

8

7

6

5

4

3

2

1

1. ALL RESISTANCE VALUES ARE IN OHMS, 0.1 WATT +/- 5%.

2. ALL CAPACITANCE VALUES ARE IN MICROFARADS.

3. ALL CRYSTALS & OSCILLATOR VALUES ARE IN HERTZ.

REV

ZONE

ECN

DESCRIPTION OF CHANGE

CK APPD

DATE

ENG APPD

DATE

?

?

SCHEM, LIO, MBP 15 "

04/20/07

PDF PAGE

CSA PAGE

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DATE

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AUDIO:CODEC

LENGO\_M75\_AUDIO

03/20/2007

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LENGO\_M75\_AUDIO

03/20/2007

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03/20/2007

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03/20/2007

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03/20/2007

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Inverter Connector

SPLIT\_INVERTER

12/06/2006

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Inverter Support

SPLIT\_INVERTER

01/31/2007

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Inverter Control IC

SPLIT\_INVERTER

01/31/2007

PART#

QTY

DESCRIPTION

REFERENCE DESIGNATOR(S)

CRITICAL

BOM OPTION

051-7226

1

SCHEM,BANDCAMP,M75

SCH1

CRITICAL

820-2102

1

PCBF,BANDCAMP,M75

PCB1

CRITICAL

DIMENSIONS ARE IN MILLIMETERS

XX :

X.XX :

X.XXX :

ANGLES :

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION

METRIC

DRAFTER

ENG APPD

QA APPD

RELEASE

DESIGN CK

MFG APPD

DESIGNER

SCALE

SIZE

D

MATERIAL/FINISH

NOTED AS

APPLICABLE

NONE

Apple Computer Inc.

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TITLE

SCHEM, LIO, MBP 15

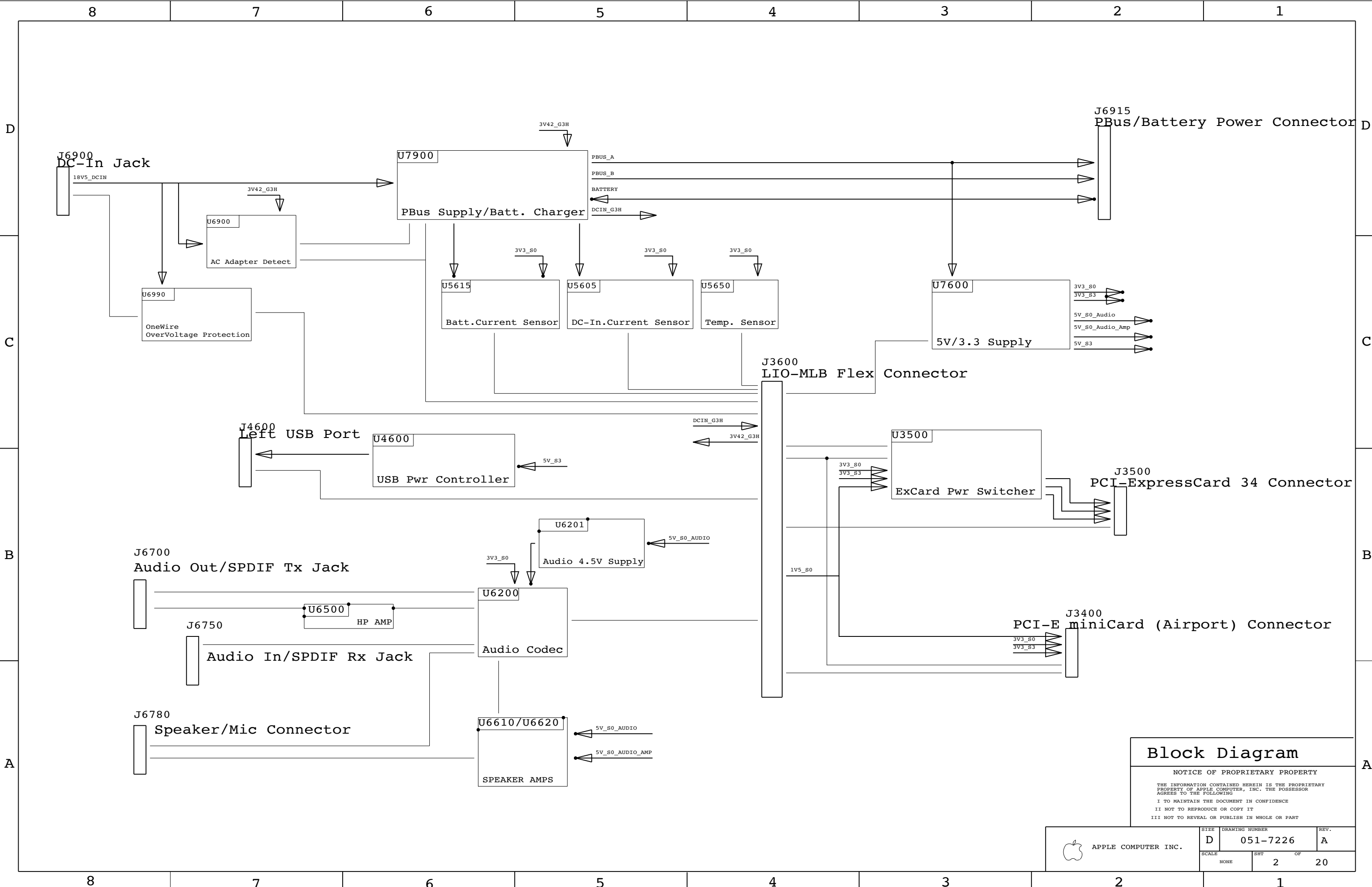
DRAWING NUMBER

051-7226

REV.

