

# BDP-BX1/S350

RMT-B102A/B102P/B103A

## SERVICE MANUAL



Ver. 1.1 2008.08



Photo: BDP-S350

US Model  
Canadian Model  
BDP-BX1/S350

AEP Model  
UK Model  
Australian Model  
BDP-S350

### SPECIFICATIONS

#### System

**Laser:** Semiconductor laser

#### Inputs and outputs

##### (Jack name:

Jack type/Output level/Load impedance)

##### LINE OUT R-AUDIO-L:

Phono jack/2 Vrms/10 kilohms

##### DIGITAL OUT (OPTICAL):

Optical output jack/-18 dBm  
(wave length 660 nm)

##### DIGITAL OUT (COAXIAL):

Phono jack/0.5 Vp-p/75 ohms

##### HDMI OUT:

HDMI 19-pin standard connector

##### COMPONENT VIDEO OUT

##### (Y, Pb, Pr) (US, Canadian):

Phono jack/Y: 1.0 Vp-p/  
Pb, Pr: 0.7 Vp-p/75 ohms

##### (Y, Pb/Cb, Pr/Cr) (AEP, UK, Australian):

Phono jack/Y: 1.0 Vp-p/  
Pb/Cb, Pr/Cr: 0.7Vp-p/75ohms

##### LINE OUT VIDEO:

Phono jack/1.0 Vp-p/75 ohms

##### LINE OUT S VIDEO:

4-pin mini DIN/  
Y: 1.0Vp-p, C: 0.286Vp-p/75ohms  
(US, Canadian)  
4-pin mini DIN/  
Y: 1.0Vp-p, C: 0.3Vp-p/75ohms  
(AEP, UK, Australian)

##### LAN (100):

100BASE-TX Terminal

#### EXT:

External memory slot (For connecting the  
external memory)

DC output: 5 V 500 mA Max

#### General

##### Power requirements:

120V AC, 60Hz (US, Canadian)

220-240 V AC, 50/60Hz (AEP, UK, Australian)

##### Power consumption:

26 W

##### Dimensions (approx.):

430 mm × 220 mm × 60 mm

(17 in. × 8 3/4 in. × 2 3/8 in.)

(width/depth/height) incl. projecting parts

##### Mass (approx.):

2.9 kg (6 3/8 lb)

##### Operating temperature:

5 °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)
- HDMI cable (1) (BDP-BX1)
- Remote commander (remote) (1)
- Size AA (R6) batteries (2)

Specifications and design are subject to  
change without notice.

AVCHD™

HDMI



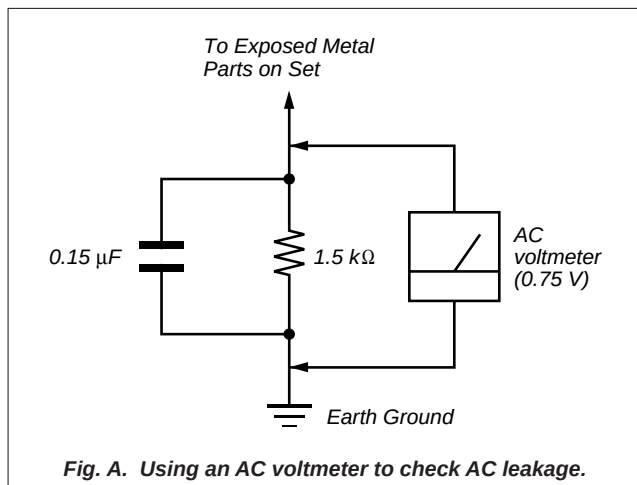
BLU-RAY DISC/DVD PLAYER

# 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 COM- POSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

### LEAKAGE TEST

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

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

### CAUTION:

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

### CAUTION

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



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

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the laser protective housing inside the enclosure. (AEP, UK, Australian)

### 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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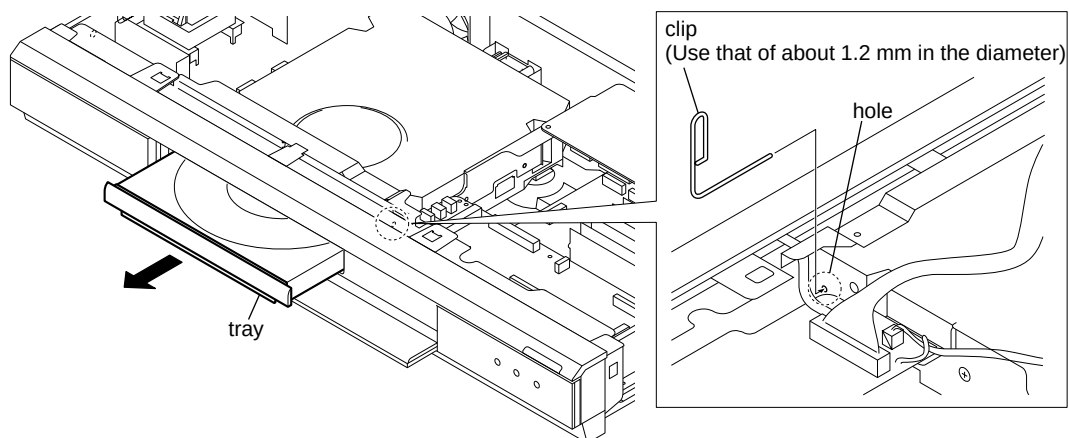
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## SECTION 1 SERVICE NOTE

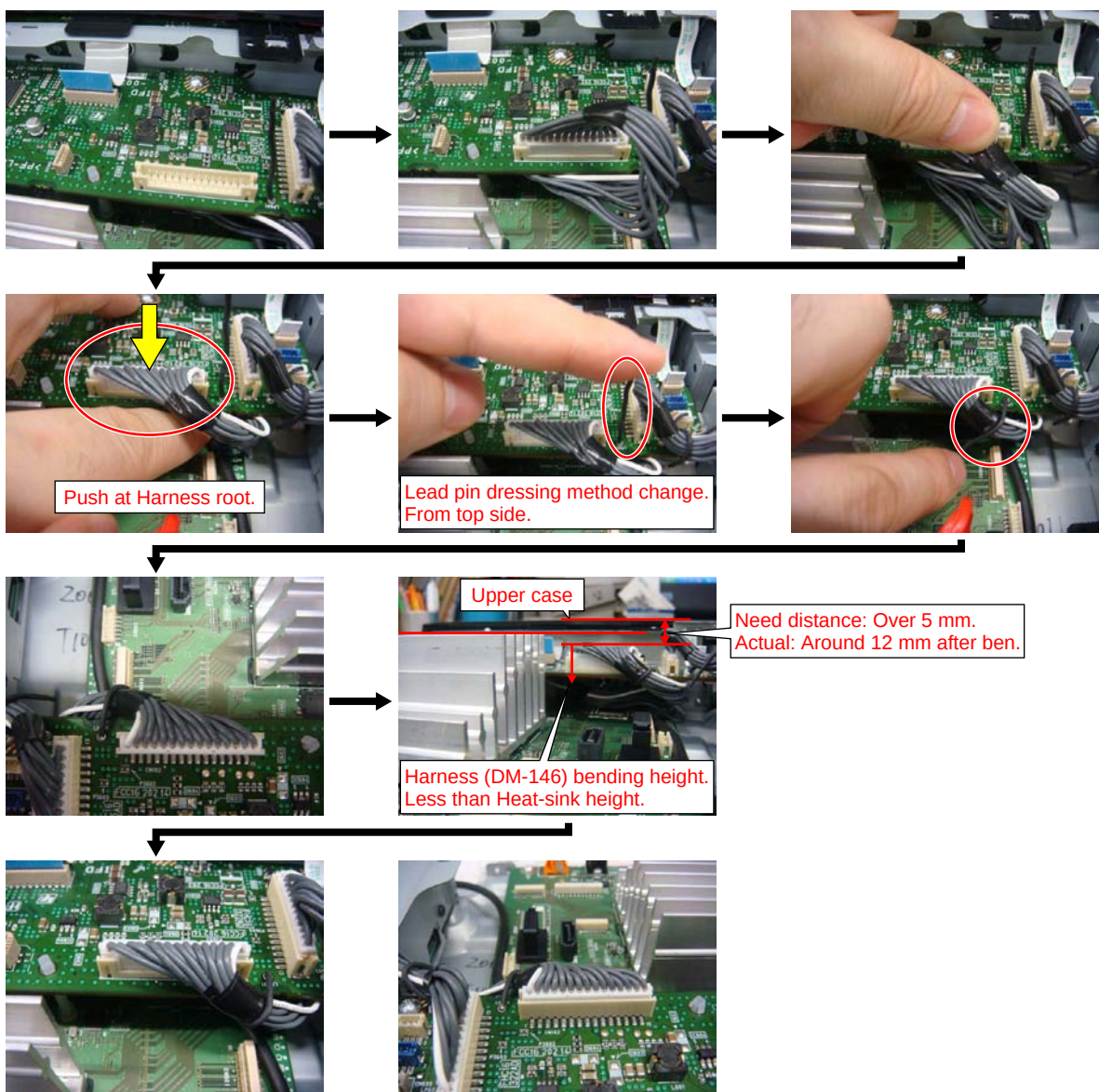
### 1-1. DISC REMOVAL PROCEDURE IF THE TRAY CANNOT BE EJECTED (FORCED EJECTION)

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. Attention at installation of harness (DM-146)



### 1-3. TEST DISC

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

#### 1-3-1. Operation and Display

##### Check Items

##### 1) BLX-104

1. Select 23.976Hz/1080p
2. Play "4.Motion pictures"
3. Check whether player can play back or not
4. Check each outputs

Video:

Composite/S Video/component/HDMI

Audio:

Digital out (Coaxial/Optical)/Audio out/5.1Ch output

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

##### 2) BLX-204

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

##### 3) CD (YEDS-18)

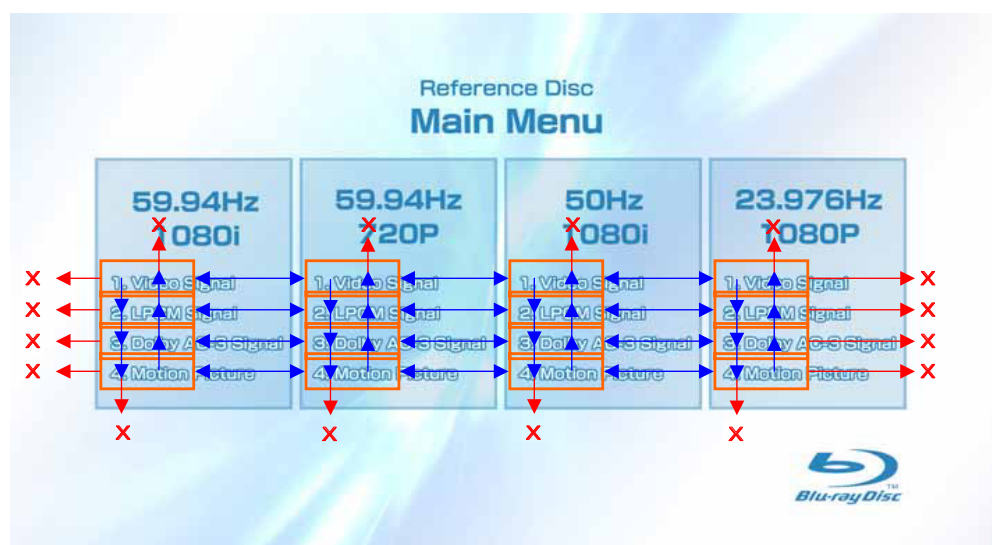
- Check whether player can play back or not  
(Check the sound output)

##### 4) HLX-504/505 (NTSC), HLX-506/507 (PAL)

1. After displayed Main Menu, select "1.Video"
2. Play "1.Color Bar 100%"  
(Check the picture and sound output)
3. Return to Menu
4. Play "Demonstration 4:3" or "5.Demonstration 16:9"  
(Check the picture and sound output)

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

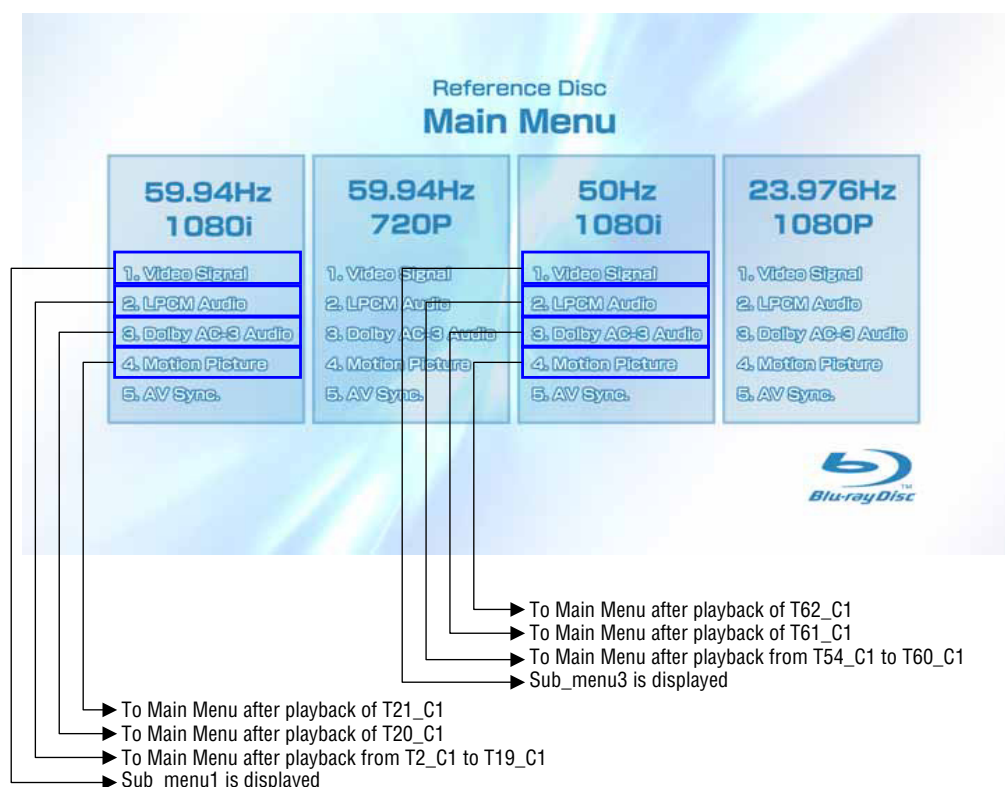
## Main Menu



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

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

## Main Menu



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

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

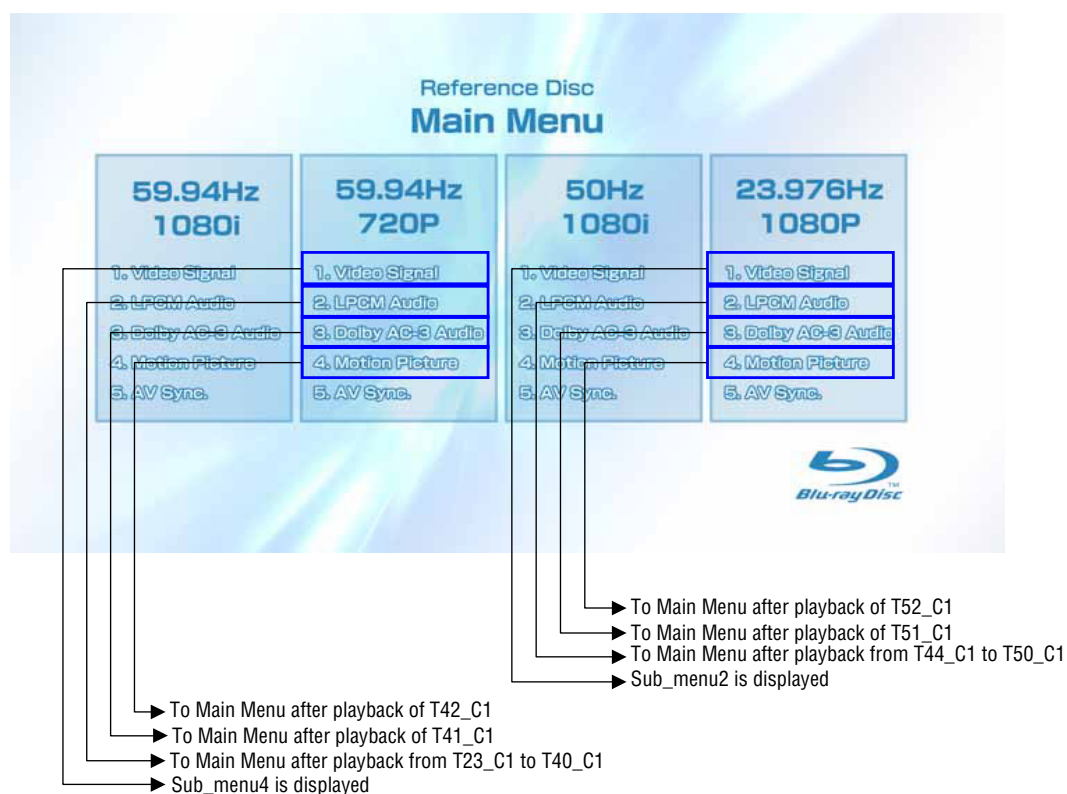
\* 5. AV Sync does not operate.

## Note:

Txx\_Cxx  
 T Chapter No.  
 C Title No.

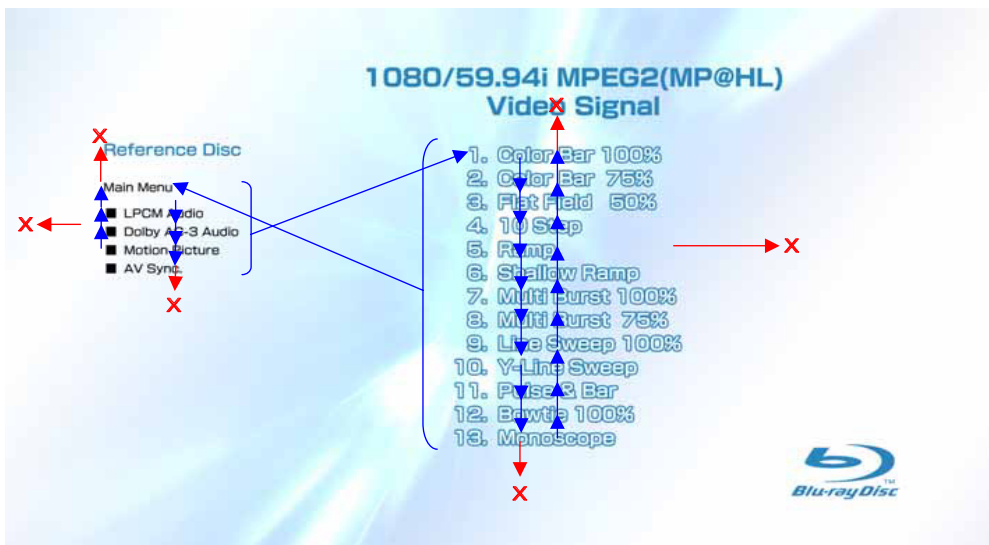
## 1-3-1-3. BLX-104 Menu Function (3)

## Main Menu



- \* When returning to Main Menu after playback from each button of 59.94Hz/720P, 1. Video Signal of 59.94Hz/720P is selectively displayed.
- \* When returning to Main Menu after playback from each button of 23.976Hz/1080P, 1. Video Signal of 23.976Hz/1080P is selectively displayed.
- \* 5. AV Sync does not operate.

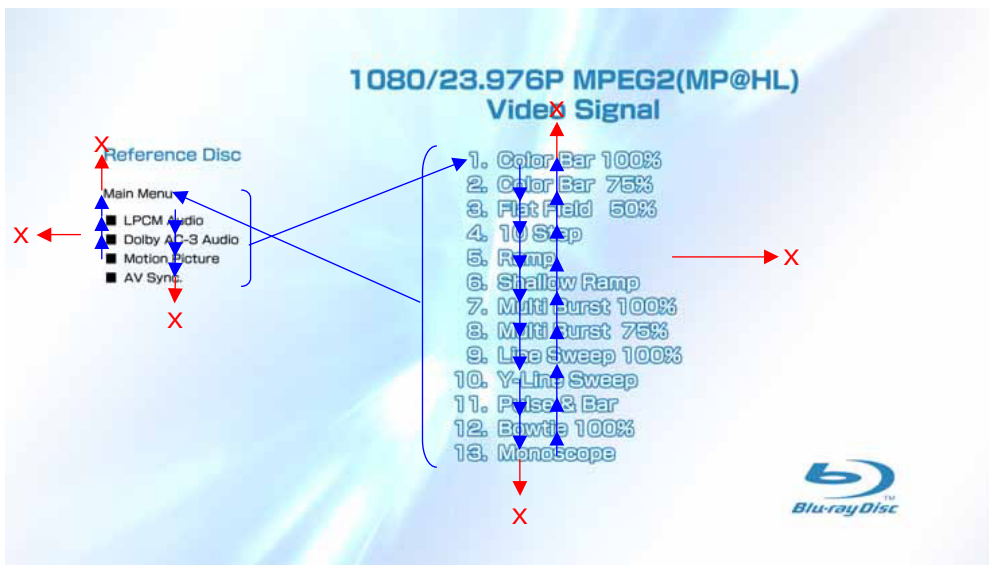
#### 1-3-1-4. BLX-104 Menu Function (4) Sub menu1



- 1) At the display of Sub menu1, 1. Color Bar 100% is selectively displayed.
- 2) Selection of 1. Color Bar 100% → Return to Sub menu1 after seamless playback from T1\_C1 to T1\_C13. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
- 3) Selection of 2. Color Bar 75% → Return to Sub menu1 after seamless playback from T1\_C2 to T1\_C13. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
- 4) At the selection of 3 - 13, item 3 mentioned above is executed as the routine.
- 5) At the display of Sub menu1, Main Menu is selected → Jump to Main Menu. At the display of Main Menu, 1. Video Signal of 59.94Hz/1080i is selectively displayed.
- 6) Selection of LPCM Audio → Playback from T2\_C1 to T19\_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu1 after playback. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
- 7) Selection of Dolby AC-3 Audio → Playback of T20\_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu1 after playback. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
- 8) Selection of Motion Picture → Return to Sub menu1 after playback of T21\_C1. 1. ColorBar 100% is selectively displayed on Sub menu1 screen.
- 9) At the selection of Main Menu, 1. VideoSignal of 1080/59.94i of Main Menu is selectively displayed.
- 10) AV Sync does not operate.

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

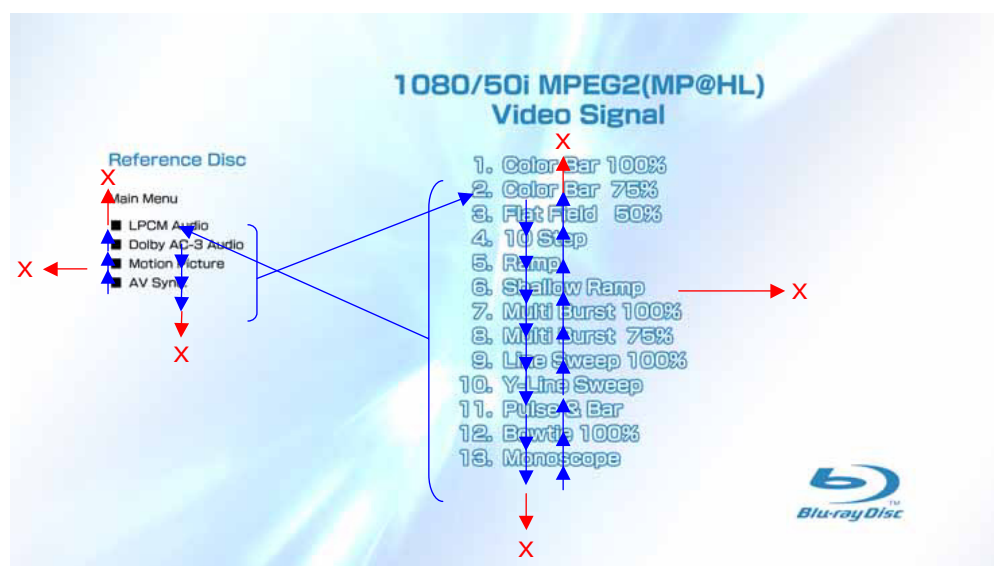
#### Sub menu2



- 1) At the display of Sub menu2, 1. Color Bar 100% is selectively displayed.
- 2) Selection of 1. Color Bar 100% → Return to Sub menu2 after seamless playback from T43\_C1 to T43\_C13. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
- 3) Selection of 2. Color Bar 75% → Return to Sub menu2 after seamless playback from T43\_C2 to T43\_C13. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
- 4) At the selection of 3 - 13, item 3 mentioned above is executed as the routine.
- 5) At the display of Sub menu2, Main Menu is selected → Jump to Main Menu. At the display of Main Menu, 1. Video Signal of 23.976Hz/1080P is selectively displayed.
- 6) Selection of LPCM Audio → Playback from T44\_C1 to T50\_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu2 after playback. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
- 7) Selection of Dolby AC-3 Audio → Playback of T51\_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu2 after playback. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
- 8) Selection of Motion Picture → Return to Sub menu2 after playback of T52\_C1. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
- 9) At the selection of Main Menu, 1. Video Signal of 1080/23.976P of Main Menu is selectively displayed.
- 10) AV Sync does not operate.

## 1-3-1-6. BLX-104 Menu Function (6)

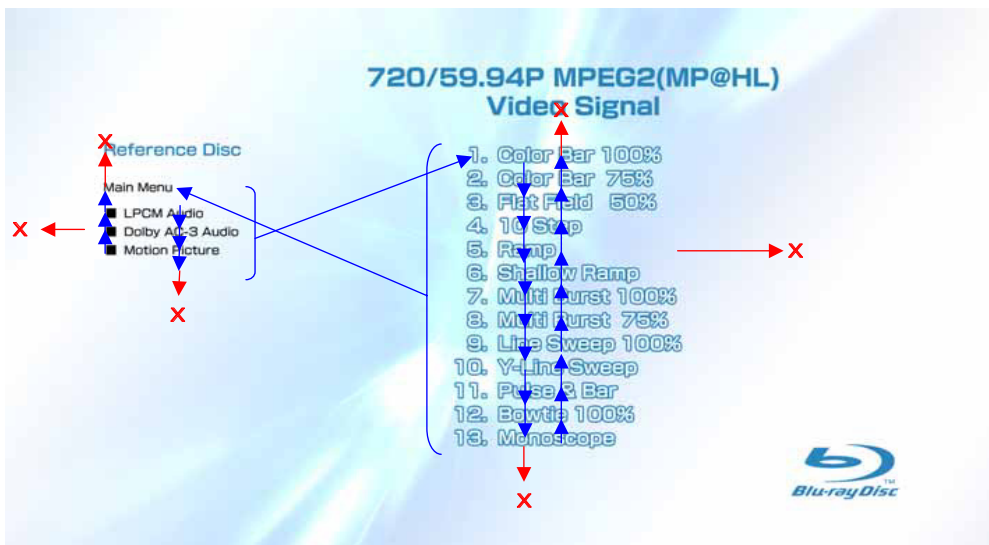
## Sub menu3



- 1) At the display of Sub menu3, 1. Color Bar 100% is selectively displayed.
- 2) Selection of 1. Color Bar 100% → Return to Sub menu3 after seamless playback from T53\_C1 to T53\_C13. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
- 3) Selection of 2. Color Bar 75% → Return to Sub menu3 after seamless playback from T53\_C2 to T53\_C13. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
- 4) At the selection of 3 - 13, item 3 mentioned above is executed as the routine.
- 5) At the display of Sub menu3, Main Menu is selected → Jump to Main Menu. At the display of Main Menu, 1. Video Signal of 50Hz/1080i is selectively displayed.
- 6) Selection of LPCM Audio → Playback from T54\_C1 to T60\_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu3 after playback. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
- 7) Selection of Dolby AC-3 Audio → Playback of T61\_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu3 after playback. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
- 8) Selection of Motion Picture → Return to Sub menu3 after playback of T62\_C1. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
- 9) At the selection of Main Menu, 1. Video Signal of 1080/50i of Main Menu is selectively displayed.
- 10) AV Sync does not operate.

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

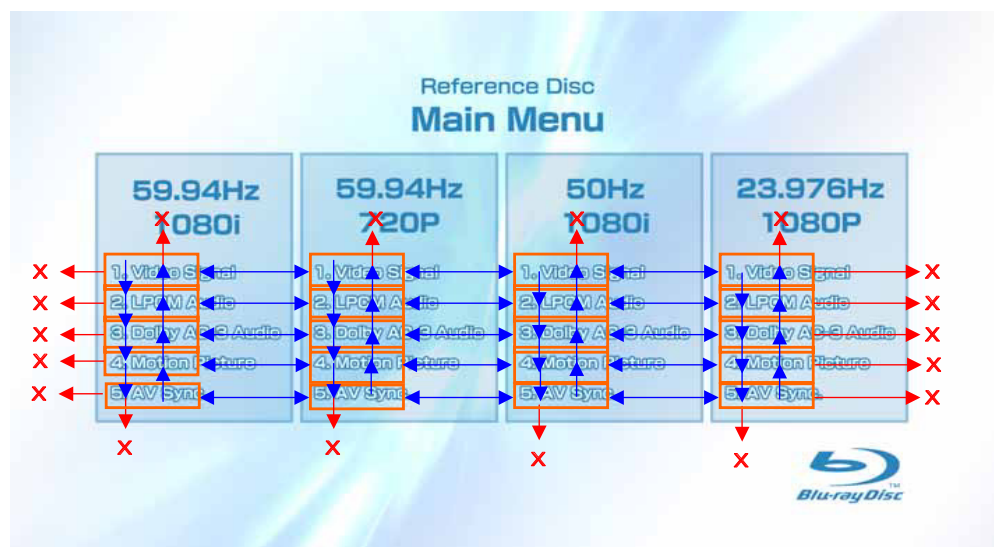
#### Sub menu4



- 1) At the display of Sub menu4, 1. Color Bar 100% is selectively displayed.
- 2) Selection of 1. Color Bar 100% → Return to Sub menu4 after seamless playback from T22\_C1 to T22\_C13. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
- 3) Selection of 2. Color Bar 75% → Return to Sub menu4 after seamless playback from T22\_C2 to T22\_C13. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
- 4) At the selection of 3 - 13, item 3 mentioned above is executed as the routine.
- 5) At the display of Sub menu4, Main Menu is selected → Jump to Main Menu. At the display of Main Menu, 1. Video Signal of 59.94Hz/ 720P is selectively displayed.
- 6) Selection of LPCM Audio → Playback from T44\_C1 to T50\_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu4 after playback. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
- 7) Selection of Dolby AC-3 Audio → Playback of T51\_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu4 after playback. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
- 8) Selection of Motion Picture → Return to Sub menu4 after playback of T52\_C1. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
- 9) At the selection of Main Menu, 1. Video Signal of 720/59.94P of Main Menu is selectively displayed.
- 10) AV Sync does not operate.

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

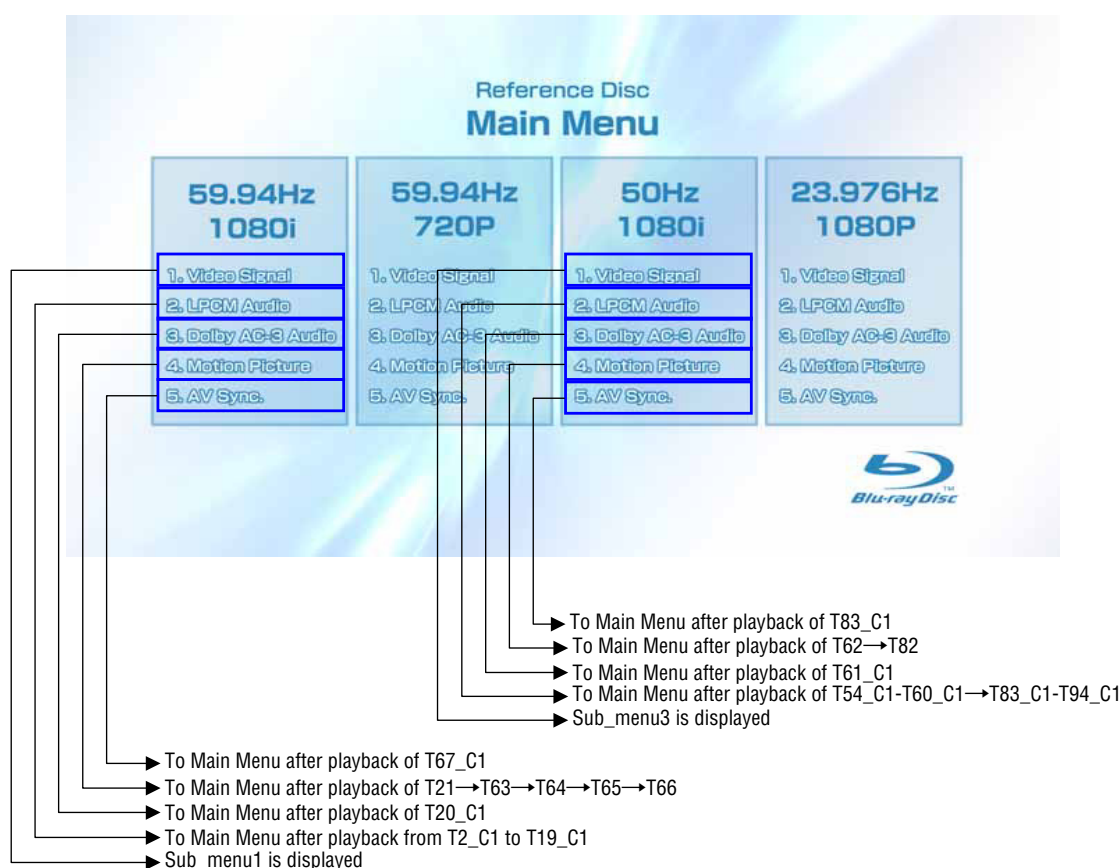
## Main Menu



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

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

## Main Menu



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

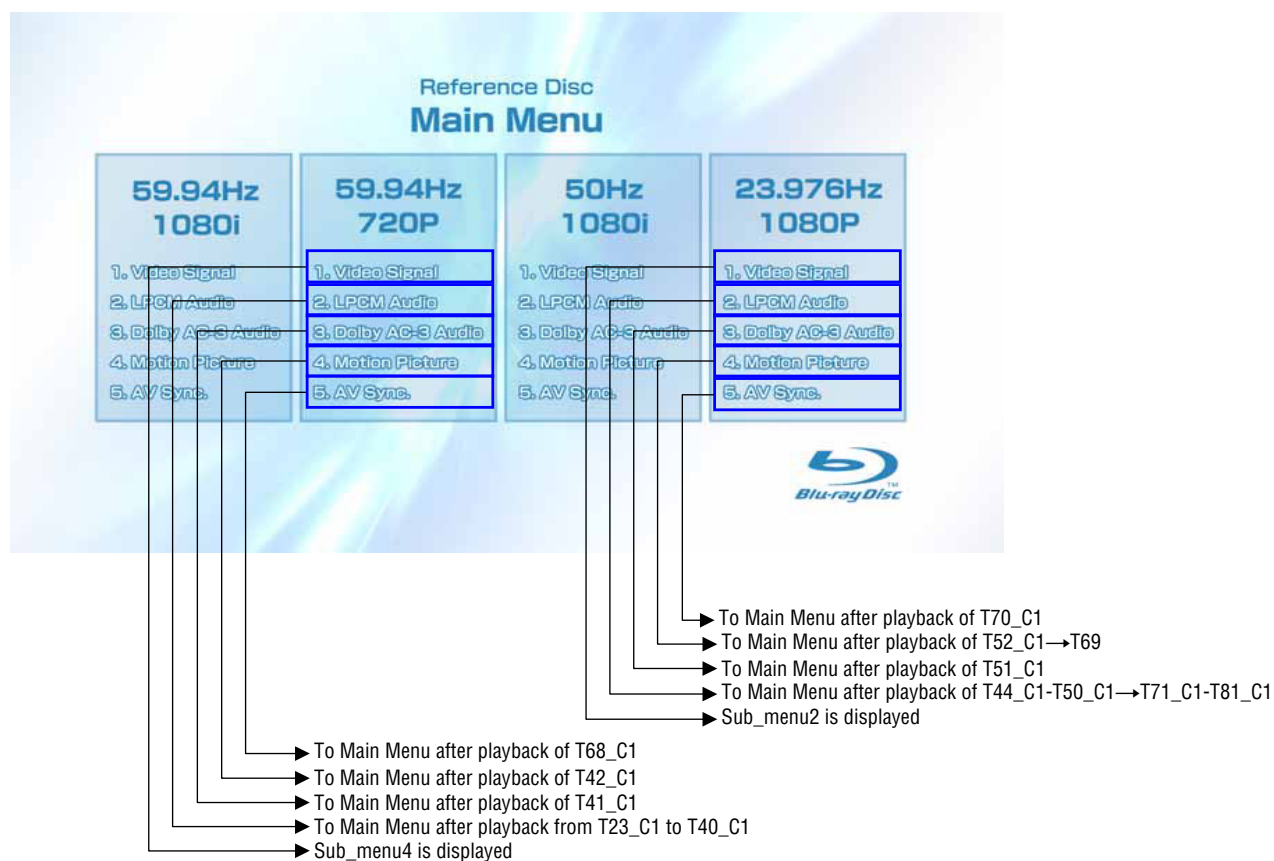
\* When returning to Main Menu after playback from each button of 50Hz/1080i, 1. Video Signal of 50Hz/1080i is selectively displayed.

## Note:

Txx\_Cxx  
 Chapter No.  
 Title No.

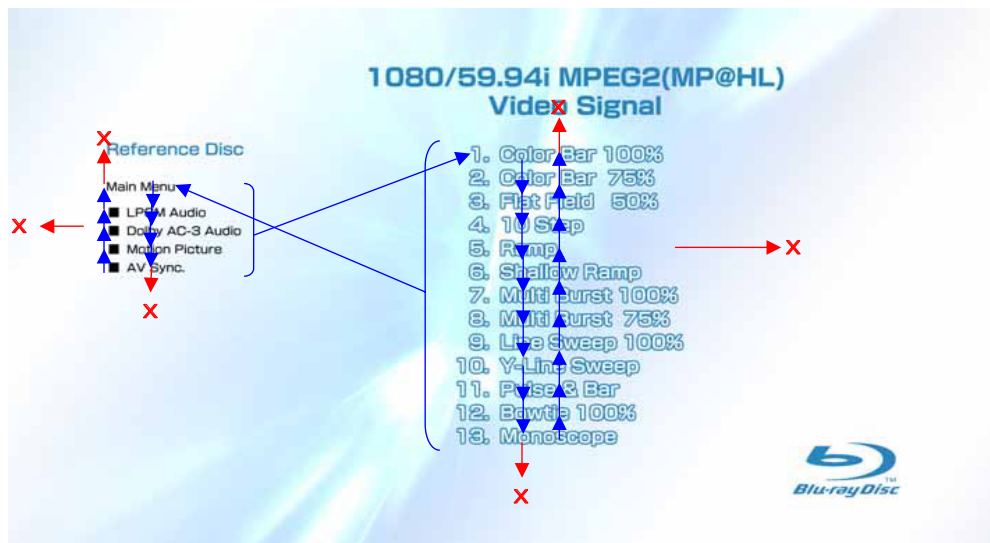
## 1-3-2-3. BLX-204 Menu Function (3)

## Main Menu



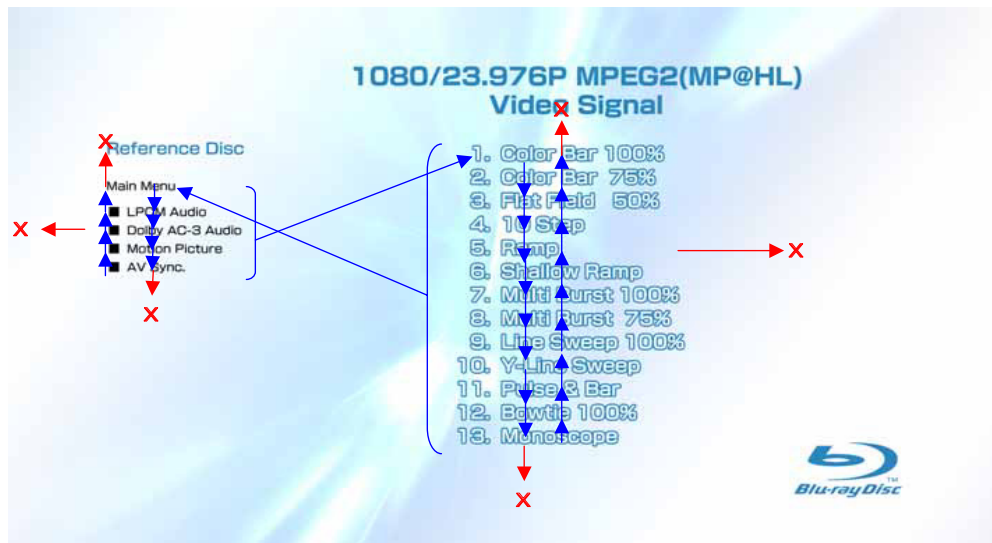
- \* When returning to Main Menu after playback from each button of 59.94Hz/720P, 1. Video Signal of 59.94Hz/720P is selectively displayed.
- \* When returning to Main Menu after playback from each button of 23.976Hz/1080P, 1. Video Signal of 23.976Hz/1080P is selectively displayed.

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



- 1) At the display of Sub menu1, 1. Color Bar 100% is selectively displayed.
- 2) Selection of 1. Color Bar 100% → Return to Sub menu1 after seamless playback from T1\_C1 to T1\_C13. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
- 3) Selection of 2. Color Bar 75% → Return to Sub menu1 after seamless playback from T1\_C2 to T1\_C13. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
- 4) At the selection of 3 - 13, item 3 mentioned above is executed as the routine.
- 5) At the display of Sub menu1, Main Menu is selected → Jump to Main Menu. At the display of Main Menu, 1. Video Signal of 59.94Hz/1080i is selectively displayed.
- 6) Selection of LPCM Audio → Playback from T2\_C1 to T19\_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu1 after playback. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
- 7) Selection of Dolby AC-3 Audio → Playback of T20\_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu1 after playback. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
- 8) Selection of Motion Picture → Return to Sub menu1 after playback of T21\_C1. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
- 9) Selection of AV Sync → Return to Sub menu1 after playback of T67\_C1. 1. Color Bar 100% is selectively displayed on Sub menu1 screen.
- 10) At the selection of Main Menu, 1. Video Signal of 1080/59.94i of Main Menu is selectively displayed.

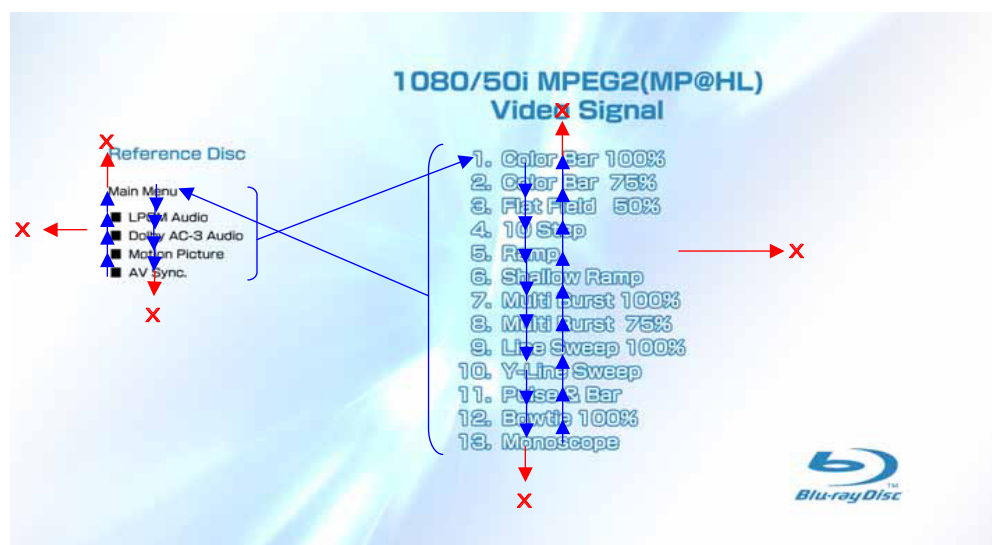
### 1-3-2-5. BLX-204 Menu Function (5) Sub menu 2



- 1) At the display of Sub menu2, 1. Color Bar 100% is selectively displayed.
- 2) Selection of 1. Color Bar 100% → Return to Sub menu2 after seamless playback from T43\_C1 to T43\_C13. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
- 3) Selection of 2. Color Bar 75% → Return to Sub menu2 after seamless playback from T43\_C2 to T43\_C13. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
- 4) At the selection of 3 - 13, item 3 mentioned above is executed as the routine.
- 5) At the display of Sub menu2, Main Menu is selected → Jump to Main Menu. At the display of Main Menu, 1. Video Signal of 23.976Hz/1080P is selectively displayed.
- 6) Selection of LPCM Audio → Playback from T44\_C1 to T50\_C1 and from T71\_C1 to T81\_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed.  
During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu2 after playback. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
- 7) Selection of Dolby AC-3 Audio → Playback of T51\_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed.  
During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu2 after playback. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
- 8) Selection of Motion Picture → Return to Sub menu2 after playback of T52\_C1 and T69. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
- 9) Selection of AV Sync → Return to Sub menu2 after playback of T70\_C1. 1. Color Bar 100% is selectively displayed on Sub menu2 screen.
- 10) At the selection of Main Menu, 1. Video Signal of 1080/23.976P of Main Menu is selectively displayed.

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

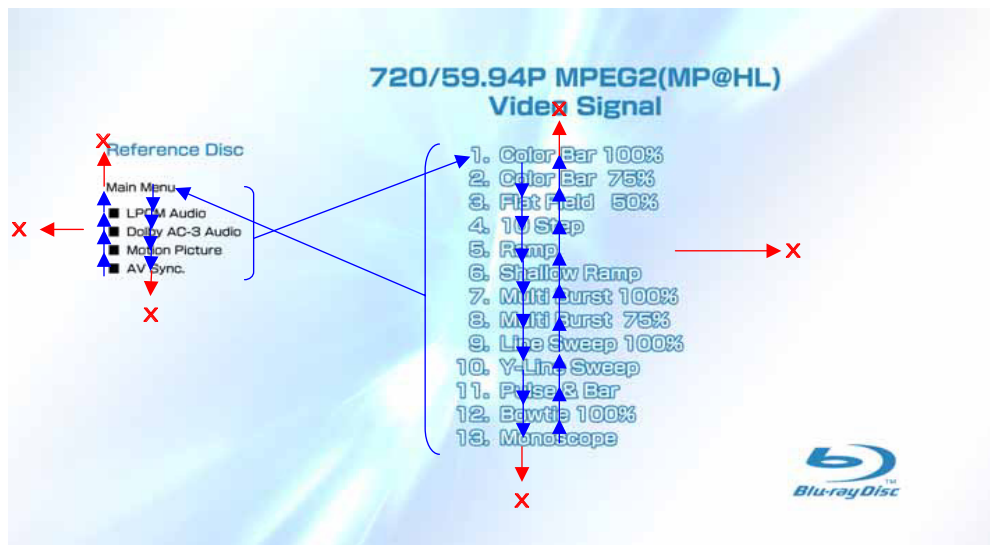
## Sub menu 3



- 1) At the display of Sub menu3, 1. Color Bar 100% is selectively displayed.
- 2) Selection of 1. Color Bar 100% → Return to Sub menu3 after seamless playback from T53\_C1 to T53\_C13. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
- 3) Selection of 2. Color Bar 75% → Return to Sub menu3 after seamless playback from T53\_C2 to T53\_C13. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
- 4) At the selection of 3 - 13, item 3 mentioned above is executed as the routine.
- 5) At the display of Sub menu3, Main Menu is selected → Jump to Main Menu. At the display of Main Menu, 1. Video Signal of 50Hz/1080i is selectively displayed.
- 6) Selection of LPCM Audio → Playback from T54\_C1 to T60\_C1 and from T84\_C1 to T94\_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu3 after playback. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
- 7) Selection of Dolby AC-3 Audio → Playback of T61\_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu3 after playback. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
- 8) Selection of Motion Picture → Return to Sub menu3 after playback of T62\_C1 and T82. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
- 9) Selection of AV Sync → Return to Sub menu3 after playback of T83\_C1. 1. Color Bar 100% is selectively displayed on Sub menu3 screen.
- 10) At the selection of Main Menu, 1. Video Signal of 1080/50i of Main Menu is selectively displayed.

### 1-3-2-7. BLX-204 Menu Function (7)

#### Sub menu 4

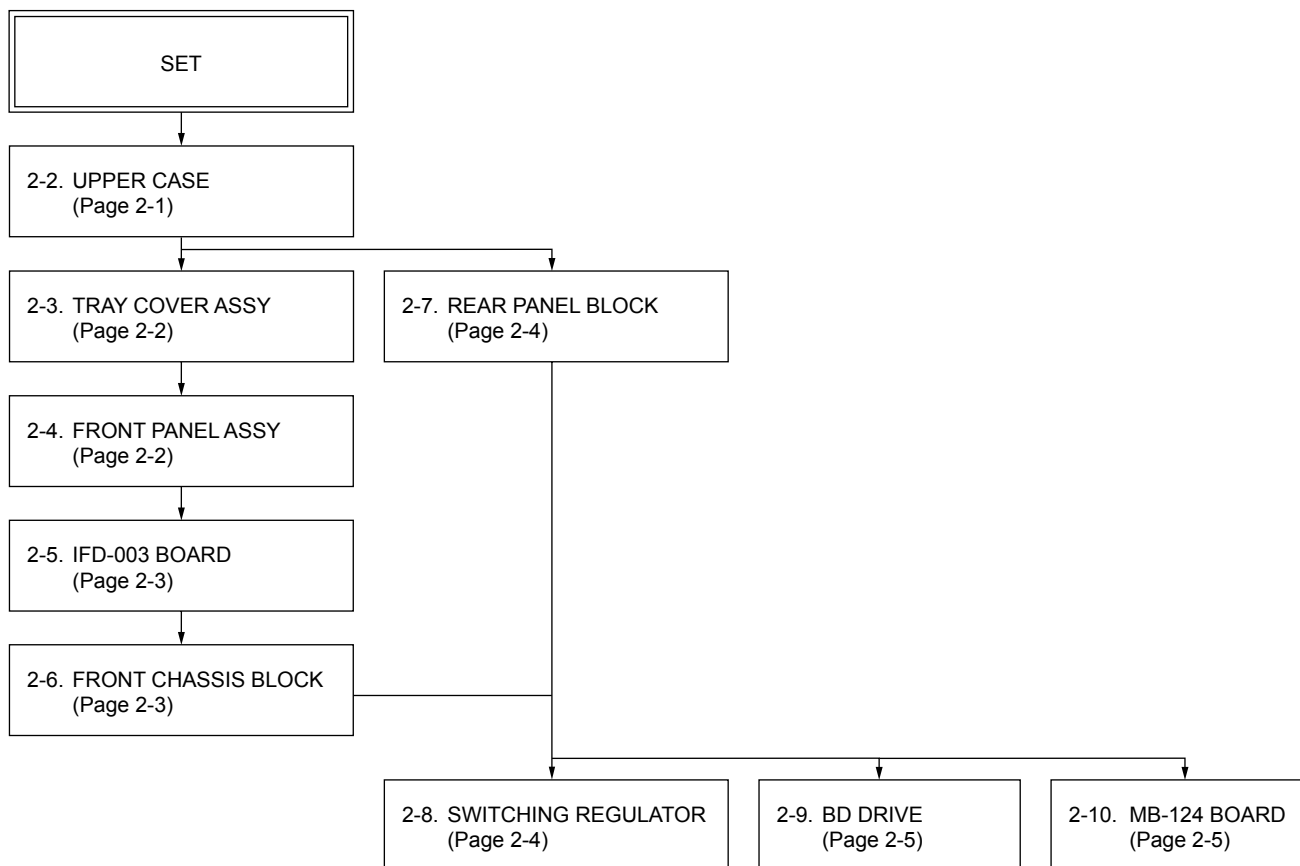


- 1) At the display of Sub menu4, 1. Color Bar 100% is selectively displayed.
- 2) Selection of 1. Color Bar 100% → Return to Sub menu4 after seamless playback from T22\_C1 to T22\_C13. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
- 3) Selection of 2. Color Bar 75% → Return to Sub menu4 after seamless playback from T22\_C2 to T22\_C13. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
- 4) At the selection of 3 - 13, item 3 mentioned above is executed as the routine.
- 5) At the display of Sub menu4, Main Menu is selected → Jump to Main Menu. At the display of Main Menu, 1. Video Signal of 59.94Hz/ 720P is selectively displayed.
- 6) Selection of LPCM Audio → Playback from T44\_C1 to T50\_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu4 after playback. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
- 7) Selection of Dolby AC-3 Audio → Playback of T51\_C1. SubPic that corresponds to Audio stream 1 is forcibly displayed. During the playback, when audio channel changes, the caption that corresponds to each audio stream is forcibly displayed. Return to Sub menu4 after playback. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
- 8) Selection of Motion Picture → Return to Sub menu4 after playback of T52\_C1. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
- 9) Selection of AV Sync → Return to Sub menu4 after playback of T68\_C1. 1. Color Bar 100% is selectively displayed on Sub menu4 screen.
- 10) At the selection of Main Menu, 1. Video Signal of 720/59.94P of Main Menu is selectively displayed.

