

**SONY®**

Line Shot Printer

**LPR-1000MD**

SERVICE MANUAL  
Volume 1 1st Edition

## 警告

このマニュアルは、サービス専用です。

お客様が、このマニュアルに記載された設置や保守、点検、修理などを行うと感電や火災、人身事故につながる可能性があります。

危険をさけるため、サービストレーニングを受けた技術者のみご使用ください。

## WARNING

This manual is intended for qualified service personnel only.

To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

## WARNUNG

Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.

Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegeben Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

## AVERTISSEMENT

Ce manuel est destiné uniquement aux personnes compétentes en charge de l'entretien. Afin de réduire les risques de décharge électrique, d'incendie ou de blessure n'effectuer que les réparations indiquées dans le mode d'emploi à moins d'être qualifié pour en effectuer d'autres. Pour toute réparation faire appel à une personne compétente uniquement.

**注意**

指定以外の電池に交換すると、破裂する危険があります。  
使用済の電池は、説明書に従って処理してください。

**CAUTION**

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the manufacturer.  
Dispose of used batteries according to the manufacturer's instructions.

**Vorsicht!**

Explosionsgefahr bei unsachgemäßem Austausch der Batterie.

Ersatz nur durch denselben oder einen vom Hersteller empfohlenen ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

**ATTENTION**

Il y a danger d'explosion s'il y a remplacement incorrect de la batterie.

Remplacer uniquement avec une batterie du même type ou d'un type équivalent recommandé par le constructeur.

Mettre au rebut les batteries usagées conformément aux instructions du fabricant.

**ADVARSEL!**

Lithiumbatteri-Eksplodingsfare ved fejlagtig håndtering.

Udskiftning må kun ske med batteri af samme fabrikat og type.  
Levér det brugte batteri tilbage til leverandøren.

**ADVARSEL**

Lithiumbatteri - Eksplosjonsfare.

Ved utskifting benyttes kun batteri som anbefalt av apparatfabrikanten.

Brukt batteri returneres apparatleverandøren.

**VARNING**

Explosionsfara vid felaktigt batteribyte.

Använd samma batterityp eller en likvärdig typ som rekommenderas av apparattillverkaren.

Kassera använt batteri enligt gällande föreskrifter.

**VAROITUS**

Paristo voi räjähtää jos se on virheellisesti asennettu.

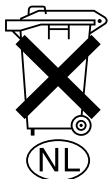
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin.

Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

**For the customers in the Netherlands  
Voor de klanten in Nederland**

Hoe u de batterijen moet verwijderen, leest u in de tekst van deze handleiding.

Gooi de batterij niet weg maar lever deze in als klein chemisch afval (KCA).



**Für Kunden in Deutschland**

Entsorgungshinweis: Bitte werfen Sie nur entladene Batterien in die Sammelboxen beim Handel oder den Kommunen. Entladen sind Batterien in der Regel dann, wenn das Gerät abschaltet und signalisiert "Batterie leer" oder nach längerer Gebrauchsdauer der Batterien "nicht mehr einwandfrei funktioniert". Um sicherzugehen, kleben Sie die Batteriepole z.B. mit einem Klebestreifen ab oder geben Sie die Batterien einzeln in einen Plastikbeutel.





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# Manual Structure

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## Purpose of this manual

This manual is the service manual Vol. 1 of LINE Shot Printer LPR-1000MD. This manual describes the information on maintenance and the service information such as service information, parts replacement, service mode and troubleshooting.

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## Related manuals

In addition to this “Service Manual Vol. 1”, this unit is provided with the manual below.

- **Service Manual Vol. 2 (Not supplied for products.)**

Part No.: 9-877-807-11

This manual describes the semiconductors, spare parts, block diagrams, schematic diagrams, and board layouts of this unit.

- **Operating Instruction (Supplied for products.)**

Part No.: 3-207-760-11

These manuals describes the information required for the actual management and operation of this unit.

- **“Semiconductor Pin Assignments” CD-ROM (Available on request)**

This “Semiconductor Pin Assignments” CD-ROM allows you to search for semiconductors used in B&P Company equipment.

Semiconductors that cannot be searched for on this CD-ROM are listed in the service manual for the corresponding unit. The service manual contains a complete list of all semiconductors and their ID Nos., and thus should be used together with the CD-ROM.

Part number: 9-968-546-XX



# Section 1

## Service Overview

### 1-1. Items to be Performed after Repair/ before Return

#### 1-1-1. Required Parts List

The following parts are used in “1-1. Items to be Performed after Repair/before Return”.

| Part Name              | Sony Part Number |
|------------------------|------------------|
| Cap bottom assembly    | A-8279-906-A     |
| Cushion (A) × 2        | 3-806-622-01     |
| Roller ejector         | 3-838-828-02     |
| Cap ejector            | 3-809-947-02     |
| Dummy pack             | X-3608-812-1     |
| Stopper (T-CAP)        | 3-808-883-01     |
| Transport pack         | 3-806-893-01     |
| Transport cap assembly | A-8279-905-E     |
| I bulb cap             | 3-806-892-02     |

#### 1-1-2. Head Unit Assembly

1. Attach the dummy pack and perform the pump circulation by using the service software.
2. Attach the transport cap assembly and I bulb cap. Put the unit in the transport pack and seal it. Secure the transport cap assembly with the stopper (T-CAP).

#### 1-1-3. Main Unit (LPR-1000MD)

1. Perform the initial setting using the service software.
2. Attach the cap bottom assembly.
3. Attach the cushion (A) × 2.
4. Pack the unit in the LPR-1000MD carton or in the transport carton (Pasocompo of Nippon Express)

#### 1-1-4. Others

1. Put the ink cartridge and cleaning unit used by user in the plastic bag and return it to the user.

### 1-2. Unleaded Solder

Boards requiring use of unleaded solder are printed with a 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

#### Notes

- Be sure to use the unleaded solder for the printed circuit board printed with the lead free mark.
- The unleaded solder melts at a temperature about 40 °C higher than the ordinary solder, therefore, it is recommended to use the soldering iron having a temperature regulator.
- The ordinary soldering iron can be used but the iron tip has to be applied to the solder joint for a slightly longer time. The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful.

The boards that are applicable to the lead free solder in this unit are as follows.

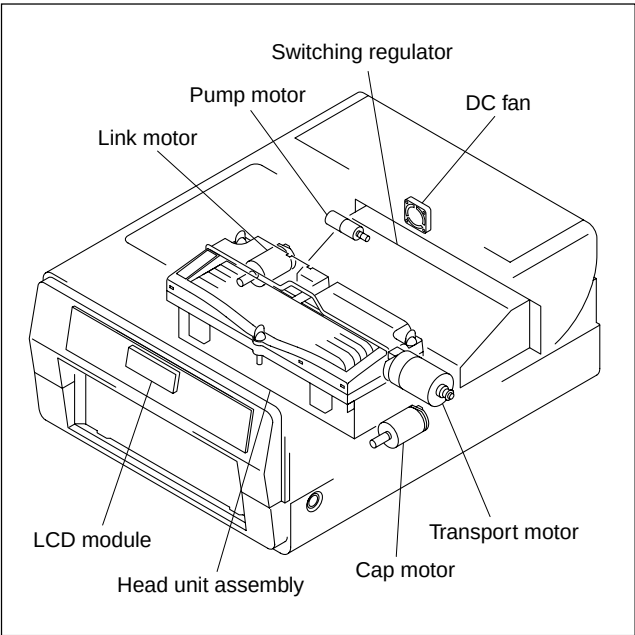
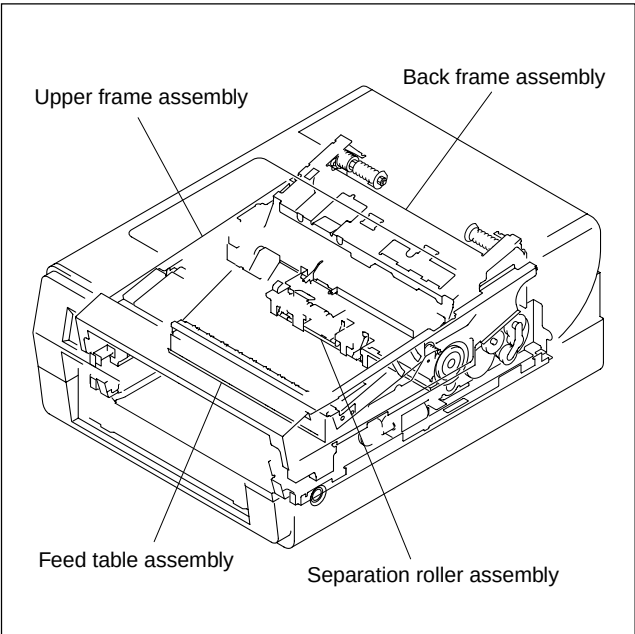
| Board name    | Applicable to lead free or not |
|---------------|--------------------------------|
| CN-2393 board | ×                              |
| CPU-347 board | ×                              |
| CPU-357 board | ×                              |
| MEC-21 board  | ×                              |
| FP-138 board  | ×                              |
| SE-643 board  | ○                              |
| SE-644 board  | ○                              |
| SE-645 board  | ○                              |
| SE-646 board  | ○                              |
| SE-673 board  | ○                              |
| SE-674 board  | ○                              |
| SE-736 board  | ○                              |
| SE-737 board  | ○                              |
| SU-69 board   | ○                              |
| SU-74 board   | ○                              |
| SU-75 board   | ○                              |
| SW-1105 board | ○                              |

○: Applicable to lead free solder

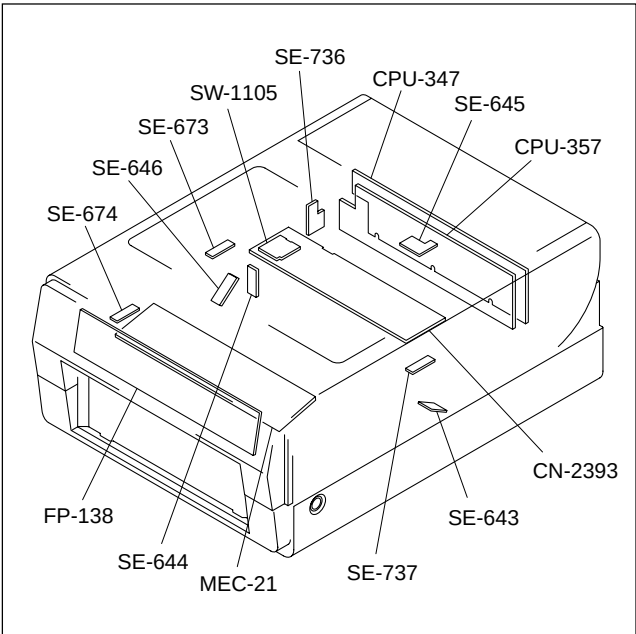
×: Not applicable to lead free solder

1-3. Main Parts Location

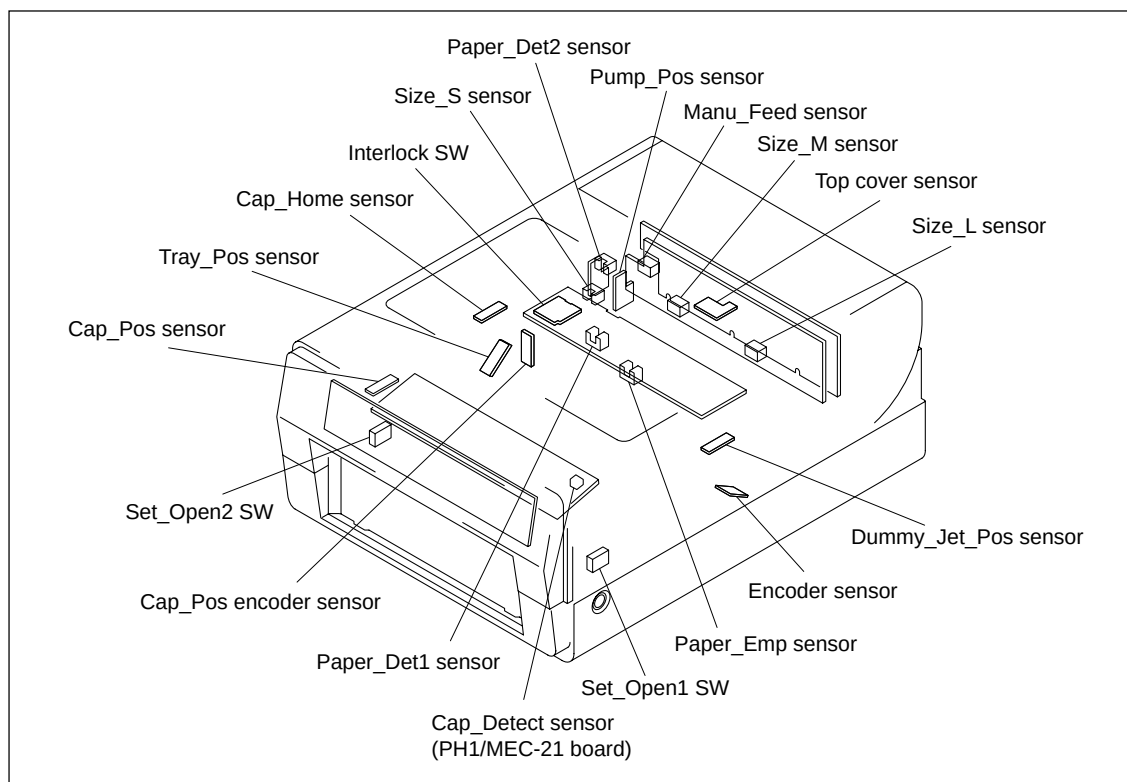
1-3-1. Main Block Location



1-3-2. Board Location



### 1-3-3. Sensor/Actuator Location and Function



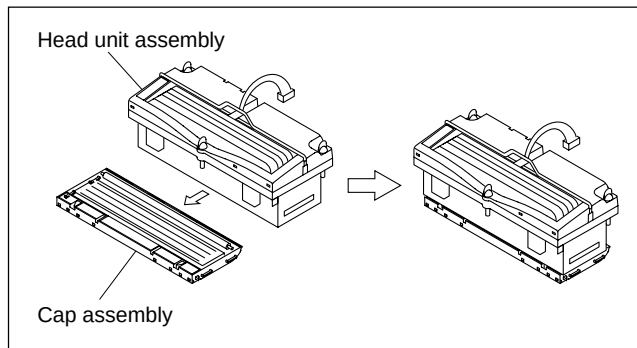
| Name                                                                    | Function                                                                                      |
|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Paper_Emp sensor (Paper sensor)                                         | Detects the presence or absence of paper in the tray.                                         |
| Paper_Det2 sensor (Transport sensor2)                                   | Detects the paper feed status and timing in auto paper feeding.                               |
| Manu_Feed sensor (Manual paper feed sensor)                             | Detects the presence or absence of the paper for manual feeding. (This function is not used.) |
| Size_S sensor (Size sensor 1)                                           | Paper size (small) sensor (Detects postcard size.)                                            |
| Size_M sensor (Size sensor 2)                                           | Paper size (medium) sensor (Detects B5 size.)                                                 |
| Size_L sensor (Size sensor 3)                                           | Paper size (large) sensor (Detects A4 size.)                                                  |
| Paper_Det1 sensor (Transport sensor 1)                                  | Detects the paper feed status and timing to control the lifter.                               |
| Encoder sensor (Paper transport sensor)                                 | Detects the rotational speed 1 (paper transport speed) of paper transport encoder.            |
| Tray_Pos sensor (tray sensor)                                           | Detects the switching of the paper feed mode (Detects paper feed state/No paper feed state)   |
| Cap_Detect sensor                                                       | —                                                                                             |
| Cap_Home sensor (Cap close sensor)                                      | Detects the home position of the head cap. (Cap close state)                                  |
| Cap_Pos encoder sensor (Cap position sensor)                            | Detects the head cap position and moving speed.                                               |
| Cap_Pos sensor (Cap open sensor)                                        | Detects the head cap printable position. (Cap open state)                                     |
| Top cover sensor (Cover open/close sensor)                              | Detects the top cover close state.<br>(During head/ink cartridge replacement)                 |
| Set_Open 1/2 SW (Set open/close detection switch)                       | Detects the main unit cover close state.                                                      |
| Dummy_Jet_Pos sensor<br>(Yellow Ink Dummy Jet starting position sensor) | Detects the Yellow Ink Dummy Jet starting position.                                           |
| Pump_Pos sensor (Pump position sensor)                                  | Detects the pump motor home position.                                                         |
| Interlock SW (Interlock switch)                                         | Interrupt the motor power forcefully when the main unit cover is in the open state.           |

## 1-4. Removing/Installing the Cabinet

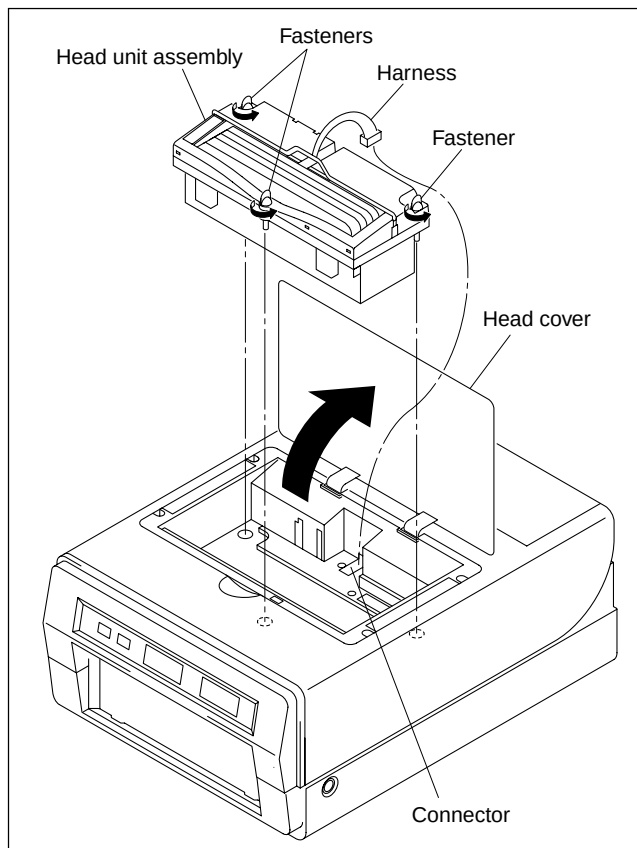
### 1-4-1. Top Cover Sub-assembly

#### Note

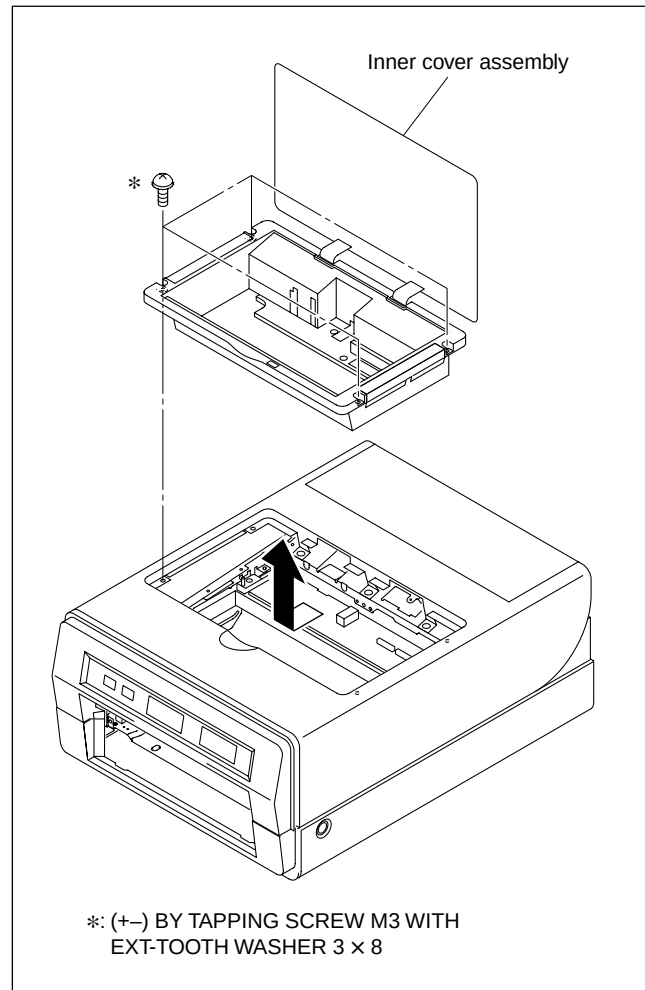
Be sure that the nozzle surface of the removed head unit assembly is not in contact with any surface. Otherwise, it may cause the damage to the nozzle surface. Place the removed head unit assembly as shown in the illustration below.



1. Open the head cover.
2. Disconnect the harness from the connector, then rotate the three fasteners in the direction shown by the arrow and remove the head unit assembly.

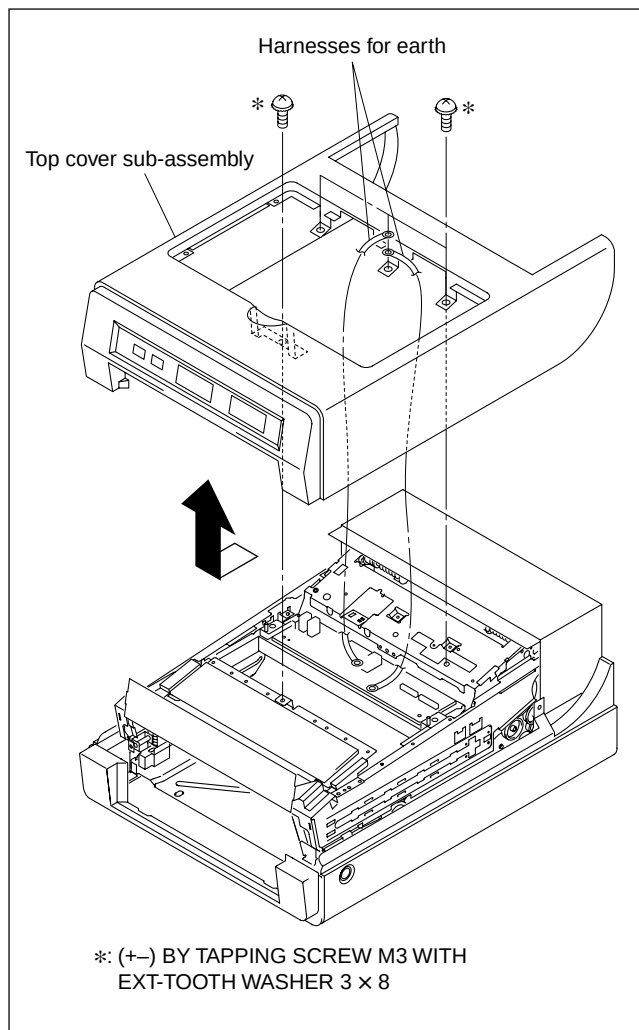


3. Remove the four screws, then remove the inner cover assembly.





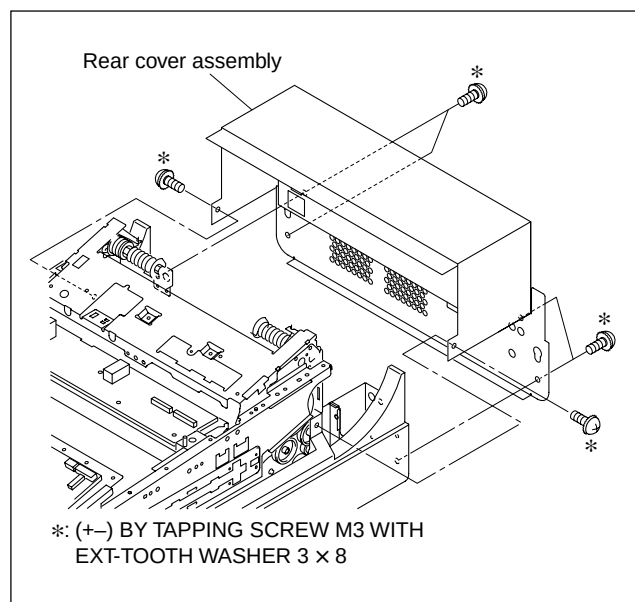
4. Remove the four screws, then remove the two harnesses for earth and top cover sub-assembly.



5. Attach the top cover sub-assembly in the reverse order of steps 1 to 4.

## 1-4-2. Rear Cover Assembly

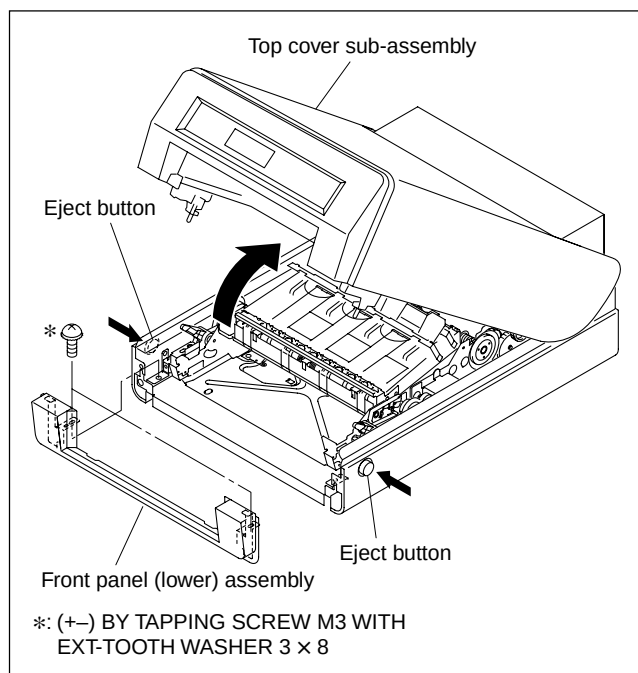
1. Remove the top cover sub-assembly. (Refer to Section 1-4-1.)
2. Remove the six screws, then remove the rear cover assembly.



3. Attach the rear cover assembly in the reverse order of steps 1 and 2.

### 1-4-3. Front Panel (Lower) Assembly

1. Press the eject button, then open the top cover sub-assembly.
2. Remove the two screws, then remove the front panel (lower) assembly.



3. Attach the front panel (lower) assembly in the reverse order of steps 1 and 2.

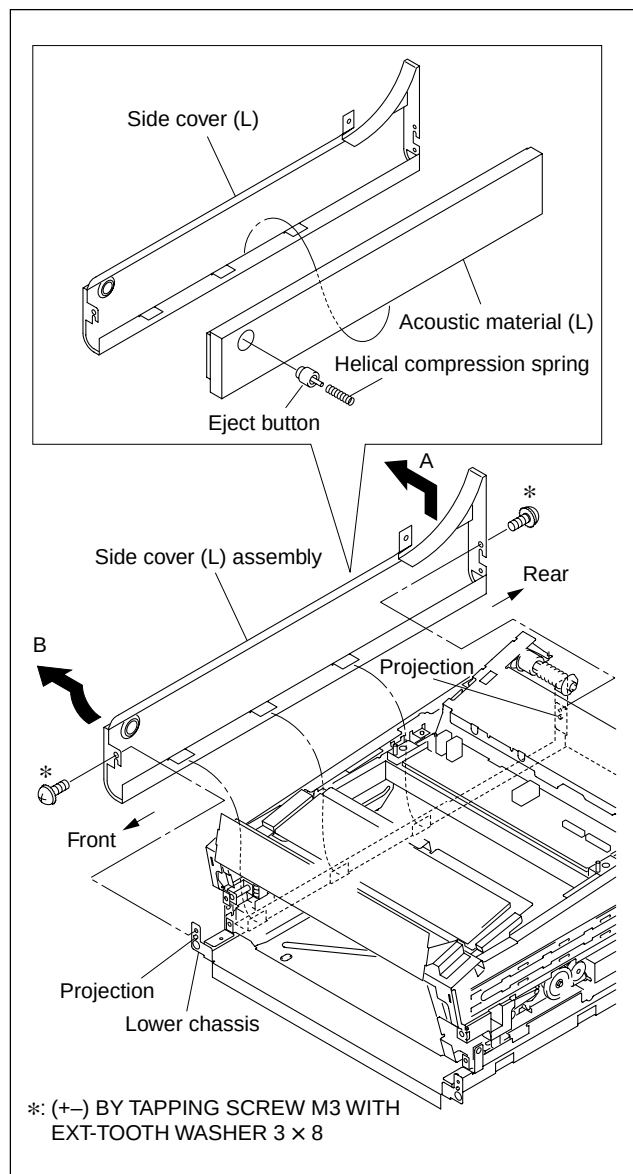
#### 1-4-4. Side Cover (L) Assembly

1. Remove the top cover sub-assembly. (Refer to Section 1-4-1.)
2. Remove the rear cover assembly. (Refer to Section 1-4-2.)
3. Remove the front panel (lower) assembly. (Refer to Section 1-4-3.)
4. Remove the two screws.
5. Remove the rear of side cover (L) assembly from the projection of lower chassis in the direction shown by the arrow A.
6. Remove the front of side cover (L) assembly from the projection of lower chassis in the direction shown by the arrow B, then remove the side cover (L) assembly.

### Note

Be careful that the helical compression spring does not pop out when removing the side cover (L) assembly.

- Remove the helical compression spring, eject button and acoustic material (L) from the side cover (L).



8. Attach the side cover (L) assembly in the reverse order of steps 1 to 7.

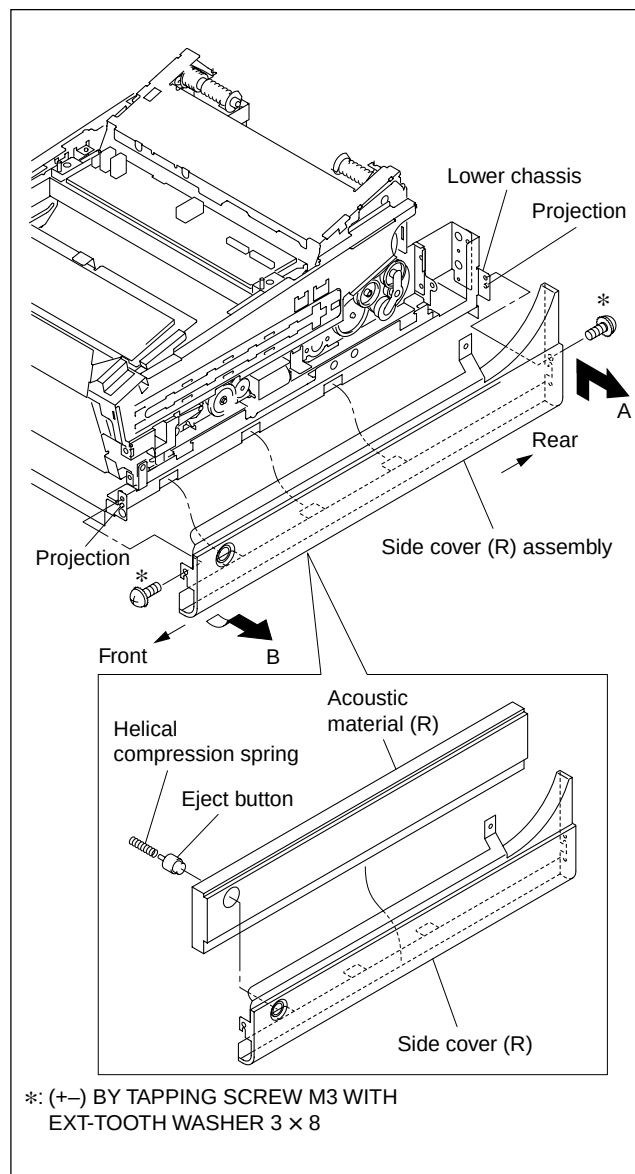
### 1-4-5. Side Cover (R) Assembly

1. Remove the top cover sub-assembly. (Refer to Section 1-4-1.)
2. Remove the rear cover assembly. (Refer to Section 1-4-2.)
3. Remove the front panel (lower) assembly. (Refer to Section 1-4-3.)
4. Remove the two screws.
5. Remove the rear of side cover (R) assembly from the projection of lower chassis in the direction shown by the arrow A.
6. Remove the front of side cover (R) assembly from the projection of lower chassis in the direction shown by the arrow B, then remove the side cover (R) assembly.

#### Note

Be careful that the helical compression spring does not pop out when removing the side cover (R) assembly.

7. Remove the helical compression spring, eject button and acoustic material (R) from the side cover (R).



8. Attach the side cover (R) assembly in the reverse order of steps 1 to 7.



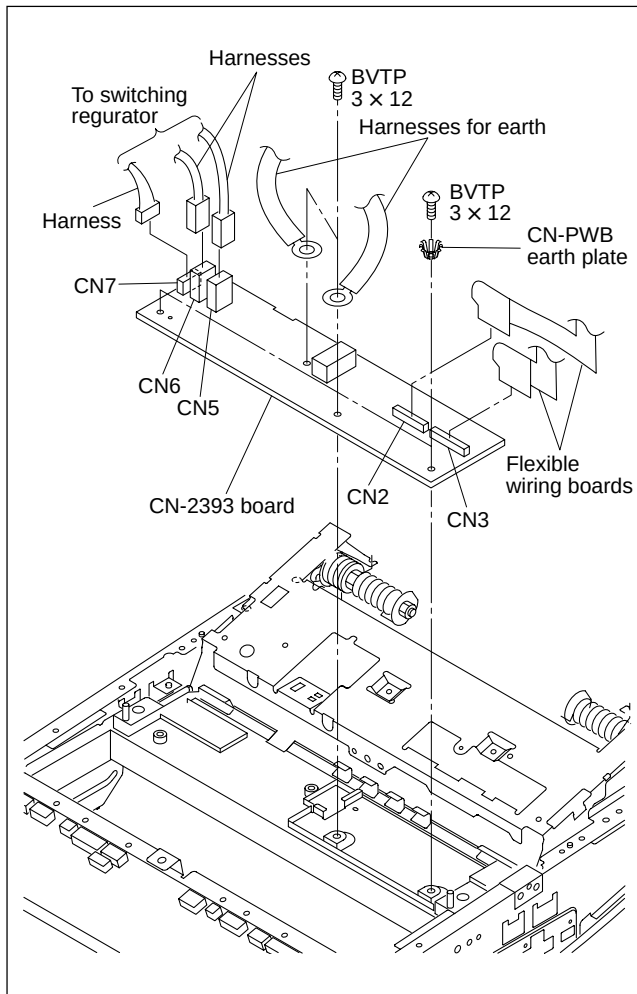
## Section 2

### Replacement of Main Parts

#### 2-1. Replacing the Board

##### 2-1-1. CN-2393 Board

1. Remove the top cover sub-assembly. (Refer to Section 1-4-1.)
2. Remove the two flexible wiring boards from the connectors (CN2 and CN3) and disconnect the three harnesses from the connectors (CN5, CN6 and CN7) on the CN-2393 board.
3. Remove the four screws, then remove the two CN-PWB earth plates, two harnesses for earth and CN-2393 board.



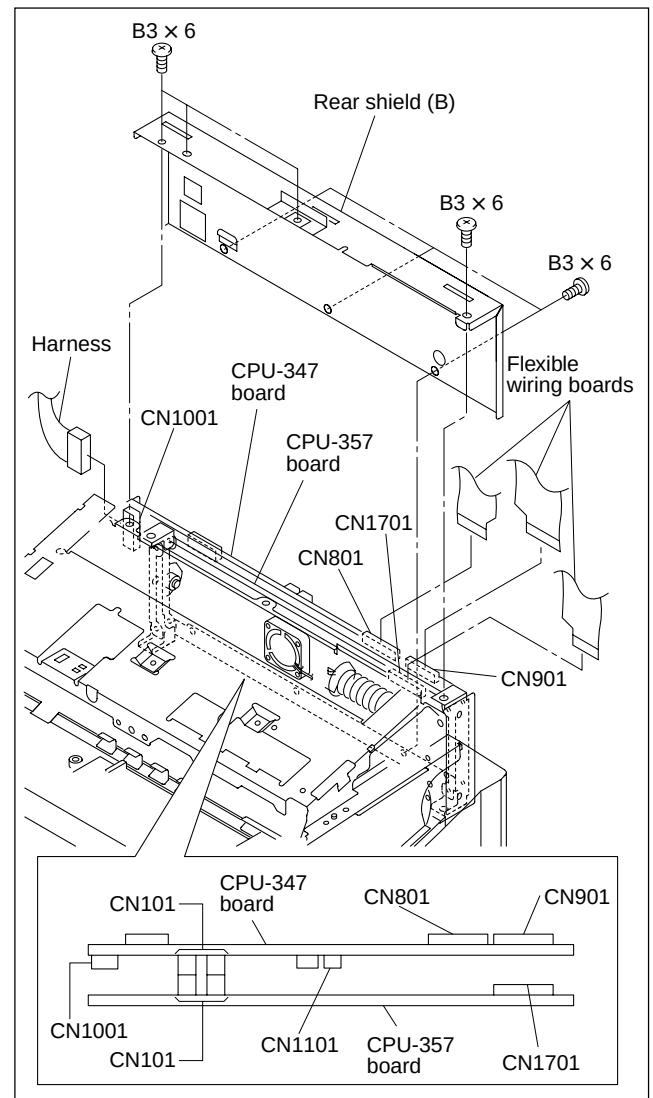
4. Install the CN-2393 board in the reverse order of steps 1 to 3.

##### 2-1-2. Main Board Assembly (CPU-347 Board/CPU-357 Board)

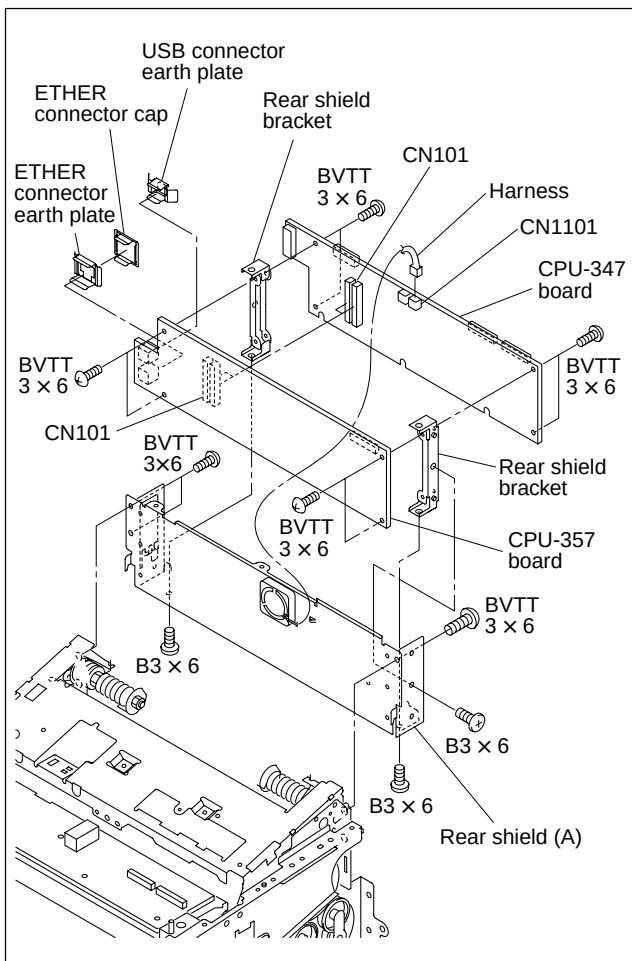
###### Note

When installing the CPU-347 board, be sure to securely insert the connector (CN101) on the CPU-347 board into the connector (CN101) on the CPU-357 board.

1. Remove the top cover sub-assembly. (Refer to Section 1-4-1.)
2. Remove the rear cover assembly. (Refer to Section 1-4-2.)
3. Remove the seven screws, then remove the rear shield (B).
4. Remove the three flexible wiring boards from the connectors (CN801 and CN901) on the CPU-347 board and the connector (CN1701) on the CPU-357 board.
5. Disconnect the harness from the connector (CN1001) on the CPU-347 board.



6. Remove the three screws, then remove the rear shield (A).
7. Remove the USB connector earth plate, ETHER connector cap and ETHER connector earth plate.
8. Remove the four screws (BVTT3 × 6) and disconnect the harness from the connector (CN1101) on the CPU-347 board.
9. Remove the CPU-347 board from the connector (CN101) on the CPU-357 board.
10. Remove the three screws (B3 × 6), then remove the two rear shield brackets.
11. Remove the four screws (BVTT3 × 6), then remove the CPU-357 board.



12. Install the CPU-347 board and CPU-357 board in the reverse order of steps 1 to 11.

### 2-1-3. Replacing the FP-138 Board, MEC-21 Board and Lithium Battery

#### Note

After replacing the lithium battery, it is required to set the clock again. For details, refer to “Set the printer on Web monitor (for administrator)” in the operating instructions.

#### Part for replacement

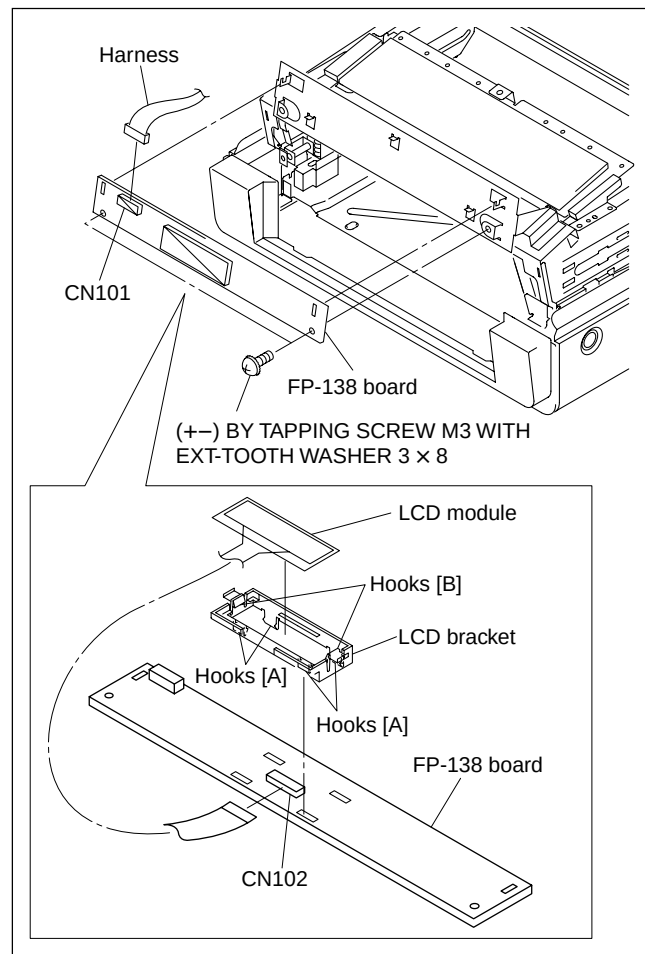
Part Name: Lithium battery (CR2032 type)

Part No.: 1-528-174-11

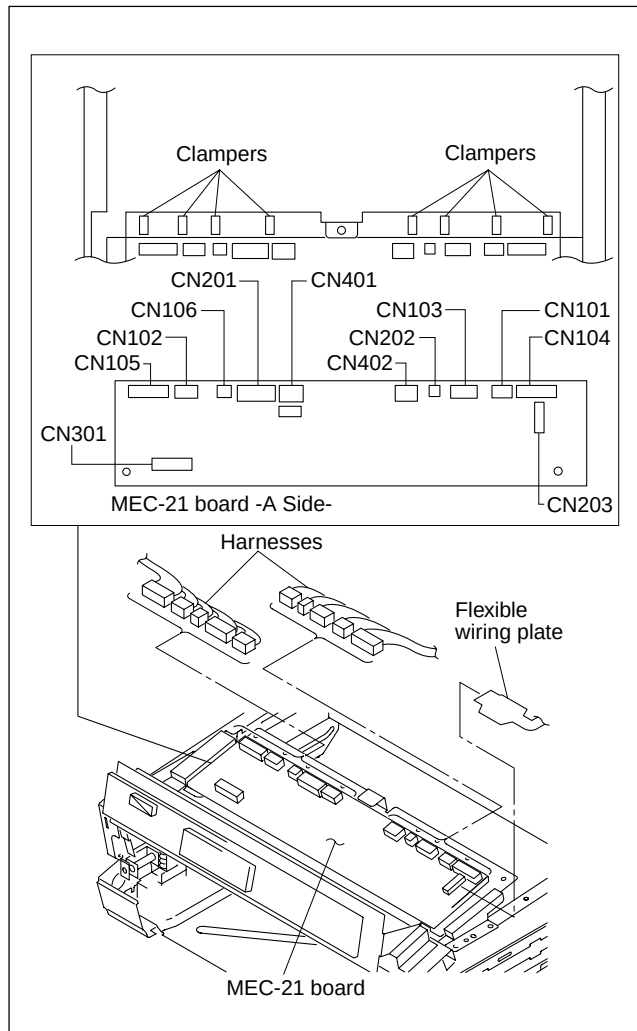
Battery spec.: Voltage: 3 V

Capacity: 220 mAH

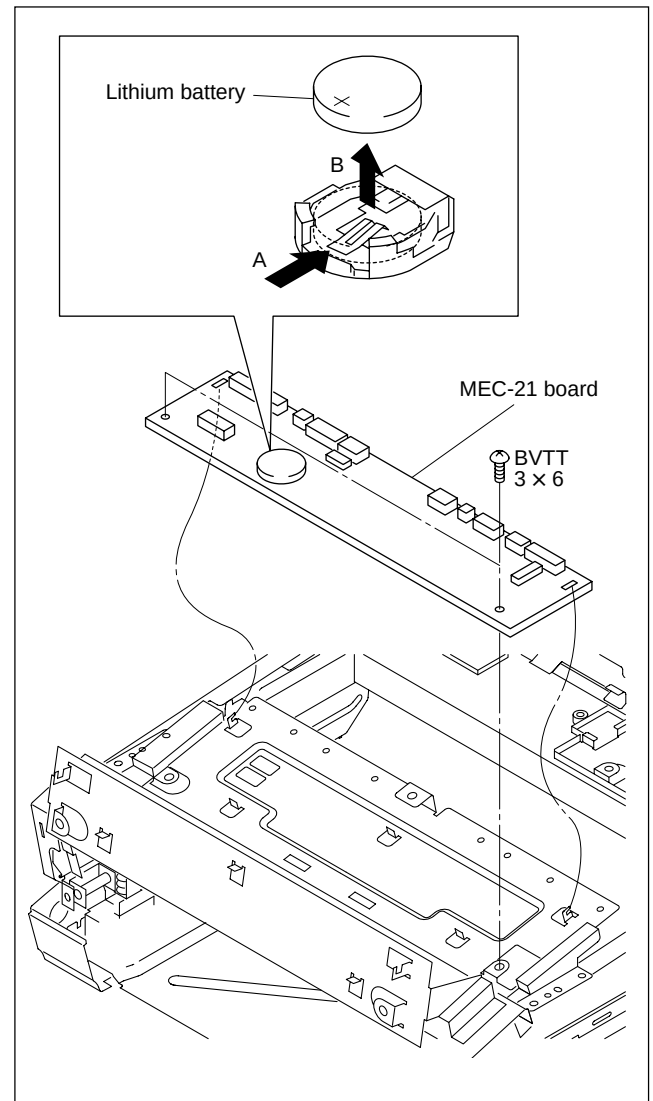
1. Remove the top cover sub-assembly. (Refer to Section 1-4-1.)
2. Remove the two screws and disconnect the harness from the connector (CN101) on the FP-138 board, then remove the FP-138 board.
3. Remove the four hooks [A], then remove the LCD bracket.
4. Remove the two hooks [B], then remove the LCD module from the connector (CN102) on the FP-138 board.



5. Remove the harness from the eight clampers.
6. Disconnect the eleven harnesses from the connectors (CN101-106, CN201, 202, 301, 401 and CN402) and remove the flexible wiring plate from the connector (CN203) on the MEC-21 board.



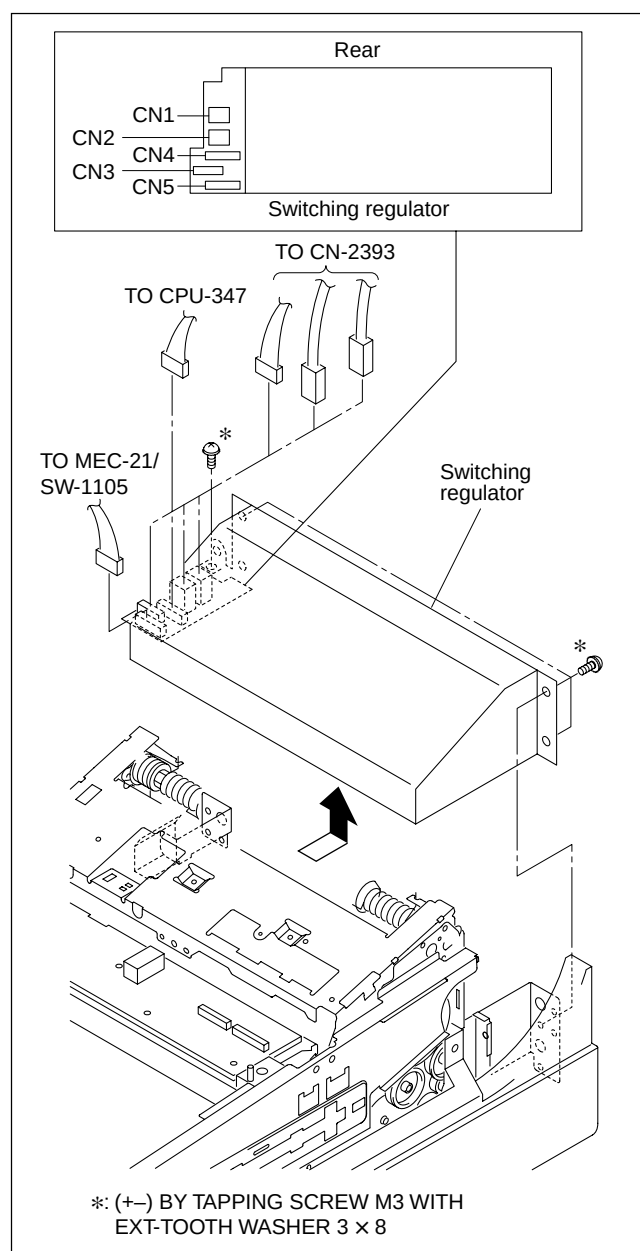
7. Remove the two screws, then remove the MEC-16 board.
8. Remove the lithium battery from the MEC-21 board in the direction shown by the arrow A, and then B.



9. Install the MEC-21 board in the reverse order of steps 1 to 8.

## 2-2. Switching Regulator

1. Remove the top cover sub-assembly. (Refer to Section 1-4-1.)
2. Remove the rear cover assembly. (Refer to Section 1-4-2.)
3. Remove the front panel (lower) assembly. (Refer to Section 1-4-3.)
4. Remove the side cover (L) assembly. (Refer to Section 1-4-4.)
5. Disconnect the five harnesses from the connectors (CN1-5) on the switching regulator.
6. Remove the three screws, then pull out the switching regulator in the direction shown by the arrow.



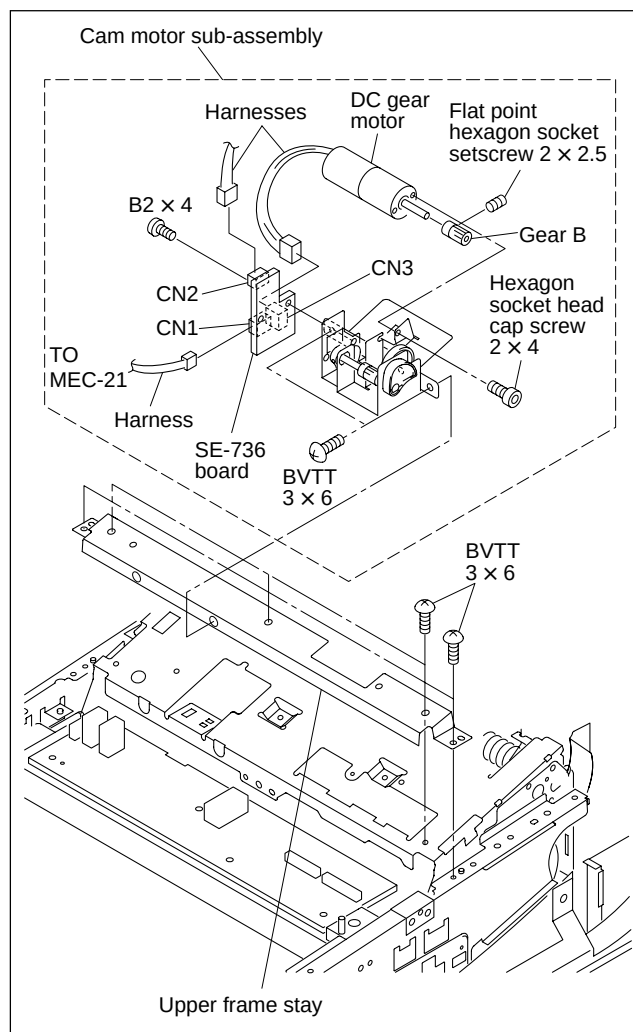
7. Attach the switching regulator in the reverse order of steps 1 to 6.

## 2-3. Cam Motor Sub-assembly

Required tool: Torque wrench

Sony Part Number: J-9001-010-A

1. Remove the top cover sub-assembly. (Refer to Section 1-4-1.)
2. Remove the five screws (BVTT3 × 6), then remove the upper frame stay.
3. Remove the two screws (BVTT3 × 6), then remove the cam motor sub-assembly.
4. Disconnect the three harnesses from the connectors (CN1-3) on the SE-736 board.
5. Remove the screw (B2 × 4), then remove the SE-736 board.
6. Remove the two hexagon socket head cap screws, then remove the DC gear motor.
7. Remove the flat point hexagon socket setscrew, then remove the gear B.



8. Attach the cam motor sub-assembly in the reverse order of steps 1 to 7.

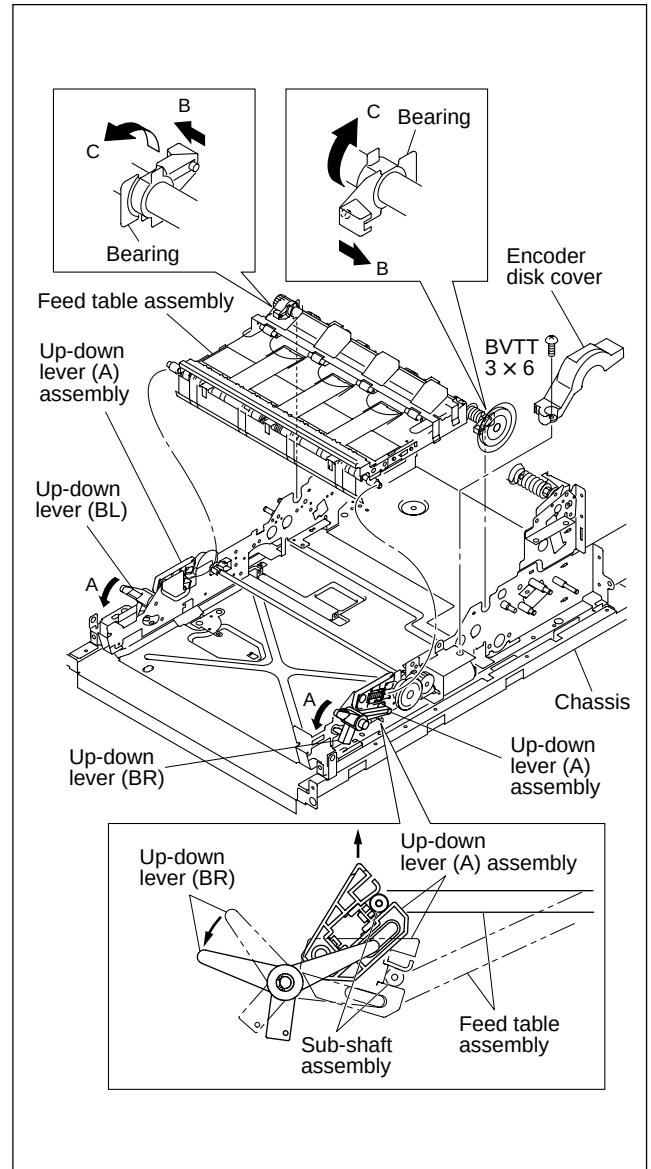


## 2-4. Feed Table Assembly

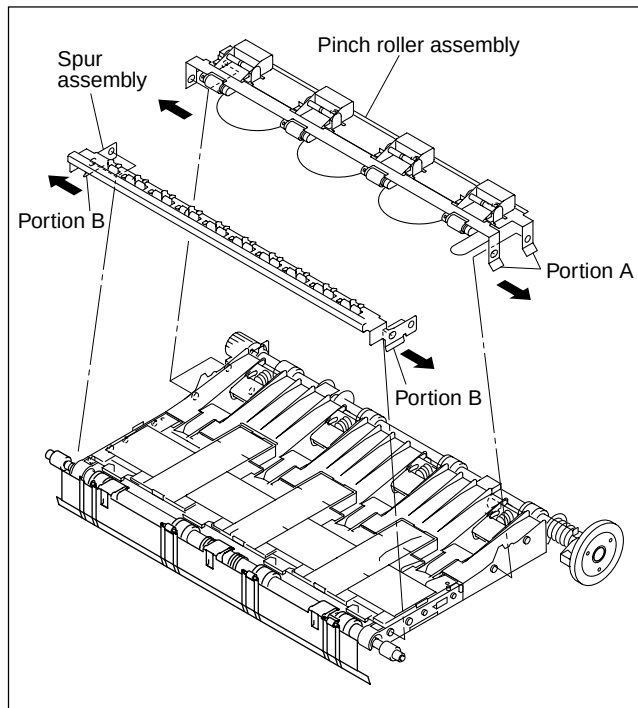
### Note

When attaching the feed table assembly, be sure to securely attach the sub-shaft assembly to the groove of the up-down lever (A) assembly.

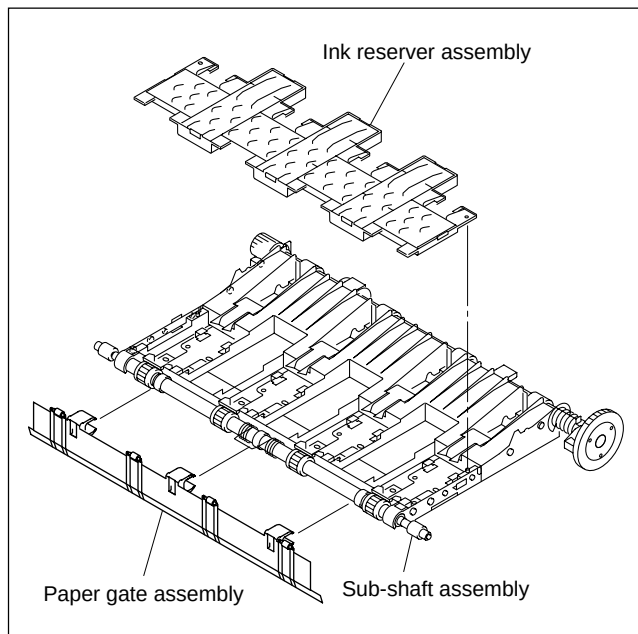
1. Remove the top cover sub-assembly. (Refer to Section 1-4-1.)
2. Remove the rear cover assembly. (Refer to Section 1-4-2.)
3. Remove the front panel (lower) assembly. (Refer to Section 1-4-3.)
4. Remove the side cover (L) assembly. (Refer to Section 1-4-3.)
5. Remove the side cover (R) assembly. (Refer to Section 1-4-4.)
6. Open the upper frame assembly. (Refer to Step 1 of Section 1-4-3.)
7. Remove the screw, then remove the encoder disk cover.
8. Push the up-down lever (BL) and up-down lever (BR) in the direction shown by the arrow A, then lift the feed table assembly.
9. Remove the two bearings from the chassis in the direction shown by the arrow B, then rotate them in the direction shown by the arrow C and remove the feed table assembly.



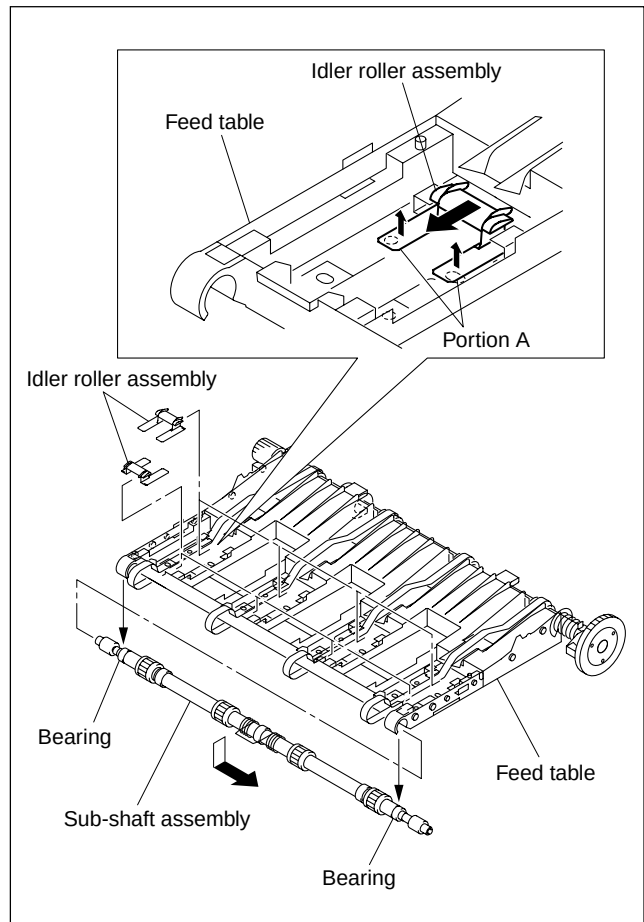
10. Expand the portion A of the pinch roller assembly, then remove the pinch roller assembly.
11. Expand the portion B of the spur assembly, then remove the spur assembly.



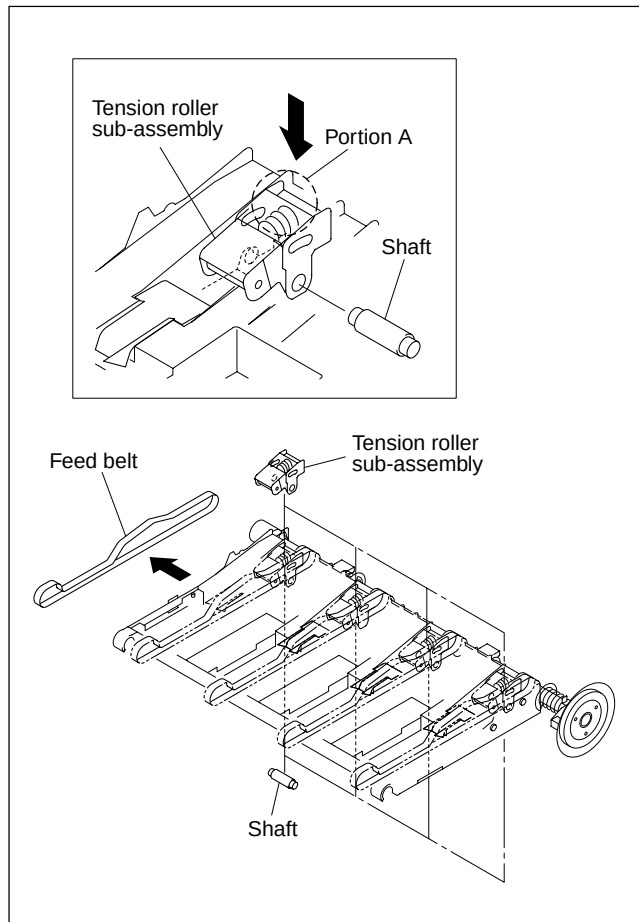
12. Remove the paper gate assembly from the ink reserver assembly and sub-shaft assembly.



13. Raise the portion A of the idler roller assembly, then remove the eight idler roller assemblies from the feed table.
14. Remove the two bearings of the sub-shaft assembly from the feed table assembly, then remove the sub-shaft assembly in the direction shown by the arrow.



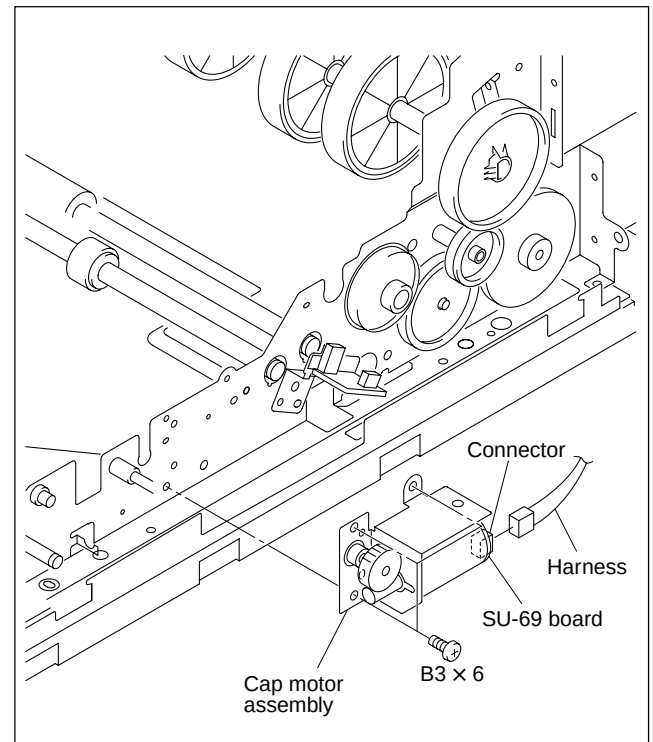
15. Pull out the shaft while pushing the portion A of the tension roller sub-assembly in the direction shown by the arrow, then remove the four shafts and four tension roller sub-assemblies.
16. Remove the four feed belts.



17. Attach the feed table assembly in the reverse order of steps 1 to 16.

## 2-5. Cap Motor Assembly

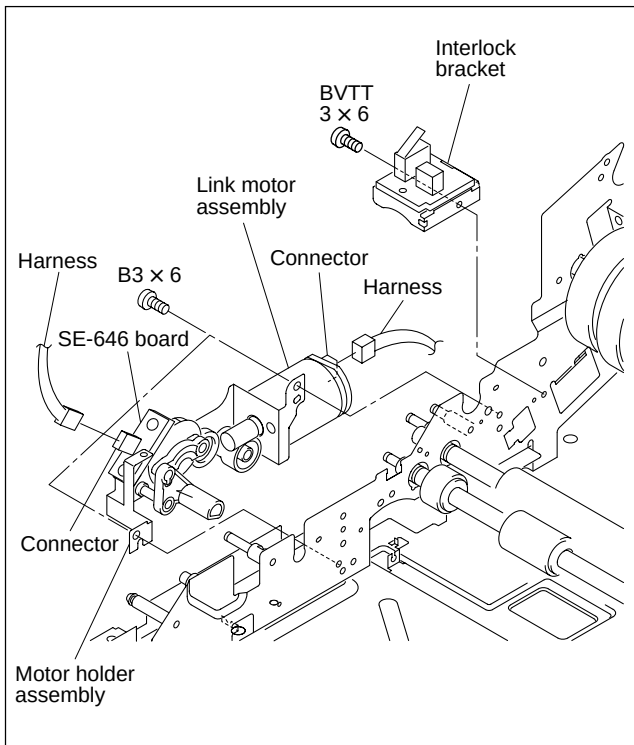
1. Remove the top cover sub-assembly. (Refer to Section 1-4-1.)
2. Remove the rear cover sub-assembly. (Refer to Section 1-4-2.)
3. Remove the front panel (lower) assembly. (Refer to Section 1-4-3.)
4. Remove the side cover (R) assembly. (Refer to Section 1-4-4.)
5. Remove the encoder disk cover. (Refer to step 6 of Section 2-4.)
6. Disconnect the harness from the connector on the SU-69 board.
7. Remove the three screws, then remove the cap motor assembly.



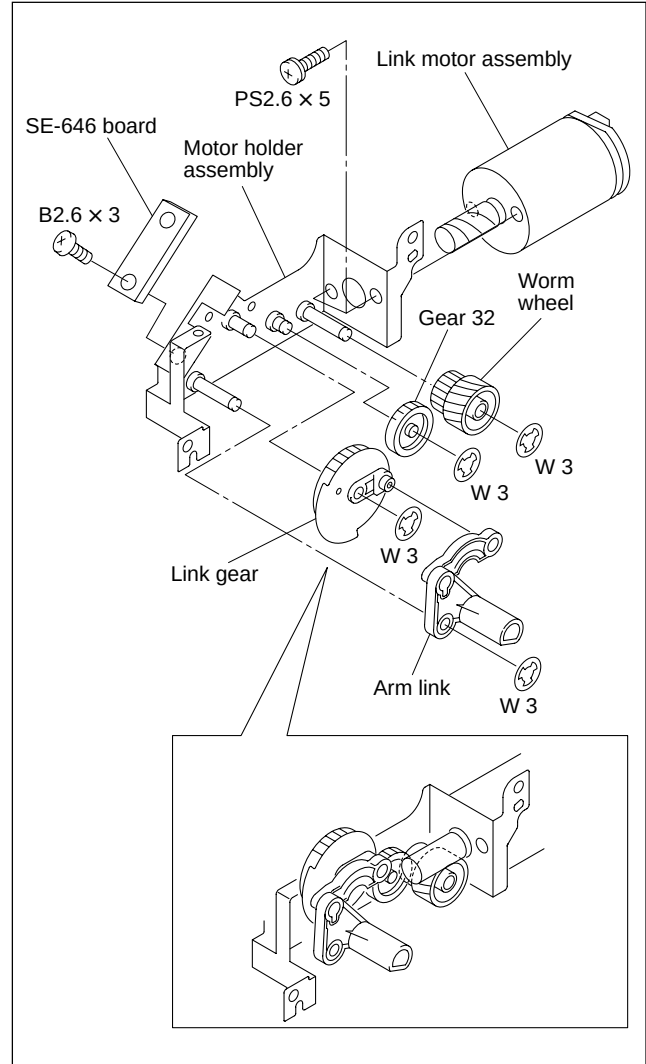
8. Attach the cap motor assembly in the reverse order of steps 1 to 7.

## 2-6. Motor Holder Assembly

1. Remove the top cover sub-assembly. (Refer to Section 1-4-1.)
2. Remove the rear cover assembly. (Refer to Section 1-4-2.)
3. Remove the front panel (lower) assembly. (Refer to Section 1-4-3.)
4. Remove the side cover (L) assembly. (Refer to Section 1-4-3.)
5. Remove the screw (BVTT3 × 6), then remove the interlock bracket.
6. Remove the two screws (B3 × 6), then remove the motor holder assembly.
7. Disconnect the harness from the connector on the link motor assembly.
8. Disconnect the harness from the connector on the SE-646 board.



9. Remove the screw (B2.6 × 3), then remove the SE-646 board.
10. Remove the retaining ring, then remove the arm link
11. Remove the three retaining rings, then remove the link gear, worm wheel and gear 32.
12. Remove the two screws (PS2.6 × 5), then remove the link motor assembly.

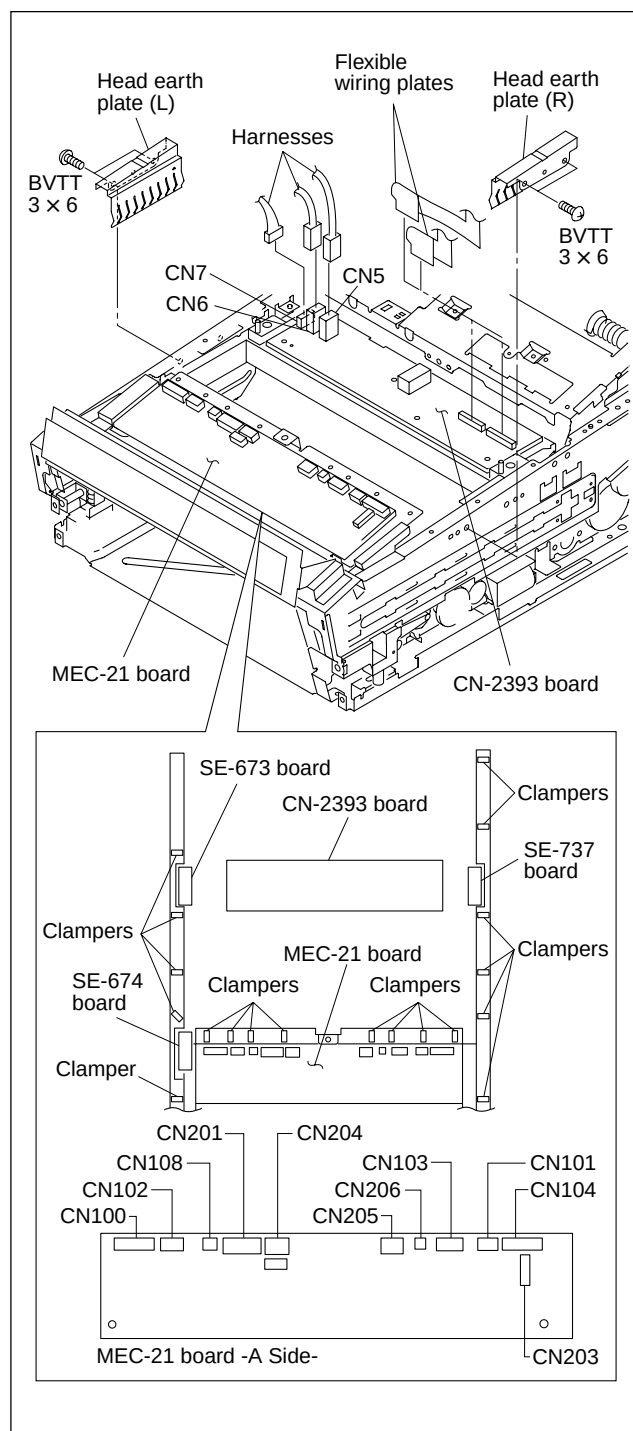


13. Attach the motor holder assembly in the reverse order of steps 1 to 12.

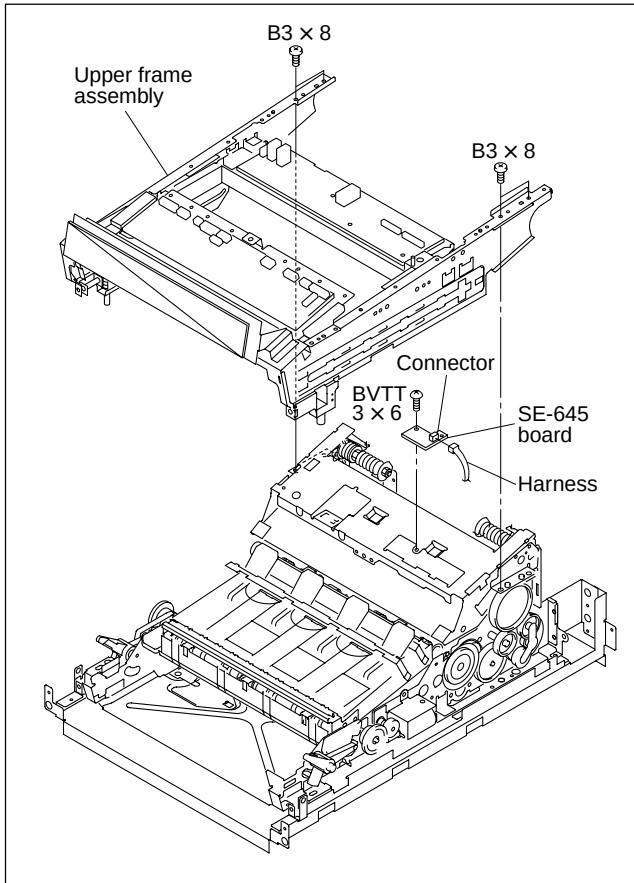
## 2-7. Back Frame Assembly

### Notes

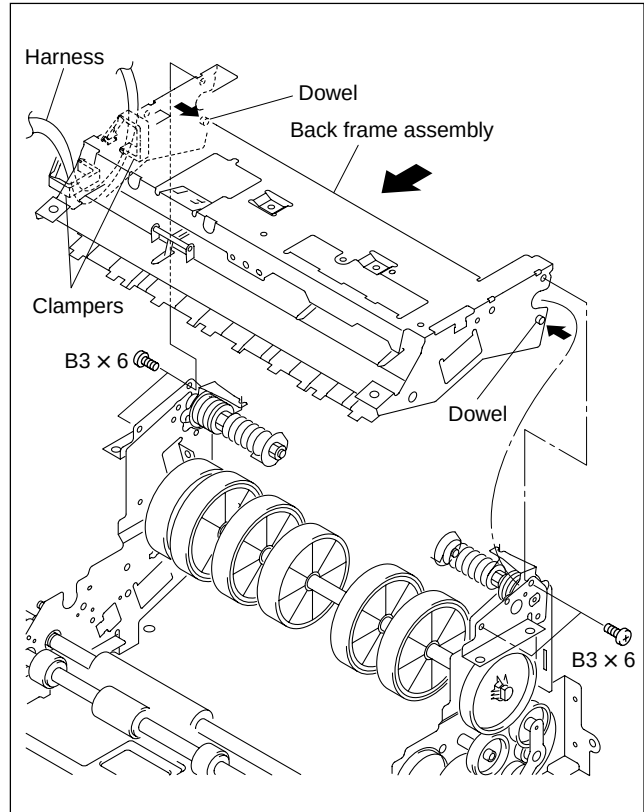
- When attaching/removing the upper frame assembly, be careful in handling the flexible wiring plate.
  - When removing the harnesses from each board, it is recommended to bundle them with adhesive cellophane tape, band, etc.
1. Remove the top cover sub-assembly. (Refer to Section 1-4-1.)
  2. Remove the rear cover assembly. (Refer to Section 1-4-2.)
  3. Remove the front panel (lower) assembly. (Refer to Section 1-4-3.)
  4. Remove the side cover (L) assembly. (Refer to Section 1-4-3.)
  5. Remove the side cover (R) assembly. (Refer to Section 1-4-4.)
  6. Remove the main board assembly. (Refer to Section 2-1-2.)
  7. Remove the cam motor sub-assembly. (Refer to Section 2-3.)
  8. Remove the feed table assembly. (Refer to Section 2-4.)
  9. Disconnect the three harnesses from the connectors (CN5-7) and remove the two flexible wiring plates from the connectors (CN2 and CN3) on the CN-2393 board.
  10. Remove all harnesses and flexible wiring plates from the connectors on the MEC-21 board.
  11. Disconnect all harnesses from the connectors on the SE-673/674/737 boards.
  12. Remove the harnesses from the nineteen clampers.
  13. Remove the four screws, then remove the head earth plate (L) and head earth plate (R).



