

# DSC-F828

## SERVICE MANUAL

**LEVEL 3**

Ver 1.1 2005.10

Revision History

How to use  
Acrobat Reader



*US Model  
Canadian Model  
AEP Model  
UK Model  
E Model  
Hong Kong Model  
Australian Model  
Korea Model  
Tourist Model  
Chinese Model  
Japanese Model*

### Link

SCHEMATIC DIAGRAMS

PRINTED WIRING BOARDS

REPAIR PARTS LIST

- For ADJUSTMENTS (SECTION 6), refer to SERVICE MANUAL, ADJ (987627951.pdf).
- For INSTRUCTION MANUAL, refer to SERVICE MANUAL, LEVEL 1 (987627941.pdf).
- Reference No. search on printed wiring boards is available.

**The information that is not described in this Service Manual is described in the LEVEL 2 Service Manual.  
When repairing, use this manual together with LEVEL 2 Service Manual.**

### Contents of LEVEL 2 Service Manual

|  |  |
|--|--|
| 1. SERVICE NOTE                                    |  |
| 2. DISASSEMBLY                                     |  |
| 3. BLOCK DIAGRAMS                                  | OVERALL<br>POWER   |
| 4. PRINTED WIRING BOARDS AND<br>SCHEMATIC DIAGRAMS | DD-204, LR-018, ST-088, LS-067, MT-067, SI-037,<br>UA-003, LB-091, CF-097, SW-410, AJ-007 BOARD        |
|  | AS-050 BOARD, FP-756 FLEXIBLE, CONTROL<br>SWITCH BLOCK (TOP)/(MID)/(UNDER)<br>(SCHEMATIC DIAGRAM ONLY) |
|  | FP-748 BOARD (PRINTED WIRING BOARD ONLY)   |
| 5. REPAIR PARTS LIST                               | EXPLODED VIEWS   |
|  | ELECTRICAL PARTS LIST  |

**DIGITAL STILL CAMERA**

**SONY®**



**Cyber-shot**  
Digital Still Camera



**CAUTION**

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

**CAUTION :**

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

**SAFETY-RELATED COMPONENT WARNING!!**

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

**ATTENTION AU COMPOSANT AYANT RAPPORT  
À LA SÉCURITÉ!**

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

## 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, through functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.
6. Flexible Circuit Board Repairing
  - Keep the temperature of the soldering iron around 270°C during repairing.
  - Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
  - Be careful not to apply force on the conductor when soldering or unsoldering.

**Unleaded solder**

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



**: LEAD FREE MARK**

Unleaded solder has the following characteristics.

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

## TABLE OF CONTENTS

### 4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

|      |   |      |
|------|---|------|
| 4-2. | SCHEMATIC DIAGRAMS .....  | 4-25 |
|      | • SY-096 (1/10) (CAMERA DSP)<br>SCHEMATIC DIAGRAM .....   | 4-25 |
|      | • SY-096 (2/10) (CAMERA SYSTEM CONTROL)<br>SCHEMATIC DIAGRAM .....  | 4-27 |
|      | • SY-096 (3/10) (CF DRIVE I/F)<br>SCHEMATIC DIAGRAM .....   | 4-29 |
|      | • SY-096 (4/10) (USB I/F)<br>SCHEMATIC DIAGRAM .....  | 4-31 |
|      | • SY-096 (5/10) (MODE CONTROL)<br>SCHEMATIC DIAGRAM .....   | 4-33 |
|      | • SY-096 (6/10) (AUDIO AMP)<br>SCHEMATIC DIAGRAM .....  | 4-35 |
|      | • SY-096 (7/10) (LCD DRIVER)<br>SCHEMATIC DIAGRAM .....   | 4-37 |
|      | • SY-096 (8/10) (EVF, LCD DRIVER)<br>SCHEMATIC DIAGRAM .....  | 4-39 |
|      | • SY-096 (9/10) (CONNECTOR)<br>SCHEMATIC DIAGRAM .....  | 4-41 |
|      | • FP-749 FLEXIBLE<br>SCHEMATIC DIAGRAM .....  | 4-42 |
|      | • SY-096 (10/10) (POWER SUPPLY)<br>SCHEMATIC DIAGRAM .....  | 4-43 |
| 4-3. | PRINTED WIRING BOARDS .....   | 4-59 |
|      | • SY-096 (CAMERA DSP, CAMERA SYSTEM<br>CONTROL, CF DRIVE I/F, USB I/F, MODE<br>CONTROL, AUDIO AMP, LCD DRIVER, EVF, LCD<br>DRIVER, CONNECTOR, POWER SUPPLY)<br>PRINTED WIRING BOARD ..... | 4-59 |
| 4-4. | MOUNTED PARTS LOCATION .....  | 4-65 |

### 5. REPAIR PARTS LIST

|      |                             |      |
|------|-----------------------------|------|
| 5-2. | ELECTRICAL PARTS LIST ..... | 5-14 |
|------|-----------------------------|------|

## 4-2. SCHEMATIC DIAGRAMS

### Link

|  |   |
|--|---|
| • SY-096 BOARD (1/10) (CAMERA DSP)               | • SY-096 BOARD (7/10) (LCD DRIVER)      |
| • SY-096 BOARD (2/10)<br>(CAMERA SYSTEM CONTROL) | • SY-096 BOARD (8/10) (EVF, LCD DRIVER) |
| • SY-096 BOARD (3/10) (CF DRIVE I/F)             | • SY-096 BOARD (9/10) (CONNECTOR)       |
| • SY-096 BOARD (4/10) (USB I/F)                  | • FP-749 FLEXIBLE BOARD                 |
| • SY-096 BOARD (5/10) (MODE CONTROL)             | • SY-096 BOARD (10/10) (POWER SUPPLY)   |
| • SY-096 BOARD (6/10) (AUDIO AMP)                |   |

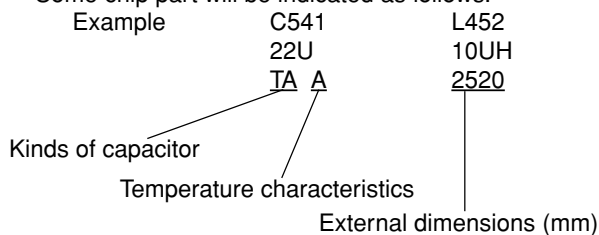
• COMMON NOTE FOR SCHEMATIC DIAGRAMS













**4-2. SCHEMATIC DIAGRAMS**

**THIS NOTE IS COMMON FOR SCHEMATIC DIAGRAMS**  
 (In addition to this, the necessary note is printed in each block)

**(For schematic diagrams)**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF} : \mu\text{F} : 50\text{V}$  or less are not indicated except for electrolytics and tantalums.
- Chip resistors are  $1/10\text{W}$  unless otherwise noted.  $\text{k}\Omega=1000\ \Omega$ ,  $\text{M}\Omega=1000\ \text{k}\Omega$ .
- 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.
- Some chip part will be indicated as follows.

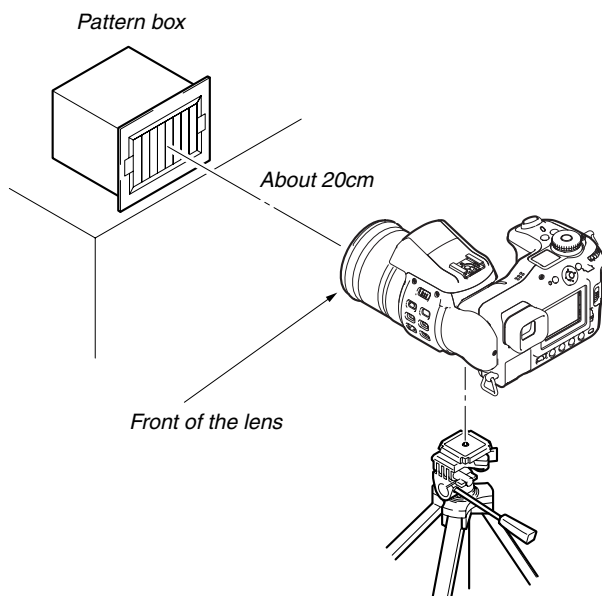


- Constants of resistors, capacitors, ICs and etc with XX indicate that they are not used. In such cases, the unused circuits may be indicated.
- Parts with \* differ according to the model/destination. Refer to the mount table for each function.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Signal name  
 $\text{XEDIT} \rightarrow \text{EDIT}$                        $\text{PB/XREC} \rightarrow \text{PB/REC}$
- : non flammable resistor
- : fusible resistor
- : panel designation
- : B+ Line
- : B- Line
- : IN/OUT direction of (+,-) B LINE.
- : adjustment for repair.
- : VIDEO SIGNAL (ANALOG)
- : AUDIO SIGNAL (ANALOG)
- : VIDEO/AUDIO SIGNAL (ANALOG)
- : VIDEO/AUDIO/SERVO SIGNAL (ANALOG)
- : SERVO SIGNAL
- Circled numbers refer to waveforms.

**(Measuring conditions voltage and waveform)**

- Voltages and waveforms are measured between the measurement points and ground when camera shoots color bar chart of pattern box. They are reference values and reference waveforms. (VOM of DC  $10\text{M}\Omega$  input impedance is used)
- Voltage values change depending upon input impedance of VOM used.)

1. Connection



2. Adjust the distance so that the output waveform of Fig. a and the Fig. b can be obtain.

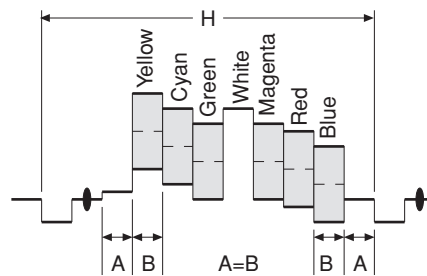


Fig. a (Video output terminal output waveform)

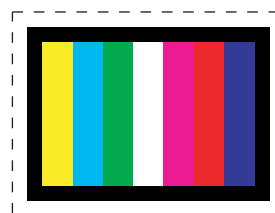


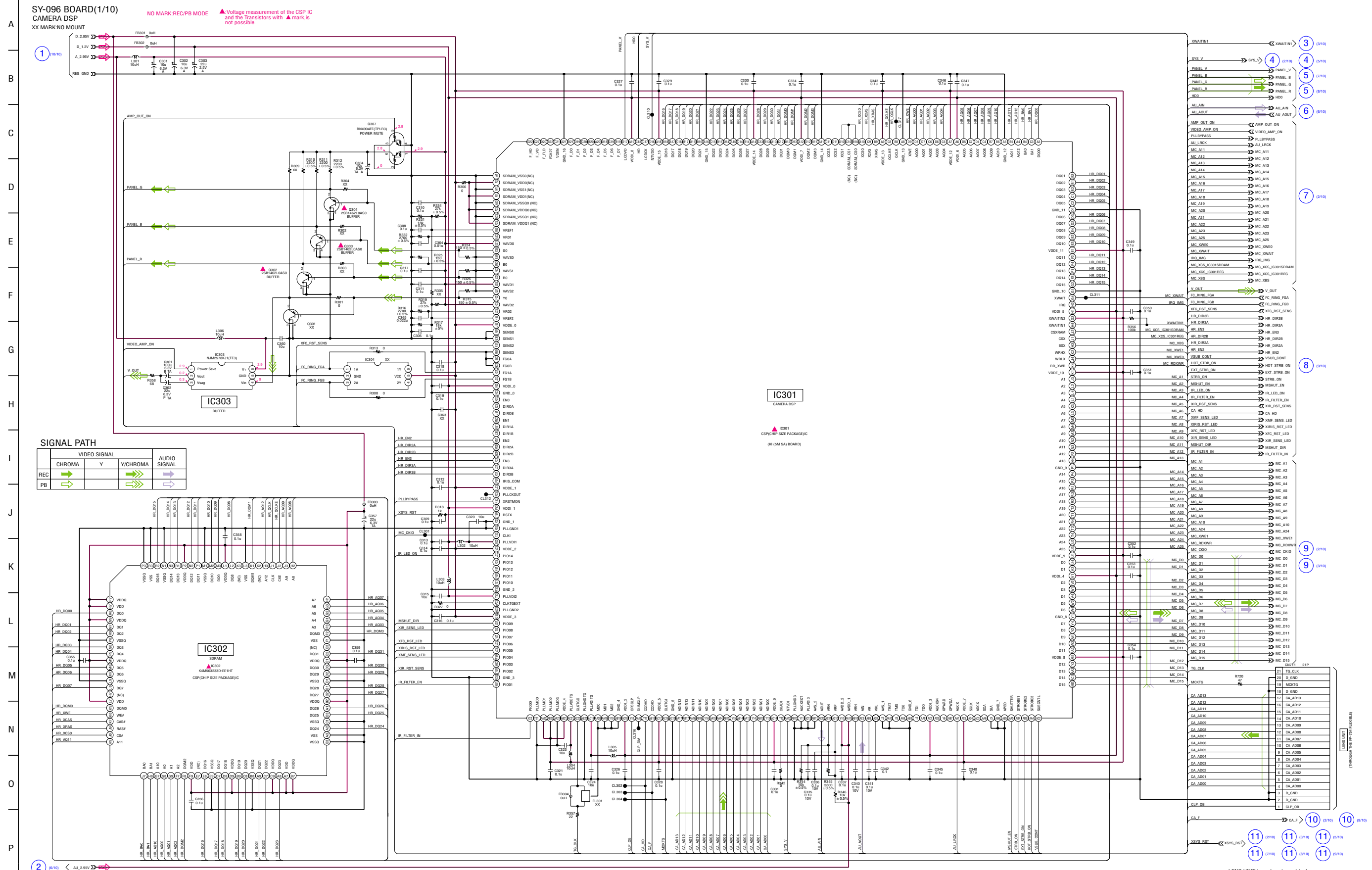
Fig.b (Picture on monitor TV)

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

|  |   |
|--|---|
| <p><b>Note :</b><br/>                 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><b>Note :</b><br/>                 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> |
|--|---|

For Schematic Diagram  
• Refer to page 4-59 for printed wiring board.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25



LENS UNIT is replaced as a block.  
So that these PRINTED WIRING BOARD and SCHEMATIC DIAGRAM are omitted.

