

BDP-S560

RMT-B104A

SERVICE MANUAL

US Model
Canadian Model



Ver. 1.0 2009.06



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):

Phono jack/Y: 1.0 Vp-p/
P_B, P_R: 0.7 Vp-p/75 ohms

LINE OUT VIDEO:

Phono jack/1.0 Vp-p/75 ohms

LINE OUT S VIDEO:

4-pin mini DIN/

Y: 1.0 Vp-p, C: 0.286 Vp-p/75 ohms

LAN (100):

100BASE-TX Terminal

EXT:

External memory slot (For connecting the external memory)

DC output: 5 V 500 mA Max

USB:

USB jack Type A (For connecting digital still camera and USB memory)

Wireless

Wireless LAN standard:

IEEE802.11a/b/g

IEEE802.11n draft 2.0

Frequency range:

U.S. models:

2.4 GHz band: Channels 1-11

5 GHz band: Channels 36-64, 100-140,
149-165

Canada models:

2.4 GHz band: Channels 1-11

5 GHz band: Channels 36-64, 100-116,
132-140, 149-165

Modulation:

DS-SS Modem and OFDM Modem

General

Power requirements:

120 V AC, 60 Hz

Power consumption:

28 W

Dimensions (approx.):

430 mm × 216 mm × 70 mm
(17 in. × 8 5/8 in. × 2 13/16 in.)

(width/depth/height) incl. projecting parts

Mass (approx.):

2.4 kg (5 lb 4 5/8 oz)

Operating temperature:

5 °C to 35 °C (41 °F to 95 °F)

Operating humidity:

25 % to 80 %

Supplied accessories

- Audio/video cable (phono plug ×3) (1)
- AC power cord (1)
- Remote commander (remote) (1)
- Size AA (R6) batteries (2)

Specifications and design are subject to change without notice.



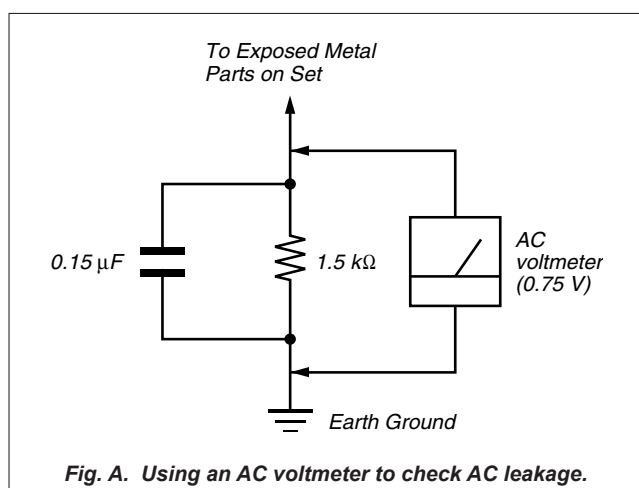
BLU-RAY DISC/DVD PLAYER

SONY®

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.



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

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

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

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.

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.

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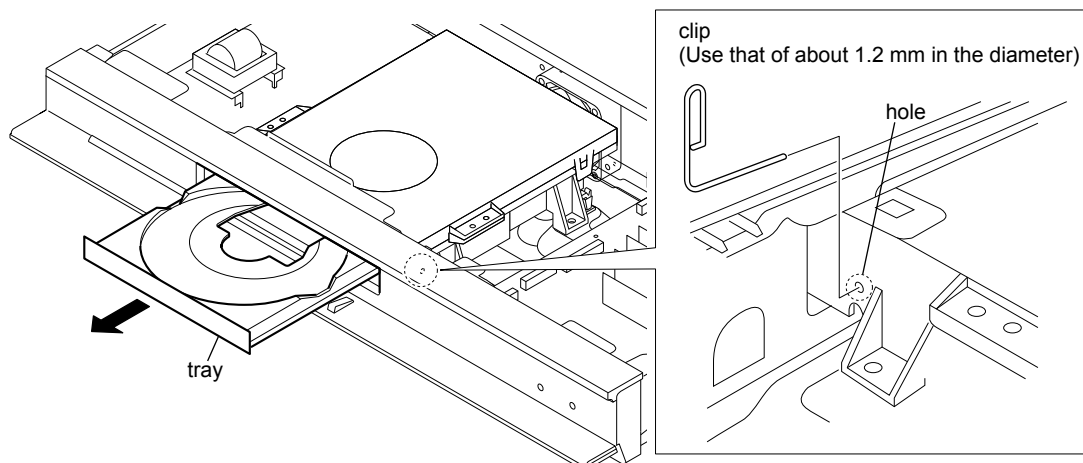
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SECTION 1 SERVICE NOTE

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. Work when optical device are replaced

Note: Please do the following work when you replace the optical device.

1. Install it in PC after downloading two set of software from following URL.
(About the procedure, refer to the attached Readme.txt file)



STEP 1

Microsoft .NET Framework Version 2.0 Redistributable Package (x86)

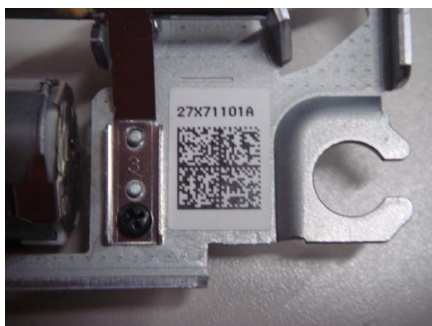
<http://www.microsoft.com/downloads/details.aspx?displaylang=en&FamilyID=0856eacb-4362-4b0d-8edd-aab15c5e04f5>

STEP 2

Microsoft .NET Framework 2.0 Service Pack 1 (x86)

<http://www.microsoft.com/downloads/details.aspx?displaylang=en&FamilyID=79bc3b77-e02c-4ad3-aacf-a7633f706ba5>

2. Take the photograph the part of the bar code of the optical device. (Refer to the following picture)



3. Drag-and-drop the bar code photograph to the icon of decode software (BDBUDec).
 - * The decode software is a complete set of "BDBUDec", "Tasman.Bars.dll", and "SavePath".
 - * Because docode software cannot be attached, it separately distributes it.
4. Input the password when you start decode software.
 - * Inquire of each service headquarters because the password cannot be disclosed.
5. Write the decode data to the set. (About the procedure, refer to the attached BU Adjustment flowchart.ppt file)



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)

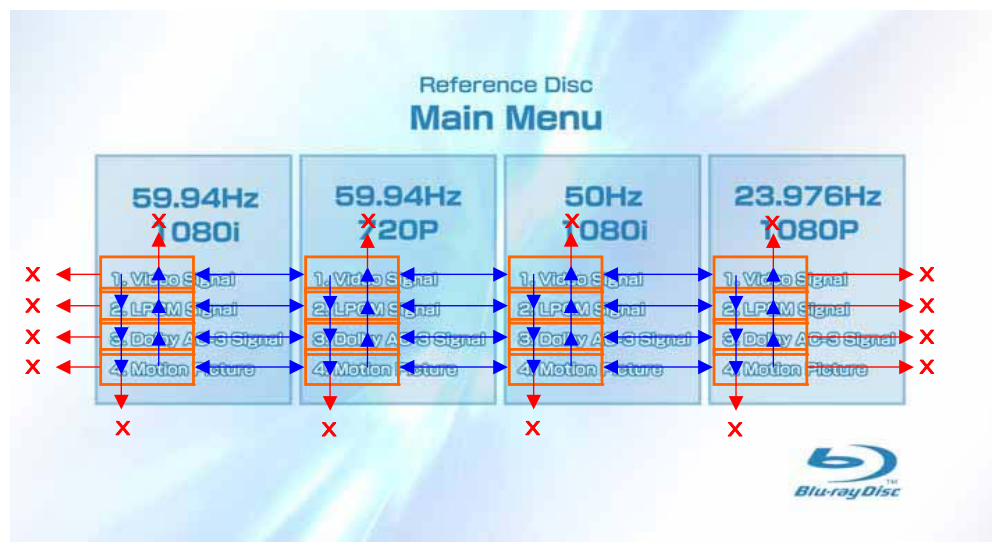
- Check whether player can play back or not
(Check the sound output)

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)

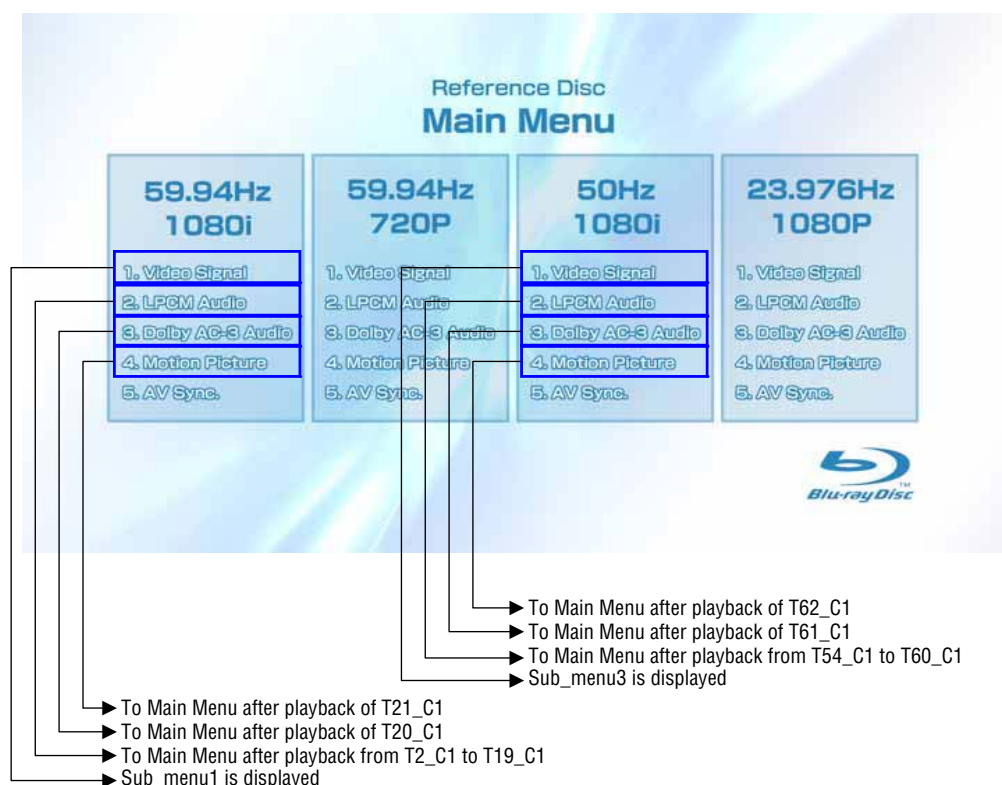
Main Menu



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.

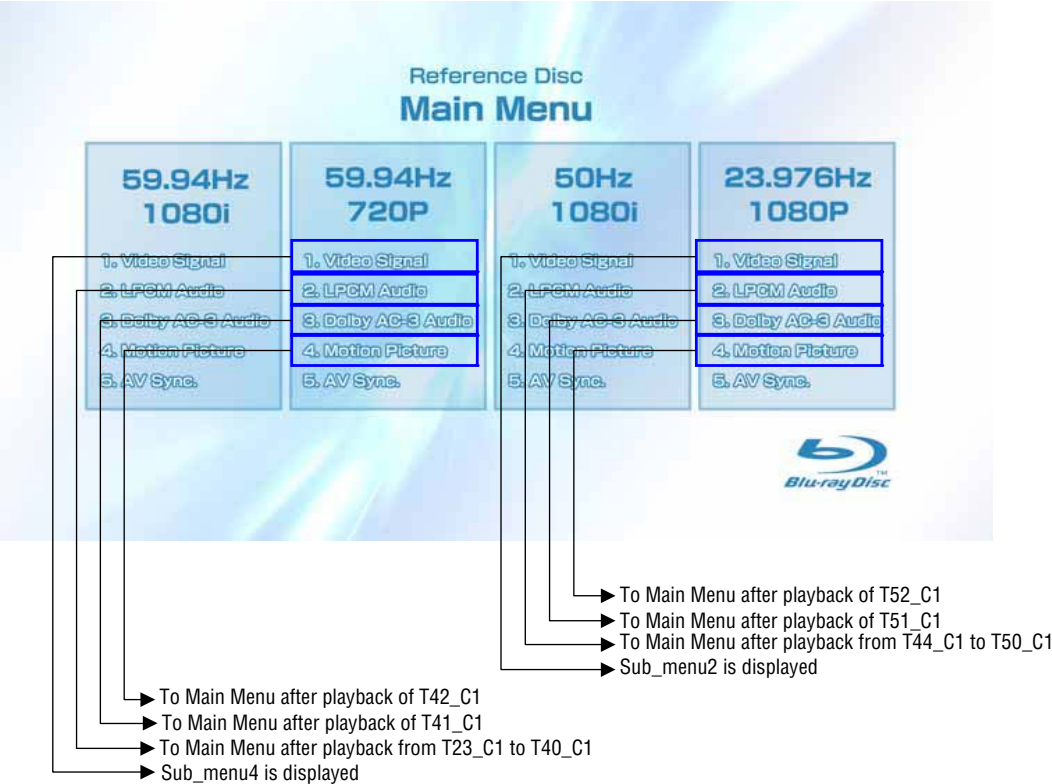
* When returning to Main Menu after playback from each button of 50Hz/1080i, 1. Video Signal of 50Hz/1080i is selectively displayed.

* 5. AV Sync does not operate.

Note:

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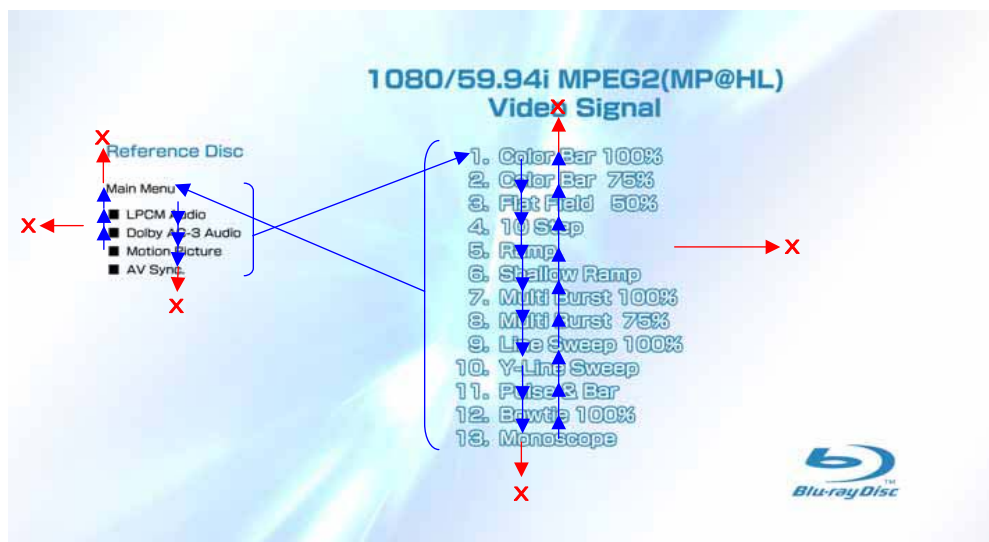
1-3-1-3. BLX-104 Menu Function (3)
Main Menu



- * 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)

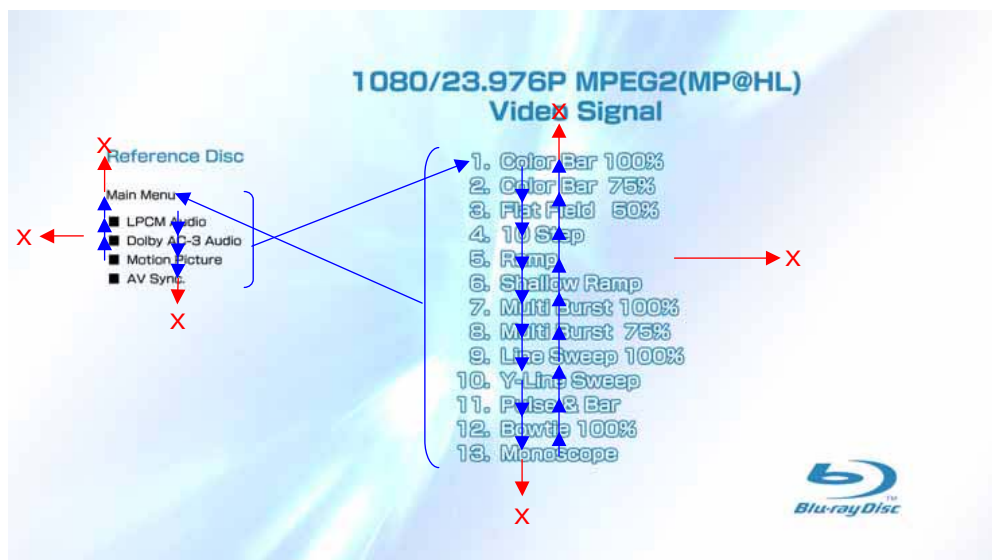
Sub menu1



- 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.

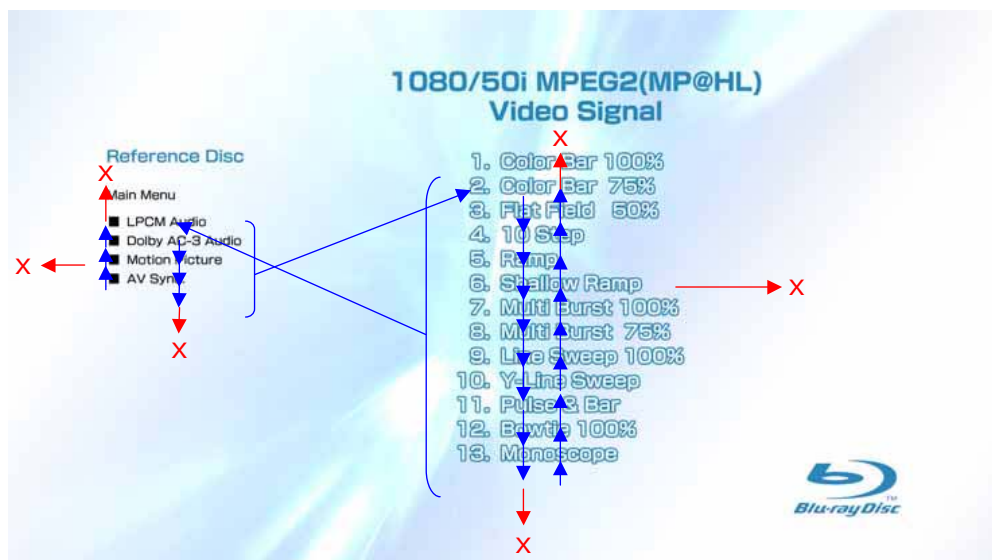
1-3-1-5. BLX-104 Menu Function (5)

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.

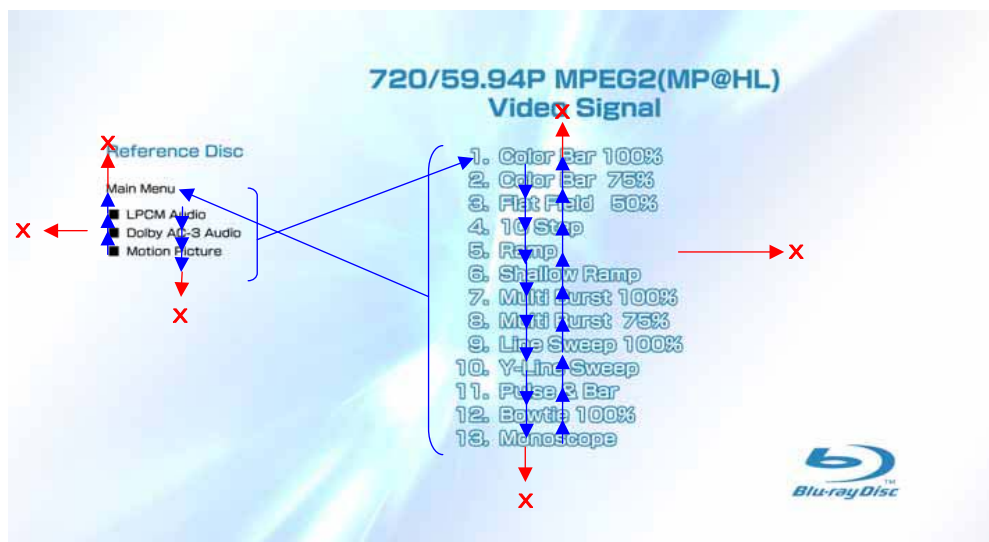
1-3-1-6. BLX-104 Menu Function (6) Sub menu3



- 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.

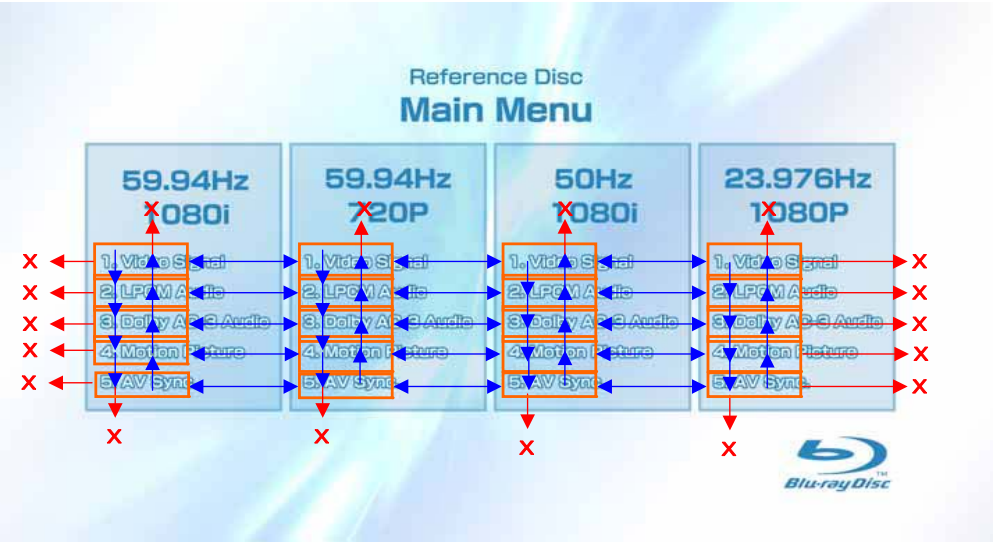
1-3-1-7. BLX-104 Menu Function (7)

Sub menu4



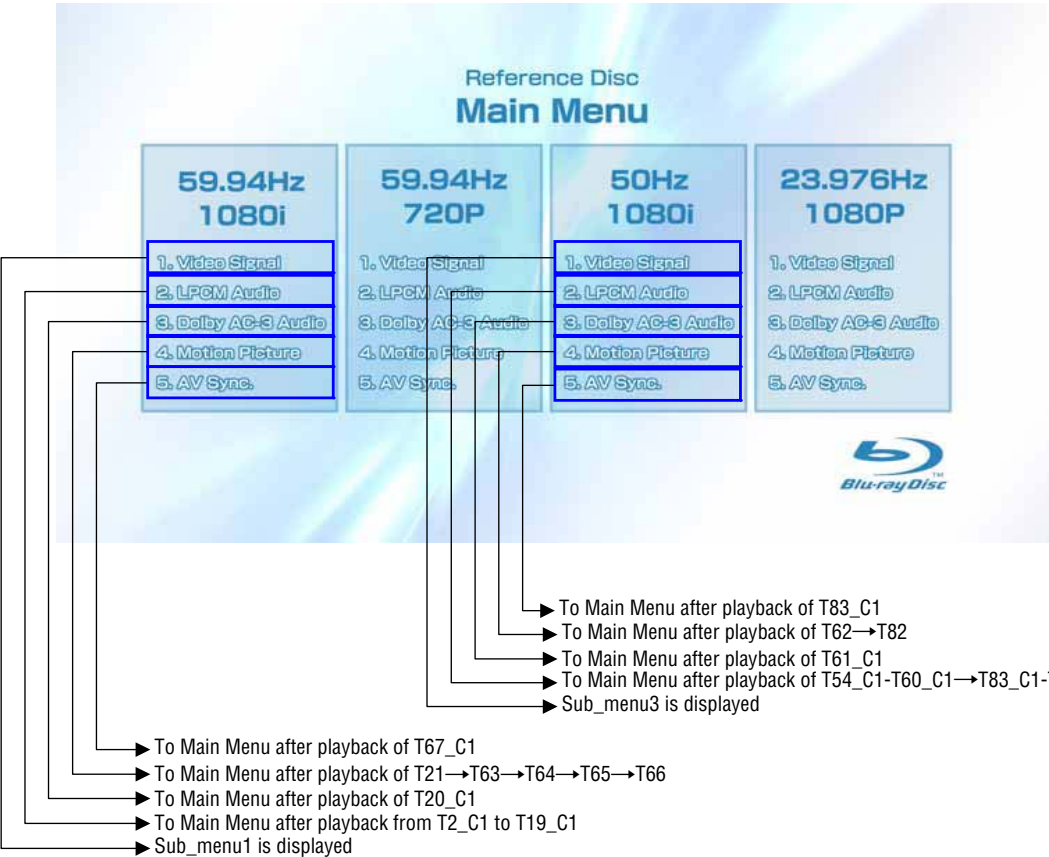
- 1) At the display of Sub menu4, 1. Color Bar 100% is selectively displayed.
- 2) Selection of 1. Color Bar 100% → Return to Sub menu4 after seamless playback from T22_C1 to T22_C13. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
- 3) Selection of 2. Color Bar 75% → Return to Sub menu4 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

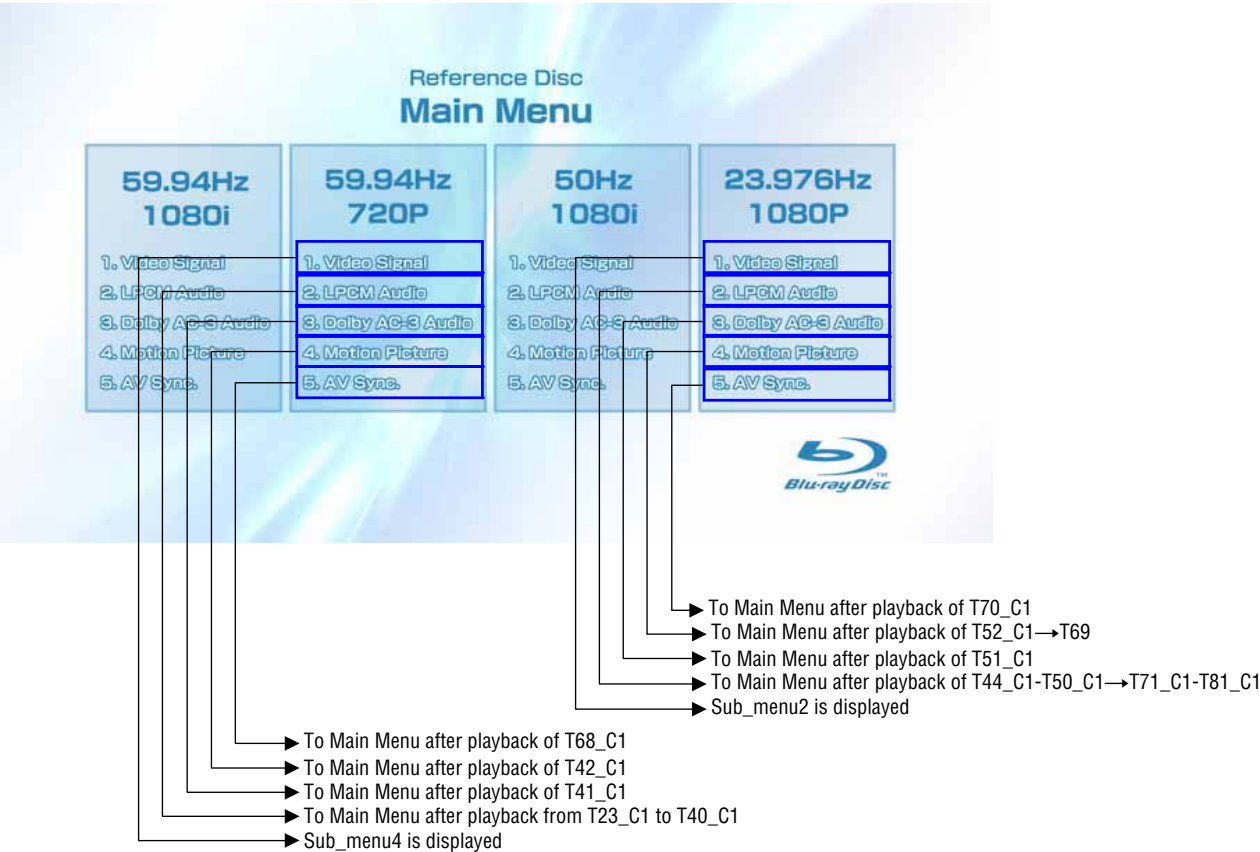


- * When returning to Main Menu after playback from each button of 59.94Hz/1080i, 1. Video Signal of 59.94Hz/1080i is selectively displayed.
- * When returning to Main Menu after playback from each button of 50Hz/1080i, 1. Video Signal of 50Hz/1080i is selectively displayed.

Note:

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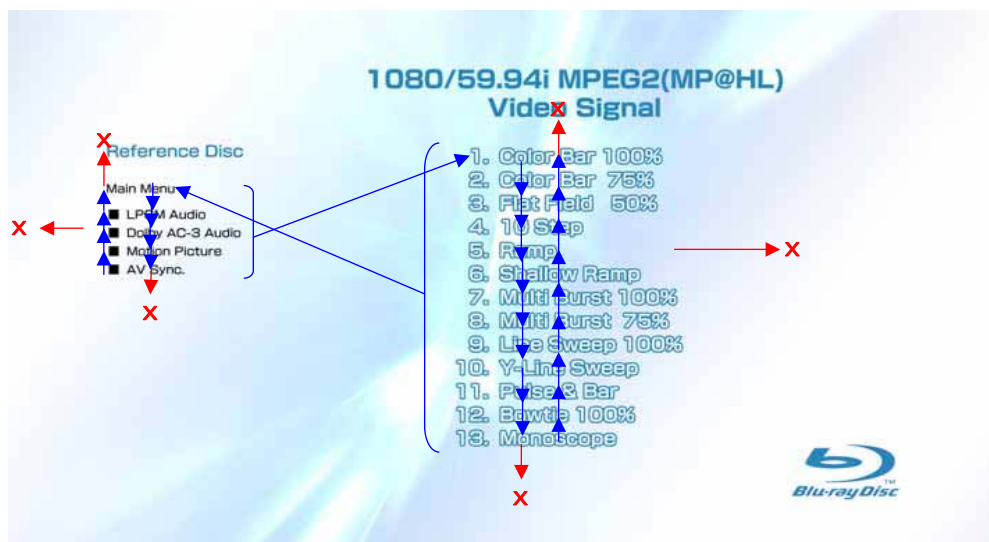
1-3-2-3. BLX-204 Menu Function (3)
Main Menu



- * 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)

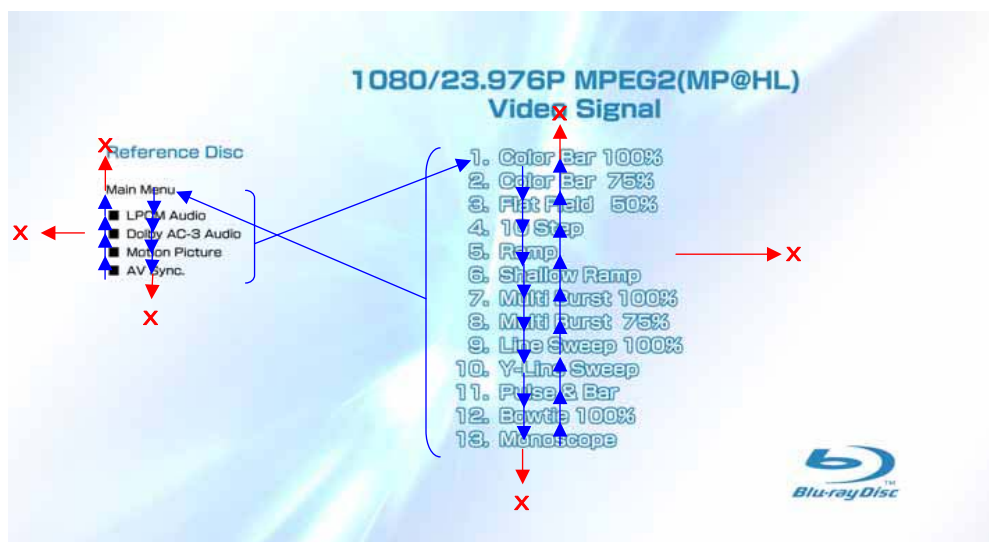
Sub menu 1



- 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)

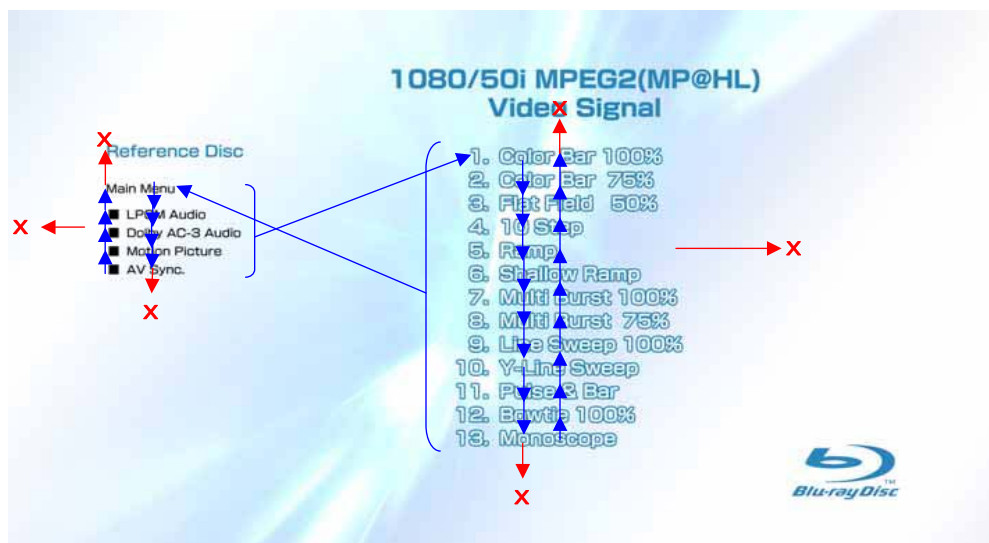
Sub menu 2



- 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)

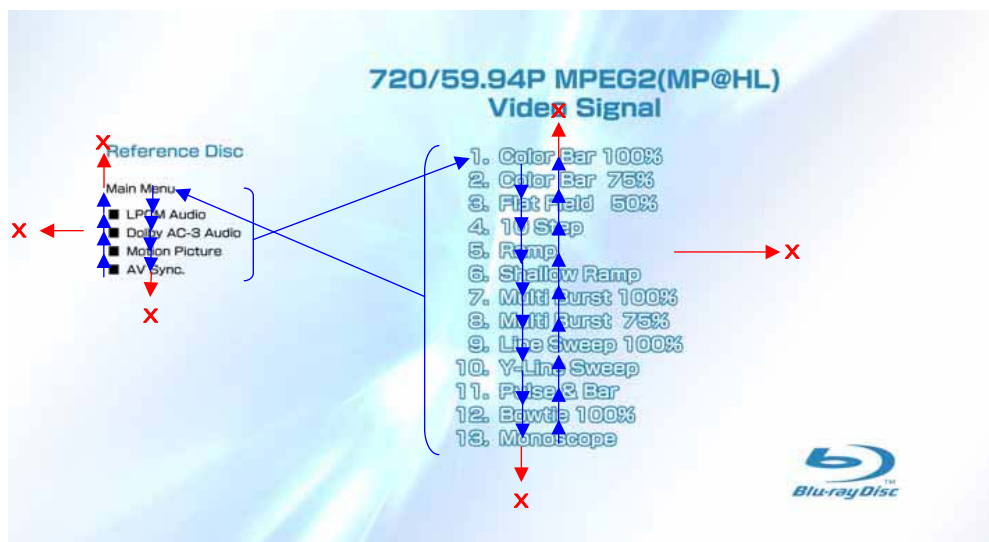
Sub menu 3



- 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

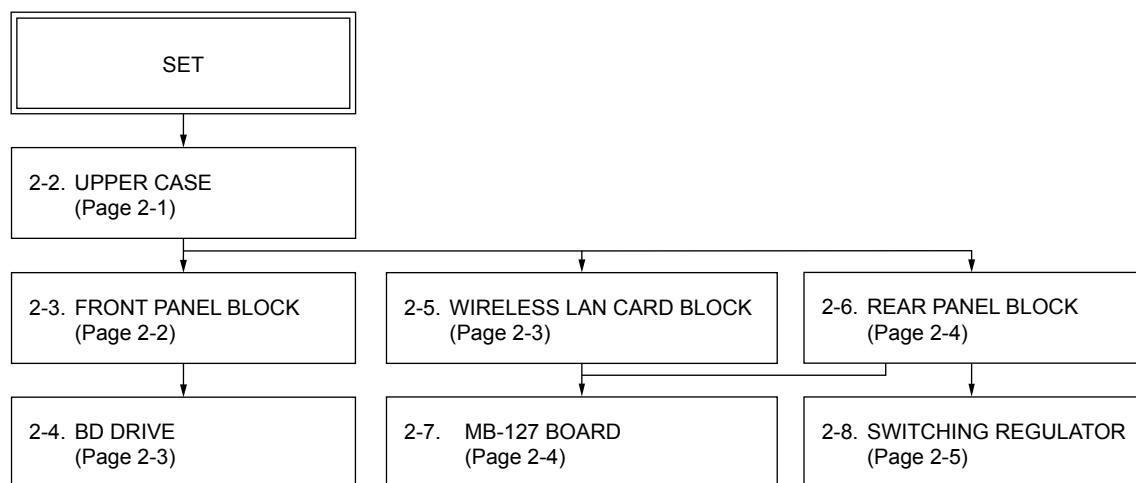


- 1) At the display of Sub menu4, 1. Color Bar 100% is selectively displayed.
- 2) Selection of 1. Color Bar 100% → Return to Sub menu4 after seamless playback from T22_C1 to T22_C13. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
- 3) Selection of 2. Color Bar 75% → Return to Sub menu4 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

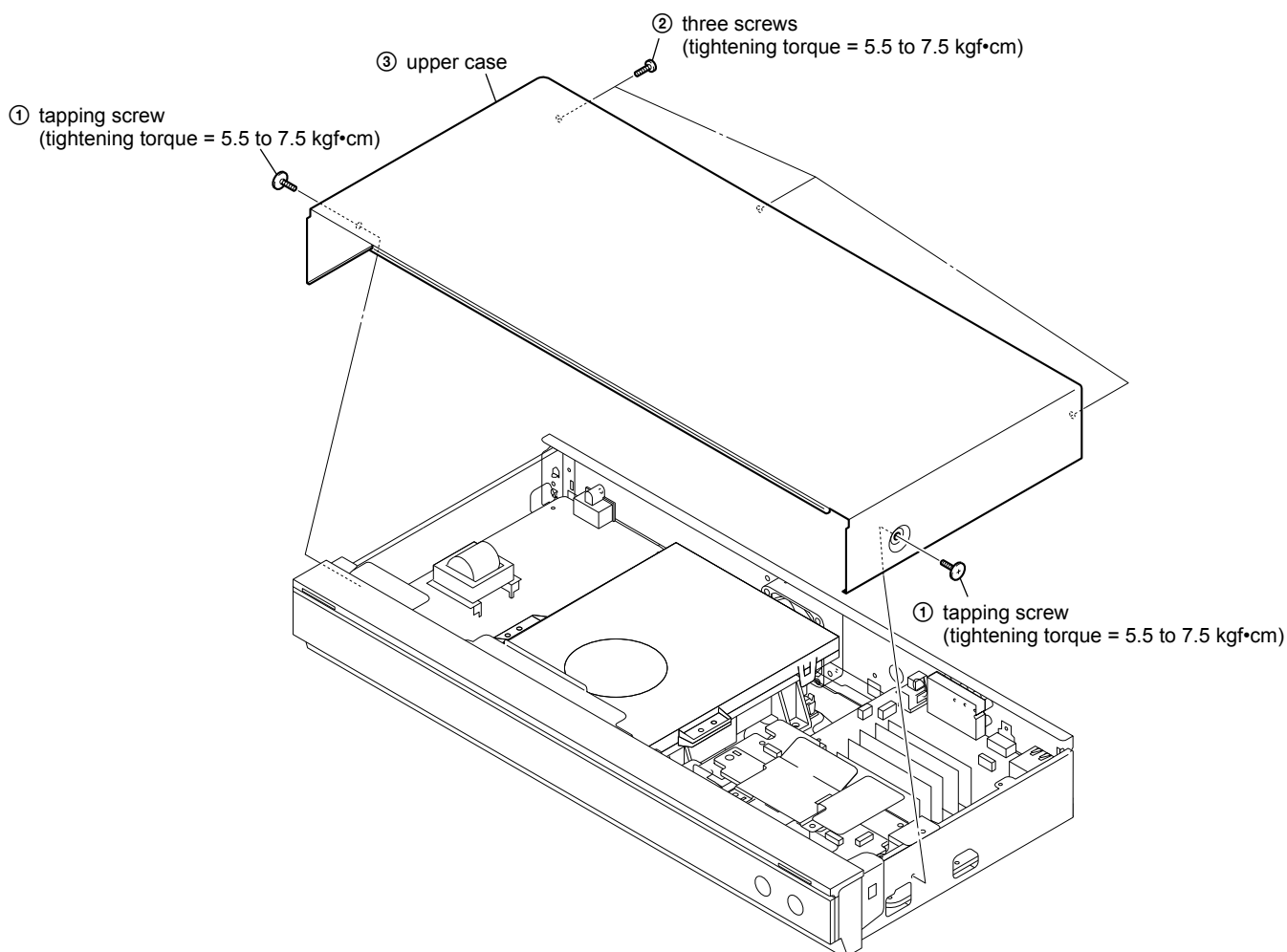
- This set can be disassembled in the order shown below.

2-1. DISASSEMBLY FLOW

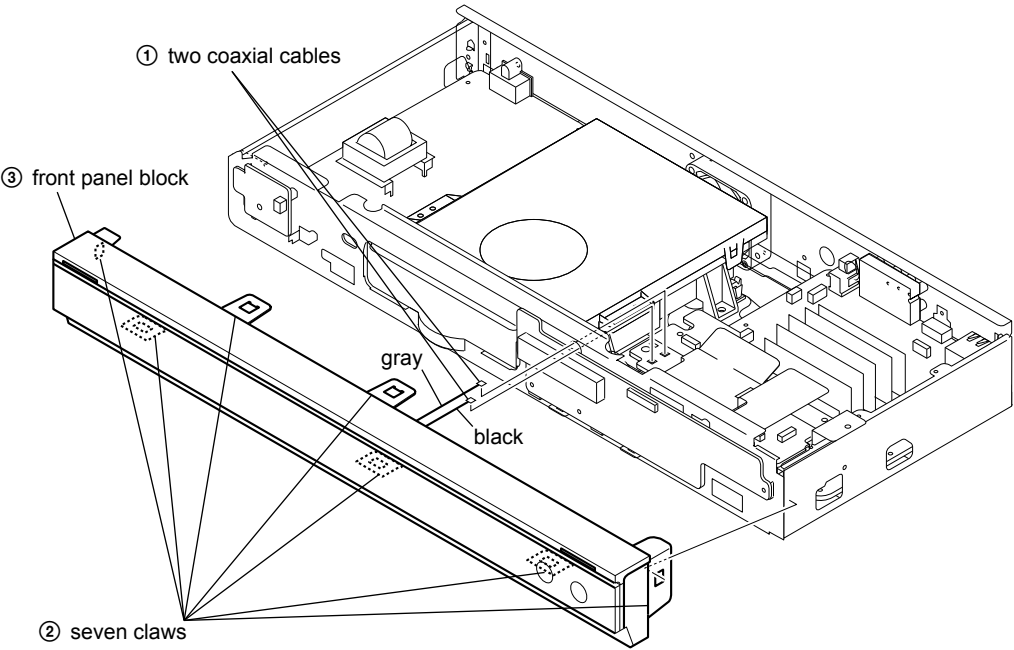


Note: Follow the disassembly procedure in the numerical order given.

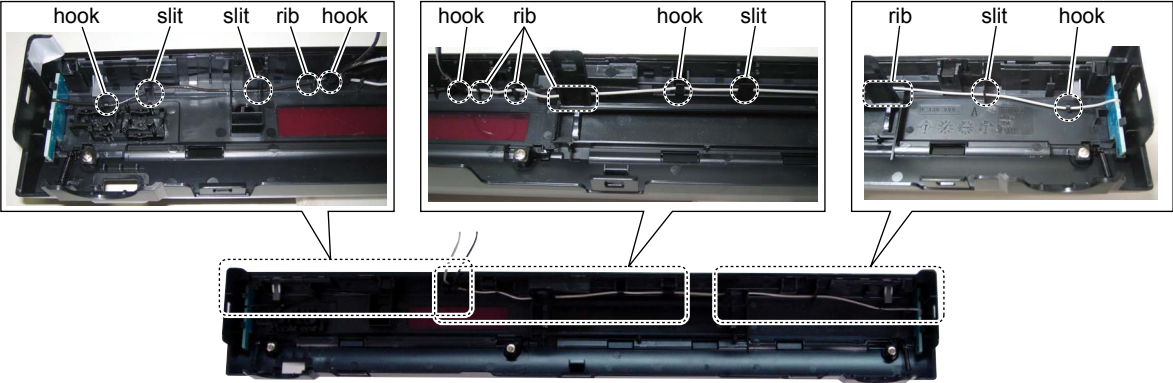
2-2. UPPER CASE



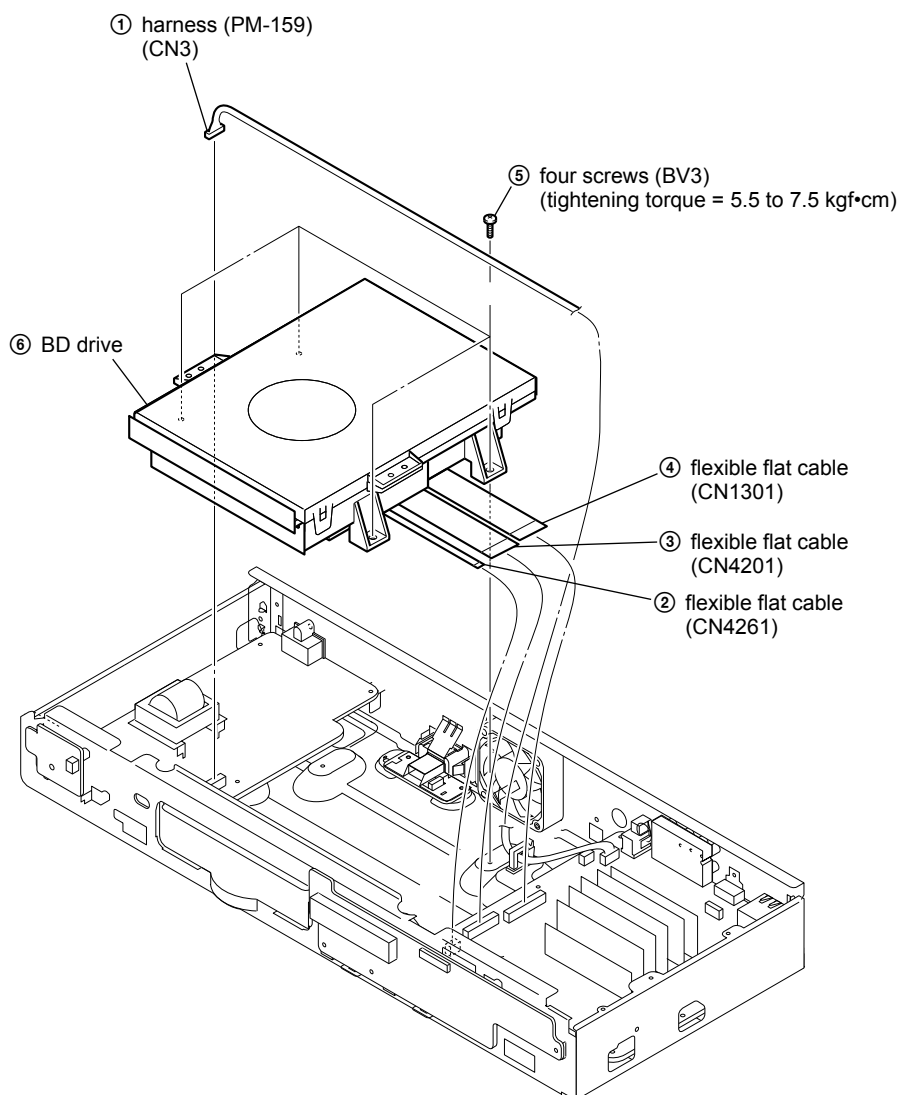
2-3. FRONT PANEL BLOCK



Arrangement of coaxial cable

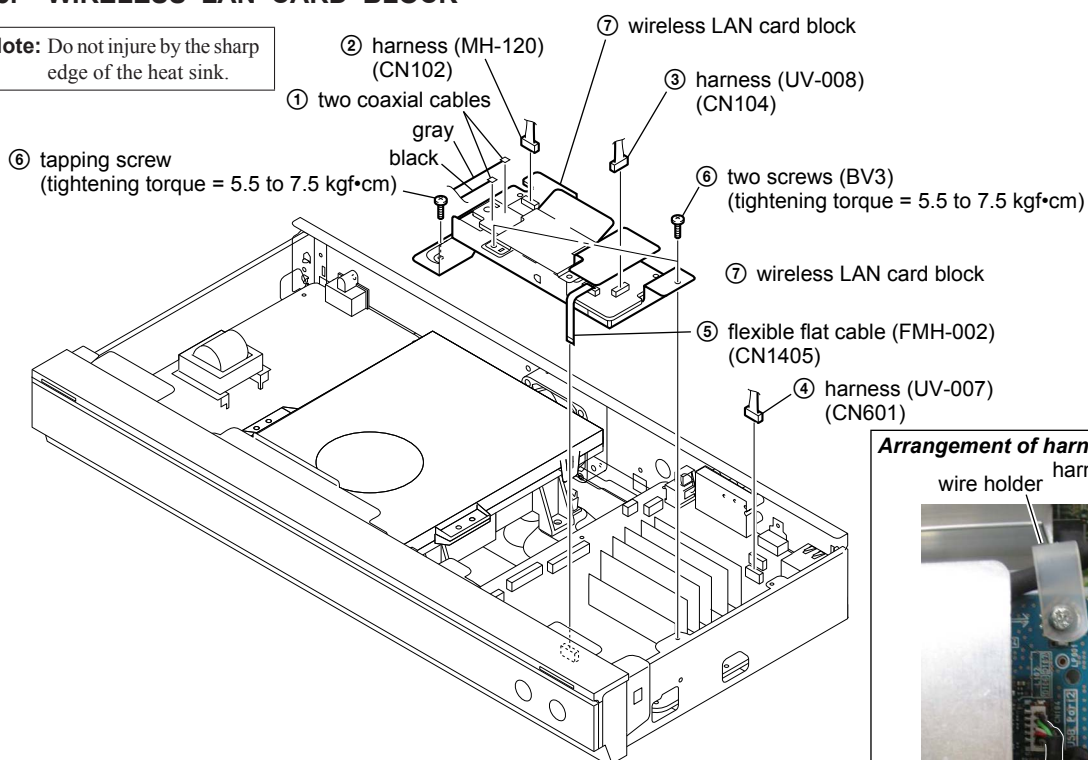
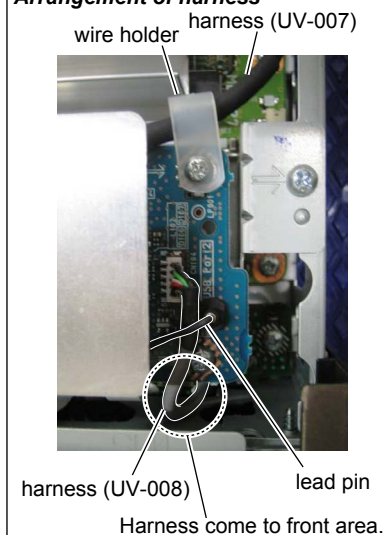


2-4. BD DRIVE

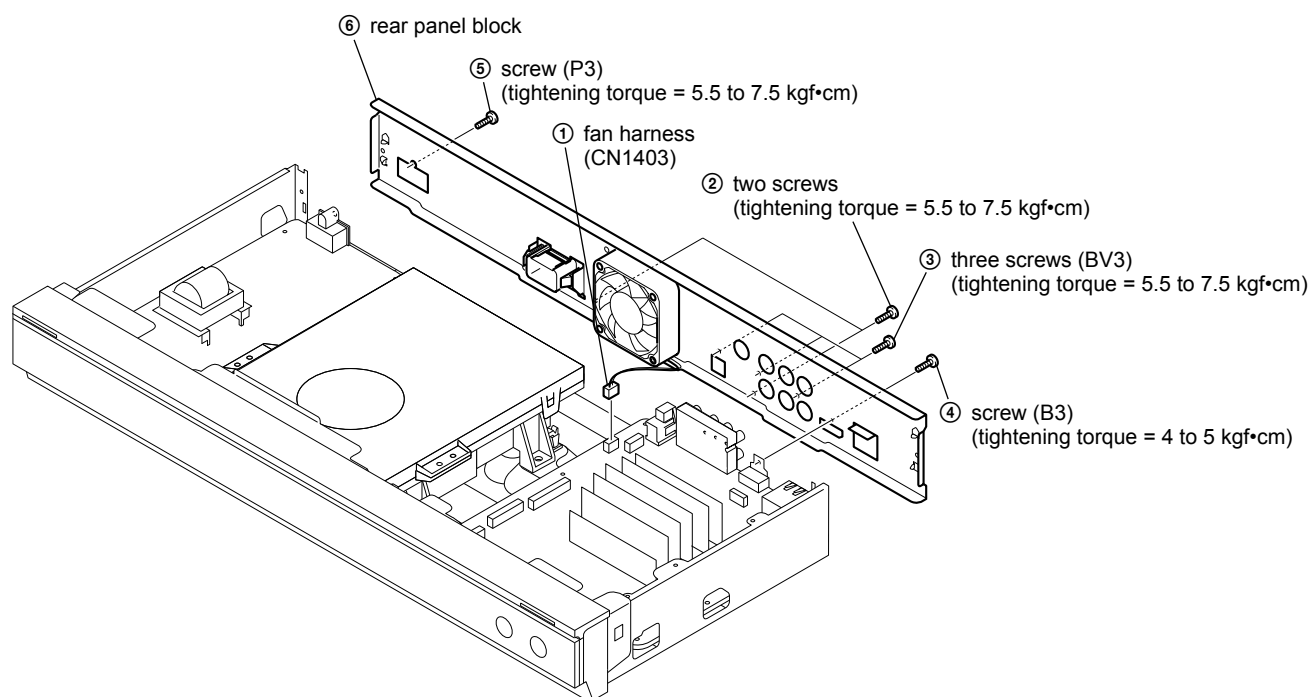


2-5. WIRELESS LAN CARD BLOCK

Note: Do not injure by the sharp edge of the heat sink.