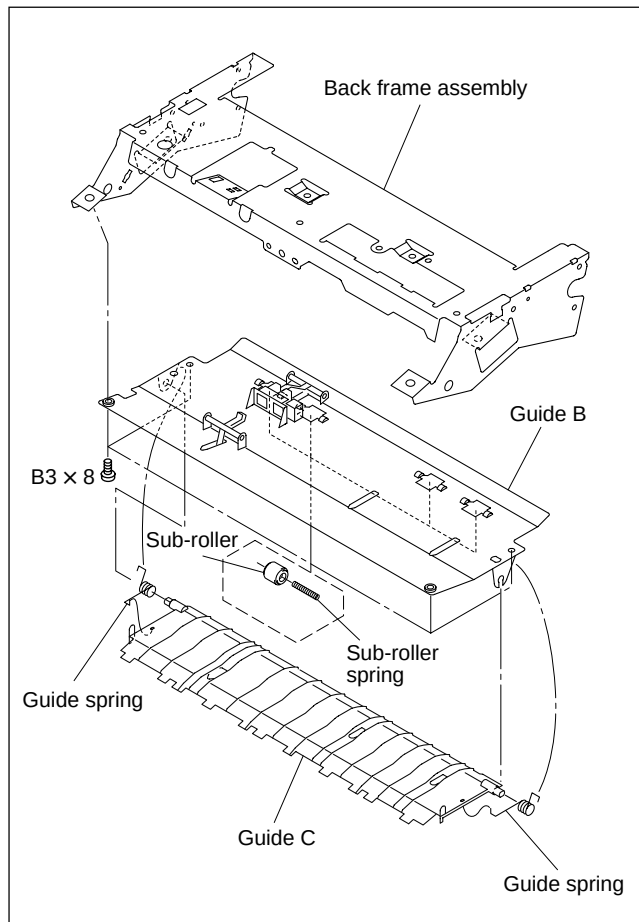
14. Disconnect the harness from the connector on the SE-645 board and remove the screw (BVTT3 × 6), then remove the SE-645 board.
15. Remove the four screws (B3 × 8), then remove the upper frame assembly.



16. Remove the harnesses from the two clampers of the back frame assembly.
17. Remove the four screws and two dowels from the back frame, then remove the back frame assembly in the direction shown by the arrow.



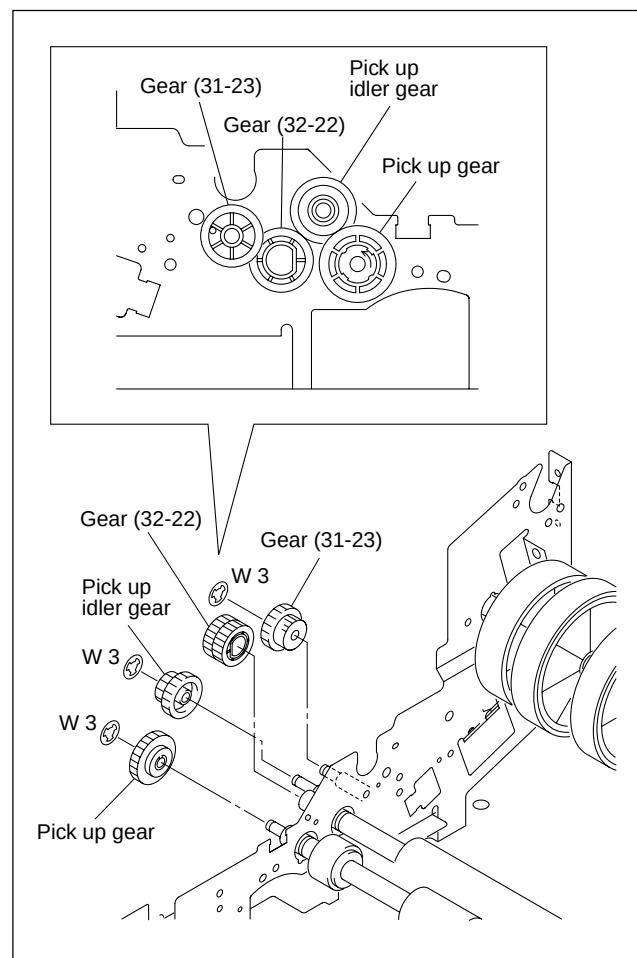
18. Remove the four screws, then remove the guide B.
19. Remove the four sub-rollers and four sub-roller springs from the guide B.
20. Remove the two guide springs, then remove the guide C.



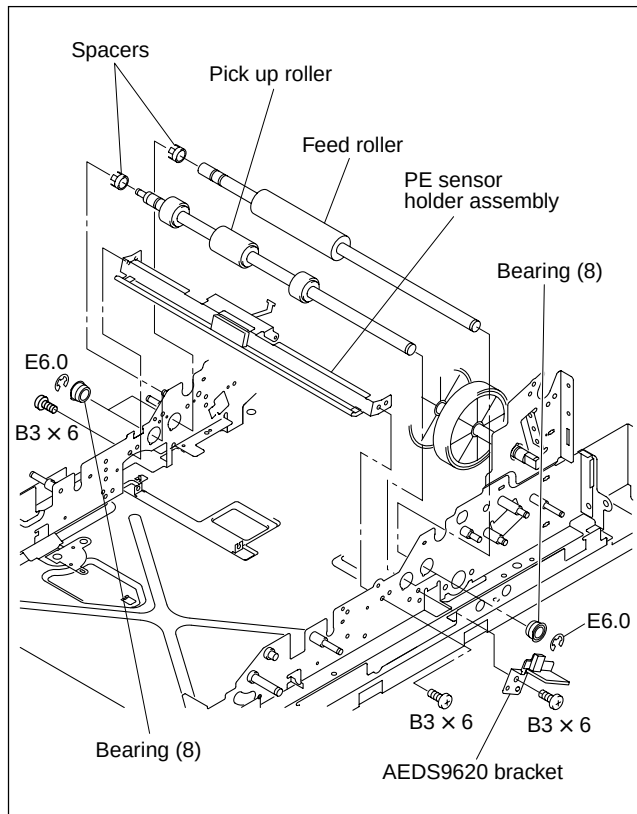
21. Attach the back frame assembly in the reverse order of steps 1 to 20.

## 2-8. Separation Roller Assembly

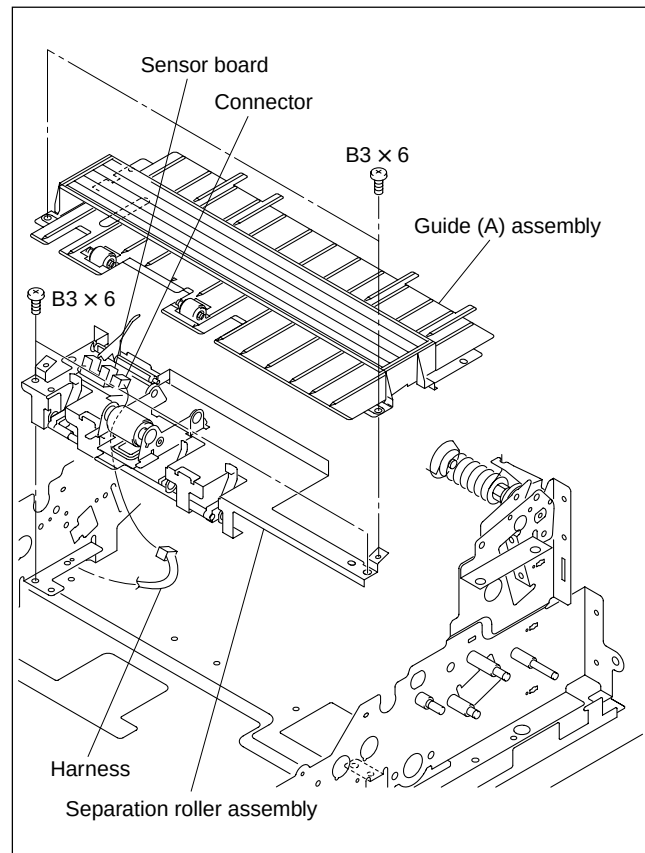
1. Remove the top cover sub-assembly. (Refer to Section 1-4-1.)
2. Remove the rear cover assembly. (Refer to Section 1-4-2.)
3. Remove the front panel (lower) assembly. (Refer to Section 1-4-3.)
4. Remove the side cover (L) assembly. (Refer to Section 1-4-3.)
5. Remove the side cover (R) assembly. (Refer to Section 1-4-4.)
6. Remove the main board assembly. (Refer to Section 2-1-2.)
7. Remove the cam motor sub-assembly. (Refer to Section 2-3.)
8. Remove the feed table assembly. (Refer to Section 2-4.)
9. Remove the cap motor assembly. (Refer to Section 2-5.)
10. Remove the motor holder assembly. (Refer to Section 2-6.)
11. Remove the back frame assembly. (Refer to Section 2-7.)
12. Remove the three retaining rings, then remove the pick up gear, pick up idler gear, gear (32-22) and gear (31-23).



13. Remove the screw, then remove the AEDS9620 bracket.
14. Remove the two screws, then remove the PE sensor holder assembly.
15. Remove the two retaining rings and two bearings (8), then remove the spacer and pick up roller.
16. Remove the two retaining rings and two bearings (8), then remove the spacer and feed roller.

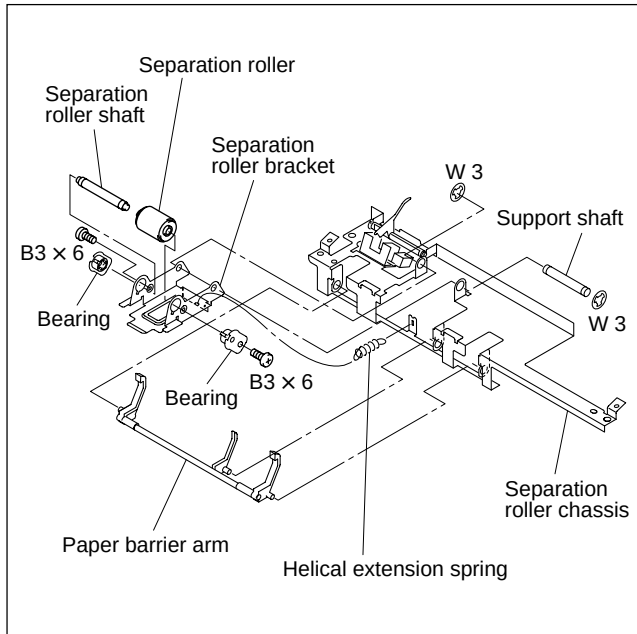


17. Remove the two screws, then remove the guide (A) assembly.
18. Disconnect the harness from the connector on the sensor board and remove the two screws, then remove the separation roller assembly.





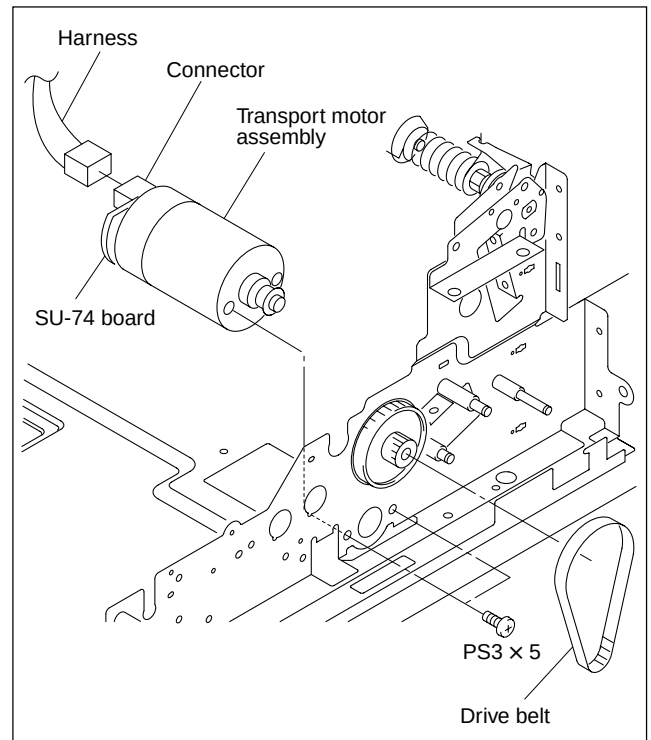
19. Remove the paper barrier arm from the separation roller chassis.
20. Remove the two retaining rings, then remove the support shaft.
21. Remove the helical extension spring, then remove the separation roller bracket.
22. Remove the two screws and two bearings, then remove the separation roller and separation roller shaft.



23. Attach the separation roller assembly in the reverse order of steps 1 to 22.

## 2-9. Transport Motor Assembly

1. Remove the top cover sub-assembly. (Refer to Section 1-4-1.)
2. Remove the rear cover assembly. (Refer to Section 1-4-2.)
3. Remove the front panel (lower) assembly. (Refer to Section 1-4-3.)
4. Remove the side cover (L) assembly. (Refer to Section 1-4-3.)
5. Remove the side cover (R) assembly. (Refer to Section 1-4-4.)
6. Remove the main board assembly. (Refer to Section 2-1-2.)
7. Remove the cam motor sub-assembly. (Refer to Section 2-3.)
8. Remove the feed table assembly. (Refer to Section 2-4.)
9. Remove the cap motor assembly. (Refer to Section 2-5.)
10. Remove the motor holder assembly. (Refer to Section 2-6.)
11. Remove the back frame assembly. (Refer to Section 2-7.)
12. Remove the separation roller assembly. (Refer to Section 2-8.)
13. Remove the drive belt.
14. Remove the two screws and disconnect the harness from the connector on the SU-74 board, then remove the transport motor assembly.



15. Attach the transport motor assembly in the reverse order of steps 1 to 14.

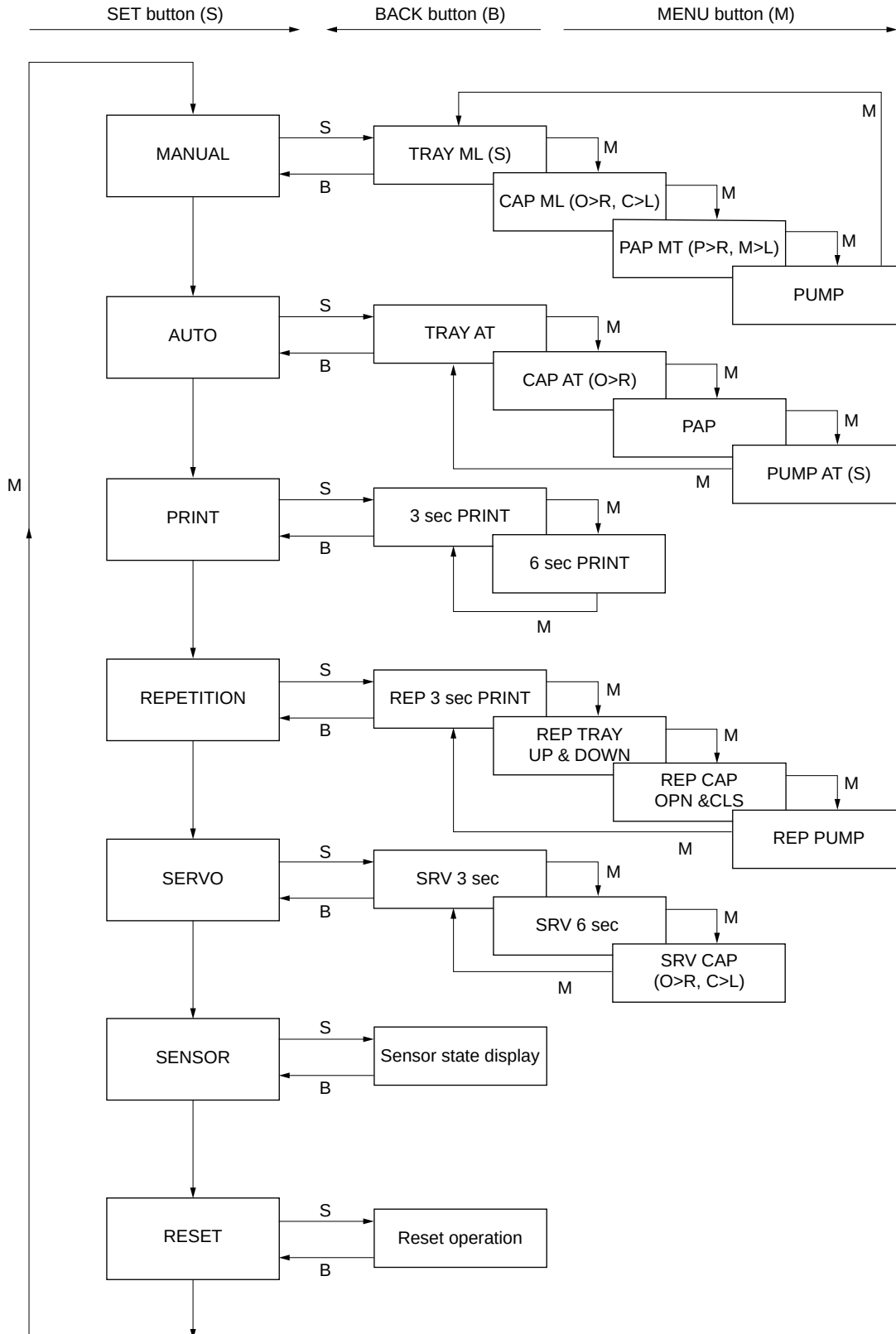


## Section 3

### Service Mode

The service mode of this unit can be used to confirm the mechanical operation.

#### Hierarchy of service mode



### 3-1. Service Mode

#### 3-1-1. Description of Buttons

- MENU (menu) button: Displays a menu on the display panel (referred to as LCD hereinafter).  
Moves the same hierarchy in a menu.
- SET (determine) button: Starts, stops, and sets the operation.  
Moves to the hierarchy below the current one.
- BACK (return) button: Moves to the hierarchy above the current one.  
Stops the operation.
- ←, → button: Changes the setting item displayed on the LCD.  
Starts and stops the operation.

#### 3-1-2. Starting the Service Mode

1. Check that the cleaning unit closes. (Cap\_Home sensor)
2. Disconnect the connector from the Cap\_Pos sensor.
3. Turn on the power switch while pressing the ON/STANDBY button on the panel.
4. Check that the service mode starts.
5. Connect the connector to the Cap\_Pos sensor.

#### 3-1-3. Confirming the Sensor

1. Press the “MENU” button and select “SENSOR (sensor)” you want to confirm.
2. Press the “SET” button.
3. The LCD display changes to “0 ⇔ 1” by interrupting a sensor.

Interrupting the sensor

**Note**

Be careful not to damage it when interrupting a sensor.

A sensor is interrupted using a small photointerrupter or paper (thick paper) according to the sensor to be interrupted.

#### Location on the LCD panel

|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 |
| 15 | 14 | 13 | 12 | 11 | 10 | 9  | 8  | 7  | 6  | 5  | 4  | 3  | 2  | 1  | 0  |

| Position | Sensor name | State                      |
|----------|-------------|----------------------------|
| 0        | Cap_Cls     | 1: Closed<br>0: Indefinite |
| 1        | Cap_Pos     | —                          |
| 2        | Cap_Open    | 1: Open<br>0: Indefinite   |
| 3        | Tray_Pos    | —                          |
| 4        | Paper_DET2  | 1: Not exist<br>0: Exists  |

| Position | Sensor name       | State                                                                                 |
|----------|-------------------|---------------------------------------------------------------------------------------|
| 5        | Size_S            | 1: Not exist<br>0: Exists                                                             |
| 6        | Size_M            | 1: Not exist<br>0: Exists                                                             |
| 7        | Size_L            | 1: Not exist<br>0: Exists                                                             |
| 8        | Pap_Emp           | 1: Not exist<br>0: Exists                                                             |
| 9        | Reserved          | —                                                                                     |
| 10       | NoCartridge       | 1: Closed<br>0: Open                                                                  |
| 11       | Set_Open          | 1: Closed<br>0: Open                                                                  |
| 12       | Manu_Feed         | 1: Not exist<br>0: Exists                                                             |
| 13       | Reserved          | —                                                                                     |
| 14       | POWER/STANDBY SW. | 1: OFF<br>0: ON                                                                       |
| 15       | Paper_Det1        | 1: Not exist<br>0: Exists                                                             |
| 16       | MENU SW           | 1: OFF<br>0: ON<br>The “POWER/STANDBY” indicator lights in orange.                    |
| 17       | ← switch          | 1: OFF<br>0: ON<br>The “POWER/STANDBY” indicator lights in green.                     |
| 18       | SET switch        | 1: OFF<br>0: ON<br>The “READY” indicator lights in red.                               |
| 19       | → switch          | 1: OFF<br>0: ON<br>The “READY” indicator lights in green.                             |
| 20       | DUMMY_JET         | The empty discharge position is obtained when 0 changes to 1.<br>(0: Closed, 1: Open) |
| 21       | Enc_A             | —                                                                                     |
| 22       | Enc_B             | —                                                                                     |
| 23       | Pump_Pos          | 1: Origin (The accurate origin is obtained when 0 changes to 1.)                      |
| 24       | Cap_Det           | 1: Exists<br>0: No exist                                                              |
| 25       | Reserved          | —                                                                                     |
| 26       | Reserved          | —                                                                                     |
| 27       | Reserved          | —                                                                                     |
| 28       | Reserved          | —                                                                                     |
| 29       | Reserved          | —                                                                                     |
| 30       | Reserved          | —                                                                                     |
| 31       | Reserved          | —                                                                                     |

### **3-1-4. Confirmation of Motor Operation**

1. Press the “MENU” button and select “MANUAL”.
2. Press the “SET” button.
  - TRAY ML (S): Press the “SET” button. The link motor rotates. Press the “SET” button again to stop the rotation of the link motor.
  - CAP ML: The cap is opened using a → button.  
The cap is closed using a ← button.
  - PAP ML: The carrier motor begins to rotate in the forward direction using a → button.  
Press the button again to stop the rotation.  
The carrier motor begins to rotate in the reverse direction using a ← button.  
Press the button again to stop the rotation.
  - PUMP ML (S): Press the “SET” button. The pump motor begins to rotate. Press the “SET” button again to stop the rotation.

### **3-1-5. Confirmation of Paper Feed Operation (A print is not done in this case.)**

1. Press the “MENU” button and select “PRINT”.
2. Press the “MENU” button, select “3 sec PRINT”, and press the “SET” button.  
The paper feed can be confirmed for three seconds.
3. Press the “MENU” button, select “6 sec PRINT”, and press the “SET” button.  
The paper feed can be confirmed for six seconds.

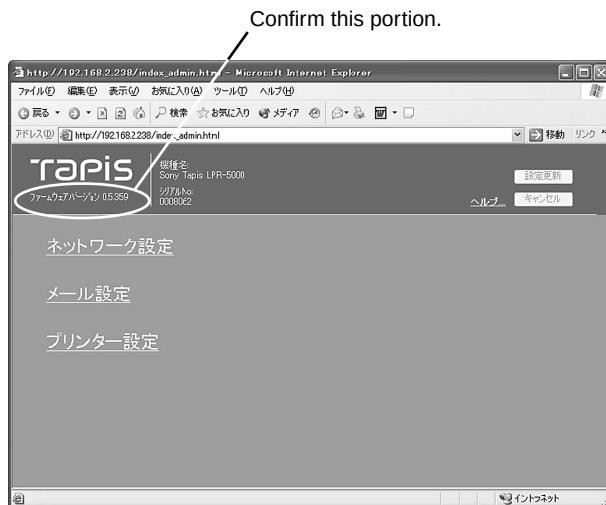
### **3-1-6. Mechanical Reset (Restart)**

1. Press the “MENU” button and select “RESET”.
2. Press the “SET” button.  
This unit is reset and restarted.

## 3-2. Upgrading

### 3-2-1. Confirmation of Version

1. Enter URL below and confirm the firmware version.  
http://[IP address of this unit]/index\_admin.html



### 3-2-2. Upgrading

#### Required equipment

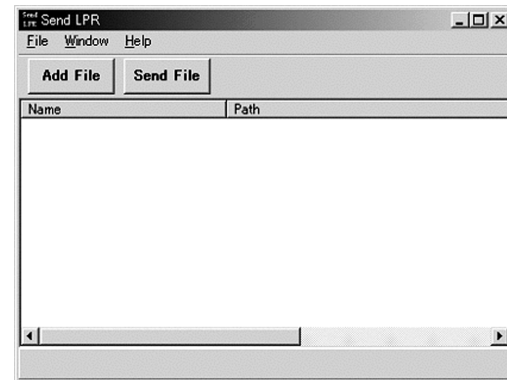
- Personal computer (PC)
- Network cable (Cross)
- Dedicated software (sendlpr)
- Firmware file

#### Preparation

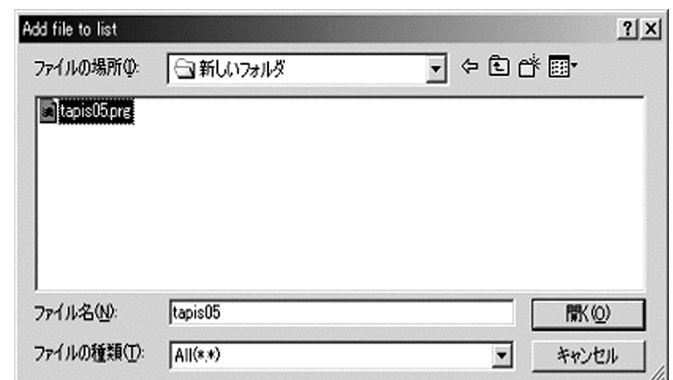
1. Connect this unit and PC using a network cable (cross).
2. Turn on the power to PC and this unit.
3. Copy dedicated software (sendlpr) to the arbitrary position of PC.

## Upgrading

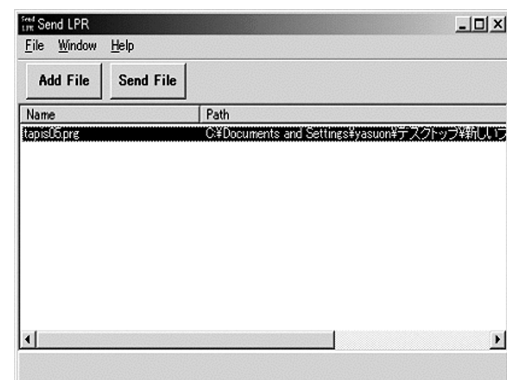
1. Confirm that “READY” is displayed on the LCD panel of this unit.
2. Start Sendlpr.



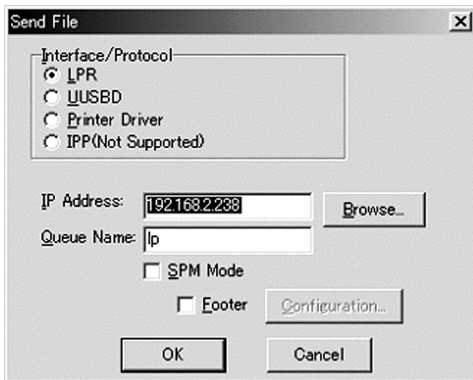
3. Press the “Add File” button and select a firmware file.  
(File name: tapisxxxx.prg (“xxxx” indicates the version.)



4. Select the firmware software and press the “SendFile”.



5. Enter the IP address of this unit and press the “OK” button.



6. Confirm that the LCD display of this unit changes from “LOADING” to “READY”. (Termination display)
7. Turn off the main power (on the rear panel of this unit) and then turn on it again after about ten seconds.
8. “Reread” the browser and confirm that the version was changed.



## Section 4

### Troubleshooting

#### 4-1. Error Code

| Error code | Contents of error                                                             | Detection conditions          | Place (block) to be supposed                                                                                                               |
|------------|-------------------------------------------------------------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 004        | I/F time-out to DSP                                                           | During print                  | System control block on CPU-357 board<br>DSP on CPU-347 board                                                                              |
| 006        | State transition error of system                                              | At all times                  | Mechanical block<br>System control block on CPU-357 board<br>Mechanical control block on MEC-21 board<br>Defective connection of harnesses |
| 013        | DSP initialization error                                                      | Before print                  | System control block on CPU-357 board<br>DSP on CPU-347 board                                                                              |
| 047        | No response is sent from the mechanical control block during initialization.  | During power ON               | System control block on CPU-357 board<br>Mechanical control block on MEC-21 board<br>Defective connection of harnesses                     |
| 051        | Circulating pump error                                                        | During pump operation         | Mechanical block (Pump)<br>Mechanical block on MEC-21 board<br>Defective connection of harnesses                                           |
| 145        | The heater current exceeding the prescribed value flows during non-operation. | Except during print execution | Head cartridge<br>Power supply                                                                                                             |
| 146        | Head cartridge ink leak                                                       | During print                  | Head cartridge<br>Power supply                                                                                                             |
| 147        | Failure in head cartridge communication                                       | During print                  | Head cartridge<br>System control block on CPU-357 board<br>Defective connection of harnesses                                               |

## 4-2. Electrical Troubleshooting

### Notes

In the troubleshooting of this section, specify the cause of a failure according to each symptom after confirming the items below.

- Connect the connectors around the MEC-21 board.
- Connect the connectors on the SW-1105 board.
- Connect the connectors in a power module.

### 4-2-1. Power cannot be turned on

#### Symptom

- The power cannot be turned on even if the power switch is set to ON.
- All LEDs on the front panel of this unit remain OFF.
- Nothing appears on the LCD display panel on the front panel of this unit.
- The LINK/ACT LED indicator on the rear panel of this unit remains OFF.
- A motor does not operate.

**Trouble:** After the unit is left unattended for about 20 minutes with the power turned off, the LED lights or the LCD display panel is displayed when the power switch is set to ON. After that, the power output is turned off with the timing when a motor operates.

**Cause:** Short-circuit of the power system in a head cartridge

Short-circuit of a motor circuit

- Defective motor
- Defective harness connected to a motor and biting by a chassis
- Defective motor driver circuit on MEC-21 board

**Remedy:** Check the power system of the board in a head cartridge.

Replace the head cartridge.

Check the motor harness and replace it as required.

Check the MEC-21 board and replace it as required.

**Trouble:** After the unit is left unattended for about 20 minutes with the power turned off, all LEDs momentarily light when the power switch is set to ON. Immediately after that, the power output is turned off.

**Cause:** Short-circuit of a logic power (3.3 V/5 V) system on the side of this unit

Defective boards

Short-circuit of a power harness and biting of harnesses by a chassis

Short-circuit of the power terminal in a flexible flat cable

**Remedy:** Check the power harness in this unit and replace it as required.

Check the flexible flat cable in this unit and replace it as required.

Check the power system of each board in this unit and replace it as required.

**Trouble:** After the system is left unattended for about 20 minutes with the power turned off, the LED blinks and lights or the LCD display panel is displayed when the power switch is set to ON with the head cartridge removed. After that, the system control software on the CPU-357 board and the mechanical control software on the MEC-21 board operate.

**Cause:** Short-circuit of the power system in a head cartridge

**Remedy:** Check the power system of the board in a head cartridge.

Replace the head cartridge.

Trouble: After the unit is left unattended for about 20 minutes with the power turned off, the items below take place when the power switch is set to ON with the head cartridge removed.

- LED does not blink and light at all.
- Nothing appears on the LCD display panel.
- A motor does not operate.

Cause: Defective power supply

Out of the range of an AC input voltage on the primary side (240 V)

Remedy: Confirm the AC input voltage.

Replace the power supply.

#### **4-2-2. Nothing appears on the LCD display panel even if the power state is changed from OFF to ON**

Trouble: All LEDs remain OFF even if the power state is changed from OFF to ON. Moreover, the LINK/ACT LED indicator on the rear panel of this unit remains OFF even when an Ethernet cable is connected.

Cause: A reset signal is not output normally.

- Defective reset circuit on CPU-357 board
- Defective power system on CPU-347 board

Remedy: Check the CPU-357 board and replace it as required.

Check the CPU-347 board and replace it as required.

Trouble: All LEDs on the front panel of this unit remains OFF even if the power state is changed from OFF to ON. However, the LINK/ACT LED indicator on the rear panel of this unit light and blink when an Ethernet cable is connected.

Cause: A reset signal does not reach the MEC-21 board.

- Defective MEC-21 board
- Defective connection of IF-881FPC

Remedy: Check the connection of IF-881FPC and replace it as required.

Check the MEC-21 board and replace it as required.

Trouble: All LEDs on the front panel of this unit light when the power state is changed from OFF to ON. After that, all LEDs remain ON. The LINK/ACT LED indicator on the rear panel of this unit remains OFF even if an Ethernet cable is connected.

Cause: The state of a reset signal is the reset output state.

- Defective reset circuit on CPU-357 board
- Defective power system on CPU-347 board
- Defective output of 3.3 V power

Remedy: Check the CPU-357 board and replace it as required.

Check the CPU-347 board and replace it as required.

Check the power supply voltage (3.3 V).

Trouble: All LEDs on the front panel of this unit light when the power state is changed from OFF to ON. After that, all LEDs remain ON. The LINK/ACT LED indicator on the rear panel of this unit lights and blinks when an Ethernet cable is connected.

Cause: A reset signal does not reach the MEC-21 board.

- Defective MEC-21 board
- Defective connection of IF-881FPC

Remedy: Check the connection of IF-881FPC and replace it as required.  
Check the MEC-21 board and replace it as required.

Trouble: When the power state is changed from OFF to ON, all LEDs on the front panel of this unit light or all LEDs remain OFF. A printer can be accessed from the browser of PC when a personal computer (referred to as PC hereinafter) is connected to Ethernet. (WEB can be opened.)

Cause: The mechanical control software on the MEC-21 board does not operate.

- Defective MEC-21 board
- Defective connection of IF-881FPC

Remedy: Check the connection of IF-881FPC and replace it as required.  
Check the MEC-21 board and replace it as required.

Trouble: The LCD display panel does not operate normally. (The LED on the front panel of this unit and the initial operation of mechanism operate normally when the power state is changed from OFF to ON. After that, the current state is shifted to the standby state when you press the ON/STANDBY button.)

Cause: Defective LCD display panel

Defective connection of an FPC connector on LCD display panel

Remedy: Check the connection of the LCD display panel and replace it as required.

Trouble: A printer cannot be accessed from the browser of PC even if PC and Ethernet are connected about 30 seconds after the power state is changed from OFF to ON. (WEB cannot be opened.)

Cause: The system control software on the CPU-357 board does not operate.

- Defective CPU-357 board
- Defective CPU-347 board

Remedy: Check the CPU-357 board and replace it as required.  
Check the CPU-347 board and replace it as required.

Trouble: A printer cannot be recognized by the printer setting of PC even if PC and USB are connected about 30 seconds after the power state is changed from OFF to ON.

Cause: The system software on the CPU-357 board does not operate.

- Defective CPU-357 board
- Defective CPU-347 board

Remedy: Check the CPU-357 board and replace it as required.  
Check the CPU-347 board and replace it as required.

#### **4-2-3. The power output is turned off during start of initial operation or during initial operation when the power state is changed from OFF to ON**

- All LEDs on the front panel of this unit remain OFF.
- Nothing appears on the LCD display panel on the front panel of this unit.
- The LINK/ACT LED indicator on the rear panel of this unit remains OFF.
- A motor stops.

Trouble: When the power state is changed from OFF to ON, all LEDs on the front panel of this unit light and a part of LEDs is turned off. After the LCD display panel is displayed, the power output is turned off as soon as a motor operates.

Cause: Short-circuit of the power system in a head cartridge  
Short-circuit of a motor circuit

- Defective motor
- Defective harness connected to a motor or biting of harnesses by a chassis
- Defective block around the motor driver circuit on MEC-21 board

Remedy: Check the power system on the board in a head cartridge.  
Replace the head cartridge.  
Check the motor harness and replace it as required.  
Check the MEC-21 board and replace it as required.

Trouble: When the power state is changed from OFF to ON, the LED on the front panel of this unit lights momentarily and the power output is turned off.

Cause: Short-circuit of a logic power (3.3 V/5 V) system on the side of this unit

- Defective boards
- Short-circuit of a power harness and biting of harnesses by a chassis
- Short-circuit of the power terminal in a flexible flat cable

Remedy: Check the power harness and replace it as required.  
Check the connection of a flexible flat cable and replace it as required.

Trouble: When the power state is changed from OFF to ON, an abnormal sound is generated from the power supply and the power output is turned off.

Cause: Out of the range of an AC input voltage on the primary side  
Defective power supply

Remedy: Confirm the AC input voltage.  
Replace the power supply.

#### **4-2-4. An error or comment is displayed during initial operation after the power state is changed from OFF to ON**

Trouble: A motor does not operate during initial operation.

Cause: Defective motor circuit

- Defective connection of a motor and harness
- Biting of harnesses connected to a motor by a chassis
- Defective motor
- Defective motor driver circuit on MEC-21 board

Defective mechanical block

Remedy: Check the motor harness and replace it as required.  
Check the motor and replace it as required.  
Check the MEC-21 board and replace it as required.  
Confirm the defective mechanical block.

Trouble: A motor operates during initial operation, but an error on the mechanical operation occurs.

Cause: Defective sensor circuit

- Defective connection of harnesses connected to each sensor
- Biting of harnesses connected to each sensor by a chassis
- Defective sensors
- Defective sensor signal input circuit on MEC-21 board

Defective mechanical block

Remedy: Check the harnesses connected to each sensor and replace them as required.  
Check each sensor and replace it as required.  
Check the MEC-21 board and replace it as required.  
Confirm the defective mechanical block.

Trouble: A “No head cartridge” error is displayed.

Cause: Defective setting of a head cartridge

- Defective connection of a board-to-board connector

Defective head cartridge detection circuit

- Defective head detection circuit on CN-2393 board
- Defective IF-912 board
- Defective connection of DIO-73FPC

Remedy: Confirm the removal and insertion of a head cartridge.  
Confirm the mechanical matching state of a head cartridge and this unit.  
Check the IF-912 board in a head cartridge and replace it as required.  
Check the connection of DIO-73FPC and replace it as required.  
Check the CN-2393 board and replace it as required.

Trouble: An error on a head cartridge function is displayed.

Cause: Defect in a head cartridge

- Occurrence of ink leak
- Defective IF-912 board
- Defective HIF-14 board
- Defective head cartridge assembly

Remedy: Confirm the ink leak in a head cartridge.  
Check the board in a head cartridge and replace it as required.  
Check the mechanical structure in a head cartridge and replace it as required.  
Replace the head cartridge.

Trouble: An error or comment on the remaining quantity of ink is displayed.

Cause: Ink is little left or no ink is left.  
Occurrence of ink leak  
Defective ink remaining quantity detection circuit

- Dirty or defective ink cartridge terminal
- Defective IE-57 board or dirty terminal
- Defective connection of IF-912 and IE-57 boards
- Defective IF-912 board

Remedy: Replace the ink cartridge.

Confirm the ink leak in a head cartridge.

Confirm the dirt in an ink cartridge terminal and remove it as required.

- Confirm the dirt in the terminal on the IE-57 board and remove it as required.
- Confirm the connection of IE-57 and IF-912 boards.
- Check the IE-57 board and replace it as required.
- Check the IF-912 board and replace it as required.

Trouble: A fetal error is displayed.

Cause: Defective electrical hardware that cannot be recovered

- Defective CPU-357 board
- Defective CPU-347 board
- Other defective electrical hardware

Defective mechanical block

Defective head cartridge

Remedy: Check the CPU-357 board and replace it as required.

Check the CPU-347 board and replace it as required.

Check the connection of each harness and replace it as required.

Check the connection of each flexible flat cable and replace it as required.

Check other electric boards and replace it as required.

Confirm the mechanical block and repair it.

Check the inside of a head cartridge and replace it as required.

Trouble: An error whose error code is specified occurs, and an error whose contents are displayed on the display panel occurs.

Cause: Refer to the error code list. (Refer to section 4-1.)

Conform to the contents displayed on the display panel.

Remedy: Check each factor.

#### **4-2-5. The initial operation after the power state is changed from OFF to ON is normally terminated, but a printer cannot be accessed from PC**

Trouble: The initial operation of a mechanical block is normally terminated, but the LINK/ACT LED indicator on the rear panel of this unit is turned off even if PC and Ethernet are connected.

Cause: Defective network

Defective Ethernet circuit on CPU-357 board

Remedy: Confirm the network operation.

Check the CPU-357 board and replace it as required.

Trouble: The initial operation of a mechanical block is terminated normally. However, even if PC and Ethernet are connected, a printer cannot be accessed from the browser of PC though the LINK/ACT LED indicator on the rear panel of this unit lights or blinks.

Cause: Defective network setting

Remedy: Confirm the setting of a network.

Trouble: The initial operation of a mechanical block is normally terminated, but a printer cannot be recognized by the printer setting of PC even if PC and USB are connected.

Cause: Defective USB-related software operation of PC  
Defective USB circuit on CPU-357 board

Remedy: Restart PC or reconnect a printer.  
Check the CPU-357 board and replace it as required.

#### **4-2-6. The state of this unit is not normally shifted even if you press each button on the front panel of this unit after the initial operation is normally terminated and after “READY” is displayed.**

Trouble: The response and display of this unit does not appear.  
The response and display that differ from those during normal operation appear.

Cause: Defective button pressing detection circuit on FP-138 board

Remedy: Check the FP-138 board and replace it as required.

#### **4-2-7. A test print or a print from PC is not normally done after the initial operation is normally terminated and after “READY” is displayed**

Trouble: An error on the operation of a mechanical block is displayed.

- Motor-related error
- Sensor-related error

Cause: Defective motor circuit

- Defective connection of the harness connected to a motor
- Biting of the harnesses to a motor by a chassis
- Defective motor
- Defective motor driver circuit on MEC-21 board

Defective sensor circuit

- Defective connection of the harnesses connected to each sensor
- Biting of the harnesses connected to each sensor by a chassis
- Defective sensors
- Defective sensor signal input circuit on MEC-21 board

Defective mechanical block

Remedy: Check each motor harness and replace it as required.

Check each motor and replace it as required.

Check each sensor harness and replace it as required.

Check each sensor and replace it as required.

Check the MEC-21 board and replace it as required.

Confirm the mechanical block.

Trouble: A “No head cartridge” error is displayed.

Cause: Defective setting of a head cartridge

- Defective connection of a board-to-board connector

Defective head cartridge detection circuit

- Defective head detection circuit on CN-2393 board
- Defective IF-912 board
- Defective connection of DIO-73FPC



Remedy: Confirm the removal and insertion of a head cartridge.  
Confirm the mechanical matching state of a head cartridge and this unit.  
Check the IF-912 board in a head cartridge and replace it as required.  
Check the connection of DIO-73FPC and replace it as required.  
Check the CN-2393 board and replace it as required.

Trouble: An error on a head cartridge function is displayed.

Cause: Defect in a head cartridge

- Occurrence of ink leak
- Defective IF-912 board
- Defective HIF-14 board
- Defective head cartridge assembly

Remedy: Confirm the ink leak in a head cartridge.  
Check the board in a head cartridge and replace it as required.  
Check the mechanical structure in a head cartridge and replace it as required.  
Replace the head cartridge.

Trouble: An error or comment on the remaining quantity of ink is displayed.

Cause: Ink is little left or no ink is left.  
Occurrence of ink leak  
Defective ink remaining quantity detection circuit

- Dirty or defective ink cartridge terminal
- Defective IE-57 board or dirty terminal
- Defective connection of IF-912 and IE-57 boards
- Defective IF-912 board

Remedy: Replace the ink cartridge.  
Confirm the ink leak in a head cartridge.  
Confirm the dirt in an ink cartridge terminal and remove it as required.

- Confirm the dirt in the terminal on the IE-57 board and remove it as required.
- Confirm the connection of IE-57 and IF-912 boards.
- Check the IE-57 board and replace it as required.
- Check the IF-912 board and replace it as required.

Trouble: A fetal error is displayed.

Cause: Defective electrical hardware that cannot be recovered

- Defective CPU-357 board
- Defective CPU-347 board
- Other defective electrical hardware

Defective mechanical block  
Defective head cartridge

Remedy: Check the CPU-357 board and replace it as required.  
Check the CPU-347 board and replace it as required.  
Check the connection of each harness and replace it as required.  
Check the connection of each flexible flat cable and replace it as required.  
Check other electric boards and replace it as required.  
Confirm the mechanical block and repair it.  
Check the inside of a head cartridge and replace it as required.

Trouble: An error whose error code is specified occurs, and an error whose contents are displayed on the display panel occurs.

Cause: Refer to the error code list. (Refer to section 4-1.)  
Conform to the contents displayed on the display panel.

Remedy: Check each factor.

Trouble: When print operation is done during connection of PC and Ethernet, the LINK/ACT LED indicator on the rear panel of this unit is turned off and the data transfer from PC stops.

Cause: Defective network  
Defective Ethernet circuit on CPU-357 board

Remedy: Confirm the network operation.  
Restart PC or the hub.  
Restart a printer.  
Check the CPU-357 board and replace it as required.

Trouble: When print operation is done during connection of PC and Ethernet, the data transfer from PC stops though the LINK/ACT LED indicator on the rear panel of this unit lights or blinks.

Cause: Defective network  
Defective system control software on CPU-357 board

Remedy: Confirm the network operation.  
Restart PC or the hub.  
Restart a printer.  
Check the CPU-357 board and replace it as required.

Trouble: The data transfer from PC stops when print operation is done during connection of PC and USB.

Cause: Defective USB-related software operation of PC  
Defective USB circuit on CPU-357 board  
Defective system control software on CPU-357 board

Remedy: Restart PC or reconnect a printer.  
Restart a printer.  
Check the CPU-357 board and replace it as required.

#### **4-2-8. A test print or a print from PC was normally done after the initial operation is normally terminated and “READY” is displayed, but a problem occurs in the print image quality.**

Trouble: Missing color occurs in one-chip units of a head.

Cause: Defective head assembly in a head cartridge

Remedy: Replace the head cartridge.

Trouble: The missing color of a thin line occurs in the vertical direction at fixed intervals.

Cause: Defective print data transfer system in this unit

- Defective connection of DIO-72 or DIO-73FPC
- Defective CN-2393 board
- Defective CPU-347 board

Defective setting of a head cartridge

- Defective connection of a board-to-board connector

Defective print data transfer system in a head cartridge

- Defective IF-912 board
- Defective head assembly

Remedy: Check the connection of DIO-72 or DIO-73FPC and replace it as required.

Check the CN-2393 board and replace it as required.

Check the CPU-347 board and replace it as required.

Confirm the removal and insertion of a head cartridge.

Confirm the mechanical matching state of a head cartridge and this unit.

Check the IF-912 board and replace it as required.

Replace the head cartridge.

Trouble: An irregular print occurs in the horizontal direction.

Cause: Defective mechanical block

Defective servo control of a paper feed motor

- Dirty encoder disk
- Defective connection of the harness connected to SE-643 board
- Defective sensor on SE-643 board
- Defective motor control circuit on MEC-21 board

Remedy: Confirm the mechanical block

Check the harness connected to the SE-643 board and replace it as required.

Check the dirt in an encoder disk.

Check the sensor on the SE-643 board and replace it as required.

Check the MEC-21 board and replace it as required.

Trouble: Defective concentration or irregular concentration occurs.

Cause: Refer to the troubleshooting for print quality.

## 4-3. Mechanical Troubleshooting

### 4-3-1. Troubles Displayed on LCD

#### 1. Head unit

##### “Head cartridge replacement” display

Cause: Removed and damaged tube

Confirmation method: Remove the top cover and check it visually.

Remedy: Confirm the tube and replace the head unit assembly according to the tube state.

Cause: Defective flexible flat cable or connector

Confirmation method: 1. Remove the top cover and check the connector pin visually.  
2. Confirm the disconnection and connection of a flexible flat cable.

Remedy: 1. Replace the head unit assembly if the connector pin is defective.  
2. Reconnect the flexible flat cable or replace it.

Cause: Defective IF-912, IE-57, and HIF-14 boards

Confirmation method: Remove the top cover and confirm the dirt in ink.  
Confirm each board electrically.

Remedy: Replace the relevant board if the IF-912 and IE-57 boards are defective.  
Replace the head unit assembly if the HIF-14 board is defective.

##### “No head cartridge” display

Cause:

- The head unit assembly is not installed properly.
- The harness connected to a switching regulator is not connected properly.

Confirmation method: Reconnect the head unit assembly or harness and confirm the operation.

Remedy:

- Replace the relevant parts.
- Replace the head unit assembly if the connector is defective.

Cause: Defective contact of a flexible flat cable or connector or defective flexible flat cable or connector

Confirmation method: 1. Reconnect the flexible flat cable or connector and confirm the operation.  
2. Remove the top cover and check the connector pin visually.  
3. Confirm the disconnection and connection of a flexible flat cable.

Remedy: 1. Replace the head unit assembly if the connector pin is defective.  
2. Replace the head unit assembly if the connector pin is defective.  
3. Reconnect the flexible flat cable or replace it.

Cause: Defective IF-912, IE-57, and HIF-14 boards

Confirmation method:

- Remove the top cover and confirm the dirt in ink.
- Confirm each board electrically.

Remedy:

- Replace the relevant board if the IF-912 and IE-57 boards are defective.
- Replace the head unit assembly if the HIF-14 board is defective.

##### “Ink little left” and “No ink cartridge” displays (during ink cartridge replacement)

Cause: Defective contact point of IE-57 board and remaining quantity detection terminal

Confirmation method: Confirm the continuity to GND using a tester.

Remedy: Replace the board folder sub-assembly.

Cause: Sinking on the side of remaining quantity detection terminal

Confirmation method: Check the board folder sub-assembly visually and confirm the elasticity of the terminal.

Remedy: Replace the board folder sub-assembly.

Cause: Position shift on the GND side of remaining quantity detection terminal

Confirmation method: Check the board folder sub-assembly visually and confirm the position shift of GND.

Remedy: Return the GND terminal to the proper position.

Cause: Dust (foreign matter) at the contact point (terminal block) of ink cartridge and this unit

Confirmation method: Remove the ink cartridge and confirm whether dust (foreign matter) exists at a contact point (terminal block.)

Remedy: Remove dust (foreign matter) and wipe out the contact point (terminal block).

Cause: Defective IE-57 board

Confirmation method: • Remove the top cover and confirm the dirt in ink.  
• Confirm the IE-57 board electrically.

Remedy: Replace it if the IE-57 board is defective.

## 2. Carrier system

### “Cleaning life” display

Cause: Wipe (cleaning) roller life

Remedy: Replace the head unit assembly.

### “Waste ink capacity limit” display

Cause: Capacity limit of a waste ink absorbent

Remedy: Replace the reserver assembly.

### “No paper” display

Cause: 1. Paper is not set.  
2. Paper is not properly set as far as it will go.

Remedy: 1. Set paper.  
2. Set paper properly.

### “Improper paper size” display

Cause: 1. “Paper tray” for print setting is not set properly.  
2. “Paper - size” for print setting is not set properly.  
3. “Vertical - horizontal” for paper is not set properly.

Remedy: Set the items described above properly.

## 4-3-2. Trouble during Print

### 1. Head unit

Many white stripes exist.

Cause: Dust (foreign matter) or bubbles exist in the path through which ink flows.

Remedy: Supplement ink.

Cause: Dust adheres to the nozzle surface.

Remedy: • Remove dust and confirm whether ink flows.  
• Remove dust and install the nozzle properly.

Cause: Heater disconnection

Remedy: • Wipe out the heater or clean it.  
• Replace the head unit assembly.

Cause: 1. Pump failure  
2. Cam failure

Confirmation method: 1. Remove the top cover and check it visually.  
2. Release the sensor of the head cover and confirm whether the cam operates by cleaning.

Remedy: 1. Replace the head unit assembly.  
2. Replace the cam motor sub-assembly in this unit.

Print is in the sparse (irregular) state.

Cause: The nozzle sheet comes off.

Remedy: Replace the head unit assembly.

Cause: Dust (foreign matter) or bubbles exist in the path through which ink flows.

Remedy: • Clean the path.  
• Supplement ink if the path is not improved by cleaning.

One color is not printed after cleaning is performed.

Cause: 1. Locked valve air  
2. Valve blocked by dust  
3. Defective valve operation  
4. Bent valve needle

Remedy: 1. Supplement ink.  
2. Replace the head unit assembly.  
3. Replace the head unit assembly.  
4. Replace the head unit assembly.

Cause: Defective flexible flat cable or connector

Confirmation method: 1. Remove the top cover and check the connector pin visually.  
2. Confirm the disconnection and connection of a flexible flat cable.

Remedy: 1. Replace the head unit assembly if the connector pin is defective.  
2. Reconnect the connector pin or replace it.

Cause: Defective IF-912 and HIF-14 boards

Confirmation method: • Remove the top cover and confirm the dirt in ink.  
• Confirm each board electrically.

Remedy: • Replace the relevant board if the IF-912 board is defective.  
• Replace the head unit assembly if the HIF-14 board is defective.

Cause: Ink does not exist in the path through which ink flows.

Confirmation method: Remove the top cover and confirm the ink.

Remedy: Supplement ink.

Cause: Defective pump

Confirmation method: Remove the top cover and check it visually.

Remedy: Replace the head unit assembly.

Two colors are all not printed after cleaning is performed.

Cause: Defective cam

Confirmation method: Release the sensor of the head cover and confirm whether the cam operates by cleaning.

Remedy: Replace the cam motor sub-assembly.

Cause: Defective contact of flexible flat cable or connector or defective flexible flat cable or connector

Confirmation method: 1. Reconnect the flexible flat cable or connector and confirm the operation.  
2. Remove the top cover and check the connector pin visually.

Remedy: 1. Replace the head unit assembly if the connector pin is defective.  
2. Replace the head unit assembly if the connector pin is defective.

Cause: Defective IF-912 and HIF-14 boards

Confirmation method: • Remove the top cover and confirm the dirt in ink.  
• Confirm each board electrically.

Remedy: • Replace the relevant board if the IF-912 board is defective.  
• Replace the head unit assembly if the HIF-14 board is defective.

Both ends are not printed (No color appears.)

Cause: Wipe life (Part of an image is not simultaneously printed in almost two colors (by a few millimeters).)

Remedy: Replace the cap assembly.

Cause: Dust (foreign matter) or bubbles exist in the path through which ink flows.

Remedy: • Clean the path.  
• Supplement ink if the path is not improved by cleaning.

The print color is shifted.

Cause: 1. Shifted head unit assembly position  
2. Defective carrier system (Refer to “2. Carrier system” in this section.)

Confirmation method: 1. Check the position (gap) of the lock block and head unit assembly visually.  
2. Refer to “2. Carrier system” in this section.

Remedy: 1. Set the head unit assembly properly.  
2. Refer to “2. Carrier system” in this section.

The print color is not clear.

Cause: Wipe life (Two colors are not printed in part of an image (by a few millimeters)).

Remedy: Replace the cap assembly.

Cause: Defective wipe or defective blade operation

Remedy: Perform cleaning. Replace the cap assembly if the blade operation is not improved.

The inverted image partially appears in print.

Cause: Wire bond disconnection

Remedy: Replace the head unit assembly.

Cause: Defective cap motor

Remedy: Replace the cap motor assembly.

One color is not printed in width of approximately 2 cm.

Cause: Wire bond disconnection

Remedy: Replace the head unit assembly.

The print surface becomes dirty.

Cause: Capacity limit of a head cleaning unit

Remedy: Replace the cap assembly.

Cause: Ink full in head cleaning unit

Confirmation method: Confirm the leak state of ink.

Remedy: Replace the cap assembly.

Print shading, running, and irregularity occur.

Cause: The specified paper is not used.

Remedy: Use the specified paper.

Cause: Defective flexible flat cable or connector

Confirmation method: 1. Remove the top cover and check the connector pin visually.  
2. Confirm the disconnection and connection of a flexible flat cable.

Remedy: 1. Replace the head unit assembly if the connector pin is defective.  
2. Reconnect the flexible flat cable or replace it.

Print becomes blurred.

Cause: Capacity limit of a head cleaning unit

Remedy: Replace the cap assembly.

Cause: Much ink adheres to the nozzle surface.

Remedy: Clean the nozzle surface. Replace the head unit assembly if the nozzle surface is not improved.

Notches appear in print in width of approximately 2 cm.

Cause: Wire bond disconnection

Remedy: Replace the head unit assembly.

White and color stripes appear in print.

Cause: Capacity limit of a head cleaning unit

Remedy: Replace the cap assembly.

Cause: Defective flexible flat cable or connector

Confirmation method: 1. Remove the top cover and check the connector pin visually.  
2. Confirm the disconnection and connection of a flexible flat cable.

Remedy: 1. Replace the head unit assembly if the connector pin is defective.  
2. Reconnect the flexible flat cable or replace it.

Cause: Much ink adheres to the nozzle surface.

Remedy: Clean the nozzle surface. Replace the head unit assembly if the nozzle surface is not improved.

## 2. Carrier system

Color mixture appears at the beginning of the print surface.

Cause: Cleaning roller life

Remedy: Replace the cap assembly.

There is the place where no print is performed.

Cause: Capacity limit of a head cleaning unit

Remedy: Replace the cap assembly.

Cause: Much ink adheres to the nozzle surface.

Remedy: Clean the nozzle surface. Replace the cleaning roller if the nozzle surface is not improved.

The opposite side (back) of the print surface becomes dirty.

Cause: Capacity limit of a waste ink absorbent  
Remedy: Replace the reserver assembly.

Paper feed stops during print.

Cause: Defective carrier belt  
Remedy: 

- Apply grease to the back of a carrier belt.
- Replace the slip board.

Cause: Defective carrier motor  
Remedy: Replace the carrier motor.

Paper feed stops during print. (The tip of paper is clogged near a spur.)

Cause: Defective kicker operation  
Remedy: Replace the paper kicker.

The concentration is irregular. (Irregular pitch)

Cause: Defective carrier belt  
Remedy: 

- Apply grease to the back of a carrier belt.
- Replace the slip board.

Cause: Shaft spring deformation  
Remedy: Replace the spur assembly.

Cause: Defective encoder disk  
Remedy: Replace the feed table assembly.

Paper is bent during print.

Cause: Shifted pulley position  
Remedy: Replace the feed table assembly.

Cause: Pinch roller deformation  
Remedy: Replace the pinch roller assembly.

Cause: Shifted main shaft and belt  
Remedy: Replace the feed table assembly.

An image is printed obliquely.

Cause: Paper is not set properly.  
Remedy: Set paper properly.

Cause: Shifted pulley position  
Remedy: Replace the feed table assembly.

Cause: Pinch roller deformation  
Remedy: Replace the pinch roller assembly.

Cause: Shifted main shaft or belt  
Remedy: Replace the feed table assembly.

### 4-3-3. Trouble during Paper Feed (Carrier System)

Paper is not fed.

Cause: “Crumples” or “folds” exist in paper.  
Remedy: Use “crumple” or “fold” free paper.

Cause: Harness disconnection  
Confirmation method: Confirm the disconnection or connection of a harness.  
Remedy: Reconnect the harness or replace it.

Cause: Defective mode motor  
Remedy: Replace the mode motor.

Cause: Defective Paper\_Emp sensor  
Remedy: Replace the Paper\_Emp sensor.

Cause: Defective Tray\_Pos sensor  
Remedy: Replace the Tray\_Pos sensor.

Two or more sheets of paper are fed simultaneously.

Cause: Defective Tray\_Pos sensor  
Remedy: Replace the Tray\_Pos sensor.

Paper feed stops near the inversion guide.

Cause: Defective carrier motor  
Remedy: Replace the carrier motor.

Cause: Defective paper size sensor  
Remedy: Replace the paper size sensor.

Cause: Defective cue sensor  
Remedy: Replace the cue sensor.



#### 4-3-4. Trouble during Paper Eject (Carrier System)

Paper feed stops during print. (The tip of paper is clogged near the spur.)

Cause: Defective paper kicker operation

Remedy: Replace the paper kicker.

The concentration is irregular. (Irregular pitch)

Cause: Defective carrier belt

Remedy:

- Apply grease to the back of a carrier belt.
- Replace the slip board.

Cause: Shaft spring deformation

Remedy: Replace the spur assembly.

Cause: Defective paper kicker

Remedy: Replace the paper kicker.

Remedy: Check the tube and replace the head unit according to the state of the tube.

Ink adheres to the paper.

Cause: Ink full in a cleaning unit

Confirmation method: Confirm the leak state of ink.

Remedy: Replace the cleaning unit.

Cause: Full absorbent of a table

Confirmation method: Check the absorbent state of a table visually.

Remedy: Replace the absorbent.

#### 4-3-5. Trouble during Operation (Head Unit)

An ink cartridge cannot be installed smoothly.

Cause: Bent tank folder needle

Confirmation method: Remove the ink cartridge and check the bending of a needle visually.

Remedy: Replace the head unit assembly.

An ink cartridge cannot be installed.

Cause: Bent valve needle

Remedy: Replace the head unit assembly.

#### 4-3-6. Other Troubles

Ink leaks.

Cause: Ink full in a cleaning unit

Confirmation method: Confirm the leak state of ink.

Remedy: Replace the cleaning unit.

Cause: Broken nozzle sheet

Confirmation method: Wipe out the nozzle sheet and check it visually.

Remedy: Replace the head unit.

Cause: Removed and damaged tube

Confirmation method: Remove the top cover and check the tube visually.







**SONY®**

Line Shot Printer

**LPR-1000MD**

SERVICE MANUAL  
Volume 2 1st Edition

## 警告

このマニュアルは、サービス専用です。

お客様が、このマニュアルに記載された設置や保守、点検、修理などを行うと感電や火災、人身事故につながる可能性があります。

危険をさけるため、サービストレーニングを受けた技術者のみご使用ください。

設置や保守、点検、修理などを行う前に、別冊のメンテナンスマニュアルVolume 1の「安全のために」と別冊のオペレーションマニュアルの「安全のために」を必ずお読みください。

## **WARNING**

This manual is intended for qualified service personnel only.

To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

## **WARNING**

Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.

Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegeben Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

## **AVERTISSEMENT**

Ce manuel est destiné uniquement aux personnes compétentes en charge de l'entretien. Afin de réduire les risques de décharge électrique, d'incendie ou de blessure n'effectuer que les réparations indiquées dans le mode d'emploi à moins d'être qualifié pour en effectuer d'autres. Pour toute réparation faire appel à une personne compétente uniquement.

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# Manual Structure

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## Purpose of this manual

This manual is the service manual Vol. 2 of LINE Shot Printer LPR-1000MD. This manual describes the information on maintenance and the service information such as semiconductors, spare parts, block diagrams, schematic diagrams, and board layouts.

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## Related manuals

In addition to this “Service Manual Vol. 2”, this unit is provided with the manual below.

- **Service Manual Vol. 1 (Not supplied for products.)**

Part No.: 9-877-807-11

This manual describes the information on the maintenance of this unit, and the service information, parts replacement, service mode, and troubleshooting.

- **Operating Instruction (Supplied for products.)**

Part No.: 3-207-760-11

These manuals describes the information required for the actual management and operation of this unit.

- **“Semiconductor Pin Assignments” CD-ROM (Available on request)**

This “Semiconductor Pin Assignments” CD-ROM allows you to search for semiconductors used in B&P Company equipment.

Semiconductors that cannot be searched for on this CD-ROM are listed in the service manual for the corresponding unit. The service manual contains a complete list of all semiconductors and their ID Nos., and thus should be used together with the CD-ROM.

Part number: 9-968-546-XX



## Section 5

### Semiconductor Pin Assignments

The following describes the semiconductor types used in this unit.

For semiconductors marked with page numbers in the index, refer to the corresponding pages in this section.

However, in some cases incompatible types are also listed, therefore, when a part is to be replaced, also refer to the Spare Parts section.

In addition, for semiconductors with ID Nos., refer to the separate CD-ROM titled “Semiconductor Pin Assignments” (Sony Part No. 9-968-546-xx) that allows searching for parts by semiconductor type or ID No.

The semiconductors in the manual or on the CD-ROM are listed by equivalent types. Thus the external view or the index mark indication may differ from the actual type.

Pin assignments and block diagrams are based on the IC manufacturer’s data book.