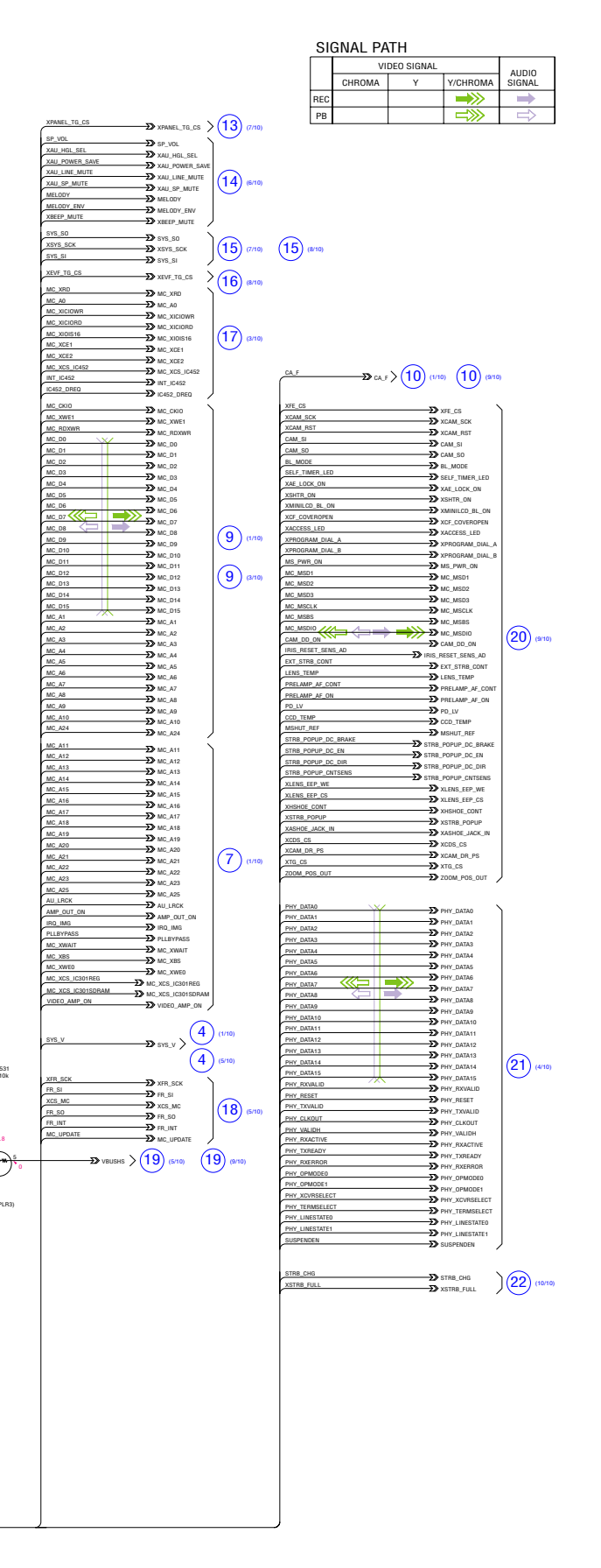
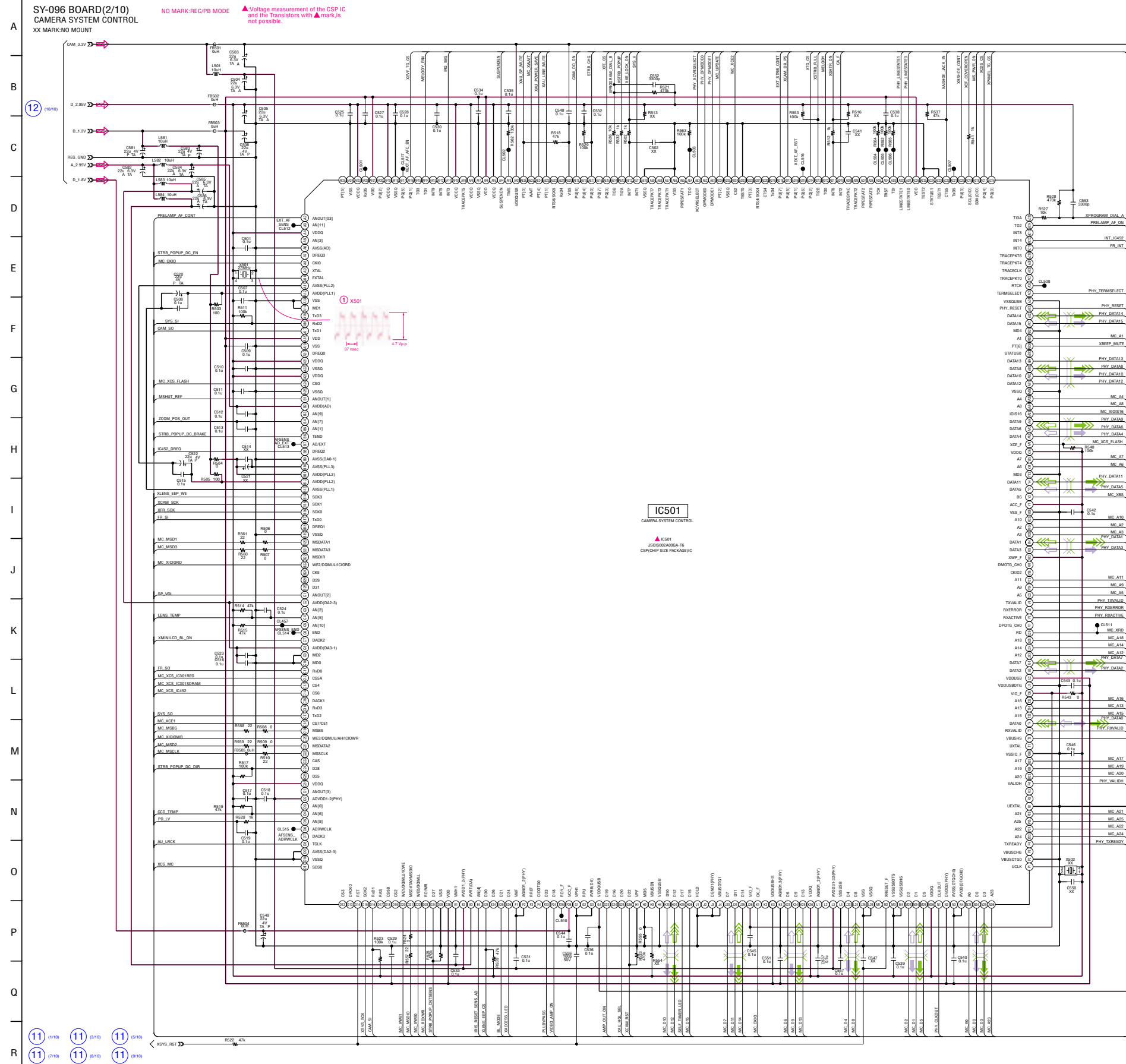
4-2. SCHEMATIC DIAGRAMS

SY-096 BOARD SIDE A

SY-096 BOARD SIDE B

For Schematic Diagram
Refer to page 4-59 for printed wiring board.

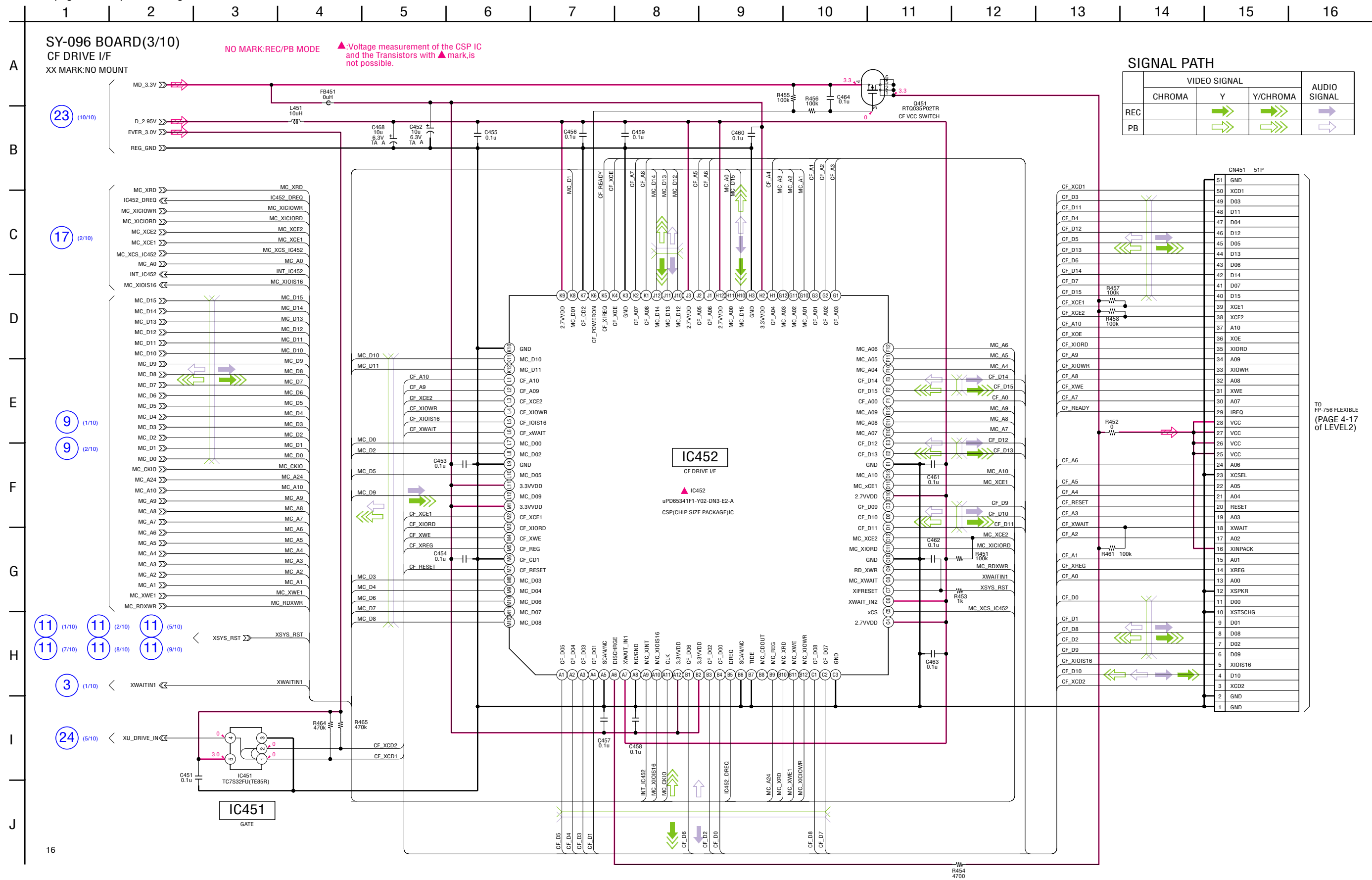
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26



IC501 CAMERA SYSTEM CONTROL
X501 JIC608A00A-TS CSPICHP SIZE PACKAGE



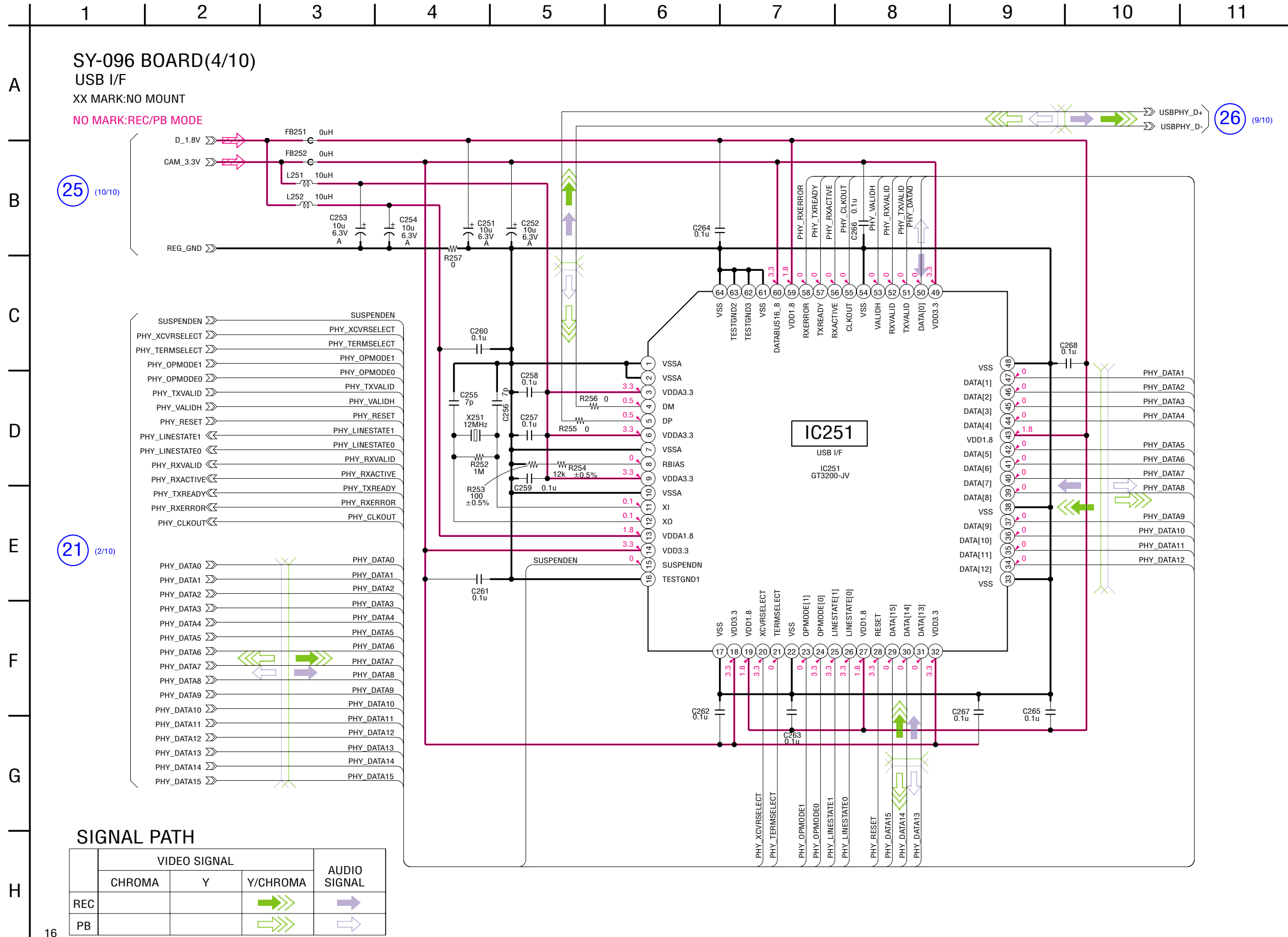
For Schematic Diagram  
 Refer to page 4-59 for printed wiring board.



TO  
FP-756 FLEXIBLE  
(PAGE 4-17  
of LEVEL2)



For Schematic Diagram  
 • Refer to page 4-59 for printed wiring board.



25 (10/10)

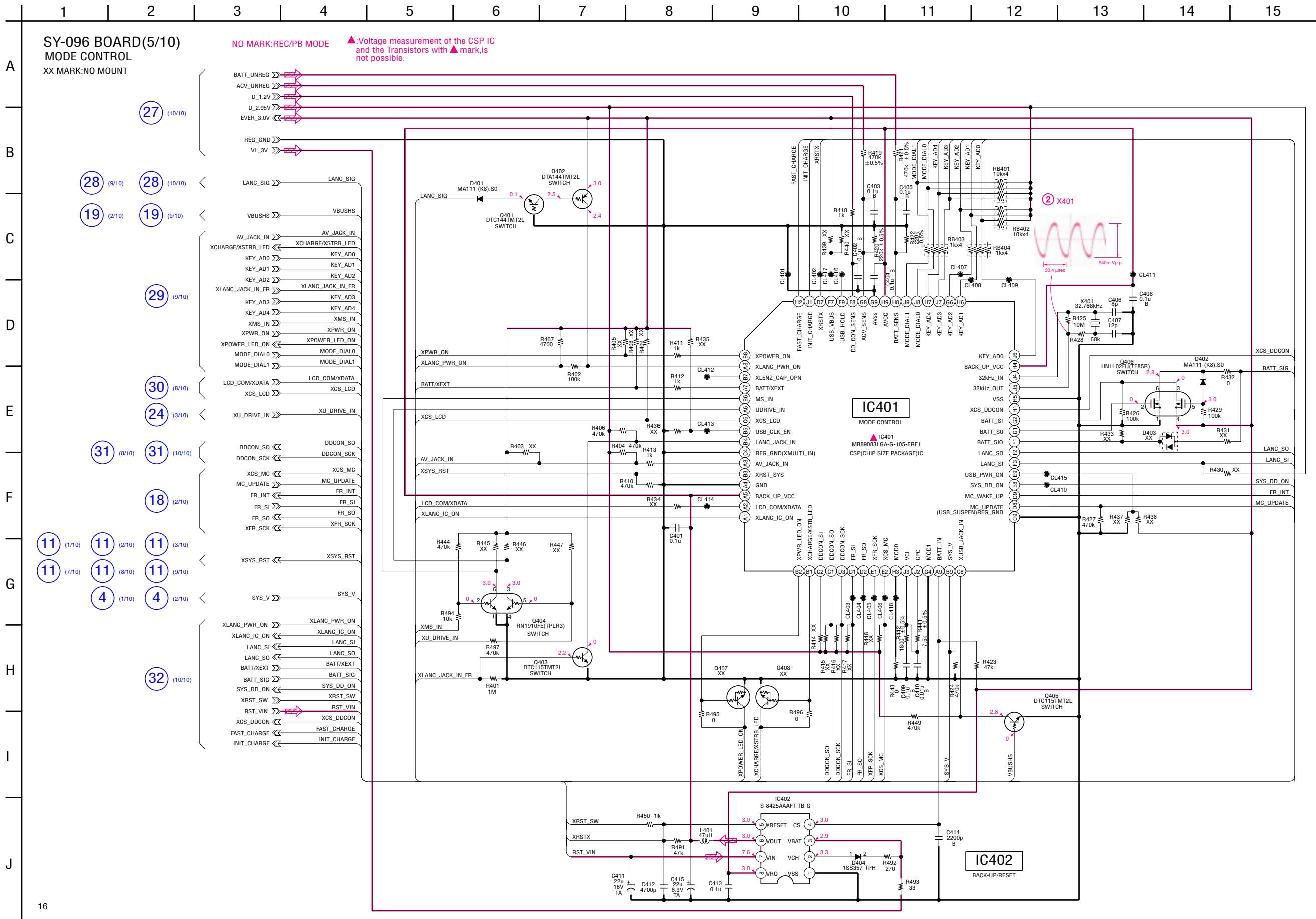
21 (2/10)