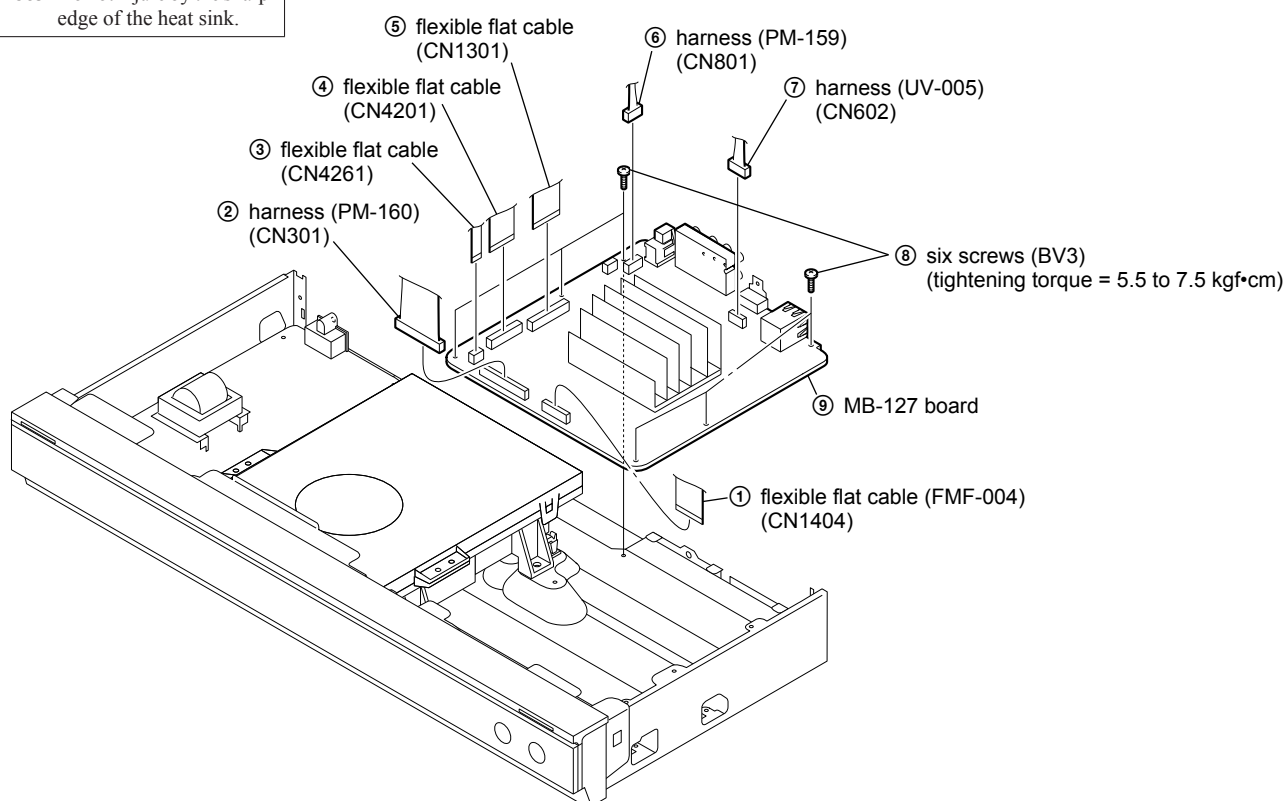
**Arrangement of harness**

2-6. REAR PANEL BLOCK

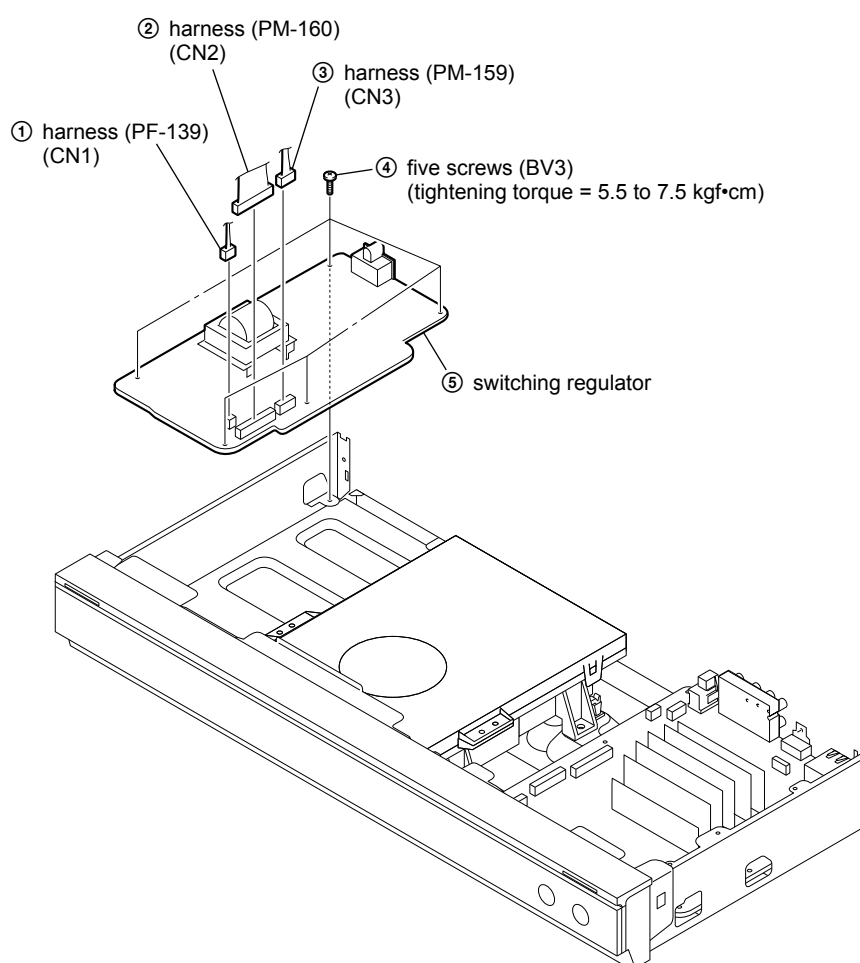


2-7. MB-127 BOARD

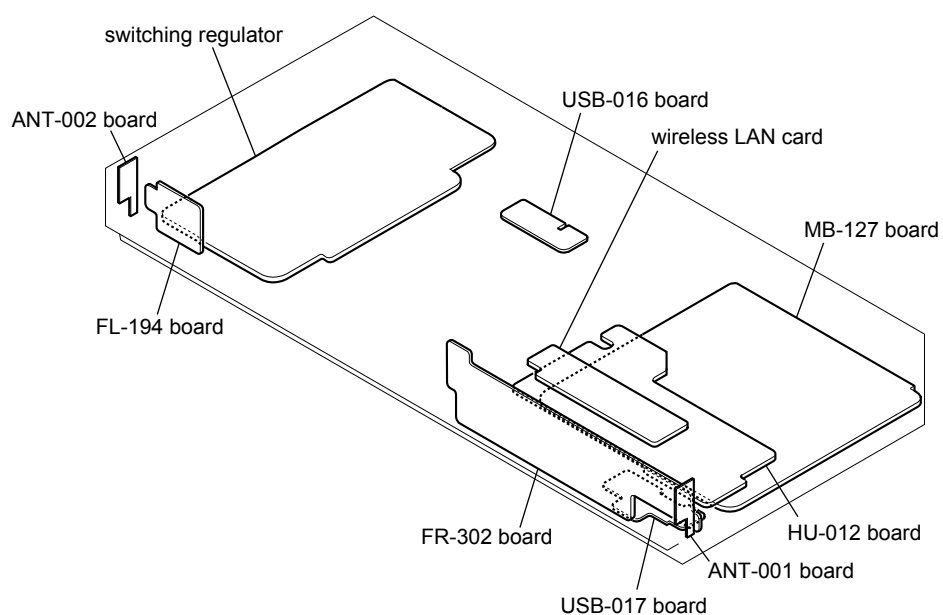
Note: Do not injure by the sharp edge of the heat sink.



2-8. SWITCHING REGULATOR

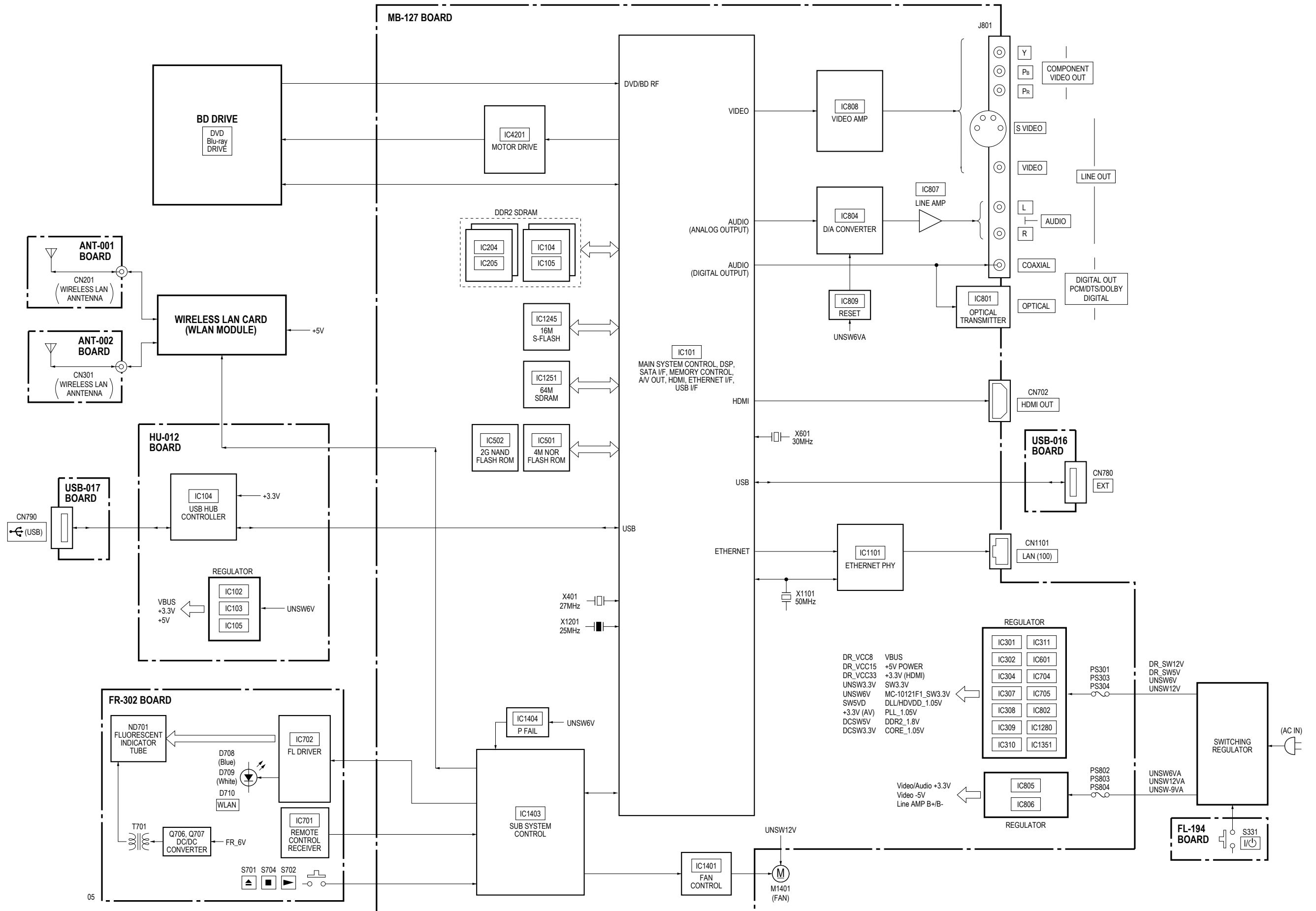


2-9. CIRCUIT BOARDS LOCATION

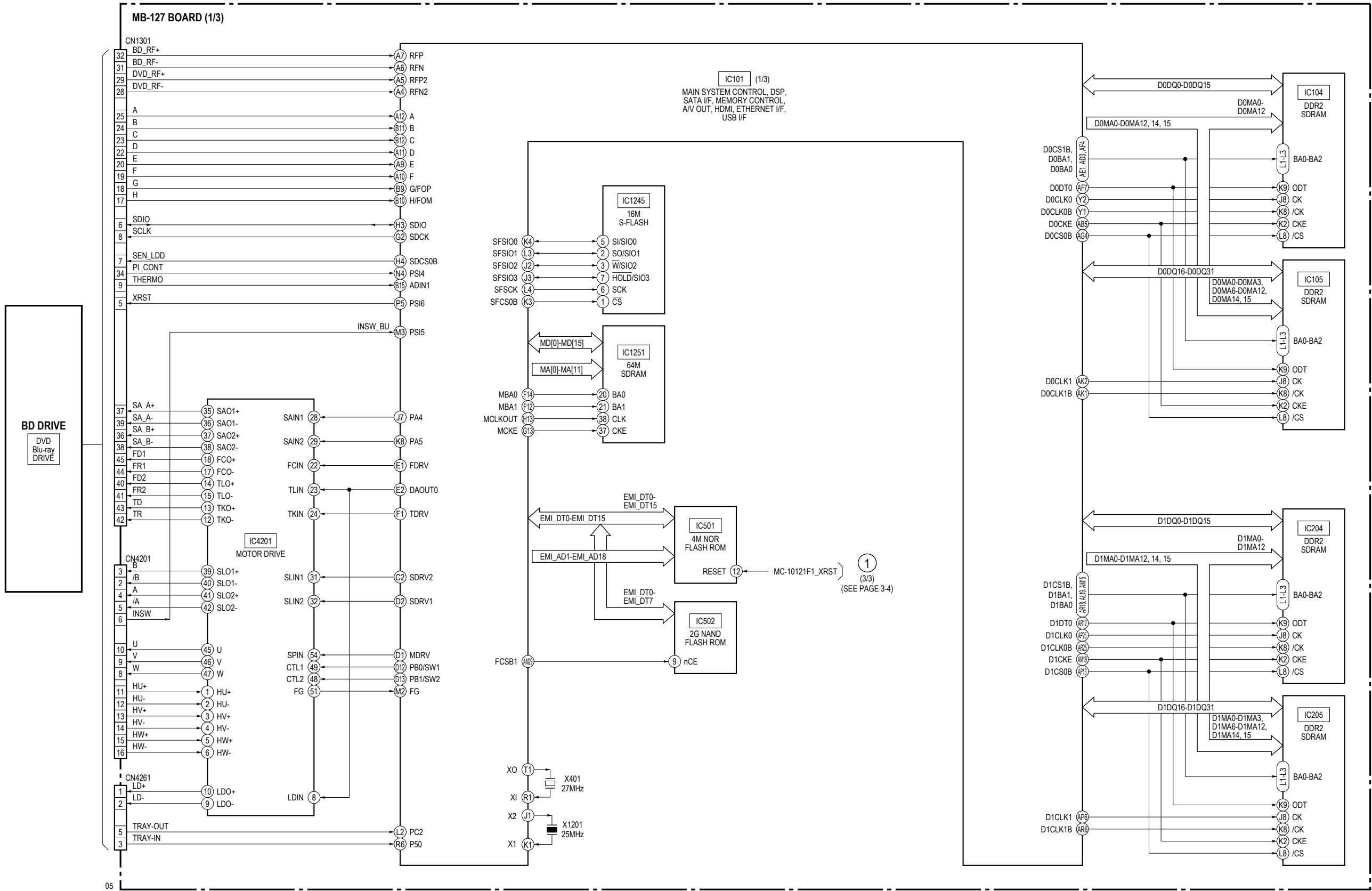


SECTION 3 BLOCK DIAGRAMS

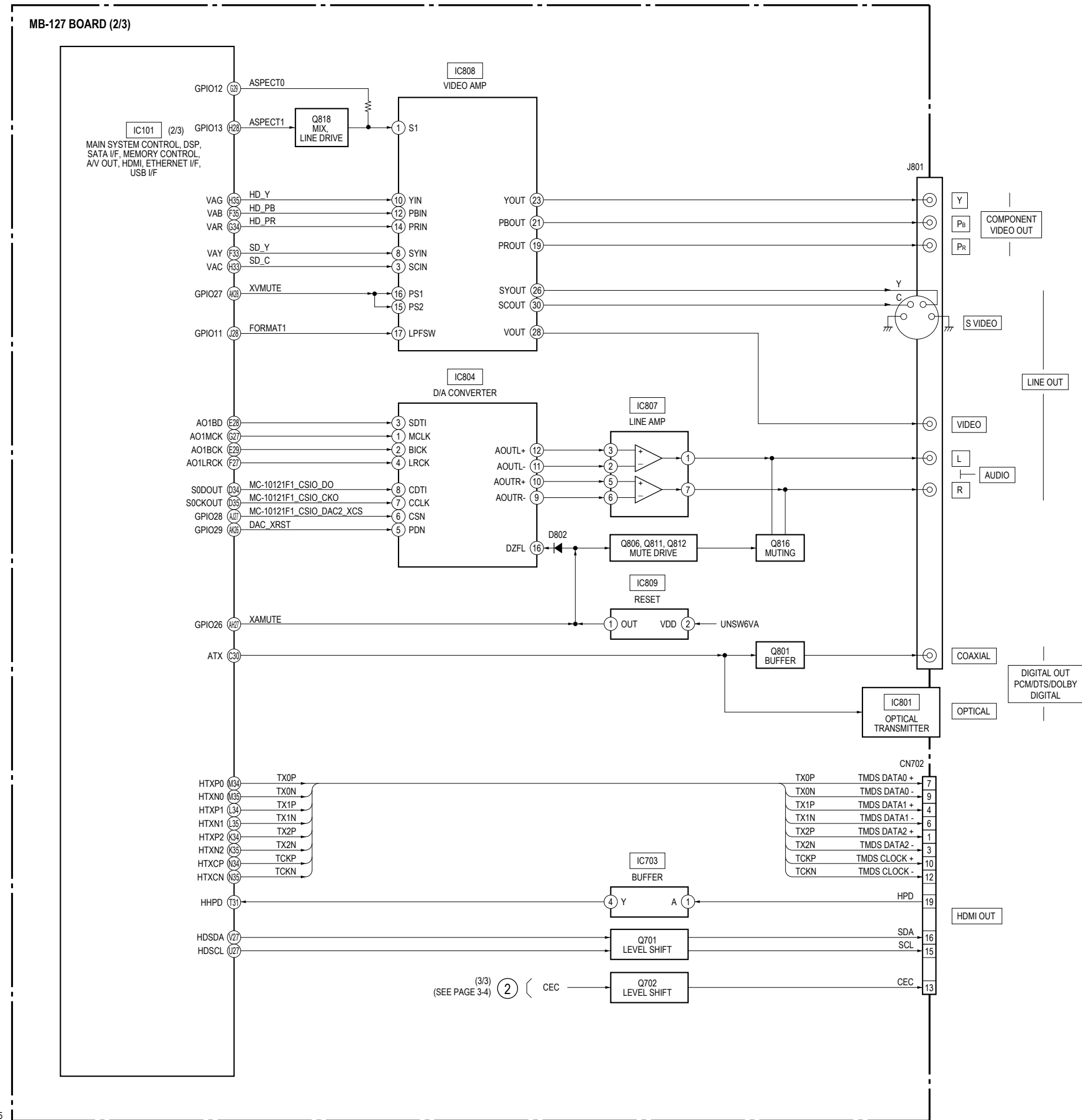
3-1. OVERALL BLOCK DIAGRAM



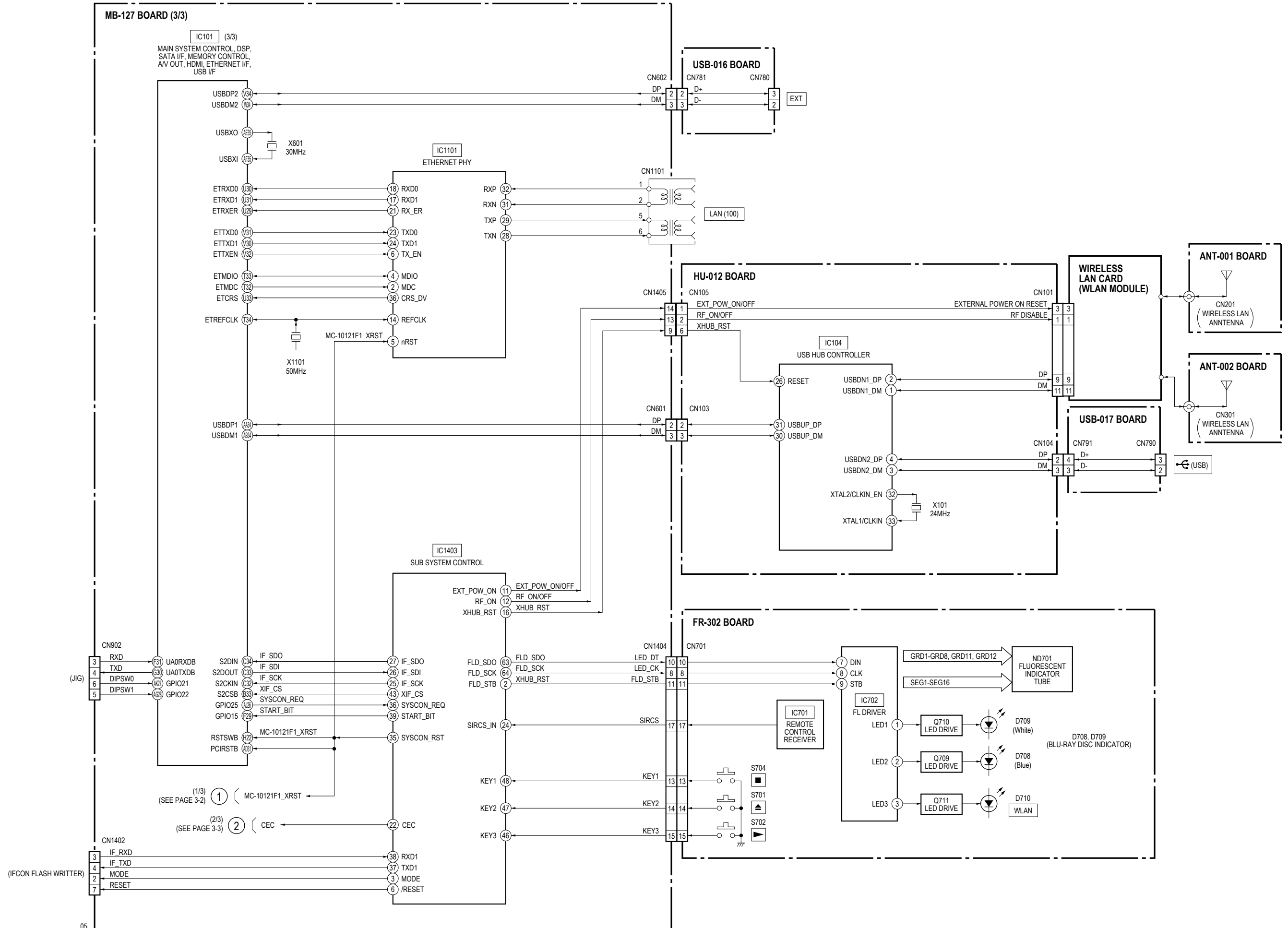
3-2. DSP BLOCK DIAGRAM



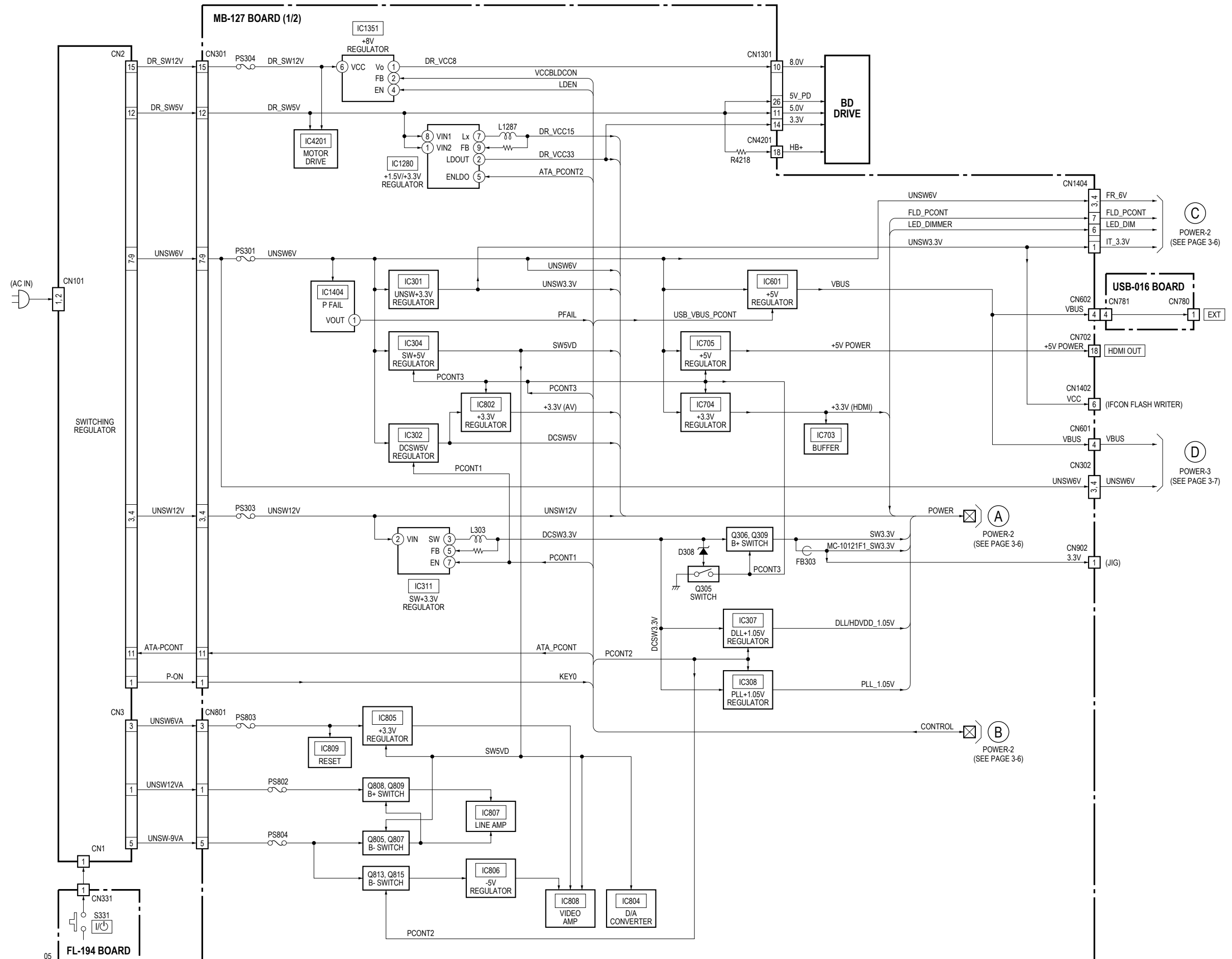
3-3. AV OUT BLOCK DIAGRAM



3-4. USB/ETHER, FL BLOCK DIAGRAM



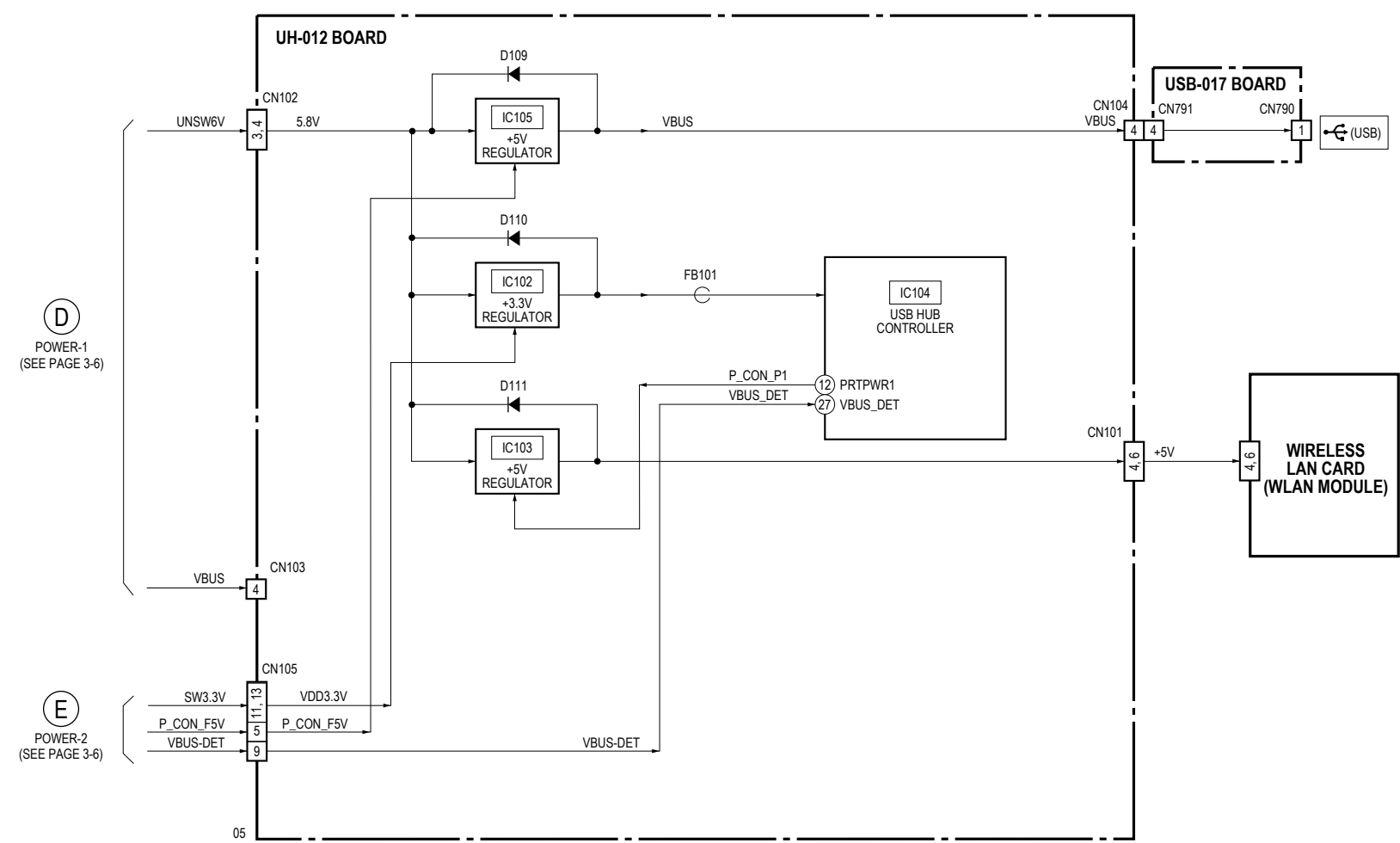
3-5. POWER BLOCK DIAGRAM (1/3)



05



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



SECTION 4
SCHEMATIC DIAGRAMS

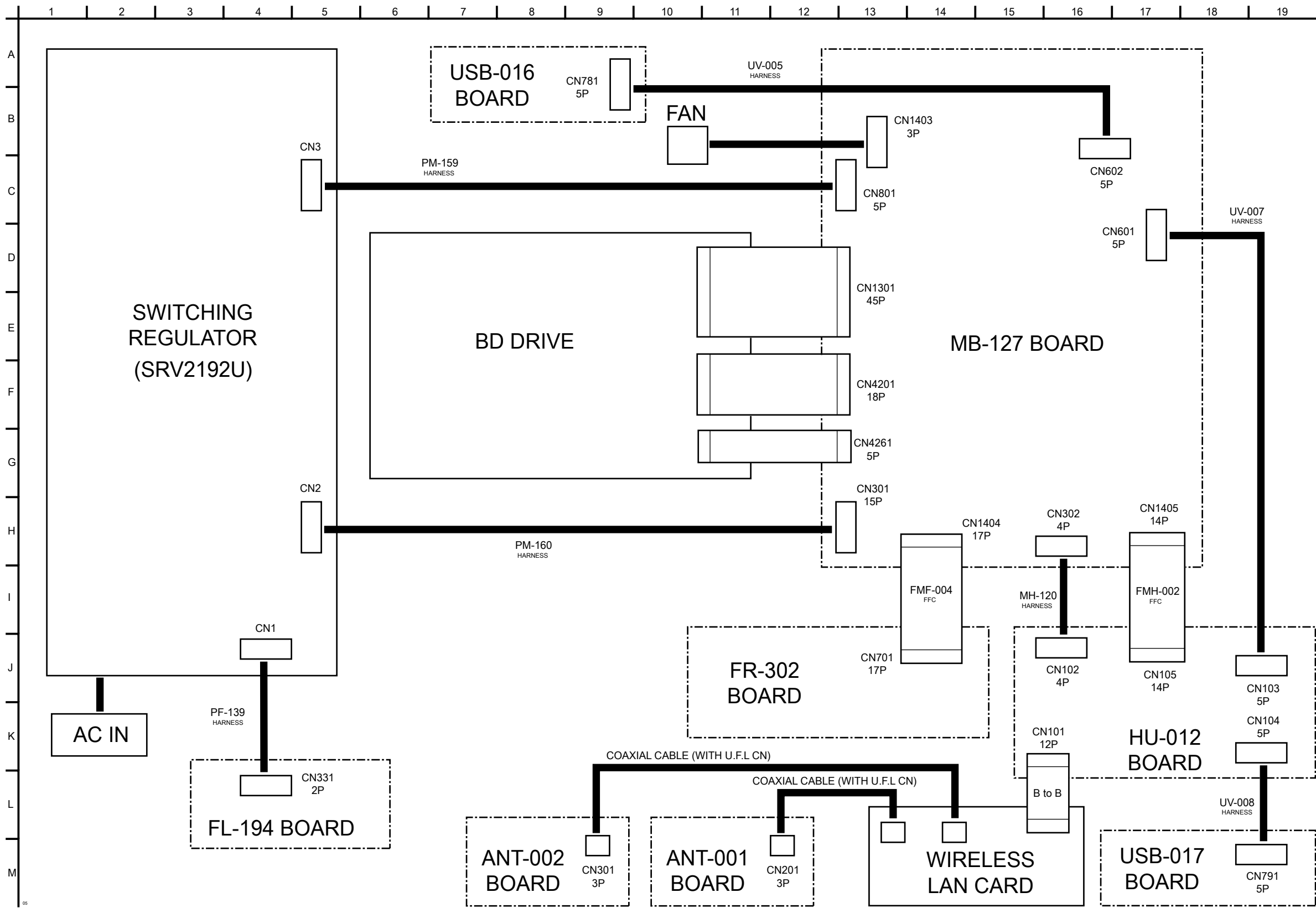
4-1. THIS NOTE IS COMMON FOR SCHEMATIC DIAGRAMS

- All capacitors are in μF unless otherwise noted. $\text{pF} : \mu\mu\text{F}$.
50V or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, 1/4 W (Chip resistors : 1 /10 W) unless otherwise specified.
 $\text{k}\Omega=1000\Omega$, $\text{M}\Omega=1000\text{k}\Omega$.
- % : 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 10M Ω).
- Voltage variations may be noted due to normal production tolerances.

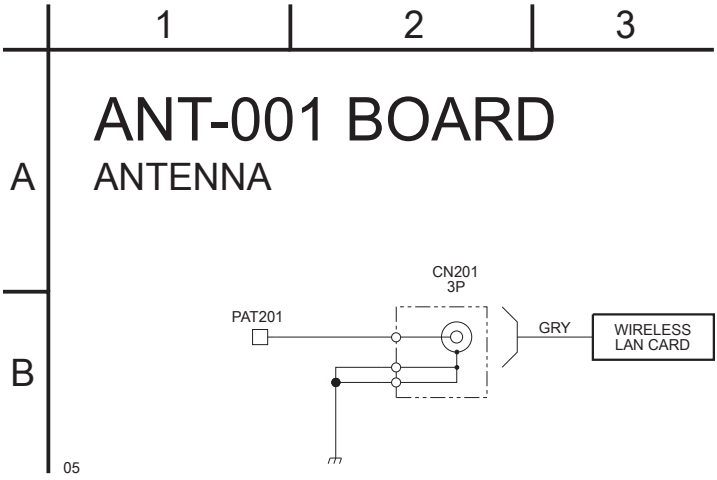
Note: The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.	Note: Les composants identifiés par une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
--	--

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

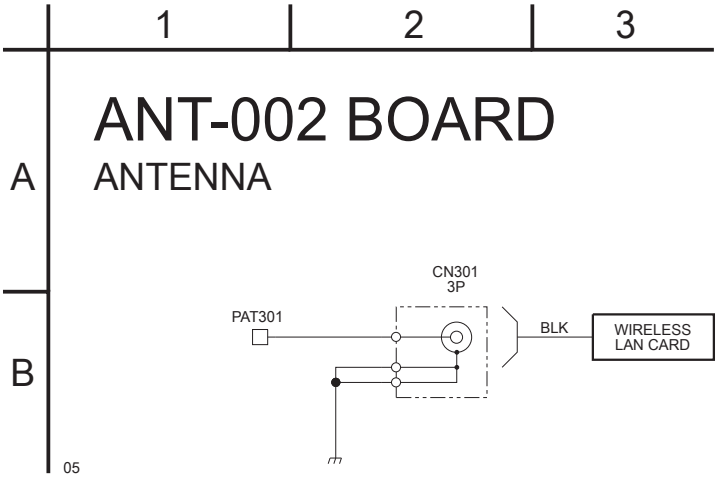
4-2. FRAME SCHEMATIC DIAGRAM



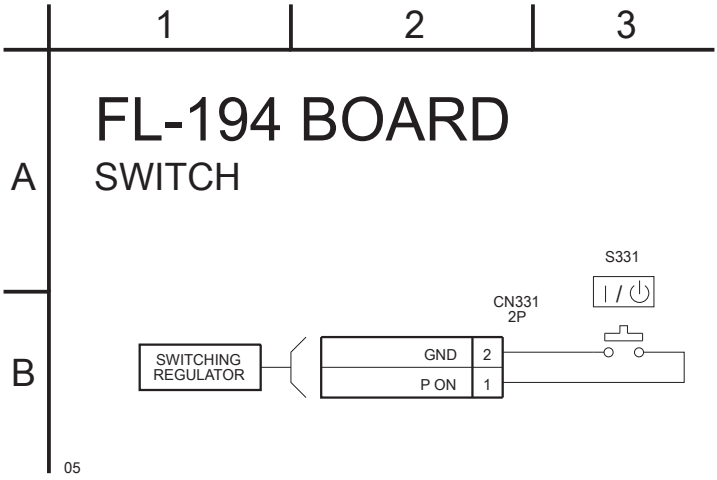
4-3. ANT-001 BOARD (ANTENNA) SCHEMATIC DIAGRAM • See page 5-2 for printed wiring board.
- Ref. No.: ANT-001 board; 20,000 series -



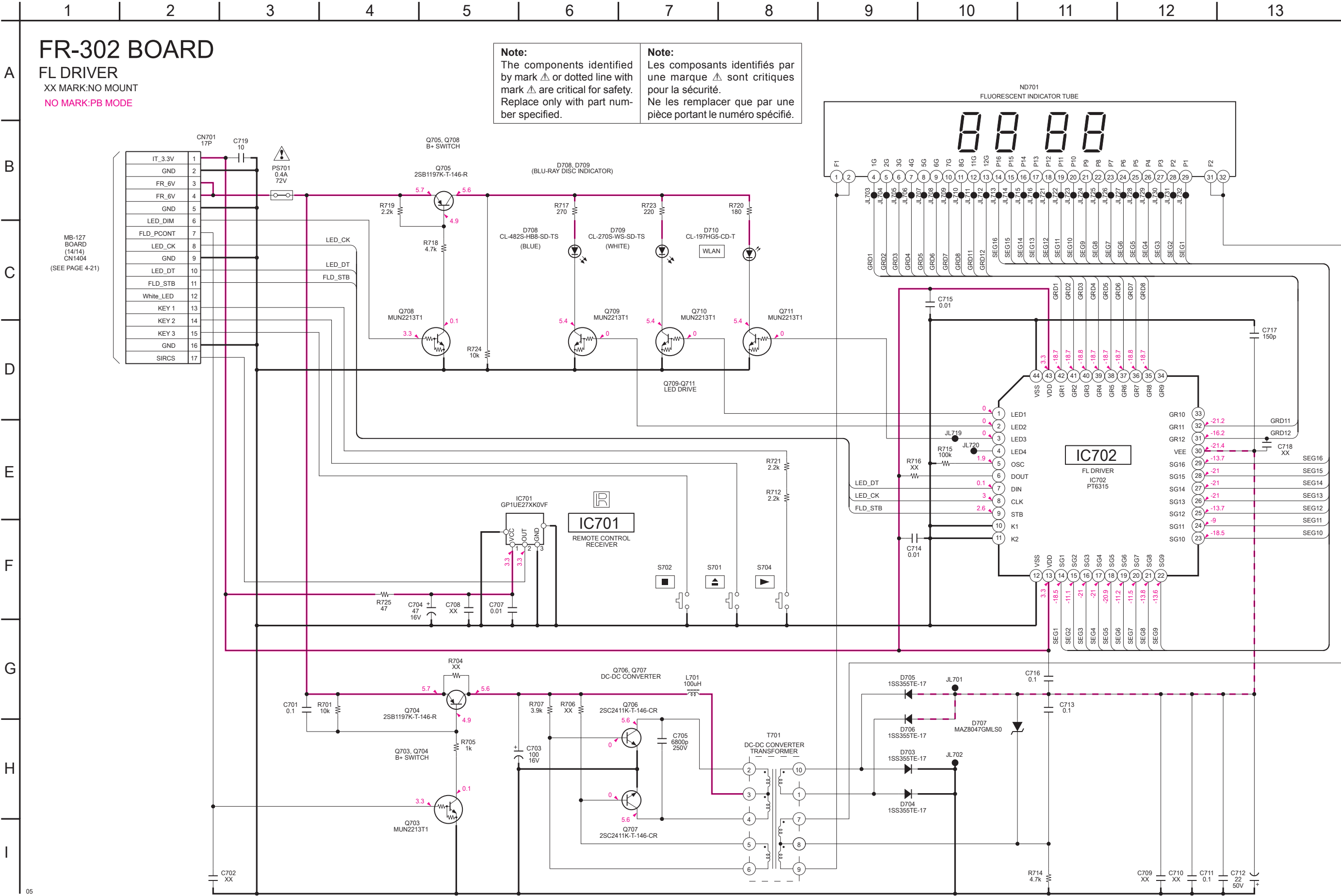
4-4. ANT-002 BOARD (ANTENNA) SCHEMATIC DIAGRAM • See page 5-3 for printed wiring board.
- Ref. No.: ANT-002 board; 20,000 series -



4-5. FL-194 BOARD (SWITCH) SCHEMATIC DIAGRAM • See page 5-4 for printed wiring board.
- Ref. No.: FL-194 board; 20,000 series -

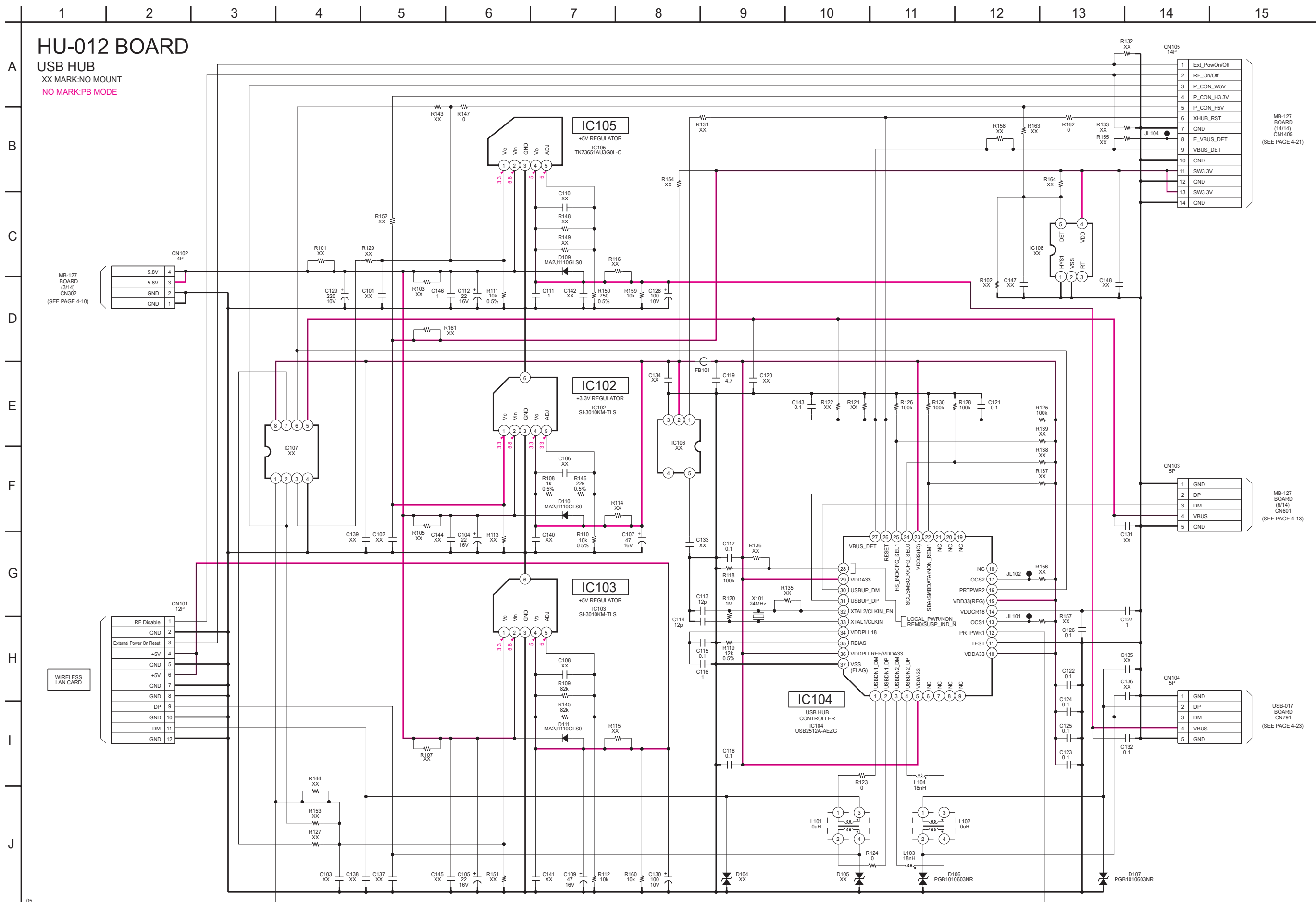


4-6. FR-302 BOARD (FL DRIVER) SCHEMATIC DIAGRAM • See page 5-5 for printed wiring board.
- Ref. No.: FR-302 board; 20,000 series -

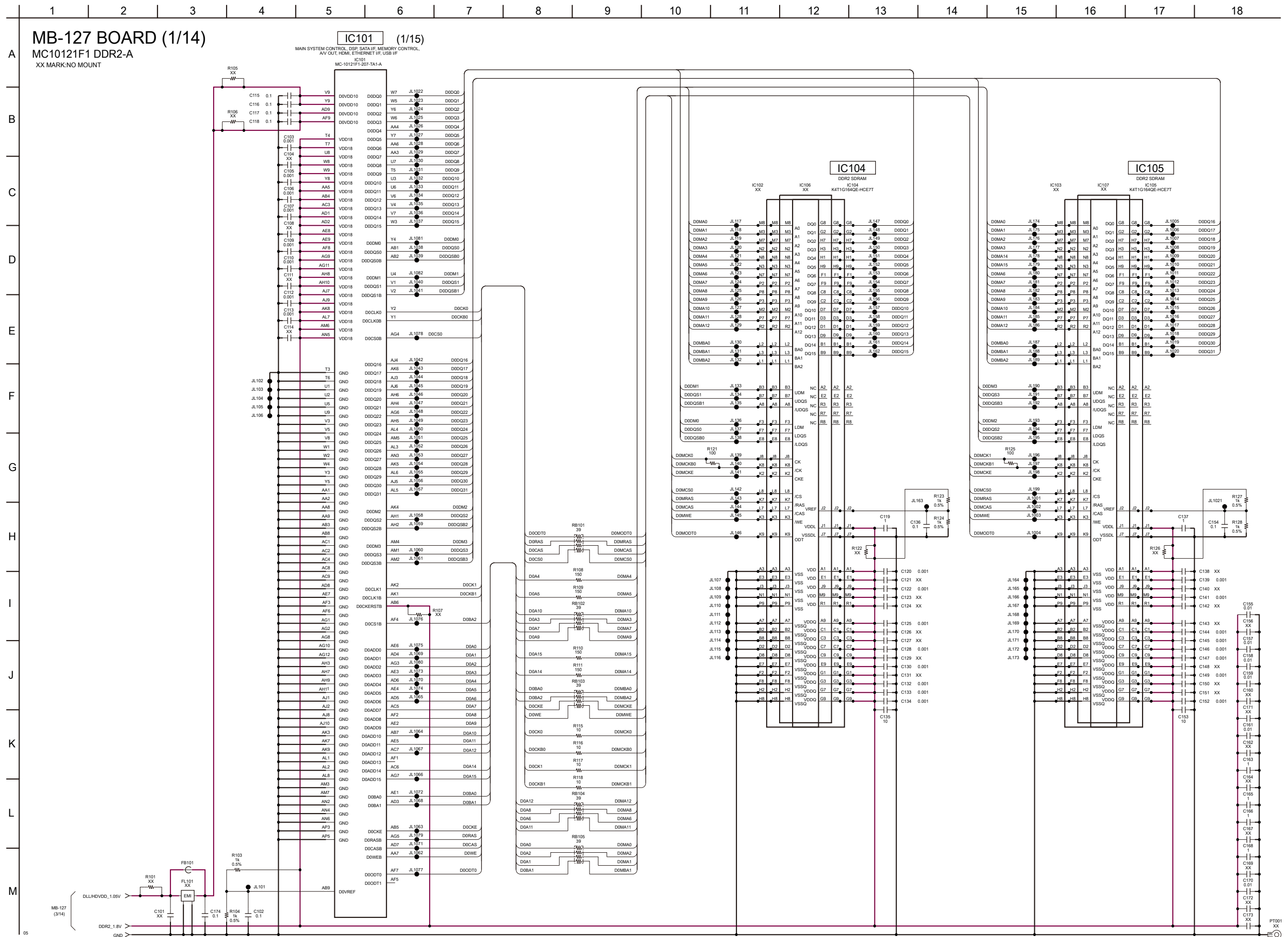


4-7. HU-012 BOARD (USB HUB) SCHEMATIC DIAGRAM • See page 5-6 for printed wiring board.

