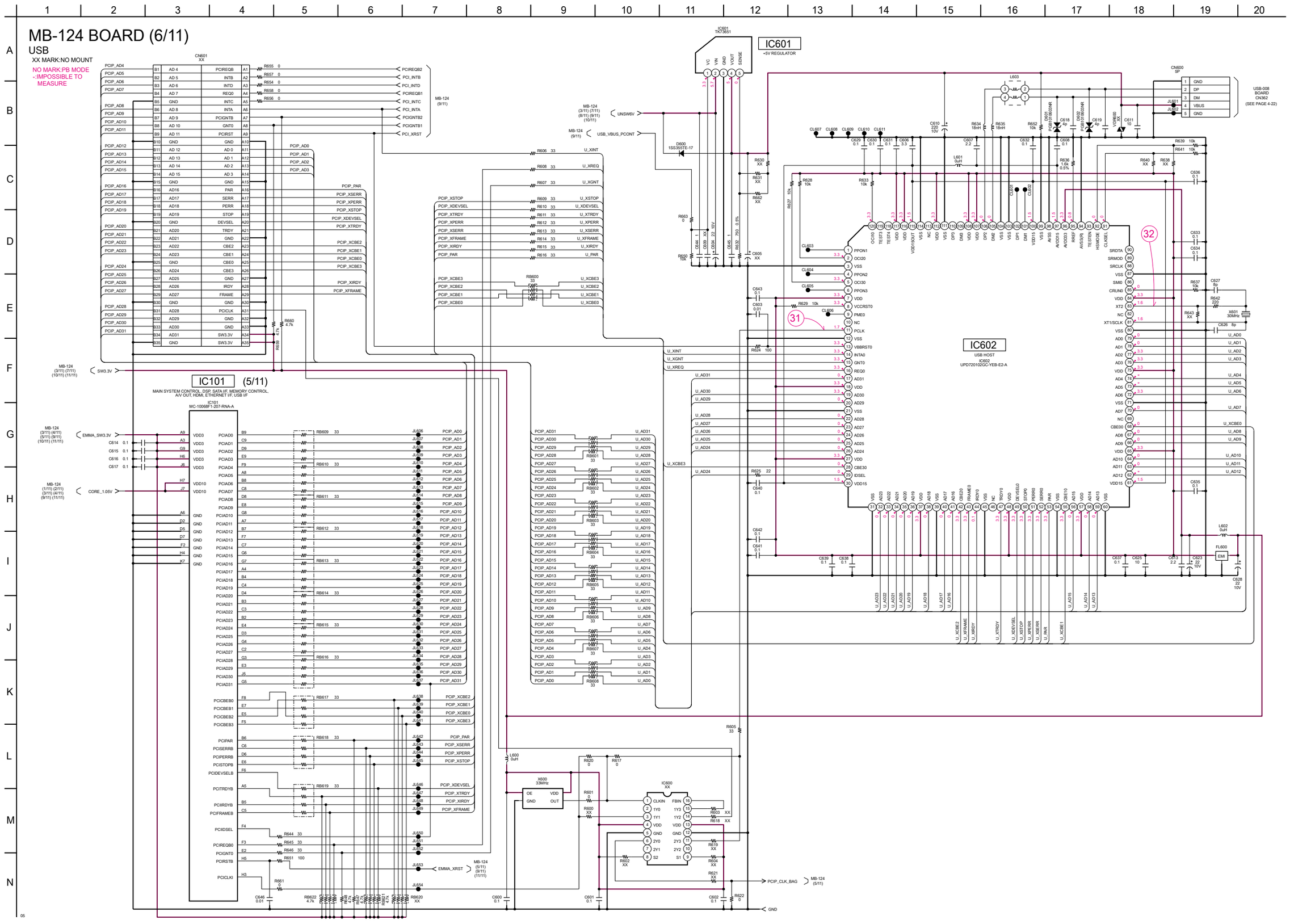
4-15. MB-124 BOARD (FLASH/HOST) SCHEMATIC DIAGRAM (5/11) • See page 5-10 for printed wiring board.

- Ref. No.: MB-124 board; 10,000 series -



4-16. MB-124 BOARD (USB) SCHEMATIC DIAGRAM (6/11) • See page 5-10 for printed wiring board.

- Ref. No.: MB-124 board; 10,000 series -



4-17. MB-124 BOARD (HDMI/SATA) SCHEMATIC DIAGRAM (7/11) • See page 5-10 for printed wiring board.

- Ref. No.: MB-124 board; 10,000 series -

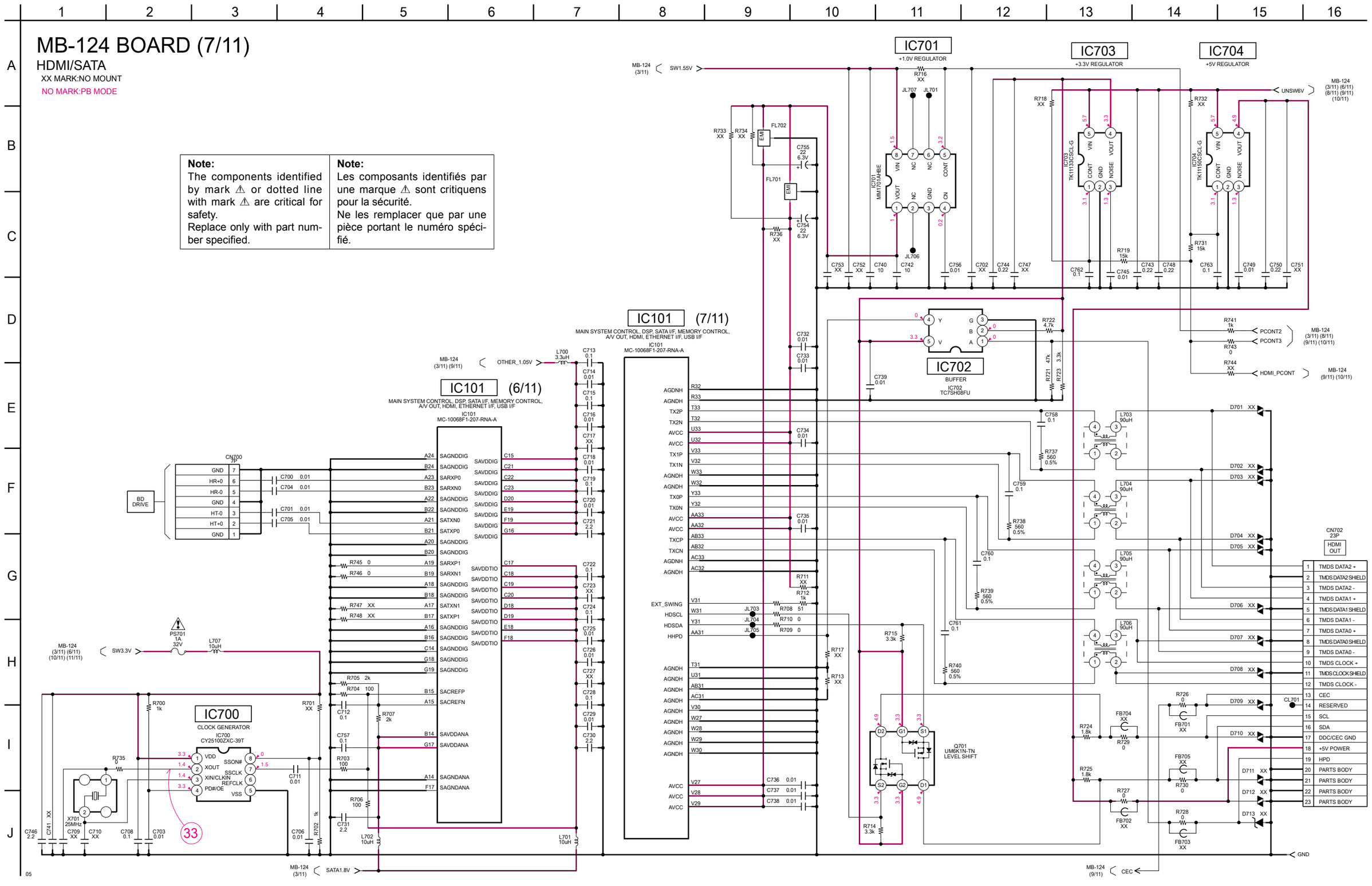
MB-124 BOARD (7/11)

HDMI/SATA

XX MARK:NO MOUNT

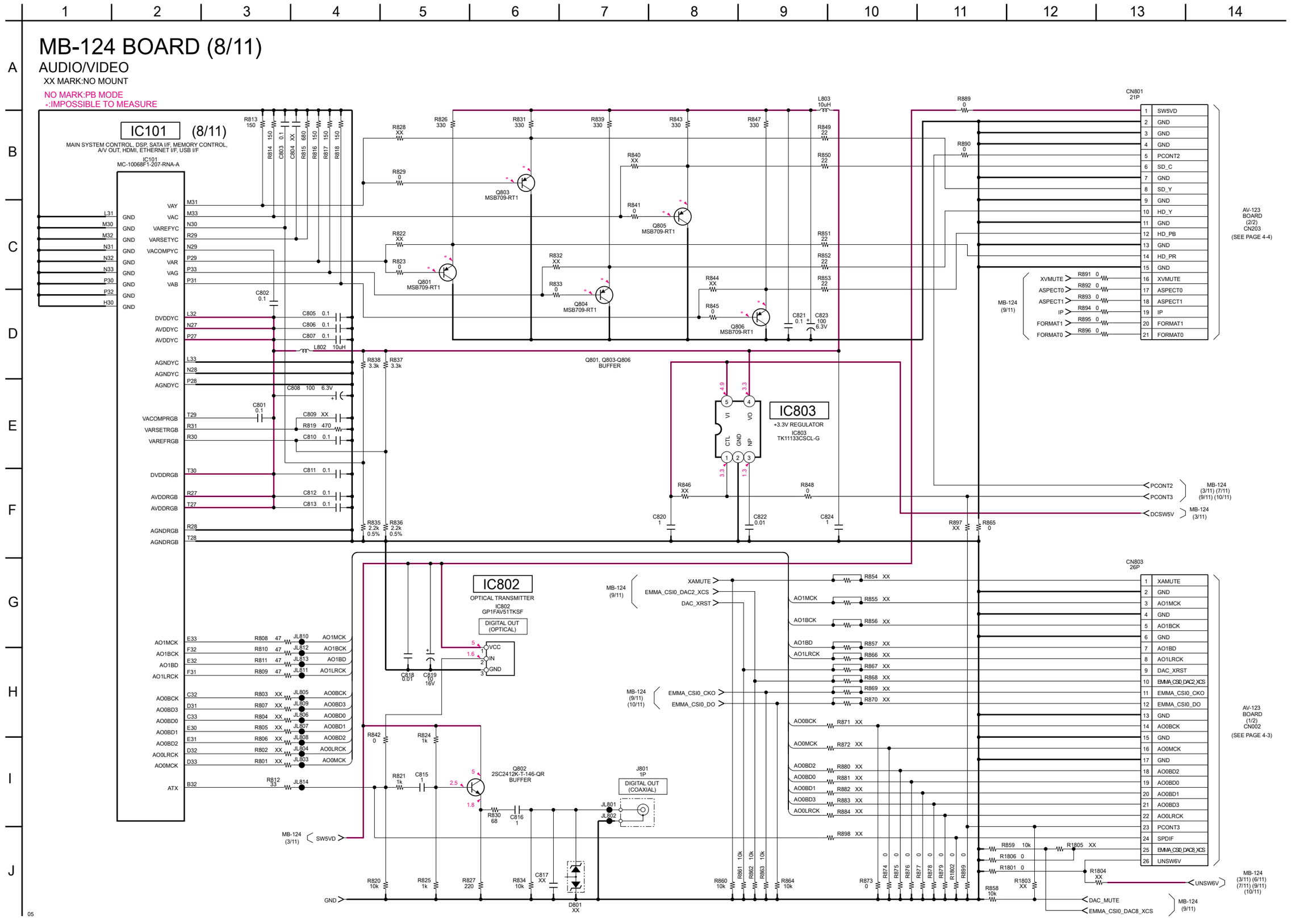
NO MARK:PB MODE

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



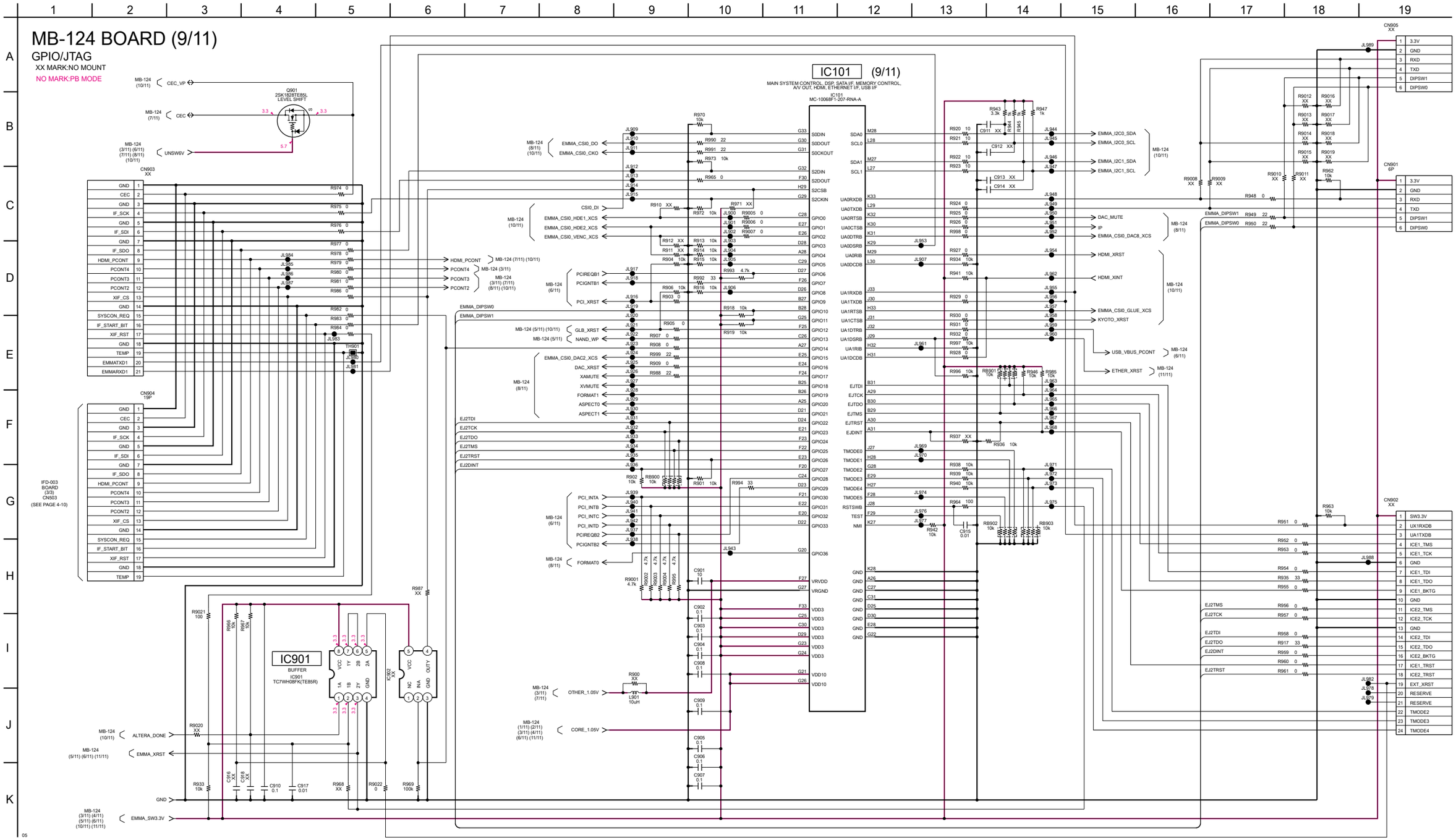
4-18. MB-124 BOARD (AUDIO/VIDEO) SCHEMATIC DIAGRAM (8/11) • See page 5-10 for printed wiring board.

- Ref. No.: MB-124 board; 10,000 series -



4-19. MB-124 BOARD (GPIO/JTAG) SCHEMATIC DIAGRAM (9/11) • See page 5-10 for printed wiring board.

- Ref. No.: MB-124 board; 10,000 series -



4-20. MB-124 BOARD (IPIO) SCHEMATIC DIAGRAM (10/11) **• See page 5-10 for printed wiring board.**

- Ref. No.: MB-124 board; 10,000 series -

MB-124 BOARD (10/11)

IPIO

XX MARK:NO MOUNT

IC101 (10/11)

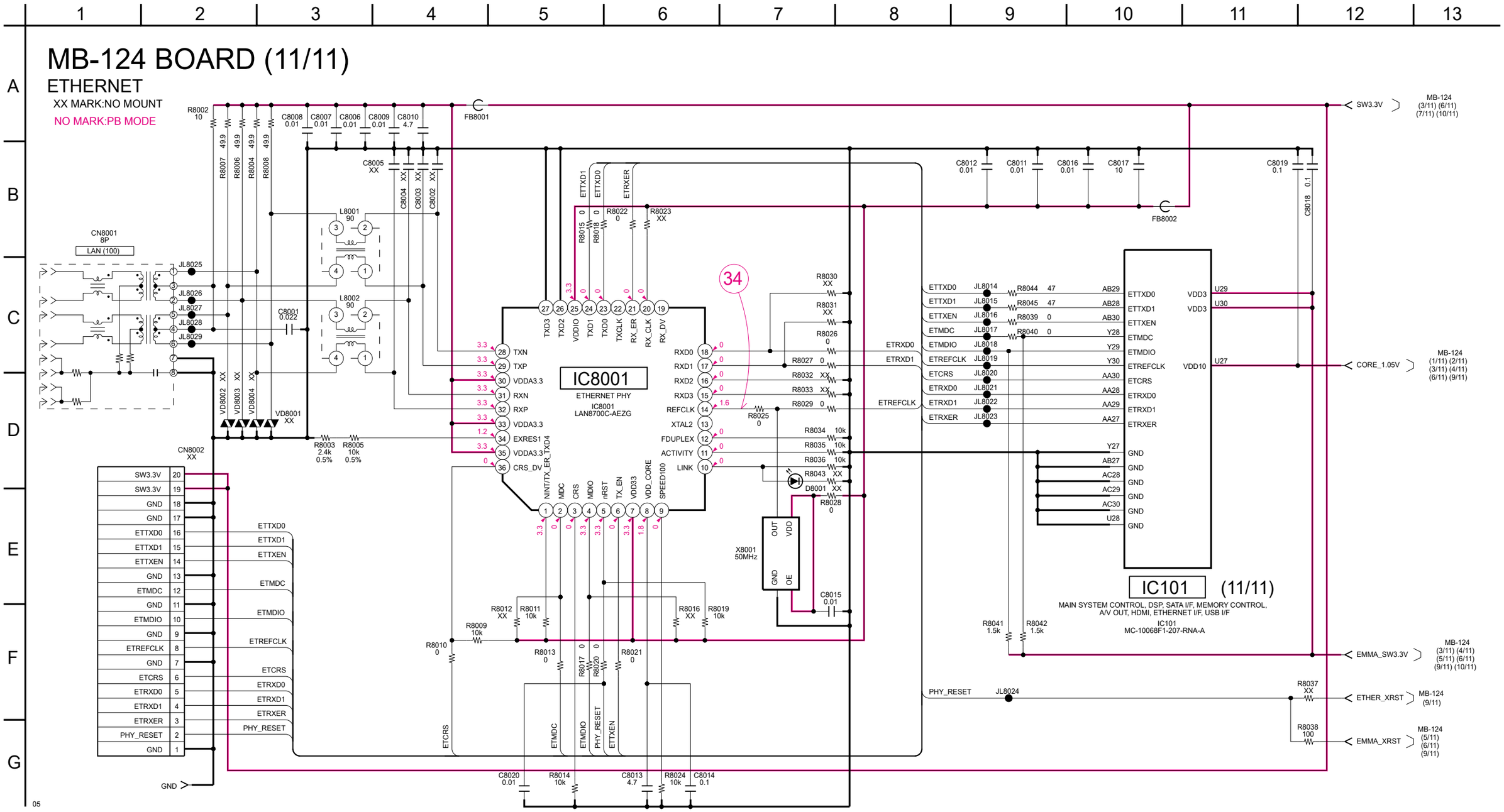
MAIN SYSTEM CONTROL, DSP, SATA I/F, MEMORY CONTROL, A/V OUT, HDMI, ETHERNET I/F, USB I/F

IC101
MC-10068F1-207-RNA-A

CN7001
XX

4-21. MB-124 BOARD (ETHERNET) SCHEMATIC DIAGRAM (11/11) • See page 5-10 for printed wiring board.

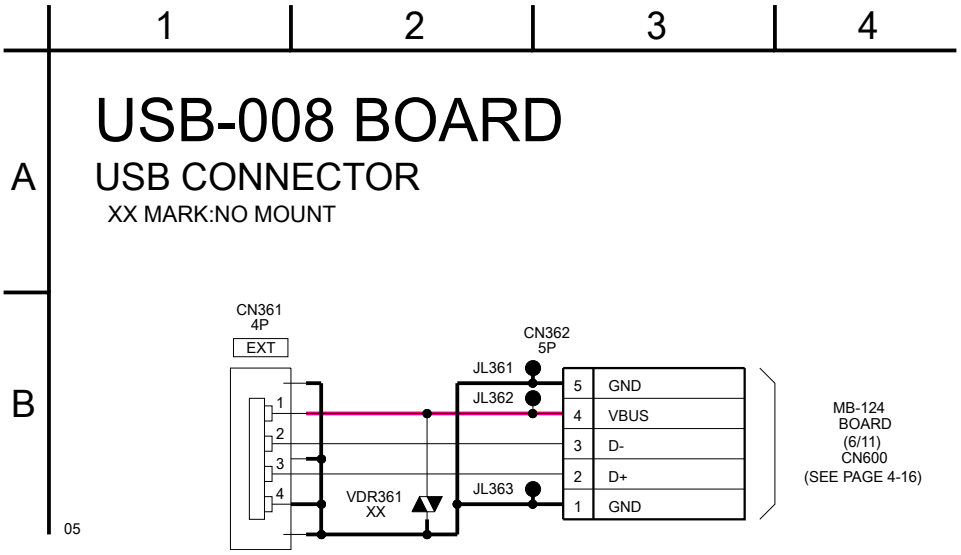
- Ref. No.: MB-124 board; 10,000 series -



4-22. USB-008 BOARD (USB CONNECTOR) SCHEMATIC DIAGRAM

- Ref. No.: USB-008 board; 20,000 series -

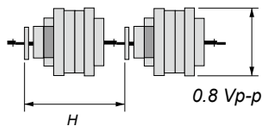
• See page 5-12 for printed wiring board.



4-23. WAVEFORMS

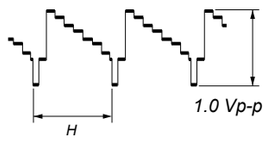
AV-123 BOARD

① IC206 ③ (SCIN)



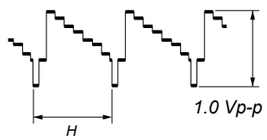
0.5 V/DIV, 20 µs/DIV

② IC206 ⑧ (SYIN)



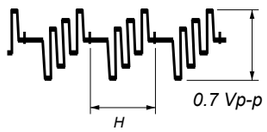
0.5 V/DIV, 20 µs/DIV

③ IC206 ⑩ (YIN)



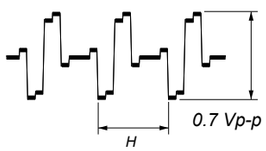
0.5 V/DIV, 20 µs/DIV

④ IC206 ⑫ (PBIN)



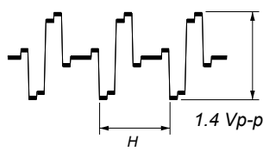
0.5 V/DIV, 20 µs/DIV

⑤ IC206 ⑭ (PRIN)



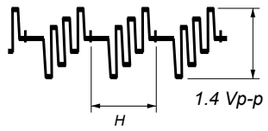
0.5 V/DIV, 20 µs/DIV

⑥ IC206 ⑲ (PROUT)



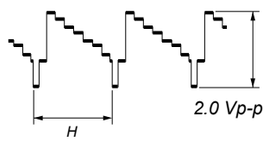
0.5 V/DIV, 20 µs/DIV

⑦ IC206 ㉑ (PBOUT)



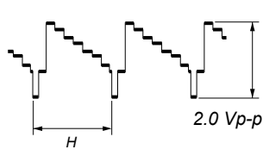
0.5 V/DIV, 20 µs/DIV

⑧ IC206 ㉓ (YOUT)



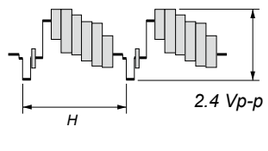
1.0 V/DIV, 20 µs/DIV

⑨ IC206 ㉖ (SYOUT)



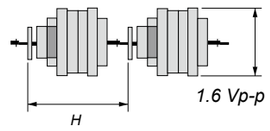
1.0 V/DIV, 20 µs/DIV

⑩ IC206 ㉘ (VOUT)



1.0 V/DIV, 20 µs/DIV

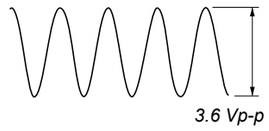
⑪ IC206 ㉚ (SCOUT)



0.5 V/DIV, 20 µs/DIV

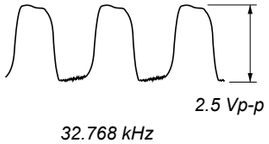
IFD-003 BOARD

㉑ IC402 ⑦ (XOUT)



1.0 V/DIV, 50 ns/DIV

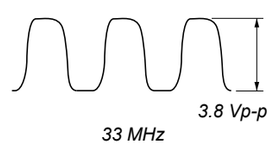
㉒ IC402 ⑤ (XCOUT)



1.0 V/DIV, 10 µs/DIV

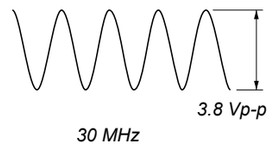
MB-124 BOARD

㉛ IC602 ⑪ (PCLK)



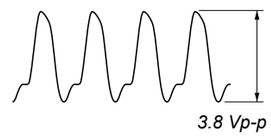
1.0 V/DIV, 20 ns/DIV

㉜ IC602 ㉝ (XT2)



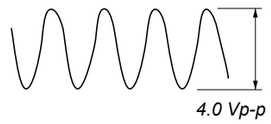
1.0 V/DIV, 20 ns/DIV

㉝ IC700 ② (XOUT)



1.0 V/DIV, 20 ns/DIV

㉞ IC8001 ⑭ (REFCLK)



1.0 V/DIV, 10 ns/DIV

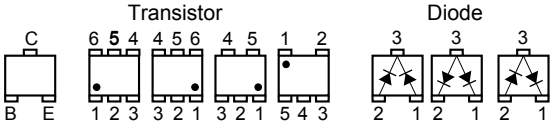
SECTION 5
PRINTED WIRING BOARDS

5-1. THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS

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

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

- Through hole is omitted.
- There are few cases that the part printed on diagram isn't mounted in this model.
- : panel designation
- Chip parts.



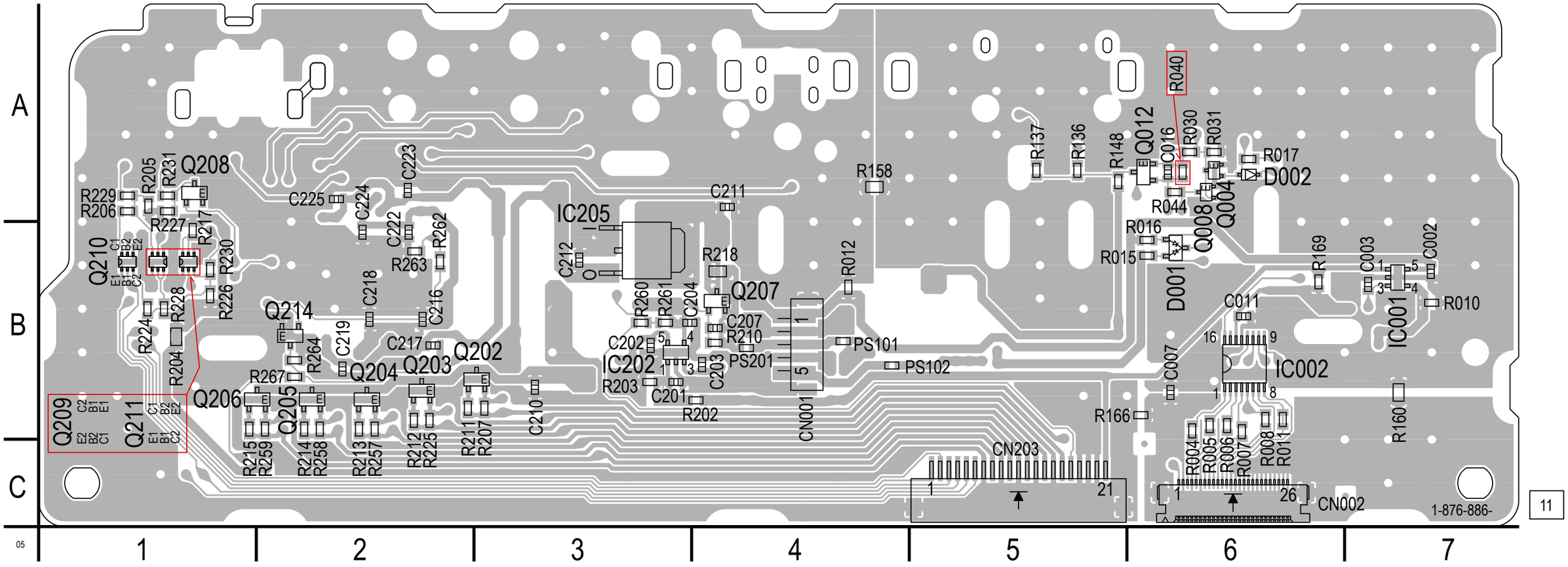
5-2. AV-123 BOARD (AUDIO/VIDEO OUT) PRINTED WIRING BOARD (SIDE A) **• See page 2-6 for circuit boards location.**

- Ref. No.: AV-123 board; 20,000 series -

: Uses unleaded solder.

There are a few cases that the part isn't mounted in this model is printed on this diagram.

AV-123 BOARD (SIDE A)



AV-123 BOARD (SIDE A)

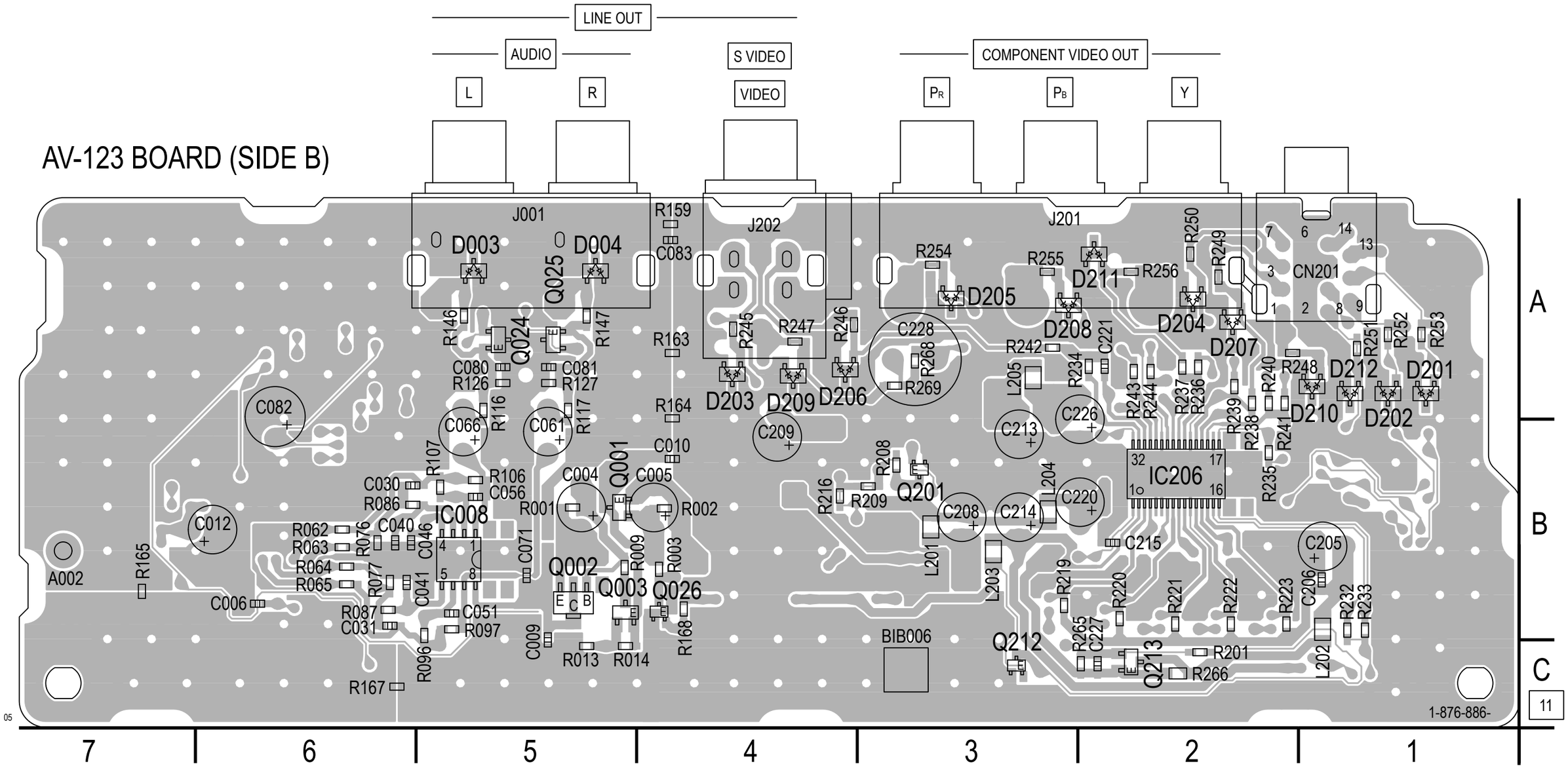
CN203	C-5
D001	B-6
D002	A-6
IC001	B-7
IC002	B-6
IC202	B-3
IC205	B-3
Q004	A-6
Q008	A-6
Q012	A-6
Q202	B-3
Q203	B-2
Q204	B-2
Q205	B-2
Q206	A-2
Q207	B-4
Q214	B-2

5-3. AV-123 BOARD (AUDIO/VIDEO OUT) PRINTED WIRING BOARD (SIDE B) **• See page 2-6 for circuit boards location.**

- Ref. No.: AV-123 board; 20,000 series -

: Uses unleaded solder.

There are a few cases that the part isn't mounted in this model is printed on this diagram.



AV-123 BOARD (SIDE B)

D203	A-4
D205	A-3
D206	A-4
D208	A-3
D209	A-4
D211	A-2
IC008	B-5
IC206	B-2
Q001	B-5
Q002	B-5
Q003	B-5
Q024	A-5
Q025	A-5
Q026	B-4
Q201	B-3
Q212	C-3
Q213	C-2

5-4. FC-096 BOARD (LED) PRINTED WIRING BOARD

- Ref. No.: FC-096 board; 20,000 series -

• See page 2-6 for circuit boards location.

: Uses unleaded solder.

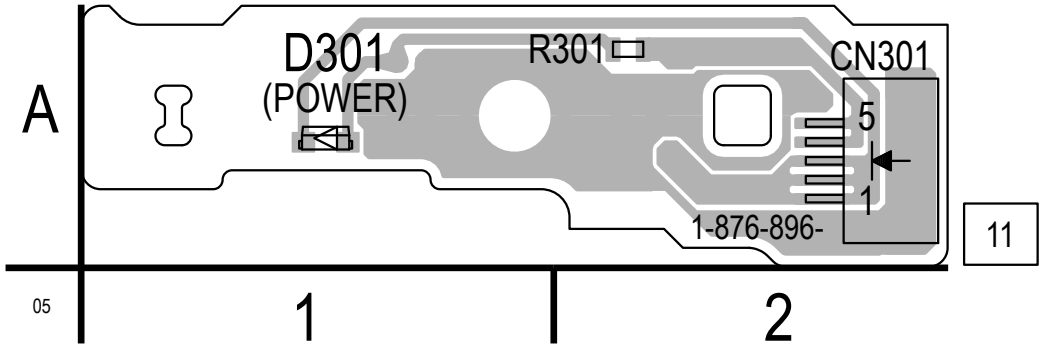
There are a few cases that the part isn't mounted in this model is printed on this diagram.

FC-096 BOARD (SIDE A)

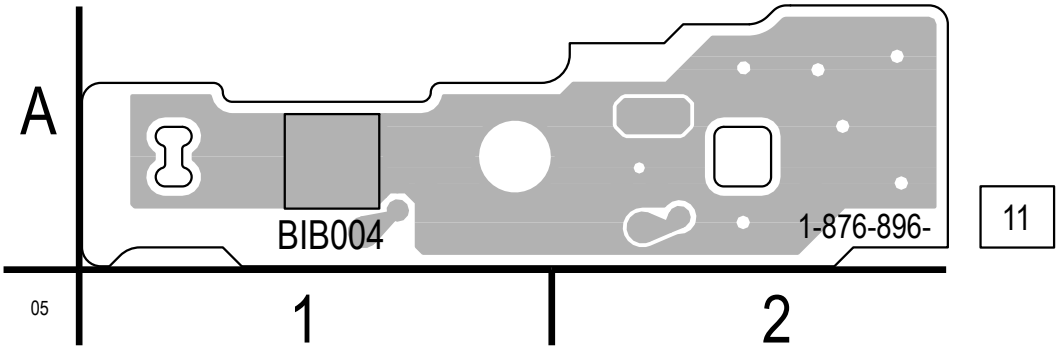
CN301 A-2

D301 A-1

FC-096 BOARD (SIDE A)



FC-096 BOARD (SIDE B)



5-5. FL-187 BOARD (SWITCH) PRINTED WIRING BOARD

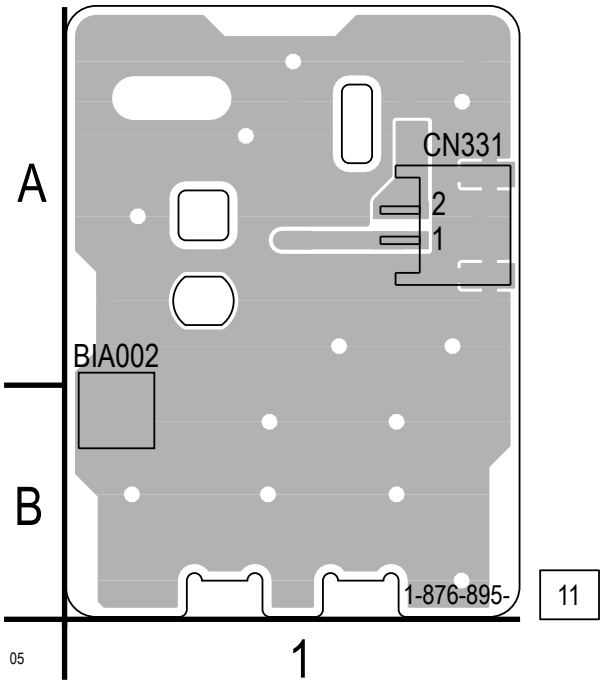
- Ref. No.: FL-187 board; 20,000 series -

• See page 2-6 for circuit boards location.