26 (9/10)

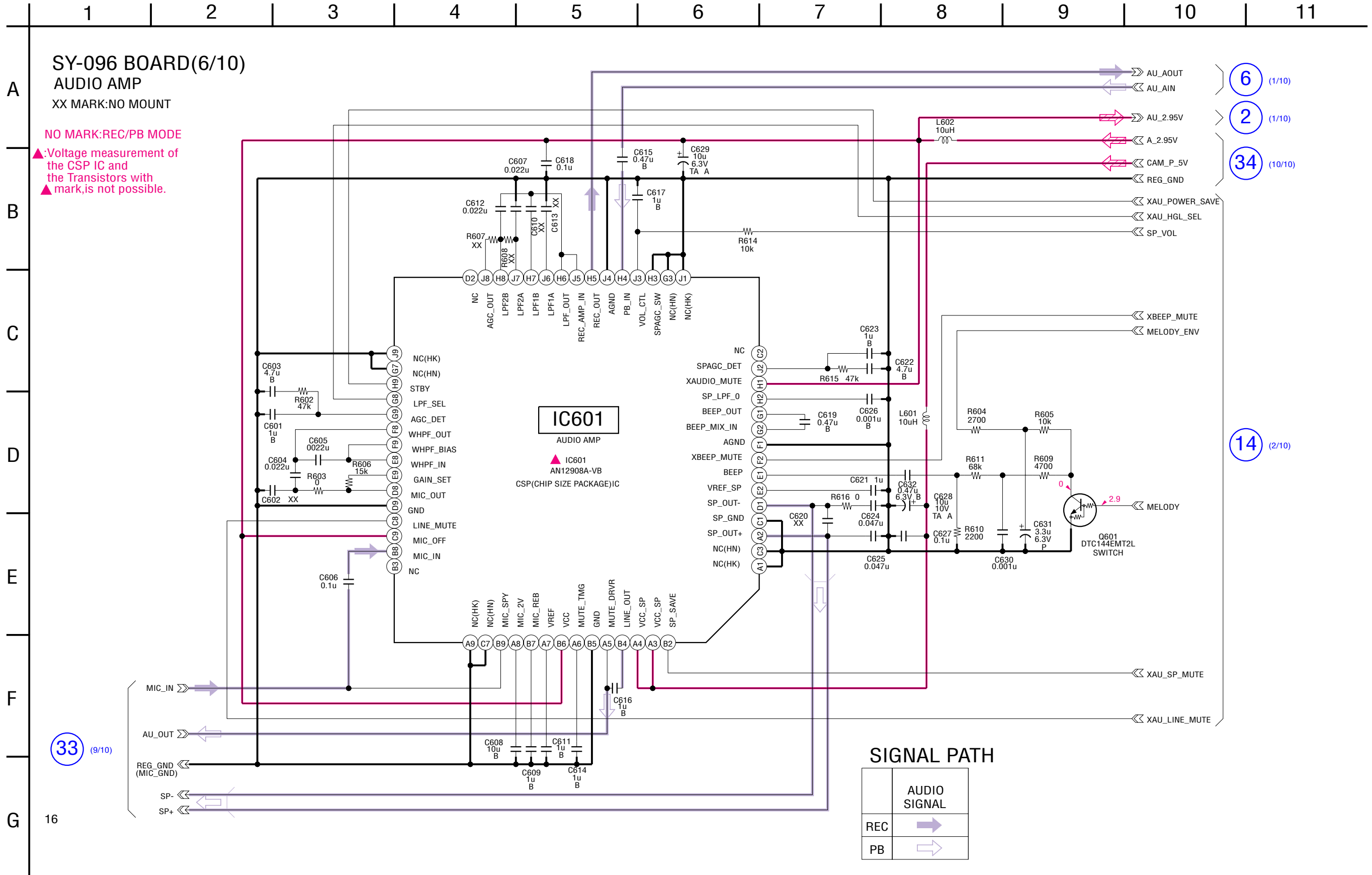
A  
B  
C  
D  
E  
F  
G  
H

1 2 3 4 5 6 7 8 9 10 11

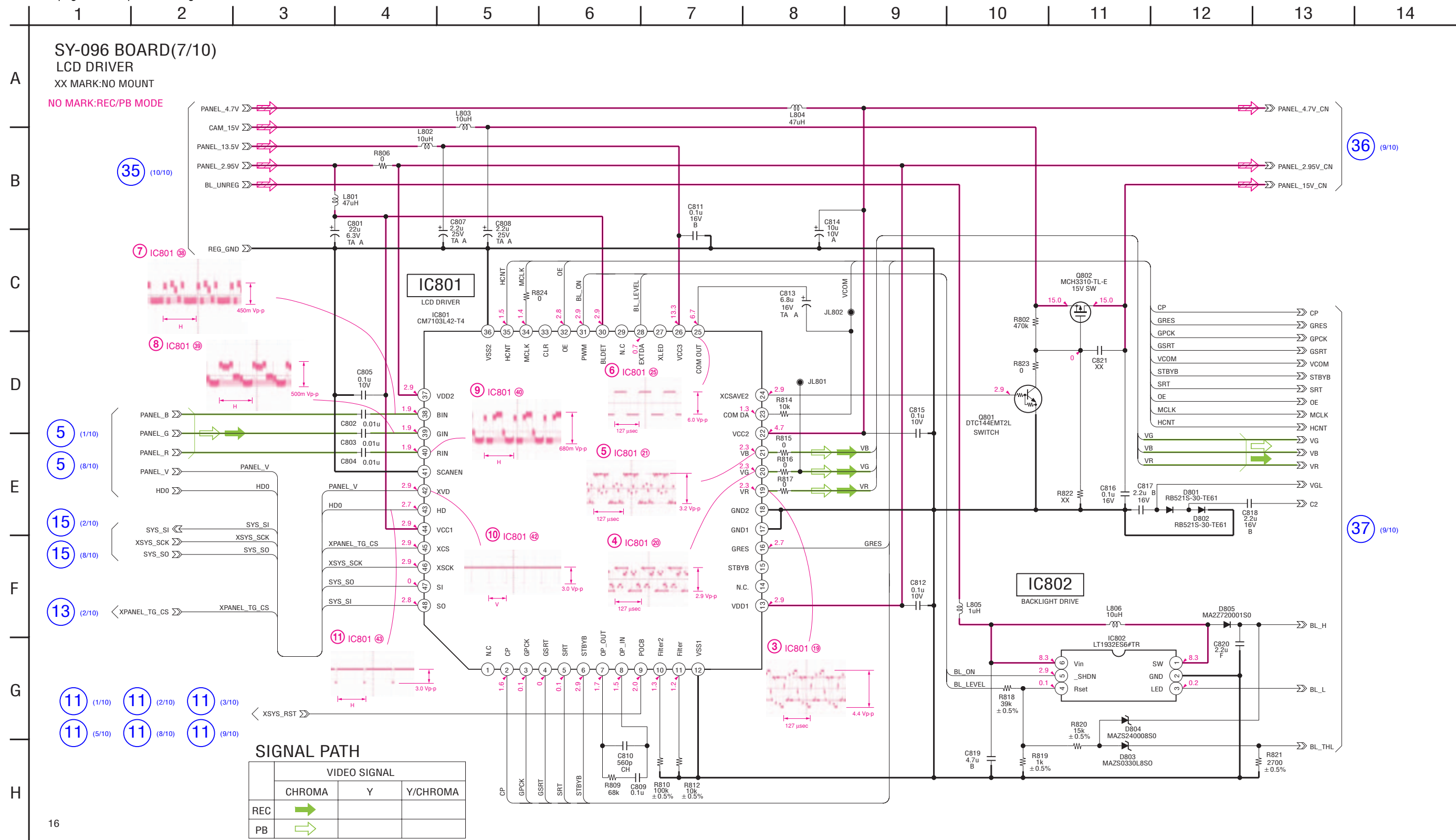
For Schematic Diagram  
• Refer to page 4-59 for printed wiring board.



For Schematic Diagram  
 • Refer to page 4-59 for printed wiring board.



For Schematic Diagram  
 • Refer to page 4-59 for printed wiring board.

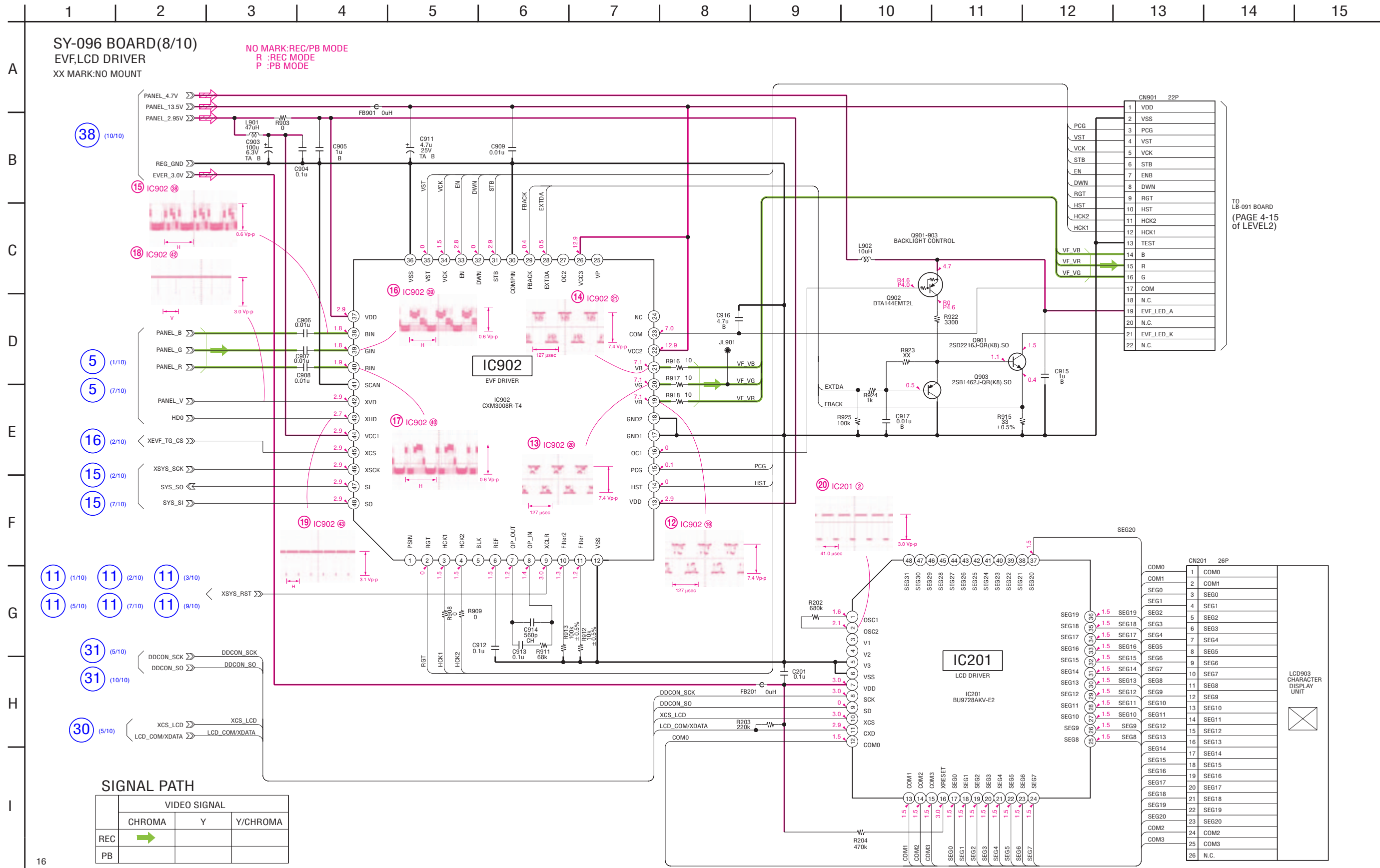


4-2. SCHEMATIC DIAGRAMS

SY-096 BOARD SIDE A

SY-096 BOARD SIDE B

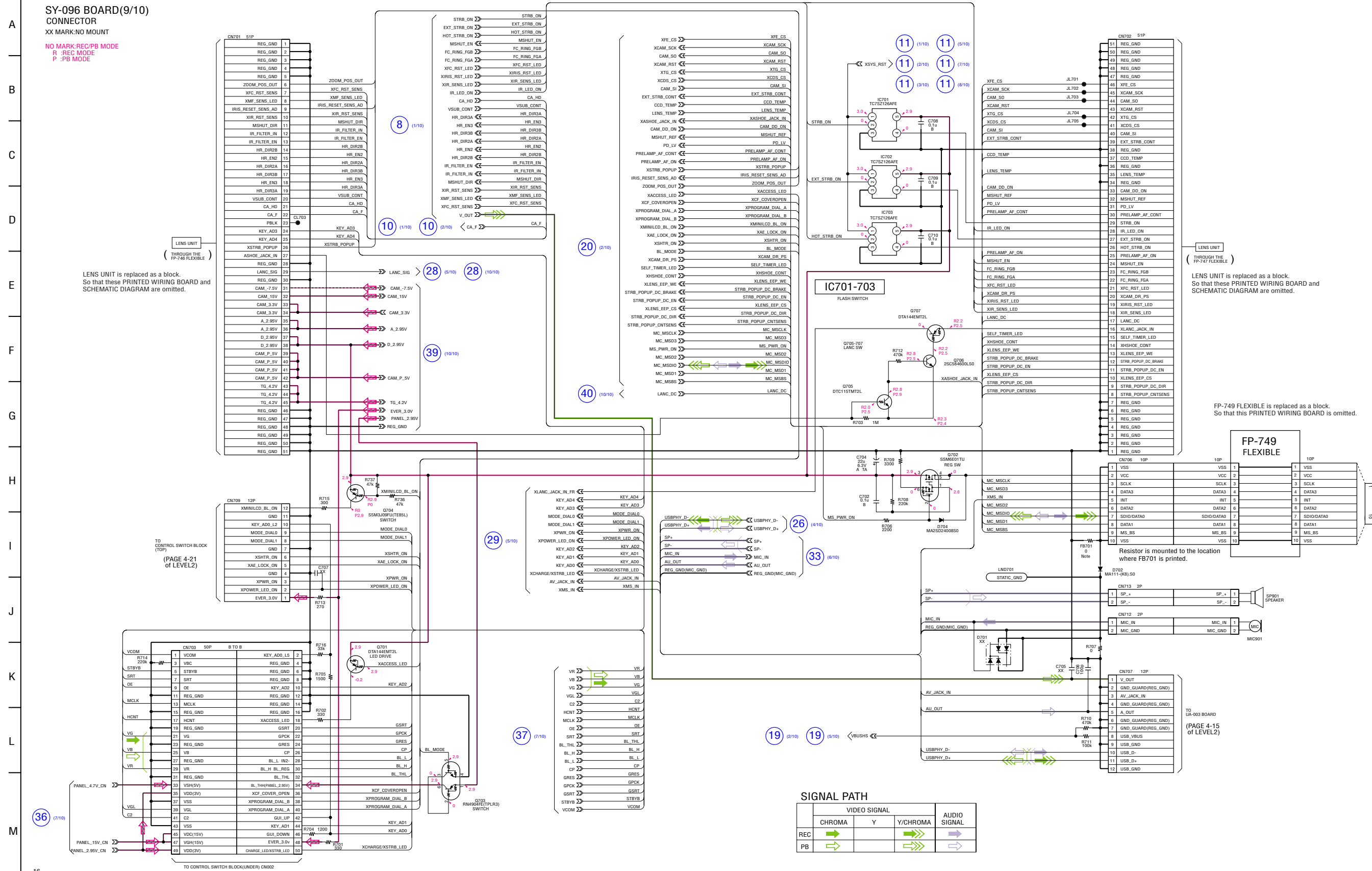
For Schematic Diagram  
 • Refer to page 4-59 for printed wiring board.





For Schematic Diagram
Refer to page 4-59 for printed wiring board.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21



SY-096 BOARD(9/10) CONNECTOR
NO MARK: REC/PB MODE
R : REC MODE
P : PB MODE

LENS UNIT is replaced as a block. So that these PRINTED WIRING BOARD and SCHEMATIC DIAGRAM are omitted.