## SECTION 2 DISASSEMBLY

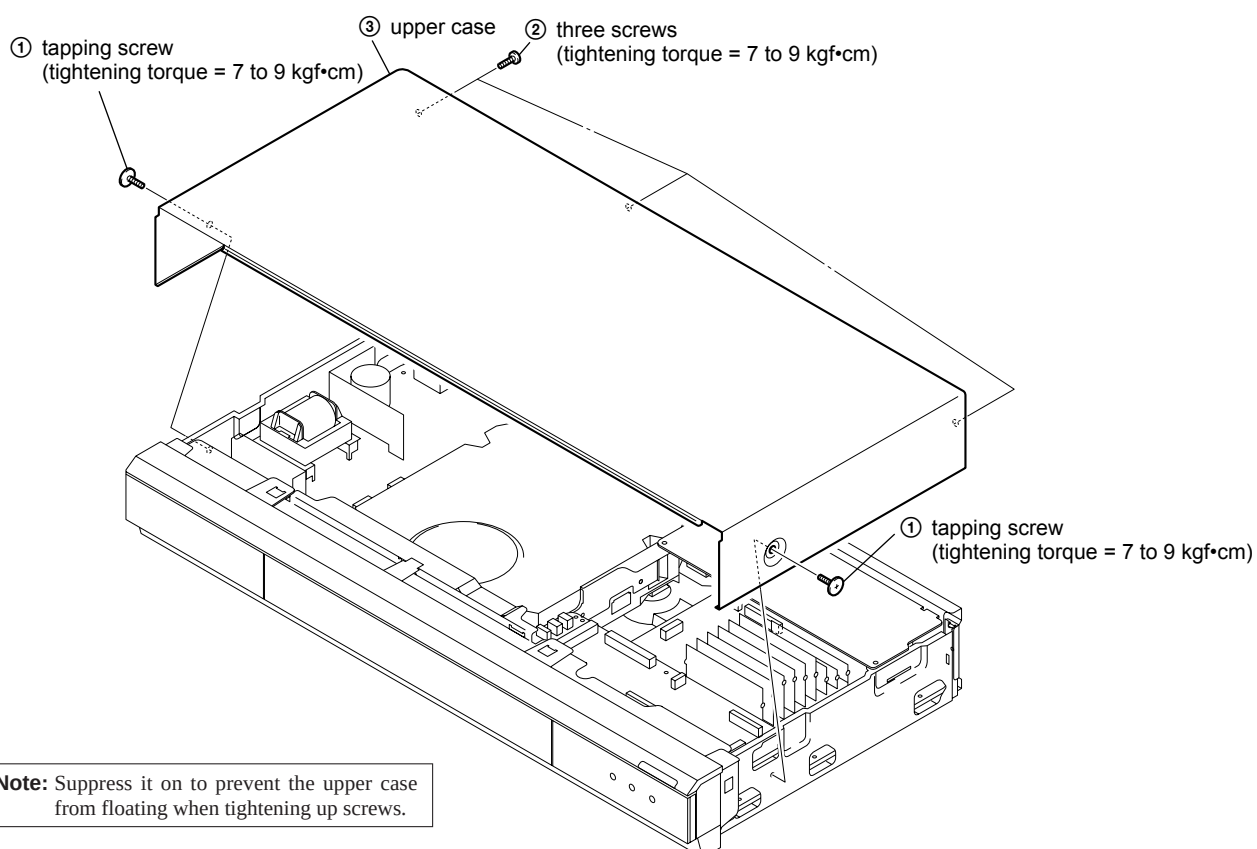
- This set can be disassembled in the order shown below.

### 2-1. DISASSEMBLY FLOW



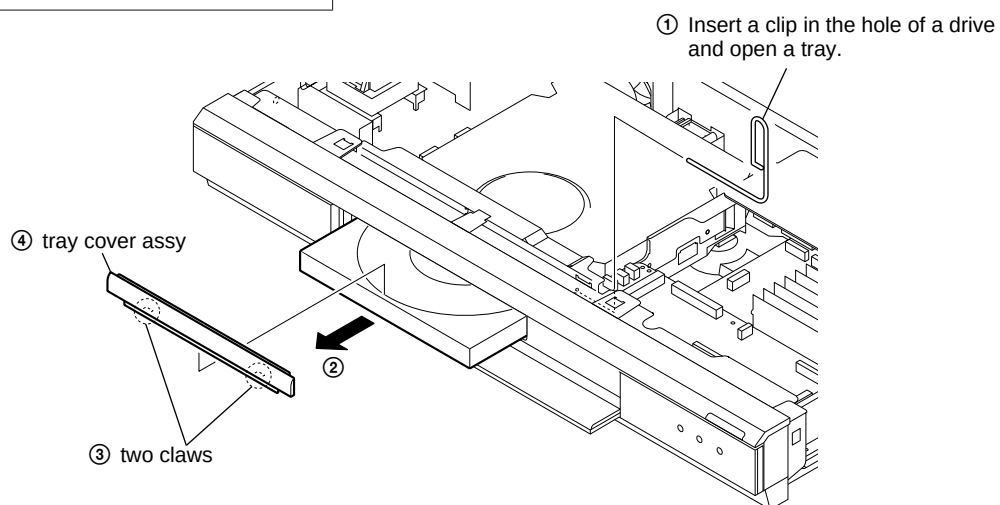
**Note:** Follow the disassembly procedure in the numerical order given.

### 2-2. UPPER CASE

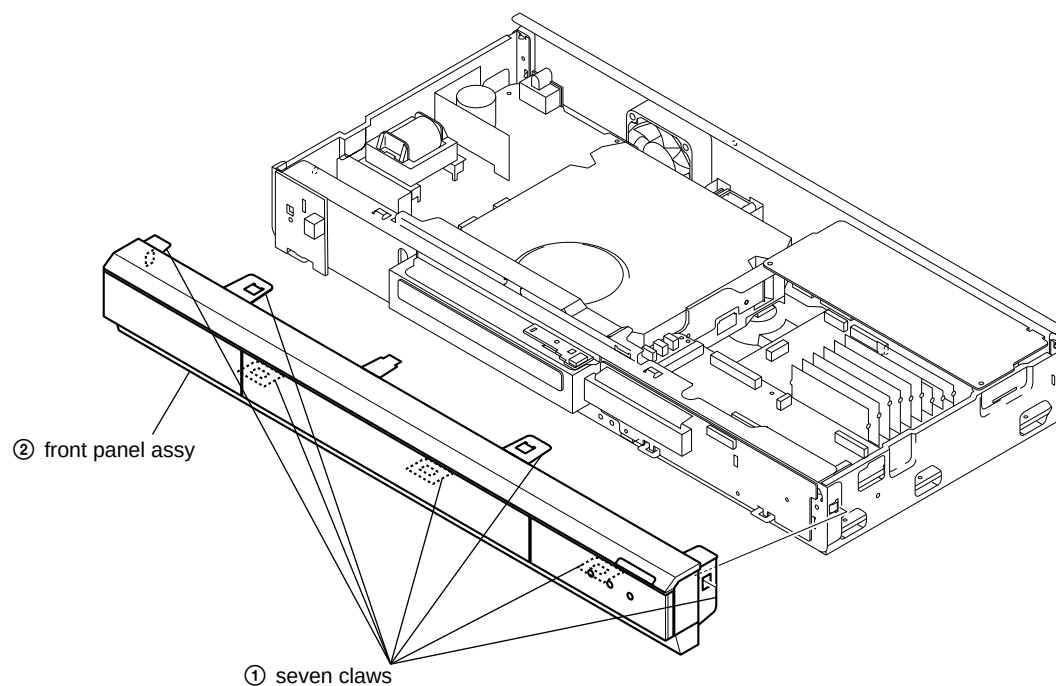


### 2-3. TRAY COVER ASSY

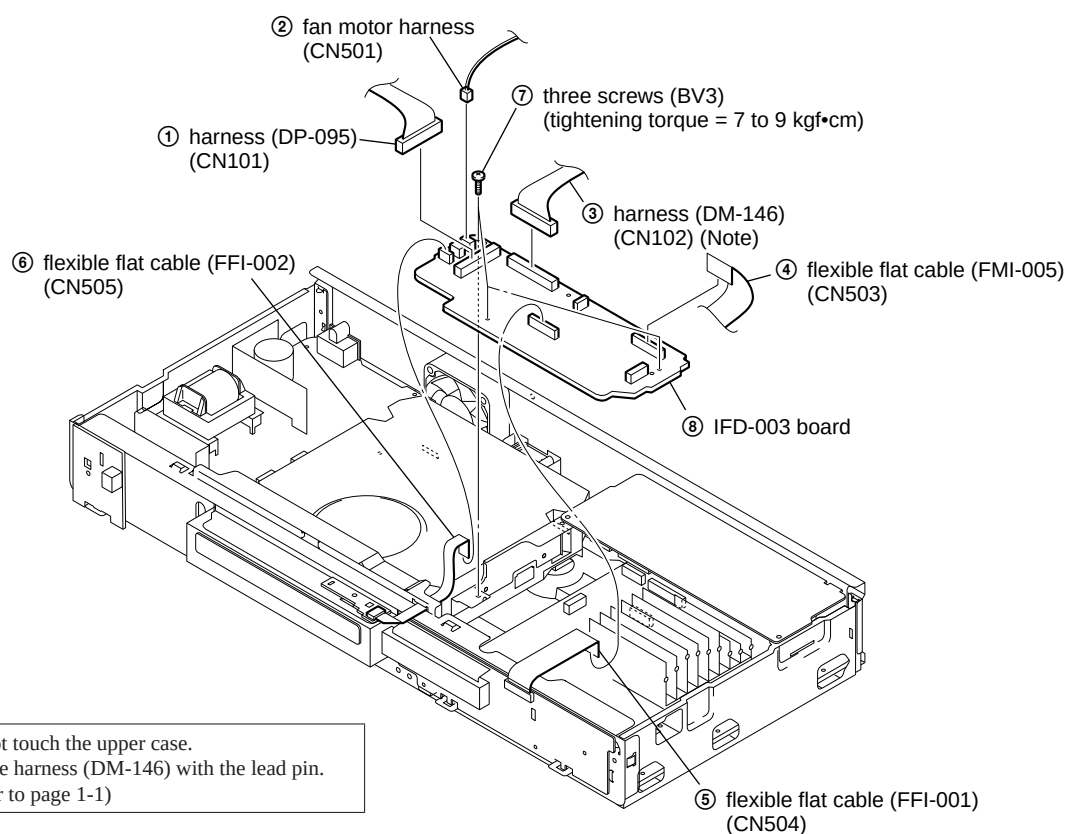
**Note:** If the tray cover assy or BD drive are not exchange, it need not be this work.



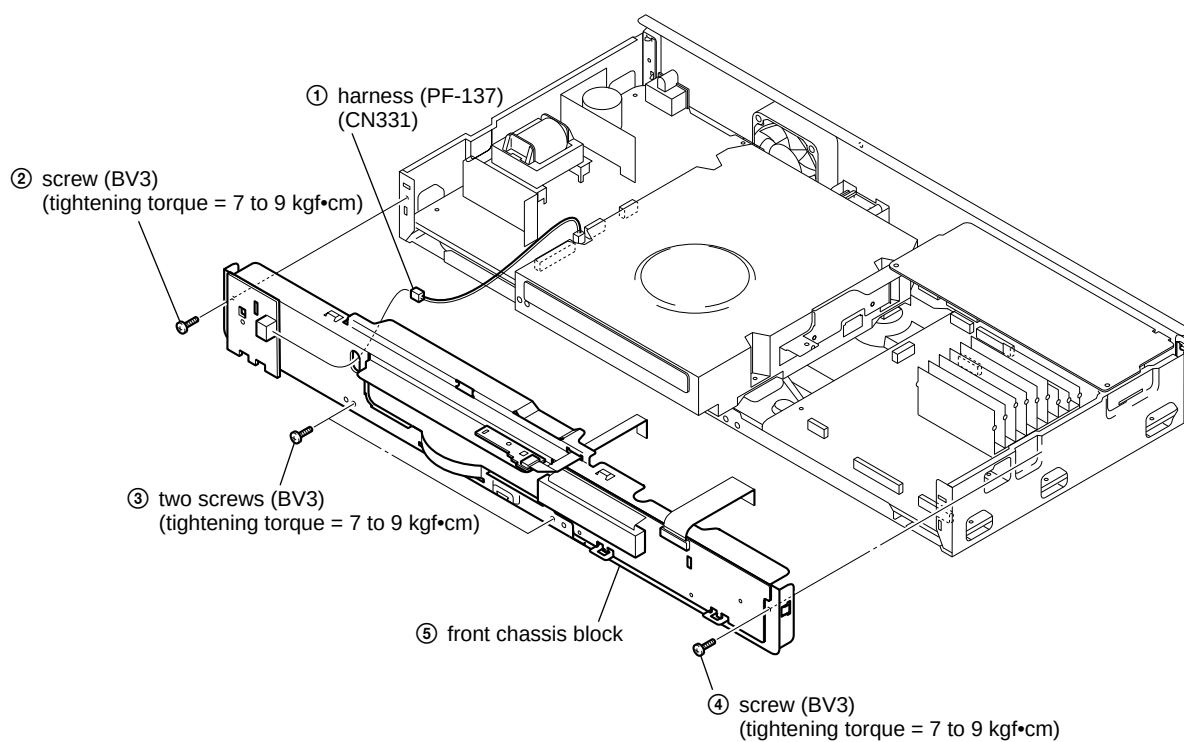
### 2-4. FRONT PANEL ASSY



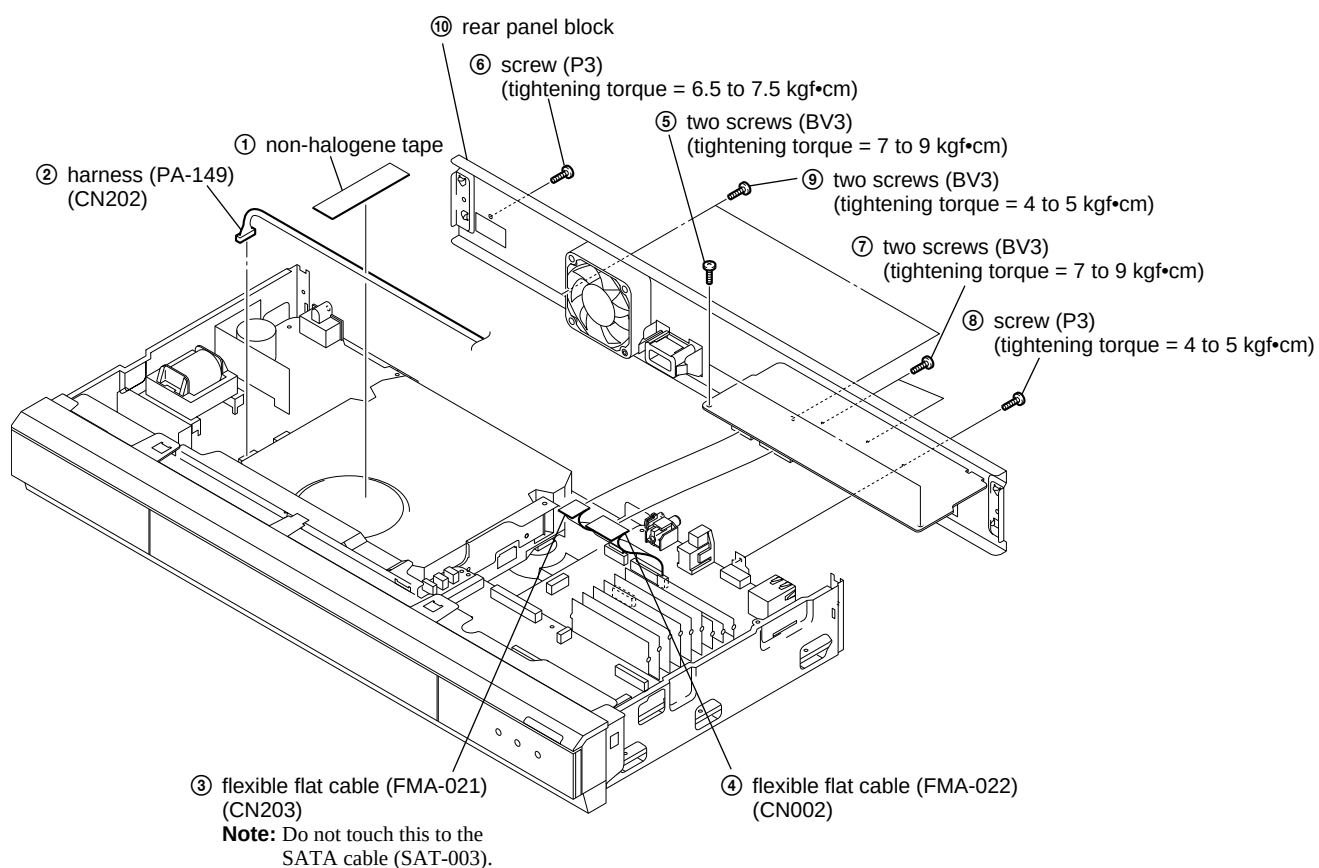
## 2-5. IFD-003 BOARD



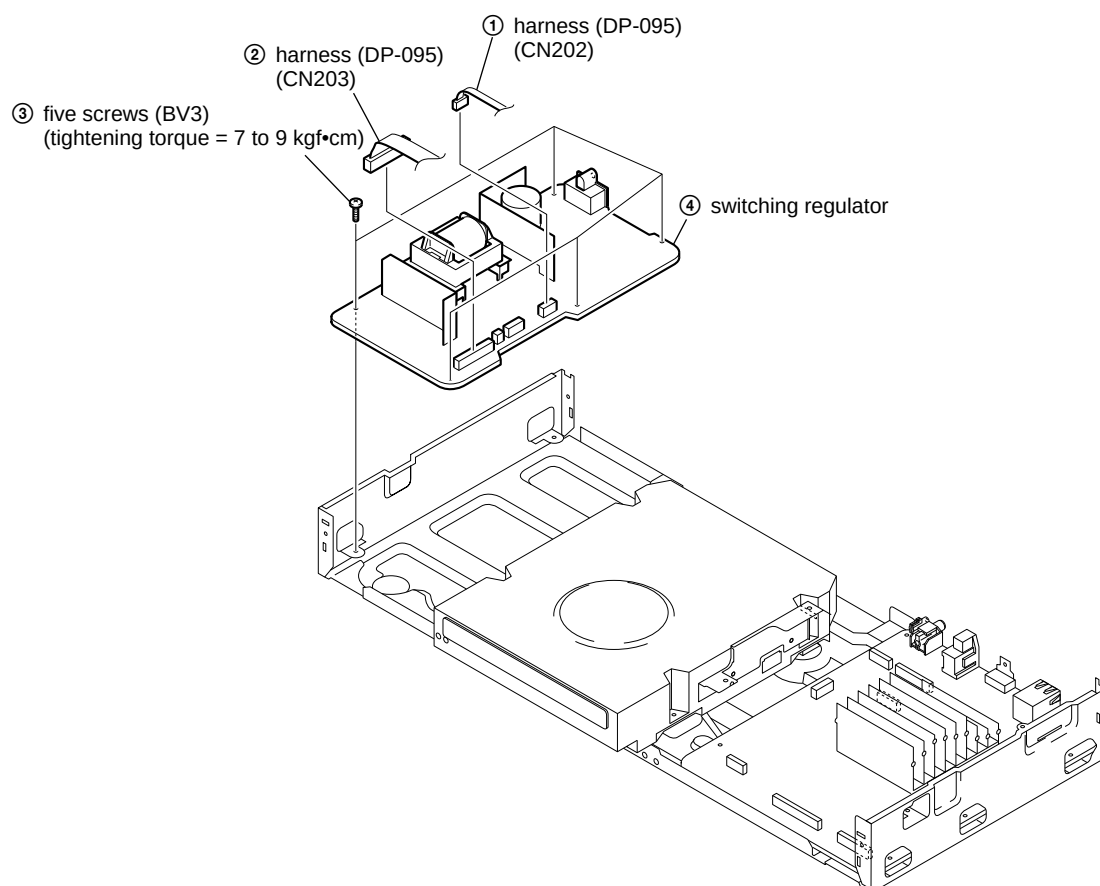
## 2-6. FRONT CHASSIS BLOCK



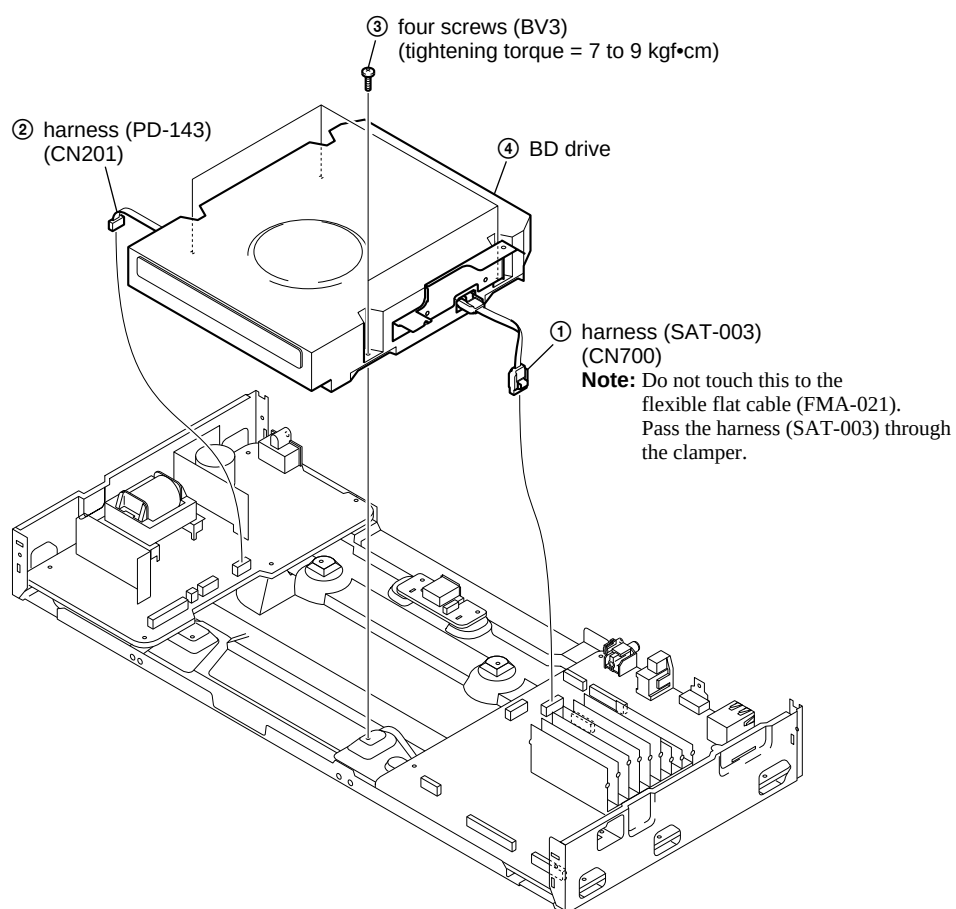
## 2-7. REAR PANEL BLOCK



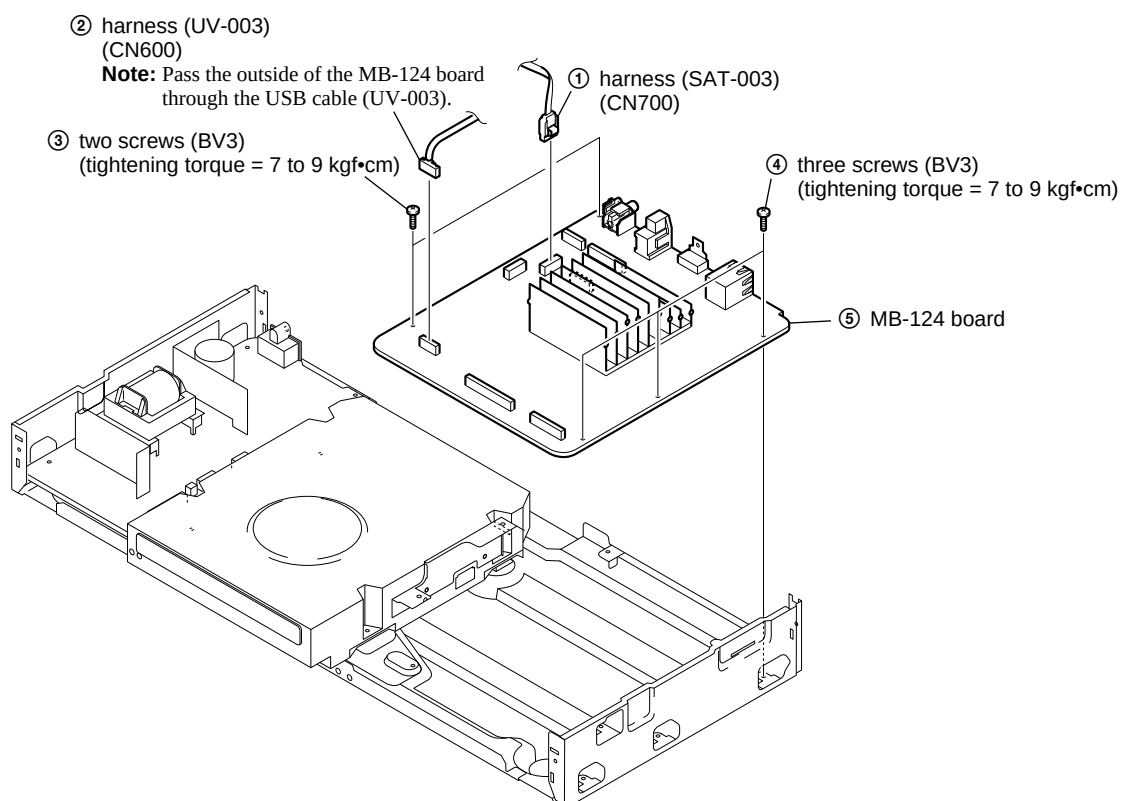
## 2-8. SWITCHING REGULATOR

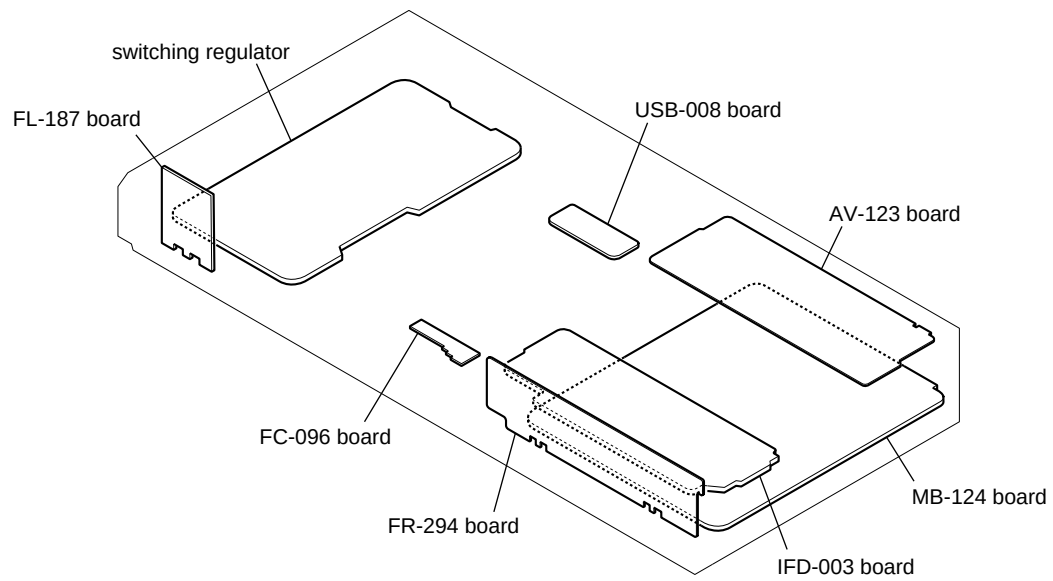


## 2-9. BD DRIVE



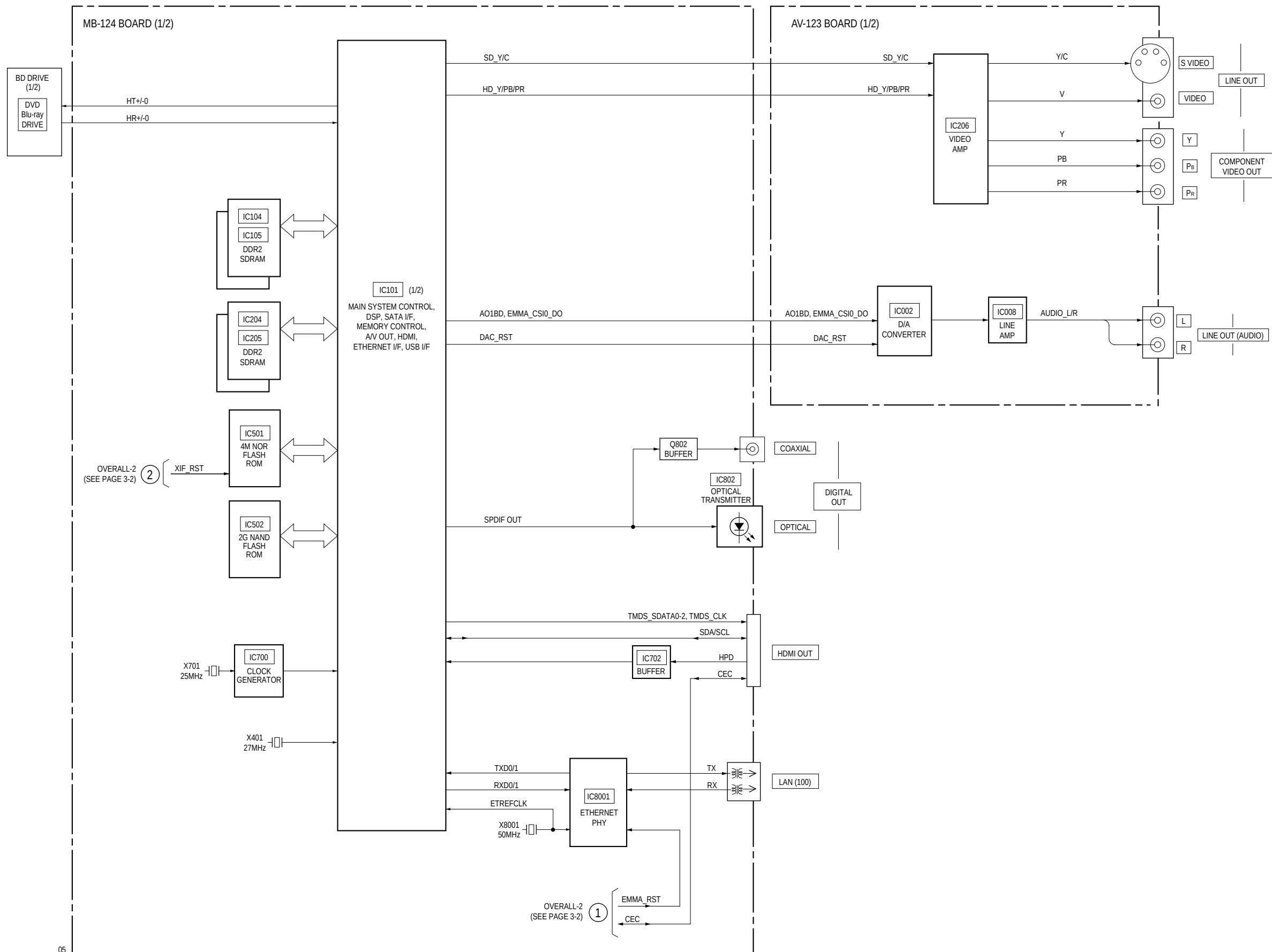
## 2-10. MB-124 BOARD



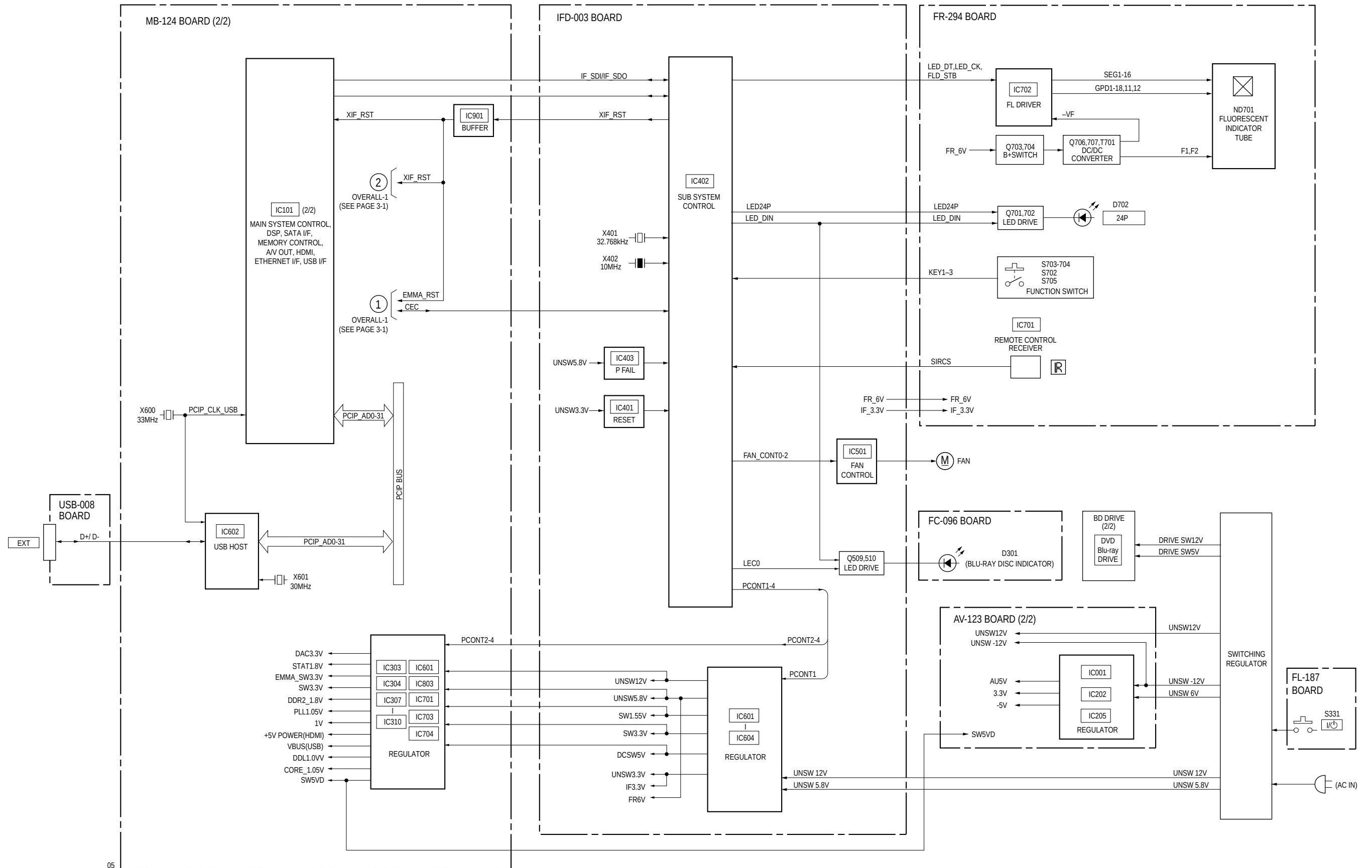
**2-11. CIRCUIT BOARDS LOCATION**

## SECTION 3 BLOCK DIAGRAMS

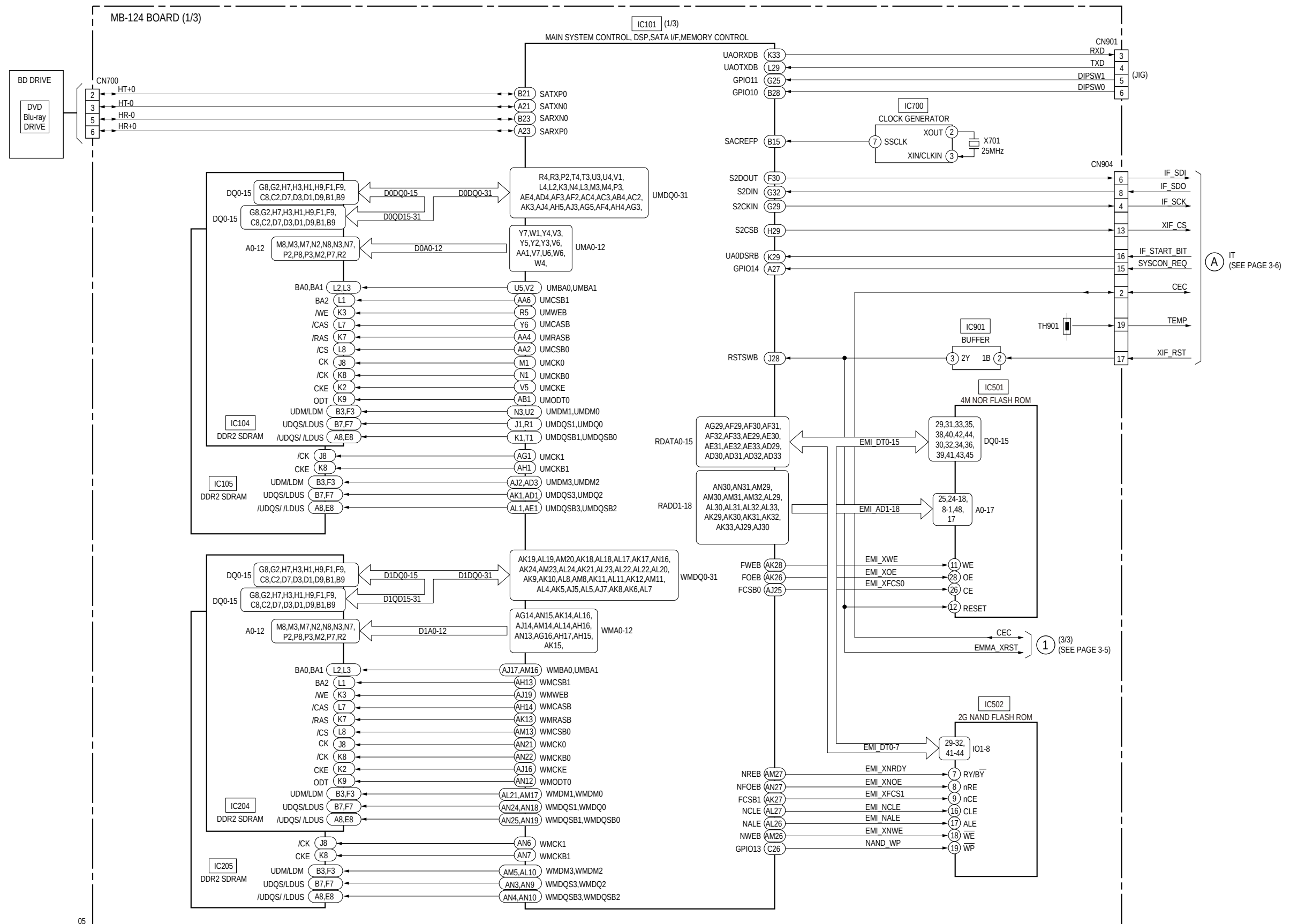
### 3-1. OVERALL BLOCK DIAGRAM (1/2)



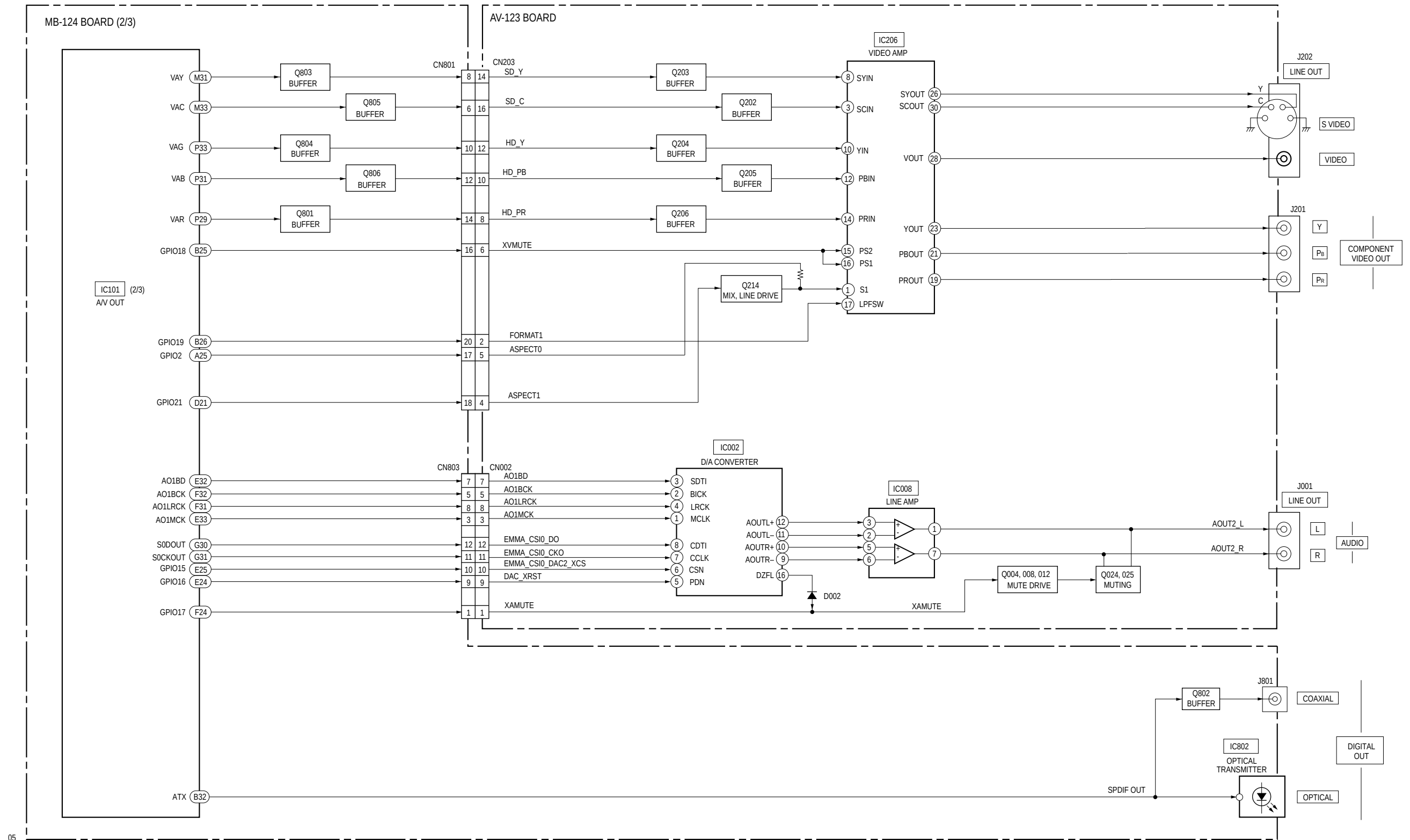
## 3-2. OVERALL BLOCK DIAGRAM (2/2)