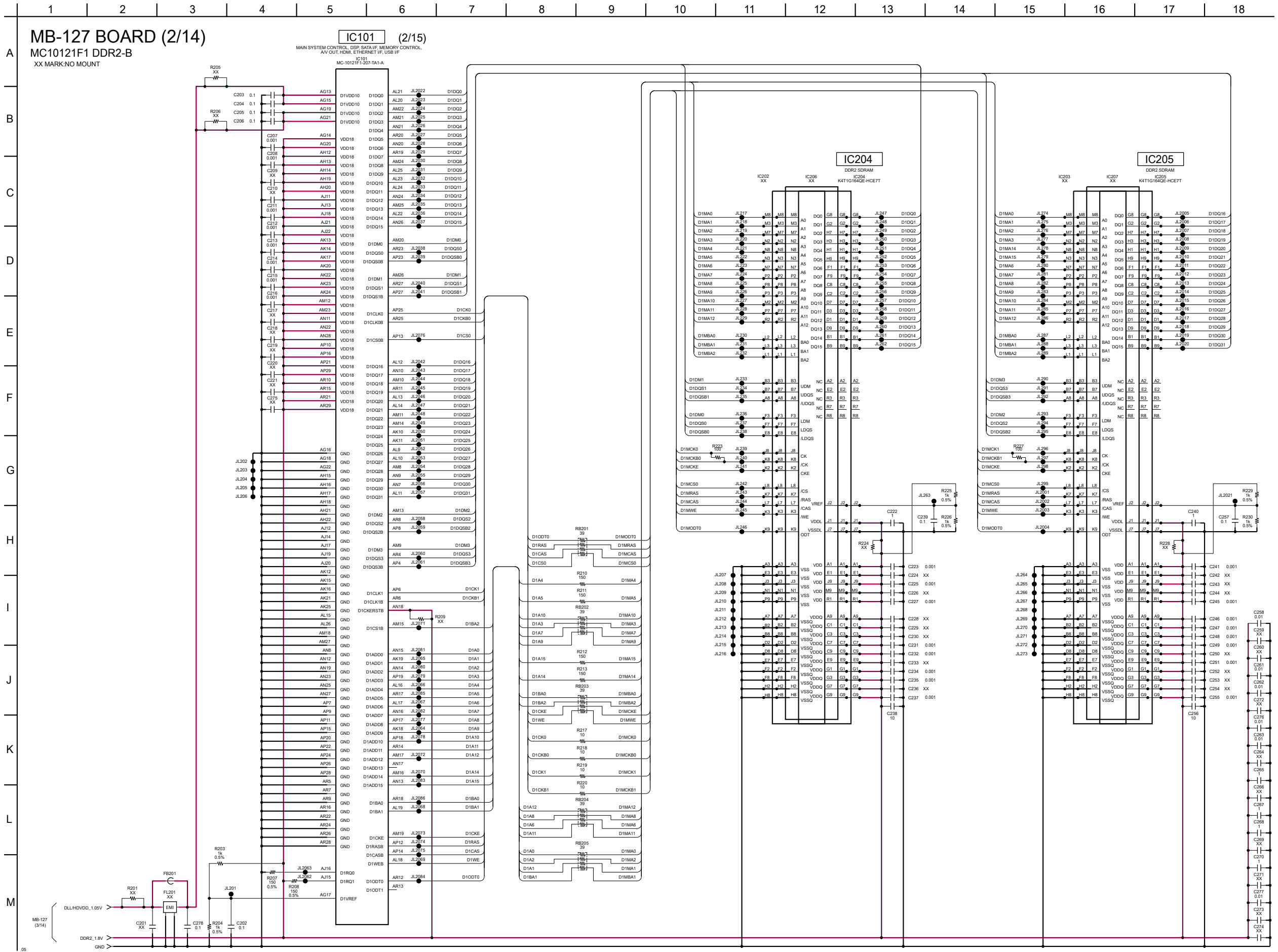
- Ref. No.: HU-012 board; 20,000 series -



4-8. MB-127 BOARD (EMMA3P DDR2-A) SCHEMATIC DIAGRAM (1/14) • See page 5-7 for printed wiring board.
- Ref. No.: MB-127 board; 10,000 series -

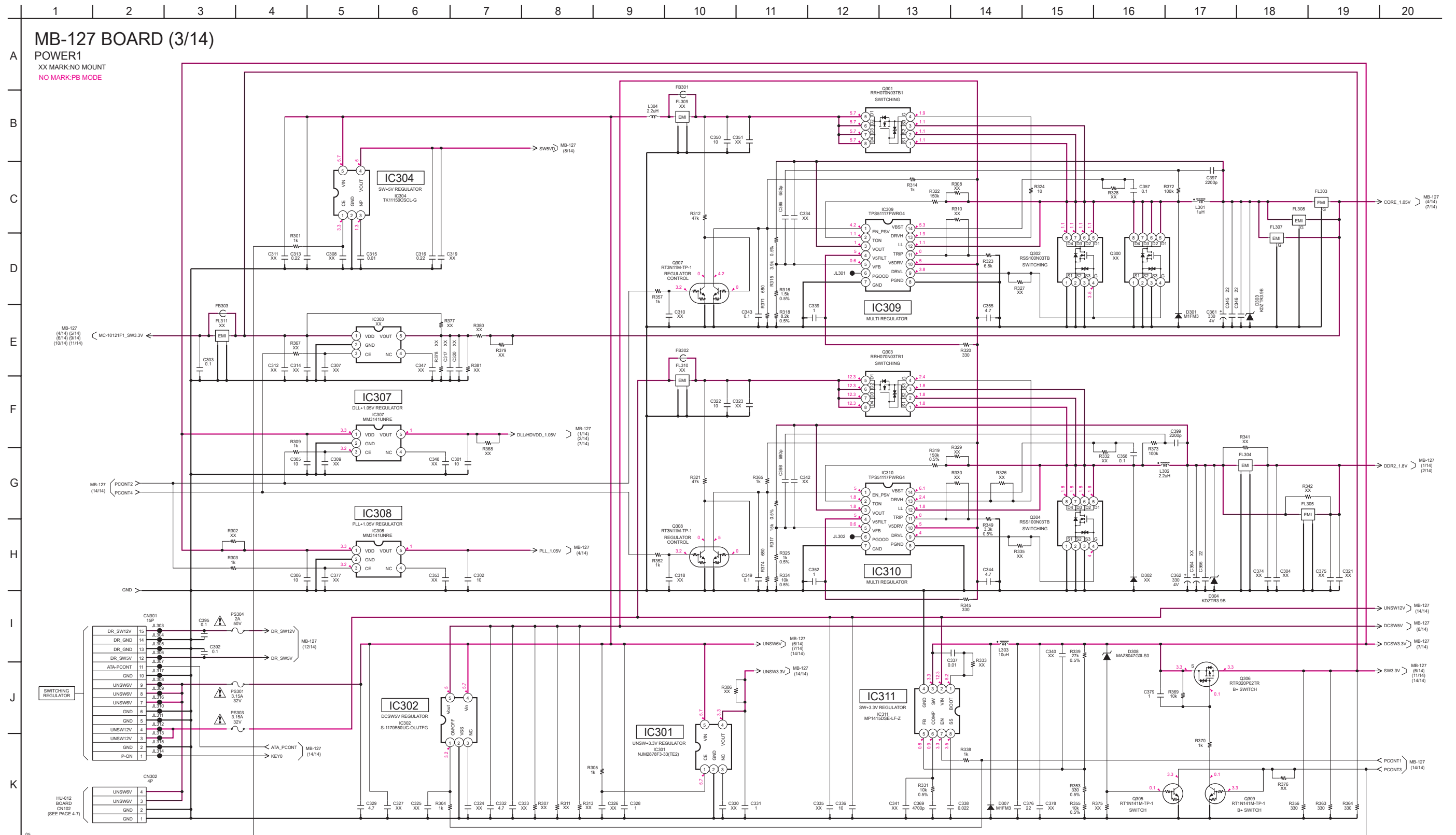


4-9. MB-127 BOARD (EMMA3P DDR2-B) SCHEMATIC DIAGRAM (2/14) • See page 5-7 for printed wiring board.
- Ref. No.: MB-127 board; 10,000 series -



4-10. MB-127 BOARD (POWER1) SCHEMATIC DIAGRAM (3/14) • See page 5-7 for printed wiring board.

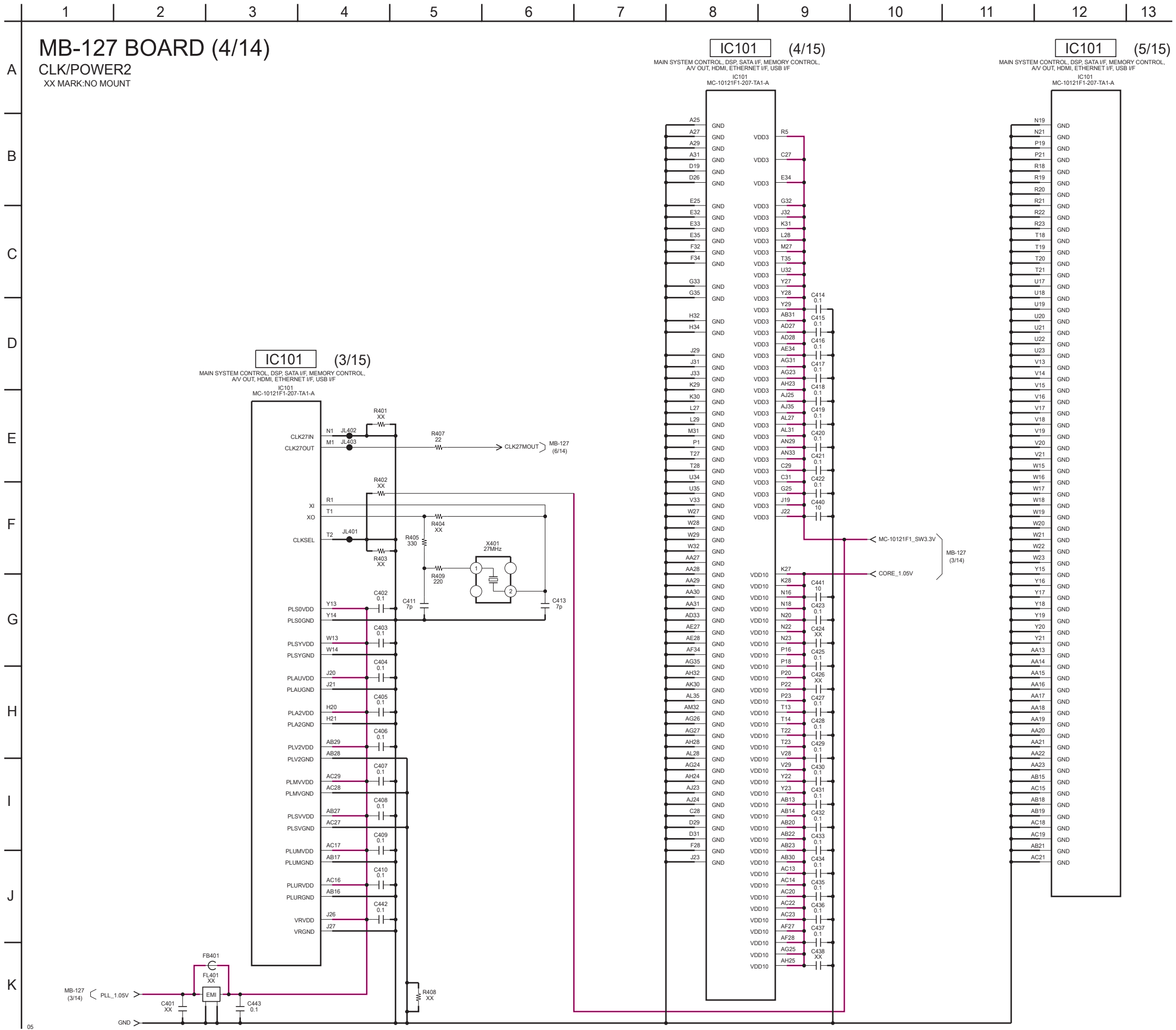
- Ref. No.: MB-127 board; 10,000 series -



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

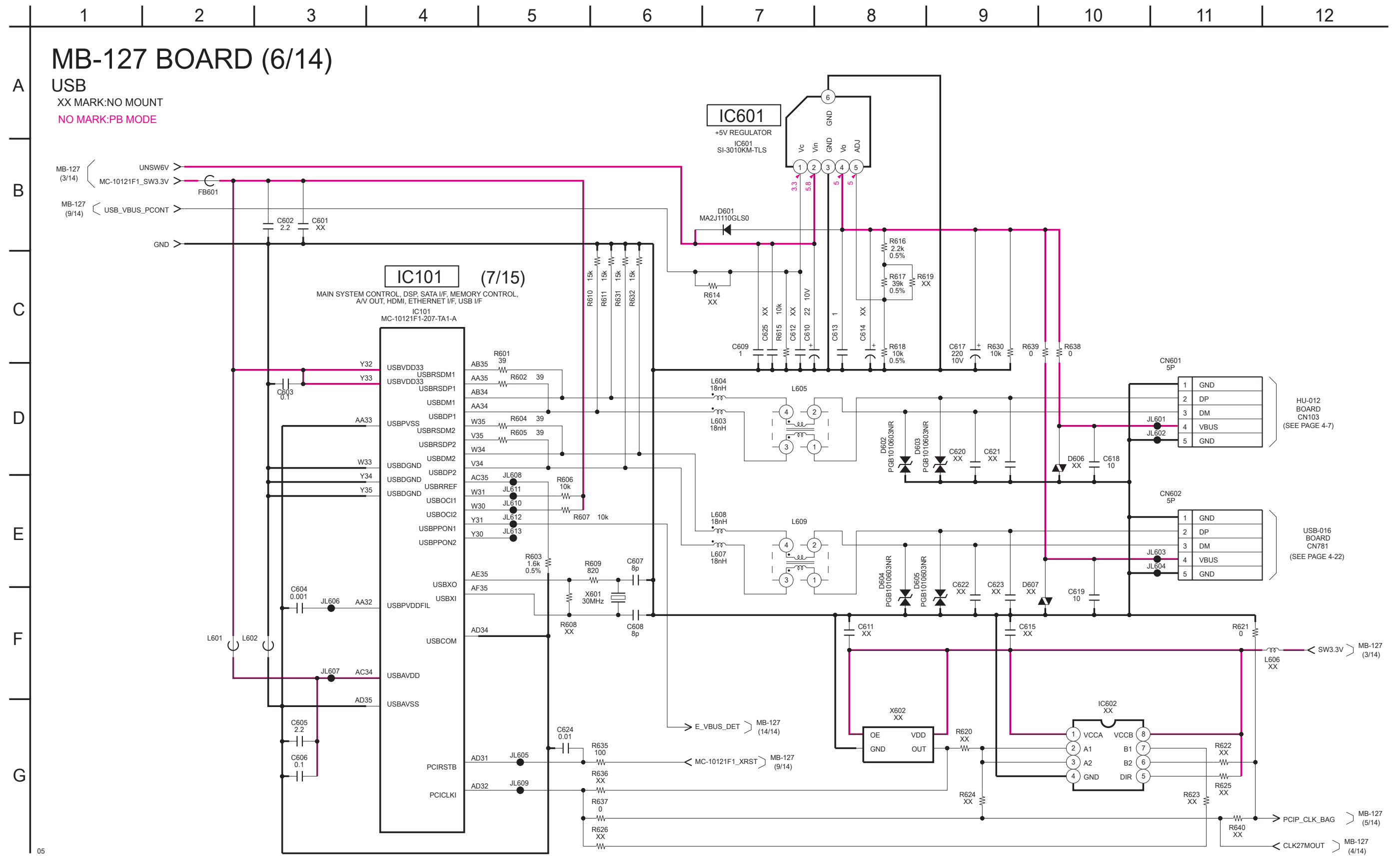
Note:
Les composants identifiés par une marque ▲ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

4-11. MB-127 BOARD (CLK/POWER2) SCHEMATIC DIAGRAM (4/14) • See page 5-7 for printed wiring board.
- Ref. No.: MB-127 board; 10,000 series -

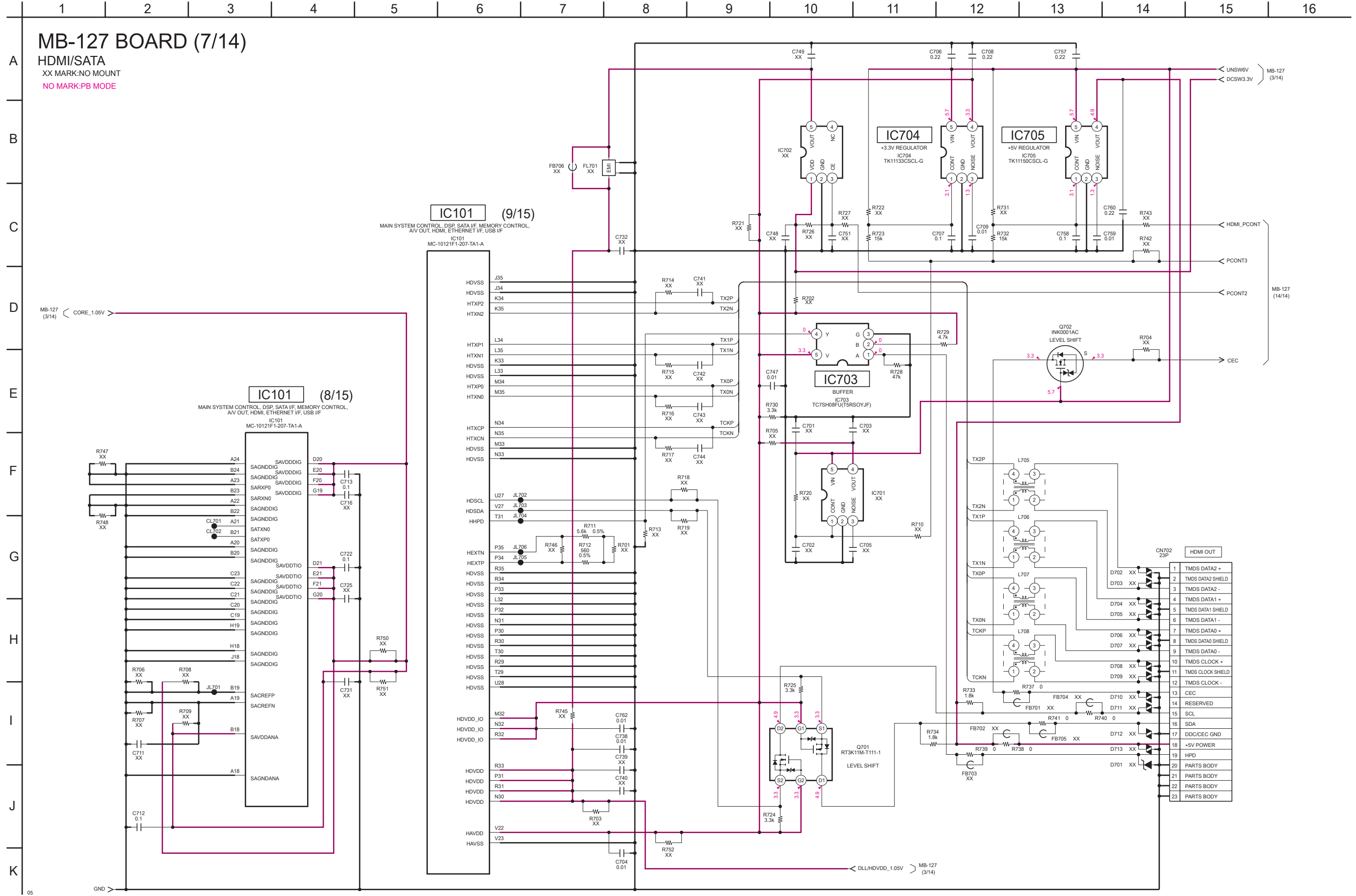


4-13. MB-127 BOARD (USB) SCHEMATIC DIAGRAM (6/14) • See page 5-7 for printed wiring board.

- Ref. No.: MB-127 board; 10,000 series -

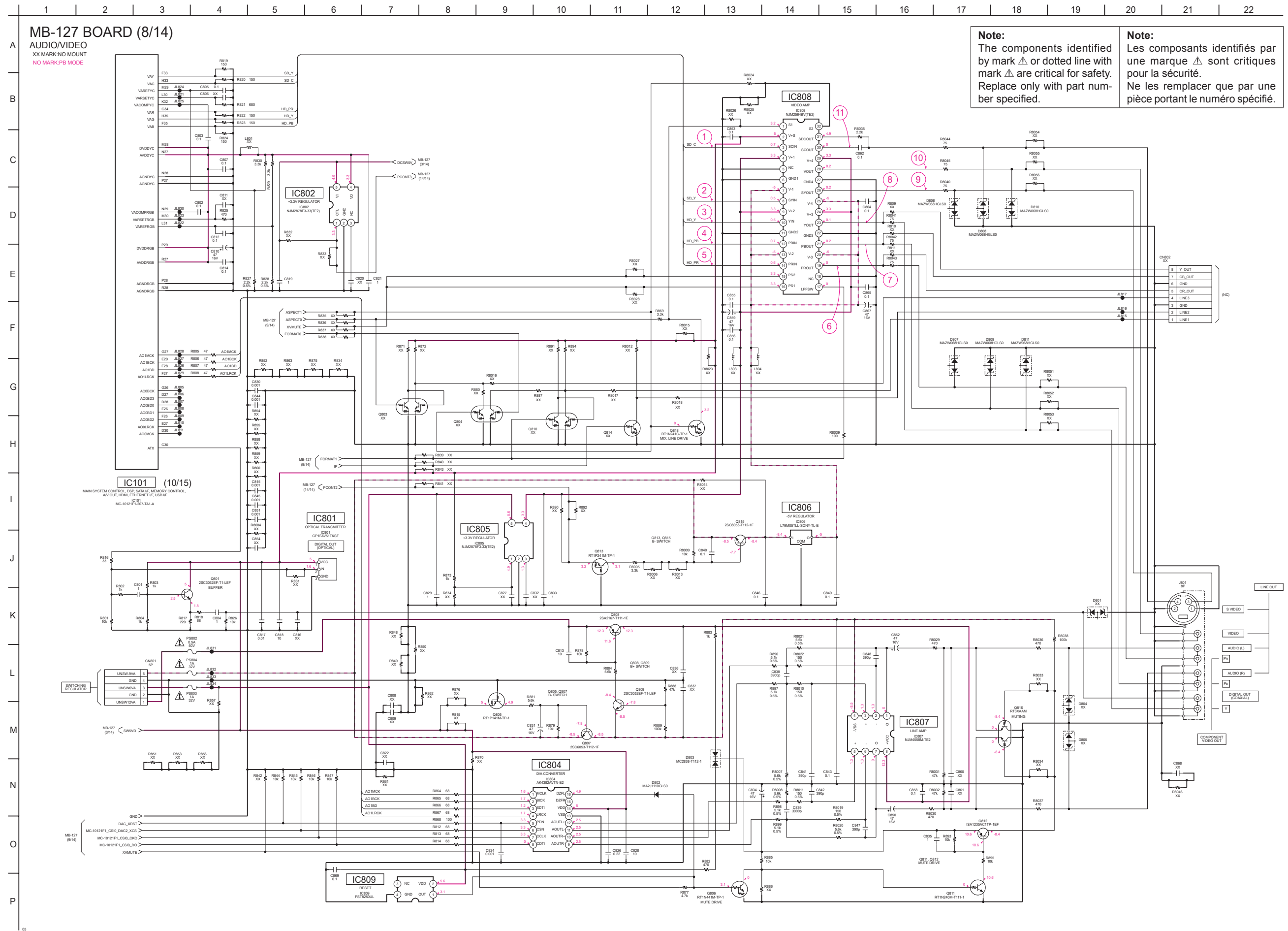


4-14. MB-127 BOARD (HDMI/SATA) SCHEMATIC DIAGRAM (7/14) • See page 5-7 for printed wiring board.
- Ref. No.: MB-127 board; 10,000 series -



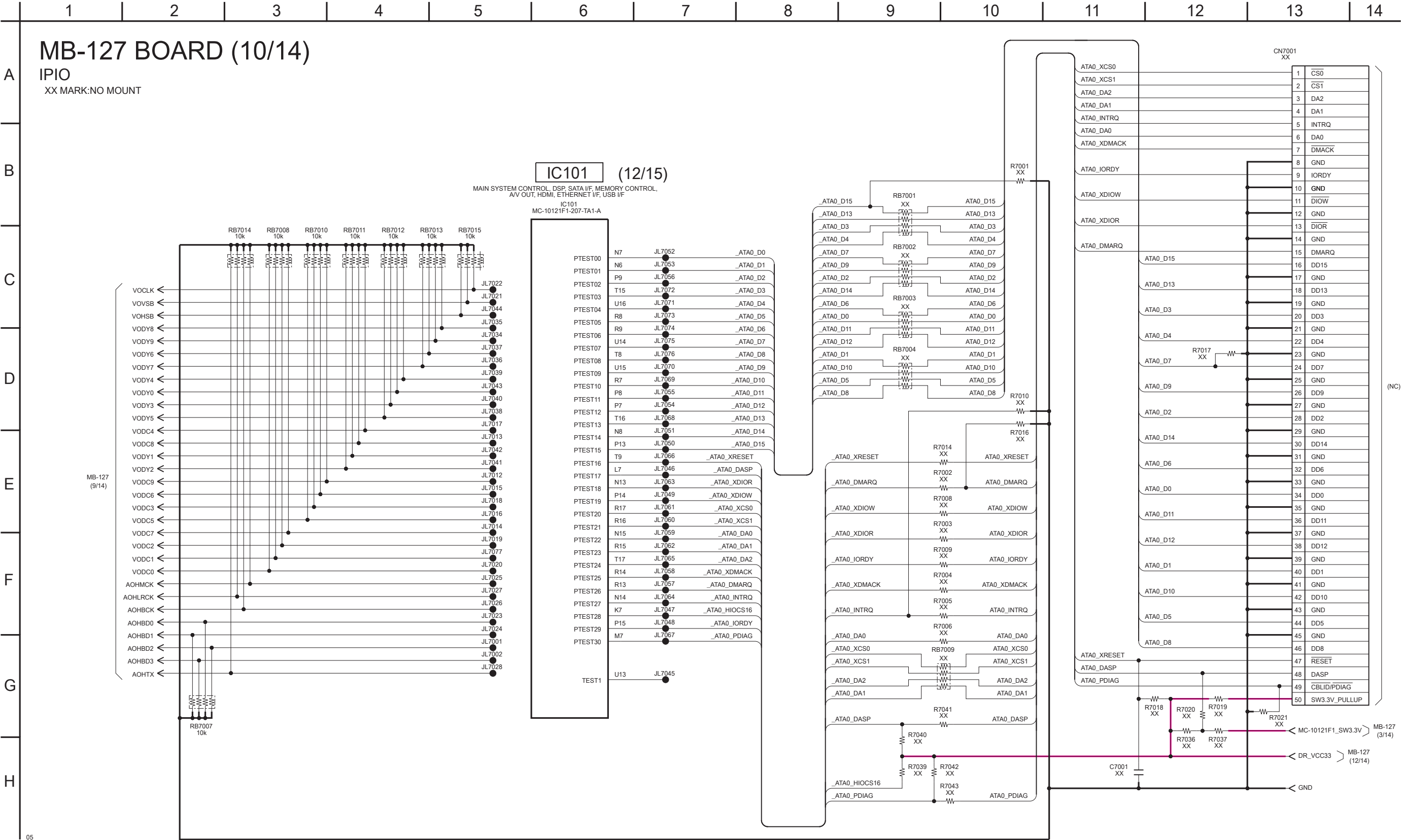
4-15. MB-127 BOARD (AUDIO/VIDEO) SCHEMATIC DIAGRAM (8/14) • See page 5-7 for printed wiring board.

- Ref. No.: MB-127 board; 10,000 series -



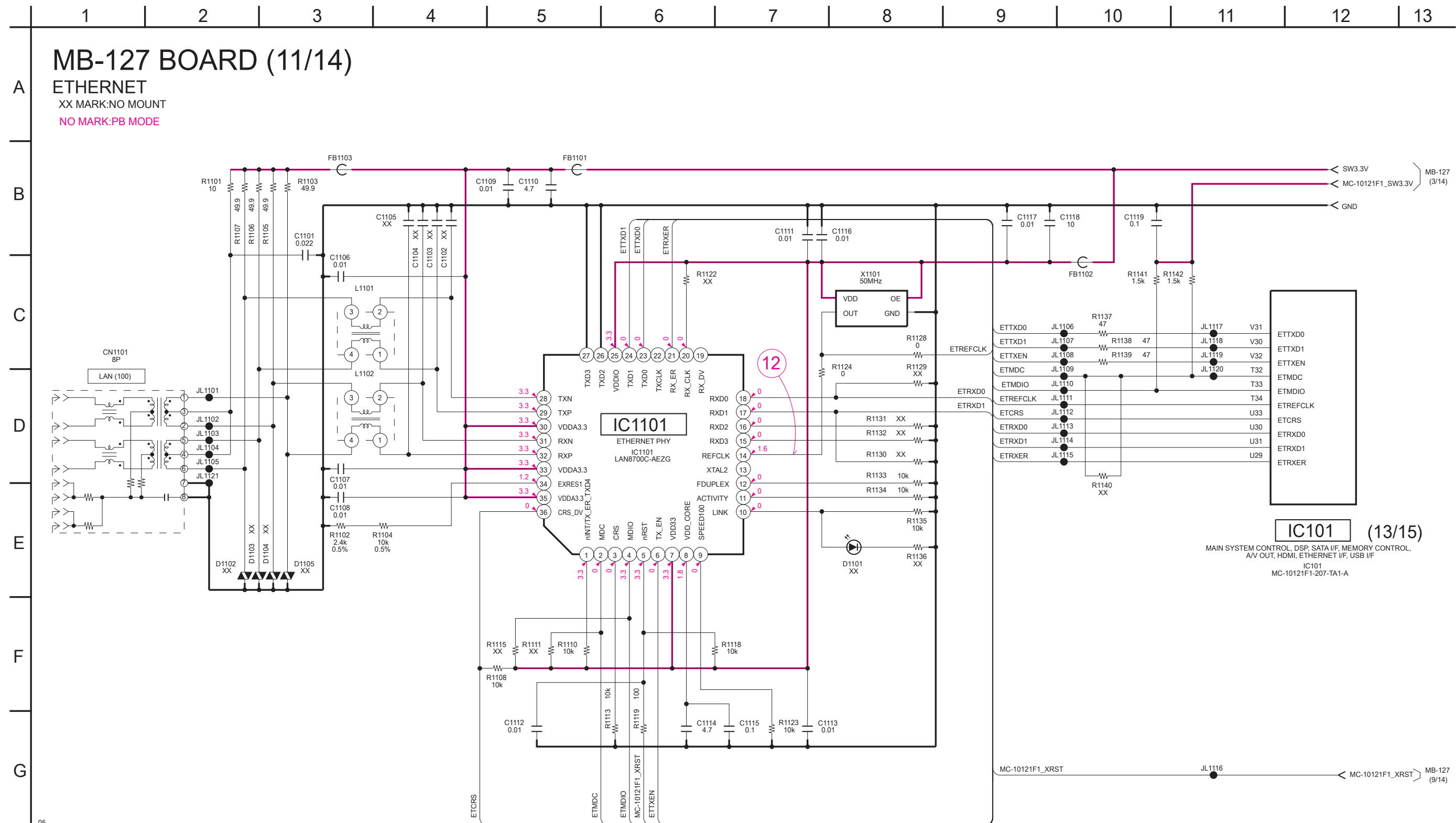


4-17. MB-127 BOARD (IPIO) SCHEMATIC DIAGRAM (10/14) • See page 5-7 for printed wiring board.
- Ref. No.: MB-127 board; 10,000 series -



4-18. MB-127 BOARD (ETHERNET) SCHEMATIC DIAGRAM (11/14) • See page 5-7 for printed wiring board.

- Ref. No.: MB-127 board; 10,000 series -

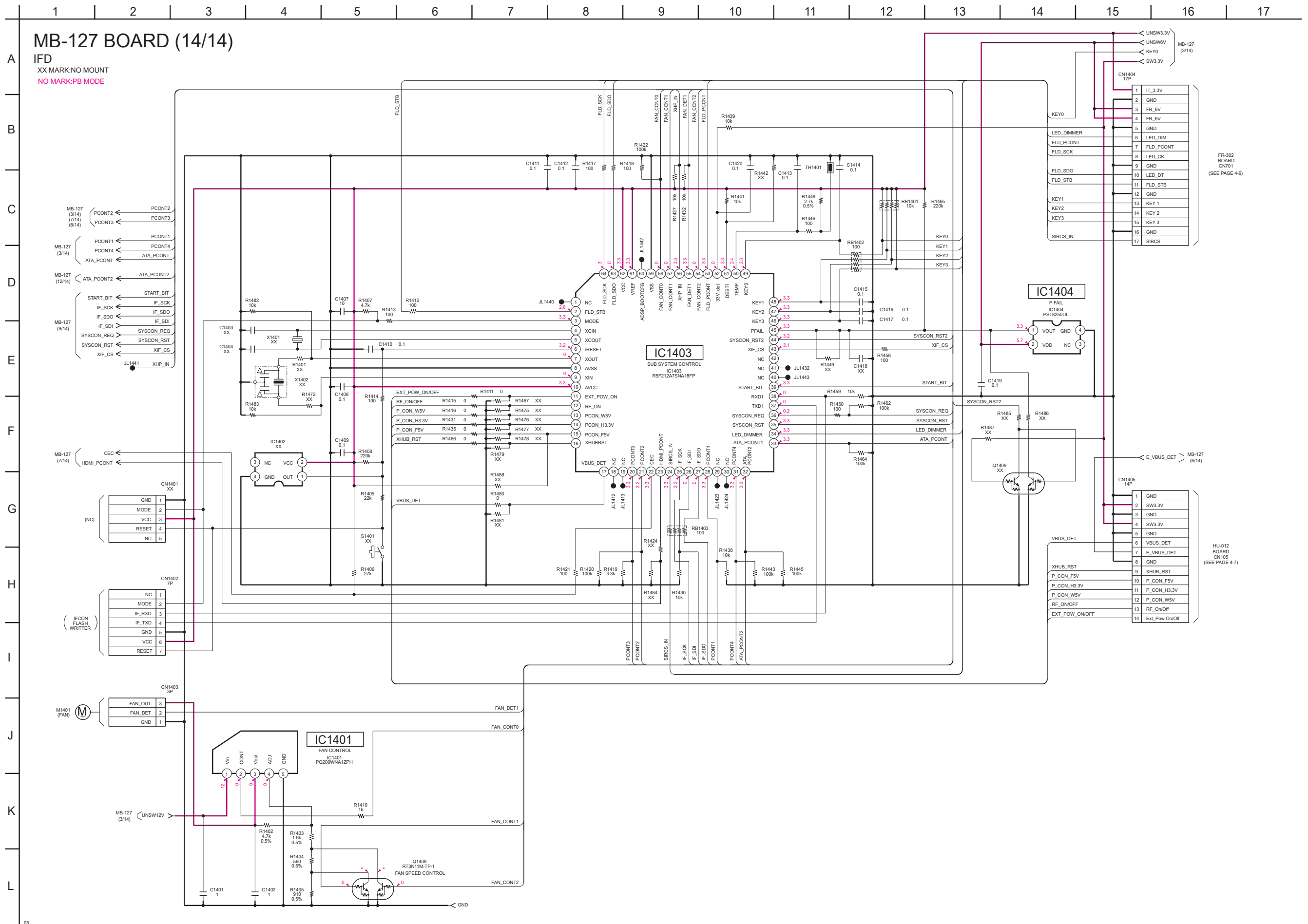






4-21. MB-127 BOARD (IFD) SCHEMATIC DIAGRAM (14/14) • See page 5-7 for printed wiring board.

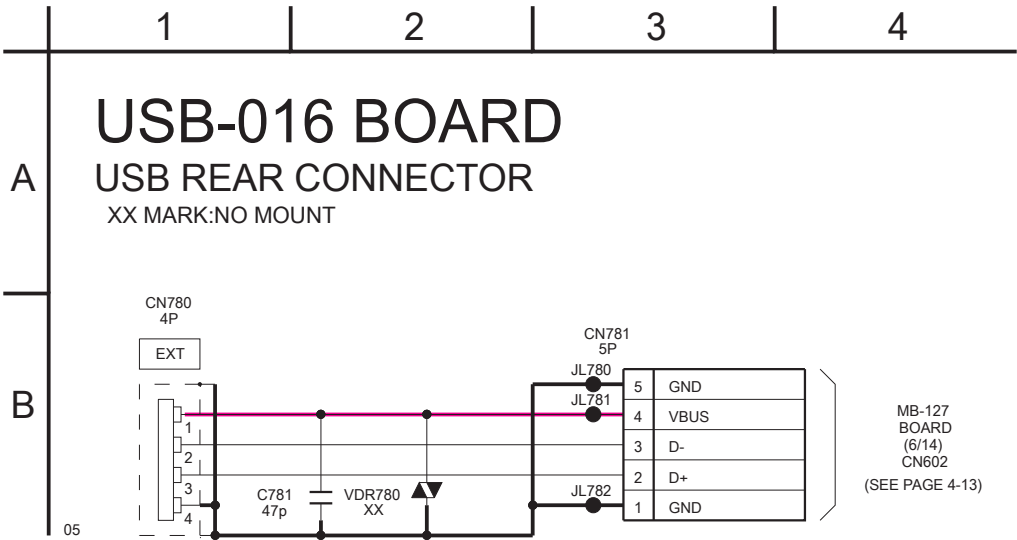
- Ref. No.: MB-127 board; 10,000 series -



4-22. USB-016 BOARD (USB REAR CONNECTOR) SCHEMATIC DIAGRAM

- Ref. No.: USB-016 board; 20,000 series -

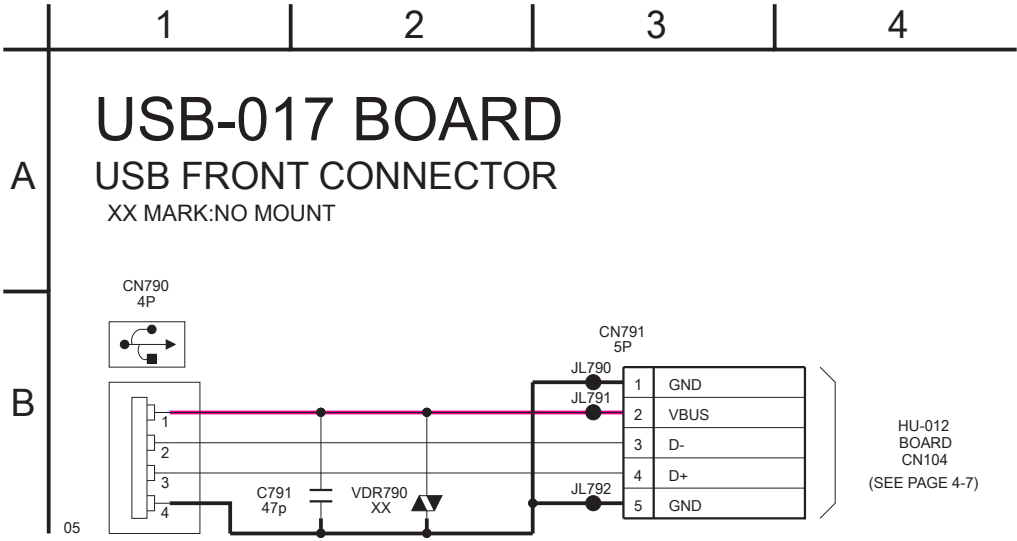
• See page 5-9 for printed wiring board.



4-23. USB-017 BOARD (USB FRONT CONNECTOR) SCHEMATIC DIAGRAM

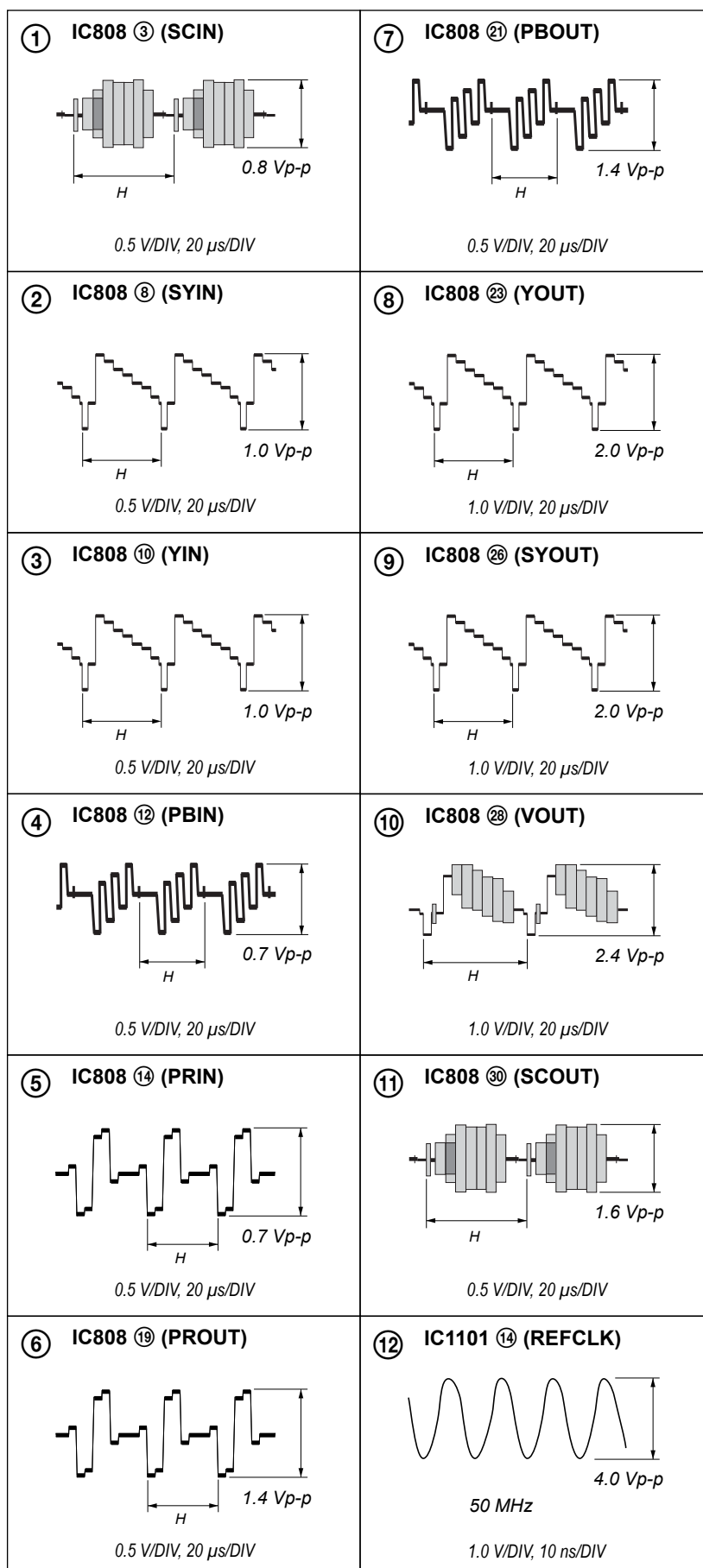
- Ref. No.: USB-017 board; 20,000 series -

- See page 5-10 for printed wiring board.



4-24. WAVEFORMS

MB-127 BOARD



SECTION 5

PRINTED WIRING BOARDS

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

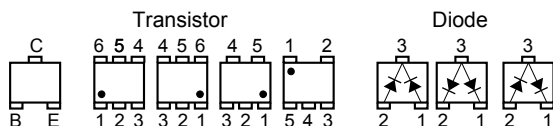
-  : Uses unleaded solders.
-  : Pattern from the side which enables seeing.
(The other layers' patterns are not indicated)

Caution:

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

Parts face side:
(SIDE A)

- 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. ANT-001 BOARD (ANTENNA) PRINTED WIRING BOARD

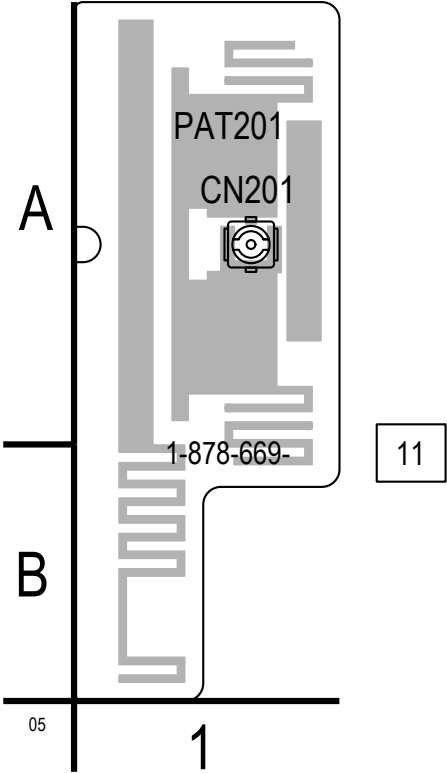
- Ref. No.: ANT-001 board; 20,000 series -

- See page 2-4 for circuit boards location.