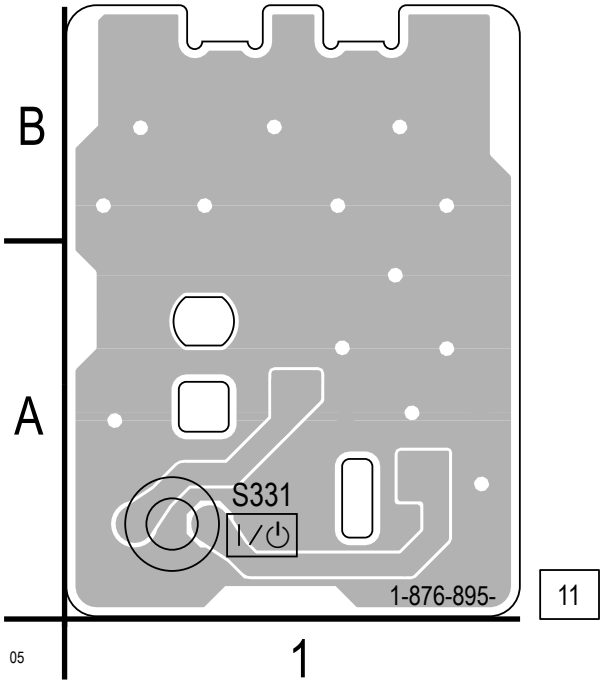
: Uses unleaded solder.

There are a few cases that the part isn't mounted in this model is printed on this diagram.

FL-187 BOARD (SIDE A)



FL-187 BOARD (SIDE B)



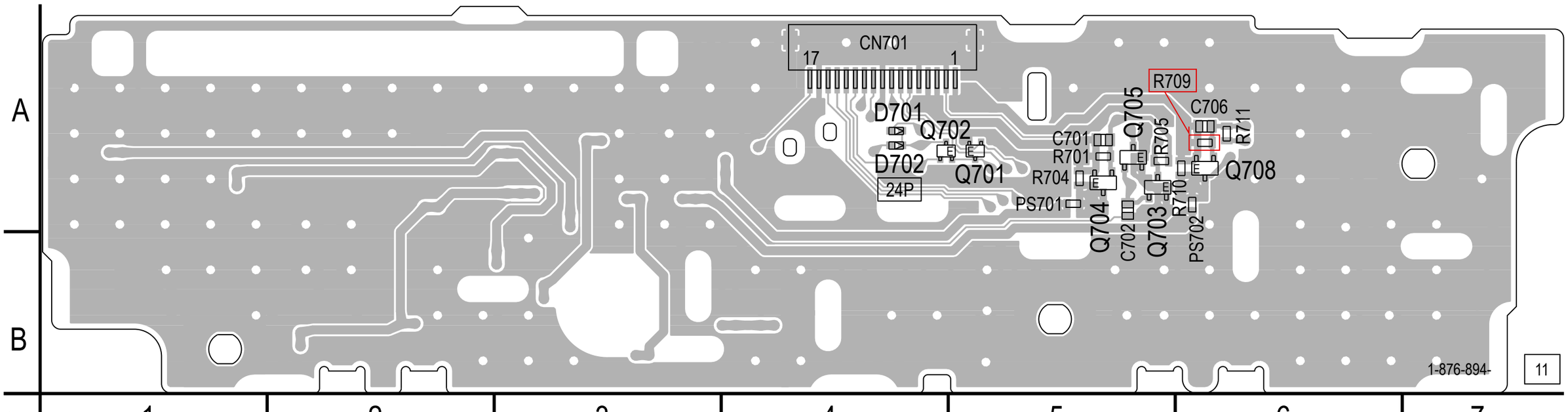
5-6. FR-294 BOARD (FL DRIVER) PRINTED WIRING BOARD (SIDE A) **• See page 2-6 for circuit boards location.**

- Ref. No.: FR-294 board; 20,000 series -

: Uses unleaded solder.

There are a few cases that the part isn't mounted in this model is printed on this diagram.

FR-294 BOARD (SIDE A)



FR-294 BOARD (SIDE A)

CN701	A-4
Q701	A-5
Q702	A-4
Q703	A-5
Q704	A-5

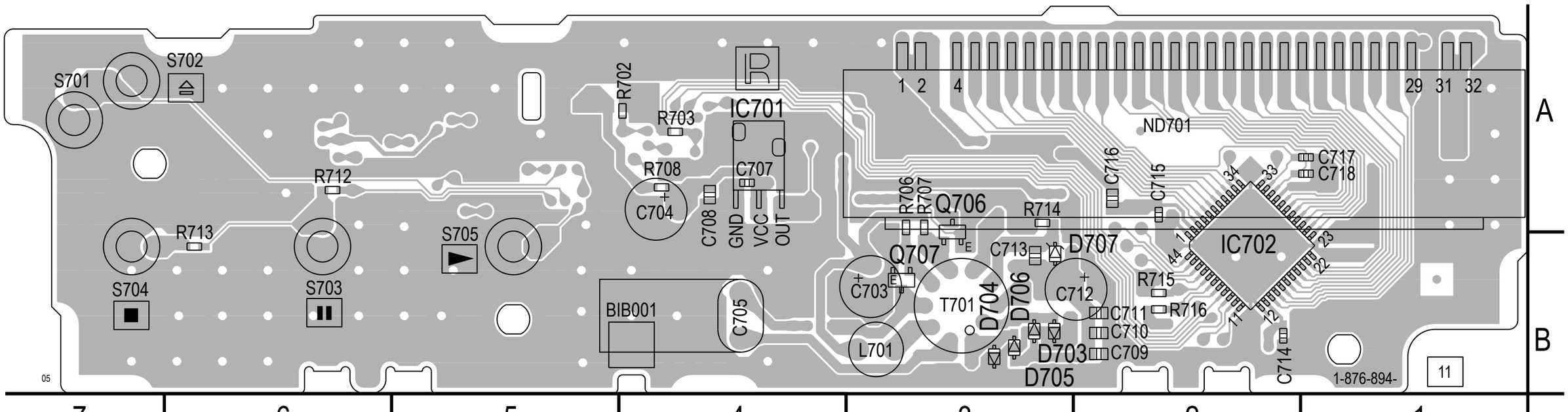
5-7. FR-294 BOARD (FL DRIVER) PRINTED WIRING BOARD (SIDE B) **• See page 2-6 for circuit boards location.**

- Ref. No.: FR-294 board; 20,000 series -

: Uses unleaded solder.

There are a few cases that the part isn't mounted in this model is printed on this diagram.

FR-294 BOARD (SIDE B)



FR-294 BOARD (SIDE B)

D703	B-3
D704	B-3
D705	B-3
D706	B-3
D707	B-3
IC701	A-4
IC702	B-2
Q706	A-3
Q707	B-3

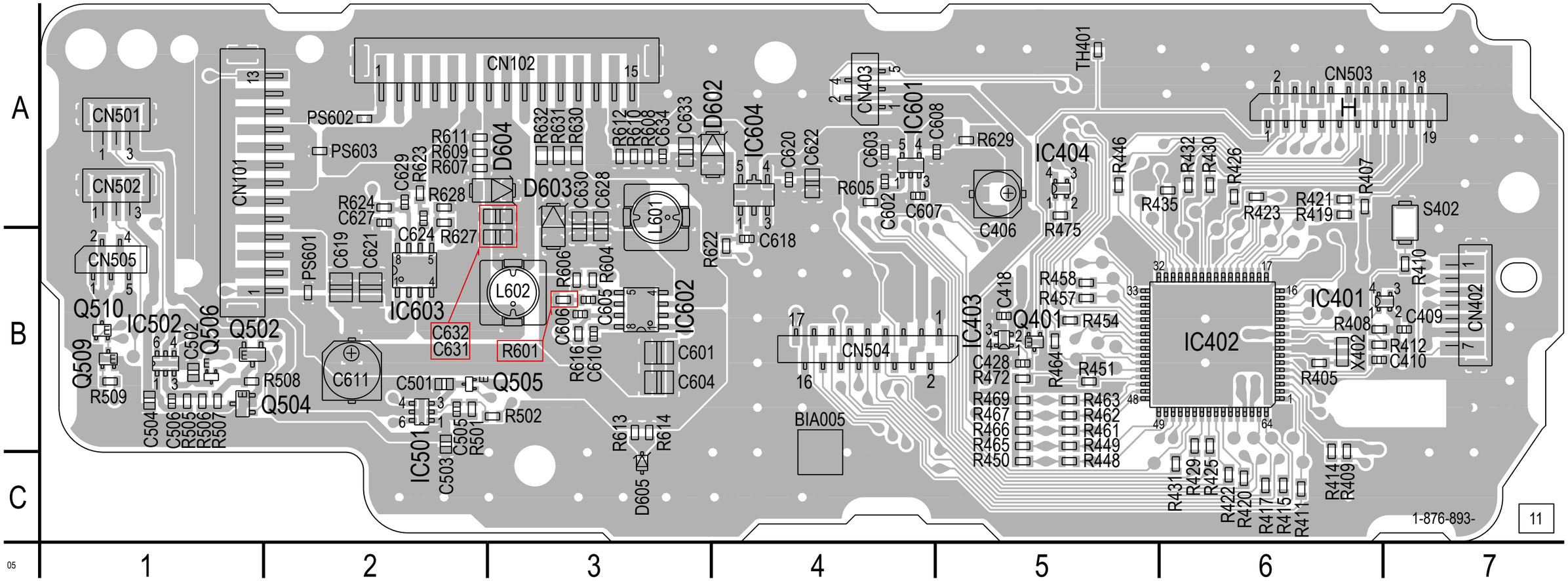
5-8. IFD-003 BOARD (IF CONTROLLER) PRINTED WIRING BOARD (SIDE A) **• See page 2-6 for circuit boards location.**

- Ref. No.: IFD-003 board; 20,000 series -

: Uses unleaded solder.

There are a few cases that the part isn't mounted in this model is printed on this diagram.

IFD-003 BOARD (SIDE A)



IFD-003 BOARD (SIDE A)

CN101	A-1
CN102	A-3
CN402	B-7
CN501	A-1
CN503	A-6
CN504	B-4
IC402	B-6
IC501	B-2
IC601	A-4
IC602	B-3
IC603	B-2
IC604	A-4
Q505	B-2
Q509	B-1
Q510	B-1

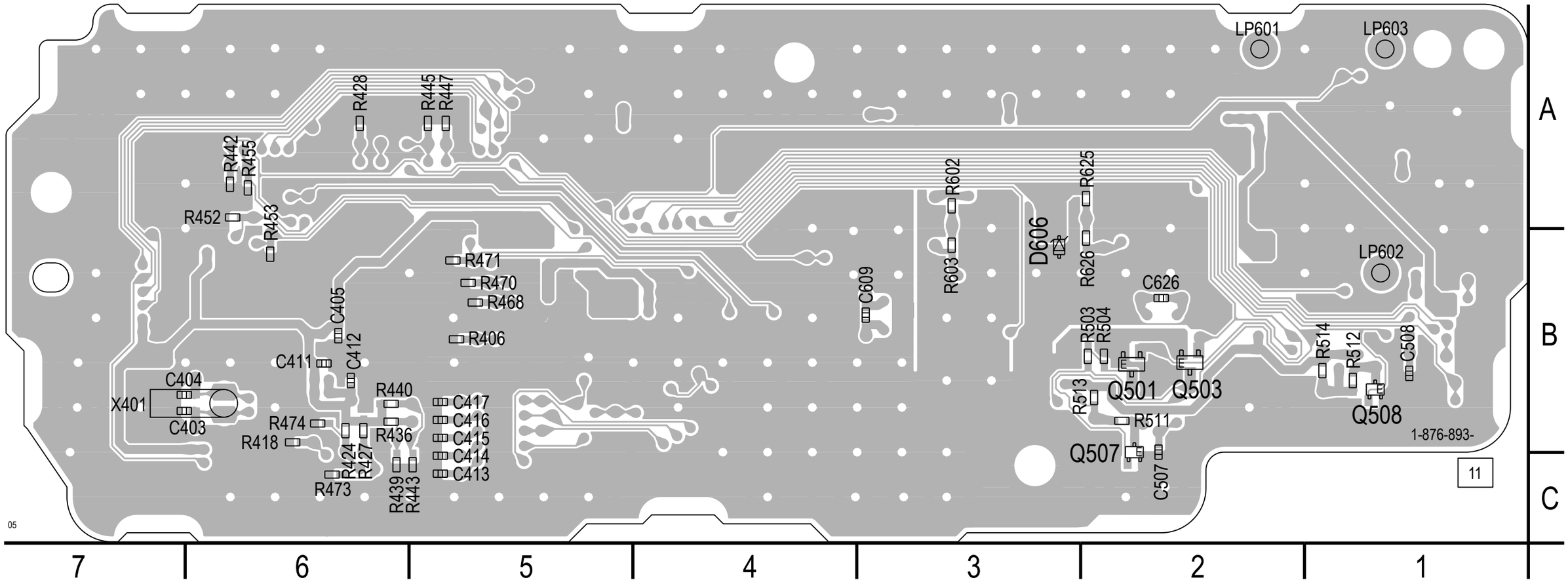
5-9. IFD-003 BOARD (IF CONTROLLER) PRINTED WIRING BOARD (SIDE B) **• See page 2-6 for circuit boards location.**

There are a few cases that the part isn't mounted in this model is printed on this diagram.

- Ref. No.: IFD-003 board; 20,000 series -

: Uses unleaded solder.

IFD-003 BOARD (SIDE B)



IFD-003 BOARD (SIDE B)

D606	B-3
Q501	B-2
Q503	B-2
Q507	C-2

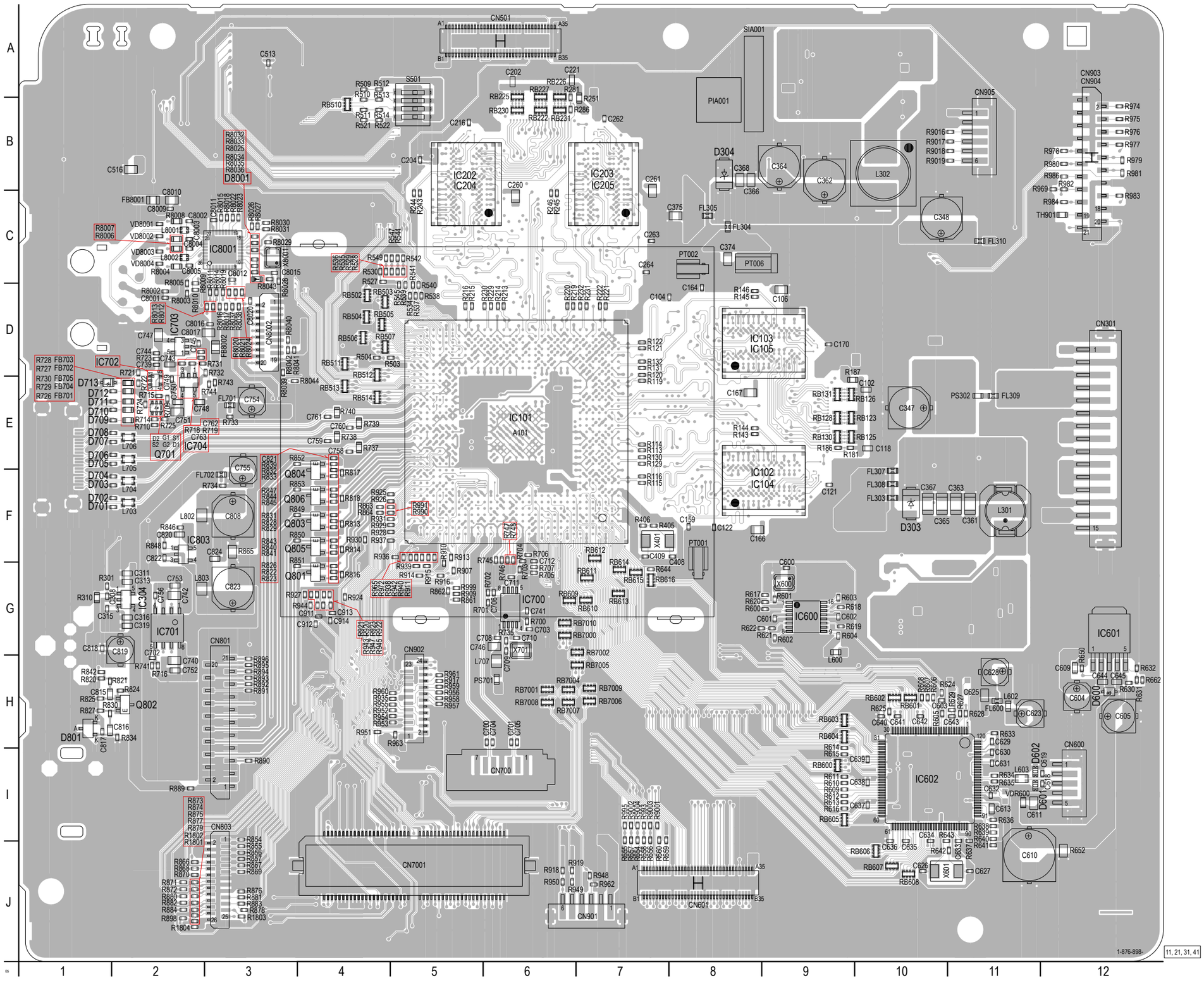
5-10. MB-124 BOARD (MAIN) PRINTED WIRING BOARD (SIDE A) • See page 2-6 for circuit boards location.

- Ref. No.: MB-124 board; 10,000 series -

: Uses unleaded solder.

There are a few cases that the part isn't mounted in this model is printed on this diagram.

MB-124 BOARD (SIDE A)



MB-124 BOARD (SIDE A)

CN301	E-12
CN700	I-6
CN901	J-7
CN904	B-12
D303	F-10
D304	B-8
D600	H-12
D601	I-11
D602	I-11
IC304	G-2
IC702	E-2
IC703	D-2
IC704	E-2
IC803	F-2
Q701	E-2
Q801	G-4
Q802	H-2
Q803	F-4
Q804	F-4
Q805	F-4
Q806	F-4

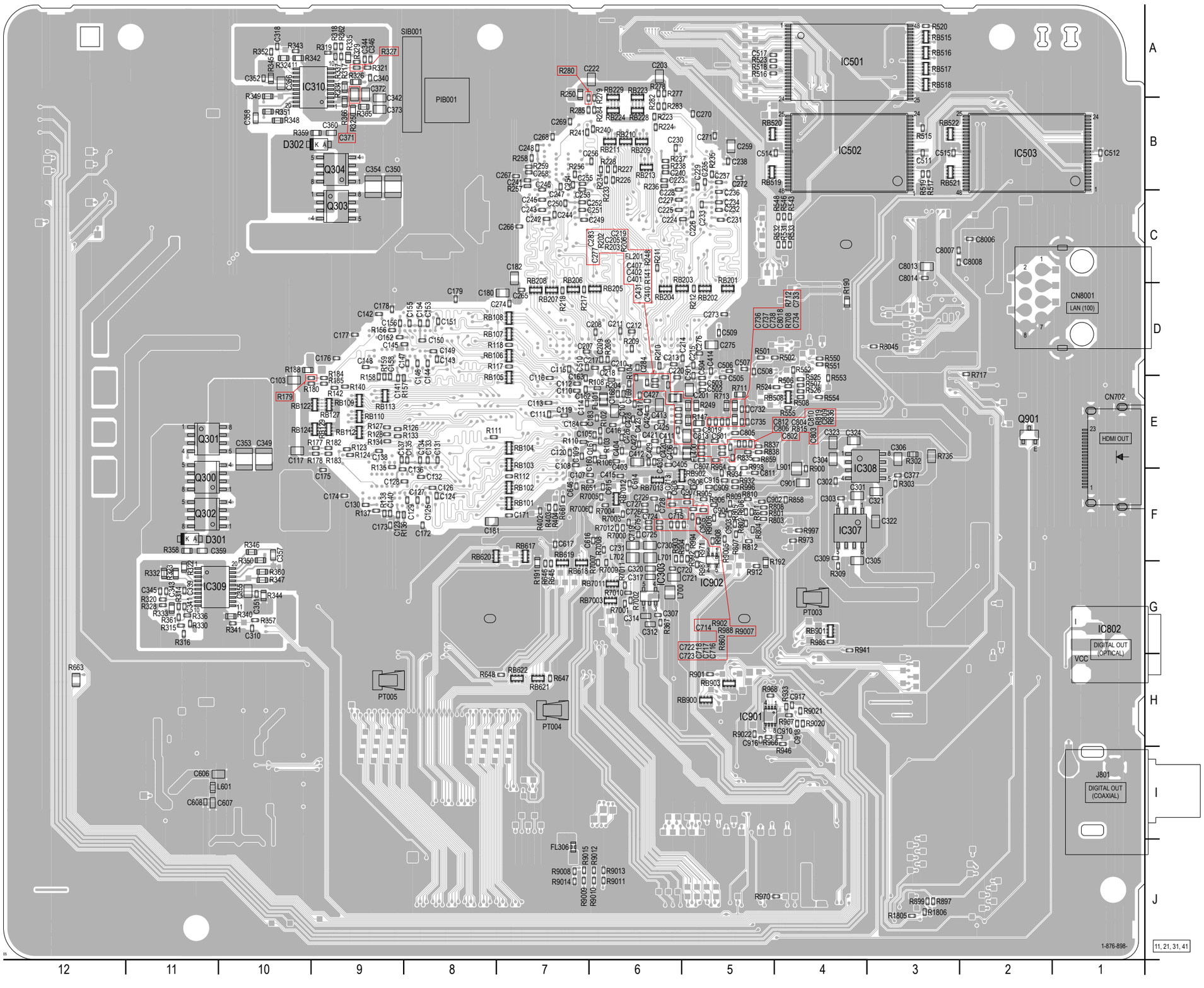
5-11. MB-124 BOARD (MAIN) PRINTED WIRING BOARD (SIDE B) • See page 2-6 for circuit boards location.

- Ref. No.: MB-124 board; 10,000 series -

: Uses unleaded solder.

There are a few cases that the part isn't mounted in this model is printed on this diagram.

MB-124 BOARD (SIDE B)



MB-124 BOARD (SIDE B)

CN702	E-1
CN8001	D-1
D301	F-11
IC303	G-6
IC309	G-10
IC310	A-9
IC901	H-5
Q300	F-11
Q301	E-11
Q302	F-11
Q303	C-9
Q304	B-9
Q901	E-2

5-12. USB-008 BOARD (USB CONNECTOR) PRINTED WIRING BOARD

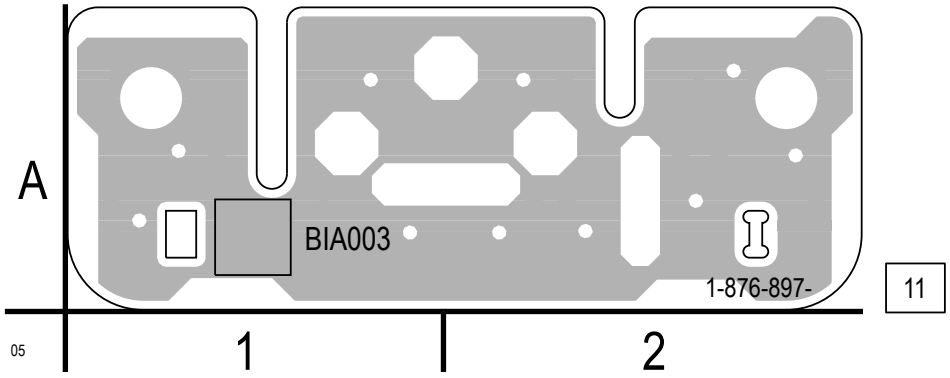
- Ref. No.: USB-008 board; 20,000 series -

• See page 2-6 for circuit boards location.

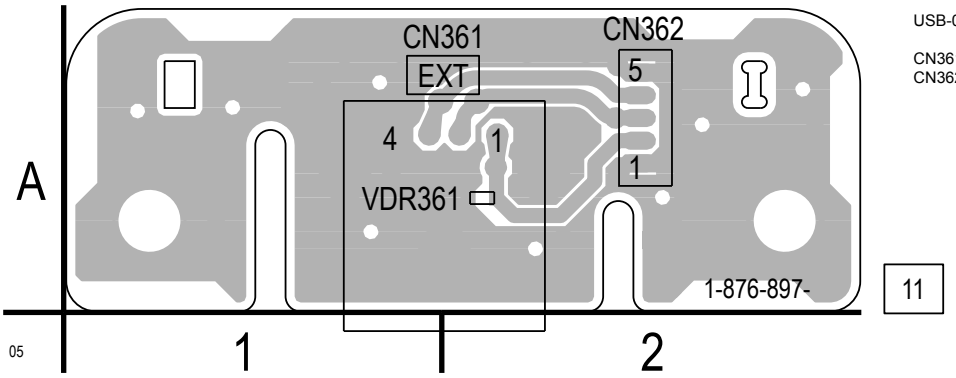
: Uses unleaded solder.

There are a few cases that the part isn't mounted in this model is printed on this diagram.

USB-008 BOARD (SIDE A)



USB-008 BOARD (SIDE B)



USB-008 BOARD (SIDE B)

CN361 A-1
CN362 A-2

SECTION 6
IC PIN FUNCTION DESCRIPTION

6-1. MAIN SYSTEM CONTROL PIN FUNCTION (MB-124 BOARD IC101: MC-10068F1-207-RNA-A)

Pin No.	Name	I/O	Description
A1	VOID	-	This pin is not ball.
A2	VOID	-	This pin is not ball.
A3	VDD3	-	3.3V supply (I/O buffers)
A4	PCIAD17	I/O	PCI Address Data
A5	PCITRDYB	I/O	PCI Target Ready
A6	GND	-	Ground for digital and DDR2 SDRAM
A7	PCIAD11	I/O	PCI Address Data
A8	PCIAD5	I/O	PCI Address Data
A9	VDD3	-	3.3V supply (I/O buffers)
A10	GPIO58	I/O	VODY6: Digital Video Y Data Output
A11	GPIO68	I/O	VODC6: Digital Video Cb/Cr Data Output
A12	GPIO76	I/O	AOHBD1: Audio Data output for External HDMI
A13	GND	-	Ground for digital and DDR2 SDRAM
A14	SAGNDANA	-	Analog Ground for Serial ATA
A15	SACREFN	I	SATA Clock Negative Input (0.9V)
A16	SAGNDDIG	-	Digital Ground for Serial ATA
A17	SATXN1	O	SATA Transport negative port-1 (not used)
A18	SAGNDDIG	-	Digital Ground for Serial ATA
A19	SARXP1	I	SATA Receiver positive port-1 (not used)
A20	SAGNDDIG	-	Digital Ground for Serial ATA
A21	SATXN0	O	SATA Transport negative port-0
A22	SAGNDDIG	-	Digital Ground for Serial ATA
A23	SARXP0	I	SATA Receiver positive port-0
A24	SAGNDDIG	-	Digital Ground for Serial ATA
A25	GPIO20	O	ASPECT0 (4:3="0" 16:9, 4:3LB="1")
A26	GND	-	Ground for digital and DDR2 SDRAM
A27	GPIO14	O	ITREQ (Communication Request for ITcon)
A28	GPIO4	I	No use (Fixed at "L")
A29	EJTCK	I	JTAG I/F_0 Clock Input
A30	EJTRSTB	I	JTAG I/F_0 Reset Input
A31	EJDINT	I	JTAG I/F_0 debug interrupt
A32	VOID	-	This pin is not ball.
A33	VOID	-	This pin is not ball.
B1	VOID	-	This pin is not ball.
B2	PCIAD23	I/O	PCI Address Data
B3	PCIAD21	I/O	PCI Address Data
B4	PCIAD18	I/O	PCI Address Data
B5	PCIIRDYB	I/O	PCI Initiator Ready
B6	PCIPAR	I/O	PCI PAR Signal
B7	PCIAD12	I/O	PCI Address Data
B8	PCIAD6	I/O	PCI Address Data
B9	PCIAD0	I/O	PCI Address Data
B10	GPIO52	I/O	VODY0: Digital Video Y Data Output
B11	GPIO56	I/O	VODY4: Digital Video Y Data Output
B12	GPIO70	I/O	VODC8: Digital Video Cb/Cr Data Output
B13	GPIO81	I/O	Not in Use. (Pull-down)
B14	SAVDDANA	-	1.8V supply (Serial ATA analog VDD)
B15	SACREFP	I	SATA Clock Positive Input
B16	SAGNDDIG	-	Digital Ground for Serial ATA
B17	SATXP1	O	SATA Transport positive port-1 (not used)
B18	SAGNDDIG	-	Digital Ground for Serial ATA
B19	SARXN1	I	SATA Receiver Negative port-1 (not used)
B20	SAGNDDIG	-	Digital Ground for Serial ATA
B21	SATXP0	O	SATA Transport Positive port-0
B22	SAGNDDIG	-	Digital Ground for Serial ATA
B23	SARXN0	I	SATA Receiver Negative port-0
B24	SAGNDDIG	-	Digital Ground for Serial ATA
B25	GPIO18	O	XVMUTE (Video Mute ON="0")
B26	GPIO19	O	FORMAT1 (480="0" 720,1080="1")
B27	GPIO9	O	PCI_XRST (PCI bus reset)

Pin No.	Name	I/O	Description
B28	GPIO10	I	EMMA_DIPSW0 (Fixed at "H")
B29	EJTMS	I	JTAG I/F_0 Mode Set
B30	EJTDO	O	JTAG I/F_0 Data Output
B31	EJTDI	I	JTAG I/F_0 Data Input
B32	ATX	O	SPDIF output (Optical and coaxial terminal output signal)
B33	VOID	-	This pin is not ball.
C1	GND	-	Ground for digital and DDR2 SDRAM
C2	PCIAD27	I/O	PCI Address Data
C3	PCIAD22	I/O	PCI Address Data
C4	PCIAD19	I/O	PCI Address Data
C5	PCIFRAMEB	I/O	PCI Cycle Frame
C6	PCISERRB	I/O	PCI System Error
C7	PCIAD14	I/O	PCI Address Data
C8	PCIAD7	I/O	PCI Address Data
C9	PCIAD1	I/O	PCI Address Data
C10	GPIO49	I/O	VOCLK: Video Pixel Clock
C11	GPIO54	I/O	VODY2: Digital Video Y Data Output
C12	GPIO67	I/O	VODC5: Digital Video Cb/Cr Data Output
C13	GPIO72	I/O	AOHMCK: External HDMI Master Clock Output
C14	SAGNDDIG	-	Digital Ground for Serial ATA
C15	SAVDDDIG	-	1.05V supply (Serial ATA digital VDD)
C16	GPIO86	I/O	Not in Use. (Pull-down)
C17	SAVDDTIO	-	1.8V supply (Serial ATA Tx I/O)
C18	SAVDDTIO	-	1.8V supply (Serial ATA Tx I/O)
C19	SAVDDTIO	-	1.8V supply (Serial ATA Tx I/O)
C20	SAVDDTIO	-	1.8V supply (Serial ATA Tx I/O)
C21	SAVDDDIG	-	1.05V supply (Serial ATA digital VDD)
C22	SAVDDDIG	-	1.05V supply (Serial ATA digital VDD)
C23	SAVDDDIG	-	1.05V supply (Serial ATA digital VDD)
C24	GPIO28	O	Not used (Fixed at "H")
C25	VDD3	-	3.3V supply (I/O buffers)
C26	GPIO13	O	NAND_WP (NAND write protect)
C27	GND	-	Ground for digital and DDR2 SDRAM
C28	GPIO0	O	Not used
C29	GPIO5	I	Not used (Fixed at "L")
C30	VDD3	-	3.3V supply (I/O buffers)
C31	GND	-	Ground for digital and DDR2 SDRAM
C32	AO0BCK	O	Bit Clock for 8ch output
C33	AO0BD0	O	Data (Front L/R) for 8ch output
D1	CLK27IN	I	27MHz Clock Input
D2	GND	-	Ground for digital and DDR2 SDRAM
D3	PCIAD25	I/O	PCI Address Data
D4	PCIAD20	I/O	PCI Address Data
D5	GND	-	Ground for digital and DDR2 SDRAM
D6	PCIPERRB	I/O	PCI Parity Error
D7	GND	-	Ground for digital and DDR2 SDRAM
D8	PCIAD8	I/O	PCI Address Data
D9	PCIAD2	I/O	PCI Address Data
D10	GND	-	Ground for digital and DDR2 SDRAM
D11	GPIO51	I/O	VOVSB: Vertical Sync Signal
D12	GPIO59	I/O	VODY7: Digital Video Y Data Output
D13	GPIO63	I/O	VODC1: Digital Video Cb/Cr Data Output
D14	GPIO79	I/O	AOHTX: IEC60958 output for External HDMI
D15	GPIO83	I/O	Not in Use. (Pull-down)
D16	GPIO85	I/O	Not in Use. (Pull-down)
D17	GPIO77	I/O	AOHBD2: Data output for External HDMI
D18	SAVDDTIO	-	1.8V supply (Serial ATA Tx I/O)
D19	SAVDDTIO	-	1.8V supply (Serial ATA Tx I/O)
D20	SAVDDDIG	-	1.05V supply (Serial ATA digital VDD)
D21	GPIO21	O	ASPECT1 (4:3, 16:9="0" 4:3LB="1")
D22	GPIO33	I	PCI INT D (PCI Interrupt: Not used)

Pin No.	Name	I/O	Description
D23	GPIO29	I	Not used (Fixed at "H")
D24	GPIO22	I	EJ2TDI (JTAG I/F_1 Data Input)
D25	GND	-	Ground for digital and DDR2 SDRAM
D26	GPIO8	I	Not used (Fixed at "L")
D27	GPIO6	I	PCI REQ1 (Not used)
D28	GPIO3	I	Not used (Fixed at "L")
D29	VDD3	-	3.3V supply (I/O buffers)
D30	GND	-	Ground for digital and DDR2 SDRAM
D31	AO0BD3	O	Data (Surround back L/R) for 8ch output
D32	AO0LRCK	O	LR Clock for 8ch output
D33	AO0MCK	O	Master Clock for 8ch output
E1	GND	-	Ground for digital and DDR2 SDRAM
E2	PCIGNT0	O	PCI Grant
E3	PCIAD29	I/O	PCI Address Data
E4	PCIAD24	I/O	PCI Address Data
E5	PCICBEB2	I/O	PCI Bus Command and Byte Enable
E6	PCISTOPB	I/O	PCI Stop
E7	PCICBEB1	I/O	PCI Bus Command and Byte Enable
E8	PCIAD9	I/O	PCI Address Data
E9	PCIAD3	I/O	PCI Address Data
E10	GPIO55	I/O	VODY3: Digital Video Y Data Output
E11	GPIO62	I/O	VODC0: Digital Video Cb/Cr Data Output
E12	GPIO66	I/O	VODC4: Digital Video Cb/Cr Data Output
E13	GPIO64	I/O	VODC2: Digital Video Cb/Cr Data Output
E14	GPIO69	I/O	VODC7: Digital Video Cb/Cr Data Output
E15	GPIO78	I/O	AOHBD3: Data output for External HDMI
E16	GPIO82	I/O	Not in Use. (Pull-down)
E17	GPIO84	I/O	Not in Use. (Pull-down)
E18	SAVDDTIO	-	1.8V supply (Serial ATA Tx I/O)
E19	SAVDDDIG	-	1.05V supply (Serial ATA digital VDD)
E20	GPIO32	I	PCI INT C (PCI Interrupt: Not used)
E21	GPIO23	I	EJ2TCK (JTAG I/F_1 Clock Input)
E22	GPIO31	I	PCI INT B (PCI Interrupt: Not used)
E23	GPIO26	I	EJ2TRST (JTAG I/F_1 Reset Input)
E24	GPIO16	O	DAC XRST (Audio DAC Reset "H": Reset "L": Normal)
E25	GPIO15	O	EMMA CSI0 DAC2 XCS (2ch Audio DAC CS)
E26	GPIO2	O	EMMA CSI0 VENC_XCS (Not used)
E27	GPIO1	O	EMMA_CSI0_HDE2_XCS (Not used)
E28	GND	-	Ground for digital and DDR2 SDRAM
E29	TMODE3	I	Test terminal (Not used: Fixed at "L")
E30	AO0BD1	O	Data (Surround L/R) for 8ch output
E31	AO0BD2	O	Data (Center/SW) for 8ch output
E32	AO1BD	O	Data for 2ch output
E33	AO1MCK	O	Master Clock for 2ch output
F1	XI	I	Crystal Input
F2	GND	-	Ground for digital and DDR2 SDRAM
F3	PCIREQB0	I	PCI Request
F4	PCIIDSEL	I	PCI Initialization Device Select
F5	PCICBEB3	I/O	PCI Bus Command and Byte Enable
F6	PCIDEVSELB	I/O	PCI Device Select
F7	PCIAD13	I/O	PCI Address Data
F8	PCICBEB0	I/O	PCI Bus Command and Byte Enable
F9	PCIAD4	I/O	PCI Address Data
F10	GPIO53	I/O	VODY1: Digital Video Y Data Output
F11	GPIO60	I/O	VODY8: Digital Video Y Data Output
F12	GPIO57	I/O	VODY5: Digital Video Y Data Output
F13	GPIO65	I/O	VODC3: Digital Video Cb/Cr Data Output
F14	GPIO71	I/O	VODC9: Digital Video Cb/Cr Data Output
F15	GPIO80	I/O	Not in Use. (Pull-down)
F16	GPIO74	I/O	AOHBCK: External HDMI BCK Output
F17	SAGNDANA	-	Analog Ground for Serial ATA

Pin No.	Name	I/O	Description
F18	SAVDDTIO	-	1.8V supply (Serial ATA Tx I/O)
F19	SAVDDDIG	-	1.05V supply (Serial ATA digital VDD)
F20	GPIO27	I	EJ2DINT (JTAG I/F_1 debug interrupt)
F21	GPIO30	I	PCI INT A (PCI Interrupt: USB)
F22	GPIO25	I	EJ2TMS (JTAG I/F_1 Mode Set)
F23	GPIO24	O	EJ2TDO (JTAG I/F_1 Data Out)
F24	GPIO17	O	XAMUTE (Audio Mute: "H": Normal "L": Mute)
F25	GPIO12	O	GLB XRST (Not used)
F26	GPIO7	O	PCI GNT1 (Not used)
F27	VRVDD	-	1.05V supply for VR5500 PLL
F28	TMODE5	I	Test terminal (Not used: Fixed at "L")
F29	TEST	I	Test terminal (Not used: Fixed at "L")
F30	S2DOUT	O	IF SDI (IFcon Communication Data Out)
F31	AO1LRCK	O	LR Clock for 2ch output
F32	AO1BCK	O	Bit Clock for 2ch output
F33	VDD3	-	3.3V supply (I/O buffers)
G1	XO	O	Crystal Output
G2	GND	-	Ground for digital and DDR2 SDRAM
G3	PCIAD28	I/O	PCI Address Data
G4	PCIAD26	I/O	PCI Address Data
G5	PCIAD31	I/O	PCI Address Data
G6	PCIAD15	I/O	PCI Address Data
G7	PCIAD16	I/O	PCI Address Data
G8	PCIAD10	I/O	PCI Address Data
G9	VDD3	-	3.3V supply (I/O buffers)
G10	GND	-	Ground for digital and DDR2 SDRAM
G11	GPIO50	I/O	VOHSB: Horizontal Sync Signal
G12	GPIO75	I/O	AOHBD0: Data output for External HDMI
G13	GPIO61	I/O	VODY9: Digital Video Y Data Output
G14	VDD3	-	3.3V supply (I/O buffers)
G15	GPIO73	I/O	AOHLRCK: External HDMI LRCK Clock Output
G16	SAVDDDIG	-	1.05V supply (Serial ATA digital VDD)
G17	SAVDDANA	-	1.8V supply (Serial ATA analog VDD)
G18	SAGNDDIG	-	Digital Ground for Serial ATA
G19	SAGNDDIG	-	Digital Ground for Serial ATA
G20	GPIO36	O	FORMAT0 (480, 1080="0" 720="1")
G21	VDD10	-	1.05V supply (core)
G22	GND	-	Ground for digital and DDR2 SDRAM
G23	VDD3	-	3.3V supply (I/O buffers)
G24	VDD3	-	3.3V supply (I/O buffers)
G25	GPIO11	I	EMMA_DIPSW0 (Fixed at "H")
G26	VDD10	-	1.05V supply (core)
G27	VRGND	-	Ground for VR5500 PLL
G28	TMODE2	I	Test terminal (Not used: Fixed at "L")
G29	S2CKIN	I	IF SCK (IFcon Communication Clock In)
G30	S0DOUT	O	EMMA CSI0 DO (CSI0 Data Out)
G31	S0CKOUT	O	EMMA CSI0 CKIO (CSI0 Clock Out)
G32	S2DIN	I	IF SDO (IFcon Communication Data In)
G33	S0DIN	I	CSI0 DI (CSI0 Data In)
H1	GND	-	Ground for digital and DDR2 SDRAM
H2	CLKSEL	I	OSC27/CLK27IN Select Signal
H3	PCICLKI	I	PCI 33MHz Clock Input
H4	GND	-	Ground for digital and DDR2 SDRAM
H5	PCIRSTB	I	PCI Hardware Reset
H6	VDD3	-	3.3V supply (I/O buffers)
H7	VDD10	-	1.05V supply (core)
H8	VOID	-	This pin is not ball.
H9	VOID	-	This pin is not ball.
H10	VOID	-	This pin is not ball.
H11	VOID	-	This pin is not ball.
H12	VOID	-	This pin is not ball.