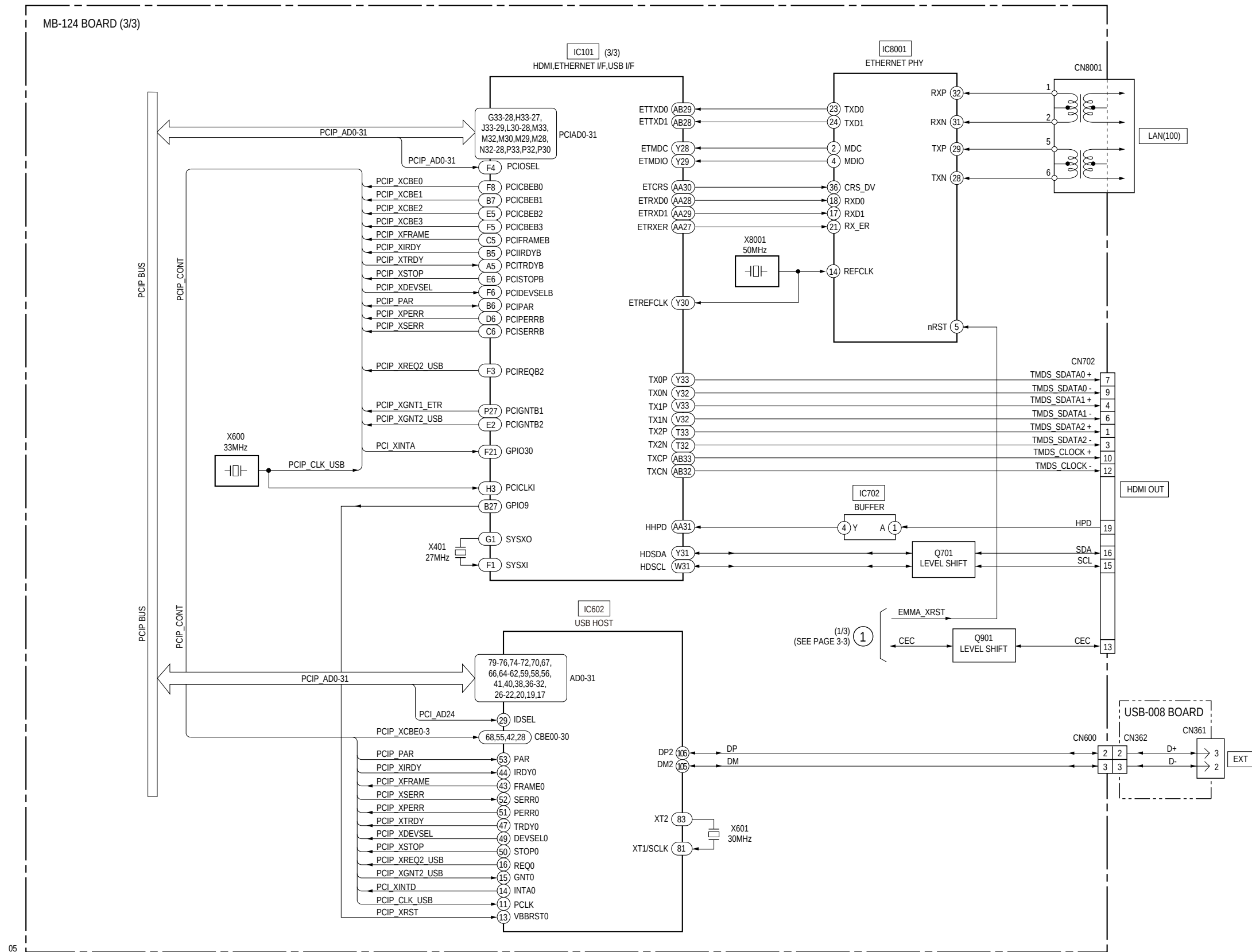
### 3-3. DSP BLOCK DIAGRAM



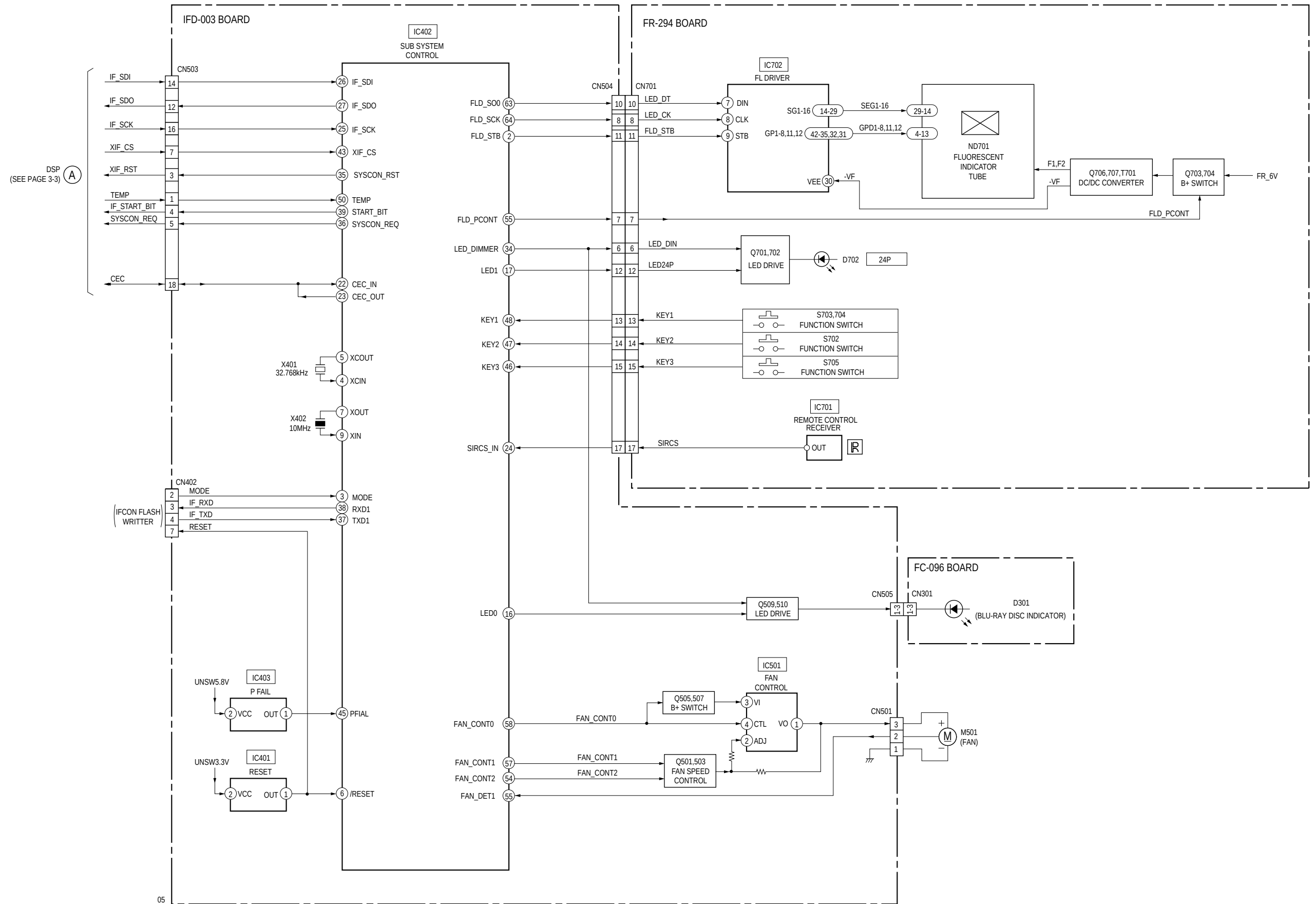
## 3-4. A/V OUT BLOCK DIAGRAM



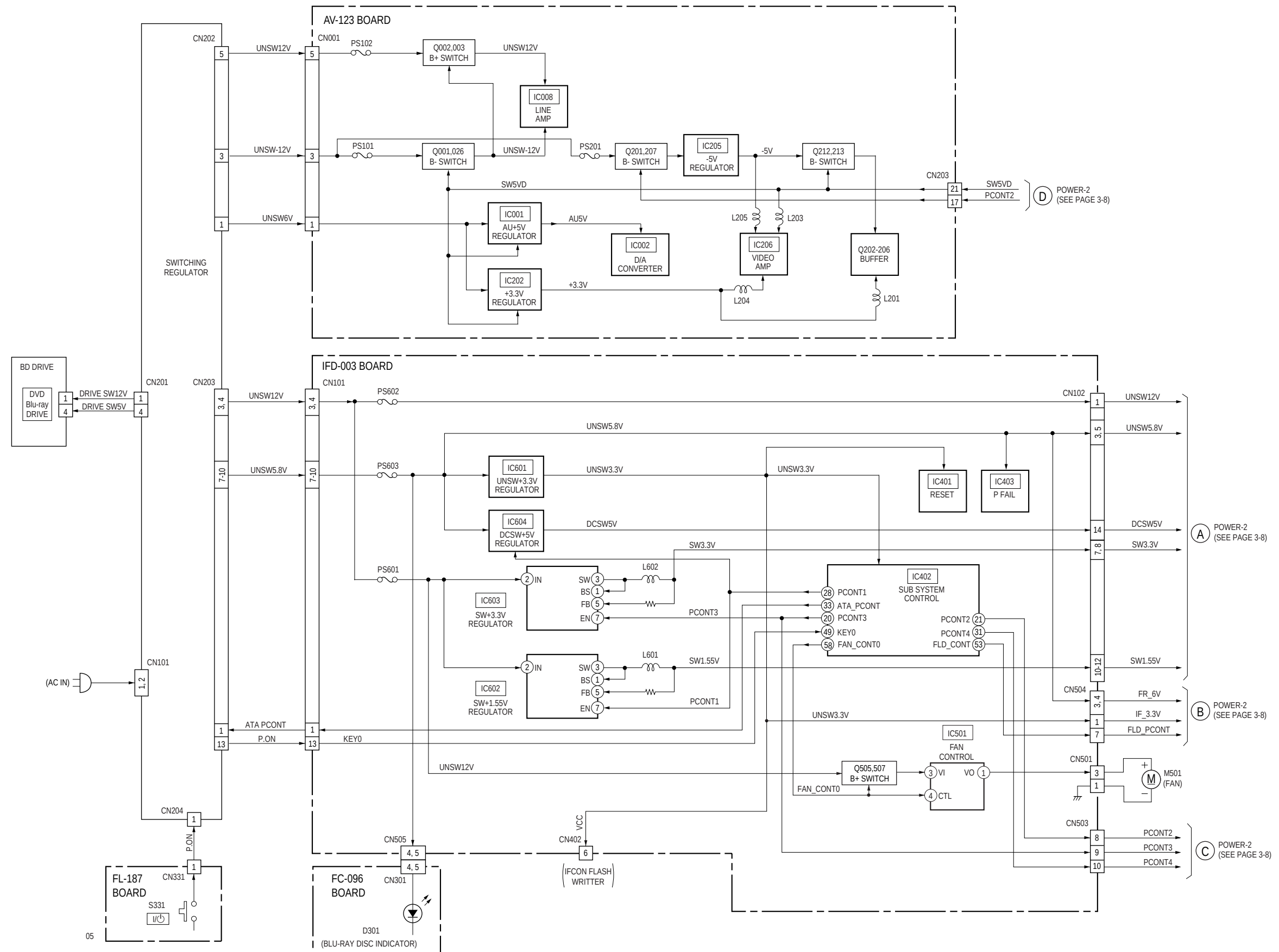
## 3-5. USB/ETHER BLOCK DIAGRAM



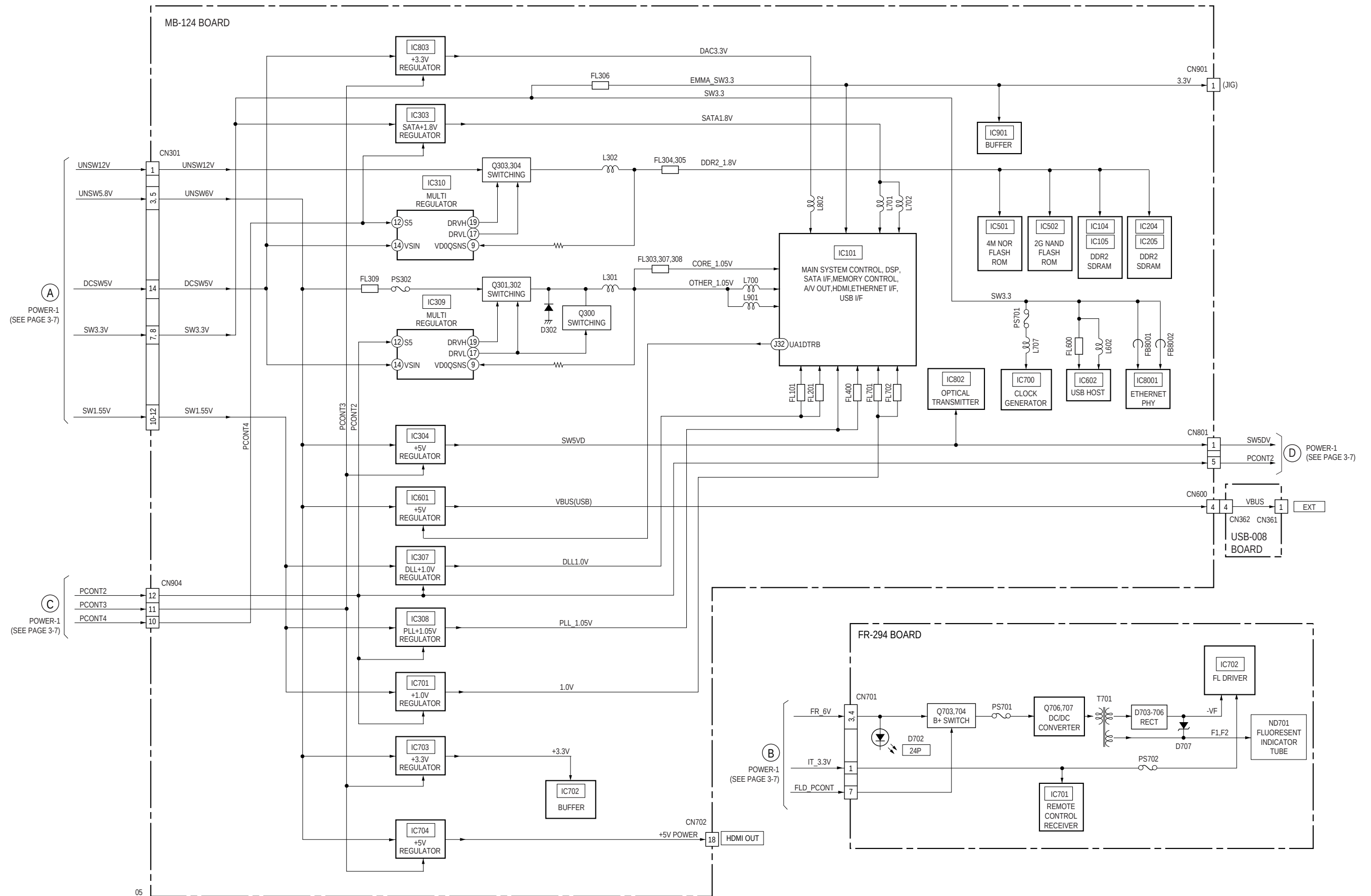
## 3-6. IT BLOCK DIAGRAM



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



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



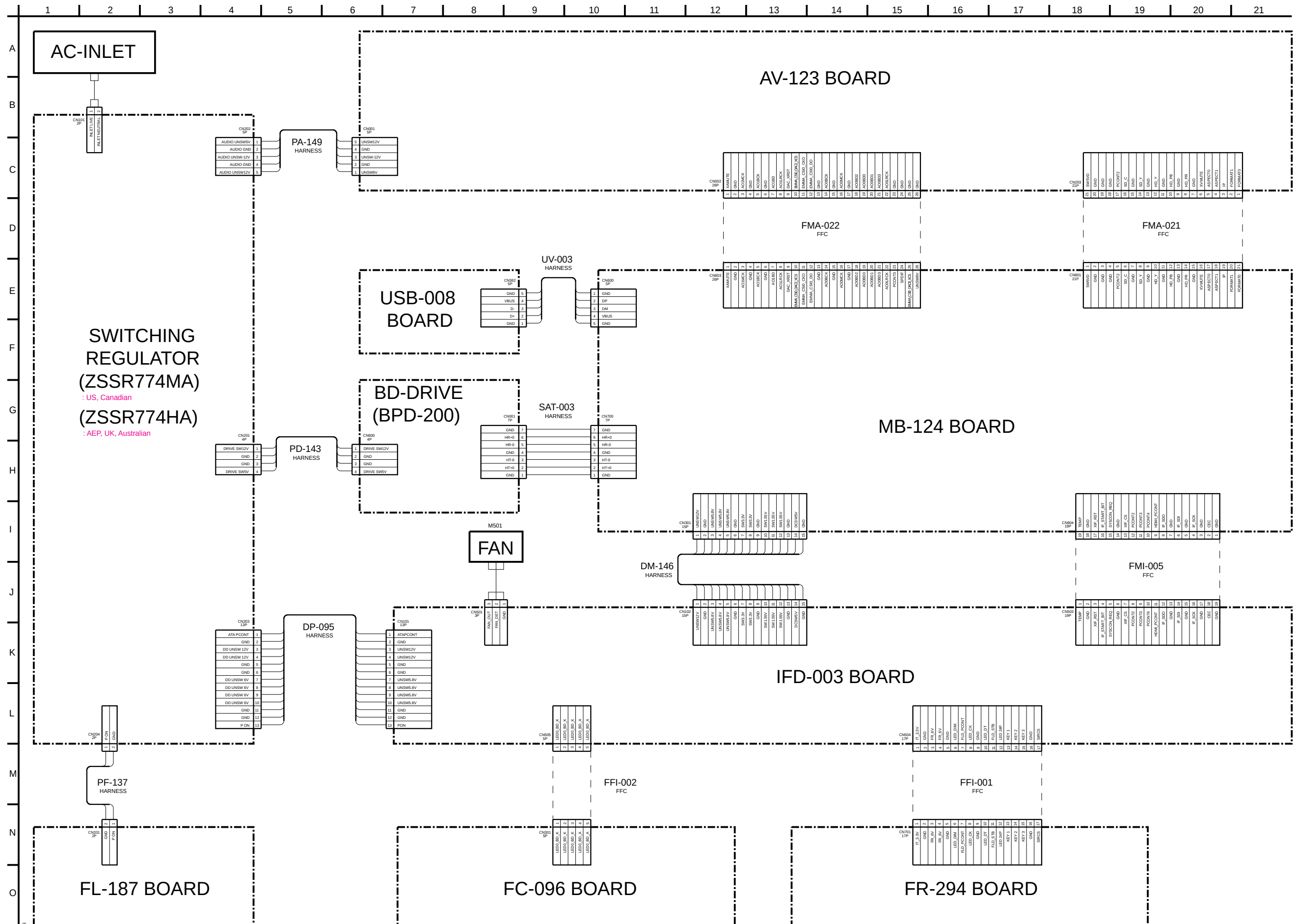
SECTION 4  
SCHEMATIC DIAGRAMS

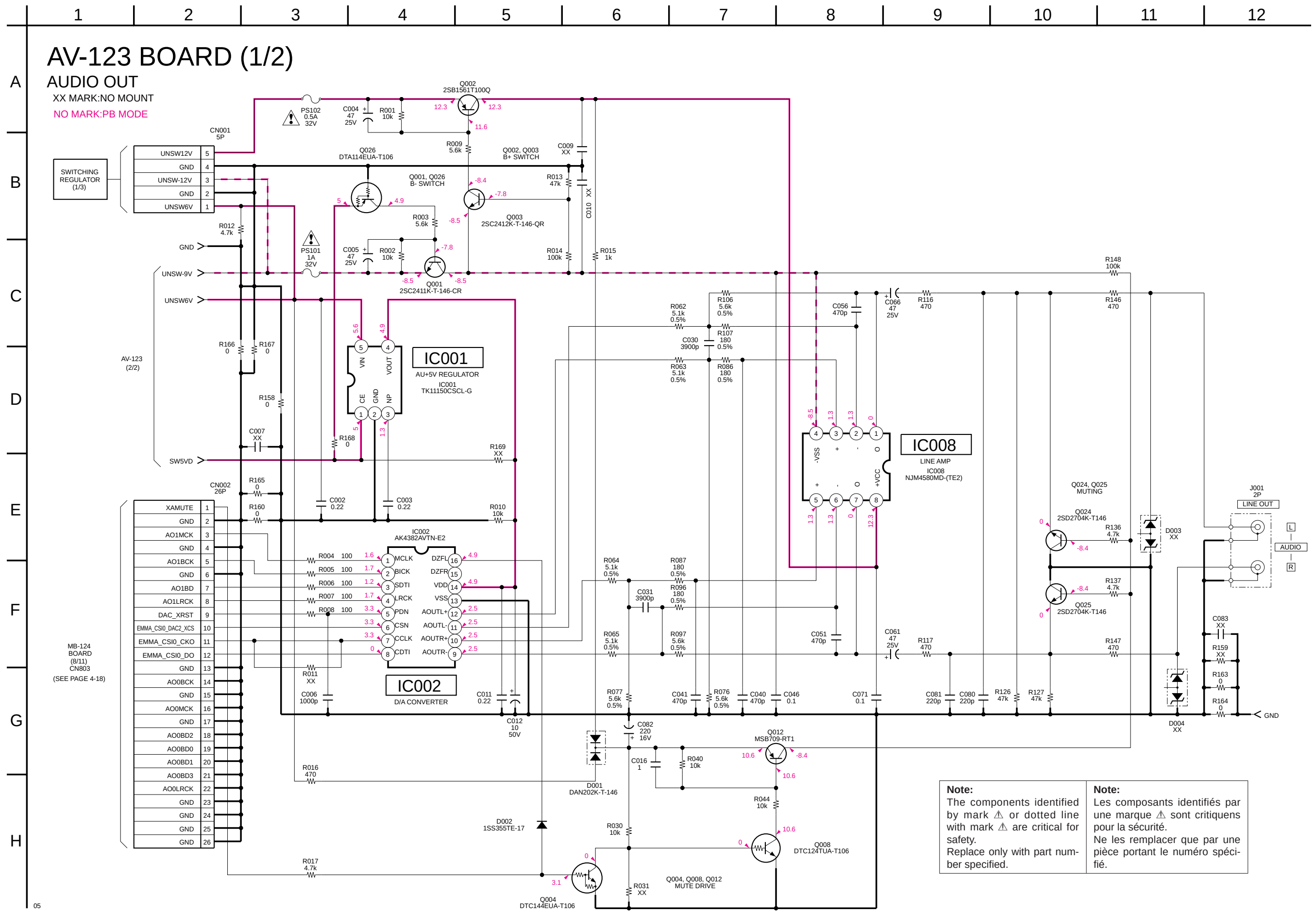
4-1. THIS NOTE IS COMMON FOR SCHEMATIC DIAGRAMS

- All capacitors are in  $\mu\text{F}$  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) un-less 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 $\Omega$ ).
- Voltage variations may be noted due to normal production tolerances.

|                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Note:</b><br>The components identified by mark  or dotted line with mark  are critical for safety.<br>Replace only with part number specified. | <b>Note:</b><br>Les composants identifiés par une marque  sont critiques pour la sécurité.<br>Ne les remplacer que par une pièce portant le numéro spécifié. |
| When indicating parts by reference number, please include the board name.                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                 |

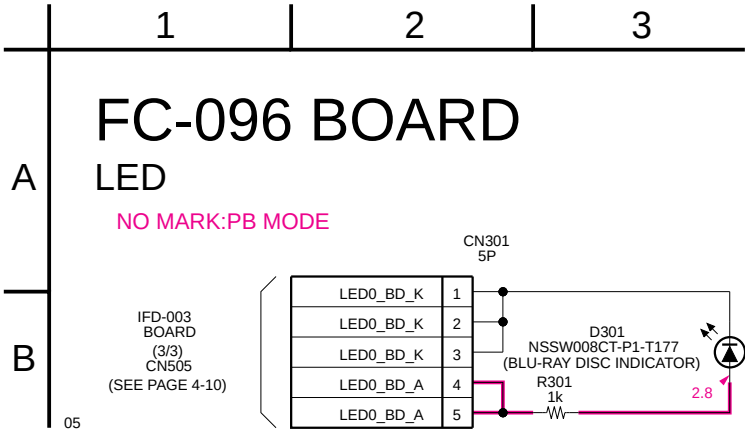
#### 4-2. FRAME SCHEMATIC DIAGRAM



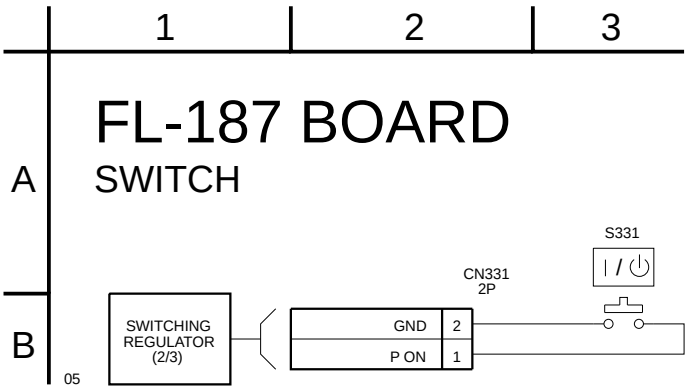




4-5. FC-096 BOARD (LED) SCHEMATIC DIAGRAM • See page 5-4 for printed wiring board.  
- Ref. No.: FC-096 board; 20,000 series -

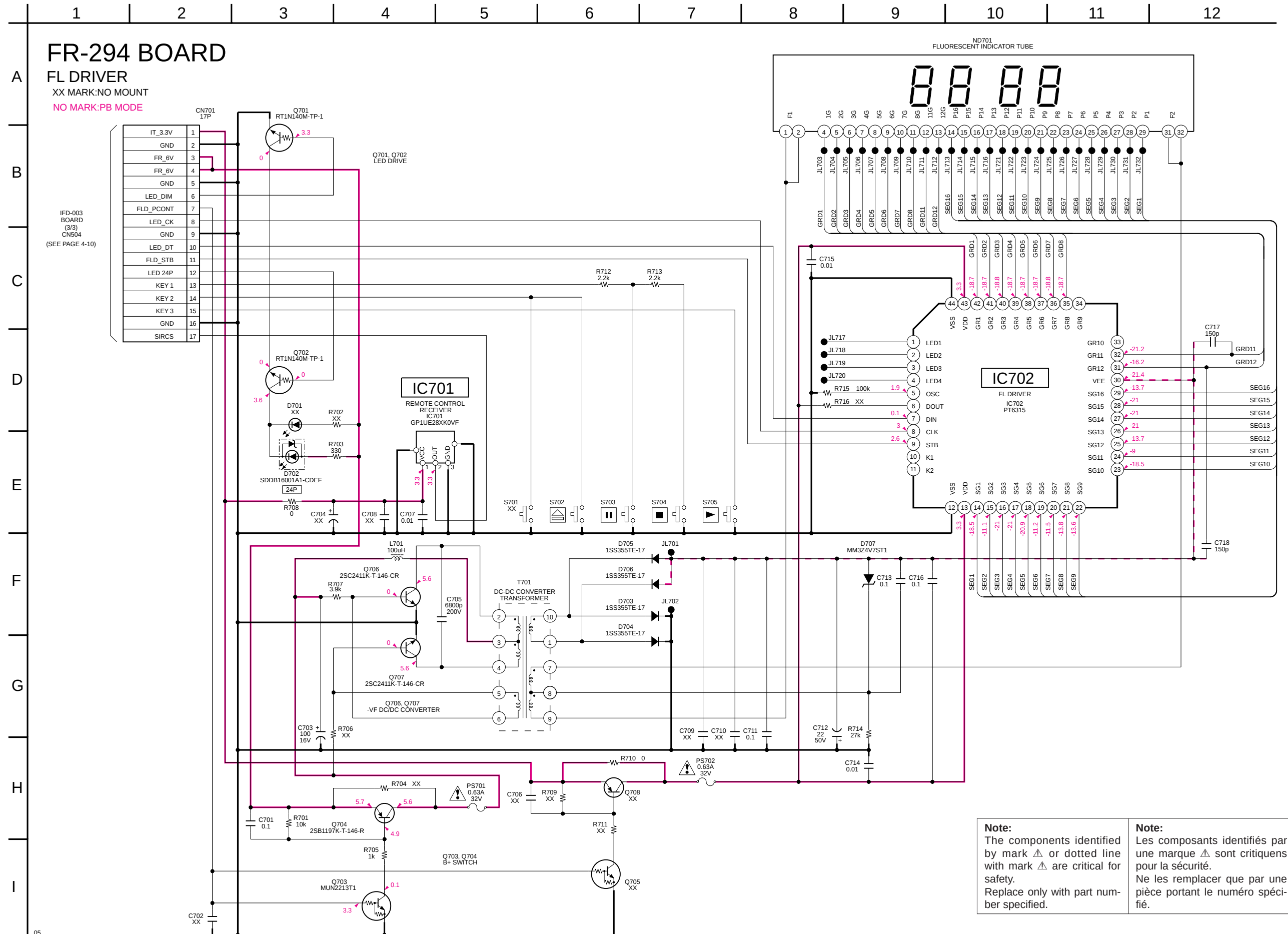


4-6. FL-187 BOARD (SWITCH) SCHEMATIC DIAGRAM • See page 5-5 for printed wiring board.  
- Ref. No.: FL-187 board; 20,000 series -

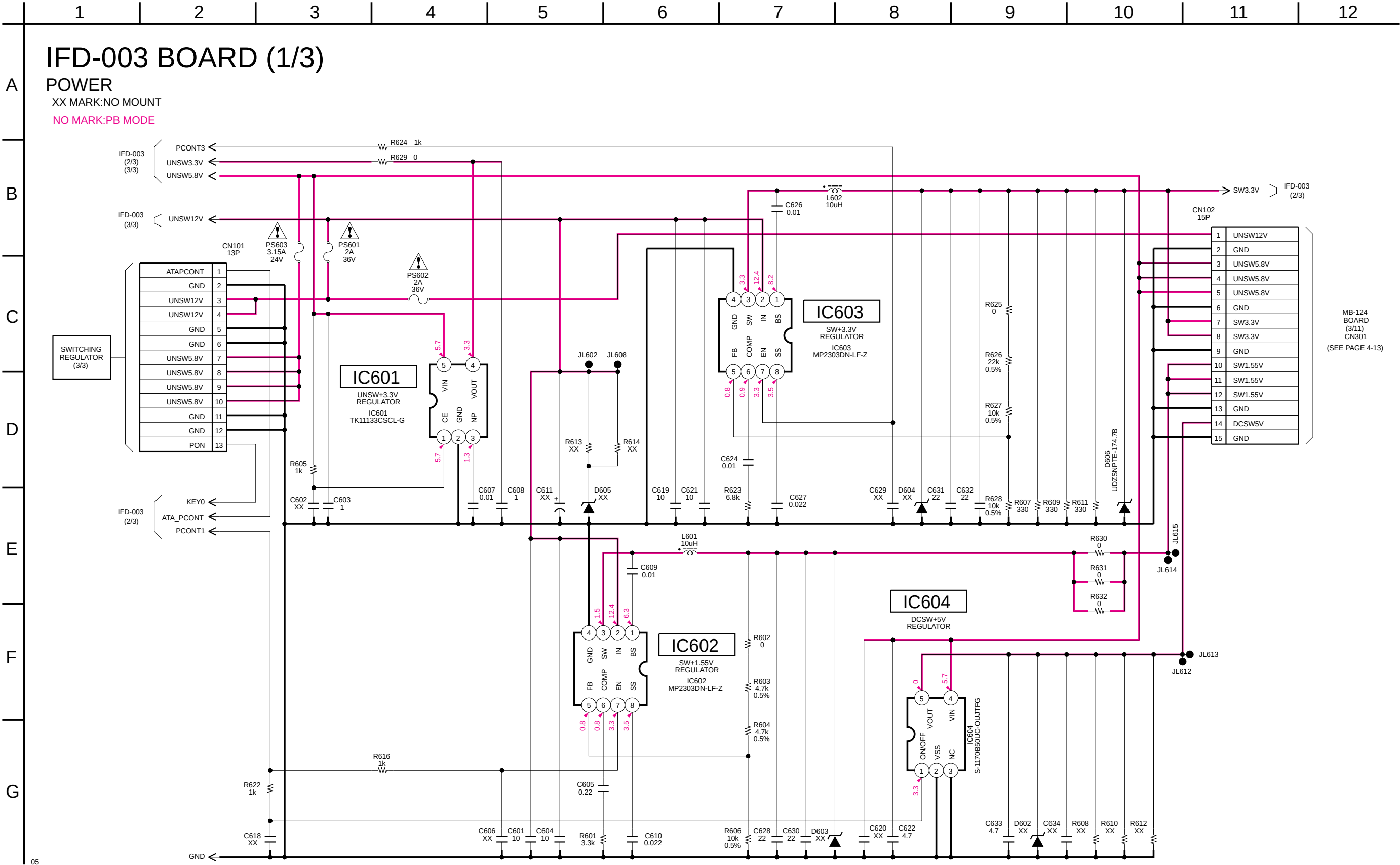


**4-7. FR-294 BOARD (FL DRIVER) SCHEMATIC DIAGRAM • See page 5-6 for printed wiring board.**

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



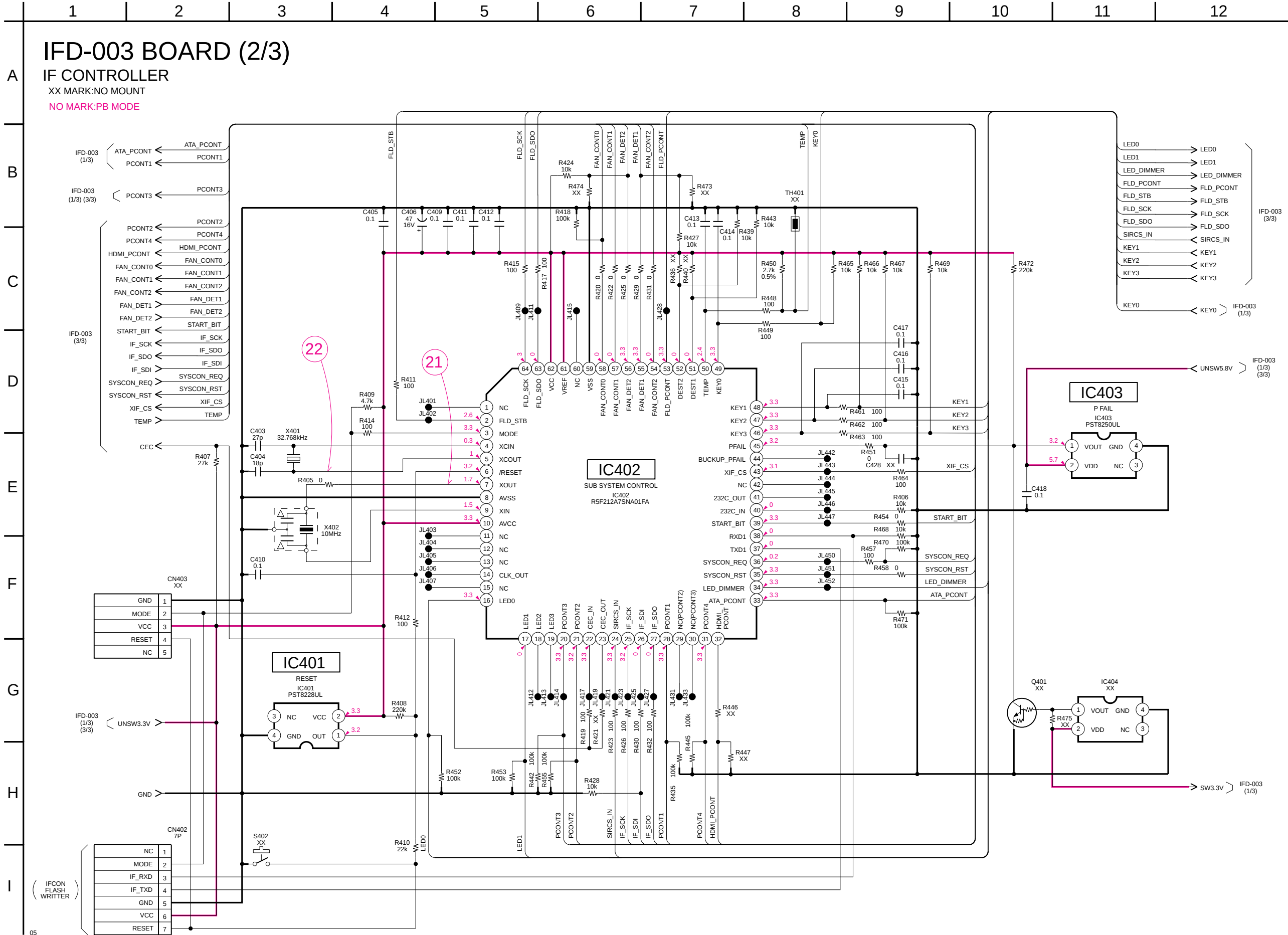
4-8. IFD-003 BOARD (POWER) SCHEMATIC DIAGRAM (1/3) • See page 5-8 for printed wiring board.  
- Ref. No.: IFD-003 board; 20,000 series -



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

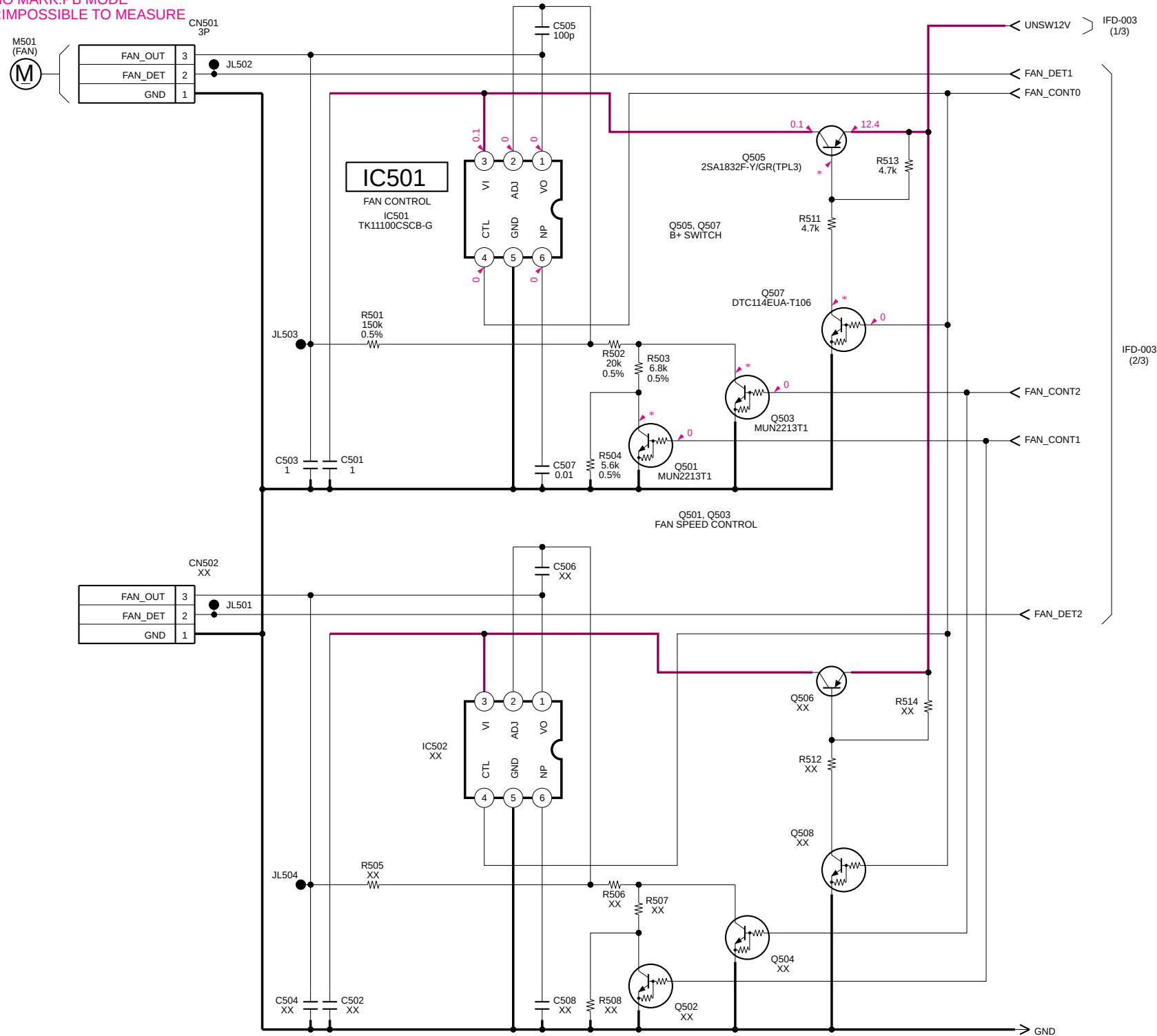
**Note:**  
Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

4-9. IFD-003 BOARD (IF CONTROLLER) SCHEMATIC DIAGRAM (2/3) • See page 5-8 for printed wiring board.  
- Ref. No.: IFD-003 board; 20,000 series -

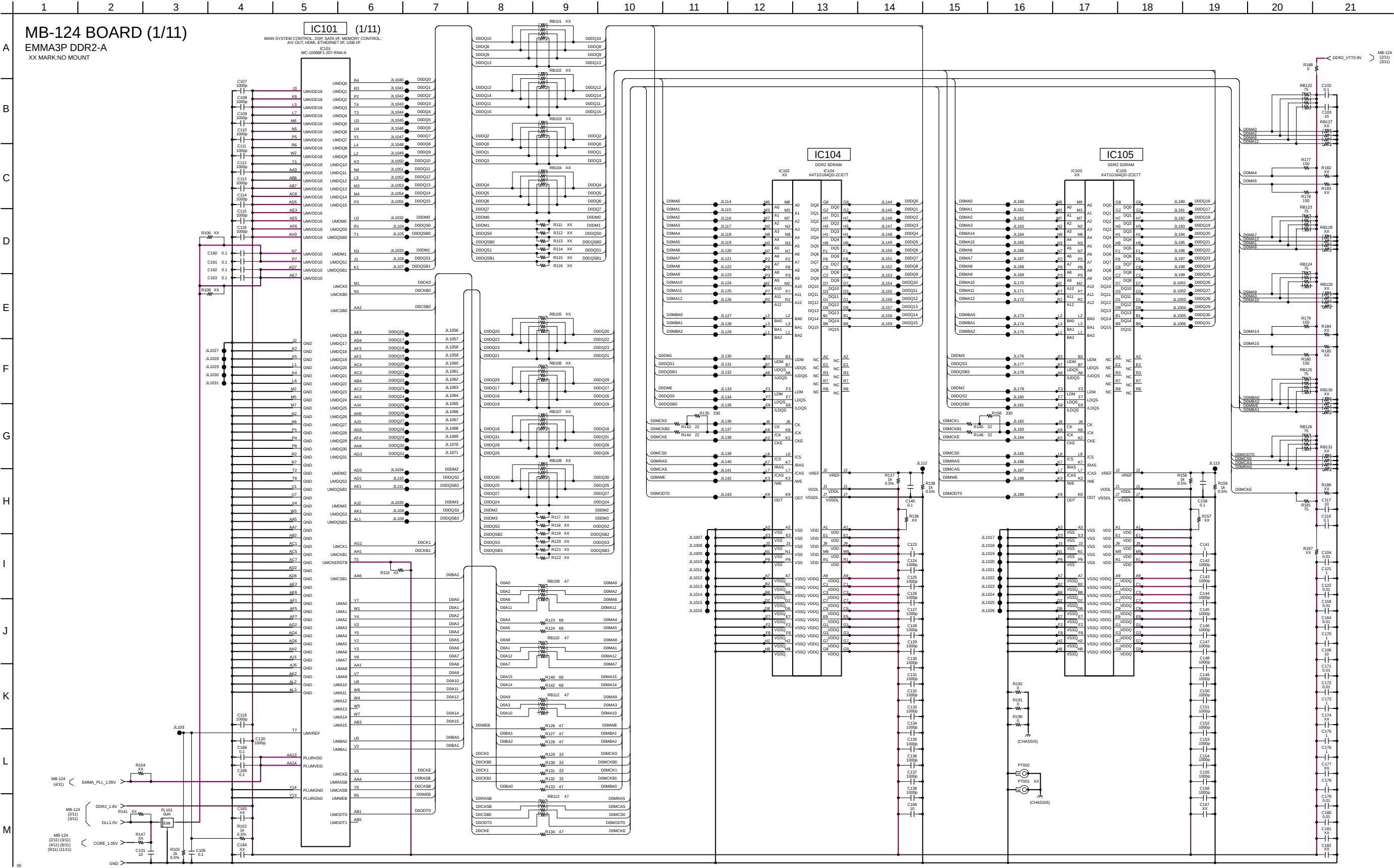


## IFD-003 BOARD (3/3)

FAN

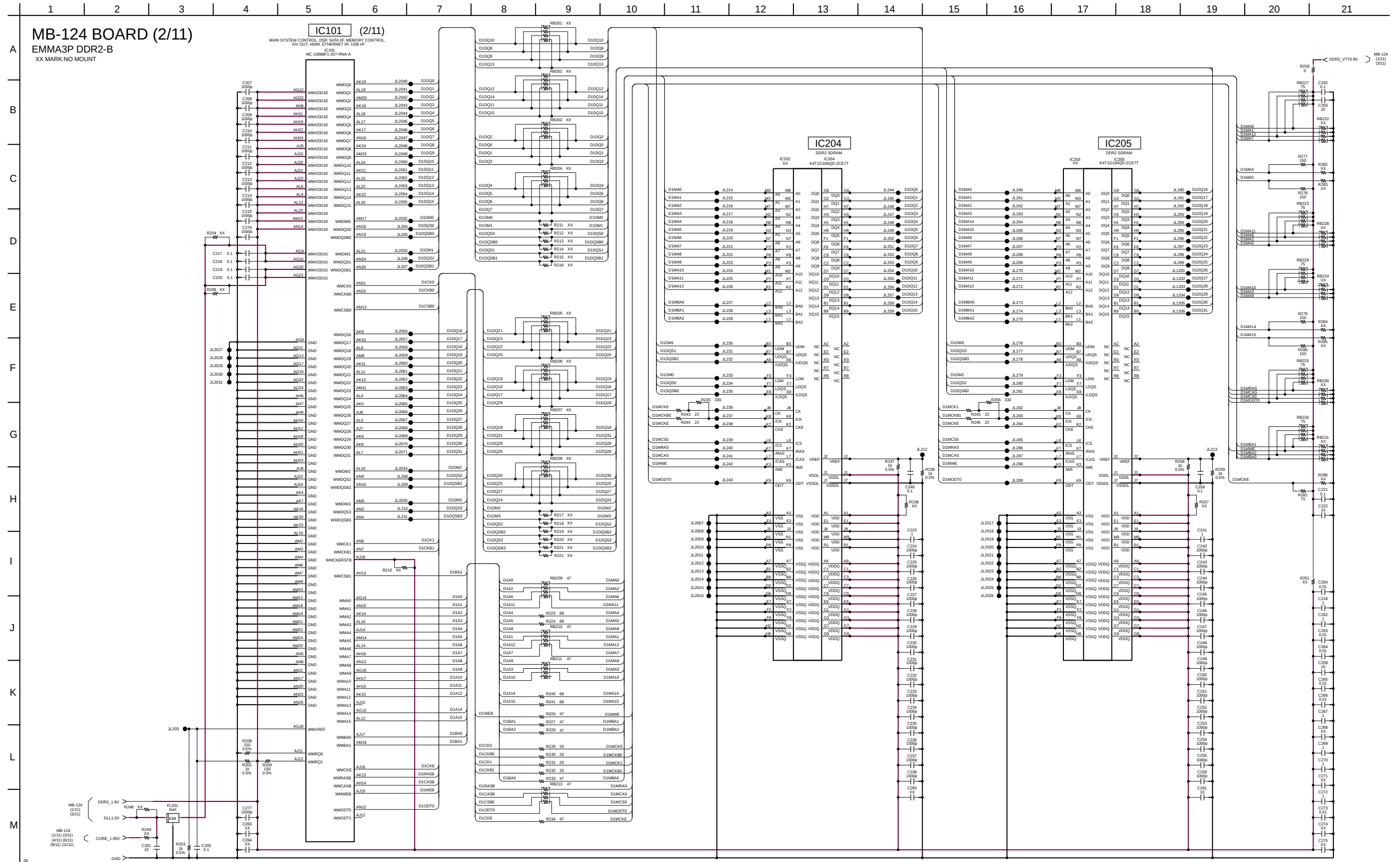


4-11. MB-124 BOARD (EMMA3P DDR2-A) SCHEMATIC DIAGRAM (1/11) • See page 5-10 for printed wiring board.  
- Ref. No.: MB-124 board; 10,000 series -

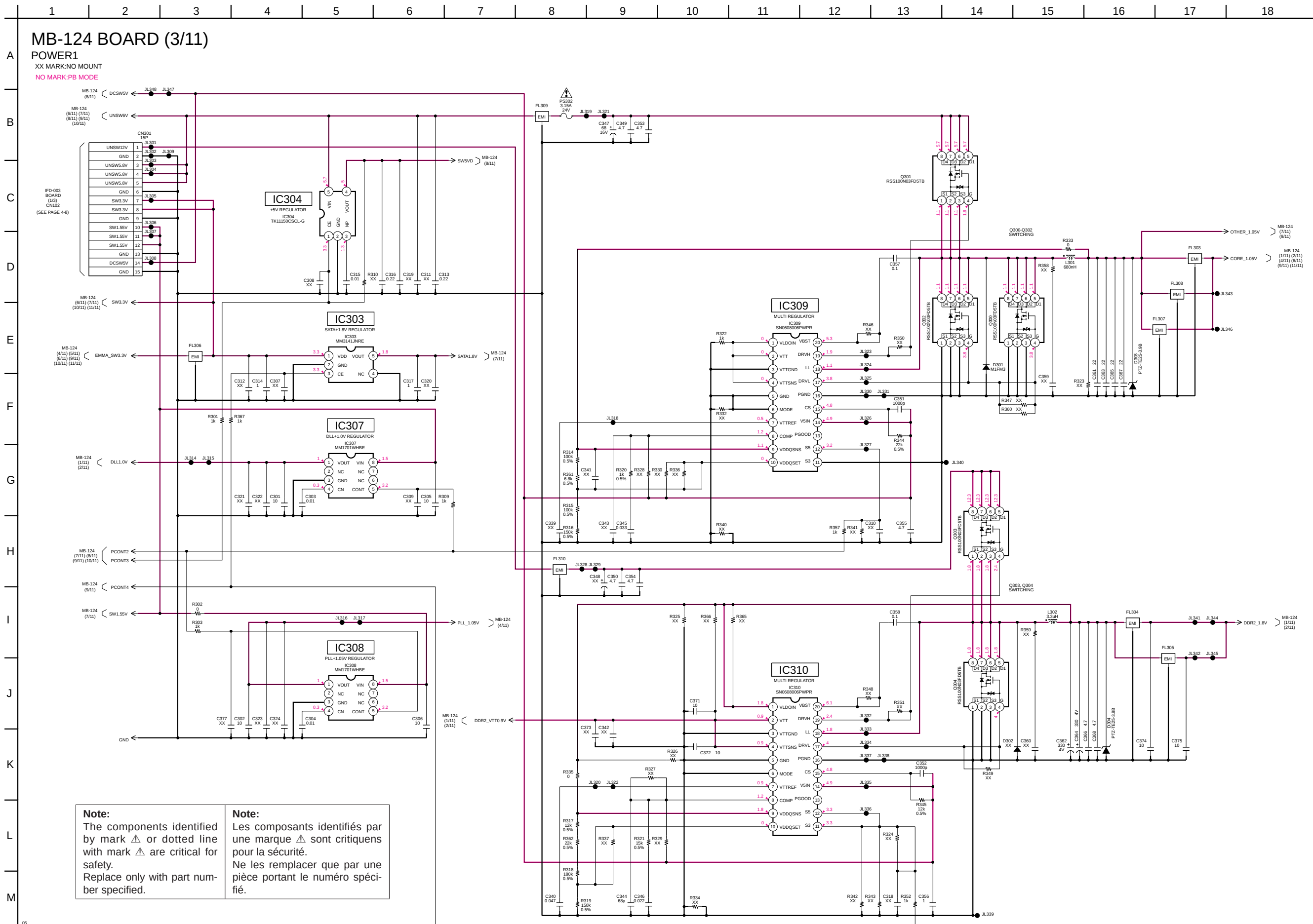


**4-12. MB-124 BOARD (EMMA3P DDR2-B) SCHEMATIC DIAGRAM (2/11) • See page 5-10 for printed wiring board.**

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

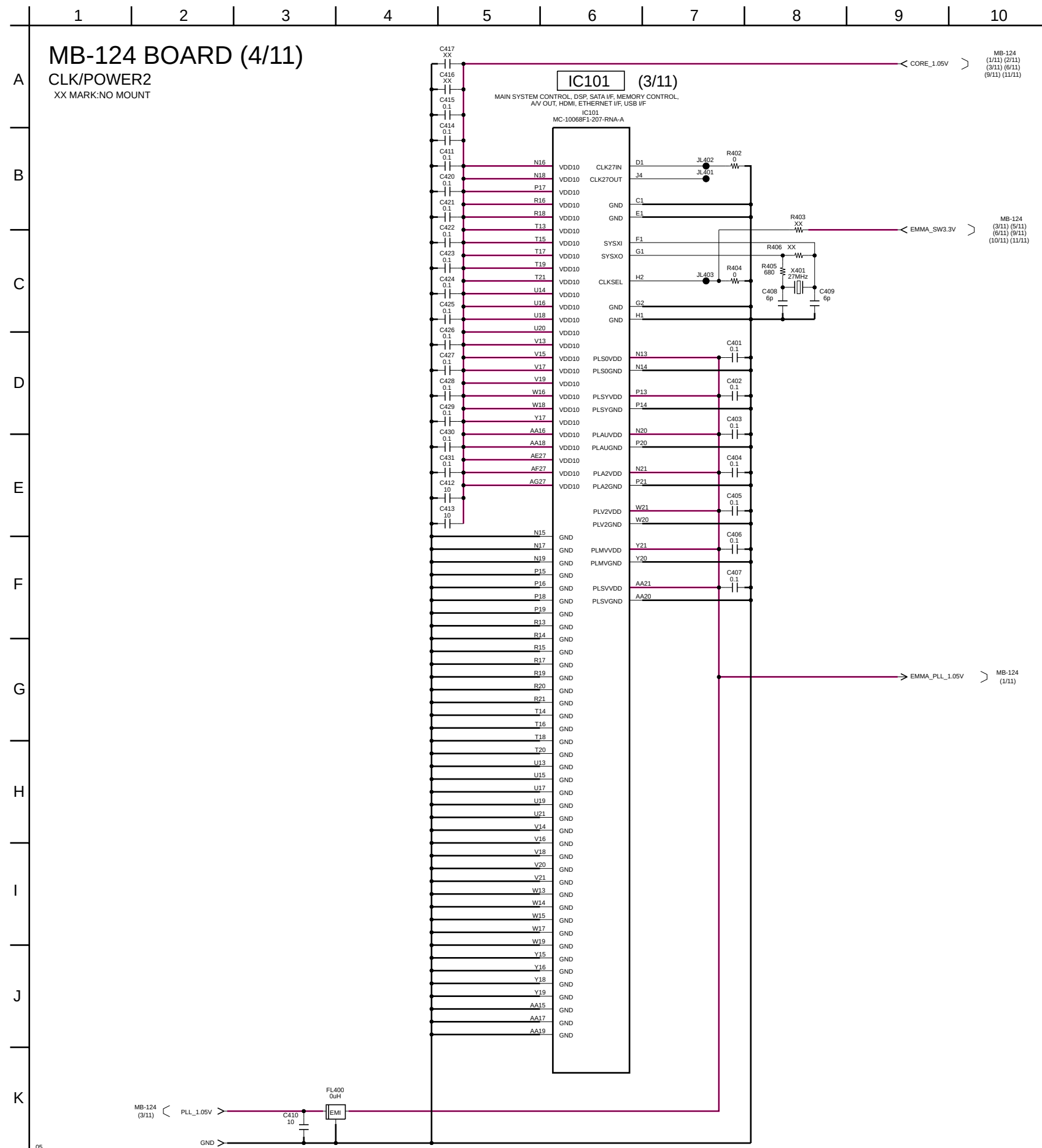


4-13. MB-124 BOARD (POWER1) SCHEMATIC DIAGRAM (3/11) • See page 5-10 for printed wiring board.  
- Ref. No.: MB-124 board; 10,000 series -



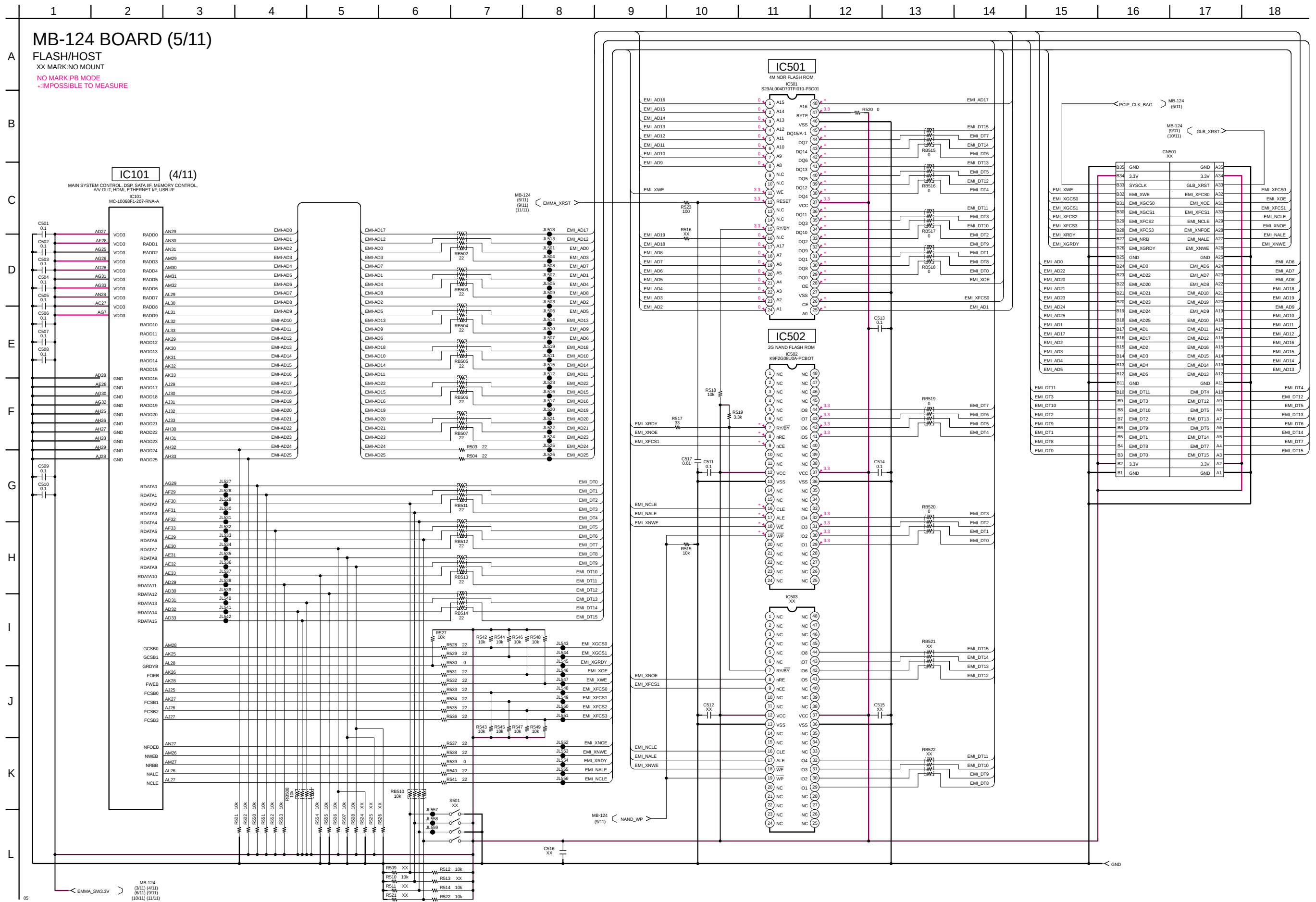
4-14. MB-124 BOARD (CLK/POWER2) SCHEMATIC DIAGRAM (4/11) • See page 5-10 for printed wiring board.