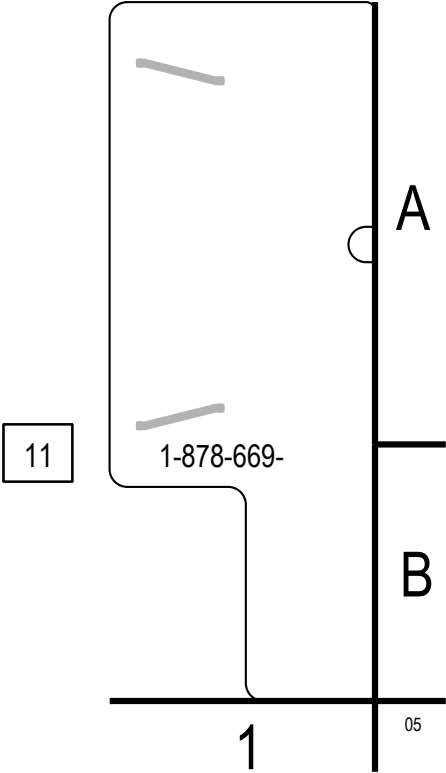
 : Uses unleaded solder.

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

ANT-001 BOARD
(SIDE A)



ANT-001 BOARD
(SIDE B)



ANT-001 BOARD (SIDE A)

CN201 A-1

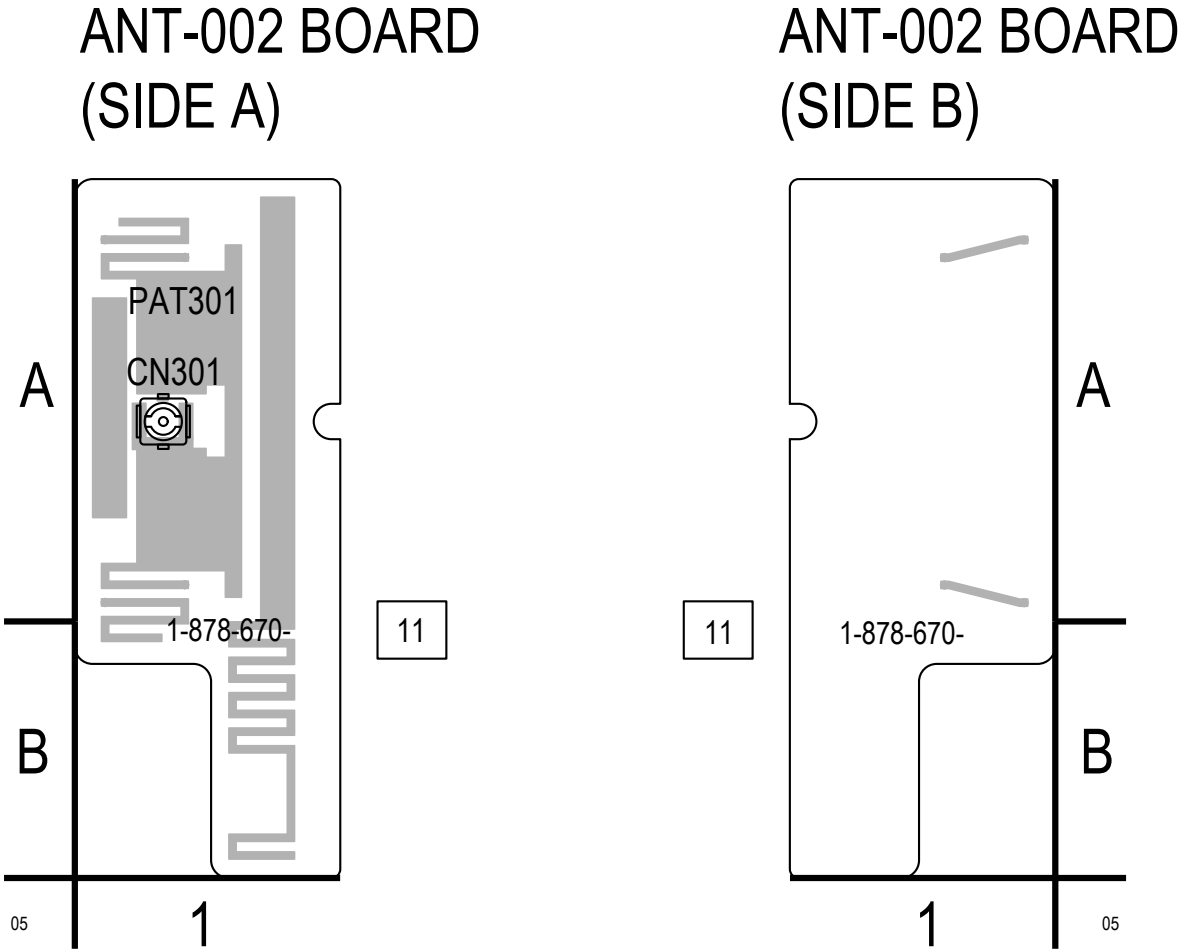
5-3. ANT-002 BOARD (ANTENNA) PRINTED WIRING BOARD

- Ref. No.: ANT-002 board; 20,000 series -

• See page 2-4 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.



ANT-002 BOARD (SIDE A)

CN301 A-1

5-4. FL-194 BOARD (SWITCH) PRINTED WIRING BOARD

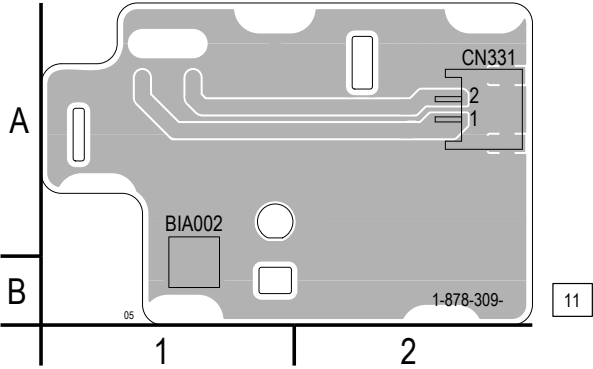
- Ref. No.: FL-194 board; 20,000 series -

- See page 2-4 for circuit boards location.

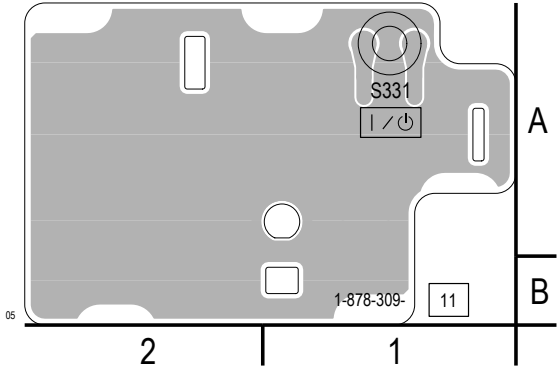
 : Uses unleaded solder.

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

FL-194 BOARD (SIDE A)



FL-194 BOARD (SIDE B)



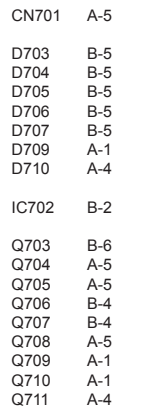
FL-194 BOARD (SIDE A)

CN331 A-2

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

LF : Uses unleaded solder.

FR-302 BOARD (SIDE A)



FR-302 BOARD (SIDE B)

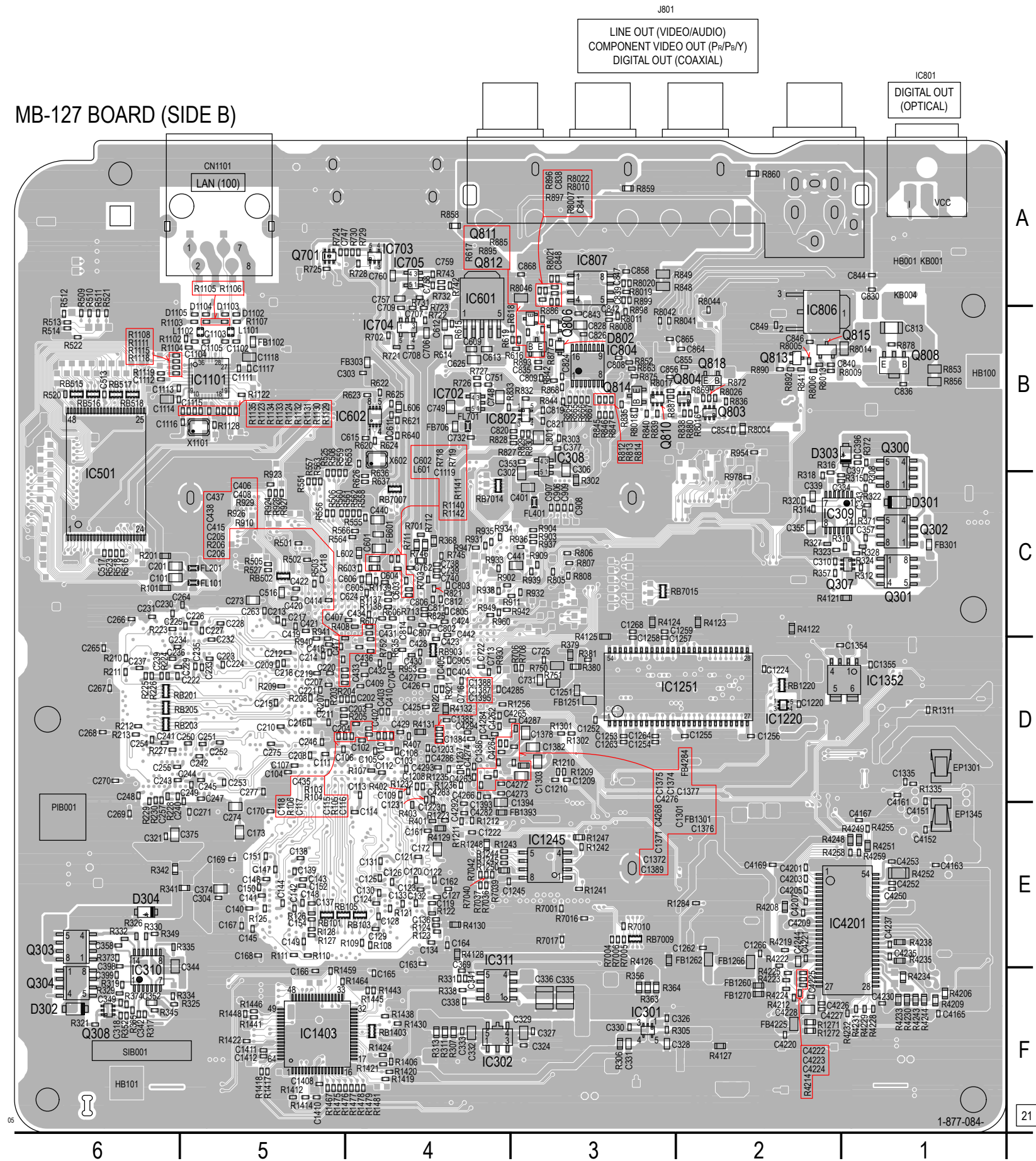


5-8. MB-127 BOARD (MAIN) PRINTED WIRING BOARD (SIDE B) • See page 2-4 for circuit boards location.

- Ref. No.: MB-127 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-127 BOARD (SIDE B)

CN1101	A-5
D301	C-1
D303	B-1
D304	E-6
D802	B-3
IC301	F-3
IC601	A-4
IC703	A-4
IC704	B-4
IC705	A-5
IC802	B-3
IC804	B-3
IC806	B-2
IC807	A-3
IC1101	B-5
IC1403	F-5
Q301	C-1
Q302	C-1
Q303	E-6
Q304	F-6
Q307	C-1
Q308	F-6
Q806	B-3
Q812	B-3
Q813	B-2
Q818	B-2

5-9. USB-016 BOARD (USB REAR CONNECTOR) PRINTED WIRING BOARD

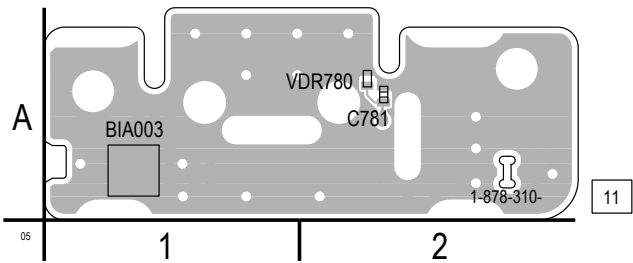
- Ref. No.: USB-016 board; 20,000 series -

- See page 2-4 for circuit boards location.

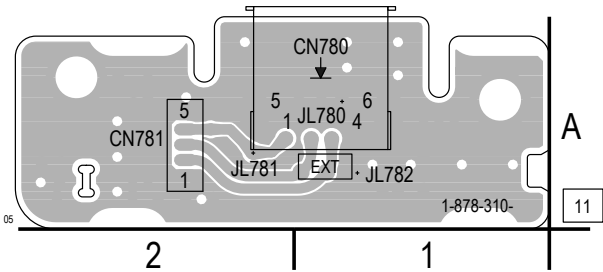
 : Uses unleaded solder.

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

USB-016 BOARD (SIDE A)



USB-016 BOARD (SIDE B)



USB-016 BOARD (SIDE B)

CN780 A-1

5-10. USB-017 BOARD (USB FRONT CONNECTOR) PRINTED WIRING BOARD

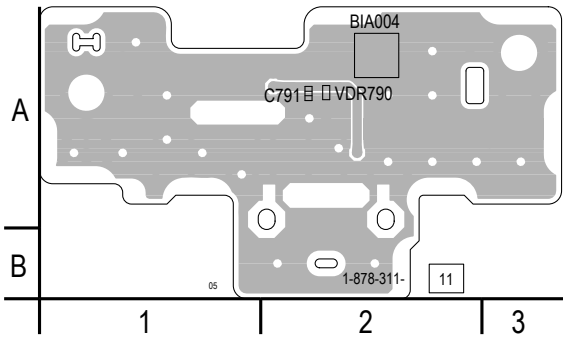
- Ref. No.: USB-017 board; 20,000 series -

- See page 2-4 for circuit boards location.

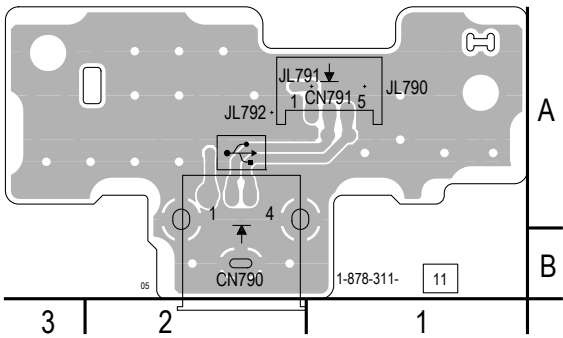
 : Uses unleaded solder.

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

USB-017 BOARD (SIDE A)



USB-017 BOARD (SIDE B)



USB-017 BOARD (SIDE B)

CN790 B-2
CN791 A-1

SECTION 6

IC PIN FUNCTION DESCRIPTION

6-1. MAIN SYSTEM CONTROL PIN FUNCTION (MB-127 BOARD IC101: MC-10121F1-207-TA1-A)

Pin No.	Name	I/O	Description
A1	VOID	-	This pin is not ball.
A2	VOID	-	This pin is not ball.
A3	VOID	-	This pin is not ball.
A4	RFN2	I	RF I/F RF differential signal (-) Input
A5	RFP2	I	RF I/F RF differential signal (+) Input
A6	RFN	I	RF I/F RF differential signal (-) Input
A7	RFP	I	RF I/F RF differential signal (+) Input
A8	AGND	-	Analog GND for Drive Controller Block
A9	E	I	RF I/F Main Beam Signal (E) Input
A10	F	I	RF I/F Main Beam Signal (F) Input
A11	D	I	RF I/F Main Beam Signal (D) Input
A12	A	I	RF I/F Main Beam Signal (A) Input
A13	CAGC1	I/O	RF I/F Connection to condenser for AGC detector (normal)
A14	CAGC2	I/O	RF I/F Connection to condenser for AGC detector (for CAPA)
A15	ADIN0/RFP7	I	RF I/F A/D Input/GPIO 7
A16	MON1/RFP4	I/O	RF I/F Internal Signal Monitor, Monitor Input Signal/GPIO 4
A17	RFEQOP	O	RF I/F RFEQ (+) Output (for monitor)
A18	SAGNDANA	-	Analog ground for Serial ATA
A19	SACREFN	I	Serial ATA Reference Clock Negative Input
A20	SAGNDDIG	-	Digital ground for Serial ATA
A21	SATXN0	O	Serial ATA Serial Transmit Data0
A22	SAGNDDIG	-	Digital ground for Serial ATA
A23	SARXP0	I	Serial ATA Serial Receive Data0
A24	SAGNDDIG	-	Digital ground for Serial ATA
A25	GND	-	Ground for digital and DDR2 SDRAM
A26	GPIO35	I/O	Horizontal Sync Signal/Composite Sync Signal
A27	GND	-	Ground for digital and DDR2 SDRAM
A28	GPIO43	I/O	VODY6: Digital Video Y Data Output
A29	GND	-	Ground for digital and DDR2 SDRAM
A30	N.U.	I	Not used (Fixed at "L")
A31	GND	-	Ground for digital and DDR2 SDRAM
A32	N.U.	I	Not used (Fixed at "H")
A33	VOID	-	This pin is not ball.
A34	VOID	-	This pin is not ball.
A35	VOID	-	This pin is not ball.
B1	VOID	-	This pin is not ball.
B2	VOID	-	This pin is not ball.
B3	AGND	-	Analog GND for Drive Controller Block
B4	AGND	-	Analog GND for Drive Controller Block
B5	AVDD33	-	Analog 3.3V supply for Drive Controller Block
B6	CREG	O	RF I/F Regulator Voltage Output (1.65V)
B7	VREFIO	I/O	RF I/F Reference Voltage Input/Output for pickup
B8	RFTSTIN1	I	RF I/F RF Test Input
B9	G/FOP	I	RF I/F Main Beam Signal (G) Input/FO (+) Input for focusing
B10	H/FOM	I	RF I/F Main Beam Signal (H) Input/FO (-) Input for focusing
B11	B	I	RF I/F Main Beam Signal (B) Input
B12	C	I	RF I/F Main Beam Signal (C) Input
B13	CEQ	I/O	RF I/F Connection to condenser for RF EQ fc control circuit
B14	REQ	I/O	RF I/F Connection to resistor for setting RF EQ circuit current
B15	ADIN1	I	RF I/F A/D Input
B16	MON2/RFP5	I/O	RF I/F Internal Signal Monitor, Monitor Input Signal/GPIO 5
B17	RFEQOM	O	RF I/F RFEQ (-) Output (for monitor)
B18	SAVDDANA	-	1.8V supply (Serial ATA analog VDD)
B19	SACREFP	I	Serial ATA Reference Clock Positive Input
B20	SAGNDDIG	-	Digital ground for Serial ATA
B21	SATXP0	O	Serial ATA Serial Transmit Data0
B22	SAGNDDIG	-	Digital ground for Serial ATA
B23	SARXN0	I	Serial ATA Serial Receive Data0
B24	SAGNDDIG	-	Digital ground for Serial ATA

Pin No.	Name	I/O	Description
B25	GPIO40	I/O	VODY3: Digital Video Y Data Output
B26	GPIO42	I/O	VODY5: Digital Video Y Data Output
B27	GPIO45	I/O	VODY8: Digital Video Y Data Output
B28	GPIO46	I/O	VODY9: Digital Video Y Data Output
B29	N.U.	I/O	Not used
B30	N.U.	I	Not used (Fixed at "H")
B31	N.U.	O	Not used
B32	N.U.	I	Not used (Fixed at "H")
B33	S2CSB	I	Clocked Serial I/F 2 Slave Select Input
B34	VOID	-	This pin is not ball.
B35	VOID	-	This pin is not ball.
C1	VOID	-	This pin is not ball.
C2	SDRV2	O	Motor Drive I/F Thread Drive Output
C3	AVDD33	-	Analog 3.3V supply for Drive Controller Block
C4	FPDVINP2	I	RF I/F Front Monitor Input (+)
C5	FPDVINP	I	RF I/F Front Monitor Input (+)
C6	AGND	-	Analog GND for Drive Controller Block
C7	AGND	-	Analog GND for Drive Controller Block
C8	AVDD15	-	Analog 1.5V supply for Drive Controller Block
C9	AVDD33	-	Analog 3.3V supply for Drive Controller Block
C10	AVDD15	-	Analog 1.5V supply for Drive Controller Block
C11	AGND	-	Analog GND for Drive Controller Block
C12	VDD15RVAD	-	Power Supply 1.5V for RV ADC
C13	AVDD15	-	Analog 1.5V supply for Drive Controller Block
C14	AGND	-	Analog GND for Drive Controller Block
C15	MON3/RFP6	I/O	RF I/F Internal Signal Monitor, Monitor Input Signal/GPIO 6
C16	MA4	O	External SDRAM I/F Memory Address Output
C17	DVDD33	-	Digital 3.3V supply for Drive Controller Block)
C18	DGND	-	Digital GND for Drive Controller Block
C19	SAGNDDIG	-	Digital ground for Serial ATA
C20	SAGNDDIG	-	Digital ground for Serial ATA
C21	SAGNDDIG	-	Digital ground for Serial ATA
C22	SAGNDDIG	-	Digital ground for Serial ATA
C23	SAGNDDIG	-	Digital ground for Serial ATA
C24	GPIO41	I/O	VODY4: Digital Video Y Data Output
C25	GPIO50	I/O	VODC3: Digital Video Cb/Cr Data Output
C26	GPIO51	I/O	VODC4: Digital Video Cb/Cr Data Output
C27	VDD3	-	3.3V supply (I/O buffers)
C28	GND	-	Ground for digital and DDR2 SDRAM
C29	VDD3	-	3.3V supply (I/O buffers)
C30	ATX	O	Sample data output for S/PDIF, HDMI
C31	VDD3	-	3.3V supply (I/O buffers)
C32	S2CKIN	I	Clocked Serial I/F 2 Serial Clock Input
C33	S2DOUT	O	Clocked Serial I/F 2 Serial Data Output
C34	S2DIN	I	Clocked Serial I/F 2 Serial Data Input
C35	VOID	-	This pin is not ball.
D1	MDRV	O	Motor Drive I/F Spindle Drive Output
D2	SDRV1	O	Motor Drive I/F Thread Drive Output
D3	DAOUT2	O	RF I/F General-purpose D/A Converter Output
D4	FPDVINN2	I	RF I/F Front Monitor Input (-)
D5	FPDVINN	I	RF I/F Front Monitor Input (-)
D6	CBC	I/O	RF I/F Connector to condenser for setting WOBBLE circuit (A+D) signal AGC response speed
D7	RFTSTIN2	I	RF I/F RF Test Input
D8	REF16	O	RF I/F System Reference Voltage Output (for 3.3V supply)
D9	RFOP	O	RF I/F Read RF Output (+)
D10	RFTST3/RFP3	O	RF I/F RF Test/GPIO 3
D11	DGND	-	Digital GND for Drive Controller Block
D12	PB0/SW1	I/O	General Port I/F, Three values Control Output SW (default)
D13	PB1/SW2	I/O	General Port I/F, Three values Control Output SW (default)
D14	MA1	O	External SDRAM I/F Memory Address Output
D15	MA6	O	External SDRAM I/F Memory Address Output

Pin No.	Name	I/O	Description
D16	MA0	O	External SDRAM I/F Memory Address Output
D17	MA2	O	External SDRAM I/F Memory Address Output
D18	MA3	O	External SDRAM I/F Memory Address Output
D19	GND	-	Ground for digital and DDR2 SDRAM
D20	SAVDDDIG	-	1.05V supply
D21	SAVDDTIO	-	1.8V supply (Serial ATA Tx I/O)
D22	GPIO34	I/O	Video Pixel Clock
D23	GPIO37	I/O	VODY0: Digital Video Y Data Output
D24	GPIO49	I/O	VODC2: Digital Video Cb/Cr Data Output
D25	GPIO53	I/O	VODC6: Digital Video Cb/Cr Data Output
D26	GND	-	Ground for digital and DDR2 SDRAM
D27	AO0BD3	O	Audio PCM Serial Data Output
D28	AO0BD0	O	Audio PCM Serial Data-L/R Output/Down Mixed Output
D29	GND	-	Ground for digital and DDR2 SDRAM
D30	AO0MCK	O	Audio Master Clock Output
D31	GND	-	Ground for digital and DDR2 SDRAM
D32	N.U.	I	Not used
D33	S0DIN	I	Not used
D34	S0DOUT	O	Clocked Serial I/F 0 Serial Data Output
D35	S0CKOUT	O	Clocked Serial I/F 0 Serial Clock Output
E1	FDRV	O	Motor Drive I/F Focus Drive Output
E2	DAOUT0	O	RF I/F General-purpose D/A Converter Output
E3	DAOUT1	O	RF I/F General-purpose D/A Converter Output
E4	VDD15WBLAD	-	Power Supply 1.5V for WOBBLE ADC
E5	GND_WBLAD	-	Ground for WOBBLE ADC
E6	CWAGC	I/O	RF I/F Connection to condenser for setting WOBBLE circuit AGC response speed
E7	CAD	I/O	RF I/F Connection to condenser for setting WOBBLE circuit (A+D) signal AGC response speed
E8	REF075	O	RF I/F System Reference Voltage Output (for 1.5V supply)
E9	RFON	O	RF I/F Read RF Output (-)
E10	AGCINP	I	RF I/F AGC Input (+)
E11	DVDD33	-	Digital 3.3V supply for Drive Controller Block)
E12	PB3/SW4	I/O	General Port I/F, Three values Control Output SW (default)
E13	PB2/SW3	I/O	General Port I/F, Three values Control Output SW (default)
E14	MA7	O	External SDRAM I/F Memory Address Output
E15	MA10	O	External SDRAM I/F Memory Address Output
E16	MA8	O	External SDRAM I/F Memory Address Output
E17	MA5	O	External SDRAM I/F Memory Address Output
E18	GPIO7	O	GPIO7
E19	N.U.	I/O	Not used
E20	SAVDDDIG	-	1.05V supply
E21	SAVDDTIO	-	1.8V supply (Serial ATA Tx I/O)
E22	GPIO38	I/O	VODY1: Digital Video Y Data Output
E23	GPIO47	I/O	VODC0: Digital Video Cb/Cr Data Output
E24	GPIO54	I/O	VODC7: Digital Video Cb/Cr Data Output
E25	GND	-	Ground for digital and DDR2 SDRAM
E26	AO0BD1	O	Audio PCM Serial Data-SL/SR Output
E27	AO0LRCK	O	Audio L/R Clock Output
E28	AO1BD	O	Audio PCM Serial Data-L/R Output/Down Mixed Output
E29	AO1BCK	O	Audio Data Clock Output
E30	GPIO10	I/O	FORMAT0 (480, 1080="0" 720="1")
E31	N.U.	I/O	Not used
E32	GND	-	Ground for digital and DDR2 SDRAM
E33	GND	-	Ground for digital and DDR2 SDRAM
E34	VDD3	-	3.3V supply (I/O buffers)
E35	GND	-	Ground for digital and DDR2 SDRAM
F1	TDRV	O	Motor Drive I/F Tracking Drive Output
F2	AVDD15	-	Analog 1.5V supply for Drive Controller Block
F3	AVDD15	-	Analog 1.5V supply for Drive Controller Block
F4	AGND	-	Analog GND for Drive Controller Block
F5	AGND	-	Analog GND for Drive Controller Block
F6	AVDD33	-	Analog 3.3V supply for Drive Controller Block

Pin No.	Name	I/O	Description
F7	RLD	O	RF I/F Laser Driver Control for Read
F8	CBCO	I/O	RF I/F Connection to condenser for WOBBLE circuit (A+D) HPF
F9	CBHWBL/CID	I/O	RF I/F Connection to condenser for LPP circuit bottom hold (WOBBLE level) and ID detection circuit LPP
F10	AGCINN	I	RF I/F AGC Input (-)
F11	DGND	-	Digital GND for Drive Controller Block
F12	MBA1	O	External SDRAM I/F Memory Bank Address Output
F13	MA9	O	External SDRAM I/F Memory Address Output
F14	MBA0	O	External SDRAM I/F Memory Bank Address Output
F15	MA11	O	External SDRAM I/F Memory Address Output
F16	MD8	I/O	External SDRAM I/F Memory Data Input/Output
F17	MD11	I/O	External SDRAM I/F Memory Data Input/Output
F18	GPIO6	I/O	GPIO6
F19	N.U.	I/O	Not used
F20	SAVDDDIG	-	1.05V supply
F21	SAVDDTIO	-	1.8V supply (Serial ATA Tx I/O)
F22	GPIO39	I/O	VODY2: Digital Video Y Data Output
F23	GPIO48	I/O	VODC1: Digital Video Cb/Cr Data Output
F24	GPIO56	I/O	VODC9: Digital Video Cb/Cr Data Output
F25	NMI	I	Not used (Fixed at "H")
F26	AOOBD2	O	Audio PCM Serial Data-C/LE Output
F27	AO1LRCK	O	Audio L/R Clock Output
F28	GND	-	Ground for digital and DDR2 SDRAM
F29	GPIO15	O	IT_GPIO1
F30	GPIO57	O	USB VBUS PCONT ("H": ON, "L": OFF)
F31	UA0RXDB	I	UART 0 Receive Data
F32	GND	-	Ground for digital and DDR2 SDRAM
F33	VAY	O	S-Video Y or Composite CVBS Signal Output
F34	GND	-	Ground for digital and DDR2 SDRAM
F35	VAB	O	Component Output either B or Pb Signal
G1	DVDD33	-	Digital 3.3V supply for Drive Controller Block)
G2	SDCK	O	General Serial I/F Clock Signal
G3	SDCS1B	O	General Serial I/F Channel #1 Select Signal
G4	SDCS3B	I/O	General Serial I/F Channel #3 Select Signal
G5	PA2	I/O	General Port I/F
G6	PA0	I/O	General Port I/F
G7	AVDD33	-	Analog 3.3V supply for Drive Controller Block
G8	RFTST1/SWRF1/RFP1	O	RF I/F RF Test Output/SWRF1 Output/GPIO 1
G9	CADO	I/O	RF I/F Connection to condenser for WOBBLE circuit (B+C) HPF
G10	CBHLPP	I/O	RF I/F For LPP circuit bottom hold (LPP)
G11	DVDD15	-	Digital 1.5V supply for Drive Controller Block
G12	CASB	O	External SDRAM I/F Memory Column Address Strobe
G13	MCKE	O	External SDRAM I/F SDRAM Clock Enable
G14	RASB	O	External SDRAM I/F Memory Row Address Strobe
G15	MD9	I/O	External SDRAM I/F Memory Data Input/Output
G16	MD4	I/O	External SDRAM I/F Memory Data Input/Output
G17	MD3	I/O	External SDRAM I/F Memory Data Input/Output
G18	N.U.	I/O	Not used
G19	SAVDDDIG	-	1.05V supply
G20	SAVDDTIO	-	1.8V supply (Serial ATA Tx I/O)
G21	GPIO36	I/O	Vertical Sync Signal/Blanking Sync Signal
G22	GPIO44	I/O	VODY7: Digital Video Y Data Output
G23	GPIO52	I/O	VODC5: Digital Video Cb/Cr Data Output
G24	GPIO55	I/O	VODC8: Digital Video Cb/Cr Data Output
G25	VDD3	-	3.3V supply (I/O buffers)
G26	AOOBCK	O	Audio Data Clock Output
G27	AO1MCK	O	Audio Master Clock Output
G28	GPIO14	I/O	IP (Progressive="0" Interlace="1") (Not used)
G29	GPIO12	I/O	ASPECT0 (4:3="0" 16:9, 4:3LB="1")
G30	UA0TXDB	O	UART 0 Transfer Data
G31	SCL1	I/O	I2C I/F 1 Serial Clock

Pin No.	Name	I/O	Description
G32	VDD3	-	3.3V supply (I/O buffers)
G33	GND	-	Ground for digital and DDR2 SDRAM
G34	VAR	O	Component Output either R or Pr Signal
G35	GND	-	Ground for digital and DDR2 SDRAM
H1	DGND	-	Digital GND for Drive Controller Block
H2	DVDD15	-	Digital 1.5V supply for Drive Controller Block
H3	SDIO	I/O	General Serial I/F Input/Output Data
H4	SDCS0B	O	General Serial I/F Channel #0 Select Signal
H5	SDCS2B	I/O	General Serial I/F Channel #2 Select Signal
H6	PA3	I/O	General Port I/F
H7	PA1	I/O	General Port I/F
H8	WALPF1	I/O	Connection to condenser for WAPLL
H9	RFTST2/SWRF2/RFP2	O	RF I/F RF Test Output/SWRF2 Output/GPIO 2
H10	CWHP	I/O	RF I/F Connection to condenser for WOBBLE circuit HPF
H11	MD12	I/O	External SDRAM I/F Memory Data Input/Output
H12	WEB	O	External SDRAM I/F Memory Write Enable
H13	MCLKOUT	O	External SDRAM I/F SDRAM Clock Output
H14	MD7	I/O	External SDRAM I/F Memory Data Input/Output
H15	MD6	I/O	External SDRAM I/F Memory Data Input/Output
H16	GPIO20	I	GPIO20
H17	N.U.	I/O	Not used
H18	SAGNDDIG	-	Digital ground for Serial ATA
H19	SAGNDDIG	-	Digital ground for Serial ATA
H20	PVDD	-	1.05V supply for PLL
H21	PGND	-	Ground for PLL
H22	RSTSWB	I	Hardware Reset (L: RESET)
H23	TMODE4	I	Not used (Fixed at "L")
H24	TEST	I	Not used (Fixed at "L")
H25	TMODE1	I	Not used (Fixed at "L")
H26	TMODE0	I	Not used (Fixed at "L")
H27	TMODE2	I	Not used (Fixed at "L")
H28	GPIO13	I/O	ASPECT1 (4:3, 16:9="0" 4:3LB="1")
H29	GPIO58	O	GPIO58
H30	SDA1	I/O	I2C I/F 1 Serial Data
H31	SDA0	I/O	I2C I/F 0 Serial Data
H32	GND	-	Ground for digital and DDR2 SDRAM
H33	VAC	O	S-Video C Signal Output
H34	GND	-	Ground for digital and DDR2 SDRAM
H35	VAG	O	Component Output either G or Y Signal
J1	X2	I/O	Crystal Input/Output
J2	SFSIO2	I/O	Flash Memory I/F Serial Data Input/Output
J3	SFSIO3	I/O	Flash Memory I/F Serial Data Input/Output
J4	PC0	I/O	General Port I/F
J5	PA7	I/O	General Port I/F
J6	PA6	I/O	General Port I/F
J7	PA4	I/O	General Port I/F
J8	MD15	I/O	External SDRAM I/F Memory Data Input/Output
J9	MD1	I/O	External SDRAM I/F Memory Data Input/Output
J10	MD2	I/O	External SDRAM I/F Memory Data Input/Output
J11	MD13	I/O	External SDRAM I/F Memory Data Input/Output
J12	LDQM	I/O	External SDRAM I/F Lower Data Mask Control
J13	UDQM	I/O	External SDRAM I/F Upper Data Mask Control
J14	MD5	I/O	External SDRAM I/F Memory Data Input/Output
J15	MD10	I/O	External SDRAM I/F Memory Data Input/Output
J16	GPIO5	I	Not Used (Fixed at "H")
J17	GPIO2	O	Not Used
J18	SAGNDDIG	-	Digital ground for Serial ATA
J19	VDD3	-	3.3V supply (I/O buffers)
J20	PVDD	-	1.05V supply for PLL
J21	PGND	-	Ground for PLL
J22	VDD3	-	3.3V supply (I/O buffers)

Pin No.	Name	I/O	Description
J23	GND	-	Ground for digital and DDR2 SDRAM
J24	TMODE3	I	Not used (Fixed at "L")
J25	TMODE5	I	Not used (Fixed at "L")
J26	VRVDD	-	1.05V supply for VR5500 PLL
J27	VRGND	-	Ground for VR5500 PLL
J28	GPIO11	I/O	FORMAT1 (480="0" 720, 1080="1")
J29	GND	-	Ground for digital and DDR2 SDRAM
J30	SCL0	I/O	I2C I/F 0 Serial Clock
J31	GND	-	Ground for digital and DDR2 SDRAM
J32	VDD3	-	3.3V supply (I/O buffers)
J33	GND	-	Ground for digital and DDR2 SDRAM
J34	HDVSS	-	Analog ground for HDMI
J35	HDVSS	-	Analog ground for HDMI
K1	X1	I	Crystal Input
K2	PC1	I/O	General Port I/F
K3	SFCS0B	O	Flash Memory I/F Serial Memory Chip Select
K4	SFSIO0	I/O	Flash Memory I/F Serial Data Input/Output
K5	PB4	I/O	General Port I/F
K6	DVDD15	-	Digital 1.5V supply for Drive Controller Block
K7	PTEST28	O	Test I/F (HIOCS16B)
K8	PA5	I/O	General Port I/F
K9	MD0	I/O	External SDRAM I/F Memory Data Input/Output
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	VDD10	-	1.05V supply (core)
K28	VDD10	-	1.05V supply (core)
K29	GND	-	Ground for digital and DDR2 SDRAM
K30	GND	-	Ground for digital and DDR2 SDRAM
K31	VDD3	-	3.3V supply (I/O buffers)
K32	VACOMPYC	-	Compensation capacitance
K33	HDVSS	-	Analog ground for HDMI
K34	HTXP2	O	HDMI TMDS Data Output 2+
K35	HTXN2	O	HDMI TMDS Data Output 2-
L1	DGND	-	Digital GND for Drive Controller Block
L2	PC2	I/O	General Port I/F
L3	SFSIO1	I/O	Flash Memory I/F Serial Data Input/Output
L4	SFSCCK	O	Flash Memory I/F Serial Interface Clock Output
L5	DVDD15	-	Digital 1.5V supply for Drive Controller Block
L6	DGND	-	Digital GND for Drive Controller Block
L7	PTEST17	I/O	Test I/F (DASPB)
L8	PB5	I/O	General Port I/F
L9	MD14	I/O	External SDRAM I/F Memory Data Input/Output
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.

Pin No.	Name	I/O	Description
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	GND	-	Ground for digital and DDR2 SDRAM
L28	VDD3	-	3.3V supply (I/O buffers)
L29	GND	-	Ground for digital and DDR2 SDRAM
L30	VARSETYC	-	680-ohm Resister
L31	VAREFRGB	-	Voltage Reference Input for DAC (1.32V)
L32	HDVSS	-	Analog ground for HDMI
L33	HDVSS	-	Analog ground for HDMI
L34	HTXP1	O	HDMI TMDS Data Output 1+
L35	HTXN1	O	HDMI TMDS Data Output 1-
M1	CLK27OUT	O	27MHz Clock output for XTAL
M2	FG	I	Motor Drive I/F FG Signal Input
M3	PSI5	I/O	General Port I/F
M4	PSI3	I/O	General Port I/F
M5	PSI1	I/O	General Port I/F
M6	DVDD33	-	Digital 3.3V supply for Drive Controller Block)
M7	PTEST30	I/O	Test I/F (PDIAGB)
M8	DGND	-	Digital GND for Drive Controller Block
M9	VDD15OSC	-	Power Supply 1.5V for Oscillator
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	VDD3	-	3.3V supply (I/O buffers)
M28	DVDDYC	-	3.3V supply (DAC Digital VDD)
M29	VAREFYC	-	Voltage Reference Input for DAC (1.32V)
M30	VARSETRGB	-	470-ohm Resister
M31	GND	-	Ground for digital and DDR2 SDRAM
M32	HVDD_IO	-	3.3V supply (HDMI Tx I/O)
M33	HDVSS	-	Analog ground for HDMI
M34	HTXP0	O	HDMI TMDS Data Output 0+
M35	HTXN0	O	HDMI TMDS Data Output 0-
N1	CLK27IN	I	27MHz Clock Input
N2	P53	I/O	General Port I/F
N3	DVDD33	-	Digital 3.3V supply for Drive Controller Block)
N4	PSI4	I/O	General Port I/F

Pin No.	Name	I/O	Description
N5	PSI2	I/O	General Port I/F
N6	PTEST01	I/O	Test I/F (HDD1)
N7	PTEST00	I/O	Test I/F (HDD0)
N8	PTEST14	I/O	Test I/F (HDD14)
N9	GNDOSC	-	Oscillator GND
N10	VOID	-	This pin is not ball.
N11	VOID	-	This pin is not ball.
N12	VOID	-	This pin is not ball.
N13	PTEST18	I	Test I/F (DIORB)
N14	PTEST27	O	Test I/F (HINTRQ)
N15	PTEST22	I	Test I/F (HDA0)
N16	VDD10	-	1.05V supply (core)
N17	PB7	I/O	General Port I/F
N18	VDD10	-	1.05V supply (core)
N19	GND	-	Ground for digital and DDR2 SDRAM
N20	VDD10	-	1.05V supply (core)
N21	GND	-	Ground for digital and DDR2 SDRAM
N22	VDD10	-	1.05V supply (core)
N23	VDD10	-	1.05V supply (core)
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	VACOMPRGB	-	Compensation capacitance
N30	HDVDD	-	1.05V supply (HDMI analog VDD)
N31	HDVSS	-	Analog ground for HDMI
N32	HVDD_IO	-	3.3V supply (HDMI Tx I/O)
N33	HDVSS	-	Analog ground for HDMI
N34	HTXCP	O	HDMI TMDS Clock Output+
N35	HTXCN	O	HDMI TMDS Clock Output-
P1	GND	-	Ground for digital and DDR2 SDRAM
P2	P52	I/O	General Port I/F
P3	P56	I/O	General Port I/F
P4	P57	I/O	General Port I/F
P5	PSI6	I/O	General Port I/F
P6	PSI0	I/O	General Port I/F
P7	PTEST12	I/O	Test I/F (HDD12)
P8	PTEST11	I/O	Test I/F (HDD11)
P9	PTEST02	I/O	Test I/F (HDD2)
P10	VOID	-	This pin is not ball.
P11	VOID	-	This pin is not ball.
P12	VOID	-	This pin is not ball.
P13	PTEST15	I/O	Test I/F (HDD15)
P14	PTEST19	I	Test I/F (DIOWB)
P15	PTEST29	O	Test I/F (IORDY)
P16	VDD10	-	1.05V supply (core)
P17	PB6	I/O	General Port I/F
P18	VDD10	-	1.05V supply (core)
P19	GND	-	Ground for digital and DDR2 SDRAM
P20	VDD10	-	1.05V supply (core)
P21	GND	-	Ground for digital and DDR2 SDRAM
P22	VDD10	-	1.05V supply (core)
P23	VDD10	-	1.05V supply (core)
P24	VOID	-	This pin is not ball.
P25	VOID	-	This pin is not ball.
P26	VOID	-	This pin is not ball.
P27	AGNDYC	-	Analog ground for Sub Video DACs
P28	AGNDRGB	-	Analog ground for Main Video DACs
P29	DVDDRGB	-	3.3V supply (DAC Digital VDD)
P30	HDVSS	-	Analog ground for HDMI

Pin No.	Name	I/O	Description
P31	HDVDD	-	1.05V supply (HDMI analog VDD)
P32	HDVSS	-	Analog ground for HDMI
P33	HDVSS	-	Analog ground for HDMI
P34	HEXTP	I	HDMI Resistance Connection Terminal for Output Amplitude Control
P35	HEXTN	I	HDMI Resistance Connection Terminal for Output Amplitude Control
R1	XI	I	Crystal Input
R2	P51	I/O	General Port I/F
R3	P54	I/O	General Port I/F
R4	P55	I/O	General Port I/F
R5	VDD3	-	3.3V supply (I/O buffers)
R6	P50	I/O	General Port I/F
R7	PTEST10	I/O	Test I/F (HDD10)
R8	PTEST05	I/O	Test I/F (HDD5)
R9	PTEST06	I/O	Test I/F (HDD6)
R10	VOID	-	This pin is not ball.
R11	VOID	-	This pin is not ball.
R12	VOID	-	This pin is not ball.
R13	PTEST26	O	Test I/F (HDMARQ)
R14	PTEST25	I	Test I/F (HDMACKB)
R15	PTEST23	I	Test I/F (HDA1)
R16	PTEST21	I	Test I/F (HCS1B)
R17	PTEST20	I	Test I/F (HCS0B)
R18	GND	-	Ground for digital and DDR2 SDRAM
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	GND	-	Ground for digital and DDR2 SDRAM
R23	GND	-	Ground for digital and DDR2 SDRAM
R24	VOID	-	This pin is not ball.
R25	VOID	-	This pin is not ball.
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	HDVSS	-	Analog ground for HDMI
R30	HDVSS	-	Analog ground for HDMI
R31	HDVDD	-	1.05V supply (HDMI analog VDD)
R32	HVDD_IO	-	3.3V supply (HDMI Tx I/O)
R33	HDVDD	-	1.05V supply (HDMI analog VDD)
R34	HDVSS	-	Analog ground for HDMI
R35	HDVSS	-	Analog ground for HDMI
T1	XO	O	Crystal Output
T2	CLKSEL	I	OSC27/CLK27IN Select Signal
T3	GND	-	Ground for digital and DDR2 SDRAM
T4	VDD18	-	1.8V supply (DDR2 SDRAM)
T5	D0DQ9	I/O	DDR2 Data Input/Output
T6	GND	-	Ground for digital and DDR2 SDRAM
T7	VDD18	-	1.8V supply (DDR2 SDRAM)
T8	PTEST08	I/O	Test I/F (HDD8)
T9	PTEST16	I	Test I/F (HRESETB)
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	VDD10	-	1.05V supply (core)
T15	PTEST03	I/O	Test I/F (HDD3)
T16	PTEST13	I/O	Test I/F (HDD13)
T17	PTEST24	I	Test I/F (HDA2)
T18	GND	-	Ground for digital and DDR2 SDRAM
T19	GND	-	Ground for digital and DDR2 SDRAM
T20	GND	-	Ground for digital and DDR2 SDRAM
T21	GND	-	Ground for digital and DDR2 SDRAM

Pin No.	Name	I/O	Description
T22	VDD10	-	1.05V supply (core)
T23	VDD10	-	1.05V supply (core)
T24	VOID	-	This pin is not ball.
T25	VOID	-	This pin is not ball.
T26	VOID	-	This pin is not ball.
T27	GND	-	Ground for digital and DDR2 SDRAM
T28	GND	-	Ground for digital and DDR2 SDRAM
T29	HDVSS	-	Analog ground for HDMI
T30	HDVSS	-	Analog ground for HDMI
T31	HHPD	I	HDMI Hot Plug Detect
T32	ETMDC	O	Ether Management Clock Output
T33	ETMDIO	I/O	Ether Management Data Input/Output
T34	ETREFCLK	I	Ether Reference Clock Input
T35	VDD3	-	3.3V supply (I/O buffers)
U1	GND	-	Ground for digital and DDR2 SDRAM
U2	GND	-	Ground for digital and DDR2 SDRAM
U3	D0DQ10	I/O	DDR2 Data Input/Output
U4	D0DM1	I/O	DDR2 Data Mask
U5	GND	-	Ground for digital and DDR2 SDRAM
U6	D0DQ11	I/O	DDR2 Data Input/Output
U7	D0DQ8	I/O	DDR2 Data Input/Output
U8	VDD18	-	1.8V supply (DDR2 SDRAM)
U9	GND	-	Ground for digital and DDR2 SDRAM
U10	VOID	-	This pin is not ball.
U11	VOID	-	This pin is not ball.
U12	VOID	-	This pin is not ball.
U13	TEST1	I	Test I/F
U14	PTEST07	I/O	Test I/F (HDD7)
U15	PTEST09	I/O	Test I/F (HDD9)
U16	PTEST04	I/O	Test I/F (HDD4)
U17	GND	-	Ground for digital and DDR2 SDRAM
U18	GND	-	Ground for digital and DDR2 SDRAM
U19	GND	-	Ground for digital and DDR2 SDRAM
U20	GND	-	Ground for digital and DDR2 SDRAM
U21	GND	-	Ground for digital and DDR2 SDRAM
U22	GND	-	Ground for digital and DDR2 SDRAM
U23	GND	-	Ground for digital and DDR2 SDRAM
U24	VOID	-	This pin is not ball.
U25	VOID	-	This pin is not ball.
U26	VOID	-	This pin is not ball.
U27	HDSCL	I/O	HDMI DDC Clock
U28	HDVSS	-	Analog ground for HDMI
U29	ETRXER	I	Ether RX Error Detection
U30	ETRXD0	I	Ether RX Data Input
U31	ETRXD1	I	Ether RX Data Input
U32	VDD3	-	3.3V supply (I/O buffers)
U33	ETCRS	I	Ether RX Data Enable
U34	GND	-	Ground for digital and DDR2 SDRAM
U35	GND	-	Ground for digital and DDR2 SDRAM
V1	D0DQS1	I/O	DDR2 Positive Data Strobe
V2	D0DQS1B	I/O	DDR2 Negative Data Strobe
V3	GND	-	Ground for digital and DDR2 SDRAM
V4	D0DQ13	I/O	DDR2 Data Input/Output
V5	GND	-	Ground for digital and DDR2 SDRAM
V6	D0DQ12	I/O	DDR2 Data Input/Output
V7	D0DQ14	I/O	DDR2 Data Input/Output
V8	GND	-	Ground for digital and DDR2 SDRAM
V9	D0VDD10	-	1.05V supply (DDR2 SDRAM DLL)
V10	VOID	-	This pin is not ball.
V11	VOID	-	This pin is not ball.
V12	VOID	-	This pin is not ball.