LENS UNIT is replaced as a block. So that these PRINTED WIRING BOARD and SCHEMATIC DIAGRAM are omitted.

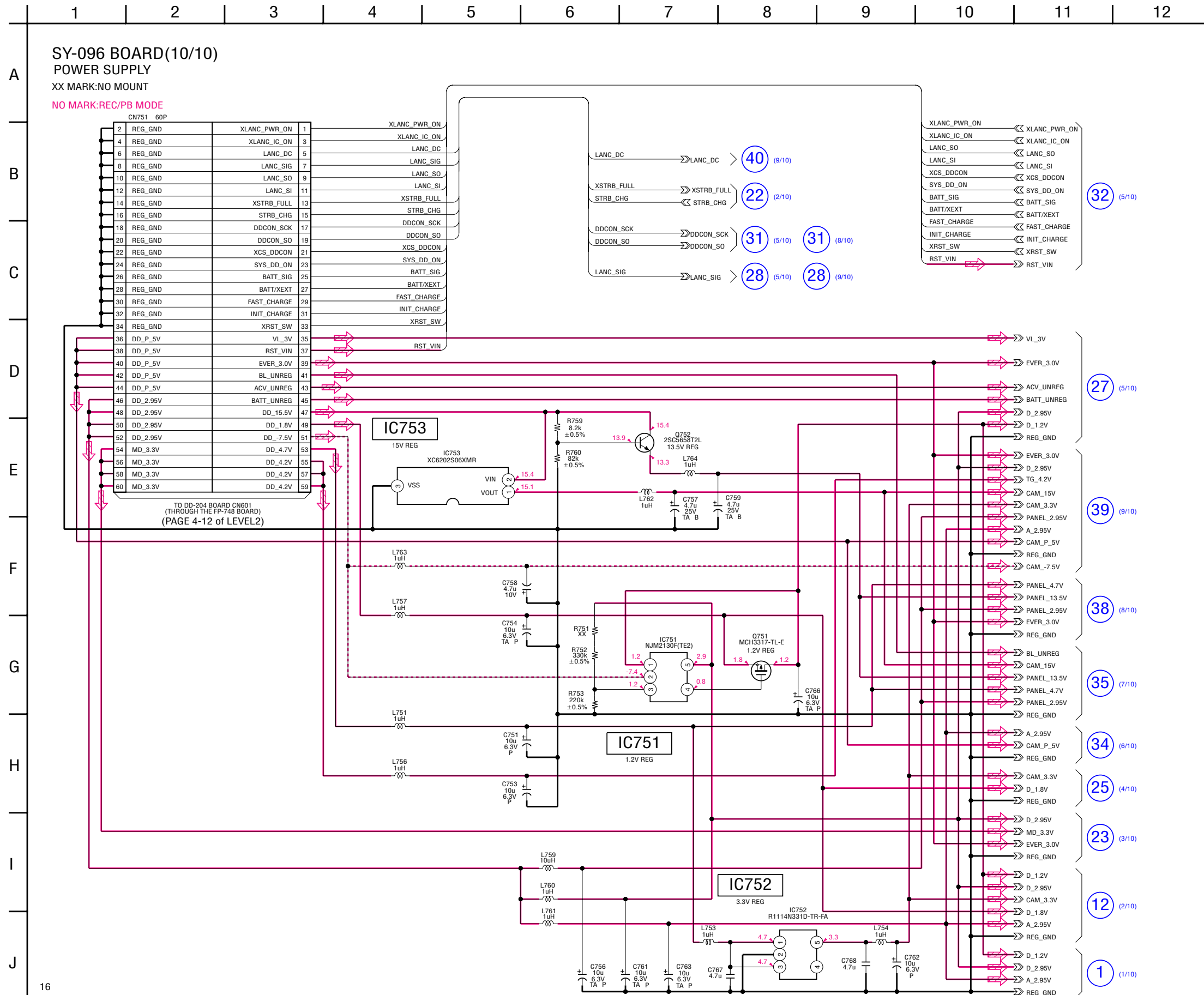
FP-749 FLEXIBLE is replaced as a block. So that this PRINTED WIRING BOARD is omitted.

TO CONTROL SWITCH BLOCK(TOP) (PAGE 4-21 of LEVEL2)

TO CONTROL SWITCH BLOCK(UNDER) CN002 (PAGE 4-23 of LEVEL2)

Table with columns: VIDEO SIGNAL (CHROMA, Y, Y/CHROMA), AUDIO SIGNAL (REC, PB). Includes a signal path diagram.

For Schematic Diagram  
 • Refer to page 4-59 for printed wiring board.





## 4-3. PRINTED WIRING BOARDS

### Link




[• SY-096 BOARD \(SIDE A\)](#)[• SY-096 BOARD \(SIDE B\)](#)[• COMMON NOTE FOR SCHEMATIC DIAGRAMS](#)[• MOUNTED PARTS LOCATION](#)

| <b>Board Name</b> | <b>Function</b>   |
|-------------------|---|
| SY-096            | CAMERA DSP, CAMERA SYSTEM CONTROL, CF DRIVE I/F, USB I/F, MODE CONTROL, AUDIO AMP, LCD DRIVER, EVF, LCD DRIVER, CONNECTOR, POWER SUPPLY |

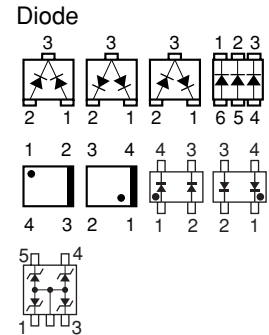
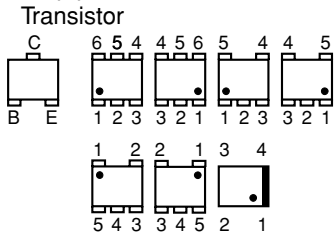
**4-3. PRINTED WIRING BOARDS**

**THIS NOTE IS COMMON FOR WIRING BOARDS**  
**(In addition to this, the necessary note is printed in each block)**

**(For printed wiring boards)**

-  : Uses unleaded solder.
-  : Pattern from the side which enables seeing.  
 (The other layers' patterns are not indicated)
- Through hole is omitted.
- Circled numbers refer to waveforms.
- There are a few cases that the part printed on diagram isn't mounted in this model.
-  : panel designation


• Chip parts.



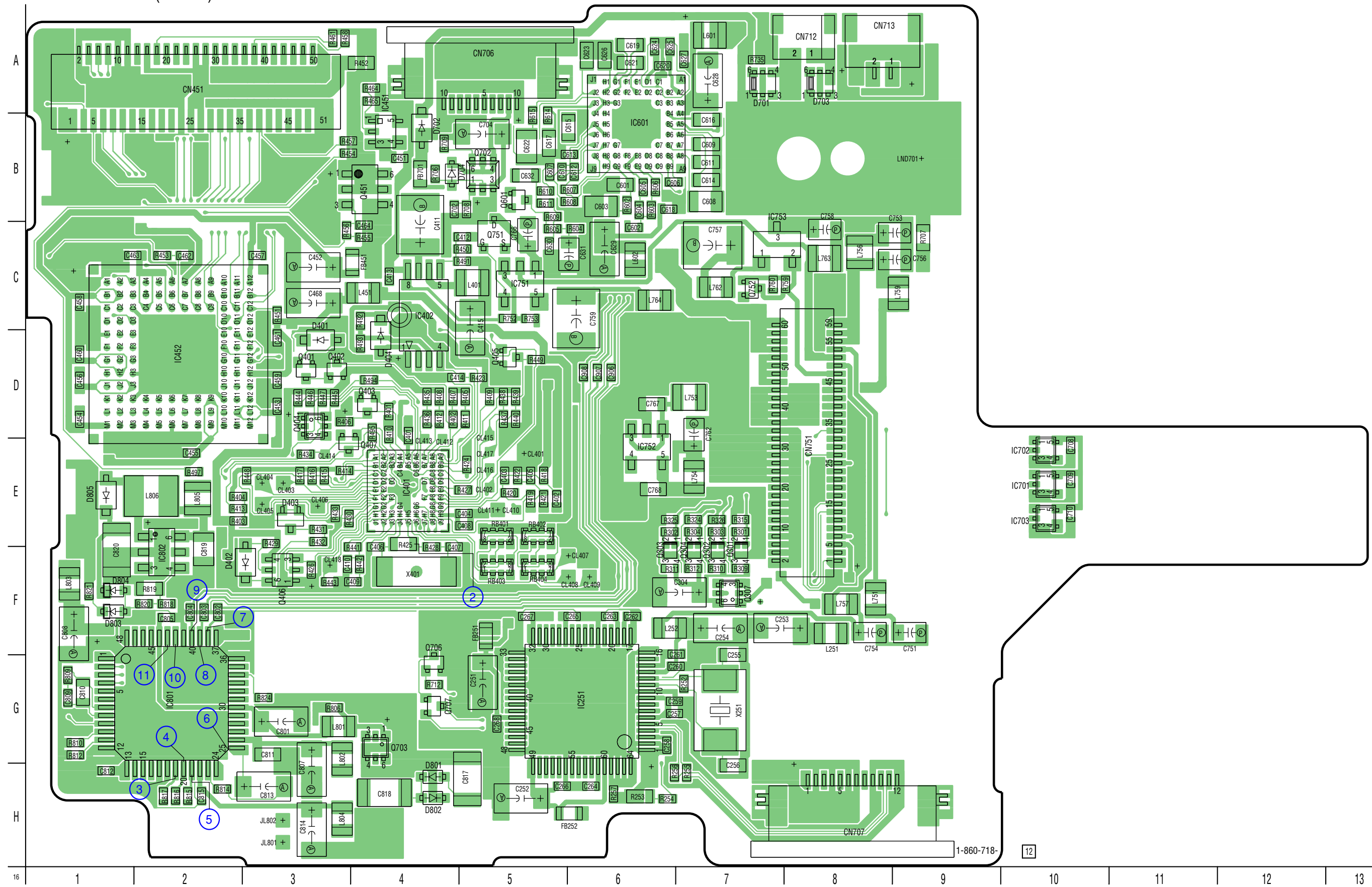
**BOARD INFORMATION**

| board name | parts location<br>(shown on page) | pattern          |                  | CSP IC                            |
|------------|-----------------------------------|------------------|------------------|-----------------------------------|
|            |                                   | number of layers | layers not shown |                                   |
| DD-204     | 4-63                              | 6                | 2 to 5           | —                                 |
| LR-018     | —                                 | 1                | —                | —                                 |
| ST-088     | 4-63                              | 6                | 2 to 5           | —                                 |
| MT-067     | —                                 | 1                | —                | —                                 |
| LS-067     | —                                 | 1                | —                | —                                 |
| SI-037     | —                                 | 1                | —                | —                                 |
| LB-091     | —                                 | 1                | —                | —                                 |
| UA-003     | 4-63                              | 1                | —                | —                                 |
| CF-097     | 4-63                              | 2                | —                | —                                 |
| AJ-007     | 4-63                              | 2                | —                | —                                 |
| SW-410     | 4-63                              | 2                | —                | —                                 |
| FP-748     | —                                 | 1                | —                | —                                 |
| SY-096     | 4-65                              | 8                | 2 to 7           | IC301, 302, 401, 452,<br>501, 601 |

• Refer to page 4-47 for common note for printed wiring board.

•  : Uses unleaded solder.


SY-096 BOARD(SIDE A)



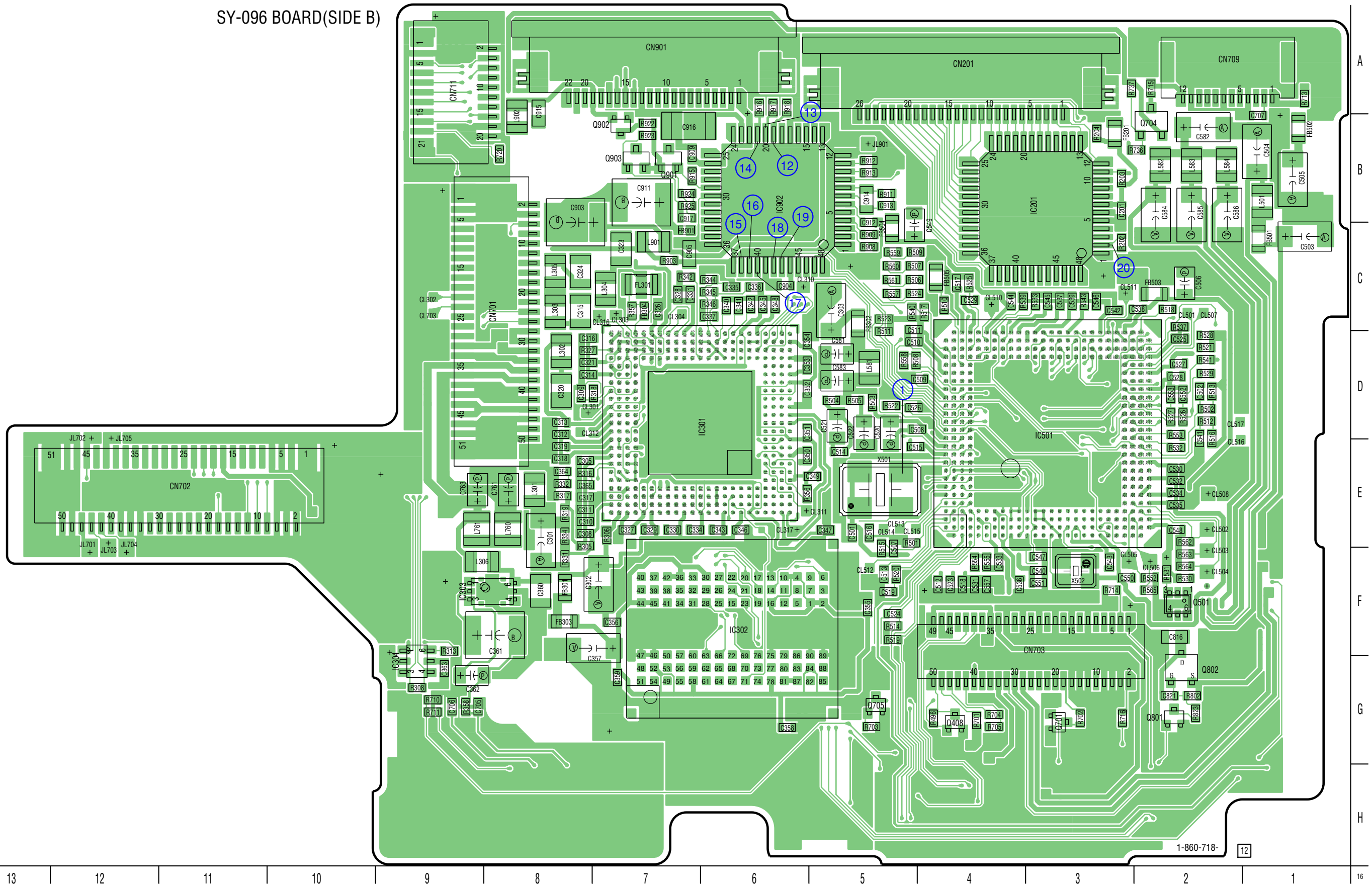
4-2. SCHEMATIC DIAGRAMS

4-3. PRINTED WIRING BOARDS

MOUNTED PARTS LOCATION

• Refer to page 4-47 for common note for printed wiring board. •  : Uses unleaded solder.