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



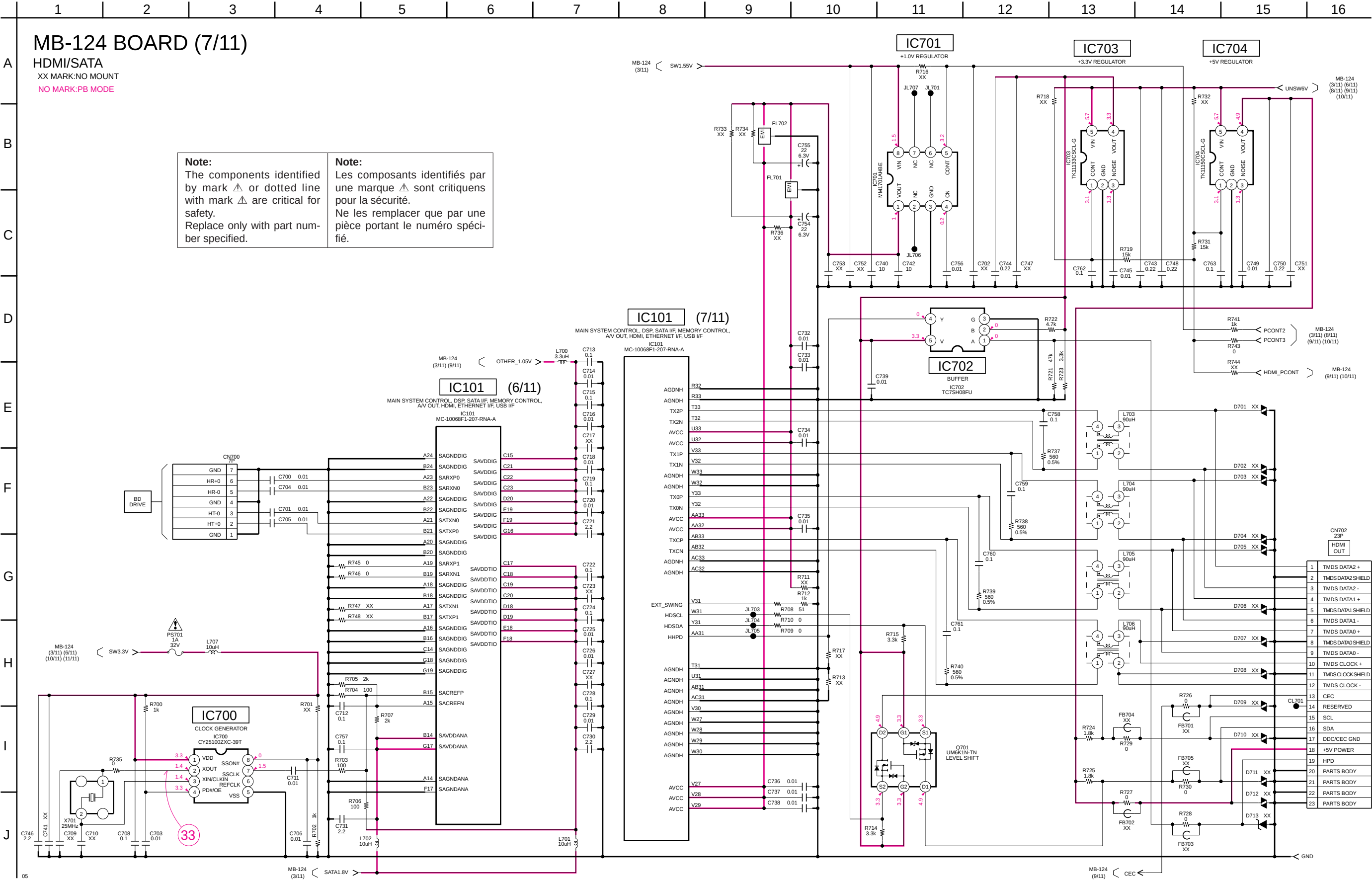
**4-15. MB-124 BOARD (FLASH/HOST) SCHEMATIC DIAGRAM (5/11) • See page 5-10 for printed wiring board.**

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

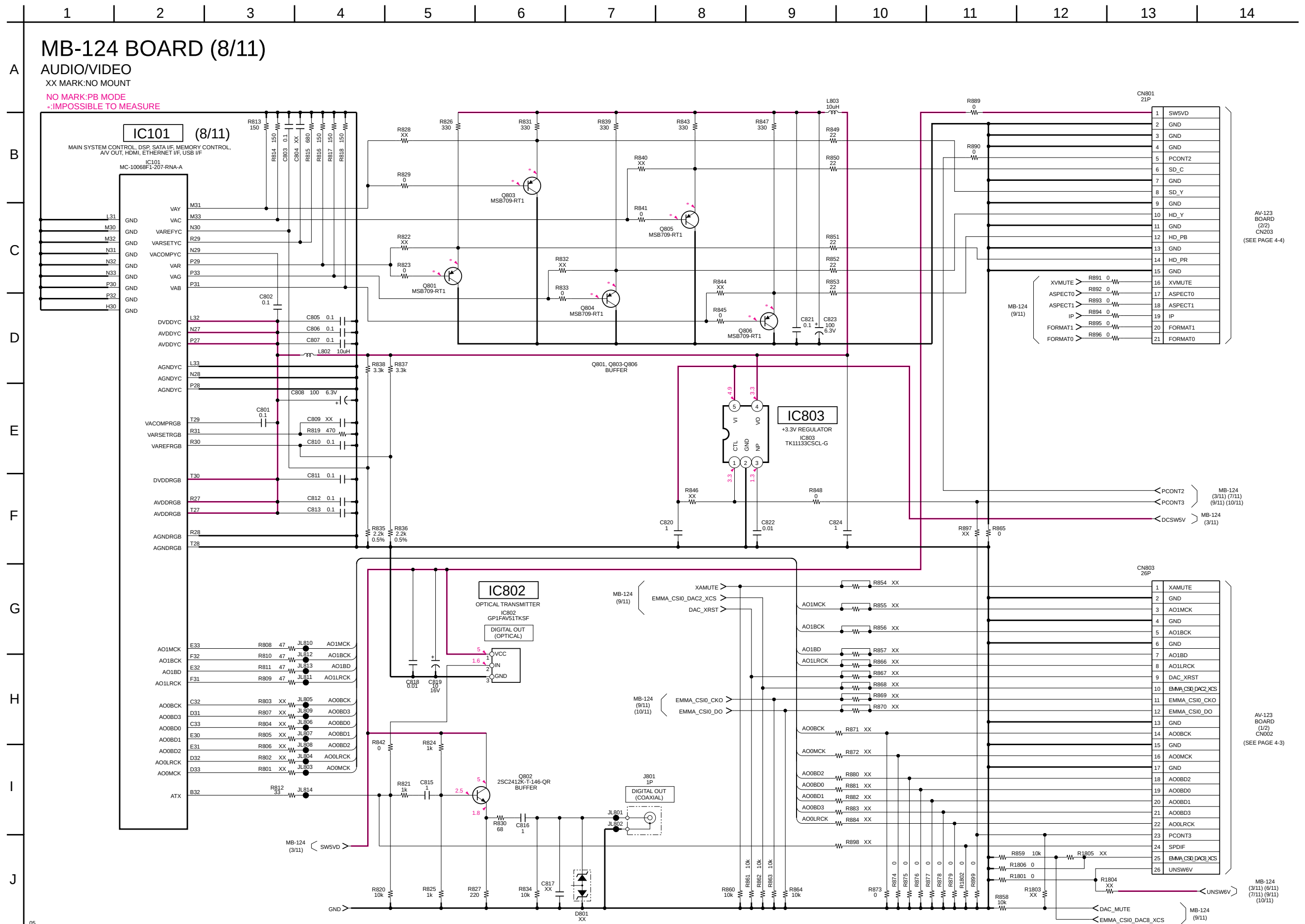




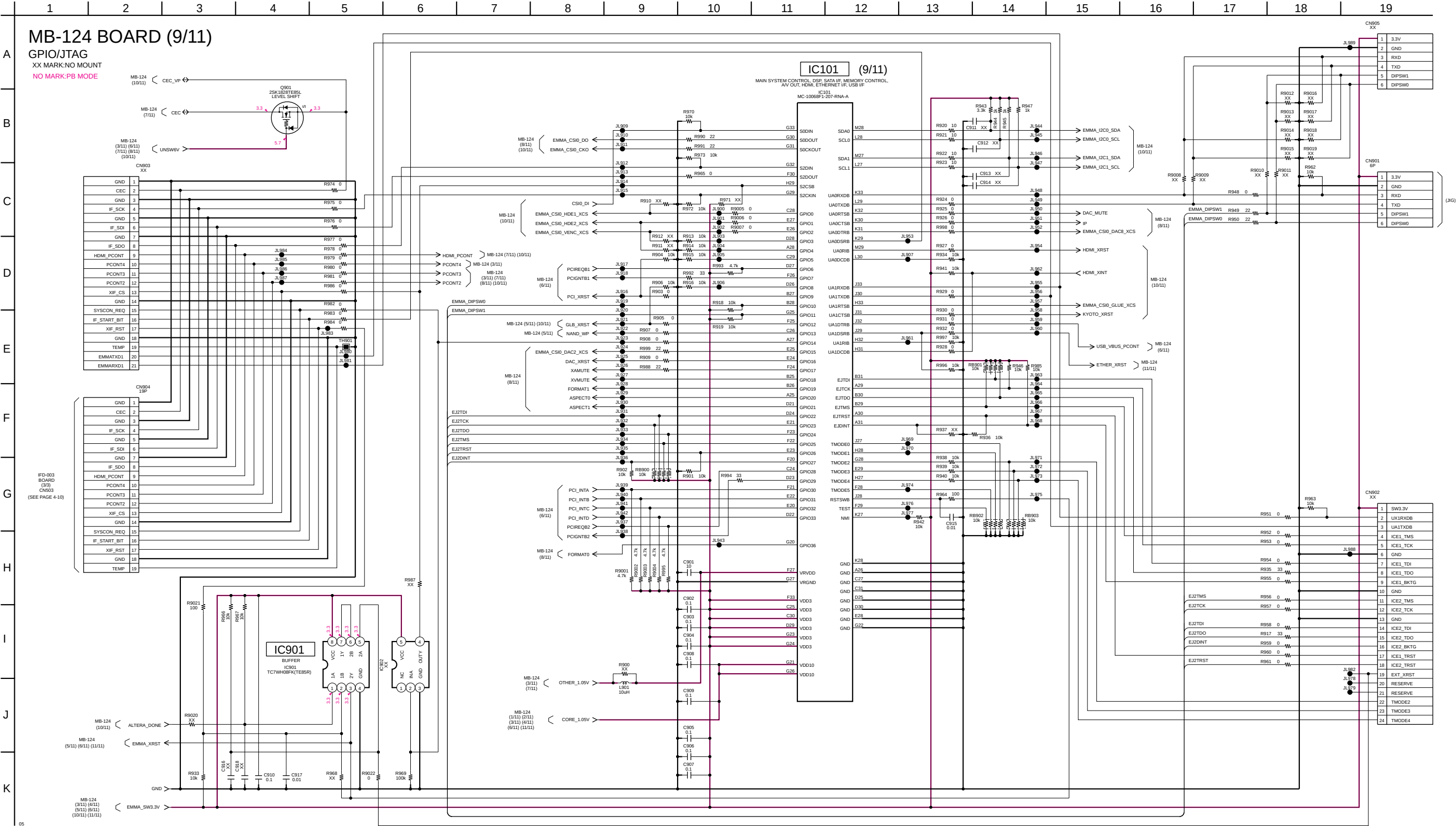
4-17. MB-124 BOARD (HDMI/SATA) SCHEMATIC DIAGRAM (7/11) • See page 5-10 for printed wiring board.  
- Ref. No.: MB-124 board; 10,000 series -



**4-18. MB-124 BOARD (AUDIO/VIDEO) SCHEMATIC DIAGRAM (8/11)** • See page 5-10 for printed wiring board.  
- Ref. No.: MB-124 board; 10,000 series -



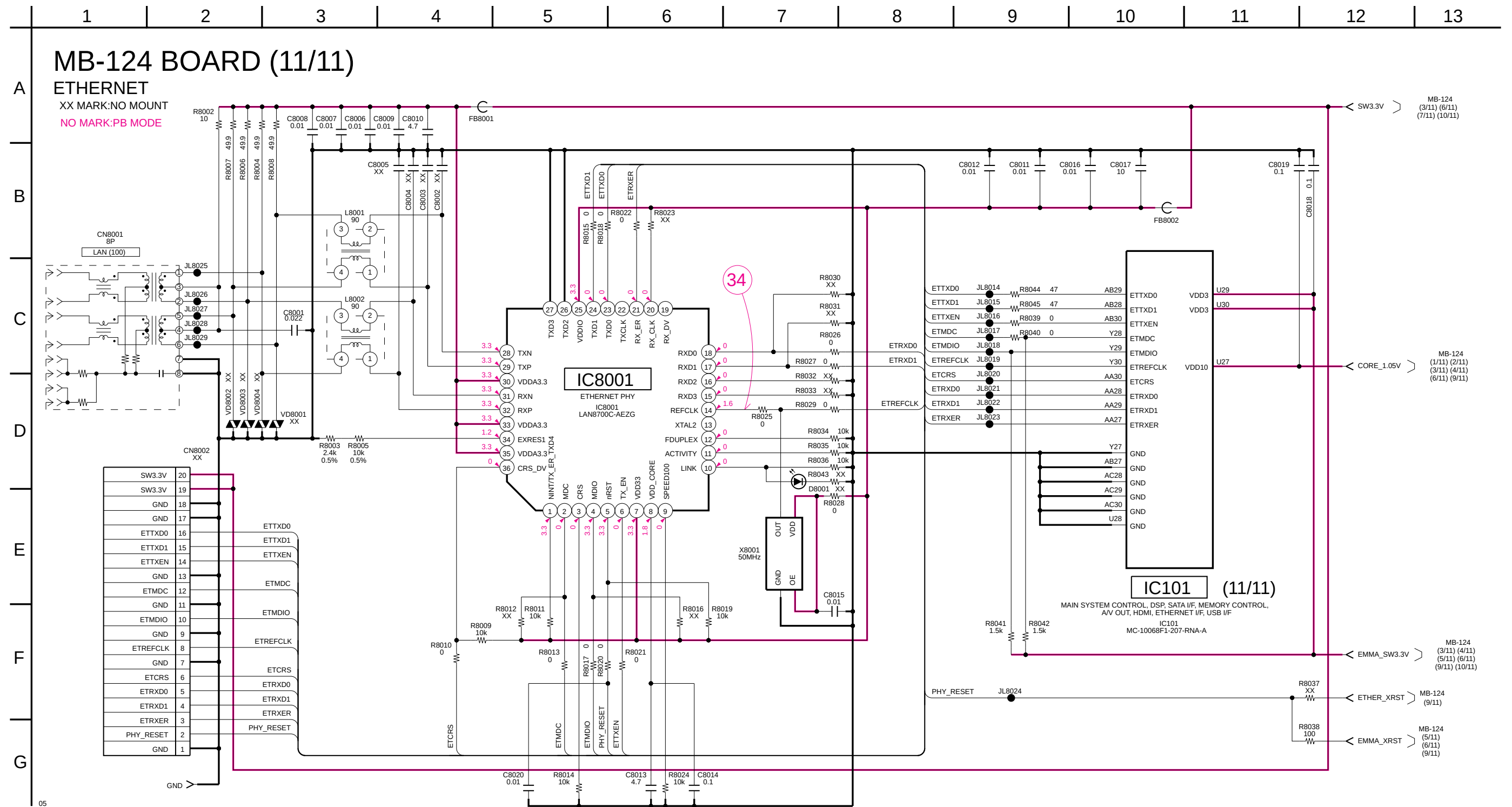
4-19. MB-124 BOARD (GPIO/JTAG) SCHEMATIC DIAGRAM (9/11) • See page 5-10 for printed wiring board.  
- Ref. No.: MB-124 board; 10,000 series -





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

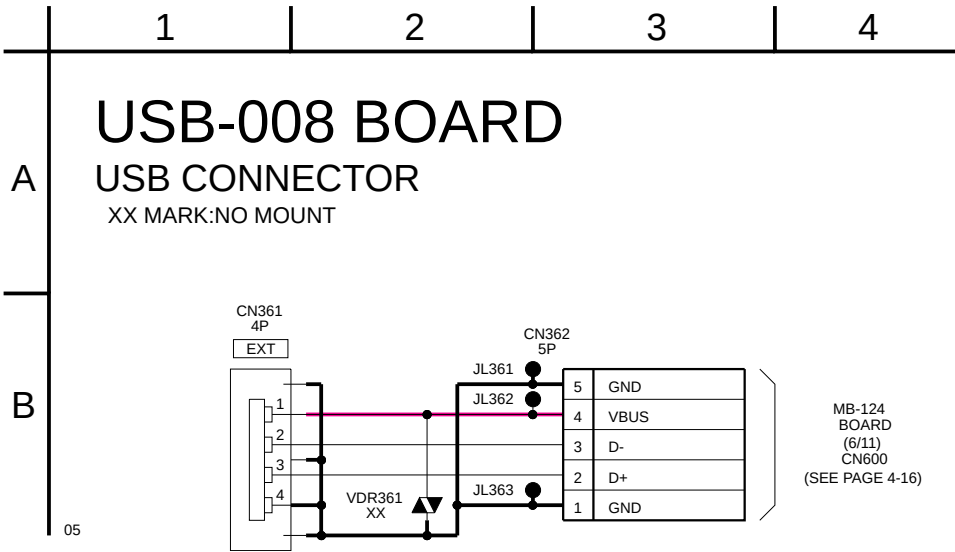
- Ref. No.: MB-124 board; 10,000 series -



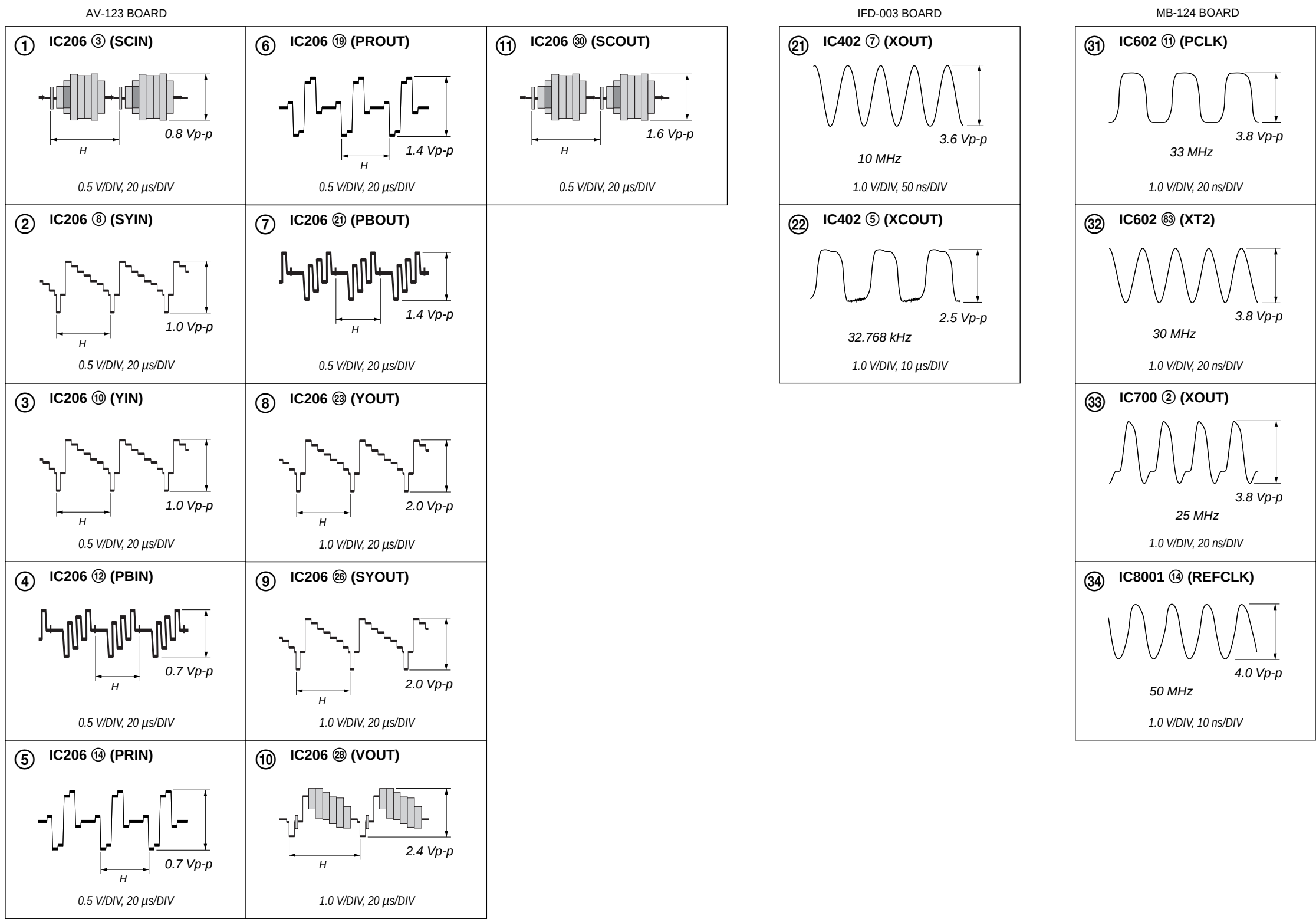
4-22. USB-008 BOARD (USB CONNECTOR) SCHEMATIC DIAGRAM

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

- See page 5-12 for printed wiring board.



4-23. WAVEFORMS



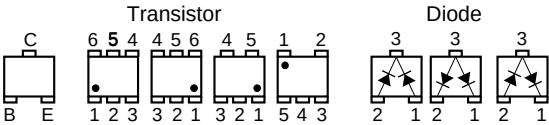
SECTION 5  
PRINTED WIRING BOARDS

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)

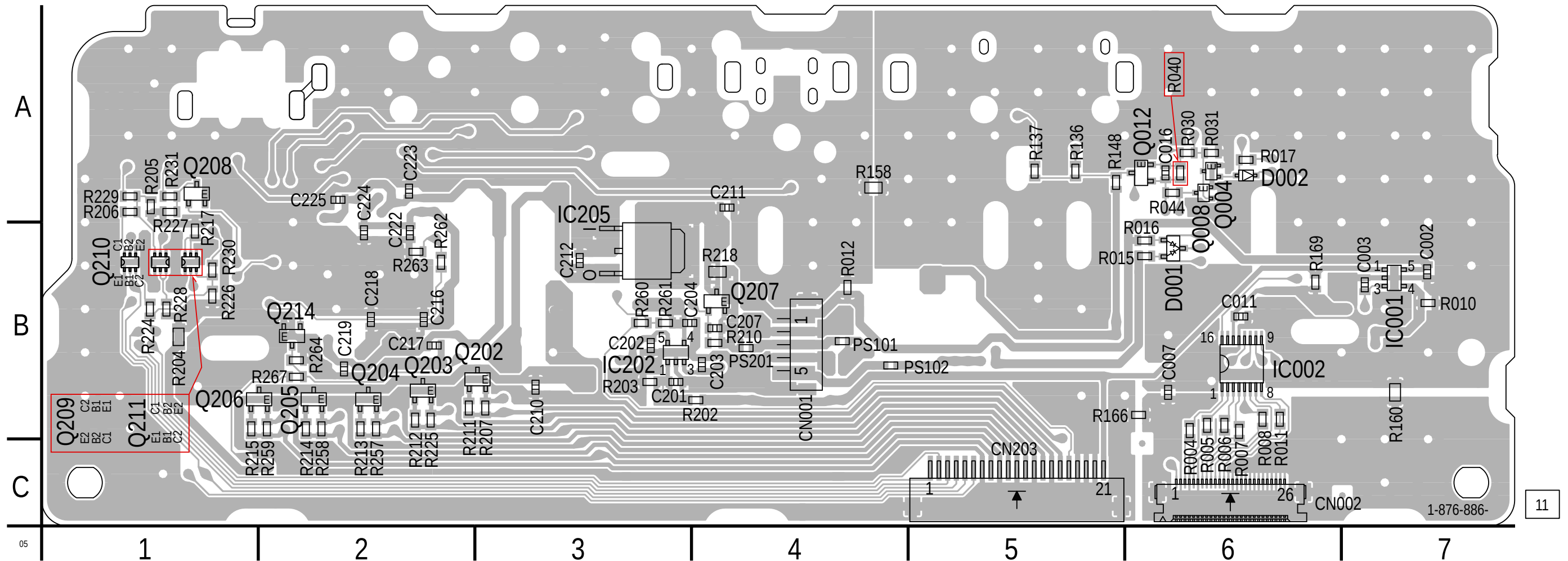
**Caution:**  
Pattern face side: Parts on the pattern face side seen from (SIDE B) the pattern face are indicated.  
Parts face side: Parts on the parts face side seen from (SIDE A) the parts face are indicated.

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



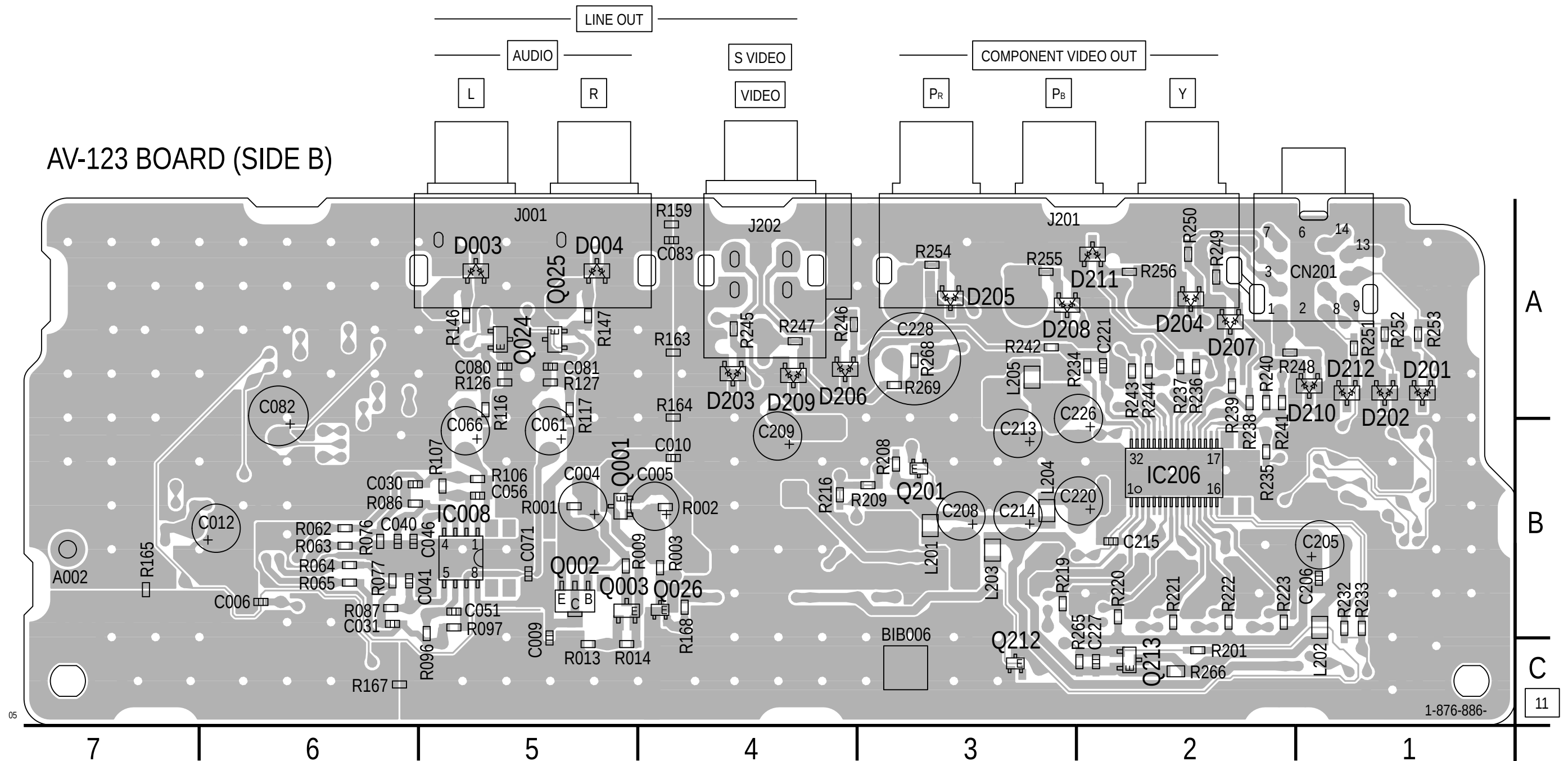
There are a few cases that the part isn't mounted in this model is printed on this diagram.

# AV-123 BOARD (SIDE A)



| AV-123 BOARD (SIDE A) |     |
|-----------------------|-----|
| CN203                 | C-5 |
| D001                  | B-6 |
| D002                  | A-6 |
| IC001                 | B-7 |
| IC002                 | B-6 |
| IC202                 | B-3 |
| IC205                 | B-3 |
| Q004                  | A-6 |
| Q008                  | A-6 |
| Q012                  | A-6 |
| Q202                  | B-3 |
| Q203                  | B-2 |
| Q204                  | B-2 |
| Q205                  | B-2 |
| Q206                  | A-2 |
| Q207                  | B-4 |
| Q214                  | B-2 |

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



AV-123 BOARD (SIDE B)

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

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

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

• See page 2-6 for circuit boards location.

 : Uses unleaded solder.

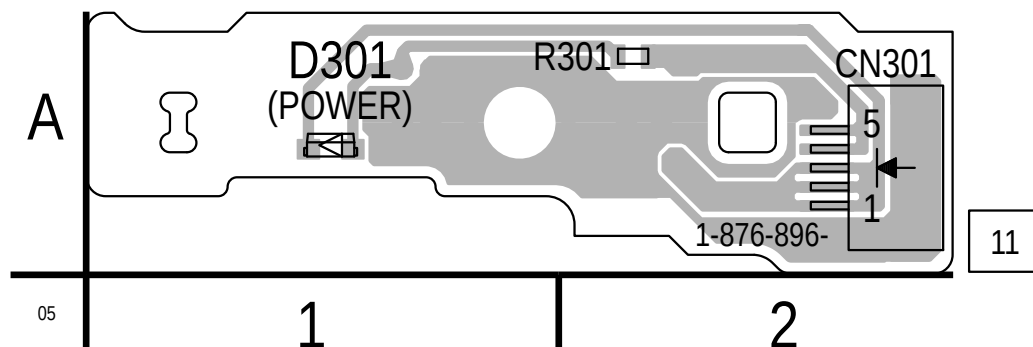
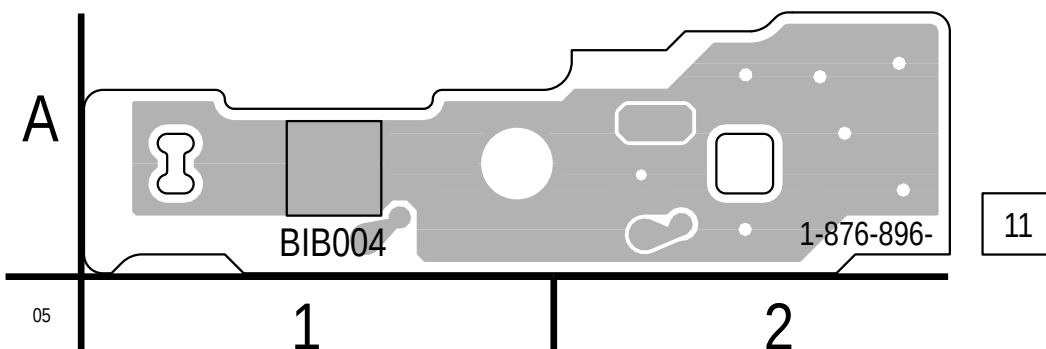
There are a few cases that the part isn't mounted in this model is printed on this diagram.

**FC-096 BOARD (SIDE A)**

FC-096 BOARD (SIDE A)

CN301 A-2

D301 A-1

**FC-096 BOARD (SIDE B)**

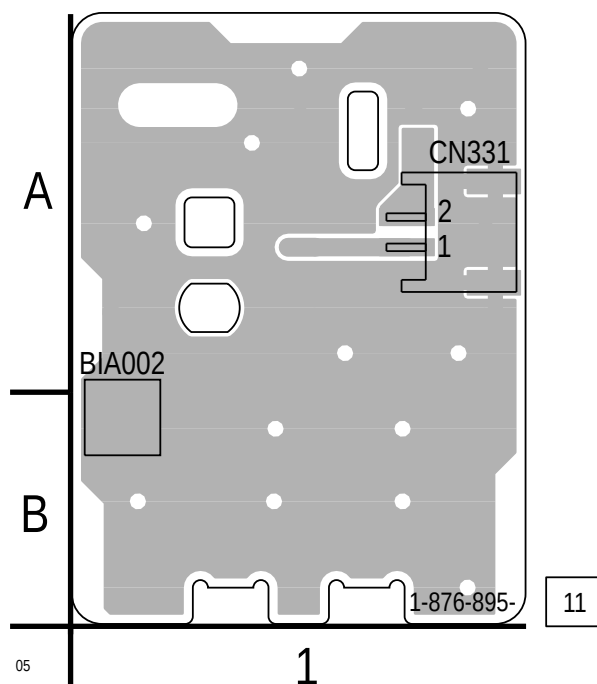
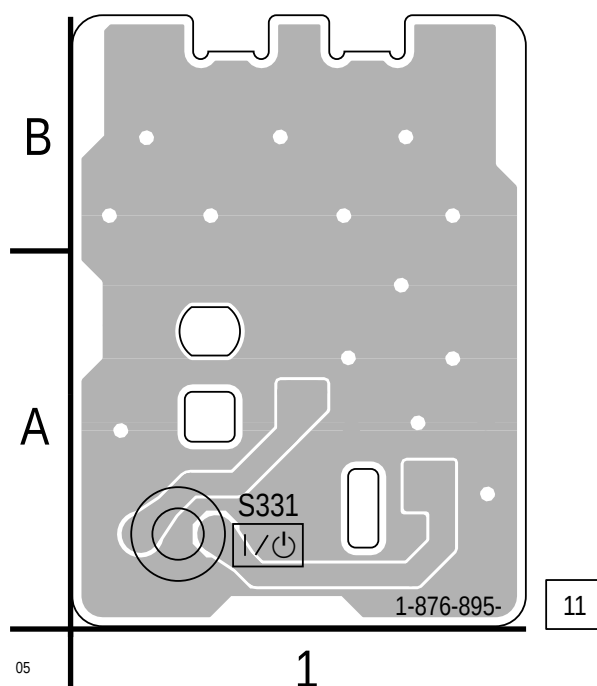
**5-5. FL-187 BOARD (SWITCH) PRINTED WIRING BOARD**

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

- See page 2-6 for circuit boards location.

 : Uses unleaded solder.

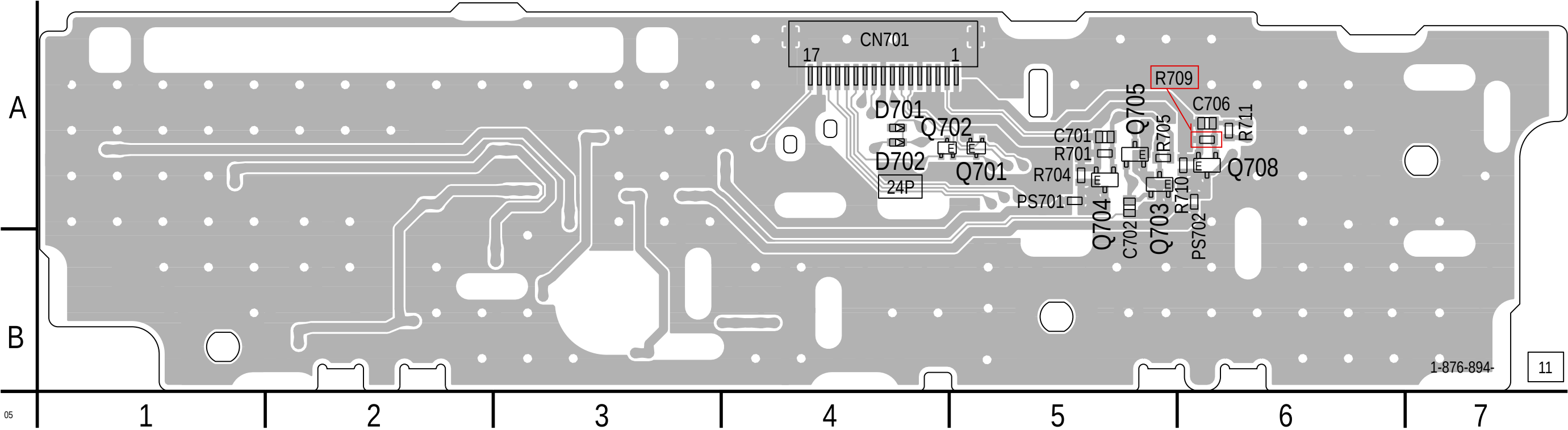
There are a few cases that the part isn't mounted in this model is printed on this diagram.

**FL-187 BOARD (SIDE A)****FL-187 BOARD (SIDE B)**

5-6. FR-294 BOARD (FL DRIVER) PRINTED WIRING BOARD (SIDE A) • See page 2-6 for circuit boards location.  
- Ref. No.: FR-294 board; 20,000 series -  
⚡ : Uses unleaded solder.

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

FR-294 BOARD (SIDE A)



FR-294 BOARD (SIDE A)

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

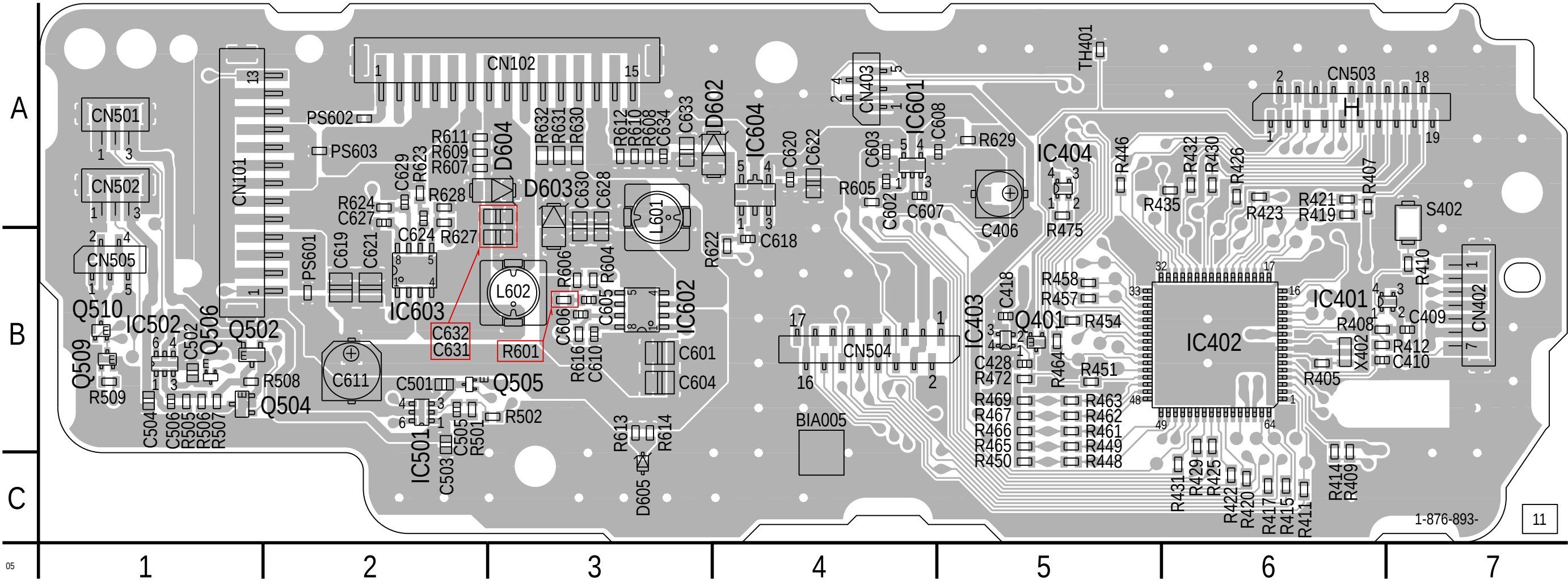


5-8. IFD-003 BOARD (IF CONTROLLER) PRINTED WIRING BOARD (SIDE A) • See page 2-6 for circuit boards location.  
- Ref. No.: IFD-003 board; 20,000 series -

 : Uses unleaded solder.

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

IFD-003 BOARD (SIDE A)



IFD-003 BOARD (SIDE A)

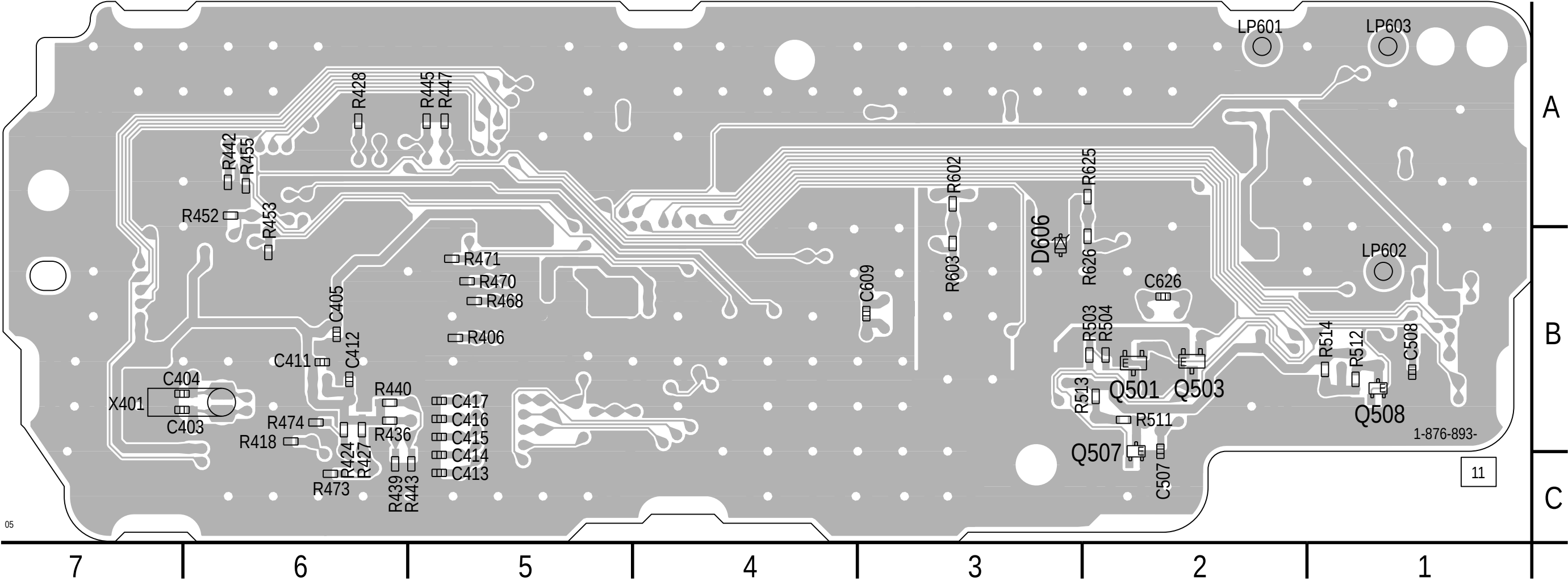
|       |     |
|-------|-----|
| CN101 | A-1 |
| CN102 | A-3 |
| CN402 | B-7 |
| CN501 | A-1 |
| CN503 | A-6 |
| CN504 | B-4 |
| IC402 | B-6 |
| IC501 | B-2 |
| IC601 | A-4 |
| IC602 | B-3 |
| IC603 | B-2 |
| IC604 | A-4 |
| Q505  | B-2 |
| Q509  | B-1 |
| Q510  | B-1 |

5-9. IFD-003 BOARD (IF CONTROLLER) PRINTED WIRING BOARD (SIDE B) • See page 2-6 for circuit boards location.  
- Ref. No.: IFD-003 board; 20,000 series -

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

 : Uses unleaded solder.

IFD-003 BOARD (SIDE B)

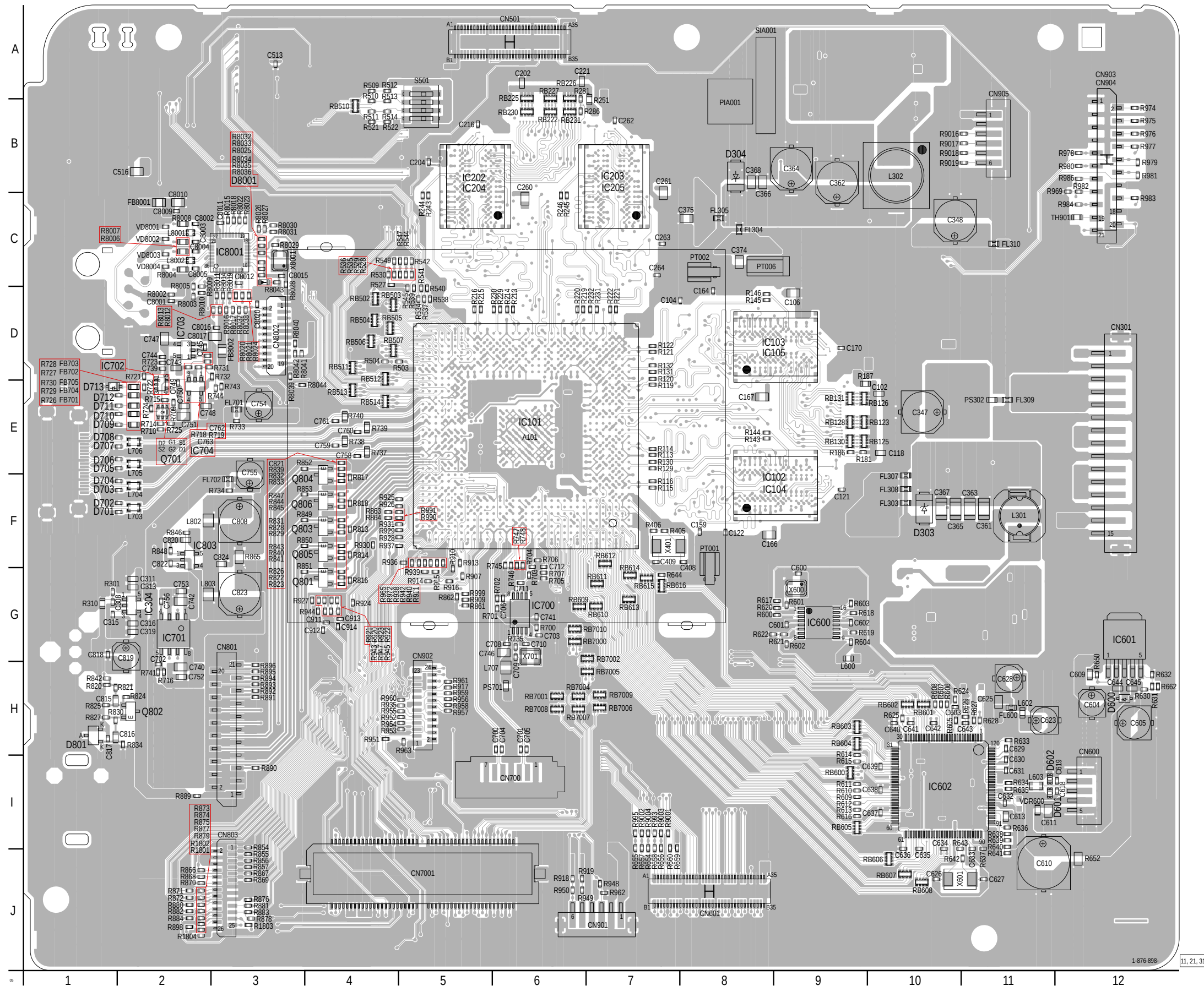


IFD-003 BOARD (SIDE B)

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

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

MB-124 BOARD (SIDE A)



MB-124 BOARD (SIDE A)

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

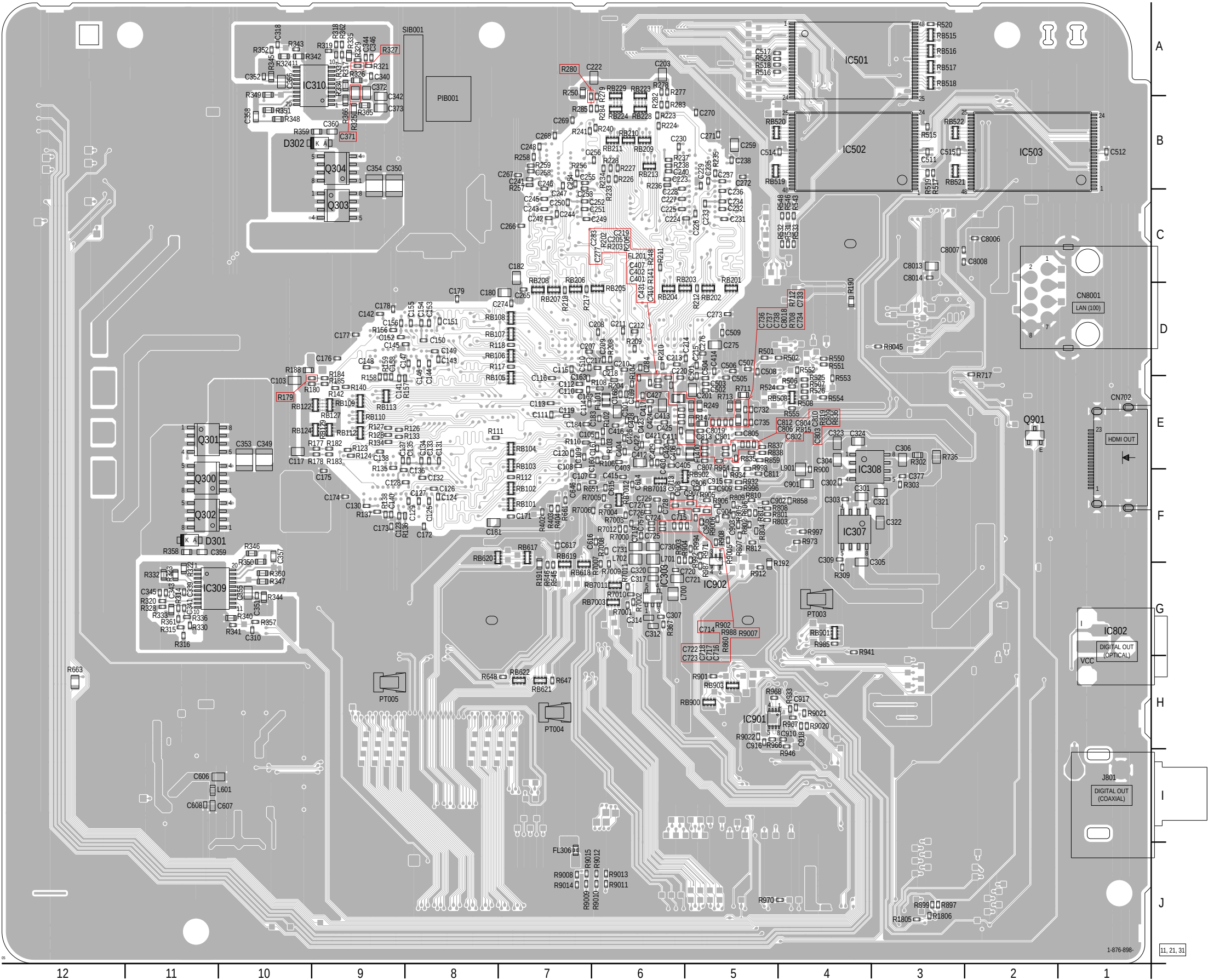
5-11. MB-124 BOARD (MAIN) PRINTED WIRING BOARD (SIDE B) • See page 2-6 for circuit boards location.

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

 : Uses unleaded solder.

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

MB-124 BOARD (SIDE B)



MB-124 BOARD (SIDE B)

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

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

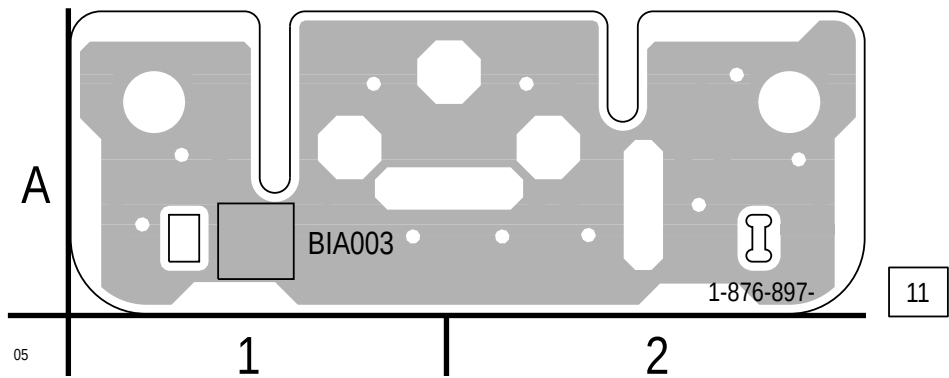
- Ref. No.: USB-008 board; 20,000 series -

• See page 2-6 for circuit boards location.

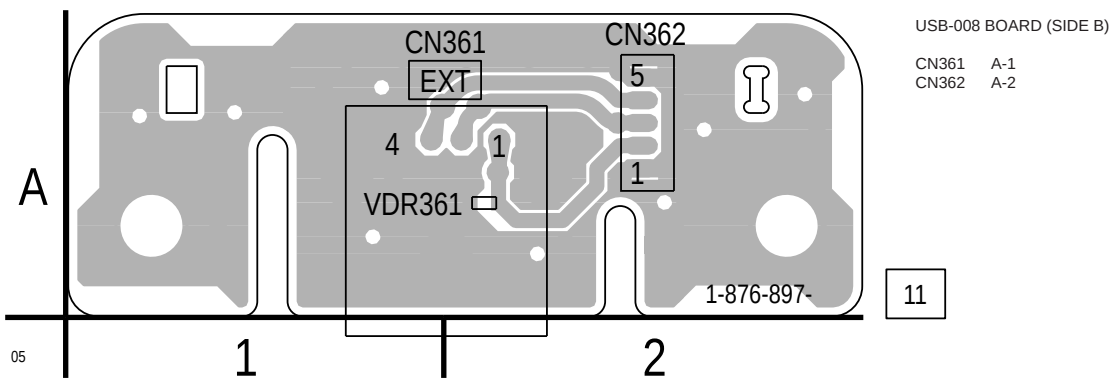
 : Uses unleaded solder.