A

SHT 1 OF 20

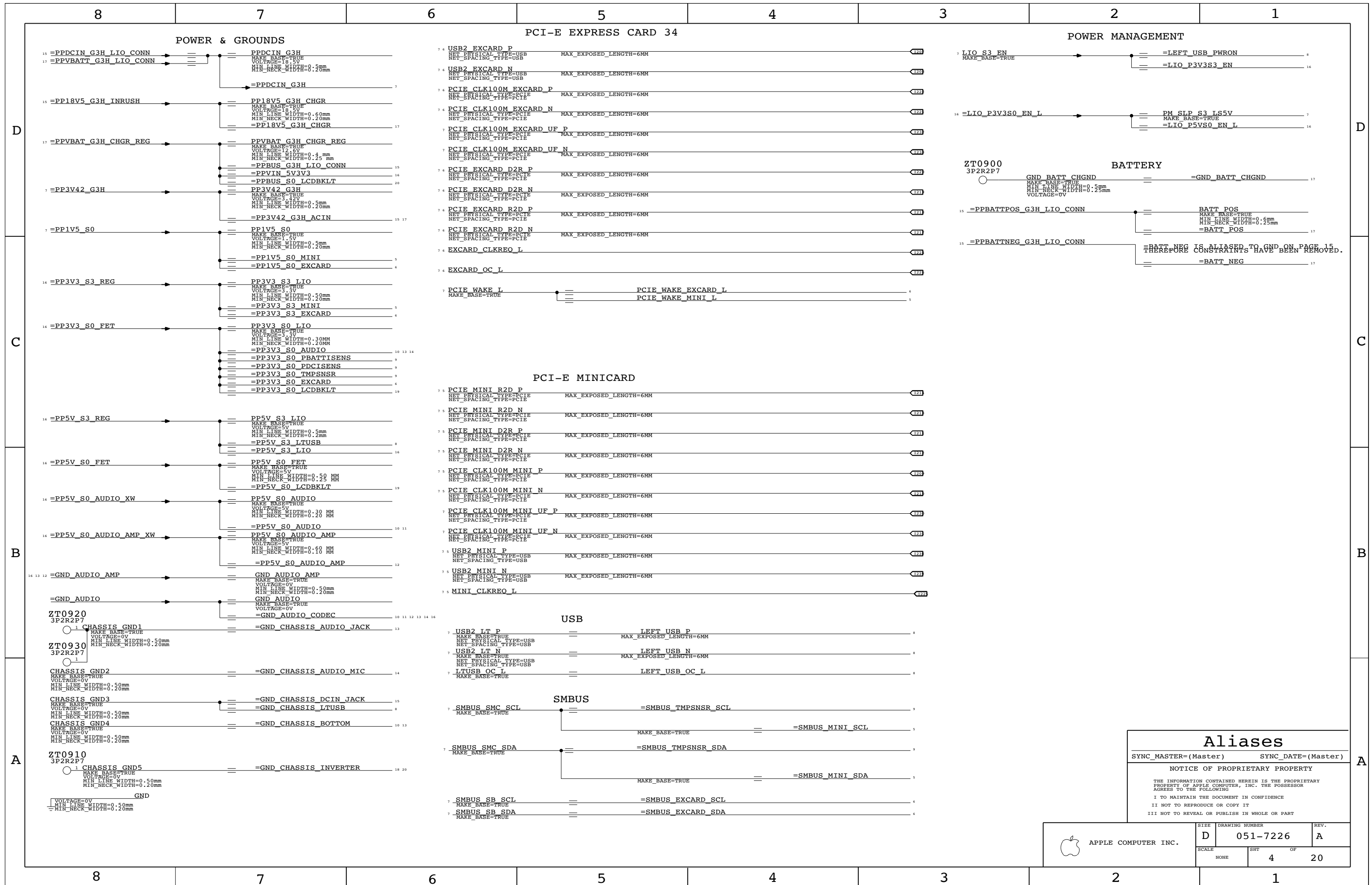


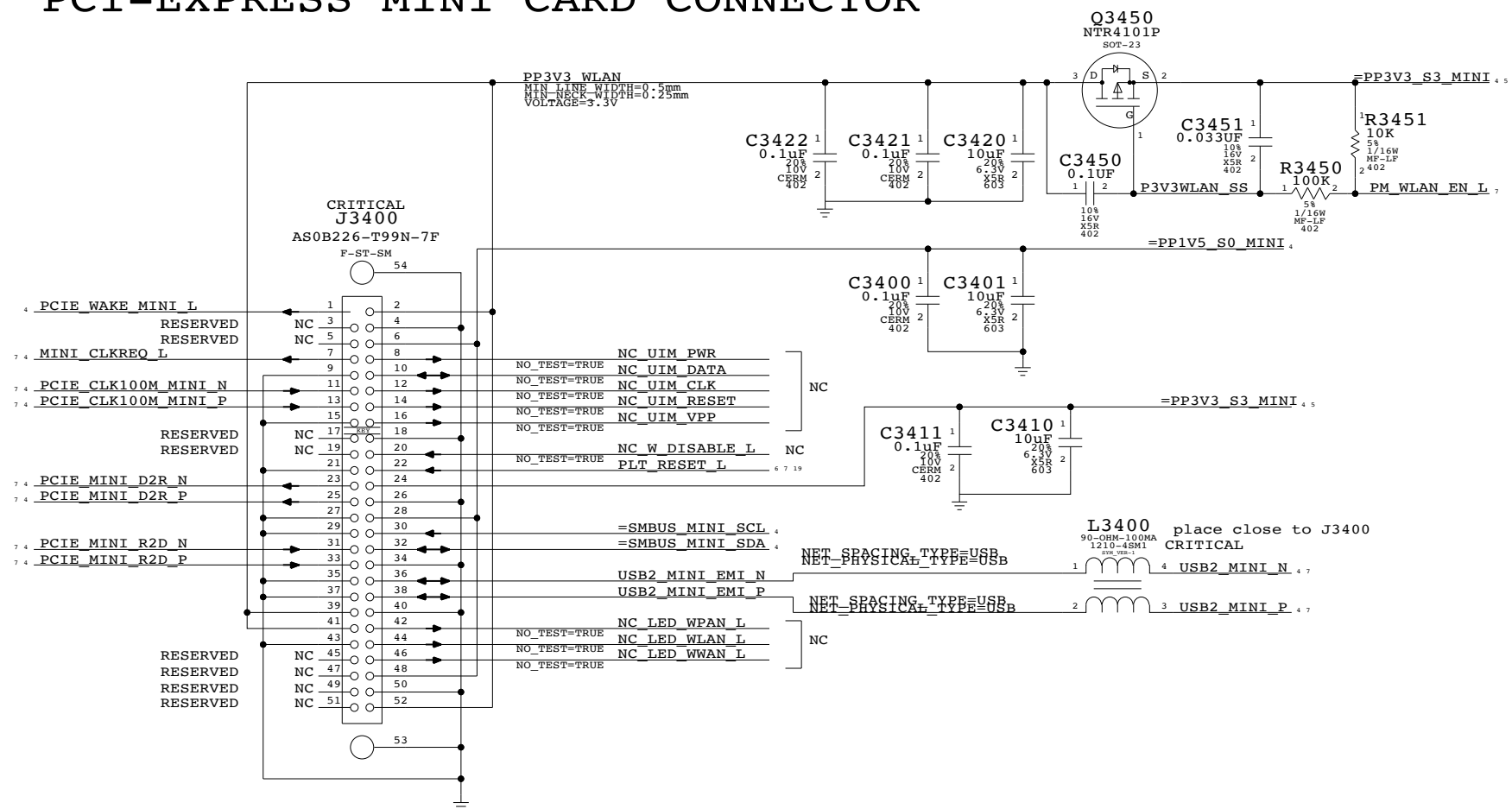
Block Diagram

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| NONE                |      | 2              | 20 |      |

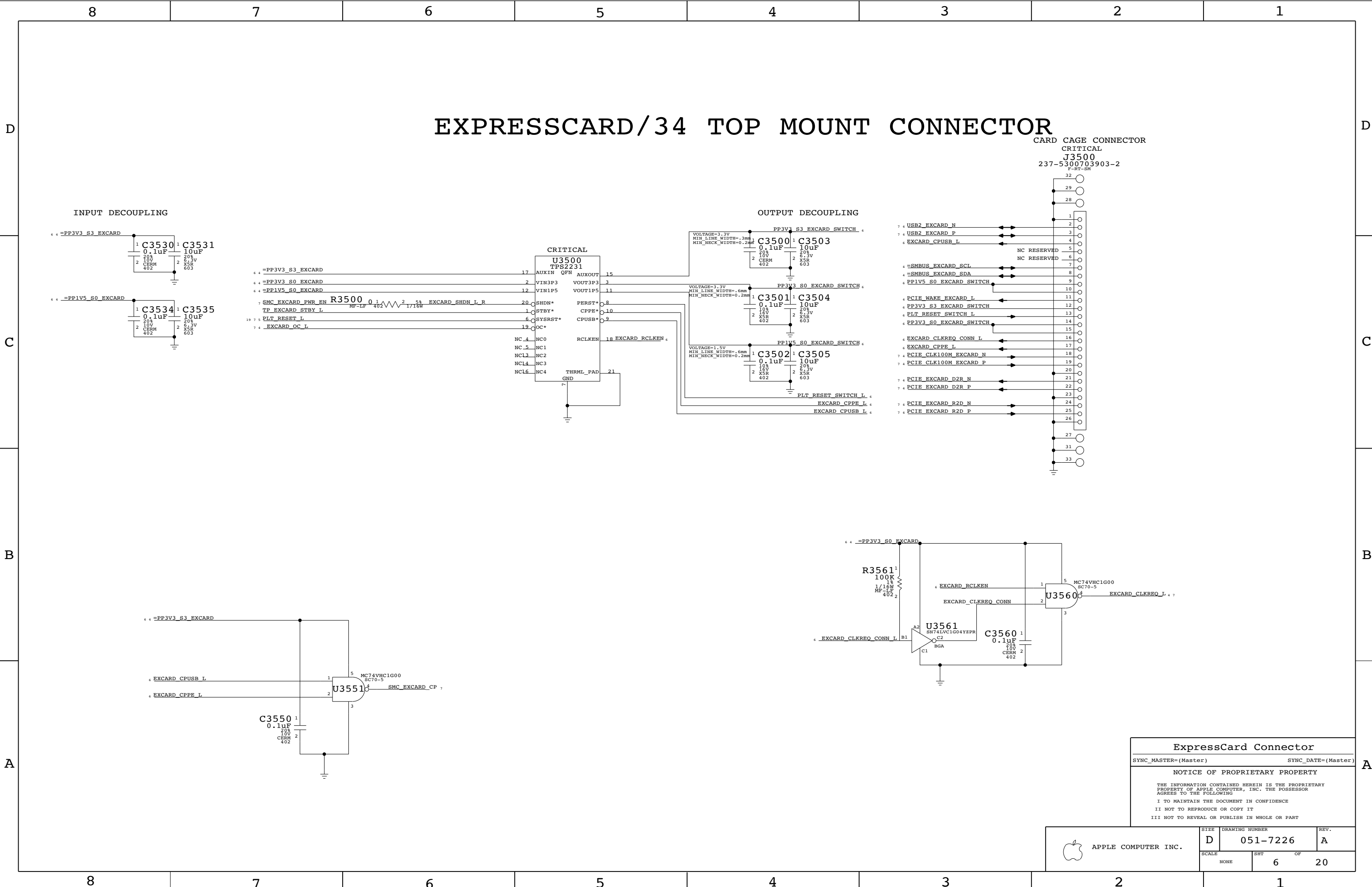
[illegible]





|                                                                                                           |       |                |      |
|-----------------------------------------------------------------------------------------------------------|-------|----------------|------|
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|                                                                                                           | D     | 051-7226       | A    |
|                                                                                                           | SCALE | SHT            | OF   |
|                                                                                                           | NONE  | 5              | 20   |