本機に使用されている半導体型名の一覧を下記に示します。索引中、ページが記載されている半導体は、本章の該当ページを参照してください。ただし、互換性のない型名を併記している場合がありますので、部品を交換するときは、Spare Partsの章を参照してください。

また、ID番号が記載されている半導体は、別途発行の“Semiconductor Pin Assignments” CD-ROM版 (ソニー部品番号：9-968-546-xx)を参照してください。

半導体型名またはID番号から検索ができます。

マニュアルまたはCD-ROMに掲載されている半導体は、それぞれの機能を等価的に表わしたものです。

外観やインデックスマークの表示方法が実物と異なる場合があります。

ピン配置およびブロック図はICメーカーのデータブックに従いました。

| DIODE                | Page or ID No. |
|----------------------|----------------|
| 1SS352 .....         | DC008-02       |
| 1SS352-TPH3 .....    | DC008-02       |
| 1SS355TE-17 .....    | DC008-02       |
| 1SS362-TE85L .....   | DC001-01       |
| DF2S12FU(TPH3) ..... | DC008-04       |
| MA111-(K8).S0 .....  | DC008-01       |
| MA111-TX .....       | DC008-01       |
| PGB0010603NR .....   | 5-2            |
| RB060L-40TE25 .....  | DC007-01       |
| RB083L-20TE25 .....  | DC008-02       |
| RB521S-30-TE61 ..... | DC008-02       |
| RB715F .....         | DC001-03       |
| RB715F-T106 .....    | DC001-03       |

| LED                  | Page or ID No. |
|----------------------|----------------|
| CL-190G-CD-T .....   | LC004-01       |
| CL-190Y-CD-T .....   | LC004-01       |
| TLGE1005B(T03) ..... | LC008-03       |
| TLRE1005B(T03) ..... | LC008-03       |
| TLYE1005B(T03) ..... | LC008-03       |

| TRANSISTOR            | Page or ID No. |
|-----------------------|----------------|
| 2SA1162G .....        | TC001-01       |
| 2SA812-T1-M5M6 .....  | TC001-01       |
| 2SC1623 .....         | TC001-02       |
| 2SC1623-T1-L5L6 ..... | TC001-02       |
| 2SC2873Y-TE12L .....  | TC002-02       |

| TRANSISTOR           | Page or ID No. |
|----------------------|----------------|
| 2SC2873Y-TE12R ..... | TC002-02       |
| 2SC4617R .....       | TC001-02       |
| 2SC4617TL-QR .....   | TC001-02       |
| DTA123JE .....       | TC001-04       |
| DTA123JE-TL .....    | TC001-04       |
| DTC123JE .....       | TC001-03       |
| DTC123JE-TL .....    | TC001-03       |
| SI4425DY-T1 .....    | TC012-04       |
| SI9426DY-T1 .....    | TC012-06       |

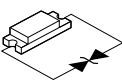
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| A3959SLBTR .....       | 5-3            |
| BA033FP .....          | L78M05T-FA     |
| BA033FP-E2 .....       | L78M05T-FA     |
| BA05FP .....           | L78M05T-FA     |
| BA05FP-E2 .....        | L78M05T-FA     |
| BA25BC0FP-E2 .....     | BA18BC0FP-E2   |
| BA25BC0FP-TE2 .....    | BA18BC0FP-E2   |
| BU2090FS-E2 .....      | BU2090FS-E2    |

|                       |                 |
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| EPM7064BTC44-7 .....  | EPM7064TC44-7   |
| EPM7128BTC100-7 ..... | EPM7128STC100-7 |

DIODE

| IC                        | Page or ID No.       |
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| HD6417750SBP200 .....     | 5-8                  |
| LC65F1306A-4M30-E .....   | 5-7                  |
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| LTC1624IS8 .....          | 5-9                  |
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| M25P10-AVMN6T .....       | 5-9                  |
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| M4A3-128/64-10VC .....    | M4A3-128_64-10VC     |
| M62354GP-75ED .....       | 5-10                 |
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| MBM29DL324BE-90PFTN ..... | MBM29DL324BD-90PFTN  |
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| RTC4574JE-TP .....        | RTC4574JE-TP         |
| S-80840CNNB-B8ZT2G .....  | S-80840CNNB-B8Z-T2   |
| SN74LV02APWR .....        | TC74HC02P            |
| SN74LV244APWR .....       | TC74HC244P           |
| SN74LV541APWR .....       | MC74HC541N           |
| SN74LVC16244ADGGR .....   | IDT74FCT16244ATPV    |
| SN74LVC244APWR .....      | TC74HC244P           |
| SN74LVC245APW(E20) .....  | TC74HC245P           |
| SN74LVC245APWR .....      | TC74HC245P           |
| SN74LVC74APWR-12 .....    | TC74HC74P            |
| SN74LVCC4245APWR .....    | 74LVX4245QSCX        |
| SN74LVCH16245ADGGR .....  | IDT74FCT16245ATPV-TR |
| TC74HC4052AFT(EL) .....   | MC74HC4052N          |
| TC74VHC00FT(EL) .....     | TC74HC00P            |
| TC74VHC02FT(EL) .....     | TC74HC02P            |
| TC74VHC14FT(EL) .....     | TC74HC14P            |
| TC74VHC153FT(EL) .....    | TC74HC153P           |
| TC74VHC32FT(EL) .....     | TC74HC32P            |
| TC74VHC540FT(EL) .....    | MC74HC540N           |
| TC74VHCT08AFT(EL) .....   | TC74HC08P            |
| TC74VHCT541AFT(EL) .....  | MC74HC541N           |
| TC7SH08FU(TE85R) .....    | TC7S08F              |
| TC7SH08FU-TE85R .....     | TC7S08F              |
| TC7SH14FU-TE85R .....     | TC7S14FU             |
| TC7SH86FU(TE85R) .....    | TC7S86FU             |
| TC7SH86FU-TE85R .....     | TC7S86FU             |
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| UPC393G2 .....            | UA393DC              |
| UPC393G2-E2 .....         | UA393DC              |

| OTHER         | Page or ID No. |
|---------------|----------------|
| RPI-352 ..... | MR010-07       |

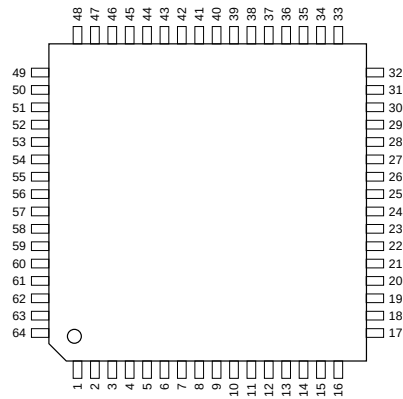


PGB0010603NR



78Q2120-64CGT/LF (TDK SEMI)

10BASE-T/100BASE-TX ETHERNET TRANSCEIVER  
—TOP VIEW—

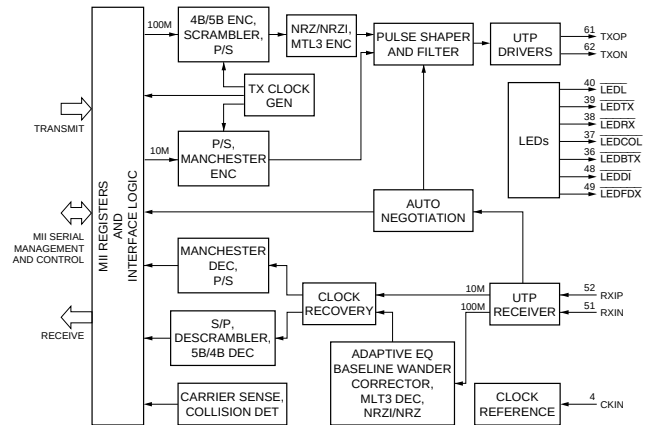


| PIN NO. | I/O | SIGNAL | PIN NO. | I/O | SIGNAL | PIN NO. | I/O | SIGNAL | PIN NO. | I/O | SIGNAL   |
|---------|-----|--------|---------|-----|--------|---------|-----|--------|---------|-----|----------|
| 1       | I   | ISODEF | 17      | I/O | MDIO   | 33      | O   | COL    | 49      | O   | LEDFDX   |
| 2       | I   | ISO    | 18      | I   | MDC    | 34      | O   | CRS    | 50      | I   | RPTR     |
| 3       | —   | GND    | 19      | O   | RXD3   | 35      | O   | INTR   | 51      | I   | RXIN     |
| 4       | I   | CKIN   | 20      | O   | RXD2   | 36      | O   | LEDBTX | 52      | I   | RXIP     |
| 5       | —   | GND    | 21      | O   | RXD1   | 37      | O   | LEDCOL | 53      | —   | GND      |
| 6       | I   | RST    | 22      | O   | RXD0   | 38      | O   | LEDRX  | 54      | I/O | RIBB RET |
| 7       | I   | PWRDN  | 23      | O   | RX DV  | 39      | O   | LEDTX  | 55      | —   | GND      |
| 8       | —   | Vcc    | 24      | O   | RX CLK | 40      | O   | LEDL   | 56      | I/O | RIBB     |
| 9       | —   | GND    | 25      | O   | RX ER  | 41      | —   | Vcc    | 57      | —   | Vcc      |
| 10      | —   | GND    | 26      | I   | TX ER  | 42      | —   | GND    | 58      | I   | XTLN     |
| 11      | —   | Vcc    | 27      | O   | TX CLK | 43      | —   | Vcc    | 59      | O   | XTLP     |
| 12      | I   | PHYAD4 | 28      | I   | TX EN  | 44      | I   | TECH2  | 60      | —   | GND      |
| 13      | I   | PHYAD3 | 29      | I   | TXD0   | 45      | I   | TECH1  | 61      | O   | TXOP     |
| 14      | I   | PHYAD2 | 30      | I   | TXD1   | 46      | I   | TECH0  | 62      | O   | TXON     |
| 15      | I   | PHYAD1 | 31      | I   | TXD2   | 47      | I   | ANEGA  | 63      | —   | Vcc      |
| 16      | I   | PHYAD0 | 32      | I   | TXD3   | 48      | O   | LEDBT  | 64      | I   | PCSBP    |

- INPUTS**
- ANEGA : AUTO-NEGOTIATION ABILITY
  - CKIN : CLOCK INPUT
  - ISO : ISOLATE
  - ISODEF : ISOLATE DEFAULT
  - MDC : MANAGEMENT DATA CLOCK
  - PCSBP : PCS BYPASS
  - PHYAD0 - PHYAD4 : PHY ADDRESS
  - PWRDN : POWER DOWN
  - RPTR : REPEATER MODE
  - RST : RESET
  - RXIN, RXIP : RECEIVE INPUT
  - TECH0 - TECH2 : TECHNOLOGY ABILITY/SELECT
  - TX EN : TRANSMIT ENABLE
  - TX ER : TRANSMIT ERROR
  - TXD0 - TXD3 : TRANSMIT DATA
  - XTLN : CRYSTAL OSCILLATOR

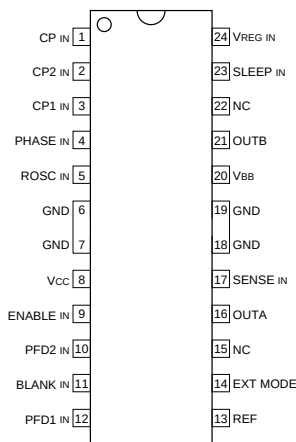
- OUTPUTS**
- COL : COLLISION DETECT
  - CRS : CARRIER SENSE
| INTR | : INTERRUPT |
| LEDBT | : LED 10BASE-T |
| LEDBTX | : LED 100BASE-TX |
| LEDCOL | : LED COLLISION |
| LEDFDX | : LED FULL DUPLEX |
| LEDL | : LED LINK |
| LEDRX | : LED RECEIVE |
| LEDTX | : LED TRANSMIT |
| RX CLK | : RECEIVE CLOCK |
| RX DV | : RECEIVE DATA VALID |
| RX ER | : RECEIVE ERROR |
| RXD0 - RXD3 | : RECEIVE DATA |
| TX CLK | : TRANSMIT CLOCK |
| TXON, TXOP | : TRANSMIT OUTPUT |
| XTLP | : CRYSTAL OSCILLATOR |

- INPUTS/OUTPUTS**
- MDIO : MANAGEMENT DATA
  - RIBB : BIAS CURRENT SETTING RESISTOR
  - RIBB RET : BIAS CURRENT SETTING RESISTOR RETURN

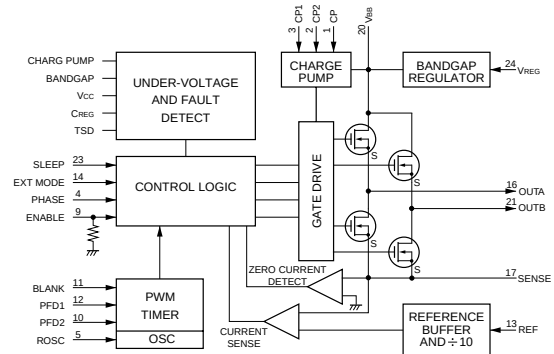


A3959SLBTR (ALLEGRO)

FULL BRIDGE MOTOR DRIVER  
—TOP VIEW—



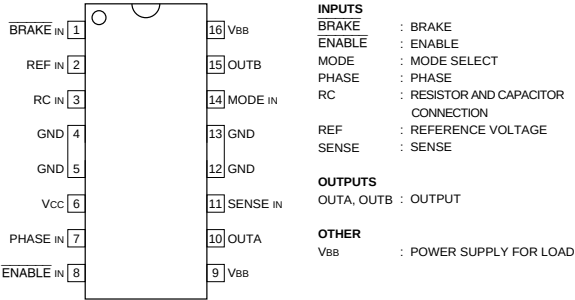
- INPUTS**
- BLANK : BLANKING CONTROL
  - CP : RESERVOIR CAPACITOR
  - CP1, CP2 : CHARGE PUMP CAPACITOR
  - ENABLE : ENABLE
  - EXT MODE : PWM MODE CONTROL
  - PFD1, PFD2 : FAST DECAY
  - PHASE : DIRECTION CONTROL
  - REF : REFERENCE
  - ROSC : OSCILLATOR RESISTOR
  - SLEEP : SLEEP
  - VREG : REGULATOR DECOUPLING CAPACITOR
- OUTPUTS**
- OUTA, OUTB : DMOS BRIDGE OUTPUTS
- OTHERS**
- NC : NO CONNECTION
  - VBB : POWER SUPPLY FOR LOAD



A3952SLB-TR (ALLEGRO)

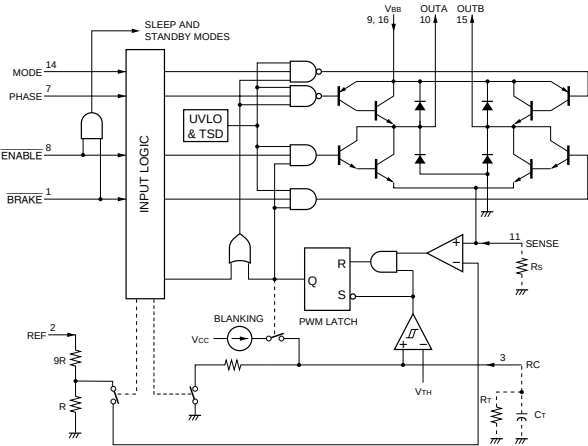
FULL BRIDGE MOTOR DRIVER

—TOP VIEW—



| BRAKE | ENABLE | PHASE | MODE | OUTA | OUTB | OPERATING MODE            |
|-------|--------|-------|------|------|------|---------------------------|
| 1     | 1      | x     | 1    | HI-Z | HI-Z | SLEEP                     |
| 1     | 1      | x     | 0    | HI-Z | HI-Z | STANDBY                   |
| 1     | 0      | 1     | 1    | 1    | 0    | NORMAL, FAST-DECAY        |
| 1     | 0      | 1     | 0    | 1    | 0    | NORMAL, SLOW-DECAY        |
| 1     | 0      | 0     | 1    | 0    | 1    | REVERSE, FAST-DECAY       |
| 1     | 0      | 0     | 0    | 1    | 1    | REVERSE, SLOW-DECAY       |
| 0     | x      | x     | 1    | 0    | 0    | BRAKE, FAST-DECAY         |
| 0     | x      | x     | 0    | 0    | 0    | BRAKE, NO CURRENT CONTROL |

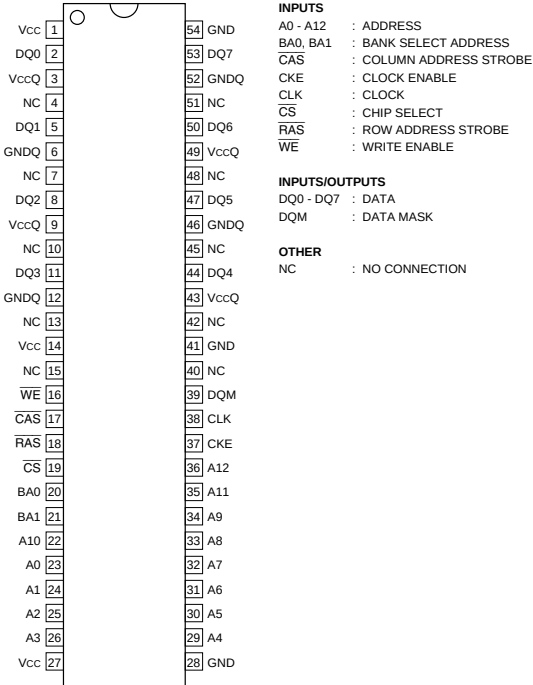
0 : LOW LEVEL  
1 : HIGH LEVEL  
x : DON'T CARE  
HI-Z : HIGH IMPEDANCE



EDS2508APTA-75 (ELPIDA)

256M (33554432 × 8) -BIT 4BANKS SDRAM

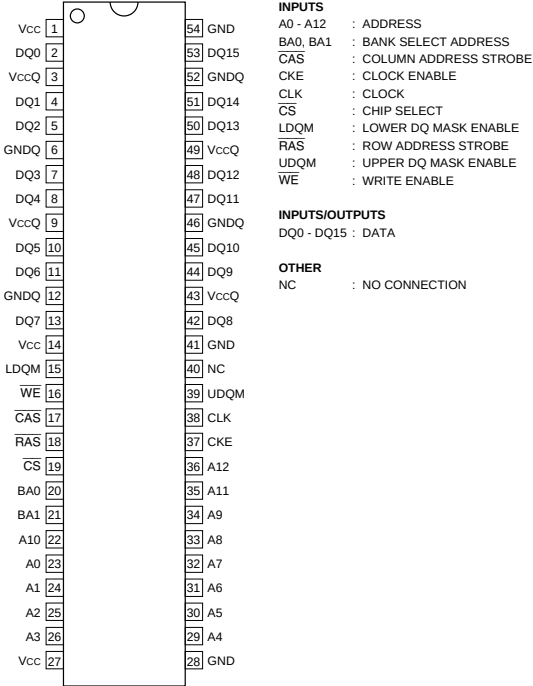
—TOP VIEW—



EDS2516APTA-75 (ELPIDA)

256M (1677721 × 16) -BIT 4BANKS SDRAM

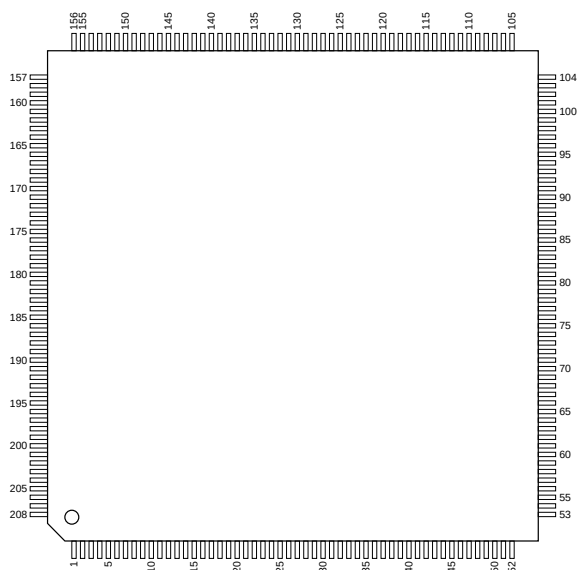
—TOP VIEW—



## CXD9181R (SONY)

## INK-JET HEAD CONTROLLER

—TOP VIEW—



| PIN NO. | I/O | SIGNAL     | PIN NO. | I/O | SIGNAL     | PIN NO. | I/O | SIGNAL         | PIN NO. | I/O | SIGNAL     |
|---------|-----|------------|---------|-----|------------|---------|-----|----------------|---------|-----|------------|
| 1       | I   | RESET      | 53      | O   | TEST OUT0  | 105     | O   | TEST OUT9      | 157     | O   | TEST OUT13 |
| 2       | —   | GND        | 54      | O   | TEST OUT1  | 106     | O   | TEST OUT10     | 158     | O   | TEST OUT14 |
| 3       | I   | WBTEST IN  | 55      | O   | TEST OUT2  | 107     | O   | TEST OUT11     | 159     | O   | TEST OUT15 |
| 4       | —   | Vcc        | 56      | O   | TEST OUT3  | 108     | O   | TEST OUT12     | 160     | O   | TEST OUT16 |
| 5       | —   | GND        | 57      | O   | TEST OUT4  | 109     | —   | Vcc            | 161     | O   | TEST OUT17 |
| 6       | O   | H DA0      | 58      | —   | GND        | 110     | —   | GND            | 162     | O   | TEST OUT18 |
| 7       | O   | H DA1      | 59      | I   | CLK66      | 111     | O   | DC SET OUT     | 163     | O   | TEST OUT19 |
| 8       | O   | H DA2      | 60      | —   | GND        | 112     | O   | DC SET CLK     | 164     | —   | GND        |
| 9       | O   | H DA3      | 61      | —   | Vcc        | 113     | O   | DC SET LAT     | 165     | —   | Vcc        |
| 10      | —   | Vcc        | 62      | I/O | CPU DA0    | 114     | —   | Vcc            | 166     | O   | H EN ON0   |
| 11      | O   | H DA4      | 63      | I/O | CPU DA1    | 115     | I   | DSP DATA0      | 167     | O   | H EN ON1   |
| 12      | O   | H DA5      | 64      | I/O | CPU DA2    | 116     | I   | DSP DATA1      | 168     | O   | H EN ON2   |
| 13      | O   | H DA6      | 65      | I/O | CPU DA3    | 117     | I   | DSP DATA2      | 169     | O   | H EN ON3   |
| 14      | O   | H DA7      | 66      | I/O | CPU DA4    | 118     | I   | DSP DATA3      | 170     | O   | H EN ON4   |
| 15      | —   | GND        | 67      | I/O | CPU DA5    | 119     | —   | GND            | 171     | O   | H EN ON5   |
| 16      | O   | H DA8      | 68      | I/O | CPU DA6    | 120     | I   | DSP DATA4      | 172     | O   | H EN ON6   |
| 17      | O   | H DA9      | 69      | I/O | CPU DA7    | 121     | I   | DSP DATA5      | 173     | O   | H EN ON7   |
| 18      | O   | H DA10     | 70      | —   | GND        | 122     | I   | DSP DATA6      | 174     | —   | GND        |
| 19      | O   | H DA11     | 71      | —   | Vcc        | 123     | I   | DSP DATA7      | 175     | —   | GND        |
| 20      | O   | H DA12     | 72      | I/O | CPU DA8    | 124     | —   | GND            | 176     | —   | Vcc        |
| 21      | O   | H DA13     | 73      | I/O | CPU DA9    | 125     | —   | Vcc            | 177     | O   | H EN ON8   |
| 22      | O   | H DA14     | 74      | I/O | CPU DA10   | 126     | I   | DSP DATA8      | 178     | O   | H EN ON9   |
| 23      | O   | H DA15     | 75      | I/O | CPU DA11   | 127     | I   | DSP DATA9      | 179     | O   | H EN ON10  |
| 24      | —   | Vcc        | 76      | I/O | CPU DA12   | 128     | I   | DSP DATA10     | 180     | O   | H EN ON11  |
| 25      | —   | GND        | 77      | I/O | CPU DA13   | 129     | I   | DSP DATA11     | 181     | O   | H EN ON12  |
| 26      | O   | H DA16     | 78      | I/O | CPU DA14   | 130     | I   | DSP DATA12     | 182     | O   | H EN ON13  |
| 27      | O   | H DA17     | 79      | I/O | CPU DA15   | 131     | —   | Vcc            | 183     | O   | H EN ON14  |
| 28      | O   | H DA18     | 80      | —   | GND        | 132     | —   | GND            | 184     | O   | H EN ON15  |
| 29      | O   | H DA19     | 81      | —   | Vcc        | 133     | I   | DSP DATA13     | 185     | —   | GND        |
| 30      | O   | H DA20     | 82      | I   | CPU ADD1   | 134     | I   | DSP DATA14     | 186     | —   | Vcc        |
| 31      | O   | H DA21     | 83      | I   | CPU ADD2   | 135     | I   | DSP DATA15     | 187     | O   | H DA CLK   |
| 32      | O   | H DA22     | 84      | I   | CPU ADD3   | 136     | —   | GND            | 188     | O   | H PH XRS   |
| 33      | O   | H DA23     | 85      | I   | CPU ADD4   | 137     | O   | H PRNT TOG     | 189     | O   | H PH CLK   |
| 34      | —   | GND        | 86      | I   | CPU ADD5   | 138     | I   | DSP REQ        | 190     | O   | H XEN      |
| 35      | O   | H DA24     | 87      | I   | CPU ADD6   | 139     | O   | DSP ACK        | 191     | —   | GND        |
| 36      | O   | H DA25     | 88      | I   | CPU ADD7   | 140     | I   | TMODE          | 192     | —   | Vcc        |
| 37      | O   | H DA26     | 89      | I   | CPU ADD8   | 141     | I   | SMODE          | 193     | O   | TEST OUT20 |
| 38      | —   | GND        | 90      | —   | GND        | 142     | —   | GND            | 194     | O   | TEST OUT21 |
| 39      | —   | Vcc        | 91      | —   | Vcc        | 143     | I   | CLK35          | 195     | O   | TEST OUT22 |
| 40      | O   | H DA27     | 92      | I   | CPU ADD9   | 144     | —   | GND            | 196     | O   | TEST OUT23 |
| 41      | O   | H DA28     | 93      | I   | CPU RW     | 145     | I   | TEST           | 197     | O   | TEST OUT24 |
| 42      | O   | H DA29     | 94      | I   | CPU WE     | 146     | I   | MTST           | 198     | O   | TEST OUT25 |
| 43      | —   | Vcc        | 95      | I   | CPU RE     | 147     | —   | Vcc            | 199     | —   | GND        |
| 44      | O   | H DA30     | 96      | —   | GND        | 148     | I   | HEAD ACTIVE    | 200     | —   | GND        |
| 45      | O   | H DA31     | 97      | —   | Vcc        | 149     | I   | HEAD ACTIVE I  | 201     | —   | Vcc        |
| 46      | —   | GND        | 98      | I   | CPU CS     | 150     | O   | HEAD ACTIVE O  | 202     | O   | TEST OUT26 |
| 47      | I   | TEST MODE0 | 99      | O   | CPU DA DIR | 151     | I   | HEAD PRNTCLK   | 203     | O   | TEST OUT27 |
| 48      | —   | GND        | 100     | O   | TEST OUT5  | 152     | I   | HEAD PRNTCLK I | 204     | O   | TEST OUT28 |
| 49      | —   | Vcc        | 101     | O   | TEST OUT6  | 153     | O   | HEAD PRNTCLK O | 205     | O   | TEST OUT29 |
| 50      | I   | TEST MODE1 | 102     | O   | TEST OUT7  | 154     | —   | GND            | 206     | O   | TEST OUT30 |
| 51      | I   | TEST MODE2 | 103     | O   | TEST OUT8  | 155     | —   | Vcc            | 207     | O   | TEST OUT31 |
| 52      | I   | TEST MODE3 | 104     | —   | GND        | 156     | I   | HEAD PAGE      | 208     | —   | GND        |

## INPUTS

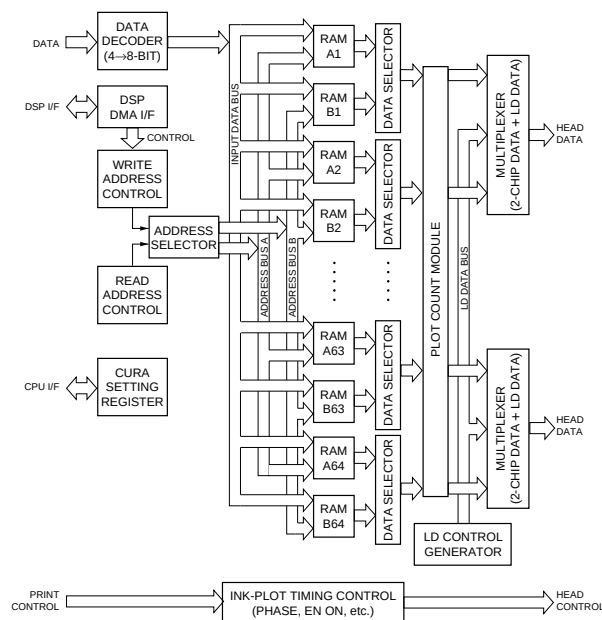
|                         |                    |
|-------------------------|--------------------|
| CLK35                   | : SYSTEM CLOCK     |
| CLK66                   | : CPU BUS CLOCK    |
| CPU ADD1 - CPU ADD9     | : CPU ADDRESS BUS  |
| DSP DATA0 - DSP DATA15  | : DSP DATA BUS     |
| CPU CS                  | : CPU CHIP SELECT  |
| CPU RE                  | : CPU READ ENABLE  |
| CPU RW                  | : CPU READ/WRITE   |
| CPU WE                  | : CPU WRITE ENABLE |
| DSP REQ                 | : DSP DATA REQUEST |
| HEAD PAGE               | : HEAD PAGE        |
| HEAD PRNTCLK            | : PRINT CLOCK      |
| HEAD PRNTCLK I          |                    |
| HEAD ACTIVE             | : HEAD ACTIVE      |
| HEAD ACTIVE I           |                    |
| MTST, SMODE, TMODE      | : TEST PIN         |
| RESET                   | : RESET            |
| TEST                    | : TEST MODE SELECT |
| TEST MODE0 - TEST MODE3 | : TEST MODE        |
| WBTEST IN               | : WB TEST          |

## OUTPUTS

|                        |                        |
|------------------------|------------------------|
| CPU DA DIR             | : CPU DATA             |
| DC SET CLK, DC SET LAT | : D/A SERIAL DATA      |
| DC SET OUT             |                        |
| DSP ACK                | : DSP DATA ACKNOWLEDGE |
| H DA CLK               | : HEAD DATA CLOCK      |
| H DA0 - H DA31         | : HEAD DATA            |
| H EN ON0 - H EN ON15   | : EN ON                |
| H PH CLK               | : HEAD PHASE CLOCK     |
| H PH XRS               | : HEAD PHASE RESET     |
| H PRNT TOG             | : PRINT CLOCK TOGGLE   |
| H XEN                  | : HEAD ENABLE          |
| HEAD ACTIVE O          | : HEAD ACTIVE          |
| HEAD PRNTCLK O         | : PRINT CLOCK          |
| TEST OUT0 - TEST OUT31 | : TEST                 |

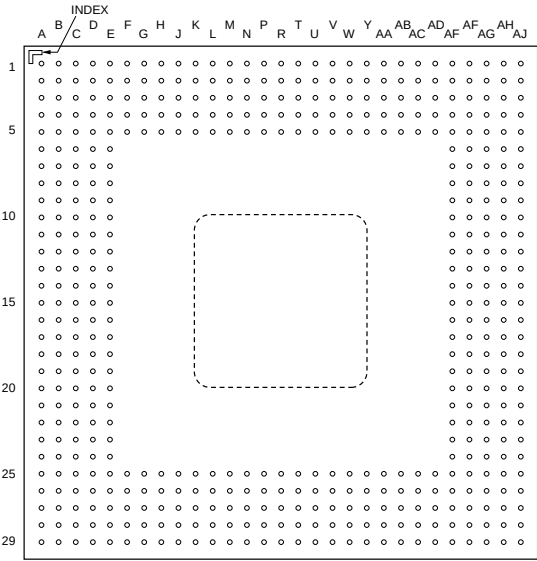
## INPUTS/OUTPUTS

|                    |                |
|--------------------|----------------|
| CPU DA0 - CPU DA15 | : CPU DATA BUS |
|--------------------|----------------|



CXD9168GB (SONY)

BUS INTERFACE CONTROLLER  
—BOTTOM VIEW—



| PIN NO. | OUTER NO. | I/O | SIGNAL     | PIN NO. | OUTER NO. | I/O | SIGNAL     | PIN NO. | OUTER NO. | I/O | SIGNAL       |
|---------|-----------|-----|------------|---------|-----------|-----|------------|---------|-----------|-----|--------------|
| 1       | A1        | I   | SH CSSD0   | 46      | AJ18      | —   | Vcc        | 91      | A23       | O   | SH IRL3      |
| 2       | B1        | I   | SH CSRG    | 47      | AJ19      | —   | Vcc        | 92      | A22       | —   | GND          |
| 3       | C1        | I   | HRESET     | 48      | AJ20      | —   | GND        | 93      | A21       | I   | CLKMODE2     |
| 4       | D1        | —   | GND        | 49      | AJ21      | —   | Vcc        | 94      | A20       | I   | SH RDWT      |
| 5       | E1        | I   | TESTMODE   | 50      | AJ22      | —   | Vcc        | 95      | A19       | —   | Vcc          |
| 6       | F1        | I   | TRST       | 51      | AJ23      | I/O | PCI AD4    | 96      | A18       | —   | Vcc          |
| 7       | G1        | —   | Vcc        | 52      | AJ24      | I/O | PCI AD2    | 97      | A17       | —   | GND          |
| 8       | H1        | I/O | P1394 D2   | 53      | AJ25      | —   | Vcc        | 98      | A16       | —   | Vcc          |
| 9       | J1        | I/O | P1394 D4   | 54      | AJ26      | —   | Vcc        | 99      | A15       | —   | GND          |
| 10      | K1        | —   | Vcc        | 55      | AJ27      | O   | RAM ADR2   | 100     | A14       | I/O | SH DT30      |
| 11      | L1        | I/O | P1394 LREQ | 56      | AJ28      | —   | GND        | 101     | A13       | I/O | SH DT18      |
| 12      | M1        | —   | Vcc        | 57      | AJ29      | O   | RAM ADR7   | 102     | A12       | I/O | SH DT27      |
| 13      | N1        | —   | GND        | 58      | AH29      | —   | Vcc        | 103     | A11       | I/O | SH DT21      |
| 14      | P1        | I   | MII RXD0   | 59      | AG29      | O   | RAM ADR9   | 104     | A10       | I/O | SH DT24      |
| 15      | R1        | I   | MII RXD3   | 60      | AF29      | O   | RAM BKADR0 | 105     | A9        | I/O | SH DT8       |
| 16      | T1        | I   | MII COL    | 61      | AE29      | I/O | RAM DT0    | 106     | A8        | I/O | SH DT5       |
| 17      | U1        | —   | GND        | 62      | AD29      | O   | RAM DT3    | 107     | A7        | I/O | SH DT11      |
| 18      | V1        | I   | MII RXER   | 63      | AC29      | I/O | RAM DT6    | 108     | A6        | I/O | SH DT2       |
| 19      | W1        | I   | MII TXCLK  | 64      | AB29      | I/O | RAM DT9    | 109     | A5        | —   | Vcc          |
| 20      | Y1        | —   | GND        | 65      | AA29      | I/O | RAM DT12   | 110     | A4        | I/O | SH DT0       |
| 21      | AA1       | O   | MII TXD2   | 66      | Y29       | I/O | RAM DT15   | 111     | A3        | —   | GND          |
| 22      | AB1       | O   | MII TXEN   | 67      | W29       | O   | RAM3 CS0   | 112     | A2        | I   | HINTEX1      |
| 23      | AC1       | O   | AWAKE      | 68      | V29       | O   | RAM4 CS1   | 113     | B2        | I   | SH CSSD3     |
| 24      | AD1       | —   | Vcc        | 69      | U29       | O   | RAM DQM2   | 114     | C2        | —   | GND          |
| 25      | AE1       | I   | PCI INT8   | 70      | T29       | I/O | RAM DT16   | 115     | D2        | —   | Vcc          |
| 26      | AF1       | O   | PCI RST    | 71      | R29       | I/O | RAM DT19   | 116     | E2        | —   | RESERVED     |
| 27      | AG1       | I   | PCI REQ0   | 72      | P29       | I/O | RAM DT20   | 117     | F2        | I   | TDI          |
| 28      | AH1       | —   | GND        | 73      | N29       | I/O | RAM DT23   | 118     | G2        | —   | GND          |
| 29      | AJ1       | —   | Vcc        | 74      | M29       | I/O | RAM DT26   | 119     | H2        | I/O | P1394 D1     |
| 30      | AJ2       | —   | GND        | 75      | L29       | I/O | RAM DT29   | 120     | J2        | —   | GND          |
| 31      | AJ3       | O   | PCI CLK3   | 76      | K29       | O   | RAM WE     | 121     | K2        | I/O | P1394 D7     |
| 32      | AJ4       | —   | Vcc        | 77      | J29       | —   | Vcc        | 122     | L2        | I/O | P1394 CTL0   |
| 33      | AJ5       | O   | PCI GNT2   | 78      | H29       | I   | SH3 RASU   | 123     | M2        | —   | GND          |
| 34      | AJ6       | O   | PCI GNT0   | 79      | G29       | I   | SH3 ADR3   | 124     | N2        | I/O | P1394 SCLK   |
| 35      | AJ7       | —   | Vcc        | 80      | F29       | I   | SH3 ADR6   | 125     | P2        | I/O | P1394 DIRECT |
| 36      | AJ8       | —   | GND        | 81      | E29       | I   | SH3 ADR9   | 126     | R2        | I   | MII RXD2     |
| 37      | AJ9       | —   | Vcc        | 82      | D29       | I   | SH3 ADR11  | 127     | T2        | I   | MII CRS      |
| 38      | AJ10      | —   | Vcc        | 83      | C29       | I   | SH3 ADR15  | 128     | U2        | I   | MII RXCLK    |
| 39      | AJ11      | —   | GND        | 84      | B29       | —   | GND        | 129     | V2        | I   | E LINK       |
| 40      | AJ12      | I/O | PCI AD19   | 85      | A29       | I   | SH3 ADR20  | 130     | W2        | —   | Vcc          |
| 41      | AJ13      | I/O | PCI AD17   | 86      | A28       | —   | Vcc        | 131     | X2        | O   | MII TXD0     |
| 42      | AJ14      | —   | Vcc        | 87      | A27       | I   | SH3 ADR22  | 132     | AA2       | O   | MII TXD3     |
| 43      | AJ15      | I/O | PCI DEVSEL | 88      | A26       | —   | Vcc        | 133     | AB2       | O   | MII MDC      |
| 44      | AJ16      | I/O | PCI STOP   | 89      | A25       | I   | SH3 BACK   | 134     | AC2       | O   | MII TXER     |
| 45      | AJ17      | I/O | PCI PAR    | 90      | A24       | O   | SH3 BREQ   | 135     | AD2       | —   | GND          |

| PIN NO. | OUTER NO. | I/O | SIGNAL     | PIN NO. | OUTER NO. | I/O | SIGNAL     | PIN NO. | OUTER NO. | I/O | SIGNAL       |
|---------|-----------|-----|------------|---------|-----------|-----|------------|---------|-----------|-----|--------------|
| 136     | AE2       | I   | PCI INTA   | 181     | M28       | I/O | RAM DT27   | 226     | M3        | I/O | P1394 LPS    |
| 137     | AF2       | I   | PCI REQ3   | 182     | L28       | I/O | RAM DT30   | 227     | N3        | —   | Vcc          |
| 138     | AG2       | I   | PCI SERR   | 183     | K28       | O   | RAM CAS    | 228     | P3        | I/O | P1394 LINKON |
| 139     | AH2       | —   | Vcc        | 184     | J28       | I   | SH3 CASU   | 229     | R3        | I   | MII RXD1     |
| 140     | AH3       | —   | Vcc        | 185     | H28       | I   | SH3 RASL   | 230     | T3        | I   | MII RXDV     |
| 141     | AH4       | —   | GND        | 186     | G28       | I   | SH3 ADR4   | 231     | U3        | —   | Vcc          |
| 142     | AH5       | O   | PCI GNT3   | 187     | F28       | I   | SH3 ADR7   | 232     | V3        | —   | Vcc          |
| 143     | AH6       | —   | Vcc        | 188     | E28       | I   | SH3 ADR10  | 233     | W3        | —   | GND          |
| 144     | AH7       | I/O | PCI AD29   | 189     | D28       | I   | SH3 ADR12  | 234     | Y3        | O   | MII TXD1     |
| 145     | AH8       | I/O | PCI AD27   | 190     | C28       | I   | SH3 ADR16  | 235     | AA3       | —   | Vcc          |
| 146     | AH9       | I/O | PCI AD25   | 191     | B28       | I   | SH3 ADR17  | 236     | AB3       | I/O | MII MIO      |
| 147     | AH10      | I/O | PCI CBE3   | 192     | B27       | I   | SH3 ADR21  | 237     | AC3       | —   | Vcc          |
| 148     | AH11      | I/O | PCI AD22   | 193     | B26       | I   | SH3 ADR25  | 238     | AD3       | I   | PCI INTD     |
| 149     | AH12      | I/O | PCI AD20   | 194     | B25       | I   | SH3 RD     | 239     | AE3       | I   | PCI REQ2     |
| 150     | AH13      | —   | Vcc        | 195     | B24       | O   | SH3 WAIT   | 240     | AF3       | I   | PCI REQ1     |
| 151     | AH14      | I/O | PCI FRAME  | 196     | B23       | O   | SH IRL2    | 241     | AG3       | —   | GND          |
| 152     | AH15      | I/O | PCI TRDY   | 197     | B22       | O   | SH NMI     | 242     | AG4       | O   | PCI CLK2     |
| 153     | AH16      | —   | GND        | 198     | B21       | I   | CLKMODE1   | 243     | AG5       | O   | PCI CLK0     |
| 154     | AH17      | I/O | PCI CBE1   | 199     | B20       | I   | SH BS      | 244     | AG6       | —   | GND          |
| 155     | AH18      | I/O | PCI AD14   | 200     | B19       | —   | GND        | 245     | AG7       | I/O | PCI AD30     |
| 156     | AH19      | I/O | PCI AD12   | 201     | B18       | —   | Vcc        | 246     | AG8       | I/O | PCI AD28     |
| 157     | AH20      | I/O | PCI AD10   | 202     | B17       | —   | Vcc        | 247     | AG9       | I/O | PCI AD26     |
| 158     | AH21      | I/O | PCI AD8    | 203     | B16       | —   | Vcc        | 248     | AG10      | I/O | PCI AD24     |
| 159     | AH22      | I/O | PCI AD7    | 204     | B15       | I/O | SH DT16    | 249     | AG11      | I/O | PCI AD23     |
| 160     | AH23      | —   | GND        | 205     | B14       | I/O | SH DT17    | 250     | AG12      | I/O | PCI AD21     |
| 161     | AH24      | I/O | PCI AD1    | 206     | B13       | I/O | SH DT28    | 251     | AG13      | —   | GND          |
| 162     | AH25      | —   | Vcc        | 207     | B12       | I/O | SH DT20    | 252     | AG14      | I/O | PCI CBE2     |
| 163     | AH26      | —   | GND        | 208     | B11       | I/O | SH DT25    | 253     | AG15      | —   | GND          |
| 164     | AH27      | O   | RAM ADR3   | 209     | B10       | I/O | SH DT23    | 254     | AG16      | —   | Vcc          |
| 165     | AH28      | O   | RAM ADR4   | 210     | B9        | I/O | SH DT6     | 255     | AG17      | I/O | PCI AD15     |
| 166     | AG28      | O   | RAM ADR8   | 211     | B8        | I/O | SH DT10    | 256     | AG18      | I/O | PCI AD13     |
| 167     | AF28      | O   | RAM ADR12  | 212     | B7        | I/O | SH DT3     | 257     | AG19      | I/O | PCI AD11     |
| 168     | AE28      | O   | RAM BKADR1 | 213     | B6        | I/O | SH DT13    | 258     | AG20      | I/O | PCI AD9      |
| 169     | AD28      | I/O | RAM DT2    | 214     | B5        | I/O | SH DT14    | 259     | AG21      | I/O | PCI CBE0     |
| 170     | AC28      | I/O | RAM DT5    | 215     | B4        | I/O | SH DT15    | 260     | AG22      | I/O | PCI AD6      |
| 171     | AB28      | I/O | RAM DT8    | 216     | B3        | I   | HINTEX0    | 261     | AG23      | —   | Vcc          |
| 172     | AA28      | I/O | RAM DT11   | 217     | C3        | I   | SH CSSD1   | 262     | AG24      | I/O | PCI AD0      |
| 173     | Y28       | I/O | RAM DT14   | 218     | D3        | —   | Vcc        | 263     | AG25      | O   | RAM ADR0     |
| 174     | W28       | O   | RAM DQM1   | 219     | E3        | I   | SH CLKEX   | 264     | AG26      | O   | RAM ADR1     |
| 175     | V28       | O   | RAM4 CS0   | 220     | F3        | O   | TDO        | 265     | AG27      | O   | RAM ADR6     |
| 176     | U28       | O   | RAM4 CS3   | 221     | G3        | I   | TCK        | 266     | AF27      | O   | RAM ADR10    |
| 177     | T28       | —   | GND        | 222     | H3        | I/O | P1394 D0   | 267     | AE27      | O   | RAM ADR11    |
| 178     | R28       | I/O | RAM DT18   | 223     | J3        | —   | Vcc        | 268     | AD27      | I/O | RAM DT1      |
| 179     | P28       | I/O | RAM DT21   | 224     | K3        | I/O | P1394 D6   | 269     | AC27      | I/O | RAM DT4      |
| 180     | N28       | I/O | RAM DT24   | 225     | L3        | I/O | P1394 CTL1 | 270     | AB27      | I/O | RAM DT7      |

| PIN NO. | OUTER NO. | I/O | SIGNAL    | PIN NO. | OUTER NO. | I/O | SIGNAL    | PIN NO. | OUTER NO. | I/O | SIGNAL    |
|---------|-----------|-----|-----------|---------|-----------|-----|-----------|---------|-----------|-----|-----------|
| 271     | AA27      | I/O | RAM DT10  | 316     | G4        | I   | TMS       | 361     | AB26      | —   | Vcc       |
| 272     | Y27       | I/O | RAM DT13  | 317     | H4        | —   | GND       | 362     | AA26      | —   | GND       |
| 273     | W27       | O   | RAM DQM0  | 318     | J4        | I/O | P1394 D3  | 363     | Y26       | —   | Vcc       |
| 274     | V27       | O   | RAM3 CS1  | 319     | K4        | I/O | P1394 D5  | 364     | W26       | —   | GND       |
| 275     | U27       | O   | RAM4 CS2  | 320     | L4        | —   | GND       | 365     | V26       | —   | Vcc       |
| 276     | T27       | —   | Vcc       | 321     | M4        | —   | Vcc       | 366     | U26       | —   | GND       |
| 277     | R27       | I/O | RAM DT17  | 322     | N4        | —   | GND       | 367     | T26       | O   | RAM DQM3  |
| 278     | P27       | I/O | RAM DT22  | 323     | P4        | —   | Vcc       | 368     | R26       | —   | GND       |
| 279     | N27       | I/O | RAM DT25  | 324     | R4        | —   | GND       | 369     | P26       | —   | Vcc       |
| 280     | M27       | I/O | RAM DT28  | 325     | T4        | —   | Vcc       | 370     | N26       | —   | GND       |
| 281     | L27       | I/O | RAM DT31  | 326     | U4        | —   | GND       | 371     | M26       | —   | GND       |
| 282     | K27       | O   | RAM RAS   | 327     | V4        | —   | GND       | 372     | L26       | —   | Vcc       |
| 283     | J27       | I   | SH3 CASL  | 328     | W4        | —   | Vcc       | 373     | K26       | —   | GND       |
| 284     | H27       | I   | SH3 ADR2  | 329     | Y4        | —   | GND       | 374     | J26       | —   | GND       |
| 285     | G27       | I   | SH3 ADR5  | 330     | AA4       | —   | GND       | 375     | H26       | —   | Vcc       |
| 286     | F27       | I   | SH3 ADR8  | 331     | AB4       | —   | Vcc       | 376     | G26       | —   | GND       |
| 287     | E27       | I   | SH3 ADR13 | 332     | AC4       | —   | GND       | 377     | F26       | —   | GND       |
| 288     | D27       | I   | SH3 ADR14 | 333     | AD4       | I   | PCI INTC  | 378     | E26       | —   | Vcc       |
| 289     | C27       | I   | SH3 ADR19 | 334     | AE4       | —   | Vcc       | 379     | D26       | I   | SH3 ADR18 |
| 290     | C26       | I   | SH3 ADR23 | 335     | AF4       | I   | PCI CLKEX | 380     | D25       | —   | GND       |
| 291     | C25       | I   | SH3 ADR24 | 336     | AG4       | O   | PCI CLK1  | 381     | D24       | —   | Vcc       |
| 292     | C24       | —   | GND       | 337     | AF6       | O   | PCI GNT1  | 382     | D23       | O   | SH IRL0   |
| 293     | C23       | O   | SH IRL1   | 338     | AF7       | I/O | PCI AD31  | 383     | D22       | —   | GND       |
| 294     | C22       | —   | Vcc       | 339     | AF8       | —   | GND       | 384     | D21       | —   | Vcc       |
| 295     | C21       | I   | CLKMODE0  | 340     | AF9       | —   | Vcc       | 385     | D20       | I   | SHMODE    |
| 296     | C20       | I   | SH FRAME  | 341     | AF10      | —   | GND       | 386     | D19       | I   | SH MPXS20 |
| 297     | C19       | —   | GND       | 342     | AF11      | —   | GND       | 387     | D18       | O   | SH CLK0   |
| 298     | C18       | —   | GND       | 343     | AF12      | —   | Vcc       | 388     | D17       | I   | SH MPXS21 |
| 299     | C17       | I   | SH MPXS22 | 344     | AF13      | I/O | PCI AD18  | 389     | D16       | O   | SH CLK1   |
| 300     | C16       | —   | GND       | 345     | AF14      | I/O | PCI AD16  | 390     | D15       | I/O | SH DT31   |
| 301     | C15       | O   | SH4 RDY   | 346     | AF15      | I/O | PCI IRDY  | 391     | D14       | —   | Vcc       |
| 302     | C14       | I/O | SH DT29   | 347     | AF16      | I/O | PCI PERR  | 392     | D13       | —   | GND       |
| 303     | C13       | I/O | SH DT19   | 348     | AF17      | —   | GND       | 393     | D12       | —   | Vcc       |
| 304     | C12       | I/O | SH DT26   | 349     | AF18      | —   | GND       | 394     | D11       | —   | GND       |
| 305     | C11       | I/O | SH DT22   | 350     | AF19      | —   | Vcc       | 395     | D10       | —   | Vcc       |
| 306     | C10       | I/O | SH DT7    | 351     | AF20      | —   | GND       | 396     | D9        | —   | GND       |
| 307     | C9        | I/O | SH DT9    | 352     | AF21      | —   | GND       | 397     | D8        | —   | Vcc       |
| 308     | C8        | I/O | SH DT4    | 353     | AF22      | I/O | PCI AD5   | 398     | D7        | —   | GND       |
| 309     | C7        | I/O | SH DT12   | 354     | AF23      | I/O | PCI AD3   | 399     | D6        | —   | GND       |
| 310     | C6        | I/O | SH DT1    | 355     | AF24      | —   | GND       | 400     | D5        | —   | Vcc       |
| 311     | C5        | —   | GND       | 356     | AF25      | —   | Vcc       |         |           |     |           |
| 312     | C4        | —   | Vcc       | 357     | AF26      | O   | RAM ADR5  |         |           |     |           |



**INPUTS**

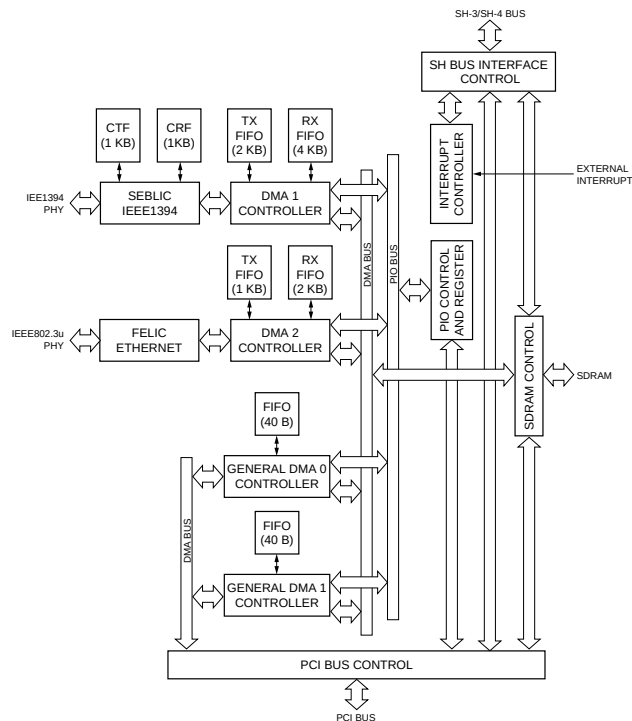
|                                           |                                     |
|-------------------------------------------|-------------------------------------|
| CLKMODE0 - CLKMODE2                       | : SH BUS CLOCK SELECT               |
| E LINK                                    | : LINK DETECT                       |
| HINTEX0, HINTEX1                          | : EXTERNAL INTERRUPT                |
| HRESET                                    | : HARDWARE RESET                    |
| MII COL                                   | : COLLISION DETECT                  |
| MII CRS                                   | : CARRIER SENS                      |
| MII RXCLK                                 | : RECEIVE CLOCK                     |
| MII RXD0 - MII RXD3                       | : RECEIVE DATA                      |
| MII RXDV                                  | : RECEIVE DATA ENABLE               |
| MII RXER                                  | : RECEIVE ERROR                     |
| MII TXCLK                                 | : TRANSMIT CLOCK                    |
| PCI CLKEX                                 | : PCI CLOCK                         |
| PCI INTA, PCI INTB,<br>PCI INTC, PCI INTD | : PCI BUS INTERRUPT                 |
| PCI REQ0 - PCI REQ3                       | : PCI BUS REQUEST                   |
| PCI SERR                                  | : PCI BUS PARITY ERROR              |
| SH BS                                     | : BUS START                         |
| SH CLKEX                                  | : SH BUS CLOCK                      |
| SH CSRG                                   | : CHIP SELECT FOR INTERNAL RESISTER |
| SH CSSD0 - SH CSSD3                       | : CHIP SELECT FOR SDRAM             |
| SH FRAME                                  | : CYCLE FRAME                       |
| SH MPXSZ0 - SH MPXSZ2                     | : PASS ACCESS SIZE SELECT           |
| SH RDWT                                   | : BUS READ/WRITE                    |
| SH3 ADR2 - SH3 ADR25                      | : SH-3 ADDRESS BUS                  |
| SH3 BACK                                  | : SH-3 BUS ACKNOWLEDGE              |
| SH3 CASL, SH3 CASU                        | : SDRAM COLUMN ADDRESS STROBE       |
| SH3 RASL, SH3 RASU                        | : SDRAM ROW ADDRESS STROBE          |
| SH3 RD                                    | : SH-3 BUS READ STROBE              |
| SHMODE                                    | : SH MODE SELECT                    |
| TCK, TDI, TESTMODE,<br>TMS, TRST          | : TEST                              |

**OUTPUTS**

|                        |                               |
|------------------------|-------------------------------|
| AWAKE                  | : MAGIC PACKET DETECT         |
| MII MDC                | : MANAGEMENT DATA CLOCK       |
| MII TXD0 - MII TXD3    | : TRANSMIT DATA               |
| MII TXEN               | : TRANSMIT DATA ENABLE        |
| MII TXER               | : TRANSMIT ERROR              |
| PCI CLK0 - PCI CLK3    | : PCI BUS CLOCK               |
| PCI GNT0 - PCI GNT3    | : PCI BUS GRANT               |
| PCI RST                | : PCI BUS RESET               |
| RAM ADR0 - RAM ADR12   | : SDRAM ADDRESS               |
| RAM BKADR0, RAM BKADR1 | : SDRAM BANK ADDRESS          |
| RAM CAS                | : SDRAM COLUMN ADDRESS STROBE |
| RAM DQM0 - RAM DQM3    | : SDRAM BITE ENABLE           |
| RAM RAS                | : SDRAM ROW ADDRESS STROBE    |
| RAM WE                 | : SDRAM WRITE ENABLE          |
| RAM3 CS0, RAM3 CS1     | : SDRAM CHIP SELECT FOR SH-3  |
| RAM4 CS0 - RAM4 CS3    | : SDRAM CHIP SELECT FOR SH-4  |
| SH CLK0, SH CLK1       | : SH CLOCK                    |
| SH IRL0 - SH IRL3      | : SH BUS INTERRUPT            |
| SH NMI                 | : SH NOM-MASKABLE INTERRUPT   |
| SH3 BREQ               | : SH-3 BUS REQUEST            |
| SH3 WAIT               | : SH-3 BUS WAIT               |
| SH4 RDY                | : SH-4 READY                  |
| TDO                    | : TEST                        |

**INPUTS/OUTPUTS**

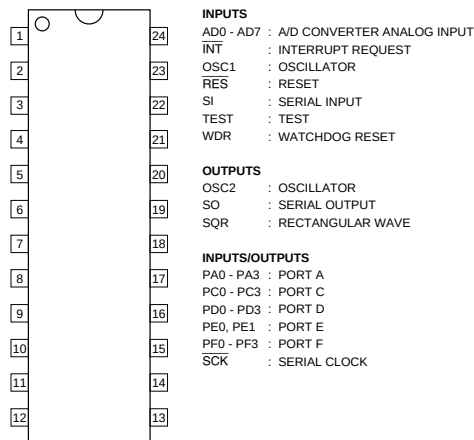
|                        |                                   |
|------------------------|-----------------------------------|
| MII MDIO               | : MANAGEMENT DATA                 |
| P1394 CTL0, P1394 CTL1 | : CONTROL                         |
| P1394 D0 - P1394 D7    | : DATA                            |
| P1394 DIRECT           | : LINK-PHY DIRECT CONNECTION      |
| P1394 LINKON           | : LINK POWER ON                   |
| P1394 LPS              | : LINK POWER SUPPLY               |
| P1394 LREQ             | : LINK REQUEST                    |
| P1394 SCLK             | : 49.152 MHz CLOCK                |
| PCI AD0 - PCI AD31     | : PCI DATA BUS                    |
| PCI CBE0 - PCI CBE3    | : PCI BUS COMMAND AND BITE ENABLE |
| PCI DEVSEL             | : PCI BUS DEVICE SELECT           |
| PCI FRAME              | : PCI BUS FRAME                   |
| PCI IRDY               | : PCI BUS INITIATE READY          |
| PCI PAR                | : PCI BUS PARITY                  |
| PCI PERR               | : PCI BUS PARITY ERROR            |
| PCI STOP               | : PCI BUS STOP                    |
| PCI TRDY               | : PCI BUS TRANSMIT READY          |
| RAM DT0 - RAM DT31     | : SDRAM DATA BUS                  |
| SH DT0 - SH DT31       | : DATA BUS                        |



LC65F1306A-4M30-E (SANYO)  
LC65F1306AU-MF-TL-E (SANYO)

**4-BIT MICROCOMPUTER**

—TOP VIEW—

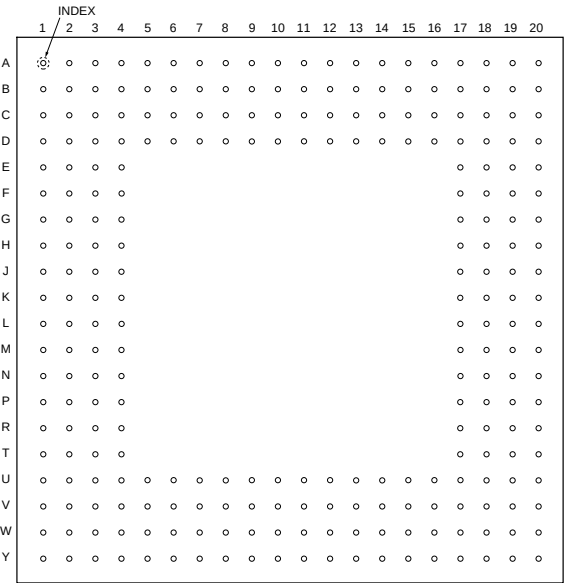


| PIN NO. | I/O | SIGNAL      | PIN NO. | I/O | SIGNAL      | PIN NO. | I/O | SIGNAL | PIN NO. | I/O | SIGNAL |
|---------|-----|-------------|---------|-----|-------------|---------|-----|--------|---------|-----|--------|
| 1       | I   | RES         | 7       | I/O | PF3/INT/AD7 | 13      | I/O | PC0    | 19      | I/O | PD2    |
| 2       | I/O | PE0/SQR     | 8       | I/O | PA0/AD0     | 14      | I/O | PC1    | 20      | I/O | PD3    |
| 3       | I/O | PE1/WDR     | 9       | I/O | PA1/AD1     | 15      | I/O | PC2    | 21      | —   | GND    |
| 4       | I/O | PF0/SI/AD4  | 10      | I/O | PA2/AD2     | 16      | I/O | PC3    | 22      | I   | TEST   |
| 5       | I/O | PF1/SO/AD5  | 11      | I/O | PA3/AD3     | 17      | I/O | PD0    | 23      | O   | OSC2   |
| 6       | I/O | PF2/SCK/AD6 | 12      | —   | Vcc         | 18      | I/O | PD1    | 24      | I   | OSC1   |

HD6417750SBP200 (HITACHI)

32-BIT RISC MICROPROCESSOR

—TOP VIEW—



| PIN NO. | I/O | SIGNAL | PIN NO. | I/O | SIGNAL     | PIN NO. | I/O | SIGNAL       | PIN NO. | I/O | SIGNAL             |
|---------|-----|--------|---------|-----|------------|---------|-----|--------------|---------|-----|--------------------|
| L1      | I/O | D41    | R1      | I/O | D13        | U17     | I   | DREQ0        | W9      | O   | A10                |
| L2      | I/O | D38    | R2      | I/O | D2         | U18     | I   | DREQ1        | W10     | O   | A8                 |
| L3      | —   | Vcc    | R3      | —   | Vcc        | U19     | I/O | D20          | W11     | O   | CKIO2              |
| L4      | —   | GND    | R4      | —   | GND        | U20     | I/O | D27          | W12     | O   | A5                 |
| L17     | —   | GND    | R17     | —   | GND        | V1      | I/O | D10          | W13     | O   | A3                 |
| L18     | —   | Vcc    | R18     | —   | Vcc        | V2      | I/O | D5           | W14     | O   | CS3                |
| L19     | I/O | D54    | R19     | I/O | D18        | V3      | I   | BREQ/BSACK   | W15     | O   | RAS                |
| L20     | I/O | D57    | R20     | I/O | D29        | V4      | —   | NC           | W16     | O   | RD/WR              |
| M1      | I/O | D40    | T1      | I/O | D12        | V5      | —   | Vcc          | W17     | O   | WE3/CAS3/DQ3/ICQWR |
| M2      | I/O | D39    | T2      | I/O | D3         | V6      | —   | Vcc          | W18     | O   | WE7/CAS7/DQ7/REG   |
| M3      | —   | Vcc    | T3      | —   | Vcc        | V7      | —   | Vcc          | W19     | I/O | D24                |
| M4      | —   | GND    | T4      | —   | GND        | V8      | —   | Vcc          | W20     | I/O | D25                |
| M17     | —   | GND    | T17     | —   | GND        | V9      | —   | Vcc          | Y1      | I/O | D6                 |
| M18     | —   | Vcc    | T18     | —   | Vcc        | V10     | —   | Vcc          | Y2      | I/O | D7                 |
| M19     | I/O | D55    | T19     | I/O | D19        | V11     | —   | Vcc          | Y3      | O   | WE5/CAS5/DQ5       |
| M20     | I/O | D56    | T20     | I/O | D28        | V12     | O   | DRAK1        | Y4      | O   | WE1/CAS1/DQ1       |
| N1      | I/O | D15    | U1      | I/O | D11        | V13     | —   | Vcc          | Y5      | O   | A17                |
| N2      | I/O | D0     | U2      | I/O | D4         | V14     | —   | Vcc          | Y6      | O   | A15                |
| N3      | —   | NC     | U3      | O   | BACK/BSREQ | V15     | —   | Vcc          | Y7      | O   | A13                |
| N4      | —   | NC     | U4      | —   | NC         | V16     | —   | Vcc          | Y8      | O   | A11                |
| N17     | —   | GND    | U5      | —   | GND        | V17     | I   | RXD          | Y9      | O   | A9                 |
| N18     | —   | Vcc    | U6      | —   | GND        | V18     | —   | NC           | Y10     | O   | A7                 |
| N19     | I/O | D16    | U7      | —   | GND        | V19     | I/O | D21          | Y11     | O   | CKIO               |
| N20     | I/O | D31    | U8      | —   | GND        | V20     | I/O | D26          | Y12     | O   | A6                 |
| P1      | I/O | D14    | U9      | —   | GND        | W1      | I/O | D9           | Y13     | O   | A4                 |
| P2      | I/O | D1     | U10     | —   | GND        | W2      | I/O | D8           | Y14     | O   | A2                 |
| P3      | —   | Vcc    | U11     | —   | GND        | W3      | O   | CKE          | Y15     | O   | CS2                |
| P4      | —   | GND    | U12     | —   | GND        | W4      | O   | WE4/CAS4/DQ4 | Y16     | O   | RD/CAS/FRAME       |
| P17     | —   | GND    | U13     | O   | DRAK0      | W5      | O   | WE0/CAS0/DQ0 | Y17     | O   | WE2/CAS2/DQ2/ICORD |
| P18     | —   | Vcc    | U14     | —   | GND        | W6      | O   | A16          | Y18     | O   | WE6/CAS6/DQ6       |
| P19     | I/O | D17    | U15     | —   | GND        | W7      | O   | A14          | Y19     | I/O | D23                |
| P20     | I/O | D30    | U16     | —   | GND        | W8      | O   | A12          | Y20     | I/O | D22                |

| PIN NO. | I/O | SIGNAL        | PIN NO. | I/O | SIGNAL   | PIN NO. | I/O | SIGNAL   | PIN NO. | I/O | SIGNAL |
|---------|-----|---------------|---------|-----|----------|---------|-----|----------|---------|-----|--------|
| A1      | I   | EXTAL         | B13     | O   | A21      | D5      | —   | GND      | G1      | I/O | D34    |
| A2      | O   | XTAL          | B14     | O   | A19      | D6      | —   | GND      | G2      | I/O | D45    |
| A3      | —   | Vcc           | B15     | I/O | MD7/TXD  | D7      | —   | GND      | G3      | —   | Vcc    |
| A4      | —   | Vcc           | B16     | I/O | MD8/RTS2 | D8      | O   | A1       | G4      | —   | GND    |
| A5      | I   | TCK           | B17     | —   | Vcc      | D9      | —   | GND      | G17     | —   | GND    |
| A6      | O   | TDO           | B18     | —   | GND      | D10     | —   | GND      | G18     | —   | Vcc    |
| A7      | I   | MD6/IOIS16    | B19     | O   | XTAL2    | D11     | —   | GND      | G19     | I/O | D61    |
| A8      | O   | STATUS0       | B20     | I   | IRL2     | D12     | —   | GND      | G20     | I/O | D50    |
| A9      | O   | DACK0         | C1      | O   | CS1      | D13     | —   | GND      | H1      | I/O | D35    |
| A10     | I/O | MD4/CE2B      | C2      | O   | CS0      | D14     | —   | GND      | H2      | I/O | D44    |
| A11     | I/O | MD3/CE2A      | C3      | I   | CKIO2ENB | D15     | —   | GND      | H3      | —   | Vcc    |
| A12     | O   | A24           | C4      | I   | TRST     | D16     | —   | NC       | H4      | —   | GND    |
| A13     | O   | A22           | C5      | —   | NC       | D17     | I   | CA*      | H17     | —   | NC     |
| A14     | O   | A20           | C6      | —   | NC       | D18     | I   | MD2/RXD2 | H18     | —   | NC     |
| A15     | O   | A18           | C7      | —   | Vcc      | D19     | I/O | MD1/TXD2 | H19     | I/O | D60    |
| A16     | I   | ACK2/MRESET   | C8      | O   | A0       | D20     | I/O | MD0/SCK  | H20     | I/O | D51    |
| A17     | I/O | TCLK          | C9      | —   | Vcc      | E1      | I/O | D32      | J1      | I/O | D36    |
| A18     | —   | Vcc           | C10     | —   | Vcc      | E2      | I/O | D47      | J2      | I/O | D43    |
| A19     | I   | EXTAL2        | C11     | —   | Vcc      | E3      | O   | RD2      | J3      | —   | Vcc    |
| A20     | I   | NMI           | C12     | —   | Vcc      | E4      | —   | GND      | J4      | —   | GND    |
| B1      | I   | RESET         | C13     | —   | Vcc      | E17     | —   | GND      | J17     | —   | GND    |
| B2      | I   | RDY           | C14     | —   | Vcc      | E18     | O   | RD/WR2   | J18     | —   | Vcc    |
| B3      | —   | GND           | C15     | —   | Vcc      | E19     | I/O | D63      | J19     | I/O | D59    |
| B4      | —   | Vcc           | C16     | I/O | CTS2     | E20     | I/O | D48      | J20     | I/O | D52    |
| B5      | I   | TDI           | C17     | —   | GND      | F1      | I/O | D33      | K1      | I/O | D37    |
| B6      | I   | TMS           | C18     | I   | IRL3     | F2      | I/O | D46      | K2      | I/O | D42    |
| B7      | I/O | ASEBRK/BRKACK | C19     | I   | IRL1     | F3      | —   | Vcc      | K3      | —   | Vcc    |
| B8      | O   | STATUS1       | C20     | I   | IRL0     | F4      | —   | GND      | K4      | —   | GND    |
| B9      | O   | DACK1         | D1      | O   | BS       | F17     | —   | GND      | K17     | —   | GND    |
| B10     | I/O | MD5/RAS2      | D2      | O   | CS6      | F18     | —   | Vcc      | K18     | —   | Vcc    |
| B11     | O   | A25           | D3      | O   | CS5      | F19     | I/O | D62      | K19     | I/O | D58    |
| B12     | O   | A23           | D4      | O   | CS4      | F20     | I/O | D49      | K20     | I/O | D53    |

\* : HD6417750BP200M IS RESERVED.

**INPUTS**

BREQ : BUS REQUEST

BSACK : BUS ACKNOWLEDGEMENT

CA : CHIP ACTIVE/HARDWARE STANDBY REQUEST

CKIO2ENB : CKIO2, RD2, RD/WR2 ENABLE

DREQ0, DREQ1 : REQUEST FROM DMAC0, DMAC1

EXTAL : EXTERNAL INPUT CLOCK/CRYSTAL RESONATOR

EXTAL2 : CRYSTAL RESONATOR FOR RTC

IOIS16 : INPUT/OUTPUT 16-BIT COMMAND

IRL0 - IRL3 : INTERRUPT

MD1 - MD8 : MODE CONTROL

MRESET : MANUAL PROGRAM RESET

NMI : NONMASKABLE INTERRUPT

RDY : BUS READY

RESERVED : RESERVED

RESET : RESET

RXD, RXD2 : RECEIVE DATA INPUT

SCK2 : SCIF CLOCK

TCK : CLOCK

TDI : DATA INPUT

TMS : MODE

TRST : RESET

# OUTPUTS

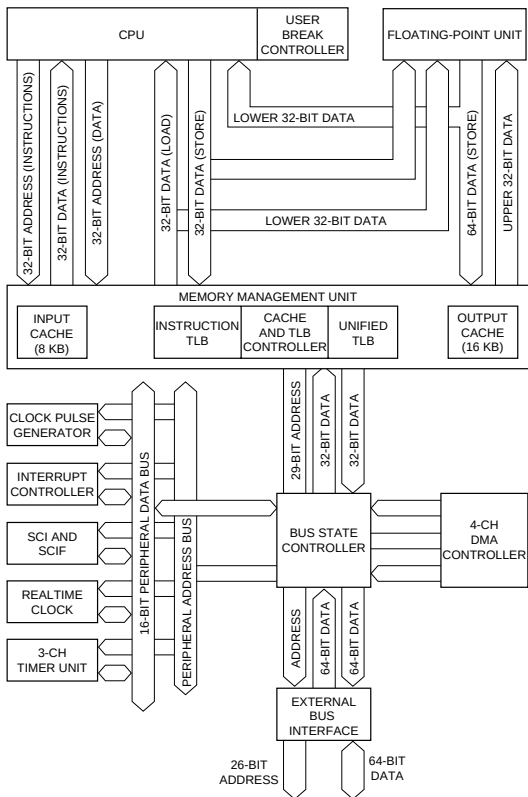
|                  |                           |
|------------------|---------------------------|
| A0 - A25         | : ADDRESS                 |
| BACK             | : BUS ACKNOWLEDGE         |
| BS               | : BURST START             |
| BSREQ            | : BUS REQUEST             |
| CAS0 - CAS7      | : COLUMN ADDRESS STROBE   |
| CASS             | : CAS SELECTION           |
| CE2A, CE2B       | : PCMCIA-CHIP ENABLE      |
| CKE              | : CLOCK OUTPUT ENABLE     |
| CKIO, CKIO2      | : CLOCK                   |
| CS0 - CS6        | : CHIP SELECT             |
| DACK0, DACK1     | : DMA TRANSFER STROBE     |
| DQM0 - DQM7      | : DATA SELECT SIGNAL      |
| DRAK0, DRAK1     | : DMA REQUEST ACKNOWLEDGE |
| FRAME            | : FRAME                   |
| ICIORD           | : PCMCIA I/O-READ         |
| ICIOWR           | : PCMCIA I/O-WRITE        |
| RAS, RAS2        | : ROW ADDRESS STROBE      |
| RD, RD, RD2      | : READ                    |
| REG              | : DATA SELECT SIGNAL      |
| STATUS0, STATUS1 | : STATUS                  |
| TDO              | : DATA                    |
| TXD, TXD2        | : TRANSMISSION DATA       |
| WE0 - WE7        | : WRITE ENABLE            |
| WR, WR2          | : WRITE                   |
| XTAL, XTAL2      | : CRYSTAL RESONATOR       |

# INPUTS/OUTPUTS

|            |                                 |
|------------|---------------------------------|
| ASEBRK     | : PIN BREAK                     |
| BRKACK     | : BREAK ACKNOWLEDGE             |
| CTS2, RTS2 | : SCIF DATA CONTROL             |
| D0 - D63   | : DATA OR I/O PORT (D32 TO D47) |
| SKC        | : SCI CLOCK                     |
| TCLK       | : TIMER CLOCK                   |

# OTHER

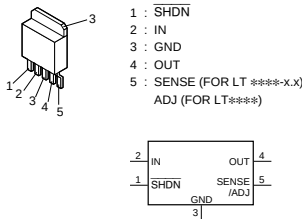
|    |                 |
|----|-----------------|
| NC | : NO CONNECTION |
|----|-----------------|



SCI : SERIAL COMMUNICATION INTERFACE  
 SCIF : SERIAL COMMUNICATION INTERFACE WITH FIFO  
 TLB : TRANSLATION LOOKASIDE BUFFER

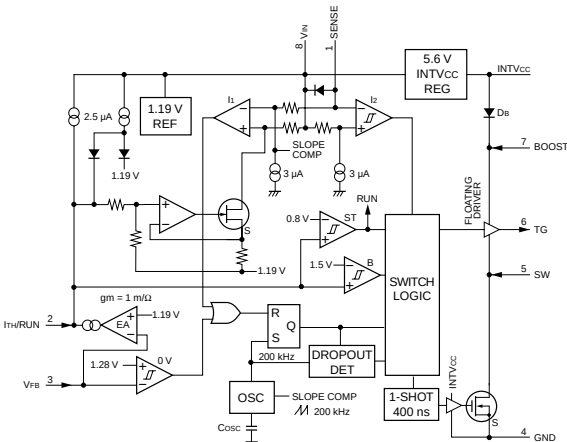
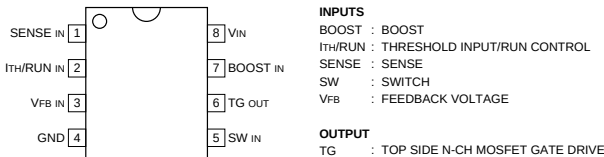
# LT1764EQ-E2 (LINEAR TECH) LT1963EQ-E2 (LINEAR TECH)

## POSITIVE VOLTAGE REGULATOR



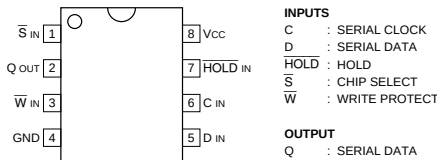
# LTC1624IS8 (LINEAR TECH) LTC1624IS8-E2

## SWITCHING REGULATOR CONTROLLER —TOP VIEW—



# M25P10-AVMN6T (ST)

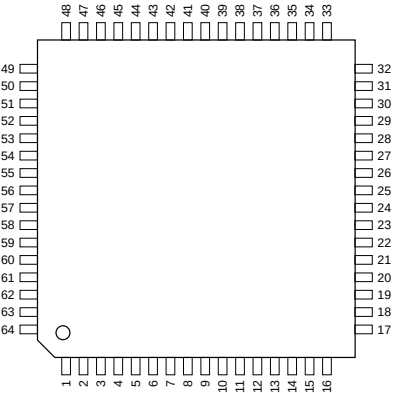
## 1M-BIT SERIAL EEPROM —TOP VIEW—



M37905F8CFP (MITSUBISHI)

16-BIT MICROCOMPUTER

—TOP VIEW—



| PIN NO. | I/O | SIGNAL             | PIN NO. | I/O | SIGNAL           | PIN NO. | I/O | SIGNAL           | PIN NO. | I/O | SIGNAL                  |
|---------|-----|--------------------|---------|-----|------------------|---------|-----|------------------|---------|-----|-------------------------|
| 1       | I/O | P73/AN3            | 17      | I   | MD0              | 33      | I/O | P41/TA5IN/RTP21  | 49      | I/O | P12/RXD0                |
| 2       | I/O | P72/AN2            | 18      | I   | RESET            | 34      | I/O | P40/TA5OUT/RTP20 | 50      | I/O | P11/CTS0 1/CLK0         |
| 3       | I/O | P71/AN1            | 19      | I   | XIN              | 35      | I   | MD1              | 51      | I/O | P10/CTS0 2/RTS0         |
| 4       | I/O | P70/AN0            | 20      | O   | XOUT             | 36      | I/O | P27              | 52      | —   | VCC                     |
| 5       | I/O | P67/TA3IN/RTP13    | 21      | I/O | VCONT            | 37      | I/O | P26              | 53      | —   | VCC                     |
| 6       | I/O | P66/TA3OUT/RTP12   | 22      | —   | GND              | 38      | I/O | P25              | 54      | —   | VREF                    |
| 7       | I/O | P65/TA2IN/RTP11    | 23      | I/O | P53/INT3/RTPTRG0 | 39      | I/O | P24              | 55      | —   | GND                     |
| 8       | I/O | P64/TA2OUT/RTP10   | 24      | I/O | P52/INT3/RTPTRG1 | 40      | I/O | P23/TA9IN        | 56      | —   | GND                     |
| 9       | I/O | P63/TA1IN/RTP03    | 25      | I/O | P51/INT1         | 41      | I/O | P22/TA9OUT       | 57      | I/O | P83/AN11/TXD2           |
| 10      | I/O | P62/TA1OUT/RTP02   | 26      | I   | P40/OUTCUT/INT0  | 42      | I/O | P21/TA4IN        | 58      | I/O | P82/AN10/RXD2           |
| 11      | I/O | P61/TA0IN/RTP01    | 27      | I/O | P47/TA8IN/RTP33  | 43      | I/O | P20/TA4OUT       | 59      | I/O | P81/AN9/CTS2 1/CLK2     |
| 12      | I/O | P60/TA0OUT/RTP00   | 28      | I/O | P46/TA8OUT/RTP32 | 44      | I/O | P17/TXD1         | 60      | I/O | P80/AN8/CTS2 2/RTS2/DA1 |
| 13      | I/O | P57/INT7/TB2IN/IDV | 29      | I/O | P45/TA7IN/RTP31  | 45      | I/O | P16/RXD1         | 61      | I/O | P77/AN7/DA0             |
| 14      | I/O | P56/INT6/TB1IN/IDV | 30      | I/O | P44/TA7OUT/RTP30 | 46      | I/O | P15/CTS1 1/CLK1  | 62      | I/O | P76/AN6                 |
| 15      | I/O | P55/INT5/TB0IN/IDW | 31      | I/O | P43/TA6IN/RTP23  | 47      | I/O | P14/CTS1 2/RTS1  | 63      | I/O | P75/AN5                 |
| 16      | I   | P60/OUTCUT/INT4    | 32      | I/O | P42/TA6OUT/RTP22 | 48      | I/O | P13/TXD0         | 64      | I/O | P74/AN4                 |

INPUTS

AN0 - AN11 : ANALOG INPUTS TO A/D CONVERTER  
TB0IN - TB2IN : TIMER B  
CLK0 - CLK2 : CLOCK FOR SERIAL I/O  
CTS0 1, CTS0 2, CTS1 1, CTS1 2, CTS2 1, CTS2 2 : CLEAR TO SEND  
IDU, IDV, IDW : THREE-PHASE LOCATION IDENTIFICATION  
INT0 - INT7 : INTERRUPT  
MD0, MD1 : MODE SELECT  
P40/OUTCUT : PORT 4 OUTPUTS CUTOFF  
P60/OUTCUT : PORT 6 OUTPUTS CUTOFF  
RESET : RESET  
RTPTRG0, RTPTRG1 : PULSE OUTPUT PORT TRIGGER  
RTS0 - RTS2 : REQUEST TO SEND  
TA0IN - TA9IN : TIMER A  
XIN : CRYSTAL OSCILLATOR

OUTPUTS

DA0, DA1 : ANALOG OUTPUTS FROM D/A CONVERTER  
RTP00 - RTP03 : PULSE OUTPUT PORT 0  
RTP10 - RTP13 : PULSE OUTPUT PORT 1  
RTP21 - RTP23 : PULSE OUTPUT PORT 2  
RTP31 - RTP33 : PULSE OUTPUT PORT 3  
RXD0 - RXD2 : RECEIVE DATA  
TA0OUT - TA9OUT : TIMER A  
TXD0 - TXD2 : TRANSMIT DATA  
U, V, W, U, V, W : THREE-PHASE MOTOR CONTROL  
XOUT : CRYSTAL OSCILLATOR