SY-096 BOARD(SIDE B)



4-4. MOUNTED PARTS LOCATION

no mark : side A  
\* mark : side B

SY-096 BOARD

|        |     |        |     |        |     |         |     |        |     |        |     |        |     |        |     |
|--------|-----|--------|-----|--------|-----|---------|-----|--------|-----|--------|-----|--------|-----|--------|-----|
| * C201 | B-3 | C410   | F-3 | C604   | B-6 | * CN201 | A-4 | * L583 | B-2 | * R327 | D-8 | * R506 | C-5 | R809   | G-1 |
| C251   | G-5 | C411   | C-4 | C605   | B-6 | CN451   | A-2 | * L584 | B-2 | * R331 | F-8 | * R507 | C-5 | R810   | G-1 |
| C252   | H-5 | C412   | C-5 | C606   | B-6 | * CN701 | C-8 | L601   | A-7 | * R332 | E-8 | * R508 | D-5 | R812   | G-1 |
| C253   | F-7 | C413   | C-4 | C607   | B-5 | * CN702 | E-9 | L602   | C-6 | * R334 | E-8 | * R509 | C-5 | R814   | H-2 |
| C254   | F-7 | C414   | D-4 | C608   | B-7 | * CN703 | F-3 | L751   | F-8 | * R342 | C-7 | * R510 | C-4 | R815   | H-2 |
| C255   | F-7 | C415   | C-5 | C609   | B-7 | CN706   | A-5 | L753   | D-7 | * R344 | C-6 | * R511 | C-5 | R816   | H-2 |
| C256   | G-7 | C451   | B-4 | C610   | B-5 | CN707   | H-8 | L754   | E-7 | * R345 | C-6 | * R512 | D-2 | R817   | H-2 |
| C257   | G-6 | C452   | C-3 | C611   | B-7 | * CN709 | A-2 | L756   | C-8 | * R346 | C-6 | * R513 | D-2 | R818   | F-2 |
| C258   | G-6 | C453   | D-3 | C612   | B-6 | * CN711 | A-9 | L757   | F-8 | * R356 | E-6 | * R514 | F-5 | R819   | F-2 |
| C259   | G-6 | C454   | D-1 | C613   | B-5 | CN712   | A-8 | L759   | C-9 | * R357 | C-7 | * R515 | E-5 | R820   | F-2 |
| C260   | G-6 | C455   | E-2 | C614   | B-7 | CN713   | A-8 | * L760 | E-8 | * R358 | G-9 | * R516 | D-2 | R821   | F-1 |
| C261   | F-6 | C456   | D-1 | C615   | B-5 | CN751   | E-8 | * L761 | E-9 | R401   | D-4 | * R517 | C-4 | * R823 | G-2 |
| C262   | F-6 | C457   | C-3 | C616   | B-7 | * CN901 | A-7 | L762   | C-7 | R402   | D-4 | * R518 | C-2 | R824   | G-3 |
| C263   | F-6 | C458   | C-1 | C617   | B-5 |         |     | L763   | C-8 | R403   | E-2 | * R519 | F-5 | * R903 | C-7 |
| C264   | H-6 | C459   | D-3 | C618   | B-6 | D401    | D-3 | L764   | C-6 | R404   | E-2 | * R520 | F-5 | * R908 | C-5 |
| C265   | F-6 | C460   | D-1 | C619   | A-6 | D402    | F-2 | L801   | G-3 | R405   | D-5 | * R521 | D-2 | * R909 | C-5 |
| C266   | H-5 | C461   | D-3 | C620   | A-6 | D403    | E-3 | L802   | G-3 | R406   | D-3 | * R522 | D-5 | * R911 | B-5 |
| C267   | F-5 | C462   | C-2 | C621   | A-6 | D404    | D-4 | L803   | F-1 | R407   | D-4 | * R523 | C-5 | * R912 | B-5 |
| C268   | G-5 | C463   | C-1 | C622   | B-5 | D701    | A-7 | L804   | H-3 | R408   | D-4 | * R524 | C-5 | * R913 | B-5 |
| * C301 | E-8 | C464   | C-4 | C623   | A-6 | D702    | B-4 | L805   | E-2 | R409   | D-5 | * R525 | C-4 | * R915 | B-7 |
| * C302 | F-7 | C468   | C-3 | C624   | A-6 | D703    | A-8 | L806   | E-2 | R410   | D-4 | * R526 | D-2 | * R916 | A-6 |
| * C303 | C-5 | * C501 | E-5 | C625   | A-6 | D704    | B-4 | * L901 | C-7 | R411   | D-5 | * R527 | D-2 | * R917 | A-6 |
| C304   | F-6 | * C502 | D-2 | C626   | A-6 | D801    | H-4 | * L902 | A-8 | R412   | D-4 | * R528 | D-2 | * R918 | A-6 |
| * C305 | E-8 | * C503 | C-1 | C627   | A-7 | D802    | H-4 |        |     | R413   | E-2 | * R529 | D-2 | * R922 | B-7 |
| * C308 | E-8 | * C504 | B-1 | C628   | A-7 | D803    | F-1 | Q301   | F-7 | R414   | E-3 | * R530 | F-2 | * R923 | B-7 |
| * C309 | D-8 | * C505 | B-1 | C629   | C-6 | D804    | F-1 | Q302   | F-7 | R415   | E-3 | * R531 | F-2 | * R924 | B-7 |
| * C310 | E-8 | * C506 | C-2 | C630   | C-5 | D805    | E-1 | Q303   | F-6 | R416   | E-3 | * R532 | E-2 | * R925 | B-7 |
| * C311 | E-8 | * C507 | E-5 | C631   | C-5 |         |     | Q304   | F-7 | R417   | E-3 | * R533 | C-3 |        |     |
| * C312 | D-8 | * C508 | D-4 | C632   | B-5 | E-10    | E-8 | Q307   | F-7 | R418   | E-5 | * R537 | C-2 | RB401  | E-5 |
| * C313 | D-8 | * C509 | D-4 | C702   | B-4 | * E-11  | E-9 | Q401   | D-3 | R419   | E-5 | * R539 | C-4 | RB402  | E-5 |
| * C314 | D-8 | * C510 | D-5 | C704   | B-5 |         |     | Q402   | D-3 | R420   | E-5 | * R540 | C-5 | RB403  | F-5 |
| * C315 | C-8 | * C511 | C-5 | * C705 | G-9 | * FB201 | B-3 | Q403   | D-4 | R421   | E-5 | * R541 | D-2 | RB404  | F-5 |
| * C316 | D-8 | * C512 | F-4 | * C706 | G-9 | FB251   | F-5 | Q404   | D-3 | R422   | E-5 | * R543 | C-3 |        |     |
| * C317 | E-8 | * C513 | F-5 | * C707 | B-1 | FB252   | H-5 | Q405   | D-5 | R423   | D-5 | * R552 | F-2 | X251   | G-7 |
| * C318 | E-8 | * C514 | E-5 | C708   | E-8 | * FB301 | F-8 | Q406   | F-3 | R424   | E-5 | * R553 | D-2 | X401   | F-4 |
| * C319 | E-8 | * C515 | E-5 | C709   | E-8 | * FB302 | C-5 | Q407   | E-4 | R425   | E-4 | * R554 | F-4 | * X501 | E-5 |
| * C320 | D-8 | * C516 | E-5 | C710   | E-8 | * FB303 | F-8 | * Q408 | G-4 | R426   | F-3 | * R555 | F-4 | * X502 | F-3 |
| * C321 | D-8 | * C517 | C-4 | C751   | F-9 | * FB304 | C-7 | Q451   | B-4 | R427   | E-5 | * R557 | C-5 |        |     |
| * C323 | C-7 | * C518 | F-4 | C753   | C-9 | FB451   | C-3 | * Q501 | F-2 | R428   | E-4 | * R558 | D-5 |        |     |
| * C324 | C-8 | * C519 | F-5 | C754   | F-8 | * FB501 | C-1 | Q601   | B-5 | R429   | E-3 | * R559 | C-5 |        |     |
| * C326 | C-7 | * C520 | D-5 | C756   | C-9 | * FB502 | B-1 | * Q701 | G-3 | R430   | E-3 | * R560 | C-5 |        |     |
| * C327 | E-7 | * C521 | D-5 | C757   | C-7 | * FB503 | C-2 | Q702   | B-5 | R431   | E-3 | * R561 | C-5 |        |     |
| * C328 | C-7 | * C522 | D-5 | C758   | C-8 | * FB504 | C-5 | Q703   | G-4 | R432   | E-3 | * R562 | E-2 |        |     |
| * C329 | E-7 | * C523 | F-4 | C759   | C-6 | * FB505 | C-4 | * Q704 | B-2 | R433   | E-3 | * R563 | F-2 |        |     |
| * C330 | E-7 | * C524 | F-5 | * C761 | E-8 | FB701   | B-4 | * Q705 | G-5 | R434   | E-3 | * R564 | F-2 |        |     |
| * C331 | C-7 | * C525 | D-2 | C762   | D-7 | * FB901 | C-7 | Q706   | G-4 | R435   | D-4 | * R565 | F-2 |        |     |
| * C334 | E-7 | * C526 | D-5 | * C763 | E-9 |         |     | Q707   | G-4 | R436   | D-4 | R602   | B-6 |        |     |
| * C335 | C-6 | * C527 | D-2 | C766   | C-5 | * FL301 | C-7 | Q751   | C-5 | R437   | D-5 | R603   | B-6 |        |     |
| * C336 | C-6 | * C528 | D-2 | C767   | D-6 |         |     | Q752   | C-7 | R438   | D-5 | R604   | C-6 |        |     |
| * C337 | C-6 | * C529 | C-4 | C768   | E-6 | * IC201 | B-3 | * Q801 | G-2 | R439   | D-5 | R605   | C-5 |        |     |
| * C340 | C-6 | * C530 | E-2 | C801   | G-3 | IC251   | G-6 | * Q802 | G-2 | R440   | D-5 | R606   | B-6 |        |     |
| * C341 | C-6 | * C531 | F-4 | C802   | F-2 | * IC301 | D-6 | * Q901 | B-7 | R441   | E-4 | R607   | B-5 |        |     |
| * C342 | C-6 | * C532 | E-2 | C803   | F-2 | * IC302 | F-6 | * Q902 | B-7 | R442   | F-4 | R608   | B-5 |        |     |
| * C343 | E-6 | * C533 | F-4 | C804   | F-2 | * IC303 | F-8 | * Q903 | B-7 | R443   | F-3 | R609   | B-5 |        |     |
| * C345 | C-6 | * C534 | E-2 | C805   | F-2 | * IC304 | G-9 |        |     | R444   | D-3 | R610   | B-5 |        |     |
| * C346 | E-6 | * C535 | E-2 | C807   | H-3 | IC401   | E-4 | * R202 | C-3 | R445   | D-3 | R611   | B-5 |        |     |
| * C347 | E-5 | * C536 | F-4 | C808   | F-1 | IC402   | C-4 | * R203 | B-3 | R446   | D-3 | R614   | A-5 |        |     |
| * C348 | C-6 | * C537 | C-3 | C809   | G-1 | IC451   | B-4 | * R204 | B-3 | R447   | D-3 | R615   | A-5 |        |     |
| * C349 | E-5 | * C538 | C-2 | C810   | G-1 | IC452   | D-2 | R252   | G-7 | R448   | E-3 | * R701 | G-4 |        |     |
| * C350 | E-6 | * C539 | C-3 | C811   | G-3 | * IC501 | D-3 | R253   | H-6 | R449   | D-5 | * R702 | G-3 |        |     |
| * C351 | D-6 | * C540 | F-3 | C812   | H-1 | IC601   | B-6 | R254   | H-6 | R450   | C-5 | * R703 | G-5 |        |     |
| * C352 | D-6 | * C541 | D-2 | C813   | H-3 | IC701   | E-8 | R255   | H-7 | R451   | C-3 | * R704 | G-4 |        |     |
| * C353 | D-6 | * C542 | C-3 | C814   | H-3 | IC702   | E-8 | R256   | H-6 | R452   | A-4 | * R705 | G-4 |        |     |
| * C354 | D-6 | * C543 | F-3 | C815   | H-2 | IC703   | E-8 | R257   | H-6 | R453   | C-2 | R706   | B-4 |        |     |
| * C355 | F-5 | * C544 | C-4 | * C816 | F-2 | IC751   | C-5 | R301   | E-7 | R454   | B-3 | R707   | C-9 |        |     |
| * C356 | F-7 | * C545 | C-3 | C817   | H-5 | IC752   | E-6 | R302   | E-6 | R455   | C-4 | R708   | B-5 |        |     |
| * C357 | F-7 | * C546 | C-3 | C818   | H-4 | IC753   | C-7 | R303   | E-7 | R456   | C-3 | R709   | B-4 |        |     |
| * C358 | G-6 | * C547 | F-3 | C819   | F-2 | IC801   | G-2 | R304   | E-7 | R457   | B-3 | * R710 | G-9 |        |     |
| * C359 | G-7 | * C548 | E-2 | C820   | F-1 | IC802   | F-2 | * R305 | E-8 | R458   | A-3 | * R711 | G-9 |        |     |
| * C360 | F-8 | * C549 | C-5 | * C821 | G-2 | * IC902 | B-6 | * R306 | E-7 | R461   | A-3 | R712   | G-4 |        |     |
| * C361 | F-8 | * C550 | F-3 | * C903 | B-8 |         |     | * R308 | G-9 | R464   | A-4 | * R713 | A-1 |        |     |
| * C362 | G-9 | * C551 | F-3 | * C904 | C-6 | L251    | F-8 | R309   | F-7 | R465   | A-4 | * R714 | F-3 |        |     |
| * C363 | G-9 | * C552 | D-2 | * C905 | C-7 | L252    | F-6 | R310   | F-7 | R491   | C-5 | * R715 | A-2 |        |     |
| * C364 | E-8 | * C553 | D-2 | C906   | D-6 | * L301  | E-8 | R311   | F-6 | R492   | C-4 | * R716 | G-3 |        |     |
| * C365 | E-8 | * C557 | F-4 | C907   | D-6 | * L302  | D-8 | R312   | F-7 | R493   | D-4 | * R720 | B-8 |        |     |
| C401   | D-4 | * C581 | D-5 | C908   | D-6 | * L303  | C-8 | * R313 | F-9 | R494   | D-4 | R735   | A-7 |        |     |
| C402   | E-5 | * C582 | B-2 | * C909 | B-7 | * L304  | C-7 | R315   | E-7 | R495   | D-4 | * R736 | B-2 |        |     |
| C403   | E-5 | * C583 | D-5 | * C911 | B-7 | * L305  | C-8 | * R316 | E-8 | * R496 | G-4 | * R737 | A-3 |        |     |
| C404   | E-5 | * C584 | B-2 | * C912 | B-5 | * L306  | F-8 | * R317 | E-8 | R497   | E-2 | R752   | C-5 |        |     |
| C405   | E-5 | * C585 | B-2 | * C913 | B-5 | L401    | C-5 | * R318 | D-7 | * R501 | E-5 | R753   | C-5 |        |     |
| C406   | E-4 | * C586 | B-2 | * C914 | B-5 | L451    | C-4 | * R319 | E-8 | * R502 | D-2 | R759   | C-7 |        |     |
| C407   | E-4 | C601   | B-6 | * C915 | A-8 | * L501  | B-1 | R324   | E-7 | * R503 | D-5 | R760   | C-7 |        |     |
| C408   | E-5 | C602   | C-6 | * C916 | B-7 | * L581  | D-5 | R325   | E-6 | * R504 | D-5 | * R802 | G-2 |        |     |
| C409   | F-3 | C603   | B-6 | * C917 | B-7 | * L582  | B-2 | R326   | E-7 | * R505 | D-5 | R806   | G-3 |        |     |

## SECTION 5 REPAIR PARTS LIST

### NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- 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.
- CAPACITORS:  
uF:  $\mu$ F
- COILS  
uH:  $\mu$ H
- RESISTORS  
All resistors are in ohms.  
METAL: metal-film resistor  
METAL OXIDE: Metal Oxide-film resistor  
F: nonflammable
- SEMICONDUCTORS  
In each case, u:  $\mu$ , for example:  
uA...:  $\mu$ A... , uPA... ,  $\mu$ PA... ,  
uPB... ,  $\mu$ PB... , uPC... ,  $\mu$ PC... ,  
uPD... ,  $\mu$ PD...
- Abbreviation  
CND : Canadian model  
AUS : Australian model  
HK : Hong Kong model  
KR : Korea model  
JE : Tourist model  
J : Japanese model

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

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.