EXPRESSCARD/34 TOP MOUNT CONNECTOR

CARD CAGE CONNECTOR  
CRITICAL  
J3500  
237-5300703903-2  
P-RP-SM

INPUT DECOUPLING

OUTPUT DECOUPLING

CRITICAL

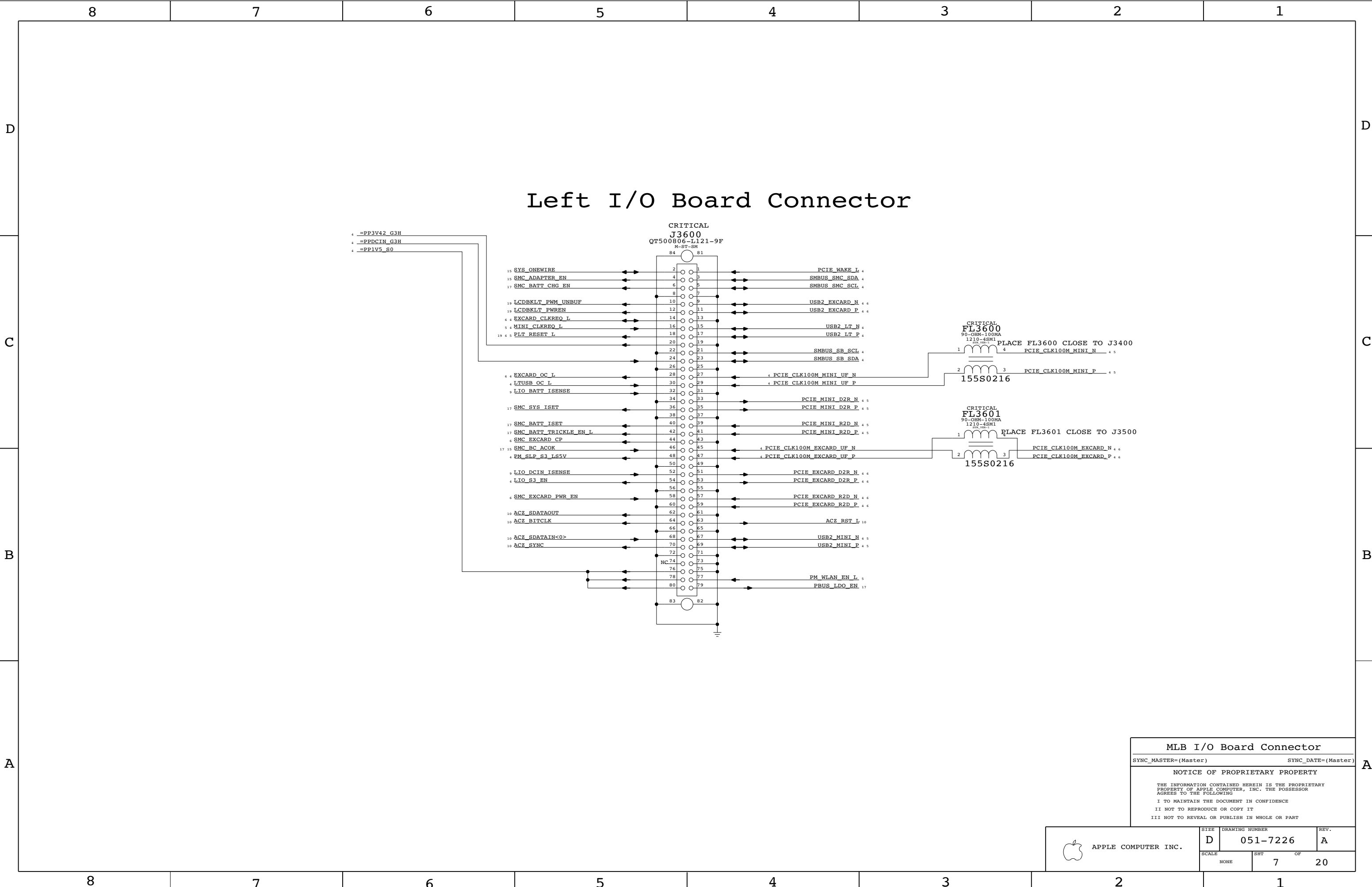
ExpressCard Connector

SYNC\_MASTER=(Master) SYNC\_DATE=(Master)

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|---------------------|---------------|----------------------------|-----------|
| APPLE COMPUTER INC. | SIZE<br>D     | DRAWING NUMBER<br>051-7226 | REV.<br>A |