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

USB-008 BOARD (SIDE A)



USB-008 BOARD (SIDE B)



## SECTION 6

### IC PIN FUNCTION DESCRIPTION

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

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

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

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

| Pin No. | Name     | I/O | Description                                |
|---------|----------|-----|--------------------------------------------|
| F18     | SAVDDTIO | -   | 1.8V supply (Serial ATA Tx I/O)            |
| F19     | SAVDDDIG | -   | 1.05V supply (Serial ATA digital VDD)      |
| F20     | GPIO27   | I   | EJ2DINT (JTAG I/F_1 debug interrupt)       |
| F21     | GPIO30   | I   | PCI INT A (PCI Interrupt: USB)             |
| F22     | GPIO25   | I   | EJ2TMS (JTAG I/F_1 Mode Set)               |
| F23     | GPIO24   | O   | EJ2TDO (JTAG I/F_1 Data Out)               |
| F24     | GPIO17   | O   | XAMUTE (Audio Mute: "H": Normal "L": Mute) |
| F25     | GPIO12   | O   | GLB XRST (Not used)                        |
| F26     | GPIO7    | O   | PCI GNT1 (Not used)                        |
| F27     | VRVDD    | -   | 1.05V supply for VR5500 PLL                |
| F28     | TMODE5   | I   | Test terminal (Not used: Fixed at "L")     |
| F29     | TEST     | I   | Test terminal (Not used: Fixed at "L")     |
| F30     | S2DOUT   | O   | IF SDI (IFcon Communication Data Out)      |
| F31     | AO1LRCK  | O   | LR Clock for 2ch output                    |
| F32     | AO1BCK   | O   | Bit Clock for 2ch output                   |
| F33     | VDD3     | -   | 3.3V supply (I/O buffers)                  |
| G1      | XO       | O   | Crystal Output                             |
| G2      | GND      | -   | Ground for digital and DDR2 SDRAM          |
| G3      | PCIAD28  | I/O | PCI Address Data                           |
| G4      | PCIAD26  | I/O | PCI Address Data                           |
| G5      | PCIAD31  | I/O | PCI Address Data                           |
| G6      | PCIAD15  | I/O | PCI Address Data                           |
| G7      | PCIAD16  | I/O | PCI Address Data                           |
| G8      | PCIAD10  | I/O | PCI Address Data                           |
| G9      | VDD3     | -   | 3.3V supply (I/O buffers)                  |
| G10     | GND      | -   | Ground for digital and DDR2 SDRAM          |
| G11     | GPIO50   | I/O | VOHSB: Horizontal Sync Signal              |
| G12     | GPIO75   | I/O | AOHBD0: Data output for External HDMI      |
| G13     | GPIO61   | I/O | VODY9: Digital Video Y Data Output         |
| G14     | VDD3     | -   | 3.3V supply (I/O buffers)                  |
| G15     | GPIO73   | I/O | AOHLRCK: External HDMI LRCK Clock Output   |
| G16     | SAVDDDIG | -   | 1.05V supply (Serial ATA digital VDD)      |
| G17     | SAVDDANA | -   | 1.8V supply (Serial ATA analog VDD)        |
| G18     | SAGNDDIG | -   | Digital Ground for Serial ATA              |
| G19     | SAGNDDIG | -   | Digital Ground for Serial ATA              |
| G20     | GPIO36   | O   | FORMAT0 (480, 1080="0" 720="1")            |
| G21     | VDD10    | -   | 1.05V supply (core)                        |
| G22     | GND      | -   | Ground for digital and DDR2 SDRAM          |
| G23     | VDD3     | -   | 3.3V supply (I/O buffers)                  |
| G24     | VDD3     | -   | 3.3V supply (I/O buffers)                  |
| G25     | GPIO11   | I   | EMMA_DIPSW0 (Fixed at "H")                 |
| G26     | VDD10    | -   | 1.05V supply (core)                        |
| G27     | VRGND    | -   | Ground for VR5500 PLL                      |
| G28     | TMODE2   | I   | Test terminal (Not used: Fixed at "L")     |
| G29     | S2CKIN   | I   | IF SCK (IFcon Communication Clock In)      |
| G30     | S0DOUT   | O   | EMMA CS10 DO (CS10 Data Out)               |
| G31     | S0CKOUT  | O   | EMMA CS10 CKIO (CS10 Clock Out)            |
| G32     | S2DIN    | I   | IF SDO (IFcon Communication Data In)       |
| G33     | S0DIN    | I   | CS10 DI (CS10 Data In)                     |
| H1      | GND      | -   | Ground for digital and DDR2 SDRAM          |
| H2      | CLKSEL   | I   | OSC27/CLK27IN Select Signal                |
| H3      | PCICLKI  | I   | PCI 33MHz Clock Input                      |
| H4      | GND      | -   | Ground for digital and DDR2 SDRAM          |
| H5      | PCIRSTB  | I   | PCI Hardware Reset                         |
| H6      | VDD3     | -   | 3.3V supply (I/O buffers)                  |
| H7      | VDD10    | -   | 1.05V supply (core)                        |
| H8      | VOID     | -   | This pin is not ball.                      |
| H9      | VOID     | -   | This pin is not ball.                      |
| H10     | VOID     | -   | This pin is not ball.                      |
| H11     | VOID     | -   | This pin is not ball.                      |
| H12     | VOID     | -   | This pin is not ball.                      |

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

| Pin No. | Name    | I/O | Description                                     |
|---------|---------|-----|-------------------------------------------------|
| K8      | VOID    | -   | This pin is not ball.                           |
| K9      | VOID    | -   | This pin is not ball.                           |
| K10     | VOID    | -   | This pin is not ball.                           |
| K11     | VOID    | -   | This pin is not ball.                           |
| K12     | VOID    | -   | This pin is not ball.                           |
| K13     | VOID    | -   | This pin is not ball.                           |
| K14     | VOID    | -   | This pin is not ball.                           |
| K15     | VOID    | -   | This pin is not ball.                           |
| K16     | VOID    | -   | This pin is not ball.                           |
| K17     | VOID    | -   | This pin is not ball.                           |
| K18     | VOID    | -   | This pin is not ball.                           |
| K19     | VOID    | -   | This pin is not ball.                           |
| K20     | VOID    | -   | This pin is not ball.                           |
| K21     | VOID    | -   | This pin is not ball.                           |
| K22     | VOID    | -   | This pin is not ball.                           |
| K23     | VOID    | -   | This pin is not ball.                           |
| K24     | VOID    | -   | This pin is not ball.                           |
| K25     | VOID    | -   | This pin is not ball.                           |
| K26     | VOID    | -   | This pin is not ball.                           |
| K27     | NMI     | I   | Non maskable interrupt (Not used: Fixed at "H") |
| K28     | GND     | -   | Ground for digital and DDR2 SDRAM               |
| K29     | GPIO42  | I   | IT_GPIO1 (Boot picture output control)          |
| K30     | GPIO35  | O   | IP (Progressive="0" Interlace="1") (Not used)   |
| K31     | GPIO41  | O   | EMMA CS10 DAC8 XCS (8ch Audio DAC CS: Not used) |
| K32     | GPIO34  | O   | DAC MUTE (Audio DAC Mute "H": Mute "L": Normal) |
| K33     | UA0RXDB | I   | UART Ch0 RX                                     |
| L1      | GND     | -   | Ground for digital and DDR2 SDRAM               |
| L2      | D0Q9    | I/O | DDR2 Data Input/Output                          |
| L3      | D0Q12   | I/O | DDR2 Data Input/Output                          |
| L4      | D0Q8    | I/O | DDR2 Data Input/Output                          |
| L5      | D0VDD18 | -   | 1.8V supply (DDR2 SDRAM)                        |
| L6      | GND     | -   | Ground for digital and DDR2 SDRAM               |
| L7      | D0VDD18 | -   | 1.8V supply (DDR2 SDRAM)                        |
| L8      | VOID    | -   | This pin is not ball.                           |
| L9      | VOID    | -   | This pin is not ball.                           |
| L10     | VOID    | -   | This pin is not ball.                           |
| L11     | VOID    | -   | This pin is not ball.                           |
| L12     | VOID    | -   | This pin is not ball.                           |
| L13     | VOID    | -   | This pin is not ball.                           |
| L14     | VOID    | -   | This pin is not ball.                           |
| L15     | VOID    | -   | This pin is not ball.                           |
| L16     | VOID    | -   | This pin is not ball.                           |
| L17     | VOID    | -   | This pin is not ball.                           |
| L18     | VOID    | -   | This pin is not ball.                           |
| L19     | VOID    | -   | This pin is not ball.                           |
| L20     | VOID    | -   | This pin is not ball.                           |
| L21     | VOID    | -   | This pin is not ball.                           |
| L22     | VOID    | -   | This pin is not ball.                           |
| L23     | VOID    | -   | This pin is not ball.                           |
| L24     | VOID    | -   | This pin is not ball.                           |
| L25     | VOID    | -   | This pin is not ball.                           |
| L26     | VOID    | -   | This pin is not ball.                           |
| L27     | SCL1    | I/O | I2C Ch1 Serial Clock (Not used)                 |
| L28     | SCL0    | I/O | I2C Ch0 Serial Clock (Not used)                 |
| L29     | UA0TXDB | O   | UART Ch0 TX                                     |
| L30     | GPIO44  | I   | Not used (Fixed at "L")                         |
| L31     | GND     | -   | Ground for digital and DDR2 SDRAM               |
| L32     | DVDDYC  | -   | 3.3V supply (DAC digital VDD)                   |
| L33     | AGNDYC  | -   | Analog Ground for sub Video DACs                |
| M1      | D0CLK0  | O   | DDR2 Positive Clock                             |
| M2      | GND     | -   | Ground for digital and DDR2 SDRAM               |

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

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

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

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

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

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

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

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

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

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

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

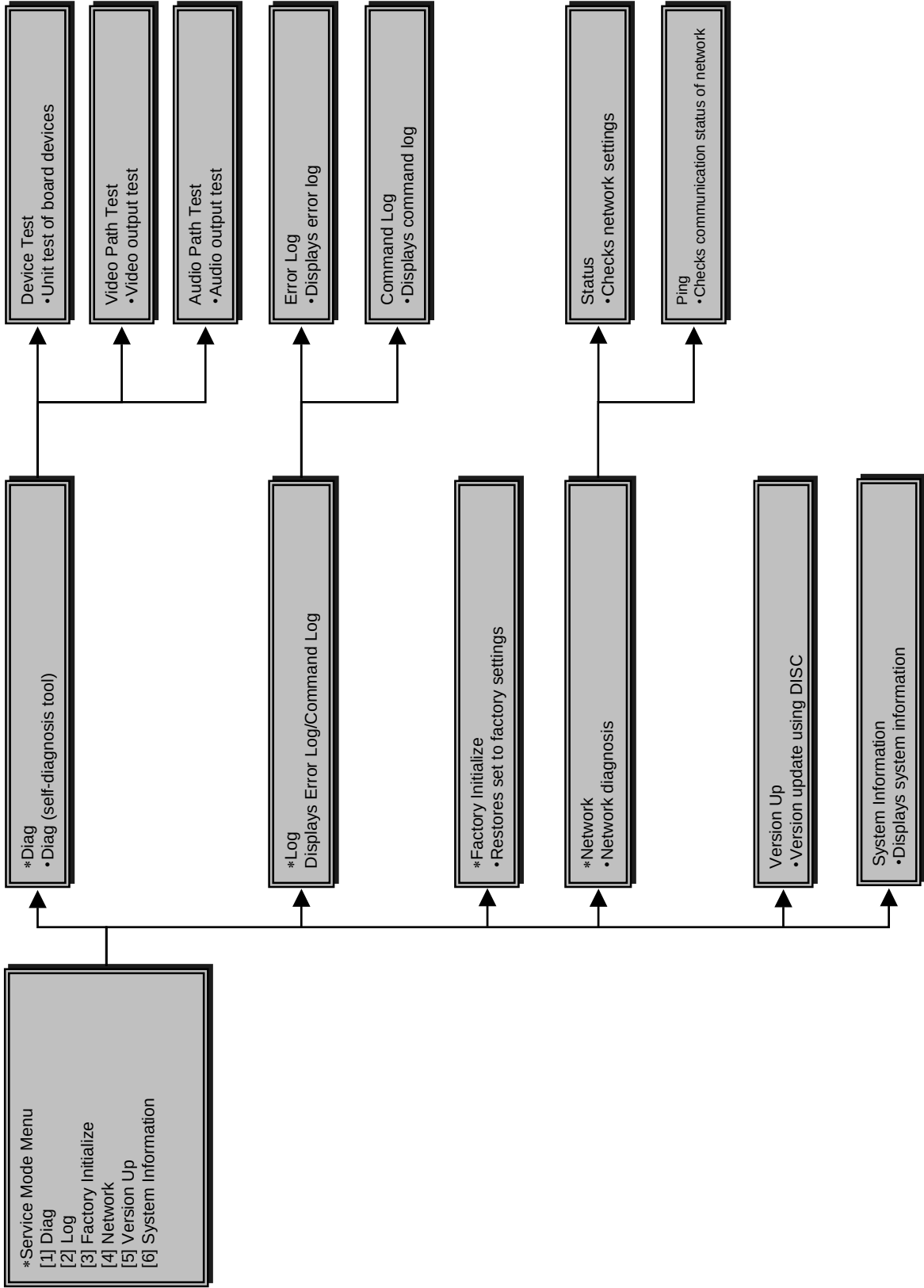
| Pin No. | Name        | I/O | Description                                    |
|---------|-------------|-----|------------------------------------------------|
| AM14    | D1ADD5      | O   | DDR2 Address Output                            |
| AM15    | D1VDD18     | -   | 1.8V supply (DDR2 SDRAM) 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

SECTION 7  
SERVICE MODE

Main Functions

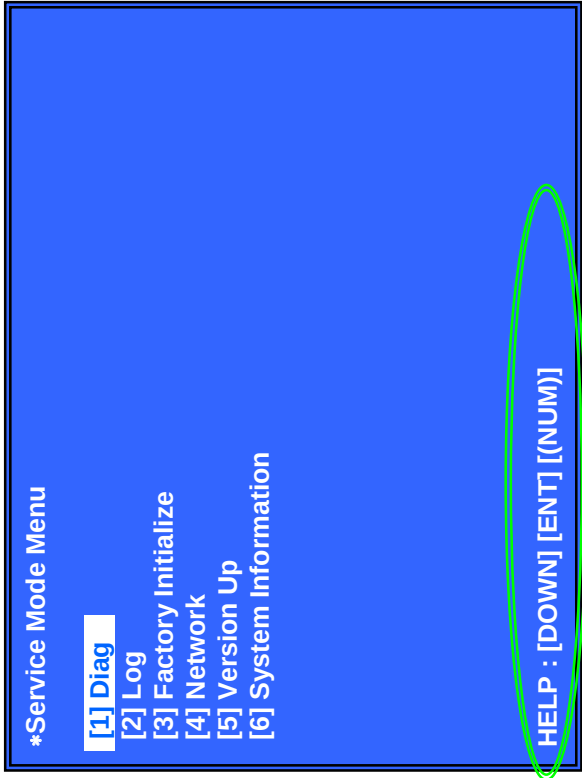
|                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <div><div>■</div><div>Launching the service mode</div></div> <div>Turn on the AC power from the off state while holding down specific keys (&lt;PLAY&gt; key, &lt;STOP&gt; key and &lt;OPEN/CLOSE&gt; key) on the front panel. Release the keys when “SERVICE” appears on the front display tube. The unit is in the service mode when the service mode screen appears on the monitor. Perform operation using the remote control.</div> |  |
| <div><div>■</div><div>ErrorLog/CommandLog display</div></div> <div>Displays the error log and command log. Displayed contents can also be saved in an USB memory device.</div>                                                                                                                                                                                                                                                           |  |
| <div><div>■</div><div>Diag</div></div> <div>Performs unit test of devices installed on the board.</div>                                                                                                                                                                                                                                                                                                                                  |  |
| <div><div>■</div><div>Factory Initialize</div></div> <div>Restores the set to its factory settings.</div>                                                                                                                                                                                                                                                                                                                                |  |
| <div><div>■</div><div>Network</div></div> <div>Checks the network connection.<br/>(1) “Ifconfig” displays the network settings of the set.<br/>Executing this function will run the #ifconfig command and display the result.<br/>(2) “Ping” checks the communication status between the network and terminal of the specified IP address.<br/>Executing this function will run the #ping command and display the result.</div>          |  |
| <div><div>■</div><div>Version Up (version update)</div></div> <div>Performs version update using a disc.</div>                                                                                                                                                                                                                                                                                                                           |  |
| <div><div>■</div><div>System Information</div></div> <div>Displays the system information of the set.<br/>Displays information such as the software version, drive information, etc.</div>                                                                                                                                                                                                                                               |  |

Menu Tree



## Service Mode Menu (Top Menu)

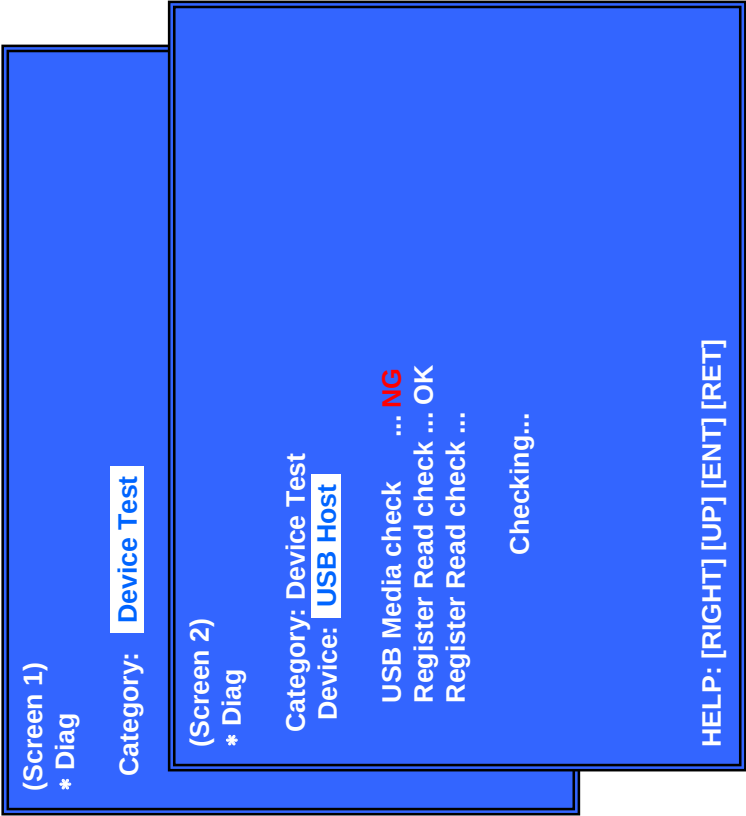
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                 |     |                      |     |                                                     |     |                                                       |     |                         |     |                                                  |     |                                                                 |             |                  |       |                                                          |       |        |      |       |                     |         |          |       |             |       |                     |        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-----|----------------------|-----|-----------------------------------------------------|-----|-------------------------------------------------------|-----|-------------------------|-----|--------------------------------------------------|-----|-----------------------------------------------------------------|-------------|------------------|-------|----------------------------------------------------------|-------|--------|------|-------|---------------------|---------|----------|-------|-------------|-------|---------------------|--------|
| <p><b>Description:</b><br/>This is the top menu of service mode.<br/>Each function is accessed from this screen.</p> <p><b>Operation:</b></p> <table><tr><td>[1]</td><td>Moves to Diag screen</td></tr><tr><td>[2]</td><td>Moves to Log (Error Log/Command Log display) screen</td></tr><tr><td>[3]</td><td>Moves to Factory Initialize (factory settings) screen</td></tr><tr><td>[4]</td><td>Moves to Network screen</td></tr><tr><td>[5]</td><td>Moves to Version Up (DISC version update) screen</td></tr><tr><td>[6]</td><td>Moves to System Information (system information display) screen</td></tr><tr><td>[UP] [DOWN]</td><td>Moves the cursor</td></tr><tr><td>[ENT]</td><td>Moves to the screen of the item selected with the cursor</td></tr></table> <p>* Cursor is not displayed when the menu is first displayed.</p> <p><b>Display tube:</b><br/>Test appears on the respective display tube when operating the cursor or menu keys.<br/>"SERVICE" is selected by default.<br/>Character strings displayed on the display tube:</p> <table><tr><td>Diag:</td><td>S-DIAG</td></tr><tr><td>Log:</td><td>S-LOG</td></tr><tr><td>Factory Initialize:</td><td>S-FINIT</td></tr><tr><td>Network:</td><td>S-NET</td></tr><tr><td>Version Up:</td><td>S-VUP</td></tr><tr><td>System Information:</td><td>S-INFO</td></tr></table> |                                                                 | [1] | Moves to Diag screen | [2] | Moves to Log (Error Log/Command Log display) screen | [3] | Moves to Factory Initialize (factory settings) screen | [4] | Moves to Network screen | [5] | Moves to Version Up (DISC version update) screen | [6] | Moves to System Information (system information display) screen | [UP] [DOWN] | Moves the cursor | [ENT] | Moves to the screen of the item selected with the cursor | Diag: | S-DIAG | Log: | S-LOG | Factory Initialize: | S-FINIT | Network: | S-NET | Version Up: | S-VUP | System Information: | S-INFO |
| [1]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Moves to Diag screen                                            |     |                      |     |                                                     |     |                                                       |     |                         |     |                                                  |     |                                                                 |             |                  |       |                                                          |       |        |      |       |                     |         |          |       |             |       |                     |        |
| [2]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Moves to Log (Error Log/Command Log display) screen             |     |                      |     |                                                     |     |                                                       |     |                         |     |                                                  |     |                                                                 |             |                  |       |                                                          |       |        |      |       |                     |         |          |       |             |       |                     |        |
| [3]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Moves to Factory Initialize (factory settings) screen           |     |                      |     |                                                     |     |                                                       |     |                         |     |                                                  |     |                                                                 |             |                  |       |                                                          |       |        |      |       |                     |         |          |       |             |       |                     |        |
| [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Moves to Network screen                                         |     |                      |     |                                                     |     |                                                       |     |                         |     |                                                  |     |                                                                 |             |                  |       |                                                          |       |        |      |       |                     |         |          |       |             |       |                     |        |
| [5]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Moves to Version Up (DISC version update) screen                |     |                      |     |                                                     |     |                                                       |     |                         |     |                                                  |     |                                                                 |             |                  |       |                                                          |       |        |      |       |                     |         |          |       |             |       |                     |        |
| [6]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Moves to System Information (system information display) screen |     |                      |     |                                                     |     |                                                       |     |                         |     |                                                  |     |                                                                 |             |                  |       |                                                          |       |        |      |       |                     |         |          |       |             |       |                     |        |
| [UP] [DOWN]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Moves the cursor                                                |     |                      |     |                                                     |     |                                                       |     |                         |     |                                                  |     |                                                                 |             |                  |       |                                                          |       |        |      |       |                     |         |          |       |             |       |                     |        |
| [ENT]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Moves to the screen of the item selected with the cursor        |     |                      |     |                                                     |     |                                                       |     |                         |     |                                                  |     |                                                                 |             |                  |       |                                                          |       |        |      |       |                     |         |          |       |             |       |                     |        |
| Diag:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | S-DIAG                                                          |     |                      |     |                                                     |     |                                                       |     |                         |     |                                                  |     |                                                                 |             |                  |       |                                                          |       |        |      |       |                     |         |          |       |             |       |                     |        |
| Log:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | S-LOG                                                           |     |                      |     |                                                     |     |                                                       |     |                         |     |                                                  |     |                                                                 |             |                  |       |                                                          |       |        |      |       |                     |         |          |       |             |       |                     |        |
| Factory Initialize:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | S-FINIT                                                         |     |                      |     |                                                     |     |                                                       |     |                         |     |                                                  |     |                                                                 |             |                  |       |                                                          |       |        |      |       |                     |         |          |       |             |       |                     |        |
| Network:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | S-NET                                                           |     |                      |     |                                                     |     |                                                       |     |                         |     |                                                  |     |                                                                 |             |                  |       |                                                          |       |        |      |       |                     |         |          |       |             |       |                     |        |
| Version Up:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | S-VUP                                                           |     |                      |     |                                                     |     |                                                       |     |                         |     |                                                  |     |                                                                 |             |                  |       |                                                          |       |        |      |       |                     |         |          |       |             |       |                     |        |
| System Information:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | S-INFO                                                          |     |                      |     |                                                     |     |                                                       |     |                         |     |                                                  |     |                                                                 |             |                  |       |                                                          |       |        |      |       |                     |         |          |       |             |       |                     |        |



HELP (currently available keys, etc.) is displayed

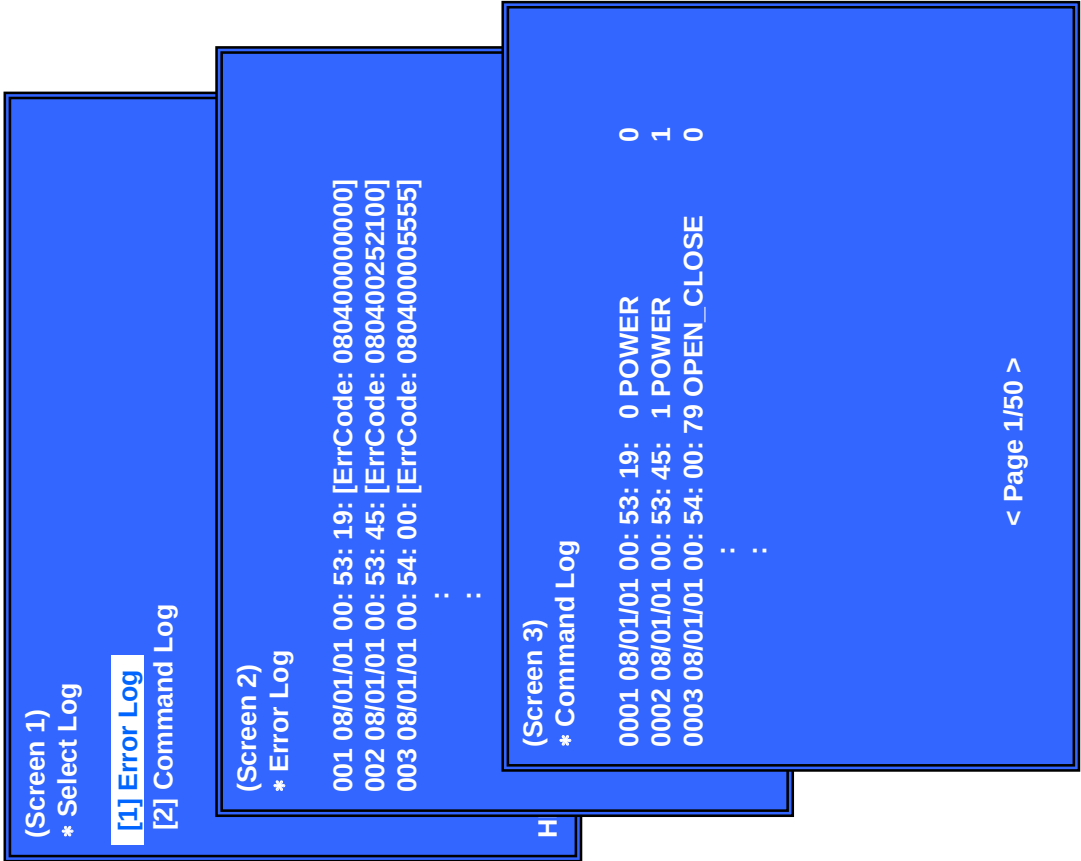
Diag (Device Test)

|                                                                                                                                                        |                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| <p>Description:</p> <p>This screen is used to test devices mounted on the board.</p> <p>This screen is also used to perform video and audio tests.</p> |                                                      |
| Screen 1: Selects the test category                                                                                                                    |                                                      |
| Operation:                                                                                                                                             |                                                      |
| [LEFT] [RIGHT]                                                                                                                                         | Selects the category                                 |
| [DOWN] [ENT]                                                                                                                                           | Moves to the selected category                       |
| Screen 2: Device test                                                                                                                                  |                                                      |
| Selects the device to test after selecting Device Test in screen 1.                                                                                    |                                                      |
| Operation:                                                                                                                                             |                                                      |
| [LEFT] [RIGHT]                                                                                                                                         | Selects the device to test                           |
| [ENT]                                                                                                                                                  | Executes the test                                    |
| [UP]                                                                                                                                                   | Returns to selection of test category                |
| [DOWN]                                                                                                                                                 | Selects the cursor during IFCOn and D terminal tests |
| >List of test categories                                                                                                                               |                                                      |
| Device Test                                                                                                                                            |                                                      |
| Video Test                                                                                                                                             |                                                      |
| Audio Test                                                                                                                                             |                                                      |
| >Device Test: List of devices                                                                                                                          |                                                      |
| USB Host (*1)                                                                                                                                          |                                                      |
| D/A Converter (*2)                                                                                                                                     |                                                      |
| D terminal (*3)                                                                                                                                        |                                                      |
| IFCon                                                                                                                                                  | <- Check using measurement device                    |
|                                                                                                                                                        | <- Check using visual inspection                     |
| *1) Output of various logs can be performed for the first USB host check only. Logs cannot be output for following checks.                             |                                                      |
| *2) 8 [ch] D/A Converter test is not available for the basic model.                                                                                    |                                                      |
| *3) JP models only                                                                                                                                     |                                                      |
| Display tube:                                                                                                                                          |                                                      |
| Category selected:                                                                                                                                     | Device Test : D-DEV                                  |
|                                                                                                                                                        | Video Test : D-VIDEO                                 |
|                                                                                                                                                        | Audio Test : D-AUDIO                                 |
| Device selected:                                                                                                                                       | USB Host : D-USB                                     |
|                                                                                                                                                        | D/A Converter : D-DAC                                |
|                                                                                                                                                        | D Terminal : D-TERM                                  |
| USB Host checked:                                                                                                                                      | USB CHK : USB CHK                                    |
|                                                                                                                                                        | All items OK : USB OK                                |
|                                                                                                                                                        | Other than above : USB NG                            |
| D/A Converter checked:                                                                                                                                 | DAC CHK : DAC CHK                                    |
|                                                                                                                                                        | All items OK : DAC OK                                |
|                                                                                                                                                        | Other than above : DAC NG                            |



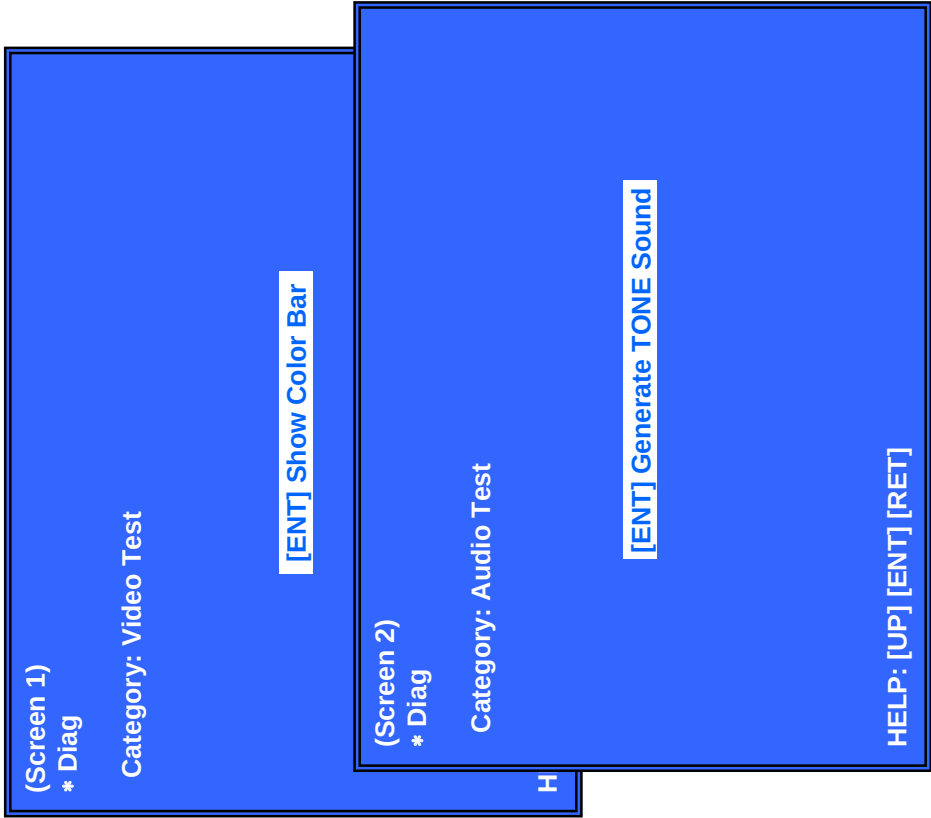
Log: Error Log/Command Log (Output of each Log)

|                                                                                                                                                                                   |                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Description:<br>This screen displays the contents of each log.                                                                                                                    |                                                                                                                                      |
| Screen 1: Selects the type of log to display                                                                                                                                      |                                                                                                                                      |
| Operation:                                                                                                                                                                        | Moves to the Error Log output screen                                                                                                 |
| [1]                                                                                                                                                                               | Moves to the Command Log output screen                                                                                               |
| [2]                                                                                                                                                                               | Moves the cursor                                                                                                                     |
| [UP] [DOWN]                                                                                                                                                                       | Moves to the item selected with the cursor                                                                                           |
| [ENT]                                                                                                                                                                             | Returns to the top menu of the service mode                                                                                          |
| [RET]                                                                                                                                                                             |                                                                                                                                      |
| Screen 2: Displays the Error Log                                                                                                                                                  |                                                                                                                                      |
| Operation:                                                                                                                                                                        | Returns to the previous page                                                                                                         |
| [LEFT]                                                                                                                                                                            | Moves to the next page                                                                                                               |
| [RIGHT]                                                                                                                                                                           | Returns to the screen (screen 1) that selects the log type                                                                           |
| [RET]                                                                                                                                                                             | Writes the log contents to a USB memory device                                                                                       |
| [RED]                                                                                                                                                                             |                                                                                                                                      |
| Screen 3: Displays the Command Log                                                                                                                                                |                                                                                                                                      |
| Operation:                                                                                                                                                                        | Returns to the previous page                                                                                                         |
| [LEFT]                                                                                                                                                                            | Moves to the next page                                                                                                               |
| [RIGHT]                                                                                                                                                                           | Returns to the screen (screen 1) that selects the log type                                                                           |
| [RET]                                                                                                                                                                             | Writes the log contents to a USB memory device                                                                                       |
| [RED]                                                                                                                                                                             |                                                                                                                                      |
| Display tube:                                                                                                                                                                     | Error Log: S-ELOG                                                                                                                    |
| Log type selected                                                                                                                                                                 | Command Log: S-CLOG                                                                                                                  |
| During log display                                                                                                                                                                | Page display ex) 1/50                                                                                                                |
| >Viewing the log display                                                                                                                                                          |                                                                                                                                      |
| Error Log:                                                                                                                                                                        | 001 08/01/01 00: 53: 19: [ErrCode: 080400000000]<br>[Number (starting from old log) ] [date] [time] [error code]                     |
| Command Log:                                                                                                                                                                      | 0001 08/01/01 00: 53: 19: 0 POWER 0<br>[Number (starting from old log) ] [date] [time] [count] [command name]<br>[Edge 0: on 1: off] |
| *About copying log to USB memory device<br>Press the [RED] button in each log display screen with the USB memory device inserted into the set                                     |                                                                                                                                      |
| Error Log:                                                                                                                                                                        | When getErrLogFile.trm file exists in the USB memory device,<br>errlog.log file is output.                                           |
| Command Log:                                                                                                                                                                      | When getCmdLogFile.trm file exists in the USB memory device,<br>cmdlog.log file is output.                                           |
| *This function cannot be used when performing USB Host test in the Diag screen.<br>Writing to a USB memory devices takes a few seconds. Wait sufficiently before removing device. |                                                                                                                                      |



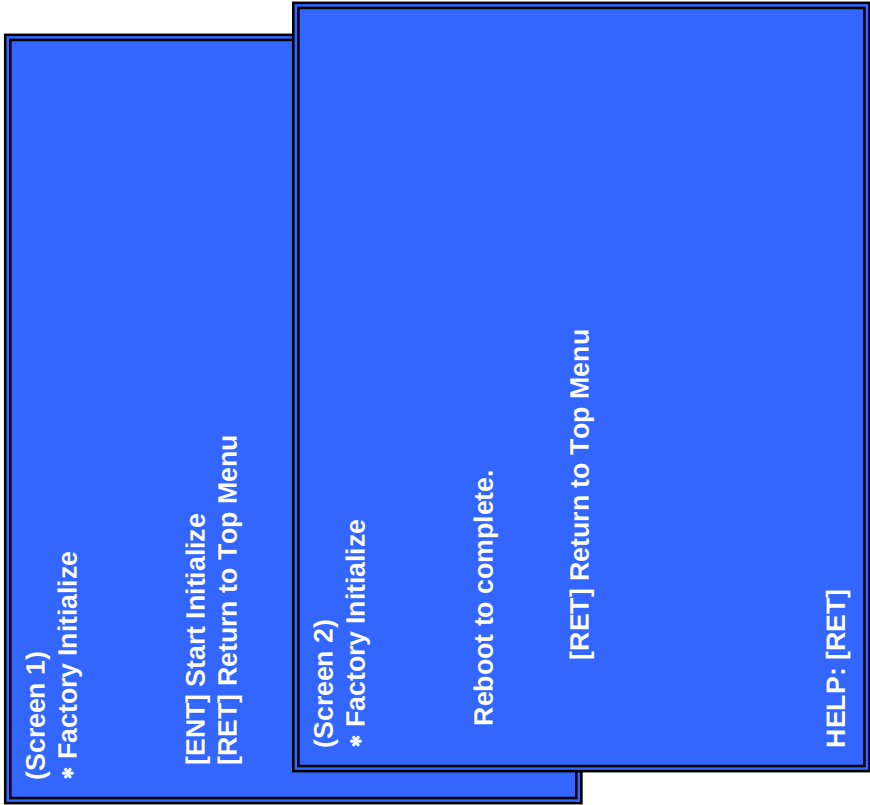
## Diag (Video/Audio Test)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Description:<br/>This screen performs video and audio tests.</p> <p>Screen 1: When video test category is selected</p> <p>Operation:<br/>[ENT]<br/>Shows/hides the color bar<br/>[UP] [RET]<br/>Returns to the selection of test category</p> <p>Screen 2: When audio test category is selected</p> <p>Operation:<br/>[ENT]<br/>Plays back/stops the tone sound<br/>[UP] [RET]<br/>Returns to the selection of test category</p> <p>&gt;Video test<br/>Outputs a color to all output terminals.<br/>(In the case of HDMI, the device must be connected when launching the function)</p> <p>&gt;Audio test<br/>Outputs a tone sound to all output terminals.<br/>(In the case of HDMI, the device must be connected when launching the function)</p> <p>Display tube:<br/>During video test: D-VIDEO<br/>During audio test: D-AUDIO</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



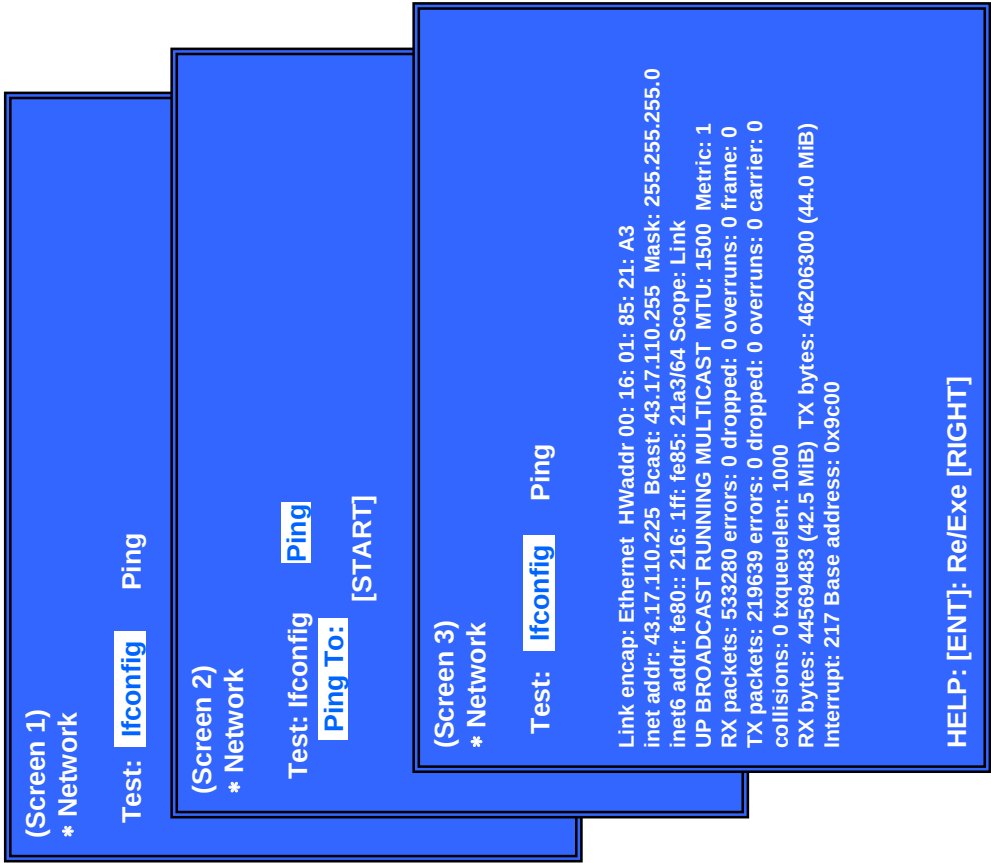
## Factory Initialize (Factory Settings)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| <p>Description:</p> <p>This screen returns the set to the factory settings. All changes settings will be restored to the factory settings, and all saved titles will be deleted. Note that executing this function does not complete the initialization process. The initialization process is completed by rebooting the set after operation is performed.</p> <p>Normal rebooting is required for the initialization to take effect. Initialization is not complete when rebooting in special modes such as the service mode.</p> |                                                         |
| <p>Screen 1</p> <p>Press [ENT] in this screen when restoring the set to its factory settings. All saved titles will also be deleted.</p> <p>Operation:</p> <p>[ENT] Initialize the set to its factory settings</p> <p>[RET] Return to the top menu of the service mode</p>                                                                                                                                                                                                                                                          |                                                         |
| <p>Screen 2</p> <p>This is the screen that is displayed after performing initialization. The initialization process is completed by rebooting the set. Remove the AC power cord and insert the AC power cord again.</p> <p>*Operations in other service menus can also be performed.</p>                                                                                                                                                                                                                                            |                                                         |
| <p>Display tube:</p> <p>During initialization:</p> <p>When initialization is OK:</p> <p>When initialization is NG:</p>                                                                                                                                                                                                                                                                                                                                                                                                              | <p>SETTING</p> <p>INIT-OK (Screen 2)</p> <p>INIT-NG</p> |



Network (Network Test Diagnosis Screen: Ifconfig)

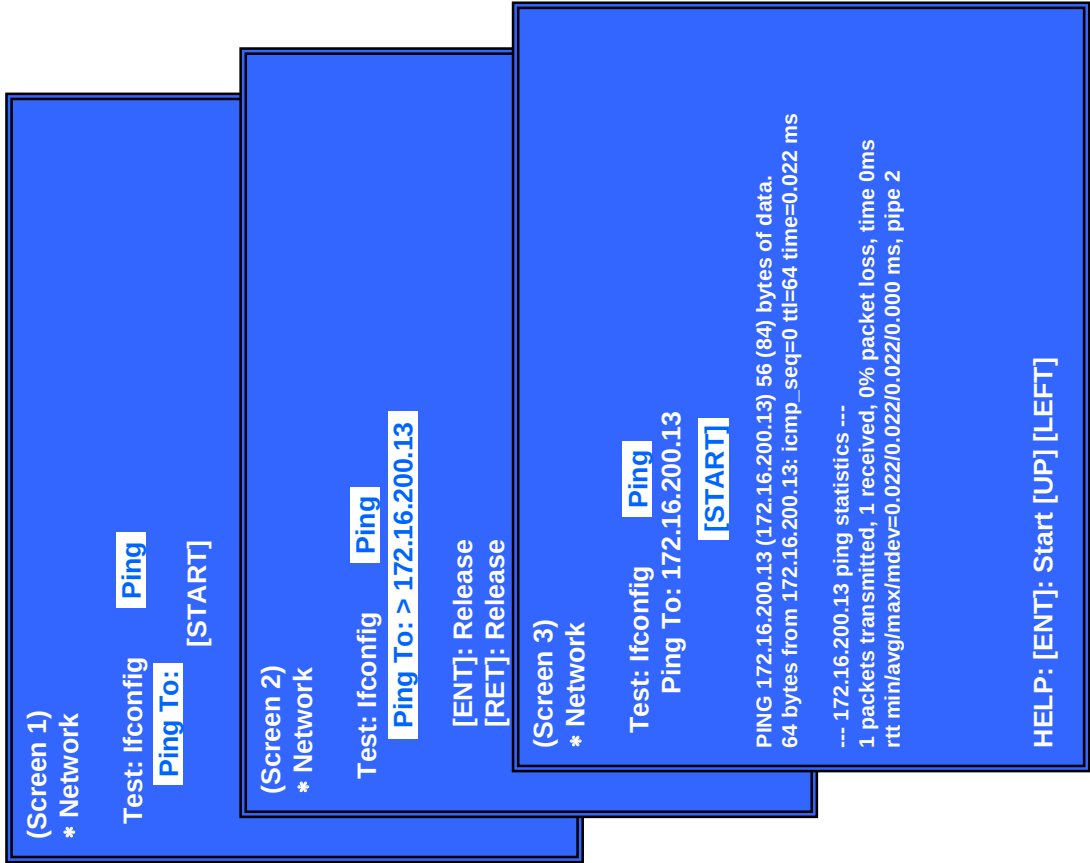
|                                                                                                        |                                                           |
|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| <p>Description:<br/>Network menu<br/>Each network diagnosis function is accessed from this screen.</p> |                                                           |
| Screen 1: Ifconfig test                                                                                |                                                           |
| Operation:                                                                                             | Executes the Ifconfig command (displays network settings) |
| [ENT]                                                                                                  | Moves to the Ping test                                    |
| [RIGHT]                                                                                                | Returns to the top menu of the service mode               |
| [RTN]                                                                                                  |                                                           |
| Screen 2: Ping test                                                                                    |                                                           |
| Screen:                                                                                                |                                                           |
| [LEFT]                                                                                                 | Moves to the Ifconfig test                                |
| [RTN]                                                                                                  | Returns to the top menu of the service mode               |
| *See next page for details on Ping test                                                                |                                                           |
| Screen 3: When executing the Ifconfig test                                                             |                                                           |
| Displays the output result of the Ifconfig command                                                     |                                                           |
| Operation:                                                                                             |                                                           |
| [ENT]                                                                                                  | Executes the command again                                |
| [RIGHT]                                                                                                | Moves to the Ping test                                    |
| [RTN]                                                                                                  | Returns to the top menu of the service mode               |
| Display tube:                                                                                          | S-NET                                                     |



\* May differ slightly from the actual screens

Network (Network Test Diagnosis Screen: Ping)

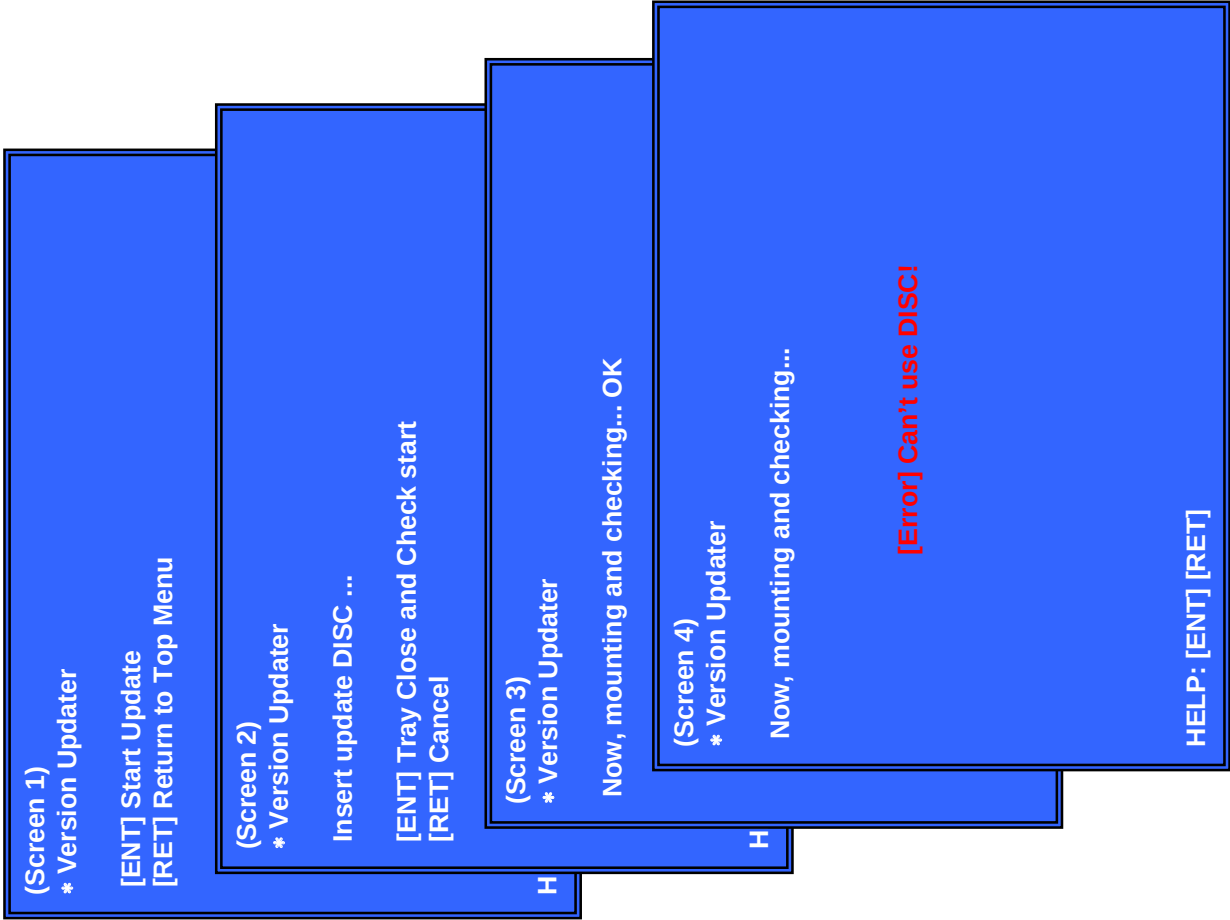
|                                                                                                                                                |                                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Description:<br>Ping test                                                                                                                      |                                                                                                                                                |
| Screen 1: Ping test                                                                                                                            |                                                                                                                                                |
| Operation:<br>[UP]<br>[DOWN]<br>[RTN]                                                                                                          | Sets the IP address of the Ping destination<br>Prepares for execution<br>Returns to the top menu of the service mode                           |
| Screen 2: Specifies the IP address of the Ping destination (IP input mode)<br>Ping To: Input the IP address by pressing [ENT] when highlighted |                                                                                                                                                |
| Operation:<br>[ENT]<br>[RTN]<br>[LEFT]<br>[(NUM)]<br>[TIME]<br>[CLEAR]                                                                         | Ends input<br>Ends input<br>Ends input, and moves to the Ifconfig test<br>Inputs characters '0-9'<br>Inputs character '.'<br>Back space        |
| Screen 3: When executing Ping test<br>Ping is executed when pressing [ENT] while [START] is highlighted.                                       |                                                                                                                                                |
| Operation:<br>[ENT]<br>[UP]<br>[DOWN]<br>[RTN]                                                                                                 | Executes the Ping test<br>Sets the IP address of the Ping destination<br>Prepares for execution<br>Returns to the top menu of the service mode |
| Display tube:                                                                                                                                  | S-NET                                                                                                                                          |



\* May differ slightly from the actual screens

## Version Up (Version Update using DISC)

|                                                                  |                                                                |
|------------------------------------------------------------------|----------------------------------------------------------------|
| Description:<br>This screen performs version updates using DISC. |                                                                |
| Screen 1: Screen when entering the Version Up menu               |                                                                |
| Operation:                                                       |                                                                |
| [ENT]                                                            | Starts update using DISC -> (opens tray and displays screen 2) |
| [RET]                                                            | Returns to the top menu of the service mode                    |
| Screen 2: Insert version update DISC                             |                                                                |
| Operation:                                                       |                                                                |
| [ENT]                                                            | Closes the tray and checks the DISC                            |
| [RET]                                                            | Cancels operation (closes the tray and returns to screen 1)    |
| Screen 3: During check -> OK                                     |                                                                |
| Operation:                                                       |                                                                |
|                                                                  | Automatically reboots the set                                  |
| Screen 4: During check -> NG                                     |                                                                |
| Operation:                                                       |                                                                |
|                                                                  | Outputs [Error] (content of error) and returns to screen 2     |
| Display tube:                                                    |                                                                |
| When DISC is inserted                                            | V-INS CD                                                       |
| When DISC cannot be mounted                                      | V-NOD SC                                                       |
| When check is NG                                                 | V-CHK NG                                                       |
| When check is OK                                                 | V-CHK OK                                                       |
| When rebooting                                                   | REBOOT                                                         |



System Information (System Information Display)

Description:  
This screen displays system information.

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

\*When measuring  $\Delta$ IOP,  
Version Up function in the Service Mode menu will no longer be available.