INPUTS/OUTPUTS

P10 - P17 : PORT 1  
P20 - P27 : PORT 2  
P40 - P47 : PORT 4  
P51 - P53, P55 - P57 : PORT 5  
P60 - P67 : PORT 6  
P70 - P77 : PORT 7  
P80 - P83 : PORT 8

OTHER

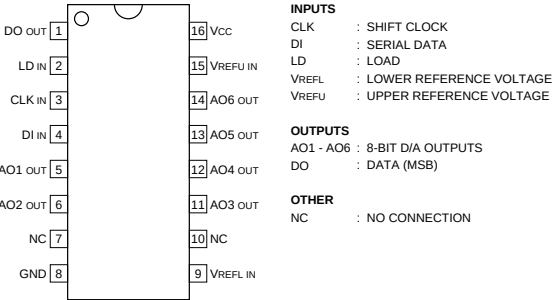
VCONT : FILTER CONNECTION  
VREF : REFERENCE VOLTAGE

M62354GP-75ED (MITSUBISHI)

M62354GP75ED

8-BIT 6CHANNEL D/A CONVERTER

—TOP VIEW—



INPUTS

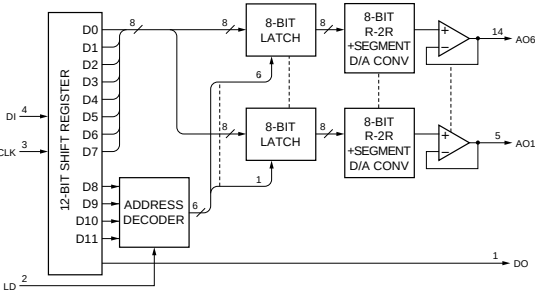
CLK : SHIFT CLOCK  
DI : SERIAL DATA  
LD : LOAD  
VREFL : LOWER REFERENCE VOLTAGE  
VREFU : UPPER REFERENCE VOLTAGE

OUTPUTS

AO1 - AO6 : 8-BIT D/A OUTPUTS  
DO : DATA (MSB)

OTHER

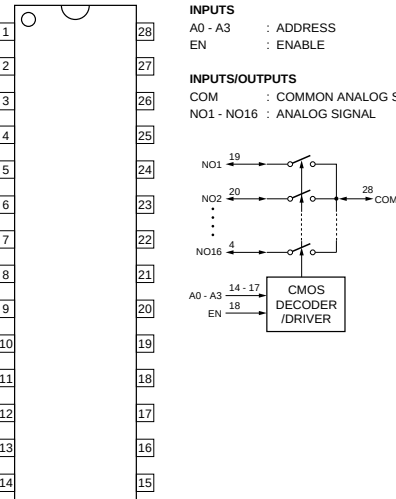
NC : NO CONNECTION



MAX336CAI-T (MAXIM)

8-BIT 6CHANNEL MULTIPLEXER

—TOP VIEW—

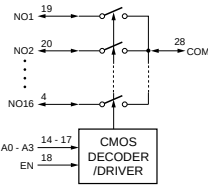


INPUTS

A0 - A3 : ADDRESS  
EN : ENABLE

INPUTS/OUTPUTS

COM : COMMON ANALOG SIGNAL  
NO1 - NO16 : ANALOG SIGNAL



| A3 | A2 | A1 | EN | ON SWITCH |
|----|----|----|----|-----------|
| x  | x  | x  | x  | NONE      |
| 0  | 0  | 0  | 0  | 1         |
| 0  | 0  | 0  | 1  | 2         |
| 0  | 0  | 1  | 0  | 3         |
| 0  | 0  | 1  | 1  | 4         |
| 0  | 1  | 0  | 0  | 5         |
| 0  | 1  | 0  | 1  | 6         |
| 0  | 1  | 1  | 0  | 7         |
| 0  | 1  | 1  | 1  | 8         |
| 1  | 0  | 0  | 0  | 9         |
| 1  | 0  | 0  | 1  | 10        |
| 1  | 0  | 1  | 0  | 11        |
| 1  | 0  | 1  | 1  | 12        |
| 1  | 1  | 0  | 0  | 13        |
| 1  | 1  | 0  | 1  | 14        |
| 1  | 1  | 1  | 0  | 15        |
| 1  | 1  | 1  | 1  | 16        |

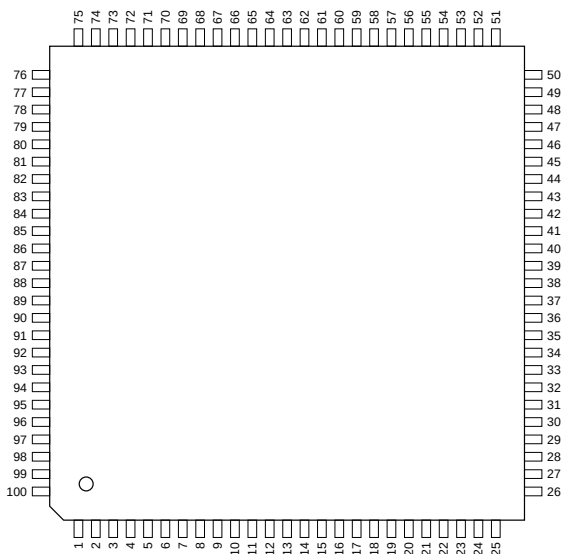
0 : LOW LEVEL  
1 : HIGH LEVEL  
x : DON'T CARE

| PIN NO. | I/O | SIGNAL | PIN NO. | I/O | SIGNAL | PIN NO. | I/O | SIGNAL | PIN NO. | I/O | SIGNAL |
|---------|-----|--------|---------|-----|--------|---------|-----|--------|---------|-----|--------|
| 1       | —   | VCC    | 8       | I/O | NO12   | 15      | I   | A2     | 22      | I/O | NO4    |
| 2       | —   | NC     | 9       | I/O | NO11   | 16      | I   | A1     | 23      | I/O | NO5    |
| 3       | —   | NC     | 10      | I/O | NO10   | 17      | I   | A0     | 24      | I/O | NO6    |
| 4       | I/O | NO16   | 11      | I/O | NO9    | 18      | I   | EN     | 25      | I/O | NO7    |
| 5       | I/O | NO15   | 12      | —   | GND    | 19      | I/O | NO1    | 26      | I/O | NO8    |
| 6       | I/O | NO14   | 13      | —   | NC     | 20      | I/O | NO2    | 27      | —   | VEE    |
| 7       | I/O | NO13   | 14      | I   | A3     | 21      | I/O | NO3    | 28      | I/O | COM    |

## M66590FP (MITSUBISHI)

## USB2.0 CONTROLLER

—TOP VIEW—



| PIN NO. | I/O | SIGNAL   | PIN NO. | I/O | SIGNAL | PIN NO. | I/O | SIGNAL  | PIN NO. | I/O | SIGNAL     |
|---------|-----|----------|---------|-----|--------|---------|-----|---------|---------|-----|------------|
| 1       | —   | D.GND    | 26      | I   | TEST1  | 51      | I/O | D11     | 76      | —   | Vcc        |
| 2       | —   | Vcc      | 27      | I   | TEST2  | 52      | I/O | D12     | 77      | —   | D.GND      |
| 3       | —   | D.GND    | 28      | O   | XOUT   | 53      | I/O | D13     | 78      | —   | VccQ       |
| 4       | —   | AFEA.Vcc | 29      | I   | XIN    | 54      | —   | VccQ    | 79      | O   | INT0       |
| 5       | —   | AFEA.GND | 30      | —   | D.GND  | 55      | —   | D.GND   | 80      | O   | SOF        |
| 6       | I/O | DFM      | 31      | —   | Vcc    | 56      | —   | Vcc     | 81      | I   | RD         |
| 7       | I/O | DHM      | 32      | —   | VccQ   | 57      | I/O | D14     | 82      | I   | WR0        |
| 8       | —   | AFEA.Vcc | 33      | I   | A1     | 58      | I/O | D15     | 83      | I   | WR1        |
| 9       | I/O | DHP      | 34      | I   | A2     | 59      | I/O | D16/PA0 | 84      | I   | WR2/EXTRG0 |
| 10      | I/O | DFP      | 35      | I   | A3     | 60      | I/O | D17/PA1 | 85      | I   | WR3/EXTRG1 |
| 11      | —   | AFEA.GND | 36      | I   | A4     | 61      | I/O | D18/PA2 | 86      | I   | CS         |
| 12      | —   | AFEA.Vcc | 37      | I   | A5     | 62      | I/O | D19/PA3 | 87      | O   | DREQ0      |
| 13      | —   | AFED.GND | 38      | I   | A6     | 63      | I/O | D20/PA4 | 88      | I   | DACK0      |
| 14      | —   | AFED.Vcc | 39      | I   | A7     | 64      | I/O | D21/PA5 | 89      | I   | DSTB0      |
| 15      | I   | VBUS     | 40      | I/O | D0     | 65      | I/O | D22/PA6 | 90      | I/O | DEND0      |
| 16      | O   | TR ON    | 41      | I/O | D1     | 66      | I/O | D23/PA7 | 91      | I/O | DBHE0      |
| 17      | I   | RPU      | 42      | I/O | D2     | 67      | I/O | D24/PB0 | 92      | I   | EXCTRL0    |
| 18      | —   | BIAS.GND | 43      | I/O | D3     | 68      | I/O | D25/PB1 | 93      | O   | DREQ1      |
| 19      | I   | REFRIN   | 44      | I/O | D4     | 69      | I/O | D26/PB2 | 94      | I   | DACK1      |
| 20      | —   | BIAS.Vcc | 45      | I/O | D5     | 70      | I/O | D27/PB3 | 95      | I   | DSTB1      |
| 21      | —   | PLL.GND  | 46      | I/O | D6     | 71      | I/O | D28/PB4 | 96      | I/O | DEND1      |
| 22      | —   | PLL.Vcc  | 47      | I/O | D7     | 72      | I/O | D29/PB5 | 97      | I/O | DBHE1      |
| 23      | —   | D.GND    | 48      | I/O | D8     | 73      | I/O | D30/PB6 | 98      | I   | EXCTRL1    |
| 24      | —   | Vcc      | 49      | I/O | D9     | 74      | I/O | D31/PB7 | 99      | I   | RST        |
| 25      | I   | TEST0    | 50      | I/O | D10    | 75      | I   | B32     | 100     | —   | VccQ       |

## INPUTS

A1 - A7 : ADDRESS BUS  
 B32 : BUS INTERFACE WIDTH SELECT  
 CS : CHIP SELECT  
 DACK0, DACK1 : DMA ACKNOWLEDGE  
 DSTB0, DSTB1 : SPLIT BUS STROBE  
 EXTRG0 : EXTERNAL TRIGGER  
 EXTRG1 : EXTERNAL TRIGGER  
 EXCTRL0, : EXTERNAL CONTROL  
 EXCTRL1 : EXTERNAL CONTROL  
 RD : READ STROBE  
 REFRIN : REFERENCE INPUT  
 RPU : PULL UP CONTROL  
 RST : RESET  
 TEST0 - TEST2 : TEST  
 VBUS : VBUS INPUT  
 WR0 - WR3 : DATA WRITE STROBE  
 XIN : CRYSTAL OSCILLATOR

## OUTPUTS

DREQ0, DREQ1 : DMA REQUEST  
 INT0 : INTERRUPT  
 SOF : SOF OUTPUT  
 TR ON : PULL UP VOLTAGE  
 XOUT : CRYSTAL OSCILLATOR

## INPUTS/OUTPUTS

D0 - D31 : DATA BUS  
 DBHE0, DBHE1 : BYTE HIGH ENABLE  
 DEND0, DEND1 : TRANSFER END  
 DFM, DFP : USB FULL SPEED DATA  
 DHM, DHP : USB HIGH SPEED DATA  
 PA0 - PA7 : PORT A  
 PB0 - PB7 : PORT B

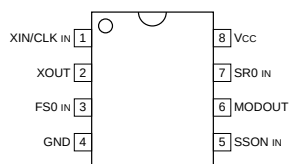
## OTHERS

AFEA.GND : ANALOG GROUND FOR USB  
 AFEA.Vcc : ANALOG POWER SUPPLY FOR USB  
 AFED.GND : DIGITAL GROUND FOR USB  
 AFED.Vcc : DIGITAL POWER SUPPLY FOR USB  
 BIAS.GND : GROUND FOR BIAS  
 BIAS.Vcc : POWER SUPPLY FOR BIAS  
 D.GND : DIGITAL GROUND  
 PLL.GND : GROUND FOR PLL  
 PLL.Vcc : POWER SUPPLY FOR PLL  
 VccQ : POWER SUPPLY FOR I/O

## P2010AF-08TR (PULSE CORE)

## FREQUENCY MODULATOR

—TOP VIEW—

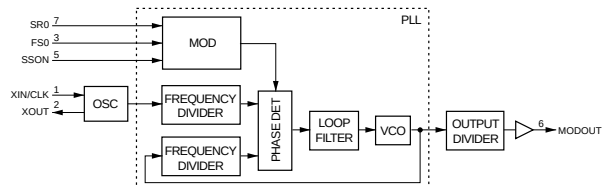


## INPUTS

FS0 : SUBCARRIER FREQUENCY  
 SR0 : SAMPLING RATE  
 SSON : SPREAD SPECTRUM FREQUENCY  
 MODULATOR ON  
 XIN/CLK : CRYSTAL OSCILLATOR/CLOCK

## OUTPUTS

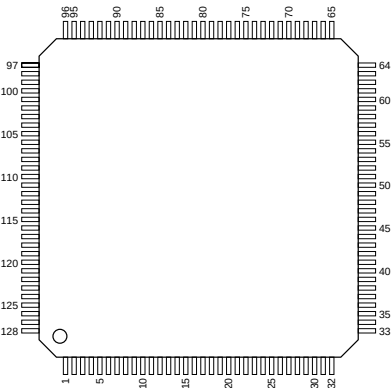
MODOUT : MODULATOR OUTPUT  
 XOUT : CRYSTAL OSCILLATOR



PM-44IX (OAK TECHNOLOGY)

PROGRAMMABLE PROCESSOR

—TOP VIEW—



| PIN NO. | I/O | SIGNAL | PIN NO. | I/O | SIGNAL | PIN NO. | I/O | SIGNAL | PIN NO. | I/O | SIGNAL |
|---------|-----|--------|---------|-----|--------|---------|-----|--------|---------|-----|--------|
| 1       | O   | OD09   | 33      | I   | CI     | 65      | O   | DA03   | 97      | O   | DA07   |
| 2       | O   | OD08   | 34      | I   | IACK   | 66      | O   | DA02   | 98      | O   | DA08   |
| 3       | O   | OD07   | 35      | I   | ICLK   | 67      | O   | DA01   | 99      | —   | GND    |
| 4       | O   | OD06   | 36      | I   | OCLK   | 68      | O   | DA00   | 100     | —   | Vcc    |
| 5       | O   | OD05   | 37      | I   | OACK   | 69      | O   | DA10   | 101     | O   | DA09   |
| 6       | —   | GND    | 38      | I   | CCS    | 70      | O   | DBA1   | 102     | O   | DA11   |
| 7       | —   | Vcc    | 39      | I   | CWR    | 71      | O   | DBA0   | 103     | O   | DCKE   |
| 8       | O   | OD04   | 40      | I   | RESET  | 72      | —   | GND    | 104     | O   | DCLK   |
| 9       | O   | OD03   | 41      | I   | TEST   | 73      | —   | Vcc    | 105     | —   | GND    |
| 10      | O   | OD02   | 42      | I   | SCAN   | 74      | O   | DCS0   | 106     | —   | Vcc    |
| 11      | O   | OD01   | 43      | O   | ORQ    | 75      | O   | DCS1   | 107     | O   | DCLK   |
| 12      | O   | OD00   | 44      | O   | IRQ    | 76      | —   | GND    | 108     | I/O | DQS1   |
| 13      | I   | ID15   | 45      | —   | GND    | 77      | —   | Vcc    | 109     | I/O | DD08   |
| 14      | I   | ID14   | 46      | —   | Vcc    | 78      | O   | DRAS   | 110     | I/O | DD09   |
| 15      | I   | ID13   | 47      | —   | GND    | 79      | O   | DCAS   | 111     | —   | GND    |
| 16      | I   | ID12   | 48      | —   | Vcc    | 80      | O   | DWE    | 112     | —   | Vcc    |
| 17      | I   | ID11   | 49      | O   | INT    | 81      | I/O | DQS0   | 113     | I/O | DD10   |
| 18      | I   | ID10   | 50      | I/O | BD07   | 82      | I/O | DD07   | 114     | I/O | DD11   |
| 19      | —   | GND    | 51      | I/O | BD06   | 83      | I/O | DD06   | 115     | I/O | DD12   |
| 20      | —   | Vcc    | 52      | I/O | BD05   | 84      | I/O | DD05   | 116     | I/O | DD13   |
| 21      | I   | ID09   | 53      | I/O | BD04   | 85      | —   | GND    | 117     | I/O | DD14   |
| 22      | I   | ID08   | 54      | I/O | BD03   | 86      | —   | Vcc    | 118     | I/O | DD15   |
| 23      | I   | ID07   | 55      | I/O | BD02   | 87      | I/O | DD04   | 119     | —   | GND    |
| 24      | I   | ID06   | 56      | I/O | BD01   | 88      | I/O | DD03   | 120     | —   | Vcc    |
| 25      | I   | ID05   | 57      | I/O | BD00   | 89      | —   | GND    | 121     | O   | OD15   |
| 26      | I   | ID04   | 58      | —   | GND    | 90      | —   | Vcc    | 122     | O   | OD14   |
| 27      | —   | GND    | 59      | —   | Vcc    | 91      | I/O | DD02   | 123     | —   | GND    |
| 28      | —   | Vcc    | 60      | I   | CLK    | 92      | I/O | DD01   | 124     | —   | Vcc    |
| 29      | I   | ID03   | 61      | —   | Vcc    | 93      | I/O | DD00   | 125     | O   | OD13   |
| 30      | I   | ID02   | 62      | —   | GND    | 94      | O   | DA04   | 126     | O   | OD12   |
| 31      | I   | ID01   | 63      | —   | GND    | 95      | O   | DA05   | 127     | O   | OD11   |
| 32      | I   | ID00   | 64      | —   | Vcc    | 96      | O   | DA06   | 128     | O   | OD10   |

INPUTS

- CCS : COMMAND PORT CHIP SELECT
- CI : CONTROL INDEX
- CLK : CLOCK
- CWR : COMMAND PORT READ/WRITE SIGNAL
- IACK : INPUT ACKNOWLEDGE
- ICLK : INPUT CLOCK
- ID00 - ID15 : INPUT PORT BUS
- OACK : OUTPUT ACKNOWLEDGE
- OCLK : OUTPUT CLOCK
- RESET : POWER ON RESET
- SCAN : TEST SIGNAL
- TEST : TEST MODE SELECT

OUTPUTS

- DA00 - DA11 : SDRAM ADDRESS
- DBA0, DBA1 : SDRAM BANK ADDRESS
- DCAS : SDRAM COLUMN ADDRESS STROBE
- DCKE : RESERVED TIE HIGH
- DCLK : SDRAM CLOCK
- DCLK : RESERVED TIE HIGH
- DCS0, DCS1 : SDRAM CHIP SELECT
- DRAS : SDRAM ROW ADDRESS STROBE
- DWE : SDRAM WRITE ENABLE
- INT : INTERRUPT
- IRQ : INPUT REQUEST
- OD00 - OD15 : OUTPUT PORT BUS
- ORQ : OUTPUT REQUEST

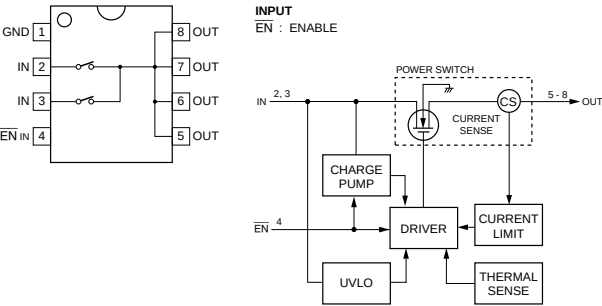
INPUTS/OUTPUTS

- BD00 - BD07 : HOST PORT DATA BUS
- DD00 - DD15 : SDRAM DATA BUS
- DQS0, DQS1 : RESERVED TIE HIGH

TPS2013ADR (TI)

POWER DISTRIBUTION SWITCHES

—TOP VIEW—



## Section 6

### Spare Parts

#### 6-1. Notes on Repair Parts

##### 1. Safety Related Components Warning

###### **WARNING**

Components marked △ are critical to safe operation.  
Therefore, specified parts should be used in the case of replacement.

##### 2. Standardization of Parts

Some repair parts supplied by Sony differ from those used for the unit. These are because of parts commonality and improvement.

Parts list has the present standardized repair parts.

##### 3. Stock of Parts

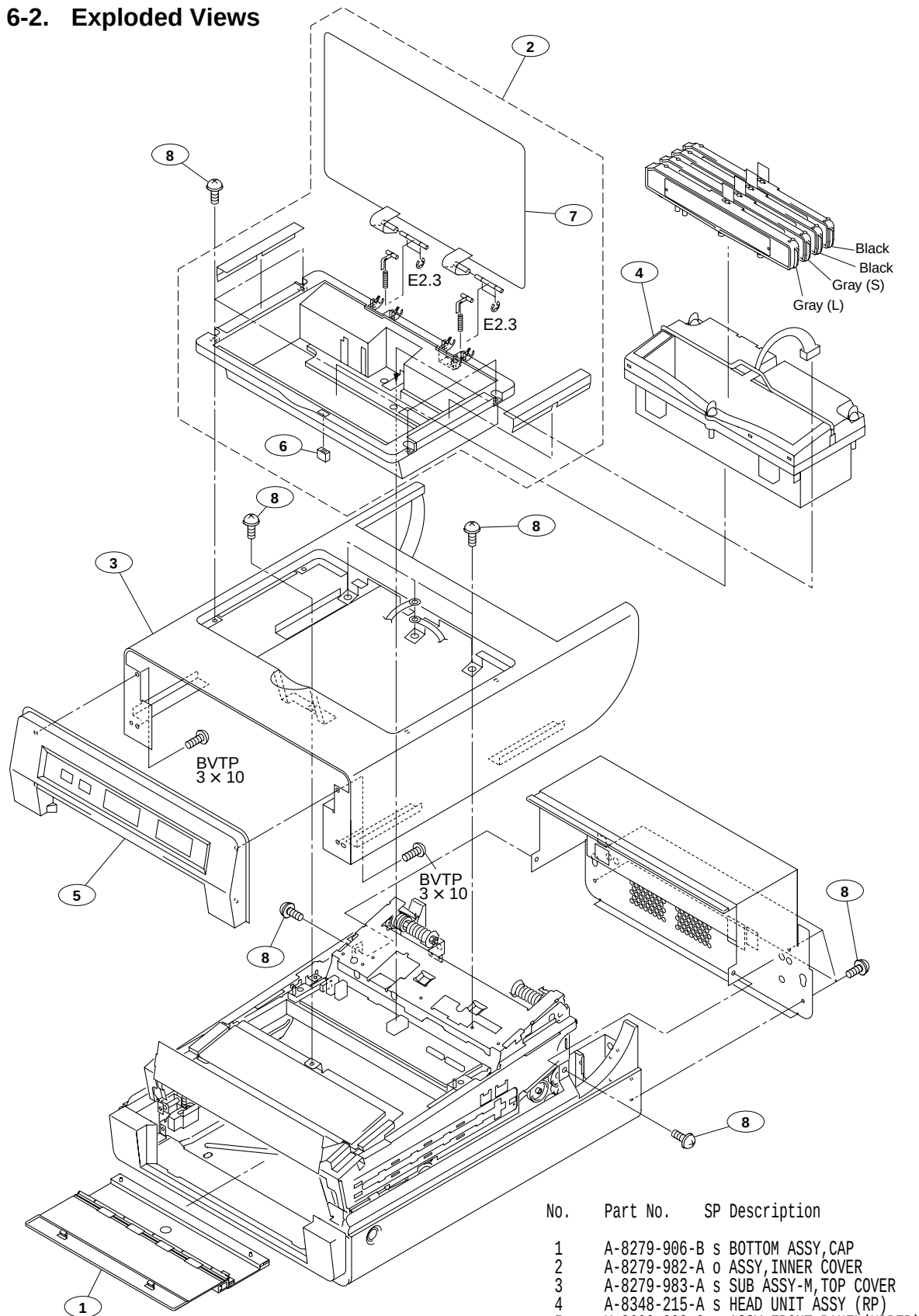
Parts marked with “o” at SP (Supply Code) column of the spare parts list may not be stocked. Therefore, the delivery date will be delayed.

##### 4. Harness

Harnesses with no part number are not registered as spare parts.

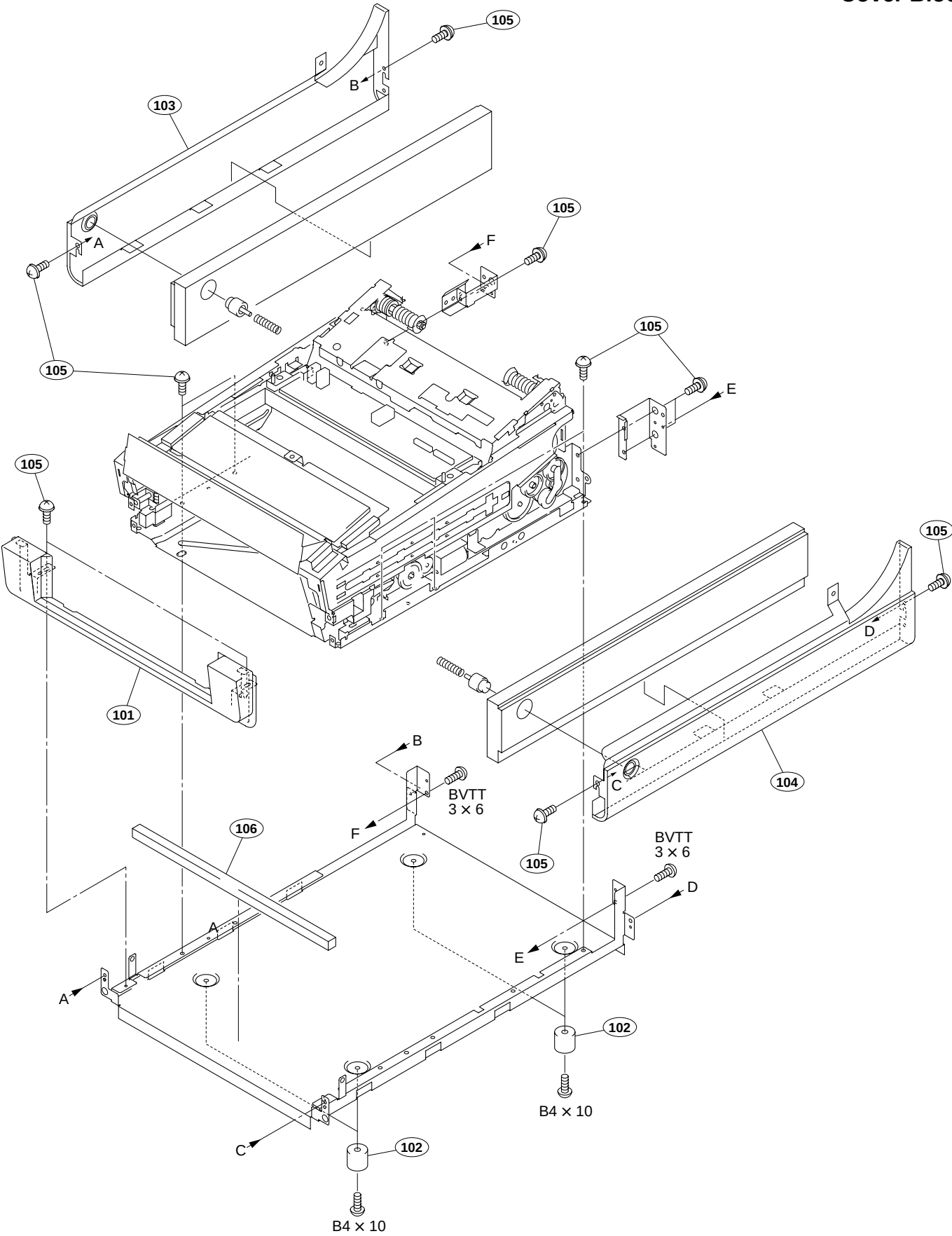
In need of repair, get components shown in the list and repair using them.

6-2. Exploded Views



| No. | Part No.     | SP Description                                         |
|-----|--------------|--------------------------------------------------------|
| 1   | A-8279-906-B | s BOTTOM ASSY,CAP                                      |
| 2   | A-8279-982-A | o ASSY,INNER COVER                                     |
| 3   | A-8279-983-A | s SUB ASSY-M,TOP COVER                                 |
| 4   | A-8348-215-A | s HEAD UNIT ASSY (RP)                                  |
| 5   | X-3608-882-3 | s ASSY,FRONT PANEL(UPPER)                              |
| 6   | 3-736-779-21 | s MAGNET                                               |
| 7   | 3-853-669-02 | s COVER,HEAD                                           |
| 8   | 4-034-937-01 | s (+-)BY TAPPING SCREW M3 WITH<br>EXT-TOOTH WASHER 3x8 |
|     | 7-624-105-04 | s STOP RING 2.3, TYPE -E                               |

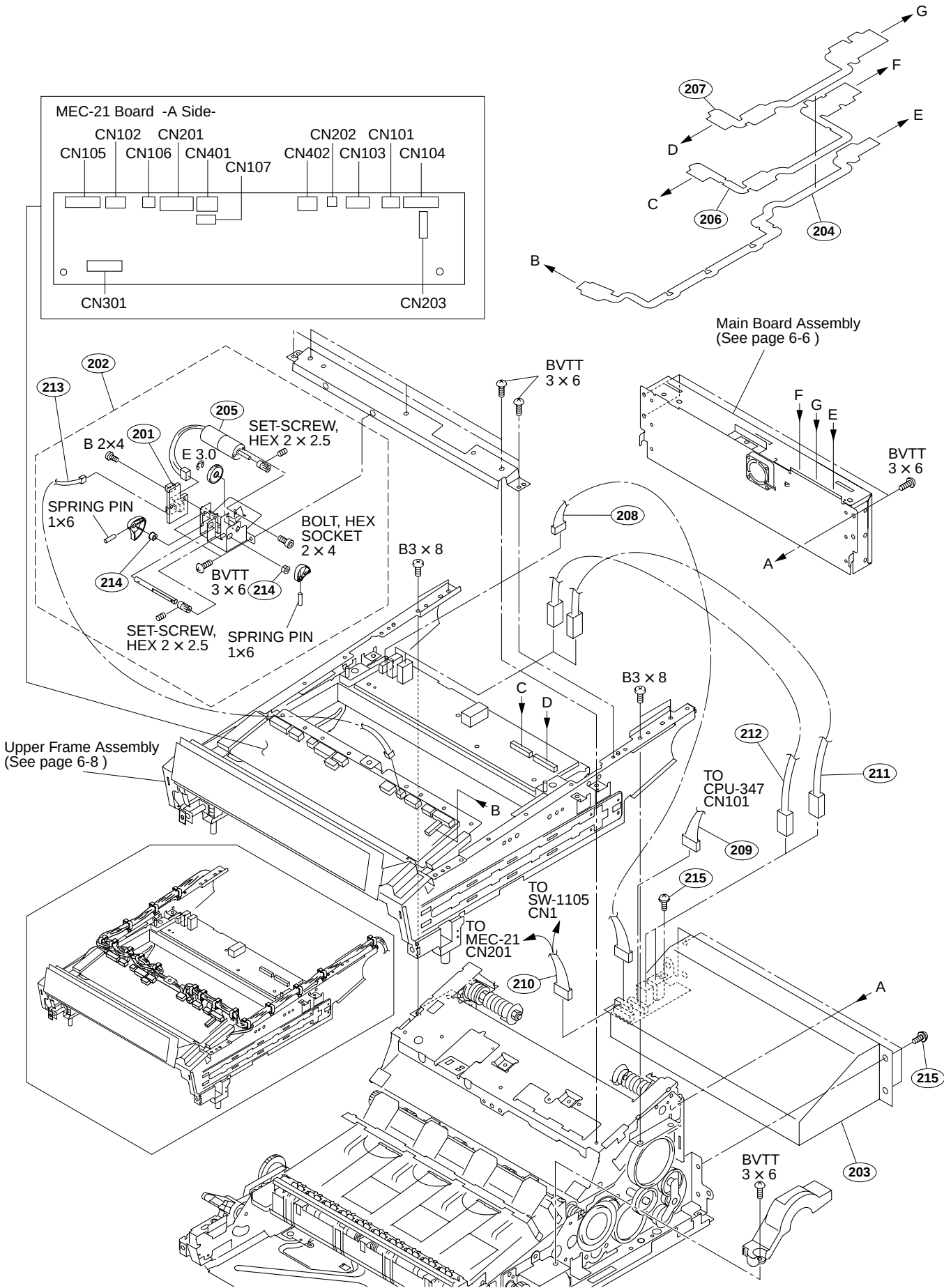




| No. | Part No.     | SP Description                                         |
|-----|--------------|--------------------------------------------------------|
| 101 | A-8279-987-A | s ASSY,FRONTPANELE(DOWN)                               |
| 102 | 3-642-656-01 | s FOOT                                                 |
| 103 | 3-853-665-02 | s COVER(L),SIDE                                        |
| 104 | 3-853-666-02 | s COVER(R),SIDE                                        |
| 105 | 4-034-937-01 | s (+-)BY TAPPING SCREW M3 WITH<br>EXT-TOOTH WASHER 3X8 |

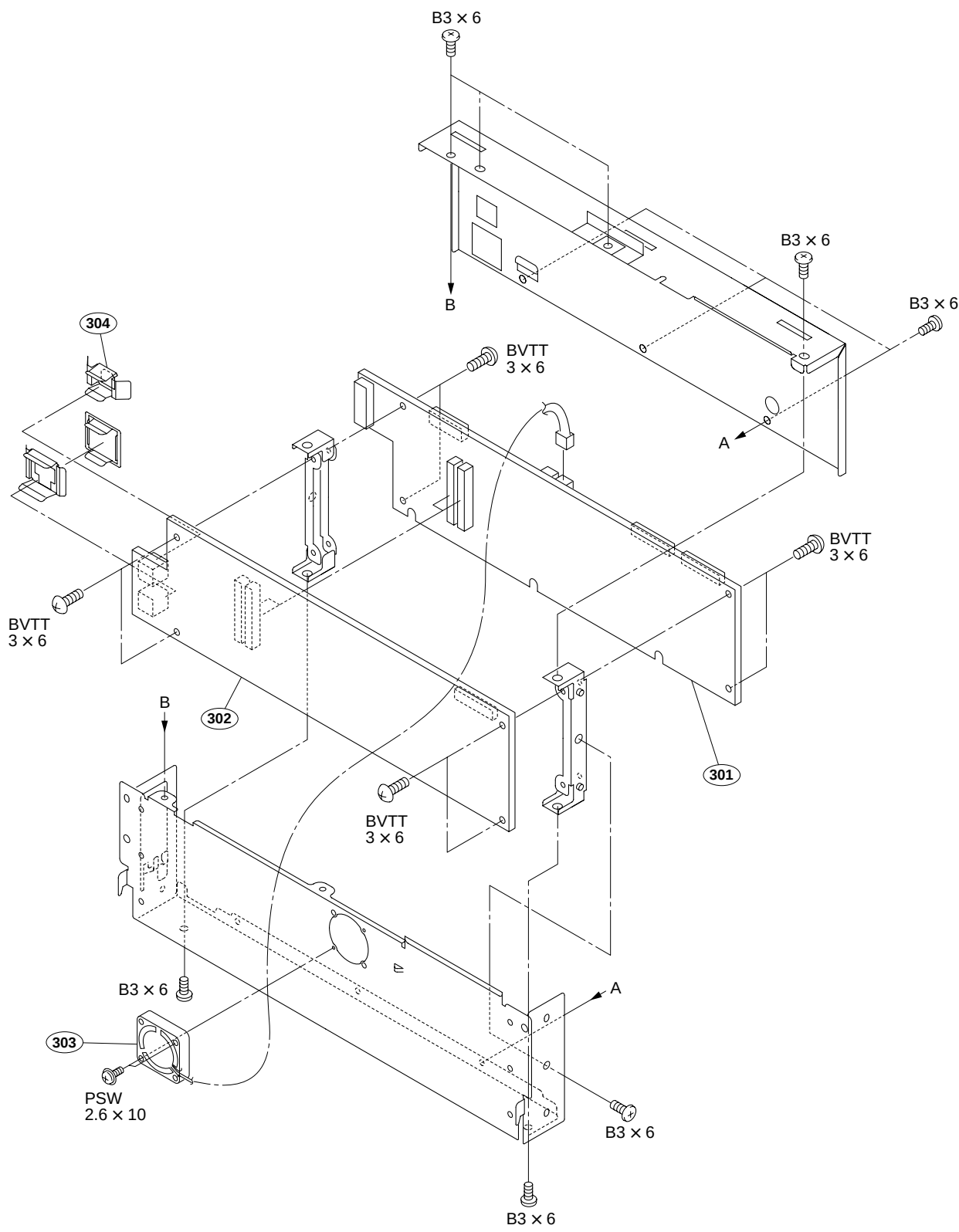
| No. | Part No.     | SP Description                 |
|-----|--------------|--------------------------------|
| 106 | 9-911-841-99 | s CUSHION,METER                |
|     | 7-682-547-04 | s SCREW +B3X6                  |
|     | 7-682-565-04 | s SCREW +B4X16(EP-FE/CU,NI,CR) |

Cam Motor, Power Block



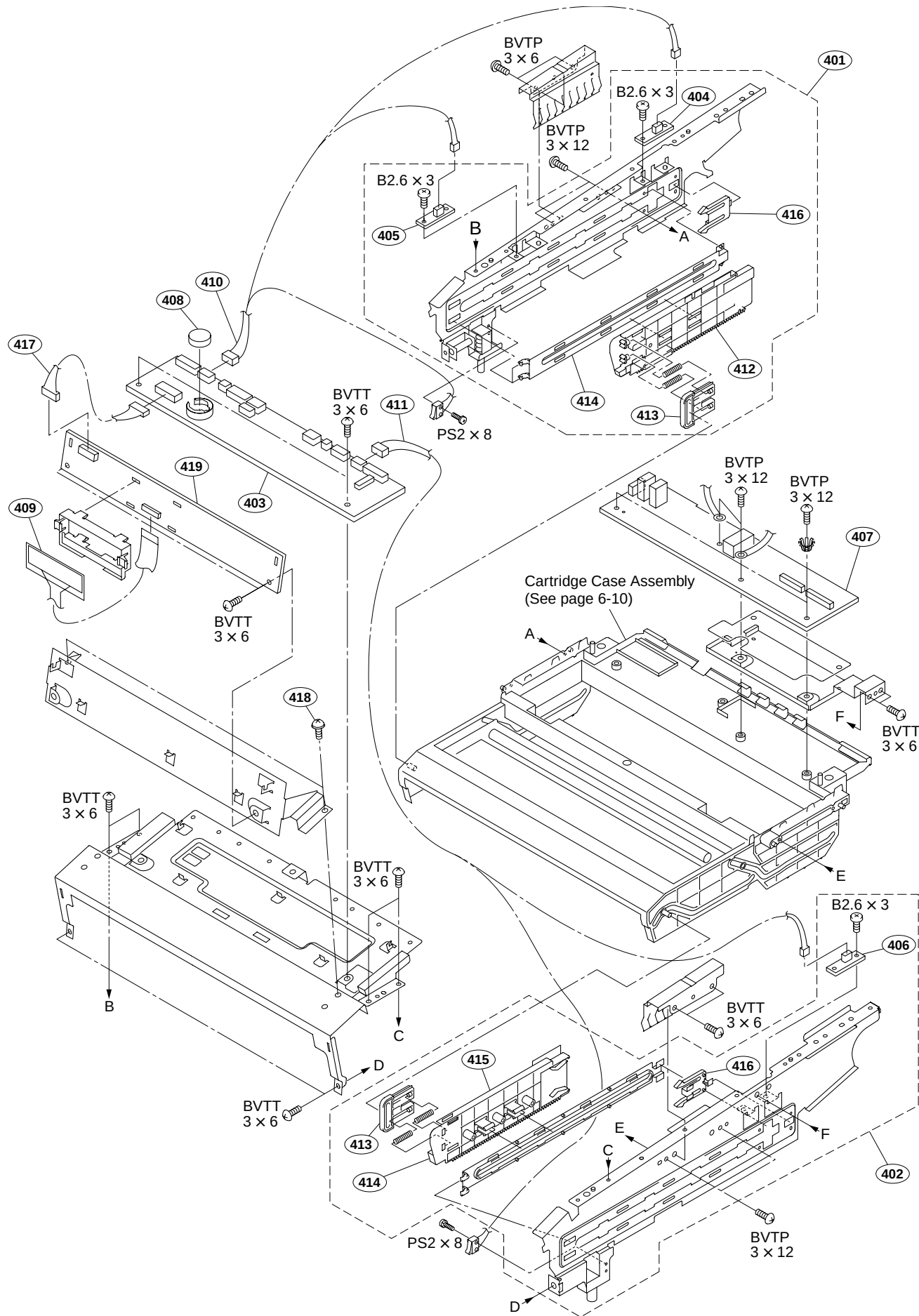
| No. | Part No.       | SP | Description                                       |
|-----|----------------|----|---------------------------------------------------|
| 201 | A-8347-443-A   | s  | MOUNTED CIRCUIT BOARD, SE-736                     |
| 202 | A-8347-512-A   | s  | MOTOR SUB ASSY, CAM                               |
| 203 | △ 1-468-854-11 | s  | REGULATOR, SWITCHING                              |
| 204 | 1-684-433-11   | o  | PRINTED WIRING BOARD, IF-881 FLEXIBLE             |
| 205 | 1-787-054-11   | s  | MOTOR, DC GEARED                                  |
| 206 | 1-860-258-11   | o  | PRINTED WIRING BOARD, DIO-72 FLEXIBLE             |
| 207 | 1-860-259-11   | o  | PRINTED WIRING BOARD, DIO-73 FLEXIBLE             |
| 208 | 1-962-585-21   | o  | HARNESS, SUB (CN)                                 |
| 209 | 1-962-586-11   | o  | HARNESS, SUB (CPU)                                |
| 210 | 1-962-587-22   | o  | HARNESS, SUB (MEC)                                |
| 211 | 1-962-594-21   | o  | HARNESS, SUB (VH)                                 |
| 212 | 1-962-595-21   | o  | HARNESS, SUB (VH-GND)                             |
| 213 | 1-962-598-12   | o  | HARNESS, SUB (POMP 1 SENSOR)                      |
| 214 | 3-636-475-01   | s  | BEARING                                           |
| 215 | 4-034-937-01   | s  | (+-)BY TAPPING SCREW M3 WITH EXT-TOOTH WASHER 3x8 |
|     | 7-621-731-08   | s  | SET-SCREW,HEX 2X2.5(FLAT) ST                      |
|     | 7-621-772-10   | s  | SCREW +B2X4                                       |
|     | 7-624-106-04   | s  | STOP RING, TYPE-E3(CZN-N4)                        |
|     | 7-626-305-21   | s  | SPRING PIN 1X6 (STEEL)                            |
|     | 7-682-547-04   | s  | SCREW +B3X6                                       |
|     | 7-682-548-09   | s  | SCREW +B 3X8                                      |
|     | 7-683-480-14   | o  | BOLT,HEXAGON SOCKET 2X4                           |
|     | 7-685-871-01   | s  | SCREW,+BVTT 3X6                                   |

Main Board Block



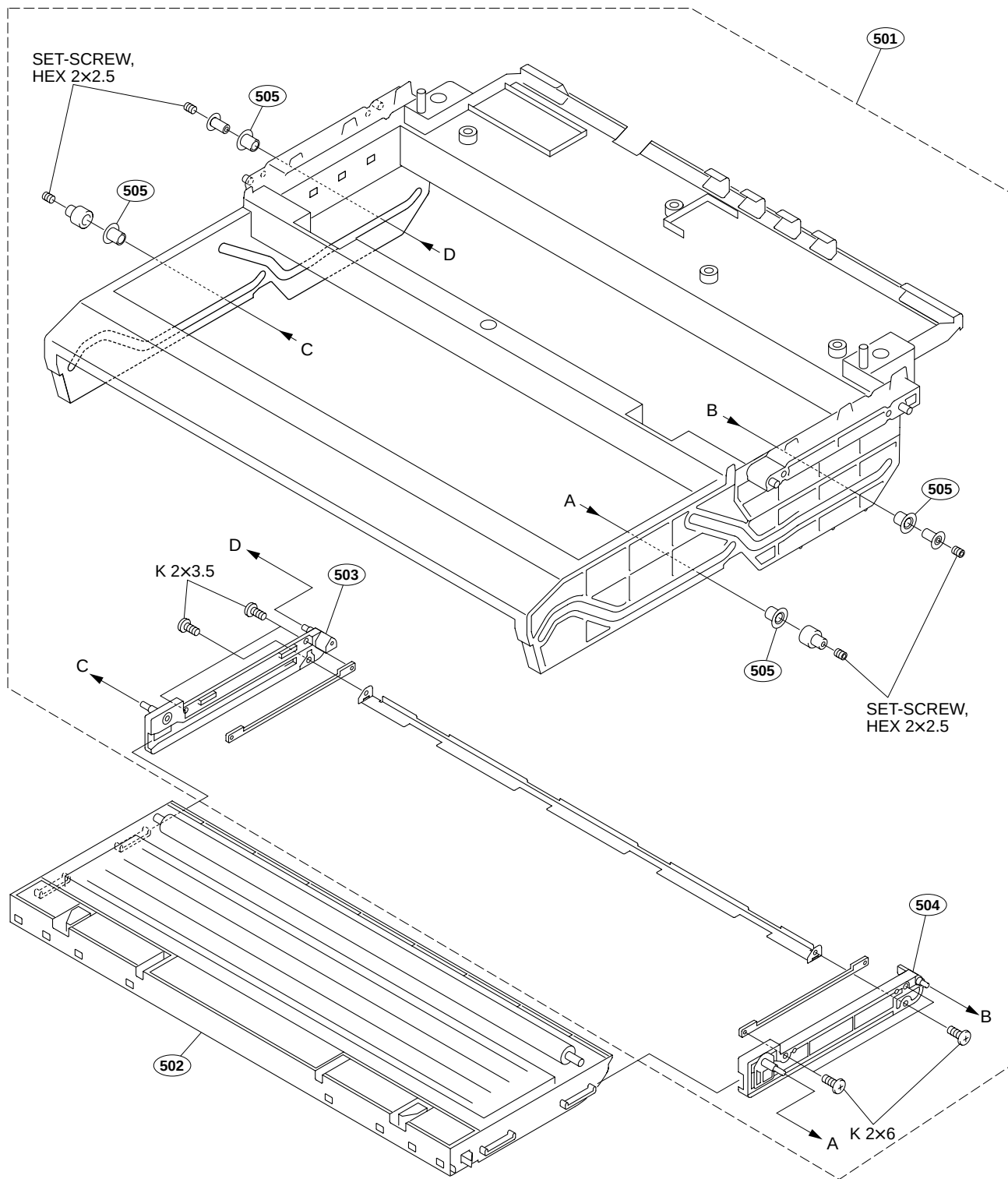
| No. | Part No.     | SP | Description                    |
|-----|--------------|----|--------------------------------|
| 301 | A-8347-451-A | s  | MOUNTED CIRCUIT BOARD, CPU-347 |
| 302 | A-8347-453-A | s  | MOUNTED CIRCUIT BOARD, CPU-357 |
| 303 | 1-763-927-11 | s  | FAN, DC (SQUARE 25)            |
| 304 | 3-776-934-01 | o  | USB PLATE,GROUND               |
|     |              |    |                                |
|     | 7-621-759-75 | s  | SCREW,+PSW 2.6X10(EP-FE/ZN/CM2 |
|     | 7-682-547-04 | s  | SCREW +B3X6                    |
|     | 7-685-871-01 | s  | SCREW,+BVTT 3X6                |

Upper Frame Block



| No. | Part No.       | SP Description                                      |
|-----|----------------|-----------------------------------------------------|
| 401 | A-8279-890-A   | o ASSY,UPPER FRAME(L)                               |
| 402 | A-8279-891-A   | o ASSY,UPPER FRAME(R)                               |
| 403 | A-8348-078-A   | s MOUNTED CIRCUIT BOARD, MEC-21                     |
| 404 | A-8347-440-A   | s MOUNTED CIRCUIT BOARD, SE-673                     |
| 405 | A-8347-441-A   | s MOUNTED CIRCUIT BOARD, SE-674                     |
| 406 | A-8347-444-A   | s MOUNTED CIRCUIT BOARD, SE-737                     |
| 407 | A-8347-449-A   | s MOUNTED CIRCUIT BOARD, CN-2393                    |
| 408 | △ 1-528-174-11 | s BATTERY, LITHIUM (CR2032 TYPE)                    |
| 409 | 1-804-542-11   | s LCD MODULE                                        |
| 410 | 1-962-596-11   | o HARNESS, SUB (CAP SWITCHING)                      |
| 411 | 1-962-597-12   | o HARNESS, SUB (LIMIT SWITCH)                       |
| 412 | 3-806-733-01   | s RACK (L)                                          |
| 413 | 3-806-734-01   | s DAMPER                                            |
| 414 | 3-806-736-01   | s RAIL,SLIDE                                        |
| 415 | 3-806-737-01   | s RACK (R)                                          |
| 416 | 3-806-866-01   | s STOPPER,RUCK                                      |
| 417 | 1-962-757-12   | o HARNESS, SUB (FP)                                 |
| 418 | 4-034-937-01   | s (+-)BY TAPPING SCREW M3 WITH EXT-TOOTH WASHER 3x8 |
| 419 | A-8348-076-A   | s MOUNTED CIRCUIT BOARD, FP-138                     |
|     | 7-621-775-00   | s SCREW +B2.6X3(EP-FE/ZNBK/CM2)                     |
|     | 7-624-105-04   | s STOP RING 2.3, TYPE -E                            |
|     | 7-624-106-04   | s STOP RING, TYPE-E3(CZN-N4)                        |
|     | 7-628-253-35   | s SCREW,+PS 2X8                                     |
|     | 7-685-648-79   | s SCREW +BV3X12((EP-FE/ZNBK/CM2)                    |
|     | 7-685-871-01   | s SCREW,+BVTT 3X6                                   |

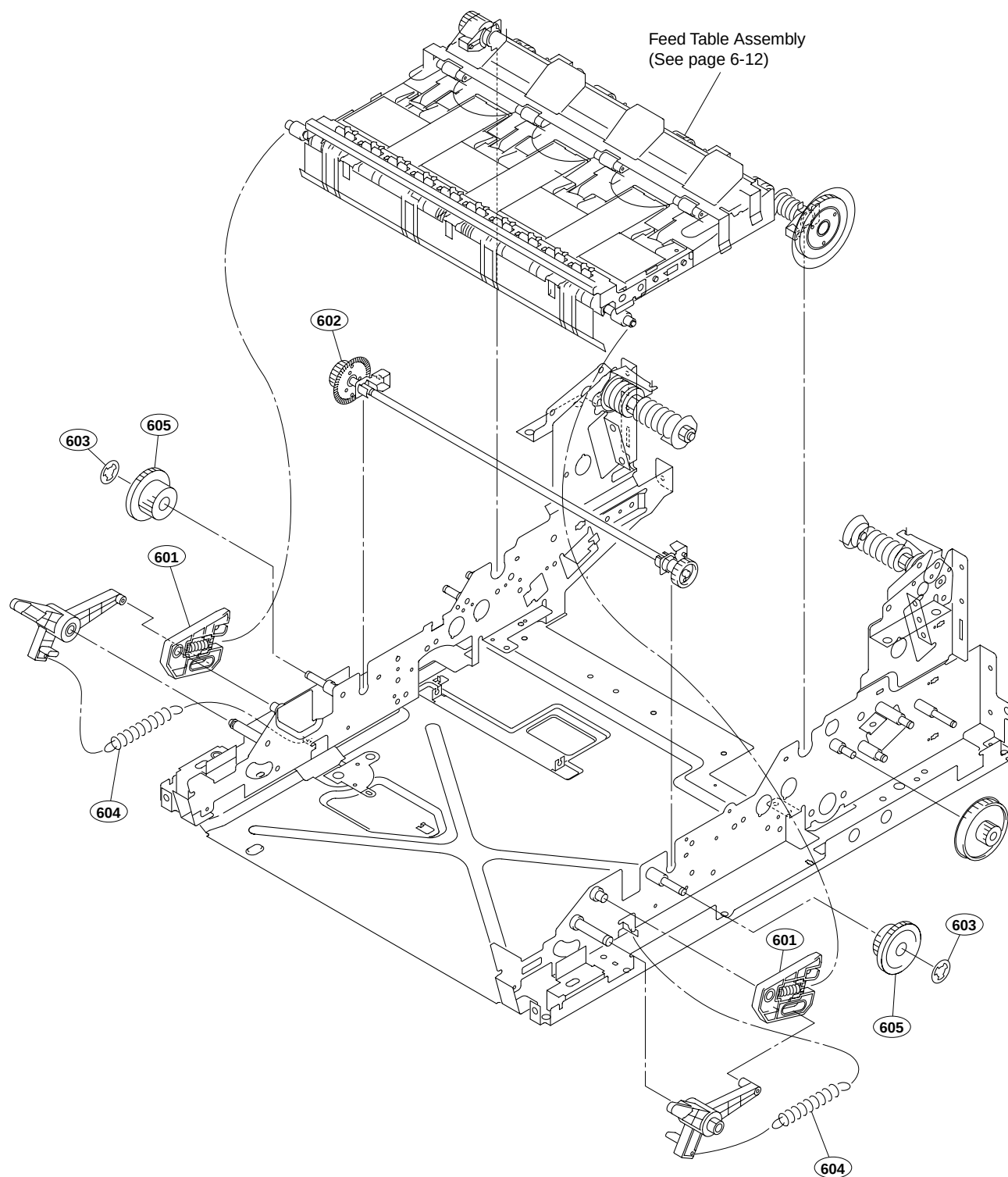
# Cartridge Case Block



| No. | Part No.     | SP Description         |
|-----|--------------|------------------------|
| 501 | A-8279-892-A | s ASSY, CARTRIDGE CASE |
| 502 | A-1063-139-A | s CAP ASSY(RP)         |
| 503 | X-3608-749-3 | s ASSY, CAP HOLDER(L)  |
| 504 | X-3608-750-2 | s ASSY, CAP HOLDER(R)  |
| 505 | 3-809-965-51 | s BEARING(ROLLER)(A)   |

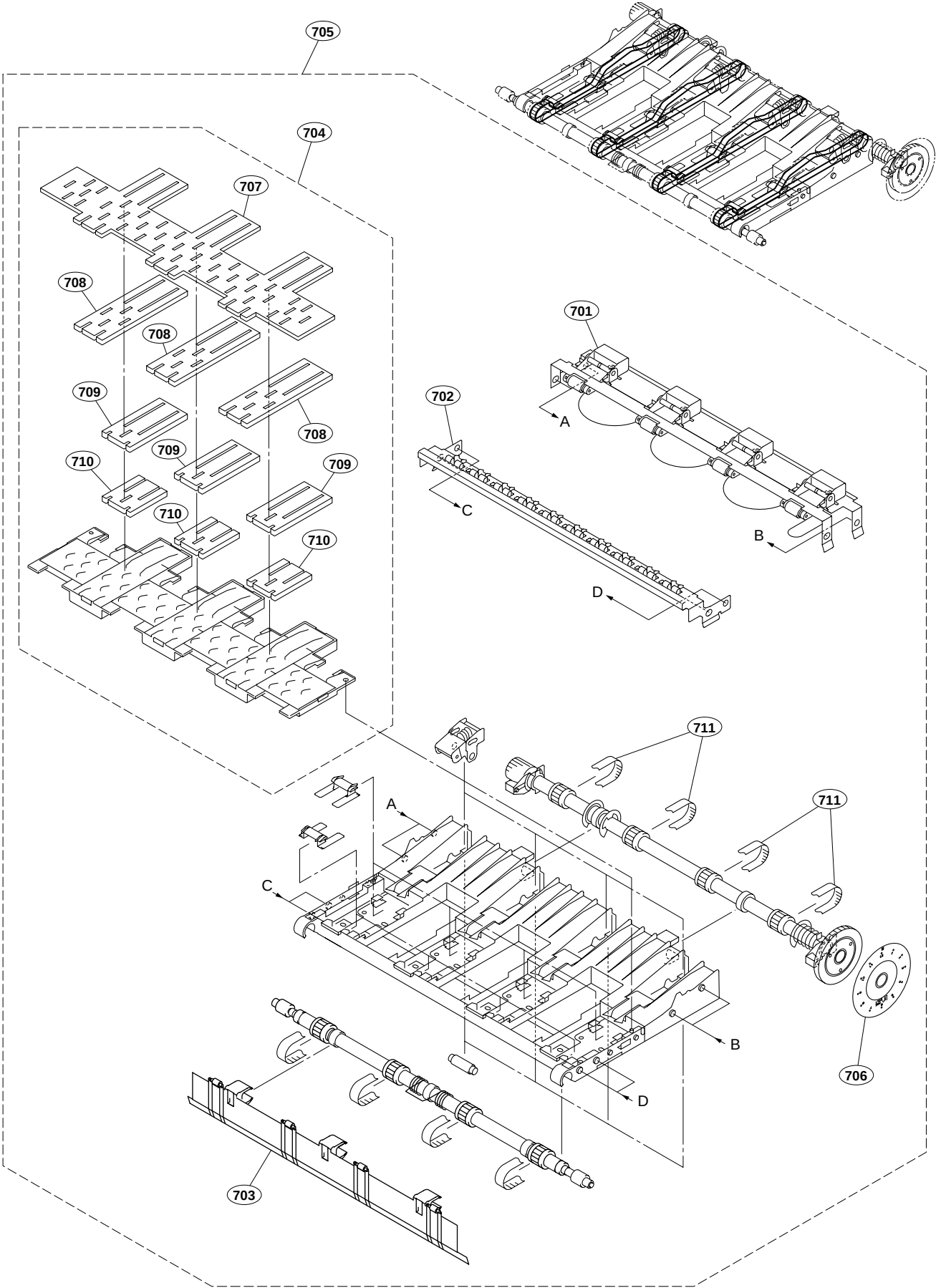
|              |                                 |    |
|--------------|---------------------------------|----|
| 7-621-731-08 | s SET-SCREW, HEX 2X2.5(FLAT)    | ST |
| 7-627-452-58 | s SCREW +K2X6(EP-FE/ZNBK/CM2)   |    |
| 7-627-452-98 | s SCREW +K2X3.5(EP-FE/ZNBK/CM2) |    |





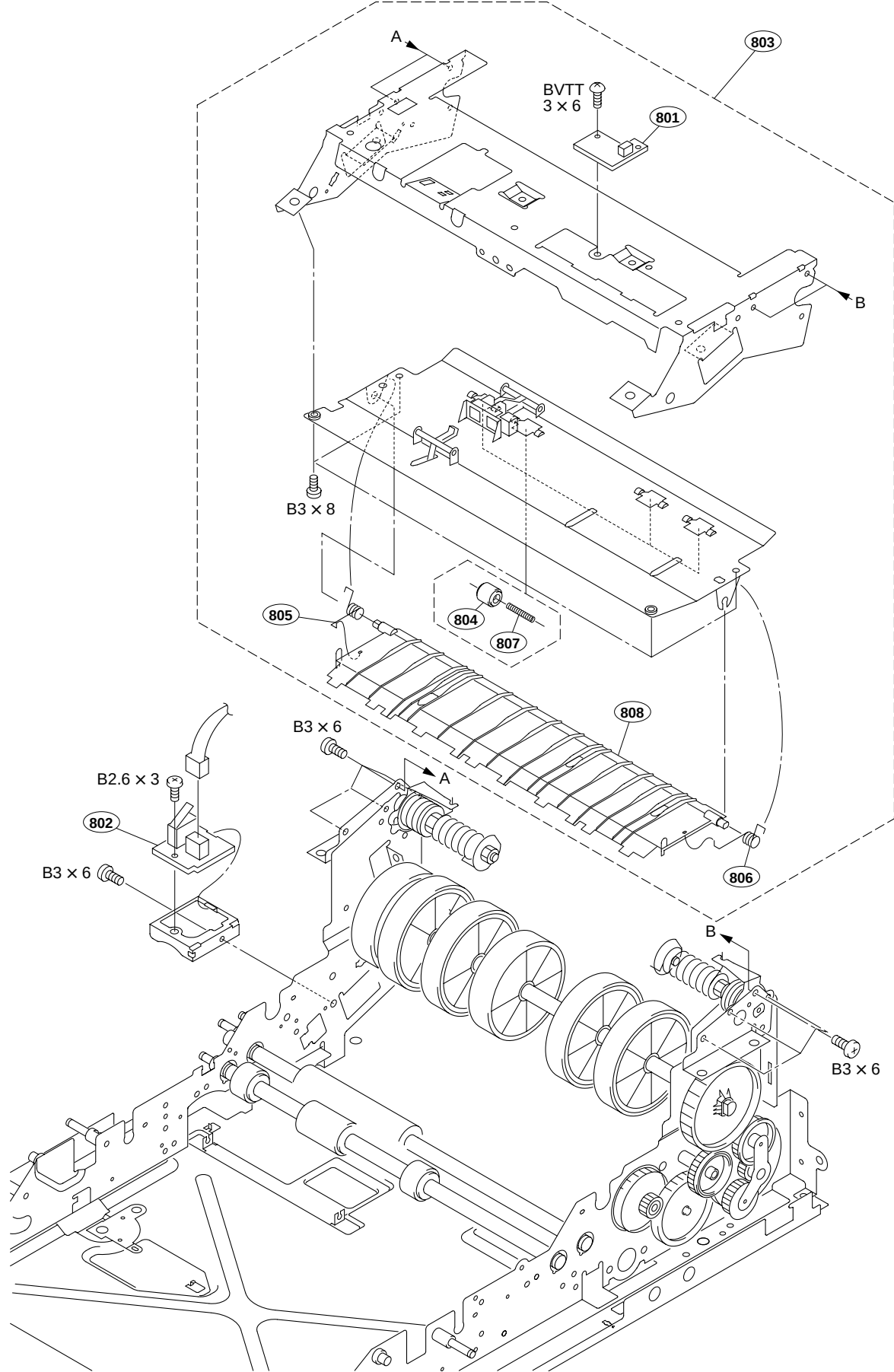
| No. | Part No.     | SP Description          |       |
|-----|--------------|-------------------------|-------|
| 601 | A-8279-888-A | s ASSY,UPDOWN LEVER(A)  |       |
| 602 | X-3608-711-1 | s SUB ASSY,CONNECT GEAR | (PLA) |
| 603 | 3-696-510-01 | s WASHER(3),STOPPER     |       |
| 604 | 3-806-731-02 | s SPRING(A),EXTENSION   |       |
| 605 | 3-806-812-01 | s GEAR,RUCK             |       |

Chassis Block 2



| No. | Part No.     | SP Description           |
|-----|--------------|--------------------------|
| 701 | A-8279-887-A | s ASSY, PINCH ROLLER     |
| 702 | A-8279-889-B | s ASSY, SPUR             |
| 703 | A-8279-910-B | s ASSY, PAPER GATE       |
| 704 | A-8279-915-B | s ASSY, RESERVER         |
| 705 | A-8347-519-A | s TABLE ASSY, FEED       |
| 706 | X-3608-709-1 | s SUB ASSY, ENCODER DISC |
| 707 | 3-806-857-02 | s SHEET(A), RESERVE      |
| 708 | 3-806-858-01 | s SHEET(B), RESERVE      |
| 709 | 3-806-859-01 | s SHEET(C), RESERVE      |
| 710 | 3-806-860-01 | s SHEET(D), RESERVE      |
| 711 | 3-809-944-01 | s BELT, FEED             |

Chassis Block 3



| No. | Part No.     | SP Description                   |
|-----|--------------|----------------------------------|
| 801 | A-8347-438-A | s MOUNTED CIRCUIT BOARD, SE-645  |
| 802 | A-8347-448-A | s MOUNTED CIRCUIT BOARD, SW-1105 |
| 803 | A-8347-535-A | s FRAME ASSY, BACK               |
| 804 | 3-838-806-01 | s ROLLER,SUB                     |
| 805 | 3-806-758-01 | s SPRING(L),GUIDE                |
| 806 | 3-806-759-01 | s SPRING(R),GUIDE                |
| 807 | 3-806-760-01 | o SPRING,SUB ROLLER              |
| 808 | 3-806-794-01 | s GUIDE(C)                       |
|     | 7-682-547-04 | s SCREW +B3X6                    |
|     | 7-682-548-04 | s SCREW +B3X8                    |
|     | 7-685-871-01 | s SCREW,+BVTT 3X6                |

## Chassis Block 4

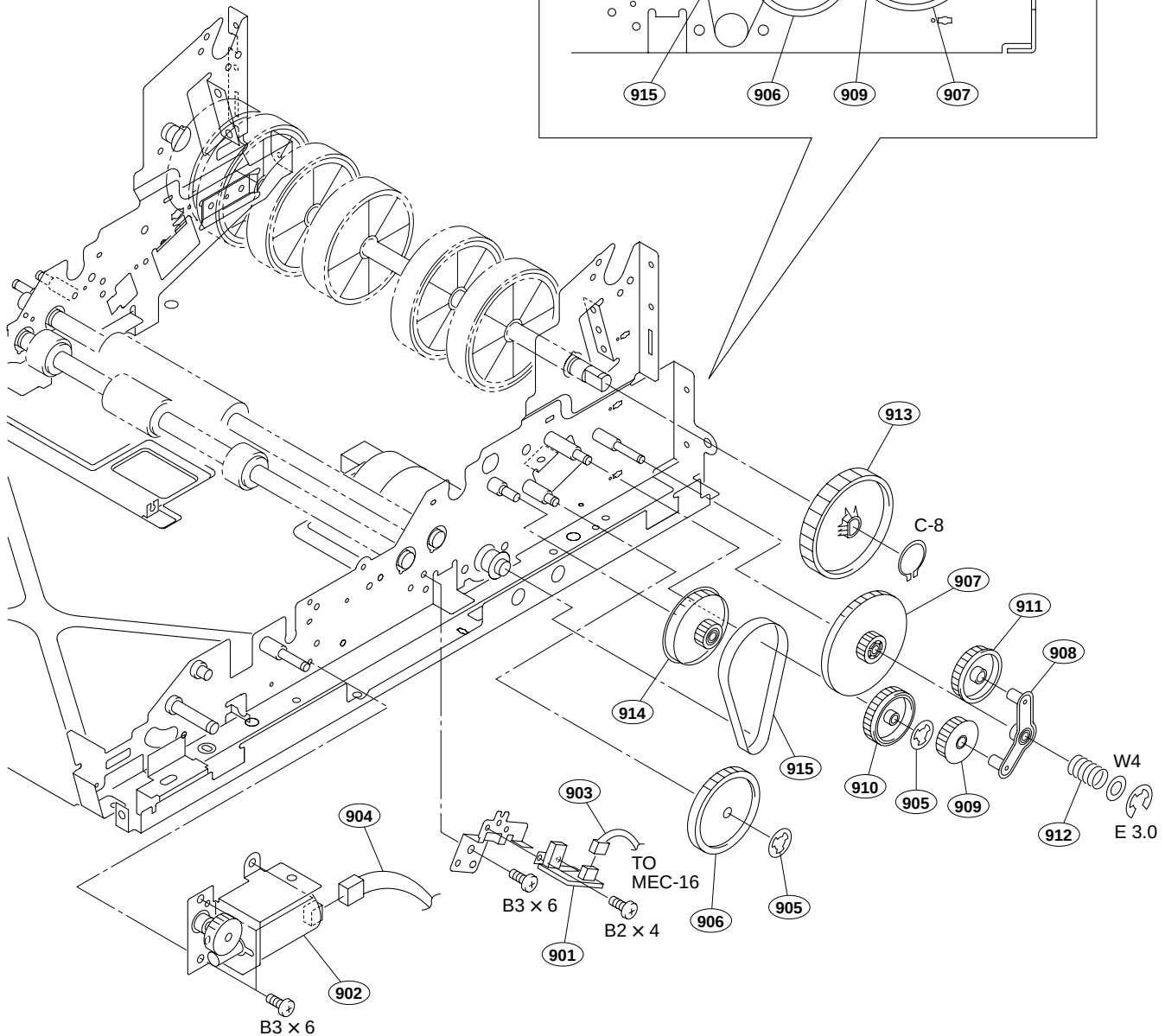
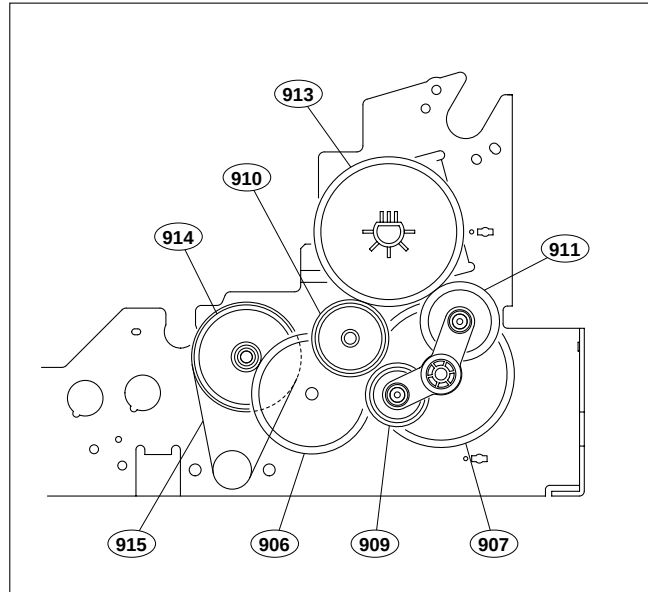
No. Part No. SP Description

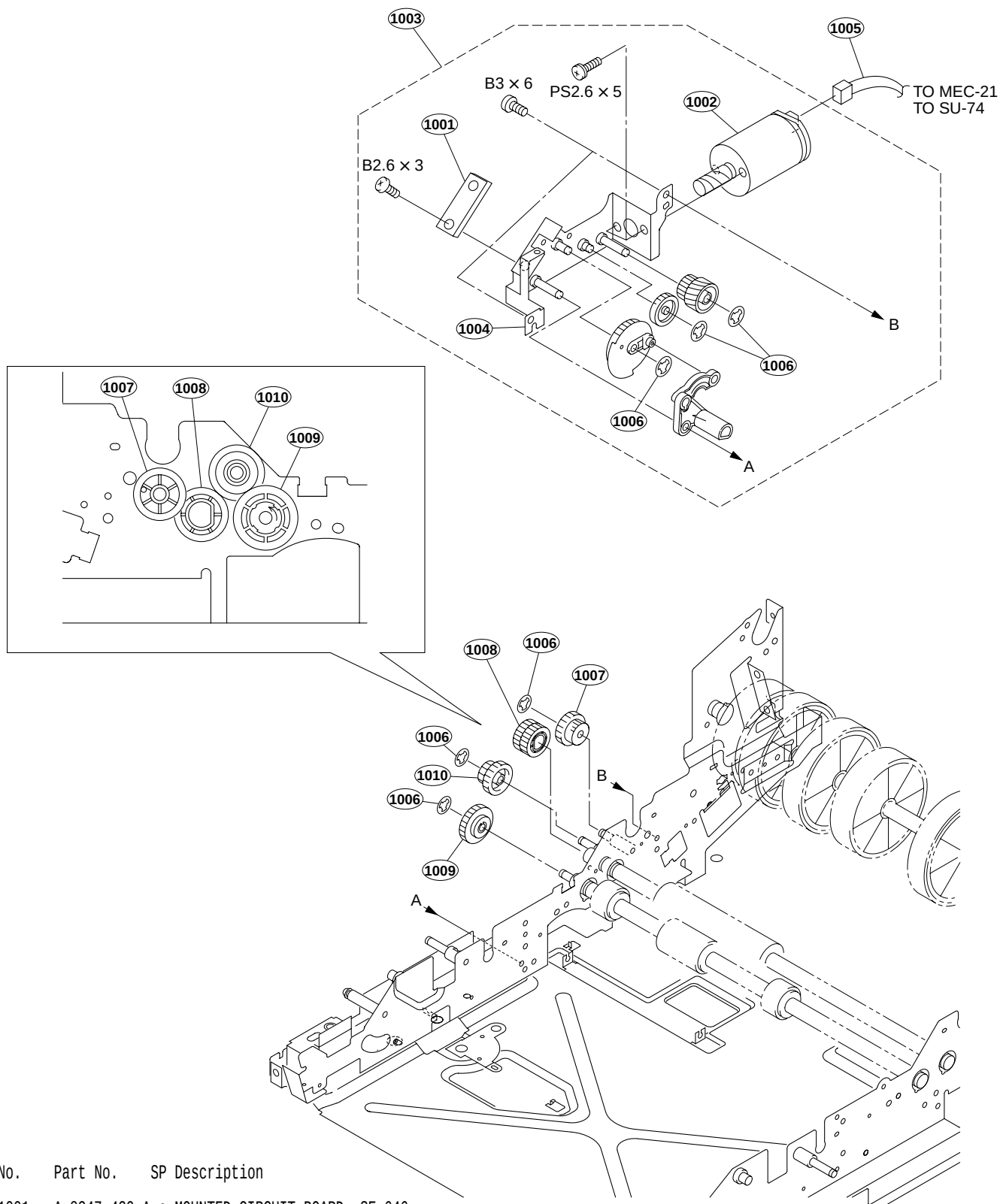
901 A-8347-436-A s MOUNTED CIRCUIT BOARD, SE-643  
 902 A-8347-515-A s MOTOR ASSY, CAP  
 903 1-962-588-11 o HARNESS, SUB (AEDS ENCODER)  
 904 1-962-592-11 o HARNESS, SUB (CAP MOTOR)  
 905 3-696-510-01 s WASHER(3), STOPPER (PLA)

906 3-806-746-01 s GEAR(79)  
 907 3-806-747-01 s GEAR(97-25)  
 908 3-806-748-01 s PLATE, PLANET  
 909 3-806-749-01 s GEAR(40), PLANET  
 910 3-806-750-01 s GEAR(50)

911 3-806-751-01 s GEAR(50), PLANET  
 912 3-806-761-01 s SPRING, PLANET  
 913 3-806-793-01 s GEAR(99)  
 914 3-806-811-02 s GEAR, PULLEY  
 915 3-809-945-01 s BELT, DRIVE

7-621-772-10 s SCREW +B2X4  
 7-624-106-04 s STOP RING, TYPE-E3(CZN-N4)  
 7-624-198-01 s RING, RETAINER C (STEEL)  
 7-682-547-04 s SCREW +B3X6  
 7-688-004-01 s WASHER W4 SMALL