|                     | SCALE<br>NONE | SHT<br>6                   | OF<br>20  |



**MLB I/O Board Connector**

SYNC\_MASTER=(Master) SYNC\_DATE=(Master)

**NOTICE OF PROPRIETARY PROPERTY**

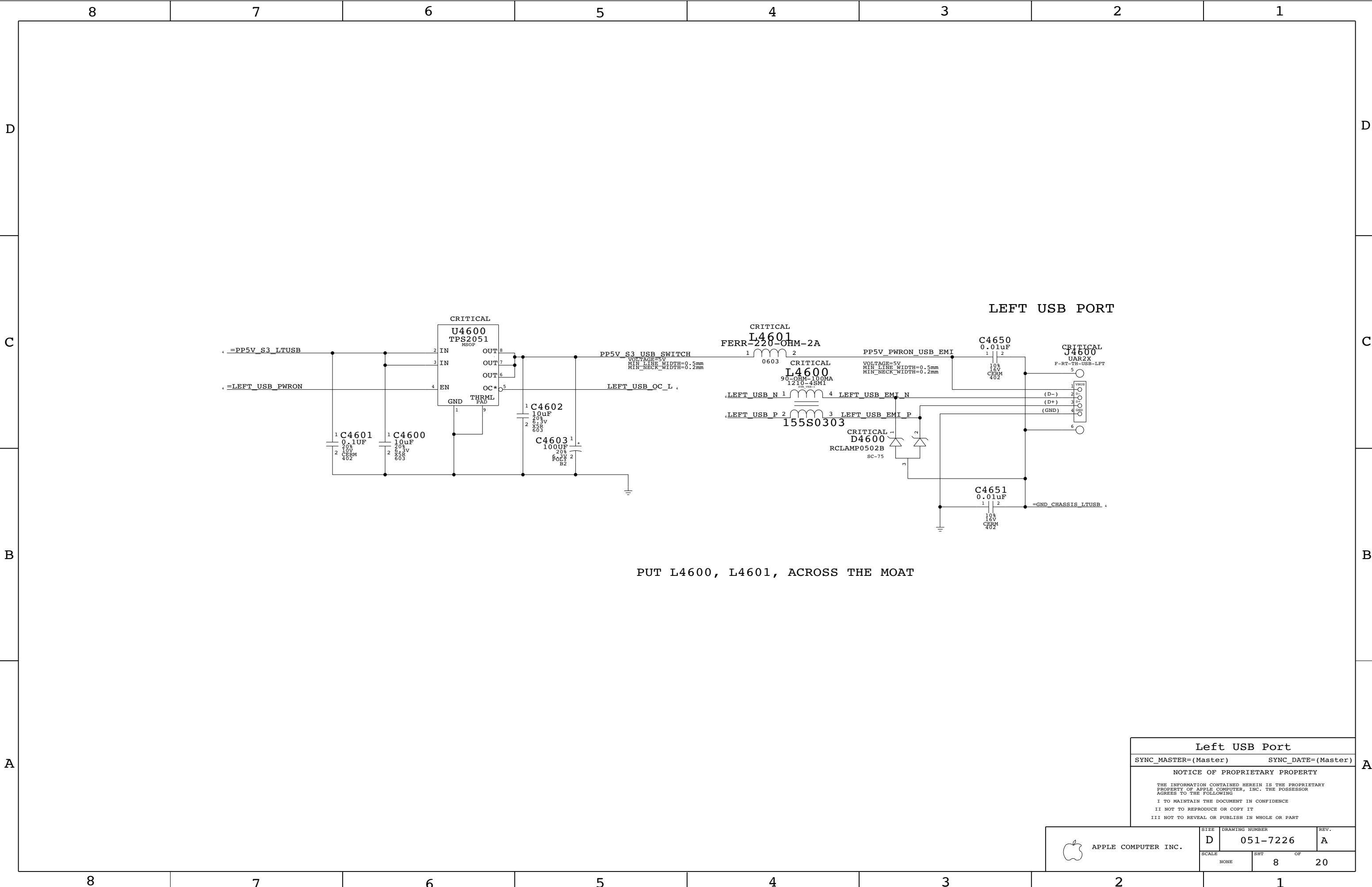
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|                     | D    | 051-7226       | A    |
| SCALE               |      | SHT            | OF   |
| NONE                |      | 7              | 20   |