Displayed contents:

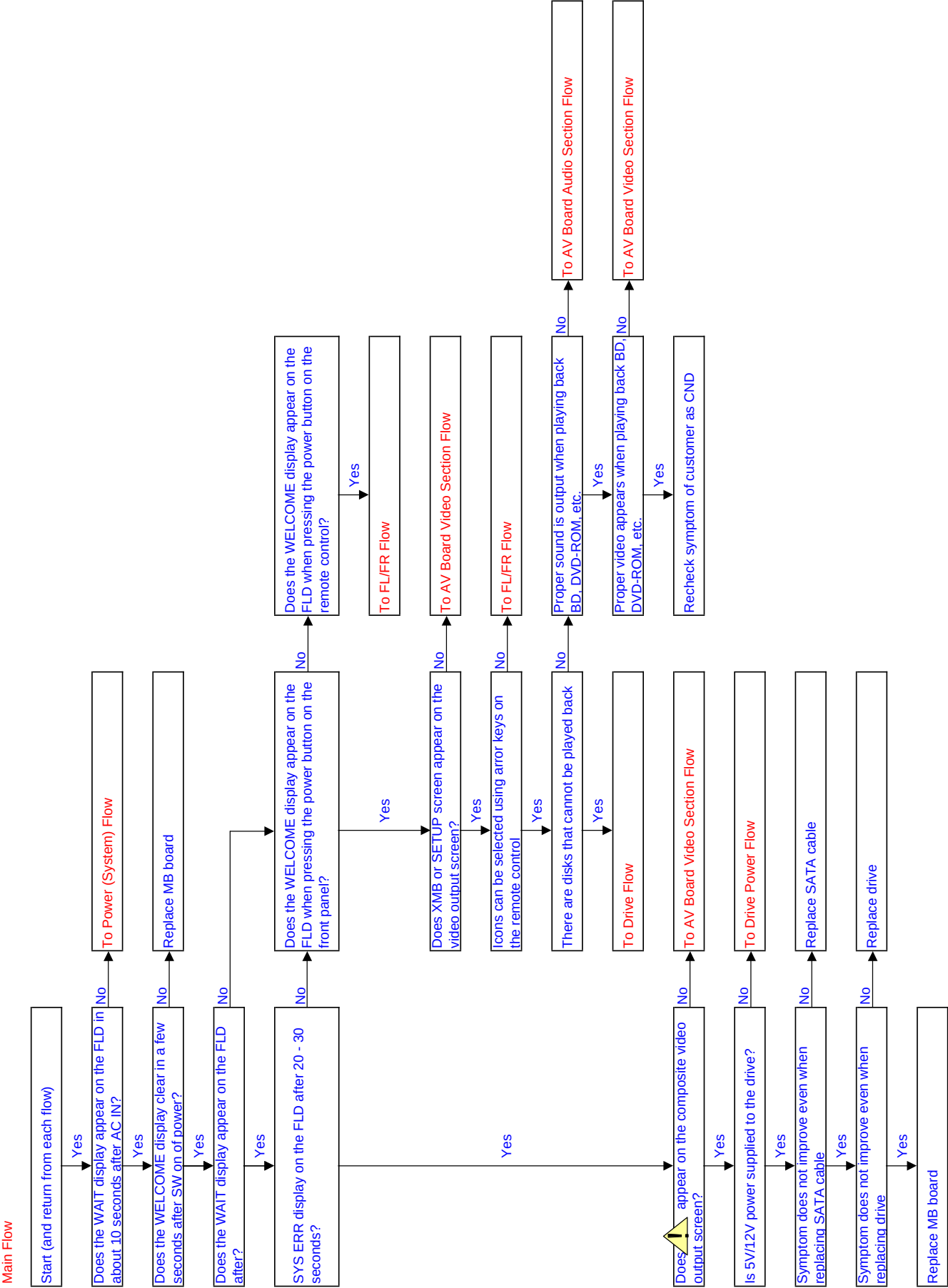
|                                      |                                                    |
|--------------------------------------|----------------------------------------------------|
| Model name                           | Model                                              |
| Destination     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

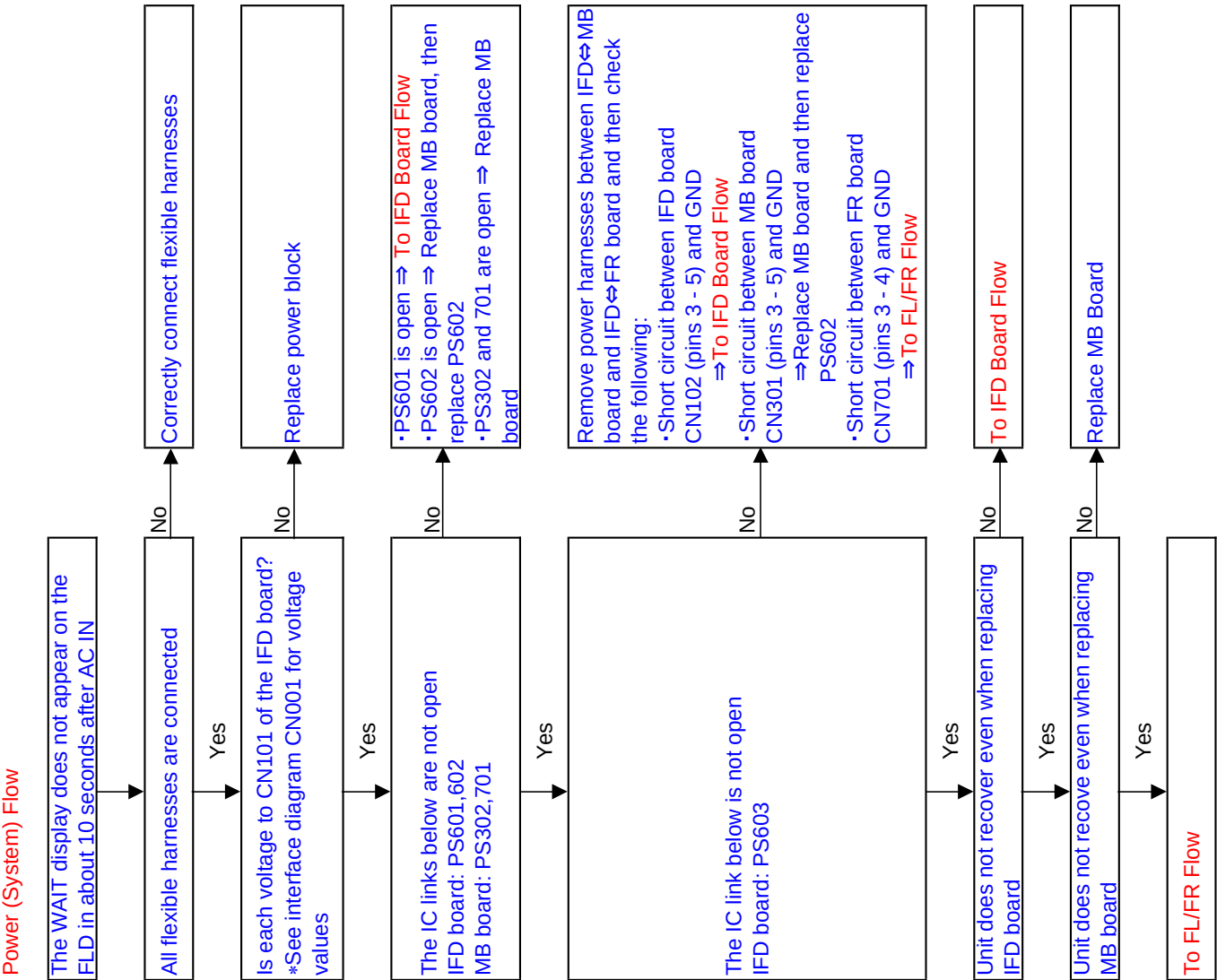
Display tube:  
Host version display  
\*01.0.002 displayed as 010 002

\* System Information

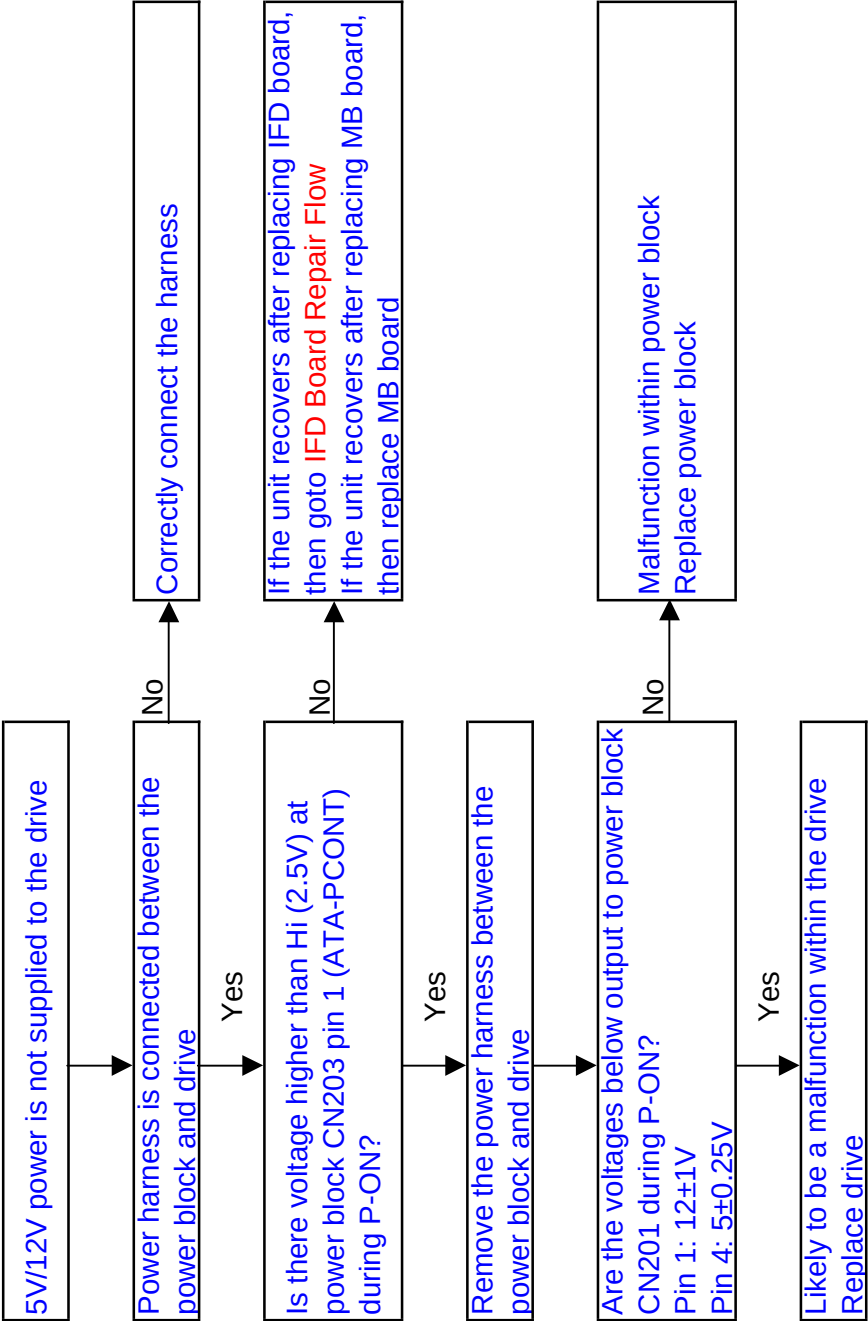
|           |                               |
|-----------|-------------------------------|
| Model     | : BDP3G-SU                    |
| Dest      | : UC                          |
| IP        | : 172.16.102.32               |
| Mac       | : 00:1a:80:d0:47:65           |
| CPU       | : E0.032.0[F021]              |
| NBL       | : BDP3G 3.1.0                 |
| Kernel    | : BDP3G-3.1.0                 |
| Host      | : 01.0.002                    |
| Drive     | : 20080121D00 ...             |
| LDTime    | : BDP200 1.01 @BPD0000557&_40 |
| /dIOP     | : BD : [ 0:00] / [ 1]         |
| DVD       | : [ 0:11] / [ 5]              |
| CD        | : [ 0:50] / [ 0]              |
| dIOP_TEMP | : [ 0]                        |
| Ifcon     | : B0: 0x03 B1: 0x01           |
| FirmDate  | : 03/07 11:55                 |
| Temp      | : 34 [degC]                   |
| [RET]     | : TopMenu                     |

SECTION 8  
TROUBLESHOOTING

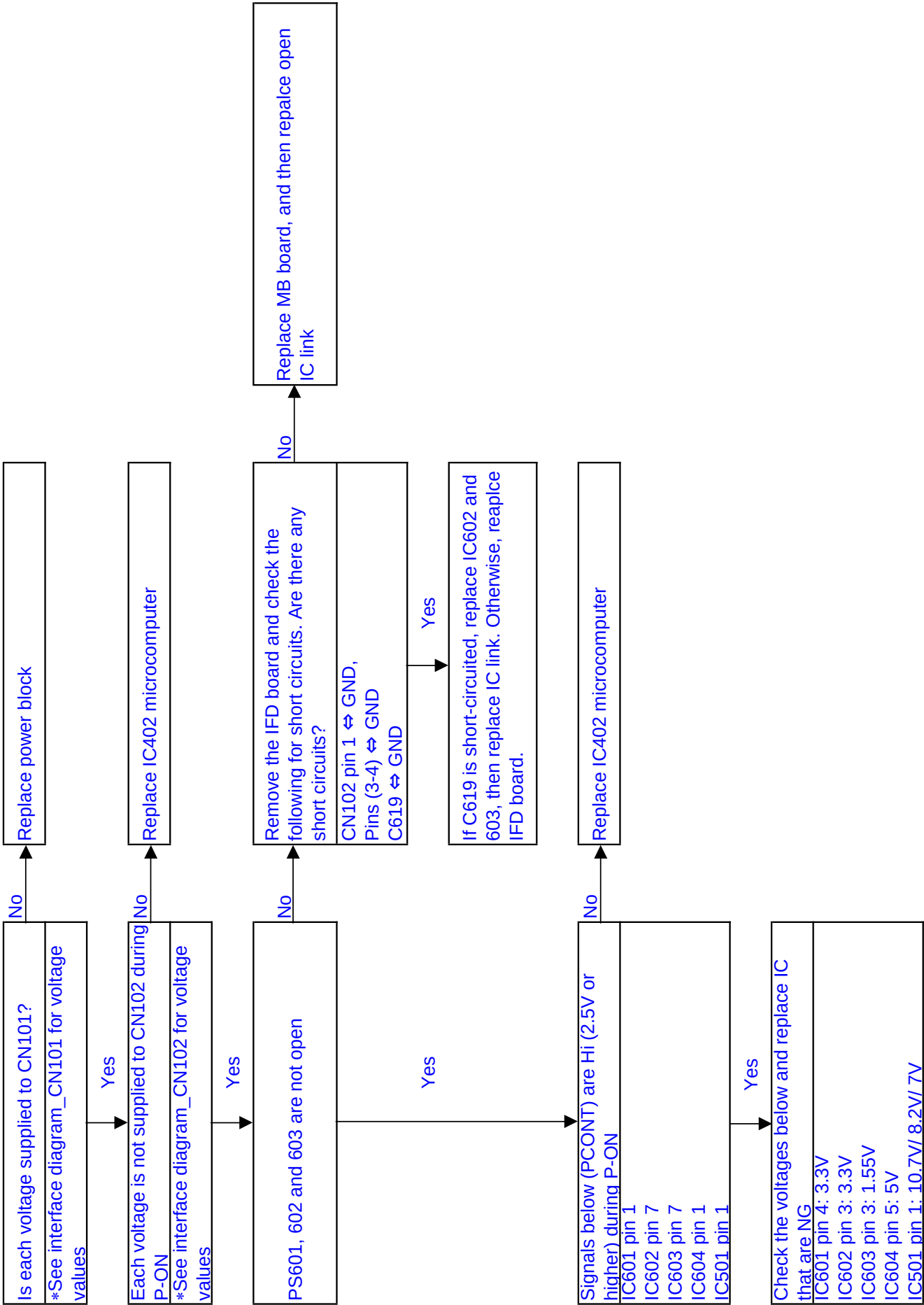




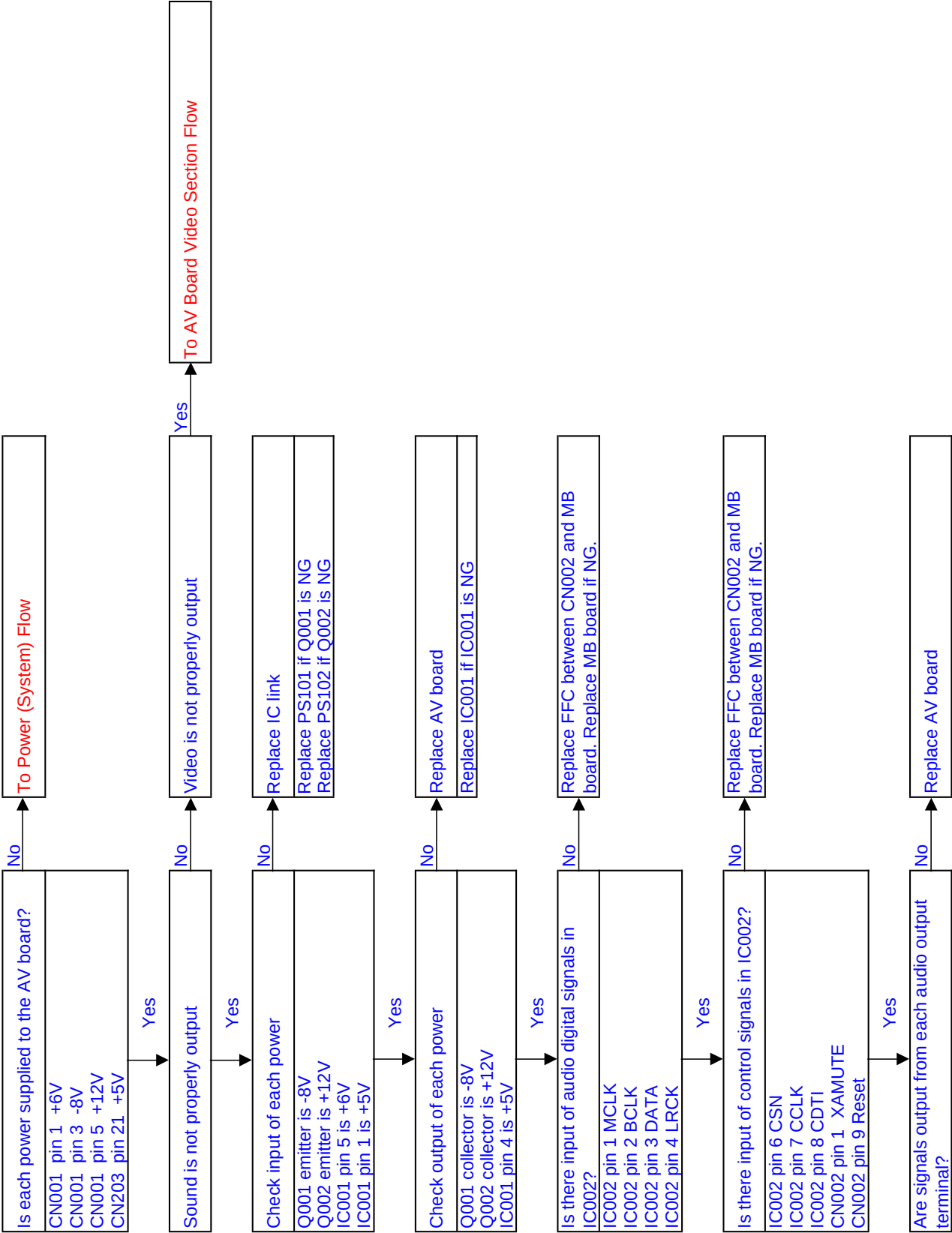
Drive Power Flow



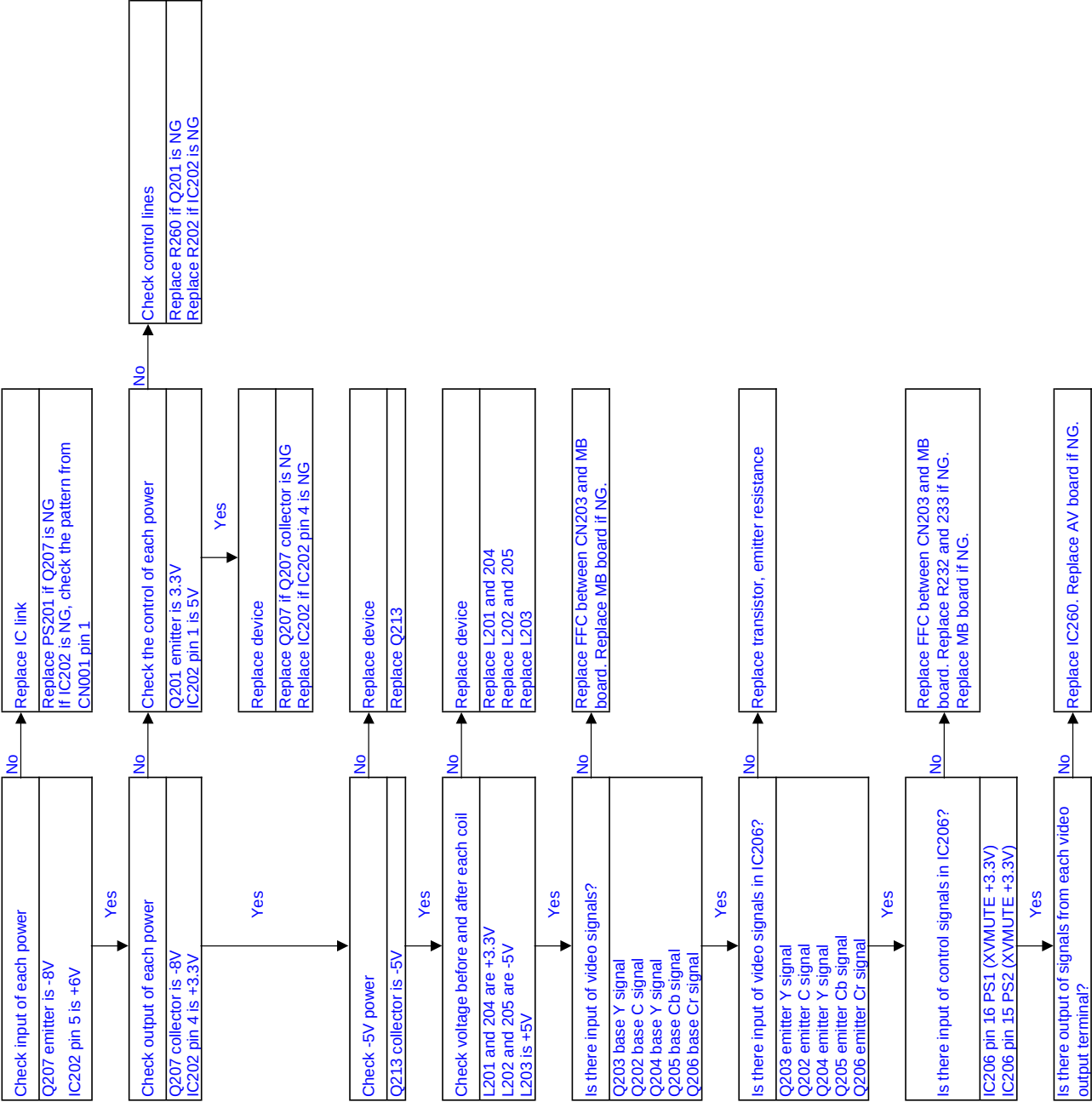
IFD Board Flow

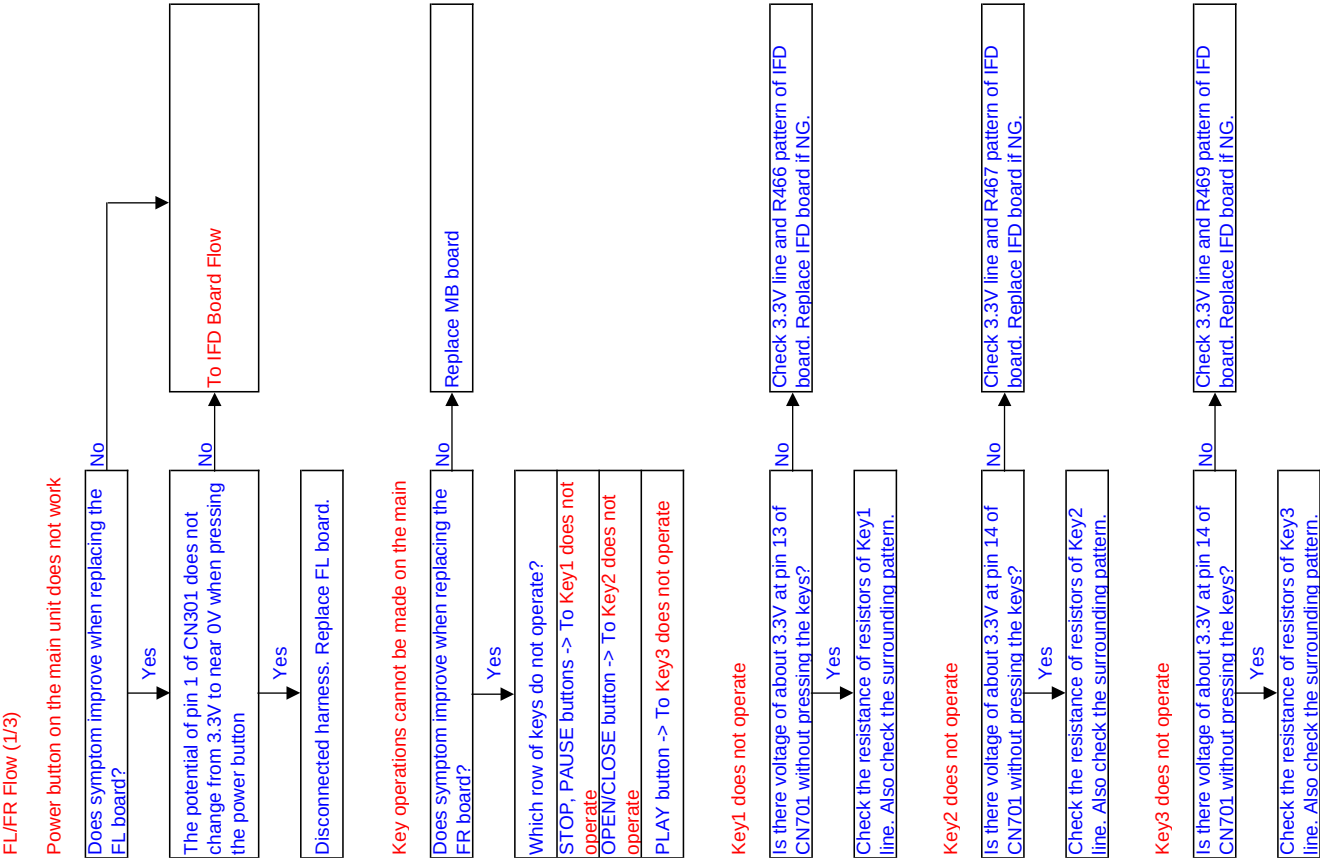


AV Board Audio Section Flow



AV Board Video Section Flow

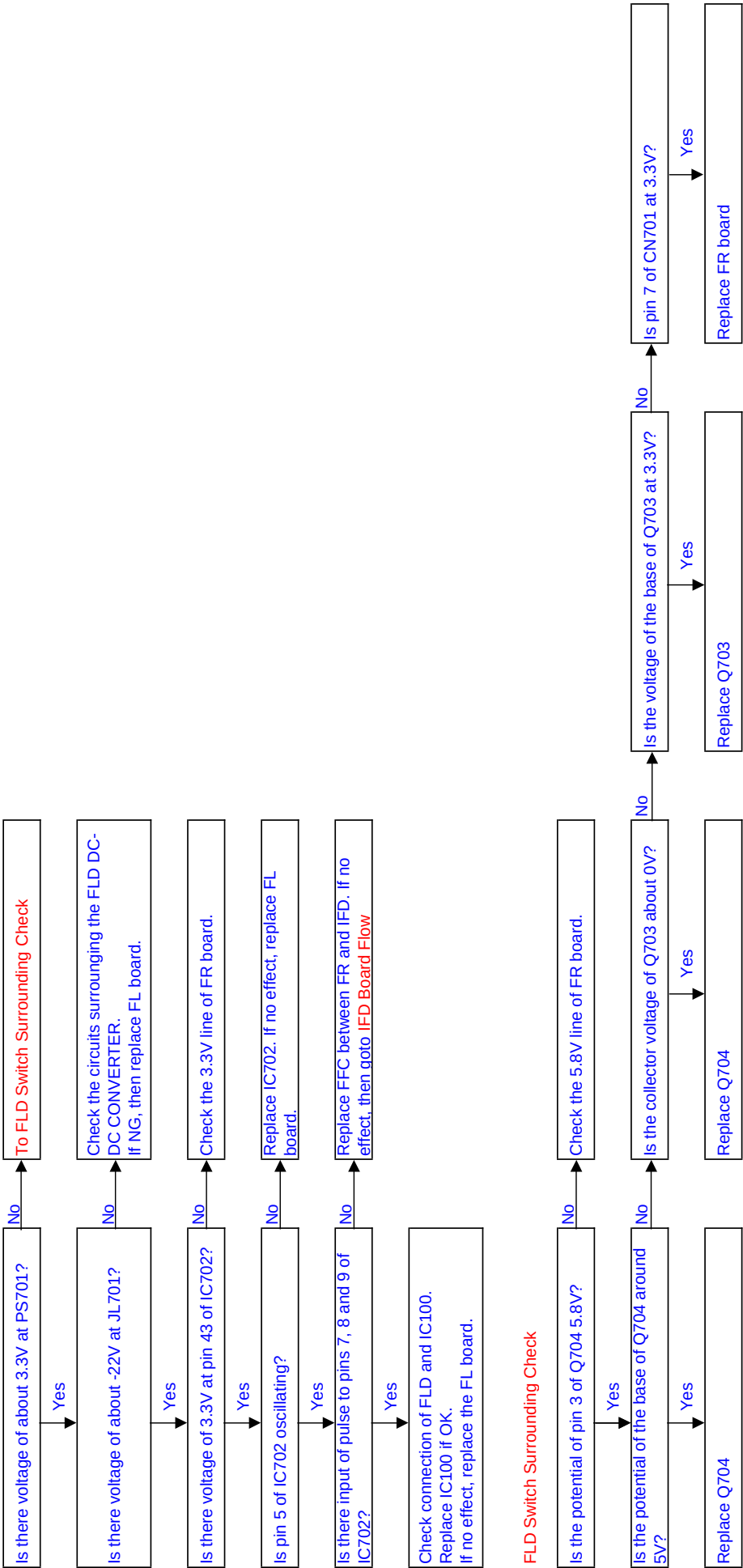




Reference: Relationship of Buttons and Voltages

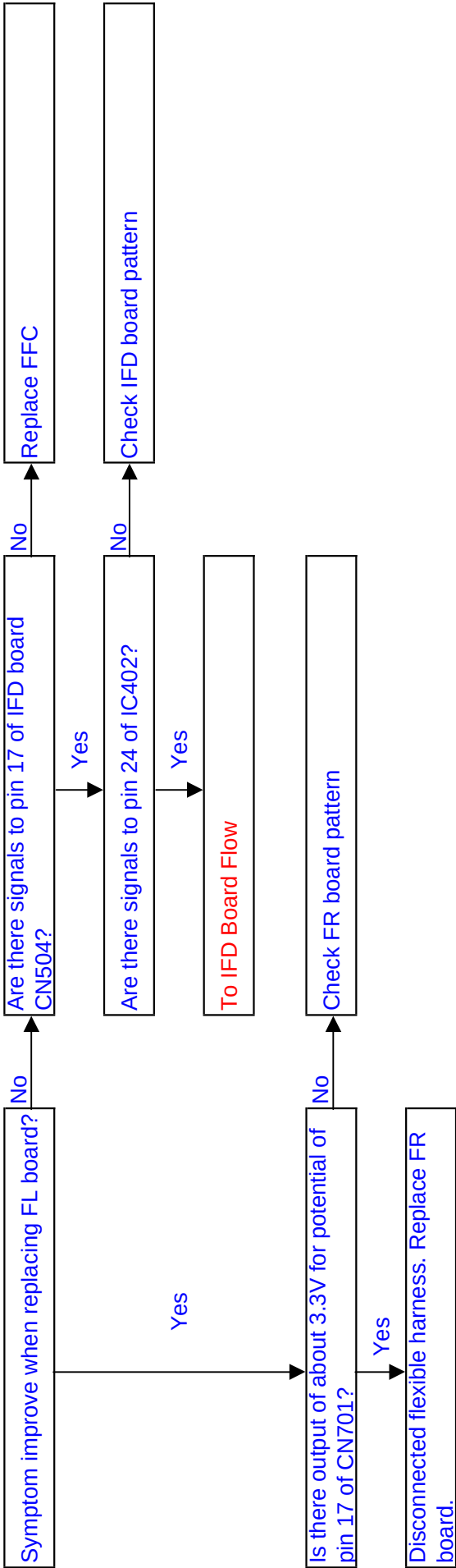
| KEY0     | KEY1     | KEY2       | KEY3     | Typ voltage |
|----------|----------|------------|----------|-------------|
| Unpushed | Unpushed | Unpushed   | Unpushed | 3.3V        |
|          | STOP     |            |          | 1.01V       |
|          | Pause    |            |          | 0.595V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

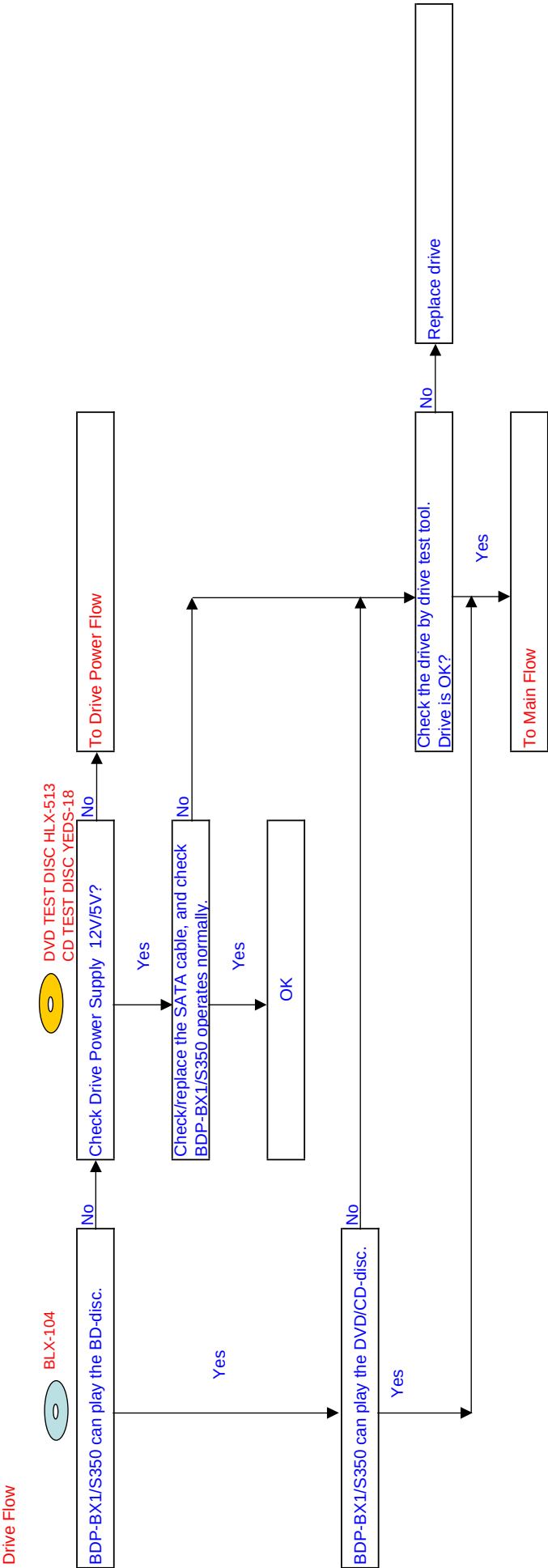
FL/FR Flow (2/3)  
FLD does not light



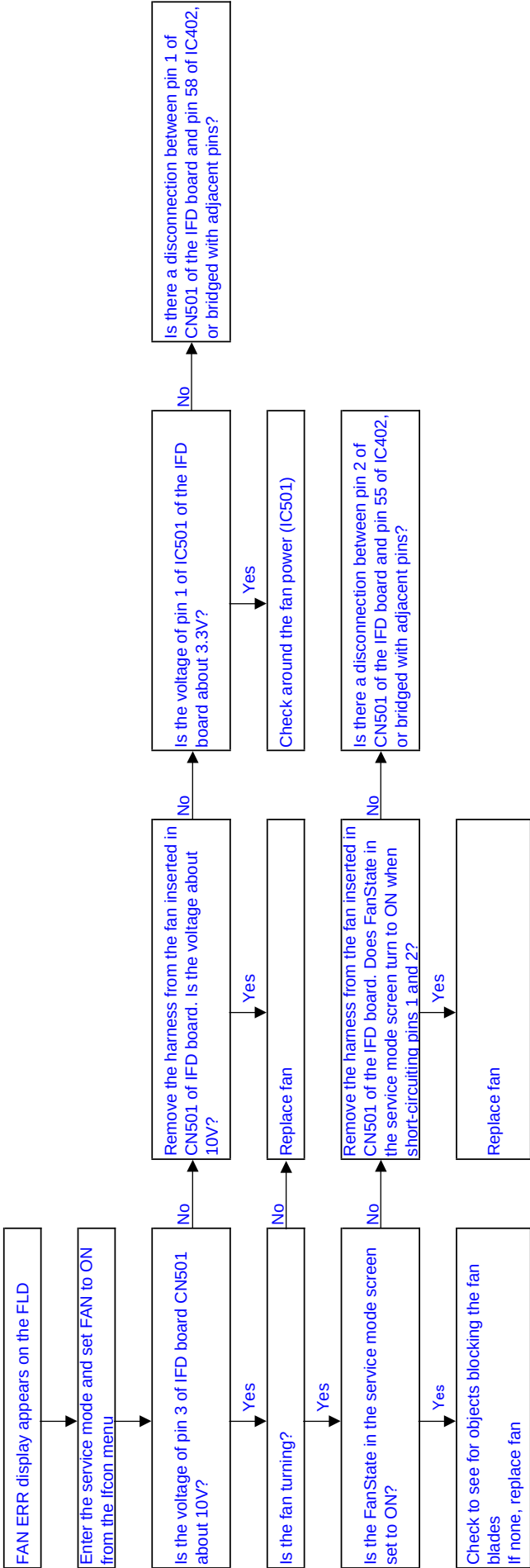
FL/FR Flow (3/3)

Remote control does not operate

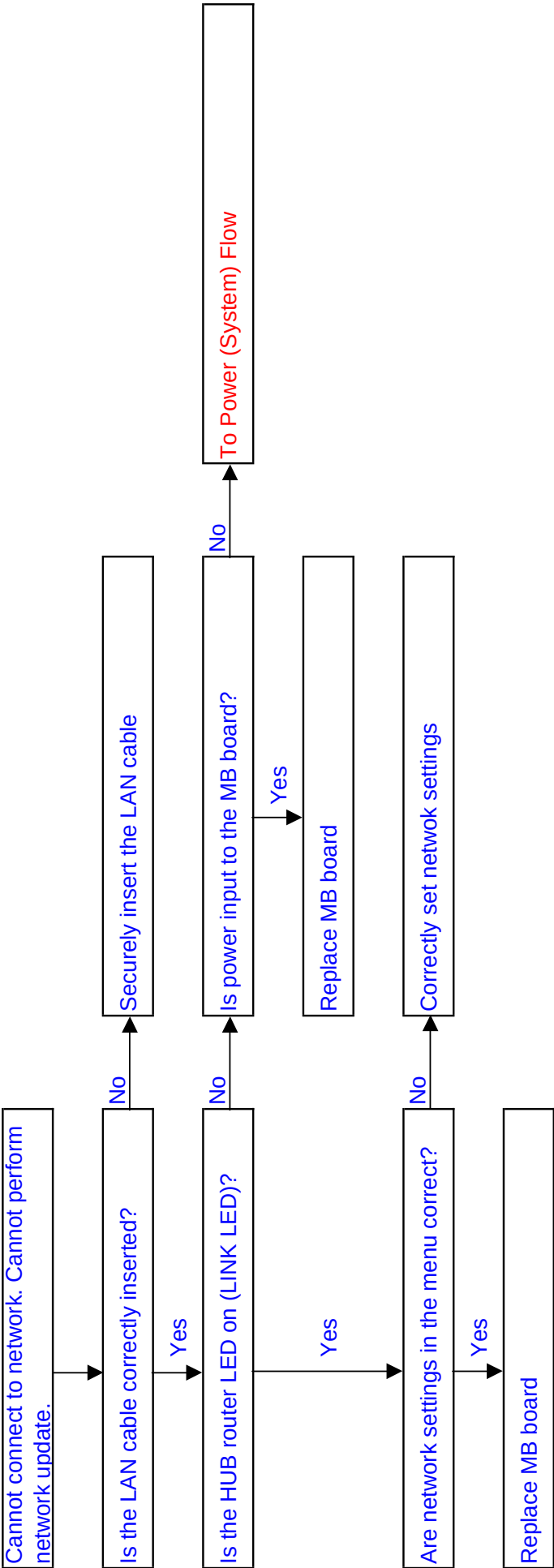


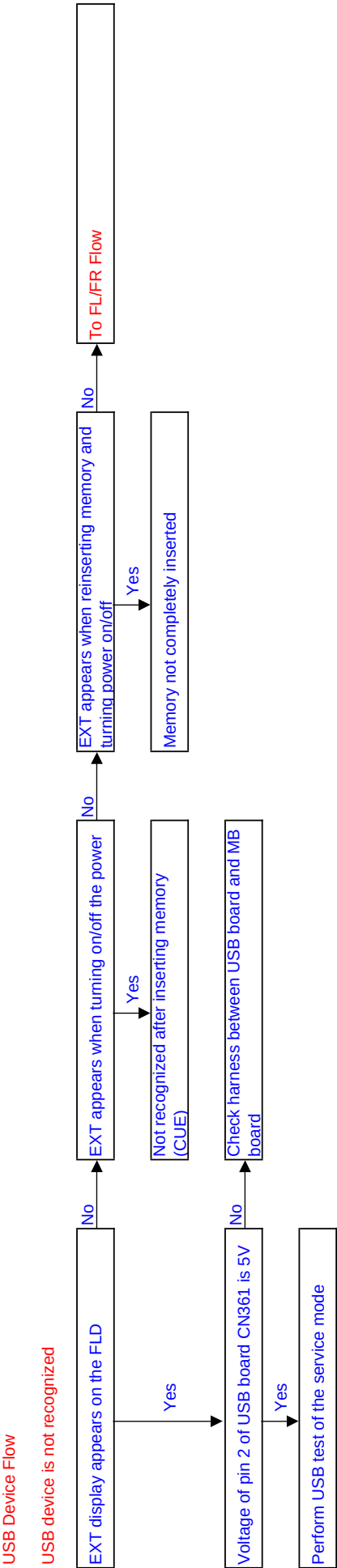


Fan Flow



Ether Flow

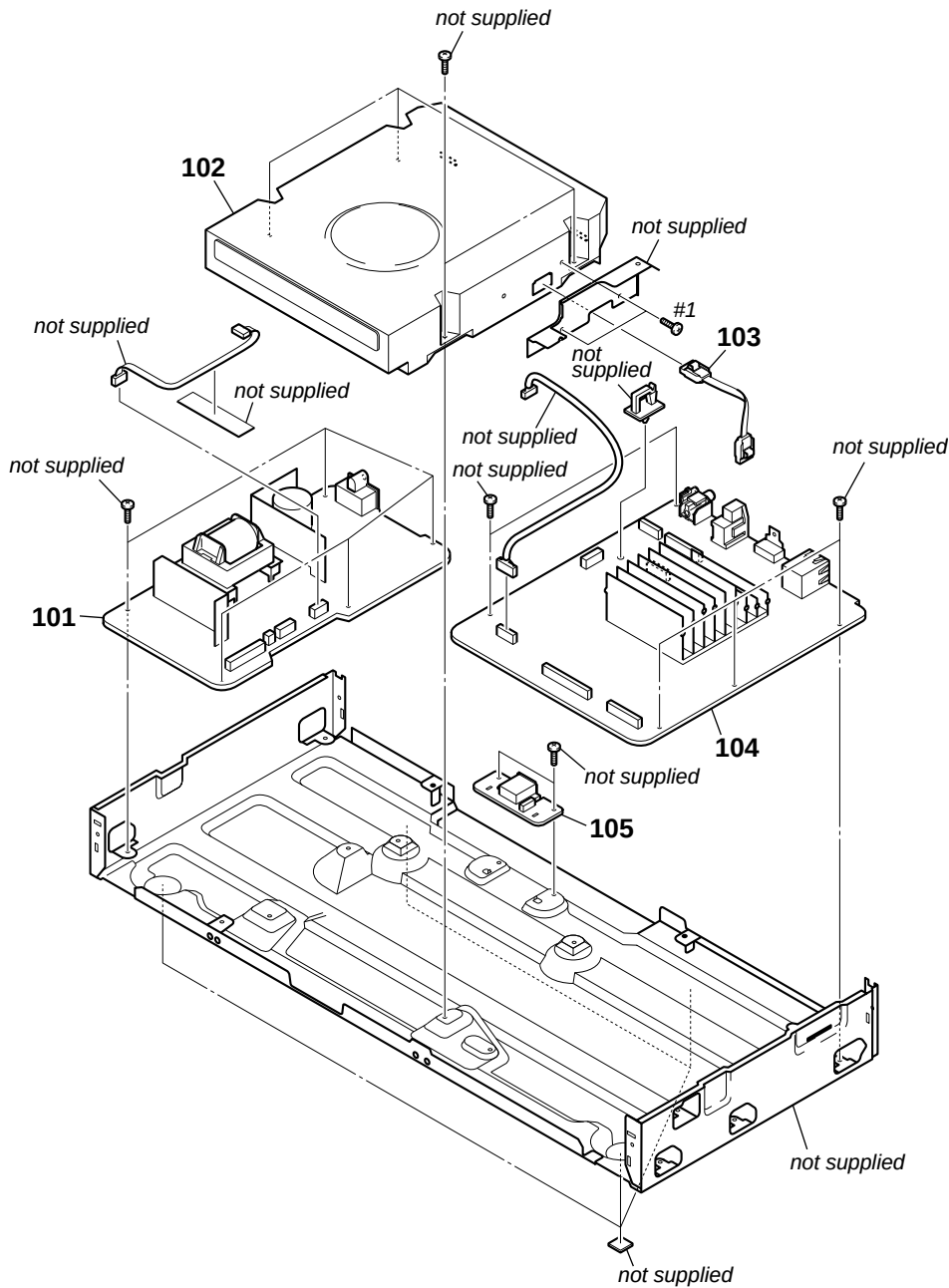








9-1-3. MAIN CHASSIS SECTION



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

| Ref. No.        | Part No.     | Description                      | Remark         | Ref. No. | Part No.     | Description                      | Remark |
|-----------------|--------------|----------------------------------|----------------|----------|--------------|----------------------------------|--------|
| $\triangle$ 101 | 1-474-088-11 | REGULATOR, SWITCHING (ZSSR774MA) | (US, CND)      | 104      | A-1545-412-A | MB-124 BOARD, COMPLETE (US, CND) |        |
| $\triangle$ 101 | 1-474-088-31 | REGULATOR, SWITCHING (ZSSR774HA) |                | 104      | A-1545-414-A | MB-124 BOARD, COMPLETE (AEP, UK) |        |
| $\triangle$ 102 | A-1540-573-A | DRIVE (SERVICE USE ), BD         | (AEP, UK, AUS) | 104      | A-1545-416-A | MB-124 BOARD, COMPLETE (AUS)     |        |
| 103             | 1-966-155-11 | HARNESS (SAT-003)                |                | 105      | A-1540-046-A | USB-008 BOARD, COMPLETE          |        |
|                 |              |                                  |                | #1       | 7-682-544-09 | +B 3X3                           |        |

9-1-4. ACCESSORIES

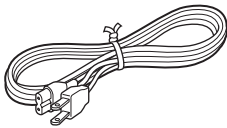
151  
Remote Commander  
(RMT-B102A/B102P)  
(S350)



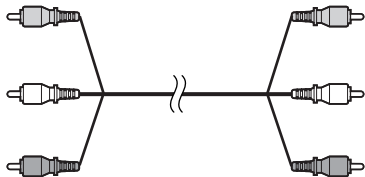
152  
Remote Commander  
(RMT-B103A)  
(BX1)



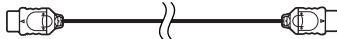
153  
AC Power Cord



154  
Audio/Video Cable (Phono Plug x3)



155  
HDMI Cable  
(BX1)



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

| Ref. No.                                                                                | Part No.     | Description                                            | Remark | Ref. No. | Part No.     | Description                                     | Remark |
|-----------------------------------------------------------------------------------------|--------------|--------------------------------------------------------|--------|----------|--------------|-------------------------------------------------|--------|
| 151                                                                                     | 1-480-649-11 | REMOTE COMMANDER (RMT-B102A)<br>(S350: US, CND)        |        | *        | 3-452-775-11 | MANUAL, INSTRUCTION (ENGLISH) (S350: UK)        |        |
| 151                                                                                     | 1-480-651-11 | REMOTE COMMANDER (RMT-B102P)<br>(S350: EXCEPT US, CND) |        | *        | 3-452-775-21 | MANUAL, INSTRUCTION (FRENCH) (S350: AEP)        |        |
| 152                                                                                     | 1-480-740-11 | REMOTE COMMANDER (RMT-B103A) (BX1)                     |        | *        | 3-452-775-31 | MANUAL, INSTRUCTION (GERMAN) (S350: AEP)        |        |
|  153 | 1-555-074-52 | CORD, POWER (AUS)                                      |        | *        | 3-452-775-41 | MANUAL, INSTRUCTION (ITALIAN) (S350: AEP)       |        |
|  153 | 1-575-131-82 | CORD, POWER (AEP)                                      |        | *        | 3-452-775-51 | MANUAL, INSTRUCTION (DUTCH) (S350: AEP)         |        |
|  153 | 1-823-701-11 | CORD, POWER (US, CND)                                  |        | *        | 3-452-776-11 | MANUAL, INSTRUCTION (SPANISH) (S350: AEP)       |        |
|  153 | 1-831-905-21 | POWER-SUPPLY CORD (UK)                                 |        | *        | 3-452-776-21 | MANUAL, INSTRUCTION (PORTUGUESE)<br>(S350: AEP) |        |
| 154                                                                                     | 1-828-145-11 | CORD, CONNECTION (AV)                                  |        | *        | 3-452-776-31 | MANUAL, INSTRUCTION (SWEDISH) (S350: AEP)       |        |
| 155                                                                                     | 1-834-169-21 | CORD WITH CONNECTOR (HDMI CABLE) (BX1)                 |        | *        | 3-452-776-41 | MANUAL, INSTRUCTION (DANISH) (S350: AEP)        |        |
| *                                                                                       | 3-287-660-11 | MANUAL, INSTRUCTION (ENGLISH)<br>(S350: US, CND)       |        | *        | 3-452-776-51 | MANUAL, INSTRUCTION (FINNISH) (S350: AEP)       |        |
| *                                                                                       | 3-287-660-21 | MANUAL, INSTRUCTION (FRENCH) (S350: CND)               |        | *        | 3-452-777-11 | MANUAL, INSTRUCTION (ENGLISH) (BX1)             |        |
|                                                                                         |              |                                                        |        | *        | 3-452-777-21 | MANUAL, INSTRUCTION (FRENCH) (BX1: CND)         |        |
|                                                                                         |              |                                                        |        | *        | 3-878-575-11 | MANUAL, INSTRUCTION (ENGLISH) (S350: AUS)       |        |

## 9-2. ELECTRICAL PARTS LIST

## NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS  
All resistors are in ohms.  
METAL: Metal-film resistor.  
METAL OXIDE: Metal oxide-film resistor.  
F: nonflammable
- Items marked "\*" are not stocked since they are seldom required for routine service.  
Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS  
In each case, u:  $\mu$ , for example:  
uA. . :  $\mu$ A. . uPA. . :  $\mu$ PA. .  
uPB. . :  $\mu$ PB. . uPC. . :  $\mu$ PC. .  
uPD. . :  $\mu$ PD. .
- CAPACITORS  
uF:  $\mu$ F  
uH:  $\mu$ H
- Abbreviation  
AUS : Australian model  
CND : Canadian model

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.