## 5-2. ELECTRICAL PARTS LIST

| Ref. No.     | Part No.                             | Description                   | Ref. No. | Part No.     | Description                      |
|--------------|--------------------------------------|-------------------------------|----------|--------------|----------------------------------|
| A-7079-008-A | SY-096 BOARD, COMPLETE (SERVICE)     |                               | C346     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
|              | *****                                |                               | C347     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
|              | (Including IC301 (KI (5M SA) BOARD)) |                               | C348     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
|              | < CAPACITOR >                        |                               | C349     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
|              |                                      |                               | C350     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C201         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C351     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C251         | 1-135-259-11                         | TANTAL. CHIP 10uF 20.00% 6.3V | C352     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C252         | 1-135-259-11                         | TANTAL. CHIP 10uF 20.00% 6.3V | C353     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C253         | 1-135-259-11                         | TANTAL. CHIP 10uF 20.00% 6.3V | C354     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C254         | 1-135-259-11                         | TANTAL. CHIP 10uF 20.00% 6.3V | C355     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C255         | 1-162-912-11                         | CERAMIC CHIP 7PF 0.5PF 50V    | C356     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C256         | 1-162-912-11                         | CERAMIC CHIP 7PF 0.5PF 50V    | C357     | 1-119-750-11 | TANTAL. CHIP 22uF 20.00% 6.3V    |
| C257         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C358     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C258         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C359     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C259         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C360     | 1-137-710-11 | CERAMIC CHIP 10uF 20% 6.3V       |
| C260         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C361     | 1-128-964-91 | TANTAL. CHIP 100uF 20% 6.3V      |
| C261         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C362     | 1-100-786-91 | TANTAL. CHIP 22uF 20% 6.3V       |
| C262         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C364     | 1-164-943-11 | CERAMIC CHIP 0.01uF 10.00% 16V   |
| C263         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C365     | 1-107-819-11 | CERAMIC CHIP 0.022uF 10.00% 16V  |
| C264         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C401     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C265         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C402     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C266         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C403     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C267         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C404     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C268         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C405     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C301         | 1-135-259-11                         | TANTAL. CHIP 10uF 20.00% 6.3V | C406     | 1-164-850-11 | CERAMIC CHIP 10PF 0.50PF 50V     |
| C302         | 1-135-259-11                         | TANTAL. CHIP 10uF 20.00% 6.3V | C407     | 1-164-852-11 | CERAMIC CHIP 12PF 5.00% 50V      |
| C303         | 1-104-847-11                         | TANTAL. CHIP 22uF 20.00% 2.5V | C408     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C304         | 1-135-259-11                         | TANTAL. CHIP 10uF 20.00% 6.3V | C409     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C305         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C410     | 1-164-943-11 | CERAMIC CHIP 0.01uF 10.00% 16V   |
| C308         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C411     | 1-119-751-11 | TANTAL. CHIP 22uF 20.00% 16V     |
| C309         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C412     | 1-164-941-11 | CERAMIC CHIP 0.0047uF 10.00% 16V |
| C310         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C413     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C311         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C414     | 1-164-939-11 | CERAMIC CHIP 0.0022uF 10.00% 50V |
| C312         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C415     | 1-119-750-11 | TANTAL. CHIP 22uF 20.00% 6.3V    |
| C313         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C451     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C314         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C452     | 1-135-259-11 | TANTAL. CHIP 10uF 20.00% 6.3V    |
| C315         | 1-137-710-11                         | CERAMIC CHIP 10uF 20% 6.3V    | C453     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C316         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C454     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C317         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C455     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C318         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C456     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C319         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C457     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C320         | 1-137-710-11                         | CERAMIC CHIP 10uF 20% 6.3V    | C458     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C321         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C459     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C323         | 1-137-710-11                         | CERAMIC CHIP 10uF 20% 6.3V    | C460     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C324         | 1-137-710-11                         | CERAMIC CHIP 10uF 20% 6.3V    | C461     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C326         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C462     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C327         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C463     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C328         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C464     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C329         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C468     | 1-135-259-11 | TANTAL. CHIP 10uF 20.00% 6.3V    |
| C330         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C501     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C331         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C503     | 1-119-750-11 | TANTAL. CHIP 22uF 20.00% 6.3V    |
| C334         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C504     | 1-119-750-11 | TANTAL. CHIP 22uF 20.00% 6.3V    |
| C335         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C505     | 1-119-750-11 | TANTAL. CHIP 22uF 20.00% 6.3V    |
| C336         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C506     | 1-127-895-91 | TANTAL. CHIP 22uF 20% 4V         |
| C337         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C507     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C340         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C508     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C341         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C509     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C342         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C510     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C343         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C511     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |
| C345         | 1-125-777-11                         | CERAMIC CHIP 0.1uF 10.00% 10V | C512     | 1-125-777-11 | CERAMIC CHIP 0.1uF 10.00% 10V    |



| Ref. No. | Part No.     | Description  |          |        |      |  |  |  |  |  |
|----------|--------------|--------------|----------|--------|------|--|--|--|--|--|
| C513     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C515     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C516     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C517     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C518     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C519     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C520     | 1-127-895-91 | TANTAL. CHIP | 22uF     | 20%    | 4V   |  |  |  |  |  |
| C522     | 1-127-895-91 | TANTAL. CHIP | 22uF     | 20%    | 4V   |  |  |  |  |  |
| C523     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C524     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C525     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C526     | 1-164-931-11 | CERAMIC CHIP | 100PF    | 10.00% | 50V  |  |  |  |  |  |
| C527     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C528     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C529     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C530     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C531     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C532     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C533     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C534     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C535     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C536     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C537     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C538     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C539     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C540     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C542     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C543     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C544     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C545     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C546     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C548     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C549     | 1-127-895-91 | TANTAL. CHIP | 22uF     | 20%    | 4V   |  |  |  |  |  |
| C551     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C552     | 1-164-940-11 | CERAMIC CHIP | 0.0033uF | 10.00% | 16V  |  |  |  |  |  |
| C553     | 1-164-940-11 | CERAMIC CHIP | 0.0033uF | 10.00% | 16V  |  |  |  |  |  |
| C557     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C581     | 1-127-895-91 | TANTAL. CHIP | 22uF     | 20%    | 4V   |  |  |  |  |  |
| C582     | 1-119-750-11 | TANTAL. CHIP | 22uF     | 20.00% | 6.3V |  |  |  |  |  |
| C583     | 1-127-895-91 | TANTAL. CHIP | 22uF     | 20%    | 4V   |  |  |  |  |  |
| C584     | 1-119-750-11 | TANTAL. CHIP | 22uF     | 20.00% | 6.3V |  |  |  |  |  |
| C585     | 1-119-750-11 | TANTAL. CHIP | 22uF     | 20.00% | 6.3V |  |  |  |  |  |
| C586     | 1-119-750-11 | TANTAL. CHIP | 22uF     | 20.00% | 6.3V |  |  |  |  |  |
| C601     | 1-125-837-91 | CERAMIC CHIP | 1uF      | 10%    | 6.3V |  |  |  |  |  |
| C603     | 1-127-760-11 | CERAMIC CHIP | 4.7uF    | 10%    | 6.3V |  |  |  |  |  |
| C604     | 1-107-819-11 | CERAMIC CHIP | 0.022uF  | 10.00% | 16V  |  |  |  |  |  |
| C605     | 1-107-819-11 | CERAMIC CHIP | 0.022uF  | 10.00% | 16V  |  |  |  |  |  |
| C606     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C607     | 1-107-819-11 | CERAMIC CHIP | 0.022uF  | 10.00% | 16V  |  |  |  |  |  |
| C608     | 1-137-710-11 | CERAMIC CHIP | 10uF     | 20%    | 6.3V |  |  |  |  |  |
| C609     | 1-165-908-11 | CERAMIC CHIP | 1uF      | 10%    | 10V  |  |  |  |  |  |
| C611     | 1-165-908-11 | CERAMIC CHIP | 1uF      | 10%    | 10V  |  |  |  |  |  |
| C612     | 1-107-819-11 | CERAMIC CHIP | 0.022uF  | 10.00% | 16V  |  |  |  |  |  |
| C614     | 1-165-908-11 | CERAMIC CHIP | 1uF      | 10%    | 10V  |  |  |  |  |  |
| C615     | 1-117-863-11 | CERAMIC CHIP | 0.47uF   | 10.00% | 6.3V |  |  |  |  |  |
| C616     | 1-165-908-11 | CERAMIC CHIP | 1uF      | 10%    | 10V  |  |  |  |  |  |
| C617     | 1-125-837-91 | CERAMIC CHIP | 1uF      | 10%    | 6.3V |  |  |  |  |  |
| C618     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C619     | 1-117-863-11 | CERAMIC CHIP | 0.47uF   | 10.00% | 6.3V |  |  |  |  |  |
| C621     | 1-165-908-11 | CERAMIC CHIP | 1uF      | 10%    | 10V  |  |  |  |  |  |
| C622     | 1-127-760-11 | CERAMIC CHIP | 4.7uF    | 10%    | 6.3V |  |  |  |  |  |
| C623     | 1-125-837-91 | CERAMIC CHIP | 1uF      | 10%    | 6.3V |  |  |  |  |  |
| C624     | 1-119-923-11 | CERAMIC CHIP | 0.047uF  | 10.00% | 10V  |  |  |  |  |  |
| C625     | 1-119-923-11 | CERAMIC CHIP | 0.047uF  | 10.00% | 10V  |  |  |  |  |  |
| C626     | 1-162-964-11 | CERAMIC CHIP | 0.001uF  | 10%    | 50V  |  |  |  |  |  |
| C627     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C628     | 1-104-851-11 | TANTAL. CHIP | 10uF     | 20.00% | 10V  |  |  |  |  |  |
| C629     | 1-135-259-11 | TANTAL. CHIP | 10uF     | 20.00% | 6.3V |  |  |  |  |  |
| C630     | 1-164-937-11 | CERAMIC CHIP | 0.001uF  | 10.00% | 50V  |  |  |  |  |  |
| C631     | 1-127-578-91 | TANTAL. CHIP | 3.3uF    | 20%    | 6.3V |  |  |  |  |  |
| C632     | 1-117-863-11 | CERAMIC CHIP | 0.47uF   | 10.00% | 6.3V |  |  |  |  |  |
| C702     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C704     | 1-119-750-11 | TANTAL. CHIP | 22uF     | 20.00% | 6.3V |  |  |  |  |  |
| C706     | 1-164-874-11 | CERAMIC CHIP | 100PF    | 5.00%  | 50V  |  |  |  |  |  |
| C708     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C709     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C710     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C751     | 1-117-919-11 | TANTAL. CHIP | 10uF     | 20.00% | 6.3V |  |  |  |  |  |
| C753     | 1-117-919-11 | TANTAL. CHIP | 10uF     | 20.00% | 6.3V |  |  |  |  |  |
| C754     | 1-117-919-11 | TANTAL. CHIP | 10uF     | 20.00% | 6.3V |  |  |  |  |  |
| C756     | 1-117-919-11 | TANTAL. CHIP | 10uF     | 20.00% | 6.3V |  |  |  |  |  |
| C757     | 1-113-987-11 | TANTAL. CHIP | 4.7uF    | 20.00% | 25V  |  |  |  |  |  |
| C758     | 1-131-860-91 | TANTAL. CHIP | 4.7uF    | 20%    | 10V  |  |  |  |  |  |
| C759     | 1-113-987-11 | TANTAL. CHIP | 4.7uF    | 20.00% | 25V  |  |  |  |  |  |
| C761     | 1-117-919-11 | TANTAL. CHIP | 10uF     | 20.00% | 6.3V |  |  |  |  |  |
| C762     | 1-117-919-11 | TANTAL. CHIP | 10uF     | 20.00% | 6.3V |  |  |  |  |  |
| C763     | 1-117-919-11 | TANTAL. CHIP | 10uF     | 20.00% | 6.3V |  |  |  |  |  |
| C766     | 1-117-919-11 | TANTAL. CHIP | 10uF     | 20.00% | 6.3V |  |  |  |  |  |
| C767     | 1-100-507-91 | CERAMIC CHIP | 4.7uF    | 20%    | 6.3V |  |  |  |  |  |
| C768     | 1-100-507-91 | CERAMIC CHIP | 4.7uF    | 20%    | 6.3V |  |  |  |  |  |
| C801     | 1-119-750-11 | TANTAL. CHIP | 22uF     | 20.00% | 6.3V |  |  |  |  |  |
| C802     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10.00% | 16V  |  |  |  |  |  |
| C803     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10.00% | 16V  |  |  |  |  |  |
| C804     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10.00% | 16V  |  |  |  |  |  |
| C805     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C807     | 1-113-986-11 | TANTAL. CHIP | 2.2uF    | 20.00% | 25V  |  |  |  |  |  |
| C808     | 1-113-986-11 | TANTAL. CHIP | 2.2uF    | 20.00% | 25V  |  |  |  |  |  |
| C809     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C810     | 1-164-739-11 | CERAMIC CHIP | 560PF    | 5.00%  | 50V  |  |  |  |  |  |
| C811     | 1-107-826-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 16V  |  |  |  |  |  |
| C812     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C813     | 1-113-994-11 | TANTAL. CHIP | 6.8uF    | 20.00% | 16V  |  |  |  |  |  |
| C814     | 1-104-851-11 | TANTAL. CHIP | 10uF     | 20.00% | 10V  |  |  |  |  |  |
| C815     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C816     | 1-107-826-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 16V  |  |  |  |  |  |
| C817     | 1-127-861-11 | CERAMIC CHIP | 2.2uF    | 10%    | 16V  |  |  |  |  |  |
| C818     | 1-127-861-11 | CERAMIC CHIP | 2.2uF    | 10%    | 16V  |  |  |  |  |  |
| C819     | 1-100-503-11 | CERAMIC CHIP | 4.7uF    | 10%    | 10V  |  |  |  |  |  |
| C820     | 1-165-596-11 | CERAMIC CHIP | 2.2uF    |        | 35V  |  |  |  |  |  |
| C903     | 1-128-964-91 | TANTAL. CHIP | 100uF    | 20%    | 6.3V |  |  |  |  |  |
| C904     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C905     | 1-125-837-91 | CERAMIC CHIP | 1uF      | 10%    | 6.3V |  |  |  |  |  |
| C906     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10.00% | 16V  |  |  |  |  |  |
| C907     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10.00% | 16V  |  |  |  |  |  |
| C908     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10.00% | 16V  |  |  |  |  |  |
| C909     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10.00% | 16V  |  |  |  |  |  |
| C911     | 1-113-987-11 | TANTAL. CHIP | 4.7uF    | 20.00% | 25V  |  |  |  |  |  |
| C912     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C913     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10.00% | 10V  |  |  |  |  |  |
| C914     | 1-164-739-11 | CERAMIC CHIP | 560PF    | 5.00%  | 50V  |  |  |  |  |  |