Left USB Port

SYNC\_MASTER=(Master)

SYNC\_DATE=(Master)

NOTICE OF PROPRIETARY PROPERTY

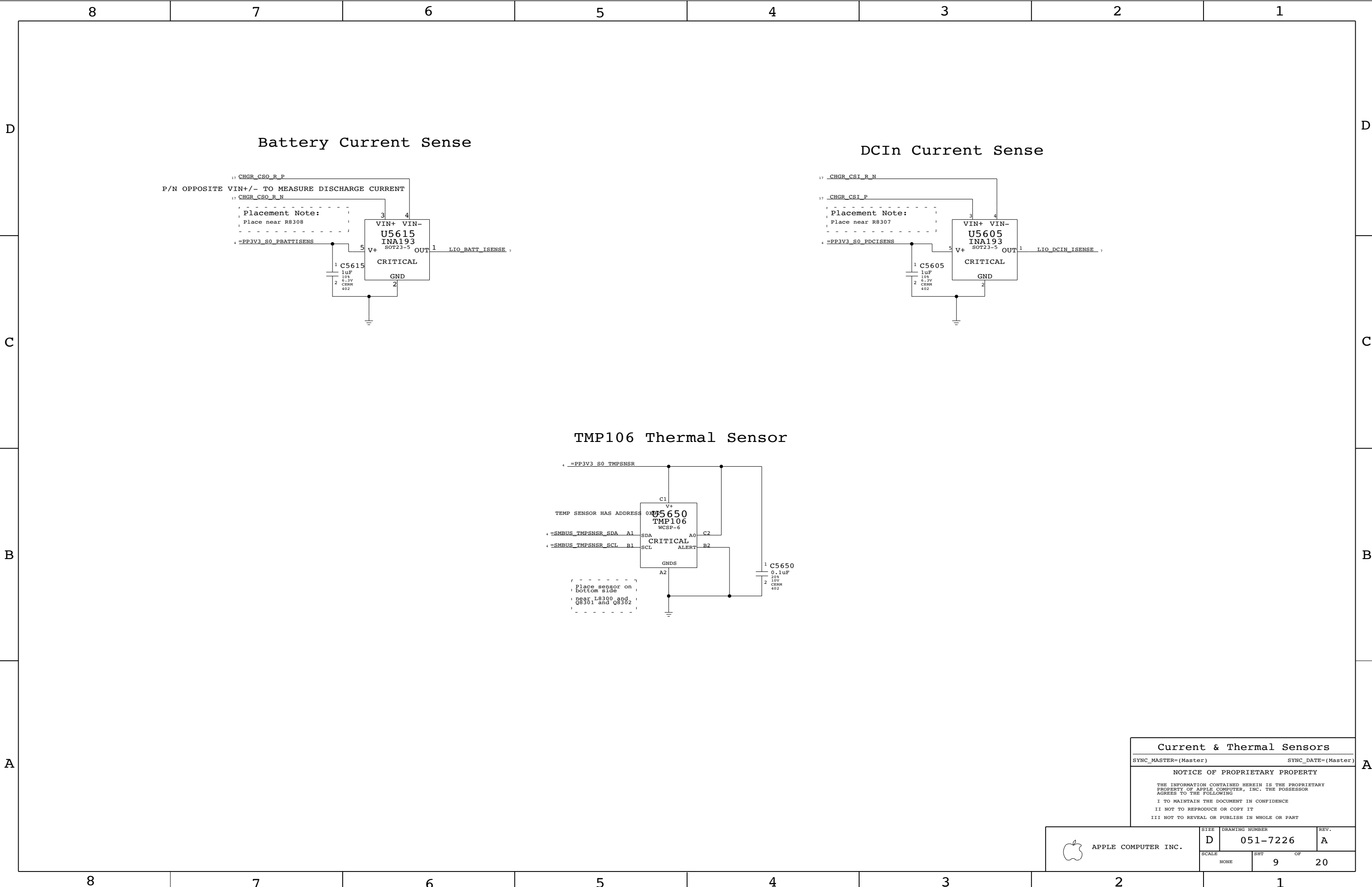
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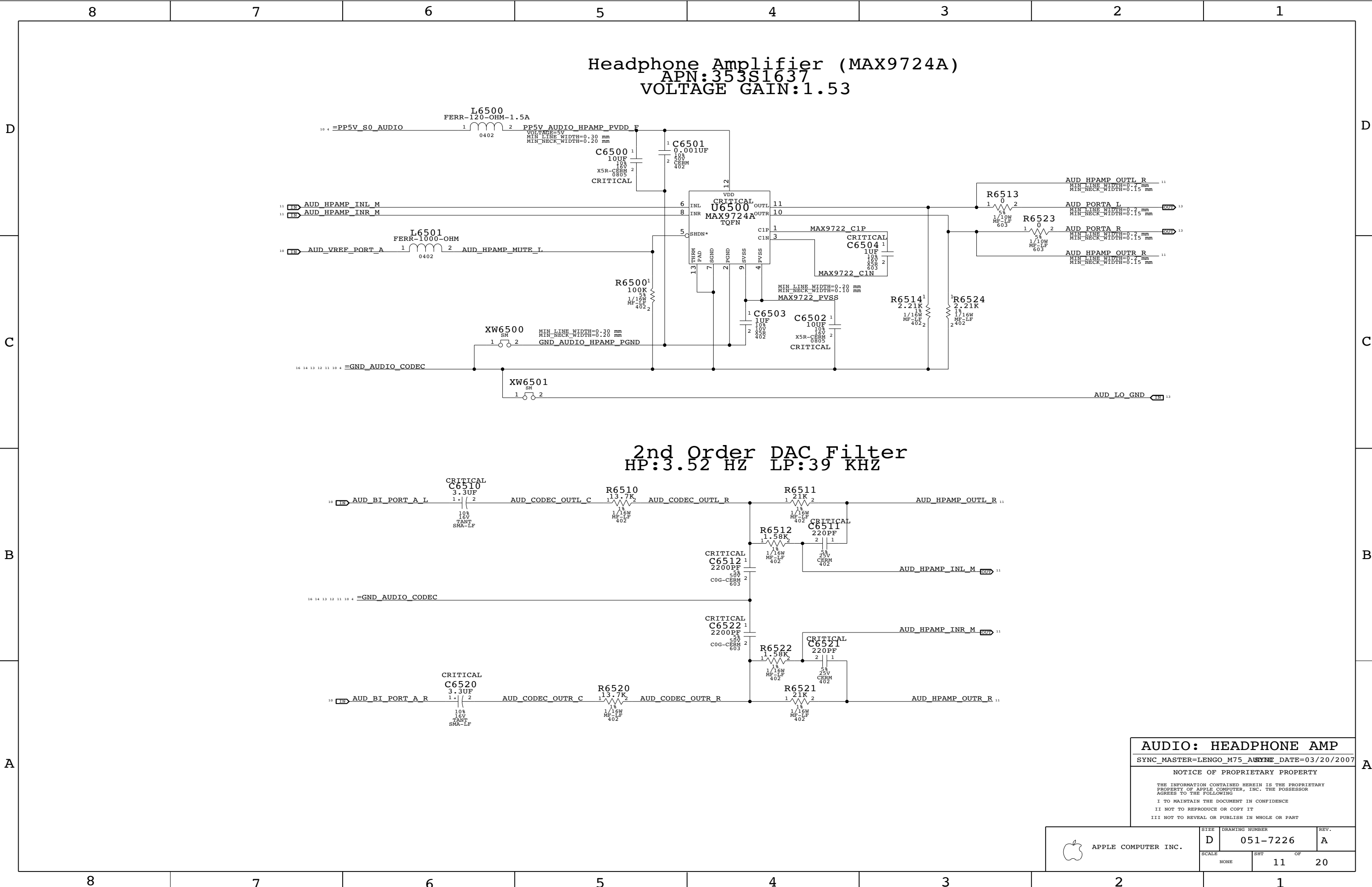
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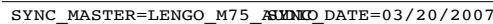
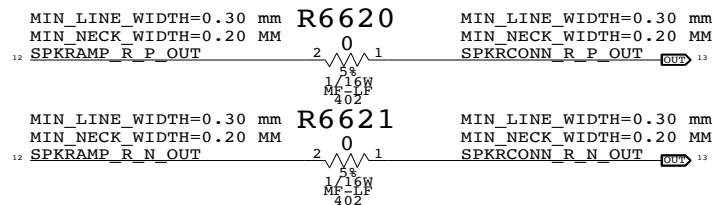
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|---------------------|------|----------------|----|------|
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| SCALE               |      | SHT            | OF |      |
| NONE                |      | 8              | 20 |      |