Pin No.	Name	I/O	Description
H13	VOID	-	This pin is not ball.
H14	VOID	-	This pin is not ball.
H15	VOID	-	This pin is not ball.
H16	VOID	-	This pin is not ball.
H17	VOID	-	This pin is not ball.
H18	VOID	-	This pin is not ball.
H19	VOID	-	This pin is not ball.
H20	VOID	-	This pin is not ball.
H21	VOID	-	This pin is not ball.
H22	VOID	-	This pin is not ball.
H23	VOID	-	This pin is not ball.
H24	VOID	-	This pin is not ball.
H25	VOID	-	This pin is not ball.
H26	VOID	-	This pin is not ball.
H27	TMODE4	I	Test terminal (Not used: Fixed at "L")
H28	TMODE1	I	Test terminal (Not used: Fixed at "L")
H29	S2CSB	I	Chip Select for CSI Ch2
H30	GND	-	Ground for digital and DDR2 SDRAM
H31	GPIO48	I	Not used. Fixed at "H"
H32	GPIO47	I	Not used (Fixed at "L")
H33	GPIO39	O	Not used
J1	D0DQS1	-	DDR2 Positive Data Strobe
J2	GND	-	Ground for digital and DDR2 SDRAM
J3	D0VDD18	-	1.8V supply (DDR2 SDRAM)
J4	CLK27OUT	O	27MHz Clock output for XTAL
J5	PCIAD30	I/O	PCI Address Data
J6	VDD3	-	3.3V supply (I/O buffers)
J7	VDD10	-	1.05V supply (core)
J8	VOID	-	This pin is not ball.
J9	VOID	-	This pin is not ball.
J10	VOID	-	This pin is not ball.
J11	VOID	-	This pin is not ball.
J12	VOID	-	This pin is not ball.
J13	VOID	-	This pin is not ball.
J14	VOID	-	This pin is not ball.
J15	VOID	-	This pin is not ball.
J16	VOID	-	This pin is not ball.
J17	VOID	-	This pin is not ball.
J18	VOID	-	This pin is not ball.
J19	VOID	-	This pin is not ball.
J20	VOID	-	This pin is not ball.
J21	VOID	-	This pin is not ball.
J22	VOID	-	This pin is not ball.
J23	VOID	-	This pin is not ball.
J24	VOID	-	This pin is not ball.
J25	VOID	-	This pin is not ball.
J26	VOID	-	This pin is not ball.
J27	TMODE0	I	Test terminal (Not used: Fixed at "L")
J28	RSTSWB	I	Main Reset
J29	GPIO46	O	Not used
J30	GPIO38	O	UART Ch1 TX (Not used)
J31	GPIO40	O	Not used
J32	GPIO45	O	USB VBUS PCONT (Bus Power ON at "H")
J33	GPIO37	I	UART Ch1 RX (Not used)
K1	D0DQS1B	I/O	DDR2 Negative Data Strobe
K2	GND	-	Ground for digital and DDR2 SDRAM
K3	D0Q10	I/O	DDR2 Data Input/Output
K4	GND	-	Ground for digital and DDR2 SDRAM
K5	GND	-	Ground for digital and DDR2 SDRAM
K6	D0VDD18	-	1.8V supply (DDR2 SDRAM)
K7	GND	-	Ground for digital and DDR2 SDRAM

Pin No.	Name	I/O	Description
K8	VOID	-	This pin is not ball.
K9	VOID	-	This pin is not ball.
K10	VOID	-	This pin is not ball.
K11	VOID	-	This pin is not ball.
K12	VOID	-	This pin is not ball.
K13	VOID	-	This pin is not ball.
K14	VOID	-	This pin is not ball.
K15	VOID	-	This pin is not ball.
K16	VOID	-	This pin is not ball.
K17	VOID	-	This pin is not ball.
K18	VOID	-	This pin is not ball.
K19	VOID	-	This pin is not ball.
K20	VOID	-	This pin is not ball.
K21	VOID	-	This pin is not ball.
K22	VOID	-	This pin is not ball.
K23	VOID	-	This pin is not ball.
K24	VOID	-	This pin is not ball.
K25	VOID	-	This pin is not ball.
K26	VOID	-	This pin is not ball.
K27	NMI	I	Non maskable interrupt (Not used: Fixed at "H")
K28	GND	-	Ground for digital and DDR2 SDRAM
K29	GPIO42	I	IT_GPIO1 (Boot picture output control)
K30	GPIO35	O	IP (Progressive="0" Interlace="1") (Not used)
K31	GPIO41	O	EMMA CSI0 DAC8 XCS (8ch Audio DAC CS: Not used)
K32	GPIO34	O	DAC MUTE (Audio DAC Mute "H": Mute "L": Normal)
K33	UA0RXDB	I	UART Ch0 RX
L1	GND	-	Ground for digital and DDR2 SDRAM
L2	D0Q9	I/O	DDR2 Data Input/Output
L3	D0Q12	I/O	DDR2 Data Input/Output
L4	D0Q8	I/O	DDR2 Data Input/Output
L5	D0VDD18	-	1.8V supply (DDR2 SDRAM)
L6	GND	-	Ground for digital and DDR2 SDRAM
L7	D0VDD18	-	1.8V supply (DDR2 SDRAM)
L8	VOID	-	This pin is not ball.
L9	VOID	-	This pin is not ball.
L10	VOID	-	This pin is not ball.
L11	VOID	-	This pin is not ball.
L12	VOID	-	This pin is not ball.
L13	VOID	-	This pin is not ball.
L14	VOID	-	This pin is not ball.
L15	VOID	-	This pin is not ball.
L16	VOID	-	This pin is not ball.
L17	VOID	-	This pin is not ball.
L18	VOID	-	This pin is not ball.
L19	VOID	-	This pin is not ball.
L20	VOID	-	This pin is not ball.
L21	VOID	-	This pin is not ball.
L22	VOID	-	This pin is not ball.
L23	VOID	-	This pin is not ball.
L24	VOID	-	This pin is not ball.
L25	VOID	-	This pin is not ball.
L26	VOID	-	This pin is not ball.
L27	SCL1	I/O	I2C Ch1 Serial Clock (Not used)
L28	SCL0	I/O	I2C Ch0 Serial Clock (Not used)
L29	UA0TXDB	O	UART Ch0 TX
L30	GPIO44	I	Not used (Fixed at "L")
L31	GND	-	Ground for digital and DDR2 SDRAM
L32	DVDDYC	-	3.3V supply (DAC digital VDD)
L33	AGNDYC	-	Analog Ground for sub Video DACs
M1	D0CLK0	O	DDR2 Positive Clock
M2	GND	-	Ground for digital and DDR2 SDRAM

Pin No.	Name	I/O	Description
M3	D0Q13	I/O	DDR2 Data Input/Output
M4	D0Q14	I/O	DDR2 Data Input/Output
M5	GND	-	Ground for digital and DDR2 SDRAM
M6	D0VDD18	-	1.8V supply (DDR2 SDRAM)
M7	GND	-	Ground for digital and DDR2 SDRAM
M8	VOID	-	This pin is not ball.
M9	VOID	-	This pin is not ball.
M10	VOID	-	This pin is not ball.
M11	VOID	-	This pin is not ball.
M12	VOID	-	This pin is not ball.
M13	VOID	-	This pin is not ball.
M14	VOID	-	This pin is not ball.
M15	VOID	-	This pin is not ball.
M16	VOID	-	This pin is not ball.
M17	VOID	-	This pin is not ball.
M18	VOID	-	This pin is not ball.
M19	VOID	-	This pin is not ball.
M20	VOID	-	This pin is not ball.
M21	VOID	-	This pin is not ball.
M22	VOID	-	This pin is not ball.
M23	VOID	-	This pin is not ball.
M24	VOID	-	This pin is not ball.
M25	VOID	-	This pin is not ball.
M26	VOID	-	This pin is not ball.
M27	SDA1	I/O	I2C Ch1 Serial Data (Not used)
M28	SDA0	I/O	I2C Ch0 Serial Data (Not used)
M29	GPIO43	O	Not used
M30	GND	-	Ground for digital and DDR2 SDRAM
M31	VAY	O	S-Video Y Signal Output
M32	GND	-	Ground for digital and DDR2 SDRAM
M33	VAC	O	S-Video C Signal Output
N1	D0CLK0B	O	DDR2 Negative Clock
N2	GND	-	Ground for digital and DDR2 SDRAM
N3	D0DM1	I/O	DDR2 Data Mask
N4	D0Q11	I/O	DDR2 Data Input/Output
N5	D0VDD18	-	1.8V supply (DDR2 SDRAM)
N6	GND	-	Ground for digital and DDR2 SDRAM
N7	D0VDD10	-	1.05V supply (DDR2 SDRAM DLL)
N8	VOID	-	This pin is not ball.
N9	VOID	-	This pin is not ball.
N10	VOID	-	This pin is not ball.
N11	VOID	-	This pin is not ball.
N12	VOID	-	This pin is not ball.
N13	PVDD	-	1.05V supply for PLL
N14	PGND	-	Ground for PLL
N15	GND	-	Ground for digital and DDR2 SDRAM
N16	VDD10	-	1.05V supply (core)
N17	GND	-	Ground for digital and DDR2 SDRAM
N18	VDD10	-	1.05V supply (core)
N19	GND	-	Ground for digital and DDR2 SDRAM
N20	PVDD	-	1.05V supply for PLL
N21	PVDD	-	1.05V supply for PLL
N22	VOID	-	This pin is not ball.
N23	VOID	-	This pin is not ball.
N24	VOID	-	This pin is not ball.
N25	VOID	-	This pin is not ball.
N26	VOID	-	This pin is not ball.
N27	AVDDYC	-	Analog 3.3v supply for sub Video DACs
N28	AGNDYC	-	Analog Ground for sub Video DACs
N29	VACOMPYC	-	Compensation capacitance terminal (It with AVDDYC through 0.1uF)
N30	VAREFYC	-	Voltage Reference Input for DAC (1.32V)

Pin No.	Name	I/O	Description
N31	GND	-	Ground for digital and DDR2 SDRAM
N32	GND	-	Ground for digital and DDR2 SDRAM
N33	GND	-	Ground for digital and DDR2 SDRAM
P1	GND	-	Ground for digital and DDR2 SDRAM
P2	D0Q2	I/O	DDR2 Data Input/Output
P3	D0Q15	I/O	DDR2 Data Input/Output
P4	GND	-	Ground for digital and DDR2 SDRAM
P5	D0VDD18	-	1.8V supply (DDR2 SDRAM)
P6	GND	-	Ground for digital and DDR2 SDRAM
P7	D0VDD10	-	1.05V supply (DDR2 SDRAM DLL)
P8	VOID	-	This pin is not ball.
P9	VOID	-	This pin is not ball.
P10	VOID	-	This pin is not ball.
P11	VOID	-	This pin is not ball.
P12	VOID	-	This pin is not ball.
P13	PVDD	-	1.05V supply for PLL
P14	PGND	-	Ground for PLL
P15	GND	-	Ground for digital and DDR2 SDRAM
P16	GND	-	Ground for digital and DDR2 SDRAM
P17	VDD10	-	1.05V supply (core)
P18	GND	-	Ground for digital and DDR2 SDRAM
P19	GND	-	Ground for digital and DDR2 SDRAM
P20	PGND	-	Ground for PLL
P21	PGND	-	Ground for PLL
P22	VOID	-	This pin is not ball.
P23	VOID	-	This pin is not ball.
P24	VOID	-	This pin is not ball.
P25	VOID	-	This pin is not ball.
P26	VOID	-	This pin is not ball.
P27	AVDDYC	-	Analog 3.3v supply for sub Video DACs
P28	AGNDYC	-	Analog Ground for sub Video DACs
P29	VAR	O	Component Output either R or Pr Signal
P30	GND	-	Ground for digital and DDR2 SDRAM
P31	VAB	O	Component Output either B or Pb Signal
P32	GND	-	Ground for digital and DDR2 SDRAM
P33	VAG	O	Component Output either G or Y Signal
R1	D0DQS0	I/O	DDR2 Positive Data Strobe
R2	GND	-	Ground for digital and DDR2 SDRAM
R3	D0Q1	I/O	DDR2 Data Input/Output
R4	D0Q0	I/O	DDR2 Data Input/Output
R5	D0WEB	O	DDR2 Command Write Enable
R6	D0VDD18	-	1.8V supply (DDR2 SDRAM)
R7	GND	-	Ground for digital and DDR2 SDRAM
R8	VOID	-	This pin is not ball.
R9	VOID	-	This pin is not ball.
R10	VOID	-	This pin is not ball.
R11	VOID	-	This pin is not ball.
R12	VOID	-	This pin is not ball.
R13	GND	-	Ground for digital and DDR2 SDRAM
R14	GND	-	Ground for digital and DDR2 SDRAM
R15	GND	-	Ground for digital and DDR2 SDRAM
R16	VDD10	-	1.05V supply (core)
R17	GND	-	Ground for digital and DDR2 SDRAM
R18	VDD10	-	1.05V supply (core)
R19	GND	-	Ground for digital and DDR2 SDRAM
R20	GND	-	Ground for digital and DDR2 SDRAM
R21	GND	-	Ground for digital and DDR2 SDRAM
R22	VOID	-	This pin is not ball.
R23	VOID	-	This pin is not ball.
R24	VOID	-	This pin is not ball.
R25	VOID	-	This pin is not ball.

Pin No.	Name	I/O	Description
R26	VOID	-	This pin is not ball.
R27	AVDDRGB	-	Analog 3.3v supply for main Video DACs
R28	AGNDRGB	-	Analog Ground for main Video DACs
R29	VARSETYC	-	680-ohm Resister
R30	VAREFRGB	-	Voltage Reference Input for DAC (1.32V)
R31	VARSETRGB	-	470-ohm Resister
R32	HGNDANA	-	Analog Ground for HDMI
R33	HGNDANA	-	Analog Ground for HDMI
T1	D0DQS0B	I/O	DDR2 Negative Data Strobe
T2	GND	-	Ground for digital and DDR2 SDRAM
T3	D0Q4	I/O	DDR2 Data Input/Output
T4	D0Q3	I/O	DDR2 Data Input/Output
T5	D0CKERSTB	I	DDR2 Clock Enable External Control 1.8V or 0.0V
T6	GND	-	Ground for digital and DDR2 SDRAM
T7	D0VREF	I	DDR2 Reference Voltage
T8	VOID	-	This pin is not ball.
T9	VOID	-	This pin is not ball.
T10	VOID	-	This pin is not ball.
T11	VOID	-	This pin is not ball.
T12	VOID	-	This pin is not ball.
T13	VDD10	-	1.05V supply (core)
T14	GND	-	Ground for digital and DDR2 SDRAM
T15	VDD10	-	1.05V supply (core)
T16	GND	-	Ground for digital and DDR2 SDRAM
T17	VDD10	-	1.05V supply (core)
T18	GND	-	Ground for digital and DDR2 SDRAM
T19	VDD10	-	1.05V supply (core)
T20	GND	-	Ground for digital and DDR2 SDRAM
T21	VDD10	-	1.05V supply (core)
T22	VOID	-	This pin is not ball.
T23	VOID	-	This pin is not ball.
T24	VOID	-	This pin is not ball.
T25	VOID	-	This pin is not ball.
T26	VOID	-	This pin is not ball.
T27	AVDDRGB	-	Analog 3.3v supply for main Video DACs
T28	AGNDRGB	-	Analog Ground for main Video DACs
T29	VACOMPRGB	-	Compensation capacitance terminal (It with AVDDYC through 0.1uF)
T30	DVDDRGB	-	3.3V supply (DAC digital VDD)
T31	HGNDANA	-	Analog Ground for HDMI
T32	HTXN2	O	TMDS Data output 2-
T33	HTXP2	O	TMDS Data output 2+
U1	GND	-	Ground for digital and DDR2 SDRAM
U2	D0DM0	I/O	DDR2 Data Mask
U3	D0Q5	I/O	DDR2 Data Input/Output
U4	D0Q6	I/O	DDR2 Data Input/Output
U5	D0BA0	O	DDR2 Bank Address
U6	D0ADD10	O	DDR2 Address Output
U7	GND	-	Ground for digital and DDR2 SDRAM
U8	VOID	-	This pin is not ball.
U9	VOID	-	This pin is not ball.
U10	VOID	-	This pin is not ball.
U11	VOID	-	This pin is not ball.
U12	VOID	-	This pin is not ball.
U13	GND	-	Ground for digital and DDR2 SDRAM
U14	VDD10	-	1.05V supply (core)
U15	GND	-	Ground for digital and DDR2 SDRAM
U16	VDD10	-	1.05V supply (core)
U17	GND	-	Ground for digital and DDR2 SDRAM
U18	VDD10	-	1.05V supply (core)
U19	GND	-	Ground for digital and DDR2 SDRAM
U20	VDD10	-	1.05V supply (core)

Pin No.	Name	I/O	Description
U21	GND	-	Ground for digital and DDR2 SDRAM
U22	VOID	-	This pin is not ball.
U23	VOID	-	This pin is not ball.
U24	VOID	-	This pin is not ball.
U25	VOID	-	This pin is not ball.
U26	VOID	-	This pin is not ball.
U27	VDD10	-	1.05V supply (core)
U28	GND	-	Ground for digital and DDR2 SDRAM
U29	VDD3	-	3.3V supply (I/O buffers)
U30	VDD3	-	3.3V supply (I/O buffers)
U31	HGNDANA	-	Analog Ground for HDMI
U32	HVDDANA	-	1.0V Supply (HDMI analog VDD)
U33	HVDDANA	-	1.0V Supply (HDMI analog VDD)
V1	D0Q7	I/O	DDR2 Data Input/Output
V2	D0BA1	O	DDR2 Bank Address
V3	D0ADD3	O	DDR2 Address Output
V4	GND	-	Ground for digital and DDR2 SDRAM
V5	D0CKE	O	DDR2 Clock Enable
V6	D0ADD7	O	DDR2 Address Output
V7	D0ADD9	O	DDR2 Address Output
V8	VOID	-	This pin is not ball.
V9	VOID	-	This pin is not ball.
V10	VOID	-	This pin is not ball.
V11	VOID	-	This pin is not ball.
V12	VOID	-	This pin is not ball.
V13	VDD10	-	1.05V supply (core)
V14	GND	-	Ground for digital and DDR2 SDRAM
V15	VDD10	-	1.05V supply (core)
V16	GND	-	Ground for digital and DDR2 SDRAM
V17	VDD10	-	1.05V supply (core)
V18	GND	-	Ground for digital and DDR2 SDRAM
V19	VDD10	-	1.05V supply (core)
V20	GND	-	Ground for digital and DDR2 SDRAM
V21	GND	-	Ground for digital and DDR2 SDRAM
V22	VOID	-	This pin is not ball.
V23	VOID	-	This pin is not ball.
V24	VOID	-	This pin is not ball.
V25	VOID	-	This pin is not ball.
V26	VOID	-	This pin is not ball.
V27	HVDDANA	-	1.0V Supply (HDMI analog VDD)
V28	HVDDANA	-	1.0V Supply (HDMI analog VDD)
V29	HVDDANA	-	1.0V Supply (HDMI analog VDD)
V30	HGNDANA	-	Analog Ground for HDMI
V31	HEXTSWING	I	Resistance Connection Terminal for Output Amplitude Control
V32	HTXN1	O	TMDS Data output 1-
V33	HTXP1	O	TMDS Data output 1+
W1	D0ADD1	O	DDR2 Address Output
W2	D0VDD18	-	1.8V supply (DDR2 SDRAM)
W3	GND	-	Ground for digital and DDR2 SDRAM
W4	D0ADD12	O	DDR2 Address Output
W5	D0ADD13	O	DDR2 Address Output
W6	D0ADD11	O	DDR2 Address Output
W7	D0ADD14	O	DDR2 Address Output
W8	VOID	-	This pin is not ball.
W9	VOID	-	This pin is not ball.
W10	VOID	-	This pin is not ball.
W11	VOID	-	This pin is not ball.
W12	VOID	-	This pin is not ball.
W13	GND	-	Ground for digital and DDR2 SDRAM
W14	GND	-	Ground for digital and DDR2 SDRAM
W15	GND	-	Ground for digital and DDR2 SDRAM

Pin No.	Name	I/O	Description
W16	VDD10	-	1.05V supply (core)
W17	GND	-	Ground for digital and DDR2 SDRAM
W18	VDD10	-	1.05V supply (core)
W19	GND	-	Ground for digital and DDR2 SDRAM
W20	PGND	-	Ground for PLL
W21	PVDD	-	1.05V supply for PLL
W22	VOID	-	This pin is not ball.
W23	VOID	-	This pin is not ball.
W24	VOID	-	This pin is not ball.
W25	VOID	-	This pin is not ball.
W26	VOID	-	This pin is not ball.
W27	HGNDANA	-	Analog Ground for HDMI
W28	HGNDANA	-	Analog Ground for HDMI
W29	HGNDANA	-	Analog Ground for HDMI
W30	HGNDANA	-	Analog Ground for HDMI
W31	HDSCL	I/O	DDC Clock
W32	HGNDANA	-	Analog Ground for HDMI
W33	HGNDANA	-	Analog Ground for HDMI
Y1	D0VDD18	-	1.8V supply (DDR2 SDRAM)
Y2	D0ADD5	O	DDR2 Address Output
Y3	D0ADD6	O	DDR2 Address Output
Y4	D0ADD2	O	DDR2 Address Output
Y5	D0ADD4	O	DDR2 Address Output
Y6	D0CASB	O	DDR2 Column Address Strobe Signal
Y7	D0ADD0	O	DDR2 Address Output
Y8	VOID	-	This pin is not ball.
Y9	VOID	-	This pin is not ball.
Y10	VOID	-	This pin is not ball.
Y11	VOID	-	This pin is not ball.
Y12	VOID	-	This pin is not ball.
Y13	PGND	-	Ground for PLL
Y14	PGND	-	Ground for PLL
Y15	GND	-	Ground for digital and DDR2 SDRAM
Y16	GND	-	Ground for digital and DDR2 SDRAM
Y17	VDD10	-	1.05V supply (core)
Y18	GND	-	Ground for digital and DDR2 SDRAM
Y19	GND	-	Ground for digital and DDR2 SDRAM
Y20	PGND	-	Ground for PLL
Y21	PVDD	-	1.05V supply for PLL
Y22	VOID	-	This pin is not ball.
Y23	VOID	-	This pin is not ball.
Y24	VOID	-	This pin is not ball.
Y25	VOID	-	This pin is not ball.
Y26	VOID	-	This pin is not ball.
Y27	GND	-	Ground for digital and DDR2 SDRAM
Y28	ETMDC	O	Ether Management Clock Output
Y29	ETMDIO	I/O	Ether Management Data Input/Output
Y30	ETREFCLK	I	Ether Reference Clock Input
Y31	HDSDA	I/O	DDC Data
Y32	HTXN0	O	TMDS Data output 0-
Y33	HTXP0	O	TMDS Data output 0+
AA1	D0ADD8	O	DDR2 Address Output
AA2	D0CS0B	O	DDR2 Chip Select
AA3	D0VDD18	-	1.8V supply (DDR2 SDRAM)
AA4	D0RASB	O	DDR2 Raw Address Strobe Signal
AA5	GND	-	Ground for digital and DDR2 SDRAM
AA6	D0CS1B	O	DDR2 Chip Select/Bank Address
AA7	GND	-	Ground for digital and DDR2 SDRAM
AA8	VOID	-	This pin is not ball.
AA9	VOID	-	This pin is not ball.
AA10	VOID	-	This pin is not ball.

Pin No.	Name	I/O	Description
AA11	VOID	-	This pin is not ball.
AA12	VOID	-	This pin is not ball.
AA13	PVDD	-	1.05V supply for PLL
AA14	PVDD	-	1.05V supply for PLL
AA15	GND	-	Ground for digital and DDR2 SDRAM
AA16	VDD10	-	1.05V supply (core)
AA17	GND	-	Ground for digital and DDR2 SDRAM
AA18	VDD10	-	1.05V supply (core)
AA19	GND	-	Ground for digital and DDR2 SDRAM
AA20	PGND	-	Ground for PLL
AA21	PVDD	-	1.05V supply for PLL
AA22	VOID	-	This pin is not ball.
AA23	VOID	-	This pin is not ball.
AA24	VOID	-	This pin is not ball.
AA25	VOID	-	This pin is not ball.
AA26	VOID	-	This pin is not ball.
AA27	ETRXER	I	Ether RX Error Detection
AA28	ETRXD0	I	Ether RX Data Input
AA29	ETRXD1	I	Ether RX Data Input
AA30	ETCRS	I	Ether RX Data Enable
AA31	HHPD	I	Hot Plug Detect
AA32	HVDDANA	-	1.0V Supply (HDMI analog VDD)
AA33	HVDDANA	-	1.0V Supply (HDMI analog VDD)
AB1	D0ODT0	O	DDR2 On Die terminal control
AB2	GND	-	Ground for digital and DDR2 SDRAM
AB3	D0ADD15	O	DDR2 Address Output
AB4	D0Q22	I/O	DDR2 Data Input/Output
AB5	D0ODT1	O	DDR2 On Die terminal control
AB6	D0VDD18	-	1.8V supply (DDR2 SDRAM)
AB7	D0VDD18	-	1.8V supply (DDR2 SDRAM)
AB8	VOID	-	This pin is not ball.
AB9	VOID	-	This pin is not ball.
AB10	VOID	-	This pin is not ball.
AB11	VOID	-	This pin is not ball.
AB12	VOID	-	This pin is not ball.
AB13	VOID	-	This pin is not ball.
AB14	VOID	-	This pin is not ball.
AB15	VOID	-	This pin is not ball.
AB16	VOID	-	This pin is not ball.
AB17	VOID	-	This pin is not ball.
AB18	VOID	-	This pin is not ball.
AB19	VOID	-	This pin is not ball.
AB20	VOID	-	This pin is not ball.
AB21	VOID	-	This pin is not ball.
AB22	VOID	-	This pin is not ball.
AB23	VOID	-	This pin is not ball.
AB24	VOID	-	This pin is not ball.
AB25	VOID	-	This pin is not ball.
AB26	VOID	-	This pin is not ball.
AB27	GND	-	Ground for digital and DDR2 SDRAM
AB28	ETTXD1	O	Ether TX Data Output
AB29	ETTXD0	O	Ether TX Data Output
AB30	ETTXEN	O	Ether TX Data Enable
AB31	HGNDANA	-	Analog Ground for HDMI
AB32	HTXCN	O	TMDS Clock output 0-
AB33	HTXCP	O	TMDS Clock output 0+
AC1	GND	-	Ground for digital and DDR2 SDRAM
AC2	D0Q23	I/O	DDR2 Data Input/Output
AC3	D0Q21	I/O	DDR2 Data Input/Output
AC4	D0Q20	I/O	DDR2 Data Input/Output
AC5	GND	-	Ground for digital and DDR2 SDRAM

Pin No.	Name	I/O	Description
AC6	D0VDD18	-	1.8V supply (DDR2 SDRAM)
AC7	GND	-	Ground for digital and DDR2 SDRAM
AC8	VOID	-	This pin is not ball.
AC9	VOID	-	This pin is not ball.
AC10	VOID	-	This pin is not ball.
AC11	VOID	-	This pin is not ball.
AC12	VOID	-	This pin is not ball.
AC13	VOID	-	This pin is not ball.
AC14	VOID	-	This pin is not ball.
AC15	VOID	-	This pin is not ball.
AC16	VOID	-	This pin is not ball.
AC17	VOID	-	This pin is not ball.
AC18	VOID	-	This pin is not ball.
AC19	VOID	-	This pin is not ball.
AC20	VOID	-	This pin is not ball.
AC21	VOID	-	This pin is not ball.
AC22	VOID	-	This pin is not ball.
AC23	VOID	-	This pin is not ball.
AC24	VOID	-	This pin is not ball.
AC25	VOID	-	This pin is not ball.
AC26	VOID	-	This pin is not ball.
AC27	VDD3	-	3.3V supply (I/O buffers)
AC28	GND	-	Ground for digital and DDR2 SDRAM
AC29	GND	-	Ground for digital and DDR2 SDRAM
AC30	GND	-	Ground for digital and DDR2 SDRAM
AC31	HGNDANA	-	Analog Ground for HDMI
AC32	HGNDANA	-	Analog Ground for HDMI
AC33	HGNDANA	-	Analog Ground for HDMI
AD1	D0DQS2	I/O	DDR2 Positive Data Strobe
AD2	GND	-	Ground for digital and DDR2 SDRAM
AD3	D0DM2	I/O	DDR2 Data Mask
AD4	D0Q17	I/O	DDR2 Data Input/Output
AD5	D0VDD18	-	1.8V supply (DDR2 SDRAM)
AD6	GND	-	Ground for digital and DDR2 SDRAM
AD7	D0VDD10	-	1.05V supply (DDR2 SDRAM DLL)
AD8	VOID	-	This pin is not ball.
AD9	VOID	-	This pin is not ball.
AD10	VOID	-	This pin is not ball.
AD11	VOID	-	This pin is not ball.
AD12	VOID	-	This pin is not ball.
AD13	VOID	-	This pin is not ball.
AD14	VOID	-	This pin is not ball.
AD15	VOID	-	This pin is not ball.
AD16	VOID	-	This pin is not ball.
AD17	VOID	-	This pin is not ball.
AD18	VOID	-	This pin is not ball.
AD19	VOID	-	This pin is not ball.
AD20	VOID	-	This pin is not ball.
AD21	VOID	-	This pin is not ball.
AD22	VOID	-	This pin is not ball.
AD23	VOID	-	This pin is not ball.
AD24	VOID	-	This pin is not ball.
AD25	VOID	-	This pin is not ball.
AD26	VOID	-	This pin is not ball.
AD27	VDD3	-	3.3V supply (I/O buffers)
AD28	GND	-	Ground for digital and DDR2 SDRAM
AD29	RDATA11/GDATA11	I/O	Data bus for external memory and peripheral
AD30	RDATA12/GDATA12	I/O	Data bus for external memory and peripheral
AD31	RDATA13/GDATA13	I/O	Data bus for external memory and peripheral
AD32	RDATA14/GDATA14	I/O	Data bus for external memory and peripheral
AD33	RDATA15/GDATA15	I/O	Data bus for external memory and peripheral

Pin No.	Name	I/O	Description
AE1	D0DQS2B	-	DDR2 Negative Data Strobe
AE2	GND	-	Ground for digital and DDR2 SDRAM
AE3	D0VDD18	-	1.8V supply (DDR2 SDRAM)
AE4	D0Q16	I/O	DDR2 Data Input/Output
AE5	D0VDD18	-	1.8V supply (DDR2 SDRAM)
AE6	GND	-	Ground for digital and DDR2 SDRAM
AE7	D0VDD10	-	1.05V supply (DDR2 SDRAM DLL)
AE8	VOID	-	This pin is not ball.
AE9	VOID	-	This pin is not ball.
AE10	VOID	-	This pin is not ball.
AE11	VOID	-	This pin is not ball.
AE12	VOID	-	This pin is not ball.
AE13	VOID	-	This pin is not ball.
AE14	VOID	-	This pin is not ball.
AE15	VOID	-	This pin is not ball.
AE16	VOID	-	This pin is not ball.
AE17	VOID	-	This pin is not ball.
AE18	VOID	-	This pin is not ball.
AE19	VOID	-	This pin is not ball.
AE20	VOID	-	This pin is not ball.
AE21	VOID	-	This pin is not ball.
AE22	VOID	-	This pin is not ball.
AE23	VOID	-	This pin is not ball.
AE24	VOID	-	This pin is not ball.
AE25	VOID	-	This pin is not ball.
AE26	VOID	-	This pin is not ball.
AE27	VDD10	-	1.05V supply (core)
AE28	GND	-	Ground for digital and DDR2 SDRAM
AE29	RDATA6/GDATA6	I/O	Data bus for external memory and peripheral
AE30	RDATA7/GDATA7	I/O	Data bus for external memory and peripheral
AE31	RDATA8/GDATA8	I/O	Data bus for external memory and peripheral
AE32	RDATA9/GDATA9	I/O	Data bus for external memory and peripheral
AE33	RDATA10/GDATA10	I/O	Data bus for external memory and peripheral
AF1	GND	-	Ground for digital and DDR2 SDRAM
AF2	D0Q19	I/O	DDR2 Data Input/Output
AF3	D0Q18	I/O	DDR2 Data Input/Output
AF4	D0Q29	I/O	DDR2 Data Input/Output
AF5	GND	-	Ground for digital and DDR2 SDRAM
AF6	D0VDD18	-	1.8V supply (DDR2 SDRAM)
AF7	GND	-	Ground for digital and DDR2 SDRAM
AF8	VOID	-	This pin is not ball.
AF9	VOID	-	This pin is not ball.
AF10	VOID	-	This pin is not ball.
AF11	VOID	-	This pin is not ball.
AF12	VOID	-	This pin is not ball.
AF13	VOID	-	This pin is not ball.
AF14	VOID	-	This pin is not ball.
AF15	VOID	-	This pin is not ball.
AF16	VOID	-	This pin is not ball.
AF17	VOID	-	This pin is not ball.
AF18	VOID	-	This pin is not ball.
AF19	VOID	-	This pin is not ball.
AF20	VOID	-	This pin is not ball.
AF21	VOID	-	This pin is not ball.
AF22	VOID	-	This pin is not ball.
AF23	VOID	-	This pin is not ball.
AF24	VOID	-	This pin is not ball.
AF25	VOID	-	This pin is not ball.
AF26	VOID	-	This pin is not ball.
AF27	VDD10	-	1.05V supply (core)
AF28	VDD3	-	3.3V supply (I/O buffers)

Pin No.	Name	I/O	Description
AF29	RDATA1/GDATA1	I/O	Data bus for external memory and peripheral
AF30	RDATA2/GDATA2	I/O	Data bus for external memory and peripheral
AF31	RDATA3/GDATA3	I/O	Data bus for external memory and peripheral
AF32	RDATA4/GDATA4	I/O	Data bus for external memory and peripheral
AF33	RDATA5/GDATA5	I/O	Data bus for external memory and peripheral
AG1	D0CLK1	O	DDR2 Positive Clock
AG2	GND	-	Ground for digital and DDR2 SDRAM
AG3	D0Q31	I/O	DDR2 Data Input/Output
AG4	GND	-	Ground for digital and DDR2 SDRAM
AG5	D0Q28	I/O	DDR2 Data Input/Output
AG6	GND	-	Ground for digital and DDR2 SDRAM
AG7	VDD3	-	3.3V supply (I/O buffers)
AG8	GND	-	Ground for digital and DDR2 SDRAM
AG9	D1VDD10	-	1.05V supply (DDR2 SDRAM DLL)
AG10	D1VDD10	-	1.05V supply (DDR2 SDRAM DLL)
AG11	GND	-	Ground for digital and DDR2 SDRAM
AG12	D1VDD18	-	1.8V supply (DDR2 SDRAM)
AG13	GND	-	Ground for digital and DDR2 SDRAM
AG14	D1ADD0	O	DDR2 Address Output
AG15	D1ADD14	O	DDR2 Address Output
AG16	D1ADD9	O	DDR2 Address Output
AG17	GND	-	Ground for digital and DDR2 SDRAM
AG18	D1VREF	I	DDR2 Reference Voltage
AG19	GND	-	Ground for digital and DDR2 SDRAM
AG20	D1VDD10	-	1.05V supply (DDR2 SDRAM DLL)
AG21	D1VDD10	-	1.05V supply (DDR2 SDRAM DLL)
AG22	GND	-	Ground for digital and DDR2 SDRAM
AG23	D1VDD18	-	1.8V supply (DDR2 SDRAM)
AG24	GND	-	Ground for digital and DDR2 SDRAM
AG25	VDD3	-	3.3V supply (I/O buffers)
AG26	VDD3	-	3.3V supply (I/O buffers)
AG27	VDD10	-	1.05V supply (core)
AG28	VDD3	-	3.3V supply (I/O buffers)
AG29	RDATA0/GDATA0	I/O	Data bus for external memory and peripheral
AG30	GND	-	Ground for digital and DDR2 SDRAM
AG31	VDD3	-	3.3V supply (I/O buffers)
AG32	GND	-	Ground for digital and DDR2 SDRAM
AG33	VDD3	-	3.3V supply (I/O buffers)
AH1	D0CLK1B	O	DDR2 Negative Clock
AH2	GND	-	Ground for digital and DDR2 SDRAM
AH3	D1VDD18	-	1.8V supply (DDR2 SDRAM)
AH4	D0Q30	I/O	DDR2 Data Input/Output
AH5	D0Q26	I/O	DDR2 Data Input/Output
AH6	GND	-	Ground for digital and DDR2 SDRAM
AH7	GND	-	Ground for digital and DDR2 SDRAM
AH8	D1VDD18	-	1.8V supply (DDR2 SDRAM)
AH9	GND	-	Ground for digital and DDR2 SDRAM
AH10	GND	-	Ground for digital and DDR2 SDRAM
AH11	D1VDD18	-	1.8V supply (DDR2 SDRAM)
AH12	GND	-	Ground for digital and DDR2 SDRAM
AH13	D1CS1B	O	DDR2 Chip Select/Bank Address
AH14	D1CASB	O	DDR2 Column Address Strobe Signal
AH15	D1ADD11	O	DDR2 Address Output
AH16	D1ADD7	O	DDR2 Address Output
AH17	D1ADD10	O	DDR2 Address Output
AH18	GND	-	Ground for digital and DDR2 SDRAM
AH19	D1VDD18	-	1.8V supply (DDR2 SDRAM)
AH20	GND	-	Ground for digital and DDR2 SDRAM
AH21	GND	-	Ground for digital and DDR2 SDRAM
AH22	D1VDD18	-	1.8V supply (DDR2 SDRAM)
AH23	GND	-	Ground for digital and DDR2 SDRAM