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

| Ref. No. | Part No.     | Description                                                 | Remark | Ref. No. | Part No.     | Description                                   | Remark |
|----------|--------------|-------------------------------------------------------------|--------|----------|--------------|-----------------------------------------------|--------|
|          | A-1540-036-A | AV-123 BOARD, COMPLETE<br>*****<br>(Ref. No. 20,000 Series) |        | C220     | 1-126-947-11 | ELECT 47uF 20% 35V                            |        |
|          |              | < CAPACITOR >                                               |        | C221     | 1-100-566-91 | CERAMIC CHIP 0.1uF 10% 25V                    |        |
|          |              |                                                             |        | C222     | 1-100-566-91 | CERAMIC CHIP 0.1uF 10% 25V                    |        |
|          |              |                                                             |        | C223     | 1-100-566-91 | CERAMIC CHIP 0.1uF 10% 25V                    |        |
|          |              |                                                             |        | C224     | 1-100-566-91 | CERAMIC CHIP 0.1uF 10% 25V                    |        |
|          |              |                                                             |        | C225     | 1-100-566-91 | CERAMIC CHIP 0.1uF 10% 25V                    |        |
| C002     | 1-127-715-11 | CERAMIC CHIP 0.22uF 10% 16V                                 |        | C226     | 1-126-947-11 | ELECT 47uF 20% 35V                            |        |
| C003     | 1-127-715-11 | CERAMIC CHIP 0.22uF 10% 16V                                 |        | C227     | 1-107-826-11 | CERAMIC CHIP 0.1uF 10% 16V                    |        |
| C004     | 1-126-947-11 | ELECT 47uF 20% 35V                                          |        |          |              | < CONNECTOR >                                 |        |
| C005     | 1-126-947-11 | ELECT 47uF 20% 35V                                          |        | CN203    | 1-821-773-51 | CONNECTOR, FFC/FPC 21P                        |        |
| C006     | 1-162-964-11 | CERAMIC CHIP 0.001uF 10% 50V                                |        |          |              | < DIODE >                                     |        |
|          |              |                                                             |        | D001     | 8-719-914-43 | DIODE DAN202K                                 |        |
| C011     | 1-127-715-11 | CERAMIC CHIP 0.22uF 10% 16V                                 |        | D002     | 8-719-988-61 | DIODE 1SS355TE-17                             |        |
| C012     | 1-126-964-11 | ELECT 10uF 20% 50V                                          |        | D203     | 8-719-067-40 | DIODE STZ6.8N-T146                            |        |
| C016     | 1-165-908-11 | CERAMIC CHIP 1uF 10% 10V                                    |        | D205     | 8-719-067-40 | DIODE STZ6.8N-T146                            |        |
| C030     | 1-164-173-11 | CERAMIC CHIP 0.0039uF 10% 50V                               |        | D206     | 8-719-067-40 | DIODE STZ6.8N-T146                            |        |
| C031     | 1-164-173-11 | CERAMIC CHIP 0.0039uF 10% 50V                               |        |          |              |                                               |        |
|          |              |                                                             |        | D208     | 8-719-067-40 | DIODE STZ6.8N-T146                            |        |
| C040     | 1-164-315-11 | CERAMIC CHIP 470PF 5% 50V                                   |        | D209     | 8-719-067-40 | DIODE STZ6.8N-T146                            |        |
| C041     | 1-164-315-11 | CERAMIC CHIP 470PF 5% 50V                                   |        | D211     | 8-719-067-40 | DIODE STZ6.8N-T146                            |        |
| C046     | 1-100-566-91 | CERAMIC CHIP 0.1uF 10% 25V                                  |        |          |              | < IC >                                        |        |
| C051     | 1-164-315-11 | CERAMIC CHIP 470PF 5% 50V                                   |        | IC001    | 6-705-337-01 | IC TK11150CSCL-G                              |        |
| C056     | 1-164-315-11 | CERAMIC CHIP 470PF 5% 50V                                   |        | IC002    | 6-702-630-01 | IC AK4382AVTN-E2                              |        |
|          |              |                                                             |        | IC008    | 8-759-656-83 | IC NJM4580MD-(TE2)                            |        |
| C061     | 1-126-947-11 | ELECT 47uF 20% 35V                                          |        | IC202    | 6-702-302-01 | IC TK11133CSCL-G                              |        |
| C066     | 1-126-947-11 | ELECT 47uF 20% 35V                                          |        | IC205    | 8-759-667-17 | IC L79M05TLL-SONY-TL-E                        |        |
| C071     | 1-100-566-91 | CERAMIC CHIP 0.1uF 10% 25V                                  |        |          |              |                                               |        |
| C080     | 1-164-230-11 | CERAMIC CHIP 220PF 5% 50V                                   |        | IC206    | 6-712-336-01 | IC NJM2564AV (TE2)                            |        |
| C081     | 1-164-230-11 | CERAMIC CHIP 220PF 5% 50V                                   |        |          |              | < JACK >                                      |        |
|          |              |                                                             |        | J001     | 1-815-894-11 | JACK, PIN (2P) (LINE OUT (AUDIO L/R))         |        |
| C082     | 1-126-934-11 | ELECT 220uF 20% 16V                                         |        | J201     | 1-793-483-11 | PHONO JACK 3P (COMPONENT VIDEO OUT (Pr/Pb/Y)) |        |
| C202     | 1-100-717-91 | CERAMIC CHIP 1uF 10% 16V                                    |        | J202     | 1-780-641-11 | JACK BLOCK, PIN (LINE OUT (S VIDEO/VIDEO))    |        |
| C203     | 1-107-726-91 | CERAMIC CHIP 0.01uF 10% 16V                                 |        |          |              | < COIL >                                      |        |
| C204     | 1-100-717-91 | CERAMIC CHIP 1uF 10% 16V                                    |        | L201     | 1-469-967-21 | INDUCTOR 10uH                                 |        |
| C205     | 1-126-947-11 | ELECT 47uF 20% 35V                                          |        | L202     | 1-469-967-21 | INDUCTOR 10uH                                 |        |
|          |              |                                                             |        | L203     | 1-469-967-21 | INDUCTOR 10uH                                 |        |
| C206     | 1-107-826-11 | CERAMIC CHIP 0.1uF 10% 16V                                  |        | L204     | 1-469-967-21 | INDUCTOR 10uH                                 |        |
| C207     | 1-100-566-91 | CERAMIC CHIP 0.1uF 10% 25V                                  |        | L205     | 1-469-967-21 | INDUCTOR 10uH                                 |        |
| C208     | 1-126-947-11 | ELECT 47uF 20% 35V                                          |        |          |              |                                               |        |
| C209     | 1-126-964-11 | ELECT 10uF 20% 50V                                          |        |          |              |                                               |        |
| C210     | 1-107-826-11 | CERAMIC CHIP 0.1uF 10% 16V                                  |        |          |              |                                               |        |
|          |              |                                                             |        |          |              |                                               |        |
| C211     | 1-100-566-91 | CERAMIC CHIP 0.1uF 10% 25V                                  |        |          |              |                                               |        |
| C212     | 1-100-566-91 | CERAMIC CHIP 0.1uF 10% 25V                                  |        |          |              |                                               |        |
| C213     | 1-126-947-11 | ELECT 47uF 20% 35V                                          |        |          |              |                                               |        |
| C214     | 1-126-947-11 | ELECT 47uF 20% 35V                                          |        |          |              |                                               |        |
| C215     | 1-100-566-91 | CERAMIC CHIP 0.1uF 10% 25V                                  |        |          |              |                                               |        |
|          |              |                                                             |        |          |              |                                               |        |
| C216     | 1-100-566-91 | CERAMIC CHIP 0.1uF 10% 25V                                  |        |          |              |                                               |        |
| C217     | 1-100-566-91 | CERAMIC CHIP 0.1uF 10% 25V                                  |        |          |              |                                               |        |
| C218     | 1-100-566-91 | CERAMIC CHIP 0.1uF 10% 25V                                  |        |          |              |                                               |        |
| C219     | 1-100-566-91 | CERAMIC CHIP 0.1uF 10% 25V                                  |        |          |              |                                               |        |

| Ref. No.       | Part No.     | Description   | Remark            |      |       |  | Ref. No.                                                                                                                            | Part No.     | Description           | Remark |    |       |  |
|----------------|--------------|---------------|-------------------|------|-------|--|-------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------|--------|----|-------|--|
| < FUSE >       |              |               |                   |      |       |  | R126                                                                                                                                | 1-216-841-11 | METAL CHIP            | 47K    | 5% | 1/10W |  |
|                |              |               |                   |      |       |  | R127                                                                                                                                | 1-216-841-11 | METAL CHIP            | 47K    | 5% | 1/10W |  |
| △ PS101        | 1-576-596-21 | FUSE 1A 32V   |                   |      |       |  | R136                                                                                                                                | 1-216-829-11 | METAL CHIP            | 4.7K   | 5% | 1/10W |  |
| △ PS102        | 1-576-863-21 | FUSE 0.5A 32V |                   |      |       |  | R137                                                                                                                                | 1-216-829-11 | METAL CHIP            | 4.7K   | 5% | 1/10W |  |
| △ PS201        | 1-576-596-21 | FUSE 1A 32V   |                   |      |       |  | R146                                                                                                                                | 1-216-817-11 | METAL CHIP            | 470    | 5% | 1/10W |  |
| < TRANSISTOR > |              |               |                   |      |       |  | R147                                                                                                                                | 1-216-817-11 | METAL CHIP            | 470    | 5% | 1/10W |  |
|                |              |               |                   |      |       |  | R148                                                                                                                                | 1-216-845-11 | METAL CHIP            | 100K   | 5% | 1/10W |  |
| Q001           | 8-729-901-88 | TRANSISTOR    | 2SC2411K-T-146-CR |      |       |  | R158                                                                                                                                | 1-216-295-91 | SHORT CHIP            | 0      |    |       |  |
| Q002           | 8-729-045-17 | TRANSISTOR    | 2SB1561T100Q      |      |       |  | R160                                                                                                                                | 1-216-295-91 | SHORT CHIP            | 0      |    |       |  |
| Q003           | 8-729-120-28 | TRANSISTOR    | 2SC1623-L5L6      |      |       |  | R163                                                                                                                                | 1-216-864-11 | SHORT CHIP            | 0      |    |       |  |
| Q004           | 8-729-029-14 | TRANSISTOR    | DTC144EUA-T106    |      |       |  | R164                                                                                                                                | 1-216-864-11 | SHORT CHIP            | 0      |    |       |  |
| Q008           | 8-729-029-07 | TRANSISTOR    | DTC124TUA-T106    |      |       |  | R165                                                                                                                                | 1-216-864-11 | SHORT CHIP            | 0      |    |       |  |
| Q012           | 8-729-010-05 | TRANSISTOR    | MSB709-RT1        |      |       |  | R166                                                                                                                                | 1-216-864-11 | SHORT CHIP            | 0      |    |       |  |
| Q024           | 6-551-287-01 | TRANSISTOR    | 2SD2704K-T146     |      |       |  | R167                                                                                                                                | 1-216-864-11 | SHORT CHIP            | 0      |    |       |  |
| Q025           | 6-551-287-01 | TRANSISTOR    | 2SD2704K-T146     |      |       |  | R168                                                                                                                                | 1-216-864-11 | SHORT CHIP            | 0      |    |       |  |
| Q026           | 8-729-028-73 | TRANSISTOR    | DTA114EUA-T106    |      |       |  | R201                                                                                                                                | 1-216-833-11 | METAL CHIP            | 10K    | 5% | 1/10W |  |
| Q201           | 8-729-028-83 | TRANSISTOR    | DTA124EUA-T106    |      |       |  | R202                                                                                                                                | 1-216-821-11 | METAL CHIP            | 1K     | 5% | 1/10W |  |
| Q202           | 8-729-010-29 | TRANSISTOR    | MSD601-RST1       |      |       |  | R208                                                                                                                                | 1-216-827-11 | METAL CHIP            | 3.3K   | 5% | 1/10W |  |
| Q203           | 8-729-010-29 | TRANSISTOR    | MSD601-RST1       |      |       |  | R210                                                                                                                                | 1-216-833-11 | METAL CHIP            | 10K    | 5% | 1/10W |  |
| Q204           | 8-729-010-29 | TRANSISTOR    | MSD601-RST1       |      |       |  | R211                                                                                                                                | 1-216-801-11 | METAL CHIP            | 22     | 5% | 1/10W |  |
| Q205           | 8-729-010-29 | TRANSISTOR    | MSD601-RST1       |      |       |  | R212                                                                                                                                | 1-216-801-11 | METAL CHIP            | 22     | 5% | 1/10W |  |
| Q206           | 8-729-010-29 | TRANSISTOR    | MSD601-RST1       |      |       |  | R213                                                                                                                                | 1-216-801-11 | METAL CHIP            | 22     | 5% | 1/10W |  |
| Q207           | 8-729-921-80 | TRANSISTOR    | 2SD1781K-T146-QR  |      |       |  | R214                                                                                                                                | 1-216-801-11 | METAL CHIP            | 22     | 5% | 1/10W |  |
| Q212           | 8-729-028-83 | TRANSISTOR    | DTA124EUA-T106    |      |       |  | R215                                                                                                                                | 1-216-801-11 | METAL CHIP            | 22     | 5% | 1/10W |  |
| Q213           | 8-729-921-80 | TRANSISTOR    | 2SD1781K-T146-QR  |      |       |  | R219                                                                                                                                | 1-216-819-11 | METAL CHIP            | 680    | 5% | 1/10W |  |
| Q214           | 8-729-024-88 | TRANSISTOR    | MUN2212T1         |      |       |  | R220                                                                                                                                | 1-216-819-11 | METAL CHIP            | 680    | 5% | 1/10W |  |
| < RESISTOR >   |              |               |                   |      |       |  | R221                                                                                                                                | 1-216-819-11 | METAL CHIP            | 680    | 5% | 1/10W |  |
| R001           | 1-216-833-11 | METAL CHIP    | 10K               | 5%   | 1/10W |  | R222                                                                                                                                | 1-216-819-11 | METAL CHIP            | 680    | 5% | 1/10W |  |
| R002           | 1-216-833-11 | METAL CHIP    | 10K               | 5%   | 1/10W |  | R223                                                                                                                                | 1-216-819-11 | METAL CHIP            | 680    | 5% | 1/10W |  |
| R003           | 1-216-830-11 | METAL CHIP    | 5.6K              | 5%   | 1/10W |  | R232                                                                                                                                | 1-216-864-11 | SHORT CHIP            | 0      |    |       |  |
| R004           | 1-216-809-11 | METAL CHIP    | 100               | 5%   | 1/10W |  | R233                                                                                                                                | 1-216-864-11 | SHORT CHIP            | 0      |    |       |  |
| R005           | 1-216-809-11 | METAL CHIP    | 100               | 5%   | 1/10W |  | R234                                                                                                                                | 1-216-825-11 | METAL CHIP            | 2.2K   | 5% | 1/10W |  |
| R006           | 1-216-809-11 | METAL CHIP    | 100               | 5%   | 1/10W |  | R235                                                                                                                                | 1-216-809-11 | METAL CHIP            | 100    | 5% | 1/10W |  |
| R007           | 1-216-809-11 | METAL CHIP    | 100               | 5%   | 1/10W |  | R237                                                                                                                                | 1-218-285-11 | METAL CHIP            | 75     | 5% | 1/10W |  |
| R008           | 1-216-809-11 | METAL CHIP    | 100               | 5%   | 1/10W |  | R239                                                                                                                                | 1-218-285-11 | METAL CHIP            | 75     | 5% | 1/10W |  |
| R009           | 1-216-830-11 | METAL CHIP    | 5.6K              | 5%   | 1/10W |  | R241                                                                                                                                | 1-218-285-11 | METAL CHIP            | 75     | 5% | 1/10W |  |
| R010           | 1-216-833-11 | METAL CHIP    | 10K               | 5%   | 1/10W |  | R242                                                                                                                                | 1-218-285-11 | METAL CHIP            | 75     | 5% | 1/10W |  |
| R012           | 1-216-829-11 | METAL CHIP    | 4.7K              | 5%   | 1/10W |  | R243                                                                                                                                | 1-218-285-11 | METAL CHIP            | 75     | 5% | 1/10W |  |
| R013           | 1-216-841-11 | METAL CHIP    | 47K               | 5%   | 1/10W |  | R244                                                                                                                                | 1-218-285-11 | METAL CHIP            | 75     | 5% | 1/10W |  |
| R014           | 1-216-845-11 | METAL CHIP    | 100K              | 5%   | 1/10W |  | R260                                                                                                                                | 1-216-864-11 | SHORT CHIP            | 0      |    |       |  |
| R015           | 1-216-821-11 | METAL CHIP    | 1K                | 5%   | 1/10W |  | R263                                                                                                                                | 1-216-864-11 | SHORT CHIP            | 0      |    |       |  |
| R016           | 1-216-817-11 | METAL CHIP    | 470               | 5%   | 1/10W |  | R265                                                                                                                                | 1-216-833-11 | METAL CHIP            | 10K    | 5% | 1/10W |  |
| R017           | 1-216-829-11 | METAL CHIP    | 4.7K              | 5%   | 1/10W |  | R267                                                                                                                                | 1-216-827-11 | METAL CHIP            | 3.3K   | 5% | 1/10W |  |
| R030           | 1-216-833-11 | METAL CHIP    | 10K               | 5%   | 1/10W |  | R268                                                                                                                                | 1-216-864-11 | SHORT CHIP            | 0      |    |       |  |
| R040           | 1-216-833-11 | METAL CHIP    | 10K               | 5%   | 1/10W |  | R269                                                                                                                                | 1-216-864-11 | SHORT CHIP            | 0      |    |       |  |
| R044           | 1-216-833-11 | METAL CHIP    | 10K               | 5%   | 1/10W |  |                                                                                                                                     |              |                       |        |    |       |  |
| R062           | 1-218-709-11 | METAL CHIP    | 5.1K              | 0.5% | 1/10W |  |                                                                                                                                     |              |                       |        |    |       |  |
| R063           | 1-218-709-11 | METAL CHIP    | 5.1K              | 0.5% | 1/10W |  | A-1540-044-A FC-096 BOARD, COMPLETE                                                                                                 |              |                       |        |    |       |  |
| R064           | 1-218-709-11 | METAL CHIP    | 5.1K              | 0.5% | 1/10W |  | *****                                                                                                                               |              |                       |        |    |       |  |
| R065           | 1-218-709-11 | METAL CHIP    | 5.1K              | 0.5% | 1/10W |  | (Ref. No. 20, 000 Series)                                                                                                           |              |                       |        |    |       |  |
| R076           | 1-218-710-11 | METAL CHIP    | 5.6K              | 0.5% | 1/10W |  | < CONNECTOR >                                                                                                                       |              |                       |        |    |       |  |
| R077           | 1-218-710-11 | METAL CHIP    | 5.6K              | 0.5% | 1/10W |  | CN301                                                                                                                               | 1-816-184-51 | CONNECTOR, FFC/FPC 5P |        |    |       |  |
| R086           | 1-218-674-11 | METAL CHIP    | 180               | 0.5% | 1/10W |  | The components identified by mark △ or dotted line with mark △ are critical for safety.<br>Replace only with part number specified. |              |                       |        |    |       |  |
| R087           | 1-218-674-11 | METAL CHIP    | 180               | 0.5% | 1/10W |  |                                                                                                                                     |              |                       |        |    |       |  |
| R096           | 1-218-674-11 | METAL CHIP    | 180               | 0.5% | 1/10W |  |                                                                                                                                     |              |                       |        |    |       |  |
| R097           | 1-218-710-11 | METAL CHIP    | 5.6K              | 0.5% | 1/10W |  |                                                                                                                                     |              |                       |        |    |       |  |
| R106           | 1-218-710-11 | METAL CHIP    | 5.6K              | 0.5% | 1/10W |  |                                                                                                                                     |              |                       |        |    |       |  |
| R107           | 1-218-674-11 | METAL CHIP    | 180               | 0.5% | 1/10W |  |                                                                                                                                     |              |                       |        |    |       |  |
| R116           | 1-216-817-11 | METAL CHIP    | 470               | 5%   | 1/10W |  |                                                                                                                                     |              |                       |        |    |       |  |
| R117           | 1-216-817-11 | METAL CHIP    | 470               | 5%   | 1/10W |  |                                                                                                                                     |              |                       |        |    |       |  |

FC-096

FL-187

FR-294

IFD-003

| Ref. No. | Part No.     | Description                                                  | Remark |  |  |  |
|----------|--------------|--------------------------------------------------------------|--------|--|--|--|
|          |              | < DIODE >                                                    |        |  |  |  |
| D301     | 6-501-476-01 | DIODE NSSW008CT-T071<br>(BLU-RAY DISC INDICATOR)             |        |  |  |  |
|          |              | < RESISTOR >                                                 |        |  |  |  |
| R301     | 1-216-821-11 | METAL CHIP 1K 5% 1/10W                                       |        |  |  |  |
|          | A-1540-042-A | FL-187 BOARD, COMPLETE<br>*****<br>(Ref. No. 20, 000 Series) |        |  |  |  |
|          |              | < SWITCH >                                                   |        |  |  |  |
| S331     | 1-771-410-21 | SWITCH, TACTILE (I/⏏)                                        |        |  |  |  |
|          | A-1540-040-A | FR-294 BOARD, COMPLETE<br>*****<br>(Ref. No. 20, 000 Series) |        |  |  |  |
|          |              | < CAPACITOR >                                                |        |  |  |  |
| C701     | 1-115-339-11 | CERAMIC CHIP 0.1uF 10% 50V                                   |        |  |  |  |
| C703     | 1-125-972-91 | ELECT 100uF 20% 16V                                          |        |  |  |  |
| C705     | 1-106-363-00 | MYLAR 0.0068uF 5% 200V                                       |        |  |  |  |
| C707     | 1-107-726-91 | CERAMIC CHIP 0.01uF 10% 16V                                  |        |  |  |  |
| C711     | 1-115-339-11 | CERAMIC CHIP 0.1uF 10% 50V                                   |        |  |  |  |
| C712     | 1-128-131-11 | ELECT 22uF 20% 50V                                           |        |  |  |  |
| C713     | 1-115-339-11 | CERAMIC CHIP 0.1uF 10% 50V                                   |        |  |  |  |
| C714     | 1-107-726-91 | CERAMIC CHIP 0.01uF 10% 16V                                  |        |  |  |  |
| C715     | 1-107-726-91 | CERAMIC CHIP 0.01uF 10% 16V                                  |        |  |  |  |
| C716     | 1-115-339-11 | CERAMIC CHIP 0.1uF 10% 50V                                   |        |  |  |  |
| C717     | 1-164-217-11 | CERAMIC CHIP 150PF 5% 50V                                    |        |  |  |  |
| C718     | 1-164-217-11 | CERAMIC CHIP 150PF 5% 50V                                    |        |  |  |  |
|          |              | < CONNECTOR >                                                |        |  |  |  |
| CN701    | 1-793-806-51 | CONNECTOR, FFC/FPC 17P                                       |        |  |  |  |
|          |              | < DIODE >                                                    |        |  |  |  |
| D703     | 8-719-988-61 | DIODE 1SS355TE-17                                            |        |  |  |  |
| D704     | 8-719-988-61 | DIODE 1SS355TE-17                                            |        |  |  |  |
| D705     | 8-719-988-61 | DIODE 1SS355TE-17                                            |        |  |  |  |
| D706     | 8-719-988-61 | DIODE 1SS355TE-17                                            |        |  |  |  |
| D707     | 6-500-021-01 | DIODE MM3Z4V7ST1                                             |        |  |  |  |
|          |              | < IC >                                                       |        |  |  |  |
| IC701    | 6-600-693-01 | IC GP1UE28XK0VF                                              |        |  |  |  |
| IC702    | 6-701-729-01 | IC PT6315                                                    |        |  |  |  |
|          |              | < COIL >                                                     |        |  |  |  |
| L701     | 1-411-919-11 | INDUCTOR 100uH                                               |        |  |  |  |
|          |              | < FLUORESCENT INDICATOR TUBE >                               |        |  |  |  |
| ND701    | 1-483-022-11 | INDICATOR TUBE, FLUORESCENT                                  |        |  |  |  |
|          |              | < FUSE >                                                     |        |  |  |  |
| △ PS701  | 1-576-570-11 | FUSE 0.63A 32V                                               |        |  |  |  |
| △ PS702  | 1-576-570-11 | FUSE 0.63A 32V                                               |        |  |  |  |

| Ref. No. | Part No.     | Description                                                   | Remark |  |  |  |
|----------|--------------|---------------------------------------------------------------|--------|--|--|--|
|          |              | < TRANSISTOR >                                                |        |  |  |  |
| Q701     | 8-729-028-97 | TRANSISTOR DTC114TUA-T106                                     |        |  |  |  |
| Q702     | 8-729-028-97 | TRANSISTOR DTC114TUA-T106                                     |        |  |  |  |
| Q703     | 8-729-421-19 | TRANSISTOR UN2213                                             |        |  |  |  |
| Q704     | 8-729-904-87 | TRANSISTOR 2SB1197K-R                                         |        |  |  |  |
| Q706     | 8-729-901-88 | TRANSISTOR 2SC2411K-CR                                        |        |  |  |  |
| Q707     | 8-729-901-88 | TRANSISTOR 2SC2411K-CR                                        |        |  |  |  |
|          |              | < RESISTOR >                                                  |        |  |  |  |
| R701     | 1-216-833-11 | METAL CHIP 10K 5% 1/10W                                       |        |  |  |  |
| R703     | 1-216-815-11 | METAL CHIP 330 5% 1/10W                                       |        |  |  |  |
| R705     | 1-216-821-11 | METAL CHIP 1K 5% 1/10W                                        |        |  |  |  |
| R707     | 1-216-828-11 | METAL CHIP 3.9K 5% 1/10W                                      |        |  |  |  |
| R708     | 1-216-864-11 | SHORT CHIP 0                                                  |        |  |  |  |
| R710     | 1-216-864-11 | SHORT CHIP 0                                                  |        |  |  |  |
| R712     | 1-216-825-11 | METAL CHIP 2.2K 5% 1/10W                                      |        |  |  |  |
| R713     | 1-216-825-11 | METAL CHIP 2.2K 5% 1/10W                                      |        |  |  |  |
| R714     | 1-216-838-11 | METAL CHIP 27K 5% 1/10W                                       |        |  |  |  |
| R715     | 1-216-845-11 | METAL CHIP 100K 5% 1/10W                                      |        |  |  |  |
|          |              | < SWITCH >                                                    |        |  |  |  |
| S702     | 1-771-410-21 | SWITCH, TACTILE (⏏)                                           |        |  |  |  |
| S703     | 1-771-410-21 | SWITCH, TACTILE (⏏)                                           |        |  |  |  |
| S704     | 1-771-410-21 | SWITCH, TACTILE (⏏)                                           |        |  |  |  |
| S705     | 1-771-410-21 | SWITCH, TACTILE (⏏)                                           |        |  |  |  |
|          |              | < TRANSFORMER >                                               |        |  |  |  |
| * T701   | 1-445-447-11 | TRANSFORMER, DC-DC CONVERTER                                  |        |  |  |  |
|          | A-1540-038-A | IFD-003 BOARD, COMPLETE<br>*****<br>(Ref. No. 20, 000 Series) |        |  |  |  |
|          |              | < CAPACITOR >                                                 |        |  |  |  |
| C403     | 1-162-920-11 | CERAMIC CHIP 27PF 5% 50V                                      |        |  |  |  |
| C404     | 1-162-918-11 | CERAMIC CHIP 18PF 5% 50V                                      |        |  |  |  |
| C405     | 1-107-826-11 | CERAMIC CHIP 0.1uF 10% 16V                                    |        |  |  |  |
| C406     | 1-137-765-21 | ELECT CHIP 47uF 20% 16V                                       |        |  |  |  |
| C409     | 1-107-826-11 | CERAMIC CHIP 0.1uF 10% 16V                                    |        |  |  |  |
| C410     | 1-107-826-11 | CERAMIC CHIP 0.1uF 10% 16V                                    |        |  |  |  |
| C411     | 1-107-826-11 | CERAMIC CHIP 0.1uF 10% 16V                                    |        |  |  |  |
| C412     | 1-107-826-11 | CERAMIC CHIP 0.1uF 10% 16V                                    |        |  |  |  |
| C413     | 1-107-826-11 | CERAMIC CHIP 0.1uF 10% 16V                                    |        |  |  |  |
| C414     | 1-107-826-11 | CERAMIC CHIP 0.1uF 10% 16V                                    |        |  |  |  |
| C415     | 1-107-826-11 | CERAMIC CHIP 0.1uF 10% 16V                                    |        |  |  |  |
| C416     | 1-107-826-11 | CERAMIC CHIP 0.1uF 10% 16V                                    |        |  |  |  |
| C417     | 1-107-826-11 | CERAMIC CHIP 0.1uF 10% 16V                                    |        |  |  |  |
| C418     | 1-107-826-11 | CERAMIC CHIP 0.1uF 10% 16V                                    |        |  |  |  |
| C501     | 1-100-591-91 | CERAMIC CHIP 1uF 10% 25V                                      |        |  |  |  |
| C503     | 1-100-591-91 | CERAMIC CHIP 1uF 10% 25V                                      |        |  |  |  |
| C505     | 1-162-927-11 | CERAMIC CHIP 100PF 5% 50V                                     |        |  |  |  |
| C507     | 1-162-970-11 | CERAMIC CHIP 0.01uF 10% 25V                                   |        |  |  |  |
| C601     | 1-135-960-91 | CERAMIC CHIP 10uF 10% 25V                                     |        |  |  |  |
| C603     | 1-100-717-91 | CERAMIC CHIP 1uF 16V                                          |        |  |  |  |

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 |      |       |  |
|----------------------------------------------------------------------------------------------------------------------------------|--------------|---------------------------------|---------|------|-------|--|----------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------|--------|------|-------|--|
| C604                                                                                                                             | 1-135-960-91 | CERAMIC CHIP                    | 10uF    | 10%  | 25V   |  | R414     | 1-216-809-11 | METAL CHIP                                                                                                                                 | 100    | 5%   | 1/10W |  |
| C605                                                                                                                             | 1-127-715-11 | CERAMIC CHIP                    | 0.22uF  | 10%  | 16V   |  | R415     | 1-216-809-11 | METAL CHIP                                                                                                                                 | 100    | 5%   | 1/10W |  |
| C607                                                                                                                             | 1-107-726-91 | CERAMIC CHIP                    | 0.01uF  | 10%  | 16V   |  |          |              |                                                                                                                                            |        |      |       |  |
| C608                                                                                                                             | 1-100-717-91 | CERAMIC CHIP                    | 1uF     |      | 16V   |  | R417     | 1-216-809-11 | METAL CHIP                                                                                                                                 | 100    | 5%   | 1/10W |  |
| C609                                                                                                                             | 1-162-970-11 | CERAMIC CHIP                    | 0.01uF  | 10%  | 25V   |  | R418     | 1-216-845-11 | METAL CHIP                                                                                                                                 | 100K   | 5%   | 1/10W |  |
|                                                                                                                                  |              |                                 |         |      |       |  | R419     | 1-216-809-11 | METAL CHIP                                                                                                                                 | 100    | 5%   | 1/10W |  |
| C610                                                                                                                             | 1-164-227-11 | CERAMIC CHIP                    | 0.022uF | 10%  | 25V   |  | R420     | 1-216-864-11 | SHORT CHIP                                                                                                                                 | 0      |      |       |  |
| C619                                                                                                                             | 1-135-960-91 | CERAMIC CHIP                    | 10uF    | 10%  | 25V   |  | R422     | 1-216-864-11 | SHORT CHIP                                                                                                                                 | 0      |      |       |  |
| C621                                                                                                                             | 1-135-960-91 | CERAMIC CHIP                    | 10uF    | 10%  | 25V   |  |          |              |                                                                                                                                            |        |      |       |  |
| C622                                                                                                                             | 1-127-820-11 | CERAMIC CHIP                    | 4.7uF   | 10%  | 16V   |  | R423     | 1-216-809-11 | METAL CHIP                                                                                                                                 | 100    | 5%   | 1/10W |  |
| C624                                                                                                                             | 1-162-970-11 | CERAMIC CHIP                    | 0.01uF  | 10%  | 25V   |  | R424     | 1-216-833-11 | METAL CHIP                                                                                                                                 | 10K    | 5%   | 1/10W |  |
|                                                                                                                                  |              |                                 |         |      |       |  | R425     | 1-216-864-11 | SHORT CHIP                                                                                                                                 | 0      |      |       |  |
| C626                                                                                                                             | 1-162-970-11 | CERAMIC CHIP                    | 0.01uF  | 10%  | 25V   |  | R426     | 1-216-809-11 | METAL CHIP                                                                                                                                 | 100    | 5%   | 1/10W |  |
| C627                                                                                                                             | 1-164-227-11 | CERAMIC CHIP                    | 0.022uF | 10%  | 25V   |  | R427     | 1-216-833-11 | METAL CHIP                                                                                                                                 | 10K    | 5%   | 1/10W |  |
| C628                                                                                                                             | 1-100-159-91 | CERAMIC CHIP                    | 22uF    | 10%  | 6.3V  |  |          |              |                                                                                                                                            |        |      |       |  |
| C630                                                                                                                             | 1-100-159-91 | CERAMIC CHIP                    | 22uF    | 10%  | 6.3V  |  | R428     | 1-216-833-11 | METAL CHIP                                                                                                                                 | 10K    | 5%   | 1/10W |  |
| C631                                                                                                                             | 1-100-159-91 | CERAMIC CHIP                    | 22uF    | 10%  | 6.3V  |  | R429     | 1-216-864-11 | SHORT CHIP                                                                                                                                 | 0      |      |       |  |
|                                                                                                                                  |              |                                 |         |      |       |  | R430     | 1-216-809-11 | METAL CHIP                                                                                                                                 | 100    | 5%   | 1/10W |  |
| C632                                                                                                                             | 1-100-159-91 | CERAMIC CHIP                    | 22uF    | 10%  | 6.3V  |  | R431     | 1-216-864-11 | SHORT CHIP                                                                                                                                 | 0      |      |       |  |
| C633                                                                                                                             | 1-127-820-11 | CERAMIC CHIP                    | 4.7uF   | 10%  | 16V   |  | R432     | 1-216-809-11 | METAL CHIP                                                                                                                                 | 100    | 5%   | 1/10W |  |
|                                                                                                                                  |              | < CONNECTOR >                   |         |      |       |  |          |              |                                                                                                                                            |        |      |       |  |
| CN101                                                                                                                            | 1-815-954-21 | PIN, CONNECTOR (PC BOARD) 13P   |         |      |       |  | R435     | 1-216-845-11 | METAL CHIP                                                                                                                                 | 100K   | 5%   | 1/10W |  |
| CN102                                                                                                                            | 1-816-587-21 | PIN, CONNECTOR (PC BOARD) 15P   |         |      |       |  | R439     | 1-216-833-11 | METAL CHIP                                                                                                                                 | 10K    | 5%   | 1/10W |  |
| CN402                                                                                                                            | 1-764-177-11 | PIN, CONNECTOR (SMD) (1.5MM) 7P |         |      |       |  | R442     | 1-216-845-11 | METAL CHIP                                                                                                                                 | 100K   | 5%   | 1/10W |  |
| CN501                                                                                                                            | 1-691-550-11 | PIN, CONNECTOR (1.5MM) (SMD) 3P |         |      |       |  | R443     | 1-216-833-11 | METAL CHIP                                                                                                                                 | 10K    | 5%   | 1/10W |  |
| CN503                                                                                                                            | 1-820-117-51 | CONNECTOR, FFC/FPC 19P          |         |      |       |  | R445     | 1-216-845-11 | METAL CHIP                                                                                                                                 | 100K   | 5%   | 1/10W |  |
|                                                                                                                                  |              |                                 |         |      |       |  |          |              |                                                                                                                                            |        |      |       |  |
| CN504                                                                                                                            | 1-820-116-51 | CONNECTOR, FFC/FPC 17P          |         |      |       |  | R448     | 1-216-809-11 | METAL CHIP                                                                                                                                 | 100    | 5%   | 1/10W |  |
|                                                                                                                                  |              | < DIODE >                       |         |      |       |  | R449     | 1-216-809-11 | METAL CHIP                                                                                                                                 | 100    | 5%   | 1/10W |  |
|                                                                                                                                  |              |                                 |         |      |       |  | R450     | 1-218-857-11 | METAL CHIP                                                                                                                                 | 2.7K   | 0.5% | 1/10W |  |
| D606                                                                                                                             | 8-719-083-60 | DIODE UDZSNPTE-174.7B           |         |      |       |  | R451     | 1-216-864-11 | SHORT CHIP                                                                                                                                 | 0      |      |       |  |
|                                                                                                                                  |              | < IC >                          |         |      |       |  | R452     | 1-216-845-11 | METAL CHIP                                                                                                                                 | 100K   | 5%   | 1/10W |  |
|                                                                                                                                  |              |                                 |         |      |       |  |          |              |                                                                                                                                            |        |      |       |  |
| IC402                                                                                                                            | 6-808-320-01 | IC R5F212A7SNA01FA              |         |      |       |  | R453     | 1-216-845-11 | METAL CHIP                                                                                                                                 | 100K   | 5%   | 1/10W |  |
| IC501                                                                                                                            | 6-707-208-01 | IC TK11100CSCB-G                |         |      |       |  | R454     | 1-216-864-11 | SHORT CHIP                                                                                                                                 | 0      |      |       |  |
| IC601                                                                                                                            | 6-702-302-01 | IC TK11133CSC-L-G               |         |      |       |  | R455     | 1-216-845-11 | METAL CHIP                                                                                                                                 | 100K   | 5%   | 1/10W |  |
| IC602                                                                                                                            | 6-711-586-01 | IC MP2303DN-LF-Z                |         |      |       |  | R457     | 1-216-809-11 | METAL CHIP                                                                                                                                 | 100    | 5%   | 1/10W |  |
| IC603                                                                                                                            | 6-711-586-01 | IC MP2303DN-LF-Z                |         |      |       |  | R458     | 1-216-864-11 | SHORT CHIP                                                                                                                                 | 0      |      |       |  |
|                                                                                                                                  |              |                                 |         |      |       |  |          |              |                                                                                                                                            |        |      |       |  |
| IC604                                                                                                                            | 6-711-050-01 | IC S-1170B50UC-0UJTFG           |         |      |       |  | R461     | 1-216-809-11 | METAL CHIP                                                                                                                                 | 100    | 5%   | 1/10W |  |
|                                                                                                                                  |              | < FUSE >                        |         |      |       |  | R462     | 1-216-809-11 | METAL CHIP                                                                                                                                 | 100    | 5%   | 1/10W |  |
| △ PS601                                                                                                                          | 1-576-415-11 | FUSE, MICRO (1608 TYPE)         |         |      |       |  | R463     | 1-216-809-11 | METAL CHIP                                                                                                                                 | 100    | 5%   | 1/10W |  |
| △ PS602                                                                                                                          | 1-576-415-11 | FUSE, MICRO (1608 TYPE)         |         |      |       |  | R464     | 1-216-809-11 | METAL CHIP                                                                                                                                 | 100    | 5%   | 1/10W |  |
| △ PS603                                                                                                                          | 1-576-603-21 | FUSE 3.15A 24V                  |         |      |       |  | R465     | 1-216-833-11 | METAL CHIP                                                                                                                                 | 10K    | 5%   | 1/10W |  |
|                                                                                                                                  |              | < TRANSISTOR >                  |         |      |       |  | R466     | 1-216-833-11 | METAL CHIP                                                                                                                                 | 10K    | 5%   | 1/10W |  |
|                                                                                                                                  |              |                                 |         |      |       |  | R467     | 1-216-833-11 | METAL CHIP                                                                                                                                 | 10K    | 5%   | 1/10W |  |
| Q501                                                                                                                             | 8-729-421-19 | TRANSISTOR UN2213               |         |      |       |  | R468     | 1-216-833-11 | METAL CHIP                                                                                                                                 | 10K    | 5%   | 1/10W |  |
| Q503                                                                                                                             | 8-729-421-19 | TRANSISTOR UN2213               |         |      |       |  | R469     | 1-216-833-11 | METAL CHIP                                                                                                                                 | 10K    | 5%   | 1/10W |  |
| Q505                                                                                                                             | 8-729-037-53 | TRANSISTOR 2SB1462J-QR (TX).SO  |         |      |       |  | R470     | 1-216-845-11 | METAL CHIP                                                                                                                                 | 100K   | 5%   | 1/10W |  |
| Q507                                                                                                                             | 8-729-907-00 | TRANSISTOR DTC114EU             |         |      |       |  |          |              |                                                                                                                                            |        |      |       |  |
| Q509                                                                                                                             | 8-729-028-97 | TRANSISTOR DTC114TUA-T106       |         |      |       |  | R471     | 1-216-845-11 | METAL CHIP                                                                                                                                 | 100K   | 5%   | 1/10W |  |
|                                                                                                                                  |              |                                 |         |      |       |  | R472     | 1-216-849-11 | METAL CHIP                                                                                                                                 | 220K   | 5%   | 1/10W |  |
| Q510                                                                                                                             | 8-729-028-97 | TRANSISTOR DTC114TUA-T106       |         |      |       |  | R501     | 1-218-899-11 | METAL CHIP                                                                                                                                 | 150K   | 0.5% | 1/16W |  |
|                                                                                                                                  |              | < RESISTOR >                    |         |      |       |  | R502     | 1-218-878-11 | METAL CHIP                                                                                                                                 | 20K    | 0.5% | 1/10W |  |
|                                                                                                                                  |              |                                 |         |      |       |  | R503     | 1-218-867-11 | METAL CHIP                                                                                                                                 | 6.8K   | 0.5% | 1/10W |  |
|                                                                                                                                  |              |                                 |         |      |       |  |          |              |                                                                                                                                            |        |      |       |  |
| R405                                                                                                                             | 1-216-864-11 | SHORT CHIP                      | 0       |      |       |  | R504     | 1-218-865-11 | METAL CHIP                                                                                                                                 | 5.6K   | 0.5% | 1/10W |  |
| R406                                                                                                                             | 1-216-833-11 | METAL CHIP                      | 10K     | 5%   | 1/10W |  | R509     | 1-216-864-11 | SHORT CHIP                                                                                                                                 | 0      |      |       |  |
| R407                                                                                                                             | 1-218-881-11 | METAL CHIP                      | 27K     | 0.5% | 1/10W |  | R511     | 1-216-829-11 | METAL CHIP                                                                                                                                 | 4.7K   | 5%   | 1/10W |  |
| R408                                                                                                                             | 1-216-849-11 | METAL CHIP                      | 220K    | 5%   | 1/10W |  | R513     | 1-216-829-11 | METAL CHIP                                                                                                                                 | 4.7K   | 5%   | 1/10W |  |
| R409                                                                                                                             | 1-216-829-11 | METAL CHIP                      | 4.7K    | 5%   | 1/10W |  | R601     | 1-216-827-11 | METAL CHIP                                                                                                                                 | 3.3K   | 5%   | 1/10W |  |
|                                                                                                                                  |              |                                 |         |      |       |  |          |              |                                                                                                                                            |        |      |       |  |
| R410                                                                                                                             | 1-216-837-11 | METAL CHIP                      | 22K     | 5%   | 1/10W |  | R602     | 1-216-864-11 | SHORT CHIP                                                                                                                                 | 0      |      |       |  |
| R411                                                                                                                             | 1-216-809-11 | METAL CHIP                      | 100     | 5%   | 1/10W |  | R603     | 1-218-863-11 | METAL CHIP                                                                                                                                 | 4.7K   | 0.5% | 1/10W |  |
| R412                                                                                                                             | 1-216-809-11 | METAL CHIP                      | 100     | 5%   | 1/10W |  | R604     | 1-218-863-11 | METAL CHIP                                                                                                                                 | 4.7K   | 0.5% | 1/10W |  |
|                                                                                                                                  |              |                                 |         |      |       |  |          |              |                                                                                                                                            |        |      |       |  |
| The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified. |              |                                 |         |      |       |  |          |              | Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié. |        |      |       |  |

| Ref. No.                  | Part No.     | Description                      |         |      | Remark |
|---------------------------|--------------|----------------------------------|---------|------|--------|
| R605                      | 1-216-821-11 | METAL CHIP                       | 1K      | 5%   | 1/10W  |
| R606                      | 1-218-871-11 | METAL CHIP                       | 10K     | 0.5% | 1/10W  |
| R607                      | 1-216-815-11 | METAL CHIP                       | 330     | 5%   | 1/10W  |
| R609                      | 1-216-815-11 | METAL CHIP                       | 330     | 5%   | 1/10W  |
| R611                      | 1-216-815-11 | METAL CHIP                       | 330     | 5%   | 1/10W  |
| R616                      | 1-216-821-11 | METAL CHIP                       | 1K      | 5%   | 1/10W  |
| R622                      | 1-216-821-11 | METAL CHIP                       | 1K      | 5%   | 1/10W  |
| R623                      | 1-218-867-11 | METAL CHIP                       | 6.8K    | 0.5% | 1/10W  |
| R624                      | 1-216-821-11 | METAL CHIP                       | 1K      | 5%   | 1/10W  |
| R625                      | 1-216-864-11 | SHORT CHIP                       | 0       |      |        |
| R626                      | 1-218-879-11 | METAL CHIP                       | 22K     | 0.5% | 1/10W  |
| R627                      | 1-218-871-11 | METAL CHIP                       | 10K     | 0.5% | 1/10W  |
| R628                      | 1-218-871-11 | METAL CHIP                       | 10K     | 0.5% | 1/10W  |
| R629                      | 1-216-864-11 | SHORT CHIP                       | 0       |      |        |
| R630                      | 1-216-295-91 | SHORT CHIP                       | 0       |      |        |
| R631                      | 1-216-295-91 | SHORT CHIP                       | 0       |      |        |
| R632                      | 1-216-295-91 | SHORT CHIP                       | 0       |      |        |
| < VIBRATOR >              |              |                                  |         |      |        |
| X401                      | 1-579-463-11 | VIBRATOR, CRYSTAL (32.768kHz)    |         |      |        |
| X402                      | 1-795-244-11 | VIBRATOR, CERAMIC (10MHZ)        |         |      |        |
|                           |              |                                  |         |      |        |
|                           | A-1545-412-A | MB-124 BOARD, COMPLETE (US, CND) |         |      |        |
|                           | A-1545-414-A | MB-124 BOARD, COMPLETE (AEP, UK) |         |      |        |
|                           | A-1545-416-A | MB-124 BOARD, COMPLETE (AUS)     |         |      |        |
| *****                     |              |                                  |         |      |        |
| (Ref. No. 10, 000 Series) |              |                                  |         |      |        |
| < CAPACITOR >             |              |                                  |         |      |        |
| C101                      | 1-100-909-11 | CERAMIC CHIP                     | 10uF    | 10%  | 6.3V   |
| C102                      | 1-107-826-11 | CERAMIC CHIP                     | 0.1uF   | 10%  | 16V    |
| C103                      | 1-100-909-11 | CERAMIC CHIP                     | 10uF    | 10%  | 6.3V   |
| C104                      | 1-100-567-81 | CERAMIC CHIP                     | 0.01uF  | 10%  | 25V    |
| C105                      | 1-125-777-11 | CERAMIC CHIP                     | 0.1uF   | 10%  | 10V    |
| C106                      | 1-100-909-11 | CERAMIC CHIP                     | 10uF    | 10%  | 6.3V   |
| C107                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |
| C108                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |
| C109                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |
| C110                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |
| C111                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |
| C112                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |
| C113                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |
| C114                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |
| C115                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |
| C116                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |
| C117                      | 1-100-909-11 | CERAMIC CHIP                     | 10uF    | 10%  | 6.3V   |
| C118                      | 1-107-826-11 | CERAMIC CHIP                     | 0.1uF   | 10%  | 16V    |
| C119                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |
| C120                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |
| C121                      | 1-112-717-91 | CERAMIC CHIP                     | 1uF     | 10%  | 6.3V   |
| C122                      | 1-100-567-81 | CERAMIC CHIP                     | 0.01uF  | 10%  | 25V    |
| C123                      | 1-100-506-91 | CERAMIC CHIP                     | 1uF     | 20%  | 6.3V   |
| C124                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |
| C125                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |
| C126                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |
| C127                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |
| C128                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |
| C129                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |
| C130                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |
| C131                      | 1-164-937-11 | CERAMIC CHIP                     | 0.001uF | 10%  | 50V    |

| Ref. No. | Part No.     | Description  | Remark  |     |      |
|----------|--------------|--------------|---------|-----|------|
| C132     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C133     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C134     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C135     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C136     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C137     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C138     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C140     | 1-125-777-11 | CERAMIC CHIP | 0.1uF   | 10% | 10V  |
| C141     | 1-100-506-91 | CERAMIC CHIP | 1uF     | 20% | 6.3V |
| C142     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C143     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C144     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C145     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C146     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C147     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C148     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C149     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C150     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C151     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C152     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C153     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C154     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C155     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C156     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C158     | 1-125-777-11 | CERAMIC CHIP | 0.1uF   | 10% | 10V  |
| C159     | 1-100-567-81 | CERAMIC CHIP | 0.01uF  | 10% | 25V  |
| C160     | 1-125-777-11 | CERAMIC CHIP | 0.1uF   | 10% | 10V  |
| C161     | 1-125-777-11 | CERAMIC CHIP | 0.1uF   | 10% | 10V  |
| C162     | 1-125-777-11 | CERAMIC CHIP | 0.1uF   | 10% | 10V  |
| C163     | 1-125-777-11 | CERAMIC CHIP | 0.1uF   | 10% | 10V  |
| C164     | 1-100-567-81 | CERAMIC CHIP | 0.01uF  | 10% | 25V  |
| C166     | 1-100-909-11 | CERAMIC CHIP | 10uF    | 10% | 6.3V |
| C168     | 1-125-777-11 | CERAMIC CHIP | 0.1uF   | 10% | 10V  |
| C169     | 1-125-777-11 | CERAMIC CHIP | 0.1uF   | 10% | 10V  |
| C170     | 1-112-717-91 | CERAMIC CHIP | 1uF     | 10% | 6.3V |
| C171     | 1-100-567-81 | CERAMIC CHIP | 0.01uF  | 10% | 25V  |
| C172     | 1-100-567-81 | CERAMIC CHIP | 0.01uF  | 10% | 25V  |
| C173     | 1-112-717-91 | CERAMIC CHIP | 1uF     | 10% | 6.3V |
| C175     | 1-112-717-91 | CERAMIC CHIP | 1uF     | 10% | 6.3V |
| C176     | 1-112-717-91 | CERAMIC CHIP | 1uF     | 10% | 6.3V |
| C178     | 1-112-717-91 | CERAMIC CHIP | 1uF     | 10% | 6.3V |
| C179     | 1-100-567-81 | CERAMIC CHIP | 0.01uF  | 10% | 25V  |
| C180     | 1-100-567-81 | CERAMIC CHIP | 0.01uF  | 10% | 25V  |
| C201     | 1-100-909-11 | CERAMIC CHIP | 10uF    | 10% | 6.3V |
| C202     | 1-107-826-11 | CERAMIC CHIP | 0.1uF   | 10% | 16V  |
| C203     | 1-100-909-11 | CERAMIC CHIP | 10uF    | 10% | 6.3V |
| C204     | 1-100-567-81 | CERAMIC CHIP | 0.01uF  | 10% | 25V  |
| C205     | 1-125-777-11 | CERAMIC CHIP | 0.1uF   | 10% | 10V  |
| C207     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C208     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C209     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C210     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C211     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C212     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C213     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C214     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C215     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  |
| C216     | 1-112-717-91 | CERAMIC CHIP | 1uF     | 10% | 6.3V |
| C217     | 1-125-777-11 | CERAMIC CHIP | 0.1uF   | 10% | 10V  |
| C218     | 1-125-777-11 | CERAMIC CHIP | 0.1uF   | 10% | 10V  |