$$79\text{Hz} < \text{FC} < 132\text{Hz}$$


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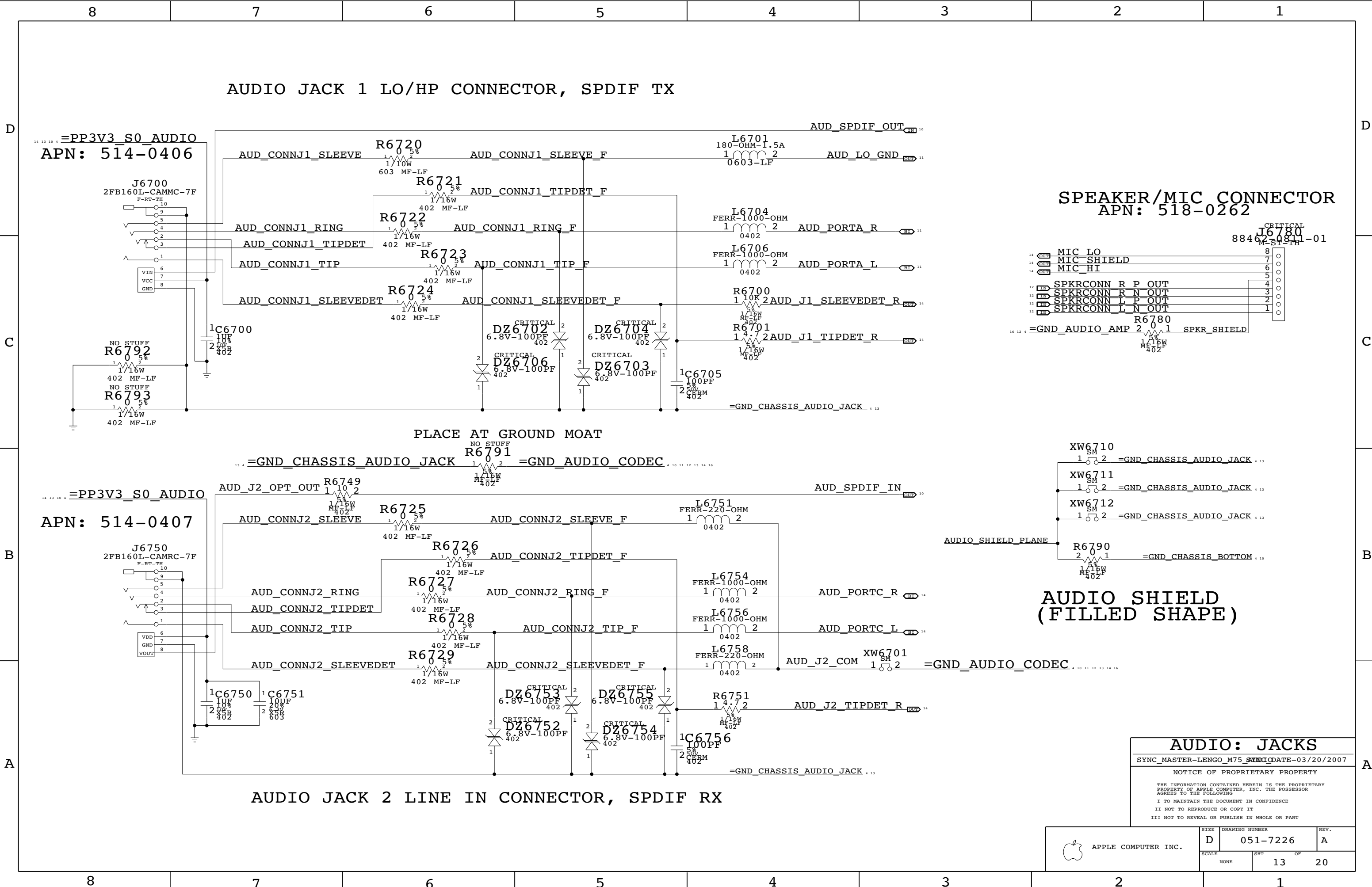
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|      |                |      |
|------|----------------|------|
| SIZE | DRAWING NUMBER | REV. |
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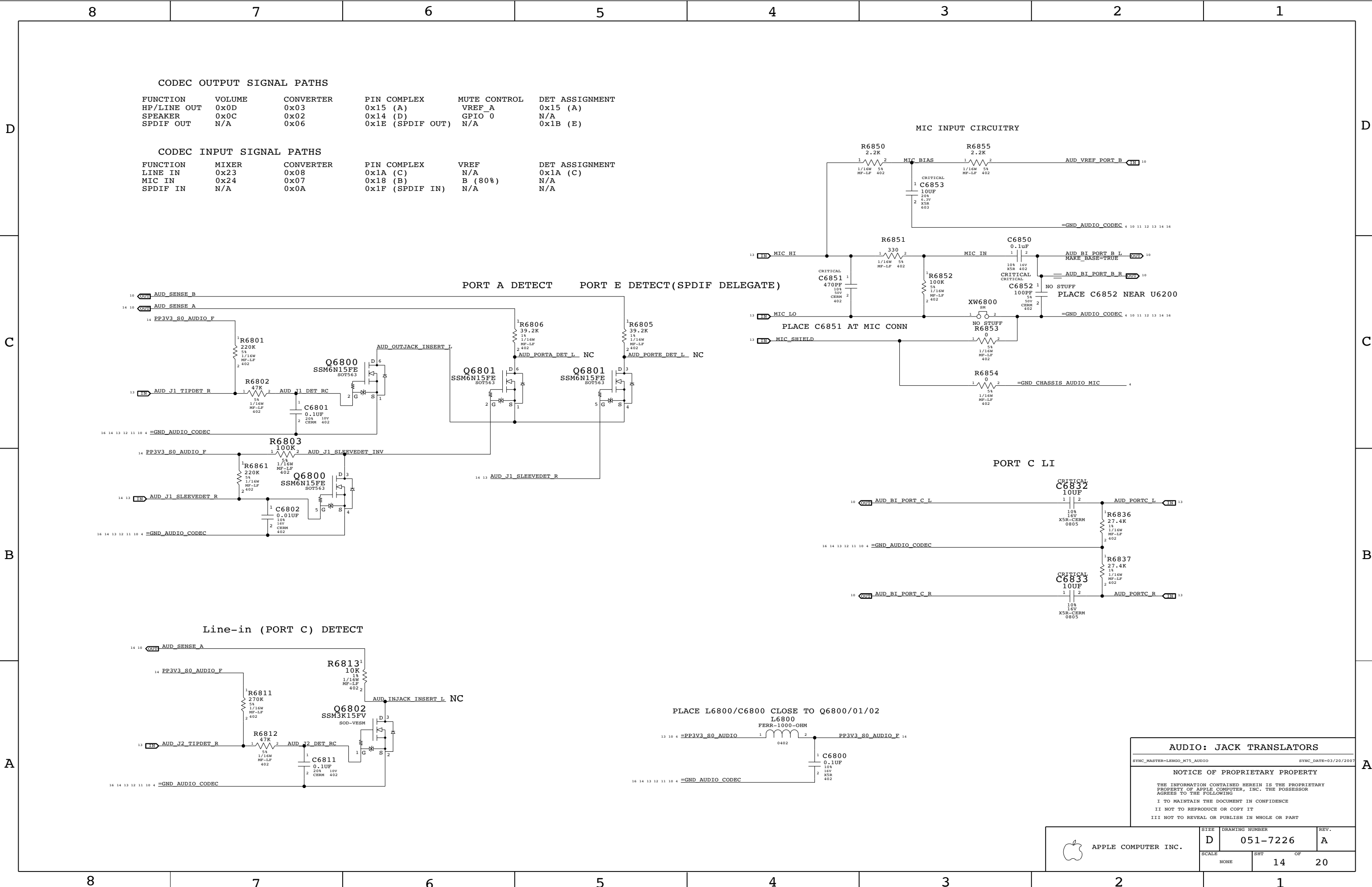
|   |          |
|---|----------|
| D | 051-7226 |
|---|----------|