Pin No.	Name	I/O	Description
AH24	D1VDD18	-	1.8V supply (DDR2 SDRAM)
AH25	GND	-	Ground for digital and DDR2 SDRAM
AH26	GND	-	Ground for digital and DDR2 SDRAM
AH27	GND	-	Ground for digital and DDR2 SDRAM
AH28	GND	-	Ground for digital and DDR2 SDRAM
AH29	GND	-	Ground for digital and DDR2 SDRAM
AH30	RADD22/GADD22	O	Address bus for external memory and peripheral
AH31	RADD23/GADD23	O	Address bus for external memory and peripheral
AH32	RADD24/GADD24	O	Address bus for external memory and peripheral
AH33	RADD25/GADD25	O	Address bus for external memory and peripheral
AJ1	GND	-	Ground for digital and DDR2 SDRAM
AJ2	D0DM3	I/O	DDR2 Data Mask
AJ3	D0Q27	I/O	DDR2 Data Input/Output
AJ4	D0Q25	I/O	DDR2 Data Input/Output
AJ5	GND	-	Ground for digital and DDR2 SDRAM
AJ6	D1Q26	I/O	DDR2 Data Input/Output
AJ7	D1Q28	I/O	DDR2 Data Input/Output
AJ8	GND	-	Ground for digital and DDR2 SDRAM
AJ9	D1VDD18	-	1.8V supply (DDR2 SDRAM)
AJ10	D1VDD18	-	1.8V supply (DDR2 SDRAM)
AJ11	D1RQ0	O	DDR2 Pull down (150 ohm) to DDR2 SDRAM GND
AJ12	D1ODT1	O	DDR2 On Die terminal control
AJ13	D1RQ1	O	DDR2 Pull up (150 ohm) to DDR2 SDRAM power supply
AJ14	D1ADD4	O	DDR2 Address Output
AJ15	D1ADD13	O	DDR2 Address Output
AJ16	D1CKE	O	DDR2 Clock Enable
AJ17	D1BA0	O	DDR2 Bank Address
AJ18	D1CKERSTB	I	DDR2 Clock Enable External Control 1.8V or 0.0V
AJ19	D1WEB	O	DDR2 Command Write Enable
AJ20	D1VDD18	-	1.8V supply (DDR2 SDRAM)
AJ21	D1VDD18	-	1.8V supply (DDR2 SDRAM)
AJ22	GND	-	Ground for digital and DDR2 SDRAM
AJ23	D1VDD18	-	1.8V supply (DDR2 SDRAM)
AJ24	GND	-	Ground for digital and DDR2 SDRAM
AJ25	FCSB0	O	Chip select for NOR Flash ROM
AJ26	FCSB2	O	Chip select for NOR Flash ROM
AJ27	FCSB3	O	Chip select for NOR Flash ROM
AJ28	GND	-	Ground for digital and DDR2 SDRAM
AJ29	RADD17/GADD17	O	Address bus for external memory and peripheral
AJ30	RADD18/GADD18	O	Address bus for external memory and peripheral
AJ31	RADD19/GADD19	O	Address bus for external memory and peripheral
AJ32	RADD20/GADD20	O	Address bus for external memory and peripheral
AJ33	RADD21/GADD21	O	Address bus for external memory and peripheral
AK1	D0DQS3	I/O	DDR2 Positive Data Strobe
AK2	GND	-	Ground for digital and DDR2 SDRAM
AK3	D0Q24	I/O	DDR2 Data Input/Output
AK4	GND	-	Ground for digital and DDR2 SDRAM
AK5	D1Q25	I/O	DDR2 Data Input/Output
AK6	D1Q30	I/O	DDR2 Data Input/Output
AK7	GND	-	Ground for digital and DDR2 SDRAM
AK8	D1Q29	I/O	DDR2 Data Input/Output
AK9	D1Q16	I/O	DDR2 Data Input/Output
AK10	D1Q17	I/O	DDR2 Data Input/Output
AK11	D1Q20	I/O	DDR2 Data Input/Output
AK12	D1Q22	I/O	DDR2 Data Input/Output
AK13	D1RASB	O	Raw Address Strobe Signal
AK14	D1ADD2	O	DDR2 Address Output
AK15	D1ADD12	O	DDR2 Address Output
AK16	GND	-	Ground for digital and DDR2 SDRAM
AK17	D1Q6	I/O	DDR2 Data Input/Output
AK18	D1Q3	I/O	DDR2 Data Input/Output

Pin No.	Name	I/O	Description
AK19	D1Q0	I/O	DDR2 Data Input/Output
AK20	GND	-	Ground for digital and DDR2 SDRAM
AK21	D1Q11	I/O	DDR2 Data Input/Output
AK22	D1Q14	I/O	DDR2 Data Input/Output
AK23	GND	-	Ground for digital and DDR2 SDRAM
AK24	D1Q8	I/O	DDR2 Data Input/Output
AK25	GCSB1	O	Chip select for external device
AK26	FOEB	O	Output enable for NOR Flash ROM
AK27	FCSB1	O	Chip select for NOR Flash ROM
AK28	FWEB	O	Write enable for NOR Flash ROM
AK29	RADD12/GADD12	O	Address bus for external memory and peripheral
AK30	RADD13/GADD13	O	Address bus for external memory and peripheral
AK31	RADD14/GADD14	O	Address bus for external memory and peripheral
AK32	RADD15/GADD15	O	Address bus for external memory and peripheral
AK33	RADD16/GADD16	O	Address bus for external memory and peripheral
AL1	D0DQS3B	I/O	DDR2 Negative Data Strobe
AL2	GND	-	Ground for digital and DDR2 SDRAM
AL3	GND	-	Ground for digital and DDR2 SDRAM
AL4	D1Q24	I/O	DDR2 Data Input/Output
AL5	D1Q27	I/O	DDR2 Data Input/Output
AL6	D1VDD18	-	1.8V supply (DDR2 SDRAM)
AL7	D1Q31	I/O	DDR2 Data Input/Output
AL8	D1Q18	I/O	DDR2 Data Input/Output
AL9	D1VDD18	-	1.8V supply (DDR2 SDRAM)
AL10	D1DM2	I/O	DDR2 Data Mask
AL11	D1Q21	I/O	DDR2 Data Input/Output
AL12	D1ADD15	O	DDR2 Address Output
AL13	D1VDD18	-	1.8V supply (DDR2 SDRAM)
AL14	D1ADD6	O	DDR2 Address Output
AL15	GND	-	Ground for digital and DDR2 SDRAM
AL16	D1ADD3	O	DDR2 Address Output
AL17	D1Q5	I/O	DDR2 Data Input/Output
AL18	D1Q4	I/O	DDR2 Data Input/Output
AL19	D1Q1	I/O	DDR2 Data Input/Output
AL20	D1Q15	I/O	DDR2 Data Input/Output
AL21	D1DM1	I/O	DDR2 Data Mask
AL22	D1Q13	I/O	DDR2 Data Input/Output
AL23	D1Q12	I/O	DDR2 Data Input/Output
AL24	D1Q10	I/O	DDR2 Data Input/Output
AL25	D1VDD18	-	1.8V supply (DDR2 SDRAM)
AL26	NALE	O	Address latch enable for NAND Flash ROM
AL27	NCLE	O	Command latch enable for NAND Flash ROM
AL28	GRDYB	I	Ready for external device
AL29	RADD7/GADD7	O	Address bus for external memory and peripheral
AL30	RADD8/GADD8	O	Address bus for external memory and peripheral
AL31	RADD9/GADD9	O	Address bus for external memory and peripheral
AL32	RADD10/GADD10	O	Address bus for external memory and peripheral
AL33	RADD11/GADD11	O	Address bus for external memory and peripheral
AM1	VOID	-	This pin is not ball.
AM2	GND	-	Ground for digital and DDR2 SDRAM
AM3	GND	-	Ground for digital and DDR2 SDRAM
AM4	GND	-	Ground for digital and DDR2 SDRAM
AM5	D1DM3	I/O	DDR2 Data Mask
AM6	GND	-	Ground for digital and DDR2 SDRAM
AM7	GND	-	Ground for digital and DDR2 SDRAM
AM8	D1Q19	I/O	DDR2 Data Input/Output
AM9	GND	-	Ground for digital and DDR2 SDRAM
AM10	GND	-	Ground for digital and DDR2 SDRAM
AM11	D1Q23	I/O	DDR2 Data Input/Output
AM12	GND	-	Ground for digital and DDR2 SDRAM
AM13	D1CS0B	O	DDR2 Chip Select

Pin No.	Name	I/O	Description
AM14	D1ADD5	O	DDR2 Address Output
AM15	D1VDD18	-	1.8V supply (DDR2 SDRAM)
AM16	D1BA1	O	DDR2 Bank Address
AM17	D1DM0	I/O	DDR2 Data Mask
AM18	GND	-	Ground for digital and DDR2 SDRAM
AM19	GND	-	Ground for digital and DDR2 SDRAM
AM20	D1Q2	I/O	DDR2 Data Input/Output
AM21	GND	-	Ground for digital and DDR2 SDRAM
AM22	GND	-	Ground for digital and DDR2 SDRAM
AM23	D1Q9	I/O	DDR2 Data Input/Output
AM24	GND	-	Ground for digital and DDR2 SDRAM
AM25	GND	-	Ground for digital and DDR2 SDRAM
AM26	NWEB	O	Write enable for NAND Flash ROM
AM27	NRBB	I	Ready/Busy for NAND Flash ROM
AM28	GCSB0	O	Chip select for external device
AM29	RADD3/GADD3	O	Address bus for external memory and peripheral
AM30	RADD4/GADD4	O	Address bus for external memory and peripheral
AM31	RADD5/GADD5	O	Output enable for NAND FLASH ROM
AM32	RADD6/GADD6	O	Address bus for external memory and peripheral
AM33	VOID	-	This pin is not ball.
AN1	VOID	-	This pin is not ball.
AN2	VOID	-	This pin is not ball.
AN3	D1DQS3	I/O	DDR2 Positive Data Strobe
AN4	D1DQS3B	I/O	DDR2 Negative Data Strobe
AN5	GND	-	Ground for digital and DDR2 SDRAM
AN6	D1CLK1	O	DDR2 Positive Clock
AN7	D1CLK1B	O	DDR2 Negative Clock
AN8	GND	-	Ground for digital and DDR2 SDRAM
AN9	D1DQS2	I/O	DDR2 Positive Data Strobe
AN10	D1DQS2B	I/O	DDR2 Negative Data Strobe
AN11	GND	-	Ground for digital and DDR2 SDRAM
AN12	D1ODT0	O	DDR2 On Die terminal control
AN13	D1ADD8	O	DDR2 Address Output
AN14	D1VDD18	-	1.8V supply (DDR2 SDRAM)
AN15	D1ADD1	O	DDR2 Address Output
AN16	D1Q7	I/O	DDR2 Data Input/Output
AN17	GND	-	Ground for digital and DDR2 SDRAM
AN18	D1DQS0	I/O	DDR2 Positive Data Strobe
AN19	D1DQS0B	I/O	DDR2 Negative Data Strobe
AN20	GND	-	Ground for digital and DDR2 SDRAM
AN21	D1CLK0	O	DDR2 Positive Clock
AN22	D1CLK0B	O	DDR2 Negative Clock
AN23	GND	-	Ground for digital and DDR2 SDRAM
AN24	D1DQS1	I/O	DDR2 Positive Data Strobe
AN25	D1DQS1B	I/O	DDR2 Negative Data Strobe
AN26	GND	-	Ground for digital and DDR2 SDRAM
AN27	NFOEB	O	Output enable for NAND FLASH ROM
AN28	VDD3	-	3.3V supply (I/O buffers)
AN29	RADD0/GADD0	O	Address bus for external memory and peripheral
AN30	RADD1/GADD1	O	Address bus for external memory and peripheral
AN31	RADD2/GADD2	O	Address bus for external memory and peripheral
AN32	VOID	-	This pin is not ball.
AN33	VOID	-	This pin is not ball.

Main Functions

■ Launching the service mode
Turn on the AC power from the off state while holding down specific keys (<PLAY> key, <STOP> key and <OPEN/CLOSE> key) on the front panel. Release the keys when “SERVICE” appears on the front display tube. The unit is in the service mode when the service mode screen appears on the monitor. Perform operation using the remote control.

■ ErrorLog/CommandLog display
Displays the error log and command log. Displayed contents can also be saved in an USB memory device.

■ Diag
Performs unit test of devices installed on the board.

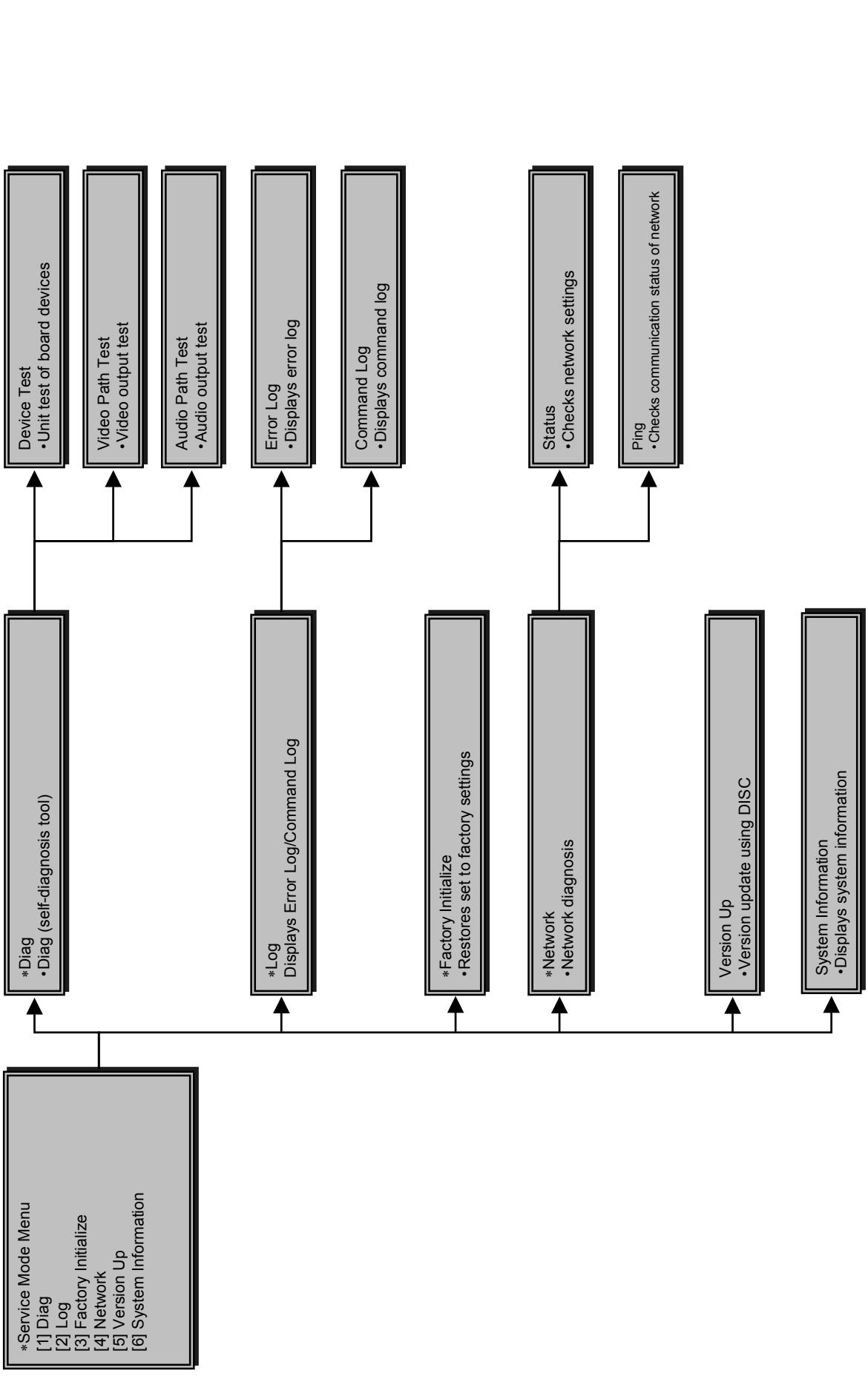
■ Factory Initialize
Restores the set to its factory settings.

■ Network
Checks the network connection.
(1) “Ifconfig” displays the network settings of the set.
Executing this function will run the #ifconfig command and display the result.
(2) “Ping” checks the communication status between the network and terminal of the specified IP address.
Executing this function will run the #ping command and display the result.

■ Version Up (version update)
Performs version update using a disc.

■ System Information
Displays the system information of the set.
Displays information such as the software version, drive information, etc.

Menu Tree


*Service Mode Menu
[1] Diag
[2] Log
[3] Factory Initialize
[4] Network
[5] Version Up
[6] System Information
*Diag
•Diag (self-diagnosis tool)
Device Test
•Unit test of board devices
Video Path Test
•Video output test
Audio Path Test
•Audio output test
*Log
Displays Error Log/Command Log
Error Log
•Displays error log
Command Log
•Displays command log
*Factory Initialize
•Restores set to factory settings
*Network
•Network diagnosis
Status
•Checks network settings
Ping
•Checks communication status of network
Version Up
•Version update using DISC
System Information
•Displays system information

Service Mode Menu (Top Menu)

Description:
This is the top menu of service mode.
Each function is accessed from this screen.

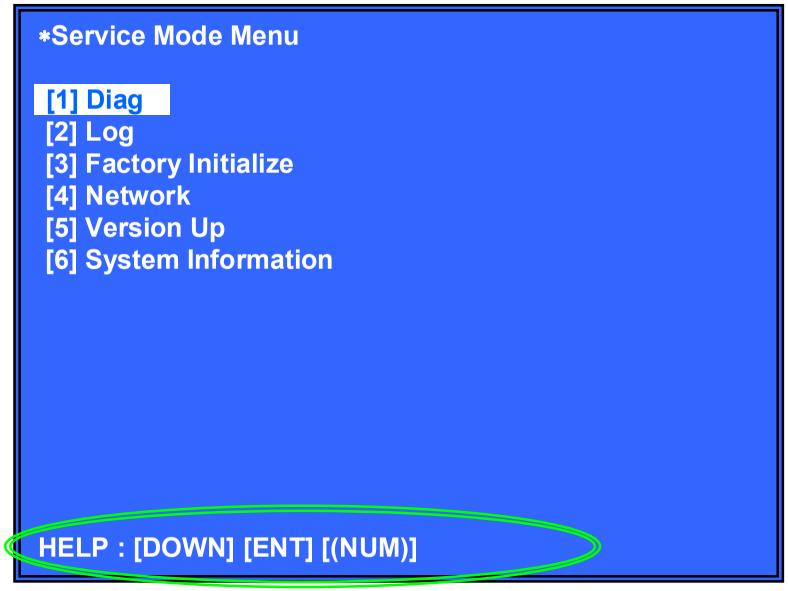
Operation:

[1]	Moves to Diag screen
[2]	Moves to Log (Error Log/Command Log display) screen
[3]	Moves to Factory Initialize (factory settings) screen
[4]	Moves to Network screen
[5]	Moves to Version Up (DISC version update) screen
[6]	Moves to System Information (system information display) screen
[UP] [DOWN]	Moves the cursor
[ENT]	Moves to the screen of the item selected with the cursor

∗ Cursor is not displayed when the menu is first displayed.

Display tube:
Test appears on the respective display tube when operating the cursor or menu keys.
“SERVICE” is selected by default.
Character strings displayed on the display tube:

Diag:	S-DIAG
Log:	S-LOG
Factory Initialize:	S-FINIT
Network:	S-NET
Version Up:	S-VUP
System Information:	S-INFO



HELP (currently available keys, etc.) is displayed

Diag (Device Test)

Description:
This screen is used to test devices mounted on the board.
This screen is also used to perform video and audio tests.

Screen 1: Selects the test category
Operation:

[LEFT] [RIGHT]	Selects the category
[DOWN] [ENT]	Moves to the selected category

Screen 2: Device test
Selects the device to test after selecting Device Test in screen 1.
Operation:

[LEFT] [RIGHT]	Selects the device to test
[ENT]	Executes the test
[UP]	Returns to selection of test category
	Selects the cursor during IFCon and D terminal tests
[DOWN]	Selects the cursor during IFCon and D terminal tests

>List of test categories
Device Test
Video Test
Audio Test

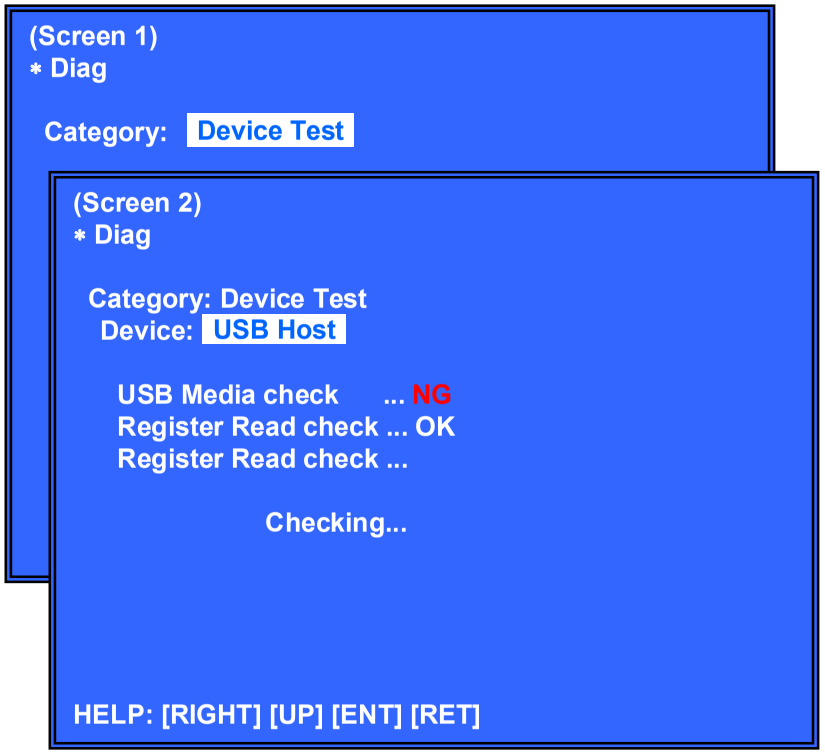
>Device Test: List of devices
USB Host (∗1)
D/A Converter (∗2)

D terminal (∗3)	<- Check using measurement device
Ifcon	<- Check using visual inspection

∗1) Output of various logs can be performed for the first USB host check only. Logs cannot be output for following checks.
∗2) 8 [ch] D/A Converter test is not available for the basic model.
∗3) JP models only

Display tube:

Category selected:	Device Test	: D-DEV
	Video Test	: D-VIDEO
	Audio Test	: D-AUDIO
Device selected:	USB Host	: D-USB
	D/A Converter	: D-DAC
	D Terminal	: D-TERM
USB Host checked:		: USB CHK
	All items OK	: USB OK
	Other than above	: USB NG
D/A Converter checked:		: DAC CHK
	All items OK	: DAC OK
	Other than above	: DAC NG



Log: Error Log/Command Log (Output of each Log)

Description:
This screen displays the contents of each log.

Screen 1: Selects the type of log to display
Operation:

[1]	Moves to the Error Log output screen
[2]	Moves to the Command Log output screen
[UP] [DOWN]	Moves the cursor
[ENT]	Moves to the item selected with the cursor
[RET]	Returns to the top menu of the service mode

Screen 2: Displays the Error Log
Operation:

[LEFT]	Returns to the previous page
[RIGHT]	Moves to the next page
[RET]	Returns to the screen (screen 1) that selects the log type
[RED]	Writes the log contents to an USB memory device

Screen 3: Displays the Command Log
Operation:

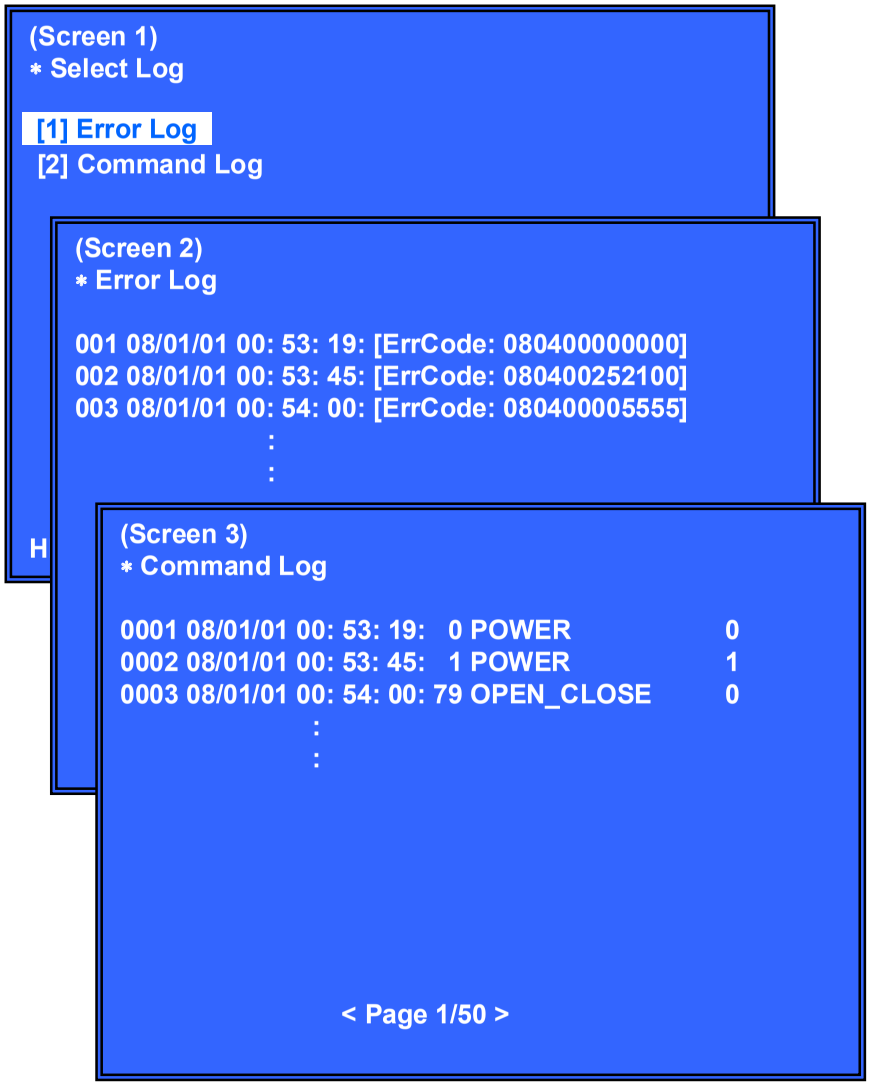
[LEFT]	Returns to the previous page
[RIGHT]	Moves to the next page
[RET]	Returns to the screen (screen 1) that selects the log type
[RED]	Writes the log contents to an USB memory device

Display tube:

Log type selected	Error Log: S-ELOG
	Command Log: S-CLOG
During log display	Page display ex) 1/50

>Viewing the log display
Error Log:
001 08/01/01 00: 53: 19: [ErrCode: 080400000000]
[Number (starting from old log)] [date] [time] [error code]
Command Log:
0001 08/01/01 00: 53: 19: 0 POWER 0
[Number (starting from old log)] [date] [time] [count] [command name]
[Edge 0: on 1: off]

∗About copying log to USB memory device
Press the [RED] button in each log display screen with the USB memory device inserted into the set
Error Log:
When getErrLogFile.trm file exists in the USB memory device,
errlog.log file is output.
Command Log:
When getCmdLogFile.trm file exists in the USB memory device,
cmdlog.log file is output.
∗This function cannot be used when performing USB Host test in the Diag screen.
Writing to an USB memory devices takes a few seconds. Wait sufficiently before removing device.



Diag (Video/Audio Test)

Description:
This screen performs video and audio tests.

Screen 1: When video test category is selected
Operation:

[ENT]	Shows/hides the color bar
[UP] [RET]	Returns to the selection of test category

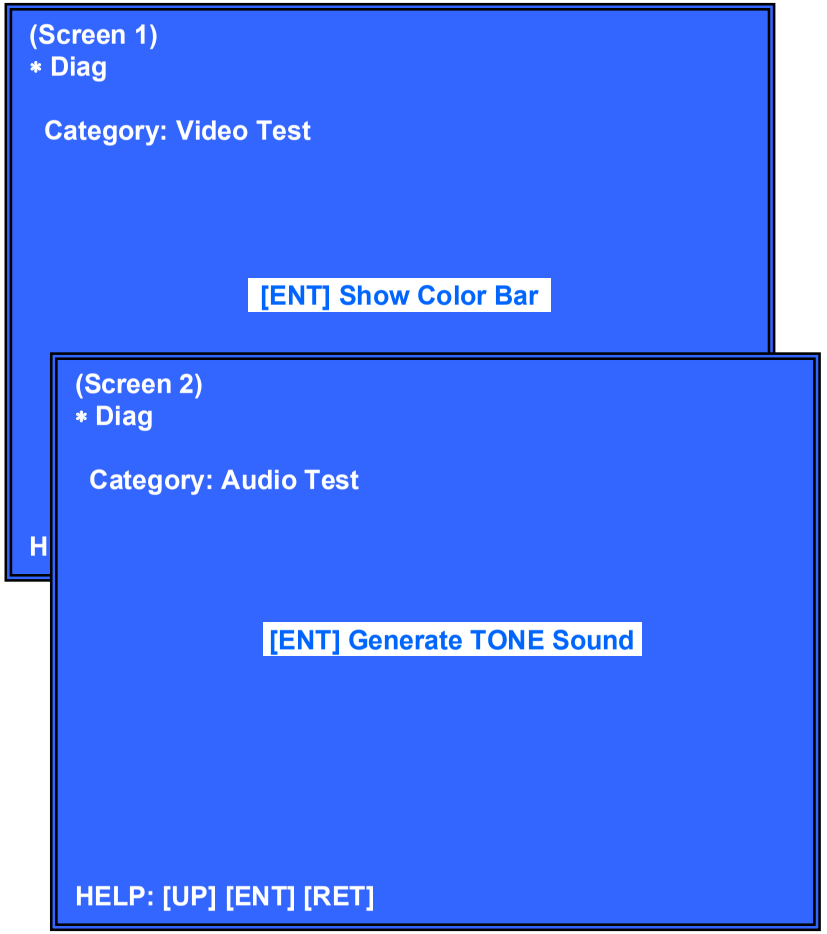
Screen 2: When audio test category is selected
Operation:

[ENT]	Plays back/stops the tone sound
[UP] [RET]	Returns to the selection of test category

>Video test
Outputs a color to all output terminals.
(In the case of HDMI, the device must be connected when launching the function)

>Audio test
Outputs a tone sound to all output terminals.
(In the case of HDMI, the device must be connected when launching the function)

Display tube:
During video test: D-VIDEO
During audio test: D-AUDIO



Factory Initialize (Factory Settings)

Description:
This screen returns the set to the factory settings.
All changes settings will be restored to the factory settings, and all saved titles will be deleted. Note that executing this function does not complete the initialization process. The initialization process is completed by rebooting the set after operation is performed.
Normal rebooting is required for the initialization to take effect. Initialization is not complete when rebooting in special modes such as the service mode.

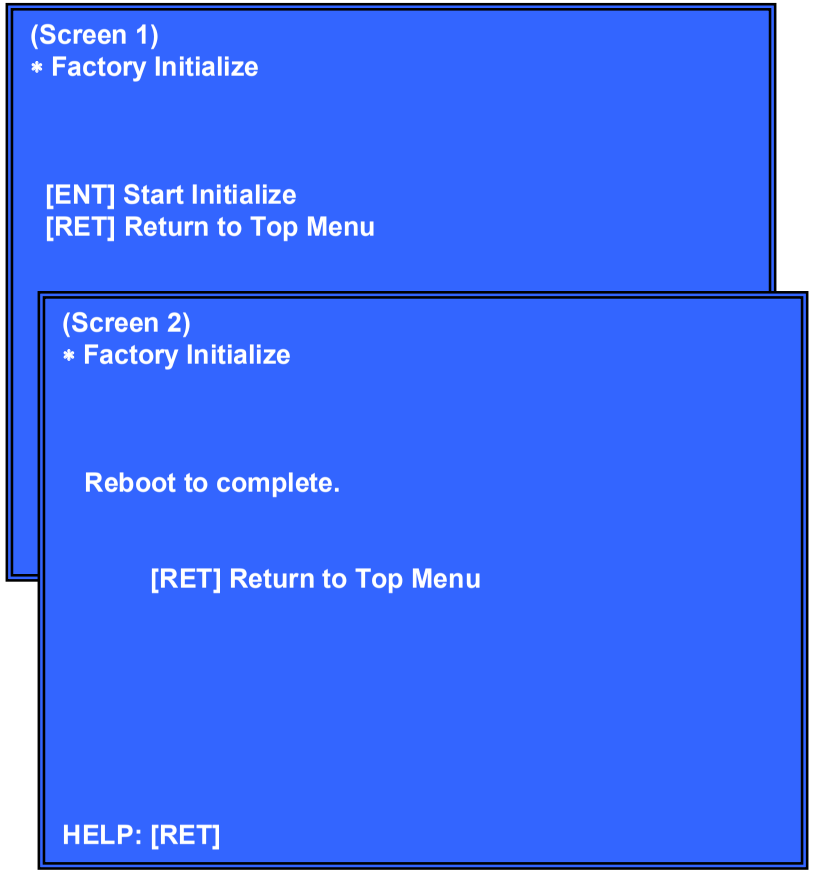
Screen 1
Press [ENT] in this screen when restoring the set to its factory settings.
All saved titles will also be deleted.
Operation:

[ENT]	Initialize the set to its factory settings
[RET]	Return to the top menu of the service mode

Screen 2
This is the screen that is displayed after performing initialization.
The initialization process is completed by rebooting the set.
Remove the AC power cord and insert the AC power cord again.
∗Operations in other service menus can also be performed.

Display tube:

During initialization:	SETTING
When initialization is OK:	INIT-OK (Screen 2)
When initialization is NG:	INIT-NG



Network (Network Test Diagnosis Screen: Ifconfig)

Description:
Network menu
Each network diagnosis function is accessed from this screen.

Screen 1: Ifconfig test
Operation:

[ENT]	Executes the Ifconfig command (displays network settings)
[RIGHT]	Moves to the Ping test
[RTN]	Returns to the top menu of the service mode

Screen 2: Ping test
Screen:

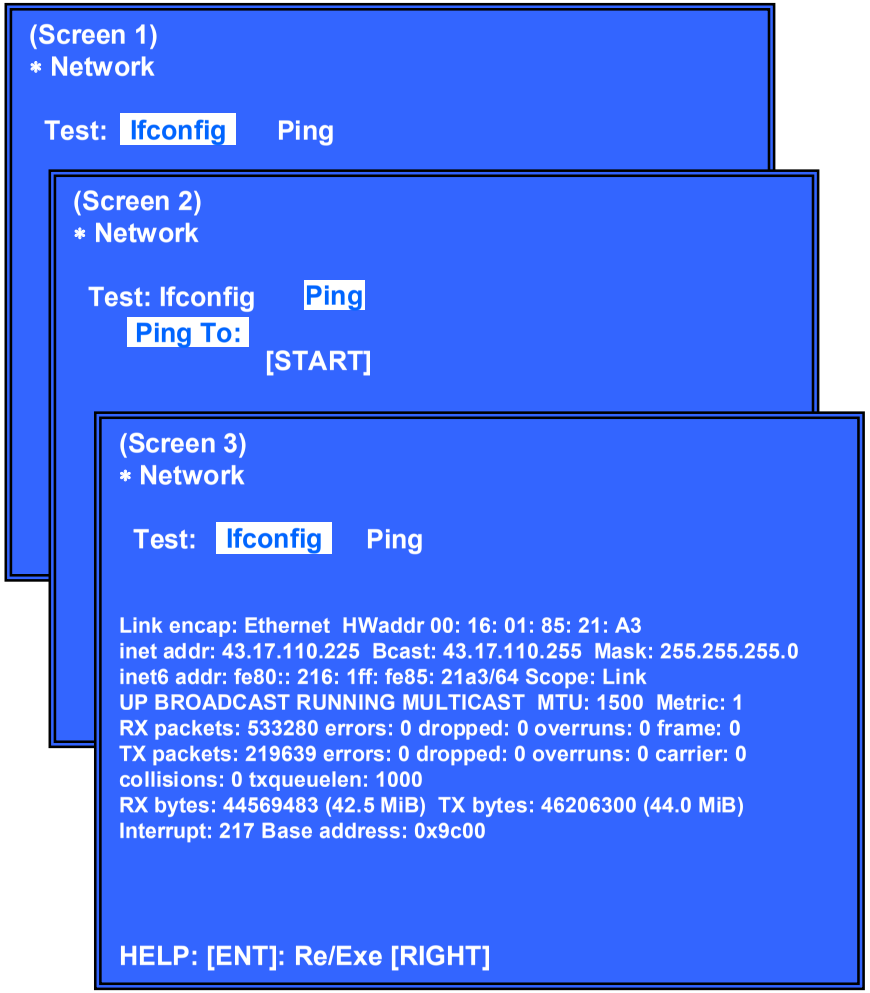
[LEFT]	Moves to the Ifconfig test
[RTN]	Returns to the top menu of the service mode

∗See next page for details on Ping test

Screen 3: When executing the Ifconfig test
Displays the output result of the Ifconfig command
Operation:

[ENT]	Executes the command again
[RIGHT]	Moves to the Ping test
[RTN]	Returns to the top menu of the service mode

Display tube:
S-NET



∗ May differ slightly from the actual screens

Network (Network Test Diagnosis Screen: Ping)

Description:
Ping test

Screen 1: Ping test
Operation:

[UP]	Sets the IP address of the Ping destination
[DOWN]	Prepares for execution
[RTN]	Returns to the top menu of the service mode

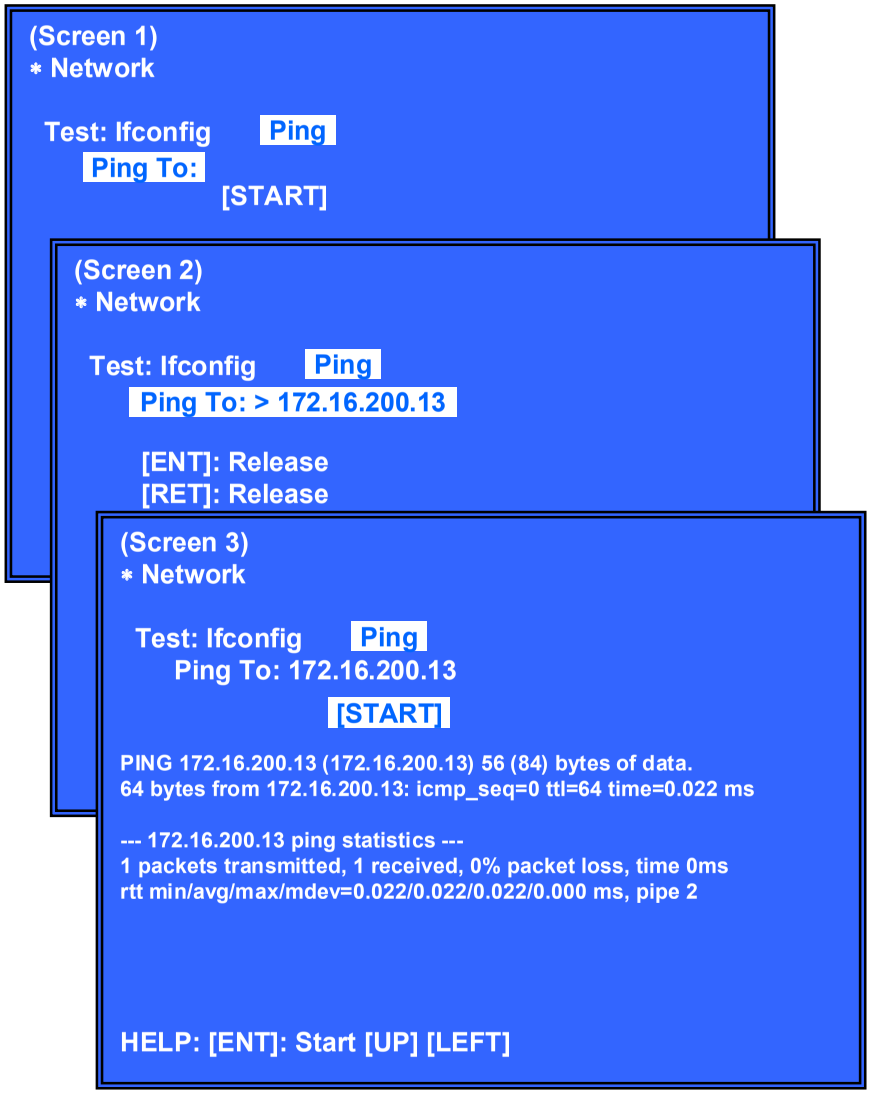
Screen 2: Specifies the IP address of the Ping destination (IP input mode)
Ping To: Input the IP address by pressing [ENT] when highlighted
Operation:

[ENT]	Ends input
[RTN]	Ends input
[LEFT]	Ends input, and moves to the Ifconfig test
[(NUM)]	Inputs characters '0-9'
[TIME]	Inputs character '.'
[CLEAR]	Back space

Screen 3: When executing Ping test
Ping is executed when pressing [ENT] while [START] is highlighted.
Operation:

[ENT]	Executes the Ping test
[UP]	Sets the IP address of the Ping destination
[DOWN]	Prepares for execution
[RTN]	Returns to the top menu of the service mode

Display tube:
S-NET



* May differ slightly from the actual screens

Version Up (Version Update using DISC)

Description:
This screen performs version updates using DISC.