Pin No.	Name	I/O	Description
V13	GND	-	Ground for digital and DDR2 SDRAM
V14	GND	-	Ground for digital and DDR2 SDRAM
V15	GND	-	Ground for digital and DDR2 SDRAM
V16	GND	-	Ground for digital and DDR2 SDRAM
V17	GND	-	Ground for digital and DDR2 SDRAM
V18	GND	-	Ground for digital and DDR2 SDRAM
V19	GND	-	Ground for digital and DDR2 SDRAM
V20	GND	-	Ground for digital and DDR2 SDRAM
V21	GND	-	Ground for digital and DDR2 SDRAM
V22	HAVDD	-	3.3V supply (HDMI Analog VDD)
V23	HAVSS	-	Analog ground for HDMI
V24	VOID	-	This pin is not ball.
V25	VOID	-	This pin is not ball.
V26	VOID	-	This pin is not ball.
V27	HSDA	I/O	HDMI DDC Data
V28	VDD10	-	1.05V supply (core)
V29	VDD10	-	1.05V supply (core)
V30	ETTXD1	O	Ether TX Data Output
V31	ETTXD0	O	Ether TX Data Output
V32	ETTXEN	O	Ether TX Data Enable
V33	GND	-	Ground for digital and DDR2 SDRAM
V34	USBDP2	I/O	USB D+ signal
V35	USBRSDP2	I/O	USB Full/low speed D+ signal
W1	GND	-	Ground for digital and DDR2 SDRAM
W2	GND	-	Ground for digital and DDR2 SDRAM
W3	D0DQ15	I/O	DDR2 Data Input/Output
W4	GND	-	Ground for digital and DDR2 SDRAM
W5	D0DQ1	I/O	DDR2 Data Input/Output
W6	D0DQ3	I/O	DDR2 Data Input/Output
W7	D0DQ0	I/O	DDR2 Data Input/Output
W8	VDD18	-	1.8V supply (DDR2 SDRAM)
W9	VDD18	-	1.8V supply (DDR2 SDRAM)
W10	VOID	-	This pin is not ball.
W11	VOID	-	This pin is not ball.
W12	VOID	-	This pin is not ball.
W13	PVDD	-	1.05V supply for PLL
W14	PGND	-	Ground for PLL
W15	GND	-	Ground for digital and DDR2 SDRAM
W16	GND	-	Ground for digital and DDR2 SDRAM
W17	GND	-	Ground for digital and DDR2 SDRAM
W18	GND	-	Ground for digital and DDR2 SDRAM
W19	GND	-	Ground for digital and DDR2 SDRAM
W20	GND	-	Ground for digital and DDR2 SDRAM
W21	GND	-	Ground for digital and DDR2 SDRAM
W22	GND	-	Ground for digital and DDR2 SDRAM
W23	GND	-	Ground for digital and DDR2 SDRAM
W24	VOID	-	This pin is not ball.
W25	VOID	-	This pin is not ball.
W26	VOID	-	This pin is not ball.
W27	GND	-	Ground for digital and DDR2 SDRAM
W28	GND	-	Ground for digital and DDR2 SDRAM
W29	GND	-	Ground for digital and DDR2 SDRAM
W30	USBOCI2	I	USB Over-current status
W31	USBOCI1	I	USB Over-current status
W32	GND	-	Ground for digital and DDR2 SDRAM
W33	USBDGND	-	Ground for USB
W34	USBDM2	I/O	USB D- signal
W35	USBRSDM2	I/O	USB Full/low speed D- signal
Y1	D0CLK0B	O	DDR2 Negative Clock
Y2	D0CLK0	O	DDR2 Positive Clock
Y3	GND	-	Ground for digital and DDR2 SDRAM

Pin No.	Name	I/O	Description
Y4	D0DM0	I/O	DDR2 Data Mask
Y5	GND	-	Ground for digital and DDR2 SDRAM
Y6	D0DQ2	I/O	DDR2 Data Input/Output
Y7	D0DQ5	I/O	DDR2 Data Input/Output
Y8	VDD18	-	1.8V supply (DDR2 SDRAM)
Y9	D0VDD10	-	1.05V supply (DDR2 SDRAM DLL)
Y10	VOID	-	This pin is not ball.
Y11	VOID	-	This pin is not ball.
Y12	VOID	-	This pin is not ball.
Y13	PVDD	-	1.05V supply for PLL
Y14	PGND	-	Ground for PLL
Y15	GND	-	Ground for digital and DDR2 SDRAM
Y16	GND	-	Ground for digital and DDR2 SDRAM
Y17	GND	-	Ground for digital and DDR2 SDRAM
Y18	GND	-	Ground for digital and DDR2 SDRAM
Y19	GND	-	Ground for digital and DDR2 SDRAM
Y20	GND	-	Ground for digital and DDR2 SDRAM
Y21	GND	-	Ground for digital and DDR2 SDRAM
Y22	VDD10	-	1.05V supply (core)
Y23	VDD10	-	1.05V supply (core)
Y24	VOID	-	This pin is not ball.
Y25	VOID	-	This pin is not ball.
Y26	VOID	-	This pin is not ball.
Y27	VDD3	-	3.3V supply (I/O buffers)
Y28	VDD3	-	3.3V supply (I/O buffers)
Y29	VDD3	-	3.3V supply (I/O buffers)
Y30	USBPPON2	O	USB Power Control
Y31	USBPPON1	O	USB Power Control
Y32	USBVDD33	-	3.3V supply for USB
Y33	USBVDD33	-	3.3V supply for USB
Y34	USBDGND	-	Ground for USB
Y35	USBDGND	-	Ground for USB
AA1	GND	-	Ground for digital and DDR2 SDRAM
AA2	GND	-	Ground for digital and DDR2 SDRAM
AA3	D0DQ7	I/O	DDR2 Data Input/Output
AA4	D0DQ4	I/O	DDR2 Data Input/Output
AA5	VDD18	-	1.8V supply (DDR2 SDRAM)
AA6	D0DQ6	I/O	DDR2 Data Input/Output
AA7	D0WEB	O	DDR2 Command Write Enable
AA8	GND	-	Ground for digital and DDR2 SDRAM
AA9	GND	-	Ground for digital and DDR2 SDRAM
AA10	VOID	-	This pin is not ball.
AA11	VOID	-	This pin is not ball.
AA12	VOID	-	This pin is not ball.
AA13	GND	-	Ground for digital and DDR2 SDRAM
AA14	GND	-	Ground for digital and DDR2 SDRAM
AA15	GND	-	Ground for digital and DDR2 SDRAM
AA16	GND	-	Ground for digital and DDR2 SDRAM
AA17	GND	-	Ground for digital and DDR2 SDRAM
AA18	GND	-	Ground for digital and DDR2 SDRAM
AA19	GND	-	Ground for digital and DDR2 SDRAM
AA20	GND	-	Ground for digital and DDR2 SDRAM
AA21	GND	-	Ground for digital and DDR2 SDRAM
AA22	GND	-	Ground for digital and DDR2 SDRAM
AA23	GND	-	Ground for digital and DDR2 SDRAM
AA24	VOID	-	This pin is not ball.
AA25	VOID	-	This pin is not ball.
AA26	VOID	-	This pin is not ball.
AA27	GND	-	Ground for digital and DDR2 SDRAM
AA28	GND	-	Ground for digital and DDR2 SDRAM
AA29	GND	-	Ground for digital and DDR2 SDRAM

Pin No.	Name	I/O	Description
AA30	GND	-	Ground for digital and DDR2 SDRAM
AA31	GND	-	Ground for digital and DDR2 SDRAM
AA32	USBPVDDFIL	O	USB Connector for USBPGND
AA33	USBPVSS	-	Analog ground for USB PLL
AA34	USBDP1	I/O	USB D+ signal
AA35	USBRSDP1	I/O	USB Full/low speed D+ signal
AB1	D0DQS0	I/O	DDR2 Positive Data Strobe
AB2	D0DQS0B	I/O	DDR2 Negative Data Strobe
AB3	GND	-	Ground for digital and DDR2 SDRAM
AB4	VDD18	-	1.8V supply (DDR2 SDRAM)
AB5	D0CKE	O	DDR2 Clock Enable
AB6	D0CKERSTB	I	DDR2 D0CKERSTB output control
AB7	D0ADD10	O	DDR2 Address Output
AB8	GND	-	Ground for digital and DDR2 SDRAM
AB9	D0VREF	I	DDR2 Reference Voltage
AB10	VOID	-	This pin is not ball.
AB11	VOID	-	This pin is not ball.
AB12	VOID	-	This pin is not ball.
AB13	VDD10	-	1.05V supply (core)
AB14	VDD10	-	1.05V supply (core)
AB15	GND	-	Ground for digital and DDR2 SDRAM
AB16	PGND	-	Ground for PLL
AB17	PGND	-	Ground for PLL
AB18	GND	-	Ground for digital and DDR2 SDRAM
AB19	GND	-	Ground for digital and DDR2 SDRAM
AB20	VDD10	-	1.05V supply (core)
AB21	GND	-	Ground for digital and DDR2 SDRAM
AB22	VDD10	-	1.05V supply (core)
AB23	VDD10	-	1.05V supply (core)
AB24	VOID	-	This pin is not ball.
AB25	VOID	-	This pin is not ball.
AB26	VOID	-	This pin is not ball.
AB27	PVDD	-	1.05V supply for PLL
AB28	PGND	-	Ground for PLL
AB29	PVDD	-	1.05V supply for PLL
AB30	VDD10	-	1.05V supply (core)
AB31	VDD3	-	3.3V supply (I/O buffers)
AB32	GPIO18	I/O	AOHBCK: BCK Output for External HDMI Device
AB33	GPIO32	I/O	AOHBD3: Data Output for External HDMI Device
AB34	USBDM1	I/O	USB D- signal
AB35	USBRSDM1	I/O	USB Full/low speed D- signal
AC1	GND	-	Ground for digital and DDR2 SDRAM
AC2	GND	-	Ground for digital and DDR2 SDRAM
AC3	VDD18	-	1.8V supply (DDR2 SDRAM)
AC4	GND	-	Ground for digital and DDR2 SDRAM
AC5	D0ADD7	O	DDR2 Address Output
AC6	D0ADD14	O	DDR2 Address Output
AC7	D0ADD12	O	DDR2 Address Output
AC8	GND	-	Ground for digital and DDR2 SDRAM
AC9	GND	-	Ground for digital and DDR2 SDRAM
AC10	VOID	-	This pin is not ball.
AC11	VOID	-	This pin is not ball.
AC12	VOID	-	This pin is not ball.
AC13	VDD10	-	1.05V supply (core)
AC14	VDD10	-	1.05V supply (core)
AC15	GND	-	Ground for digital and DDR2 SDRAM
AC16	PVDD	-	1.05V supply for PLL
AC17	PVDD	-	1.05V supply for PLL
AC18	GND	-	Ground for digital and DDR2 SDRAM
AC19	GND	-	Ground for digital and DDR2 SDRAM
AC20	VDD10	-	1.05V supply (core)

Pin No.	Name	I/O	Description
AC21	GND	-	Ground for digital and DDR2 SDRAM
AC22	VDD10	-	1.05V supply (core)
AC23	VDD10	-	1.05V supply (core)
AC24	VOID	-	This pin is not ball.
AC25	VOID	-	This pin is not ball.
AC26	VOID	-	This pin is not ball.
AC27	PGND	-	Ground for PLL
AC28	PGND	-	Ground for PLL
AC29	PVDD	-	1.05V supply for PLL
AC30	GPIO16	I/O	AOHTX: IEC60958 Output for External HDMI Device
AC31	GPIO17	I/O	AOHLRCK: LRCK Clock Output for External HDMI Device
AC32	GPIO33	I/O	AOHMCK: Master Clock Output for External HDMI Device
AC33	GPIO31	I/O	AOHBD2: Data Output for External HDMI Device
AC34	USBAVDD	-	Analog 3.3V supply for USB
AC35	USBRREF	I	USB Connector for USBAGND
AD1	VDD18	-	1.8V supply (DDR2 SDRAM)
AD2	VDD18	-	1.8V supply (DDR2 SDRAM)
AD3	D0BA1	O	DDR2 Bank Address
AD4	D0ADD1	O	DDR2 Address Output
AD5	D0ADD6	O	DDR2 Address Output
AD6	D0ADD4	O	DDR2 Address Output
AD7	D0CASB	O	DDR2 Colmun Address Strobe Signal
AD8	GND	-	Ground for digital and DDR2 SDRAM
AD9	D0VDD10	-	1.05V supply (DDR2 SDRAM DLL)
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	VDD3	-	3.3V supply (I/O buffers)
AD29	GPIO30	I/O	AOHBD1: Data Output for External HDMI Device
AD30	GPIO19	I/O	AOHBD0: Data Output for External HDMI Device
AD31	PCIRSTB	I	PCI I/F PCI Hardware Reset
AD32	PCICLK1	I	PCI 33MHz Clock Input/27MHz Clock Input for System Clock
AD33	GND	-	Ground for digital and DDR2 SDRAM
AD34	USBCOM	-	Analog ground for USB (bulk)
AD35	USBAVSS	-	Analog ground for USB
AE1	D0BA0	O	DDR2 Bank Address
AE2	D0ADD9	O	DDR2 Address Output
AE3	D0ADD3	O	DDR2 Address Output
AE4	D0ADD5	O	DDR2 Address Output
AE5	D0ADD11	O	DDR2 Address Output
AE6	D0ADD0	O	DDR2 Address Output
AE7	GND	-	Ground for digital and DDR2 SDRAM
AE8	VDD18	-	1.8V supply (DDR2 SDRAM)
AE9	VDD18	-	1.8V supply (DDR2 SDRAM)
AE10	VOID	-	This pin is not ball.
AE11	VOID	-	This pin is not ball.

Pin No.	Name	I/O	Description
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	GND	-	Ground for digital and DDR2 SDRAM
AE28	GND	-	Ground for digital and DDR2 SDRAM
AE29	RDATA15/GDATA15	I/O	ROM Data Input/Output
AE30	RDATA14/GDATA14	I/O	ROM Data Input/Output
AE31	RDATA13/GDATA13	I/O	ROM Data Input/Output
AE32	RDATA12/GDATA12	I/O	ROM Data Input/Output
AE33	RDATA11/GDATA11	I/O	ROM Data Input/Output
AE34	VDD3	-	3.3V supply (I/O buffers)
AE35	USBXO	O	USB Clock output from Oscillator
AF1	D0ADD13	O	DDR2 Address Output
AF2	D0ADD8	O	DDR2 Address Output
AF3	GND	-	Ground for digital and DDR2 SDRAM
AF4	D0CS1B	O	DDR2 Chip Select/Bank Address
AF5	D0ODT1	O	DDR2 On Die terminal control
AF6	GND	-	Ground for digital and DDR2 SDRAM
AF7	D0ODT0	O	DDR2 On Die terminal control
AF8	VDD18	-	1.8V supply (DDR2 SDRAM)
AF9	D0VDD10	-	1.05V supply (DDR2 SDRAM DLL)
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	VDD10	-	1.05V supply (core)
AF29	RDATA10/GDATA10	I/O	ROM Data Input/Output
AF30	RDATA9/GDATA9	I/O	ROM Data Input/Output
AF31	RDATA8/GDATA8	I/O	ROM Data Input/Output
AF32	RDATA7/GDATA7	I/O	ROM Data Input/Output
AF33	RDATA6/GDATA6	I/O	ROM Data Input/Output
AF34	GND	-	Ground for digital and DDR2 SDRAM
AF35	USBXI	I	USB Clock input to Oscillator
AG1	GND	-	Ground for digital and DDR2 SDRAM
AG2	GND	-	Ground for digital and DDR2 SDRAM

Pin No.	Name	I/O	Description
AG3	D0ADD2	O	DDR2 Address Output
AG4	D0CS0B	O	DDR2 Chip Select
AG5	D0RASB	O	DDR2 Raw Address Strobe Signal
AG6	D0DQ22	I/O	DDR2 Data Input/Output
AG7	D0ADD15	O	DDR2 Address Output
AG8	GND	-	Ground for digital and DDR2 SDRAM
AG9	VDD18	-	1.8V supply (DDR2 SDRAM)
AG10	GND	-	Ground for digital and DDR2 SDRAM
AG11	VDD18	-	1.8V supply (DDR2 SDRAM)
AG12	GND	-	Ground for digital and DDR2 SDRAM
AG13	D1VDD10	-	1.05V supply (DDR2 SDRAM DLL)
AG14	VDD18	-	1.8V supply (DDR2 SDRAM)
AG15	D1VDD10	-	1.05V supply (DDR2 SDRAM DLL)
AG16	GND	-	Ground for digital and DDR2 SDRAM
AG17	D1VREF	I	DDR2 Reference Voltage
AG18	GND	-	Ground for digital and DDR2 SDRAM
AG19	D1VDD10	-	1.05V supply (DDR2 SDRAM DLL)
AG20	VDD18	-	1.8V supply (DDR2 SDRAM)
AG21	D1VDD10	-	1.05V supply (DDR2 SDRAM DLL)
AG22	GND	-	Ground for digital and DDR2 SDRAM
AG23	VDD3	-	3.3V supply (I/O buffers)
AG24	GND	-	Ground for digital and DDR2 SDRAM
AG25	VDD10	-	1.05V supply (core)
AG26	GND	-	Ground for digital and DDR2 SDRAM
AG27	GND	-	Ground for digital and DDR2 SDRAM
AG28	N.U.	I	Fixed at "H"
AG29	RDATA5/GDATA5	I/O	ROM Data Input/Output
AG30	RDATA4/GDATA4	I/O	ROM Data Input/Output
AG31	VDD3	-	3.3V supply (I/O buffers)
AG32	RDATA3/GDATA3	I/O	ROM Data Input/Output
AG33	RDATA2/GDATA2	I/O	ROM Data Input/Output
AG34	RDATA1/GDATA1	I/O	ROM Data Input/Output
AG35	GND	-	Ground for digital and DDR2 SDRAM
AH1	D0DQS2	I/O	DDR2 Positive Data Strobe
AH2	D0DQS2B	I/O	DDR2 Negative Data Strobe
AH3	GND	-	Ground for digital and DDR2 SDRAM
AH4	D0DQ21	I/O	DDR2 Data Input/Output
AH5	D0DQ23	I/O	DDR2 Data Input/Output
AH6	D0DQ20	I/O	DDR2 Data Input/Output
AH7	GND	-	Ground for digital and DDR2 SDRAM
AH8	VDD18	-	1.8V supply (DDR2 SDRAM)
AH9	GND	-	Ground for digital and DDR2 SDRAM
AH10	VDD18	-	1.8V supply (DDR2 SDRAM)
AH11	GND	-	Ground for digital and DDR2 SDRAM
AH12	VDD18	-	1.8V supply (DDR2 SDRAM)
AH13	VDD18	-	1.8V supply (DDR2 SDRAM)
AH14	VDD18	-	1.8V supply (DDR2 SDRAM)
AH15	GND	-	Ground for digital and DDR2 SDRAM
AH16	GND	-	Ground for digital and DDR2 SDRAM
AH17	GND	-	Ground for digital and DDR2 SDRAM
AH18	GND	-	Ground for digital and DDR2 SDRAM
AH19	VDD18	-	1.8V supply (DDR2 SDRAM)
AH20	VDD18	-	1.8V supply (DDR2 SDRAM)
AH21	GND	-	Ground for digital and DDR2 SDRAM
AH22	GND	-	Ground for digital and DDR2 SDRAM
AH23	VDD3	-	3.3V supply (I/O buffers)
AH24	GND	-	Ground for digital and DDR2 SDRAM
AH25	VDD10	-	1.05V supply (core)
AH26	GPIO24	O	NAND_ WP (L: Write Protect)
AH27	GPIO26	O	XAMUTE (L: MUTE)
AH28	GND	-	Ground for digital and DDR2 SDRAM

Pin No.	Name	I/O	Description
AH29	RDATA0/GDATA0	I/O	ROM Data Input/Output
AH30	RADD25/GADD25	O	ROM Address Output
AH31	RADD24/GADD24	O	ROM Address Output
AH32	GND	-	Ground for digital and DDR2 SDRAM
AH33	RADD23/GADD23	O	ROM Address Output
AH34	RADD22/GADD22	O	ROM Address Output
AH35	RADD21/GADD21	O	ROM Address Output
AJ1	GND	-	Ground for digital and DDR2 SDRAM
AJ2	GND	-	Ground for digital and DDR2 SDRAM
AJ3	D0DQ18	I/O	DDR2 Data Input/Output
AJ4	D0DQ16	I/O	DDR2 Data Input/Output
AJ5	D0DQ30	I/O	DDR2 Data Input/Output
AJ6	D0DQ19	I/O	DDR2 Data Input/Output
AJ7	VDD18	-	1.8V supply (DDR2 SDRAM)
AJ8	GND	-	Ground for digital and DDR2 SDRAM
AJ9	VDD18	-	1.8V supply (DDR2 SDRAM)
AJ10	GND	-	Ground for digital and DDR2 SDRAM
AJ11	VDD18	-	1.8V supply (DDR2 SDRAM)
AJ12	GND	-	Ground for digital and DDR2 SDRAM
AJ13	VDD18	-	1.8V supply (DDR2 SDRAM)
AJ14	GND	-	Ground for digital and DDR2 SDRAM
AJ15	D1RQ1	O	DDR2 Pull up (150 ohm) to DDR2 SDRAM power supply
AJ16	D1RQ0	O	DDR2 Pull down (150 ohm) to DDR2 SDRAM GND
AJ17	GND	-	Ground for digital and DDR2 SDRAM
AJ18	VDD18	-	1.8V supply (DDR2 SDRAM)
AJ19	GND	-	Ground for digital and DDR2 SDRAM
AJ20	GND	-	Ground for digital and DDR2 SDRAM
AJ21	VDD18	-	1.8V supply (DDR2 SDRAM)
AJ22	VDD18	-	1.8V supply (DDR2 SDRAM)
AJ23	GND	-	Ground for digital and DDR2 SDRAM
AJ24	GND	-	Ground for digital and DDR2 SDRAM
AJ25	VDD3	-	3.3V supply (I/O buffers)
AJ26	GPIO25	O	IT_REQ (Communication request for front micon)
AJ27	GPIO28	O	EMMA_CSI0_DAC2_XCS (L: Active)
AJ28	GPIO23	O	GLB_XRST (L: RESET)
AJ29	RADD20/GADD20	O	ROM Address Output
AJ30	RADD19/GADD19	O	ROM Address Output
AJ31	RADD18/GADD18	O	ROM Address Output
AJ32	RADD17/GADD17	O	ROM Address Output
AJ33	RADD16/GADD16	O	ROM Address Output
AJ34	RADD15/GADD15	O	ROM Address Output
AJ35	VDD3	-	3.3V supply (I/O buffers)
AK1	D0CLK1B	O	DDR2 Negative Clock
AK2	D0CLK1	O	DDR2 Positive Clock
AK3	GND	-	Ground for digital and DDR2 SDRAM
AK4	D0DM2	I/O	DDR2 Data Mask
AK5	D0DQ28	I/O	DDR2 Data Input/Output
AK6	D0DQ17	I/O	DDR2 Data Input/Output
AK7	GND	-	Ground for digital and DDR2 SDRAM
AK8	VDD18	-	1.8V supply (DDR2 SDRAM)
AK9	GND	-	Ground for digital and DDR2 SDRAM
AK10	D1DQ24	I/O	DDR2 Data Input/Output
AK11	D1DQ25	I/O	DDR2 Data Input/Output
AK12	GND	-	Ground for digital and DDR2 SDRAM
AK13	VDD18	-	1.8V supply (DDR2 SDRAM)
AK14	VDD18	-	1.8V supply (DDR2 SDRAM)
AK15	GND	-	Ground for digital and DDR2 SDRAM
AK16	GND	-	Ground for digital and DDR2 SDRAM
AK17	VDD18	-	1.8V supply (DDR2 SDRAM)
AK18	D1ADD9	O	DDR2 Address Output
AK19	D1ADD1	O	DDR2 Address Output

Pin No.	Name	I/O	Description
AK20	VDD18	-	1.8V supply (DDR2 SDRAM)
AK21	GND	-	Ground for digital and DDR2 SDRAM
AK22	VDD18	-	1.8V supply (DDR2 SDRAM)
AK23	VDD18	-	1.8V supply (DDR2 SDRAM)
AK24	VDD18	-	1.8V supply (DDR2 SDRAM)
AK25	GND	-	Ground for digital and DDR2 SDRAM
AK26	GPIO29	O	DAC_XRST (L: RESET)
AK27	N.U.	I	Fixed at "H"
AK28	GPIO27	I/O	XVMUTE (Video Mute ON="0")
AK29	RADD14/GADD14	O	ROM Address Output
AK30	GND	-	Ground for digital and DDR2 SDRAM
AK31	RADD13/GADD13	O	ROM Address Output
AK32	RADD12/GADD12	O	ROM Address Output
AK33	RADD11/GADD11	O	ROM Address Output
AK34	RADD10/GADD10	O	ROM Address Output
AK35	RADD9/GADD9	O	ROM Address Output
AL1	GND	-	Ground for digital and DDR2 SDRAM
AL2	GND	-	Ground for digital and DDR2 SDRAM
AL3	D0DQ26	I/O	DDR2 Data Input/Output
AL4	D0DQ24	I/O	DDR2 Data Input/Output
AL5	D0DQ31	I/O	DDR2 Data Input/Output
AL6	D0DQ29	I/O	DDR2 Data Input/Output
AL7	VDD18	-	1.8V supply (DDR2 SDRAM)
AL8	GND	-	Ground for digital and DDR2 SDRAM
AL9	D1DQ26	I/O	DDR2 Data Input/Output
AL10	D1DQ27	I/O	DDR2 Data Input/Output
AL11	D1DQ31	I/O	DDR2 Data Input/Output
AL12	D1DQ16	I/O	DDR2 Data Input/Output
AL13	D1DQ20	I/O	DDR2 Data Input/Output
AL14	D1DQ21	I/O	DDR2 Data Input/Output
AL15	GND	-	Ground for digital and DDR2 SDRAM
AL16	D1ADD4	O	DDR2 Address Output
AL17	D1ADD6	O	DDR2 Address Output
AL18	D1WEB	O	DDR2 Command Write Enable
AL19	D1BA1	O	DDR2 Bank Address
AL20	D1DQ1	I/O	DDR2 Data Input/Output
AL21	D1DQ0	I/O	DDR2 Data Input/Output
AL22	D1DQ14	I/O	DDR2 Data Input/Output
AL23	D1DQ10	I/O	DDR2 Data Input/Output
AL24	D1DQ11	I/O	DDR2 Data Input/Output
AL25	D1DQ9	I/O	DDR2 Data Input/Output
AL26	GND	-	Ground for digital and DDR2 SDRAM
AL27	VDD3	-	3.3V supply (I/O buffers)
AL28	GND	-	Ground for digital and DDR2 SDRAM
AL29	RADD8/GADD8	O	ROM Address Output
AL30	RADD7/GADD7	O	ROM Address Output
AL31	VDD3	-	3.3V supply (I/O buffers)
AL32	RADD6/GADD6	O	ROM Address Output
AL33	RADD5/GADD5	O	ROM Address Output
AL34	RADD4/GADD4	O	ROM Address Output
AL35	GND	-	Ground for digital and DDR2 SDRAM
AM1	D0DQS3	I/O	DDR2 Positive Data Strobe
AM2	D0DQS3B	I/O	DDR2 Negative Data Strobe
AM3	GND	-	Ground for digital and DDR2 SDRAM
AM4	D0DM3	I/O	DDR2 Data Mask
AM5	D0DQ25	I/O	DDR2 Data Input/Output
AM6	VDD18	-	1.8V supply (DDR2 SDRAM)
AM7	GND	-	Ground for digital and DDR2 SDRAM
AM8	D1DQ28	I/O	DDR2 Data Input/Output
AM9	D1DM3	I/O	DDR2 Data Mask
AM10	D1DQ18	I/O	DDR2 Data Input/Output

Pin No.	Name	I/O	Description
AM11	D1DQ22	I/O	DDR2 Data Input/Output
AM12	VDD18	-	1.8V supply (DDR2 SDRAM)
AM13	D1DM2	I/O	DDR2 Data Mask
AM14	D1DQ23	I/O	DDR2 Data Input/Output
AM15	D1CS1B	O	DDR2 Chip Select/Bank Address
AM16	D1ADD14	O	DDR2 Address Output
AM17	D1ADD12	O	DDR2 Address Output
AM18	GND	-	Ground for digital and DDR2 SDRAM
AM19	D1CKE	O	DDR2 Clock Enable
AM20	D1DM0	I/O	DDR2 Data Mask
AM21	D1DQ3	I/O	DDR2 Data Input/Output
AM22	D1DQ2	I/O	DDR2 Data Input/Output
AM23	VDD18	-	1.8V supply (DDR2 SDRAM)
AM24	D1DQ8	I/O	DDR2 Data Input/Output
AM25	D1DQ13	I/O	DDR2 Data Input/Output
AM26	D1DM1	I/O	DDR2 Data Mask
AM27	GND	-	Ground for digital and DDR2 SDRAM
AM28	FCSB0	O	ROM Chip select
AM29	FCSB1	O	ROM Chip select
AM30	FCSB2	O	ROM Chip select (Not used)
AM31	FCSB3	O	ROM Chip select (Not used)
AM32	GND	-	Ground for digital and DDR2 SDRAM
AM33	RADD3/GADD3	O	ROM Address Output
AM34	RADD2/GADD2	O	ROM Address Output
AM35	RADD1/GADD1	O	ROM Address Output
AN1	VOID	-	This pin is not ball.
AN2	GND	-	Ground for digital and DDR2 SDRAM
AN3	D0DQ27	I/O	DDR2 Data Input/Output
AN4	GND	-	Ground for digital and DDR2 SDRAM
AN5	VDD18	-	1.8V supply (DDR2 SDRAM)
AN6	GND	-	Ground for digital and DDR2 SDRAM
AN7	D1DQ30	I/O	DDR2 Data Input/Output
AN8	GND	-	Ground for digital and DDR2 SDRAM
AN9	D1DQ29	I/O	DDR2 Data Input/Output
AN10	D1DQ17	I/O	DDR2 Data Input/Output
AN11	VDD18	-	1.8V supply (DDR2 SDRAM)
AN12	GND	-	Ground for digital and DDR2 SDRAM
AN13	D1ADD15	O	DDR2 Address Output
AN14	D1ADD2	O	DDR2 Address Output
AN15	D1ADD0	O	DDR2 Address Output
AN16	D1ADD7	O	DDR2 Address Output
AN17	D1ADD13	O	DDR2 Address Output
AN18	D1CKERSTB	I	DDR2 D0CKERSTB output control
AN19	GND	-	Ground for digital and DDR2 SDRAM
AN20	D1DQ6	I/O	DDR2 Data Input/Output
AN21	D1DQ4	I/O	DDR2 Data Input/Output
AN22	VDD18	-	1.8V supply (DDR2 SDRAM)
AN23	GND	-	Ground for digital and DDR2 SDRAM
AN24	D1DQ12	I/O	DDR2 Data Input/Output
AN25	GND	-	Ground for digital and DDR2 SDRAM
AN26	D1DQ15	I/O	DDR2 Data Input/Output
AN27	GND	-	Ground for digital and DDR2 SDRAM
AN28	VDD18	-	1.8V supply (DDR2 SDRAM)
AN29	VDD3	-	3.3V supply (I/O buffers)
AN30	GRDYB	I	GIO I/F Ready for external device Not used)
AN31	FOEB/GOEB	O	NOR Flash ROM Output Enable
AN32	FWEB/GWEB	O	NOR Flash ROM Write Enable
AN33	VDD3	-	3.3V supply (I/O buffers)
AN34	RADD0/GADD0	O	ROM Address Output
AN35	VOID	-	This pin is not ball.
AP1	VOID	-	This pin is not ball.

Pin No.	Name	I/O	Description
AP2	VOID	-	This pin is not ball.
AP3	GND	-	Ground for digital and DDR2 SDRAM
AP4	D1DQS3B	I/O	DDR2 Negative Data Strobe
AP5	GND	-	Ground for digital and DDR2 SDRAM
AP6	D1CLK1	O	DDR2 Positive Clock
AP7	GND	-	Ground for digital and DDR2 SDRAM
AP8	D1DQS2B	I/O	DDR2 Negative Data Strobe
AP9	GND	-	Ground for digital and DDR2 SDRAM
AP10	VDD18	-	1.8V supply (DDR2 SDRAM)
AP11	GND	-	Ground for digital and DDR2 SDRAM
AP12	D1RASB	O	DDR2 Raw Address Strobe Signal
AP13	D1CS0B	O	DDR2 Chip Select
AP14	D1CASB	O	DDR2 Column Address Strobe Signal
AP15	GND	-	Ground for digital and DDR2 SDRAM
AP16	VDD18	-	1.8V supply (DDR2 SDRAM)
AP17	D1ADD8	O	DDR2 Address Output
AP18	D1ADD10	O	DDR2 Address Output
AP19	D1ADD3	O	DDR2 Address Output
AP20	GND	-	Ground for digital and DDR2 SDRAM
AP21	VDD18	-	1.8V supply (DDR2 SDRAM)
AP22	GND	-	Ground for digital and DDR2 SDRAM
AP23	D1DQS0B	I/O	DDR2 Negative Data Strobe
AP24	GND	-	Ground for digital and DDR2 SDRAM
AP25	D1CLK0	O	DDR2 Positive Clock
AP26	GND	-	Ground for digital and DDR2 SDRAM
AP27	D1DQS1B	I/O	DDR2 Negative Data Strobe
AP28	GND	-	Ground for digital and DDR2 SDRAM
AP29	VDD18	-	1.8V supply (DDR2 SDRAM)
AP30	NRBB	I	NAND Flash ROM Ready/Busy
AP31	NCLE	O	NAND Flash ROM Command Latch Enable
AP32	GCSB0	O	GIO I/F Chip select
AP33	GCSB1	O	GIO I/F Chip select (Not used)
AP34	VOID	-	This pin is not ball.
AP35	VOID	-	This pin is not ball.
AR1	VOID	-	This pin is not ball.
AR2	VOID	-	This pin is not ball.
AR3	VOID	-	This pin is not ball.
AR4	D1DQS3	I/O	DDR2 Positive Data Strobe
AR5	GND	-	Ground for digital and DDR2 SDRAM
AR6	D1CLK1B	O	DDR2 Negative Clock
AR7	GND	-	Ground for digital and DDR2 SDRAM
AR8	D1DQS2	I/O	DDR2 Positive Data Strobe
AR9	GND	-	Ground for digital and DDR2 SDRAM
AR10	VDD18	-	1.8V supply (DDR2 SDRAM)
AR11	D1DQ19	I/O	DDR2 Data Input/Output
AR12	D1ODT0	O	DDR2 On Die terminal control
AR13	D1ODT1	O	DDR2 On Die terminal control
AR14	D1ADD11	O	DDR2 Address Output
AR15	VDD18	-	1.8V supply (DDR2 SDRAM)
AR16	GND	-	Ground for digital and DDR2 SDRAM
AR17	D1ADD5	O	DDR2 Address Output
AR18	D1BA0	O	DDR2 Bank Address
AR19	D1DQ7	I/O	DDR2 Data Input/Output
AR20	D1DQ5	I/O	DDR2 Data Input/Output
AR21	VDD18	-	1.8V supply (DDR2 SDRAM)
AR22	GND	-	Ground for digital and DDR2 SDRAM
AR23	D1DQS0	I/O	DDR2 Positive Data Strobe
AR24	GND	-	Ground for digital and DDR2 SDRAM
AR25	D1CLK0B	O	DDR2 Negative Clock
AR26	GND	-	Ground for digital and DDR2 SDRAM
AR27	D1DQS1	I/O	DDR2 Positive Data Strobe

Pin No.	Name	I/O	Description
AR28	GND	-	Ground for digital and DDR2 SDRAM
AR29	VDD18	-	1.8V supply (DDR2 SDRAM)
AR30	NFOEB	O	NAND Flash ROM Output Enable
AR31	NWEB	O	NAND Flash ROM Write Enable
AR32	NALE	O	NAND Flash ROM Address Latch Enable
AR33	VOID	-	This pin is not ball.
AR34	VOID	-	This pin is not ball.
AR35	VOID	-	This pin is not ball.

SECTION 7

SERVICE MODE

Main Functions

- Starting Service Mode
To start Service Mode, while the AC power is off, turn on the AC power while holding down a specific key (**PLAY key, STOP key, or OPEN/CLOSE key**) on the front panel of the unit. Release the key when "SERVICE" appears on the front display panel. Startup is completed when the Service Mode screen is displayed on the monitor. Use the remote control to perform operation.
- View ErrorLog/CommandLog
This displays the error log or command log. The displayed information can also be saved to a USB memory device.
- Diag (Diagnostics)
This performs individual tests on devices installed on the board.
- Drive (Drive-related diagnostics and tools)
These are tools for performing diagnostics on the BD-Drive and writing of operation data. (For details on the menu options, refer to the separate documentation.)
- Factory Initialize (Factory default settings)
This returns the set to the factory default settings.
- Network
This checks the network connection.
1. "Ifconfig" is used to display the network settings of the set unit.
When this is executed, the #ifconfig command is executed, and the command execution results are displayed.
2. "Ping" is used to check network connectivity with the terminal specified by the IP address.
When this is executed, the #ping command is executed, and the command execution results are displayed.
- Version Up (Version update)
This updates the version using an update disc. For details on version updating, refer to the separate documentation.
- System Information
This displays the system information of this set. Information about the software version and drive is displayed.

Menu Layout



Service Mode Menu (Top menu)

Overview:
Top menu of the Service Mode
The various functions are accessed from this menu.

Operations:

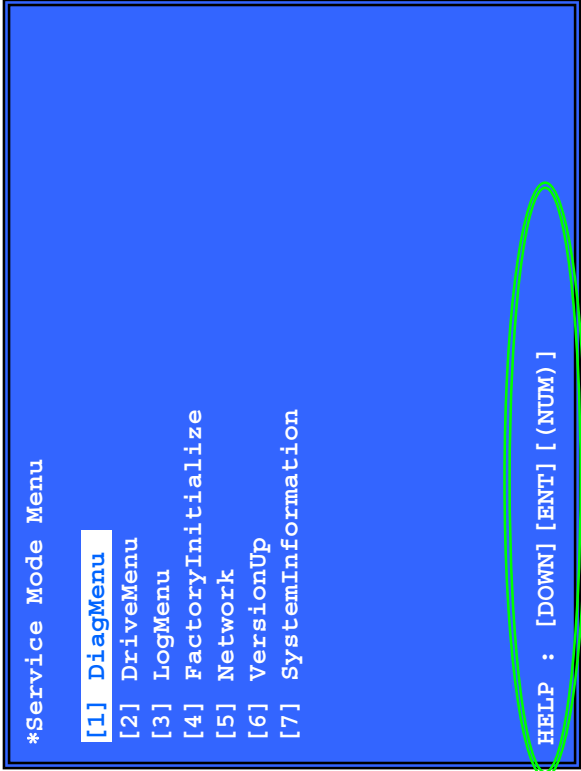
[1]	DiagMenu (Diagnostics)
[2]	DriveMenu (Drive-related diagnostics & tools)
[3]	LogMenu (View ErrorLog/CommandLog)
[4]	Factory Initialize (Factory default settings)
[5]	Network
[6]	VersionUp (Version update by disc)
[7]	SystemInformation (View system information)

[UP][DOWN]
[ENT]

* The cursor is not displayed initially.

Display panel:
When a cursor key or selected menu key is used, text is output to the display panel.
Initially, "SERVICE" is displayed.
Character strings shown on the display panel

DiagMenu:	S-DIAG
DriveMenu:	S-DRIVE
LogMenu:	S-LOG
FactoryInitialize:	S-FINIT
Network:	S-NET
VersionUp:	S-VUP
SystemInformation:	S-INFO



Shows hints (such as the currently usable keys)

DiagMenu (Diag: 1)

Overview:
This menu is used to conduct tests on devices installed on the board for the Device Test/Audio Path Test/Video Path Test/Wireless LAN Test.

Screen 1: Selecting the test category
Operations:
[LEFT] [RIGHT] Select the category
[DOWN] [ENT] Open the selected category

Screen 2: Device test
After Device Test is selected in Screen 1, the device to be tested is selected.
Operations:
[LEFT] [RIGHT] Select the device to be tested
[ENT] Execute the test
[UP] Return to the test category selection
[DOWN] Move the cursor up
 Move the cursor down

>Test category list
Device Test
Video Test
Audio Test
WirelessLAN Test <- Stepup1/2

- Device Test:
>USB Host: USB terminal check
 USB HubID Check <- Stepup2
 USB Media Check

>D/A Converter: AudioDac test
 Dac 2 [ch] Read Check <- Stepup1/2
 Dac 8 [ch] Read Check <- Stepup2
 Dac HeadPhone Check

>D Terminal: D terminal check
>IFCon: IFCon function test (Screen 3)
 FDP all ON
 Show Strings
 LED Sequecial
 FAN Control
 FanState
 HeadPhone //Plug in detection of headphone <- Stepup2

>Audio DSP: Audio DSP test
 Register Read Check (Revision display) <- Stepup2

(Screen 1)
* Diag

Category: Device Test

(Screen 2)
* Diag

Category: Device Test
Device: USB Host

USB Media check ... NG

Checking...

(Screen 3)
* Diag

Category: Device Test
Device: Ifcon

FDP all ON
Show strings
LED Sequecial ON
Fan Control ON
FanState: ON
HeadPhone: CONNECT

FAN rotating detection
ON:rotate OFF:stop

Plug in detection of headphone
(Stepup2 only)
CONNECT or DISCONNECT

HELP: [RIGHT] [UP] [ENT] [RET]

DiagMenu (Diag: 2)

>HD Enhancer: HD Enhancer test

Register Read Check (Revision display) <- Stepup2

>External HDMI: External HDMI test

Register Read Check (Revision display) <- Stepup2

- Video Path Test

Screen 4: When the Video Test category is selected

[ENT] Show/Hide color bar

[UP][RET] Return to test category selection

- Audio Path Test

Screen 5: When the Audio Test category is selected

[ENT] Play/stop audio tone

Basic/Stepup1

[UP][RET] Return to test category selection

Stepup2

[UP][DOWN] Audio tone play menu selection

[RET] Return to test category selection

Menu:

Basic/Stepup1

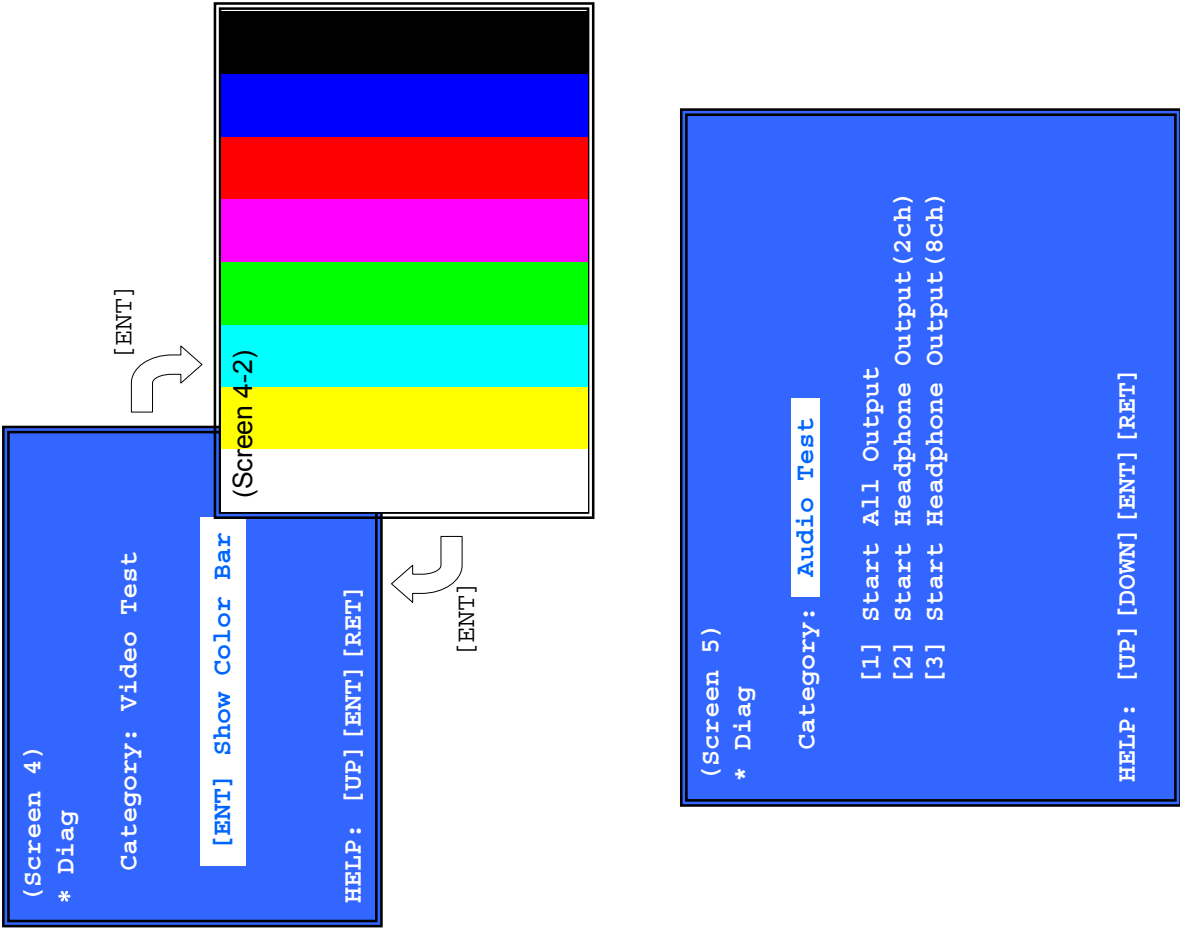
Generate Tone Sound Output the audio tone to all terminal

Stepup2

[1] Start All Output //Output the audio tone to all terminal

[2] Start Headphone Output (2ch) //Output the audio tone from EMMA2ch to the headphone

[3] Start Headphone Output (8ch) //Output the audio tone from EMMA8ch to the headphone



ex) In case of Stepup2

DiagMenu (Diag: 3)

- WirelessLAN Test

Stepup 1 / 2

Screen 6: When the WirelessLAN category is selected

[1] Display the wireless LAN module information

[2] Store module information to the registry by [RED]

[3] Connect to the access point

[RET] Get value and display of RSSI

*Can not get the correct value of RSSI, if it connected to AP

Return to test category selection

(1) Show WLAN HwInfo (Screen 6)

*Disconnect the AP, if it is connected

Serial: Serial No.

Board: Board revision

Model: Model No.

Mac: Mac address

[RED]: Store module information to the registry

ex) Example of store to the registry

wlan_customvar1=010000df

wlan_ethaddr=00:01:36:23:FD:CF

(2) Connect to AccessPoint (Screen 7)

- Get the setting value of network from USB memory device

The set side: /dev/sda1 Read the following file to root directory of USB memory device

File name: svc_wlan.conf

Authentication method:

SVC_CERT

WEP-OPENSYSYSTEM

WPA2-PSK_AES

WPA-PSK_TKIP

WEP_SHAREDKEY_AUTH

WPA-PSK_AES

NO-ENCRYPT

Country code:

SVC_COUNTRY_CODE

SVC_REGULATORY_REVISION

WEP Key: SVC_WEPKEY

PMK: SVC_PMK

Setting of IP/NetMask/BroadCast

SVC_IPADDR 192.168.1.10

SVC_NETMASK 255.255.255.0

SVC_BROADCAST 192.168.1.255

- "Connected!" is displayed to the "Status", if it is connected to the AP.

(3) Start Display RSSI Value

Display the RSSI value

*Does not display the correct value of RSSI, if execute this function without the AP connection

(Screen 6)

* Diag

Category: WirelessLAN Test

(1) Show WLAN HwInfo

(2) Connect to AccessPoint

(3) Start Display RSSI Value

[Wlan Module Info]

Serial: 0x00000df

Board : 0x01

Model : 0x00

Mac : 00:01:36:23:FD:CF

(Screen 7)

* Diag

Category: WirelessLAN Test

(1) Show WLAN HwInfo

(2) Connect to AccessPoint

(3) Start Display RSSI Value

CERT : WPA2-PSK_AES

COUNTRY: US/5

WEPKEY : abcdef1234

PMK : ABCDE12345

SSID : NETGEAR-DualBand-N

IPADDR : 192.168.1.10

NETMASK: 255.255.255.0

BCADDR : 192.168.1.255

Status : Connected

HELP: [(NUM)] [RET]

- When can not read the svc_wlan.conf from USB memory device or not exist a setting item, it use the following default value.

SVC_CERT

SVC_COUNTRY_CODE

SVC_REGULATORY_REVISION

SVC_WEPKEY

SVC_SSID

SVC_PMK

SVC_IPADDR

SVC_NETMASK

SVC_BROADCAST

NO-ENCRYPT

US

5

abcdef1234

NETGEAR-DualBand-N

ABCDE12345

192.168.1.10

255.255.255.0

192.168.1.255

DriveMenu (Drive-related Diagnostics & Tools)

Overview:
This menu is used to operate the drive using drive-related diagnostics and tools.

Screen 1: Selecting items
Operations:
[UP] [DOWN] Move the cursor up or down
[ENT] Open the selected cursor item
[RET] Return to the top menu

> Test item list
1. Open/close the drive tray
2. Perform JT check
3. Write OP data to drive
4. Perform aging by opening and closing the drive tray
5. Perform device diagnostics for drive
6. Acquire and display LD time from drive
7. Check Δ IOP and display the results

Display Panel:
TrayOpen/Close: DV-O/C
JTCheck: DV-JT
RewriteOPData: DV-WOP
TrayAging: DV-AGN
DriveDeviceDiag: DV-DIAG
DriveLDTIME: DV-LDTM
DeltaIOPCheck: DV-DIOP

- TrayOpen/Close (Screen 2)
Operations:
[UP] [DOWN] Move the cursor up or down (Open/Close)
[ENT] Execute the selected cursor item
[RET] Return to the drive menu

- DriveDeviceDiag (Screen 3)
Operations:
[ENT] Execute DriveDeviceDiag
[RET] Return to the drive menu

- DriveLDTIME (Screen 4)
Operations:
[ENT] Display the LD time of the drive
[RET] Return to the drive menu

- DeltaIOPCheck (Screen 5)
Operations:
[ENT] Display the Δ IOP of the drive
[RET] Return to the drive menu

***If Δ IOP measurement is executed, version update by CD is no longer possible in Service Mode.**

(Screen 1)
* Diag

[1] TrayOpen/Close
[2] JTCheck
[3] RewriteOPData
[4] TrayAging
[5] DriveDeviceDiag
[6] DriveLDTIME
[7] DeltaIOPCheck

Information is displayed here when one of the menu options below is selected (*See below.)