## SY-096

| Ref. No.         | Part No.     | Description                   |        |        |                 |
|------------------|--------------|-------------------------------|--------|--------|-----------------|
| C915             | 1-165-908-11 | CERAMIC CHIP                  | 1uF    | 10%    | 10V             |
| C916             | 1-115-566-11 | CERAMIC CHIP                  | 4.7uF  | 10.00% | 10V             |
| C917             | 1-164-943-11 | CERAMIC CHIP                  | 0.01uF | 10.00% | 16V             |
| < CONNECTOR >    |              |                               |        |        |                 |
| CN201            | 1-766-687-21 | CONNECTOR, FFC/FPC 26P        |        |        |                 |
| CN451            | 1-794-505-21 | CONNECTOR, FPC (ZIF) 51P      |        |        |                 |
| CN701            | 1-794-505-21 | CONNECTOR, FPC (ZIF) 51P      |        |        |                 |
| CN702            | 1-794-505-21 | CONNECTOR, FPC (ZIF) 51P      |        |        |                 |
| CN703            | 1-778-592-21 | CONNECTOR, BOARD TO BOARD 50P |        |        |                 |
| CN706            | 1-766-340-21 | CONNECTOR, FFC/FPC 10P        |        |        |                 |
| CN707            | 1-766-342-21 | CONNECTOR, FFC/FPC 12P        |        |        |                 |
| CN709            | 1-817-706-11 | CONNECTOR, FPC 12P            |        |        |                 |
| CN711            | 1-815-098-11 | CONNECTOR, FPC (ZIF) 21P      |        |        |                 |
| CN712            | 1-794-375-21 | PIN, CONNECTOR 2P             |        |        |                 |
| CN713            | 1-778-506-21 | PIN, CONNECTOR (PC BOARD) 2P  |        |        |                 |
| CN751            | 1-778-593-21 | CONNECTOR, BOARD TO BOARD 60P |        |        |                 |
| CN901            | 1-766-352-21 | CONNECTOR, FFC/FPC 22P        |        |        |                 |
| < DIODE >        |              |                               |        |        |                 |
| D401             | 8-719-073-01 | DIODE MA111-(K8),S0           |        |        |                 |
| D402             | 8-719-073-01 | DIODE MA111-(K8),S0           |        |        |                 |
| D404             | 8-719-027-76 | DIODE 1SS357-TPH3             |        |        |                 |
| D702             | 8-719-073-01 | DIODE MA111-(K8),S0           |        |        |                 |
| D704             | 6-500-186-01 | DIODE MA2SD24008S0            |        |        |                 |
| D801             | 8-719-071-34 | DIODE RB521S-30-TE61          |        |        |                 |
| D802             | 8-719-071-34 | DIODE RB521S-30-TE61          |        |        |                 |
| D803             | 8-719-056-51 | DIODE MAZS0330L8S0            |        |        |                 |
| D804             | 6-500-346-01 | DIODE MAZS240008S0            |        |        |                 |
| D805             | 8-719-076-88 | DIODE MA2Z720001S0            |        |        |                 |
| < FERRITE BEAD > |              |                               |        |        |                 |
| FB201            | 1-414-921-11 | FERRITE                       | 0uH    |        |                 |
| FB251            | 1-414-760-21 | FERRITE                       | 0uH    |        |                 |
| FB252            | 1-414-760-21 | FERRITE                       | 0uH    |        |                 |
| FB301            | 1-414-921-11 | FERRITE                       | 0uH    |        |                 |
| FB302            | 1-414-921-11 | FERRITE                       | 0uH    |        |                 |
| FB303            | 1-414-921-11 | FERRITE                       | 0uH    |        |                 |
| FB304            | 1-469-580-11 | FERRITE                       | 0uH    |        |                 |
| FB451            | 1-414-921-11 | FERRITE                       | 0uH    |        |                 |
| FB501            | 1-414-921-11 | FERRITE                       | 0uH    |        |                 |
| FB502            | 1-414-921-11 | FERRITE                       | 0uH    |        |                 |
| FB503            | 1-414-921-11 | FERRITE                       | 0uH    |        |                 |
| FB504            | 1-414-921-11 | FERRITE                       | 0uH    |        |                 |
| FB505            | 1-469-836-21 | FERRITE                       | 0uH    |        |                 |
| FB701            | 1-216-864-11 | METAL CHIP                    | 0      | 5%     | 1/16W<br>(Note) |
| FB901            | 1-469-082-21 | FERRITE                       | 0uH    |        |                 |
| < IC >           |              |                               |        |        |                 |
| IC201            | 8-759-465-98 | IC BU9728AKV-E2               |        |        |                 |
| IC251            | 6-704-875-01 | IC GT3200-JV                  |        |        |                 |
| IC301            | A-7078-917-A | IC KI (5M SA) BOARD, COMPLETE |        |        |                 |
| IC302            | 6-704-335-01 | IC K4M563233D-EE1HT           |        |        |                 |
| IC303            | 6-704-365-01 | IC NJM2578KJ1(TE3)            |        |        |                 |
| IC401            | 6-803-184-01 | IC MB89083LGA-G-105-ERE1      |        |        |                 |
| IC402            | 6-702-096-01 | IC S-8425AAFT-TB-G            |        |        |                 |
| IC451            | 8-759-058-64 | IC TC7S32FU(TE85R)            |        |        |                 |
| IC452            | 6-705-178-01 | IC uPD65341F1-Y02-DN3-E2-A    |        |        |                 |
| IC501            | not supplied | IC JSCIS002AF00GA-T6 (Note1)  |        |        |                 |

| Ref. No.       | Part No.     | Description         |                 |  |
|----------------|--------------|---------------------|-----------------|--|
| IC601          | 6-703-734-01 | IC AN12908A-VB      |                 |  |
| IC701          | 6-703-011-01 | IC TC7SZ126AFE      |                 |  |
| IC702          | 6-703-011-01 | IC TC7SZ126AFE      |                 |  |
| IC703          | 6-703-011-01 | IC TC7SZ126AFE      |                 |  |
| IC751          | 8-759-580-26 | IC NJM2130F(TE2)    |                 |  |
| IC752          | 6-705-356-01 | IC R1114N331D-TR-FA |                 |  |
| IC753          | 6-704-873-01 | IC XC6202S06XMR     |                 |  |
| IC801          | 6-704-882-01 | IC CM7103L42-T4     |                 |  |
| IC802          | 6-701-385-01 | IC LT1932ES6#TR     |                 |  |
| IC902          | 8-752-109-93 | IC CXM3008R-T4      |                 |  |
| < COIL >       |              |                     |                 |  |
| L251           | 1-469-570-11 | INDUCTOR            | 10uH            |  |
| L252           | 1-469-570-11 | INDUCTOR            | 10uH            |  |
| L301           | 1-469-570-11 | INDUCTOR            | 10uH            |  |
| L302           | 1-469-570-11 | INDUCTOR            | 10uH            |  |
| L303           | 1-469-570-11 | INDUCTOR            | 10uH            |  |
| L304           | 1-469-570-11 | INDUCTOR            | 10uH            |  |
| L305           | 1-469-570-11 | INDUCTOR            | 10uH            |  |
| L306           | 1-469-570-11 | INDUCTOR            | 10uH            |  |
| L401           | 1-469-559-21 | INDUCTOR            | 47uH            |  |
| L451           | 1-469-570-11 | INDUCTOR            | 10uH            |  |
| L501           | 1-469-757-21 | INDUCTOR            | 10uH            |  |
| L581           | 1-469-757-21 | INDUCTOR            | 10uH            |  |
| L582           | 1-469-570-11 | INDUCTOR            | 10uH            |  |
| L583           | 1-469-570-11 | INDUCTOR            | 10uH            |  |
| L584           | 1-469-570-11 | INDUCTOR            | 10uH            |  |
| L601           | 1-469-555-21 | INDUCTOR            | 10uH            |  |
| L602           | 1-469-570-11 | INDUCTOR            | 10uH            |  |
| L751           | 1-400-336-21 | INDUCTOR            | 1uH             |  |
| L753           | 1-469-549-21 | INDUCTOR            | 1uH             |  |
| L754           | 1-400-336-21 | INDUCTOR            | 1uH             |  |
| L756           | 1-469-549-21 | INDUCTOR            | 1uH             |  |
| L757           | 1-400-336-21 | INDUCTOR            | 1uH             |  |
| L759           | 1-469-757-21 | INDUCTOR            | 10uH            |  |
| L760           | 1-469-549-21 | INDUCTOR            | 1uH             |  |
| L761           | 1-469-549-21 | INDUCTOR            | 1uH             |  |
| L762           | 1-400-336-21 | INDUCTOR            | 1uH             |  |
| L763           | 1-469-549-21 | INDUCTOR            | 1uH             |  |
| L764           | 1-400-336-21 | INDUCTOR            | 1uH             |  |
| L801           | 1-469-846-11 | INDUCTOR            | 47uH            |  |
| L802           | 1-469-570-11 | INDUCTOR            | 10uH            |  |
| L803           | 1-469-570-11 | INDUCTOR            | 10uH            |  |
| L804           | 1-469-846-11 | INDUCTOR            | 47uH            |  |
| L805           | 1-469-549-21 | INDUCTOR            | 1uH             |  |
| L806           | 1-414-410-21 | INDUCTOR            | 10uH            |  |
| L901           | 1-469-846-11 | INDUCTOR            | 47uH            |  |
| L902           | 1-469-570-11 | INDUCTOR            | 10uH            |  |
| < TRANSISTOR > |              |                     |                 |  |
| Q302           | 8-729-050-74 | TRANSISTOR          | 2SB1462LOAS0    |  |
| Q303           | 8-729-050-74 | TRANSISTOR          | 2SB1462LOAS0    |  |
| Q304           | 8-729-050-74 | TRANSISTOR          | 2SB1462LOAS0    |  |
| Q307           | 6-550-179-01 | TRANSISTOR          | RN4904FE(TPLR3) |  |
| Q401           | 6-550-243-01 | TRANSISTOR          | DTC144TMT2L     |  |

**Note :**  
Resistor is mounted to the location where FB701 is printed.

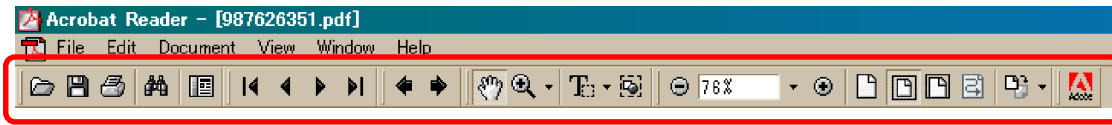
**Note 1 :**  
A service for IC501 is not available because an adjustment is required before replacement.

| Ref. No. | Part No.     | Description  | Ref. No.           | Part No. | Description  |            |              |                        |
|----------|--------------|--------------|--------------------|----------|--------------|------------|--------------|------------------------|
| Q402     | 6-550-241-01 | TRANSISTOR   | DTA144TMT2L        | R401     | 1-218-989-11 | RES-CHIP   | 1M           | 5% 1/16W               |
| Q403     | 6-550-566-01 | TRANSISTOR   | DTC115TMT2L        | R402     | 1-218-977-11 | RES-CHIP   | 100K         | 5% 1/16W               |
| Q404     | 8-729-054-52 | TRANSISTOR   | RN1910FE(TPLR3)    | R404     | 1-218-985-11 | RES-CHIP   | 470K         | 5% 1/16W               |
| Q405     | 6-550-566-01 | TRANSISTOR   | DTC115TMT2L        | R406     | 1-218-985-11 | RES-CHIP   | 470K         | 5% 1/16W               |
| Q406     | 8-729-041-43 | TRANSISTOR   | HN1L02FU(TE85R)    | R407     | 1-218-961-11 | RES-CHIP   | 4.7K         | 5% 1/16W               |
| Q451     | 6-550-354-01 | TRANSISTOR   | RTQ035P02TR        | R410     | 1-218-985-11 | RES-CHIP   | 470K         | 5% 1/16W               |
| Q501     | 8-729-053-58 | TRANSISTOR   | RN1904FE(TPLR3)    | R411     | 1-218-953-11 | RES-CHIP   | 1K           | 5% 1/16W               |
| Q601     | 6-550-119-01 | TRANSISTOR   | DTC144EMT2L        | R412     | 1-218-953-11 | RES-CHIP   | 1K           | 5% 1/16W               |
| Q701     | 6-550-239-01 | TRANSISTOR   | DTA144EMT2L        | R413     | 1-218-953-11 | RES-CHIP   | 1K           | 5% 1/16W               |
| Q702     | 6-550-576-01 | TRANSISTOR   | SSM6E01TU          | R418     | 1-218-953-11 | RES-CHIP   | 1K           | 5% 1/16W               |
| Q703     | 6-550-179-01 | TRANSISTOR   | RN4904FE(TPLR3)    | R419     | 1-218-985-11 | METAL CHIP | 470K         | 0.5% 1/16W             |
| Q704     | 6-550-150-01 | TRANSISTOR   | SSM3J09FU(TE85L)   | R420     | 1-208-943-11 | METAL CHIP | 220K         | 0.5% 1/16W             |
| Q705     | 6-550-566-01 | TRANSISTOR   | DTC115TMT2L        | R421     | 1-218-985-11 | METAL CHIP | 470K         | 0.5% 1/16W             |
| Q706     | 6-550-237-01 | TRANSISTOR   | 2SC584600LS0       | R422     | 1-208-943-11 | METAL CHIP | 220K         | 0.5% 1/16W             |
| Q707     | 6-550-239-01 | TRANSISTOR   | DTA144EMT2L        | R423     | 1-218-973-11 | RES-CHIP   | 47K          | 5% 1/16W               |
| Q751     | 6-550-171-01 | TRANSISTOR   | MCH3317-TL-E       | R424     | 1-218-985-11 | RES-CHIP   | 470K         | 5% 1/16W               |
| Q752     | 6-550-102-01 | TRANSISTOR   | 2SC5663T2L         | R425     | 1-219-570-11 | METAL CHIP | 10M          | 5% 1/10W               |
| Q801     | 6-550-119-01 | TRANSISTOR   | DTC144EMT2L        | R426     | 1-218-977-11 | RES-CHIP   | 100K         | 5% 1/16W               |
| Q802     | 8-729-056-00 | TRANSISTOR   | MCH3310-TL-E       | R427     | 1-218-985-11 | RES-CHIP   | 470K         | 5% 1/16W               |
| Q901     | 8-729-037-52 | TRANSISTOR   | 2SD2216J-QR(K8).SO | R428     | 1-218-975-11 | RES-CHIP   | 68K          | 5% 1/16W               |
| Q902     | 6-550-239-01 | TRANSISTOR   | DTA144EMT2L        | R429     | 1-218-977-11 | RES-CHIP   | 100K         | 5% 1/16W               |
| Q903     | 8-729-042-26 | TRANSISTOR   | 2SB1462J-QR(K8).SO | R432     | 1-218-990-11 | SHORT CHIP | 0            |                        |
|          |              | < RESISTOR > |                    | R441     | 1-208-908-11 | METAL CHIP | 7.5K         | 0.5% 1/16W             |
| R202     | 1-218-987-11 | RES-CHIP     | 680K               | 5%       | 1/16W        |            |              |                        |
| R203     | 1-218-981-11 | RES-CHIP     | 220K               | 5%       | 1/16W        | R444       | 1-218-985-11 | RES-CHIP 470K 5% 1/16W |
| R204     | 1-218-985-11 | RES-CHIP     | 470K               | 5%       | 1/16W        | R449       | 1-218-985-11 | RES-CHIP 470K 5% 1/16W |
| R252     | 1-218-989-11 | RES-CHIP     | 1M                 | 5%       | 1/16W        | R450       | 1-218-953-11 | RES-CHIP 1K 5% 1/16W   |
| R253     | 1-218-823-11 | METAL CHIP   | 100                | 0.5%     | 1/10W        | R451       | 1-218-977-11 | RES-CHIP 100K 5% 1/16W |
| R254     | 1-208-709-11 | METAL CHIP   | 12K                | 0.5%     | 1/16W        | R452       | 1-216-864-11 | METAL CHIP 0 5% 1/16W  |
| R255     | 1-218-990-11 | SHORT CHIP   | 0                  |          |              | R453       | 1-218-953-11 | RES-CHIP 1K 5% 1/16W   |
| R256     | 1-218-990-11 | SHORT CHIP   | 0                  |          |              | R454       | 1-218-955-11 | RES-CHIP 1.5K 5% 1/16W |
| R257     | 1-218-990-11 | SHORT CHIP   | 0                  |          |              | R455       | 1-218-977-11 | RES-CHIP 100K 5% 1/16W |
| R301     | 1-218-990-11 | SHORT CHIP   | 0                  |          |              | R456       | 1-218-977-11 | RES-CHIP 100K 5% 1/16W |
| R306     | 1-218-990-11 | SHORT CHIP   | 0                  |          |              | R457       | 1-218-977-11 | RES-CHIP 100K 5% 1/16W |
| R308     | 1-218-965-11 | RES-CHIP     | 10K                | 5%       | 1/16W        | R458       | 1-218-977-11 | RES-CHIP 100K 5% 1/16W |
| R310     | 1-208-691-11 | METAL CHIP   | 2.2K               | 0.5%     | 1/16W        | R461       | 1-218-977-11 | RES-CHIP 100K 5% 1/16W |
| R311     | 1-208-691-11 | METAL CHIP   | 2.2K               | 0.5%     | 1/16W        | R464       | 1-218-985-11 | RES-CHIP 470K 5% 1/16W |
| R312     | 1-208-691-11 | METAL CHIP   | 2.2K               | 0.5%     | 1/16W        | R465       | 1-218-985-11 | RES-CHIP 470K 5% 1/16W |
| R313     | 1-218-965-11 | RES-CHIP     | 10K                | 5%       | 1/16W        | R491       | 1-218-973-11 | RES-CHIP 47K 5% 1/16W  |
| R315     | 1-208-663-11 | METAL CHIP   | 150                | 0.5%     | 1/16W        | R492       | 1-218-946-11 | RES-CHIP 270 5% 1/16W  |
| R316     | 1-218-958-11 | METAL CHIP   | 2.7K               | 0.5%     | 1/16W        | R493       | 1-218-935-11 | RES-CHIP 33 5% 1/16W   |
| R317     | 1-218-968-11 | RES-CHIP     | 18K                | 5%       | 1/16W        | R494       | 1-218-965-11 | RES-CHIP 10K 5% 1/16W  |
| R318     | 1-218-953-11 | RES-CHIP     | 1K                 | 5%       | 1/16W        | R495       | 1-218-990-11 | SHORT CHIP 0           |
| R319     | 1-218-970-11 | METAL CHIP   | 27K                | 0.5%     | 1/16W        | R496       | 1-218-990-11 | SHORT CHIP 0           |
| R324     | 1-208-663-11 | METAL CHIP   | 150                | 0.5%     | 1/16W        | R497       | 1-218-985-11 | RES-CHIP 470K 5% 1/16W |
| R325     | 1-208-663-11 | METAL CHIP   | 150                | 0.5%     | 1/16W        | R502       | 1-218-953-11 | RES-CHIP 1K 5% 1/16W   |
| R326     | 1-208-663-11 | METAL CHIP   | 150                | 0.5%     | 1/16W        | R503       | 1-218-941-81 | RES-CHIP 100 5% 1/16W  |
| R327     | 1-218-990-11 | SHORT CHIP   | 0                  |          |              | R504       | 1-218-990-11 | SHORT CHIP 0           |
| R331     | 1-208-713-11 | METAL CHIP   | 18K                | 0.5%     | 1/16W        | R505       | 1-218-941-81 | RES-CHIP 100 5% 1/16W  |
| R332     | 1-218-958-11 | METAL CHIP   | 2.7K               | 0.5%     | 1/16W        | R506       | 1-218-990-11 | SHORT CHIP 0           |
| R334     | 1-218-970-11 | METAL CHIP   | 27K                | 0.5%     | 1/16W        | R507       | 1-218-990-11 | SHORT CHIP 0           |
| R342     | 1-218-990-11 | SHORT CHIP   | 0                  |          |              | R508       | 1-218-990-11 | SHORT CHIP 0           |
| R344     | 1-208-707-11 | METAL CHIP   | 10K                | 0.5%     | 1/16W        | R509       | 1-218-990-11 | SHORT CHIP 0           |
| R345     | 1-208-701-11 | METAL CHIP   | 5.6K               | 0.5%     | 1/16W        | R510       | 1-218-933-11 | RES-CHIP 22 5% 1/16W   |
| R346     | 1-208-707-11 | METAL CHIP   | 10K                | 0.5%     | 1/16W        | R511       | 1-218-977-11 | RES-CHIP 100K 5% 1/16W |
| R356     | 1-218-977-11 | RES-CHIP     | 100K               | 5%       | 1/16W        | R512       | 1-218-953-11 | RES-CHIP 1K 5% 1/16W   |
| R357     | 1-218-933-11 | RES-CHIP     | 22                 | 5%       | 1/16W        | R514       | 1-218-973-11 | RES-CHIP 47K 5% 1/16W  |
| R358     | 1-218-939-11 | RES-CHIP     | 68                 | 5%       | 1/16W        | R515       | 1-218-973-11 | RES-CHIP 47K 5% 1/16W  |
|          |              |              |                    |          |              | R517       | 1-218-977-11 | RES-CHIP 100K 5% 1/16W |