No. Part No. SP Description

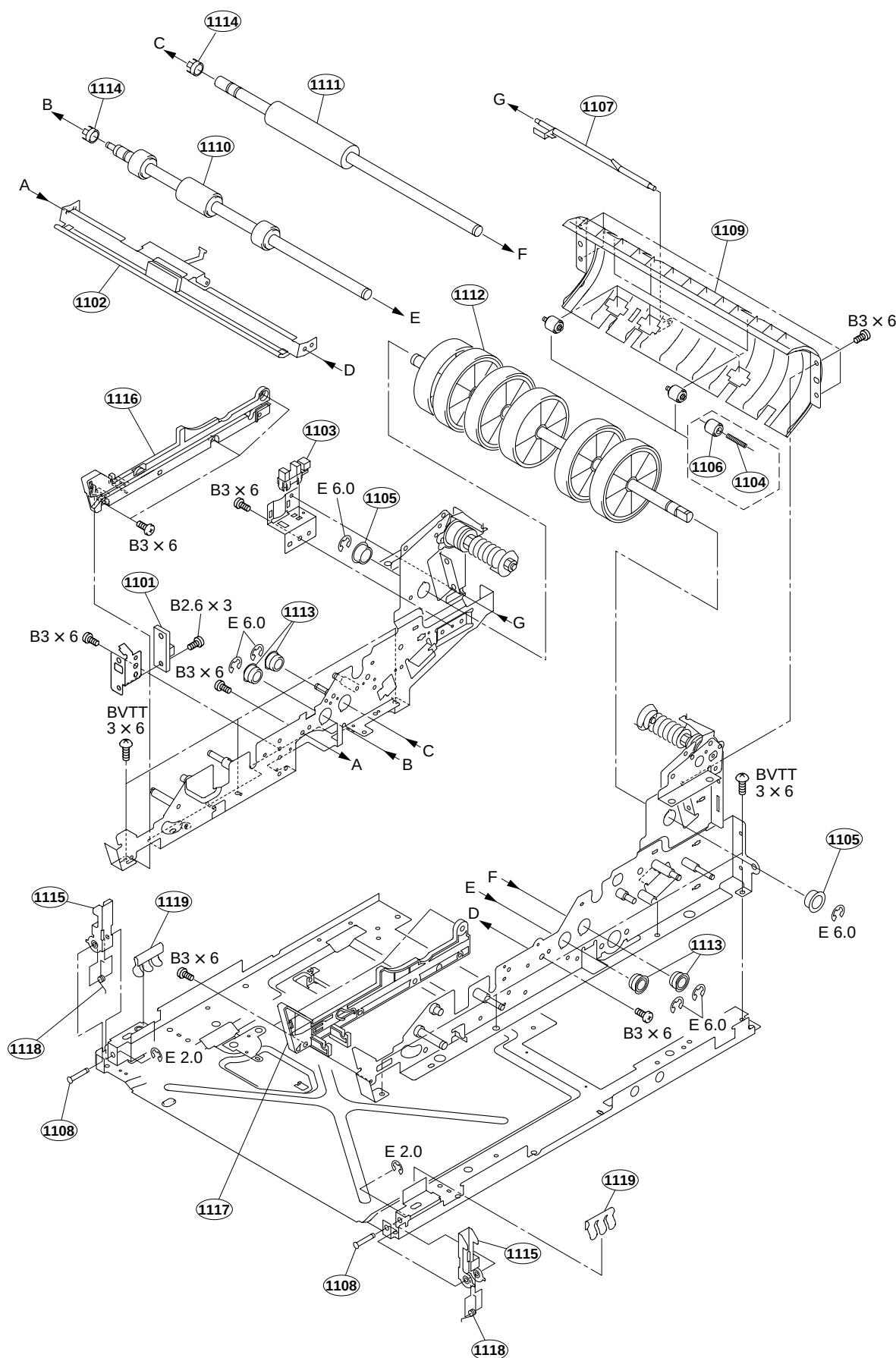
|      |              |   |                                |
|------|--------------|---|--------------------------------|
| 1001 | A-8347-439-A | s | MOUNTED CIRCUIT BOARD, SE-646  |
| 1002 | A-8347-514-A | s | MOTOR ASSY, LINK               |
| 1003 | A-8347-534-A | s | HOLDER ASSY, MOTOR             |
| 1004 | X-3608-717-1 | s | SUB ASSY, MOTOR HOLDER         |
| 1005 | 1-962-593-11 | o | HARNESS, SUB(CONVEYANCE MOTOR) |

|      |              |   |                          |
|------|--------------|---|--------------------------|
| 1006 | 3-696-510-01 | s | WASHER(3), STOPPER (PLA) |
| 1007 | 3-806-698-01 | s | GEAR(31-23)              |
| 1008 | 3-806-752-01 | s | GEAR(32-22)              |
| 1009 | 3-806-814-01 | s | GEAR, PICK UP            |
| 1010 | 3-806-825-01 | s | GEAR, IDLER, PICK UP     |

No. Part No. SP Description

|              |   |                               |
|--------------|---|-------------------------------|
| 7-621-775-00 | s | SCREW +B2.6X3(EP-FE/ZNBK/CM2) |
| 7-628-254-00 | s | SCREW +PS 2.6X5               |
| 7-682-547-04 | s | SCREW +B3X6                   |

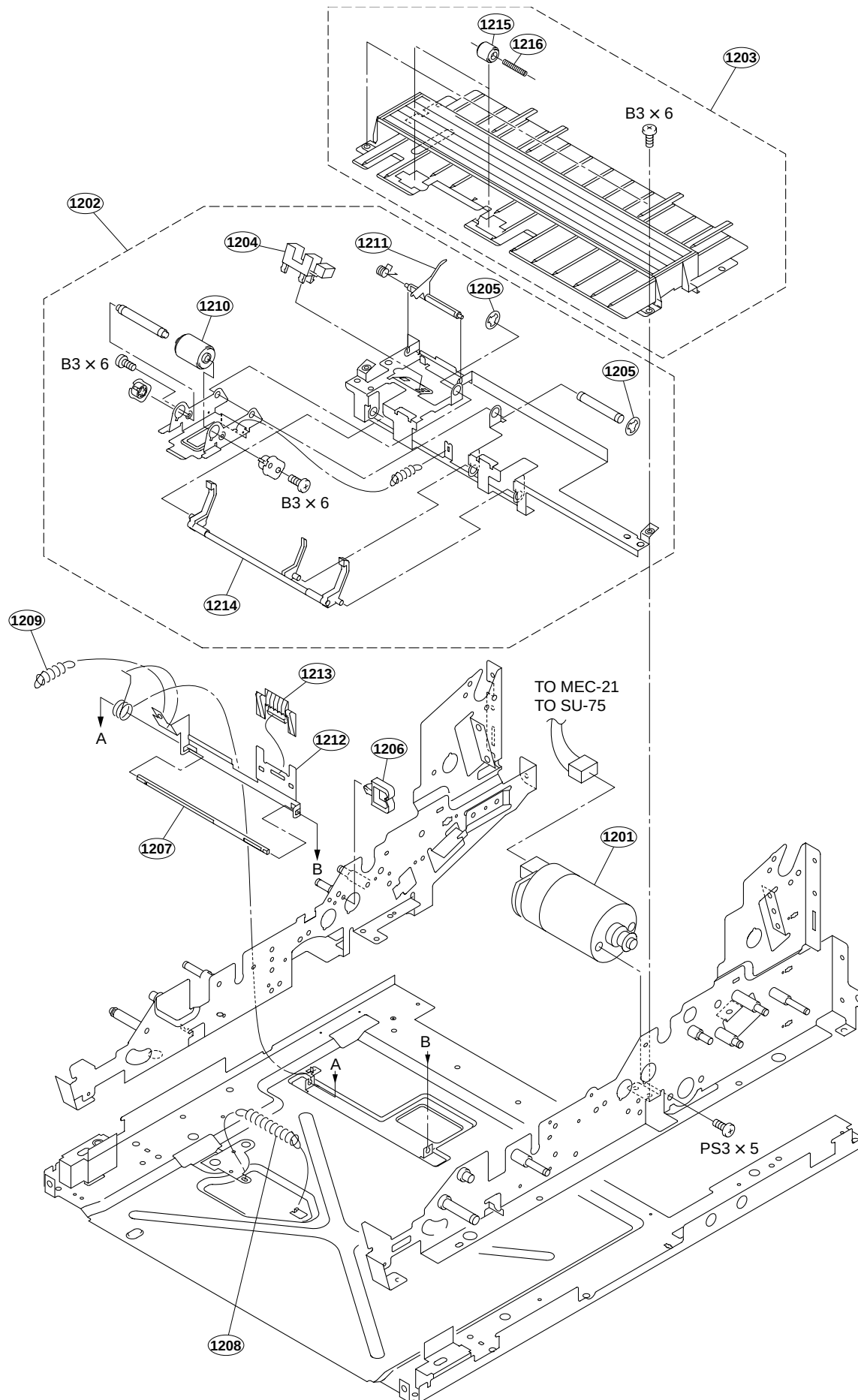
Chassis Block 6





| No.  | Part No.     | SP Description                  |
|------|--------------|---------------------------------|
| 1101 | A-8347-437-A | s MOUNTED CIRCUIT BOARD, SE-644 |
| 1102 | A-8347-532-A | s HOLDER ASSY, PE SENSOR        |
| 1103 | 1-476-936-11 | s SENSOR, PHOTO MICRO           |
| 1104 | 3-806-652-02 | o SPRING,SUB ROLLER             |
| 1105 | 3-806-661-01 | s BEARING                       |
| 1106 | 3-838-806-01 | s ROLLER,SUB                    |
| 1107 | 3-806-688-01 | s ACC(A),DETECTION              |
| 1108 | 3-806-705-01 | s SHAFT,HOOK FULCRUM            |
| 1109 | 3-806-741-01 | o GUIDE,REVERSE                 |
| 1110 | 3-806-743-03 | s ROLLER,PICKUP                 |
| 1111 | 3-806-744-02 | s ROLLER,FEED                   |
| 1112 | 3-806-745-01 | o ROLLER,REVERSE                |
| 1113 | 3-806-789-01 | s BEARING(8)                    |
| 1114 | 3-806-795-01 | s SPACER                        |
| 1115 | 3-806-819-01 | s HOOK                          |
| 1116 | 3-806-842-01 | s GUIDE(L),CASSETTE             |
| 1117 | 3-806-843-01 | s GUIDE(R),CASSETTE             |
| 1118 | 3-806-853-01 | s SPRING,TORSION                |
| 1119 | 3-806-865-02 | s GASKET                        |
|      | 7-621-775-00 | s SCREW +B2.6X3(EP-FE/ZNBK/CM2) |
|      | 7-624-104-04 | s STOP RING,E-2                 |
|      | 7-624-110-04 | s STOP RING 6.0 TYPE-E          |
|      | 7-682-547-04 | s SCREW +B3X6                   |
|      | 7-685-871-01 | s SCREW,+BVTT 3X6               |

## Chassis Block 7



| No.  | Part No.     | SP Description             |
|------|--------------|----------------------------|
| 1201 | A-8347-513-A | s MOTOR ASSY, CONVEYANCE   |
| 1202 | A-8347-543-A | s ROLLER ASSY, SEPARATION  |
| 1203 | A-8347-545-A | s GUIDE (A) ASSY           |
| 1204 | 1-476-936-11 | s SENSOR, PHOTO MICRO      |
| 1205 | 3-696-510-01 | s WASHER(3), STOPPER (PLA) |
| 1206 | 3-742-419-01 | o CLAMP, HARNESS           |
| 1207 | 3-806-666-01 | s SHAFT(PLATE LIFTER)      |
| 1208 | 3-806-791-02 | s SPRING, EXTENSION        |
| 1209 | 3-806-799-01 | s SPRING, EXTENSION        |
| 1210 | 3-806-813-01 | s ROLLER, SEPARATE         |
| 1211 | 3-806-815-01 | s DETECTION, SEPARATE      |
| 1212 | 3-806-832-01 | s LIFTER, PLATE            |
| 1213 | 3-806-833-01 | s COVER, PLATE LIFTER      |
| 1214 | 3-806-841-01 | s ARM, BARRIER, PAPER      |
| 1215 | 3-838-806-01 | s ROLLER, SUB              |
| 1216 | 3-806-760-01 | o SPRING, SUB ROLLER       |
|      | 7-682-547-04 | s SCREW +B3X6              |
|      | 7-682-646-09 | s SCREW +PS 3X5            |
|      | 7-685-646-79 | s SCREW +BVTP 3X8          |

### 6-3. Electrical Parts List

-----  
CN-2393 BOARD  
-----

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| 2pcs                | 7-621-772-40 | s SCREW +B 2X8(EP-FE/ZNBK/CM2)   |
| C1                  | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C2                  | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C3                  | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C4                  | 1-107-826-11 | s CAPACITOR,CHIP CERAMIC 0.1MF   |
| C5                  | 1-164-936-11 | s CAPACITOR,CHIP CERAMIC 680PF   |
| C6                  | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C7                  | 1-128-416-11 | s CAPACITOR ELECT 100MF/16V(105C |
| C8                  | 1-107-826-11 | s CAPACITOR,CHIP CERAMIC 0.1MF   |
| C9                  | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF   |
| C10                 | 1-115-339-11 | s CAPACITOR,CERAMIC 0.1MF/50V    |
| C12                 | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF   |
| C13                 | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF   |
| C16                 | 1-135-960-91 | s CAP, CHIP CERAMIC 10MF B(3225) |
| C17                 | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF   |
| C18                 | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C20                 | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF   |
| C21                 | 1-135-366-11 | s CAPACITOR ELECT 100MF (SMD)    |
| C22                 | 1-135-366-11 | s CAPACITOR ELECT 100MF (SMD)    |
| C23                 | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C24                 | 1-115-339-11 | s CAPACITOR,CERAMIC 0.1MF/50V    |
| C25                 | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C26                 | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C27                 | 1-128-416-11 | s CAPACITOR ELECT 100MF/16V(105C |
| C28                 | 1-127-573-11 | s CAPACITOR,CERAMIC 1MFB(2012)   |
| C29                 | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C30                 | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C31                 | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C32                 | 1-107-826-11 | s CAPACITOR,CHIP CERAMIC 0.1MF   |
| C33                 | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C34                 | 1-107-826-11 | s CAPACITOR,CHIP CERAMIC 0.1MF   |
| C35                 | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF   |
| C36                 | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF   |
| C38                 | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF   |
| C39                 | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF   |
| C40                 | 1-135-960-91 | s CAP, CHIP CERAMIC 10MF B(3225) |
| C41                 | 1-115-339-11 | s CAPACITOR,CERAMIC 0.1MF/50V    |
| C42                 | 1-115-339-11 | s CAPACITOR,CERAMIC 0.1MF/50V    |
| C43                 | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C44                 | 1-115-339-11 | s CAPACITOR,CERAMIC 0.1MF/50V    |
| C201                | 1-164-943-11 | s CAPACITOR,CHIP CERAMIC 0.01MF  |
| C202                | 1-164-943-11 | s CAPACITOR,CHIP CERAMIC 0.01MF  |
| C203                | 1-127-573-11 | s CAPACITOR,CERAMIC 1MFB(2012)   |
| C204                | 1-127-573-11 | s CAPACITOR,CERAMIC 1MFB(2012)   |
| C205                | 1-164-943-11 | s CAPACITOR,CHIP CERAMIC 0.01MF  |
| C206                | 1-164-943-11 | s CAPACITOR,CHIP CERAMIC 0.01MF  |
| C207                | 1-127-573-11 | s CAPACITOR,CERAMIC 1MFB(2012)   |
| C208                | 1-127-573-11 | s CAPACITOR,CERAMIC 1MFB(2012)   |
| C301                | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF   |
| C302                | 1-164-943-11 | s CAPACITOR,CHIP CERAMIC 0.01MF  |
| C303                | 1-164-943-11 | s CAPACITOR,CHIP CERAMIC 0.01MF  |
| C304                | 1-164-943-11 | s CAPACITOR,CHIP CERAMIC 0.01MF  |
| C305                | 1-127-573-11 | s CAPACITOR,CERAMIC 1MFB(2012)   |
| C306                | 1-127-573-11 | s CAPACITOR,CERAMIC 1MFB(2012)   |
| C307                | 1-127-573-11 | s CAPACITOR,CERAMIC 1MFB(2012)   |
| C308                | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C309                | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C310                | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |

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| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| C311                | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C312                | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF   |
| C313                | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C314                | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C315                | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF   |
| CN1                 | 1-794-847-21 | s CONNECTOR,100PIN DOCKING(PLUG) |
| CN2                 | 1-778-651-11 | o CONNECTOR, FFC (ZIF) 40P       |
| CN3                 | 1-778-534-11 | o CONNECTOR, FFC (ZIF) 45P       |
| CN4                 | 1-816-384-11 | s HEADER 10P                     |
| CN7                 | 1-564-708-11 | o PIN,CONNECTOR (6P)             |
| D1                  | 8-719-080-03 | s DIODE RB083L-20TE25            |
| D2                  | 8-719-080-03 | s DIODE RB083L-20TE25            |
| D3                  | 8-719-037-96 | s LED CL-190G-CD                 |
| D4                  | 8-719-037-96 | s LED CL-190G-CD                 |
| D5                  | 8-719-080-03 | s DIODE RB083L-20TE25            |
| D6                  | 8-719-080-03 | s DIODE RB083L-20TE25            |
| D7                  | 8-719-080-03 | s DIODE RB083L-20TE25            |
| D8                  | 8-719-080-03 | s DIODE RB083L-20TE25            |
| D9                  | 8-719-080-03 | s DIODE RB083L-20TE25            |
| D10                 | 8-719-037-96 | s LED CL-190G-CD                 |
| D11                 | 8-719-071-34 | s DIODE RB521S-30-TE61           |
| D12                 | 8-719-080-03 | s DIODE RB083L-20TE25            |
| D13                 | 8-719-080-03 | s DIODE RB083L-20TE25            |
| D15                 | 8-719-080-03 | s DIODE RB083L-20TE25            |
| E1                  | 1-535-877-22 | s CHIP,CHECKER (TEST POINT)      |
| E2                  | 1-535-877-22 | s CHIP,CHECKER (TEST POINT)      |
| FB1                 | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB2                 | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB3                 | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB4                 | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB5                 | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB6                 | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB7                 | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB10                | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)      |
| FB11                | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)      |
| FB13                | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)      |
| FB15                | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)      |
| FB16                | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)      |
| FB17                | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)      |
| FB18                | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)      |
| FB20                | 1-400-162-21 | s FILTER, EMI                    |
| FB21                | 1-400-162-21 | s FILTER, EMI                    |
| FB22                | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)      |
| FB23                | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB24                | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB25                | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB26                | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB27                | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)      |
| FB28                | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB29                | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)      |
| FB30                | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)      |
| FB201               | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)      |
| FB202               | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)      |
| FB203               | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)      |
| FB204               | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)      |
| FB205               | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)      |
| FB206               | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)      |
| FB207               | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)      |

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| Ref. No.<br>or Q'ty | Part No.     | SP | Description        |        |
|---------------------|--------------|----|--------------------|--------|
| FB208               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB209               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB210               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB211               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB212               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB213               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB214               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB215               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB216               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB217               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB218               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB219               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB220               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB221               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB222               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB223               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB224               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB225               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB226               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB227               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB228               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB229               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB230               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB231               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB232               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB301               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB302               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB303               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB304               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB305               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB306               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB307               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB308               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB309               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB310               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB311               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB312               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB313               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB314               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB315               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB316               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB317               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB318               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB319               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB320               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB321               | 1-400-162-21 | s  | FILTER, EMI        |        |
| FB322               | 1-400-162-21 | s  | FILTER, EMI        |        |
| FB323               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB324               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB325               | 1-400-047-21 | s  | FERRITE, EMI (SMD) | (1005) |
| FB326               | 1-400-162-21 | s  | FILTER, EMI        |        |
| FB327               | 1-400-162-21 | s  | FILTER, EMI        |        |
| IC1                 | 8-759-557-45 | s  | IC LTC1624IS8      |        |
| IC2                 | 6-701-921-01 | s  | IC TPS2013ADR      |        |
| IC201               | 8-759-549-14 | s  | IC SN74LV244APWR   |        |
| IC202               | 8-759-549-14 | s  | IC SN74LV244APWR   |        |
| IC203               | 8-759-549-14 | s  | IC SN74LV244APWR   |        |
| IC204               | 8-759-549-14 | s  | IC SN74LV244APWR   |        |

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| Ref. No.<br>or Q'ty | Part No.     | SP | Description                    |  |
|---------------------|--------------|----|--------------------------------|--|
| IC301               | 8-759-549-14 | s  | IC SN74LV244APWR               |  |
| IC302               | 8-759-549-14 | s  | IC SN74LV244APWR               |  |
| IC303               | 8-759-549-14 | s  | IC SN74LV244APWR               |  |
| IC304               | 8-759-523-84 | s  | IC TC74VHC14FT (EL)            |  |
| IC305               | 8-759-523-78 | s  | IC TC74VHC00FT(EL)             |  |
| IC306               | 8-759-523-84 | s  | IC TC74VHC14FT (EL)            |  |
| IC307               | 8-759-523-84 | s  | IC TC74VHC14FT (EL)            |  |
| IC308               | 8-759-196-96 | s  | IC TC7SH08FU (TE85R)           |  |
| IC309               | 8-759-196-96 | s  | IC TC7SH08FU (TE85R)           |  |
| L1                  | 1-416-281-11 | s  | COIL, CHOKE                    |  |
| L2                  | 1-416-281-11 | s  | COIL, CHOKE                    |  |
| Q1                  | 8-729-043-71 | s  | TRANSISTOR SI9426DY-T1         |  |
| Q2                  | 8-729-929-08 | s  | TRANSISTOR DTC123JE            |  |
| Q4                  | 8-729-807-51 | s  | TRANSISTOR 2SD1623-S           |  |
| Q6                  | 8-729-929-08 | s  | TRANSISTOR DTC123JE            |  |
| Q7                  | 8-729-047-32 | s  | TRANSISTOR SI4425DY-T1         |  |
| R1                  | 1-218-965-11 | s  | RESISTOR, CHIP 10K 1/16W       |  |
| R2                  | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W        |  |
| R3                  | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W        |  |
| R4                  | 1-218-951-11 | s  | RESISTOR, CHIP 680 1/16        |  |
| R5                  | 1-218-951-11 | s  | RESISTOR, CHIP 680 1/16        |  |
| R21                 | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W      |  |
| R22                 | 1-219-611-21 | s  | RESISTOR, CHIP 0.047 1W        |  |
| R23                 | 1-218-951-11 | s  | RESISTOR, CHIP 680 1/16        |  |
| R24                 | 1-218-951-11 | s  | RESISTOR, CHIP 680 1/16        |  |
| R25                 | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |  |
| R28                 | 1-218-949-11 | s  | RESISTOR,CHIP 470 1/16W        |  |
| R29                 | 1-218-949-11 | s  | RESISTOR,CHIP 470 1/16W        |  |
| R30                 | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |  |
| R32                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W       |  |
| R35                 | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W        |  |
| R42                 | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |  |
| R43                 | 1-208-707-11 | s  | RESISTOR,CHIP 10K 1/16W (1005) |  |
| R44                 | 1-208-683-11 | s  | RESISTOR CHIP 1K 1/16W (1005)  |  |
| R47                 | 1-208-719-11 | s  | RESISTOR CHIP 33K 1/16W (1005) |  |
| R48                 | 1-218-965-11 | s  | RESISTOR, CHIP 10K 1/16W       |  |
| R50                 | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W      |  |
| R51                 | 1-218-965-11 | s  | RESISTOR, CHIP 10K 1/16W       |  |
| R54                 | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |  |
| R61                 | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |  |
| R62                 | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |  |
| R63                 | 1-218-949-11 | s  | RESISTOR,CHIP 470 1/16W        |  |
| R64                 | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W      |  |
| R69                 | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |  |
| R70                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W       |  |
| R71                 | 1-220-258-11 | s  | RESISTOR, CHIP 100 1/4W (3225) |  |
| R72                 | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W      |  |
| R73                 | 1-220-230-11 | s  | RESISTOR CHIP 2.2 1/4W (3225)  |  |
| R74                 | 1-218-630-11 | s  | RESISTOR CHIP 220/1W (6332)    |  |
| R75                 | 1-218-630-11 | s  | RESISTOR CHIP 220/1W (6332)    |  |
| R76                 | 1-218-630-11 | s  | RESISTOR CHIP 220/1W (6332)    |  |
| R77                 | 1-218-630-11 | s  | RESISTOR CHIP 220/1W (6332)    |  |
| R78                 | 1-218-630-11 | s  | RESISTOR CHIP 220/1W (6332)    |  |
| R79                 | 1-218-630-11 | s  | RESISTOR CHIP 220/1W (6332)    |  |
| R80                 | 1-218-630-11 | s  | RESISTOR CHIP 220/1W (6332)    |  |
| R81                 | 1-218-630-11 | s  | RESISTOR CHIP 220/1W (6332)    |  |
| R86                 | 1-218-477-11 | s  | RESISTOR CHIP 220 1/4W (3225)  |  |
| R94                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W       |  |

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| Ref. No.<br>or Q'ty | Part No.     | SP | Description                     |
|---------------------|--------------|----|---------------------------------|
| R201                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R202                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R203                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R204                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R205                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R206                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R207                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R208                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R209                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R210                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R211                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R212                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R213                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R214                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R215                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R216                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R217                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R218                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R219                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R220                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R221                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R222                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R223                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R224                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R225                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R226                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R227                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R228                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R229                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R230                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R231                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R232                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R301                | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W        |
| R302                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R303                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R304                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R305                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R306                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R307                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R308                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R309                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R310                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R311                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R312                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R313                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R314                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R315                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R316                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R317                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R318                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R319                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R320                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R321                | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W       |
| R322                | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W       |
| R323                | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W        |
| R324                | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W        |
| R325                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R326                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R328                | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W        |

## (CN-2393 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description                     |
|---------------------|--------------|----|---------------------------------|
| R330                | 1-218-990-11 | s  | RESISTOR, CHIP 0 1/16W (1005)   |
| R331                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R332                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)   |
| R333                | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W       |
| R334                | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W       |
| R335                | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W        |
| R336                | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W        |
| R337                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R339                | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W        |
| R340                | 1-218-990-11 | s  | RESISTOR, CHIP 0 1/16W (1005)   |
| RB201               | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4 (1005)  |
| RB202               | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4 (1005)  |
| RB203               | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4 (1005)  |
| RB204               | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4 (1005)  |
| RB205               | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4 (1005)  |
| RB206               | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4 (1005)  |
| RB207               | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4 (1005)  |
| RB208               | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4 (1005)  |
| RB301               | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4 (1005)  |
| RB302               | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4 (1005)  |
| RB303               | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4 (1005)  |
| RB304               | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4 (1005)  |
| RB305               | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4 (1005)  |
| RB306               | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4 (1005)  |
| THP1                | 1-533-817-21 | s  | THERMISTOR                      |
| THP2                | 1-533-817-21 | s  | THERMISTOR                      |
| THP3                | 1-533-817-21 | s  | THERMISTOR                      |
| TP1                 | 1-535-877-22 | s  | CHIP, CHECKER (TEST POINT)      |
| TP2                 | 1-535-877-22 | s  | CHIP, CHECKER (TEST POINT)      |
| TP4                 | 1-535-877-22 | s  | CHIP, CHECKER (TEST POINT)      |
| TP5                 | 1-535-877-22 | s  | CHIP, CHECKER (TEST POINT)      |
| TP6                 | 1-535-877-22 | s  | CHIP, CHECKER (TEST POINT)      |
| TP7                 | 1-535-877-22 | s  | CHIP, CHECKER (TEST POINT)      |
| TP8                 | 1-535-877-22 | s  | CHIP, CHECKER (TEST POINT)      |
| VDR1                | 1-801-922-11 | s  | VARISTOR, CHIP                  |
| VDR2                | 1-801-922-11 | s  | VARISTOR, CHIP                  |
| VDR3                | 1-801-922-11 | s  | VARISTOR, CHIP                  |
| VDR4                | 1-801-922-11 | s  | VARISTOR, CHIP                  |
| VDR6                | 1-803-974-11 | s  | VARISTOR, CHIP                  |
| VDR7                | 1-801-922-11 | s  | VARISTOR, CHIP                  |
| VDR8                | 1-801-922-11 | s  | VARISTOR, CHIP                  |
| VDR301              | 1-801-922-11 | s  | VARISTOR, CHIP                  |
| VDR302              | 1-801-922-11 | s  | VARISTOR, CHIP                  |
| VDR303              | 1-803-974-11 | s  | VARISTOR, CHIP                  |
| VDR304              | 1-803-974-11 | s  | VARISTOR, CHIP                  |
| VDR305              | 1-801-922-11 | s  | VARISTOR, CHIP                  |
| VDR306              | 1-801-922-11 | s  | VARISTOR, CHIP                  |
| VDR307              | 1-803-974-11 | s  | VARISTOR, CHIP                  |

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CPU-347 BOARD
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LPR-1000MD V2

## (CPU-347 BOARD)

6-25





## (CPU-347 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description                    |
|---------------------|--------------|----|--------------------------------|
| C703                | 1-126-396-11 | s  | CAPACITOR,ELECT 47MF/16V(CHIP) |
| C704                | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C705                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| C706                | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF   |
| C707                | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C708                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C709                | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C710                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| C711                | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF   |
| C712                | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C713                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| C714                | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF   |
| C715                | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C716                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| C717                | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF   |
| C718                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| C719                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| C720                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| C721                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| C722                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| C723                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| C724                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| C725                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| C726                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C727                | 1-115-339-11 | s  | CAPACITOR,CERAMIC 0.1MF/50V    |
| C801                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C802                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C803                | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C804                | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C805                | 1-127-573-11 | s  | CAPACITOR,CERAMIC 1MFB(2012)   |
| C806                | 1-127-573-11 | s  | CAPACITOR,CERAMIC 1MFB(2012)   |
| C807                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| C808                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| C809                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C810                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C811                | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C812                | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C813                | 1-127-573-11 | s  | CAPACITOR,CERAMIC 1MFB(2012)   |
| C814                | 1-127-573-11 | s  | CAPACITOR,CERAMIC 1MFB(2012)   |
| C815                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| C816                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| C901                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C902                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C903                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C904                | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C905                | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C906                | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C907                | 1-127-573-11 | s  | CAPACITOR,CERAMIC 1MFB(2012)   |
| C908                | 1-127-573-11 | s  | CAPACITOR,CERAMIC 1MFB(2012)   |
| C909                | 1-127-573-11 | s  | CAPACITOR,CERAMIC 1MFB(2012)   |
| C910                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| C911                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| C912                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| C913                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C914                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C916                | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C917                | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C919                | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C920                | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF   |

## (CPU-347 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description                     |
|---------------------|--------------|----|---------------------------------|
| C921                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C922                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C923                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C924                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C925                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C927                | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF   |
| C928                | 1-127-573-11 | s  | CAPACITOR,CERAMIC 1MFB(2012)    |
| C1001               | 1-126-396-11 | s  | CAPACITOR,ELECT 47MF/16V(CHIP)  |
| C1002               | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |
| C1003               | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |
| C1004               | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |
| C1005               | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |
| C1006               | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |
| C1007               | 1-104-607-11 | s  | CAPACITOR ELECT 47MF/16V(105C)  |
| C1008               | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |
| C1009               | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |
| C1010               | 1-128-416-11 | s  | CAPACITOR ELECT 100MF/16V(105C) |
| C1011               | 1-128-416-11 | s  | CAPACITOR ELECT 100MF/16V(105C) |
| C1012               | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |
| C1013               | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |
| C1014               | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |
| C1015               | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF   |
| C1016               | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF   |
| C1017               | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF    |
| C1018               | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF    |
| C1019               | 1-127-573-11 | s  | CAPACITOR,CERAMIC 1MFB(2012)    |
| C1020               | 1-104-607-11 | s  | CAPACITOR ELECT 47MF/16V(105C)  |
| C1021               | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |
| C1023               | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |
| C1024               | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C1025               | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |
| C1026               | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |
| C1028               | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C1029               | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C1031               | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |
| C1032               | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C1033               | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C1034               | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF    |
| C1035               | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF   |
| C1038               | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF    |
| C1101               | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF    |
| C1102               | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C1103               | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C1104               | 1-127-573-11 | s  | CAPACITOR,CERAMIC 1MFB(2012)    |
| C1105               | 1-127-573-11 | s  | CAPACITOR,CERAMIC 1MFB(2012)    |
| C1106               | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF    |
| C1108               | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF    |
| C1109               | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF    |
| C1110               | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF    |
| C1111               | 1-127-573-11 | s  | CAPACITOR,CERAMIC 1MFB(2012)    |
| C1112               | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |
| C1113               | 1-107-826-11 | s  | CAPACITOR,CHIP CERAMIC 0.1MF    |
| CN801               | 1-815-231-11 | s  | CONNECTOR, FFC/FPC (ZIF) 40P    |
| CN901               | 1-779-950-21 | s  | CONNECTOR, FFC/FPC (ZIF) 45P    |
| CN1001              | 1-564-726-51 | o  | PIN, CONNECTOR (SMALL TYPE)10P  |
| CN1002              | 1-573-360-21 | s  | CONNECTOR,FFC/FPC 20P           |
| CN1101              | 1-580-055-21 | o  | PIN, CONNECTOR 2P               |
| CN1102              | 1-580-056-21 | s  | PIN,CONNECTOR 3P                |

## (CPU-347 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description               |        |
|---------------------|--------------|----|---------------------------|--------|
| FB834               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB903               | 1-400-162-21 | s  | FILTER, EMI               |        |
| FB904               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB905               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB907               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB908               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB909               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB910               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB911               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB912               | 1-400-162-21 | s  | FILTER, EMI               |        |
| FB914               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB915               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB916               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB918               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB919               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB920               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB921               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB922               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB923               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB924               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB925               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB926               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB927               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB928               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB929               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB930               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB931               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB932               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB934               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB935               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB936               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB937               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB938               | 1-400-047-21 | s  | FERRITE, EMI (SMD)        | (1005) |
| FB939               | 1-400-162-21 | s  | FILTER, EMI               |        |
| FB1001              | 1-469-324-21 | s  | FERRITE, EMI (SMD)        | 4.7UH  |
| FB1002              | 1-469-324-21 | s  | FERRITE, EMI (SMD)        | 4.7UH  |
| FB1003              | 1-469-324-21 | s  | FERRITE, EMI (SMD)        | 4.7UH  |
| FB1004              | 1-469-324-21 | s  | FERRITE, EMI (SMD)        | 4.7UH  |
| FB1005              | 1-469-324-21 | s  | FERRITE, EMI (SMD)        | 4.7UH  |
| FB1006              | 1-469-324-21 | s  | FERRITE, EMI (SMD)        | 4.7UH  |
| FB1101              | 1-469-324-21 | s  | FERRITE, EMI (SMD)        | 4.7UH  |
| FB1102              | 1-469-324-21 | s  | FERRITE, EMI (SMD)        | 4.7UH  |
| FL301               | 1-234-494-21 | l  | FILTER, EMI REMOVAL (SMD) |        |
| FL302               | 1-234-494-21 | l  | FILTER, EMI REMOVAL (SMD) |        |
| FL303               | 1-234-494-21 | l  | FILTER, EMI REMOVAL (SMD) |        |
| FL304               | 1-234-494-21 | l  | FILTER, EMI REMOVAL (SMD) |        |
| FL400               | 1-234-494-21 | l  | FILTER, EMI REMOVAL (SMD) |        |
| FL401               | 1-234-494-21 | l  | FILTER, EMI REMOVAL (SMD) |        |
| FL402               | 1-234-494-21 | l  | FILTER, EMI REMOVAL (SMD) |        |
| FL500               | 1-234-494-21 | l  | FILTER, EMI REMOVAL (SMD) |        |
| FL501               | 1-234-494-21 | l  | FILTER, EMI REMOVAL (SMD) |        |
| FL502               | 1-234-494-21 | l  | FILTER, EMI REMOVAL (SMD) |        |
| FL503               | 1-234-494-21 | l  | FILTER, EMI REMOVAL (SMD) |        |
| FL600               | 1-234-494-21 | l  | FILTER, EMI REMOVAL (SMD) |        |
| FL601               | 1-234-494-21 | l  | FILTER, EMI REMOVAL (SMD) |        |
| FL602               | 1-234-494-21 | l  | FILTER, EMI REMOVAL (SMD) |        |
| FL603               | 1-234-494-21 | l  | FILTER, EMI REMOVAL (SMD) |        |
| FL701               | 1-234-494-21 | l  | FILTER, EMI REMOVAL (SMD) |        |

## (CPU-347 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP   | Description                   |
|---------------------|--------------|------|-------------------------------|
| IC202               | 8-759-392-77 | s IC | SN74LVC245APW (E20)           |
| IC203               | 8-759-679-53 | s IC | SN74LVC244APWR                |
| IC204               | 8-759-392-77 | s IC | SN74LVC245APW (E20)           |
| IC205               | 8-759-679-53 | s IC | SN74LVC244APWR                |
| IC206               | 8-759-679-53 | s IC | SN74LVC244APWR                |
| IC301               | 6-803-594-02 | s IC | 7128BTC100-LPR5000A2V1.01     |
| IC302               | 6-803-593-01 | s IC | 7128BTC100-LPR5000A3V1.00     |
| IC400               | 6-701-037-01 | s IC | PM-44IX                       |
| IC403               | 8-759-679-53 | s IC | SN74LVC244APWR                |
| IC500               | 6-701-037-01 | s IC | PM-44IX                       |
| IC600               | 6-701-037-01 | s IC | PM-44IX                       |
| IC703               | 8-759-669-44 | s IC | SN74LVC74APWR-12              |
| IC704               | 6-703-524-01 | s IC | P2010AF-08TR                  |
| IC705               | 6-803-547-01 | s IC | CXD9181R                      |
| IC801               | 8-759-578-68 | s IC | SN74LVCC4245APWR              |
| IC802               | 8-759-578-68 | s IC | SN74LVCC4245APWR              |
| IC803               | 8-759-578-68 | s IC | SN74LVCC4245APWR              |
| IC804               | 8-759-578-68 | s IC | SN74LVCC4245APWR              |
| IC901               | 8-759-578-68 | s IC | SN74LVCC4245APWR              |
| IC902               | 8-759-578-68 | s IC | SN74LVCC4245APWR              |
| IC903               | 8-759-578-68 | s IC | SN74LVCC4245APWR              |
| IC905               | 8-759-578-68 | s IC | SN74LVCC4245APWR              |
| IC906               | 8-759-523-78 | s IC | TC74VHC00FT(EL)               |
| IC907               | 8-759-523-84 | s IC | TC74VHC14FT (EL)              |
| IC908               | 8-759-578-68 | s IC | SN74LVCC4245APWR              |
| IC910               | 8-759-549-14 | s IC | SN74LV244APWR                 |
| IC1001              | 8-749-018-23 | s IC | LT1764EQ-E2                   |
| IC1002              | 6-700-394-01 | s IC | BA25BC0FP-TE2                 |
| IC1003              | 8-759-523-84 | s IC | TC74VHC14FT (EL)              |
| IC1004              | 8-759-523-79 | s IC | TC74VHC02FT                   |
| IC1006              | 8-759-523-79 | s IC | TC74VHC02FT                   |
| IC1007              | 8-759-523-78 | s IC | TC74VHC00FT(EL)               |
| IC1101              | 8-759-100-93 | s IC | UPC393G2                      |
| IC1102              | 8-759-594-71 | s IC | TC75SH14FU-TE85R              |
| IC1103              | 8-759-523-78 | s IC | TC74VHC00FT(EL)               |
| LF1001              | 1-421-773-11 | s    | FILTER, NOISE REMOVAL         |
| Q100                | 8-729-927-99 | s    | TRANSISTOR 2SC4617R           |
| Q101                | 8-729-927-99 | s    | TRANSISTOR 2SC4617R           |
| Q1001               | 8-729-927-99 | s    | TRANSISTOR 2SC4617R           |
| Q1002               | 8-729-927-99 | s    | TRANSISTOR 2SC4617R           |
| Q1101               | 8-729-929-08 | s    | TRANSISTOR DTC123JE           |
| Q1102               | 8-729-047-32 | s    | TRANSISTOR SI4425DY-T1        |
| R101                | 1-208-635-11 | s    | RESISTOR CHIP 10 1/16W (1005) |
| R102                | 1-208-635-11 | s    | RESISTOR CHIP 10 1/16W (1005) |
| R103                | 1-208-635-11 | s    | RESISTOR CHIP 10 1/16W (1005) |
| R104                | 1-208-635-11 | s    | RESISTOR CHIP 10 1/16W (1005) |
| R105                | 1-208-635-11 | s    | RESISTOR CHIP 10 1/16W (1005) |
| R106                | 1-208-635-11 | s    | RESISTOR CHIP 10 1/16W (1005) |
| R107                | 1-208-635-11 | s    | RESISTOR CHIP 10 1/16W (1005) |
| R108                | 1-208-635-11 | s    | RESISTOR CHIP 10 1/16W (1005) |
| R109                | 1-208-635-11 | s    | RESISTOR CHIP 10 1/16W (1005) |
| R110                | 1-208-635-11 | s    | RESISTOR CHIP 10 1/16W (1005) |
| R111                | 1-208-635-11 | s    | RESISTOR CHIP 10 1/16W (1005) |
| R112                | 1-208-635-11 | s    | RESISTOR CHIP 10 1/16W (1005) |
| R119                | 1-208-635-11 | s    | RESISTOR CHIP 10 1/16W (1005) |
| R120                | 1-208-635-11 | s    | RESISTOR CHIP 10 1/16W (1005) |
| R121                | 1-218-949-11 | s    | RESISTOR, CHIP 470 1/16W      |

## (CPU-347 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description                     |
|---------------------|--------------|----|---------------------------------|
| R122                | 1-218-949-11 | s  | RESISTOR, CHIP 470 1/16W        |
| R123                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R124                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R125                | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W       |
| R126                | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W       |
| R127                | 1-208-635-11 | s  | RESISTOR CHIP 10 1/16W (1005)   |
| R128                | 1-208-635-11 | s  | RESISTOR CHIP 10 1/16W (1005)   |
| R129                | 1-208-635-11 | s  | RESISTOR CHIP 10 1/16W (1005)   |
| R130                | 1-208-635-11 | s  | RESISTOR CHIP 10 1/16W (1005)   |
| R131                | 1-208-635-11 | s  | RESISTOR CHIP 10 1/16W (1005)   |
| R133                | 1-208-635-11 | s  | RESISTOR CHIP 10 1/16W (1005)   |
| R202                | 1-218-938-11 | s  | RESISTOR, CHIP 56 1/16W (1005)  |
| R203                | 1-218-938-11 | s  | RESISTOR, CHIP 56 1/16W (1005)  |
| R301                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R302                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R303                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R304                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R305                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R306                | 1-218-935-11 | s  | RESISTOR, CHIP 33 1/16W (1005)  |
| R307                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R311                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R312                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R313                | 1-218-935-11 | s  | RESISTOR, CHIP 33 1/16W (1005)  |
| R314                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R315                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R316                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R317                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R318                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R320                | 1-218-990-11 | s  | RESISTOR, CHIP 0 1/16W (1005)   |
| R321                | 1-218-935-11 | s  | RESISTOR, CHIP 33 1/16W (1005)  |
| R322                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R323                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R324                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R325                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R326                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R327                | 1-218-935-11 | s  | RESISTOR, CHIP 33 1/16W (1005)  |
| R329                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R330                | 1-218-945-11 | s  | RESISTOR, CHIP 220 1/16W (1005) |
| R331                | 1-218-945-11 | s  | RESISTOR, CHIP 220 1/16W (1005) |
| R332                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R400                | 1-218-935-11 | s  | RESISTOR, CHIP 33 1/16W (1005)  |
| R401                | 1-218-937-11 | s  | RESISTOR, CHIP 47               |
| R402                | 1-218-937-11 | s  | RESISTOR, CHIP 47               |
| R403                | 1-218-937-11 | s  | RESISTOR, CHIP 47               |
| R404                | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W       |
| R405                | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W       |
| R406                | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W       |
| R407                | 1-218-935-11 | s  | RESISTOR, CHIP 33 1/16W (1005)  |
| R408                | 1-218-935-11 | s  | RESISTOR, CHIP 33 1/16W (1005)  |
| R409                | 1-218-935-11 | s  | RESISTOR, CHIP 33 1/16W (1005)  |
| R410                | 1-218-935-11 | s  | RESISTOR, CHIP 33 1/16W (1005)  |
| R411                | 1-218-935-11 | s  | RESISTOR, CHIP 33 1/16W (1005)  |
| R412                | 1-218-935-11 | s  | RESISTOR, CHIP 33 1/16W (1005)  |
| R413                | 1-218-935-11 | s  | RESISTOR, CHIP 33 1/16W (1005)  |
| R414                | 1-218-935-11 | s  | RESISTOR, CHIP 33 1/16W (1005)  |
| R415                | 1-218-990-11 | s  | RESISTOR, CHIP 0 1/16W (1005)   |
| R416                | 1-218-990-11 | s  | RESISTOR, CHIP 0 1/16W (1005)   |
| R417                | 1-218-937-11 | s  | RESISTOR, CHIP 47               |
| R418                | 1-218-990-11 | s  | RESISTOR, CHIP 0 1/16W (1005)   |

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| Ref. No.<br>or Q'ty | Part No.     | SP | Description                    |
|---------------------|--------------|----|--------------------------------|
| R511                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R512                | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |
| R513                | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |
| R514                | 1-218-937-11 | s  | RESISTOR,CHIP 47               |
| R515                | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |
| R516                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R517                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R518                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R519                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R520                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R521                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R522                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R523                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R524                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R525                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R526                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R527                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R528                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R529                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R530                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R531                | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |
| R532                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R533                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R534                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R535                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R536                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R537                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R538                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R539                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R540                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R541                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R542                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R543                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R544                | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R545                | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R548                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R549                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R550                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R551                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R552                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R553                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R554                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R555                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R556                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R557                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R558                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R559                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R560                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R561                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R562                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R563                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R564                | 1-218-945-11 | s  | RESISTOR,CHIP 220 1/16W (1005) |
| R565                | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |
| R566                | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |
| R567                | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R601                | 1-218-961-11 | s  | RESISTOR,CHIP 4.7K 1/16W       |
| R602                | 1-218-961-11 | s  | RESISTOR,CHIP 4.7K 1/16W       |
| R604                | 1-218-961-11 | s  | RESISTOR,CHIP 4.7K 1/16W       |
| R605                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |

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| Ref. No.<br>or Q'ty | Part No.     | SP | Description                    |
|---------------------|--------------|----|--------------------------------|
| R606                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R607                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R608                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R609                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R610                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R611                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R612                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R613                | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |
| R614                | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |
| R615                | 1-218-937-11 | s  | RESISTOR, CHIP 47              |
| R616                | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |
| R617                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R618                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R619                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R620                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R621                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R622                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R623                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R624                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R625                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R626                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R627                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R628                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R629                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R630                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R631                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R632                | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |
| R633                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R634                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R635                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R636                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R637                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R638                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R639                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R640                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R641                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R642                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R643                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R644                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R645                | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R646                | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R649                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R650                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R651                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R652                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R653                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R654                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R655                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R656                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R657                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R658                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R659                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R660                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R661                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R662                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R663                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R664                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R665                | 1-218-945-11 | s  | RESISTOR,CHIP 220 1/16W(1005)  |
| R666                | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |

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| Ref. No.<br>or Q'ty | Part No.     | SP | Description                    |
|---------------------|--------------|----|--------------------------------|
| R667                | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |
| R668                | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R669                | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R702                | 1-218-937-11 | s  | RESISTOR, CHIP 47              |
| R703                | 1-218-937-11 | s  | RESISTOR, CHIP 47              |
| R704                | 1-218-937-11 | s  | RESISTOR, CHIP 47              |
| R710                | 1-218-945-11 | s  | RESISTOR,CHIP 220 1/16W(1005)  |
| R713                | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |
| R714                | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R717                | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |
| R719                | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R720                | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R721                | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R722                | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R903                | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R906                | 1-218-949-11 | s  | RESISTOR,CHIP 470 1/16W        |
| R907                | 1-218-965-11 | s  | RESISTOR, CHIP 10K 1/16W       |
| R908                | 1-218-945-11 | s  | RESISTOR,CHIP 220 1/16W(1005)  |
| R910                | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W      |
| R911                | 1-218-945-11 | s  | RESISTOR,CHIP 220 1/16W(1005)  |
| R935                | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R936                | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |
| R940                | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R942                | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R943                | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R944                | 1-218-945-11 | s  | RESISTOR,CHIP 220 1/16W(1005)  |
| R1001               | 1-218-945-11 | s  | RESISTOR,CHIP 220 1/16W(1005)  |
| R1002               | 1-208-873-11 | s  | RESISTOR,CHIP 270 1/16W (1005) |
| R1003               | 1-208-683-11 | s  | RESISTOR CHIP 1K 1/16W (1005)  |
| R1004               | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |
| R1005               | 1-218-949-11 | s  | RESISTOR,CHIP 470 1/16W        |
| R1006               | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W        |
| R1007               | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W        |
| R1008               | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W        |
| R1009               | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W      |
| R1010               | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R1011               | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R1012               | 1-218-965-11 | s  | RESISTOR, CHIP 10K 1/16W       |
| R1013               | 1-208-635-11 | s  | RESISTOR CHIP 10 1/16W (1005)  |
| R1014               | 1-208-635-11 | s  | RESISTOR CHIP 10 1/16W (1005)  |
| R1017               | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |
| R1018               | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R1020               | 1-218-945-11 | s  | RESISTOR,CHIP 220 1/16W(1005)  |
| R1021               | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R1023               | 1-218-965-11 | s  | RESISTOR, CHIP 10K 1/16W       |
| R1024               | 1-218-985-11 | s  | RESISTOR CHIP 470K 1/16W(1005) |
| R1025               | 1-218-985-11 | s  | RESISTOR CHIP 470K 1/16W(1005) |
| R1026               | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W        |
| R1027               | 1-218-969-11 | s  | RESISTOR,CHIP 22K 1/16W (1608) |
| R1028               | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R1030               | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |
| R1033               | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R1034               | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |
| R1101               | 1-208-707-11 | s  | RESISTOR,CHIP 10K 1/16W (1005) |
| R1102               | 1-208-719-11 | s  | RESISTOR CHIP 33K 1/16W (1005) |
| R1103               | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W        |
| R1104               | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W        |
| R1105               | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |
| R1106               | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |

## (CPU-347 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description                    |  |
|---------------------|--------------|----|--------------------------------|--|
| R1107               | 1-218-941-81 | s  | RESISTOR,CHIP 100,1/16W (1005) |  |
| R1108               | 1-218-941-81 | s  | RESISTOR,CHIP 100,1/16W (1005) |  |
| R1111               | 1-218-965-11 | s  | RESISTOR, CHIP 10K 1/16W       |  |
| R1112               | 1-218-965-11 | s  | RESISTOR, CHIP 10K 1/16W       |  |
| R1113               | 1-208-709-11 | s  | RESISTOR CHIP 12K 1/16W (1005) |  |
| R1114               | 1-208-695-11 | s  | RESISTOR CHIP 3.3K 1/16W(1005) |  |
| R1115               | 1-208-697-11 | s  | RESISTOR CHIP 3.9K 1/16W(1005) |  |
| R1116               | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W      |  |
| R1117               | 1-208-689-11 | s  | RESISTOR CHIP 1.8K 1/16W(1005) |  |
| R1118               | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |  |
| R1119               | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |  |
| R1120               | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |  |
| R1121               | 1-218-973-11 | s  | RESISTOR,CHIP 47K 1/16W (1005) |  |
| R1122               | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W      |  |
| R1123               | 1-218-965-11 | s  | RESISTOR, CHIP 10K 1/16W       |  |
| R1124               | 1-218-965-11 | s  | RESISTOR, CHIP 10K 1/16W       |  |
| R1125               | 1-218-941-81 | s  | RESISTOR,CHIP 100,1/16W (1005) |  |
| R1126               | 1-208-671-11 | s  | RESISTOR CHIP 330 1/16W (1005) |  |
| R1127               | 1-218-965-11 | s  | RESISTOR, CHIP 10K 1/16W       |  |
| R1128               | 1-218-965-11 | s  | RESISTOR, CHIP 10K 1/16W       |  |
| RB101               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB102               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB103               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB104               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB105               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB106               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB107               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB108               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB109               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB110               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB111               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB112               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB113               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB114               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB115               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB116               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB117               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB118               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB119               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB120               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB121               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB122               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB123               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB124               | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)       |  |
| RB201               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005)  |  |
| RB202               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005)  |  |
| RB203               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005)  |  |
| RB204               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005)  |  |
| RB205               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005)  |  |
| RB206               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005)  |  |
| RB207               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005)  |  |
| RB208               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005)  |  |
| RB301               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005)  |  |
| RB302               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005)  |  |
| RB303               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005)  |  |
| RB400               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005)  |  |
| RB401               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005)  |  |
| RB402               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005)  |  |
| RB403               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005)  |  |

## (CPU-347 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description                   |  |
|---------------------|--------------|----|-------------------------------|--|
| RB404               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB405               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB406               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB407               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB500               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB501               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB502               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB503               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB504               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB505               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB506               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB507               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB600               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB601               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB602               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB603               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB604               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB605               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB606               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB607               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB608               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB609               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB610               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB611               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB801               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB802               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB803               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB804               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB809               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB810               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB811               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB812               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB901               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB902               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB903               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB904               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB905               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB906               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB907               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 (1005) |  |
| RB1001              | 1-234-378-11 | s  | RES, NETWORK 10X4 (1005)      |  |
| RB1002              | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)      |  |
| RB1003              | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)      |  |
| RB1004              | 1-234-369-21 | s  | RES, NETWORK 10X4 (1005)      |  |
| S1001               | 1-786-608-21 | s  | SWITCH, TACTILE               |  |
| THP111              | 1-809-357-21 | s  | THERMISTOR                    |  |
| THP112              | 1-533-817-21 | s  | THERMISTOR                    |  |
| VDR101              | 1-801-922-11 | s  | VARISTOR, CHIP                |  |
| VDR111              | 1-801-922-11 | s  | VARISTOR, CHIP                |  |
| VDR901              | 1-801-922-11 | s  | VARISTOR, CHIP                |  |
| VDR902              | 1-803-974-11 | s  | VARISTOR, CHIP                |  |
| VDR903              | 1-803-974-11 | s  | VARISTOR, CHIP                |  |
| VDR904              | 1-803-974-11 | s  | VARISTOR, CHIP                |  |
| VDR905              | 1-801-922-11 | s  | VARISTOR, CHIP                |  |
| VDR906              | 1-803-974-11 | s  | VARISTOR, CHIP                |  |
| VDR907              | 1-803-974-11 | s  | VARISTOR, CHIP                |  |
| X401                | 1-813-155-21 | s  | OSCILLATOR, CRYSTAL           |  |

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CPU-357 BOARD  
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LPR-1000MD V2

## (CPU-357 BOARD)

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## (CPU-357 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                     |
|---------------------|--------------|------------------------------------|
| C970                | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF    |
| C971                | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C972                | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF    |
| C973                | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C974                | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF    |
| C975                | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C976                | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF    |
| C977                | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C978                | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF    |
| C1000               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF     |
| C1001               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF     |
| C1002               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF     |
| C1003               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF     |
| C1004               | 1-127-573-11 | s CAPACITOR,CERAMIC 1MFB(2012)     |
| C1005               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C1006               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF    |
| C1007               | 1-127-573-11 | s CAPACITOR,CERAMIC 1MFB(2012)     |
| C1008               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C1009               | 1-127-573-11 | s CAPACITOR,CERAMIC 1MFB(2012)     |
| C1010               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF    |
| C1011               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C1012               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF    |
| C1013               | 1-127-573-11 | s CAPACITOR,CERAMIC 1MFB(2012)     |
| C1014               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C1015               | 1-127-573-11 | s CAPACITOR,CERAMIC 1MFB(2012)     |
| C1016               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF    |
| C1017               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C1018               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF    |
| C1019               | 1-127-573-11 | s CAPACITOR,CERAMIC 1MFB(2012)     |
| C1020               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C1021               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF    |
| C1066               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF    |
| C1067               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C1068               | 1-164-862-11 | s CAPACITOR,CHIP CERAMIC 33PF/50   |
| C1200               | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF     |
| C1201               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C1202               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C1203               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C1204               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C1205               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C1206               | 1-164-943-11 | s CAPACITOR,CHIP CERAMIC 0.01MF    |
| C1207               | 1-164-943-11 | s CAPACITOR,CHIP CERAMIC 0.01MF    |
| C1208               | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF     |
| C1209               | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF     |
| C1210               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C1211               | 1-128-416-11 | s CAPACITOR ELECT 100MF/16V(105C   |
| C1212               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C1214               | 1-165-805-91 | s CAPACITOR, CHIP CERAMIC 100000PF |
| C1300               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF     |
| C1301               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C1302               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF    |
| C1303               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C1304               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF    |
| C1305               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF     |
| C1306               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C1307               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |
| C1308               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF    |
| C1309               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF    |
| C1310               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V      |

## (CPU-357 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| C1311               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C1312               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C1313               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C1314               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C1315               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C1316               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C1317               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C1318               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C1319               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C1320               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C1321               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C1322               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C1323               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C1400               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C1401               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C1402               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C1403               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C1404               | 1-107-826-11 | s CAPACITOR,CHIP CERAMIC 0.1MF   |
| C1405               | 1-107-826-11 | s CAPACITOR,CHIP CERAMIC 0.1MF   |
| C1406               | 1-164-943-11 | s CAPACITOR,CHIP CERAMIC 0.01MF  |
| C1407               | 1-164-943-11 | s CAPACITOR,CHIP CERAMIC 0.01MF  |
| C1408               | 1-127-573-11 | s CAPACITOR,CERAMIC 1MFB(2012)   |
| C1409               | 1-127-573-11 | s CAPACITOR,CERAMIC 1MFB(2012)   |
| C1410               | 1-107-826-11 | s CAPACITOR,CHIP CERAMIC 0.1MF   |
| C1411               | 1-107-826-11 | s CAPACITOR,CHIP CERAMIC 0.1MF   |
| C1412               | 1-164-943-11 | s CAPACITOR,CHIP CERAMIC 0.01MF  |
| C1413               | 1-164-943-11 | s CAPACITOR,CHIP CERAMIC 0.01MF  |
| C1414               | 1-127-573-11 | s CAPACITOR,CERAMIC 1MFB(2012)   |
| C1415               | 1-107-826-11 | s CAPACITOR,CHIP CERAMIC 0.1MF   |
| C1416               | 1-164-943-11 | s CAPACITOR,CHIP CERAMIC 0.01MF  |
| C1417               | 1-164-943-11 | s CAPACITOR,CHIP CERAMIC 0.01MF  |
| C1418               | 1-164-943-11 | s CAPACITOR,CHIP CERAMIC 0.01MF  |
| C1419               | 1-127-573-11 | s CAPACITOR,CERAMIC 1MFB(2012)   |
| C1420               | 1-104-607-11 | s CAPACITOR ELECT 47MF/16V(105C) |
| C1421               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C1423               | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF   |
| C1424               | 1-164-943-11 | s CAPACITOR,CHIP CERAMIC 0.01MF  |
| C1425               | 1-107-826-11 | s CAPACITOR,CHIP CERAMIC 0.1MF   |
| C1500               | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF   |
| C1501               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C1502               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C1503               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C1504               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C1505               | 1-107-826-11 | s CAPACITOR,CHIP CERAMIC 0.1MF   |
| C1506               | 1-107-826-11 | s CAPACITOR,CHIP CERAMIC 0.1MF   |
| C1507               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C1508               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C1601               | 1-128-416-11 | s CAPACITOR ELECT 100MF/16V(105C |
| C1602               | 1-128-416-11 | s CAPACITOR ELECT 100MF/16V(105C |
| C1603               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C1604               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C1605               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C1606               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C1607               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C1608               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C1609               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C1610               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C1611               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C1612               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |



## (CPU-357 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description                    |
|---------------------|--------------|----|--------------------------------|
| C3012               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3013               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3014               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3015               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3016               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3017               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3018               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3019               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3020               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3021               | 1-125-777-11 | S  | CAPACITOR CERAMIC 0.1MF/10V    |
| C3022               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3023               | 1-125-777-11 | S  | CAPACITOR CERAMIC 0.1MF/10V    |
| C3024               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3025               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3026               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3027               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3028               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3029               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3030               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3031               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3032               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3033               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3034               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3035               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3036               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3037               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3038               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3039               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3040               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3041               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3042               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3043               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3044               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3045               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3046               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3047               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3048               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3049               | 1-126-399-11 | S  | CAPACITOR ELECT 10MF/35V(CHIP) |
| C3050               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3051               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3052               | 1-125-777-11 | S  | CAPACITOR CERAMIC 0.1MF/10V    |
| C3053               | 1-125-777-11 | S  | CAPACITOR CERAMIC 0.1MF/10V    |
| C3054               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3055               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3056               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3057               | 1-125-777-11 | S  | CAPACITOR CERAMIC 0.1MF/10V    |
| C3058               | 1-125-777-11 | S  | CAPACITOR CERAMIC 0.1MF/10V    |
| C3059               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3060               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3061               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3062               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3063               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3064               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3065               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3066               | 1-107-826-11 | S  | CAPACITOR,CHIP CERAMIC 0.1MF   |
| C3067               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3068               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3069               | 1-164-937-11 | S  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C3070               | 1-127-820-11 | S  | CAPACITOR, SQUARE CHIP 4.7MF   |

## (CPU-357 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| C3071               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C3072               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C3073               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C3074               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C3075               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C3076               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C3077               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C3078               | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C3079               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C3080               | 1-126-399-11 | s CAPACITOR ELECT 10MF/35V(CHIP) |
| C3083               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C3084               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C3085               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C3086               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C3087               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C3088               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C3089               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C3090               | 1-127-820-11 | s CAPACITOR, SQUARE CHIP 4.7MF   |
| C3091               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C3092               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C3093               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C3094               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C3095               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C3096               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C3097               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C3098               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C3099               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C3100               | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| CN1200              | 1-816-289-11 | s JACK, MODULAR                  |
| CN1601              | 1-817-693-11 | s CONNECTOR, USB (B)             |
| CN1701              | 1-815-031-11 | s CONNECTOR, FFC/FPC (ZIF) 24P   |
| D1204               | 6-500-760-01 | s DIODE V0603MHS03NH             |
| D1205               | 6-500-760-01 | s DIODE V0603MHS03NH             |
| D1206               | 6-500-760-01 | s DIODE V0603MHS03NH             |
| D1207               | 6-500-760-01 | s DIODE V0603MHS03NH             |
| D1603               | 8-719-073-98 | s DIODE DF2S12FU(TPH3)           |
| D1604               | 6-500-701-01 | s DIODE PGB0010603NR             |
| D1605               | 6-500-701-01 | s DIODE PGB0010603NR             |
| D1606               | 6-500-760-01 | s DIODE V0603MHS03NH             |
| E100                | 1-535-877-22 | s CHIP,CHECKER (TEST POINT)      |
| E101                | 1-535-877-22 | s CHIP,CHECKER (TEST POINT)      |
| E102                | 1-535-877-22 | s CHIP,CHECKER (TEST POINT)      |
| E103                | 1-535-877-22 | s CHIP,CHECKER (TEST POINT)      |
| FB201               | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB202               | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB203               | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB900               | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB1000              | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB1001              | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB1200              | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB1400              | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB1401              | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB1500              | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB1501              | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB1601              | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB1602              | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB1603              | 1-400-162-21 | s FILTER, EMI                    |
| FB1604              | 1-400-162-21 | s FILTER, EMI                    |

## (CPU-357 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| FB1605              | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH      |
| FB1607              | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH      |
| FB1700              | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH      |
| FB1702              | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)     |
| FB1703              | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)     |
| FB1704              | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)     |
| FB1705              | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)     |
| FB1706              | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)     |
| FB1707              | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)     |
| FB1708              | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)     |
| FB1709              | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)     |
| FB1710              | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)     |
| FB1711              | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)     |
| FB1712              | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)     |
| FB1713              | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)     |
| FB1714              | 1-400-047-21 | s FERRITE, EMI (SMD) (1005)     |
| FB3000              | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH      |
| FB3001              | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH      |
| IC200               | 6-701-042-01 | s IC LT1963EQ-E2                |
| IC202               | 6-701-116-01 | s IC TPS3823-33DBVR             |
| IC401               | 8-759-669-44 | s IC SN74LVC74APWR-12           |
| IC1006              | 8-759-829-30 | s IC CY2305SC-1HT               |
| IC1200              | 6-705-408-01 | s IC 78Q2120C-64CGT/F           |
| IC1300              | 6-701-025-01 | s IC SN74LVC16244ADGGR          |
| IC1301              | 6-701-025-01 | s IC SN74LVC16244ADGGR          |
| IC1302              | 6-700-421-01 | s IC SN74LVCH16245ADGGR         |
| IC1303              | 8-759-679-53 | s IC SN74LVC244APWR             |
| IC1400              | 6-700-394-01 | s IC BA25BC0FP-TE2              |
| IC1402              | 8-759-594-71 | s IC TC7SH14FU-TE85R            |
| IC1501              | 8-759-692-08 | s IC MBM29DL324BE-90PFTN        |
| IC1601              | 6-705-003-01 | s IC M66590FP                   |
| IC1700              | 8-759-549-14 | s IC SN74LV244APWR              |
| IC1802              | 8-759-523-84 | s IC TC74VHC14FT (EL)           |
| IC1803              | 8-759-548-96 | s IC SN74LV02APWR               |
| IC1900              | 6-803-597-01 | s IC 7064BTC44-LPR5000A0V1.00   |
| IC3000              | 8-759-549-14 | s IC SN74LV244APWR              |
| IC3001              | 8-759-549-14 | s IC SN74LV244APWR              |
| L1601               | 1-400-284-21 | s COIL, COMMON MODE CHOKE       |
| Q201                | 8-729-927-99 | s TRANSISTOR 2SC4617R           |
| R101                | 1-208-635-11 | s RESISTOR CHIP 10 1/16W (1005) |
| R102                | 1-208-635-11 | s RESISTOR CHIP 10 1/16W (1005) |
| R103                | 1-208-635-11 | s RESISTOR CHIP 10 1/16W (1005) |
| R104                | 1-208-635-11 | s RESISTOR CHIP 10 1/16W (1005) |
| R106                | 1-208-635-11 | s RESISTOR CHIP 10 1/16W (1005) |
| R107                | 1-208-635-11 | s RESISTOR CHIP 10 1/16W (1005) |
| R108                | 1-208-635-11 | s RESISTOR CHIP 10 1/16W (1005) |
| R109                | 1-208-635-11 | s RESISTOR CHIP 10 1/16W (1005) |
| R110                | 1-208-635-11 | s RESISTOR CHIP 10 1/16W (1005) |
| R112                | 1-208-635-11 | s RESISTOR CHIP 10 1/16W (1005) |
| R113                | 1-208-635-11 | s RESISTOR CHIP 10 1/16W (1005) |
| R114                | 1-208-635-11 | s RESISTOR CHIP 10 1/16W (1005) |
| R115                | 1-208-635-11 | s RESISTOR CHIP 10 1/16W (1005) |
| R116                | 1-208-635-11 | s RESISTOR CHIP 10 1/16W (1005) |
| R117                | 1-208-635-11 | s RESISTOR CHIP 10 1/16W (1005) |
| R118                | 1-208-635-11 | s RESISTOR CHIP 10 1/16W (1005) |
| R119                | 1-208-635-11 | s RESISTOR CHIP 10 1/16W (1005) |
| R200                | 1-218-945-11 | s RESISTOR,CHIP 220 1/16W(1005) |

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| Ref. No.<br>or Q'ty | Part No.     | SP | Description                    |
|---------------------|--------------|----|--------------------------------|
| R548                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R549                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R550                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R551                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R552                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R553                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R554                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R555                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R556                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R557                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R558                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R603                | 1-218-935-11 | s  | RESISTOR,CHIP 33 1/16W (1005)  |
| R700                | 1-218-937-11 | s  | RESISTOR, CHIP 47              |
| R701                | 1-218-937-11 | s  | RESISTOR, CHIP 47              |
| R702                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R703                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R705                | 1-218-990-11 | s  | RESISTOR,CHIP 0 1/16W (1005)   |
| R706                | 1-218-937-11 | s  | RESISTOR, CHIP 47              |
| R707                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R708                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R709                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R710                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R711                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R712                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R713                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R714                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R715                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R716                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R717                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R718                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R719                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R720                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R721                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R722                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R723                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R724                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R725                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R726                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R727                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R728                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R729                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R730                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R731                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R732                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R733                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R734                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R735                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R736                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R737                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R738                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R739                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R740                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R741                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R742                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R743                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R744                | 1-208-643-11 | s  | RESISTOR CHIP 22 1/16W (1005)  |
| R745                | 1-218-938-11 | s  | RESISTOR,CHIP 56 1/16W (1005)  |
| R746                | 1-218-945-11 | s  | RESISTOR,CHIP 220 1/16W (1005) |
| R747                | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W      |



## (CPU-357 BOARD)

[illegible]

## (CPU-357 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description            |
|---------------------|--------------|----|------------------------|
| RB102               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB103               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB104               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB105               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB106               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
|                     |              |    |                        |
| RB107               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB108               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB109               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB110               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB111               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
|                     |              |    |                        |
| RB112               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB113               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB114               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB115               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB116               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
|                     |              |    |                        |
| RB117               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB118               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB119               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB120               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB121               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
|                     |              |    |                        |
| RB122               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB123               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB124               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB125               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
| RB126               | 1-234-369-21 | s  | RES, NETWORK 10X4      |
|                     |              |    |                        |
| RB400               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB401               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB402               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB403               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB500               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
|                     |              |    |                        |
| RB501               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB502               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB503               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB504               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB505               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
|                     |              |    |                        |
| RB506               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB507               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB600               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB601               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB602               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
|                     |              |    |                        |
| RB603               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB604               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB605               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB606               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB607               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
|                     |              |    |                        |
| RB608               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB609               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB610               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB611               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB612               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
|                     |              |    |                        |
| RB613               | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB1300              | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB1301              | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB1302              | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB1303              | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
|                     |              |    |                        |
| RB1304              | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB1400              | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB1401              | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |
| RB1402              | 1-234-380-11 | s  | RESISTOE,NETWORK 47KX4 |

## (CPU-357 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description                |        |
|---------------------|--------------|----|----------------------------|--------|
| RB1403              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| RB1404              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| RB1601              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| RB1602              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| RB1603              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| RB1604              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| RB3000              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| RB3001              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| RB3006              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| RB3007              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| RB3008              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| RB3009              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| RB3010              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| RB3011              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| RB3012              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| RB3013              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| RB3014              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| RB3015              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| RB3016              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| RB3017              | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4    | (1005) |
| T1200               | 1-437-527-41 | s  | TRANSFORMER, PULSE         |        |
| THP700              | 1-533-817-21 | s  | THERMISTOR                 |        |
| TP100               | 1-535-877-22 | s  | CHIP, CHECKER (TEST POINT) |        |
| VDR161              | 1-801-922-11 | s  | VARISTOR, CHIP             |        |
| X700                | 1-795-176-21 | s  | OSCILLATOR, CRYSTAL        |        |
| X1200               | 1-795-457-21 | s  | OSCILLATOR, CRYSTAL (SMD)  |        |
| X1601               | 1-795-904-21 | s  | OSCILLATOR, CRYSTAL        |        |

## FP-138 BOARD

| Ref. No.<br>or Q'ty | Part No.     | SP | Description                     |        |
|---------------------|--------------|----|---------------------------------|--------|
| C101                | 1-125-827-11 | s  | CAPACITOR, CERAMIC 1MF/25V      |        |
| C102                | 1-126-396-11 | s  | CAPACITOR, ELECT 47MF/16V(CHIP) |        |
| C103                | 1-126-396-11 | s  | CAPACITOR, ELECT 47MF/16V(CHIP) |        |
| C104                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C105                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C106                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C107                | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |        |
| C108                | 1-164-874-11 | s  | CAPACITOR, CHIP CERAMIC 100PF   |        |
| C109                | 1-164-874-11 | s  | CAPACITOR, CHIP CERAMIC 100PF   |        |
| C110                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C111                | 1-125-827-11 | s  | CAPACITOR, CERAMIC 1MF/25V      |        |
| C112                | 1-162-970-11 | s  | CAPACITOR CERAMIC 0.01MF/25V B  |        |
| C113                | 1-135-960-91 | s  | CAP, CHIP CERAMIC 10MF B(3225)  |        |
| C114                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C115                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C120                | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |        |
| C121                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C122                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C123                | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |        |
| C124                | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |        |
| C125                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C126                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C127                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C128                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C129                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C130                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C131                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C132                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C133                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C134                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C135                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C136                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C137                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| C138                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |        |
| CN101               | 1-778-795-21 | s  | PIN, CONNECTOR 9P               |        |
| CN102               | 1-573-934-21 | s  | CONNECTOR, FFC/FPC (ZIF) 25P    |        |
| D101                | 8-719-037-96 | s  | LED CL-190G-CD                  |        |
| D102                | 8-719-037-96 | s  | LED CL-190G-CD                  |        |
| D105                | 8-719-071-34 | s  | DIODE RB521S-30-TE61            |        |
| D108                | 8-719-071-34 | s  | DIODE RB521S-30-TE61            |        |
| D109                | 6-500-051-01 | s  | DIODE TLGE1005B(T03)            |        |
| D110                | 6-500-704-01 | s  | DIODE TLYE1005B(T03)            |        |
| D111                | 6-500-051-01 | s  | DIODE TLGE1005B(T03)            |        |
| D112                | 6-500-704-01 | s  | DIODE TLYE1005B(T03)            |        |
| E101                | 1-535-877-22 | s  | CHIP, CHECKER (TEST POINT)      |        |
| E102                | 1-535-877-22 | s  | CHIP, CHECKER (TEST POINT)      |        |
| FB101               | 1-400-462-21 | s  | FERRITE, EMI (SMD)              | (1005) |
| FB102               | 1-400-462-21 | s  | FERRITE, EMI (SMD)              | (1005) |
| FB103               | 1-400-462-21 | s  | FERRITE, EMI (SMD)              | (1005) |
| FB104               | 1-400-462-21 | s  | FERRITE, EMI (SMD)              | (1005) |
| FB105               | 1-400-462-21 | s  | FERRITE, EMI (SMD)              | (1005) |
| FB106               | 1-400-461-21 | s  | FERRITE, EMI (SMD)              | (1005) |
| FB107               | 1-400-461-21 | s  | FERRITE, EMI (SMD)              | (1005) |
| FB108               | 1-400-462-21 | s  | FERRITE, EMI (SMD)              | (1005) |
| FB109               | 1-400-462-21 | s  | FERRITE, EMI (SMD)              | (1005) |
| FB110               | 1-400-462-21 | s  | FERRITE, EMI (SMD)              | (1005) |
| FB111               | 1-400-462-21 | s  | FERRITE, EMI (SMD)              | (1005) |