[1] TrayOpen/Close
[5] DriveDeviceDiag
[6] DriveLDTIME
[7] DeltaIOPCheck

(Screen 2) TrayOpen/Close

*TrayCtrl
Open
Close
Processing...

(Screen 3) DriveDeviceDiag

*DriveDeviceDiag
Remove DISC and close tray.
[ENT] Start Device Diag
OK - DeviceDiag

(Screen 4) DriveLDTIME

*DriveLDTIME
[ENT] Show LDTIME
BD : [1:25]
DVD : [0:00]
CD : [0:00]

(Screen 5) DeltaIOPCheck

*DeltaIOPCheck
[ENT] Start
BD : [0]
DVD : [2]
CD : [2]
TEMP : [0]

DriveMenu (Drive-related Diagnostics & Tools - Continued)

- JT Check (Screen 6)

Operations:

[UP][DOWN]	Move the cursor up or down(TrayOpen/TrayClose/PSN/START)
[ENT]	Select and execute the selected cursor item
[RET]	Return to drive menu

PSN input(PSN):

Operations:

[[NUM]]	Number input
[CLEAR]	Backspace
[RET][ENT]	Return

- TrayAging (Screen 7)

Operations:

[UP][DOWN]	Move the cursor up or down (Times/START)
[ENT]	Select and execute the selected cursor item
[RET]	Return to drive menu

Drive tray open/close count input (Times):

Operations:	Number of times drive tray is opened and closed
[NUM]	Backspace
[CLEAR]	Return
[RETI] [ENT]	

- ReWriteOPData (Screen 8)

Operations:
[ENT] Read, register, and write drive operation data
*Before executing the above operation, a USB memory device with OP data must be inserted
[RET] Return to drive menu

➤ Drive operation data

The operation data is read from the USB memory device. The device that is read (loaded device) is located in `/dev/sda1`. (In the Setup/ES model, the storage device loaded in one of the two USB ports that is recognized first is designated as `/dev/sda1`.)

The data in BuData.txt in the USB memory device (route) is read.

*For details on the above drive tools, refer to the separate documentation.

```
(Screen 6)
* DriveJCheck
  TrayOpen
  TrayClose
```

PSN:

(Screen 7)

```
* DriveTrayAging
Times :
Tray Open/Close:
[START]
```

(Screen 8)

* DriveRewriteOPData

Insert USB StorageDevice ...
Remove DISC and Close tray.

[ENT] start

HELP: [ENT] [RET]

Example of screen when USB memory device is not inserted

Log: Command Log / Error Log (Display of Logs)

Overview:
This is used to display the log information.

Screen 1: Selecting the log type that is displayed

Operations:

[1]

Open the Error Log output screen

[2]

Open the Command Log output screen

[UP][DOWN]

Move the cursor up or down

[ENT]

Open the selected cursor item

[RET]

Return to Service Mode top menu

Screen 2: Display of Error Log

Operations:

[LEFT]

Previous page

[RIGHT]

Next page

[RET]

Return to screen for selecting log type (Screen 1)

[RED]

Save the error log data to the USB memory device

Screen 3: Display of Command Log

Operations:

[LEFT]

Previous page

[RIGHT]

Next page

[RET]

Return to screen for selecting log type (Screen 1)

[RED]

Save the command log data to the USB memory device

Display panel:

When log type is selected

Error log: S-ELOG

Command log: S-CLOG

Page indicator ex) 1/50

When log is displayed

>Reading the log display

Error log:

001 08/01/01 00:53:19: [ErrCode:080400000000]

[Number (from oldest log)] [Date] [Time] [Error code]

Command log:

0001 08/01/01 00:53:19: 0 POWER 0

[No. (from oldest log)] [Date] [Time] [Count] [Command name] [Edge 0:on 1:off]

*Copying logs to a USB memory device

Load the USB memory device into the set while the log screen is displayed, and press the [RED] button.

Error log:

If the getErrLogFile.irm file is found in the USB memory device, the errlog.log file is output.

Command log:

If the getCmdLogFile.irm file is found in the USB memory device, the cmdlog.log file is output.

★ This function cannot be used if USBHost test is being conducted in the Diag menu.

Several seconds are required for saving the data, and so be sure to wait long enough before removing the USB memory device.



Factory Initialize (Factory Default Settings)

Overview:
This is used to return the set to the factory default settings.
This returns all modified settings to the factory default settings.
However, the initialization process is not complete by only performing this operation.
After this operation, the set must be rebooted to complete the initialization process.
A normal restart is used to reboot. Initialization is not completed by restarting in Service Mode or other special mode.

Operations:
Screen 1
To return the set to the factory default settings, press [ENT] in this screen.
All saved titles are erased.
Initialize the set to the factory default state
Return to Service Mode top menu
[ENT]
[RET]

Screen 2
This is the screen displayed after initialization is executed.
Initialization is completed by rebooting the set.
Turn the AC power supply off and then on again.
* You can continue to perform other Service Menu operations before rebooting.

Display panel:
During initialization:
When initialization was successful:
When initialization failed:

	SETTING
When initialization was successful:	INIT-OK (Screen 2)
When initialization failed:	INIT-NG



Network (Network Test Diagnostics Screen: Ifconfig)

Overview:
This is the network menu.
The various network diagnostic functions are accessed from this menu.

Screen 1: Ifconfig test
Operations:
[ENT] Execute the Ifconfig command (Display network settings)
[RIGHT] Open the Ping test
[RTN] Return to Service Mode top menu

Screen 2: Ping test
Operations:
[LEFT] Open the Ifconfig test
[RTN] Return to Service Mode top menu
*For details on the Ping test, refer to the next page.

Screen 3: During execution of Ifconfig test
The Ifconfig command output results are displayed.
Operations:
[ENT] Execute again
[RIGHT] Open the Ping test
[RTN] Return to Service Mode top menu

Display panel:

S-NET



*The actual screens may differ slightly from the screen content shown here.

Network (Network Test Diagnostics Screen: Ping)

Overview:
Ping test

Screen 1: Ping test

Operations:

- [UP] Set the IP address of the ping location
- [DOWN] Prepare to execute test
- [RTN] Return to Service Mode top menu

*For details on the Ping test, refer to the next page.

Screen 2: Specify the IP address of the ping location (IP input mode)

When "Ping To:" is highlighted, press [ENT] to enter the IP address.

Operations:

- [ENT] Exit input
- [RTN] Exit input
- [LEFT] Exit input, and open the Ifconfig test
- [(NUM)] Enter numbers from 0 to 9
- [TIME] Enter the character "
- [CLEAR] Backspace

Screen 3: During execution of Ping test

When "START" is highlighted, pressing [ENT] executes the Ping test.

Operations:

- [ENT] Execute Ping test
- [UP] Set the IP address of ping location
- [DOWN] Prepare to execute test
- [RTN] Return to Service Mode top menu

Display panel: S-NET

(Screen 1)

* Network

Test: Ifconfig Ping

Ping To : [START]

(Screen 2)

* Network

Test: Ifconfig Ping

Ping To :> 172.16.200.13

[ENT] : Release

[RET] : Release

(Screen 3)

* Network

Test: Ifconfig Ping

Ping To : 172.16.200.13

[START]

PING 172.16.200.13 (172.16.200.13) 56(84) bytes of data.
64 bytes from 172.16.200.13: icmp_seq=0 ttl=64 time=0.022 ms

--- 172.16.200.13 ping statistics ---
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 0.022/0.022/0.022/0.000 ms, pipe 2

[HELP] : [ENT]:Start [UP] [LEFT]

*The actual screens may differ slightly from the screen content shown here.

Version Up (Version Update by disc)

Overview: This is used to update the version using an update disc. * This menu is not available after ΔIOP measurement is executed. Screen 1: Screen after entering Version Updater menu Operations: [ENT] Start update by disc → (Tray opens, and Screen 2 is opened) [RET] Return to Service Mode top menu Screen 2: Insert the version update disc Operations: [ENT] Close tray and perform disc check [RET] Cancel (Tray closes, and screen returns to Screen 1) Screen 3: During disc check → OK Operations: The set is rebooted automatically. Screen 4: During check → NG Operations: [Error] ... (Error message) is output, and the screen returns to screen 2. Display panel: <table><tr><td>During disc loading</td><td>V-INSCD</td></tr><tr><td>When loading of disc fails</td><td>V-NODSC</td></tr><tr><td>When check fails</td><td>V-CHKNG</td></tr><tr><td>When check is successful</td><td>V-CHKOK</td></tr><tr><td>During reboot</td><td>REBOOT</td></tr></table>	During disc loading	V-INSCD	When loading of disc fails	V-NODSC	When check fails	V-CHKNG	When check is successful	V-CHKOK	During reboot	REBOOT	
During disc loading	V-INSCD										
When loading of disc fails	V-NODSC										
When check fails	V-CHKNG										
When check is successful	V-CHKOK										
During reboot	REBOOT										



System Information (Viewing the System Information)

Overview:
This is used to view the system information.

Operations:
[RET] Return to Service Mode top menu

* If the ΔIOP measurement is performed, the VersionUP function in the Service Mode Menu is no longer available.

Displayed information:
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]
IFCon version IFCon <- B0: [Block0 version] B1: [Block1 version]
IFCon firmware date FirmDate
Temperature of set Temp <- [°C]

Display panel:
Viewing the Host version
 *01.0.002 → Displayed as 010 002

* System Information

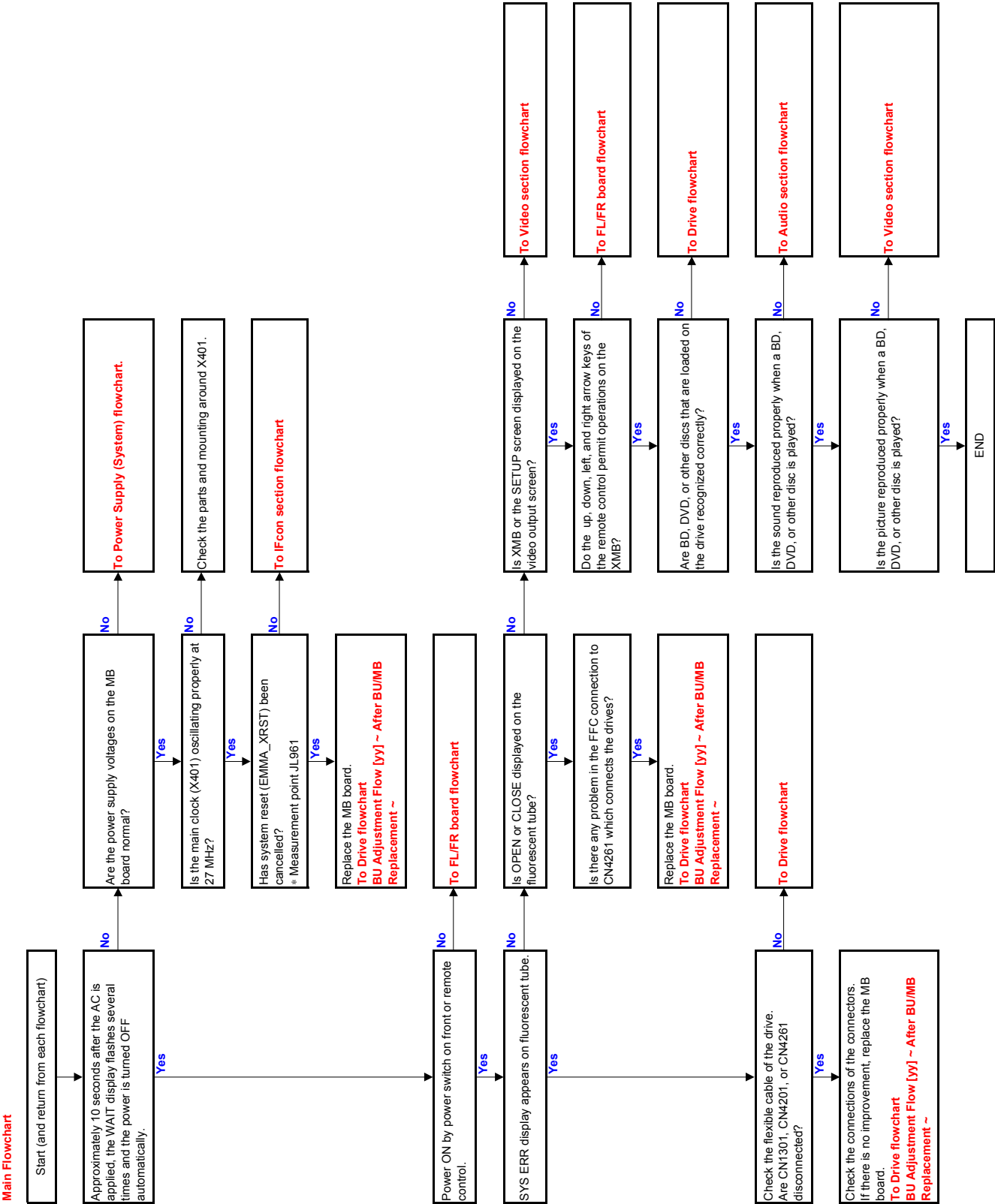
Model : BDP4G-BP
Dest : JP
IP : 172.16.102.32
Mac : 00:1a:80:d0:47:65
CPU : E0.029.0 [F020]
NBL : BDP4G 3.2.0
Kernel: BDP4G-3.2.0
Host : 01.0.002
 20090121D00 ...
Drive : BDP300 1.00 B300000000383_20
LDTime: BD : [0:00]
 DVD: [0:11]
 CD : [0:50]

IFcon : B0: 0x24 B1: 0x05
 FirmDate: 02/12 17:10
Temp : 42 [degC]
[RET] : TopMenu

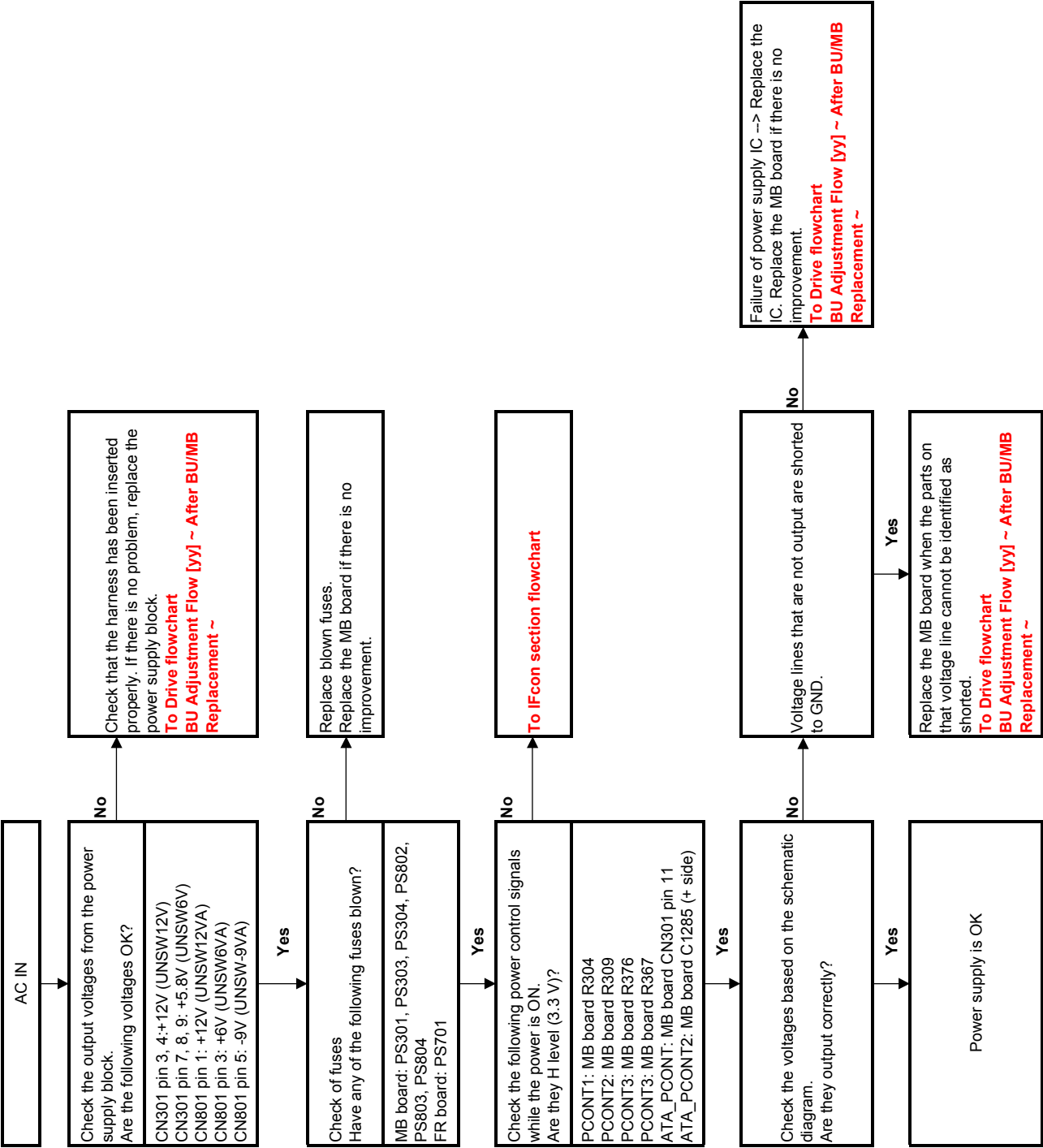
SECTION 8
ERROR LOG LIST

Major Classification Classification Number	Cause/Error Description	Message on Display Panel	Error Information Displayed in Error Log			Response by Service Center	Additional Notes
			Category	err_code	err_info (4-byte length)		
System related ERRLOG_CATEGORY_SYSTEM	CSI communication timeout Mainly ITcon communication error		0x00	0x01	csi_id	Replace the chip corresponding to the ID, or replace the EMMA3P chip.	Cases where problem occurs •Device for sending only (ex. DAC 2ch/8ch, ES DAC 2ch/8ch device) Recorded to log during a timeout of the sending complete interrupt •Device for sending and receiving (ex. IFcon device) Recorded to log during a timeout of the receiving complete interrupt •Other VIDEO_GLUE and HDE specifications are unknown at this time. •ID list (Driver/Common/CSI/ifi/csi_id_bdp3g_ryoushi.h) CSI_ID_DAC_2CH = 0, /* Audio DAC AK4385A 2ch Write only */ CSI_ID_DAC_8CH = 1, /* Audio DAC AK4358 8ch Write only */ CSI_ID_DAC_2CH_ES = 2, /* Audio DAC PCM1796 2ch Write only for ES */ CSI_ID_DAC_8CH_ES = 3, /* Audio DACs PCM1791A 2ch*4 Write only for ES */ CSI_ID_VIDEO_GLUE = 4, /* VIDEO Glue for ES */ CSI_ID_HDE1 = 5, /* HD Enhancer1 for ES */ CSI_ID_HDE2 = 6, /* HD Enhancer2 for ES */ CSI_ID_CC_UCOM = 7, /* Spare micro-controller for CC */ CSI_ID_ITCON = 8, /* ITcon */
	I2C communication timeout			0x02	i2c_id	Replace the chip corresponding to the ID, or replace the EMMA3P chip.	Cases where problem occurs •Recorded to log during a timeout at sending interrupt standby •ID list (Driver/Common/I2C/ifi/i2c_id_bdp3g_ryoushi.h) I2C_ID_HDMI_A = 0, /* External HDMI (sub-addrA) SiI9134 */ I2C_ID_HDMI_B = 1, /* External HDMI (sub-addrB) SiI9134 */ I2C_ID_SCALER = 2, /* 1080p SCALER */ I2C_ID_HDMI_INTERNAL_A = 3, /* EMMA3P Internal HDMI I2C-A */ I2C_ID_HDMI_INTERNAL_B = 4, /* EMMA3P Internal HDMI I2C-B */
	Device ID error for HDMI device			0x03	VendorId DeviceId	EMMA fault/External HDMI device fault (for ES)	
Playback related ERRLOG_CATEGORY_PB	Read error		0x02	0x00		Check for scratches and dust on the disc.	Stream or NaviPack read error. Read error for information is not handled.
	Wrong region			0x01		Unable to play because of wrong region	
	Decode error			0x02		Problem with stream	This is output by detection of EMMA, and so output may continue for some time.
	AACS verify error			0x03		Disc may be invalid.	When an error has occurred in ReqAacsPmVerifyUsageHash
	Wrong TV system (DVD-Video)			0x04		Disc is invalid.	If the TV_system is mixed in the DVD-Video disc, playback stops when mixing is found.
Disc, Drive, or Tray related ERRLOG_CATEGORY_DISC	Drive communication error		0x04	0x00	opcode ercd	Perform key operation again. Replace if the error occurs again.	EMMA error. Perform a system reboot if this occurs.
	Drive mechanical error			0x01	opcode sense_key	Service repair	Perform a system reboot if this occurs.
	Tray open/close error			0x02	- - - -	Perform key operation again. Replace if the error occurs again.	LU error: (Disc loading error)
	Command timeout			0x03	cdb	Perform key operation again. Replace if the error occurs again.	Immediate timeout type. Perform a system reboot if this occurs.
Heating related ERRLOG_CATEGORY_THERMO	Shutdown due to overheating of set	FAN ERR	0x05	0x01	Temperat ure data (8bit)	Check the operating temperature environment of the set.	Cases where problem occurs •If the temperature rise results in a thermal shutdown, this is recorded in the log. No information is available yet in the conversion table between temperature data (8bit) A/D value and temperature data.
	FAN breakdown	FAN ERR		0x02		Replace the fan.	Cases where problem occurs •When FANDET is used, a fan breakdown diagnosis by FANDET is recorded in the log.
NVRAM related ERRLOG_CATEGORY_NVRAM	NAND Error	E7001	0x07	0x01		After rebooting, if the error occurs again, or a malfunction occurs, repair by the Service Center is needed. (Replace NAND if a forced formatting of the NVRAM does not fix the problem. The settings and all other data in the NVRAM are reset.)	
	NAND Error	E7002		0x02		After rebooting, if the error occurs again, or a malfunction occurs, repair by the Service Center is needed. (Replace NAND if a forced formatting of the NVRAM does not fix the problem. The settings and all other data in the NVRAM are reset.)	
	NAND Error	E7003		0x03		After rebooting, if the error occurs again, or a malfunction occurs, repair by the Service Center is needed. (Replace NAND if a forced formatting of the NVRAM does not fix the problem. The settings and all other data in the NVRAM are reset.)	
	NAND Error	E7004		0x04		After rebooting, if the error occurs again, or a malfunction occurs, repair by the Service Center is needed. (Replace NAND if a forced formatting of the NVRAM does not fix the problem. The settings and all other data in the NVRAM are reset.)	
	NAND Error	E7005		0x05		Reboot and perform automatic repair. If the error occurs again, repair by the Service Center is needed. (Replace NAND if a forced formatting of the NVRAM does not fix the problem. The settings and all other data in the NVRAM are reset.)	
	NAND Error	E7006		0x06		Reboot and perform automatic repair. If the error occurs again, repair by the Service Center is needed. (Replace NAND if a forced formatting of the NVRAM does not fix the problem. The settings and all other data in the NVRAM are reset.)	
	NAND Error	E7007		0x07		Reboot and perform automatic repair. If the error occurs again, repair by the Service Center is needed. (Replace NAND if a forced formatting of the NVRAM does not fix the problem. The settings and all other data in the NVRAM are reset.)	
	NAND Error	E7008		0x08		Reboot and perform automatic repair. If the error occurs again, repair by the Service Center is needed. (Replace NAND if a forced formatting of the NVRAM does not fix the problem. The settings and all other data in the NVRAM are reset.)	
	NAND Error	E7009		0x09		Reboot and perform automatic repair. If the error occurs again, repair by the Service Center is needed. (Replace NAND if a forced formatting of the NVRAM does not fix the problem. The settings and all other data in the NVRAM are reset.)	
	NAND Error	E7010		0x0A		Reboot and perform automatic repair. If the error occurs again, repair by the Service Center is needed. (Replace NAND if a forced formatting of the NVRAM does not fix the problem. The settings and all other data in the NVRAM are reset.)	
	NAND Error	E7011		0x0B		Reboot and perform automatic repair. If the error occurs again, repair by the Service Center is needed. (Replace NAND if a forced formatting of the NVRAM does not fix the problem. The settings and all other data in the NVRAM are reset.)	
	NAND (SdmRegistrv) error	E7101		0x65		If the error still appears after rebooting, repair by the Service Center is needed. (NAND lifespan replacement)	
	NAND (SdmRegistrv) error	E7102		0x66		If the error still appears after rebooting, repair by the Service Center is needed. (NAND lifespan replacement)	
	NAND (SdmRegistrv) error	E7103		0x67		If the error still appears after rebooting, repair by the Service Center is needed. (NAND lifespan replacement)	
	NAND (SdmRegistrv) error	E7104		0x68		If the error still appears after rebooting, repair by the Service Center is needed. (NAND lifespan replacement)	
	NAND (SdmRegistrv) error	E7105		0x69		If the error still appears after rebooting, repair by the Service Center is needed. (NAND lifespan replacement)	
DB related ERRLOG_CATEGORY_DB	Video filesystem mount error		0x08	0x01		Load a different disc.	
	Photo filesystem mount error			0x02		Load a different disc.	
	Video database mount error			0x03		Load a different disc.	
	Photo database mount error			0x04		Load a different disc.	
	USB mount error			0x05		Insert a USB memory device.	
	Video unplayable			0x11		Load a different disc.	
	Video unplayable (invalid region)			0x12		Check the product region, and load a different disc.	
	Video unplayable (invalid tv system)			0x13		Check the product region, and load a different disc.	
	Video unplayable (pin lock)			0x14			
	Video unplayable (parental lock)			0x15			
	Virtual package authentication error			0x21		Delete the BD data.	
	Invalid disc			0x31		Load a different disc.	
	Disc read error			0x32		Load a different disc.	
	Buda read error			0x41		Insert a USB memory device.	
	Buda write error			0x42		Insert a USB memory device.	
	Ada read error			0x51		Load a different disc, and initialize the settings.	There may be something wrong with the BD-J read/write, and the NAND may be corrupted.
	Ada write error			0x52		Load a different disc, and initialize the settings.	There may be something wrong with the BD-J read/write, and the NAND may be corrupted.

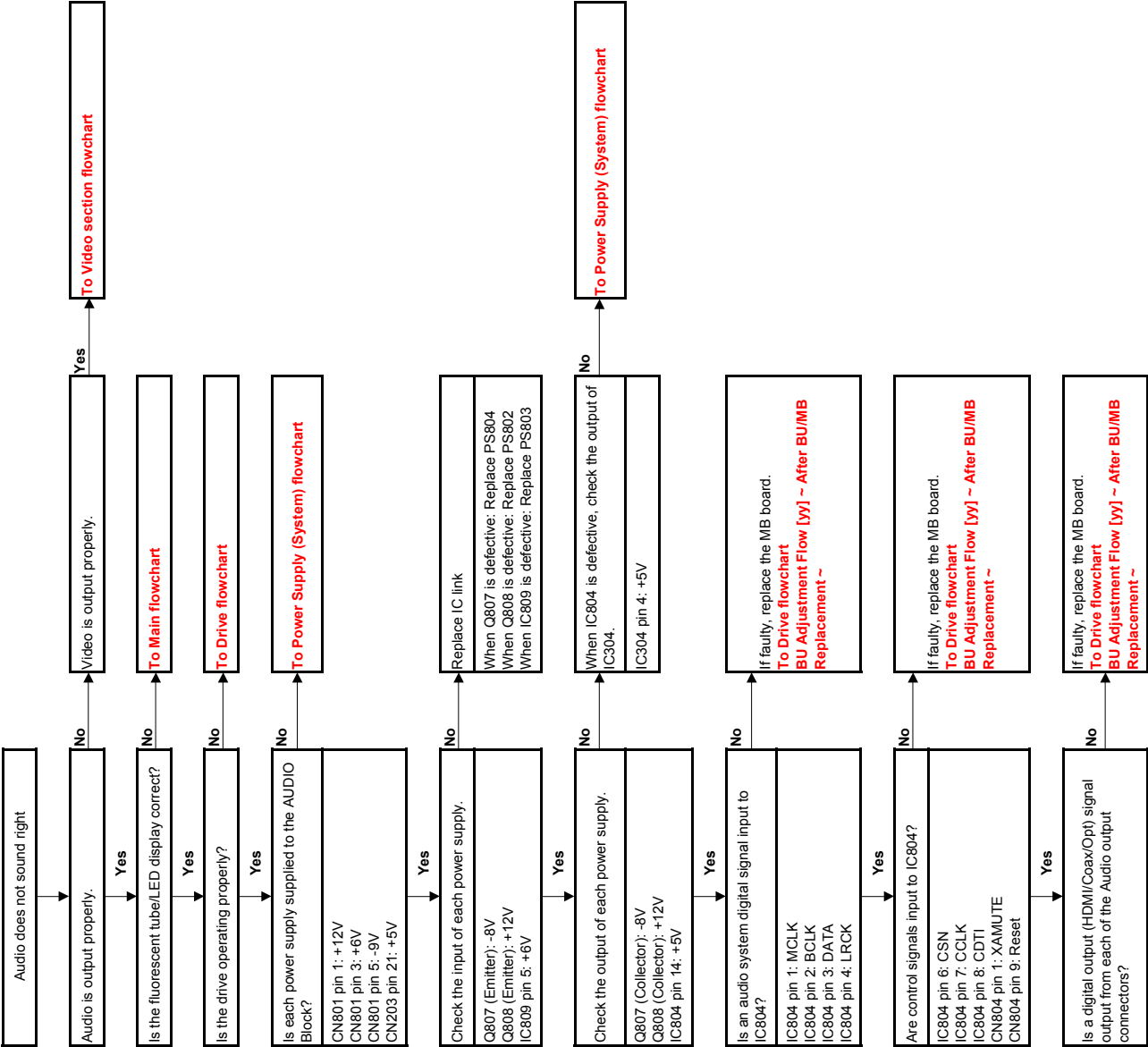
SECTION 9
TROUBLESHOOTING



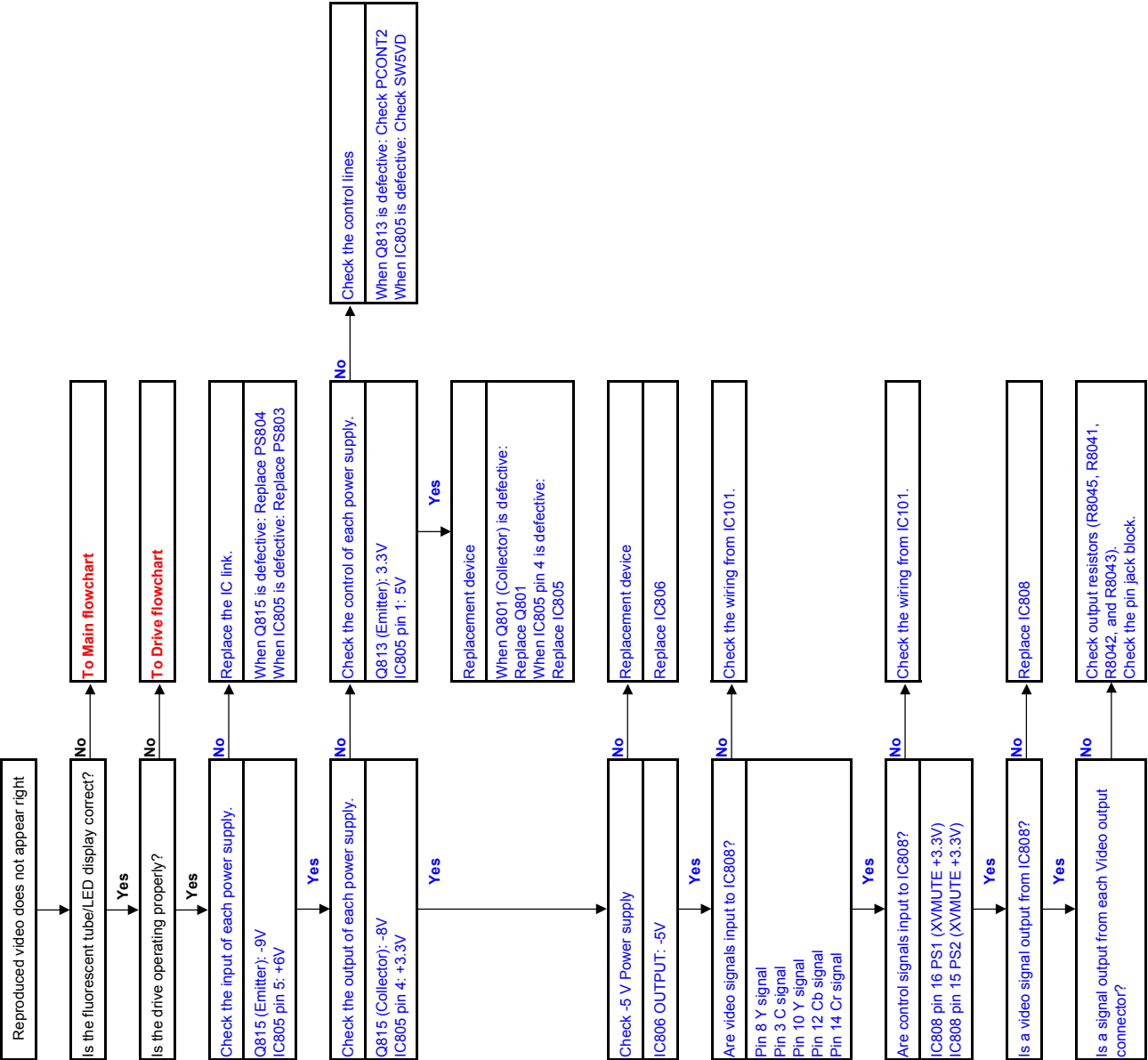
Power Supply (System) flowchart



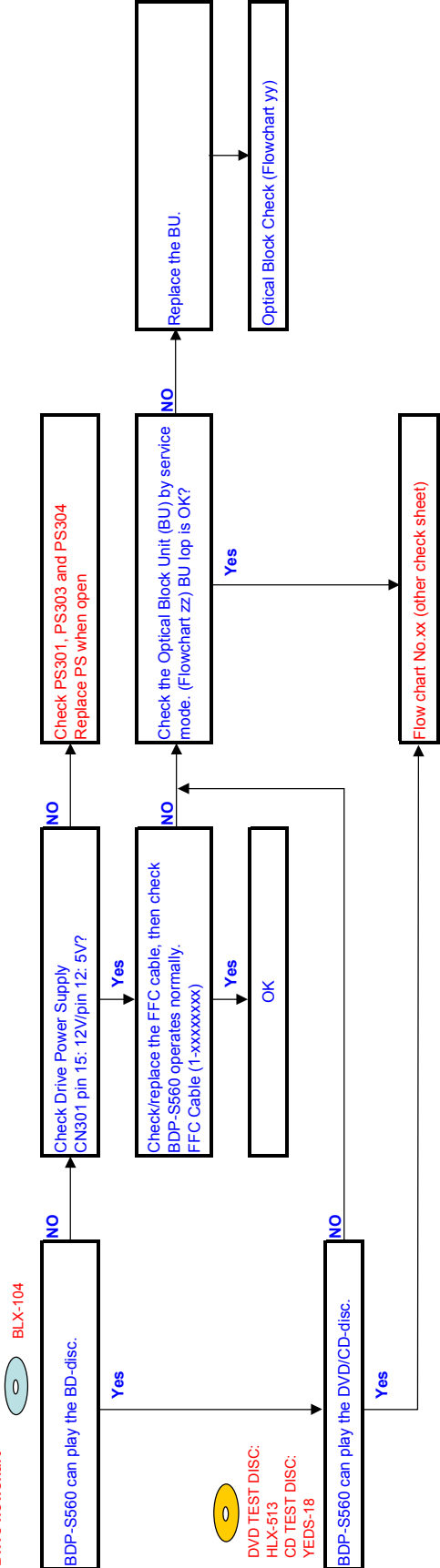
Audio section flowchart



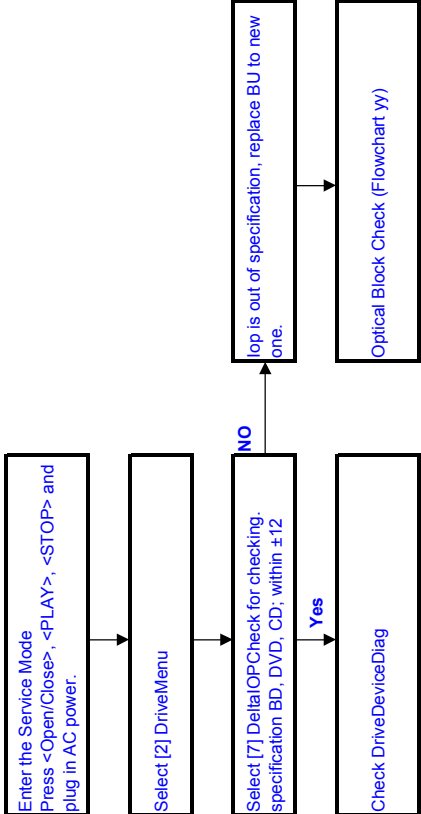
Video section flowchart



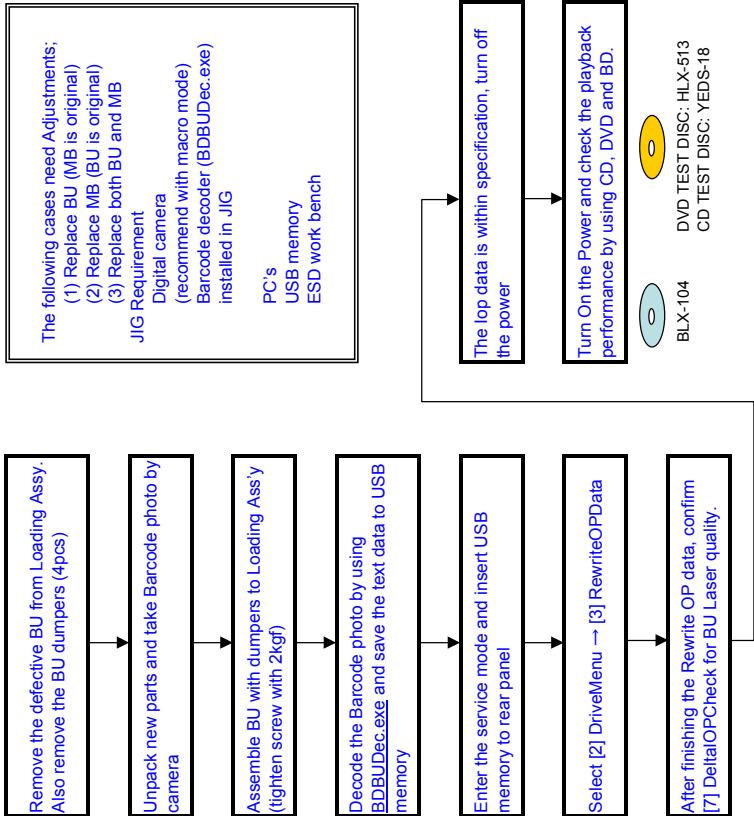
Drive flowchart



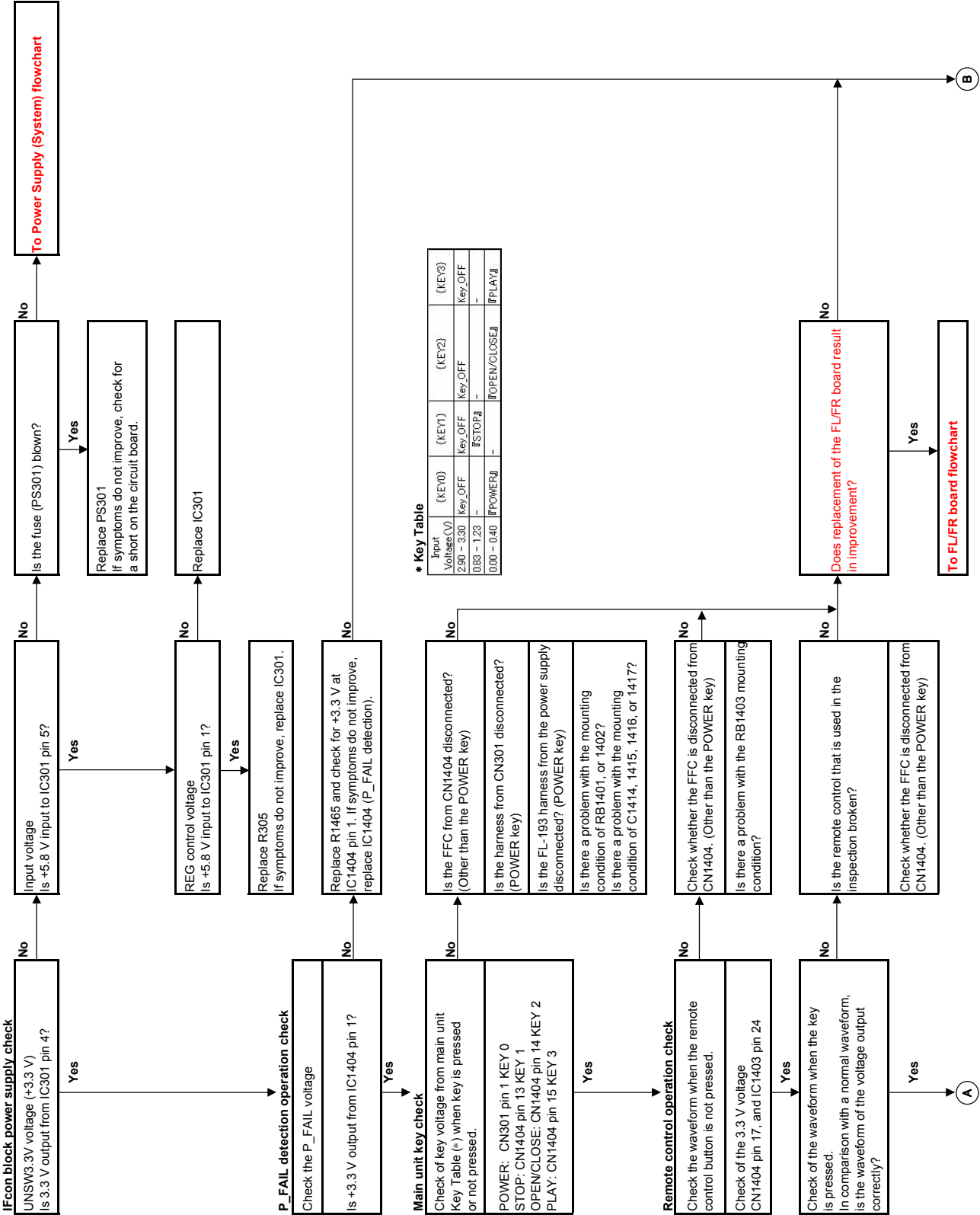
BU Check Flow [zz] ~ Before BU Replacement ~



BU Adjustment Flow [yy] ~ After BU/MB Replacement ~



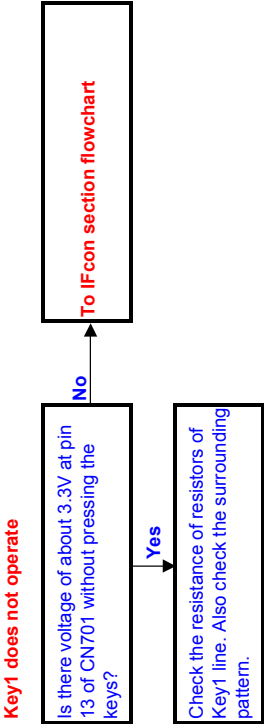
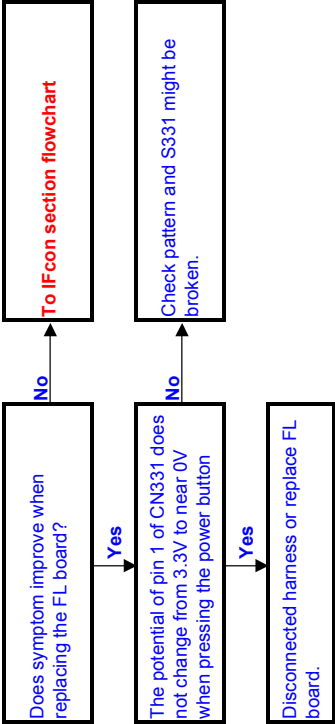
IFcon section flowchart (1/2)



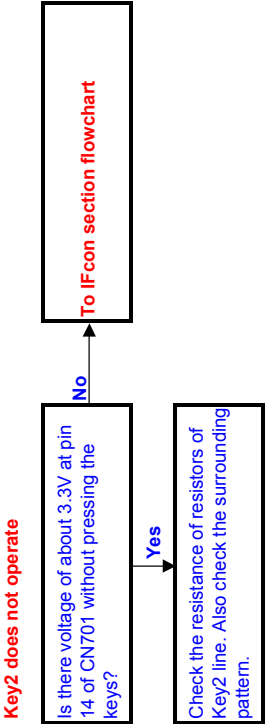
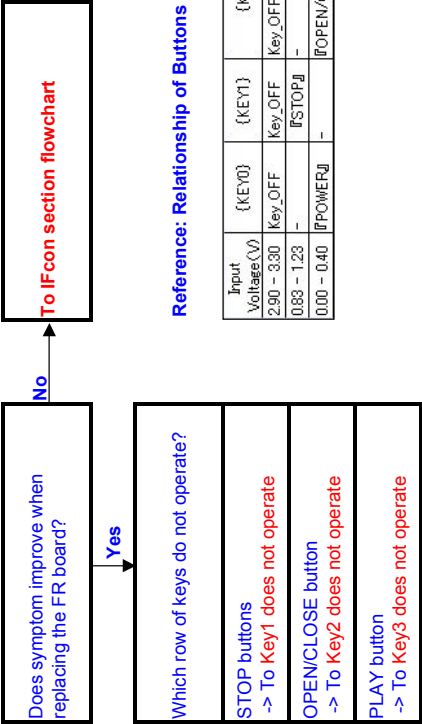


FL/FR Board flowchart (1/3)

Power button on the main unit does not work

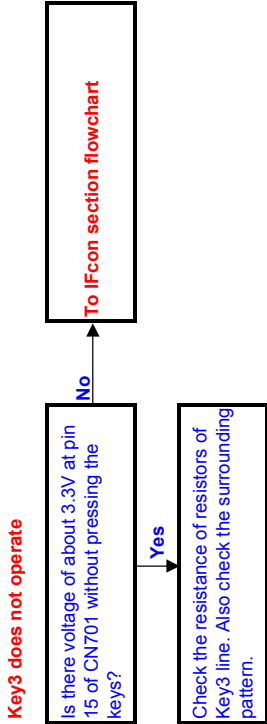


Key operations cannot be made on



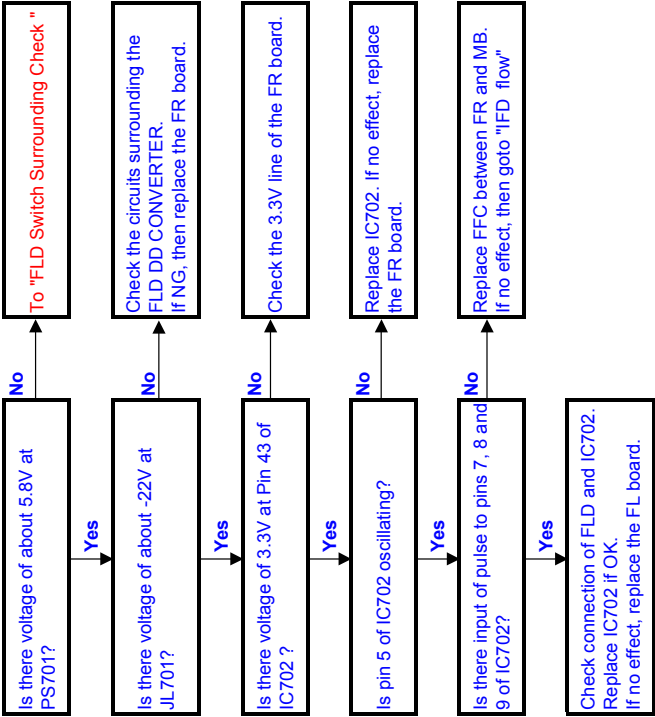
Reference: Relationship of Buttons and Voltages

Input Voltage(V)	{KEY0}	{KEY1}	{KEY2}	{KEY3}
2.90 - 3.30	Key_OFF	Key_OFF	Key_OFF	Key_OFF
0.88 - 1.23	-	[[STOP]]	-	-
0.00 - 0.40	[[POWER]]	-	[[OPEN/CLOSE]]	[[PLAY]]

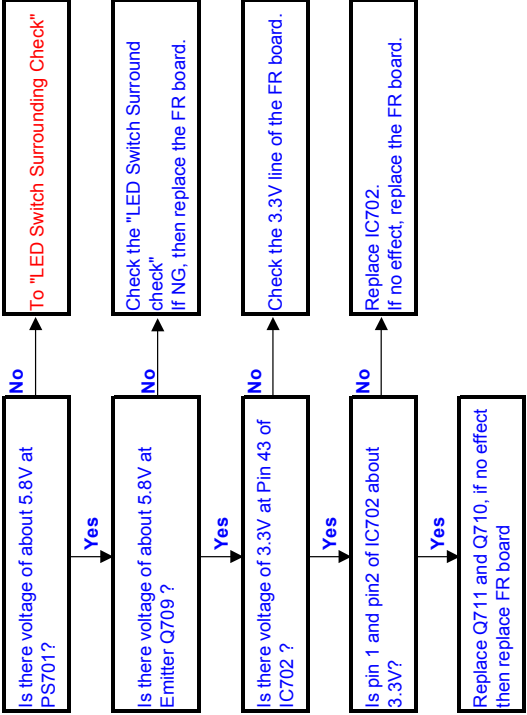


FL/FR Board flowchart (2/3)