Screen 1: Screen when entering the Version Up menu
Operation:

[ENT]	Starts update using DISC -> (opens tray and displays screen 2)
[RET]	Returns to the top menu of the service mode

Screen 2: Insert version update DISC
Operation:

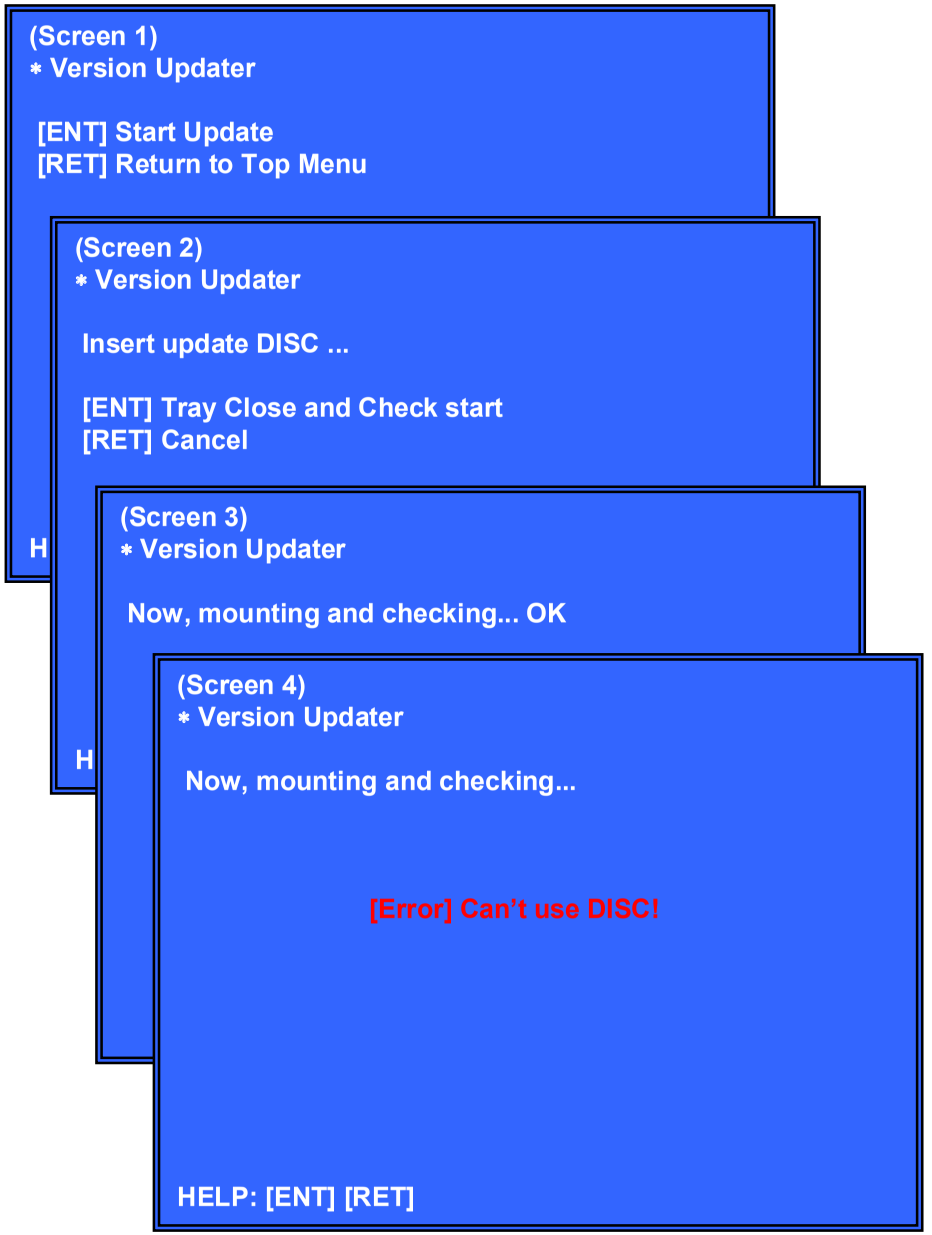
[ENT]	Closes the tray and checks the DISC
[RET]	Cancels operation (closes the tray and returns to screen 1)

Screen 3: During check -> OK
Operation:
Automatically reboots the set

Screen 4: During check - > NG
Operation:
Outputs [Error] (content of error) and returns to screen 2

Display tube:

When DISC is inserted	V-INSCD
When DISC cannot be mounted	V-NODSC
When check is NG	V-CHKNG
When check is OK	V-CHKOK
When rebooting	REBOOT



System Information (System Information Display)

Description:
This screen displays system information.

Operation:

[ENT]	Measures ΔIOP of the drive (takes a few seconds: 1 time only)
[RET]	Returns to the top menu of the service mode

*When measuring ΔIOP,
Version Up function in the Service Mode menu will no longer be available.

Displayed contents:

Model name	Model
Destination	Dest
IP address	IP
Mac address	Mac
CPU version	CPU <- [FirmVersion] [GenerationVersion]
NBL version	NBL
Kernel version	Kernel
Host version	Host <- [HostVersion] [ReleaseVersion]
Optical disc drive	Drive <- [Model] [FirmRevision] [SerialNumber]
Drive usage time	LDTime [Media]: [LDTime]/[ΔIOP]
/ ΔIOP	/ΔIOP
ΔIOP temperature measurement	dIOP_TEMP
IFCon version	IFCon <- B0: [Block0 version] B1: [Block1 version]
IFCon Firm date	FirmDate
Set temperature	Temp <- [℃]

Display tube:
Host version display
*01.0.002 displayed as 010 002

```
* System Information

Model          : BDP3G-SU
Dest           : UC
IP             : 172.16.102.32
Mac            : 00:1a:80:d0:47:65
CPU            : E0.032.0[F021]
NBL            : BDP3G 3.1.0
Kernel         : BDP3G-3.1.0
Host           : 01.0.002
                 20080121D00 ...
Drive          : BDP200 1.01 @BPD0000557&__40
LDTime         : BD              : [     0:00] / [     1]
          /dIOP  DVD             : [     0:11] / [     5]
                 CD              : [     0:50] / [     0]
                                   dIOP_TEMP:  [     0]
Ifcon          : B0: 0x03    B1: 0x01
                 FirmDate: 03/07 11:55
Temp           : 34 [degC]
 [RET]         : TopMenu
```

SECTION 8
ERROR LOG LIST

[Operation] How to confirm

<1> Display method

1-1 Plug AC code during "PLAY" button, "STOP" button and "OPEN/CLOSE" button, then, go to service mode.

1-2 Select "[2] Log" -> "[1] Error Log" on Menu screen.

<2> Save Error Log in USB memory.

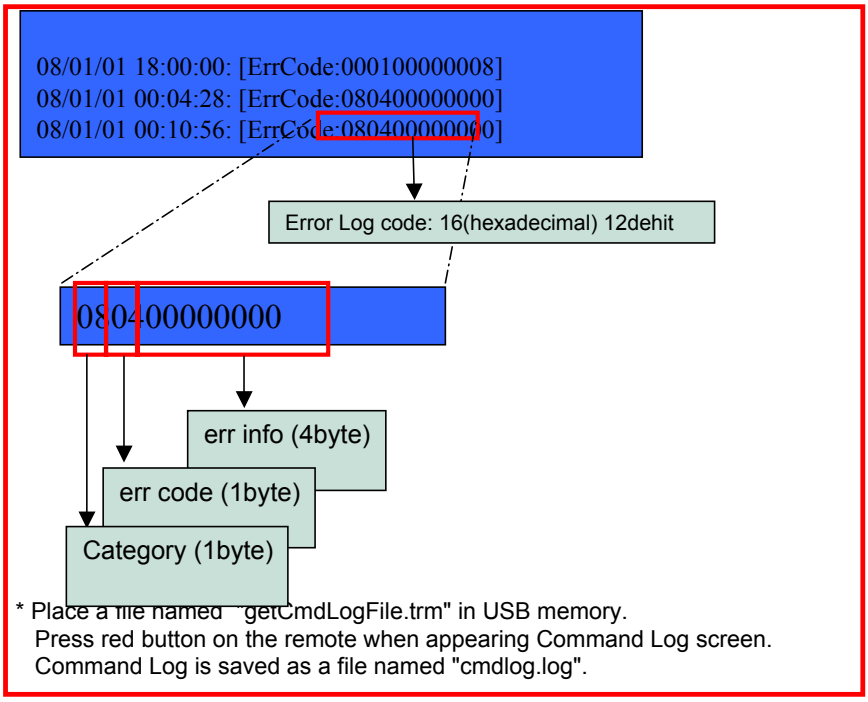
2-1 Prepare USB memory and place a named file as "getErrLogFile.trm" in the root directory.

2-2 Insert this USB memory and display "Error Log" the same as "<1>".

2-3 Press red button on the remote after appearing Error Log.

2-4 "Error log" is saved as file named "errlog.log" in USB memory.

<3> Error log example



* Place a file named "getCmdLogFile.trm" in USB memory.
Press red button on the remote when appearing Command Log screen.
Command Log is saved as a file named "cmdlog.log".

Defect list which is saved as Error log

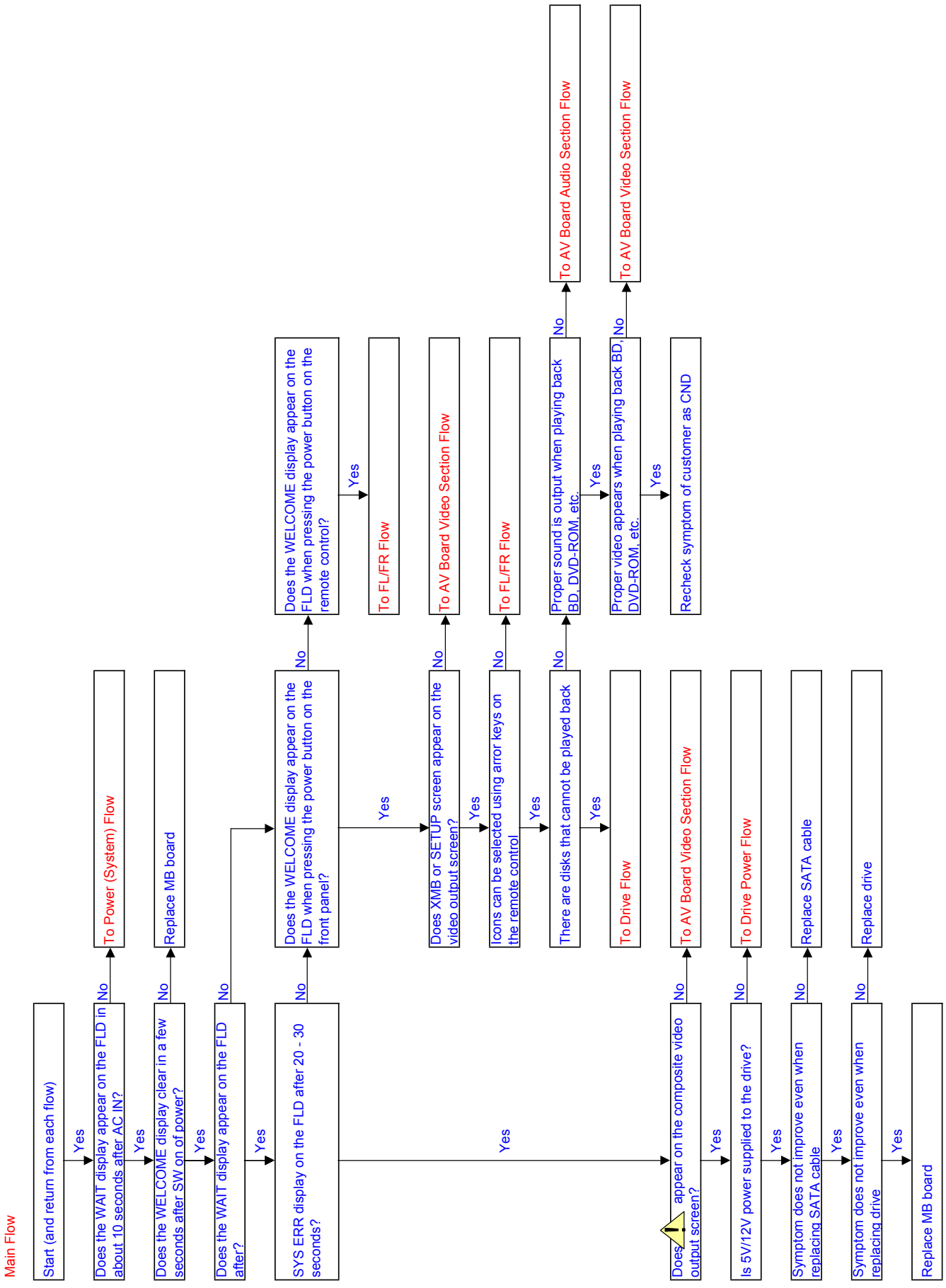
DB series	Drive series	PB series	System series
All kinds of Mount error	No connection cable	Disc dirty, scratching	IF-Con connection error
All kinds of external memory error	All kinds of SATA error	No a designated information	Network error
Non a designated information	Drive defect	Different region	All kinds of Device error (ex. Audio DAC)
All kinds of file access error	Tray defect	Decode error	NAND FLASH ROM access error
	Disc error		Increase of temperature of set (FAN defect)
	All kinds of Servo error		
	Access error		

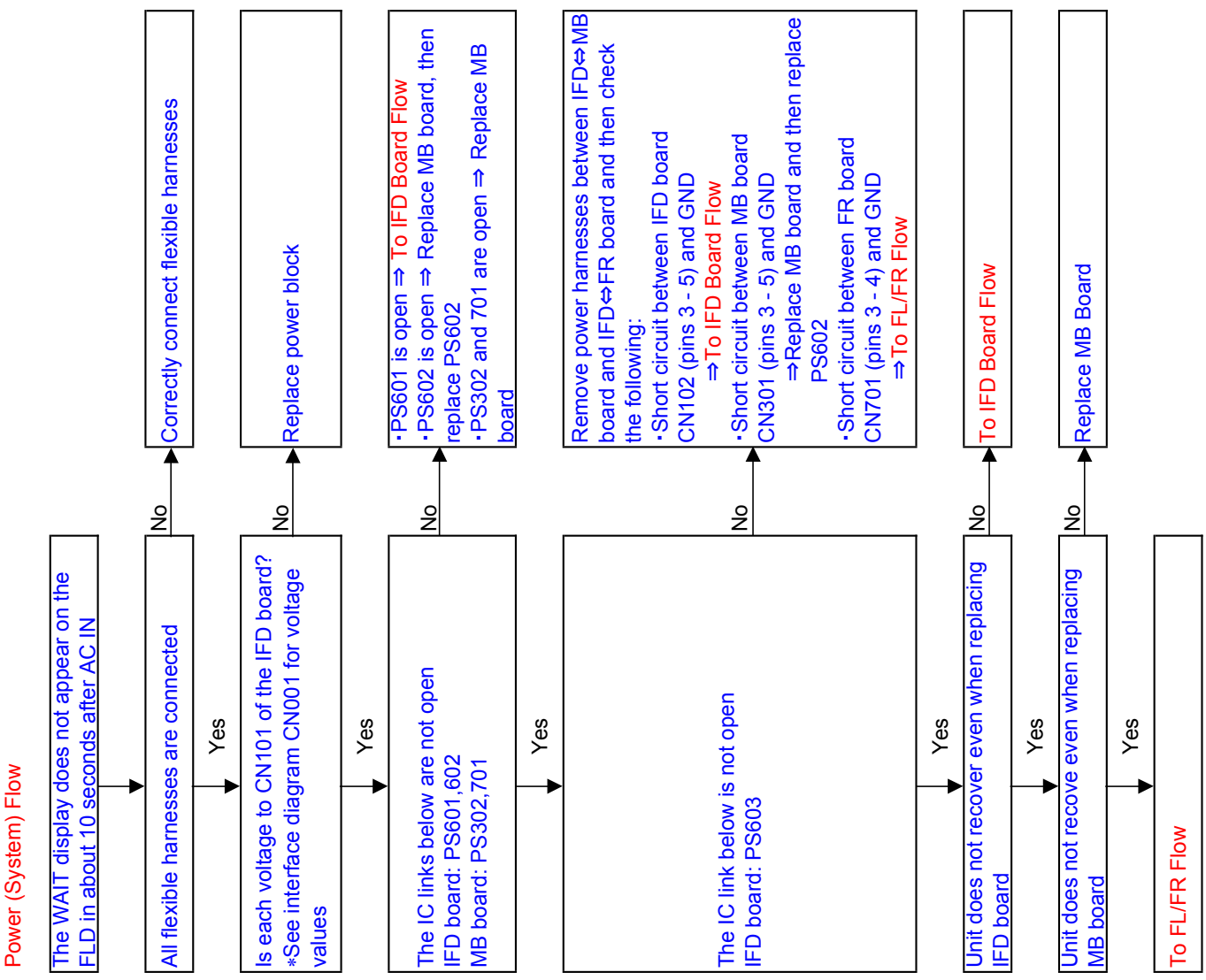
Error Log list

Error Log information（6byte)						Service responce	Remarks
Category（1byte)	err_code（1byte)	err_info（4byte)					
1	2	3	4	5	6		
Error code Items	Symptoms						
0x00 system-related ERRLOG_CATEGORY_SYSTEM	**0x01** CSI Timeout (Mainly ITcon communication Error)	csi_id	- (*2)	- (*2)	- (*2)	Exchange a Chip equivalent to id or EMMA(MB board)	A list of problems ・Transmission OnlyDevice (ex. DAC 2ch/8ch, ES DAC 2ch/8ch device) Write "Log data" on your repair data when transmission interrupt task completion time is over ・Transmission and receiving Device (ex. IFcon device) Write "Log data" on your repair data when receiving interrupt task completion time is over ・Specifications regarding other VIDEO_GLUE or HDE are not clear. ・ID (Driver/Common/CSI/if/csi_id_bdp3g_ryoushi.h) CSI_ID_DAC_2CH = 0x00, /* Audio DAC AK4385A 2ch Write only */ CSI_ID_DAC_8CH = 0x01, /* Audio DAC AK4358 8ch Write only*/ CSI_ID_DAC_2CH_ES = 0x02, /* Audio DAC PCM1796 2ch Write only for ES*/ CSI_ID_DAC_8CH_ES = 0x03, /* Audio DACs PCM1791A 2ch*4 Write only for ES*/ CSI_ID_VIDEO_GLUE = 0x04, /* VIDEO Glue for ES */ CSI_ID_HDE1 = 0x05, /* HD Enhancer1 for ES*/ CSI_ID_HDE2 = 0x06, /* HD Enhancer2 for ES*/ CSI_ID_CC_UCOM = 0x07, /* micro-controller for CC*/ CSI_ID_ITCON = 0x08, /* ITcon */
	0x02 I2C communication Timeout	i2c_id	- (*2)	- (*2)	- (*2)	Exchange a Chip equivalent to id or EMMA(MB board)	A list of problems ・Write "Log data" on your repair data when transmission interrupt task time is over. ・ID (Driver/Common/I2C/if/i2c_id_bdp3g_ryoushi.h) I2C_ID_HDMI_A = 0x00, /* External HDMI (sub-addrA) Sil9134 */ I2C_ID_HDMI_B = 0x01, /* External HDMI (sub-addrB) Sil9134 */ I2C_ID_SCALER = 0x02, /* 1080p SCALER */ I2C_ID_HDMI_INTERNAL_A = 0x03, /* EMMA3P Internal HDMI I2C-A */ I2C_ID_HDMI_INTERNAL_B = 0x04, /* EMMA3P Internal HDMI I2C-B */
	0x03 HDMI device ID failure	VendorId	- (*2)	DeviceId	- (*2)	Exchange a EMMA(MB board). Exchange a HDMI device in case of ES model.	
0x02 Playback-related ERRLOG_CATEGORY_PB	**0x00** Read error	- (*2)	- (*2)	- (*2)	- (*2)	Confirm Disc scratching and dirt	Read Error in "Read Error.Info" stream of NaviPack is not target.
	0x01 Wrong Region	- (*2)	- (*2)	- (*2)	- (*2)	Can't playback due to wrong Region	
	0x02 Decode error	- (*2)	- (*2)	- (*2)	- (*2)	Stream problem	Error code is output when dictating EMMA. There is a possibility that back to back error code is found.
	0x03 AACS verify error	- (*2)	- (*2)	- (*2)	- (*2)	It seems Disc infraction	In case ReqAacsPmVerifyUsageHash is error
	0x04 Wrong TV system (DVD-Video)	- (*2)	- (*2)	- (*2)	- (*2)	It seems Disc infraction	Drive stop when a mixted TV_system in Disc by DVD-Video is found.
0x04 Disc・Drive・Tray -related ERRLOG_CATEGORY_DISC	**0x00** Drive communication error	opcode	ercd			The first is key operation again , the second drive exchange	EMMA error Reboot a system when occurring the problem
	0x01 Drive mecha error	opcode	sense_key			Service repair	Reboot a system when occurring the problem
	0x02 Tray "Open/Close" Error	- (*2)	- (*2)	- (*2)	- (*2)	The first is key operation again , the second drive exchange	Abnormal LU：(Abnormal Disc loading)
	0x03 Command time out	cdb				The first is key operation again , the second drive exchange	Immediate timeout Reboot a system when occurring the problem

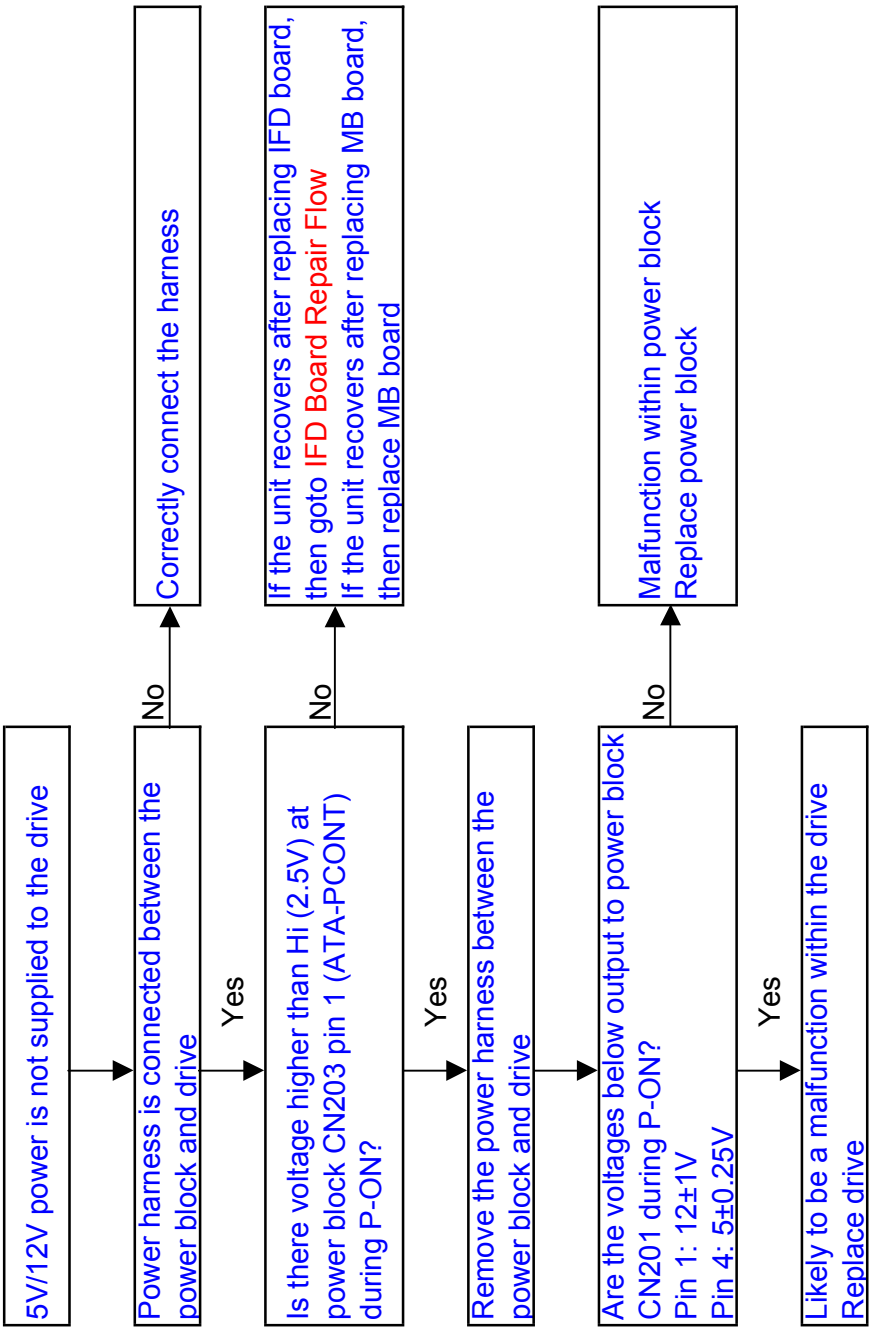
Error Log information（6byte）						Service responce	Remarks
Category（1byte）	err_code（1byte）	err_info（4byte）					
1	2	3	4	5	6		
Error code Items	Symptoms						
0x05 Temperature -related ERRLOG_CATEGORY_THERMO	0x01 Shutdown by set temperature rise	Temperature information（8bit）	-(*2)	-(*2)	-(*2)	Check environmental temperature around the unit	A list of problems ・Write "Log data" on your repair data when Thermal Shutdown occurs on Temperature rise .
	0x02 FAN problem	-(*2)	-(*2)	-(*2)	-(*2)	Exchange Fan	A list of problems ・Write "Log" on your repair data when FAN DET is detected by fan failure.
0x08 DB -related ERRLOG_CATEGORY_DB	0x01 video filesystem mount error	-(*2)	-(*2)	-(*2)	-(*2)	Exchange for a different disc	
	0x02 photo filesystem mount error	-(*2)	-(*2)	-(*2)	-(*2)	Exchange for a different disc	
	0x03 video database mount error	-(*2)	-(*2)	-(*2)	-(*2)	Exchange for a different disc	
	0x04 photo database mount error	-(*2)	-(*2)	-(*2)	-(*2)	Exchange for a different disc	
	0x05 usb mount error	-(*2)	-(*2)	-(*2)	-(*2)	Exchange for a different USB	
	0x11 video unplayable	-(*2)	-(*2)	-(*2)	-(*2)	Exchange for a different disc	
	0x12 video unplayable(invalid region)	-(*2)	-(*2)	-(*2)	-(*2)	Check the destination, exchange for a different disc	
	0x13 video unplayable(invalid tv system)	-(*2)	-(*2)	-(*2)	-(*2)	Check the destination, exchange for a different disc	
	0x14 video unplayable(pin lock)	-(*2)	-(*2)	-(*2)	-(*2)		
	0x15 video unplayable(parental lock)	-(*2)	-(*2)	-(*2)	-(*2)		
	0x21 vitualpackage authentication error	-(*2)	-(*2)	-(*2)	-(*2)	Delete BD data	
	0x31 invalid disc	-(*2)	-(*2)	-(*2)	-(*2)	Exchange for a different disc	
	0x32 disc read error	-(*2)	-(*2)	-(*2)	-(*2)	Exchange for a different disc	
	0x41 buda read error	-(*2)	-(*2)	-(*2)	-(*2)	Exchange for a different USB	
	0x42 buda write error	-(*2)	-(*2)	-(*2)	-(*2)	Exchange for a different USB	
	0x51 ada read error	-(*2)	-(*2)	-(*2)	-(*2)	Exchange for a different disc, initialize	There is a possibility that "read/write" of BD-J has problem or "NAND Flash ROM" may be broken
	0x52 ada write error	-(*2)	-(*2)	-(*2)	-(*2)	Exchange for a different disc, initialize	There is a possibility that "read/write" of BD-J has problem or "NAND Flash ROM" may be broken

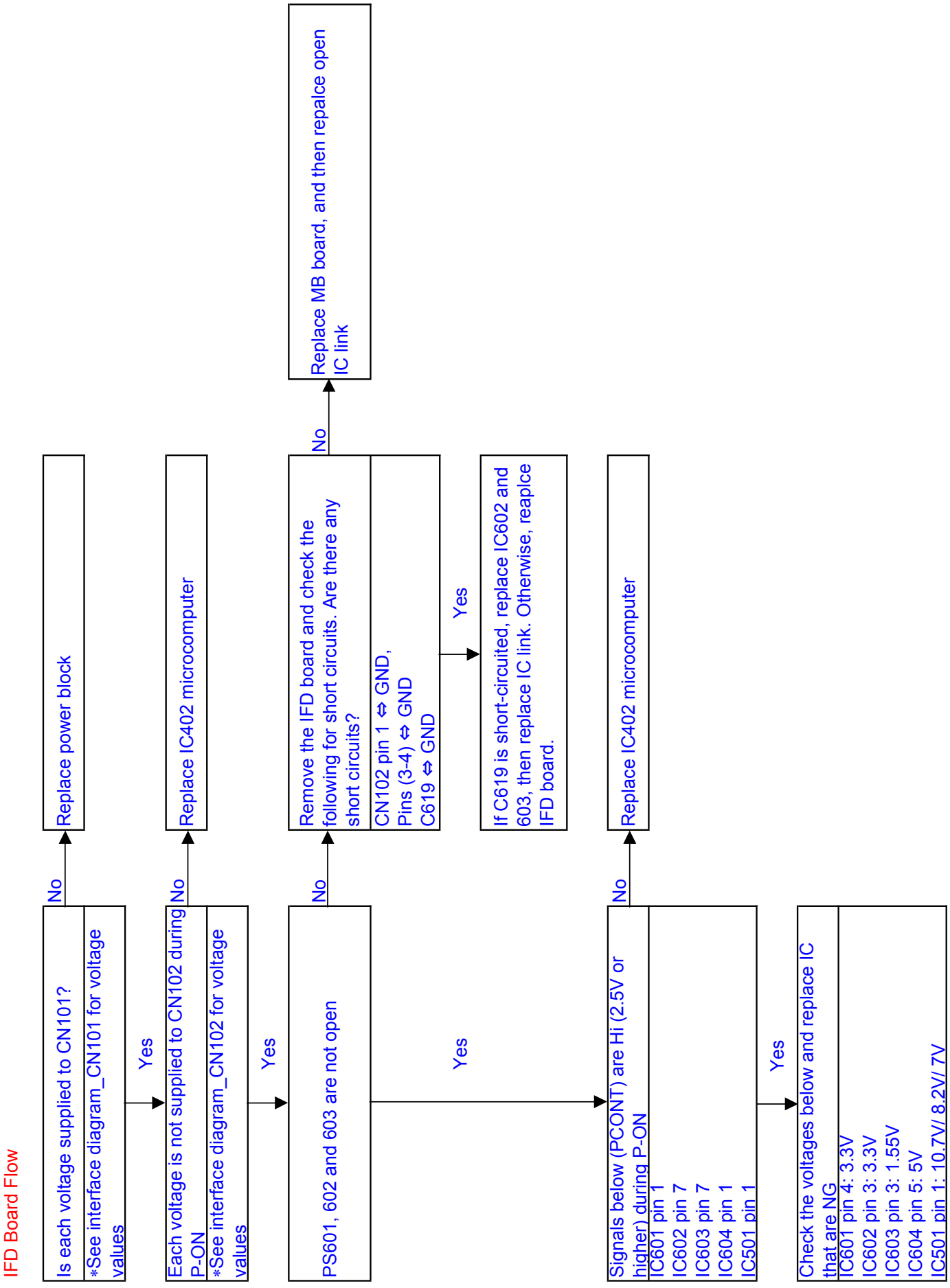
SECTION 9
TROUBLESHOOTING

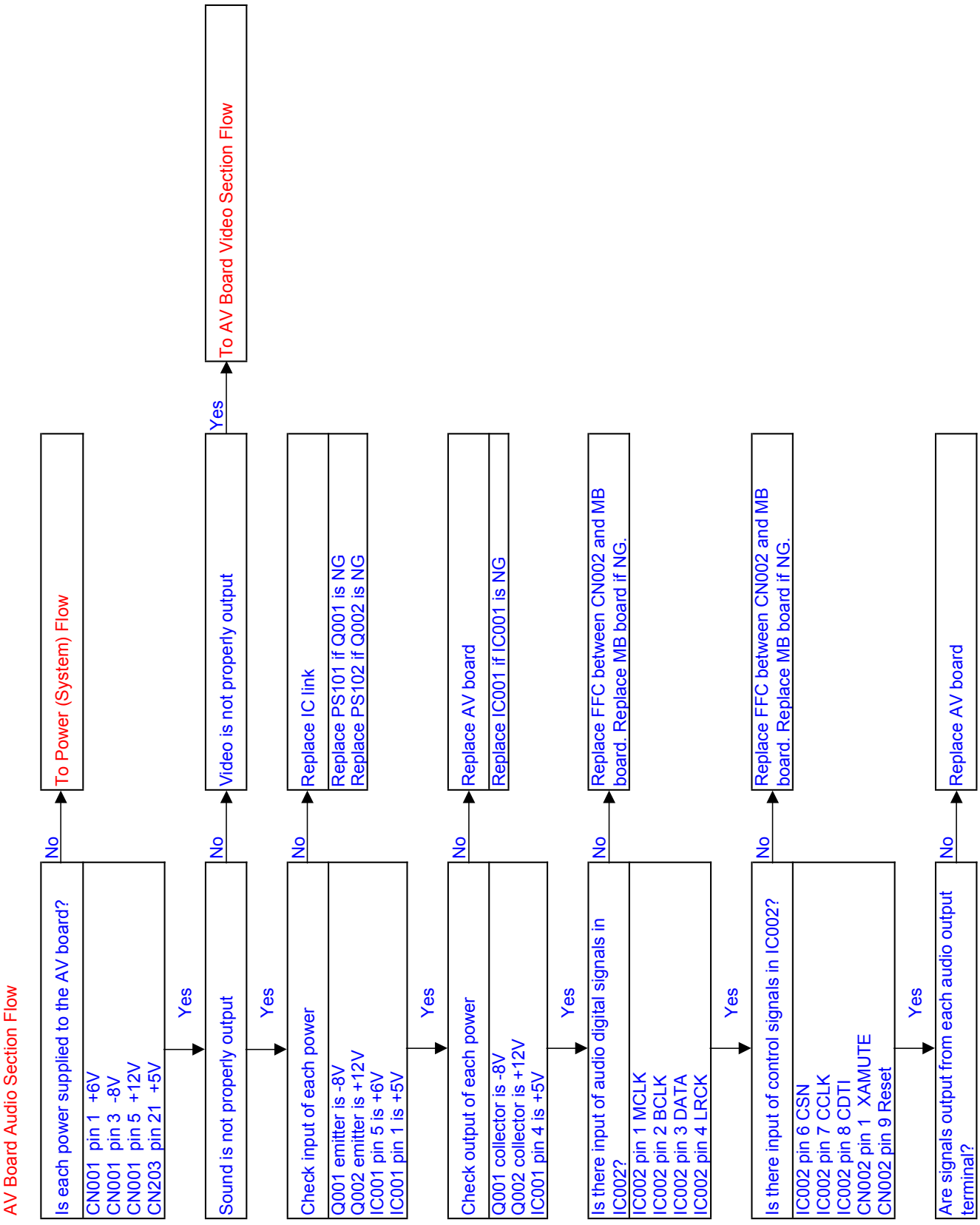


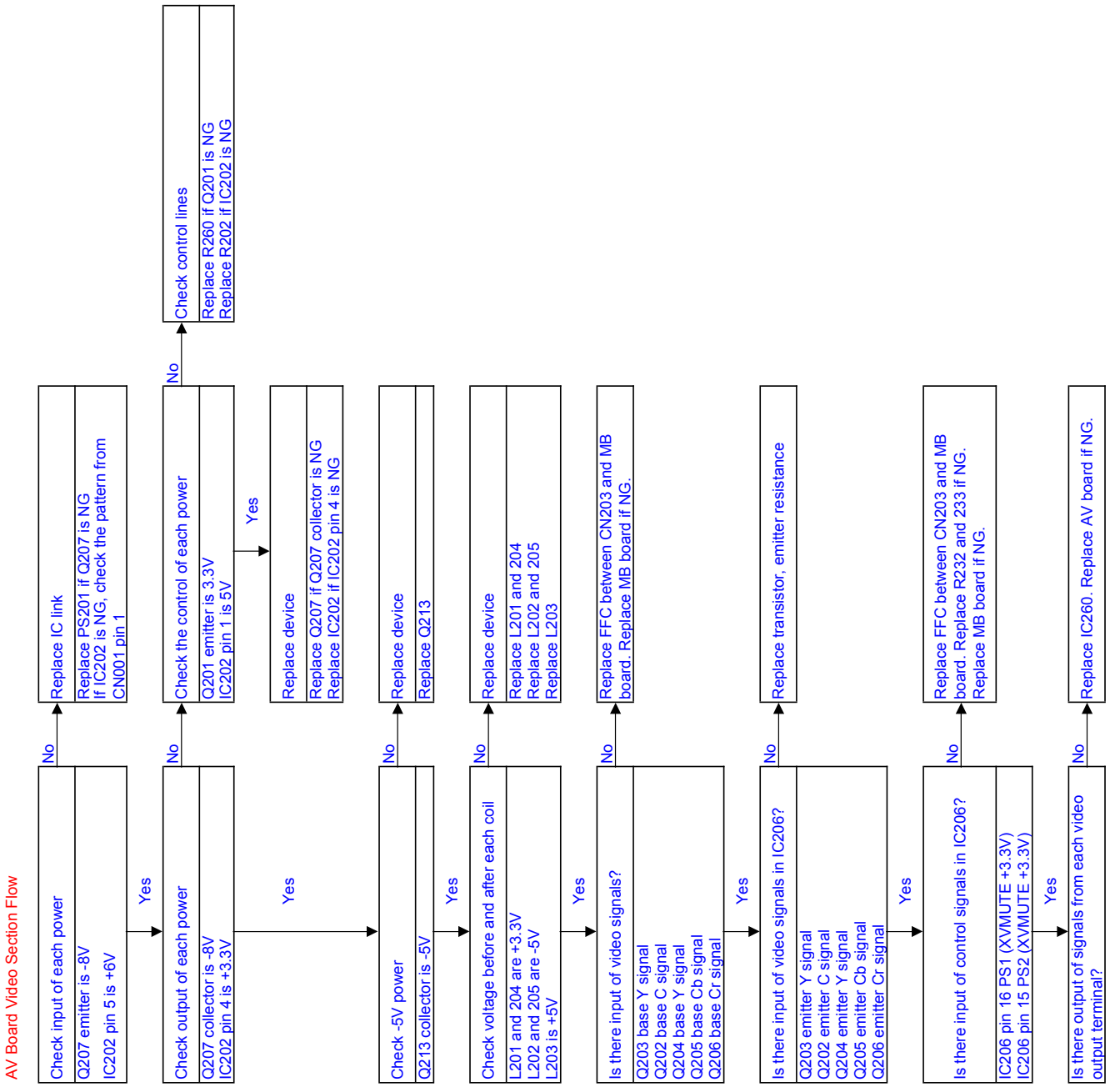

Power (System) Flow
The WAIT display does not appear on the FLD in about 10 seconds after AC IN
All flexible harnesses are connected
No
Correctly connect flexible harnesses
Yes
Is each voltage to CN101 of the IFD board?
*See interface diagram CN001 for voltage values
No
Replace power block
Yes
The IC links below are not open
IFD board: PS601,602
MB board: PS302,701
No
・PS601 is open ⇒ To IFD Board Flow
・PS602 is open ⇒ Replace MB board, then replace PS602
・PS302 and 701 are open ⇒ Replace MB board
Yes
The IC link below is not open
IFD board: PS603
No
Remove power harnesses between IFD⇔MB board and IFD⇔FR board and then check the following:
・Short circuit between IFD board CN102 (pins 3 - 5) and GND
⇒To IFD Board Flow
・Short circuit between MB board CN301 (pins 3 - 5) and GND
⇒Replace MB board and then replace PS602
・Short circuit between FR board CN701 (pins 3 - 4) and GND
⇒To FL/FR Flow
Yes
Unit does not recover even when replacing IFD board
No
To IFD Board Flow
Yes
Unit does not recove even when replacing MB board
No
Replace MB Board
Yes
To FL/FR Flow