| Ref. No. | Part No.     | Description  | Remark  |     |      | Ref. No. | Part No.     | Description  | Remark  |       |      |
|----------|--------------|--------------|---------|-----|------|----------|--------------|--------------|---------|-------|------|
| C219     | 1-125-777-11 | CERAMIC CHIP | 0.1uF   | 10% | 10V  | C315     | 1-100-567-81 | CERAMIC CHIP | 0.01uF  | 10%   | 25V  |
| C220     | 1-125-777-11 | CERAMIC CHIP | 0.1uF   | 10% | 10V  | C316     | 1-115-467-11 | CERAMIC CHIP | 0.22uF  | 10%   | 10V  |
| C221     | 1-107-826-11 | CERAMIC CHIP | 0.1uF   | 10% | 16V  | C317     | 1-165-908-11 | CERAMIC CHIP | 1uF     | 10%   | 10V  |
| C222     | 1-100-909-11 | CERAMIC CHIP | 10uF    | 10% | 6.3V | C340     | 1-119-923-11 | CERAMIC CHIP | 0.047uF | 10%   | 10V  |
| C223     | 1-100-506-91 | CERAMIC CHIP | 1uF     | 20% | 6.3V | C344     | 1-164-870-11 | CERAMIC CHIP | 68PF    | 5%    | 50V  |
| C224     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C345     | 1-127-772-81 | CERAMIC CHIP | 0.033uF | 10%   | 10V  |
| C225     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C346     | 1-107-819-11 | CERAMIC CHIP | 0.022uF | 10%   | 16V  |
| C226     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C349     | 1-127-738-91 | CERAMIC CHIP | 4.7uF   | 10%   | 25V  |
| C227     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C350     | 1-127-738-91 | CERAMIC CHIP | 4.7uF   | 10%   | 25V  |
| C228     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C351     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10%   | 50V  |
| C229     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C352     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10%   | 50V  |
| C230     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C353     | 1-127-738-91 | CERAMIC CHIP | 4.7uF   | 10%   | 25V  |
| C231     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C354     | 1-127-738-91 | CERAMIC CHIP | 4.7uF   | 10%   | 25V  |
| C232     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C355     | 1-112-300-91 | CERAMIC CHIP | 4.7uF   | 10%   | 10V  |
| C233     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C356     | 1-127-573-11 | CERAMIC CHIP | 1uF     | 10%   | 16V  |
| C234     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C357     | 1-107-826-11 | CERAMIC CHIP | 0.1uF   | 10%   | 16V  |
| C235     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C358     | 1-107-826-11 | CERAMIC CHIP | 0.1uF   | 10%   | 16V  |
| C236     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C361     | 1-100-159-91 | CERAMIC CHIP | 22uF    | 10%   | 6.3V |
| C237     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C362     | 1-112-786-11 | ELECT CHIP   | 330uF   | 20%   | 4V   |
| C238     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C363     | 1-100-159-91 | CERAMIC CHIP | 22uF    | 10%   | 6.3V |
| C240     | 1-125-777-11 | CERAMIC CHIP | 0.1uF   | 10% | 10V  | C364     | 1-112-786-11 | ELECT CHIP   | 330uF   | 20%   | 4V   |
| C241     | 1-100-506-91 | CERAMIC CHIP | 1uF     | 20% | 6.3V | C365     | 1-100-159-91 | CERAMIC CHIP | 22uF    | 10%   | 6.3V |
| C242     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C366     | 1-127-760-11 | CERAMIC CHIP | 4.7uF   | 10%   | 6.3V |
| C243     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C367     | 1-100-159-91 | CERAMIC CHIP | 22uF    | 10%   | 6.3V |
| C244     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C368     | 1-127-760-11 | CERAMIC CHIP | 4.7uF   | 10%   | 6.3V |
| C245     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C371     | 1-165-989-11 | CERAMIC CHIP | 10uF    | 10%   | 6.3V |
| C246     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C372     | 1-165-989-11 | CERAMIC CHIP | 10uF    | 10%   | 6.3V |
| C247     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C374     | 1-165-989-11 | CERAMIC CHIP | 10uF    | 10%   | 6.3V |
| C248     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C375     | 1-165-989-11 | CERAMIC CHIP | 10uF    | 10%   | 6.3V |
| C249     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C401     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C250     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C402     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C251     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C403     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C252     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C404     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C253     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C405     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C254     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C406     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C255     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C407     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C256     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C408     | 1-164-846-11 | CERAMIC CHIP | 6PF     | 0.5PF | 50V  |
| C258     | 1-125-777-11 | CERAMIC CHIP | 0.1uF   | 10% | 10V  | C409     | 1-164-846-11 | CERAMIC CHIP | 6PF     | 0.5PF | 50V  |
| C259     | 1-100-909-11 | CERAMIC CHIP | 10uF    | 10% | 6.3V | C410     | 1-100-909-11 | CERAMIC CHIP | 10uF    | 10%   | 6.3V |
| C261     | 1-100-909-11 | CERAMIC CHIP | 10uF    | 10% | 6.3V | C411     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C262     | 1-112-717-91 | CERAMIC CHIP | 1uF     | 10% | 6.3V | C412     | 1-165-989-11 | CERAMIC CHIP | 10uF    | 10%   | 6.3V |
| C263     | 1-100-567-81 | CERAMIC CHIP | 0.01uF  | 10% | 25V  | C413     | 1-165-989-11 | CERAMIC CHIP | 10uF    | 10%   | 6.3V |
| C264     | 1-100-567-81 | CERAMIC CHIP | 0.01uF  | 10% | 25V  | C414     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C265     | 1-100-567-81 | CERAMIC CHIP | 0.01uF  | 10% | 25V  | C415     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C266     | 1-100-567-81 | CERAMIC CHIP | 0.01uF  | 10% | 25V  | C420     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C267     | 1-112-717-91 | CERAMIC CHIP | 1uF     | 10% | 6.3V | C421     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C269     | 1-112-717-91 | CERAMIC CHIP | 1uF     | 10% | 6.3V | C422     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C270     | 1-112-717-91 | CERAMIC CHIP | 1uF     | 10% | 6.3V | C423     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C272     | 1-112-717-91 | CERAMIC CHIP | 1uF     | 10% | 6.3V | C424     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C273     | 1-100-567-81 | CERAMIC CHIP | 0.01uF  | 10% | 25V  | C425     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C276     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C426     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C277     | 1-164-937-11 | CERAMIC CHIP | 0.001uF | 10% | 50V  | C427     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C301     | 1-165-989-11 | CERAMIC CHIP | 10uF    | 10% | 6.3V | C428     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C302     | 1-165-989-11 | CERAMIC CHIP | 10uF    | 10% | 6.3V | C429     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C303     | 1-164-943-81 | CERAMIC CHIP | 0.01uF  | 10% | 16V  | C430     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C304     | 1-164-943-81 | CERAMIC CHIP | 0.01uF  | 10% | 16V  | C431     | 1-107-820-11 | CERAMIC CHIP | 0.1uF   |       | 16V  |
| C305     | 1-165-989-11 | CERAMIC CHIP | 10uF    | 10% | 6.3V | C501     | 1-125-777-11 | CERAMIC CHIP | 0.1uF   | 10%   | 10V  |
| C306     | 1-165-989-11 | CERAMIC CHIP | 10uF    | 10% | 6.3V | C502     | 1-125-777-11 | CERAMIC CHIP | 0.1uF   | 10%   | 10V  |
| C313     | 1-115-467-11 | CERAMIC CHIP | 0.22uF  | 10% | 10V  | C503     | 1-125-777-11 | CERAMIC CHIP | 0.1uF   | 10%   | 10V  |
| C314     | 1-165-908-11 | CERAMIC CHIP | 1uF     | 10% | 10V  | C504     | 1-125-777-11 | CERAMIC CHIP | 0.1uF   | 10%   | 10V  |

| Ref. No. | Part No.     | Description  | Remark |        |      | Ref. No. | Part No.     | Description  | Remark |     |      |
|----------|--------------|--------------|--------|--------|------|----------|--------------|--------------|--------|-----|------|
| C505     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C714     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10% | 16V  |
| C506     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C715     | 1-107-820-11 | CERAMIC CHIP | 0.1uF  |     | 16V  |
| C507     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C716     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10% | 16V  |
| C508     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C718     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10% | 16V  |
| C509     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C719     | 1-107-820-11 | CERAMIC CHIP | 0.1uF  |     | 16V  |
| C510     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C720     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10% | 16V  |
| C511     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C721     | 1-125-838-11 | CERAMIC CHIP | 2.2uF  | 10% | 6.3V |
| C513     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C722     | 1-107-820-11 | CERAMIC CHIP | 0.1uF  |     | 16V  |
| C514     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C724     | 1-107-820-11 | CERAMIC CHIP | 0.1uF  |     | 16V  |
| C517     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10%    | 16V  | C725     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10% | 16V  |
| C600     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C726     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10% | 16V  |
| C601     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C728     | 1-107-820-11 | CERAMIC CHIP | 0.1uF  |     | 16V  |
| C602     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C729     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10% | 16V  |
| C603     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10%    | 16V  | C730     | 1-125-838-11 | CERAMIC CHIP | 2.2uF  | 10% | 6.3V |
| C604     | 1-128-993-21 | ELECT CHIP   | 22uF   | 20%    | 10V  | C731     | 1-125-838-11 | CERAMIC CHIP | 2.2uF  | 10% | 6.3V |
| C606     | 1-165-646-91 | CERAMIC CHIP | 3.3uF  | 10%    | 10V  | C732     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10% | 16V  |
| C607     | 1-165-884-11 | CERAMIC CHIP | 2.2uF  | 10%    | 6.3V | C733     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10% | 16V  |
| C608     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C734     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10% | 16V  |
| C610     | 1-128-394-11 | ELECT CHIP   | 220uF  | 20%    | 10V  | C735     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10% | 16V  |
| C611     | 1-100-966-91 | CERAMIC CHIP | 10uF   | 20%    | 10V  | C736     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10% | 16V  |
| C613     | 1-165-884-11 | CERAMIC CHIP | 2.2uF  | 10%    | 6.3V | C737     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10% | 16V  |
| C614     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C738     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10% | 16V  |
| C615     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C739     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10% | 16V  |
| C616     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C740     | 1-165-989-11 | CERAMIC CHIP | 10uF   | 10% | 6.3V |
| C617     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C742     | 1-165-989-11 | CERAMIC CHIP | 10uF   | 10% | 6.3V |
| C618     | 1-164-844-11 | CERAMIC CHIP | 4PF    | 0.25PF | 50V  | C743     | 1-115-467-11 | CERAMIC CHIP | 0.22uF | 10% | 10V  |
| C619     | 1-164-844-11 | CERAMIC CHIP | 4PF    | 0.25PF | 50V  | C744     | 1-165-887-91 | CERAMIC CHIP | 0.22uF | 10% | 6.3V |
| C623     | 1-128-993-21 | ELECT CHIP   | 22uF   | 20%    | 10V  | C745     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10% | 16V  |
| C625     | 1-165-989-11 | CERAMIC CHIP | 10uF   | 10%    | 6.3V | C746     | 1-125-838-11 | CERAMIC CHIP | 2.2uF  | 10% | 6.3V |
| C626     | 1-164-848-11 | CERAMIC CHIP | 8PF    | 0.5PF  | 50V  | C748     | 1-115-467-11 | CERAMIC CHIP | 0.22uF | 10% | 10V  |
| C627     | 1-164-848-11 | CERAMIC CHIP | 8PF    | 0.5PF  | 50V  | C749     | 1-100-567-81 | CERAMIC CHIP | 0.01uF | 10% | 25V  |
| C628     | 1-128-993-21 | ELECT CHIP   | 22uF   | 20%    | 10V  | C750     | 1-115-467-11 | CERAMIC CHIP | 0.22uF | 10% | 10V  |
| C629     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C754     | 1-124-778-00 | ELECT CHIP   | 22uF   | 20% | 6.3V |
| C630     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C755     | 1-124-778-00 | ELECT CHIP   | 22uF   | 20% | 6.3V |
| C631     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C756     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10% | 16V  |
| C632     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C757     | 1-107-820-11 | CERAMIC CHIP | 0.1uF  |     | 16V  |
| C633     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C758     | 1-107-820-11 | CERAMIC CHIP | 0.1uF  |     | 16V  |
| C634     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C759     | 1-107-820-11 | CERAMIC CHIP | 0.1uF  |     | 16V  |
| C635     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C760     | 1-107-820-11 | CERAMIC CHIP | 0.1uF  |     | 16V  |
| C636     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C761     | 1-107-820-11 | CERAMIC CHIP | 0.1uF  |     | 16V  |
| C637     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C762     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10% | 10V  |
| C638     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C763     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10% | 10V  |
| C639     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C801     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10% | 10V  |
| C640     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C802     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10% | 10V  |
| C641     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C803     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10% | 10V  |
| C642     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C805     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10% | 10V  |
| C643     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10%    | 10V  | C806     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10% | 10V  |
| C644     | 1-165-908-11 | CERAMIC CHIP | 1uF    | 10%    | 10V  | C807     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10% | 10V  |
| C645     | 1-165-908-11 | CERAMIC CHIP | 1uF    | 10%    | 10V  | C808     | 1-126-206-11 | ELECT CHIP   | 100uF  | 20% | 6.3V |
| C646     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10%    | 16V  | C810     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10% | 10V  |
| C700     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10%    | 16V  | C811     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10% | 10V  |
| C701     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10%    | 16V  | C812     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10% | 10V  |
| C703     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10%    | 16V  | C813     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10% | 10V  |
| C704     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10%    | 16V  | C815     | 1-165-908-11 | CERAMIC CHIP | 1uF    | 10% | 10V  |
| C705     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10%    | 16V  | C816     | 1-165-908-11 | CERAMIC CHIP | 1uF    | 10% | 10V  |
| C706     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10%    | 16V  | C818     | 1-100-567-81 | CERAMIC CHIP | 0.01uF | 10% | 25V  |
| C708     | 1-107-820-11 | CERAMIC CHIP | 0.1uF  |        | 16V  | C819     | 1-124-779-00 | ELECT CHIP   | 10uF   | 20% | 16V  |
| C711     | 1-164-943-81 | CERAMIC CHIP | 0.01uF | 10%    | 16V  | C820     | 1-165-908-11 | CERAMIC CHIP | 1uF    | 10% | 10V  |
| C712     | 1-107-820-11 | CERAMIC CHIP | 0.1uF  |        | 16V  | C821     | 1-125-777-11 | CERAMIC CHIP | 0.1uF  | 10% | 10V  |
| C713     | 1-107-820-11 | CERAMIC CHIP | 0.1uF  |        | 16V  | C822     | 1-100-567-81 | CERAMIC CHIP | 0.01uF | 10% | 25V  |

| Ref. No. | Part No.     | Description                         | Remark  |     |      | Ref. No. | Part No.     | Description                   | Remark |
|----------|--------------|-------------------------------------|---------|-----|------|----------|--------------|-------------------------------|--------|
| C823     | 1-126-206-11 | ELECT CHIP                          | 100uF   | 20% | 6.3V | FL308    | 1-234-986-11 | FILTER, EMI REMOVAL (1608SMD) |        |
| C824     | 1-165-908-11 | CERAMIC CHIP                        | 1uF     | 10% | 10V  | FL309    | 1-234-986-11 | FILTER, EMI REMOVAL (1608SMD) |        |
| C901     | 1-137-710-91 | CERAMIC CHIP                        | 10uF    | 20% | 6.3V | FL310    | 1-234-986-11 | FILTER, EMI REMOVAL (1608SMD) |        |
| C902     | 1-125-777-11 | CERAMIC CHIP                        | 0.1uF   | 10% | 10V  |          |              |                               |        |
| C903     | 1-125-777-11 | CERAMIC CHIP                        | 0.1uF   | 10% | 10V  | FL400    | 1-234-177-21 | FILTER, CHIP EMI              |        |
| C904     | 1-125-777-11 | CERAMIC CHIP                        | 0.1uF   | 10% | 10V  | FL600    | 1-234-867-11 | FILTER, EMI REMOVAL (SMD)     |        |
| C905     | 1-125-777-11 | CERAMIC CHIP                        | 0.1uF   | 10% | 10V  | FL701    | 1-400-874-11 | FILTER, EMI REMOVAL (SMD)     |        |
| C906     | 1-125-777-11 | CERAMIC CHIP                        | 0.1uF   | 10% | 10V  | FL702    | 1-400-874-11 | FILTER, EMI REMOVAL (SMD)     |        |
| C907     | 1-125-777-11 | CERAMIC CHIP                        | 0.1uF   | 10% | 10V  |          |              | < IC >                        |        |
| C908     | 1-125-777-11 | CERAMIC CHIP                        | 0.1uF   | 10% | 10V  | IC303    | 6-709-703-01 | IC MM3141JNRE                 |        |
| C909     | 1-125-777-11 | CERAMIC CHIP                        | 0.1uF   | 10% | 10V  | IC304    | 6-705-337-01 | IC TK11150CSCL-G              |        |
| C910     | 1-125-777-11 | CERAMIC CHIP                        | 0.1uF   | 10% | 10V  | IC309    | 6-710-949-01 | IC SN0608006PWPR              |        |
| C915     | 1-164-943-81 | CERAMIC CHIP                        | 0.01uF  | 10% | 16V  | IC310    | 6-710-949-01 | IC SN0608006PWPR              |        |
| C917     | 1-164-943-81 | CERAMIC CHIP                        | 0.01uF  | 10% | 16V  | IC702    | 6-706-487-01 | IC TC7SH08FU (T5RSOYJF)       |        |
| C8001    | 1-107-819-11 | CERAMIC CHIP                        | 0.022uF | 10% | 16V  | IC703    | 6-702-302-01 | IC TK11133CSCL-G              |        |
| C8006    | 1-164-943-81 | CERAMIC CHIP                        | 0.01uF  | 10% | 16V  | IC704    | 6-705-337-01 | IC TK11150CSCL-G              |        |
| C8007    | 1-164-943-81 | CERAMIC CHIP                        | 0.01uF  | 10% | 16V  | IC803    | 6-702-302-01 | IC TK11133CSCL-G              |        |
| C8008    | 1-164-943-81 | CERAMIC CHIP                        | 0.01uF  | 10% | 16V  | IC901    | 8-759-598-44 | IC TC7WH08FK (TE85R)          |        |
| C8009    | 1-164-943-81 | CERAMIC CHIP                        | 0.01uF  | 10% | 16V  |          |              | < COIL >                      |        |
| C8010    | 1-127-760-11 | CERAMIC CHIP                        | 4.7uF   | 10% | 6.3V | L600     | 1-400-180-21 | INDUCTOR, EMI FERRITE (1608)  |        |
| C8011    | 1-164-943-81 | CERAMIC CHIP                        | 0.01uF  | 10% | 16V  | L601     | 1-400-180-21 | INDUCTOR, EMI FERRITE (1608)  |        |
| C8012    | 1-164-943-81 | CERAMIC CHIP                        | 0.01uF  | 10% | 16V  | L602     | 1-400-180-21 | INDUCTOR, EMI FERRITE (1608)  |        |
| C8013    | 1-127-760-11 | CERAMIC CHIP                        | 4.7uF   | 10% | 6.3V | * L603   | 1-813-308-11 | COMMON MODE CHOKE             |        |
| C8014    | 1-125-777-11 | CERAMIC CHIP                        | 0.1uF   | 10% | 10V  | L700     | 1-469-552-21 | INDUCTOR 3.3uH                |        |
| C8015    | 1-164-943-81 | CERAMIC CHIP                        | 0.01uF  | 10% | 16V  | L701     | 1-469-555-21 | INDUCTOR 10uH                 |        |
| C8016    | 1-164-943-81 | CERAMIC CHIP                        | 0.01uF  | 10% | 16V  | L702     | 1-469-555-21 | INDUCTOR 10uH                 |        |
| C8017    | 1-137-710-91 | CERAMIC CHIP                        | 10uF    | 20% | 6.3V | L703     | 1-457-374-21 | COMMON MODE CHOKE COIL        |        |
| C8018    | 1-125-777-11 | CERAMIC CHIP                        | 0.1uF   | 10% | 10V  | L704     | 1-457-374-21 | COMMON MODE CHOKE COIL        |        |
| C8019    | 1-125-777-11 | CERAMIC CHIP                        | 0.1uF   | 10% | 10V  | L705     | 1-457-374-21 | COMMON MODE CHOKE COIL        |        |
| C8020    | 1-164-943-81 | CERAMIC CHIP                        | 0.01uF  | 10% | 16V  | L706     | 1-457-374-21 | COMMON MODE CHOKE COIL        |        |
|          |              | < CONNECTOR >                       |         |     |      | L707     | 1-469-555-21 | INDUCTOR 10uH                 |        |
| CN301    | 1-816-587-21 | PIN, CONNECTOR (PC BOARD) 15P       |         |     |      | L802     | 1-469-555-21 | INDUCTOR 10uH                 |        |
| CN700    | 1-819-876-21 | CONNECTOR, SATA SMT (7P)            |         |     |      | L803     | 1-469-555-21 | INDUCTOR 10uH                 |        |
| CN702    | 1-821-450-12 | CONNECTOR, HDMI (HDMI OUT)          |         |     |      | L901     | 1-469-555-21 | INDUCTOR 10uH                 |        |
| CN901    | 1-573-806-21 | PIN, CONNECTOR (1.5MM) (SMD) 6P     |         |     |      |          |              | < FUSE >                      |        |
| CN904    | 1-820-117-51 | CONNECTOR, FFC/FPC 19P              |         |     |      | △ PS302  | 1-576-603-21 | FUSE 3.15A 24V                |        |
| CN8001   | 1-819-875-21 | ETHERNET CONNECTOR (8P) (LAN (100)) |         |     |      | △ PS701  | 1-576-596-21 | FUSE 1A 32V                   |        |
|          |              | < DIODE >                           |         |     |      |          |              | < CONTACT TERMINAL >          |        |
| D301     | 8-719-081-67 | DIODE M1FM3                         |         |     |      | PT002    | 1-694-802-21 | CONTACT TERMINAL              |        |
| D303     | 6-500-294-01 | DIODE PTZ-TE25-3.9B                 |         |     |      |          |              | < TRANSISTOR >                |        |
| D304     | 6-500-294-01 | DIODE PTZ-TE25-3.9B                 |         |     |      | Q300     | 6-550-663-01 | TRANSISTOR RSS100N03FD5TB     |        |
| D600     | 8-719-988-61 | DIODE 1SS355TE-17                   |         |     |      | Q301     | 6-550-663-01 | TRANSISTOR RSS100N03FD5TB     |        |
| D601     | 6-500-701-01 | DIODE PGB1010603NR                  |         |     |      | Q302     | 6-550-663-01 | TRANSISTOR RSS100N03FD5TB     |        |
| D602     | 6-500-701-01 | DIODE PGB1010603NR                  |         |     |      | Q303     | 6-550-663-01 | TRANSISTOR RSS100N03FD5TB     |        |
|          |              | < FERRITE BEAD >                    |         |     |      | Q304     | 6-550-663-01 | TRANSISTOR RSS100N03FD5TB     |        |
| FB8001   | 1-469-324-21 | FERRITE, EMI (SMD) (2012)           |         |     |      | Q701     | 6-550-008-01 | TRANSISTOR UM6K1N-TN          |        |
| FB8002   | 1-469-324-21 | FERRITE, EMI (SMD) (2012)           |         |     |      | Q801     | 8-729-010-05 | TRANSISTOR MSB709-RT1         |        |
|          |              | < FILTER >                          |         |     |      | Q802     | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6       |        |
| FL101    | 1-234-177-21 | FILTER, CHIP EMI                    |         |     |      | Q803     | 8-729-010-05 | TRANSISTOR MSB709-RT1         |        |
| FL201    | 1-234-177-21 | FILTER, CHIP EMI                    |         |     |      | Q804     | 8-729-010-05 | TRANSISTOR MSB709-RT1         |        |
| FL303    | 1-234-986-11 | FILTER, EMI REMOVAL (1608SMD)       |         |     |      | Q805     | 8-729-010-05 | TRANSISTOR MSB709-RT1         |        |
| FL304    | 1-234-986-11 | FILTER, EMI REMOVAL (1608SMD)       |         |     |      |          |              |                               |        |
| FL305    | 1-234-986-11 | FILTER, EMI REMOVAL (1608SMD)       |         |     |      |          |              |                               |        |
| FL306    | 1-234-986-11 | FILTER, EMI REMOVAL (1608SMD)       |         |     |      |          |              |                               |        |
| FL307    | 1-234-986-11 | FILTER, EMI REMOVAL (1608SMD)       |         |     |      |          |              |                               |        |

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 |      |       |
|----------|--------------|--------------|------------|------|-------|----------|--------------|-------------|--------|------|-------|
| Q806     | 8-729-010-05 | TRANSISTOR   | MSB709-RT1 |      |       | R245     | 1-218-933-11 | RES-CHIP    | 22     | 5%   | 1/16W |
| Q901     | 8-729-025-28 | TRANSISTOR   | 2SK1828    |      |       | R246     | 1-218-933-11 | RES-CHIP    | 22     | 5%   | 1/16W |
|          |              | < RESISTOR > |            |      |       | R250     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
|          |              |              |            |      |       | R256     | 1-218-947-11 | RES-CHIP    | 330    | 5%   | 1/16W |
| R102     | 1-208-683-11 | METAL CHIP   | 1K         | 0.5% | 1/16W | R258     | 1-208-683-11 | METAL CHIP  | 1K     | 0.5% | 1/16W |
| R103     | 1-208-683-11 | METAL CHIP   | 1K         | 0.5% | 1/16W | R259     | 1-208-683-11 | METAL CHIP  | 1K     | 0.5% | 1/16W |
| R123     | 1-218-939-11 | RES-CHIP     | 68         | 5%   | 1/16W | R277     | 1-218-943-11 | RES-CHIP    | 150    | 5%   | 1/16W |
| R124     | 1-218-939-11 | RES-CHIP     | 68         | 5%   | 1/16W | R278     | 1-218-943-11 | RES-CHIP    | 150    | 5%   | 1/16W |
| R126     | 1-218-937-11 | RES-CHIP     | 47         | 5%   | 1/16W | R279     | 1-218-943-11 | RES-CHIP    | 150    | 5%   | 1/16W |
| R127     | 1-218-937-11 | RES-CHIP     | 47         | 5%   | 1/16W | R280     | 1-218-943-11 | RES-CHIP    | 150    | 5%   | 1/16W |
| R128     | 1-218-937-11 | RES-CHIP     | 47         | 5%   | 1/16W | R281     | 1-220-169-11 | RES-CHIP    | 75     | 5%   | 1/16W |
| R129     | 1-218-935-11 | RES-CHIP     | 33         | 5%   | 1/16W | R301     | 1-218-953-11 | RES-CHIP    | 1K     | 5%   | 1/16W |
| R130     | 1-218-935-11 | RES-CHIP     | 33         | 5%   | 1/16W | R302     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R131     | 1-218-935-11 | RES-CHIP     | 33         | 5%   | 1/16W | R303     | 1-218-953-11 | RES-CHIP    | 1K     | 5%   | 1/16W |
| R132     | 1-218-935-11 | RES-CHIP     | 33         | 5%   | 1/16W | R309     | 1-218-953-11 | RES-CHIP    | 1K     | 5%   | 1/16W |
| R133     | 1-218-937-11 | RES-CHIP     | 47         | 5%   | 1/16W | R314     | 1-208-935-11 | METAL CHIP  | 100K   | 0.5% | 1/16W |
| R134     | 1-218-937-11 | RES-CHIP     | 47         | 5%   | 1/16W | R315     | 1-208-935-11 | METAL CHIP  | 100K   | 0.5% | 1/16W |
| R135     | 1-218-947-11 | RES-CHIP     | 330        | 5%   | 1/16W | R316     | 1-208-939-11 | METAL CHIP  | 150K   | 0.5% | 1/16W |
| R137     | 1-208-683-11 | METAL CHIP   | 1K         | 0.5% | 1/16W | R317     | 1-208-709-11 | METAL CHIP  | 12K    | 0.5% | 1/16W |
| R138     | 1-208-683-11 | METAL CHIP   | 1K         | 0.5% | 1/16W | R318     | 1-208-941-11 | METAL CHIP  | 180K   | 0.5% | 1/16W |
| R140     | 1-218-939-11 | RES-CHIP     | 68         | 5%   | 1/16W | R319     | 1-208-939-11 | METAL CHIP  | 150K   | 0.5% | 1/16W |
| R142     | 1-218-939-11 | RES-CHIP     | 68         | 5%   | 1/16W | R320     | 1-208-683-11 | METAL CHIP  | 1K     | 0.5% | 1/16W |
| R143     | 1-218-933-11 | RES-CHIP     | 22         | 5%   | 1/16W | R321     | 1-208-711-11 | METAL CHIP  | 15K    | 0.5% | 1/16W |
| R144     | 1-218-933-11 | RES-CHIP     | 22         | 5%   | 1/16W | R322     | 1-216-821-11 | METAL CHIP  | 1K     | 5%   | 1/10W |
| R145     | 1-218-933-11 | RES-CHIP     | 22         | 5%   | 1/16W | R333     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R146     | 1-218-933-11 | RES-CHIP     | 22         | 5%   | 1/16W | R335     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R156     | 1-218-947-11 | RES-CHIP     | 330        | 5%   | 1/16W | R344     | 1-218-879-11 | METAL CHIP  | 22K    | 0.5% | 1/10W |
| R158     | 1-208-683-11 | METAL CHIP   | 1K         | 0.5% | 1/16W | R345     | 1-218-873-11 | METAL CHIP  | 12K    | 0.5% | 1/10W |
| R159     | 1-208-683-11 | METAL CHIP   | 1K         | 0.5% | 1/16W | R352     | 1-218-953-11 | RES-CHIP    | 1K     | 5%   | 1/16W |
| R177     | 1-218-943-11 | RES-CHIP     | 150        | 5%   | 1/16W | R357     | 1-218-953-11 | RES-CHIP    | 1K     | 5%   | 1/16W |
| R178     | 1-218-943-11 | RES-CHIP     | 150        | 5%   | 1/16W | R361     | 1-208-703-11 | METAL CHIP  | 6.8K   | 0.5% | 1/16W |
| R179     | 1-218-943-11 | RES-CHIP     | 150        | 5%   | 1/16W | R362     | 1-208-715-11 | METAL CHIP  | 22K    | 0.5% | 1/16W |
| R180     | 1-218-943-11 | RES-CHIP     | 150        | 5%   | 1/16W | R367     | 1-218-953-11 | RES-CHIP    | 1K     | 5%   | 1/16W |
| R181     | 1-220-169-11 | RES-CHIP     | 75         | 5%   | 1/16W | R402     | 1-218-990-81 | SHORT CHIP  | 0      |      |       |
| R188     | 1-216-864-11 | SHORT CHIP   | 0          |      |       | R404     | 1-218-990-81 | SHORT CHIP  | 0      |      |       |
| R190     | 1-216-864-11 | SHORT CHIP   | 0          |      |       | R405     | 1-218-951-11 | RES-CHIP    | 680    | 5%   | 1/16W |
| R191     | 1-216-864-11 | SHORT CHIP   | 0          |      |       | R501     | 1-218-965-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R192     | 1-216-864-11 | SHORT CHIP   | 0          |      |       | R502     | 1-218-965-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R202     | 1-208-683-11 | METAL CHIP   | 1K         | 0.5% | 1/16W | R503     | 1-218-933-11 | RES-CHIP    | 22     | 5%   | 1/16W |
| R203     | 1-208-683-11 | METAL CHIP   | 1K         | 0.5% | 1/16W | R504     | 1-218-933-11 | RES-CHIP    | 22     | 5%   | 1/16W |
| R208     | 1-208-663-11 | METAL CHIP   | 150        | 0.5% | 1/16W | R506     | 1-218-965-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R209     | 1-208-663-11 | METAL CHIP   | 150        | 0.5% | 1/16W | R507     | 1-218-965-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R223     | 1-218-939-11 | RES-CHIP     | 68         | 5%   | 1/16W | R508     | 1-218-965-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R224     | 1-218-939-11 | RES-CHIP     | 68         | 5%   | 1/16W | R510     | 1-218-965-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R226     | 1-218-937-11 | RES-CHIP     | 47         | 5%   | 1/16W | R512     | 1-218-965-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R227     | 1-218-937-11 | RES-CHIP     | 47         | 5%   | 1/16W | R514     | 1-218-965-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R228     | 1-218-937-11 | RES-CHIP     | 47         | 5%   | 1/16W | R515     | 1-218-965-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R229     | 1-218-935-11 | RES-CHIP     | 33         | 5%   | 1/16W | R517     | 1-218-935-11 | RES-CHIP    | 33     | 5%   | 1/16W |
| R230     | 1-218-935-11 | RES-CHIP     | 33         | 5%   | 1/16W | R518     | 1-218-965-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R231     | 1-218-935-11 | RES-CHIP     | 33         | 5%   | 1/16W | R519     | 1-218-959-11 | RES-CHIP    | 3.3K   | 5%   | 1/16W |
| R232     | 1-218-935-11 | RES-CHIP     | 33         | 5%   | 1/16W | R520     | 1-218-990-81 | SHORT CHIP  | 0      |      |       |
| R233     | 1-218-937-11 | RES-CHIP     | 47         | 5%   | 1/16W | R522     | 1-218-965-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R234     | 1-218-937-11 | RES-CHIP     | 47         | 5%   | 1/16W | R523     | 1-218-941-81 | RES-CHIP    | 100    | 5%   | 1/16W |
| R235     | 1-218-947-11 | RES-CHIP     | 330        | 5%   | 1/16W | R527     | 1-218-965-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R237     | 1-208-683-11 | METAL CHIP   | 1K         | 0.5% | 1/16W | R528     | 1-218-933-11 | RES-CHIP    | 22     | 5%   | 1/16W |
| R238     | 1-208-683-11 | METAL CHIP   | 1K         | 0.5% | 1/16W | R529     | 1-218-933-11 | RES-CHIP    | 22     | 5%   | 1/16W |
| R240     | 1-218-939-11 | RES-CHIP     | 68         | 5%   | 1/16W | R530     | 1-218-990-81 | SHORT CHIP  | 0      |      |       |
| R241     | 1-218-939-11 | RES-CHIP     | 68         | 5%   | 1/16W | R531     | 1-218-933-11 | RES-CHIP    | 22     | 5%   | 1/16W |
| R243     | 1-218-933-11 | RES-CHIP     | 22         | 5%   | 1/16W | R532     | 1-218-933-11 | RES-CHIP    | 22     | 5%   | 1/16W |
| R244     | 1-218-933-11 | RES-CHIP     | 22         | 5%   | 1/16W | R533     | 1-218-933-11 | RES-CHIP    | 22     | 5%   | 1/16W |

| Ref. No. | Part No.     | Description |      |      |       | Remark | Ref. No. | Part No.     | Description |      |      |       | Remark |
|----------|--------------|-------------|------|------|-------|--------|----------|--------------|-------------|------|------|-------|--------|
| R534     | 1-218-933-11 | RES-CHIP    | 22   | 5%   | 1/16W |        | R654     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        |
| R535     | 1-218-933-11 | RES-CHIP    | 22   | 5%   | 1/16W |        | R655     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        |
| R536     | 1-218-933-11 | RES-CHIP    | 22   | 5%   | 1/16W |        | R656     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        |
| R537     | 1-218-933-11 | RES-CHIP    | 22   | 5%   | 1/16W |        | R657     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        |
| R538     | 1-218-933-11 | RES-CHIP    | 22   | 5%   | 1/16W |        | R658     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        |
| R539     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | R659     | 1-218-961-11 | RES-CHIP    | 4.7K | 5%   | 1/16W |        |
| R540     | 1-218-933-11 | RES-CHIP    | 22   | 5%   | 1/16W |        | R660     | 1-218-961-11 | RES-CHIP    | 4.7K | 5%   | 1/16W |        |
| R541     | 1-218-933-11 | RES-CHIP    | 22   | 5%   | 1/16W |        | R661     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        |
| R542     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R663     | 1-216-295-91 | SHORT CHIP  | 0    |      |       |        |
| R543     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R700     | 1-218-953-11 | RES-CHIP    | 1K   | 5%   | 1/16W |        |
| R544     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R702     | 1-218-953-11 | RES-CHIP    | 1K   | 5%   | 1/16W |        |
| R545     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R703     | 1-218-941-81 | RES-CHIP    | 100  | 5%   | 1/16W |        |
| R546     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R704     | 1-218-941-81 | RES-CHIP    | 100  | 5%   | 1/16W |        |
| R547     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R705     | 1-208-690-11 | METAL CHIP  | 2K   | 0.5% | 1/16W |        |
| R548     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R706     | 1-218-941-81 | RES-CHIP    | 100  | 5%   | 1/16W |        |
| R549     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R707     | 1-208-690-11 | METAL CHIP  | 2K   | 0.5% | 1/16W |        |
| R550     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R708     | 1-211-986-11 | METAL CHIP  | 51   | 0.5% | 1/10W |        |
| R551     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R709     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        |
| R552     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R710     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        |
| R553     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R712     | 1-218-847-11 | METAL CHIP  | 1K   | 0.5% | 1/10W |        |
| R554     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R714     | 1-218-959-11 | RES-CHIP    | 3.3K | 5%   | 1/16W |        |
| R555     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R715     | 1-218-959-11 | RES-CHIP    | 3.3K | 5%   | 1/16W |        |
| R601     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | R719     | 1-218-967-11 | RES-CHIP    | 15K  | 5%   | 1/16W |        |
| R605     | 1-218-935-11 | RES-CHIP    | 33   | 5%   | 1/16W |        | R721     | 1-218-973-11 | RES-CHIP    | 47K  | 5%   | 1/16W |        |
| R606     | 1-218-935-11 | RES-CHIP    | 33   | 5%   | 1/16W |        | R722     | 1-218-961-11 | RES-CHIP    | 4.7K | 5%   | 1/16W |        |
| R607     | 1-218-935-11 | RES-CHIP    | 33   | 5%   | 1/16W |        | R723     | 1-218-959-11 | RES-CHIP    | 3.3K | 5%   | 1/16W |        |
| R608     | 1-218-935-11 | RES-CHIP    | 33   | 5%   | 1/16W |        | R724     | 1-218-956-11 | RES-CHIP    | 1.8K | 5%   | 1/16W |        |
| R609     | 1-218-935-11 | RES-CHIP    | 33   | 5%   | 1/16W |        | R725     | 1-218-956-11 | RES-CHIP    | 1.8K | 5%   | 1/16W |        |
| R610     | 1-218-935-11 | RES-CHIP    | 33   | 5%   | 1/16W |        | R726     | 1-216-864-11 | SHORT CHIP  | 0    |      |       |        |
| R611     | 1-218-935-11 | RES-CHIP    | 33   | 5%   | 1/16W |        | R727     | 1-216-864-11 | SHORT CHIP  | 0    |      |       |        |
| R612     | 1-218-935-11 | RES-CHIP    | 33   | 5%   | 1/16W |        | R728     | 1-216-864-11 | SHORT CHIP  | 0    |      |       |        |
| R613     | 1-218-935-11 | RES-CHIP    | 33   | 5%   | 1/16W |        | R729     | 1-216-864-11 | SHORT CHIP  | 0    |      |       |        |
| R614     | 1-218-935-11 | RES-CHIP    | 33   | 5%   | 1/16W |        | R730     | 1-216-864-11 | SHORT CHIP  | 0    |      |       |        |
| R615     | 1-218-935-11 | RES-CHIP    | 33   | 5%   | 1/16W |        | R731     | 1-218-967-11 | RES-CHIP    | 15K  | 5%   | 1/16W |        |
| R616     | 1-218-935-11 | RES-CHIP    | 33   | 5%   | 1/16W |        | R735     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        |
| R617     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | R737     | 1-218-841-11 | METAL CHIP  | 560  | 0.5% | 1/10W |        |
| R620     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | R738     | 1-218-841-11 | METAL CHIP  | 560  | 0.5% | 1/10W |        |
| R622     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | R739     | 1-218-841-11 | METAL CHIP  | 560  | 0.5% | 1/10W |        |
| R624     | 1-218-941-81 | RES-CHIP    | 100  | 5%   | 1/16W |        | R740     | 1-218-841-11 | METAL CHIP  | 560  | 0.5% | 1/10W |        |
| R625     | 1-218-933-11 | RES-CHIP    | 22   | 5%   | 1/16W |        | R741     | 1-218-953-11 | RES-CHIP    | 1K   | 5%   | 1/16W |        |
| R627     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R743     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        |
| R628     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R745     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        |
| R629     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R746     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        |
| R632     | 1-208-884-81 | METAL CHIP  | 750  | 0.5% | 1/16W |        | R808     | 1-218-937-11 | RES-CHIP    | 47   | 5%   | 1/16W |        |
| R633     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R809     | 1-218-937-11 | RES-CHIP    | 47   | 5%   | 1/16W |        |
| R634     | 1-414-843-21 | INDUCTOR    | 18nH |      |       |        | R810     | 1-218-937-11 | RES-CHIP    | 47   | 5%   | 1/16W |        |
| R635     | 1-414-843-21 | INDUCTOR    | 18nH |      |       |        | R811     | 1-218-937-11 | RES-CHIP    | 47   | 5%   | 1/16W |        |
| R636     | 1-208-688-11 | METAL CHIP  | 1.6K | 0.5% | 1/16W |        | R812     | 1-218-935-11 | RES-CHIP    | 33   | 5%   | 1/16W |        |
| R637     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R813     | 1-208-663-11 | METAL CHIP  | 150  | 0.5% | 1/16W |        |
| R639     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R814     | 1-208-663-11 | METAL CHIP  | 150  | 0.5% | 1/16W |        |
| R641     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R815     | 1-208-883-81 | METAL CHIP  | 680  | 0.5% | 1/16W |        |
| R642     | 1-218-945-11 | RES-CHIP    | 220  | 5%   | 1/16W |        | R816     | 1-208-663-11 | METAL CHIP  | 150  | 0.5% | 1/16W |        |
| R644     | 1-218-935-11 | RES-CHIP    | 33   | 5%   | 1/16W |        | R817     | 1-208-663-11 | METAL CHIP  | 150  | 0.5% | 1/16W |        |
| R645     | 1-218-935-11 | RES-CHIP    | 33   | 5%   | 1/16W |        | R818     | 1-208-663-11 | METAL CHIP  | 150  | 0.5% | 1/16W |        |
| R646     | 1-218-935-11 | RES-CHIP    | 33   | 5%   | 1/16W |        | R819     | 1-208-675-11 | METAL CHIP  | 470  | 0.5% | 1/16W |        |
| R647     | 1-218-961-11 | RES-CHIP    | 4.7K | 5%   | 1/16W |        | R820     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        |
| R648     | 1-218-961-11 | RES-CHIP    | 4.7K | 5%   | 1/16W |        | R821     | 1-218-953-11 | RES-CHIP    | 1K   | 5%   | 1/16W |        |
| R650     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R823     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        |
| R651     | 1-218-941-81 | RES-CHIP    | 100  | 5%   | 1/16W |        | R824     | 1-218-953-11 | RES-CHIP    | 1K   | 5%   | 1/16W |        |
| R652     | 1-216-073-91 | RES-CHIP    | 10K  | 5%   | 1/10W |        | R825     | 1-218-953-11 | RES-CHIP    | 1K   | 5%   | 1/16W |        |

| Ref. No. | Part No.     | Description |      |      | Remark | Ref. No. | Part No.     | Description |      |    | Remark |
|----------|--------------|-------------|------|------|--------|----------|--------------|-------------|------|----|--------|
| R826     | 1-218-947-11 | RES-CHIP    | 330  | 5%   | 1/16W  | R917     | 1-218-935-11 | RES-CHIP    | 33   | 5% | 1/16W  |
| R827     | 1-218-945-11 | RES-CHIP    | 220  | 5%   | 1/16W  | R918     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W  |
| R829     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R919     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W  |
| R830     | 1-218-939-11 | RES-CHIP    | 68   | 5%   | 1/16W  | R920     | 1-218-929-11 | RES-CHIP    | 10   | 5% | 1/16W  |
| R831     | 1-218-947-11 | RES-CHIP    | 330  | 5%   | 1/16W  | R921     | 1-218-929-11 | RES-CHIP    | 10   | 5% | 1/16W  |
| R833     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R922     | 1-218-929-11 | RES-CHIP    | 10   | 5% | 1/16W  |
| R834     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W  | R923     | 1-218-929-11 | RES-CHIP    | 10   | 5% | 1/16W  |
| R835     | 1-208-691-11 | METAL CHIP  | 2.2K | 0.5% | 1/16W  | R924     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R836     | 1-208-691-11 | METAL CHIP  | 2.2K | 0.5% | 1/16W  | R925     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R837     | 1-208-695-11 | METAL CHIP  | 3.3K | 0.5% | 1/16W  | R926     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R838     | 1-208-695-11 | METAL CHIP  | 3.3K | 0.5% | 1/16W  | R927     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R839     | 1-218-947-11 | RES-CHIP    | 330  | 5%   | 1/16W  | R928     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R841     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R929     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R842     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R930     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R843     | 1-218-947-11 | RES-CHIP    | 330  | 5%   | 1/16W  | R931     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R845     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R932     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R847     | 1-218-947-11 | RES-CHIP    | 330  | 5%   | 1/16W  | R933     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W  |
| R848     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R934     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W  |
| R849     | 1-218-933-11 | RES-CHIP    | 22   | 5%   | 1/16W  | R935     | 1-218-935-11 | RES-CHIP    | 33   | 5% | 1/16W  |
| R850     | 1-218-933-11 | RES-CHIP    | 22   | 5%   | 1/16W  | R936     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W  |
| R851     | 1-218-933-11 | RES-CHIP    | 22   | 5%   | 1/16W  | R938     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W  |
| R852     | 1-218-933-11 | RES-CHIP    | 22   | 5%   | 1/16W  | R939     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W  |
| R853     | 1-218-933-11 | RES-CHIP    | 22   | 5%   | 1/16W  | R940     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W  |
| R858     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W  | R941     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W  |
| R859     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W  | R942     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W  |
| R860     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W  | R943     | 1-218-959-11 | RES-CHIP    | 3.3K | 5% | 1/16W  |
| R861     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W  | R944     | 1-218-953-11 | RES-CHIP    | 1K   | 5% | 1/16W  |
| R862     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W  | R945     | 1-218-953-11 | RES-CHIP    | 1K   | 5% | 1/16W  |
| R863     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W  | R946     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W  |
| R864     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W  | R947     | 1-218-953-11 | RES-CHIP    | 1K   | 5% | 1/16W  |
| R865     | 1-216-295-91 | SHORT CHIP  | 0    |      |        | R948     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R873     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R949     | 1-218-933-11 | RES-CHIP    | 22   | 5% | 1/16W  |
| R874     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R950     | 1-218-933-11 | RES-CHIP    | 22   | 5% | 1/16W  |
| R875     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R951     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R876     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R952     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R877     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R953     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R878     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R954     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R879     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R955     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R889     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R956     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R890     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R957     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R891     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R958     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R892     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R959     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R893     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R960     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R894     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R961     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R895     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R962     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W  |
| R896     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R963     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W  |
| R899     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R964     | 1-218-941-81 | RES-CHIP    | 100  | 5% | 1/16W  |
| R901     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W  | R965     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R902     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W  | R966     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W  |
| R903     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R967     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W  |
| R904     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W  | R969     | 1-218-977-11 | RES-CHIP    | 100K | 5% | 1/16W  |
| R905     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R970     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W  |
| R906     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W  | R972     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W  |
| R907     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R973     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W  |
| R908     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R974     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R909     | 1-218-990-81 | SHORT CHIP  | 0    |      |        | R975     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R913     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W  | R976     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R914     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W  | R977     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R915     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W  | R978     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |
| R916     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W  | R979     | 1-218-990-81 | SHORT CHIP  | 0    |    |        |

| Ref. No. | Part No.     | Description |      |      |       | Remark | Ref. No.                      | Part No.     | Description                 |              |    |       | Remark |
|----------|--------------|-------------|------|------|-------|--------|-------------------------------|--------------|-----------------------------|--------------|----|-------|--------|
| R980     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | R8044                         | 1-218-937-11 | RES-CHIP                    | 47           | 5% | 1/16W |        |
| R981     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | R8045                         | 1-218-937-11 | RES-CHIP                    | 47           | 5% | 1/16W |        |
| R982     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | R9001                         | 1-218-961-11 | RES-CHIP                    | 4.7K         | 5% | 1/16W |        |
| R983     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | R9002                         | 1-218-961-11 | RES-CHIP                    | 4.7K         | 5% | 1/16W |        |
| R984     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | R9003                         | 1-218-961-11 | RES-CHIP                    | 4.7K         | 5% | 1/16W |        |
| R985     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | R9004                         | 1-218-961-11 | RES-CHIP                    | 4.7K         | 5% | 1/16W |        |
| R986     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | R9005                         | 1-218-990-81 | SHORT CHIP                  | 0            |    |       |        |
| R988     | 1-218-933-11 | RES-CHIP    | 22   | 5%   | 1/16W |        | R9006                         | 1-218-990-81 | SHORT CHIP                  | 0            |    |       |        |
| R990     | 1-218-933-11 | RES-CHIP    | 22   | 5%   | 1/16W |        | R9007                         | 1-218-990-81 | SHORT CHIP                  | 0            |    |       |        |
| R991     | 1-218-933-11 | RES-CHIP    | 22   | 5%   | 1/16W |        | R9021                         | 1-218-941-81 | RES-CHIP                    | 100          | 5% | 1/16W |        |
| R992     | 1-218-935-11 | RES-CHIP    | 33   | 5%   | 1/16W |        | R9022                         | 1-218-990-81 | SHORT CHIP                  | 0            |    |       |        |
| R993     | 1-218-961-11 | RES-CHIP    | 4.7K | 5%   | 1/16W |        | < COMPOSITION CIRCUIT BLOCK > |              |                             |              |    |       |        |
| R994     | 1-218-935-11 | RES-CHIP    | 33   | 5%   | 1/16W |        |                               |              |                             |              |    |       |        |
| R995     | 1-218-961-11 | RES-CHIP    | 4.7K | 5%   | 1/16W |        |                               |              |                             |              |    |       |        |
| R996     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | RB109                         | 1-234-371-21 | RES, NETWORK                | 47 (1005X4)  |    |       |        |
| R997     | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | RB110                         | 1-234-371-21 | RES, NETWORK                | 47 (1005X4)  |    |       |        |
| R998     | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | RB112                         | 1-234-371-21 | RES, NETWORK                | 47 (1005X4)  |    |       |        |
| R999     | 1-218-933-11 | RES-CHIP    | 22   | 5%   | 1/16W |        | RB113                         | 1-234-371-21 | RES, NETWORK                | 47 (1005X4)  |    |       |        |
| R1801    | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | * RB122                       | 1-234-723-21 | RES, NETWORK                | 75 (1005X4)  |    |       |        |
| R1802    | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | * RB123                       | 1-234-723-21 | RES, NETWORK                | 75 (1005X4)  |    |       |        |
| R1806    | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | * RB124                       | 1-234-723-21 | RES, NETWORK                | 75 (1005X4)  |    |       |        |
| R7004    | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | * RB125                       | 1-234-723-21 | RES, NETWORK                | 75 (1005X4)  |    |       |        |
| R7005    | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | * RB126                       | 1-234-723-21 | RES, NETWORK                | 75 (1005X4)  |    |       |        |
| R7006    | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | RB209                         | 1-234-371-21 | RES, NETWORK                | 47 (1005X4)  |    |       |        |
| R7010    | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | RB210                         | 1-234-371-21 | RES, NETWORK                | 47 (1005X4)  |    |       |        |
| R7011    | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | RB211                         | 1-234-371-21 | RES, NETWORK                | 47 (1005X4)  |    |       |        |
| R7012    | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | RB213                         | 1-234-371-21 | RES, NETWORK                | 47 (1005X4)  |    |       |        |
| R8002    | 1-218-929-11 | RES-CHIP    | 10   | 5%   | 1/16W |        | * RB223                       | 1-234-723-21 | RES, NETWORK                | 75 (1005X4)  |    |       |        |
| R8003    | 1-208-692-11 | METAL CHIP  | 2.4K | 0.5% | 1/16W |        | * RB225                       | 1-234-723-21 | RES, NETWORK                | 75 (1005X4)  |    |       |        |
| R8004    | 1-245-369-91 | METAL CHIP  | 49.9 | 1%   | 1/16W |        | * RB226                       | 1-234-723-21 | RES, NETWORK                | 75 (1005X4)  |    |       |        |
| R8005    | 1-208-911-11 | METAL CHIP  | 10K  | 0.5% | 1/16W |        | * RB227                       | 1-234-723-21 | RES, NETWORK                | 75 (1005X4)  |    |       |        |
| R8006    | 1-245-369-91 | METAL CHIP  | 49.9 | 1%   | 1/16W |        | * RB229                       | 1-234-723-21 | RES, NETWORK                | 75 (1005X4)  |    |       |        |
| R8007    | 1-245-369-91 | METAL CHIP  | 49.9 | 1%   | 1/16W |        | RB502                         | 1-234-370-21 | RES, NETWORK                | 22 (1005X4)  |    |       |        |
| R8008    | 1-245-369-91 | METAL CHIP  | 49.9 | 1%   | 1/16W |        | RB503                         | 1-234-370-21 | RES, NETWORK                | 22 (1005X4)  |    |       |        |
| R8009    | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | RB504                         | 1-234-370-21 | RES, NETWORK                | 22 (1005X4)  |    |       |        |
| R8010    | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | RB505                         | 1-234-370-21 | RES, NETWORK                | 22 (1005X4)  |    |       |        |
| R8011    | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | RB506                         | 1-234-370-21 | RES, NETWORK                | 22 (1005X4)  |    |       |        |
| R8013    | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | RB507                         | 1-234-370-21 | RES, NETWORK                | 22 (1005X4)  |    |       |        |
| R8014    | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | RB508                         | 1-234-378-21 | RES, NETWORK                | 10K (1005X4) |    |       |        |
| R8015    | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | RB510                         | 1-234-378-21 | RES, NETWORK                | 10K (1005X4) |    |       |        |
| R8017    | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | RB511                         | 1-234-370-21 | RES, NETWORK                | 22 (1005X4)  |    |       |        |
| R8018    | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | RB512                         | 1-234-370-21 | RES, NETWORK                | 22 (1005X4)  |    |       |        |
| R8019    | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | RB513                         | 1-234-370-21 | RES, NETWORK                | 22 (1005X4)  |    |       |        |
| R8020    | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | RB514                         | 1-234-370-21 | RES, NETWORK                | 22 (1005X4)  |    |       |        |
| R8021    | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | RB515                         | 1-234-400-21 | CONDUCTOR, NETWORK (1005X4) |              |    |       |        |
| R8022    | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | RB516                         | 1-234-400-21 | CONDUCTOR, NETWORK (1005X4) |              |    |       |        |
| R8024    | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | RB517                         | 1-234-400-21 | CONDUCTOR, NETWORK (1005X4) |              |    |       |        |
| R8025    | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | RB518                         | 1-234-400-21 | CONDUCTOR, NETWORK (1005X4) |              |    |       |        |
| R8026    | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | RB519                         | 1-234-400-21 | CONDUCTOR, NETWORK (1005X4) |              |    |       |        |
| R8027    | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | RB520                         | 1-234-400-21 | CONDUCTOR, NETWORK (1005X4) |              |    |       |        |
| R8028    | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | RB600                         | 1-242-963-21 | RES, NETWORK                | 33 (1005X4)  |    |       |        |
| R8029    | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | RB601                         | 1-242-963-21 | RES, NETWORK                | 33 (1005X4)  |    |       |        |
| R8034    | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | RB602                         | 1-242-963-21 | RES, NETWORK                | 33 (1005X4)  |    |       |        |
| R8035    | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | RB603                         | 1-242-963-21 | RES, NETWORK                | 33 (1005X4)  |    |       |        |
| R8036    | 1-218-965-11 | RES-CHIP    | 10K  | 5%   | 1/16W |        | RB604                         | 1-242-963-21 | RES, NETWORK                | 33 (1005X4)  |    |       |        |
| R8038    | 1-218-941-81 | RES-CHIP    | 100  | 5%   | 1/16W |        | RB605                         | 1-242-963-21 | RES, NETWORK                | 33 (1005X4)  |    |       |        |
| R8039    | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | RB606                         | 1-242-963-21 | RES, NETWORK                | 33 (1005X4)  |    |       |        |
| R8040    | 1-218-990-81 | SHORT CHIP  | 0    |      |       |        | RB607                         | 1-242-963-21 | RES, NETWORK                | 33 (1005X4)  |    |       |        |
| R8041    | 1-218-955-11 | RES-CHIP    | 1.5K | 5%   | 1/16W |        | RB608                         | 1-242-963-21 | RES, NETWORK                | 33 (1005X4)  |    |       |        |
| R8042    | 1-218-955-11 | RES-CHIP    | 1.5K | 5%   | 1/16W |        | RB609                         | 1-242-963-21 | RES, NETWORK                | 33 (1005X4)  |    |       |        |
|          |              |             |      |      |       |        | RB610                         | 1-242-963-21 | RES, NETWORK                | 33 (1005X4)  |    |       |        |

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

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

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

## REVISION HISTORY

[illegible]