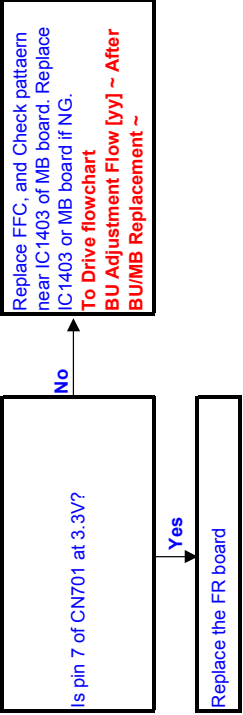
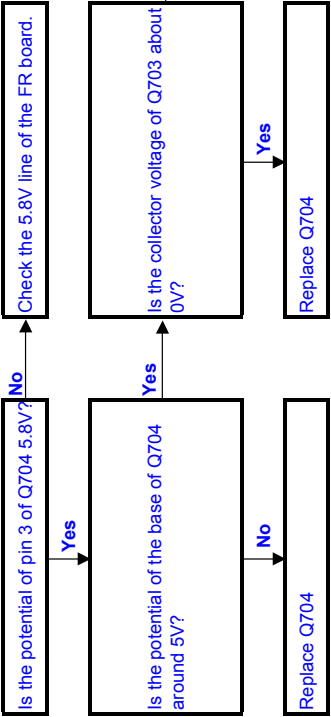
FLD does not light



LED does not light

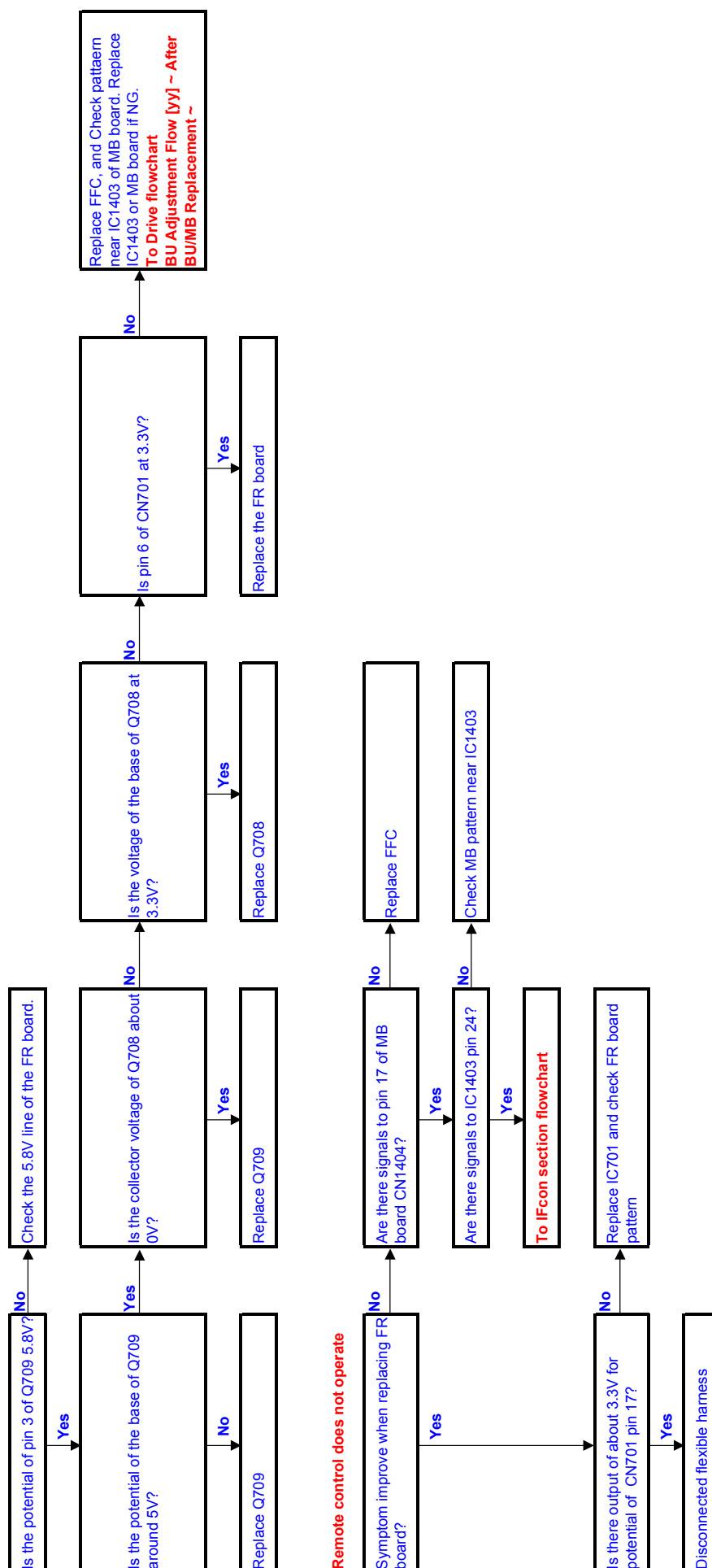


FLD Switch Surrounding Check

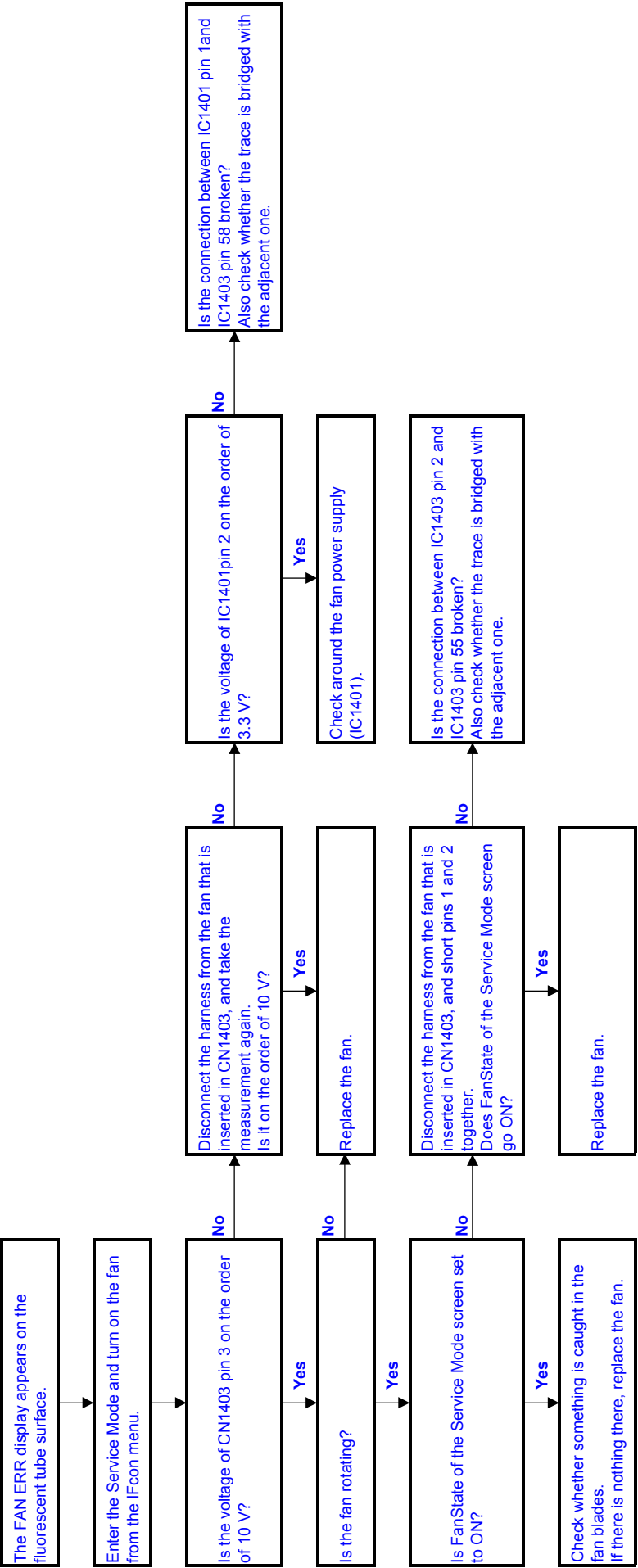


FL/FR Board flowchart (3/3)

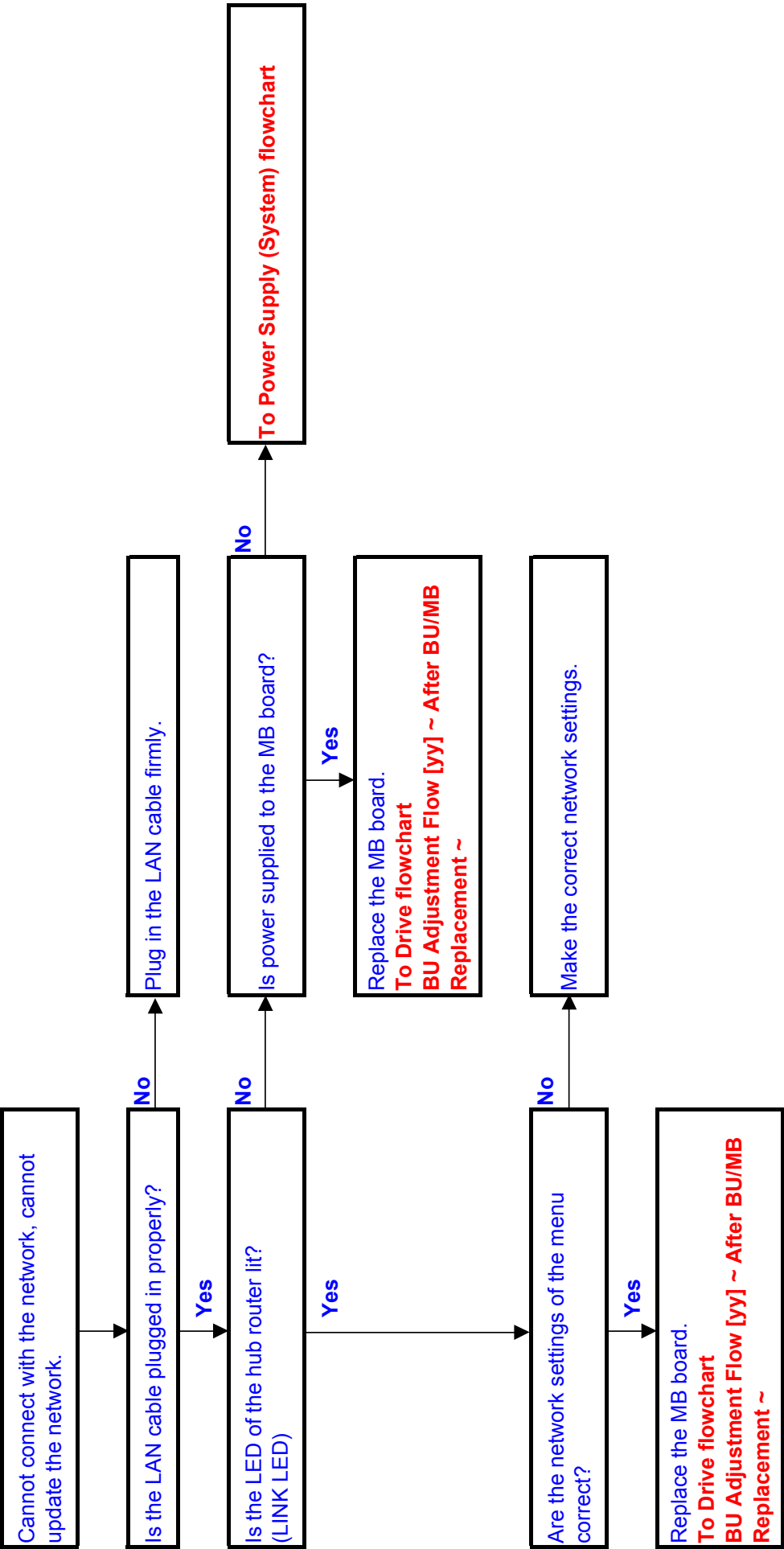
LED Switch Surrounding Check



Fan flowchart

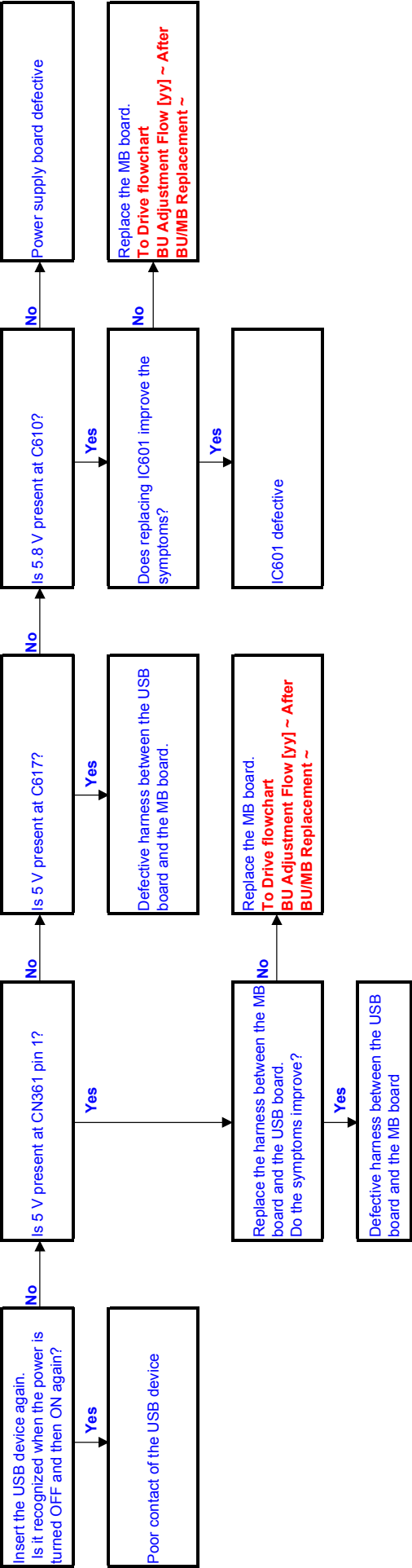


Ethernet flowchart



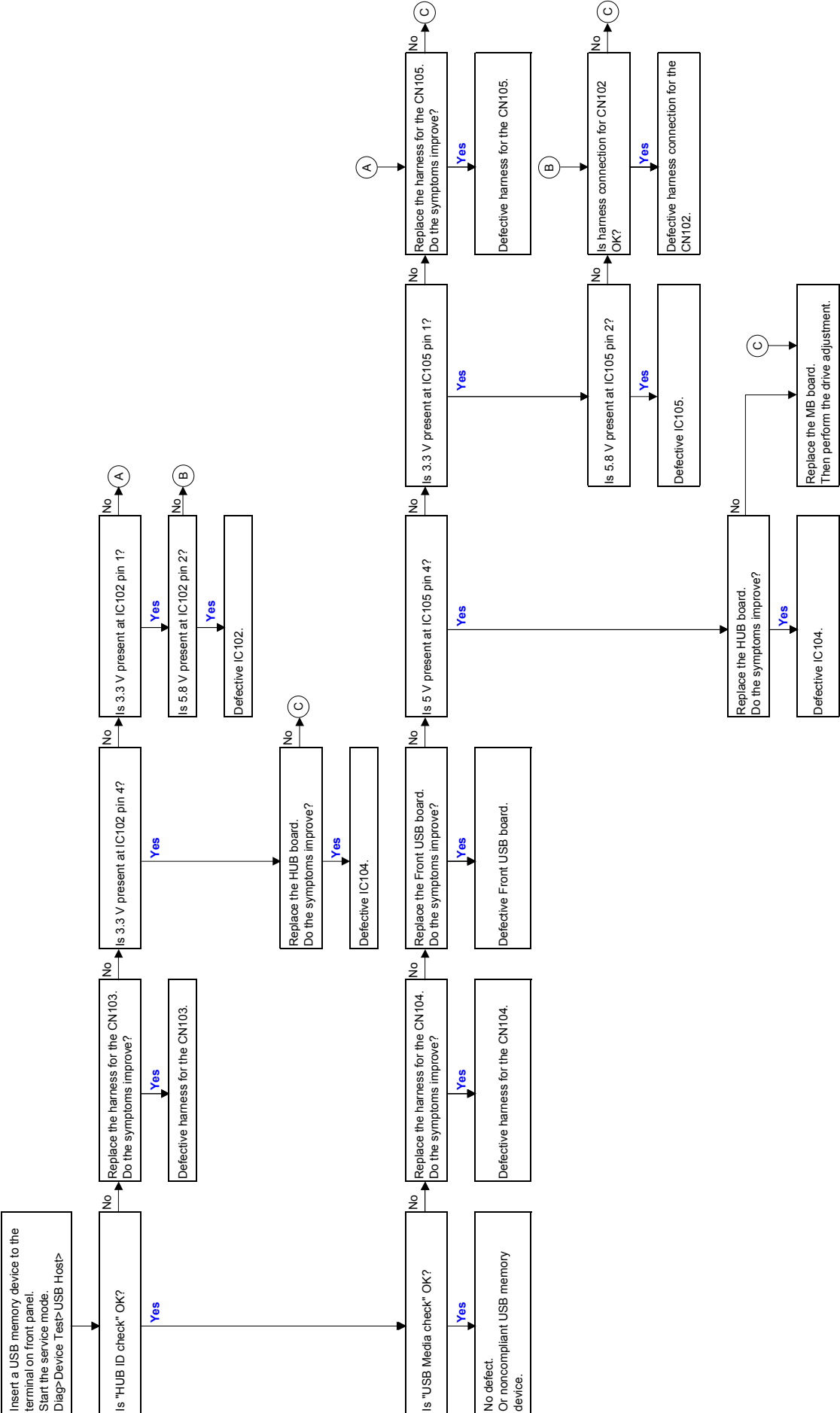
USB Device flowchart

The USB device is not recognized.



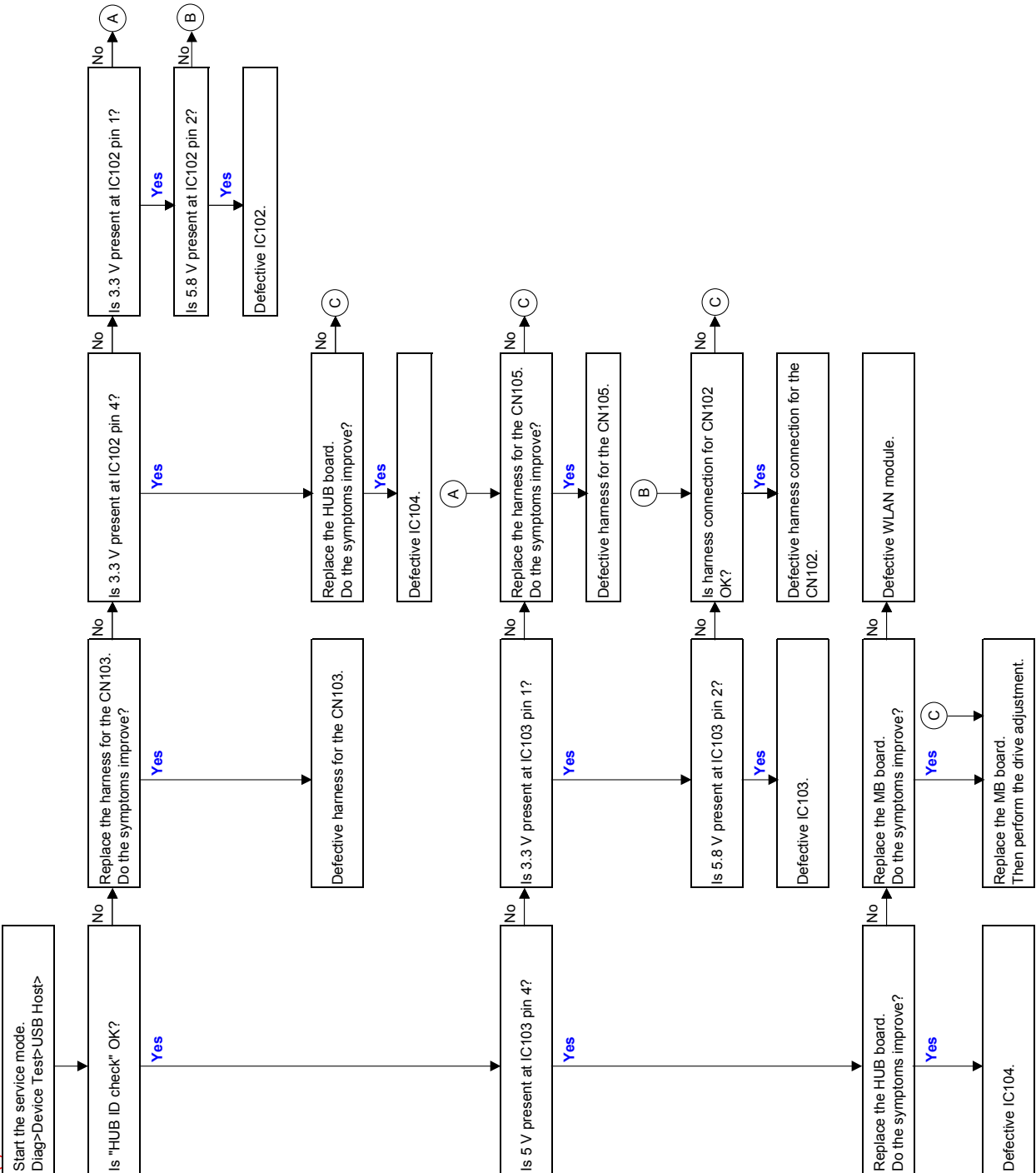
HUB board flowchart (1/2)

(1) Does not recognize a USB device at the front panel

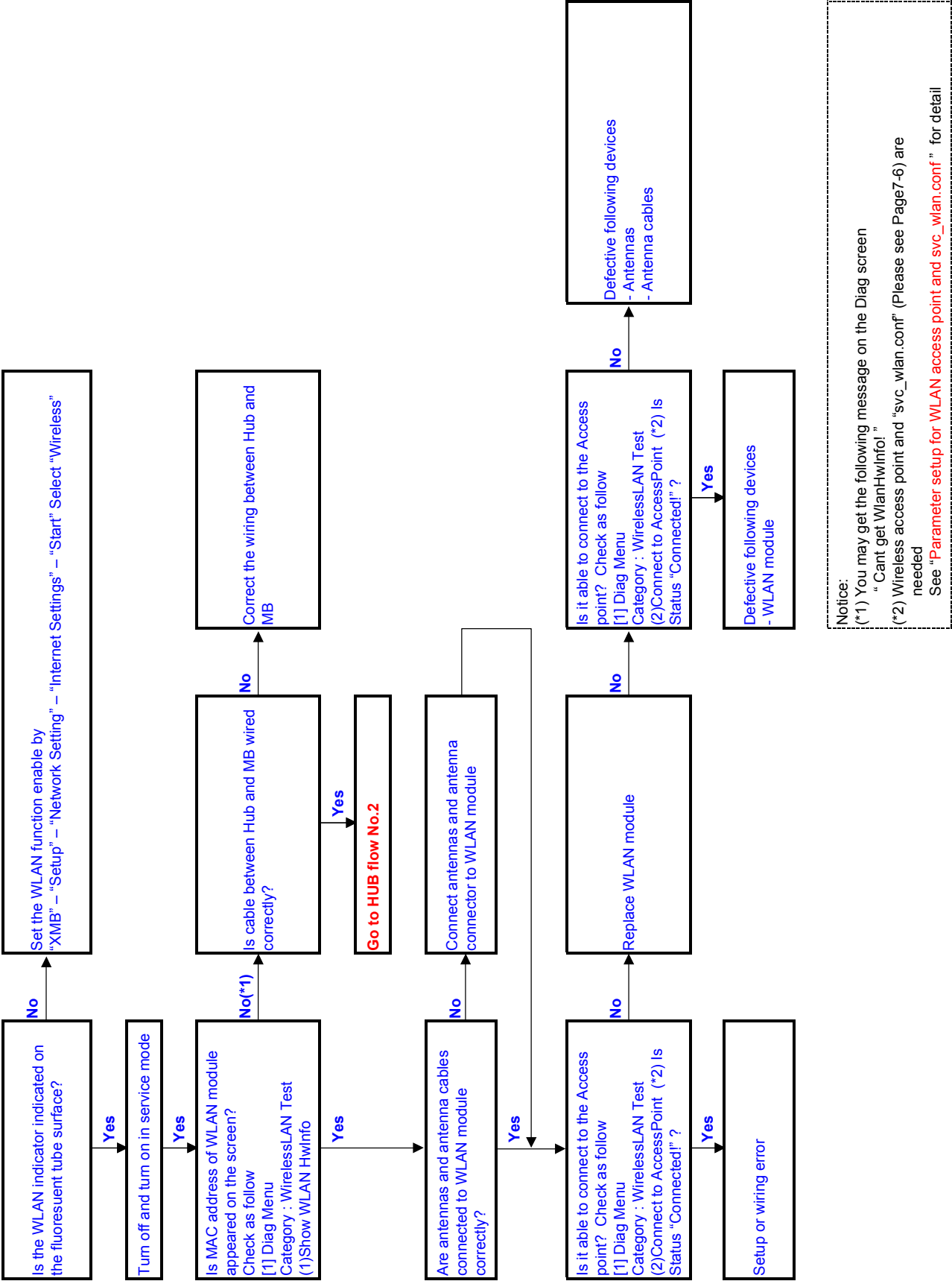


HUB board flowchart (2/2)

(2) From WLAN flow



WLAN flowchart



Notice:

(*1) You may get the following message on the Diag screen
" Cant get WlanHwInfo! "

(*2) Wireless access point and "svc_wlan.conf" (Please see Page7-6) are needed
See "Parameter setup for WLAN access point and svc_wlan.conf" for detail

[Devices]

Following devices are required

- 1. WLAN access point
e.g.) WRT310N(Linksys), WRT160N(Linksys), DIR-655(D-Link), WNDR3300(Netgear)
- 2. USB memory
For “svc_wlan.conf”

[Parameter for WLAN access point]

Following parameter should be change from default settings (See Table1)

Table1(example)

Parameter	Value
Security mode	Disable
SSID	BDP4G-SU
IP address	192.168.1.1(*1)
Subnet mask	255.255.255.0

[Content of “svc_wlan.conf”]example

SVC_CERT	NO-ENCRYPT
SVC_COUNTRY_CODE	(See Table2)
SVC_REGULATORY_REVISION	(See Table2)
SVC_WEPKEY	abcdef1234
SVC_SSID	BDP4G-SU(*1)
SVC_PMK	ABCDE12345
SVC_IPADDR	192.168.1.10
SVC_NETMASK	255.255.255.0
SVC_BROADCAST	192.168.1.255

Note (*1) SVC_SSID must be the same value as WLAN Access point

Table2

Destination	SVC_COUNTRY_CODE	SVC_REGULATORY_REVISION
U2, CA2	US	5
EC1, EC2, CEK	FR	0
AU2	NZ	0

SECTION 10

REPAIR PARTS LIST

10-1. 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
CND : Canadian model

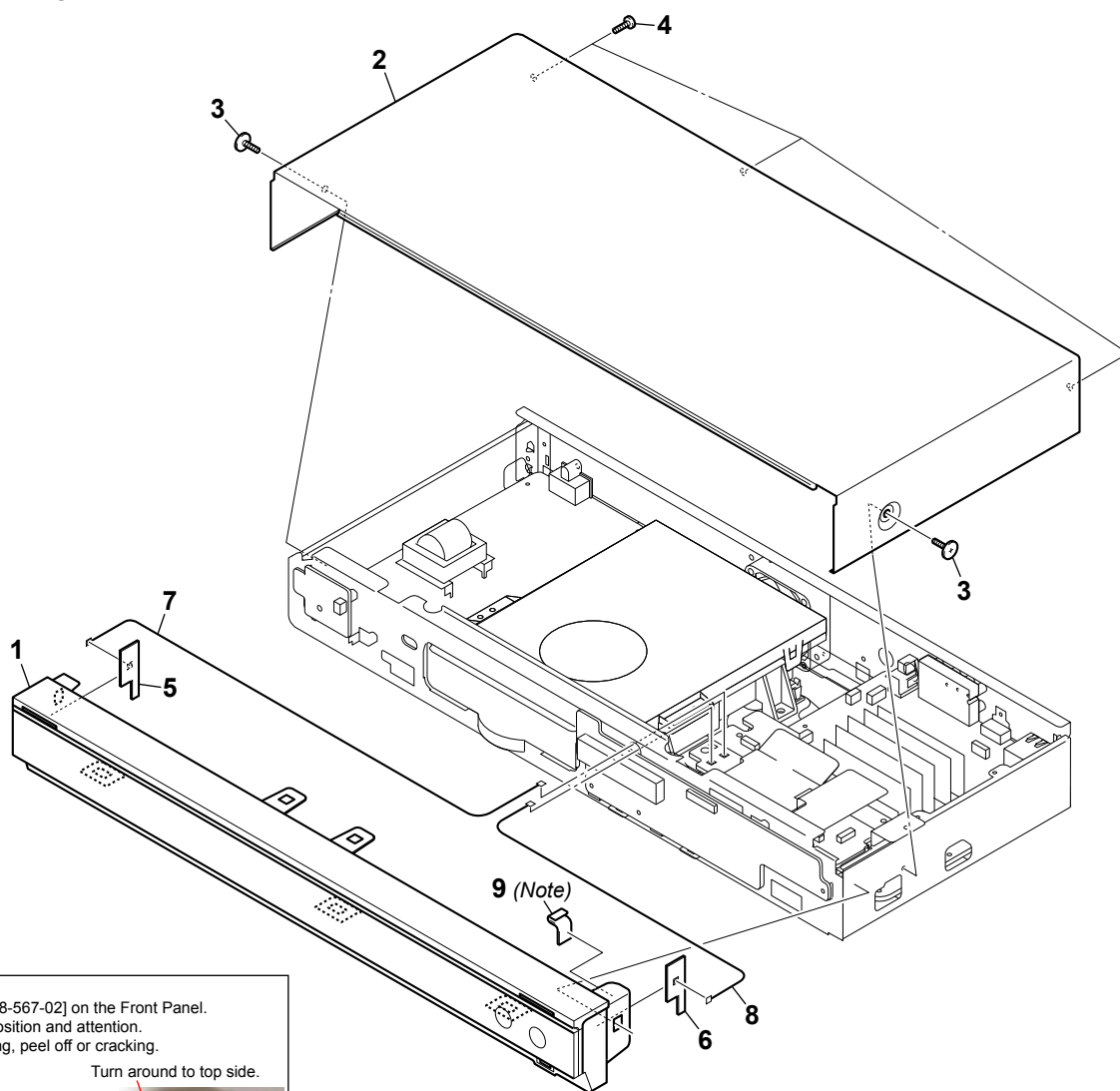
The components identified by mark  or dotted line with mark are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque $\triangle$ sont critiques 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.

10-1-1. CASE SECTION



Note:
Stick Sheet (Panel) [4-158-567-02] on the Front Panel.
Refer below picture for position and attention.
Stick tightly and no floating, peel off or cracking.

Stick Sheet (Panel)
On the Front Panel here.

Turn around to top side.



No stick out from panel rib. No overlap on this rib.
Gap less than 1mm.

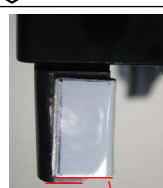


Turn around to top side.



Corner R gap is OK.

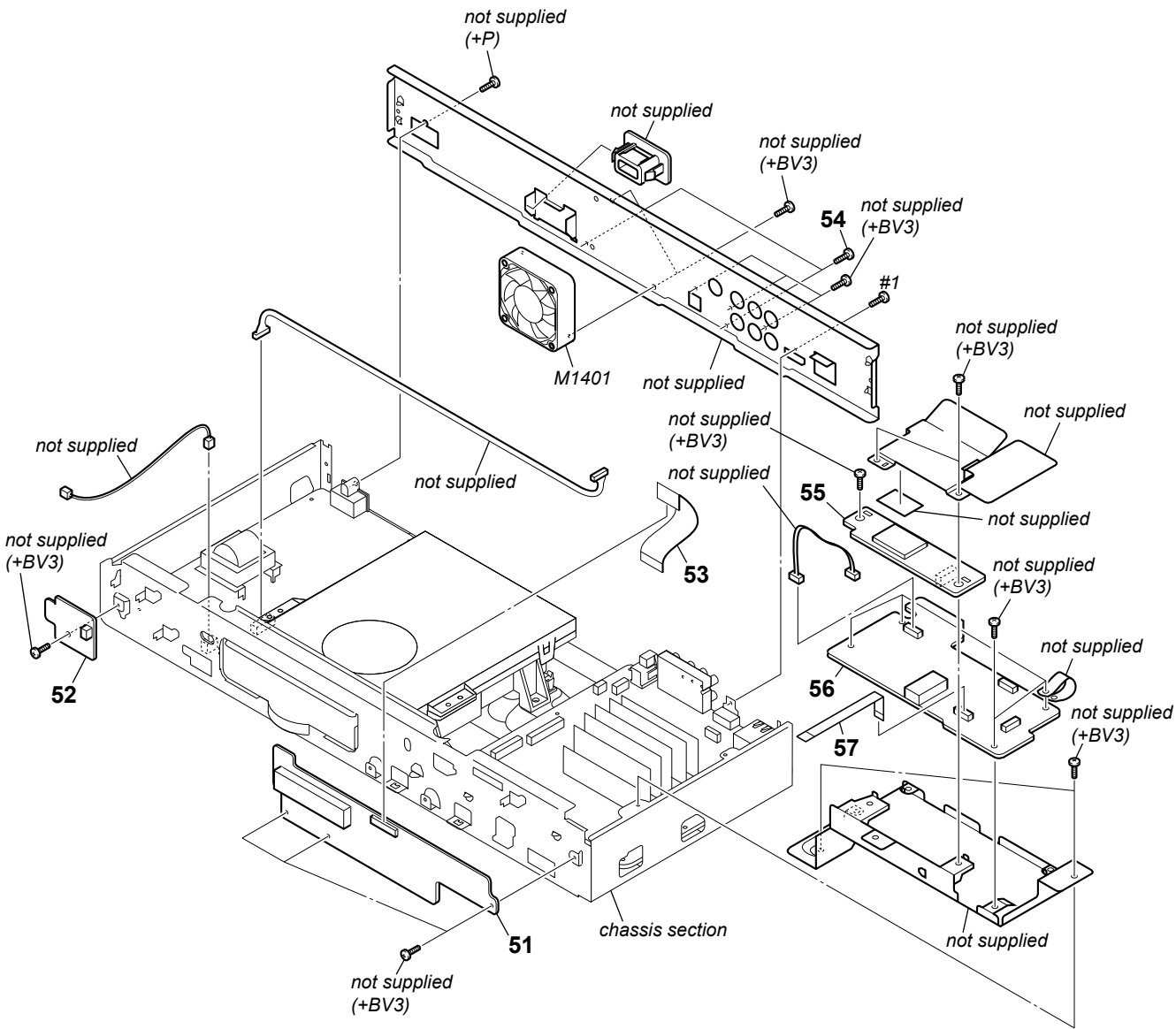
No overlap on this rib



No stick out from panel
rib except corner R.

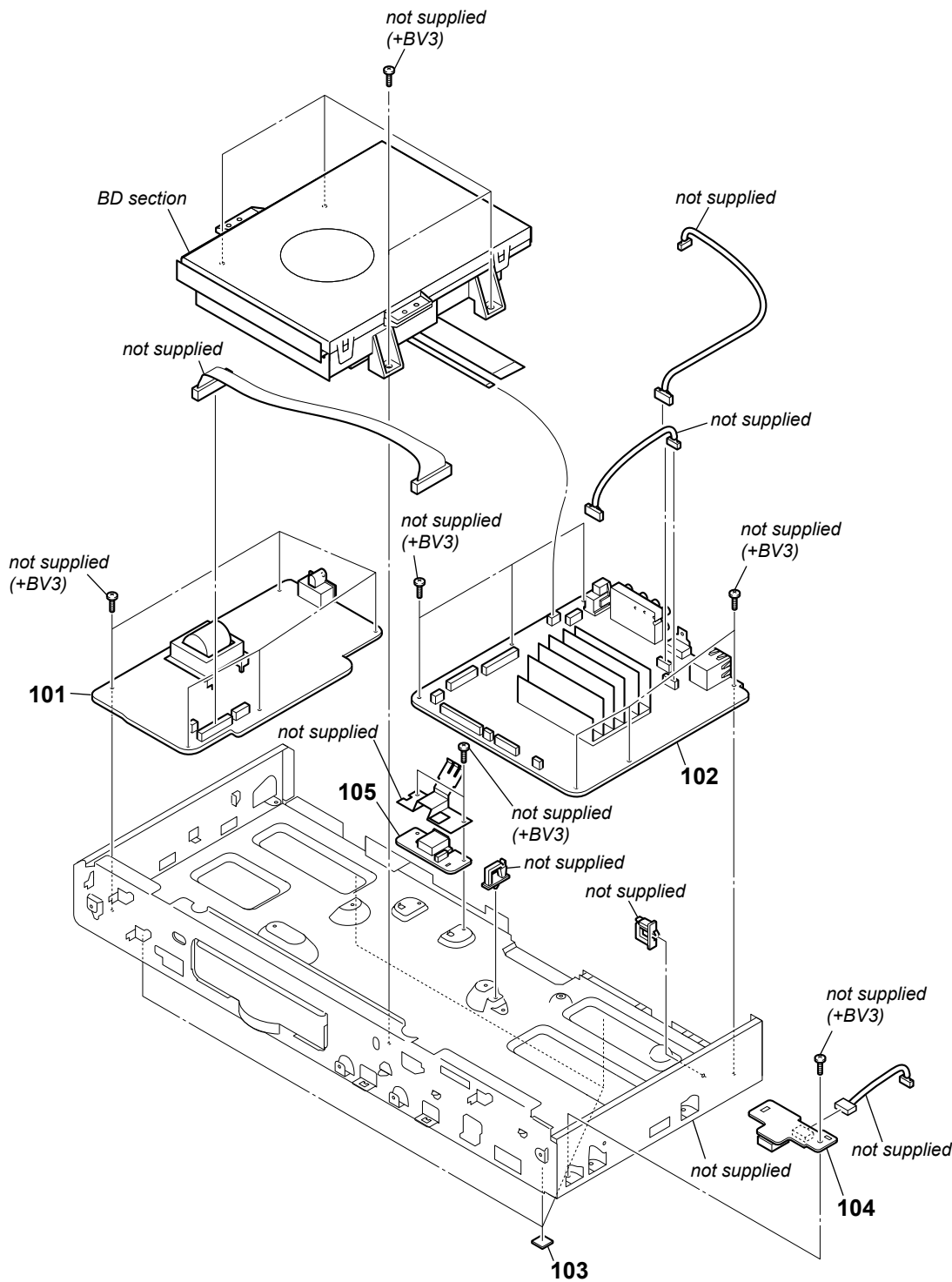
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	X-2348-385-1	PANEL ASSY, FRONT (SU1)		6	A-1719-610-A	ANT-002 BOARD, COMPLETE	
2	A-1726-839-A	CASE BLOCK(SERVICE USE SOEM)		7	1-836-438-11	CABLE, COAXIAL (WITH U.F.L CN) (GRAY)	
3	3-070-883-71	SCREW, TAPPING		8	1-836-439-11	CABLE, COAXIAL (WITH U.F.L CN) (BLACK)	
4	3-710-901-71	SCREW, TAPPING		9	4-158-567-02	SHEET (PANEL) (Note)	
5	A-1719-608-A	ANT-001 BOARD, COMPLETE					

10-1-2. FRONT/REAR CHASSIS SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	A-1719-598-A	FR-302 BOARD, COMPLETE		56	A-1719-606-A	HU-012 BOARD, COMPLETE	
52	A-1719-600-A	FL-194 BOARD, COMPLETE		57	1-836-489-11	CABLE, FLEXIBLE FLAT (FMH-002)	
53	1-836-488-11	CABLE, FLEXIBLE FLAT (FMF-004)		58	3-077-331-31	+BV3 (3-CR)	
54	3-710-901-71	SCREW, TAPPING		M1401	1-787-879-11	FAN, D.C.	
55	1-458-129-11	CARD, WIRELESS LAN		#1	7-682-544-09	+B 3X3	

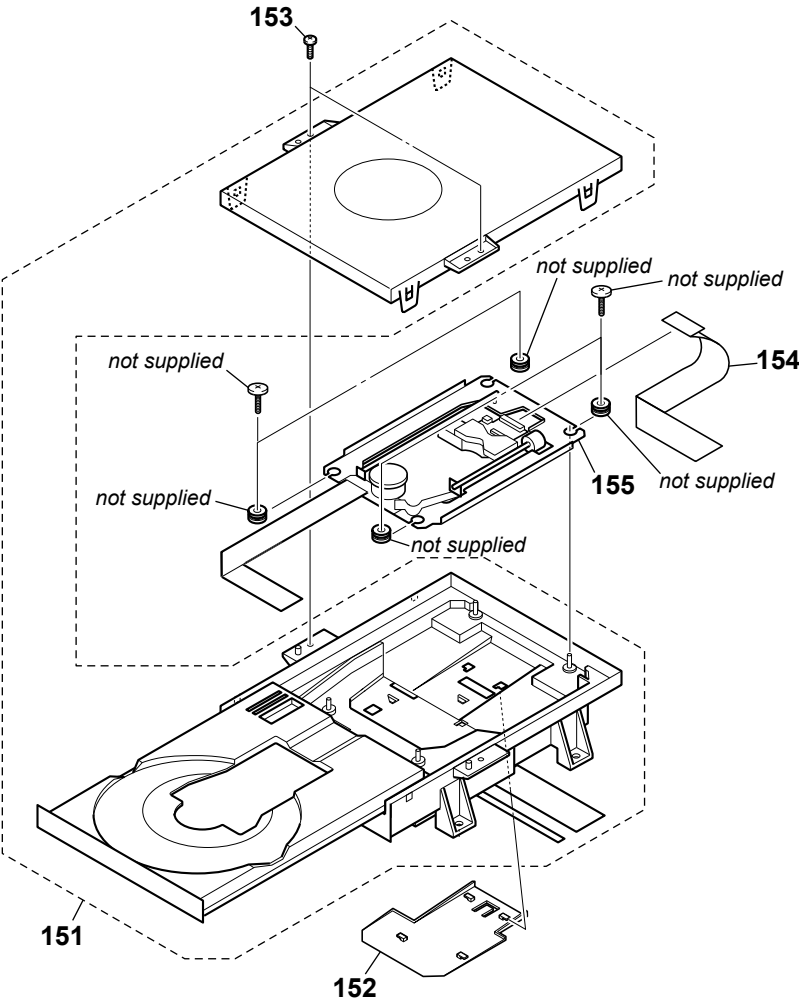
10-1-3. MAIN CHASSIS SECTION



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 critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
--	--	--

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
 101	1-474-150-51	REGULATOR, SWITCHING (SRV2192U)		104	A-1719-604-A	USB-017 BOARD, COMPLETE	
 102	A-1719-611-A	MB-127 BOARD, COMPLETE		105	A-1719-602-A	USB-016 BOARD, COMPLETE	
103	2-319-429-01	CUSHION, FOOT					

10-1-4. BD SECTION

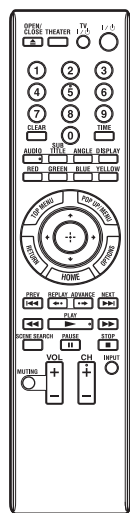


The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque $\triangle$ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
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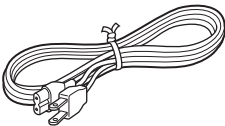
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
$\triangle$ 151	A-1727-332-A	LOADING FOR SERVICE		154	1-836-504-11	CABLE, FLEXIBLE FLAT	
152	4-137-203-01	HOLDER, FFC		$\triangle$ 155	8-820-424-02	DEVICE, OPTICAL KEM-430AAA/C2RP	
153	3-087-053-11	+BVTP2.6 (3CR)					

10-1-5. ACCESSORIES

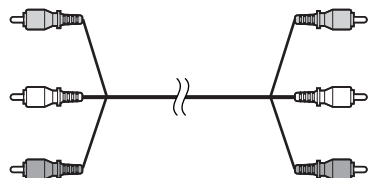
151
Remote Commander
(RMT-B104A)



152
AC Power Cord



153
Audio/Video Cable (Phono Plug x3)



Ref. No.	Part No.	Description	Remark
201	1-487-218-11	REMOTE COMMANDER (RMT-B104A)	
 202	1-823-701-11	CORD, POWER	
203	1-828-145-11	CORD, CONNECTION (AV)	

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

Ref. No.	Part No.	Description	Remark
*	4-145-643-11	MANUAL, INSTRUCTION (ENGLISH)	
*	4-145-643-21	MANUAL, INSTRUCTION (FRENCH) (CND)	

ANT-001

ANT-002

FL-194

FR-302

10-2. 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. . . : μ A. . . uPA. . . : μ PA. . .uPB. . . : μ PB. . . uPC. . . : μ PC. . .uPD. . . : μ PD. . .

CAPACITORS

uF: μ F

COILS

uH: μ H

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

Les composants identifiés par une marque Δ sont critiques 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 Δ contain confidential information.
Strictly follow the instructions whenever the components are repaired and/or replaced.