Drive Power Flow



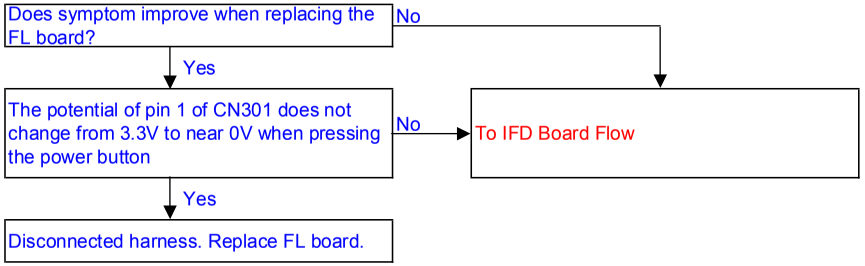

IFD Board Flow
Is each voltage supplied to CN101?
*See interface diagram_CN101 for voltage values
No
Replace power block
Yes
Each voltage is not supplied to CN102 during P-ON
*See interface diagram_CN102 for voltage values
No
Replace IC402 microcomputer
Yes
PS601, 602 and 603 are not open
No
Remove the IFD board and check the following for short circuits. Are there any short circuits?
CN102 pin 1 ⇔ GND,
Pins (3-4) ⇔ GND
C619 ⇔ GND
Yes
If C619 is short-circuited, replace IC602 and 603, then replace IC link. Otherwise, reaplce IFD board.
No
Replace MB board, and then repalce open IC link
Yes
Signals below (PCONT) are Hi (2.5V or higher) during P-ON
IC601 pin 1
IC602 pin 7
IC603 pin 7
IC604 pin 1
IC501 pin 1
No
Replace IC402 microcomputer
Yes
Check the voltages below and replace IC that are NG
IC601 pin 4: 3.3V
IC602 pin 3: 3.3V
IC603 pin 3: 1.55V
IC604 pin 5: 5V
IC501 pin 1: 10.7V/ 8.2V/ 7V


AV Board Audio Section Flow
Is each power supplied to the AV board?
CN001 pin 1 +6V
CN001 pin 3 -8V
CN001 pin 5 +12V
CN203 pin 21 +5V
No
To Power (System) Flow
Yes
Sound is not properly output
No
Video is not properly output
Yes
To AV Board Video Section Flow
Yes
Check input of each power
Q001 emitter is -8V
Q002 emitter is +12V
IC001 pin 5 is +6V
IC001 pin 1 is +5V
No
Replace IC link
Replace PS101 if Q001 is NG
Replace PS102 if Q002 is NG
Yes
Check output of each power
Q001 collector is -8V
Q002 collector is +12V
IC001 pin 4 is +5V
No
Replace AV board
Replace IC001 if IC001 is NG
Yes
Is there input of audio digital signals in IC002?
IC002 pin 1 MCLK
IC002 pin 2 BCLK
IC002 pin 3 DATA
IC002 pin 4 LRCK
No
Replace FFC between CN002 and MB board. Replace MB board if NG.
Yes
Is there input of control signals in IC002?
IC002 pin 6 CSN
IC002 pin 7 CCLK
IC002 pin 8 CDTI
CN002 pin 1 XAMUTE
CN002 pin 9 Reset
No
Replace FFC between CN002 and MB board. Replace MB board if NG.
Yes
Are signals output from each audio output terminal?
No
Replace AV board

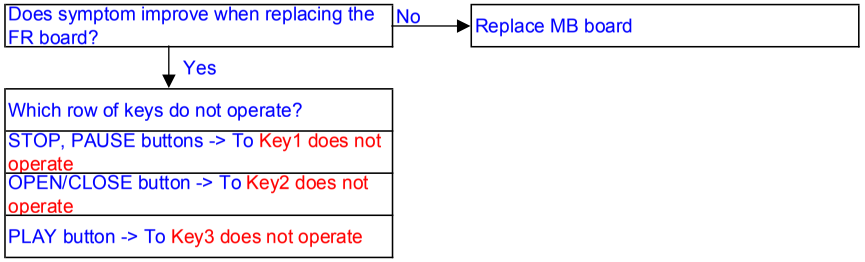

AV Board Video Section Flow
Check input of each power
Q207 emitter is -8V
IC202 pin 5 is +6V
No
Replace IC link
Replace PS201 if Q207 is NG
If IC202 is NG, check the pattern from CN001 pin 1
Yes
Check output of each power
Q207 collector is -8V
IC202 pin 4 is +3.3V
No
Check the control of each power
Q201 emitter is 3.3V
IC202 pin 1 is 5V
No
Check control lines
Replace R260 if Q201 is NG
Replace R202 if IC202 is NG
Yes
Replace device
Replace Q207 if Q207 collector is NG
Replace IC202 if IC202 pin 4 is NG
Yes
Check -5V power
Q213 collector is -5V
No
Replace device
Replace Q213
Yes
Check voltage before and after each coil
L201 and 204 are +3.3V
L202 and 205 are -5V
L203 is +5V
No
Replace device
Replace L201 and 204
Replace L202 and 205
Replace L203
Yes
Is there input of video signals?
Q203 base Y signal
Q202 base C signal
Q204 base Y signal
Q205 base Cb signal
Q206 base Cr signal
No
Replace FFC between CN203 and MB board. Replace MB board if NG.
Yes
Is there input of video signals in IC206?
Q203 emitter Y signal
Q202 emitter C signal
Q204 emitter Y signal
Q205 emitter Cb signal
Q206 emitter Cr signal
No
Replace transistor, emitter resistance
Yes
Is there input of control signals in IC206?
IC206 pin 16 PS1 (XVMUTE +3.3V)
IC206 pin 15 PS2 (XVMUTE +3.3V)
No
Replace FFC between CN203 and MB board. Replace R232 and 233 if NG.
Replace MB board if NG.
Yes
Is there output of signals from each video output terminal?
No
Replace IC260. Replace AV board if NG.

FL/FR Flow (1/3)

Power button on the main unit does not work



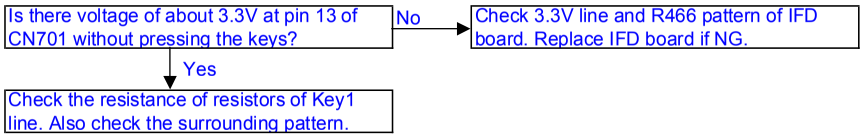
Key operations cannot be made on the main



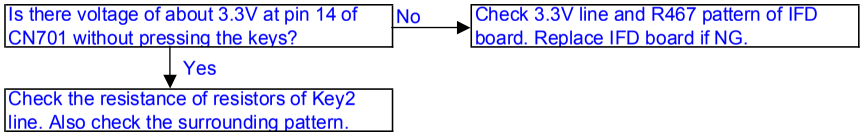
Reference: Relationship of Buttons and Voltages

KEY0	KEY1	KEY2	KEY3	Typ voltage
Unpushed	Unpushed	Unpushed	Unpushed	3.3V
	STOP			1.01V
	Pause			0.595V
Power		OPEN/CLOSE	PLAY	0V

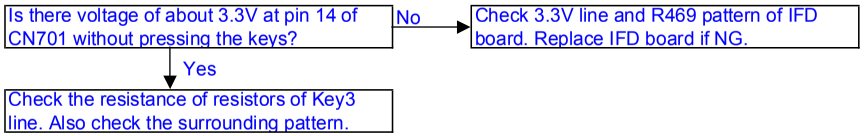
Key1 does not operate

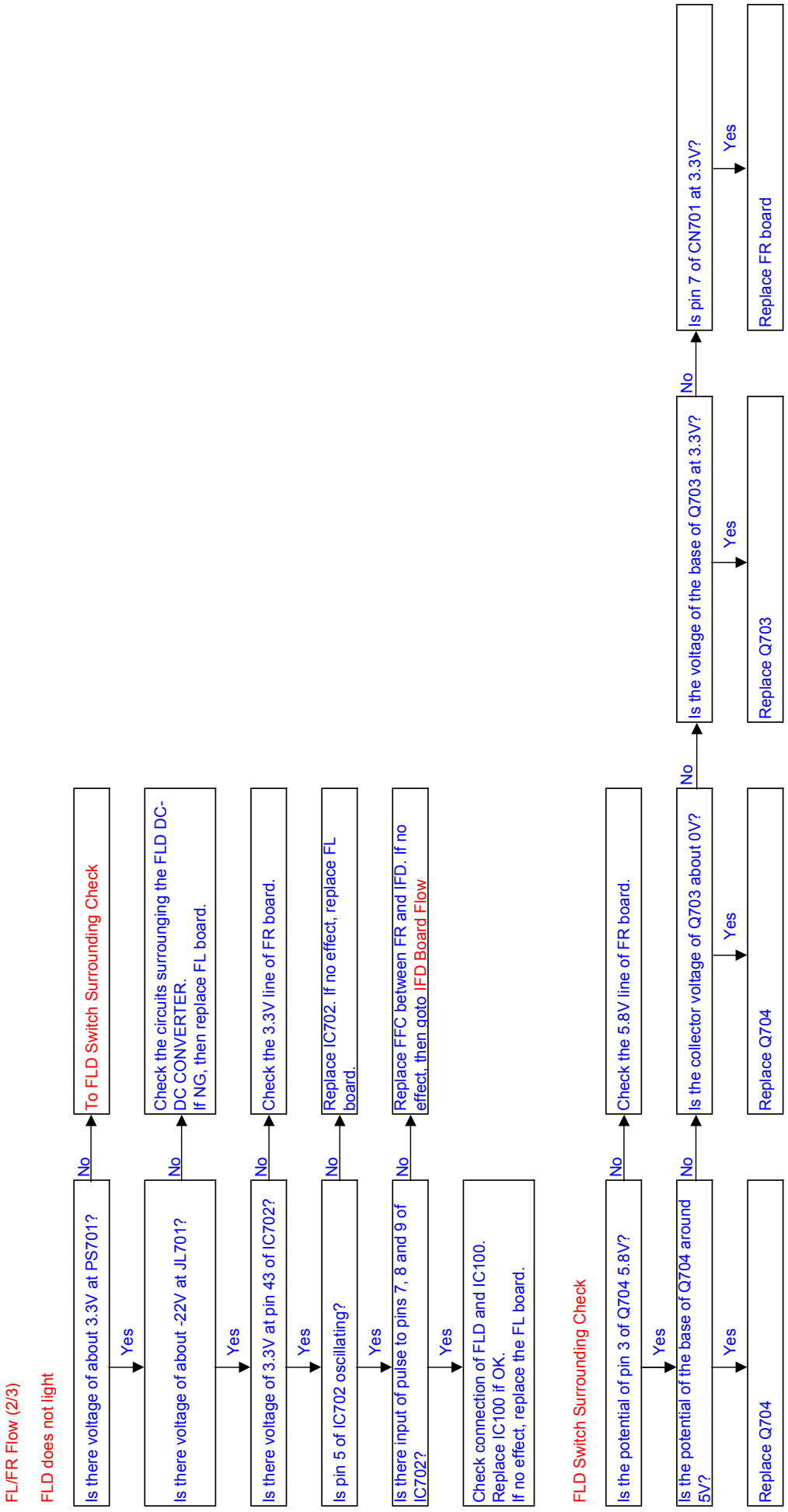


Key2 does not operate



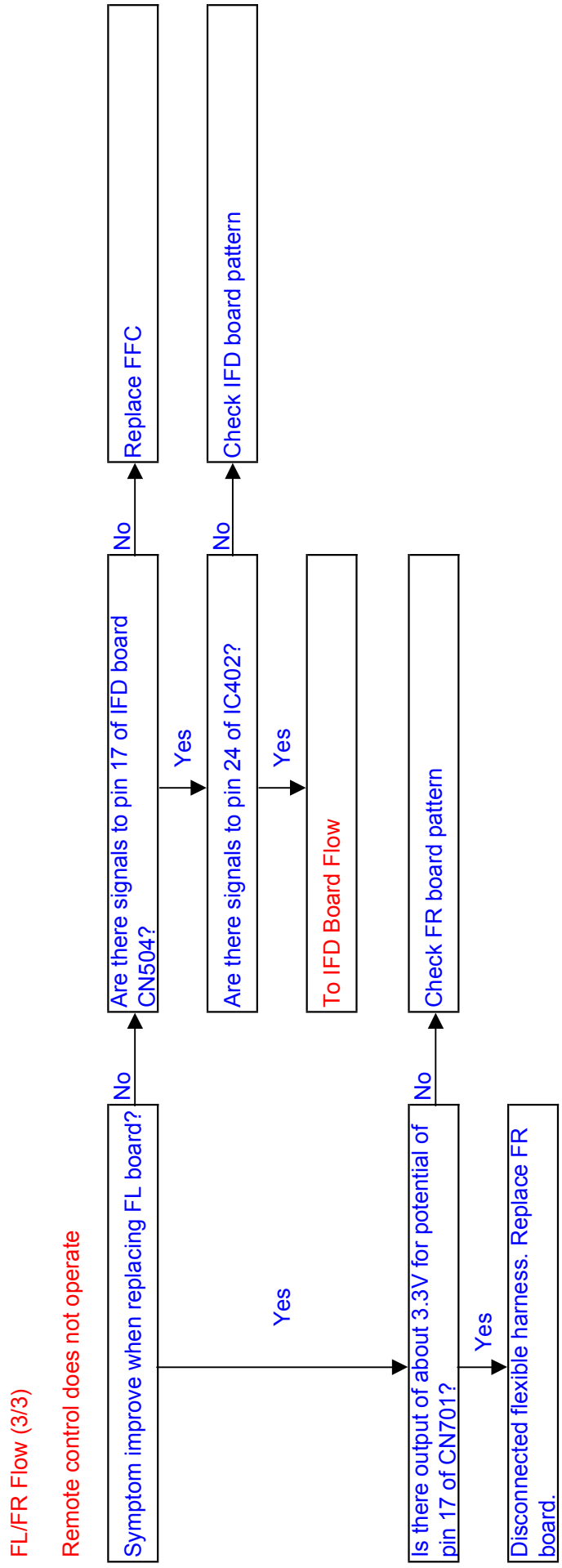
Key3 does not operate

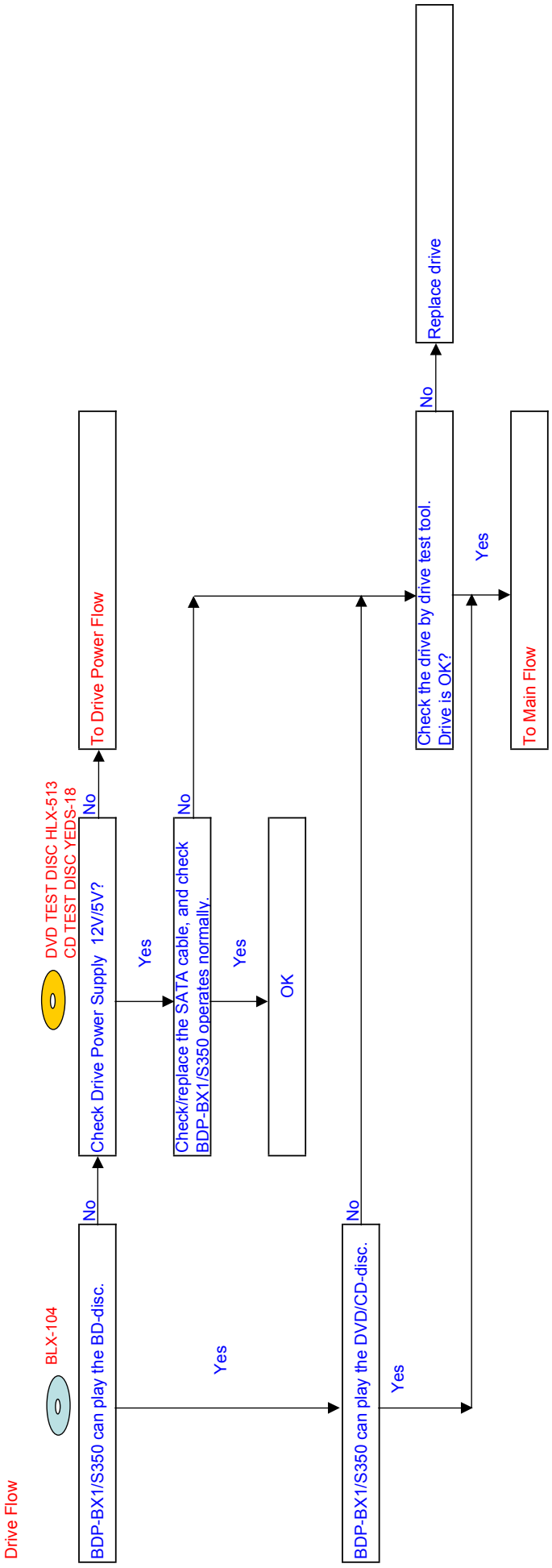



FL/FR Flow (2/3)
FLD does not light
Is there voltage of about 3.3V at PS701?
No
To FLD Switch Surrounding Check
Yes
Is there voltage of about -22V at JL701?
No
Check the circuits surrounging the FLD DC-DC CONVERTER.
If NG, then replace FL board.
Yes
Is there voltage of 3.3V at pin 43 of IC702?
No
Check the 3.3V line of FR board.
Yes
Is pin 5 of IC702 oscillating?
No
Replace IC702. If no effect, replace FL board.
Yes
Is there input of pulse to pins 7, 8 and 9 of IC702?
No
Replace FFC between FR and IFD. If no effect, then goto IFD Board Flow
Yes
Check connection of FLD and IC100.
Replace IC100 if OK.
If no effect, replace the FL board.
FLD Switch Surrounding Check
Is the potential of pin 3 of Q704 5.8V?
No
Check the 5.8V line of FR board.
Yes
Is the potential of the base of Q704 around 5V?
No
Is the collector voltage of Q703 about 0V?
No
Is the voltage of the base of Q703 at 3.3V?
No
Is pin 7 of CN701 at 3.3V?
Yes
Replace FR board
Yes
Replace Q703
Yes
Replace Q704
Yes
Replace Q704

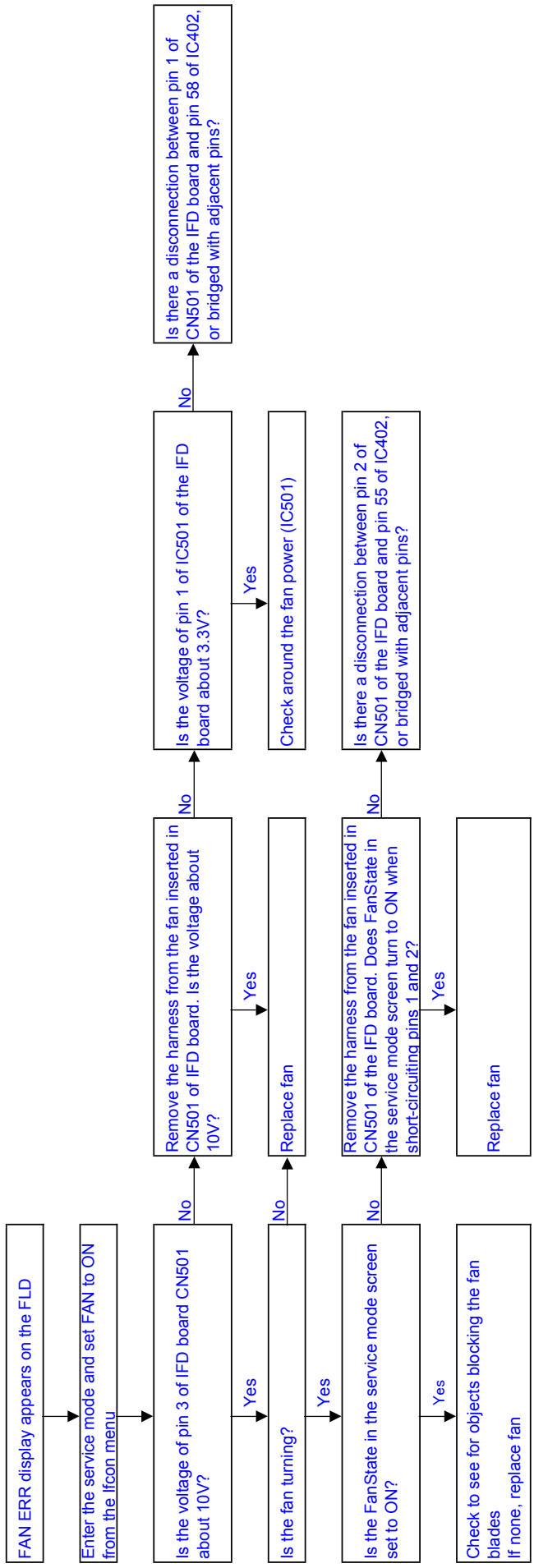
FL/FR Flow (3/3)

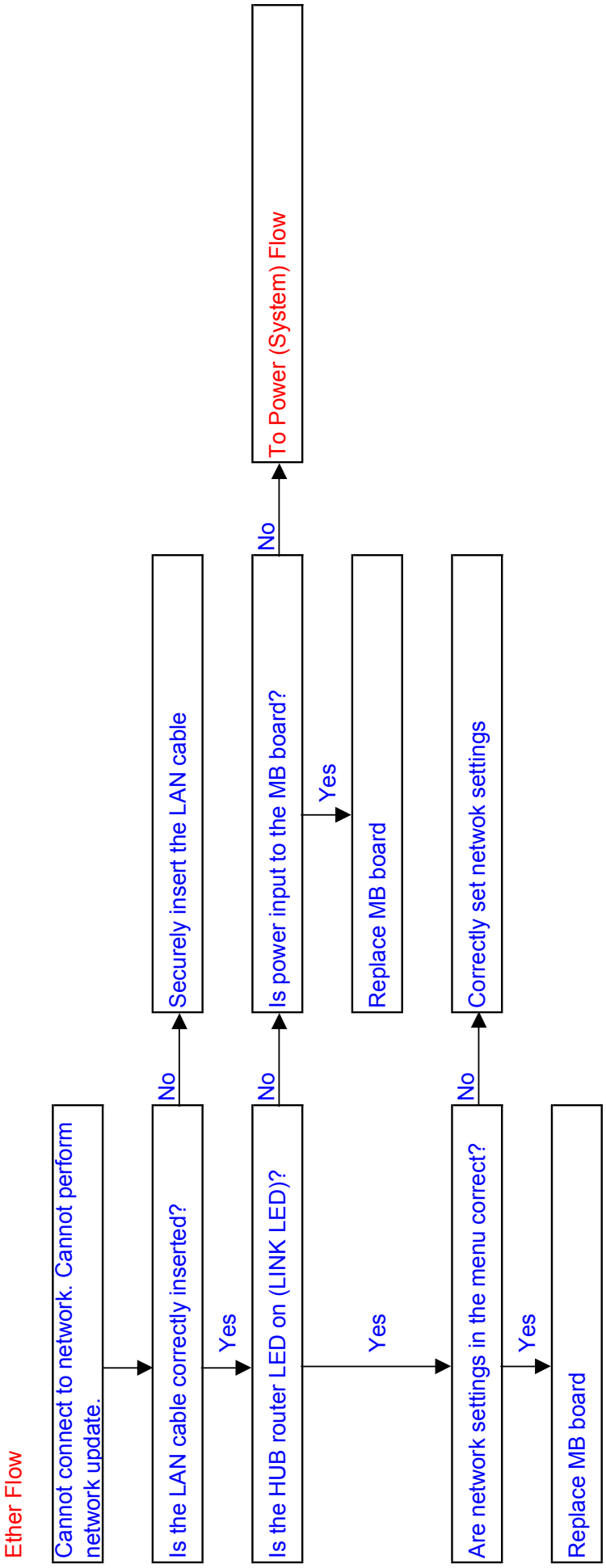
Remote control does not operate

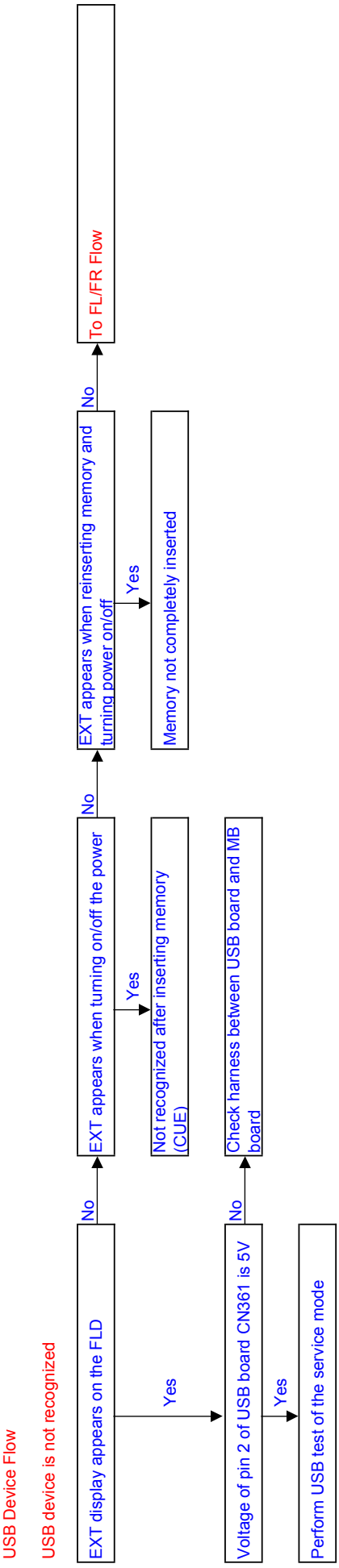



Drive Flow
BLX-104
BDP-BX1/S350 can play the BD-disc.
No
Check Drive Power Supply 12V/5V?
DVD TEST DISC HLX-513
CD TEST DISC YEDS-18
No
To Drive Power Flow
Yes
Check/replace the SATA cable, and check BDP-BX1/S350 operates normally.
No
Yes
OK
Yes
BDP-BX1/S350 can play the DVD/CD-disc.
No
Check the drive by drive test tool. Drive is OK?
No
Replace drive
Yes
To Main Flow
Yes

Fan Flow


FAN ERR display appears on the FLD
Enter the service mode and set FAN to ON from the Ifcon menu
Is the voltage of pin 3 of IFD board CN501 about 10V?
No
Remove the harness from the fan inserted in CN501 of IFD board. Is the voltage about 10V?
No
Is the voltage of pin 1 of IC501 of the IFD board about 3.3V?
No
Is there a disconnection between pin 1 of CN501 of the IFD board and pin 58 of IC402, or bridged with adjacent pins?
Yes
Check around the fan power (IC501)
Yes
Replace fan
Yes
Is the fan turning?
No
Is the FanState in the service mode screen set to ON?
No
Remove the harness from the fan inserted in CN501 of the IFD board. Does FanState in the service mode screen turn to ON when short-circuiting pins 1 and 2?
No
Is there a disconnection between pin 2 of CN501 of the IFD board and pin 55 of IC402, or bridged with adjacent pins?
Yes
Replace fan
Yes
Check to see for objects blocking the fan blades
If none, replace fan


Ether Flow
Cannot connect to network. Cannot perform network update.
Is the LAN cable correctly inserted?
No
Securely insert the LAN cable
Yes
Is the HUB router LED on (LINK LED)?
No
Is power input to the MB board?
No
To Power (System) Flow
Yes
Replace MB board
Yes
Are network settings in the menu correct?
No
Correctly set netwok settings
Yes
Replace MB board


USB Device Flow
USB device is not recognized
EXT display appears on the FLD
No
EXT appears when turning on/off the power
Yes
Not recognized after inserting memory (CUE)
No
EXT appears when reinserting memory and turning power on/off
Yes
Memory not completely inserted
No
To FL/FR Flow
Yes
Voltage of pin 2 of USB board CN361 is 5V
No
Check harness between USB board and MB board
Yes
Perform USB test of the service mode

SECTION 10
REPAIR PARTS LIST

9-1. EXPLODED VIEWS

NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories and packing materials are given in the last of the electrical parts list.
- Abbreviation
  AUS : Australian model
  CH : Chinese model
  CND : Canadian model
  HK : Hong Kong model
  KR : Korea model
  RUS : Russian model
  TH : Thai model
  TW : Taiwan model

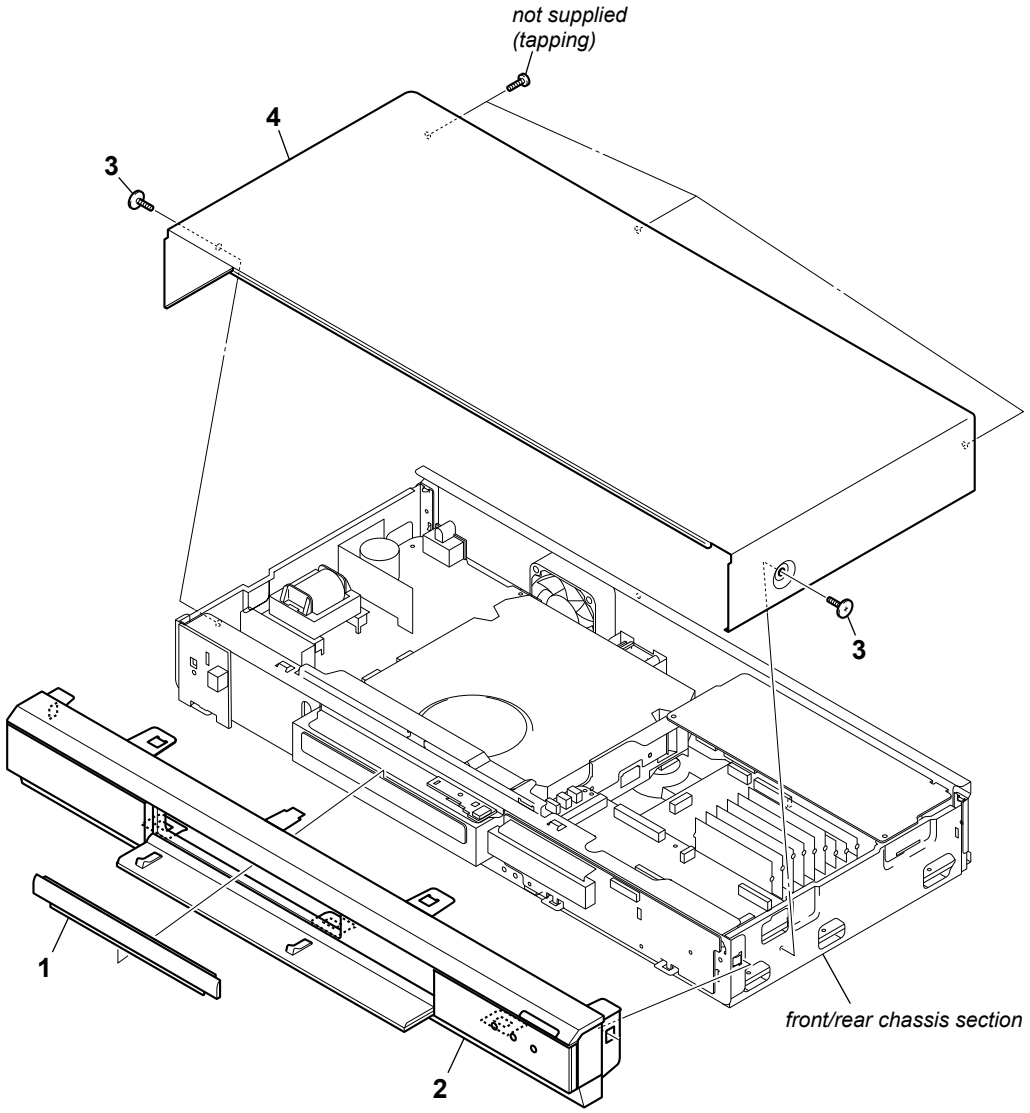
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

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

The components identified by mark 🔒 contain confidential information.
Strictly follow the instructions whenever the components are repaired and/or replaced.

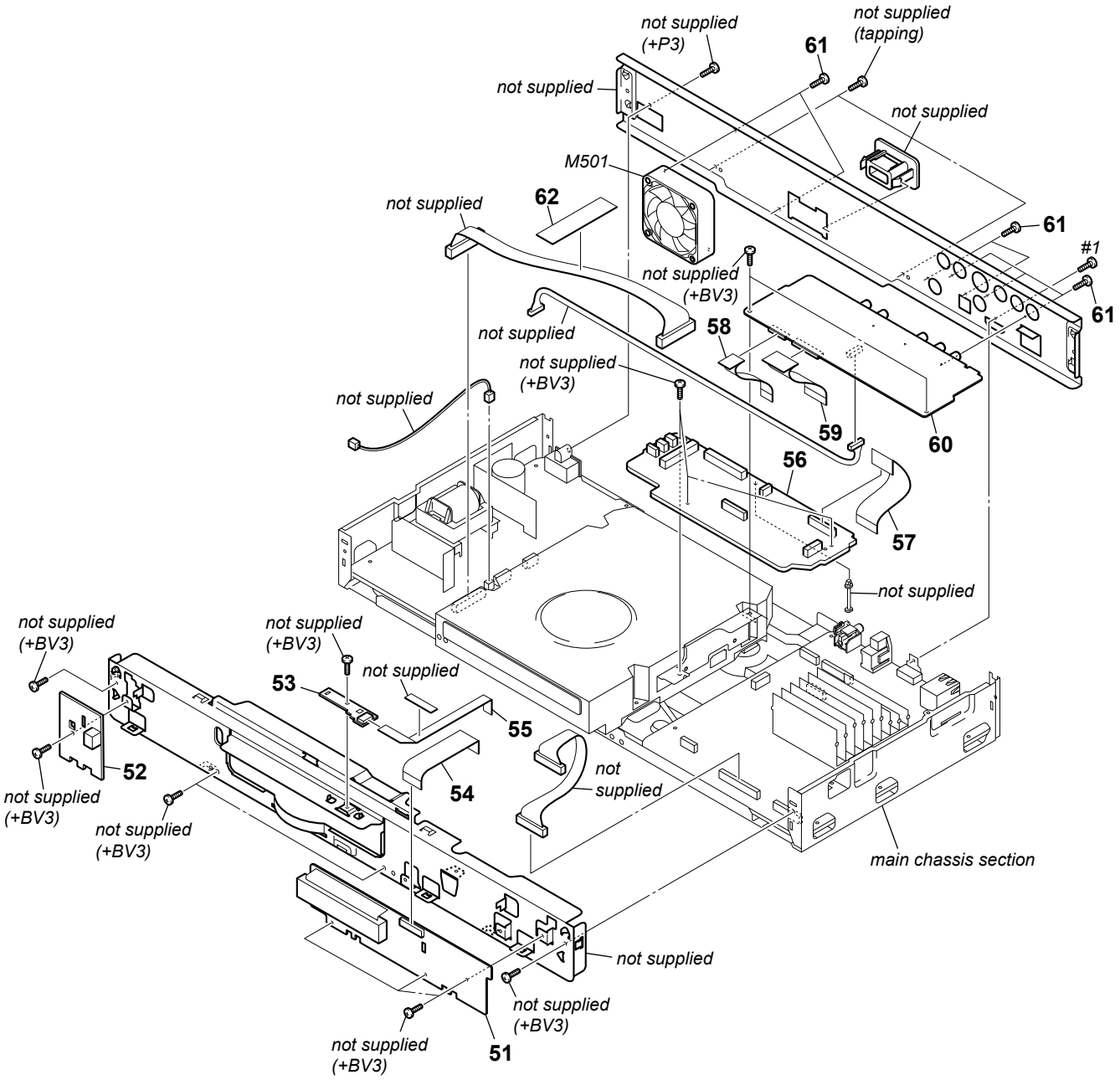
Les composants identifiés par la marque 🔒 contiennent des informations confidentielles.
Suivre scrupuleusement les instructions chaque fois qu'un composant est remplacé et / ou réparé.