| Ref. No. | Part No.     | Description |      |    |       | Ref. No. | Part No.     | Description                   |        |      |       |
|----------|--------------|-------------|------|----|-------|----------|--------------|-------------------------------|--------|------|-------|
| R518     | 1-218-973-11 | RES-CHIP    | 47K  | 5% | 1/16W | R735     | 1-218-990-11 | SHORT CHIP                    | 0      |      |       |
| R519     | 1-218-973-11 | RES-CHIP    | 47K  | 5% | 1/16W | R736     | 1-218-973-11 | RES-CHIP                      | 47K    | 5%   | 1/16W |
| R520     | 1-218-953-11 | RES-CHIP    | 1K   | 5% | 1/16W | R737     | 1-218-973-11 | RES-CHIP                      | 47K    | 5%   | 1/16W |
| R521     | 1-218-985-11 | RES-CHIP    | 470K | 5% | 1/16W | R752     | 1-208-947-11 | METAL CHIP                    | 330K   | 0.5% | 1/16W |
| R522     | 1-218-973-11 | RES-CHIP    | 47K  | 5% | 1/16W | R753     | 1-208-943-11 | METAL CHIP                    | 220K   | 0.5% | 1/16W |
| R523     | 1-218-977-11 | RES-CHIP    | 100K | 5% | 1/16W | R759     | 1-208-909-11 | METAL CHIP                    | 8.2K   | 0.5% | 1/16W |
| R524     | 1-218-990-11 | SHORT CHIP  | 0    |    |       | R760     | 1-208-933-11 | METAL CHIP                    | 82K    | 0.5% | 1/16W |
| R525     | 1-218-985-11 | RES-CHIP    | 470K | 5% | 1/16W | R802     | 1-218-985-11 | RES-CHIP                      | 470K   | 5%   | 1/16W |
| R526     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W | R806     | 1-218-990-11 | SHORT CHIP                    | 0      |      |       |
| R527     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W | R809     | 1-218-975-11 | RES-CHIP                      | 68K    | 5%   | 1/16W |
| R528     | 1-218-985-11 | RES-CHIP    | 470K | 5% | 1/16W | R810     | 1-208-935-11 | METAL CHIP                    | 100K   | 0.5% | 1/16W |
| R529     | 1-218-977-11 | RES-CHIP    | 100K | 5% | 1/16W | R812     | 1-208-707-11 | METAL CHIP                    | 10K    | 0.5% | 1/16W |
| R530     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W | R814     | 1-218-965-11 | RES-CHIP                      | 10K    | 5%   | 1/16W |
| R531     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W | R815     | 1-218-990-11 | SHORT CHIP                    | 0      |      |       |
| R532     | 1-218-953-11 | RES-CHIP    | 1K   | 5% | 1/16W | R816     | 1-218-990-11 | SHORT CHIP                    | 0      |      |       |
| R533     | 1-218-985-11 | RES-CHIP    | 470K | 5% | 1/16W | R817     | 1-218-990-11 | SHORT CHIP                    | 0      |      |       |
| R537     | 1-218-973-11 | RES-CHIP    | 47K  | 5% | 1/16W | R818     | 1-208-721-11 | METAL CHIP                    | 39K    | 0.5% | 1/16W |
| R539     | 1-218-973-11 | RES-CHIP    | 47K  | 5% | 1/16W | R819     | 1-218-847-11 | METAL CHIP                    | 1K     | 0.5% | 1/10W |
| R540     | 1-218-977-11 | RES-CHIP    | 100K | 5% | 1/16W | R820     | 1-208-711-11 | METAL CHIP                    | 15K    | 0.5% | 1/16W |
| R541     | 1-218-953-11 | RES-CHIP    | 1K   | 5% | 1/16W | R821     | 1-218-958-11 | METAL CHIP                    | 2.7K   | 0.5% | 1/16W |
| R543     | 1-218-990-11 | SHORT CHIP  | 0    |    |       | R823     | 1-218-990-11 | SHORT CHIP                    | 0      |      |       |
| R552     | 1-218-977-11 | RES-CHIP    | 100K | 5% | 1/16W | R824     | 1-218-990-11 | SHORT CHIP                    | 0      |      |       |
| R553     | 1-218-977-11 | RES-CHIP    | 100K | 5% | 1/16W | R903     | 1-218-990-11 | SHORT CHIP                    | 0      |      |       |
| R555     | 1-218-990-11 | SHORT CHIP  | 0    |    |       | R908     | 1-218-990-11 | SHORT CHIP                    | 0      |      |       |
| R557     | 1-218-933-11 | RES-CHIP    | 22   | 5% | 1/16W | R909     | 1-218-990-11 | SHORT CHIP                    | 0      |      |       |
| R558     | 1-218-933-11 | RES-CHIP    | 22   | 5% | 1/16W | R911     | 1-218-975-11 | RES-CHIP                      | 68K    | 5%   | 1/16W |
| R559     | 1-218-933-11 | RES-CHIP    | 22   | 5% | 1/16W | R912     | 1-208-707-11 | METAL CHIP                    | 10K    | 0.5% | 1/16W |
| R560     | 1-218-933-11 | RES-CHIP    | 22   | 5% | 1/16W | R913     | 1-208-935-11 | METAL CHIP                    | 100K   | 0.5% | 1/16W |
| R561     | 1-218-933-11 | RES-CHIP    | 22   | 5% | 1/16W | R915     | 1-208-647-11 | METAL CHIP                    | 33     | 0.5% | 1/16W |
| R562     | 1-218-977-11 | RES-CHIP    | 100K | 5% | 1/16W | R916     | 1-208-635-11 | RES-CHIP                      | 10     | 5%   | 1/16W |
| R563     | 1-218-977-11 | RES-CHIP    | 100K | 5% | 1/16W | R917     | 1-208-635-11 | RES-CHIP                      | 10     | 5%   | 1/16W |
| R564     | 1-218-977-11 | RES-CHIP    | 100K | 5% | 1/16W | R918     | 1-208-635-11 | RES-CHIP                      | 10     | 5%   | 1/16W |
| R565     | 1-218-977-11 | RES-CHIP    | 100K | 5% | 1/16W | R922     | 1-218-959-11 | RES-CHIP                      | 3.3K   | 5%   | 1/16W |
| R602     | 1-218-973-11 | RES-CHIP    | 47K  | 5% | 1/16W | R924     | 1-218-953-11 | RES-CHIP                      | 1K     | 5%   | 1/16W |
| R603     | 1-218-990-11 | SHORT CHIP  | 0    |    |       | R925     | 1-218-977-11 | RES-CHIP                      | 100K   | 5%   | 1/16W |
| R604     | 1-218-958-11 | RES-CHIP    | 2.7K | 5% | 1/16W |          |              | < COMPOSITION CIRCUIT BLOCK > |        |      |       |
| R605     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W | RB401    | 1-234-378-21 | RES, NETWORK 10KX4            | (1005) |      |       |
| R606     | 1-218-967-11 | RES-CHIP    | 15K  | 5% | 1/16W | RB402    | 1-234-378-21 | RES, NETWORK 10KX4            | (1005) |      |       |
| R609     | 1-218-961-11 | RES-CHIP    | 4.7K | 5% | 1/16W | RB403    | 1-234-375-21 | RES, NETWORK 1KX4             | (1005) |      |       |
| R610     | 1-218-957-11 | RES-CHIP    | 2.2K | 5% | 1/16W | RB404    | 1-234-375-21 | RES, NETWORK 1KX4             | (1005) |      |       |
| R611     | 1-218-975-11 | RES-CHIP    | 68K  | 5% | 1/16W |          |              | < VIBRATOR >                  |        |      |       |
| R614     | 1-218-965-11 | RES-CHIP    | 10K  | 5% | 1/16W | X251     | 1-813-090-11 | VIBRATOR, CRYSTAL (12MHz)     |        |      |       |
| R615     | 1-218-973-11 | RES-CHIP    | 47K  | 5% | 1/16W | X401     | 1-795-029-11 | VIBRATOR, CRYSTAL (32.768kHz) |        |      |       |
| R701     | 1-218-947-11 | RES-CHIP    | 330  | 5% | 1/16W | X501     | 1-795-172-11 | OSCILLATOR, CRYSTAL (27MHz)   |        |      |       |
| R702     | 1-218-947-11 | RES-CHIP    | 330  | 5% | 1/16W |          |              |                               |        |      |       |
| R703     | 1-218-989-11 | RES-CHIP    | 1M   | 5% | 1/16W |          |              |                               |        |      |       |
| R704     | 1-218-954-11 | RES-CHIP    | 1.2K | 5% | 1/16W |          |              |                               |        |      |       |
| R705     | 1-218-955-11 | RES-CHIP    | 1.5K | 5% | 1/16W |          |              |                               |        |      |       |
| R706     | 1-218-957-11 | RES-CHIP    | 2.2K | 5% | 1/16W |          |              |                               |        |      |       |
| R707     | 1-216-864-11 | METAL CHIP  | 0    | 5% | 1/16W |          |              |                               |        |      |       |
| R708     | 1-218-981-11 | RES-CHIP    | 220K | 5% | 1/16W |          |              |                               |        |      |       |
| R709     | 1-218-959-11 | RES-CHIP    | 3.3K | 5% | 1/16W |          |              |                               |        |      |       |
| R710     | 1-218-985-11 | RES-CHIP    | 470K | 5% | 1/16W |          |              |                               |        |      |       |
| R711     | 1-218-977-11 | RES-CHIP    | 100K | 5% | 1/16W |          |              |                               |        |      |       |
| R712     | 1-218-985-11 | RES-CHIP    | 470K | 5% | 1/16W |          |              |                               |        |      |       |
| R713     | 1-218-946-11 | RES-CHIP    | 270  | 5% | 1/16W |          |              |                               |        |      |       |
| R714     | 1-218-981-11 | RES-CHIP    | 220K | 5% | 1/16W |          |              |                               |        |      |       |
| R715     | 1-220-176-11 | RES-CHIP    | 300  | 5% | 1/16W |          |              |                               |        |      |       |
| R716     | 1-218-971-11 | RES-CHIP    | 33K  | 5% | 1/16W |          |              |                               |        |      |       |
| R720     | 1-218-937-11 | RES-CHIP    | 47   | 5% | 1/16W |          |              |                               |        |      |       |




**[Description of main button functions on toolbar of the Adobe Acrobat Reader Ver5.0 (for Windows)]**




Toolbar



**Printing a text**

1. Click the Print button .
2. Specify a printer, print range, number of copies, and other options, and then click [OK].

**Application of printing:**

To set a range to be printed within a page, select the graphic selection tool  and drag on the page to enclose a range to be printed, and then click the Print button.


**Reversing the screens displayed once**

- To reverse the previous screens (operation) one by one, click the .
- To advance the reversed screens (operation) one by one, click the .

**Application to the Service Manual:**

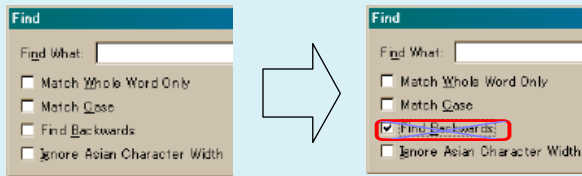
This function allows you to go and back between circuit diagram and printed circuit board diagram, and accordingly it will be convenient for the voltage check.

**Finding a text**

1. Click the Find button .
2. Enter a character string to be found into a text box, and click the [Find]. (Specify the find options as necessary)

**Application to the Service Manual:**

To execute “find” from current page toward the previous pages, select the check box “Find Backwards” and then click the “Find”.








3. Open the find dialog box again, and click the [Find Again] and you can find the matched character strings displayed next. (Character strings entered previously are displayed as they are in the text box.)

**Application to the Service Manual:**


The parts on the drawing pages (block diagrams, circuit diagrams, printed circuit boards) and parts list pages in a text can be found using this find function. For example, find a Ref. No. of IC on the block diagram, and click the [Find Again] continuously, so that you can move to the Ref. No. of IC on the circuit diagram or printed circuit board diagram successively.


**Note:** The find function may not be applied to the Service Manual depending on the date of issue.

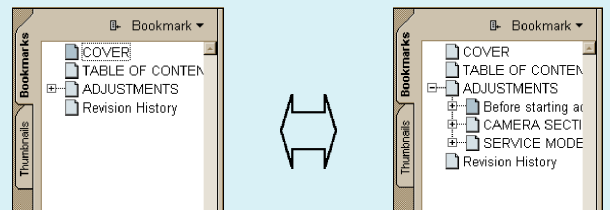
**Moving with link**

1. Select either palm tool , zoom tool , text selection tool , or graphic selection tool .
2. Place the pointer in the position in a text where the link exists (such as a button on cover and the table of contents page, or blue characters on the removal flowchart page or drawing page), and the pointer will change to the forefinger form .
3. Then, click the link. (You will go to the link destination.)

**Moving with bookmark:**



Click an item (text) on the bookmark pallet. and you can move to the link destination. Also, clicking  can display the hidden items.

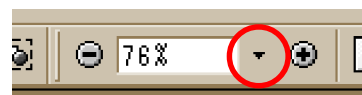
(To go back to original state, click )




**Zooming or rotating the screen display**

**“Zoom in/out”**

- Click the triangle button in the zoom control box to select the display magnification. Or, you may click  or  for zooming in or out.







**“Rotate”**

- Click rotate tool , and the page then rotates 90 degrees each.

**Application to the Service Manual:**

The printed circuit board diagram you see now can be changed to the same direction as the set.

**Switching a page**

- To move to the first page, click the .
- To move to the last page, click the .
- To move to the previous page, click the .
- To move to the next page, click the .

# Revision History

| Ver. | Date    | History          | Contents  | S.M. Rev.<br>issued |
|------|---------|------------------|---|---------------------|
| 1.0  | 2003.12 | Official Release | —   | —                   |
| 1.1  | 2005.10 | Correction-1     | • Correction of repair parts list<br>S.M. correction: <a href="#">Page 5-16</a> | Yes                 |
|      |         |                  |   |                     |