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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
	A-1719-608-A	ANT-001 BOARD, COMPLETE ***** (Ref. No. 20,000 Series)				< CONNECTOR >	
		< CONNECTOR >				< DIODE >	
CN201	1-818-381-11	CONNECTOR, COAXIAL		CN701	1-793-806-51	CONNECTOR, FFC/FPC 17P	
	A-1719-610-A	ANT-002 BOARD, COMPLETE ***** (Ref. No. 20,000 Series)		D703	8-719-988-61	DIODE 1SS355TE-17	
		< CONNECTOR >		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	6-501-726-01	DIODE MAZ8047GMLS0	
CN301	1-818-381-11	CONNECTOR, COAXIAL		* D709	6-502-466-01	LED CL-270S-WS-SD-TS (BLU-LAY DISC INDICATOR)	
				D710	6-501-358-01	LED CL-197HG5-CD-T (WLAN)	
						< IC >	
	A-1719-600-A	FL-194 BOARD, COMPLETE ***** (Ref. No. 20,000 Series)		IC701	6-600-665-01	IC GP1UE27XK0VF	
		< CONNECTOR >		IC702	6-701-729-01	IC PT6315	
						< COIL >	
CN331	1-770-160-21	PIN, CONNECTOR (PC BOARD) 2P		L701	1-411-919-11	INDUCTOR 100uH	
		< SWITCH >				< FLUORESCENT INDICATOR TUBE >	
S331	1-771-410-21	SWITCH, TACTILE (I/⏻)		ND701	1-483-097-11	INDICATOR TUBE, FLUORESCENT	
						< IC LINK >	
	A-1719-598-A	FR-302 BOARD, COMPLETE ***** (Ref. No. 20,000 Series)		Δ PS701	1-576-122-21	IC LINK 0.4A 72V	
		< CAPACITOR >				< TRANSISTOR >	
C701	1-115-339-11	CERAMIC CHIP 0.1uF 10% 50V		Q703	8-729-421-19	TRANSISTOR UN2213	
C703	1-117-681-11	ELECT CHIP 100uF 20% 16V		Q704	8-729-904-87	TRANSISTOR 2SB1197K-R	
C704	1-137-765-21	ELECT CHIP 47uF 20% 16V		Q705	8-729-904-87	TRANSISTOR 2SB1197K-R	
C707	1-107-726-91	CERAMIC CHIP 0.01uF 10% 16V		Q706	8-729-901-88	TRANSISTOR 2SC2411K-CR	
C711	1-115-339-11	CERAMIC CHIP 0.1uF 10% 50V		Q707	8-729-901-88	TRANSISTOR 2SC2411K-CR	
C712	1-128-131-11	ELECT 22uF 20% 50V		Q708	8-729-421-19	TRANSISTOR UN2213	
C713	1-115-339-11	CERAMIC CHIP 0.1uF 10% 50V		Q709	8-729-421-19	TRANSISTOR UN2213	
C714	1-107-726-91	CERAMIC CHIP 0.01uF 10% 16V		Q710	8-729-421-19	TRANSISTOR UN2213	
C715	1-107-726-91	CERAMIC CHIP 0.01uF 10% 16V		Q711	8-729-421-19	TRANSISTOR UN2213	
C716	1-115-339-11	CERAMIC CHIP 0.1uF 10% 50V				< RESISTOR >	
C717	1-164-217-11	CERAMIC CHIP 150PF 5% 50V		R701	1-216-833-11	METAL CHIP 10K 5% 1/10W	
C719	1-100-909-11	CERAMIC CHIP 10uF 10% 6.3V		R705	1-216-821-11	METAL CHIP 1K 5% 1/10W	
				R707	1-216-828-11	METAL CHIP 3.9K 5% 1/10W	
				R712	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	

FR-302

HU-012

MB-127

Ref. No.	Part No.	Description	Remark		
R714	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R715	1-216-845-11	METAL CHIP	100K	5%	1/10W
R717	1-216-814-11	METAL CHIP	270	5%	1/10W
R718	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R719	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R720	1-216-812-11	METAL CHIP	180	5%	1/10W
R721	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R723	1-216-813-11	METAL CHIP	220	5%	1/10W
R724	1-216-833-11	METAL CHIP	10K	5%	1/10W
R725	1-216-805-11	METAL CHIP	47	5%	1/10W
< SWITCH >					
S701	1-771-410-21	SWITCH, TACTILE (▲)			
S702	1-771-410-21	SWITCH, TACTILE (■)			
S704	1-771-410-21	SWITCH, TACTILE (▶)			
< TRANSFORMER >					
* T701	1-445-447-11	TRANSFORMER, DC-DC CONVERTER			
A-1719-606-A HU-012 BOARD, COMPLETE					

(Ref. No. 20,000 Series)					
< CAPACITOR >					
C104	1-137-893-11	ELECT CHIP	22uF	20%	16V
C105	1-137-893-11	ELECT CHIP	22uF	20%	16V
C107	1-100-766-21	ELECT CHIP	47uF	20%	16V
C109	1-100-766-21	ELECT CHIP	47uF	20%	16V
C111	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C112	1-137-893-11	ELECT CHIP	22uF	20%	16V
C113	1-164-852-11	CERAMIC CHIP	12PF	5%	50V
C114	1-164-852-11	CERAMIC CHIP	12PF	5%	50V
C115	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
* C116	1-112-298-91	CERAMIC CHIP	1uF	10%	16V
C117	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C118	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C119	1-112-300-91	CERAMIC CHIP	4.7uF	10%	10V
C121	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C122	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C123	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C124	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C125	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C126	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
* C127	1-112-298-91	CERAMIC CHIP	1uF	10%	16V
C128	1-165-492-21	ELECT CHIP	100uF	20%	10V
C129	1-128-394-11	ELECT CHIP	220uF	20%	10V
C130	1-165-492-21	ELECT CHIP	100uF	20%	10V
C132	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C143	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C146	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
< CONNECTOR >					
CN102	1-573-290-21	PIN, CONNECTOR (1.5MM) (SMD) 4P			
CN103	1-573-768-61	PIN, CONNECTOR (1.5MM) (SMD) 5P			
CN104	1-573-768-41	PIN, CONNECTOR (1.5MM) (SMD) 5P			
< DIODE >					
D106	6-500-701-01	DIODE PGB1010603NR			
D107	6-500-701-01	DIODE PGB1010603NR			

Ref. No.	Part No.	Description	Remark		
D109	6-501-817-01	DIODE MA2J1110GLS0			
D110	6-501-817-01	DIODE MA2J1110GLS0			
D111	6-501-817-01	DIODE MA2J1110GLS0			
< FERRITE BEAD >					
FB101	1-400-382-11	EMI FERRITE (SMD) (1608)			
< IC >					
IC102	6-712-613-01	IC SI-3010KM-TLS			
IC103	6-712-613-01	IC SI-3010KM-TLS			
< COIL >					
L101	1-457-223-11	COMMON MODE CHOKE COIL			
L102	1-457-223-11	COMMON MODE CHOKE COIL			
L103	1-414-843-21	INDUCTOR	18nH		
L104	1-414-843-21	INDUCTOR	18nH		
< RESISTOR >					
R108	1-208-683-11	METAL CHIP	1K	0.5%	1/16W
R109	1-208-933-11	METAL CHIP	82K	0.5%	1/16W
R110	1-208-911-11	METAL CHIP	10K	0.5%	1/16W
R111	1-208-911-11	METAL CHIP	10K	0.5%	1/16W
R112	1-208-911-11	METAL CHIP	10K	0.5%	1/16W
R118	1-218-977-11	METAL CHIP	100K	5%	1/16W
R119	1-208-709-11	METAL CHIP	12K	0.5%	1/16W
R120	1-218-989-11	METAL CHIP	1M	5%	1/16W
R123	1-218-990-81	SHORT CHIP	0		
R124	1-218-990-81	SHORT CHIP	0		
R125	1-218-977-11	METAL CHIP	100K	5%	1/16W
R126	1-218-977-11	METAL CHIP	100K	5%	1/16W
R128	1-218-977-11	METAL CHIP	100K	5%	1/16W
R130	1-218-977-11	METAL CHIP	100K	5%	1/16W
R145	1-208-933-11	METAL CHIP	82K	0.5%	1/16W
R146	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R147	1-216-864-11	SHORT CHIP	0		
R150	1-208-884-81	METAL CHIP	750	0.5%	1/16W
R159	1-216-833-11	METAL CHIP	10K	5%	1/10W
R160	1-216-833-11	METAL CHIP	10K	5%	1/10W
R162	1-218-990-81	SHORT CHIP	0		
< VIBRATOR >					
X101	1-813-082-11	VIBRATOR, CRYSTAL (24MHz)			
	A-1719-611-A	MB-127 BOARD, COMPLETE			

(Ref. No. 10,000 Series)					
< CAPACITOR >					
C102	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C103	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V
C105	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V
C106	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V
C107	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V
C109	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V
C110	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V
C112	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V
C113	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V
C115	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C116	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description				Remark
C117	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C241	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	
C118	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C245	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	
C119	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V		C246	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	
C120	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C247	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	
C122	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C248	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	
C125	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C249	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	
C128	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C251	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	
C130	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C255	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	
C132	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C256	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V	
C133	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C257	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C134	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C258	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	
C135	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V		C261	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	
C136	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C262	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	
C137	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V		C263	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	
C139	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C265	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V	
C141	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C267	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V	
C144	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C268	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V	
C145	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C270	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V	
C146	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C276	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	
C147	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C277	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	
C149	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C278	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C152	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C301	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V	
C153	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V		C302	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V	
C154	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C303	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C155	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		C305	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V	
C157	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		C306	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V	
C158	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		C313	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V	
C159	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		C315	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	
C161	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		C316	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V	
C163	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V		C322	1-135-960-91	CERAMIC CHIP	10uF	10%	25V	
C165	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V		* C328	1-112-298-91	CERAMIC CHIP	1uF	10%	16V	
C166	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V		C329	1-112-300-91	CERAMIC CHIP	4.7uF	10%	10V	
C168	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V		* C331	1-112-298-91	CERAMIC CHIP	1uF	10%	16V	
C170	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		C332	1-112-300-91	CERAMIC CHIP	4.7uF	10%	10V	
C174	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C336	1-135-960-91	CERAMIC CHIP	10uF	10%	25V	
C202	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C337	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	
C203	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C338	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V	
C204	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		* C339	1-112-298-91	CERAMIC CHIP	1uF	10%	16V	
C205	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C343	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C206	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C344	1-112-300-91	CERAMIC CHIP	4.7uF	10%	10V	
C207	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C345	1-100-159-91	CERAMIC CHIP	22uF	10%	6.3V	
C208	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C346	1-100-159-91	CERAMIC CHIP	22uF	10%	6.3V	
C211	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C349	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C212	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C350	1-100-672-11	CERAMIC CHIP	10uF	20%	16V	
C213	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		* C352	1-112-298-91	CERAMIC CHIP	1uF	10%	16V	
C214	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C355	1-112-300-91	CERAMIC CHIP	4.7uF	10%	10V	
C215	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C357	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C216	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C358	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C222	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V		C361	1-114-532-21	ELECT CHIP	330uF	20%	4V	
C223	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C362	1-114-532-21	ELECT CHIP	330uF	20%	4V	
C225	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C366	1-100-159-91	CERAMIC CHIP	22uF	10%	6.3V	
C227	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C369	1-112-776-11	CERAMIC CHIP	0.0047uF	10%	50V	
C231	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C376	1-100-159-91	CERAMIC CHIP	22uF	10%	6.3V	
C232	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		* C379	1-112-298-91	CERAMIC CHIP	1uF	10%	16V	
C234	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C392	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C235	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C395	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C237	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C396	1-164-936-11	CERAMIC CHIP	680PF	10%	50V	
C238	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V		C397	1-112-775-11	CERAMIC CHIP	0.0022uF	10%	50V	
C239	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C398	1-164-936-11	CERAMIC CHIP	680PF	10%	50V	
C240	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V		C399	1-112-775-11	CERAMIC CHIP	0.0022uF	10%	50V	

Ref. No.	Part No.	Description	Remark				Ref. No.	Part No.	Description	Remark			
C402	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C712	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C403	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C713	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C404	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C722	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C405	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C738	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	
C406	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C747	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	
C407	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C757	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V	
C408	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C758	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C409	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C759	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	
C410	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C760	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V	
C411	1-164-847-11	CERAMIC CHIP	7PF	0.5PF	50V		C762	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	
C413	1-164-847-11	CERAMIC CHIP	7PF	0.5PF	50V		C801	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V	
C414	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C802	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C415	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C803	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C416	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C804	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V	
C417	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C805	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C418	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C807	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C419	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C810	1-137-765-21	ELECT CHIP	47uF	20%	16V	
C420	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C812	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C421	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C813	1-100-672-11	CERAMIC CHIP	10uF	20%	16V	
C422	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C814	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C423	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C815	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	
C425	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C817	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	
C427	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C818	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V	
C428	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C819	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V	
C429	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C821	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V	
C430	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C824	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	
C431	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C826	1-165-887-91	CERAMIC CHIP	0.22uF	10%	6.3V	
C432	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C828	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V	
C433	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		* C829	1-112-298-91	CERAMIC CHIP	1uF	10%	16V	
C434	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C830	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	
C435	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C831	1-137-765-21	ELECT CHIP	47uF	20%	16V	
C436	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C833	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V	
C437	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C834	1-137-765-21	ELECT CHIP	47uF	20%	16V	
C440	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V		C835	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V	
C441	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V		C840	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C442	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C841	1-100-740-81	CERAMIC CHIP	390PF	5%	50V	
C443	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C842	1-100-740-81	CERAMIC CHIP	390PF	5%	50V	
C511	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C843	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C513	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C844	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	
C514	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C845	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	
C517	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		C846	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C602	1-165-884-11	CERAMIC CHIP	2.2uF	10%	6.3V		C847	1-100-740-81	CERAMIC CHIP	390PF	5%	50V	
C603	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C848	1-100-740-81	CERAMIC CHIP	390PF	5%	50V	
C604	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		C849	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C605	1-165-884-11	CERAMIC CHIP	2.2uF	10%	6.3V		C850	1-137-765-21	ELECT CHIP	47uF	20%	16V	
C606	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C851	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	
C607	1-164-848-11	CERAMIC CHIP	8PF	0.5PF	50V		C852	1-137-765-21	ELECT CHIP	47uF	20%	16V	
C608	1-164-848-11	CERAMIC CHIP	8PF	0.5PF	50V		C853	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
* C609	1-112-298-91	CERAMIC CHIP	1uF	10%	16V		C855	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C610	1-128-993-21	ELECT CHIP	22uF	20%	10V		C856	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
* C613	1-112-298-91	CERAMIC CHIP	1uF	10%	16V		C858	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C617	1-128-394-11	ELECT CHIP	220uF	20%	10V		C859	1-137-765-21	ELECT CHIP	47uF	20%	16V	
C618	1-100-966-91	CERAMIC CHIP	10uF	20%	10V		C862	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C619	1-100-966-91	CERAMIC CHIP	10uF	20%	10V		C864	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C624	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		C865	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C704	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		C867	1-137-765-21	ELECT CHIP	47uF	20%	16V	
C706	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V		C869	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	
C707	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		C905	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	
C708	1-165-887-91	CERAMIC CHIP	0.22uF	10%	6.3V		C1101	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V	
C709	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		C1106	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
C1107	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	C1321	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C1108	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	C1326	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C1109	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	C1328	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1110	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V	C1329	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1111	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	C1331	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1112	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	C1332	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1113	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	C1335	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C1114	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V	C1350	1-117-681-11	ELECT CHIP	100uF	20%	16V
C1115	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	C1351	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1116	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	C1353	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C1117	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	C1356	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C1118	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V	C1359	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1119	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	C1361	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C1203	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	C1369	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V
C1208	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	C1370	1-114-808-11	CERAMIC CHIP	0.033uF	10%	16V
C1209	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	C1371	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1210	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	C1372	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1215	1-128-993-21	ELECT CHIP	22uF	20%	10V	C1374	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C1222	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	C1375	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C1223	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	C1376	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V
C1224	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	C1377	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C1231	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	C1378	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V
C1233	1-128-993-21	ELECT CHIP	22uF	20%	10V	C1382	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V
C1245	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V	C1384	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C1252	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	C1385	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C1253	1-164-874-11	CERAMIC CHIP	100PF	5%	50V	C1386	1-114-411-21	CERAMIC CHIP	0.33uF	10%	6.3V
C1254	1-164-874-11	CERAMIC CHIP	100PF	5%	50V	C1387	1-114-411-21	CERAMIC CHIP	0.33uF	10%	6.3V
C1255	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	C1389	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C1256	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	C1393	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C1257	1-164-874-11	CERAMIC CHIP	100PF	5%	50V	C1394	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V
C1258	1-164-874-11	CERAMIC CHIP	100PF	5%	50V	C1395	1-112-775-11	CERAMIC CHIP	0.0022uF	10%	50V
C1259	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V	C1401	1-100-591-91	CERAMIC CHIP	1uF	10%	25V
C1261	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	C1402	1-100-591-91	CERAMIC CHIP	1uF	10%	25V
C1262	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	C1407	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V
C1263	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V	C1408	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1264	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V	C1409	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1265	1-117-681-11	ELECT CHIP	100uF	20%	16V	C1410	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1266	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	C1411	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1267	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	C1412	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1268	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V	C1413	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1271	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	C1414	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1272	1-117-681-11	ELECT CHIP	100uF	20%	16V	C1415	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1273	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	C1416	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1279	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	C1417	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1281	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V	C1419	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1282	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V	C1420	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1286	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V	C4201	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C1287	1-165-884-11	CERAMIC CHIP	2.2uF	10%	6.3V	C4203	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C1288	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V	C4205	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C1289	1-164-849-11	CERAMIC CHIP	9PF	0.5PF	50V	C4207	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1293	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	C4209	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1295	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	C4220	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V
C1301	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	C4221	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1303	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V	C4225	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V
C1305	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	C4226	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V
C1310	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V	C4227	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C1311	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	C4228	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V
C1314	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V	C4230	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V
C1315	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V	C4235	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V
C1316	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V	C4237	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description				Remark
C4245	1-164-874-11	CERAMIC CHIP	100PF	5%	50V								
C4246	1-164-874-11	CERAMIC CHIP	100PF	5%	50V				< FERRITE BEAD >				
C4247	1-164-874-11	CERAMIC CHIP	100PF	5%	50V								
C4250	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		FB101	1-400-794-21	EMI FERRITE (SMD) (1608)				
							FB201	1-400-794-21	EMI FERRITE (SMD) (1608)				
C4252	1-100-916-11	CERAMIC CHIP	0.1uF	10%	16V		FB301	1-400-794-21	EMI FERRITE (SMD) (1608)				
C4253	1-114-214-81	CERAMIC CHIP	470PF	5%	50V		FB302	1-400-794-21	EMI FERRITE (SMD) (1608)				
C4262	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		FB303	1-400-794-21	EMI FERRITE (SMD) (1608)				
C4263	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V								
C4264	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		FB401	1-400-794-21	EMI FERRITE (SMD) (1608)				
							FB601	1-400-794-21	EMI FERRITE (SMD) (1608)				
C4265	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		FB1101	1-400-382-11	EMI FERRITE (SMD) (1608)				
C4266	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		FB1102	1-400-382-11	EMI FERRITE (SMD) (1608)				
C4268	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		FB1103	1-400-382-11	EMI FERRITE (SMD) (1608)				
C4272	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V								
C4273	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V				< FLUORESCENT INDICATOR TUBE >				
C4274	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		FL303	1-234-986-11	FILTER, EMI REMOVAL (1608SMD)				
C4276	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		FL304	1-234-939-21	FILTER, EMI REMOVAL (SMD)				
C4282	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		FL305	1-234-939-21	FILTER, EMI REMOVAL (SMD)				
C4283	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		FL307	1-234-986-11	FILTER, EMI REMOVAL (1608SMD)				
C4284	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		FL308	1-234-986-11	FILTER, EMI REMOVAL (1608SMD)				
C4285	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V				< IC >				
C4286	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V								
C4287	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V		IC301	6-711-237-01	IC NJM2878F3-33 (TE2)				
C4292	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		IC304	6-705-337-01	IC TK11150CSCL-G				
C4293	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V		IC601	6-712-613-01	IC SI-3010KM-TLS				
							IC703	6-706-487-01	IC TC7SH08FU (T5RSOYJF)				
C4294	1-100-905-11	CERAMIC CHIP	0.001uF	10%	50V		IC704	6-702-302-01	IC TK11133CSCL-G				
C4295	1-100-966-91	CERAMIC CHIP	10uF	20%	10V								
		< CONNECTOR >					IC705	6-705-337-01	IC TK11150CSCL-G				
							IC802	6-711-237-01	IC NJM2878F3-33 (TE2)				
CN301	1-816-587-21	PIN, CONNECTOR (PC BOARD) 15P					IC804	6-702-630-01	IC AK4382AVTN-E2				
CN302	1-573-290-21	PIN, CONNECTOR (1.5MM) (SMD) 4P					IC805	6-711-237-01	IC NJM2878F3-33 (TE2)				
CN601	1-573-768-61	PIN, CONNECTOR (1.5MM) (SMD) 5P					IC806	8-759-667-17	IC L79M05TLL-SONY-TL-E				
CN602	1-573-768-21	PIN, CONNECTOR (1.5MM) (SMD) 5P											
CN702	1-821-450-12	CONNECTOR, HDMI (HDMI OUT)					IC807	8-759-100-96	IC uPC4558G2				
							IC808	6-713-907-01	IC NJM2564BV (TE2)				
							IC1101	6-712-663-11	IC LAN8700C-AEZG-CTI				
CN801	1-573-768-21	PIN, CONNECTOR (1.5MM) (SMD) 5P					IC1351	6-713-929-01	IC BD35630HFV-TR				
CN902	1-573-806-21	PIN, CONNECTOR (1.5MM) (SMD) 6P					IC1401	6-708-762-01	IC PQ200WNA1ZPH				
CN1101	1-819-875-31	ETHERNET CONNECTOR (8P) (LAN (100))											
CN1402	1-580-756-21	PIN, CONNECTOR (SMD) 7P					IC1403	6-808-722-01	IC R5F212A7SNA18FP				
CN1403	1-691-550-11	PIN, CONNECTOR (1.5MM) (SMD) 3P											
									< COIL >				
CN1404	1-820-116-51	CONNECTOR, FFC/FPC 17P											
CN4201	1-794-343-51	CONNECTOR, FFC/FPC 18P					L302	1-481-246-11	INDUCTOR 2.2uH				
							L304	1-400-789-21	INDUCTOR 2.2uH				
		< DIODE >					L601	1-400-180-21	INDUCTOR, EMI FERRITE (1608)				
							L602	1-400-180-21	INDUCTOR, EMI FERRITE (1608)				
D301	8-719-081-67	DIODE M1FM3					L603	1-414-843-21	INDUCTOR 18nH				
D303	6-502-248-01	DIODE KDZTR3.9B											
D304	6-502-248-01	DIODE KDZTR3.9B					L604	1-414-843-21	INDUCTOR 18nH				
D307	8-719-081-67	DIODE M1FM3					L605	1-457-223-11	COMMON MODE CHOKE COIL				
D308	6-501-724-01	DIODE MAZ8047G0LS0					L607	1-414-843-21	INDUCTOR 18nH				
							L608	1-414-843-21	INDUCTOR 18nH				
D601	6-501-817-01	DIODE MA2J1110GLS0					L609	1-457-223-11	COMMON MODE CHOKE COIL				
D602	6-500-701-01	DIODE PGB1010603NR											
D603	6-500-701-01	DIODE PGB1010603NR					L705	1-457-374-21	COMMOM MODE CHOKE COIL				
D604	6-500-701-01	DIODE PGB1010603NR					L706	1-457-374-21	COMMOM MODE CHOKE COIL				
D605	6-500-701-01	DIODE PGB1010603NR					L707	1-457-374-21	COMMOM MODE CHOKE COIL				
							L708	1-457-374-21	COMMOM MODE CHOKE COIL				
D802	6-501-817-01	DIODE MA2J1110GLS0					L1287	1-400-789-21	INDUCTOR 2.2uH				
D803	6-500-335-01	DIODE MC2838-T112-1											
* D806	6-501-930-01	DIODE MAZW068HGLS0							< FUSE >				
* D807	6-501-930-01	DIODE MAZW068HGLS0					△ PS301	1-523-095-31	FUSE 3.15A 32V				
* D808	6-501-930-01	DIODE MAZW068HGLS0					△ PS303	1-523-095-31	FUSE 3.15A 32V				
							△ PS304	1-523-094-31	FUSE 2A 50V				
* D809	6-501-930-01	DIODE MAZW068HGLS0					△ PS802	1-523-093-31	FUSE 0.5A 50V				
* D810	6-501-930-01	DIODE MAZW068HGLS0					△ PS803	1-523-074-31	FUSE 1A 32V				
* D811	6-501-930-01	DIODE MAZW068HGLS0											

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
△ PS804	1-523-074-31	FUSE	1A	32V		R304	1-218-953-11	METAL CHIP	1K	5%	1/16W
		< TRANSISTOR >				R305	1-218-953-11	METAL CHIP	1K	5%	1/16W
Q301	6-552-024-01	TRANSISTOR	RRH070N03TB1			R309	1-218-953-11	METAL CHIP	1K	5%	1/16W
Q302	6-550-663-01	TRANSISTOR	RSS100N03FD5TB			R312	1-218-973-11	METAL CHIP	47K	5%	1/16W
Q303	6-552-024-01	TRANSISTOR	RRH070N03TB1			R314	1-218-953-11	METAL CHIP	1K	5%	1/16W
Q304	6-550-663-01	TRANSISTOR	RSS100N03FD5TB			R315	1-208-697-11	METAL CHIP	3.9K	0.5%	1/16W
Q305	8-729-028-96	TRANSISTOR	DTC114EUA-T106			R316	1-208-687-11	METAL CHIP	1.5K	0.5%	1/16W
						R317	1-208-711-11	METAL CHIP	15K	0.5%	1/16W
Q306	6-551-456-01	TRANSISTOR	RTR020P02TL			R318	1-208-909-11	METAL CHIP	8.2K	0.5%	1/16W
Q307	6-551-690-01	TRANSISTOR	RT3N11M-TP-1			R319	1-208-939-11	METAL CHIP	150K	0.5%	1/16W
Q308	6-551-690-01	TRANSISTOR	RT3N11M-TP-1			R320	1-218-947-11	METAL CHIP	330	5%	1/16W
Q309	8-729-028-96	TRANSISTOR	DTC114EUA-T106			R321	1-218-973-11	METAL CHIP	47K	5%	1/16W
Q702	6-551-714-01	TRANSISTOR	INK0001AC1-T112A-1			R322	1-208-939-11	METAL CHIP	150K	0.5%	1/16W
						R323	1-208-703-11	METAL CHIP	6.8K	0.5%	1/16W
Q801	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF			R324	1-218-929-11	METAL CHIP	10	5%	1/16W
Q805	8-729-028-73	TRANSISTOR	DTA114EUA-T106			R325	1-208-683-11	METAL CHIP	1K	0.5%	1/16W
Q806	8-729-029-14	TRANSISTOR	DTC144EUA-T106			R331	1-208-911-11	METAL CHIP	10K	0.5%	1/16W
Q809	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF			R334	1-208-911-11	METAL CHIP	10K	0.5%	1/16W
Q812	6-551-696-01	TRANSISTOR	ISA1235AC1TP-1EF			R338	1-218-953-11	METAL CHIP	1K	5%	1/16W
						R339	1-218-970-11	METAL CHIP	27K	5%	1/16W
Q813	8-729-028-83	TRANSISTOR	DTA124EUA-T106			R345	1-218-947-11	METAL CHIP	330	5%	1/16W
Q818	8-729-027-52	TRANSISTOR	DTC124EKA-T146			R349	1-208-695-11	METAL CHIP	3.3K	0.5%	1/16W
Q1408	6-551-690-01	TRANSISTOR	RT3N11M-TP-1			R352	1-218-953-11	METAL CHIP	1K	5%	1/16W
		< RESISTOR >				R353	1-208-671-11	METAL CHIP	330	0.5%	1/16W
R103	1-208-683-11	METAL CHIP	1K	0.5%	1/16W	R355	1-208-911-11	METAL CHIP	10K	0.5%	1/16W
R104	1-208-683-11	METAL CHIP	1K	0.5%	1/16W	R356	1-216-815-11	METAL CHIP	330	5%	1/10W
R108	1-218-943-11	METAL CHIP	150	5%	1/16W	R357	1-218-953-11	METAL CHIP	1K	5%	1/16W
R109	1-218-943-11	METAL CHIP	150	5%	1/16W	R363	1-216-815-11	METAL CHIP	330	5%	1/10W
R110	1-218-943-11	METAL CHIP	150	5%	1/16W	R364	1-216-815-11	METAL CHIP	330	5%	1/10W
						R365	1-218-953-11	METAL CHIP	1K	5%	1/16W
R111	1-218-943-11	METAL CHIP	150	5%	1/16W	R369	1-218-965-11	METAL CHIP	10K	5%	1/16W
R115	1-218-929-11	METAL CHIP	10	5%	1/16W	R370	1-218-953-11	METAL CHIP	1K	5%	1/16W
R116	1-218-929-11	METAL CHIP	10	5%	1/16W	R371	1-218-951-11	METAL CHIP	680	5%	1/16W
R117	1-218-929-11	METAL CHIP	10	5%	1/16W	R372	1-218-977-11	METAL CHIP	100K	5%	1/16W
R118	1-218-929-11	METAL CHIP	10	5%	1/16W						
R121	1-218-941-81	METAL CHIP	100	5%	1/16W	R373	1-218-977-11	METAL CHIP	100K	5%	1/16W
R123	1-208-683-11	METAL CHIP	1K	0.5%	1/16W	R374	1-218-951-11	METAL CHIP	680	5%	1/16W
R124	1-208-683-11	METAL CHIP	1K	0.5%	1/16W	R405	1-218-947-11	METAL CHIP	330	5%	1/16W
R125	1-218-941-81	METAL CHIP	100	5%	1/16W	R407	1-218-933-11	METAL CHIP	22	5%	1/16W
R127	1-208-683-11	METAL CHIP	1K	0.5%	1/16W	R409	1-218-945-11	METAL CHIP	220	5%	1/16W
						R506	1-218-965-11	METAL CHIP	10K	5%	1/16W
R128	1-208-683-11	METAL CHIP	1K	0.5%	1/16W	R510	1-218-965-11	METAL CHIP	10K	5%	1/16W
R203	1-208-683-11	METAL CHIP	1K	0.5%	1/16W	R512	1-218-965-11	METAL CHIP	10K	5%	1/16W
R204	1-208-683-11	METAL CHIP	1K	0.5%	1/16W	R514	1-218-965-11	METAL CHIP	10K	5%	1/16W
R207	1-208-663-11	METAL CHIP	150	0.5%	1/16W	R515	1-218-965-11	METAL CHIP	10K	5%	1/16W
R208	1-208-663-11	METAL CHIP	150	0.5%	1/16W						
R210	1-218-943-11	METAL CHIP	150	5%	1/16W	R517	1-218-935-11	METAL CHIP	33	5%	1/16W
R211	1-218-943-11	METAL CHIP	150	5%	1/16W	R519	1-218-959-11	METAL CHIP	3.3K	5%	1/16W
R212	1-218-943-11	METAL CHIP	150	5%	1/16W	R523	1-218-941-81	METAL CHIP	100	5%	1/16W
R213	1-218-943-11	METAL CHIP	150	5%	1/16W	R525	1-218-965-11	METAL CHIP	10K	5%	1/16W
R217	1-218-929-11	METAL CHIP	10	5%	1/16W	R526	1-218-965-11	METAL CHIP	10K	5%	1/16W
						R527	1-218-965-11	METAL CHIP	10K	5%	1/16W
R218	1-218-929-11	METAL CHIP	10	5%	1/16W	R550	1-218-965-11	METAL CHIP	10K	5%	1/16W
R219	1-218-929-11	METAL CHIP	10	5%	1/16W	R551	1-218-965-11	METAL CHIP	10K	5%	1/16W
R220	1-218-929-11	METAL CHIP	10	5%	1/16W	R556	1-218-965-11	METAL CHIP	10K	5%	1/16W
R223	1-218-941-81	METAL CHIP	100	5%	1/16W	R558	1-218-965-11	METAL CHIP	10K	5%	1/16W
R225	1-208-683-11	METAL CHIP	1K	0.5%	1/16W						
						R559	1-218-965-11	METAL CHIP	10K	5%	1/16W
R226	1-208-683-11	METAL CHIP	1K	0.5%	1/16W	R560	1-218-965-11	METAL CHIP	10K	5%	1/16W
R227	1-218-941-81	METAL CHIP	100	5%	1/16W	R561	1-218-965-11	METAL CHIP	10K	5%	1/16W
R229	1-208-683-11	METAL CHIP	1K	0.5%	1/16W	R563	1-218-965-11	METAL CHIP	10K	5%	1/16W
R230	1-208-683-11	METAL CHIP	1K	0.5%	1/16W	R565	1-218-965-11	METAL CHIP	10K	5%	1/16W
R301	1-218-953-11	METAL CHIP	1K	5%	1/16W						
						R566	1-218-965-11	METAL CHIP	10K	5%	1/16W
R303	1-218-953-11	METAL CHIP	1K	5%	1/16W						

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R601	1-218-936-11	METAL CHIP	39	5%	1/16W	R827	1-208-691-11	METAL CHIP	2.2K	0.5%	1/16W
R602	1-218-936-11	METAL CHIP	39	5%	1/16W	R828	1-208-691-11	METAL CHIP	2.2K	0.5%	1/16W
R603	1-208-688-11	METAL CHIP	1.6K	0.5%	1/16W	R829	1-208-695-11	METAL CHIP	3.3K	0.5%	1/16W
R604	1-218-936-11	METAL CHIP	39	5%	1/16W	R830	1-208-695-11	METAL CHIP	3.3K	0.5%	1/16W
R605	1-218-936-11	METAL CHIP	39	5%	1/16W	R844	1-218-965-11	METAL CHIP	10K	5%	1/16W
R606	1-218-965-11	METAL CHIP	10K	5%	1/16W	R845	1-218-965-11	METAL CHIP	10K	5%	1/16W
R607	1-218-965-11	METAL CHIP	10K	5%	1/16W	R846	1-218-965-11	METAL CHIP	10K	5%	1/16W
R609	1-218-952-11	METAL CHIP	820	5%	1/16W	R847	1-218-965-11	METAL CHIP	10K	5%	1/16W
R610	1-218-967-11	METAL CHIP	15K	5%	1/16W	R864	1-218-939-11	METAL CHIP	68	5%	1/16W
R611	1-218-967-11	METAL CHIP	15K	5%	1/16W	R865	1-218-939-11	METAL CHIP	68	5%	1/16W
R615	1-218-965-11	METAL CHIP	10K	5%	1/16W	R866	1-218-939-11	METAL CHIP	68	5%	1/16W
R616	1-208-691-11	METAL CHIP	2.2K	0.5%	1/16W	R867	1-218-939-11	METAL CHIP	68	5%	1/16W
R617	1-208-721-11	METAL CHIP	39K	0.5%	1/16W	R868	1-218-941-81	METAL CHIP	100	5%	1/16W
R618	1-208-911-11	METAL CHIP	10K	0.5%	1/16W	R869	1-218-959-11	METAL CHIP	3.3K	5%	1/16W
R621	1-218-990-81	SHORT CHIP	0			R873	1-218-953-11	METAL CHIP	1K	5%	1/16W
R630	1-216-833-11	METAL CHIP	10K	5%	1/10W	R877	1-218-961-11	METAL CHIP	4.7K	5%	1/16W
R631	1-218-967-11	METAL CHIP	15K	5%	1/16W	R878	1-218-965-11	METAL CHIP	10K	5%	1/16W
R632	1-218-967-11	METAL CHIP	15K	5%	1/16W	R879	1-218-965-11	METAL CHIP	10K	5%	1/16W
R635	1-218-941-81	METAL CHIP	100	5%	1/16W	R881	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R637	1-218-990-81	SHORT CHIP	0			R882	1-218-949-11	METAL CHIP	470	5%	1/16W
R638	1-218-990-81	SHORT CHIP	0			R883	1-218-953-11	METAL CHIP	1K	5%	1/16W
R639	1-216-295-91	SHORT CHIP	0			R884	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R711	1-218-865-11	METAL CHIP	5.6K	0.5%	1/10W	R885	1-218-965-11	METAL CHIP	10K	5%	1/16W
R712	1-218-841-11	METAL CHIP	560	0.5%	1/10W	R888	1-218-973-11	METAL CHIP	47K	5%	1/16W
R723	1-218-967-11	METAL CHIP	15K	5%	1/16W	R889	1-218-977-11	METAL CHIP	100K	5%	1/16W
R724	1-218-959-11	METAL CHIP	3.3K	5%	1/16W	R893	1-218-965-11	METAL CHIP	10K	5%	1/16W
R725	1-218-959-11	METAL CHIP	3.3K	5%	1/16W	R895	1-218-965-11	METAL CHIP	10K	5%	1/16W
R728	1-218-973-11	METAL CHIP	47K	5%	1/16W	R896	1-208-700-11	METAL CHIP	5.1K	0.5%	1/16W
R729	1-218-961-11	METAL CHIP	4.7K	5%	1/16W	R897	1-208-700-11	METAL CHIP	5.1K	0.5%	1/16W
R730	1-218-959-11	METAL CHIP	3.3K	5%	1/16W	R898	1-208-700-11	METAL CHIP	5.1K	0.5%	1/16W
R732	1-218-967-11	METAL CHIP	15K	5%	1/16W	R899	1-208-700-11	METAL CHIP	5.1K	0.5%	1/16W
R733	1-218-956-11	METAL CHIP	1.8K	5%	1/16W	R919	1-218-990-81	SHORT CHIP	0		
R734	1-218-956-11	METAL CHIP	1.8K	5%	1/16W	R921	1-218-965-11	METAL CHIP	10K	5%	1/16W
R737	1-216-864-11	SHORT CHIP	0			R922	1-218-965-11	METAL CHIP	10K	5%	1/16W
R738	1-216-864-11	SHORT CHIP	0			R923	1-218-965-11	METAL CHIP	10K	5%	1/16W
R739	1-216-864-11	SHORT CHIP	0			R926	1-218-933-11	METAL CHIP	22	5%	1/16W
R740	1-216-864-11	SHORT CHIP	0			R927	1-218-933-11	METAL CHIP	22	5%	1/16W
R741	1-216-864-11	SHORT CHIP	0			R928	1-218-933-11	METAL CHIP	22	5%	1/16W
R801	1-218-965-11	METAL CHIP	10K	5%	1/16W	R930	1-218-965-11	METAL CHIP	10K	5%	1/16W
R802	1-218-953-11	METAL CHIP	1K	5%	1/16W	R933	1-218-965-11	METAL CHIP	10K	5%	1/16W
R803	1-218-953-11	METAL CHIP	1K	5%	1/16W	R934	1-218-933-11	METAL CHIP	22	5%	1/16W
R804	1-218-953-11	METAL CHIP	1K	5%	1/16W	R935	1-218-933-11	METAL CHIP	22	5%	1/16W
R805	1-218-937-11	METAL CHIP	47	5%	1/16W	R936	1-218-965-11	METAL CHIP	10K	5%	1/16W
R806	1-218-937-11	METAL CHIP	47	5%	1/16W	R937	1-218-933-11	METAL CHIP	22	5%	1/16W
R807	1-218-937-11	METAL CHIP	47	5%	1/16W	R938	1-218-965-11	METAL CHIP	10K	5%	1/16W
R808	1-218-937-11	METAL CHIP	47	5%	1/16W	R940	1-218-965-11	METAL CHIP	10K	5%	1/16W
R812	1-218-939-11	METAL CHIP	68	5%	1/16W	R941	1-218-965-11	METAL CHIP	10K	5%	1/16W
R813	1-218-939-11	METAL CHIP	68	5%	1/16W	R942	1-218-965-11	METAL CHIP	10K	5%	1/16W
R814	1-218-939-11	METAL CHIP	68	5%	1/16W	R948	1-218-965-11	METAL CHIP	10K	5%	1/16W
R816	1-218-935-11	METAL CHIP	33	5%	1/16W	R953	1-218-941-81	METAL CHIP	100	5%	1/16W
R817	1-218-945-11	METAL CHIP	220	5%	1/16W	R960	1-218-965-11	METAL CHIP	10K	5%	1/16W
R818	1-218-939-11	METAL CHIP	68	5%	1/16W	R962	1-218-933-11	METAL CHIP	22	5%	1/16W
R819	1-208-663-11	METAL CHIP	150	0.5%	1/16W	R963	1-218-933-11	METAL CHIP	22	5%	1/16W
R820	1-208-663-11	METAL CHIP	150	0.5%	1/16W	R977	1-218-965-11	METAL CHIP	10K	5%	1/16W
R821	1-208-883-81	METAL CHIP	680	0.5%	1/16W	R978	1-218-965-11	METAL CHIP	10K	5%	1/16W
R822	1-208-663-11	METAL CHIP	150	0.5%	1/16W	R1101	1-218-929-11	METAL CHIP	10	5%	1/16W
R823	1-208-663-11	METAL CHIP	150	0.5%	1/16W	R1102	1-208-692-11	METAL CHIP	2.4K	0.5%	1/16W
R824	1-208-663-11	METAL CHIP	150	0.5%	1/16W	R1104	1-208-911-11	METAL CHIP	10K	0.5%	1/16W
R825	1-208-675-11	METAL CHIP	470	0.5%	1/16W	R1108	1-218-965-11	METAL CHIP	10K	5%	1/16W
R826	1-218-965-11	METAL CHIP	10K	5%	1/16W	R1110	1-218-965-11	METAL CHIP	10K	5%	1/16W

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R1113	1-218-965-11	METAL CHIP	10K	5%	1/16W	R1413	1-218-941-81	METAL CHIP	100	5%	1/16W
R1118	1-218-965-11	METAL CHIP	10K	5%	1/16W	R1414	1-218-941-81	METAL CHIP	100	5%	1/16W
R1119	1-218-941-81	METAL CHIP	100	5%	1/16W	R1415	1-218-990-81	SHORT CHIP	0		
R1123	1-218-965-11	METAL CHIP	10K	5%	1/16W	R1416	1-218-990-81	SHORT CHIP	0		
R1124	1-218-990-81	SHORT CHIP	0			R1417	1-218-941-81	METAL CHIP	100	5%	1/16W
R1128	1-218-990-81	SHORT CHIP	0			R1418	1-218-941-81	METAL CHIP	100	5%	1/16W
R1133	1-218-965-11	METAL CHIP	10K	5%	1/16W	R1419	1-218-959-11	METAL CHIP	3.3K	5%	1/16W
R1134	1-218-965-11	METAL CHIP	10K	5%	1/16W	R1420	1-218-977-11	METAL CHIP	100K	5%	1/16W
R1135	1-218-965-11	METAL CHIP	10K	5%	1/16W	R1421	1-218-941-81	METAL CHIP	100	5%	1/16W
R1137	1-218-937-11	METAL CHIP	47	5%	1/16W	R1422	1-218-977-11	METAL CHIP	100K	5%	1/16W
R1138	1-218-937-11	METAL CHIP	47	5%	1/16W	R1427	1-218-965-11	METAL CHIP	10K	5%	1/16W
R1139	1-218-937-11	METAL CHIP	47	5%	1/16W	R1430	1-218-965-11	METAL CHIP	10K	5%	1/16W
R1141	1-218-955-11	METAL CHIP	1.5K	5%	1/16W	R1431	1-218-990-81	SHORT CHIP	0		
R1142	1-218-955-11	METAL CHIP	1.5K	5%	1/16W	R1432	1-218-965-11	METAL CHIP	10K	5%	1/16W
R1208	1-218-965-11	METAL CHIP	10K	5%	1/16W	R1435	1-218-990-81	SHORT CHIP	0		
R1209	1-218-957-11	METAL CHIP	2.2K	5%	1/16W	R1438	1-218-965-11	METAL CHIP	10K	5%	1/16W
R1210	1-218-957-11	METAL CHIP	2.2K	5%	1/16W	R1439	1-218-965-11	METAL CHIP	10K	5%	1/16W
R1211	1-218-965-11	METAL CHIP	10K	5%	1/16W	R1441	1-218-965-11	METAL CHIP	10K	5%	1/16W
R1212	1-218-965-11	METAL CHIP	10K	5%	1/16W	R1443	1-218-977-11	METAL CHIP	100K	5%	1/16W
R1223	1-218-965-11	METAL CHIP	10K	5%	1/16W	R1445	1-218-977-11	METAL CHIP	100K	5%	1/16W
R1231	1-218-965-11	METAL CHIP	10K	5%	1/16W	R1446	1-218-941-81	METAL CHIP	100	5%	1/16W
R1234	1-218-953-11	METAL CHIP	1K	5%	1/16W	R1448	1-218-958-11	METAL CHIP	2.7K	5%	1/16W
R1235	1-218-953-11	METAL CHIP	1K	5%	1/16W	R1450	1-218-941-81	METAL CHIP	100	5%	1/16W
R1236	1-218-953-11	METAL CHIP	1K	5%	1/16W	R1456	1-218-941-81	METAL CHIP	100	5%	1/16W
R1237	1-218-953-11	METAL CHIP	1K	5%	1/16W	R1459	1-218-965-11	METAL CHIP	10K	5%	1/16W
R1258	1-218-929-11	METAL CHIP	10	5%	1/16W	R1462	1-218-977-11	METAL CHIP	100K	5%	1/16W
R1259	1-218-933-11	METAL CHIP	22	5%	1/16W	R1464	1-218-977-11	METAL CHIP	100K	5%	1/16W
R1261	1-218-965-11	METAL CHIP	10K	5%	1/16W	R1465	1-218-981-91	METAL CHIP	220K	5%	1/16W
R1263	1-218-965-11	METAL CHIP	10K	5%	1/16W	R1466	1-218-990-81	SHORT CHIP	0		
R1271	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R1480	1-218-990-81	SHORT CHIP	0		
R1272	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R1482	1-218-965-11	METAL CHIP	10K	5%	1/16W
R1284	1-218-953-11	METAL CHIP	1K	5%	1/16W	R1483	1-218-965-11	METAL CHIP	10K	5%	1/16W
R1287	1-208-941-11	METAL CHIP	180K	0.5%	1/16W	R4212	1-218-965-11	METAL CHIP	10K	5%	1/16W
R1289	1-218-978-11	METAL CHIP	120K	5%	1/16W	R4214	1-218-965-11	METAL CHIP	10K	5%	1/16W
R1301	1-208-911-11	METAL CHIP	10K	0.5%	1/16W	R4217	1-218-949-11	METAL CHIP	470	5%	1/16W
R1302	1-208-711-11	METAL CHIP	15K	0.5%	1/16W	R4218	1-218-949-11	METAL CHIP	470	5%	1/16W
R1303	1-218-961-11	METAL CHIP	4.7K	5%	1/16W	R4219	1-218-990-81	SHORT CHIP	0		
R1305	1-218-929-11	METAL CHIP	10	5%	1/16W	R4222	1-218-971-11	METAL CHIP	33K	5%	1/16W
R1308	1-208-911-11	METAL CHIP	10K	0.5%	1/16W	R4223	1-218-971-11	METAL CHIP	33K	5%	1/16W
R1309	1-218-990-81	SHORT CHIP	0			R4224	1-218-971-11	METAL CHIP	33K	5%	1/16W
R1310	1-218-957-11	METAL CHIP	2.2K	5%	1/16W	R4225	1-218-965-11	METAL CHIP	10K	5%	1/16W
R1311	1-218-961-11	METAL CHIP	4.7K	5%	1/16W	R4228	1-208-931-11	METAL CHIP	68K	0.5%	1/16W
R1335	1-218-953-11	METAL CHIP	1K	5%	1/16W	R4229	1-218-892-11	METAL CHIP	75K	0.5%	1/10W
R1354	1-208-943-11	METAL CHIP	220K	0.5%	1/16W	R4231	1-208-930-11	METAL CHIP	62K	0.5%	1/16W
R1355	1-218-970-11	METAL CHIP	27K	5%	1/16W	R4232	1-208-930-11	METAL CHIP	62K	0.5%	1/16W
R1356	1-218-953-11	METAL CHIP	1K	5%	1/16W	R4255	1-218-961-11	METAL CHIP	4.7K	5%	1/16W
R1358	1-208-931-11	METAL CHIP	68K	0.5%	1/16W	R4258	1-218-965-11	METAL CHIP	10K	5%	1/16W
R1359	1-208-939-11	METAL CHIP	150K	0.5%	1/16W	R4259	1-218-965-11	METAL CHIP	10K	5%	1/16W
R1362	1-208-702-11	METAL CHIP	6.2K	0.5%	1/16W	R7040	1-218-965-11	METAL CHIP	10K	5%	1/16W
R1402	1-208-699-11	METAL CHIP	4.7K	0.5%	1/16W	R7042	1-218-965-11	METAL CHIP	10K	5%	1/16W
R1403	1-208-688-11	METAL CHIP	1.6K	0.5%	1/16W	R8005	1-218-959-11	METAL CHIP	3.3K	5%	1/16W
R1404	1-208-677-11	METAL CHIP	560	0.5%	1/16W	R8007	1-208-701-11	METAL CHIP	5.6K	0.5%	1/16W
R1405	1-208-886-81	METAL CHIP	910	0.5%	1/16W	R8008	1-208-701-11	METAL CHIP	5.6K	0.5%	1/16W
R1406	1-218-970-11	METAL CHIP	27K	5%	1/16W	R8009	1-218-965-11	METAL CHIP	10K	5%	1/16W
R1407	1-218-961-11	METAL CHIP	4.7K	5%	1/16W	R8010	1-208-663-11	METAL CHIP	150	0.5%	1/16W
R1408	1-218-981-91	METAL CHIP	220K	5%	1/16W	R8011	1-208-663-11	METAL CHIP	150	0.5%	1/16W
R1409	1-218-969-11	METAL CHIP	22K	5%	1/16W	R8019	1-208-663-11	METAL CHIP	150	0.5%	1/16W
R1410	1-218-953-11	METAL CHIP	1K	5%	1/16W	R8020	1-208-701-11	METAL CHIP	5.6K	0.5%	1/16W
R1411	1-218-990-81	SHORT CHIP	0			R8021	1-208-701-11	METAL CHIP	5.6K	0.5%	1/16W
R1412	1-218-941-81	METAL CHIP	100	5%	1/16W	R8022	1-208-663-11	METAL CHIP	150	0.5%	1/16W

Ref. No.	Part No.	Description	Remark		
R8029	1-218-949-11	METAL CHIP	470	5%	1/16W
R8030	1-218-949-11	METAL CHIP	470	5%	1/16W
R8031	1-218-973-11	METAL CHIP	47K	5%	1/16W
R8032	1-218-973-11	METAL CHIP	47K	5%	1/16W
R8035	1-218-957-11	METAL CHIP	2.2K	5%	1/16W
R8036	1-218-949-11	METAL CHIP	470	5%	1/16W
R8037	1-218-949-11	METAL CHIP	470	5%	1/16W
R8038	1-218-977-11	METAL CHIP	100K	5%	1/16W
R8039	1-218-941-81	METAL CHIP	100	5%	1/16W
R8040	1-220-169-11	METAL CHIP	75	5%	1/16W
R8041	1-220-169-11	METAL CHIP	75	5%	1/16W
R8042	1-220-169-11	METAL CHIP	75	5%	1/16W
R8043	1-220-169-11	METAL CHIP	75	5%	1/16W
R8044	1-220-169-11	METAL CHIP	75	5%	1/16W
R8045	1-220-169-11	METAL CHIP	75	5%	1/16W
< COMPOSITION CIRCUIT BLOCK >					
RB101	1-234-706-21	RES, NETWORK	39 (1005X4)		
RB102	1-234-706-21	RES, NETWORK	39 (1005X4)		
RB103	1-234-706-21	RES, NETWORK	39 (1005X4)		
RB104	1-234-706-21	RES, NETWORK	39 (1005X4)		
RB105	1-234-706-21	RES, NETWORK	39 (1005X4)		
RB201	1-234-706-21	RES, NETWORK	39 (1005X4)		
RB202	1-234-706-21	RES, NETWORK	39 (1005X4)		
RB203	1-234-706-21	RES, NETWORK	39 (1005X4)		
RB204	1-234-706-21	RES, NETWORK	39 (1005X4)		
RB205	1-234-706-21	RES, NETWORK	39 (1005X4)		
RB502	1-234-370-21	RES, NETWORK	22 (1005X4)		
RB503	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	1-234-370-21	RES, NETWORK	22 (1005X4)		
RB509	1-234-370-21	RES, NETWORK	22 (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)		
RB522	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)		
RB904	1-234-378-21	RES, NETWORK	10K (1005X4)		
RB905	1-234-375-21	RES, NETWORK	1K (1005X4)		
RB906	1-234-378-21	RES, NETWORK	10K (1005X4)		
RB1251	1-234-400-21	CONDUCTOR, NETWORK	(1005X4)		
RB1252	1-234-400-21	CONDUCTOR, NETWORK	(1005X4)		
RB1253	1-234-370-21	RES, NETWORK	22 (1005X4)		
RB1254	1-234-370-21	RES, NETWORK	22 (1005X4)		
RB1255	1-234-370-21	RES, NETWORK	22 (1005X4)		
RB1256	1-234-370-21	RES, NETWORK	22 (1005X4)		
RB1257	1-234-370-21	RES, NETWORK	22 (1005X4)		
RB1258	1-234-400-21	CONDUCTOR, NETWORK	(1005X4)		
RB1259	1-234-400-21	CONDUCTOR, NETWORK	(1005X4)		
RB1401	1-234-378-21	RES, NETWORK	10K (1005X4)		
RB1402	1-234-372-11	RES, NETWORK	100 (1005X4)		
RB1403	1-234-372-11	RES, NETWORK	100 (1005X4)		
RB7007	1-234-378-21	RES, NETWORK	10K (1005X4)		
RB7008	1-234-378-21	RES, NETWORK	10K (1005X4)		

Ref. No.	Part No.	Description	Remark		
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)		
RB7014	1-234-378-21	RES, NETWORK	10K (1005X4)		
RB7015	1-234-378-21	RES, NETWORK	10K (1005X4)		
< THERMISTOR >					
TH1401	1-804-949-11	THERMISTOR, NTC (SMD)			
< VIBRATOR >					
X1101	1-813-821-11	OSCILLATOR, CRYSTAL (50MHz)			
A-1719-602-A USB-016 BOARD, COMPLETE					

(Ref. No. 20,000 Series)					
< CAPACITOR >					
C781	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
< CONNECTOR >					
CN781	1-566-760-11	PIN, CONNECTOR (PC BOARD) 5P			
A-1719-604-A USB-017 BOARD, COMPLETE					

(Ref. No. 20,000 Series)					
< CAPACITOR >					
C791	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
< CONNECTOR >					
CN790	1-793-365-21	CONNECTOR, USB (A) (USB)			
* CN791	1-564-721-11	PIN, CONNECTOR (SMALL TYPE) 5P			
MISCELLANEOUS PARTS					

7	1-836-438-11	CABLE, COAXIAL (WITH U.F.L CN)			
8	1-836-439-11	CABLE, COAXIAL (WITH U.F.L CN)			
53	1-836-488-11	CABLE, FLEXIBLE FLAT (FMF-004)			
55	1-458-129-11	CARD, WIRELESS LAN			
57	1-836-489-11	CABLE, FLEXIBLE FLAT (FMH-002)			
△ 101	1-474-150-51	REGULATOR, SWITCHING (SRV2192U)			
154	1-836-504-11	CABLE, FLEXIBLE FLAT			
△ 155	8-820-424-02	DEVICE, OPTICAL KEM-430AAA/C2R			
M1401	1-787-879-11	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 critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

REVISION HISTORY

[illegible]