9-1-1. CASE SECTION



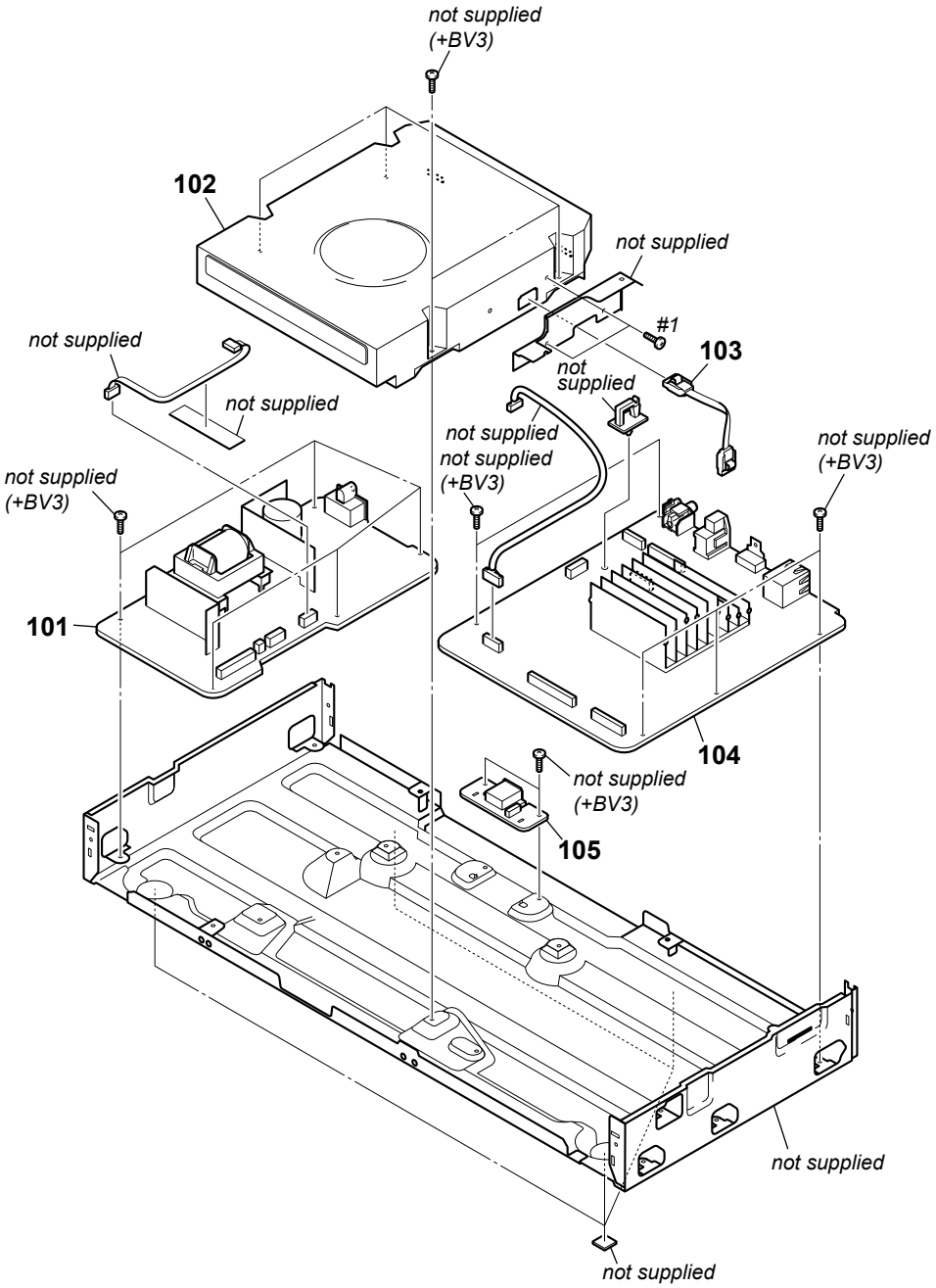
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	X-2188-516-1	COVER ASSY, TRAY		3	3-070-883-71	SCREW, TAPPING	
2	X-2188-515-1	PANEL ASSY, FRONT (S350)		4	3-287-653-01	CASE, UPPER	
2	X-2318-471-1	PANEL ASSY, FRONT (BX1)					

9-1-2. FRONT/REAR CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
51	A-1540-040-A	FR-294 BOARD, COMPLETE	
52	A-1540-042-A	FL-187 BOARD, COMPLETE	
53	A-1540-044-A	FC-096 BOARD, COMPLETE	
54	1-835-294-11	CABLE, FLEXIBLE FLAT (FFI-001)	
55	1-835-295-11	CABLE, FLEXIBLE FLAT (FFI-002)	
56	A-1540-038-A	IFD-003 BOARD, COMPLETE	
57	1-835-293-11	CABLE, FLEXIBLE FLAT (FMI-005)	
58	1-835-292-11	CABLE, FLEXIBLE FLAT (FMA-021)	
59	1-835-296-11	CABLE, FLEXIBLE FLAT (FMA-022)	
60	A-1540-036-A	AV-123 BOARD, COMPLETE	
61	3-077-331-31	+BV3 (3-CR)	
62	3-087-220-01	TAPE, NON-HALOGENE	
M501	1-787-760-11	FAN, D.C.	
#1	7-682-544-09	+B 3X3	

9-1-3. MAIN CHASSIS SECTION



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

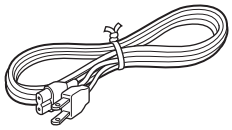
Ref. No.	Part No.	Description	Remark
⚠101	1-474-088-11	REGULATOR, SWITCHING (ZSSR774MA) (US, CND)	
⚠101	1-474-088-31	REGULATOR, SWITCHING (ZSSR774HA) (AEP, UK, AUS, RUS, KR)	
⚠101	1-474-088-41	REGULATOR, SWITCHING (ZSSR774IA) (E, HK, TW, TH)	
⚠101	1-474-088-51	REGULATOR, SWITCHING (ZSSR774CA) (CH)	
⚠102	A-1540-573-A	DRIVE (SERVICE USE), BD	
103	1-966-155-11	HARNESS (SAT-003)	
104	A-1545-412-A	MB-124 BOARD, COMPLETE (US, CND)	
104	A-1545-414-A	MB-124 BOARD, COMPLETE (AEP, UK)	
104	A-1545-415-A	MB-124 BOARD, COMPLETE (RUS)	
104	A-1545-416-A	MB-124 BOARD, COMPLETE (AUS)	
104	A-1545-417-A	MB-124 BOARD, COMPLETE (E)	
104	A-1545-418-A	MB-124 BOARD, COMPLETE (TW, KR)	
104	A-1545-419-A	MB-124 BOARD, COMPLETE (HK, TH)	
104	A-1545-420-A	MB-124 BOARD, COMPLETE (CH)	
105	A-1540-046-A	USB-008 BOARD, COMPLETE	
#1	7-682-544-09	+B 3X3	

9-1-4. ACCESSORIES

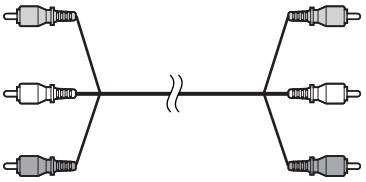
151
Remote Commander
(RMT-B102A/B102P)
(S350)

152
Remote Commander
(RMT-B103A)
(BX1)

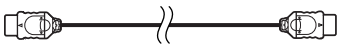
153
AC Power Cord



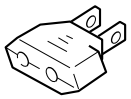
154
Audio/Video Cable (Phono Plug x3)



155
HDMI Cable
(S350: E/BX1)



156
Conversion Adaptor (E)



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

Ref. No.	Part No.	Description	Remark
151	1-480-649-11	REMOTE COMMANDER (RMT-B102A)	(S350: US, CND, E)
151	1-480-651-11	REMOTE COMMANDER (RMT-B102P)	(S350: EXCEPT US, CND, E)
152	1-480-740-11	REMOTE COMMANDER (RMT-B103A) (BX1)	
⚠153	1-555-074-52	CORD, POWER (AUS)	
⚠153	1-575-131-82	CORD, POWER (AEP, E, RUS)	
⚠153	1-782-476-13	CORD, POWER (CH)	
⚠153	1-823-701-11	CORD, POWER (US, CND)	
⚠153	1-830-337-11	POWER-SUPPLY CORD (TW)	
⚠153	1-831-905-21	POWER-SUPPLY CORD (UK, HK)	
⚠153	1-833-892-31	CORD SET, POWER SUPPLY (KR)	
⚠153	1-835-214-11	CORD, POWER (TH)	
154	1-828-145-11	CORD, CONNECTION (AV)	
155	1-834-169-21	CORD WITH CONNECTOR (HDMI CABLE)	(S350: E/BX1)
⚠156	1-569-008-22	ADAPTOR, CONVERSION 2P (E)	
*	3-287-660-11	MANUAL, INSTRUCTION (ENGLISH)	(S350: US, CND)
*	3-287-660-21	MANUAL, INSTRUCTION (FRENCH) (S350: CND)	
*	3-287-660-31	MANUAL, INSTRUCTION (KOREAN) (S350: KR)	
*	3-287-660-41	MANUAL, INSTRUCTION	(TRADITIONAL CHINESE) (S350: TW)
*	3-287-660-51	MANUAL, INSTRUCTION (SPANISH) (S350: E)	
*	3-287-660-61	MANUAL, INSTRUCTION (ENGLISH)	(S350: HK, TH)
*	3-287-660-71	MANUAL, INSTRUCTION	(TRADITIONAL CHINESE) (S350: HK)
*	3-287-660-81	MANUAL, INSTRUCTION (SIMPLIFID CHINESE)	(S350: CH)
*	3-452-775-11	MANUAL, INSTRUCTION (ENGLISH) (S350: UK)	
*	3-452-775-21	MANUAL, INSTRUCTION (FRENCH) (S350: AEP)	
*	3-452-775-31	MANUAL, INSTRUCTION (GERMAN) (S350: AEP)	
*	3-452-775-41	MANUAL, INSTRUCTION (ITALIAN) (S350: AEP)	
*	3-452-775-51	MANUAL, INSTRUCTION (DUTCH) (S350: AEP)	
*	3-452-776-11	MANUAL, INSTRUCTION (SPANISH) (S350: AEP)	
*	3-452-776-21	MANUAL, INSTRUCTION (PORTUGUESE)	(S350: AEP)
*	3-452-776-31	MANUAL, INSTRUCTION (SWEDISH) (S350: AEP)	
*	3-452-776-41	MANUAL, INSTRUCTION (DANISH) (S350: AEP)	
*	3-452-776-51	MANUAL, INSTRUCTION (FINNISH) (S350: AEP)	
*	4-120-892-61	MANUAL, INSTRUCTION (RUSSIAN) (S350: RUS)	
*	3-452-777-11	MANUAL, INSTRUCTION (ENGLISH) (BX1)	
*	3-452-777-21	MANUAL, INSTRUCTION (FRENCH) (BX1: CND)	
*	3-878-575-11	MANUAL, INSTRUCTION (ENGLISH) (S350: AUS)	

9-2. ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . uPA. . : µPA. .
  uPB. . : µPB. . uPC. . : µPC. .
  uPD. . : µPD. .
- CAPACITORS
  uF: µF
- COILS
  uH: µH
- Abbreviation
  AUS : Australian model
  CH : Chinese model
  CND : Canadian model
  HK : Hong Kong model
  KR : Korea model
  RUS : Russian model
  TH : Thai model
  TW : Taiwan model

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

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

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

The components identified by mark 🔒 contain confidential information.
Strictly follow the instructions whenever the components are repaired and/or replaced.

Les composants identifiés par la marque 🔒 contiennent des informations confidentielles.
Suivre scrupuleusement les instructions chaque fois qu'un composant est remplacé et / ou réparé.

Ref. No.	Part No.	Description			Remark
	A-1540-036-A	AV-123 BOARD, COMPLETE			
		**********			
		(Ref. No. 20,000 Series)			
		< CAPACITOR >			
C002	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C003	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C004	1-126-947-11	ELECT	47uF	20%	35V
C005	1-126-947-11	ELECT	47uF	20%	35V
C006	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C011	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C012	1-126-964-11	ELECT	10uF	20%	50V
C016	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C030	1-164-173-11	CERAMIC CHIP	0.0039uF	10%	50V
C031	1-164-173-11	CERAMIC CHIP	0.0039uF	10%	50V
C040	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C041	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C046	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C051	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C056	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C061	1-126-947-11	ELECT	47uF	20%	35V
C066	1-126-947-11	ELECT	47uF	20%	35V
C071	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C080	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C081	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C082	1-126-934-11	ELECT	220uF	20%	16V
C202	1-100-717-91	CERAMIC CHIP	1uF		16V
C203	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C204	1-100-717-91	CERAMIC CHIP	1uF		16V
C205	1-126-947-11	ELECT	47uF	20%	35V
C206	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C207	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C208	1-126-947-11	ELECT	47uF	20%	35V
C209	1-126-964-11	ELECT	10uF	20%	50V
C210	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C211	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C212	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C213	1-126-947-11	ELECT	47uF	20%	35V
C214	1-126-947-11	ELECT	47uF	20%	35V
C215	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C216	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C217	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C218	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C219	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C220	1-126-947-11	ELECT	47uF	20%	35V
C221	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C222	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C223	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C224	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C225	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
C226	1-126-947-11	ELECT	47uF	20%	35V
C227	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
		< CONNECTOR >			
CN203	1-821-773-51	CONNECTOR, FFC/FPC 21P			
		< DIODE >			
D001	8-719-914-43	DIODE DAN202K			
D002	8-719-988-61	DIODE 1SS355TE-17			
D203	8-719-067-40	DIODE STZ6.8N-T146			
D205	8-719-067-40	DIODE STZ6.8N-T146			
D206	8-719-067-40	DIODE STZ6.8N-T146			
D208	8-719-067-40	DIODE STZ6.8N-T146			
D209	8-719-067-40	DIODE STZ6.8N-T146			
D211	8-719-067-40	DIODE STZ6.8N-T146			
		< IC >			
IC001	6-705-337-01	IC TK11150CSCL-G			
IC002	6-702-630-01	IC AK4382AVTN-E2			
IC008	8-759-656-83	IC NJM4580MD-(TE2)			
IC202	6-702-302-01	IC TK11133CSCL-G			
IC205	8-759-667-17	IC L79M05TLL-SONY-TL-E			
IC206	6-712-336-01	IC NJM2564AV (TE2)			
		< JACK >			
J001	1-815-894-11	JACK, PIN (2P) (LINE OUT (AUDIO L/R))			
J201	1-793-483-11	PHONO JACK 3P (COMPONENT VIDEO OUT (PR/PB/Y))			
J202	1-780-641-11	JACK BLOCK, PIN (LINE OUT (S VIDEO/VIDEO))			

Ref. No.	Part No.	Description			Remark
		< COIL >			
L201	1-469-967-21	INDUCTOR	10uH		
L202	1-469-967-21	INDUCTOR	10uH		
L203	1-469-967-21	INDUCTOR	10uH		
L204	1-469-967-21	INDUCTOR	10uH		
L205	1-469-967-21	INDUCTOR	10uH		
		< FUSE >			
⚠PS101	1-576-596-21	FUSE 1A 32V			
⚠PS102	1-576-863-21	FUSE 0.5A 32V			
⚠PS201	1-576-596-21	FUSE 1A 32V			
		< TRANSISTOR >			
Q001	8-729-901-88	TRANSISTOR	2SC2411K-T-146-CR		
Q002	8-729-045-17	TRANSISTOR	2SB1561T100Q		
Q003	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q004	8-729-029-14	TRANSISTOR	DTC144EUA-T106		
Q008	8-729-029-07	TRANSISTOR	DTC124TUA-T106		
Q012	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q024	6-551-287-01	TRANSISTOR	2SD2704K-T146		
Q025	6-551-287-01	TRANSISTOR	2SD2704K-T146		
Q026	8-729-028-73	TRANSISTOR	DTA114EUA-T106		
Q201	8-729-028-83	TRANSISTOR	DTA124EUA-T106		
Q202	8-729-010-29	TRANSISTOR	MSD601-RST1		
Q203	8-729-010-29	TRANSISTOR	MSD601-RST1		
Q204	8-729-010-29	TRANSISTOR	MSD601-RST1		
Q205	8-729-010-29	TRANSISTOR	MSD601-RST1		
Q206	8-729-010-29	TRANSISTOR	MSD601-RST1		
Q207	8-729-921-80	TRANSISTOR	2SD1781K-T146-QR		
Q212	8-729-028-83	TRANSISTOR	DTA124EUA-T106		
Q213	8-729-921-80	TRANSISTOR	2SD1781K-T146-QR		
Q214	8-729-024-88	TRANSISTOR	MUN2212T1		
		< RESISTOR >			
R001	1-216-833-11	METAL CHIP	10K	5%	1/10W
R002	1-216-833-11	METAL CHIP	10K	5%	1/10W
R003	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R004	1-216-809-11	METAL CHIP	100	5%	1/10W
R005	1-216-809-11	METAL CHIP	100	5%	1/10W
R006	1-216-809-11	METAL CHIP	100	5%	1/10W
R007	1-216-809-11	METAL CHIP	100	5%	1/10W
R008	1-216-809-11	METAL CHIP	100	5%	1/10W
R009	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R010	1-216-833-11	METAL CHIP	10K	5%	1/10W
R012	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R013	1-216-841-11	METAL CHIP	47K	5%	1/10W
R014	1-216-845-11	METAL CHIP	100K	5%	1/10W
R015	1-216-821-11	METAL CHIP	1K	5%	1/10W
R016	1-216-817-11	METAL CHIP	470	5%	1/10W
R017	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R030	1-216-833-11	METAL CHIP	10K	5%	1/10W
R040	1-216-833-11	METAL CHIP	10K	5%	1/10W
R044	1-216-833-11	METAL CHIP	10K	5%	1/10W
R062	1-218-709-11	METAL CHIP	5.1K	0.5%	1/10W
R063	1-218-709-11	METAL CHIP	5.1K	0.5%	1/10W
R064	1-218-709-11	METAL CHIP	5.1K	0.5%	1/10W
R065	1-218-709-11	METAL CHIP	5.1K	0.5%	1/10W
R076	1-218-710-11	METAL CHIP	5.6K	0.5%	1/10W
R077	1-218-710-11	METAL CHIP	5.6K	0.5%	1/10W
R086	1-218-674-11	METAL CHIP	180	0.5%	1/10W
R087	1-218-674-11	METAL CHIP	180	0.5%	1/10W
R096	1-218-674-11	METAL CHIP	180	0.5%	1/10W
R097	1-218-710-11	METAL CHIP	5.6K	0.5%	1/10W
R106	1-218-710-11	METAL CHIP	5.6K	0.5%	1/10W
R107	1-218-674-11	METAL CHIP	180	0.5%	1/10W
R116	1-216-817-11	METAL CHIP	470	5%	1/10W
R117	1-216-817-11	METAL CHIP	470	5%	1/10W
R126	1-216-841-11	METAL CHIP	47K	5%	1/10W
R127	1-216-841-11	METAL CHIP	47K	5%	1/10W
R136	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R137	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R146	1-216-817-11	METAL CHIP	470	5%	1/10W
R147	1-216-817-11	METAL CHIP	470	5%	1/10W
R148	1-216-845-11	METAL CHIP	100K	5%	1/10W
R158	1-216-295-91	SHORT CHIP	0		
R160	1-216-295-91	SHORT CHIP	0		
R163	1-216-864-11	SHORT CHIP	0		
R164	1-216-864-11	SHORT CHIP	0		
R165	1-216-864-11	SHORT CHIP	0		
R166	1-216-864-11	SHORT CHIP	0		
R167	1-216-864-11	SHORT CHIP	0		
R168	1-216-864-11	SHORT CHIP	0		
R201	1-216-833-11	METAL CHIP	10K	5%	1/10W
R202	1-216-821-11	METAL CHIP	1K	5%	1/10W
R208	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R210	1-216-833-11	METAL CHIP	10K	5%	1/10W
R211	1-216-801-11	METAL CHIP	22	5%	1/10W
R212	1-216-801-11	METAL CHIP	22	5%	1/10W
R213	1-216-801-11	METAL CHIP	22	5%	1/10W
R214	1-216-801-11	METAL CHIP	22	5%	1/10W
R215	1-216-801-11	METAL CHIP	22	5%	1/10W
R219	1-216-819-11	METAL CHIP	680	5%	1/10W
R220	1-216-819-11	METAL CHIP	680	5%	1/10W
R221	1-216-819-11	METAL CHIP	680	5%	1/10W
R222	1-216-819-11	METAL CHIP	680	5%	1/10W
R223	1-216-819-11	METAL CHIP	680	5%	1/10W
R232	1-216-864-11	SHORT CHIP	0		
R233	1-216-864-11	SHORT CHIP	0		
R234	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R235	1-216-809-11	METAL CHIP	100	5%	1/10W
R237	1-218-285-11	METAL CHIP	75	5%	1/10W
R239	1-218-285-11	METAL CHIP	75	5%	1/10W
R241	1-218-285-11	METAL CHIP	75	5%	1/10W
R242	1-218-285-11	METAL CHIP	75	5%	1/10W
R243	1-218-285-11	METAL CHIP	75	5%	1/10W
R244	1-218-285-11	METAL CHIP	75	5%	1/10W
R260	1-216-864-11	SHORT CHIP	0		
R263	1-216-864-11	SHORT CHIP	0		
R265	1-216-833-11	METAL CHIP	10K	5%	1/10W
R267	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R268	1-216-864-11	SHORT CHIP	0		
R269	1-216-864-11	SHORT CHIP	0		

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Ref. No.	Part No.	Description			Remark
	A-1540-044-A	FC-096 BOARD, COMPLETE			
		**********			
		(Ref. No. 20, 000 Series)			
		< CONNECTOR >			
CN301	1-816-184-51	CONNECTOR, FFC/FPC 5P			
		< DIODE >			
D301	6-501-476-01	DIODE NSSW008CT-T071			
		(BLU-RAY DISC INDICATOR)			
		< RESISTOR >			
R301	1-216-821-11	METAL CHIP	1K	5%	1/10W
	A-1540-042-A	FL-187 BOARD, COMPLETE			
		**********			
		(Ref. No. 20, 000 Series)			
		< SWITCH >			
S331	1-771-410-21	SWITCH, TACTILE (I/⏻)			
	A-1540-040-A	FR-294 BOARD, COMPLETE			
		**********			
		(Ref. No. 20, 000 Series)			
		< CAPACITOR >			
C701	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C703	1-125-972-91	ELECT	100uF	20%	16V
C705	1-106-363-00	MYLAR	0.0068uF	5%	200V
C707	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C711	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C712	1-128-131-11	ELECT	22uF	20%	50V
C713	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C714	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C715	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C716	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C717	1-164-217-11	CERAMIC CHIP	150PF	5%	50V
C718	1-164-217-11	CERAMIC CHIP	150PF	5%	50V
		< CONNECTOR >			
CN701	1-793-806-51	CONNECTOR, FFC/FPC 17P			
		< DIODE >			
D703	8-719-988-61	DIODE 1SS355TE-17			
D704	8-719-988-61	DIODE 1SS355TE-17			
D705	8-719-988-61	DIODE 1SS355TE-17			
D706	8-719-988-61	DIODE 1SS355TE-17			
D707	6-500-021-01	DIODE MM3Z4V7ST1			
		< IC >			
IC701	6-600-693-01	IC GP1UE28XK0VF			
IC702	6-701-729-01	IC PT6315			
		< COIL >			
L701	1-411-919-11	INDUCTOR	100uH		
		< FLUORESCENT INDICATOR TUBE >			
ND701	1-483-022-11	INDICATOR TUBE, FLUORESCENT			

Ref. No.	Part No.	Description			Remark
		< FUSE >			
⚠ PS701	1-576-570-11	FUSE 0.63A 32V			
⚠ PS702	1-576-570-11	FUSE 0.63A 32V			
		< TRANSISTOR >			
Q701	8-729-028-97	TRANSISTOR	DTC114TUA-T106		
Q702	8-729-028-97	TRANSISTOR	DTC114TUA-T106		
Q703	8-729-421-19	TRANSISTOR	UN2213		
Q704	8-729-904-87	TRANSISTOR	2SB1197K-R		
Q706	8-729-901-88	TRANSISTOR	2SC2411K-CR		
Q707	8-729-901-88	TRANSISTOR	2SC2411K-CR		
		< RESISTOR >			
R701	1-216-833-11	METAL CHIP	10K	5%	1/10W
R703	1-216-815-11	METAL CHIP	330	5%	1/10W
R705	1-216-821-11	METAL CHIP	1K	5%	1/10W
R707	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R708	1-216-864-11	SHORT CHIP	0		
R710	1-216-864-11	SHORT CHIP	0		
R712	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R713	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R714	1-216-838-11	METAL CHIP	27K	5%	1/10W
R715	1-216-845-11	METAL CHIP	100K	5%	1/10W
		< SWITCH >			
S702	1-771-410-21	SWITCH, TACTILE (⏏)			
S703	1-771-410-21	SWITCH, TACTILE (❚❚)			
S704	1-771-410-21	SWITCH, TACTILE (■)			
S705	1-771-410-21	SWITCH, TACTILE (►)			
		< TRANSFORMER >			
* T701	1-445-447-11	TRANSFORMER, DC-DC CONVERTER			
	A-1540-038-A	IFD-003 BOARD, COMPLETE			
		**********			
		(Ref. No. 20, 000 Series)			
		< CAPACITOR >			
C403	1-162-920-11	CERAMIC CHIP	27PF	5%	50V
C404	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C405	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C406	1-137-765-21	ELECT CHIP	47uF	20%	16V
C409	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C410	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C411	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C412	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C413	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C414	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C415	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C416	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C417	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C418	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C501	1-100-591-91	CERAMIC CHIP	1uF	10%	25V

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Ref. No.	Part No.	Description			Remark
C503	1-100-591-91	CERAMIC CHIP	1uF	10%	25V
C505	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C507	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C601	1-135-960-91	CERAMIC CHIP	10uF	10%	25V
C603	1-100-717-91	CERAMIC CHIP	1uF		16V
C604	1-135-960-91	CERAMIC CHIP	10uF	10%	25V
C605	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C607	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C608	1-100-717-91	CERAMIC CHIP	1uF		16V
C609	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C610	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C619	1-135-960-91	CERAMIC CHIP	10uF	10%	25V
C621	1-135-960-91	CERAMIC CHIP	10uF	10%	25V
C622	1-127-820-11	CERAMIC CHIP	4.7uF	10%	16V
C624	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C626	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C627	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C628	1-100-159-91	CERAMIC CHIP	22uF	10%	6.3V
C630	1-100-159-91	CERAMIC CHIP	22uF	10%	6.3V
C631	1-100-159-91	CERAMIC CHIP	22uF	10%	6.3V
C632	1-100-159-91	CERAMIC CHIP	22uF	10%	6.3V
C633	1-127-820-11	CERAMIC CHIP	4.7uF	10%	16V
		< CONNECTOR >			
CN101	1-815-954-21	PIN, CONNECTOR (PC BOARD) 13P			
CN102	1-816-587-21	PIN, CONNECTOR (PC BOARD) 15P			
CN402	1-764-177-11	PIN, CONNECTOR (SMD) (1.5MM) 7P			
CN501	1-691-550-11	PIN, CONNECTOR (1.5MM) (SMD) 3P			
CN503	1-820-117-51	CONNECTOR, FFC/FPC 19P			
CN504	1-820-116-51	CONNECTOR, FFC/FPC 17P			
		< DIODE >			
D606	8-719-083-60	DIODE UDZSNPTE-174.7B			
		< IC >			
IC402	6-808-473-01	IC R5F212A7SNA06FA			
IC501	6-707-208-01	IC TK11100CSCB-G			
IC601	6-702-302-01	IC TK11133CSCL-G			
IC602	6-711-586-01	IC MP2303DN-LF-Z			
IC603	6-711-586-01	IC MP2303DN-LF-Z			
IC604	6-711-050-01	IC S-1170B50UC-0UJTFG			
		< FUSE >			
⚠PS601	1-576-415-11	FUSE, MICRO (1608 TYPE)			
⚠PS602	1-576-415-11	FUSE, MICRO (1608 TYPE)			
⚠PS603	1-576-603-21	FUSE 3.15A 24V			
		< TRANSISTOR >			
Q501	8-729-421-19	TRANSISTOR	UN2213		
Q503	8-729-421-19	TRANSISTOR	UN2213		
Q505	8-729-037-53	TRANSISTOR	2SB1462J-QR (TX).SO		
Q507	8-729-907-00	TRANSISTOR	DTC114EU		
Q509	8-729-028-97	TRANSISTOR	DTC114TUA-T106		
Q510	8-729-028-97	TRANSISTOR	DTC114TUA-T106		
		< RESISTOR >			
R405	1-216-864-11	SHORT CHIP	0		
R406	1-216-833-11	METAL CHIP	10K	5%	1/10W
R407	1-218-881-11	METAL CHIP	27K	0.5%	1/10W

Ref. No.	Part No.	Description			Remark
R408	1-216-849-11	METAL CHIP	220K	5%	1/10W
R409	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R410	1-216-837-11	METAL CHIP	22K	5%	1/10W
R411	1-216-809-11	METAL CHIP	100	5%	1/10W
R412	1-216-809-11	METAL CHIP	100	5%	1/10W
R414	1-216-809-11	METAL CHIP	100	5%	1/10W
R415	1-216-809-11	METAL CHIP	100	5%	1/10W
R417	1-216-809-11	METAL CHIP	100	5%	1/10W
R418	1-216-845-11	METAL CHIP	100K	5%	1/10W
R419	1-216-809-11	METAL CHIP	100	5%	1/10W
R420	1-216-864-11	SHORT CHIP	0		
R422	1-216-864-11	SHORT CHIP	0		
R423	1-216-809-11	METAL CHIP	100	5%	1/10W
R424	1-216-833-11	METAL CHIP	10K	5%	1/10W
R425	1-216-864-11	SHORT CHIP	0		
R426	1-216-809-11	METAL CHIP	100	5%	1/10W
R427	1-216-833-11	METAL CHIP	10K	5%	1/10W
R428	1-216-833-11	METAL CHIP	10K	5%	1/10W
R429	1-216-864-11	SHORT CHIP	0		
R430	1-216-809-11	METAL CHIP	100	5%	1/10W
R431	1-216-864-11	SHORT CHIP	0		
R432	1-216-809-11	METAL CHIP	100	5%	1/10W
R435	1-216-845-11	METAL CHIP	100K	5%	1/10W
R439	1-216-833-11	METAL CHIP	10K	5%	1/10W
R442	1-216-845-11	METAL CHIP	100K	5%	1/10W
R443	1-216-833-11	METAL CHIP	10K	5%	1/10W
R445	1-216-845-11	METAL CHIP	100K	5%	1/10W
R448	1-216-809-11	METAL CHIP	100	5%	1/10W
R449	1-216-809-11	METAL CHIP	100	5%	1/10W
R450	1-218-857-11	METAL CHIP	2.7K	0.5%	1/10W
R451	1-216-864-11	SHORT CHIP	0		
R452	1-216-845-11	METAL CHIP	100K	5%	1/10W
R453	1-216-845-11	METAL CHIP	100K	5%	1/10W
R454	1-216-864-11	SHORT CHIP	0		
R455	1-216-845-11	METAL CHIP	100K	5%	1/10W
R457	1-216-809-11	METAL CHIP	100	5%	1/10W
R458	1-216-864-11	SHORT CHIP	0		
R461	1-216-809-11	METAL CHIP	100	5%	1/10W
R462	1-216-809-11	METAL CHIP	100	5%	1/10W
R463	1-216-809-11	METAL CHIP	100	5%	1/10W
R464	1-216-809-11	METAL CHIP	100	5%	1/10W
R465	1-216-833-11	METAL CHIP	10K	5%	1/10W
R466	1-216-833-11	METAL CHIP	10K	5%	1/10W
R467	1-216-833-11	METAL CHIP	10K	5%	1/10W
R468	1-216-833-11	METAL CHIP	10K	5%	1/10W
R469	1-216-833-11	METAL CHIP	10K	5%	1/10W
R470	1-216-845-11	METAL CHIP	100K	5%	1/10W
R471	1-216-845-11	METAL CHIP	100K	5%	1/10W
R472	1-216-849-11	METAL CHIP	220K	5%	1/10W
R501	1-218-899-11	METAL CHIP	150K	0.5%	1/16W
R502	1-218-878-11	METAL CHIP	20K	0.5%	1/10W
R503	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R504	1-218-865-11	METAL CHIP	5.6K	0.5%	1/10W
R509	1-216-864-11	SHORT CHIP	0		
R511	1-216-829-11	METAL CHIP	4.7K	5%	1/10W

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Ref. No.	Part No.	Description			Remark
R513	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R601	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R602	1-216-864-11	SHORT CHIP	0		
R603	1-218-863-11	METAL CHIP	4.7K	0.5%	1/10W
R604	1-218-863-11	METAL CHIP	4.7K	0.5%	1/10W
R605	1-216-821-11	METAL CHIP	1K	5%	1/10W
R606	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R607	1-216-815-11	METAL CHIP	330	5%	1/10W
R609	1-216-815-11	METAL CHIP	330	5%	1/10W
R611	1-216-815-11	METAL CHIP	330	5%	1/10W
R616	1-216-821-11	METAL CHIP	1K	5%	1/10W
R622	1-216-821-11	METAL CHIP	1K	5%	1/10W
R623	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R624	1-216-821-11	METAL CHIP	1K	5%	1/10W
R625	1-216-864-11	SHORT CHIP	0		
R626	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
R627	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R628	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R629	1-216-864-11	SHORT CHIP	0		
R630	1-216-295-91	SHORT CHIP	0		
R631	1-216-295-91	SHORT CHIP	0		
R632	1-216-295-91	SHORT CHIP	0		
		< VIBRATOR >			
X401	1-579-463-11	VIBRATOR, CRYSTAL (32.768kHz)			
X402	1-795-244-11	VIBRATOR, CERAMIC (10MHz)			
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	A-1545-412-A	MB-124 BOARD, COMPLETE (US, CND)			
	A-1545-414-A	MB-124 BOARD, COMPLETE (AEP, UK)			
	A-1545-415-A	MB-124 BOARD, COMPLETE (RUS)			
	A-1545-416-A	MB-124 BOARD, COMPLETE (AUS)			
	A-1545-417-A	MB-124 BOARD, COMPLETE (E)			
	A-1545-418-A	MB-124 BOARD, COMPLETE (TW, KR)			
	A-1545-419-A	MB-124 BOARD, COMPLETE (HK, TH)			
	A-1545-420-A	MB-124 BOARD, COMPLETE (CH)			
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		(Ref. No. 10, 000 Series)			
		< CAPACITOR >			
C101	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V
C102	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C103	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V
C104	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C105	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C106	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V
C107	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C108	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C109	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C110	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C111	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C112	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C113	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C114	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C115	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C116	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C117	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V
C118	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C119	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C120	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C121	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V

Ref. No.	Part No.	Description			Remark
C122	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C123	1-100-506-91	CERAMIC CHIP	1uF	20%	6.3V
C124	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C125	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C126	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C127	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C128	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C129	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C130	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C131	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C132	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C133	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C134	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C135	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C136	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C137	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C138	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C140	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C141	1-100-506-91	CERAMIC CHIP	1uF	20%	6.3V
C142	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C143	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C144	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C145	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C146	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C147	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C148	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C149	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C150	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C151	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C152	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C153	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C154	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C155	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C156	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C158	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C159	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C160	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C161	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C162	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C163	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C164	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C166	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V
C168	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C169	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C170	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C171	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C172	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C173	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C175	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C176	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C178	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C179	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C180	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C201	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V
C202	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C203	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V
C204	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C205	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C207	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C208	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V

Ref. No.	Part No.	Description			Remark
C209	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C210	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C211	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C212	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C213	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C214	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C215	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C216	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C217	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C218	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C219	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C220	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C221	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C222	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V
C223	1-100-506-91	CERAMIC CHIP	1uF	20%	6.3V
C224	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C225	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C226	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C227	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C228	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C229	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C230	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C231	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C232	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C233	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C234	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C235	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C236	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C237	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C238	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C240	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C241	1-100-506-91	CERAMIC CHIP	1uF	20%	6.3V
C242	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C243	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C244	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C245	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C246	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C247	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C248	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C249	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C250	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C251	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C252	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C253	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C254	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C255	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C256	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C258	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C259	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V
C261	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V
C262	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C263	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C264	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C265	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C266	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C267	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C269	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C270	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C272	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C273	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V

Ref. No.	Part No.	Description			Remark
C276	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C277	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C301	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C302	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C303	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C304	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C305	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C306	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C313	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C314	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C315	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C316	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C317	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C340	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C344	1-164-870-11	CERAMIC CHIP	68PF	5%	50V
C345	1-127-772-81	CERAMIC CHIP	0.033uF	10%	10V
C346	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
* C347	1-112-833-11	ELECT CHIP	68uF	20%	16V
C349	1-127-738-91	CERAMIC CHIP	4.7uF	10%	25V
C350	1-127-738-91	CERAMIC CHIP	4.7uF	10%	25V
C351	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C352	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C353	1-127-738-91	CERAMIC CHIP	4.7uF	10%	25V
C354	1-127-738-91	CERAMIC CHIP	4.7uF	10%	25V
C355	1-112-300-91	CERAMIC CHIP	4.7uF	10%	10V
C356	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C357	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C358	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C361	1-100-159-91	CERAMIC CHIP	22uF	10%	6.3V
C362	1-112-786-11	ELECT CHIP	330uF	20%	4V
C363	1-100-159-91	CERAMIC CHIP	22uF	10%	6.3V
C364	1-112-786-11	ELECT CHIP	330uF	20%	4V
C365	1-100-159-91	CERAMIC CHIP	22uF	10%	6.3V
C366	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C367	1-100-159-91	CERAMIC CHIP	22uF	10%	6.3V
C368	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C371	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C372	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C374	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C375	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C401	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C402	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C403	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C404	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C405	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C406	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C407	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C408	1-164-846-11	CERAMIC CHIP	6PF	0.5PF	50V
C409	1-164-846-11	CERAMIC CHIP	6PF	0.5PF	50V
C410	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V
C411	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C412	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C413	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C414	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C415	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C420	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C421	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C422	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C423	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C424	1-107-820-11	CERAMIC CHIP	0.1uF		16V

Ref. No.	Part No.	Description			Remark
C425	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C426	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C427	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C428	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C429	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C430	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C431	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C501	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C502	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C503	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C504	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C505	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C506	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C507	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C508	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C509	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C510	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C511	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C513	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C514	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C517	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C600	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C601	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C602	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C603	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C604	1-128-993-21	ELECT CHIP	22uF	20%	10V
C606	1-165-646-91	CERAMIC CHIP	3.3uF	10%	10V
C607	1-165-884-11	CERAMIC CHIP	2.2uF	10%	6.3V
C608	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C610	1-128-394-11	ELECT CHIP	220uF	20%	10V
C611	1-100-966-91	CERAMIC CHIP	10uF	20%	10V
C613	1-165-884-11	CERAMIC CHIP	2.2uF	10%	6.3V
C614	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C615	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C616	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C617	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C618	1-164-844-11	CERAMIC CHIP	4PF	0.25PF	50V
C619	1-164-844-11	CERAMIC CHIP	4PF	0.25PF	50V
C623	1-128-993-21	ELECT CHIP	22uF	20%	10V
C625	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C626	1-164-848-11	CERAMIC CHIP	8PF	0.5PF	50V
C627	1-164-848-11	CERAMIC CHIP	8PF	0.5PF	50V
C628	1-128-993-21	ELECT CHIP	22uF	20%	10V
C629	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C630	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C631	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C632	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C633	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C634	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C635	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C636	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C637	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C638	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C639	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C640	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C641	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C642	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C643	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C644	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C645	1-165-908-11	CERAMIC CHIP	1uF	10%	10V

Ref. No.	Part No.	Description			Remark
C646	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C700	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C701	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C703	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C704	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C705	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C706	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C708	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C711	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C712	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C713	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C714	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C715	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C716	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C718	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C719	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C720	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C721	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C722	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C724	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C725	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C726	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C728	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C729	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C730	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C731	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C732	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C733	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C734	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C735	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C736	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C737	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C738	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C739	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C740	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C742	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C743	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C744	1-165-887-91	CERAMIC CHIP	0.22uF	10%	6.3V
C745	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C746	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C748	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C749	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C750	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C754	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C755	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C756	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C757	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C758	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C759	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C760	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C761	1-107-820-11	CERAMIC CHIP	0.1uF		16V
C762	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C763	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C801	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C802	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C803	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C805	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C806	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C807	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C808	1-126-206-11	ELECT CHIP	100uF	20%	6.3V