## (FP-138 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description                     |
|---------------------|--------------|----|---------------------------------|
| FB112               | 1-400-462-21 | s  | FERRITE, EMI (SMD) (1005)       |
| FB113               | 1-400-462-21 | s  | FERRITE, EMI (SMD) (1005)       |
| FB114               | 1-400-462-21 | s  | FERRITE, EMI (SMD) (1005)       |
| FB115               | 1-400-462-21 | s  | FERRITE, EMI (SMD) (1005)       |
| FB116               | 1-469-324-21 | s  | FERRITE, EMI (SMD) 4.7UH        |
| FB117               | 1-469-324-21 | s  | FERRITE, EMI (SMD) 4.7UH        |
| FB118               | 1-400-461-21 | s  | FERRITE, EMI (SMD) (1005)       |
| FB119               | 1-400-461-21 | s  | FERRITE, EMI (SMD) (1005)       |
| FB120               | 1-400-461-21 | s  | FERRITE, EMI (SMD) (1005)       |
| FB121               | 1-400-461-21 | s  | FERRITE, EMI (SMD) (1005)       |
| FB122               | 1-400-461-21 | s  | FERRITE, EMI (SMD) (1005)       |
| IC101               | 8-759-687-37 | s  | IC OPA2340EA/2K5-S              |
| IC102               | 8-759-670-89 | s  | IC BU2090FS-E2                  |
| IC103               | 8-759-460-71 | s  | IC BA030FP-E2                   |
| IC104               | 8-759-549-14 | s  | IC SN74LV244APWR                |
| Q101                | 8-729-927-99 | s  | TRANSISTOR 2SC4617R             |
| Q102                | 8-729-927-99 | s  | TRANSISTOR 2SC4617R             |
| Q103                | 8-729-927-99 | s  | TRANSISTOR 2SC4617R             |
| Q104                | 8-729-927-99 | s  | TRANSISTOR 2SC4617R             |
| R101                | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W       |
| R103                | 1-218-957-11 | s  | RESISTOR, CHIP 2.2K 1/16W(1608) |
| R104                | 1-218-965-11 | s  | RESISTOR, CHIP 10K 1/16W        |
| R105                | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W       |
| R106                | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W       |
| R109                | 1-218-977-11 | s  | RESISTOR, CHIP 100K 1/16W(1005) |
| R110                | 1-216-817-11 | s  | RESISTOR, CHIP 470 1/10W 1608   |
| R111                | 1-216-817-11 | s  | RESISTOR, CHIP 470 1/10W 1608   |
| R112                | 1-218-937-11 | s  | RESISTOR, CHIP 47               |
| R113                | 1-218-937-11 | s  | RESISTOR, CHIP 47               |
| R114                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R115                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R117                | 1-218-990-11 | s  | RESISTOR, CHIP 0 1/16W (1005)   |
| R118                | 1-218-965-11 | s  | RESISTOR, CHIP 10K 1/16W        |
| R119                | 1-218-965-11 | s  | RESISTOR, CHIP 10K 1/16W        |
| R120                | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W        |
| R121                | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W        |
| R122                | 1-208-707-11 | s  | RESISTOR, CHIP 10K 1/16W (1005) |
| R123                | 1-208-707-11 | s  | RESISTOR, CHIP 10K 1/16W (1005) |
| R124                | 1-208-721-11 | s  | RESISTOR CHIP 39K 1/16W (1005)  |
| R125                | 1-208-709-11 | s  | RESISTOR CHIP 12K 1/16W (1005)  |
| R126                | 1-208-703-11 | s  | RESISTOR, CHIP 6.8K 1/16W(1005) |
| R127                | 1-208-697-11 | s  | RESISTOR CHIP 3.9K 1/16W(1005)  |
| R128                | 1-218-958-11 | s  | RESISTOR, CHIP 2.7K 1/16W(1005) |
| R129                | 1-208-689-11 | s  | RESISTOR CHIP 1.8K 1/16W(1005)  |
| R130                | 1-208-687-11 | s  | RESISTOR CHIP 1.5K 1/16W (1005) |
| R134                | 1-218-959-11 | s  | RESISTOR, CHIP 3.3K             |
| R135                | 1-218-959-11 | s  | RESISTOR, CHIP 3.3K             |
| R136                | 1-218-959-11 | s  | RESISTOR, CHIP 3.3K             |
| R137                | 1-218-959-11 | s  | RESISTOR, CHIP 3.3K             |
| R142                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R143                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R144                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R145                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R146                | 1-218-990-11 | s  | RESISTOR, CHIP 0 1/16W (1005)   |
| R147                | 1-218-990-11 | s  | RESISTOR, CHIP 0 1/16W (1005)   |
| R149                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R150                | 1-216-815-11 | s  | RESISTOR, CHIP 330 1/10W 1608   |
| R151                | 1-216-815-11 | s  | RESISTOR, CHIP 330 1/10W 1608   |

## (FP-138 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description                     |
|---------------------|--------------|----|---------------------------------|
| R152                | 1-216-815-11 | s  | RESISTOR, CHIP 330 1/10W 1608   |
| R153                | 1-216-815-11 | s  | RESISTOR, CHIP 330 1/10W 1608   |
| R154                | 1-216-815-11 | s  | RESISTOR, CHIP 330 1/10W 1608   |
| R155                | 1-216-815-11 | s  | RESISTOR, CHIP 330 1/10W 1608   |
| R156                | 1-216-815-11 | s  | RESISTOR, CHIP 330 1/10W 1608   |
| R157                | 1-216-815-11 | s  | RESISTOR, CHIP 330 1/10W 1608   |
| R159                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| R161                | 1-218-990-11 | s  | RESISTOR, CHIP 0 1/16W (1005)   |
| R162                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005) |
| RB101               | 1-234-378-11 | s  | RES, NETWORK 10KX4 (1005)       |
| RB102               | 1-234-378-11 | s  | RES, NETWORK 10KX4 (1005)       |
| RB103               | 1-234-378-11 | s  | RES, NETWORK 10KX4 (1005)       |
| RB104               | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4 (1005)  |
| RB105               | 1-234-380-11 | s  | RESISTOE, NETWORK 47KX4 (1005)  |
| S101                | 1-786-608-21 | s  | SWITCH, TACTILE                 |
| S102                | 1-786-608-21 | s  | SWITCH, TACTILE                 |
| S103                | 1-786-608-21 | s  | SWITCH, TACTILE                 |
| S104                | 1-786-608-21 | s  | SWITCH, TACTILE                 |
| S105                | 1-786-608-21 | s  | SWITCH, TACTILE                 |
| S106                | 1-786-608-21 | s  | SWITCH, TACTILE                 |
| S107                | 1-786-608-21 | s  | SWITCH, TACTILE                 |
| VDR105              | 1-803-974-11 | s  | VARISTOR, CHIP                  |
| VDR106              | 1-803-974-11 | s  | VARISTOR, CHIP                  |
| VDR107              | 1-803-974-11 | s  | VARISTOR, CHIP                  |
| VDR109              | 1-801-922-11 | s  | VARISTOR, CHIP                  |
| VDR110              | 1-801-922-11 | s  | VARISTOR, CHIP                  |
| VDR111              | 1-803-974-11 | s  | VARISTOR, CHIP                  |
| VDR112              | 1-803-974-11 | s  | VARISTOR, CHIP                  |
| VDR113              | 1-803-974-11 | s  | VARISTOR, CHIP                  |
| VDR114              | 1-803-974-11 | s  | VARISTOR, CHIP                  |
| VDR115              | 1-803-974-11 | s  | VARISTOR, CHIP                  |
| VDR116              | 1-803-974-11 | s  | VARISTOR, CHIP                  |
| VDR117              | 1-801-922-11 | s  | VARISTOR, CHIP                  |
| VDR118              | 1-801-922-11 | s  | VARISTOR, CHIP                  |
| VDR119              | 1-803-974-11 | s  | VARISTOR, CHIP                  |
| VDR120              | 1-801-922-11 | s  | VARISTOR, CHIP                  |
| VDR121              | 1-803-974-11 | s  | VARISTOR, CHIP                  |
| VDR122              | 1-801-922-11 | s  | VARISTOR, CHIP                  |
| VDR123              | 1-801-922-11 | s  | VARISTOR, CHIP                  |
| VDR124              | 1-801-922-11 | s  | VARISTOR, CHIP                  |



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| Ref. No.<br>or Q'ty | Part No.     | SP | Description                     |
|---------------------|--------------|----|---------------------------------|
| BT201               | 1-550-414-31 | s  | HOLDER, BATTERY                 |
| C101                | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF    |
| C102                | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF    |
| C103                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C104                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C105                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C106                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C107                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C108                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C109                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C110                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C111                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C112                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C114                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C115                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C117                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C118                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C119                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C120                | 1-135-960-91 | s  | CAP, CHIP CERAMIC 10MF B(3225)  |
| C121                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C122                | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF    |
| C123                | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF    |
| C124                | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF    |
| C125                | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF    |
| C126                | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF    |
| C127                | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF    |
| C128                | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF    |
| C129                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C130                | 1-164-882-11 | s  | CAPACITOR,CERAMIC 220PF/16V CH  |
| C131                | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF    |
| C132                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C201                | 1-107-420-11 | s  | CAPACITOR,ELECT 47MF/35V(105C)  |
| C202                | 1-128-416-11 | s  | CAPACITOR ELECT 100MF/16V(105C) |
| C203                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C204                | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF    |
| C205                | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF    |
| C206                | 1-115-339-11 | s  | CAPACITOR,CERAMIC 0.1MF/50V     |
| C207                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C208                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C209                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C210                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C211                | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |
| C212                | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF    |
| C213                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C214                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C215                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C216                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C217                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C218                | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF    |
| C219                | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF    |
| C220                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C221                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C222                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C223                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C224                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V     |
| C225                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF   |
| C226                | 1-100-352-91 | s  | CAP, CHIP CERAMIC 1MF B (1608)  |
| C227                | 1-100-352-91 | s  | CAP, CHIP CERAMIC 1MF B (1608)  |

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| Ref. No.<br>or Q'ty | Part No.     | SP | Description                    |
|---------------------|--------------|----|--------------------------------|
| C229                | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF   |
| C230                | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF   |
| C232                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C233                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C234                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C235                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C236                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C237                | 1-126-396-11 | s  | CAPACITOR,ELECT 47MF/16V(CHIP) |
| C238                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C239                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C241                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C242                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C301                | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF   |
| C302                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C303                | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF   |
| C304                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C305                | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF   |
| C306                | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF   |
| C307                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C308                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C309                | 1-127-573-11 | s  | CAPACITOR,CERAMIC 1MFB(2012)   |
| C310                | 1-127-573-11 | s  | CAPACITOR,CERAMIC 1MFB(2012)   |
| C311                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C313                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C314                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C315                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C316                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C317                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C318                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C401                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C402                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C403                | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF   |
| C404                | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF   |
| C405                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C406                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C407                | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF   |
| C408                | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF   |
| C409                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C410                | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF   |
| C411                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C412                | 1-107-420-11 | s  | CAPACITOR,ELECT 47MF/35V(105C) |
| C413                | 1-115-339-11 | s  | CAPACITOR,CERAMIC 0.1MF/50V    |
| C414                | 1-164-937-11 | s  | CAPACITOR,CHIP CERAMIC 1000PF  |
| C415                | 1-164-882-11 | s  | CAPACITOR,CERAMIC 220PF/16V CH |
| C416                | 1-125-898-91 | s  | C-CAP, 0.22-50 Z F             |
| C417                | 1-125-898-91 | s  | C-CAP, 0.22-50 Z F             |
| C418                | 1-127-715-11 | s  | CAPACITOR,CERAMIC 0.22MF B1608 |
| C419                | 1-125-898-91 | s  | C-CAP, 0.22-50 Z F             |
| C420                | 1-125-898-91 | s  | C-CAP, 0.22-50 Z F             |
| C421                | 1-127-715-11 | s  | CAPACITOR,CERAMIC 0.22MF B1608 |
| C422                | 1-107-420-11 | s  | CAPACITOR,ELECT 47MF/35V(105C) |
| C423                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C424                | 1-107-420-11 | s  | CAPACITOR,ELECT 47MF/35V(105C) |
| C425                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C426                | 1-115-339-11 | s  | CAPACITOR,CERAMIC 0.1MF/50V    |
| C427                | 1-115-339-11 | s  | CAPACITOR,CERAMIC 0.1MF/50V    |
| C434                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C435                | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF   |
| C436                | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |

## (MEC-21 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| C437                | 1-107-420-11 | s CAPACITOR,ELECT 47MF/35V(105C) |
| C438                | 1-115-339-11 | s CAPACITOR,CERAMIC 0.1MF/50V    |
| C439                | 1-164-937-11 | s CAPACITOR,CHIP CERAMIC 1000PF  |
| C440                | 1-164-882-11 | s CAPACITOR,CERAMIC 220PF/16V CH |
| CN101               | 1-569-775-11 | o PIN, CONNECTOR                 |
| CN102               | 1-691-551-11 | o PIN, CONNECTOR (SMD) 8P        |
| CN103               | 1-691-551-11 | o PIN, CONNECTOR (SMD) 8P        |
| CN104               | 1-764-007-11 | o PIN, CONNECTOR (SMD) 12P       |
| CN105               | 1-764-007-11 | o PIN, CONNECTOR (SMD) 12P       |
| CN106               | 1-580-056-21 | s PIN,CONNECTOR 3P               |
| CN107               | 1-691-346-11 | s CONNECTOR, FFC/FPC 8P          |
| CN201               | 1-774-863-11 | s PIN, CONNECTOR (PC BOARD) 8P   |
| CN202               | 1-580-056-21 | s PIN,CONNECTOR 3P               |
| CN203               | 1-815-031-11 | s CONNECTOR, FFC/FPC (ZIF) 24P   |
| CN301               | 1-778-795-21 | s PIN, CONNECTOR 9P              |
| CN401               | 1-750-005-11 | o PIN,CONNECTOR 4P               |
| CN402               | 1-750-005-11 | o PIN,CONNECTOR 4P               |
| D101                | 8-719-073-01 | s DIODE MA111-(K8).S0            |
| D201                | 8-719-037-96 | s LED CL-190G-CD                 |
| D202                | 8-719-037-96 | s LED CL-190G-CD                 |
| D203                | 8-719-988-82 | s DIODE RB715F                   |
| D204                | 8-719-071-34 | s DIODE RB521S-30-TE61           |
| D301                | 8-719-071-34 | s DIODE RB521S-30-TE61           |
| D302                | 8-719-071-34 | s DIODE RB521S-30-TE61           |
| D303                | 8-719-071-34 | s DIODE RB521S-30-TE61           |
| D304                | 8-719-071-34 | s DIODE RB521S-30-TE61           |
| D401                | 8-719-073-92 | s DIODE RB060L-40TE25            |
| D402                | 8-719-073-92 | s DIODE RB060L-40TE25            |
| D413                | 8-719-073-92 | s DIODE RB060L-40TE25            |
| D414                | 8-719-073-92 | s DIODE RB060L-40TE25            |
| E101                | 1-535-877-22 | s CHIP,CHECKER (TEST POINT)      |
| FB101               | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB102               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)      |
| FB103               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)      |
| FB104               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB105               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB106               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB107               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB108               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB109               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB110               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB111               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB112               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB113               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB114               | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB115               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB116               | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH       |
| FB117               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB118               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB119               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB120               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB121               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB122               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB123               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB124               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB125               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |
| FB126               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)      |

## (MEC-21 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                 |
|---------------------|--------------|--------------------------------|
| FB127               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)    |
| FB128               | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH     |
| FB129               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)    |
| FB130               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)    |
| FB131               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)    |
| FB132               | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH     |
| FB201               | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH     |
| FB202               | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH     |
| FB203               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)    |
| FB204               | 1-400-461-21 | s FERRITE, EMI (SMD) (1005)    |
| FB205               | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH     |
| FB206               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)    |
| FB207               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)    |
| FB208               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)    |
| FB209               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)    |
| FB210               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)    |
| FB211               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)    |
| FB212               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)    |
| FB213               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)    |
| FB214               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)    |
| FB215               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)    |
| FB216               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)    |
| FB217               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)    |
| FB218               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)    |
| FB301               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)    |
| FB302               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)    |
| FB303               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)    |
| FB304               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)    |
| FB305               | 1-400-462-21 | s FERRITE, EMI (SMD) (1005)    |
| FB306               | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH     |
| FB307               | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH     |
| FB401               | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH     |
| FB402               | 1-469-379-11 | s FERRITE, EMI (SMD) 4.7UH     |
| FB403               | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH     |
| FB404               | 1-469-324-21 | s FERRITE, EMI (SMD) 4.7UH     |
| FB405               | 1-469-379-11 | s FERRITE, EMI (SMD)           |
| FB406               | 1-469-379-11 | s FERRITE, EMI (SMD)           |
| FB407               | 1-469-379-11 | s FERRITE, EMI (SMD)           |
| FB409               | 1-469-379-11 | s FERRITE, EMI (SMD)           |
| FB410               | 1-469-379-11 | s FERRITE, EMI (SMD)           |
| FB411               | 1-469-379-11 | s FERRITE, EMI (SMD)           |
| FB412               | 1-469-379-11 | s FERRITE, EMI (SMD)           |
| FB413               | 1-469-379-11 | s FERRITE, EMI (SMD)           |
| FB414               | 1-469-379-11 | s FERRITE, EMI (SMD)           |
| FB415               | 1-469-379-11 | s FERRITE, EMI (SMD)           |
| FB416               | 1-469-379-11 | s FERRITE, EMI (SMD)           |
| IC101               | 6-803-598-01 | s IC 37905F8CFP-LPR5000M0V1.00 |
| IC102               | 8-759-549-14 | s IC SN74LV244APWR             |
| IC201               | 8-759-648-04 | s IC RTC4574JE-TP              |
| IC202               | 8-759-523-84 | s IC TC74VHC14FT (EL)          |
| IC203               | 8-759-548-96 | s IC SN74LV02APWR              |
| IC204               | 8-759-523-84 | s IC TC74VHC14FT (EL)          |
| IC205               | 8-759-196-96 | s IC TC7SH08FU (TE85R)         |
| IC206               | 8-759-578-68 | s IC SN74LVCC4245APWR          |
| IC207               | 8-759-578-68 | s IC SN74LVCC4245APWR          |
| IC301               | 8-759-196-96 | s IC TC7SH08FU (TE85R)         |
| IC302               | 8-759-196-96 | s IC TC7SH08FU (TE85R)         |
| IC401               | 6-701-548-01 | s IC A3952SLB-TR               |

## (MEC-21 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description                      |
|---------------------|--------------|----|----------------------------------|
| IC402               | 6-705-040-01 | s  | IC A3959SLBTR                    |
| IC403               | 6-705-040-01 | s  | IC A3959SLBTR                    |
| IC404               | 6-701-548-01 | s  | IC A3952SLB-TR                   |
| IC3003              | 8-759-100-93 | s  | IC UPC393G2                      |
| PH201               | 8-719-052-69 | s  | PHOTO INTERRUPTER RPI-352        |
| Q101                | 8-729-929-08 | s  | TRANSISTOR DTC123JE              |
| Q102                | 8-729-929-08 | s  | TRANSISTOR DTC123JE              |
| Q103                | 8-729-928-54 | s  | TRANSISTOR DTA123JE              |
| Q201                | 8-729-929-08 | s  | TRANSISTOR DTC123JE              |
| Q202                | 8-729-929-08 | s  | TRANSISTOR DTC123JE              |
| Q203                | 8-729-047-32 | s  | TRANSISTOR SI4425DY-T1           |
| Q204                | 8-729-047-32 | s  | TRANSISTOR SI4425DY-T1           |
| R1                  | 1-218-477-11 | s  | RESISTOR CHIP 220 1/4W (3225)    |
| R2                  | 1-218-477-11 | s  | RESISTOR CHIP 220 1/4W (3225)    |
| R3                  | 1-218-477-11 | s  | RESISTOR CHIP 220 1/4W (3225)    |
| R4                  | 1-218-477-11 | s  | RESISTOR CHIP 220 1/4W (3225)    |
| R5                  | 1-218-477-11 | s  | RESISTOR CHIP 220 1/4W (3225)    |
| R6                  | 1-218-477-11 | s  | RESISTOR CHIP 220 1/4W (3225)    |
| R7                  | 1-218-477-11 | s  | RESISTOR CHIP 220 1/4W (3225)    |
| R8                  | 1-218-477-11 | s  | RESISTOR CHIP 220 1/4W (3225)    |
| R9                  | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005)  |
| R10                 | 1-218-477-11 | s  | RESISTOR CHIP 220 1/4W (3225)    |
| R11                 | 1-218-477-11 | s  | RESISTOR CHIP 220 1/4W (3225)    |
| R12                 | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005)  |
| R13                 | 1-218-969-11 | s  | RESISTOR, CHIP 22K 1/16W (1608)  |
| R14                 | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W        |
| R15                 | 1-218-965-11 | s  | RESISTOR, CHIP 10K 1/16W         |
| R16                 | 1-218-941-81 | s  | RESISTOR, CHIP 100, 1/16W (1005) |
| R17                 | 1-218-941-81 | s  | RESISTOR, CHIP 100, 1/16W (1005) |
| R18                 | 1-218-969-11 | s  | RESISTOR, CHIP 22K 1/16W (1608)  |
| R19                 | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W        |
| R20                 | 1-218-965-11 | s  | RESISTOR, CHIP 10K 1/16W         |
| R21                 | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W          |
| R22                 | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W          |
| R23                 | 1-218-971-11 | s  | RESISTOR, CHIP 33K 1/16W (1005)  |
| R24                 | 1-218-969-11 | s  | RESISTOR, CHIP 22K 1/16W (1608)  |
| R25                 | 1-218-969-11 | s  | RESISTOR, CHIP 22K 1/16W (1608)  |
| R26                 | 1-218-969-11 | s  | RESISTOR, CHIP 22K 1/16W (1608)  |
| R27                 | 1-218-969-11 | s  | RESISTOR, CHIP 22K 1/16W (1608)  |
| R28                 | 1-218-969-11 | s  | RESISTOR, CHIP 22K 1/16W (1608)  |
| R29                 | 1-218-969-11 | s  | RESISTOR, CHIP 22K 1/16W (1608)  |
| R30                 | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W        |
| R31                 | 1-218-969-11 | s  | RESISTOR, CHIP 22K 1/16W (1608)  |
| R32                 | 1-218-961-11 | s  | RESISTOR, CHIP 4.7K 1/16W        |
| R33                 | 1-218-969-11 | s  | RESISTOR, CHIP 22K 1/16W (1608)  |
| R34                 | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W          |
| R35                 | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W          |
| R36                 | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W          |
| R37                 | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W          |
| R38                 | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W          |
| R39                 | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W          |
| R40                 | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W          |
| R41                 | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W          |
| R42                 | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W          |
| R43                 | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W          |
| R44                 | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W          |
| R45                 | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W          |

## (MEC-21 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description                      |
|---------------------|--------------|----|----------------------------------|
| R46                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R47                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R48                 | 1-218-969-11 | s  | RESISTOR, CHIP 22K 1/16W (1608)  |
| R49                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R50                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R51                 | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W          |
| R52                 | 1-218-971-11 | s  | RESISTOR, CHIP 33K 1/16W (1005)  |
| R54                 | 1-218-965-11 | s  | RESISTOR, CHIP 10K 1/16W         |
| R55                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R56                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R57                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R58                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R59                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R60                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R62                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R63                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R64                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R65                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R66                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R67                 | 1-218-941-81 | s  | RESISTOR, CHIP 100, 1/16W (1005) |
| R68                 | 1-218-941-81 | s  | RESISTOR, CHIP 100, 1/16W (1005) |
| R69                 | 1-218-941-81 | s  | RESISTOR, CHIP 100, 1/16W (1005) |
| R70                 | 1-218-941-81 | s  | RESISTOR, CHIP 100, 1/16W (1005) |
| R71                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R72                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R73                 | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W          |
| R74                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R75                 | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W          |
| R76                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R77                 | 1-218-941-81 | s  | RESISTOR, CHIP 100, 1/16W (1005) |
| R78                 | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005)  |
| R79                 | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005)  |
| R80                 | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005)  |
| R81                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R82                 | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005)  |
| R83                 | 1-218-941-81 | s  | RESISTOR, CHIP 100, 1/16W (1005) |
| R84                 | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005)  |
| R85                 | 1-218-941-81 | s  | RESISTOR, CHIP 100, 1/16W (1005) |
| R86                 | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005)  |
| R87                 | 1-218-941-81 | s  | RESISTOR, CHIP 100, 1/16W (1005) |
| R88                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R89                 | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005)  |
| R90                 | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005)  |
| R91                 | 1-218-989-11 | s  | RESISTOR, CHIP 1M 1/16W (1005)   |
| R92                 | 1-218-963-11 | s  | RESISTOR, CHIP 6.8K 1/16W        |
| R93                 | 1-218-951-11 | s  | RESISTOR, CHIP 680 1/16          |
| R94                 | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005)  |
| R95                 | 1-218-953-11 | s  | RESISTOR, CHIP 1K 1/16W          |
| R96                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R97                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R98                 | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005)  |
| R99                 | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R100                | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R101                | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W         |
| R102                | 1-218-973-11 | s  | RESISTOR, CHIP 47K 1/16W (1005)  |
| R201                | 1-218-951-11 | s  | RESISTOR, CHIP 680 1/16          |
| R202                | 1-216-821-11 | s  | RESISTOR, CHIP 1.0K 1/10W (1608) |
| R203                | 1-216-821-11 | s  | RESISTOR, CHIP 1.0K 1/10W (1608) |
| R204                | 1-216-821-11 | s  | RESISTOR, CHIP 1.0K 1/10W (1608) |

## (MEC-21 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| R205                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R206                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R207                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R208                | 1-218-965-11 | s RESISTOR, CHIP 10K 1/16W       |
| R209                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R210                | 1-218-965-11 | s RESISTOR, CHIP 10K 1/16W       |
| R213                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R214                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R215                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R216                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R217                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R218                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R219                | 1-218-953-11 | s RESISTOR, CHIP 1K 1/16W        |
| R220                | 1-218-961-11 | s RESISTOR, CHIP 4.7K 1/16W      |
| R222                | 1-218-961-11 | s RESISTOR, CHIP 4.7K 1/16W      |
| R224                | 1-218-965-11 | s RESISTOR, CHIP 10K 1/16W       |
| R225                | 1-218-965-11 | s RESISTOR, CHIP 10K 1/16W       |
| R226                | 1-218-965-11 | s RESISTOR, CHIP 10K 1/16W       |
| R227                | 1-218-965-11 | s RESISTOR, CHIP 10K 1/16W       |
| R228                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R229                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R230                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R231                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R232                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R235                | 1-208-707-11 | s RESISTOR,CHIP 10K 1/16W (1005) |
| R237                | 1-218-969-11 | s RESISTOR,CHIP 22K 1/16W (1608) |
| R238                | 1-218-969-11 | s RESISTOR,CHIP 22K 1/16W (1608) |
| R239                | 1-218-477-11 | s RESISTOR CHIP 220 1/4W (3225)  |
| R241                | 1-218-477-11 | s RESISTOR CHIP 220 1/4W (3225)  |
| R242                | 1-218-953-11 | s RESISTOR, CHIP 1K 1/16W        |
| R243                | 1-218-953-11 | s RESISTOR, CHIP 1K 1/16W        |
| R244                | 1-218-953-11 | s RESISTOR, CHIP 1K 1/16W        |
| R246                | 1-218-969-11 | s RESISTOR,CHIP 22K 1/16W (1608) |
| R247                | 1-218-969-11 | s RESISTOR,CHIP 22K 1/16W (1608) |
| R248                | 1-218-953-11 | s RESISTOR, CHIP 1K 1/16W        |
| R249                | 1-218-953-11 | s RESISTOR, CHIP 1K 1/16W        |
| R251                | 1-218-947-11 | s RESISTOR, CHIP 330 1/16W       |
| R253                | 1-218-947-11 | s RESISTOR, CHIP 330 1/16W       |
| R254                | 1-218-947-11 | s RESISTOR, CHIP 330 1/16W       |
| R301                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R302                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R304                | 1-218-965-11 | s RESISTOR, CHIP 10K 1/16W       |
| R305                | 1-218-961-11 | s RESISTOR, CHIP 4.7K 1/16W      |
| R306                | 1-218-965-11 | s RESISTOR, CHIP 10K 1/16W       |
| R307                | 1-218-961-11 | s RESISTOR, CHIP 4.7K 1/16W      |
| R308                | 1-218-941-81 | s RESISTOR,CHIP 100,1/16W (1005) |
| R309                | 1-218-941-81 | s RESISTOR,CHIP 100,1/16W (1005) |
| R310                | 1-218-941-81 | s RESISTOR,CHIP 100,1/16W (1005) |
| R311                | 1-218-947-11 | s RESISTOR, CHIP 330 1/16W       |
| R312                | 1-218-961-11 | s RESISTOR, CHIP 4.7K 1/16W      |
| R313                | 1-218-947-11 | s RESISTOR, CHIP 330 1/16W       |
| R314                | 1-218-961-11 | s RESISTOR, CHIP 4.7K 1/16W      |
| R315                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R316                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R317                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R318                | 1-208-707-11 | s RESISTOR,CHIP 10K 1/16W (1005) |
| R319                | 1-208-707-11 | s RESISTOR,CHIP 10K 1/16W (1005) |
| R320                | 1-218-965-11 | s RESISTOR, CHIP 10K 1/16W       |
| R321                | 1-218-965-11 | s RESISTOR, CHIP 10K 1/16W       |

## (MEC-21 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| R322                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R323                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R324                | 1-218-965-11 | s RESISTOR, CHIP 10K 1/16W       |
| R325                | 1-218-965-11 | s RESISTOR, CHIP 10K 1/16W       |
| R401                | 1-218-990-11 | s RESISTOR,CHIP 0 1/16W (1005)   |
| R402                | 1-218-990-11 | s RESISTOR,CHIP 0 1/16W (1005)   |
| R403                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R406                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R407                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R409                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R411                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R413                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R415                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R417                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R418                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R423                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R425                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R428                | 1-218-990-11 | s RESISTOR,CHIP 0 1/16W (1005)   |
| R430                | 1-218-990-11 | s RESISTOR,CHIP 0 1/16W (1005)   |
| R431                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R433                | 1-208-703-11 | s RESISTOR,CHIP 6.8K 1/16W(1005) |
| R434                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R436                | 1-218-990-11 | s RESISTOR,CHIP 0 1/16W (1005)   |
| R437                | 1-218-971-11 | s RESISTOR,CHIP 33K 1/16W (1005) |
| R438                | 1-208-713-11 | s RESISTOR CHIP 18K 1/16W (1005) |
| R439                | 1-208-695-11 | s RESISTOR CHIP 3.3K 1/16W(1005) |
| R440                | 1-218-971-11 | s RESISTOR,CHIP 33K 1/16W (1005) |
| R441                | 1-208-713-11 | s RESISTOR CHIP 18K 1/16W (1005) |
| R442                | 1-218-963-11 | s RESISTOR,CHIP 6.8K 1/16W       |
| R443                | 1-218-961-11 | s RESISTOR, CHIP 4.7K 1/16W      |
| R445                | 1-218-965-11 | s RESISTOR, CHIP 10K 1/16W       |
| R446                | 1-218-963-11 | s RESISTOR,CHIP 6.8K 1/16W       |
| R447                | 1-218-961-11 | s RESISTOR, CHIP 4.7K 1/16W      |
| R448                | 1-245-259-21 | s RESISTOR, METAL FILM CHIP 0.22 |
| R449                | 1-218-969-11 | s RESISTOR,CHIP 22K 1/16W (1608) |
| R450                | 1-219-706-11 | s RESISTOR, CHIP 0.10/1W         |
| R451                | 1-219-706-11 | s RESISTOR, CHIP 0.10/1W         |
| R453                | 1-218-990-11 | s RESISTOR,CHIP 0 1/16W (1005)   |
| R454                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R455                | 1-218-973-11 | s RESISTOR,CHIP 47K 1/16W (1005) |
| R456                | 1-208-703-11 | s RESISTOR,CHIP 6.8K 1/16W(1005) |
| R457                | 1-218-990-11 | s RESISTOR,CHIP 0 1/16W (1005)   |
| R458                | 1-208-695-11 | s RESISTOR CHIP 3.3K 1/16W(1005) |
| R460                | 1-218-965-11 | s RESISTOR, CHIP 10K 1/16W       |
| R461                | 1-218-990-11 | s RESISTOR,CHIP 0 1/16W (1005)   |
| R462                | 1-218-990-11 | s RESISTOR,CHIP 0 1/16W (1005)   |
| R463                | 1-218-990-11 | s RESISTOR,CHIP 0 1/16W (1005)   |
| R464                | 1-218-990-11 | s RESISTOR,CHIP 0 1/16W (1005)   |
| R465                | 1-245-259-21 | s RESISTOR, METAL FILM CHIP 0.22 |
| R466                | 1-218-969-11 | s RESISTOR,CHIP 22K 1/16W (1608) |
| SE201               | 1-477-178-11 | s HUMIDITY SENSOR                |
| THP201              | 1-533-817-21 | s THERMISTOR                     |
| THP202              | 1-533-817-21 | s THERMISTOR                     |
| THP203              | 1-809-357-21 | s THERMISTOR                     |
| TP101               | 1-535-877-22 | s CHIP,CHECKER (TEST POINT)      |
| TP102               | 1-535-877-22 | s CHIP,CHECKER (TEST POINT)      |
| TP103               | 1-535-877-22 | s CHIP,CHECKER (TEST POINT)      |

(MEC-21 BOARD)

| Ref. No.<br>or Q'ty | Part No.     | SP | Description       |
|---------------------|--------------|----|-------------------|
| VDR201              | 1-803-974-11 | s  | VARISTOR, CHIP    |
| VDR202              | 1-803-974-11 | s  | VARISTOR, CHIP    |
| VDR203              | 1-803-974-11 | s  | VARISTOR, CHIP    |
| VDR204              | 1-803-974-11 | s  | VARISTOR, CHIP    |
| VDR205              | 1-803-974-11 | s  | VARISTOR, CHIP    |
| VDR206              | 1-803-974-11 | s  | VARISTOR, CHIP    |
| VDR207              | 1-803-974-11 | s  | VARISTOR, CHIP    |
| VDR208              | 1-803-974-11 | s  | VARISTOR, CHIP    |
| VDR209              | 1-803-974-11 | s  | VARISTOR, CHIP    |
| VDR210              | 1-803-974-11 | s  | VARISTOR, CHIP    |
| VDR211              | 1-803-974-11 | s  | VARISTOR, CHIP    |
| VDR212              | 1-803-974-11 | s  | VARISTOR, CHIP    |
| VDR213              | 1-803-974-11 | s  | VARISTOR, CHIP    |
| VDR301              | 1-803-974-11 | s  | VARISTOR, CHIP    |
| VDR302              | 1-803-974-11 | s  | VARISTOR, CHIP    |
| VDR304              | 1-803-974-11 | s  | VARISTOR, CHIP    |
| VDR305              | 1-803-974-11 | s  | VARISTOR, CHIP    |
| VDR306              | 1-801-922-11 | s  | VARISTOR, CHIP    |
| VDR307              | 1-801-922-11 | s  | VARISTOR, CHIP    |
| X101                | 1-795-121-11 | s  | VIBRATOR, CERAMIC |

-----  
SE-643 BOARD  
-----

| Ref. No.<br>or Q'ty | Part No.     | SP | Description                    |
|---------------------|--------------|----|--------------------------------|
| 1pc                 | A-8347-436-A | s  | MOUNTED CIRCUIT BOARD, SE-643  |
| C1                  | 1-127-820-11 | s  | CAPACITOR, SQUARE CHIP 4.7MF   |
| C2                  | 1-164-943-11 | s  | CAPACITOR,CHIP CERAMIC 0.01MF  |
| CN1                 | 1-566-760-11 | s  | PIN,CONNECTOR (PC BOARD) 5P    |
| PH1                 | 1-476-935-11 | s  | SENSOR, ENCODER                |
| R1                  | 1-218-831-11 | s  | RESISTOR, CHIP 220 1/10W(1608) |
| R2                  | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W       |
| R3                  | 1-218-947-11 | s  | RESISTOR, CHIP 330 1/16W       |
| VDR1                | 1-801-922-11 | s  | VARISTOR, CHIP                 |
| VDR2                | 1-803-974-11 | s  | VARISTOR, CHIP                 |
| VDR3                | 1-803-974-11 | s  | VARISTOR, CHIP                 |

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SE-644 BOARD  
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| Ref. No.<br>or Q'ty | Part No.     | SP | Description                    |
|---------------------|--------------|----|--------------------------------|
| 1pc                 | A-8347-437-A | s  | MOUNTED CIRCUIT BOARD, SE-644  |
| C1                  | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V    |
| C2                  | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF   |
| CN1                 | 1-691-550-11 | s  | PIN,CONNECTOR (3P)(SMD)(1.5MM) |
| PH1                 | 8-719-052-69 | s  | PHOTO INTERRUPTER RPI-352      |

-----  
SE-645 BOARD  
-----

| Ref. No.<br>or Q'ty | Part No.     | SP | Description                   |
|---------------------|--------------|----|-------------------------------|
| 1pc                 | A-8347-438-A | s  | MOUNTED CIRCUIT BOARD, SE-645 |
| C1                  | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V   |
| C2                  | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF  |
| CN1                 | 1-565-875-11 | o  | PIN,CONNECTOR(PC BOARD)3P     |
| PH1                 | 8-719-052-69 | s  | PHOTO INTERRUPTER RPI-352     |

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SE-646 BOARD  
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| Ref. No.<br>or Q'ty | Part No.     | SP | Description                   |
|---------------------|--------------|----|-------------------------------|
| 1pc                 | A-8347-439-A | s  | MOUNTED CIRCUIT BOARD, SE-646 |
| C1                  | 1-125-777-11 | s  | CAPACITOR CERAMIC 0.1MF/10V   |
| C2                  | 1-164-874-11 | s  | CAPACITOR,CHIP CERAMIC 100PF  |
| CN1                 | 1-691-550-51 | s  | PIN, CONNECTOR (1.5MM)(SMD)3P |
| PH1                 | 8-719-052-69 | s  | PHOTO INTERRUPTER RPI-352     |

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SE-673 BOARD  
-----

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| 1pc                 | A-8347-440-A | s MOUNTED CIRCUIT BOARD, SE-673  |
| C1                  | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C2                  | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF   |
| CN1                 | 1-691-550-11 | s PIN,CONNECTOR (3P)(SMD)(1.5MM) |
| PH1                 | 8-719-052-69 | s PHOTO INTERRUPTER RPI-352      |

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SE-674 BOARD  
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| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| 1pc                 | A-8347-441-A | s MOUNTED CIRCUIT BOARD, SE-674  |
| C1                  | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V    |
| C2                  | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF   |
| CN1                 | 1-691-550-11 | s PIN,CONNECTOR (3P)(SMD)(1.5MM) |
| PH1                 | 8-719-052-69 | s PHOTO INTERRUPTER RPI-352      |

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SE-736 BOARD  
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| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| 1pc                 | A-8347-443-A | s MOUNTED CIRCUIT BOARD, SE-736 |
| C1                  | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF  |
| C2                  | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V   |
| C3                  | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF  |
| CN1                 | 1-770-160-21 | o PIN, CONNECTOR (SMT) 2P       |
| CN2                 | 1-580-056-21 | s PIN,CONNECTOR 3P              |
| CN3                 | 1-770-469-21 | o PIN, CONNECTOR (PC BOARD) 2P  |
| PH1                 | 8-719-052-69 | s PHOTO INTERRUPTER RPI-352     |

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SE-737 BOARD  
-----

| Ref. No.<br>or Q'ty | Part No.     | SP Description                  |
|---------------------|--------------|---------------------------------|
| 1pc                 | A-8347-444-A | s MOUNTED CIRCUIT BOARD, SE-737 |
| C1                  | 1-125-777-11 | s CAPACITOR CERAMIC 0.1MF/10V   |
| C2                  | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF  |
| CN1                 | 1-691-550-51 | s PIN, CONNECTOR (1.5MM)(SMD)3P |
| PH1                 | 8-719-052-69 | s PHOTO INTERRUPTER RPI-352     |

-----  
SU-69 BOARD  
-----

| Ref. No.<br>or Q'ty | Part No.     | SP Description                 |
|---------------------|--------------|--------------------------------|
| C1                  | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF |
| CN1                 | 1-770-469-21 | o PIN, CONNECTOR (PC BOARD) 2P |

-----  
SU-74 BOARD  
-----

| Ref. No.<br>or Q'ty | Part No.     | SP Description                 |
|---------------------|--------------|--------------------------------|
| CN1                 | 1-770-469-21 | o PIN, CONNECTOR (PC BOARD) 2P |

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SU-75 BOARD  
-----

| Ref. No.<br>or Q'ty | Part No.     | SP Description                 |
|---------------------|--------------|--------------------------------|
| C1                  | 1-164-874-11 | s CAPACITOR,CHIP CERAMIC 100PF |
| CN1                 | 1-770-469-21 | o PIN, CONNECTOR (PC BOARD) 2P |

-----  
SW-1105 BOARD  
-----

| Ref. No.<br>or Q'ty | Part No.     | SP Description                   |
|---------------------|--------------|----------------------------------|
| 1pc                 | A-8347-448-A | s MOUNTED CIRCUIT BOARD, SW-1105 |
| C1                  | 1-115-339-11 | s CAPACITOR,CERAMIC 0.1MF/50V    |
| CN1                 | 1-564-706-11 | o PIN,CONNECTOR (4P)             |

## 6-4. Frame

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FRAME  
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| Ref. No.<br>or Q'ty | Part No.       | SP | Description                           |
|---------------------|----------------|----|---------------------------------------|
| 1pc                 | △ 1-468-854-11 | s  | REGULATOR, SWITCHING                  |
| 2pcs                | 1-476-936-11   | s  | SENSOR, PHOTO MICRO                   |
| 1pc                 | △ 1-528-174-11 | s  | BATTERY, LITHIUM (CR2032 TYPE)        |
| 1pc                 | 1-684-433-11   | o  | PRINTED WIRING BOARD, IF-881 FLEXIBLE |
| 1pc                 | 1-763-927-11   | s  | FAN, DC (SQUARE 25)                   |
| 1pc                 | 1-787-054-11   | s  | MOTOR, DC GEARED                      |
| 1pc                 | 1-804-542-11   | s  | LCD MODULE                            |
| 1pc                 | 1-860-258-11   | o  | PRINTED WIRING BOARD, DIO-72 FLEXIBLE |
| 1pc                 | 1-860-259-11   | o  | PRINTED WIRING BOARD, DIO-73 FLEXIBLE |

HN001 1-962-585-21 o HARNESS, SUB (CN)  
(TO CN3/SWITCHING REGULATOR)  
(TO CN7/CN-2393 BOARD)

HN002 1-962-586-11 o HARNESS, SUB (CPU)  
(TO CN4/SWITCHING REGULATOR)  
(TO CN1001/CPU-347 BOARD)

HN003 1-962-587-22 o HARNESS, SUB (MEC)  
(TO CN5/SWITCHING REGULATOR)  
(TO CN201/MEC-21 BOARD)  
(TO CN1/SW-1105 BOARD)

HN004 1-962-594-21 o HARNESS, SUB (VH)  
(TO CN1/SWITCHING REGULATOR)  
(TO CN5/CN-2393 BOARD)

HN005 1-962-595-21 o HARNESS, SUB (VH-GND)  
(TO CN2/SWITCHING REGULATOR)  
(TO CN6/CN-2393 BOARD)

HN006 1-962-592-11 o HARNESS, SUB (CAP MOTOR)  
(TO CN402/MEC-21 BOARD)  
(TO CN1/SU-69 BOARD)  
(TO CN1/SE-736 BOARD)

HN007 1-962-588-11 o HARNESS, SUB (AEDS ENCODER)  
(TO CN101/MEC-21 BOARD)  
(TO CN1/SE-643 BOARD)

HN008 1-962-598-12 o HARNESS, SUB (POMP 1 SENSOR)  
(TO CN202/MEC-21 BOARD)  
(TO CN2/SE-736 BOARD)

HN009 1-962-593-11 o HARNESS, SUB (CONVEYANCE MOTOR)  
(TO CN401/MEC-21 BOARD)  
(TO CN1/SU-74 BOARD)  
(TO CN1/SU-75 BOARD)

HN010 1-962-596-11 o HARNESS, SUB (CAP SWITCHING)  
(TO CN102/MEC-21 BOARD)  
(TO CN1/SE-673 BOARD)  
(TO CN1/SE-674 BOARD)  
(TO SET\_OPEN2 SWITCH)

HN011 1-962-597-12 o HARNESS, SUB (LIMIT SWITCH)  
(TO CN103/MEC-21 BOARD)  
(TO CN1/SE-645 BOARD)  
(TO CN1/SE-737 BOARD)  
(TO SET\_OPEN1 SWITCH)

HN012 1-962-757-12 o HARNESS, SUB (FP)  
(TO CN301/MEC-21 BOARD)  
(TO CN101/FP-138 BOARD)

## 6-5. Packing Materials & Supplied Accessories

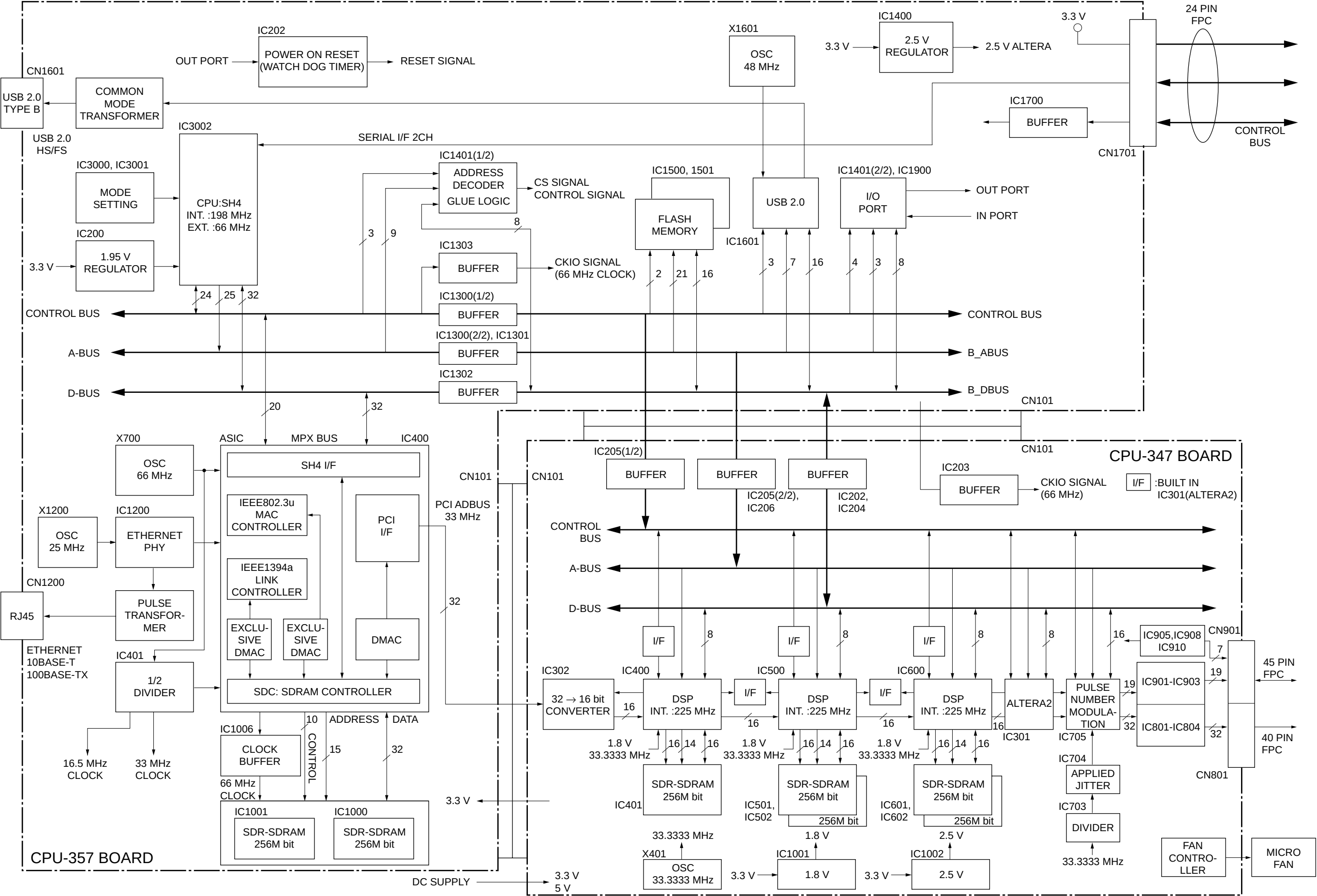
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PACKING MATERIALS & SUPPLIED ACCESSORIES  
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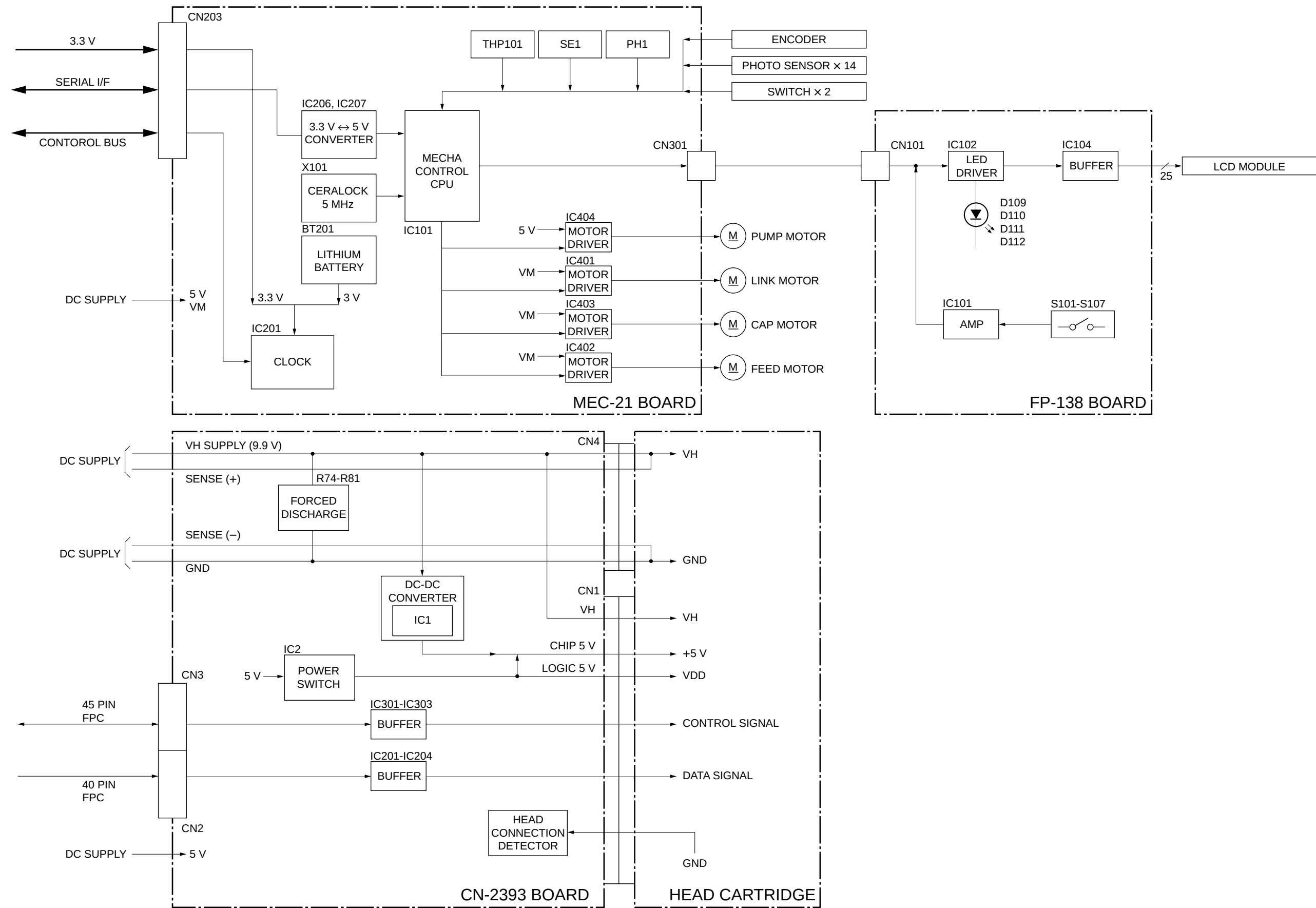
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|---------------------|--------------|----|---------------------|
| 1pc                 | A-8348-215-A | s  | HEAD UNIT ASSY (RP) |
| 1pc                 | 1-824-211-41 | s  | CORD, CONNECTION    |
| 1pc                 | 3-809-956-02 | s  | JOINT, ARM          |
| 1pc                 | 3-853-994-02 | s  | PACK, CD-ROM        |





**Section 7**  
**Block Diagrams**

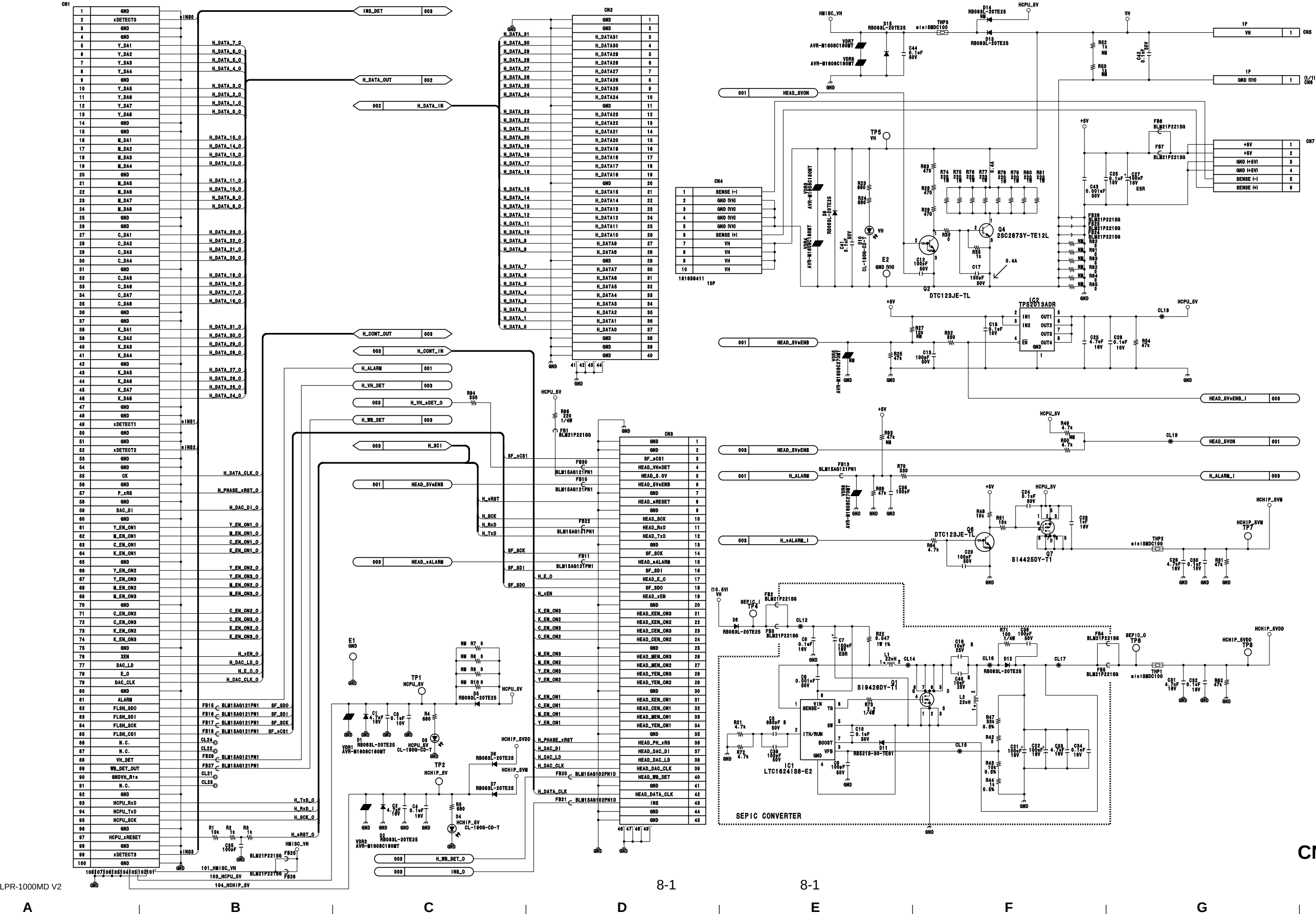






Section 8  
Schematic Diagrams and Board Layouts

8-1. Schematic Diagrams



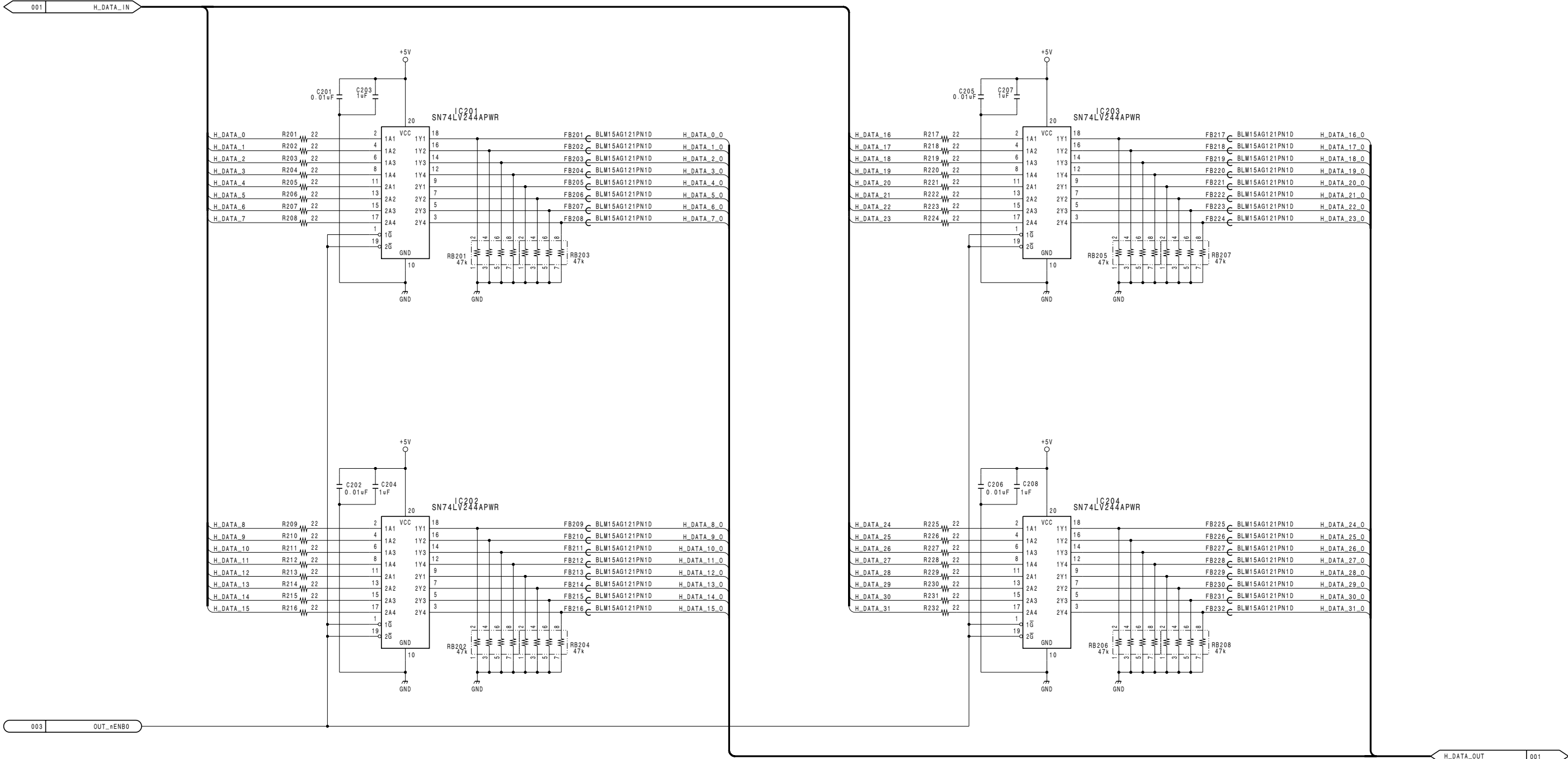
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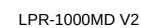
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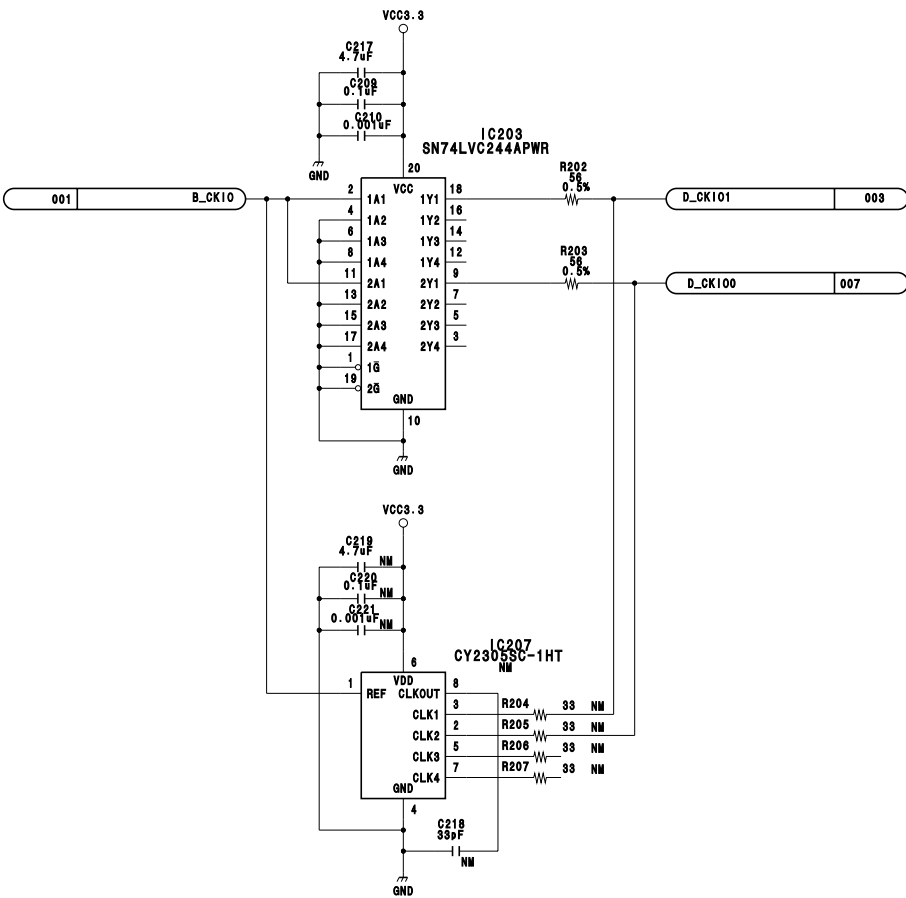
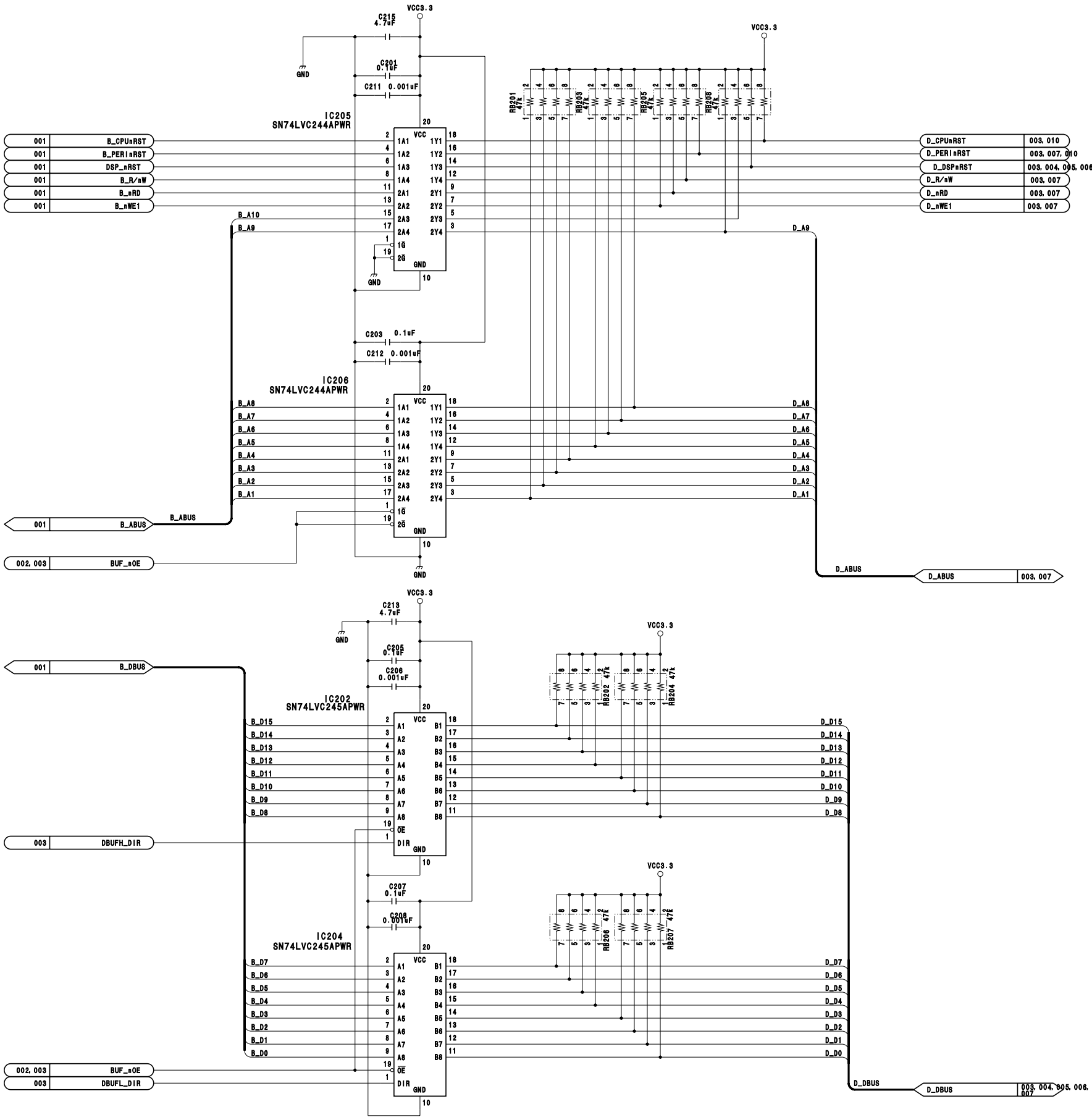




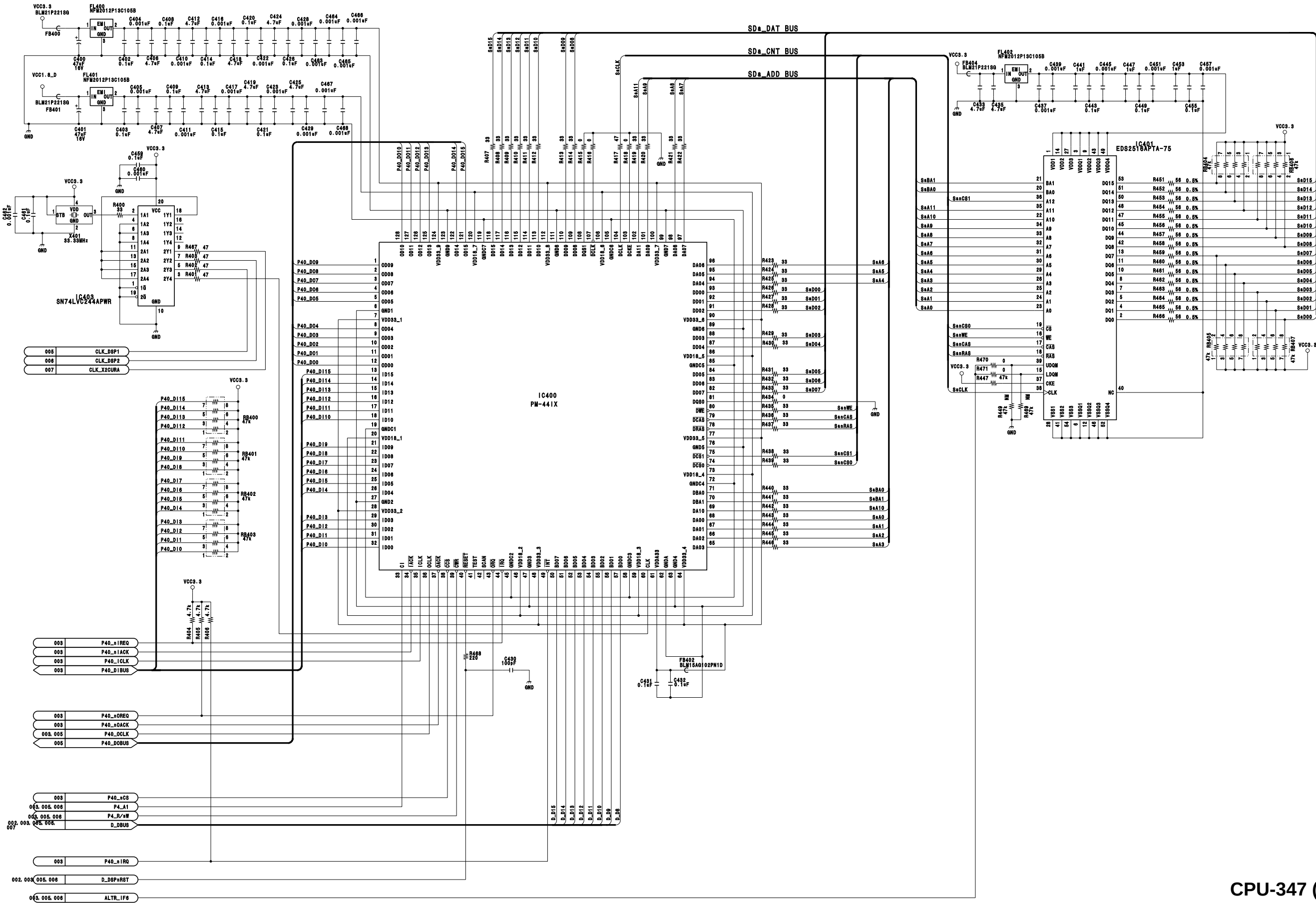


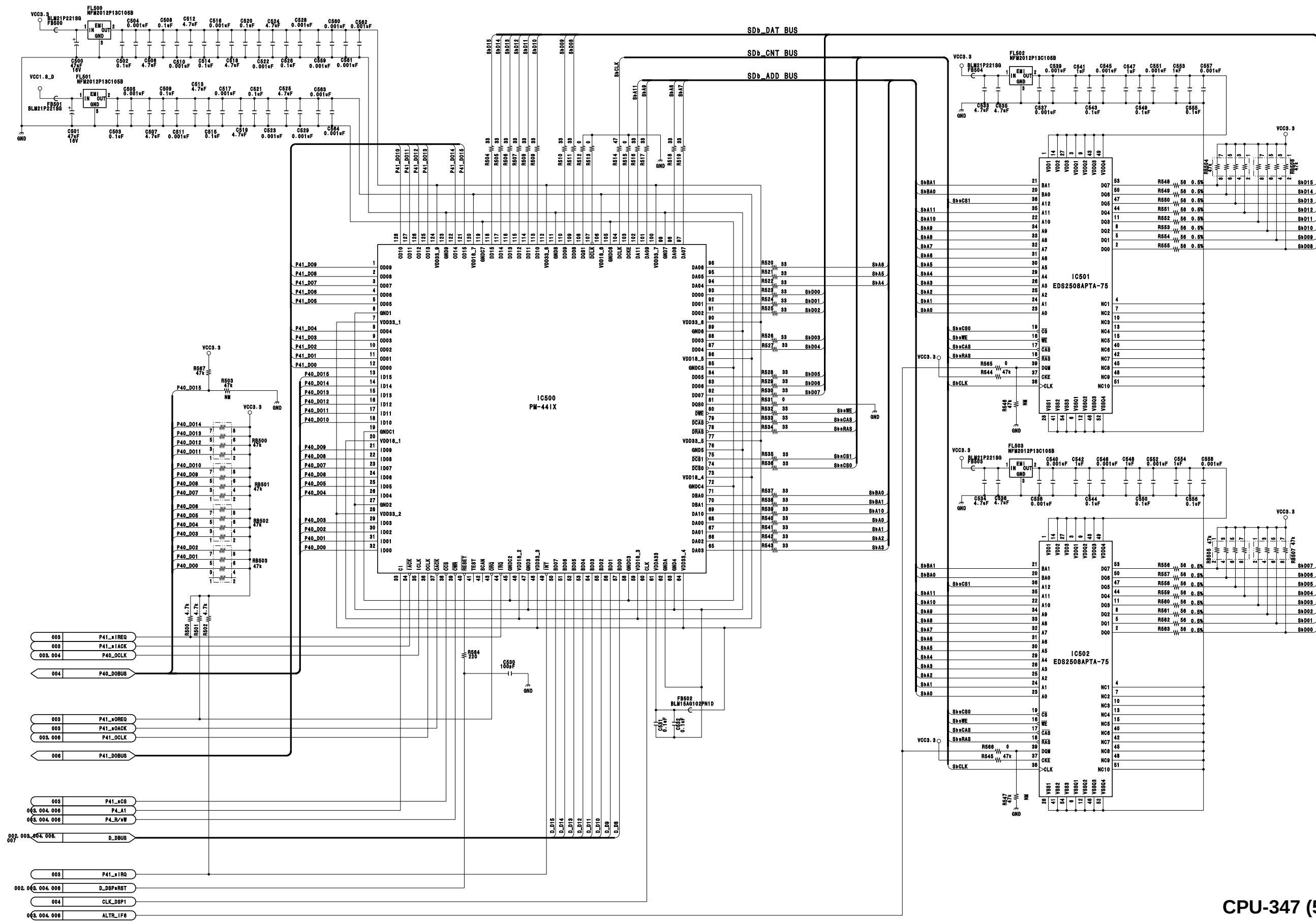


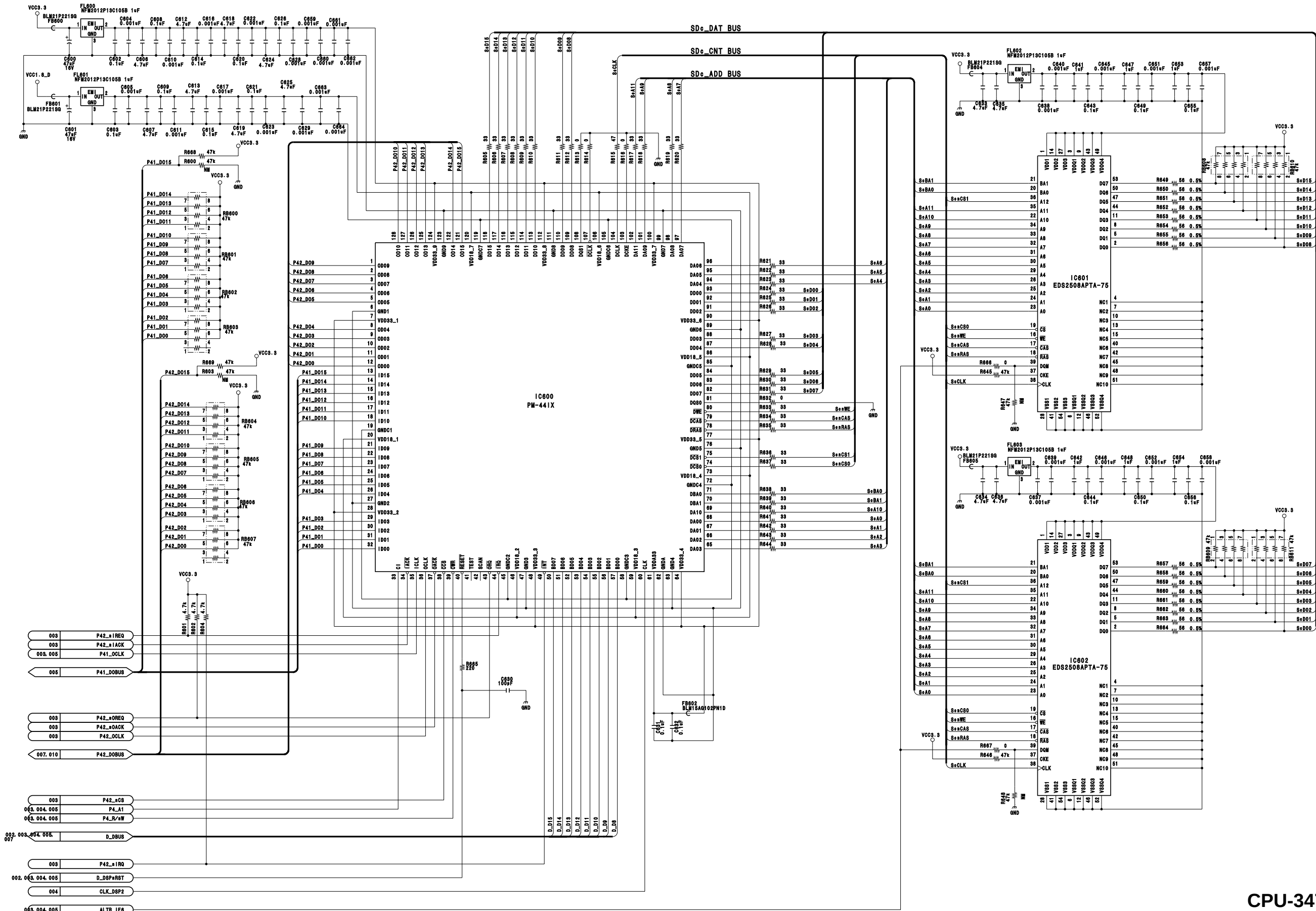












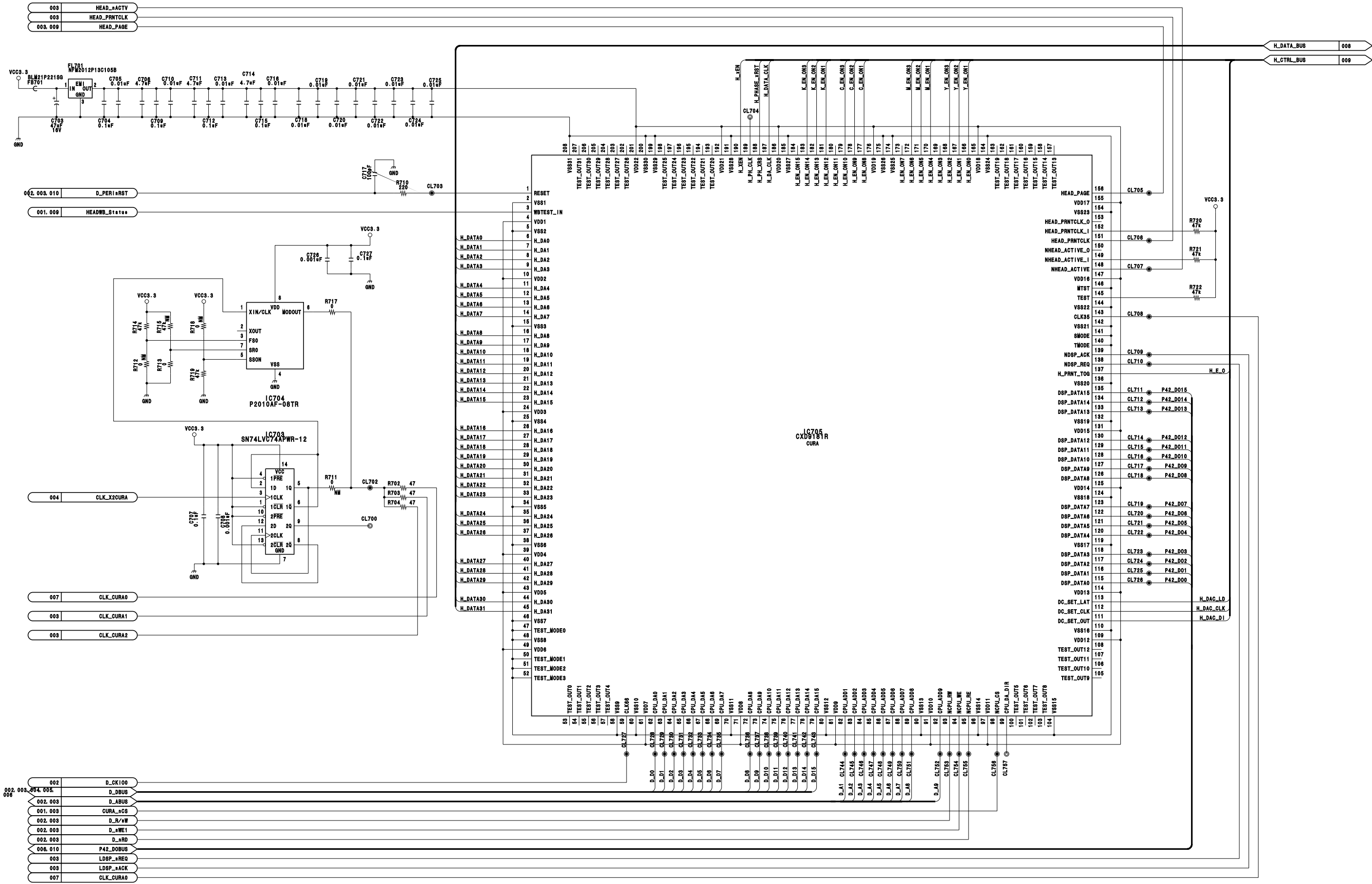
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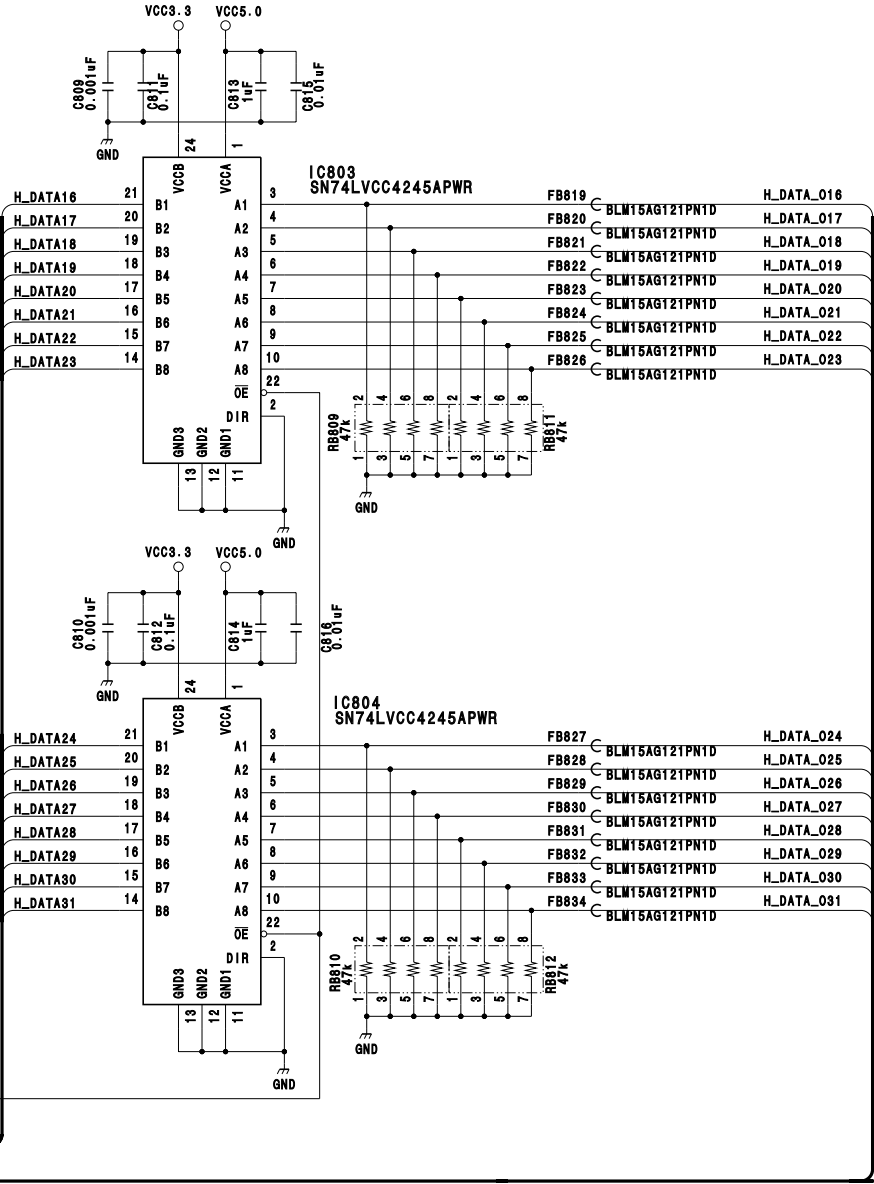
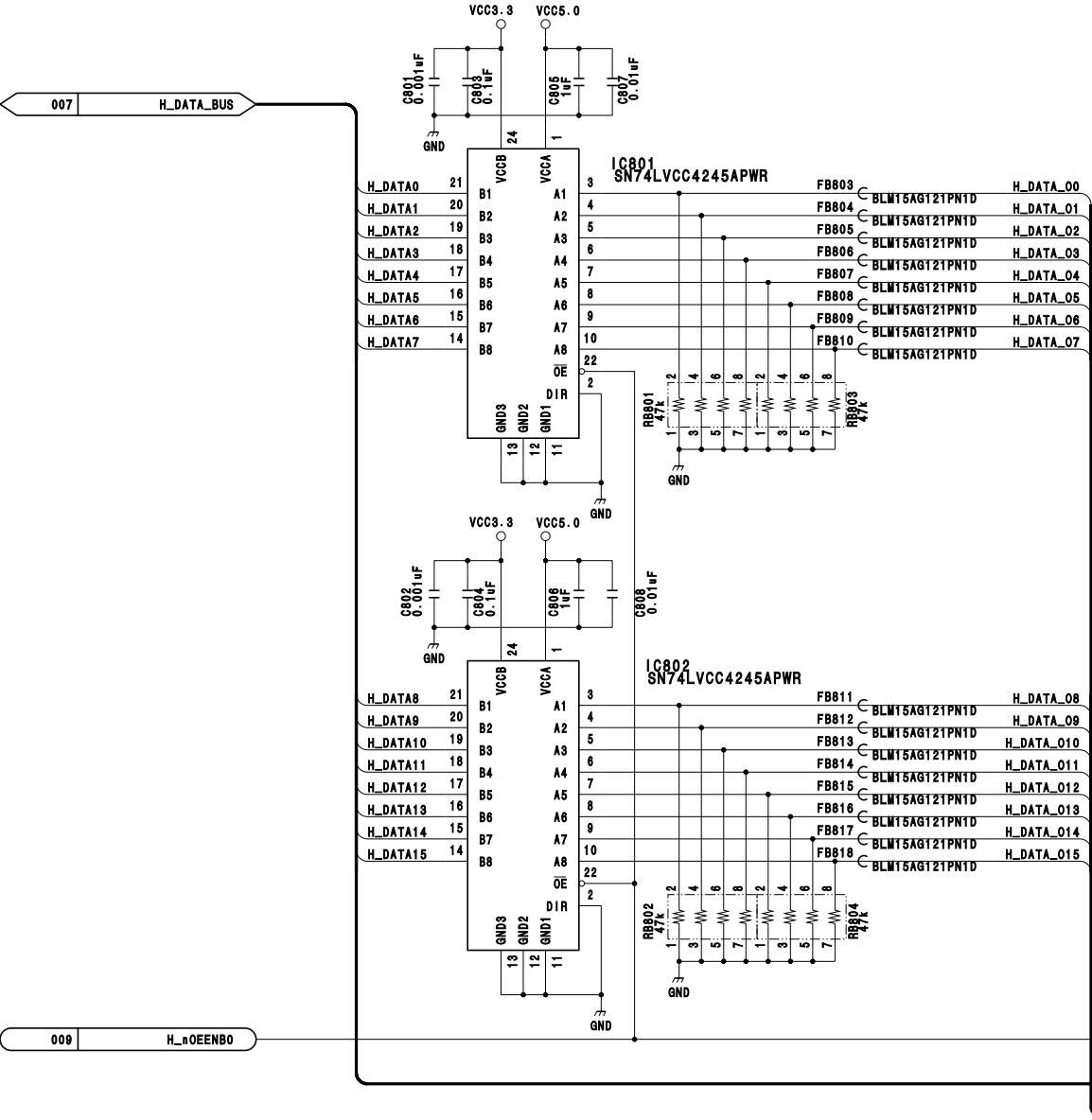
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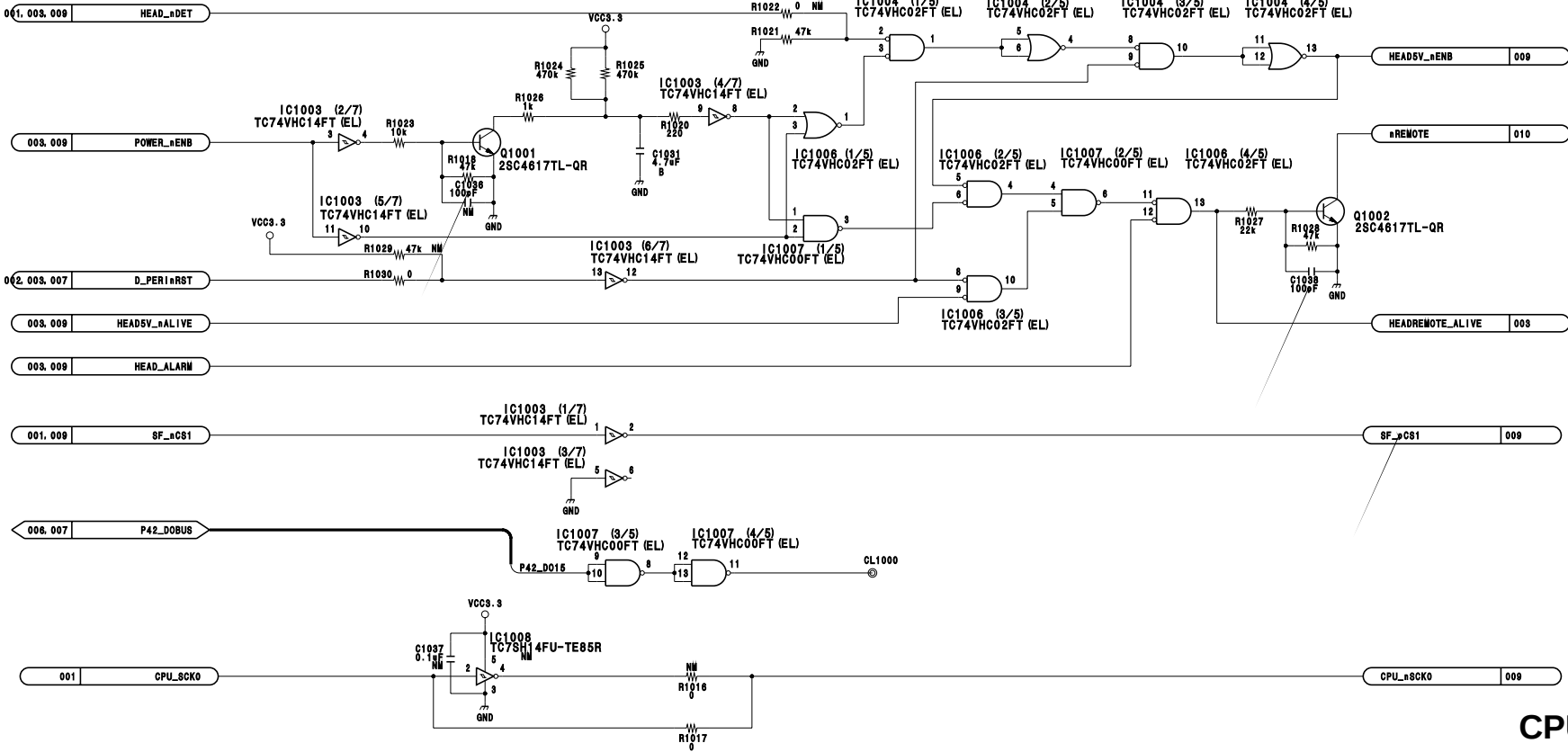
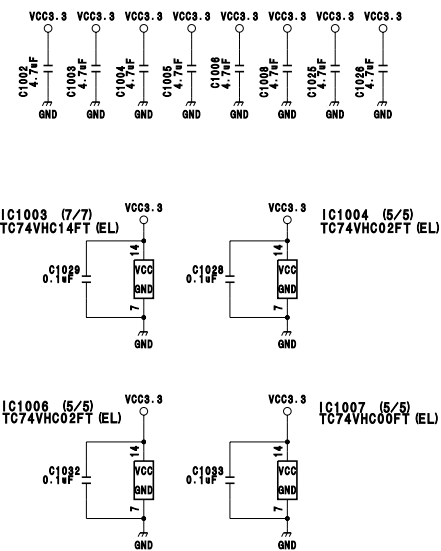
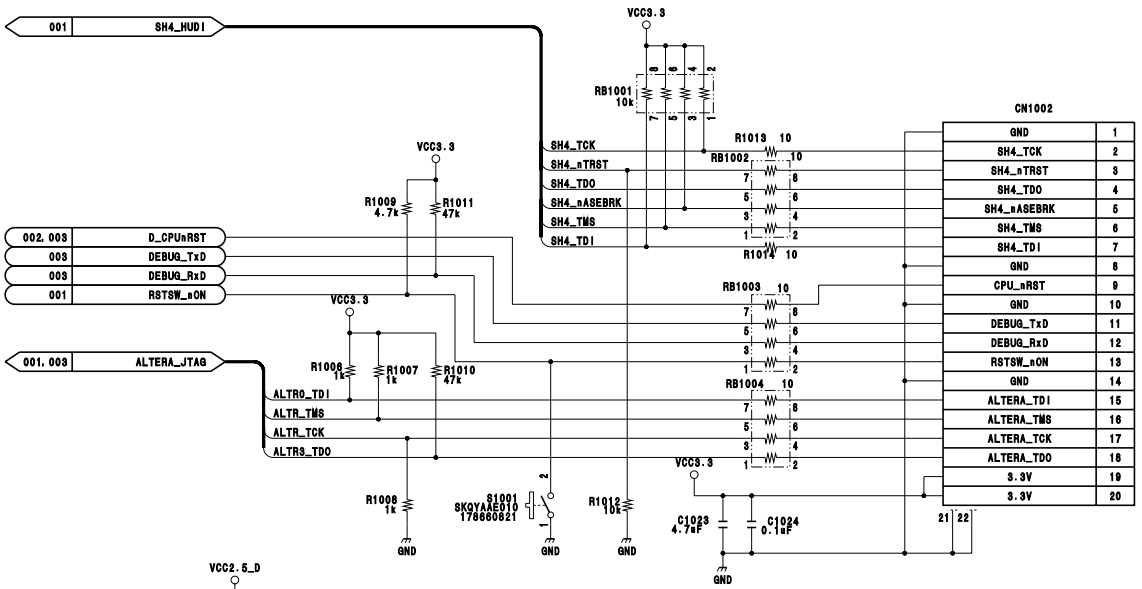
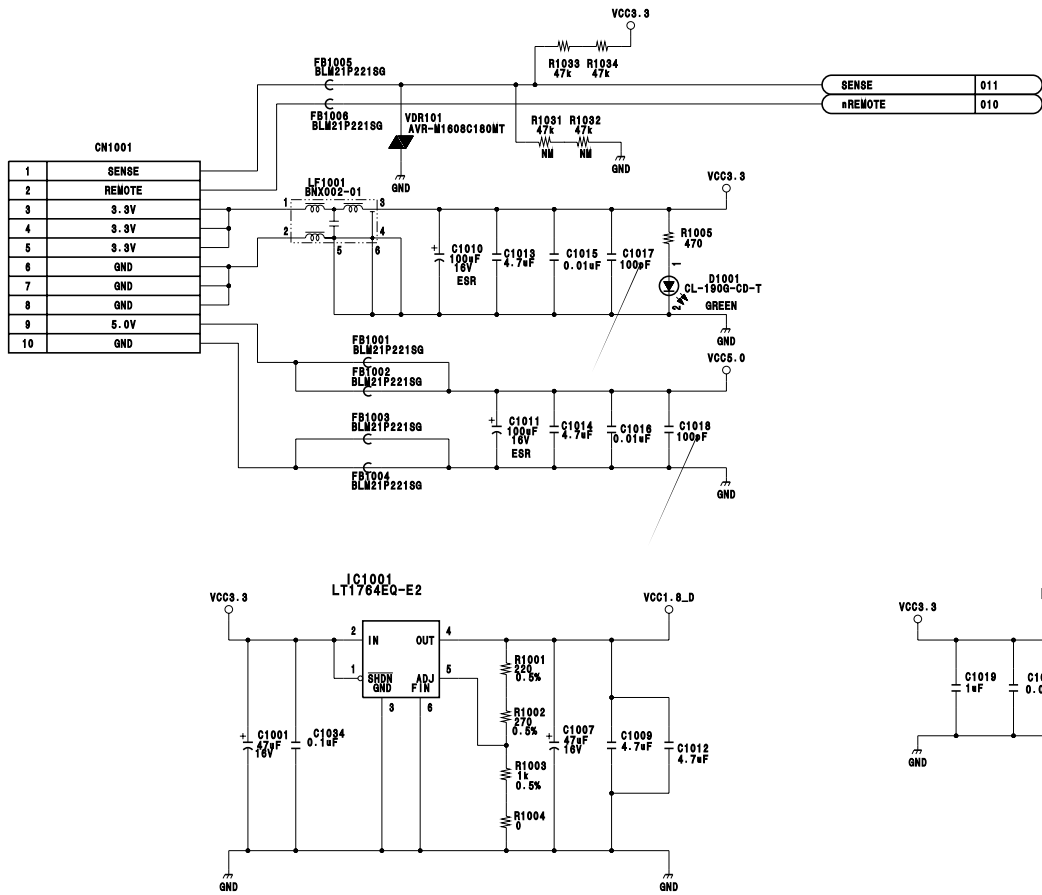


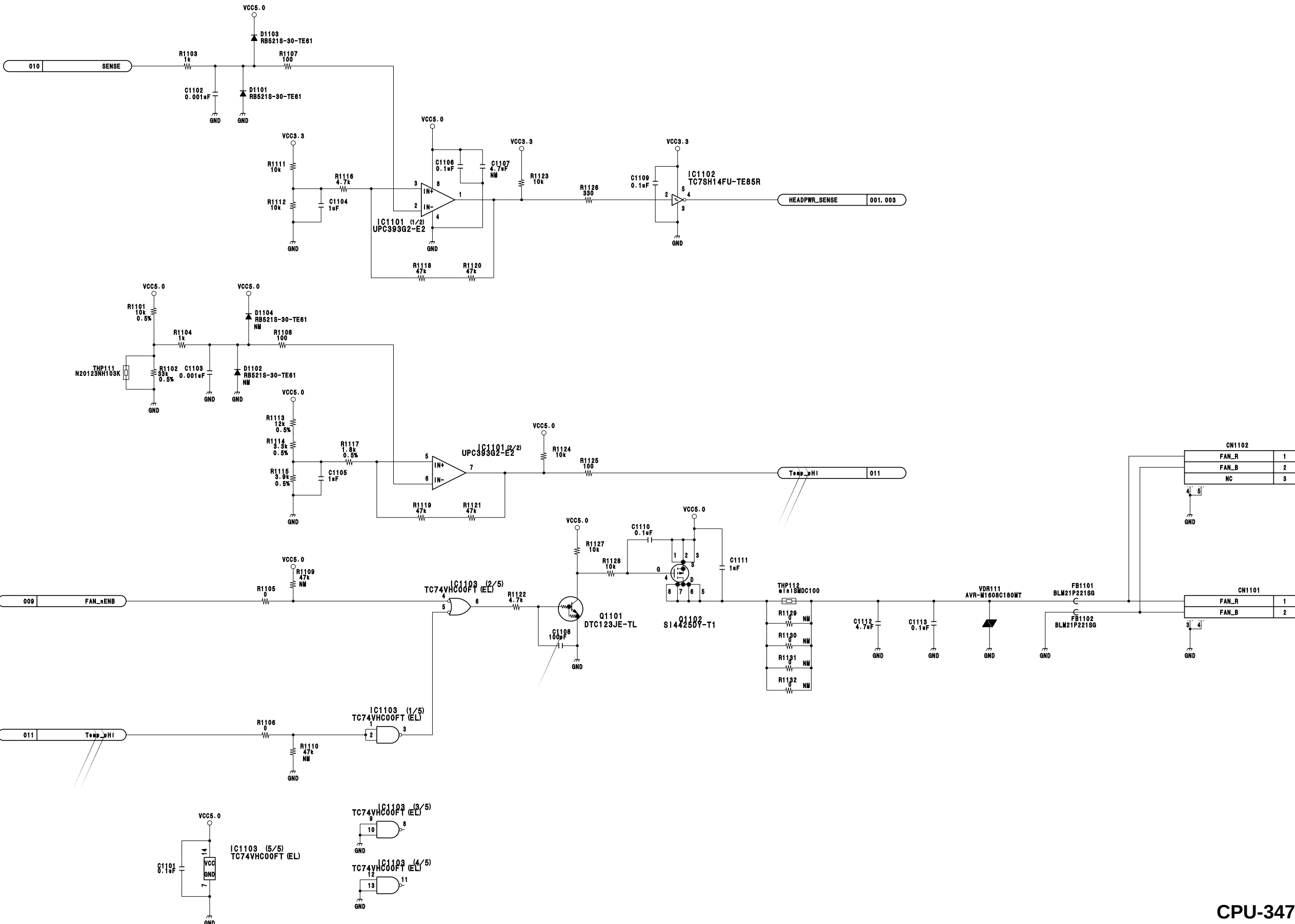


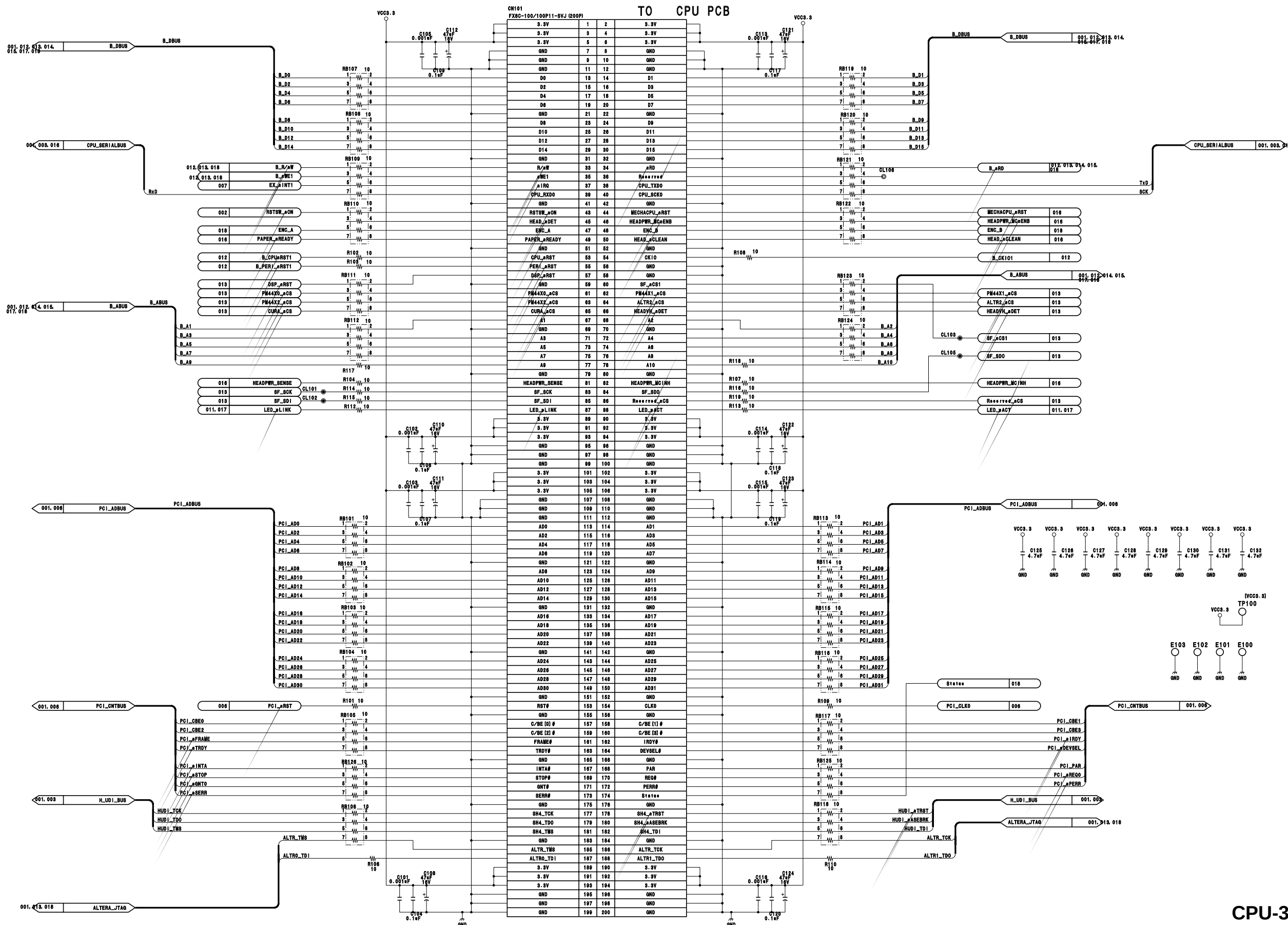
|          |    |
|----------|----|
| CN801    |    |
| GND      | 1  |
| GND      | 2  |
| GND      | 3  |
| H_DATA00 | 4  |
| H_DATA01 | 5  |
| H_DATA02 | 6  |
| H_DATA03 | 7  |
| H_DATA04 | 8  |
| H_DATA05 | 9  |
| H_DATA06 | 10 |
| H_DATA07 | 11 |
| GND      | 12 |
| H_DATA08 | 13 |
| H_DATA09 | 14 |
| H_DATA10 | 15 |
| H_DATA11 | 16 |
| H_DATA12 | 17 |
| H_DATA13 | 18 |
| H_DATA14 | 19 |
| H_DATA15 | 20 |
| GND      | 21 |
| H_DATA16 | 22 |
| H_DATA17 | 23 |
| H_DATA18 | 24 |
| H_DATA19 | 25 |
| H_DATA20 | 26 |
| H_DATA21 | 27 |
| H_DATA22 | 28 |
| H_DATA23 | 29 |
| GND      | 30 |
| H_DATA24 | 31 |
| H_DATA25 | 32 |
| H_DATA26 | 33 |
| H_DATA27 | 34 |
| H_DATA28 | 35 |
| H_DATA29 | 36 |
| H_DATA30 | 37 |
| H_DATA31 | 38 |
| GND      | 39 |
| GND      | 40 |

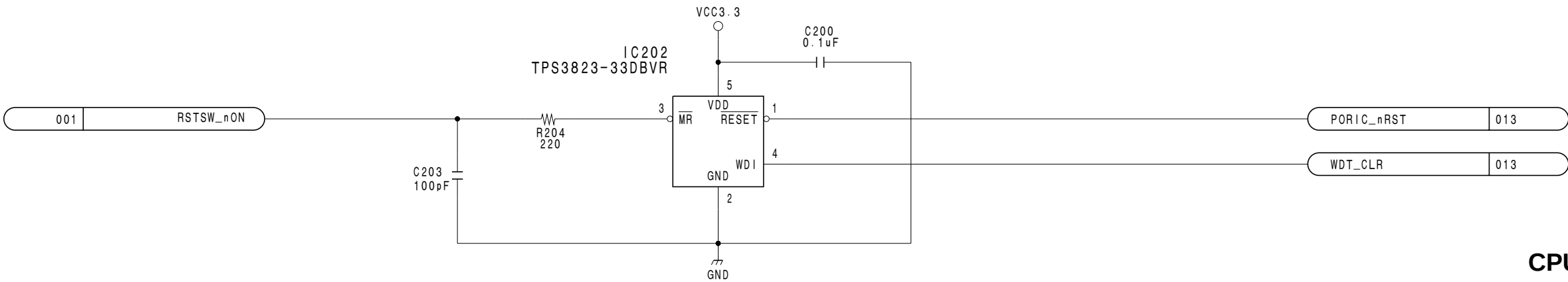
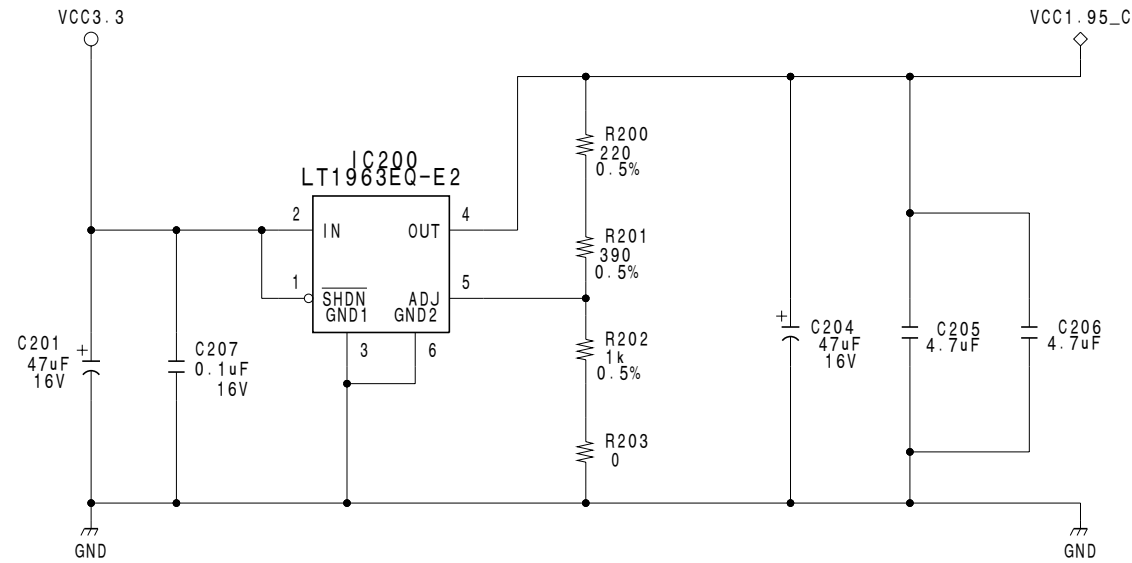
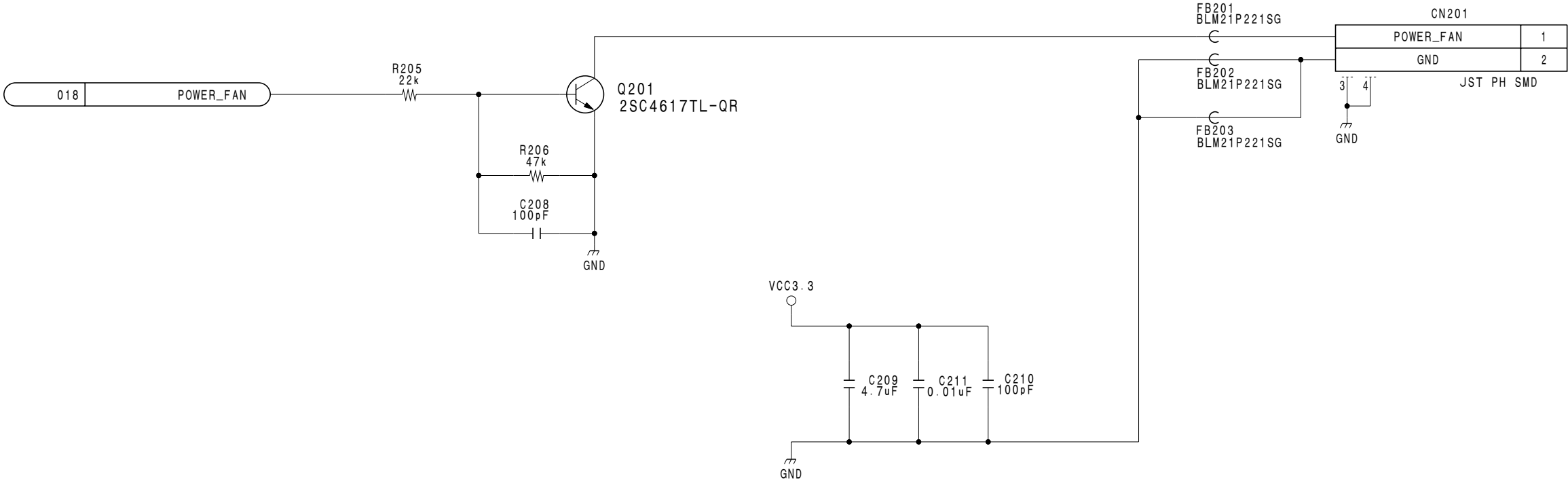














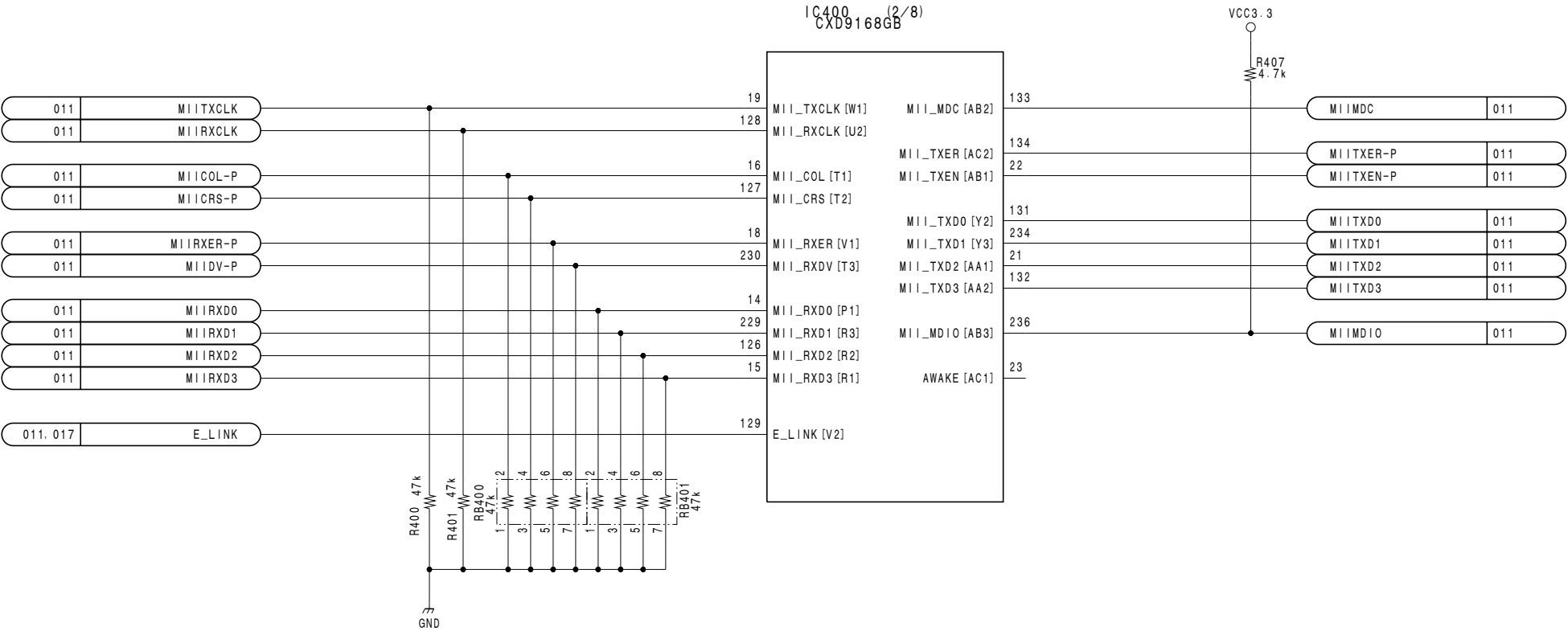
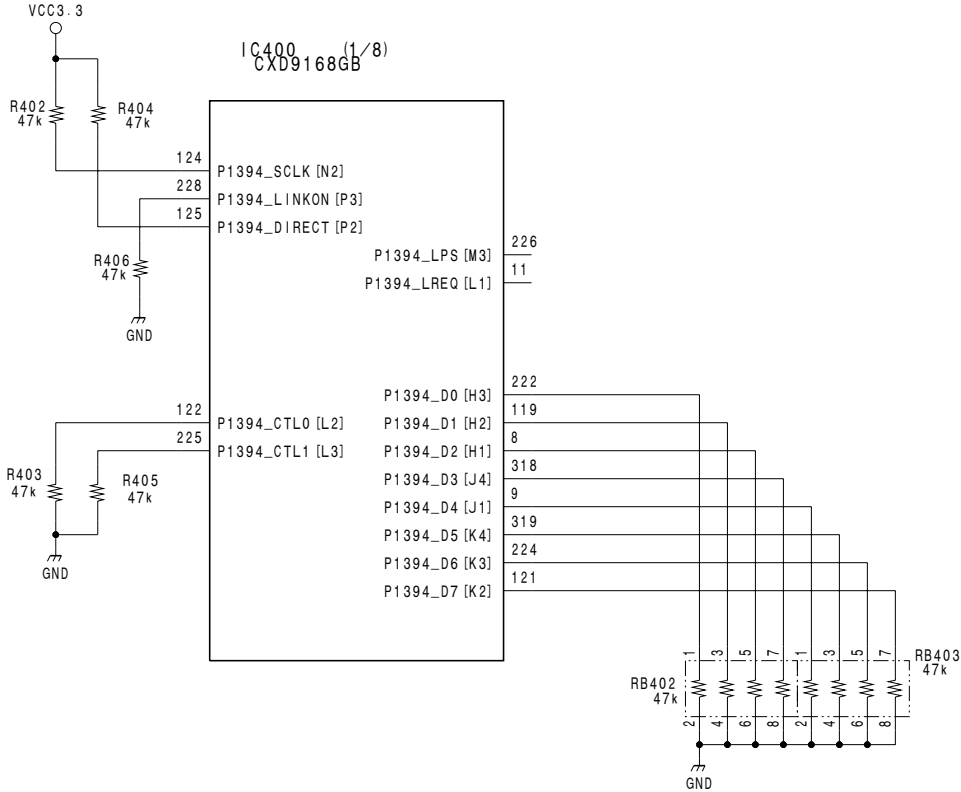
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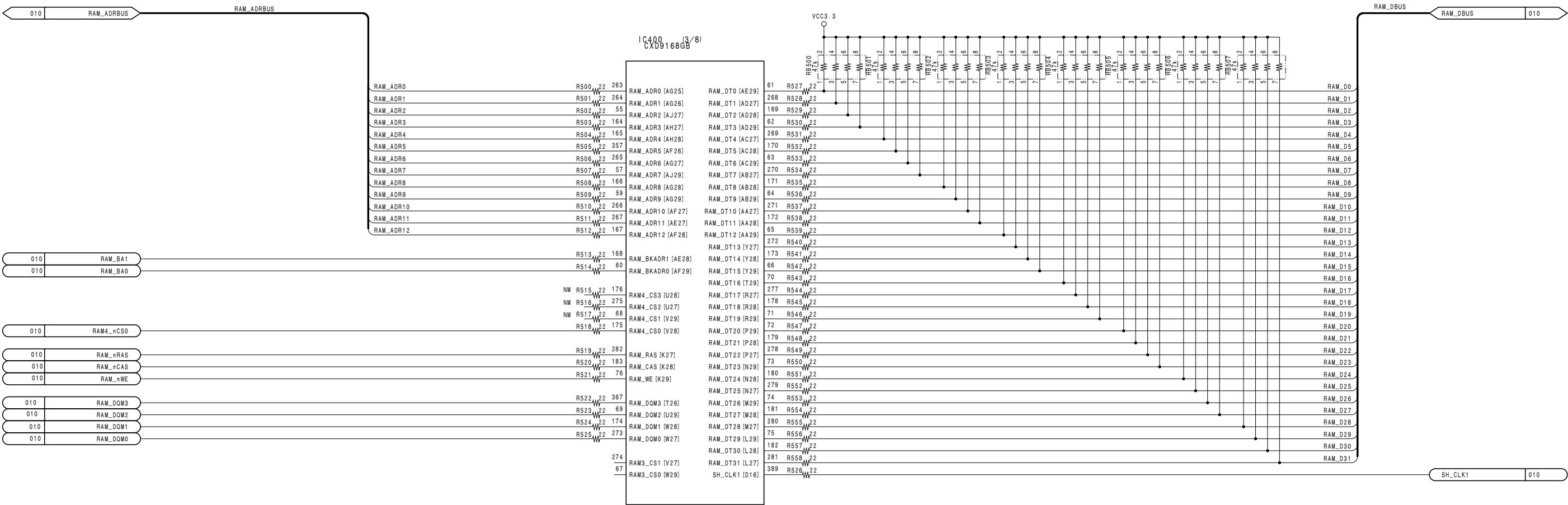
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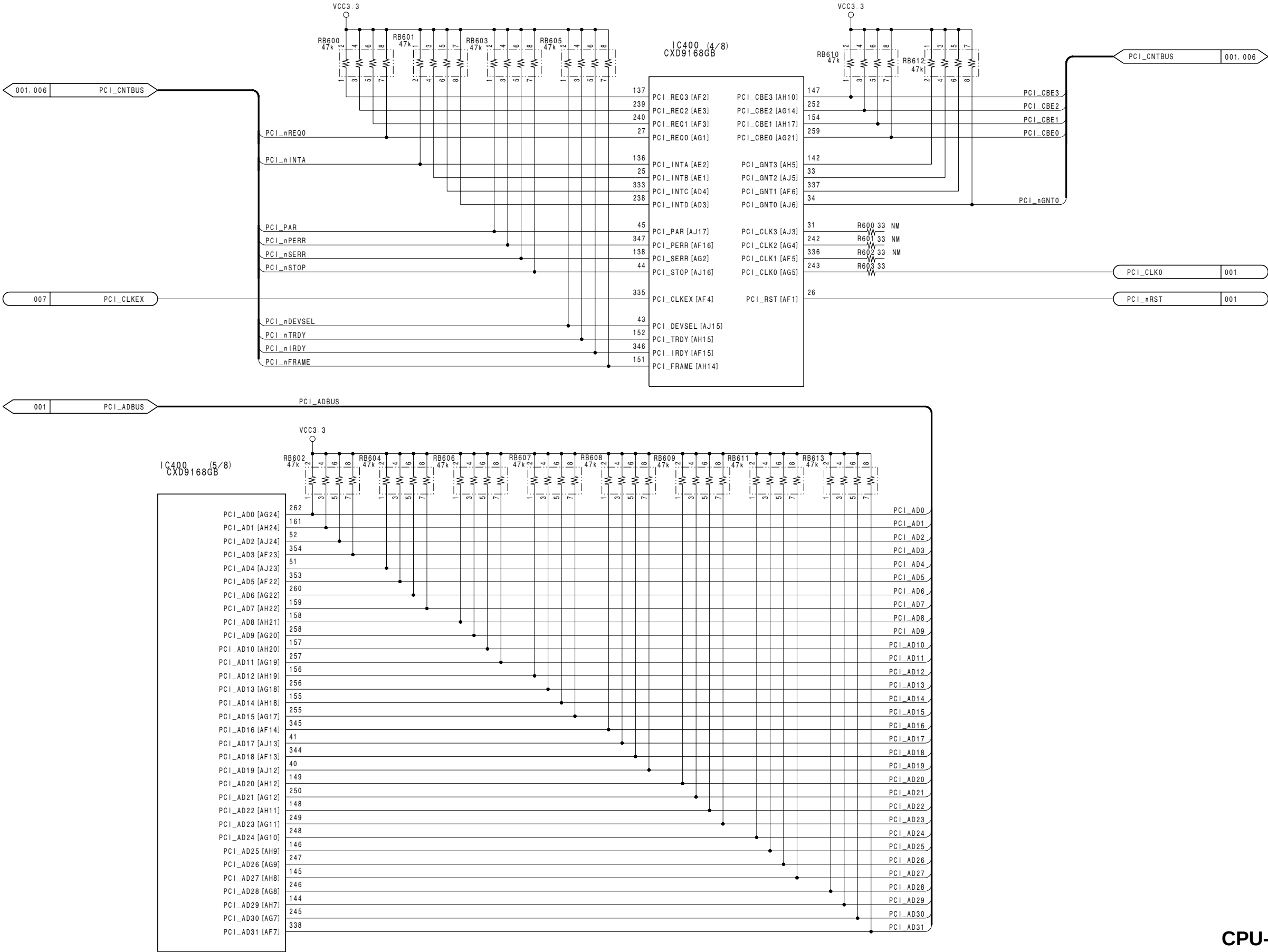
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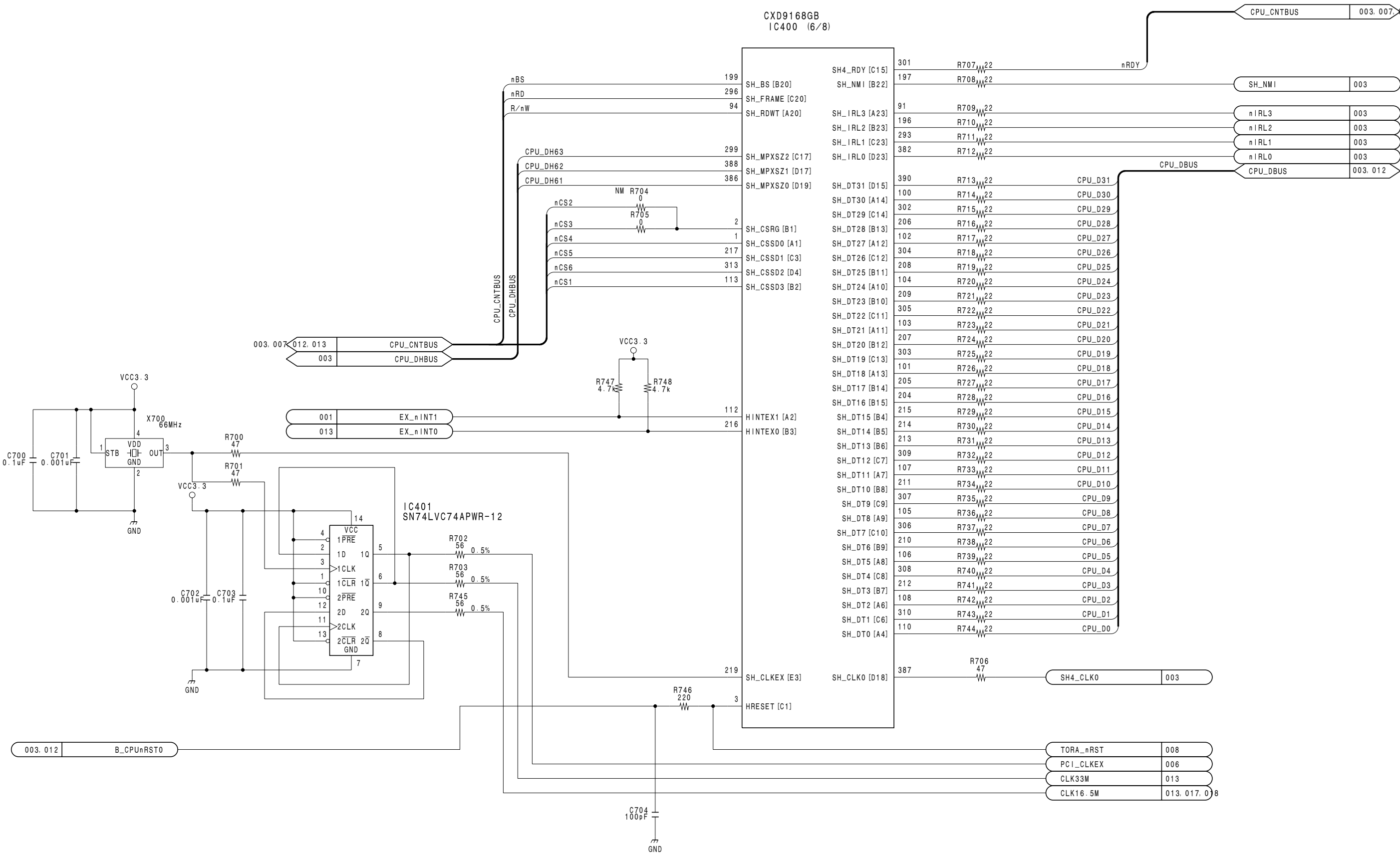


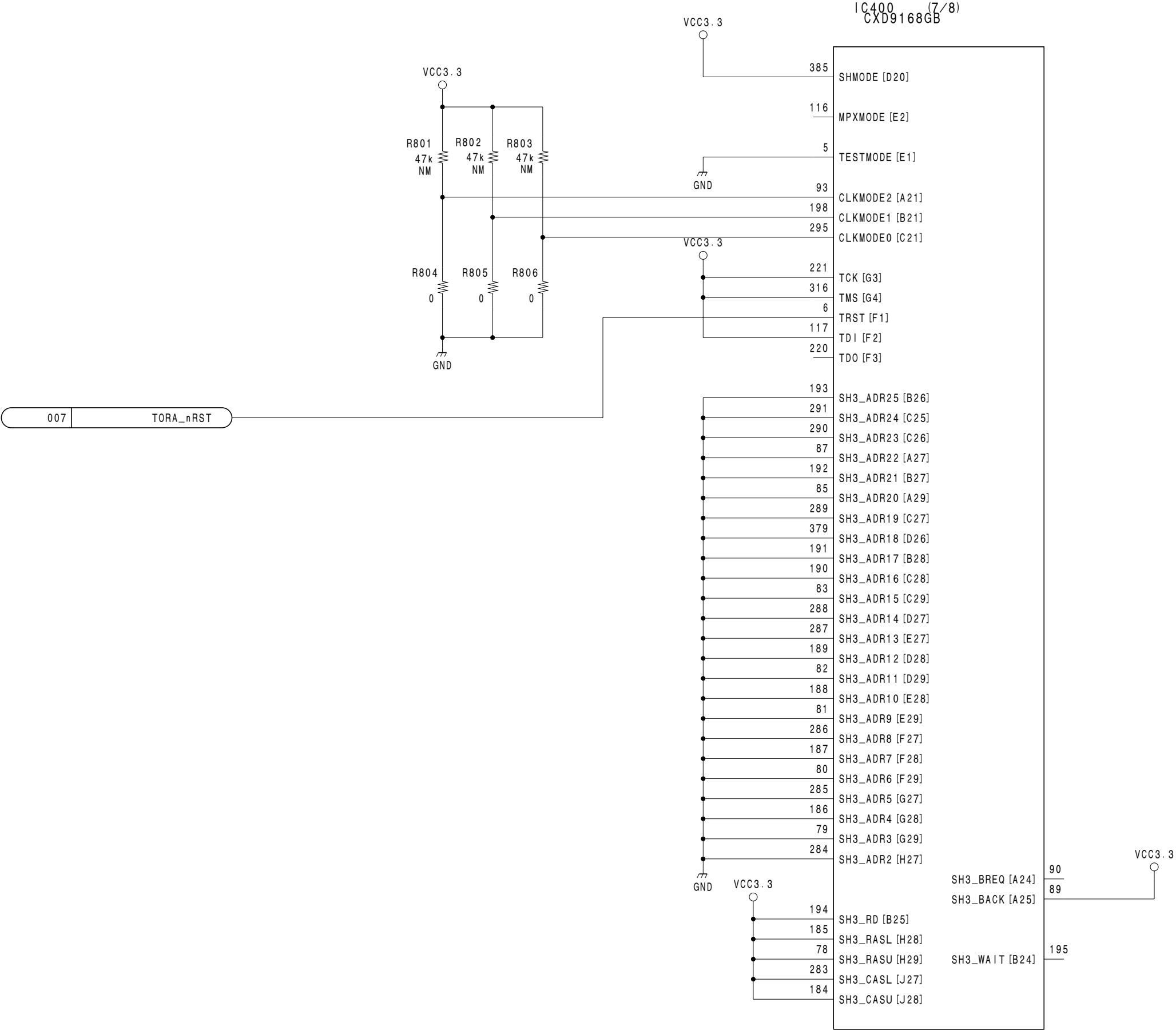


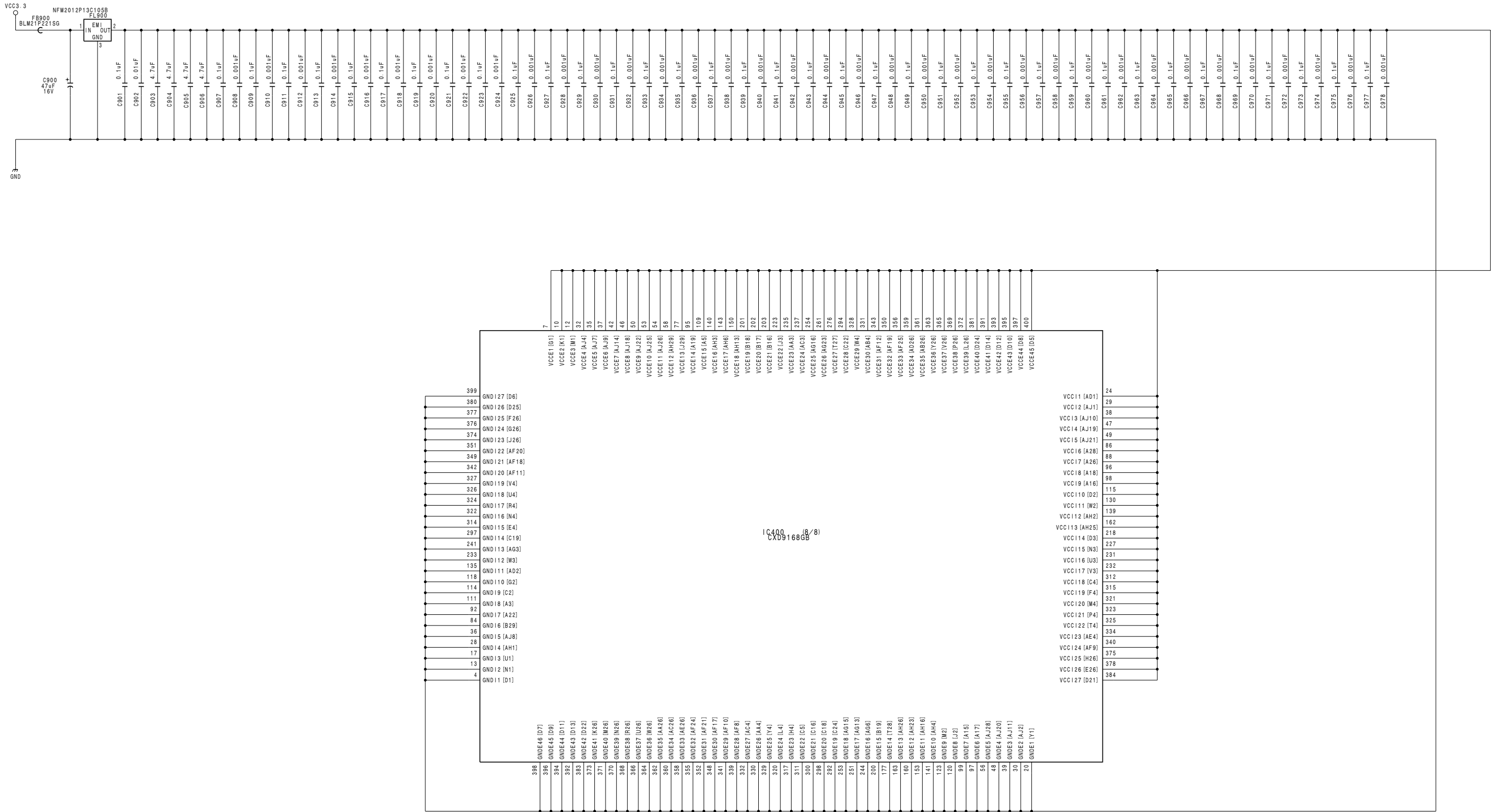


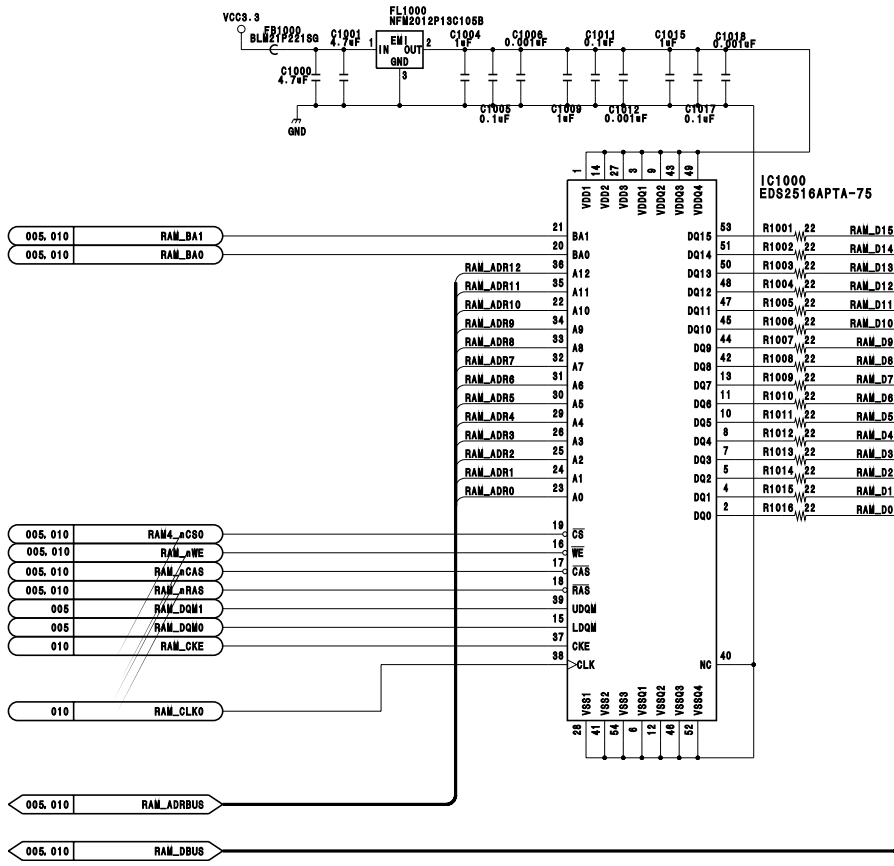
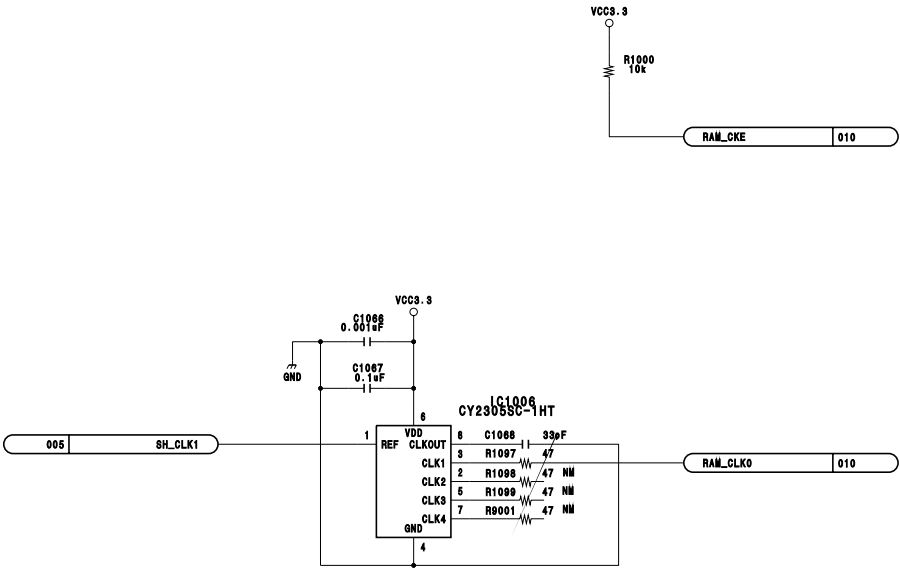
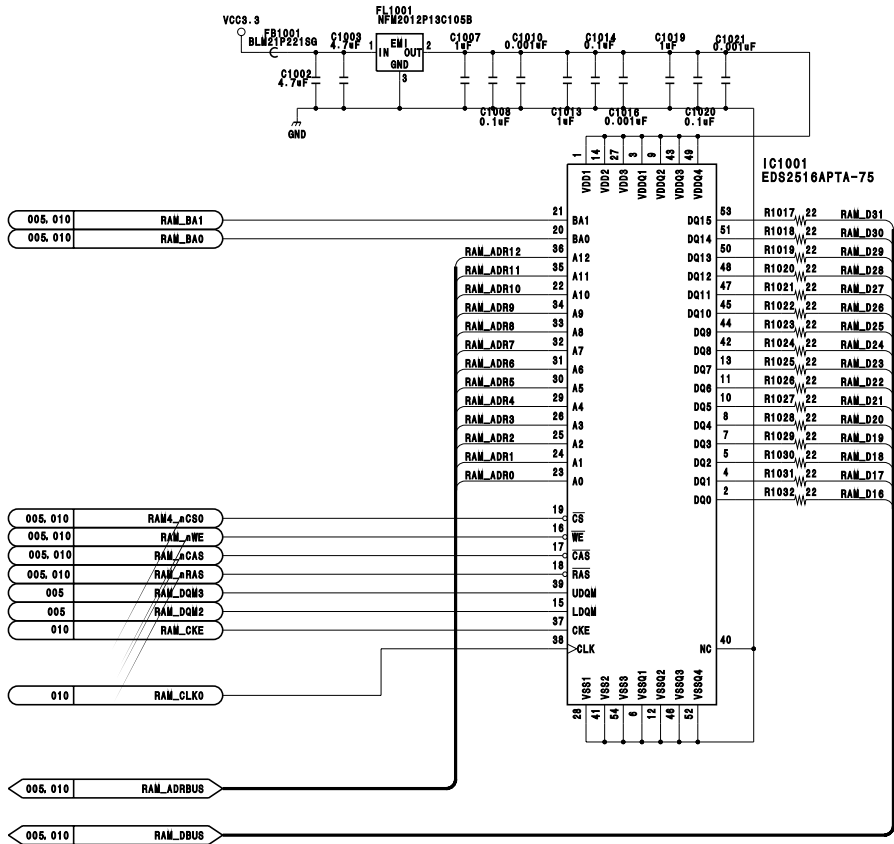