Ref. No.	Part No.	Description			Remark
C810	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C811	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C812	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C813	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C815	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C816	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C818	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C819	1-124-779-00	ELECT CHIP	10uF	20%	16V
C820	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C821	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C822	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C823	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C824	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C901	1-137-710-91	CERAMIC CHIP	10uF	20%	6.3V
C902	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C903	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C904	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C905	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C906	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C907	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C908	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C909	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C910	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C915	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C917	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C8001	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C8006	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C8007	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C8008	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C8009	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C8010	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C8011	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C8012	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C8013	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C8014	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C8015	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C8016	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
C8017	1-137-710-91	CERAMIC CHIP	10uF	20%	6.3V
C8018	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C8019	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C8020	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
		< CONNECTOR >			
CN301	1-816-587-21	PIN, CONNECTOR (PC BOARD) 15P			
CN700	1-819-876-21	CONNECTOR, SATA SMT (7P)			
CN702	1-821-450-12	CONNECTOR, HDMI (HDMI OUT)			
CN901	1-573-806-21	PIN, CONNECTOR (1.5MM) (SMD) 6P			
CN904	1-820-117-51	CONNECTOR, FFC/FPC 19P			
CN8001	1-819-875-21	ETHERNET CONNECTOR (8P) (LAN (100))			
		< DIODE >			
D301	8-719-081-67	DIODE M1FM3			
D303	6-500-294-01	DIODE PTZ-TE25-3.9B			
D304	6-500-294-01	DIODE PTZ-TE25-3.9B			
D600	8-719-988-61	DIODE 1SS355TE-17			
D601	6-500-701-01	DIODE PGB1010603NR			
D602	6-500-701-01	DIODE PGB1010603NR			

Ref. No.	Part No.	Description	Remark
		< FERRITE BEAD >	
FB8001	1-469-324-21	FERRITE, EMI (SMD) (2012)	
FB8002	1-469-324-21	FERRITE, EMI (SMD) (2012)	
		< FILTER >	
FL101	1-234-177-21	FILTER, CHIP EMI	
FL201	1-234-177-21	FILTER, CHIP EMI	
FL303	1-234-986-11	FILTER, EMI REMOVAL (1608SMD)	
FL304	1-234-986-11	FILTER, EMI REMOVAL (1608SMD)	
FL305	1-234-986-11	FILTER, EMI REMOVAL (1608SMD)	
FL306	1-234-986-11	FILTER, EMI REMOVAL (1608SMD)	
FL307	1-234-986-11	FILTER, EMI REMOVAL (1608SMD)	
FL308	1-234-986-11	FILTER, EMI REMOVAL (1608SMD)	
FL309	1-234-986-11	FILTER, EMI REMOVAL (1608SMD)	
FL310	1-234-986-11	FILTER, EMI REMOVAL (1608SMD)	
FL400	1-234-177-21	FILTER, CHIP EMI	
FL600	1-234-867-11	FILTER, EMI REMOVAL (SMD)	
FL701	1-400-874-11	FILTER, EMI REMOVAL (SMD)	
FL702	1-400-874-11	FILTER, EMI REMOVAL (SMD)	
		< IC >	
IC303	6-709-703-01	IC MM3141JNRE	
IC304	6-705-337-01	IC TK11150CSCL-G	
IC309	6-710-949-01	IC SN0608006PWPR	
IC310	6-710-949-01	IC SN0608006PWPR	
IC702	6-706-487-01	IC TC7SH08FU (T5RSOYJF)	
IC703	6-702-302-01	IC TK11133CSCL-G	
IC704	6-705-337-01	IC TK11150CSCL-G	
IC803	6-702-302-01	IC TK11133CSCL-G	
IC901	8-759-598-44	IC TC7WH08FK (TE85R)	
		< COIL >	
L600	1-400-180-21	INDUCTOR, EMI FERRITE (1608)	
L601	1-400-180-21	INDUCTOR, EMI FERRITE (1608)	
L602	1-400-180-21	INDUCTOR, EMI FERRITE (1608)	
* L603	1-813-308-11	COMMON MODE CHOKE	
L700	1-469-552-21	INDUCTOR 3.3uH	
L701	1-469-555-21	INDUCTOR 10uH	
L702	1-469-555-21	INDUCTOR 10uH	
L703	1-457-374-21	COMMOM MODE CHOKE COIL	
L704	1-457-374-21	COMMOM MODE CHOKE COIL	
L705	1-457-374-21	COMMOM MODE CHOKE COIL	
L706	1-457-374-21	COMMOM MODE CHOKE COIL	
L707	1-469-555-21	INDUCTOR 10uH	
L802	1-469-555-21	INDUCTOR 10uH	
L803	1-469-555-21	INDUCTOR 10uH	
L901	1-469-555-21	INDUCTOR 10uH	
		< FUSE >	
⚠ PS302	1-576-603-21	FUSE 3.15A 24V	
⚠ PS701	1-576-596-21	FUSE 1A 32V	
		< CONTACT TERMINAL >	
PT002	1-694-802-21	CONTACT TERMINAL	

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

Ref. No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q300	6-550-663-01	TRANSISTOR	RSS100N03FD5TB		
Q301	6-550-663-01	TRANSISTOR	RSS100N03FD5TB		
Q302	6-550-663-01	TRANSISTOR	RSS100N03FD5TB		
Q303	6-550-663-01	TRANSISTOR	RSS100N03FD5TB		
Q304	6-550-663-01	TRANSISTOR	RSS100N03FD5TB		
Q701	6-550-008-01	TRANSISTOR	UM6K1N-TN		
Q801	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q802	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q803	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q804	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q805	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q806	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q901	8-729-025-28	TRANSISTOR	2SK1828		
		< RESISTOR >			
R102	1-208-683-11	METAL CHIP	1K	0.5% 1/16W	
R103	1-208-683-11	METAL CHIP	1K	0.5% 1/16W	
R123	1-218-939-11	RES-CHIP	68	5% 1/16W	
R124	1-218-939-11	RES-CHIP	68	5% 1/16W	
R126	1-218-937-11	RES-CHIP	47	5% 1/16W	
R127	1-218-937-11	RES-CHIP	47	5% 1/16W	
R128	1-218-937-11	RES-CHIP	47	5% 1/16W	
R129	1-218-935-11	RES-CHIP	33	5% 1/16W	
R130	1-218-935-11	RES-CHIP	33	5% 1/16W	
R131	1-218-935-11	RES-CHIP	33	5% 1/16W	
R132	1-218-935-11	RES-CHIP	33	5% 1/16W	
R133	1-218-937-11	RES-CHIP	47	5% 1/16W	
R134	1-218-937-11	RES-CHIP	47	5% 1/16W	
R135	1-218-947-11	RES-CHIP	330	5% 1/16W	
R137	1-208-683-11	METAL CHIP	1K	0.5% 1/16W	
R138	1-208-683-11	METAL CHIP	1K	0.5% 1/16W	
R140	1-218-939-11	RES-CHIP	68	5% 1/16W	
R142	1-218-939-11	RES-CHIP	68	5% 1/16W	
R143	1-218-933-11	RES-CHIP	22	5% 1/16W	
R144	1-218-933-11	RES-CHIP	22	5% 1/16W	
R145	1-218-933-11	RES-CHIP	22	5% 1/16W	
R146	1-218-933-11	RES-CHIP	22	5% 1/16W	
R156	1-218-947-11	RES-CHIP	330	5% 1/16W	
R158	1-208-683-11	METAL CHIP	1K	0.5% 1/16W	
R159	1-208-683-11	METAL CHIP	1K	0.5% 1/16W	
R177	1-218-943-11	RES-CHIP	150	5% 1/16W	
R178	1-218-943-11	RES-CHIP	150	5% 1/16W	
R179	1-218-943-11	RES-CHIP	150	5% 1/16W	
R180	1-218-943-11	RES-CHIP	150	5% 1/16W	
R181	1-220-169-11	RES-CHIP	75	5% 1/16W	
R188	1-216-864-11	SHORT CHIP	0		
R190	1-216-864-11	SHORT CHIP	0		
R191	1-216-864-11	SHORT CHIP	0		
R192	1-216-864-11	SHORT CHIP	0		
R202	1-208-683-11	METAL CHIP	1K	0.5% 1/16W	
R203	1-208-683-11	METAL CHIP	1K	0.5% 1/16W	
R208	1-208-663-11	METAL CHIP	150	0.5% 1/16W	
R209	1-208-663-11	METAL CHIP	150	0.5% 1/16W	
R223	1-218-939-11	RES-CHIP	68	5% 1/16W	
R224	1-218-939-11	RES-CHIP	68	5% 1/16W	
R226	1-218-937-11	RES-CHIP	47	5% 1/16W	
R227	1-218-937-11	RES-CHIP	47	5% 1/16W	
R228	1-218-937-11	RES-CHIP	47	5% 1/16W	
R229	1-218-935-11	RES-CHIP	33	5% 1/16W	

Ref. No.	Part No.	Description			Remark
R230	1-218-935-11	RES-CHIP	33	5% 1/16W	
R231	1-218-935-11	RES-CHIP	33	5% 1/16W	
R232	1-218-935-11	RES-CHIP	33	5% 1/16W	
R233	1-218-937-11	RES-CHIP	47	5% 1/16W	
R234	1-218-937-11	RES-CHIP	47	5% 1/16W	
R235	1-218-947-11	RES-CHIP	330	5% 1/16W	
R237	1-208-683-11	METAL CHIP	1K	0.5% 1/16W	
R238	1-208-683-11	METAL CHIP	1K	0.5% 1/16W	
R240	1-218-939-11	RES-CHIP	68	5% 1/16W	
R241	1-218-939-11	RES-CHIP	68	5% 1/16W	
R243	1-218-933-11	RES-CHIP	22	5% 1/16W	
R244	1-218-933-11	RES-CHIP	22	5% 1/16W	
R245	1-218-933-11	RES-CHIP	22	5% 1/16W	
R246	1-218-933-11	RES-CHIP	22	5% 1/16W	
R250	1-216-864-11	SHORT CHIP	0		
R256	1-218-947-11	RES-CHIP	330	5% 1/16W	
R258	1-208-683-11	METAL CHIP	1K	0.5% 1/16W	
R259	1-208-683-11	METAL CHIP	1K	0.5% 1/16W	
R277	1-218-943-11	RES-CHIP	150	5% 1/16W	
R278	1-218-943-11	RES-CHIP	150	5% 1/16W	
R279	1-218-943-11	RES-CHIP	150	5% 1/16W	
R280	1-218-943-11	RES-CHIP	150	5% 1/16W	
R281	1-220-169-11	RES-CHIP	75	5% 1/16W	
R301	1-218-953-11	RES-CHIP	1K	5% 1/16W	
R302	1-216-864-11	SHORT CHIP	0		
R303	1-218-953-11	RES-CHIP	1K	5% 1/16W	
R309	1-218-953-11	RES-CHIP	1K	5% 1/16W	
R314	1-208-935-11	METAL CHIP	100K	0.5% 1/16W	
R315	1-208-935-11	METAL CHIP	100K	0.5% 1/16W	
R316	1-208-939-11	METAL CHIP	150K	0.5% 1/16W	
R317	1-208-709-11	METAL CHIP	12K	0.5% 1/16W	
R318	1-208-941-11	METAL CHIP	180K	0.5% 1/16W	
R319	1-208-939-11	METAL CHIP	150K	0.5% 1/16W	
R320	1-208-683-11	METAL CHIP	1K	0.5% 1/16W	
R321	1-208-711-11	METAL CHIP	15K	0.5% 1/16W	
R322	1-216-821-11	METAL CHIP	1K	5% 1/10W	
R333	1-216-864-11	SHORT CHIP	0		
R335	1-216-864-11	SHORT CHIP	0		
R344	1-218-879-11	METAL CHIP	22K	0.5% 1/10W	
R345	1-218-873-11	METAL CHIP	12K	0.5% 1/10W	
R352	1-218-953-11	RES-CHIP	1K	5% 1/16W	
R357	1-218-953-11	RES-CHIP	1K	5% 1/16W	
R361	1-208-703-11	METAL CHIP	6.8K	0.5% 1/16W	
R362	1-208-715-11	METAL CHIP	22K	0.5% 1/16W	
R367	1-218-953-11	RES-CHIP	1K	5% 1/16W	
R402	1-218-990-81	SHORT CHIP	0		
R404	1-218-990-81	SHORT CHIP	0		
R405	1-218-951-11	RES-CHIP	680	5% 1/16W	
R501	1-218-965-11	RES-CHIP	10K	5% 1/16W	
R502	1-218-965-11	RES-CHIP	10K	5% 1/16W	
R503	1-218-933-11	RES-CHIP	22	5% 1/16W	
R504	1-218-933-11	RES-CHIP	22	5% 1/16W	
R506	1-218-965-11	RES-CHIP	10K	5% 1/16W	
R507	1-218-965-11	RES-CHIP	10K	5% 1/16W	
R508	1-218-965-11	RES-CHIP	10K	5% 1/16W	
R510	1-218-965-11	RES-CHIP	10K	5% 1/16W	
R512	1-218-965-11	RES-CHIP	10K	5% 1/16W	
R514	1-218-965-11	RES-CHIP	10K	5% 1/16W	
R515	1-218-965-11	RES-CHIP	10K	5% 1/16W	
R517	1-218-935-11	RES-CHIP	33	5% 1/16W	

Ref. No.	Part No.	Description			Remark
R518	1-218-965-11	RES-CHIP	10K	5%	1/16W
R519	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R520	1-218-990-81	SHORT CHIP	0		
R522	1-218-965-11	RES-CHIP	10K	5%	1/16W
R523	1-218-941-81	RES-CHIP	100	5%	1/16W
R527	1-218-965-11	RES-CHIP	10K	5%	1/16W
R528	1-218-933-11	RES-CHIP	22	5%	1/16W
R529	1-218-933-11	RES-CHIP	22	5%	1/16W
R530	1-218-990-81	SHORT CHIP	0		
R531	1-218-933-11	RES-CHIP	22	5%	1/16W
R532	1-218-933-11	RES-CHIP	22	5%	1/16W
R533	1-218-933-11	RES-CHIP	22	5%	1/16W
R534	1-218-933-11	RES-CHIP	22	5%	1/16W
R535	1-218-933-11	RES-CHIP	22	5%	1/16W
R536	1-218-933-11	RES-CHIP	22	5%	1/16W
R537	1-218-933-11	RES-CHIP	22	5%	1/16W
R538	1-218-933-11	RES-CHIP	22	5%	1/16W
R539	1-218-990-81	SHORT CHIP	0		
R540	1-218-933-11	RES-CHIP	22	5%	1/16W
R541	1-218-933-11	RES-CHIP	22	5%	1/16W
R542	1-218-965-11	RES-CHIP	10K	5%	1/16W
R543	1-218-965-11	RES-CHIP	10K	5%	1/16W
R544	1-218-965-11	RES-CHIP	10K	5%	1/16W
R545	1-218-965-11	RES-CHIP	10K	5%	1/16W
R546	1-218-965-11	RES-CHIP	10K	5%	1/16W
R547	1-218-965-11	RES-CHIP	10K	5%	1/16W
R548	1-218-965-11	RES-CHIP	10K	5%	1/16W
R549	1-218-965-11	RES-CHIP	10K	5%	1/16W
R550	1-218-965-11	RES-CHIP	10K	5%	1/16W
R551	1-218-965-11	RES-CHIP	10K	5%	1/16W
R552	1-218-965-11	RES-CHIP	10K	5%	1/16W
R553	1-218-965-11	RES-CHIP	10K	5%	1/16W
R554	1-218-965-11	RES-CHIP	10K	5%	1/16W
R555	1-218-965-11	RES-CHIP	10K	5%	1/16W
R601	1-218-990-81	SHORT CHIP	0		
R605	1-218-935-11	RES-CHIP	33	5%	1/16W
R606	1-218-935-11	RES-CHIP	33	5%	1/16W
R607	1-218-935-11	RES-CHIP	33	5%	1/16W
R608	1-218-935-11	RES-CHIP	33	5%	1/16W
R609	1-218-935-11	RES-CHIP	33	5%	1/16W
R610	1-218-935-11	RES-CHIP	33	5%	1/16W
R611	1-218-935-11	RES-CHIP	33	5%	1/16W
R612	1-218-935-11	RES-CHIP	33	5%	1/16W
R613	1-218-935-11	RES-CHIP	33	5%	1/16W
R614	1-218-935-11	RES-CHIP	33	5%	1/16W
R615	1-218-935-11	RES-CHIP	33	5%	1/16W
R616	1-218-935-11	RES-CHIP	33	5%	1/16W
R617	1-218-990-81	SHORT CHIP	0		
R620	1-218-990-81	SHORT CHIP	0		
R622	1-218-990-81	SHORT CHIP	0		
R624	1-218-941-81	RES-CHIP	100	5%	1/16W
R625	1-218-933-11	RES-CHIP	22	5%	1/16W
R627	1-218-965-11	RES-CHIP	10K	5%	1/16W
R628	1-218-965-11	RES-CHIP	10K	5%	1/16W
R629	1-218-965-11	RES-CHIP	10K	5%	1/16W
R632	1-208-884-81	METAL CHIP	750	0.5%	1/16W
R633	1-218-965-11	RES-CHIP	10K	5%	1/16W
R634	1-414-843-21	INDUCTOR	18nH		
R635	1-414-843-21	INDUCTOR	18nH		
R636	1-208-688-11	METAL CHIP	1.6K	0.5%	1/16W
R637	1-218-965-11	RES-CHIP	10K	5%	1/16W
R639	1-218-965-11	RES-CHIP	10K	5%	1/16W
R641	1-218-965-11	RES-CHIP	10K	5%	1/16W
R642	1-218-945-11	RES-CHIP	220	5%	1/16W
R644	1-218-935-11	RES-CHIP	33	5%	1/16W
R645	1-218-935-11	RES-CHIP	33	5%	1/16W
R646	1-218-935-11	RES-CHIP	33	5%	1/16W
R647	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R648	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R650	1-218-965-11	RES-CHIP	10K	5%	1/16W
R651	1-218-941-81	RES-CHIP	100	5%	1/16W
R652	1-216-073-91	RES-CHIP	10K	5%	1/10W
R654	1-218-990-81	SHORT CHIP	0		
R655	1-218-990-81	SHORT CHIP	0		
R656	1-218-990-81	SHORT CHIP	0		
R657	1-218-990-81	SHORT CHIP	0		
R658	1-218-990-81	SHORT CHIP	0		
R659	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R660	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R661	1-218-990-81	SHORT CHIP	0		
R663	1-216-295-91	SHORT CHIP	0		
R700	1-218-953-11	RES-CHIP	1K	5%	1/16W
R702	1-218-953-11	RES-CHIP	1K	5%	1/16W
R703	1-218-941-81	RES-CHIP	100	5%	1/16W
R704	1-218-941-81	RES-CHIP	100	5%	1/16W
R705	1-208-690-11	METAL CHIP	2K	0.5%	1/16W
R706	1-218-941-81	RES-CHIP	100	5%	1/16W
R707	1-208-690-11	METAL CHIP	2K	0.5%	1/16W
R708	1-211-986-11	METAL CHIP	51	0.5%	1/10W
R709	1-218-990-81	SHORT CHIP	0		
R710	1-218-990-81	SHORT CHIP	0		
R712	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R714	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R715	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R719	1-218-967-11	RES-CHIP	15K	5%	1/16W
R721	1-218-973-11	RES-CHIP	47K	5%	1/16W
R722	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R723	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R724	1-218-956-11	RES-CHIP	1.8K	5%	1/16W
R725	1-218-956-11	RES-CHIP	1.8K	5%	1/16W
R726	1-216-864-11	SHORT CHIP	0		
R727	1-216-864-11	SHORT CHIP	0		
R728	1-216-864-11	SHORT CHIP	0		
R729	1-216-864-11	SHORT CHIP	0		
R730	1-216-864-11	SHORT CHIP	0		
R731	1-218-967-11	RES-CHIP	15K	5%	1/16W
R735	1-218-990-81	SHORT CHIP	0		
R737	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R738	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R739	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R740	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R741	1-218-953-11	RES-CHIP	1K	5%	1/16W
R743	1-218-990-81	SHORT CHIP	0		
R745	1-218-990-81	SHORT CHIP	0		
R746	1-218-990-81	SHORT CHIP	0		
R808	1-218-937-11	RES-CHIP	47	5%	1/16W
R809	1-218-937-11	RES-CHIP	47	5%	1/16W
R810	1-218-937-11	RES-CHIP	47	5%	1/16W
R811	1-218-937-11	RES-CHIP	47	5%	1/16W
R812	1-218-935-11	RES-CHIP	33	5%	1/16W

Ref. No.	Part No.	Description			Remark
R813	1-208-663-11	METAL CHIP	150	0.5%	1/16W
R814	1-208-663-11	METAL CHIP	150	0.5%	1/16W
R815	1-208-883-81	METAL CHIP	680	0.5%	1/16W
R816	1-208-663-11	METAL CHIP	150	0.5%	1/16W
R817	1-208-663-11	METAL CHIP	150	0.5%	1/16W
R818	1-208-663-11	METAL CHIP	150	0.5%	1/16W
R819	1-208-675-11	METAL CHIP	470	0.5%	1/16W
R820	1-218-965-11	RES-CHIP	10K	5%	1/16W
R821	1-218-953-11	RES-CHIP	1K	5%	1/16W
R823	1-218-990-81	SHORT CHIP	0		
R824	1-218-953-11	RES-CHIP	1K	5%	1/16W
R825	1-218-953-11	RES-CHIP	1K	5%	1/16W
R826	1-218-947-11	RES-CHIP	330	5%	1/16W
R827	1-218-945-11	RES-CHIP	220	5%	1/16W
R829	1-218-990-81	SHORT CHIP	0		
R830	1-218-939-11	RES-CHIP	68	5%	1/16W
R831	1-218-947-11	RES-CHIP	330	5%	1/16W
R833	1-218-990-81	SHORT CHIP	0		
R834	1-218-965-11	RES-CHIP	10K	5%	1/16W
R835	1-208-691-11	METAL CHIP	2.2K	0.5%	1/16W
R836	1-208-691-11	METAL CHIP	2.2K	0.5%	1/16W
R837	1-208-695-11	METAL CHIP	3.3K	0.5%	1/16W
R838	1-208-695-11	METAL CHIP	3.3K	0.5%	1/16W
R839	1-218-947-11	RES-CHIP	330	5%	1/16W
R841	1-218-990-81	SHORT CHIP	0		
R842	1-218-990-81	SHORT CHIP	0		
R843	1-218-947-11	RES-CHIP	330	5%	1/16W
R845	1-218-990-81	SHORT CHIP	0		
R847	1-218-947-11	RES-CHIP	330	5%	1/16W
R848	1-218-990-81	SHORT CHIP	0		
R849	1-218-933-11	RES-CHIP	22	5%	1/16W
R850	1-218-933-11	RES-CHIP	22	5%	1/16W
R851	1-218-933-11	RES-CHIP	22	5%	1/16W
R852	1-218-933-11	RES-CHIP	22	5%	1/16W
R853	1-218-933-11	RES-CHIP	22	5%	1/16W
R858	1-218-965-11	RES-CHIP	10K	5%	1/16W
R859	1-218-965-11	RES-CHIP	10K	5%	1/16W
R860	1-218-965-11	RES-CHIP	10K	5%	1/16W
R861	1-218-965-11	RES-CHIP	10K	5%	1/16W
R862	1-218-965-11	RES-CHIP	10K	5%	1/16W
R863	1-218-965-11	RES-CHIP	10K	5%	1/16W
R864	1-218-965-11	RES-CHIP	10K	5%	1/16W
R865	1-216-295-91	SHORT CHIP	0		
R873	1-218-990-81	SHORT CHIP	0		
R874	1-218-990-81	SHORT CHIP	0		
R875	1-218-990-81	SHORT CHIP	0		
R876	1-218-990-81	SHORT CHIP	0		
R877	1-218-990-81	SHORT CHIP	0		
R878	1-218-990-81	SHORT CHIP	0		
R879	1-218-990-81	SHORT CHIP	0		
R889	1-218-990-81	SHORT CHIP	0		
R890	1-218-990-81	SHORT CHIP	0		
R891	1-218-990-81	SHORT CHIP	0		
R892	1-218-990-81	SHORT CHIP	0		
R893	1-218-990-81	SHORT CHIP	0		
R894	1-218-990-81	SHORT CHIP	0		
R895	1-218-990-81	SHORT CHIP	0		
R896	1-218-990-81	SHORT CHIP	0		
R899	1-218-990-81	SHORT CHIP	0		
R901	1-218-965-11	RES-CHIP	10K	5%	1/16W

Ref. No.	Part No.	Description			Remark
R902	1-218-965-11	RES-CHIP	10K	5%	1/16W
R903	1-218-990-81	SHORT CHIP	0		
R904	1-218-965-11	RES-CHIP	10K	5%	1/16W
R905	1-218-990-81	SHORT CHIP	0		
R906	1-218-965-11	RES-CHIP	10K	5%	1/16W
R907	1-218-990-81	SHORT CHIP	0		
R908	1-218-990-81	SHORT CHIP	0		
R909	1-218-990-81	SHORT CHIP	0		
R913	1-218-965-11	RES-CHIP	10K	5%	1/16W
R914	1-218-965-11	RES-CHIP	10K	5%	1/16W
R915	1-218-965-11	RES-CHIP	10K	5%	1/16W
R916	1-218-965-11	RES-CHIP	10K	5%	1/16W
R917	1-218-935-11	RES-CHIP	33	5%	1/16W
R918	1-218-965-11	RES-CHIP	10K	5%	1/16W
R919	1-218-965-11	RES-CHIP	10K	5%	1/16W
R920	1-218-929-11	RES-CHIP	10	5%	1/16W
R921	1-218-929-11	RES-CHIP	10	5%	1/16W
R922	1-218-929-11	RES-CHIP	10	5%	1/16W
R923	1-218-929-11	RES-CHIP	10	5%	1/16W
R924	1-218-990-81	SHORT CHIP	0		
R925	1-218-990-81	SHORT CHIP	0		
R926	1-218-990-81	SHORT CHIP	0		
R927	1-218-990-81	SHORT CHIP	0		
R928	1-218-990-81	SHORT CHIP	0		
R929	1-218-990-81	SHORT CHIP	0		
R930	1-218-990-81	SHORT CHIP	0		
R931	1-218-990-81	SHORT CHIP	0		
R932	1-218-990-81	SHORT CHIP	0		
R933	1-218-965-11	RES-CHIP	10K	5%	1/16W
R934	1-218-965-11	RES-CHIP	10K	5%	1/16W
R935	1-218-935-11	RES-CHIP	33	5%	1/16W
R936	1-218-965-11	RES-CHIP	10K	5%	1/16W
R938	1-218-965-11	RES-CHIP	10K	5%	1/16W
R939	1-218-965-11	RES-CHIP	10K	5%	1/16W
R940	1-218-965-11	RES-CHIP	10K	5%	1/16W
R941	1-218-965-11	RES-CHIP	10K	5%	1/16W
R942	1-218-965-11	RES-CHIP	10K	5%	1/16W
R943	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R944	1-218-953-11	RES-CHIP	1K	5%	1/16W
R945	1-218-953-11	RES-CHIP	1K	5%	1/16W
R946	1-218-965-11	RES-CHIP	10K	5%	1/16W
R947	1-218-953-11	RES-CHIP	1K	5%	1/16W
R948	1-218-990-81	SHORT CHIP	0		
R949	1-218-933-11	RES-CHIP	22	5%	1/16W
R950	1-218-933-11	RES-CHIP	22	5%	1/16W
R951	1-218-990-81	SHORT CHIP	0		
R952	1-218-990-81	SHORT CHIP	0		
R953	1-218-990-81	SHORT CHIP	0		
R954	1-218-990-81	SHORT CHIP	0		
R955	1-218-990-81	SHORT CHIP	0		
R956	1-218-990-81	SHORT CHIP	0		
R957	1-218-990-81	SHORT CHIP	0		
R958	1-218-990-81	SHORT CHIP	0		
R959	1-218-990-81	SHORT CHIP	0		
R960	1-218-990-81	SHORT CHIP	0		
R961	1-218-990-81	SHORT CHIP	0		
R962	1-218-965-11	RES-CHIP	10K	5%	1/16W
R963	1-218-965-11	RES-CHIP	10K	5%	1/16W
R964	1-218-941-81	RES-CHIP	100	5%	1/16W
R965	1-218-990-81	SHORT CHIP	0		

Ref. No.	Part No.	Description			Remark
R966	1-218-965-11	RES-CHIP	10K	5%	1/16W
R967	1-218-965-11	RES-CHIP	10K	5%	1/16W
R969	1-218-977-11	RES-CHIP	100K	5%	1/16W
R970	1-218-965-11	RES-CHIP	10K	5%	1/16W
R972	1-218-965-11	RES-CHIP	10K	5%	1/16W
R973	1-218-965-11	RES-CHIP	10K	5%	1/16W
R974	1-218-990-81	SHORT CHIP	0		
R975	1-218-990-81	SHORT CHIP	0		
R976	1-218-990-81	SHORT CHIP	0		
R977	1-218-990-81	SHORT CHIP	0		
R978	1-218-990-81	SHORT CHIP	0		
R979	1-218-990-81	SHORT CHIP	0		
R980	1-218-990-81	SHORT CHIP	0		
R981	1-218-990-81	SHORT CHIP	0		
R982	1-218-990-81	SHORT CHIP	0		
R983	1-218-990-81	SHORT CHIP	0		
R984	1-218-990-81	SHORT CHIP	0		
R985	1-218-965-11	RES-CHIP	10K	5%	1/16W
R986	1-218-990-81	SHORT CHIP	0		
R988	1-218-933-11	RES-CHIP	22	5%	1/16W
R990	1-218-933-11	RES-CHIP	22	5%	1/16W
R991	1-218-933-11	RES-CHIP	22	5%	1/16W
R992	1-218-935-11	RES-CHIP	33	5%	1/16W
R993	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R994	1-218-935-11	RES-CHIP	33	5%	1/16W
R995	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R996	1-218-965-11	RES-CHIP	10K	5%	1/16W
R997	1-218-965-11	RES-CHIP	10K	5%	1/16W
R998	1-218-990-81	SHORT CHIP	0		
R999	1-218-933-11	RES-CHIP	22	5%	1/16W
R1801	1-218-990-81	SHORT CHIP	0		
R1802	1-218-990-81	SHORT CHIP	0		
R1806	1-218-990-81	SHORT CHIP	0		
R7004	1-218-965-11	RES-CHIP	10K	5%	1/16W
R7005	1-218-965-11	RES-CHIP	10K	5%	1/16W
R7006	1-218-965-11	RES-CHIP	10K	5%	1/16W
R7010	1-218-965-11	RES-CHIP	10K	5%	1/16W
R7011	1-218-965-11	RES-CHIP	10K	5%	1/16W
R7012	1-218-965-11	RES-CHIP	10K	5%	1/16W
R8002	1-218-929-11	RES-CHIP	10	5%	1/16W
R8003	1-208-692-11	METAL CHIP	2.4K	0.5%	1/16W
R8004	1-245-369-91	METAL CHIP	49.9	1%	1/16W
R8005	1-208-911-11	METAL CHIP	10K	0.5%	1/16W
R8006	1-245-369-91	METAL CHIP	49.9	1%	1/16W
R8007	1-245-369-91	METAL CHIP	49.9	1%	1/16W
R8008	1-245-369-91	METAL CHIP	49.9	1%	1/16W
R8009	1-218-965-11	RES-CHIP	10K	5%	1/16W
R8010	1-218-990-81	SHORT CHIP	0		
R8011	1-218-965-11	RES-CHIP	10K	5%	1/16W
R8013	1-218-990-81	SHORT CHIP	0		
R8014	1-218-965-11	RES-CHIP	10K	5%	1/16W
R8015	1-218-990-81	SHORT CHIP	0		
R8017	1-218-990-81	SHORT CHIP	0		
R8018	1-218-990-81	SHORT CHIP	0		
R8019	1-218-965-11	RES-CHIP	10K	5%	1/16W
R8020	1-218-990-81	SHORT CHIP	0		
R8021	1-218-990-81	SHORT CHIP	0		
R8022	1-218-990-81	SHORT CHIP	0		
R8024	1-218-965-11	RES-CHIP	10K	5%	1/16W
R8025	1-218-990-81	SHORT CHIP	0		

Ref. No.	Part No.	Description			Remark
R8026	1-218-990-81	SHORT CHIP	0		
R8027	1-218-990-81	SHORT CHIP	0		
R8028	1-218-990-81	SHORT CHIP	0		
R8029	1-218-990-81	SHORT CHIP	0		
R8034	1-218-965-11	RES-CHIP	10K	5%	1/16W
R8035	1-218-965-11	RES-CHIP	10K	5%	1/16W
R8036	1-218-965-11	RES-CHIP	10K	5%	1/16W
R8038	1-218-941-81	RES-CHIP	100	5%	1/16W
R8039	1-218-990-81	SHORT CHIP	0		
R8040	1-218-990-81	SHORT CHIP	0		
R8041	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R8042	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R8044	1-218-937-11	RES-CHIP	47	5%	1/16W
R8045	1-218-937-11	RES-CHIP	47	5%	1/16W
R9001	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R9002	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R9003	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R9004	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R9005	1-218-990-81	SHORT CHIP	0		
R9006	1-218-990-81	SHORT CHIP	0		
R9007	1-218-990-81	SHORT CHIP	0		
R9021	1-218-941-81	RES-CHIP	100	5%	1/16W
R9022	1-218-990-81	SHORT CHIP	0		

< COMPOSITION CIRCUIT BLOCK >

Ref. No.	Part No.	Description	
RB109	1-234-371-21	RES, NETWORK	47 (1005X4)
RB110	1-234-371-21	RES, NETWORK	47 (1005X4)
RB112	1-234-371-21	RES, NETWORK	47 (1005X4)
RB113	1-234-371-21	RES, NETWORK	47 (1005X4)
* RB122	1-234-723-21	RES, NETWORK	75 (1005X4)
* RB123	1-234-723-21	RES, NETWORK	75 (1005X4)
* RB124	1-234-723-21	RES, NETWORK	75 (1005X4)
* RB125	1-234-723-21	RES, NETWORK	75 (1005X4)
* RB126	1-234-723-21	RES, NETWORK	75 (1005X4)
RB209	1-234-371-21	RES, NETWORK	47 (1005X4)
RB210	1-234-371-21	RES, NETWORK	47 (1005X4)
RB211	1-234-371-21	RES, NETWORK	47 (1005X4)
RB213	1-234-371-21	RES, NETWORK	47 (1005X4)
* RB223	1-234-723-21	RES, NETWORK	75 (1005X4)
* RB225	1-234-723-21	RES, NETWORK	75 (1005X4)
* RB226	1-234-723-21	RES, NETWORK	75 (1005X4)
* RB227	1-234-723-21	RES, NETWORK	75 (1005X4)
* RB229	1-234-723-21	RES, NETWORK	75 (1005X4)
RB502	1-234-370-21	RES, NETWORK	22 (1005X4)
RB503	1-234-370-21	RES, NETWORK	22 (1005X4)
RB504	1-234-370-21	RES, NETWORK	22 (1005X4)
RB505	1-234-370-21	RES, NETWORK	22 (1005X4)
RB506	1-234-370-21	RES, NETWORK	22 (1005X4)
RB507	1-234-370-21	RES, NETWORK	22 (1005X4)
RB508	1-234-378-21	RES, NETWORK	10K (1005X4)
RB510	1-234-378-21	RES, NETWORK	10K (1005X4)
RB511	1-234-370-21	RES, NETWORK	22 (1005X4)
RB512	1-234-370-21	RES, NETWORK	22 (1005X4)
RB513	1-234-370-21	RES, NETWORK	22 (1005X4)
RB514	1-234-370-21	RES, NETWORK	22 (1005X4)
RB515	1-234-400-21	CONDUCTOR, NETWORK	(1005X4)
RB516	1-234-400-21	CONDUCTOR, NETWORK	(1005X4)
RB517	1-234-400-21	CONDUCTOR, NETWORK	(1005X4)
RB518	1-234-400-21	CONDUCTOR, NETWORK	(1005X4)
RB519	1-234-400-21	CONDUCTOR, NETWORK	(1005X4)

Ref. No.	Part No.	Description	Remark
RB520	1-234-400-21	CONDUCTOR, NETWORK (1005X4)	
RB600	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB601	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB602	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB603	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB604	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB605	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB606	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB607	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB608	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB609	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB610	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB611	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB612	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB613	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB614	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB615	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB616	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB617	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB618	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB619	1-242-963-21	RES, NETWORK 33 (1005X4)	
RB621	1-234-377-21	RES, NETWORK 4.7K (1005X4)	
RB622	1-234-377-21	RES, NETWORK 4.7K (1005X4)	
RB900	1-234-378-21	RES, NETWORK 10K (1005X4)	
RB901	1-234-378-21	RES, NETWORK 10K (1005X4)	
RB902	1-234-378-21	RES, NETWORK 10K (1005X4)	
RB903	1-234-378-21	RES, NETWORK 10K (1005X4)	
RB7000	1-234-378-21	RES, NETWORK 10K (1005X4)	
RB7001	1-234-378-21	RES, NETWORK 10K (1005X4)	
RB7004	1-234-378-21	RES, NETWORK 10K (1005X4)	
RB7005	1-234-378-21	RES, NETWORK 10K (1005X4)	
RB7010	1-234-378-21	RES, NETWORK 10K (1005X4)	
RB7011	1-234-378-21	RES, NETWORK 10K (1005X4)	
RB7012	1-234-378-21	RES, NETWORK 10K (1005X4)	
RB7013	1-234-378-21	RES, NETWORK 10K (1005X4)	
		< THERMISTOR >	
TH901	1-804-045-11	THERMISTOR	
		< VIBRATOR >	
X600	1-813-263-11	OSCILLATOR, CRYSTAL (33MHz)	
X601	1-813-208-11	VIBRATOR, CRYSTAL (30MHz)	
X701	1-813-052-21	VIBRATOR, CRYSTAL (25MHz)	
X8001	1-813-821-11	OSCILLATOR, CRYSTAL (50MHz)	
	A-1540-046-A	USB-008 BOARD, COMPLETE **********	
		(Ref. No. 20, 000 Series)	
		< CONNECTOR >	
CN361	1-817-109-11	CONNECTOR, USB (A) (EXT)	
CN362	1-566-760-11	PIN, CONNECTOR (PC BOARD) 5P	
		MISCELLANEOUS PARTS **********	
54	1-835-294-11	CABLE, FLEXIBLE FLAT (FFI-001)	
55	1-835-295-11	CABLE, FLEXIBLE FLAT (FFI-002)	
57	1-835-293-11	CABLE, FLEXIBLE FLAT (FMI-005)	
58	1-835-292-11	CABLE, FLEXIBLE FLAT (FMA-021)	
59	1-835-296-11	CABLE, FLEXIBLE FLAT (FMA-022)	
⚠101	1-474-088-11	REGULATOR, SWITCHING (ZSSR774MA)	(US, CND)
⚠101	1-474-088-31	REGULATOR, SWITCHING (ZSSR774HA)	(AEP, UK, AUS, RUS, KR)
⚠101	1-474-088-41	REGULATOR, SWITCHING (ZSSR774IA)	(E, HK, TW, TH)
⚠101	1-474-088-51	REGULATOR, SWITCHING (ZSSR774CA) (CH)	
⚠102	A-1540-573-A	DRIVE (SERVICE USE), BD	
103	1-966-155-11	HARNESS (SAT-003)	
M501	1-787-760-11	FAN, D.C.	

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

REVISION HISTORY

Ver.	Date	Description of Revision
1.0	2008.06	New
1.1	2008.08	Addition of AEP, UK and Australian models.
1.2	2008.09	Addition of E, Chinese, Russian, Hong Kong, Taiwan, Korea and Thai models.