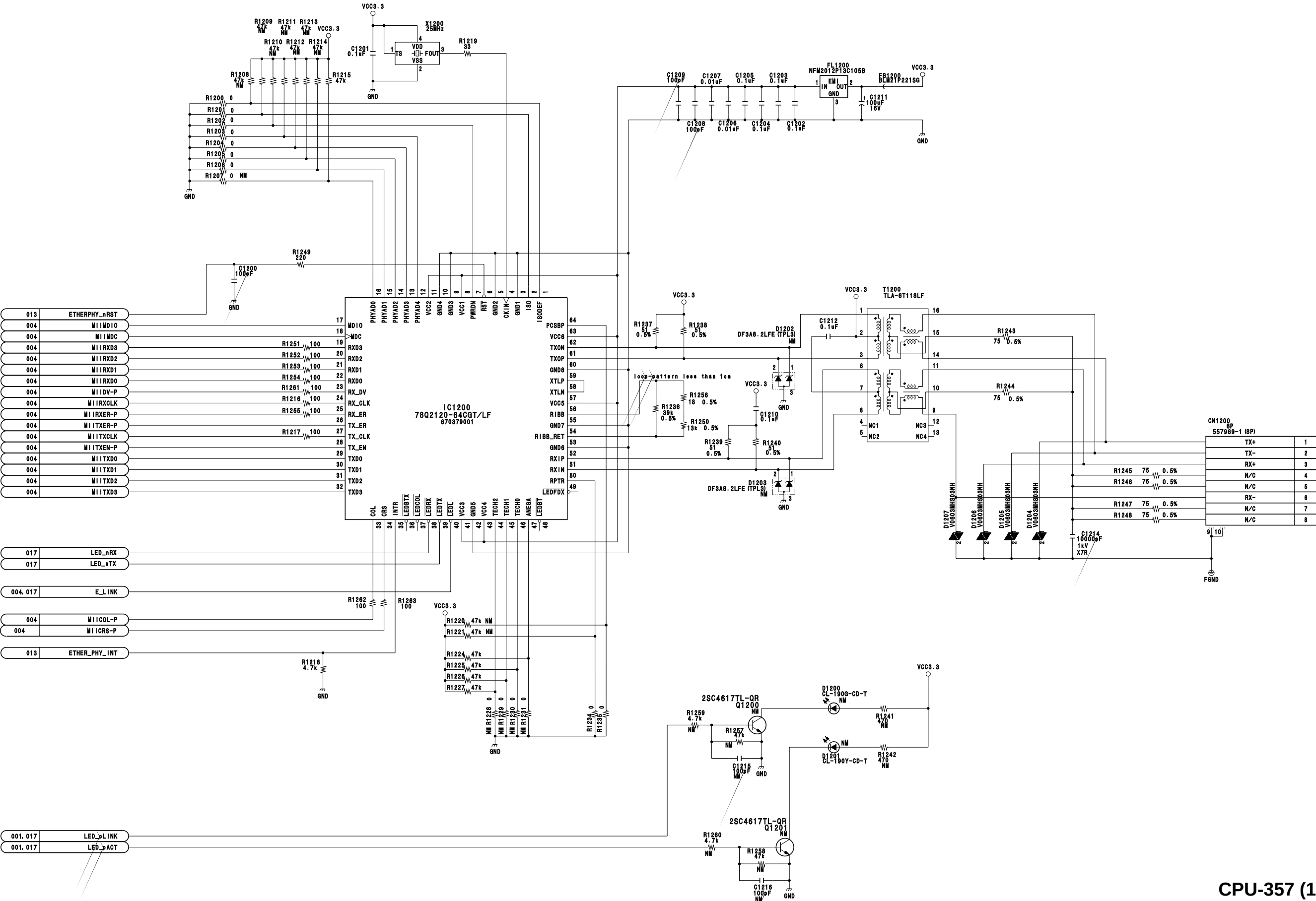


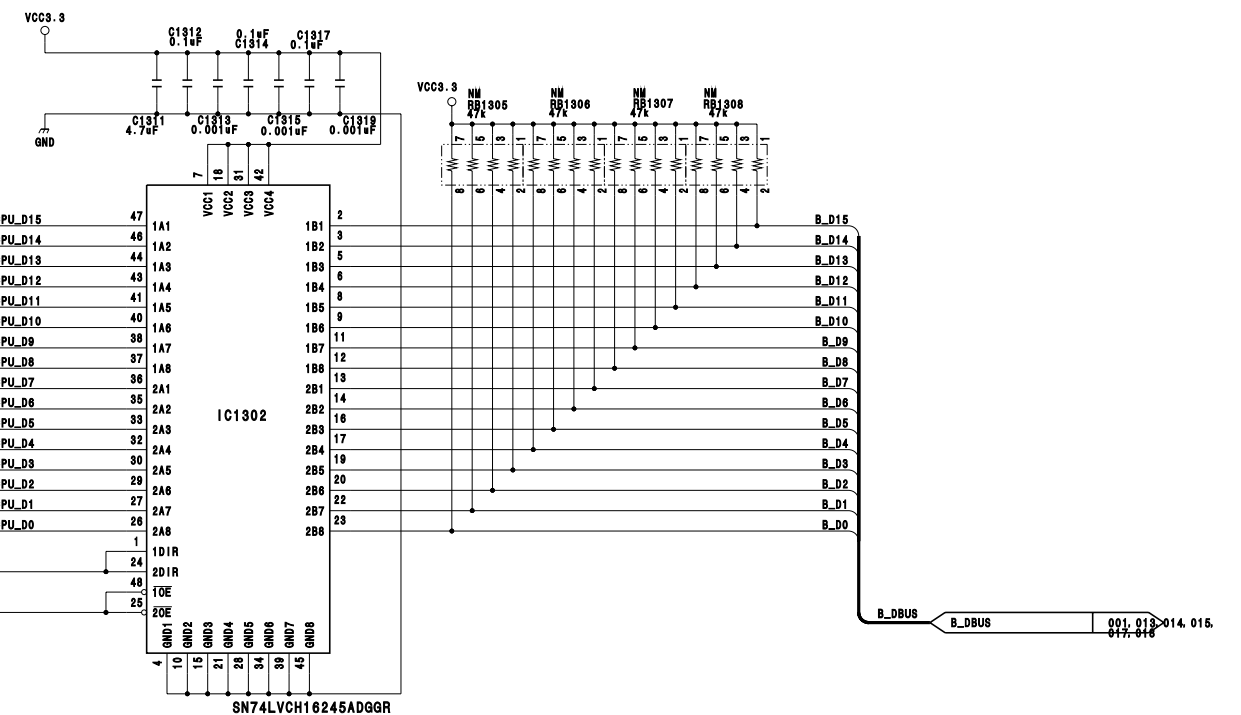






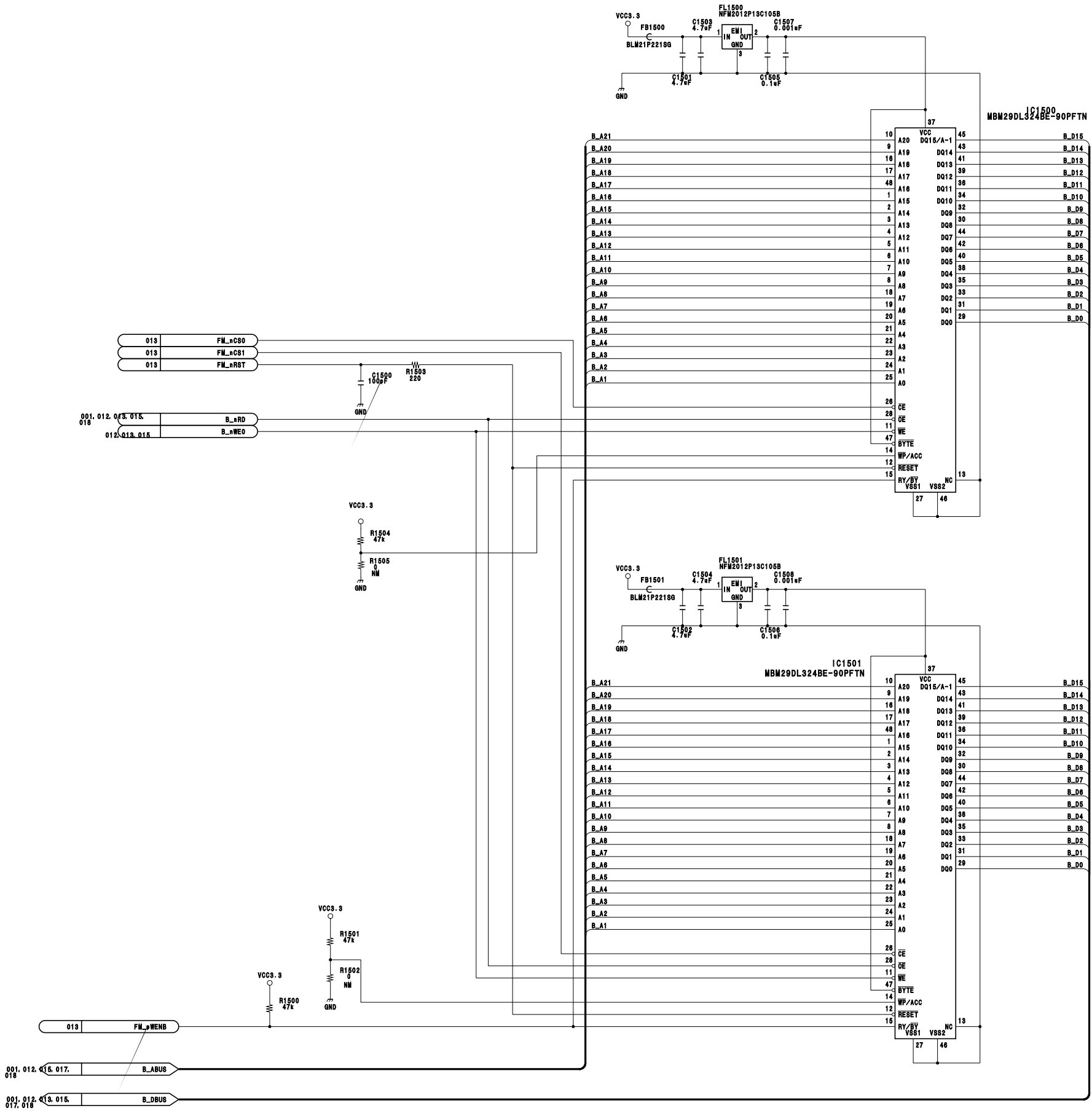




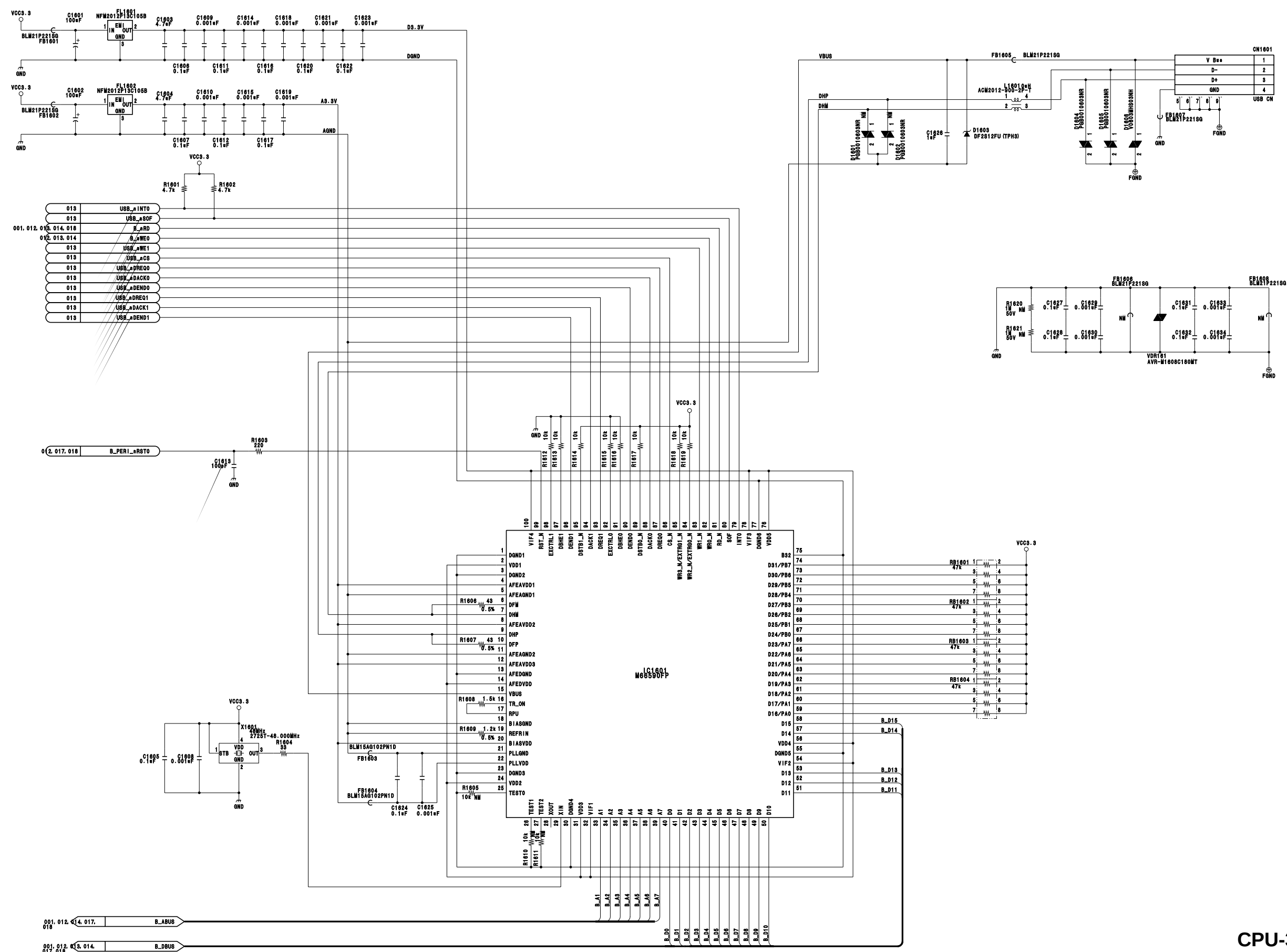






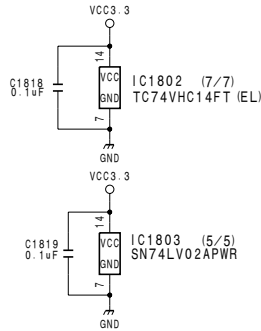
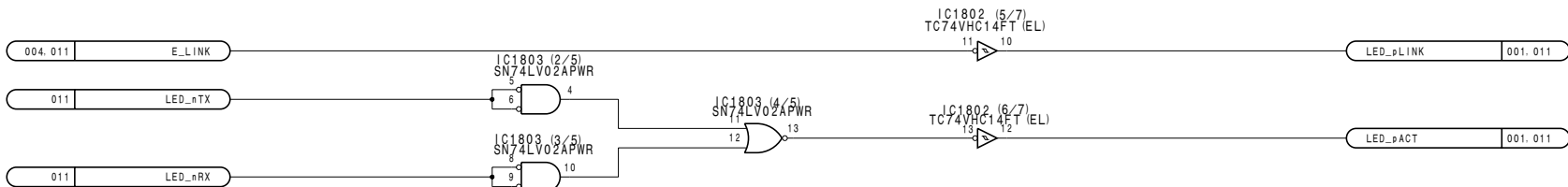
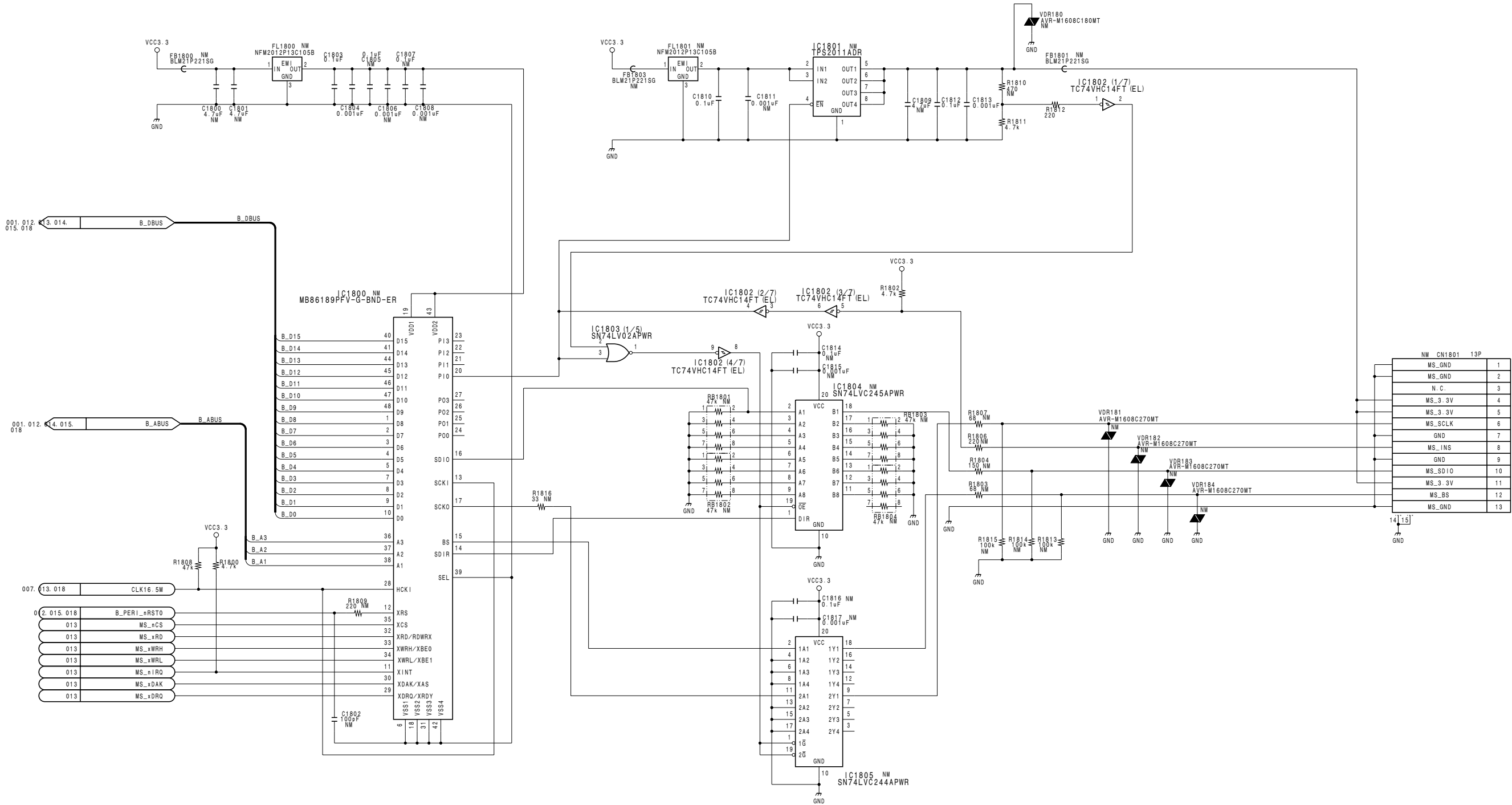






5





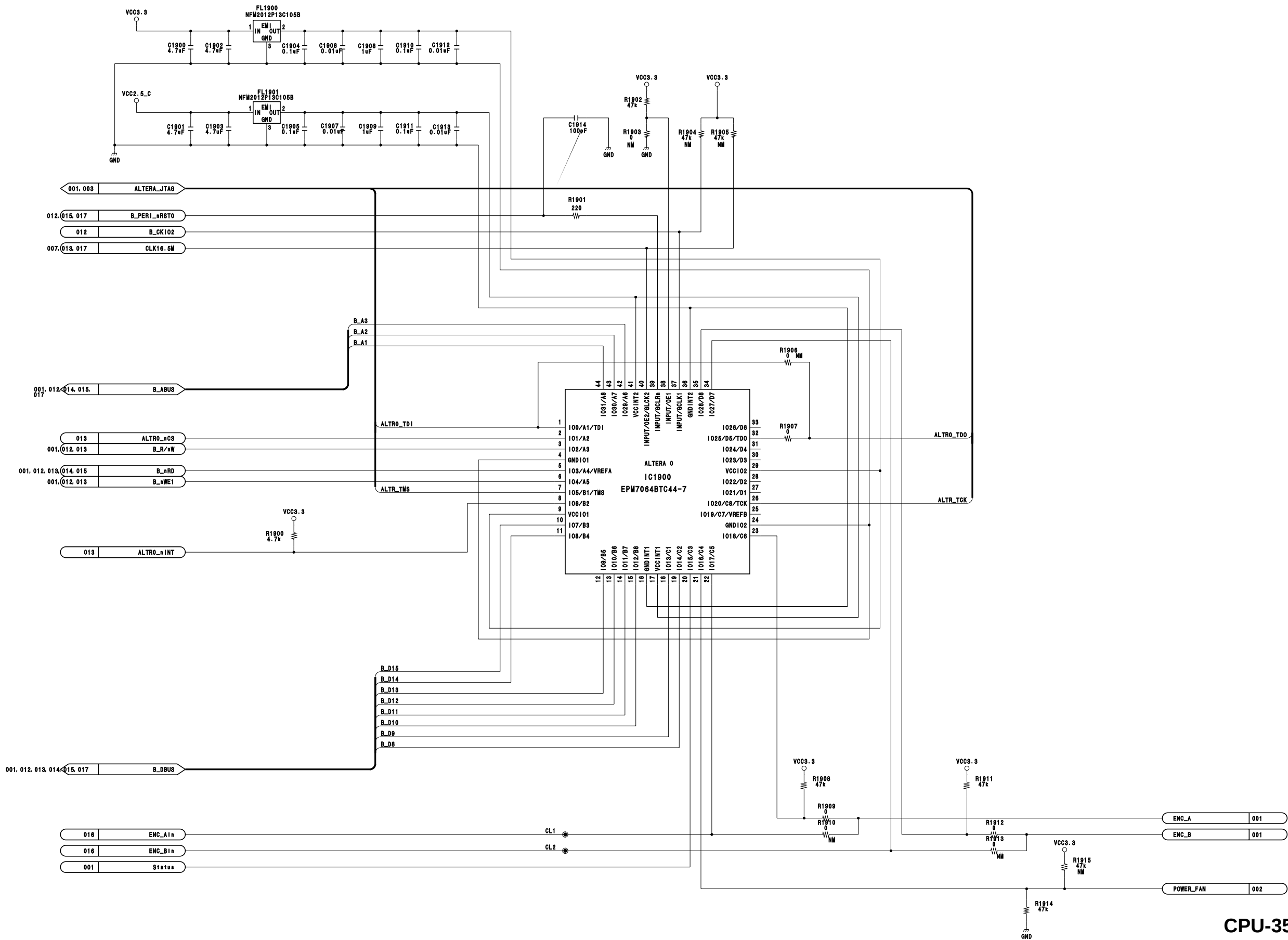
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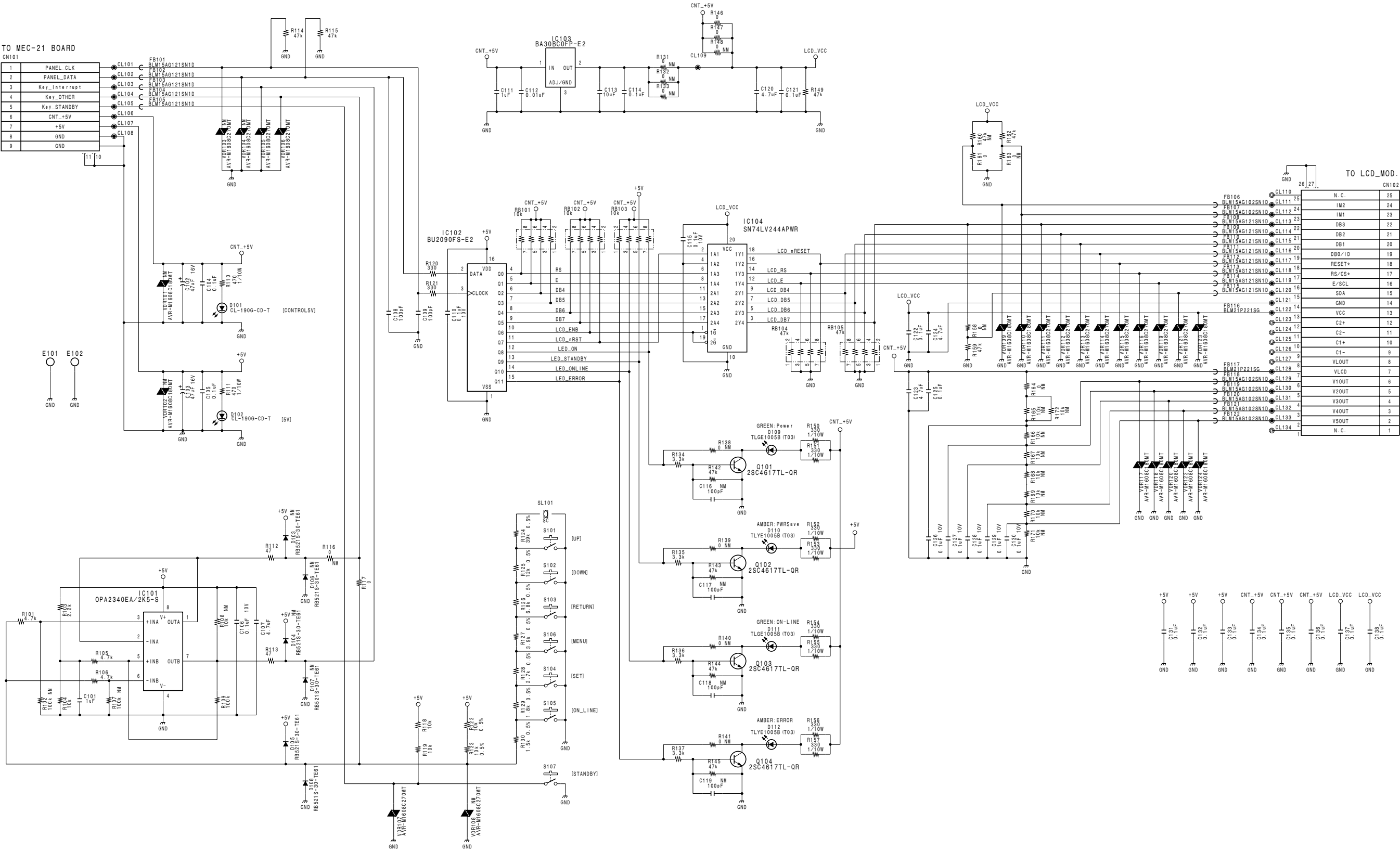
2

3

4

5





1

2

3

4

5

A

B

C

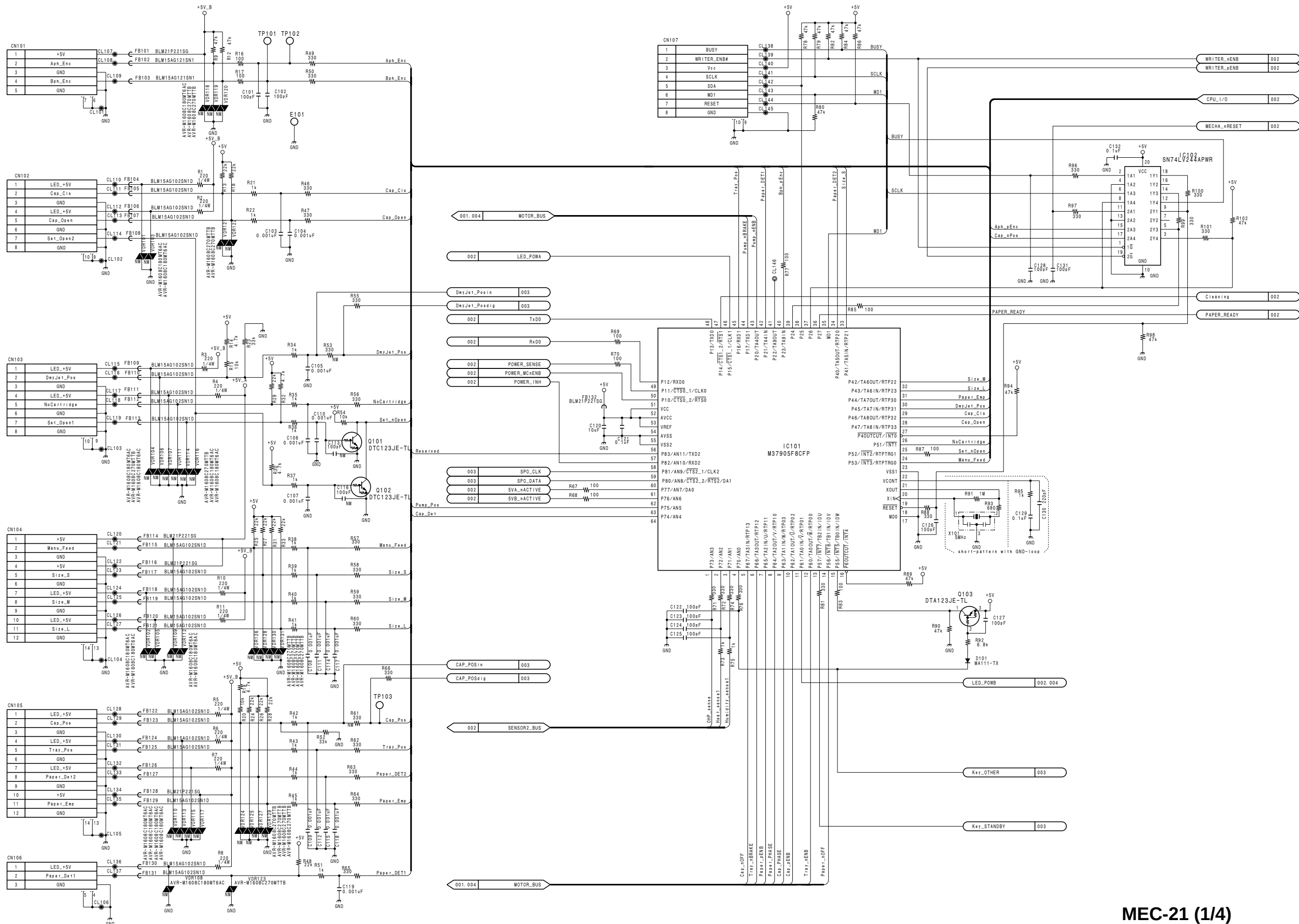
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E

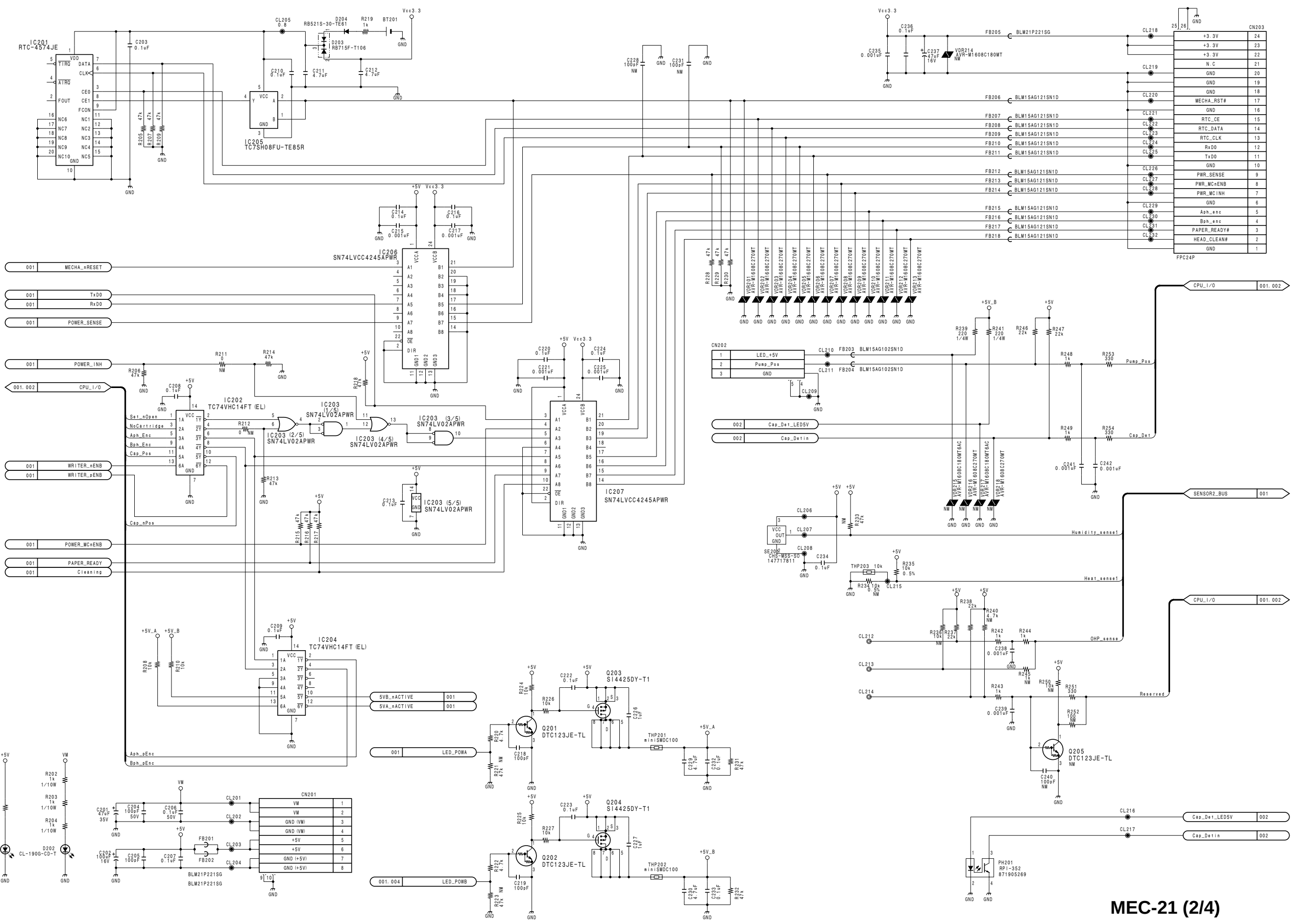
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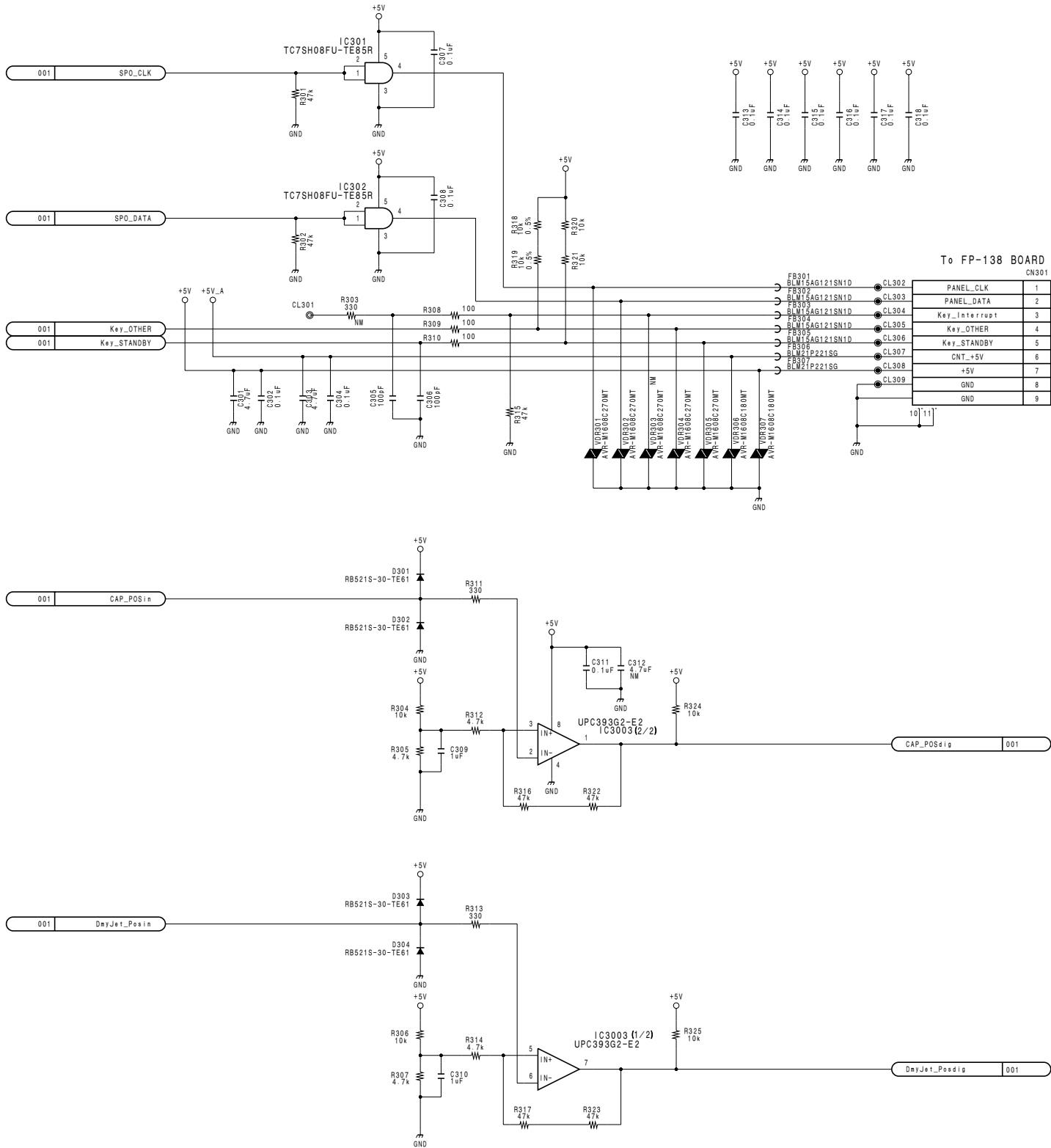
G

H

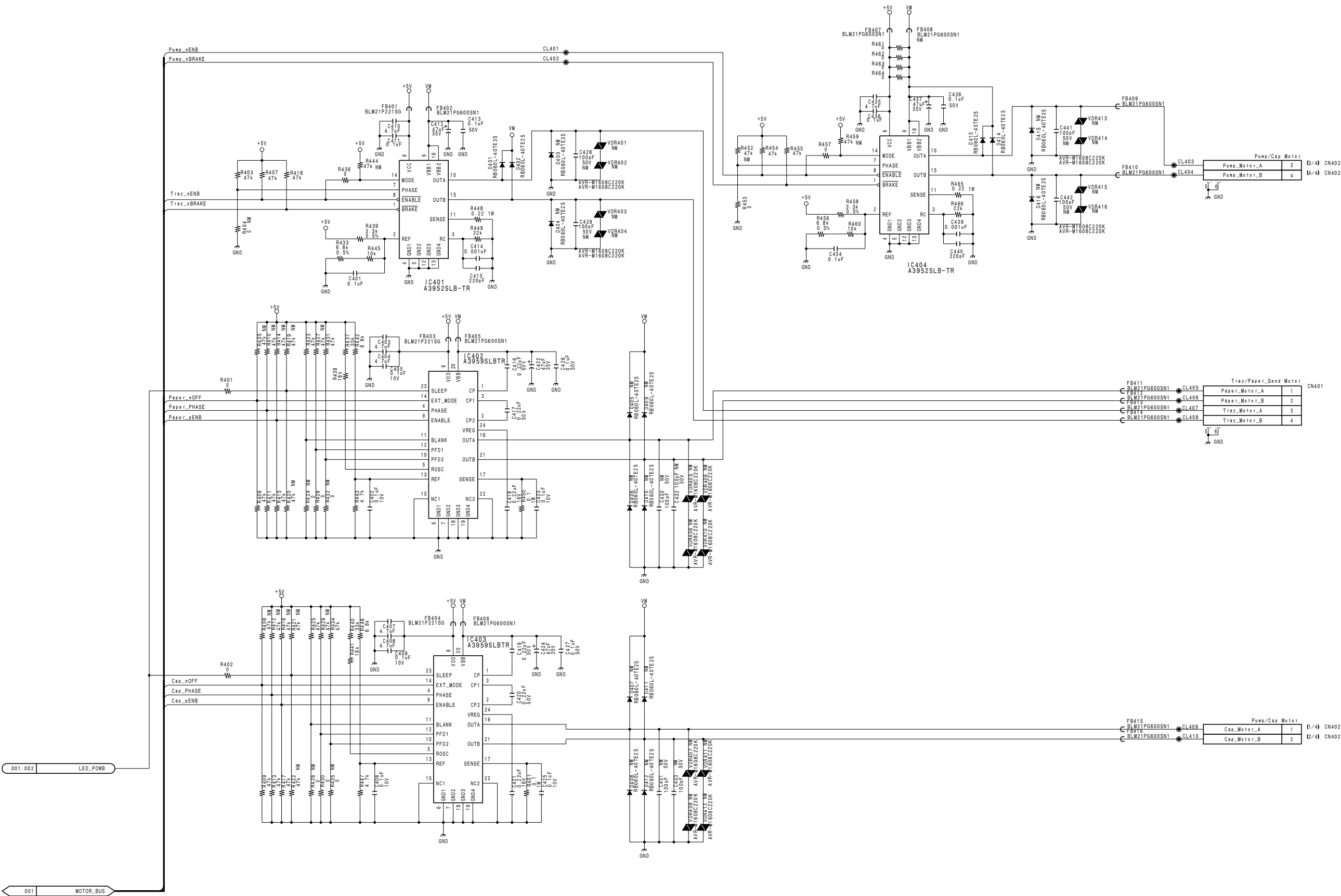






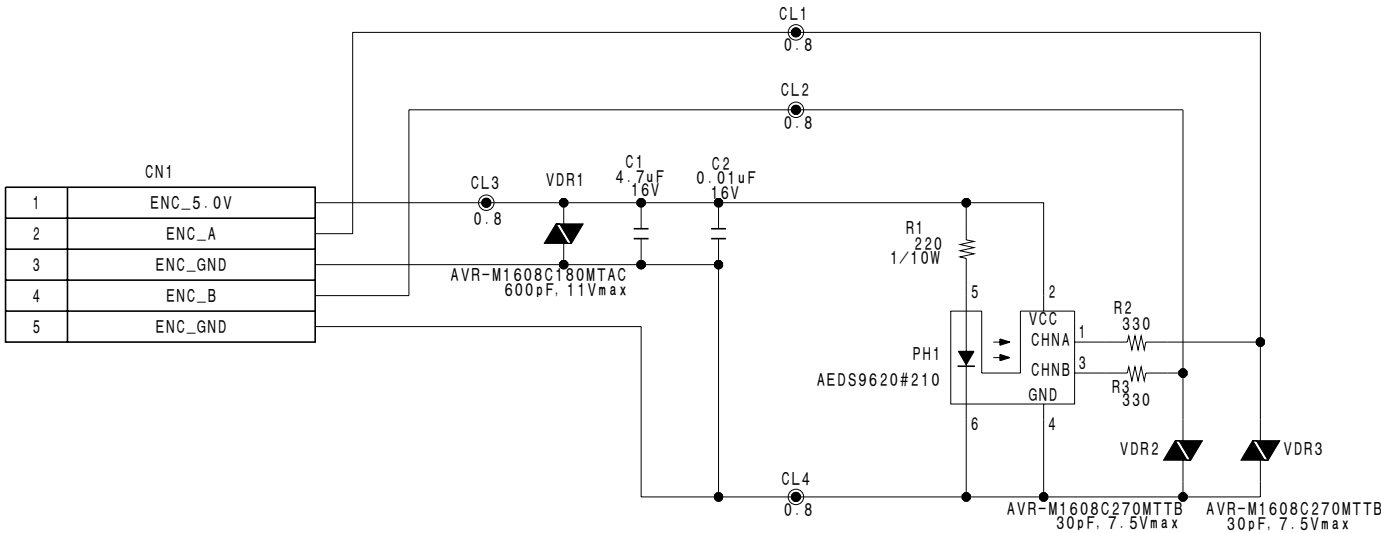






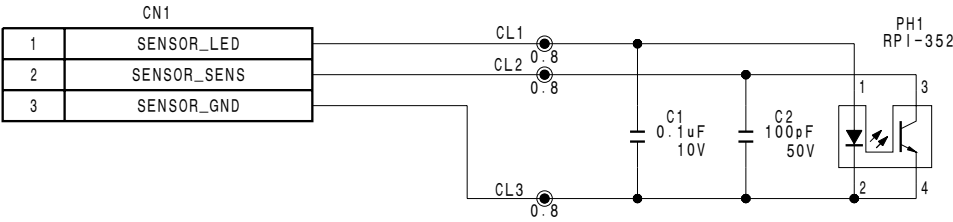
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2



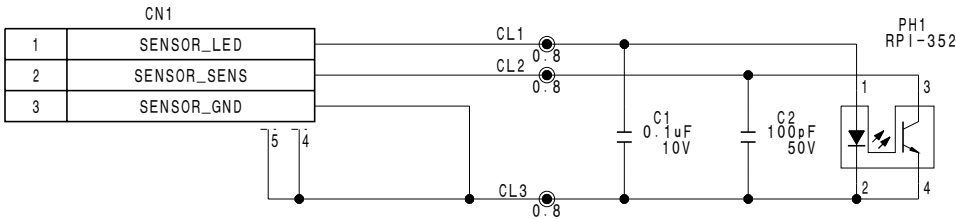
SE-643

3



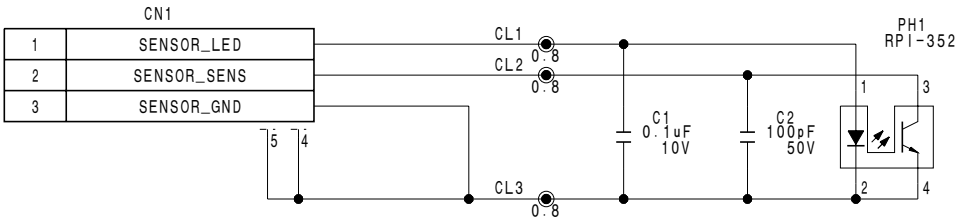
SE-645

4

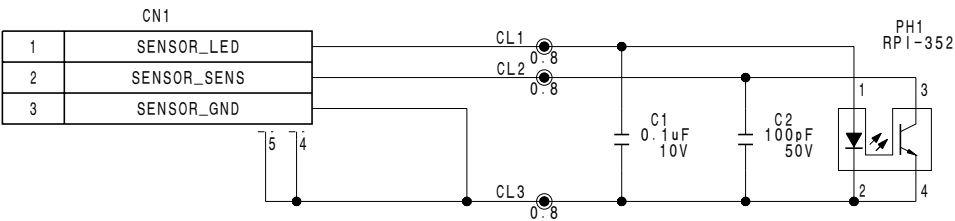


SE-644

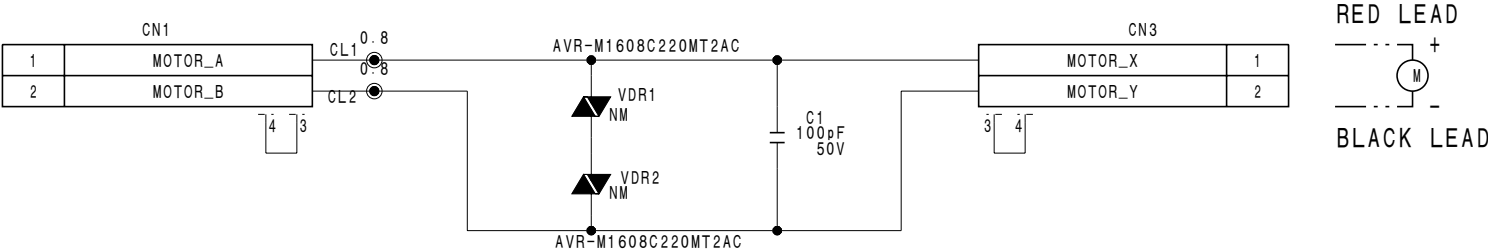
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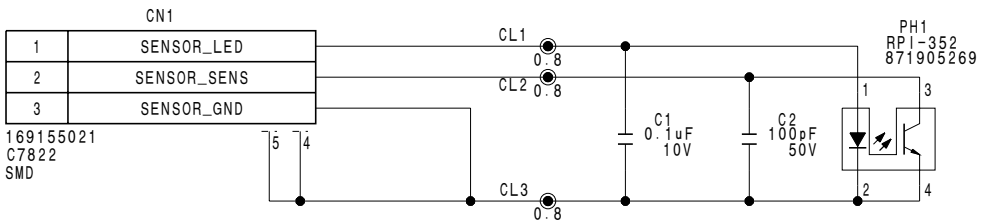
SE-646



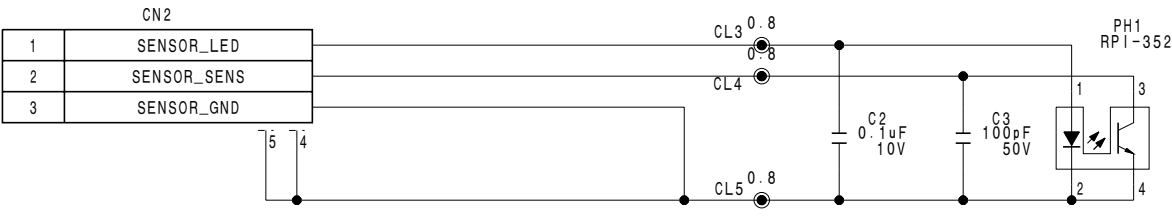
SE-673



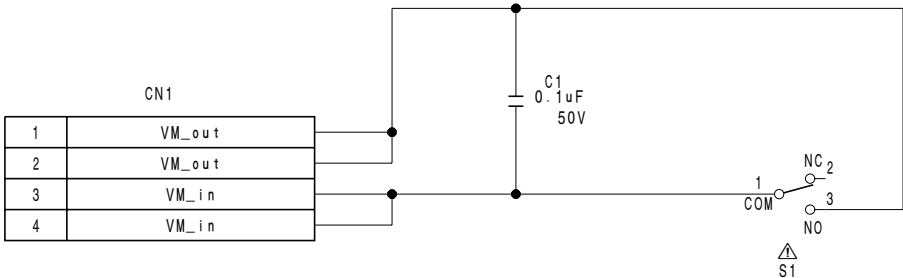
RED LEAD  
BLACK LEAD



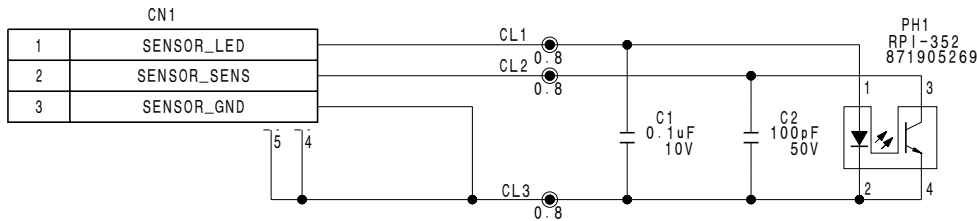
SE-674



SE-736



SW-1105



SE-737

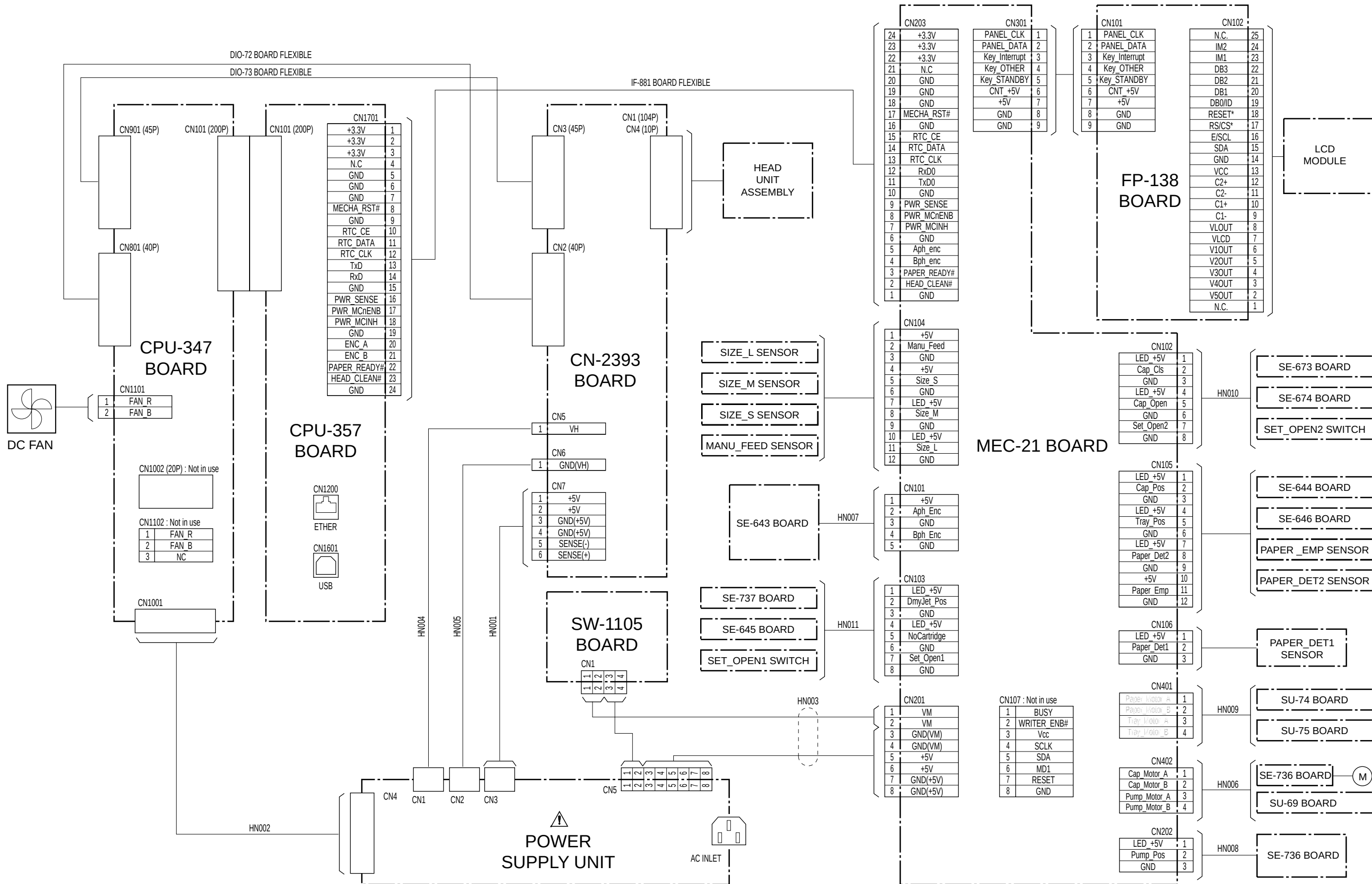
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2

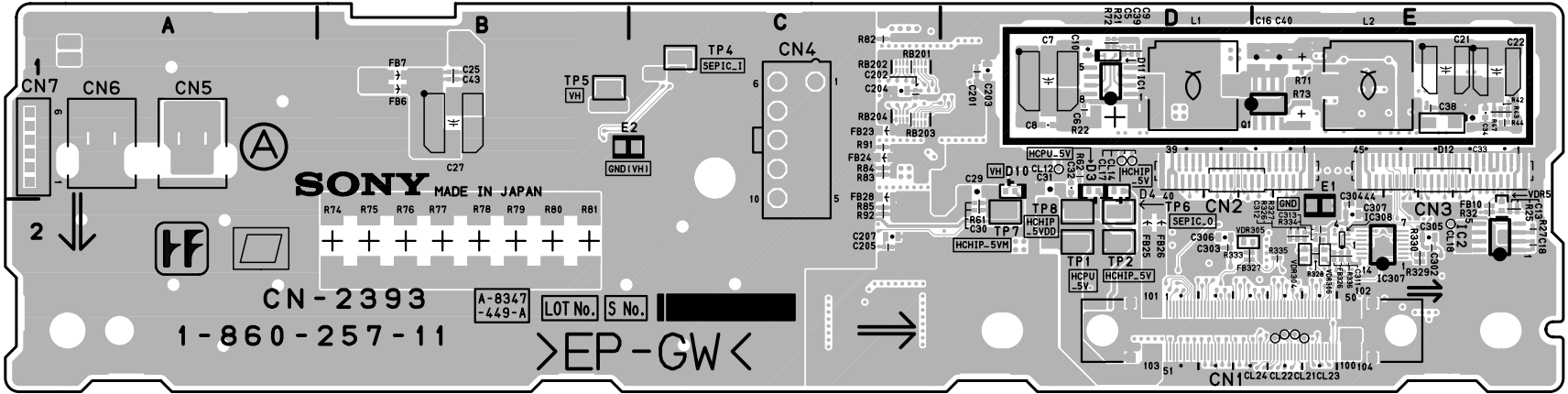
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4

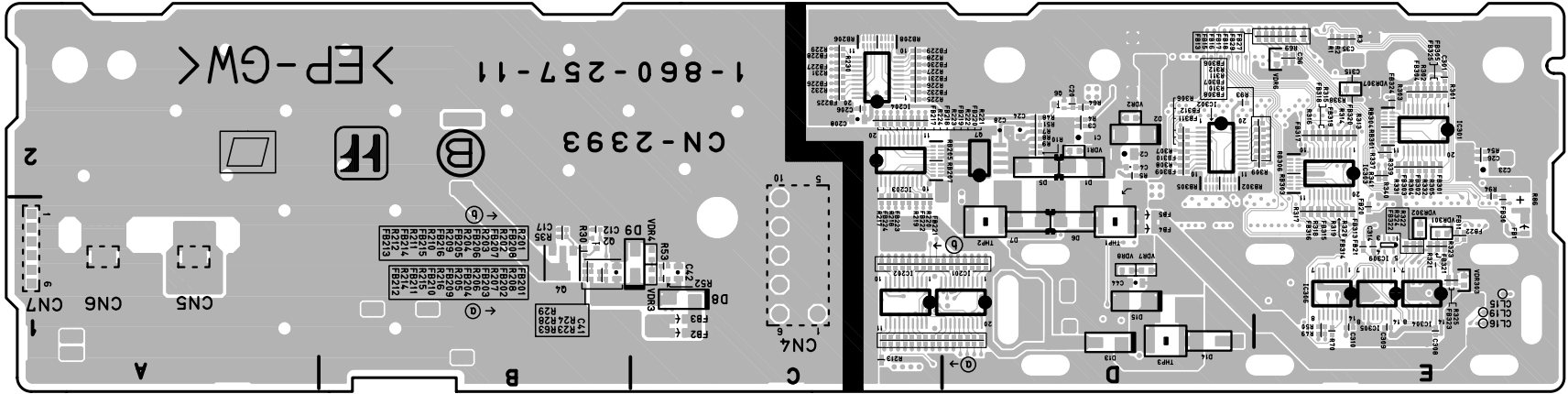
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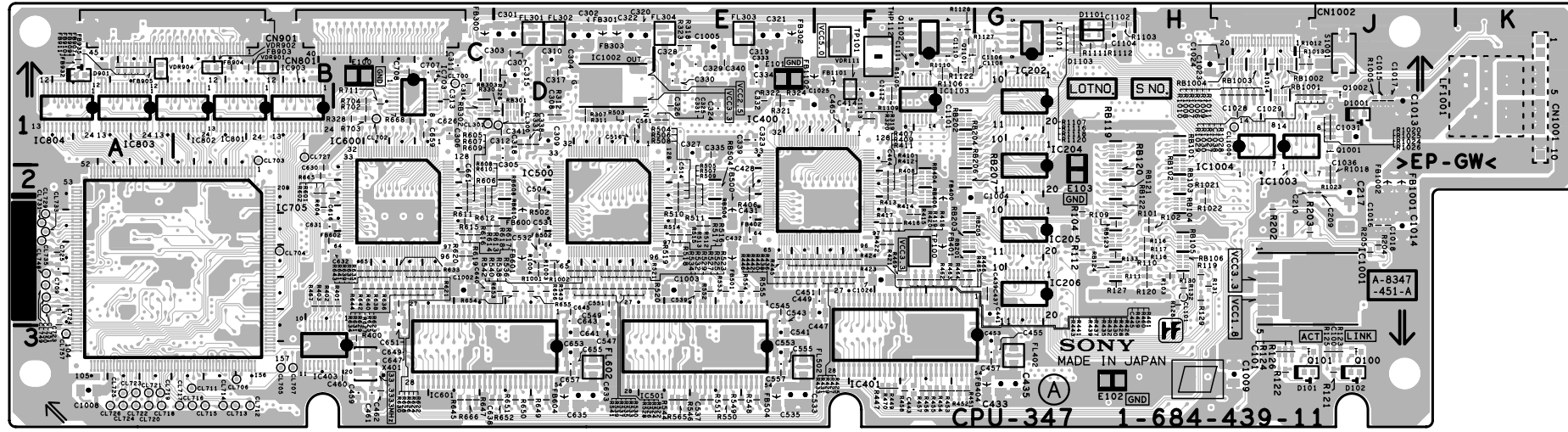
8-2. Board Layouts



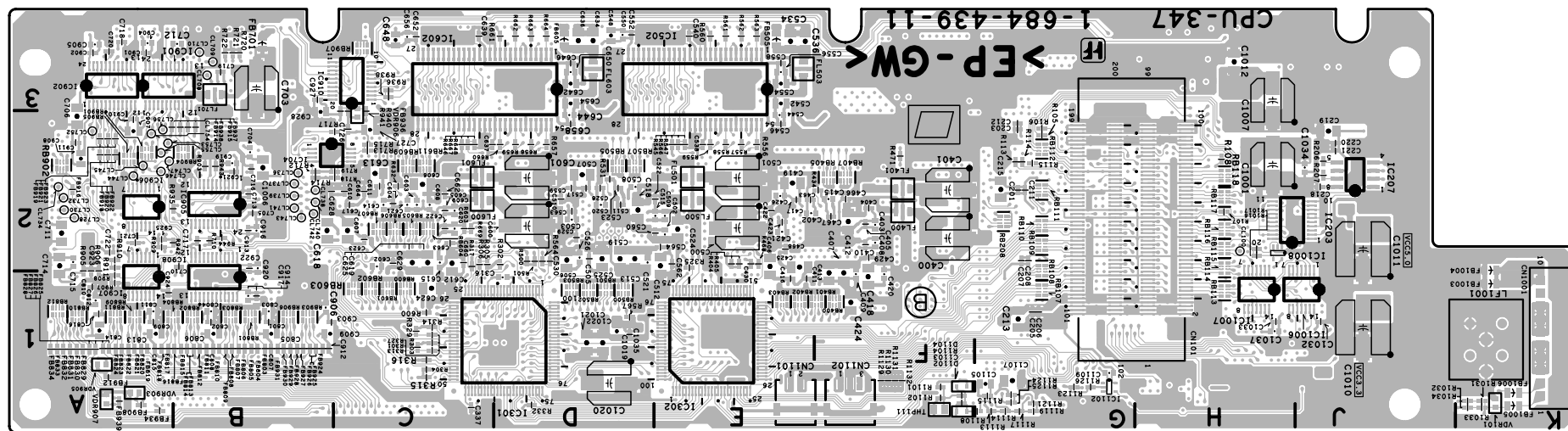
CN-2393 -A SIDE-  
SUFFIX: -11



CN-2393 -B SIDE-  
SUFFIX: -11

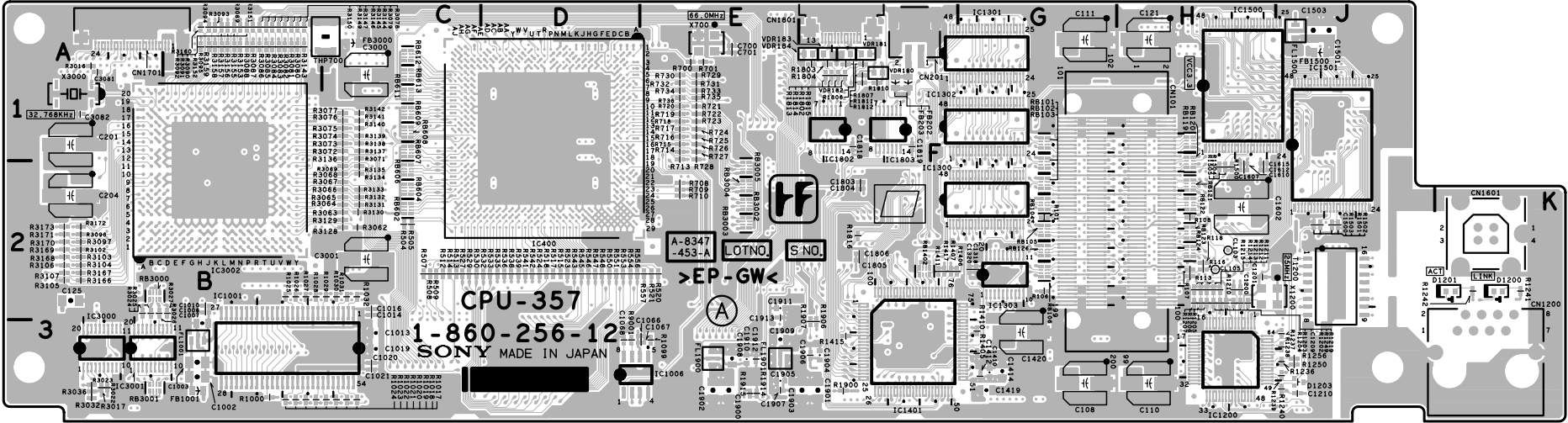


**CPU-347** -A SIDE-SUFFIX: -11

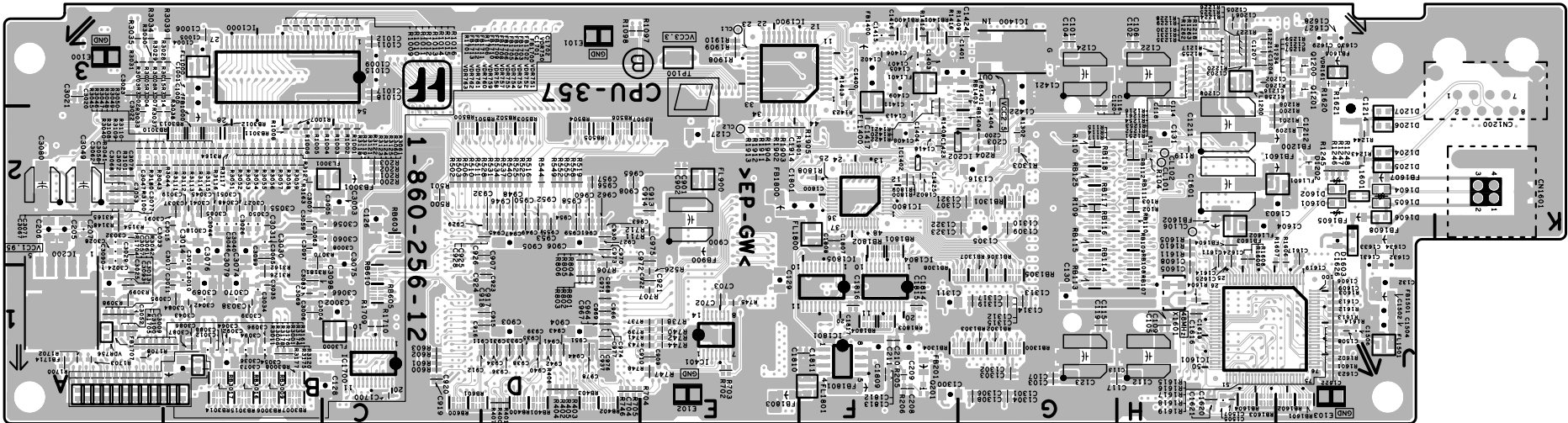


**CPU-347** -B SIDE-  
SUFFIX: -11

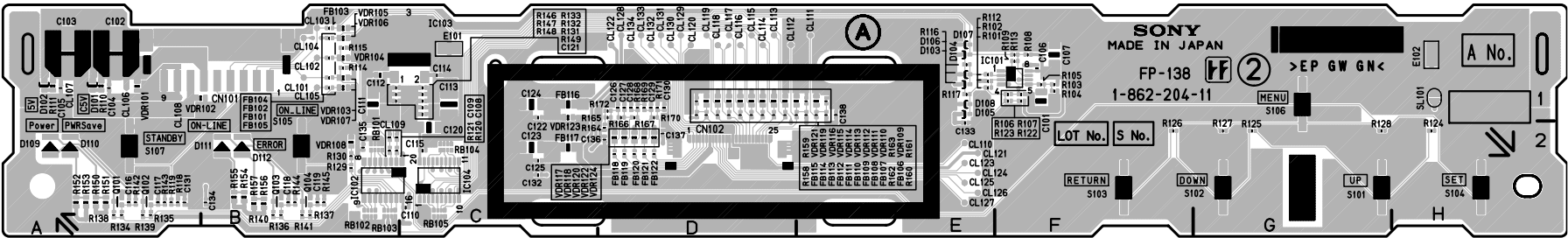




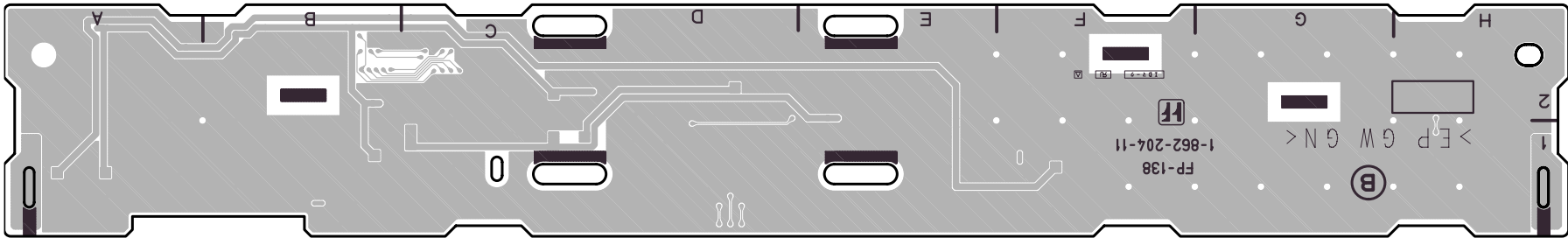
CPU-357 -A SIDE-  
SUFFIX: -12



CPU-357 -B SIDE-  
SUFFIX: -12

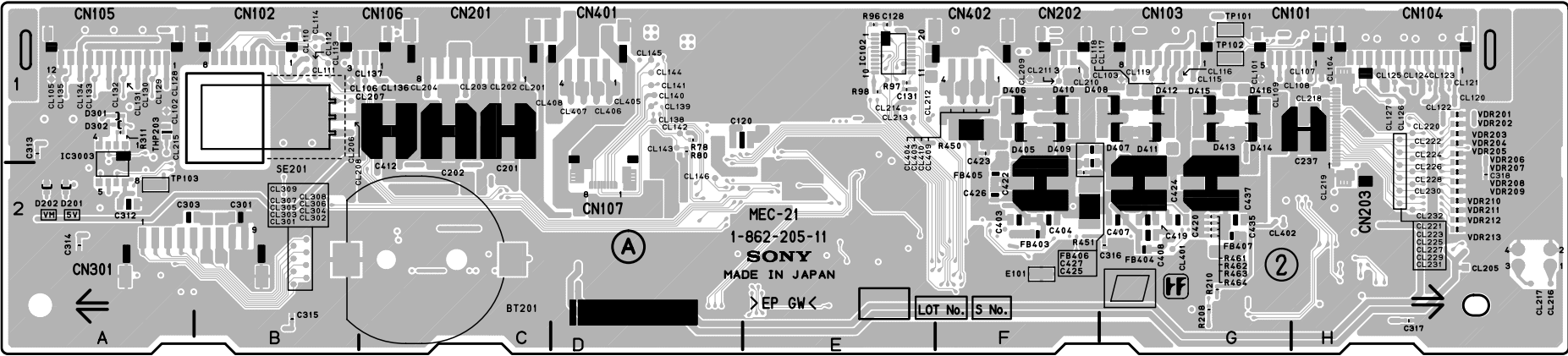


**FP-138 -A SIDE-**  
SUFFIX: -11

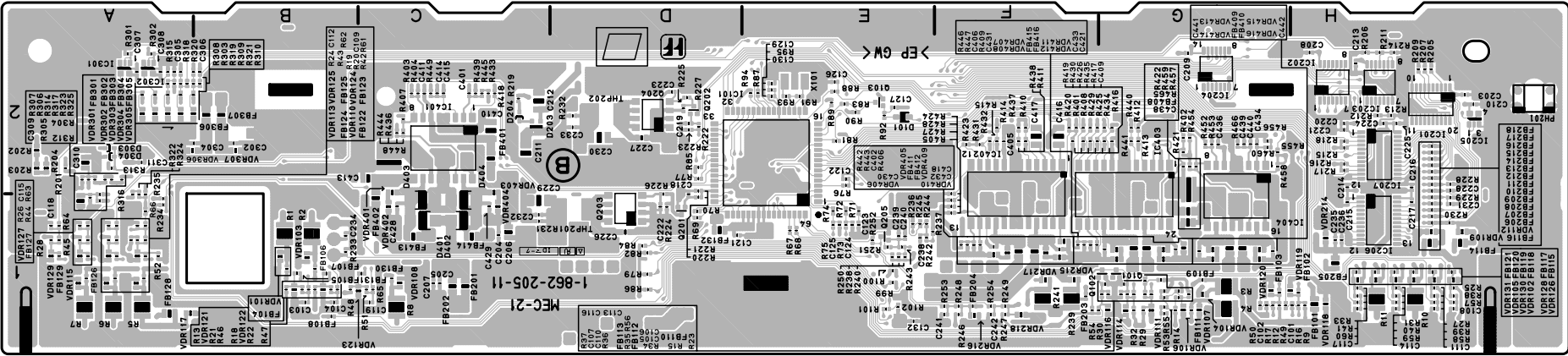


**FP-138 -B SIDE-**  
SUFFIX: -11

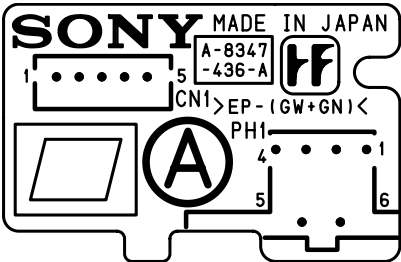




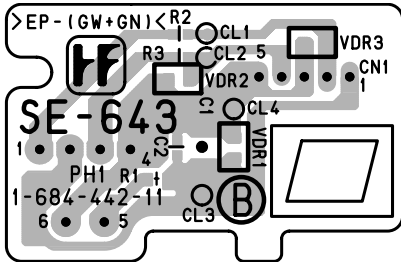
MEC-21 -A SIDE-  
SUFFIX: -11



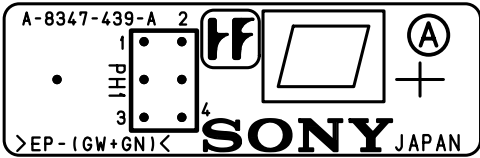
MEC-21 -B SIDE-  
SUFFIX: -11



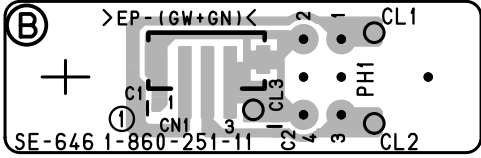
**SE-643** -A SIDE-  
SUFFIX: -11



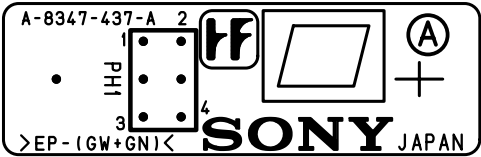
**SE-643** -B SIDE-  
SUFFIX: -11



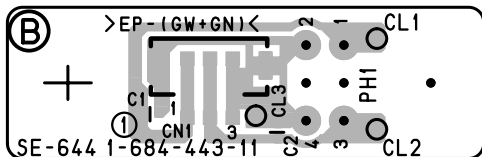
**SE-646** -A SIDE-  
SUFFIX: -11



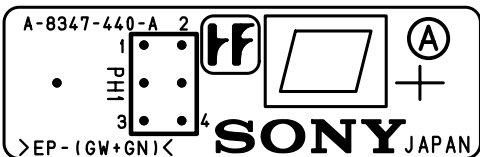
**SE-646** -B SIDE-  
SUFFIX: -11



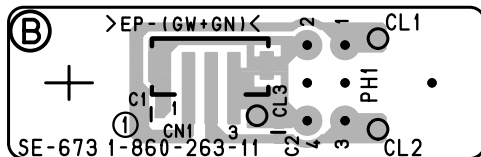
**SE-644** -A SIDE-  
SUFFIX: -11



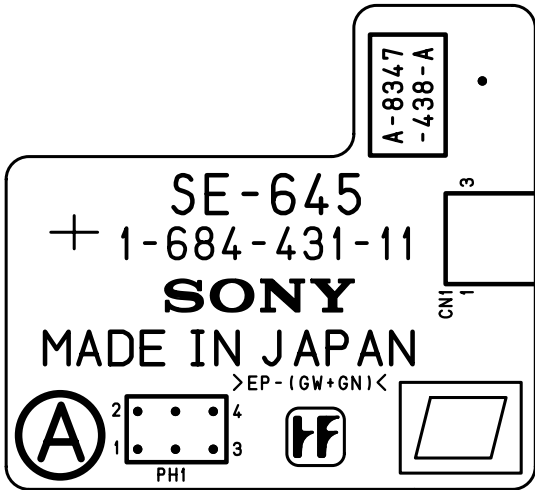
**SE-644** -B SIDE-  
SUFFIX: -11



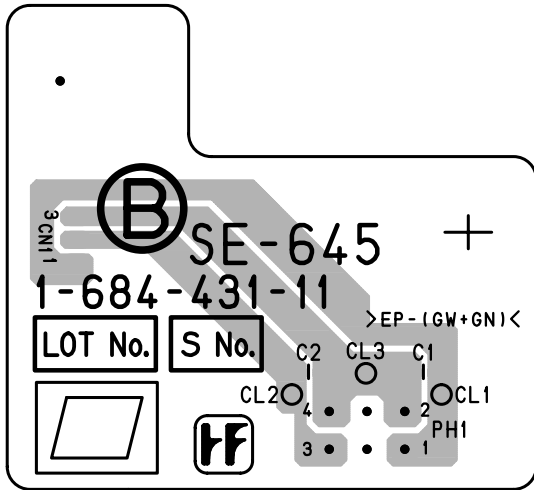
**SE-673** -A SIDE-  
SUFFIX: -11



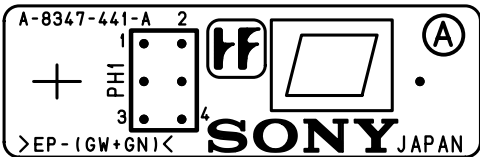
**SE-673** -B SIDE-  
SUFFIX: -11



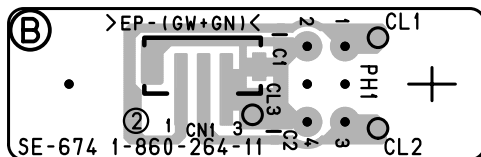
**SE-645** -A SIDE-  
SUFFIX: -11



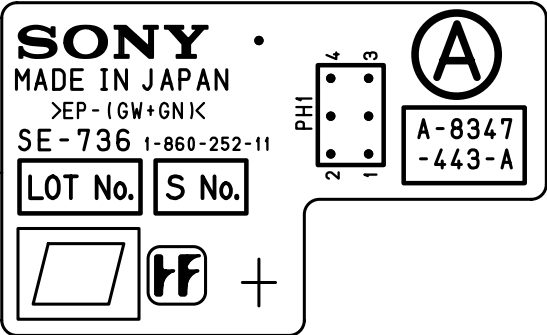
**SE-645** -B SIDE-  
SUFFIX: -11



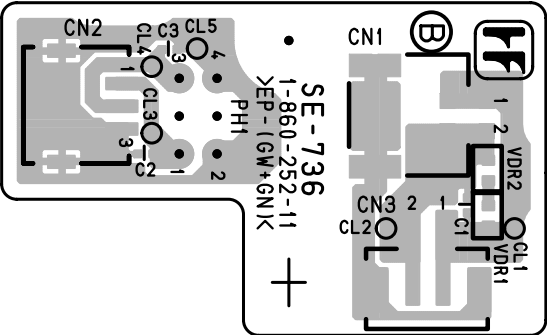
**SE-674** -A SIDE-  
SUFFIX: -11



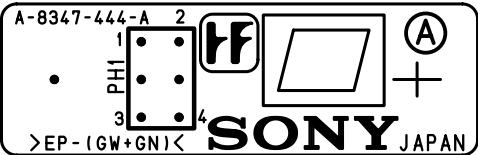
**SE-674** -B SIDE-  
SUFFIX: -11



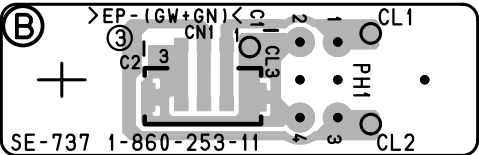
**SE-736 -A SIDE-**  
SUFFIX: -11



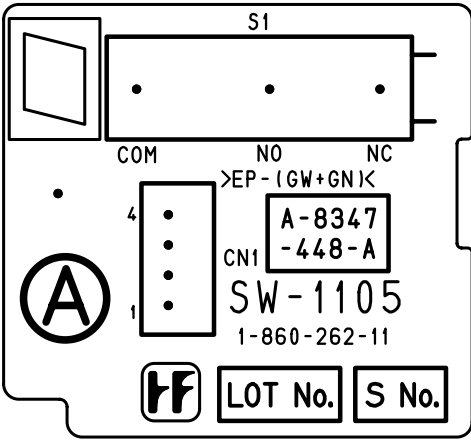
**SE-736 -B SIDE-**  
SUFFIX: -11



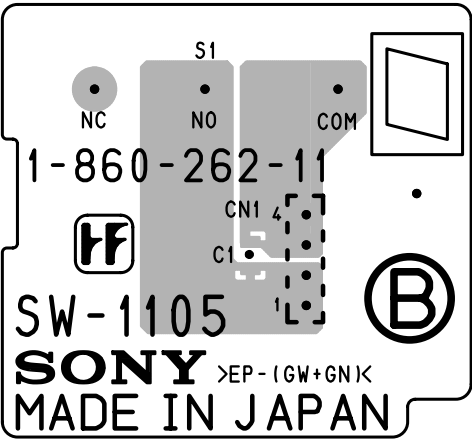
**SE-737 -A SIDE-**  
SUFFIX: -11



**SE-737 -B SIDE-**  
SUFFIX: -11



**SW-1105 -A SIDE-**  
SUFFIX: -11



**SW-1105 -B SIDE-**  
SUFFIX: -11