|       |     |    |
|-------|-----|----|
| SCALE | SHT | OF |
| NONE  | 12  | 20 |

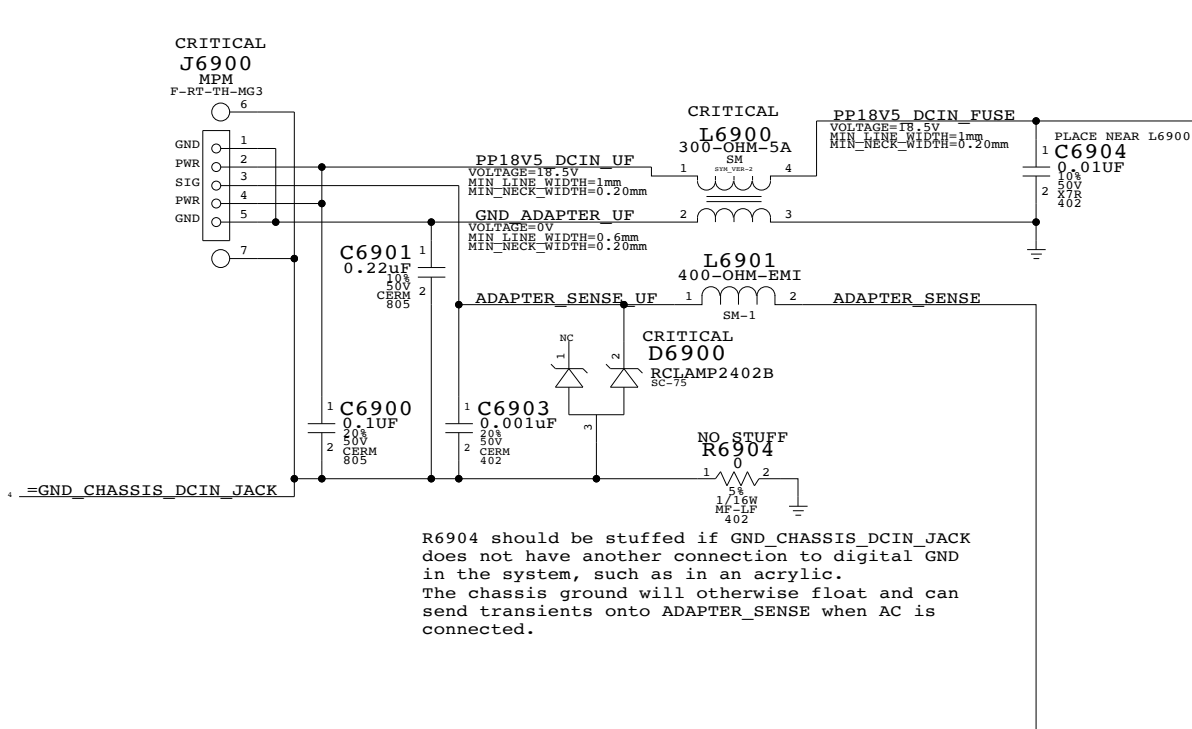


**AUDIO: JACKS**  
SYNC\_MASTER=LENGO\_M75\_SYNC\_DATE=03/20/2007  
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|                     | D    | 051-7226       | A    |
| SCALE               |      | SBT            | OF   |
| NONE                |      | 13             | 20   |

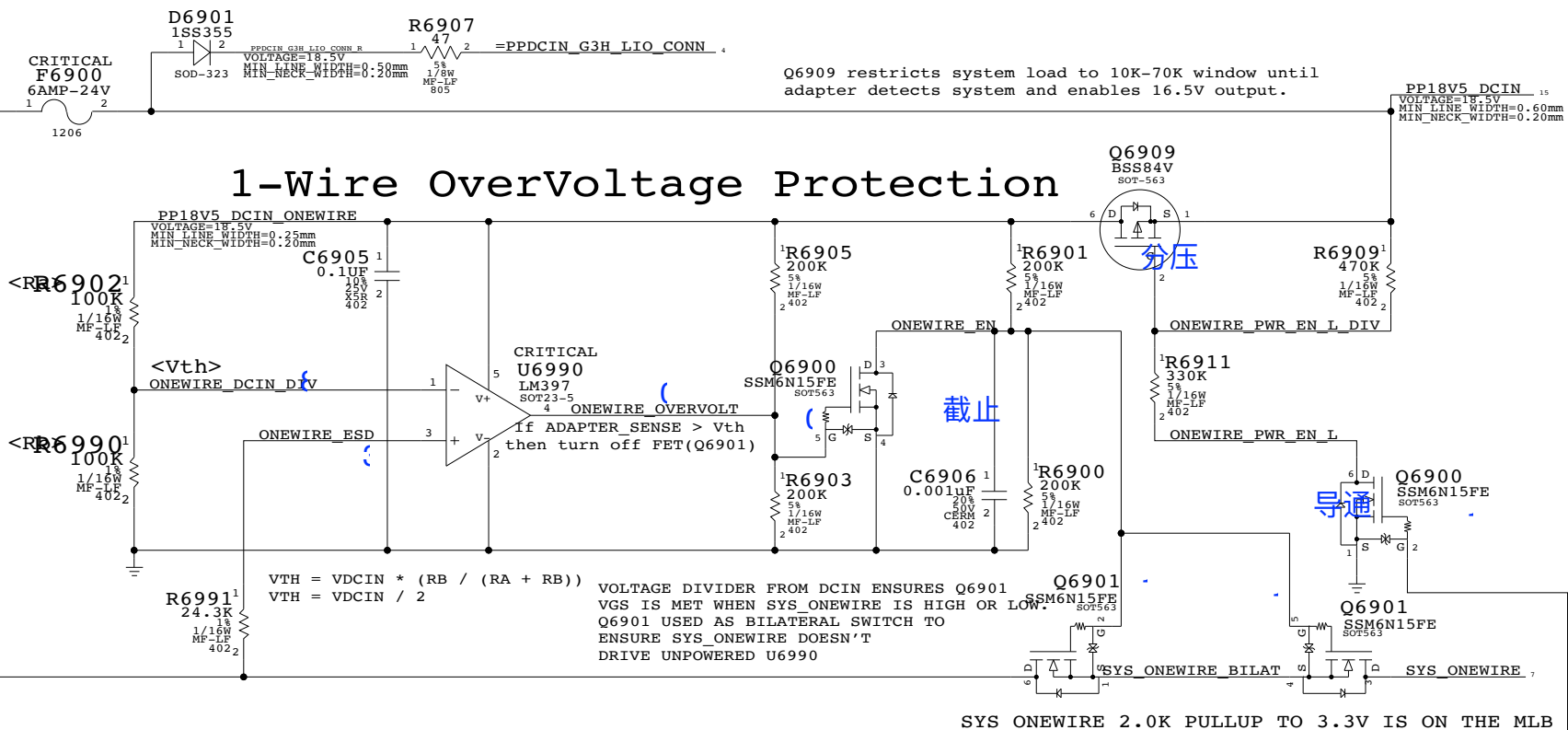


DC Power Jack

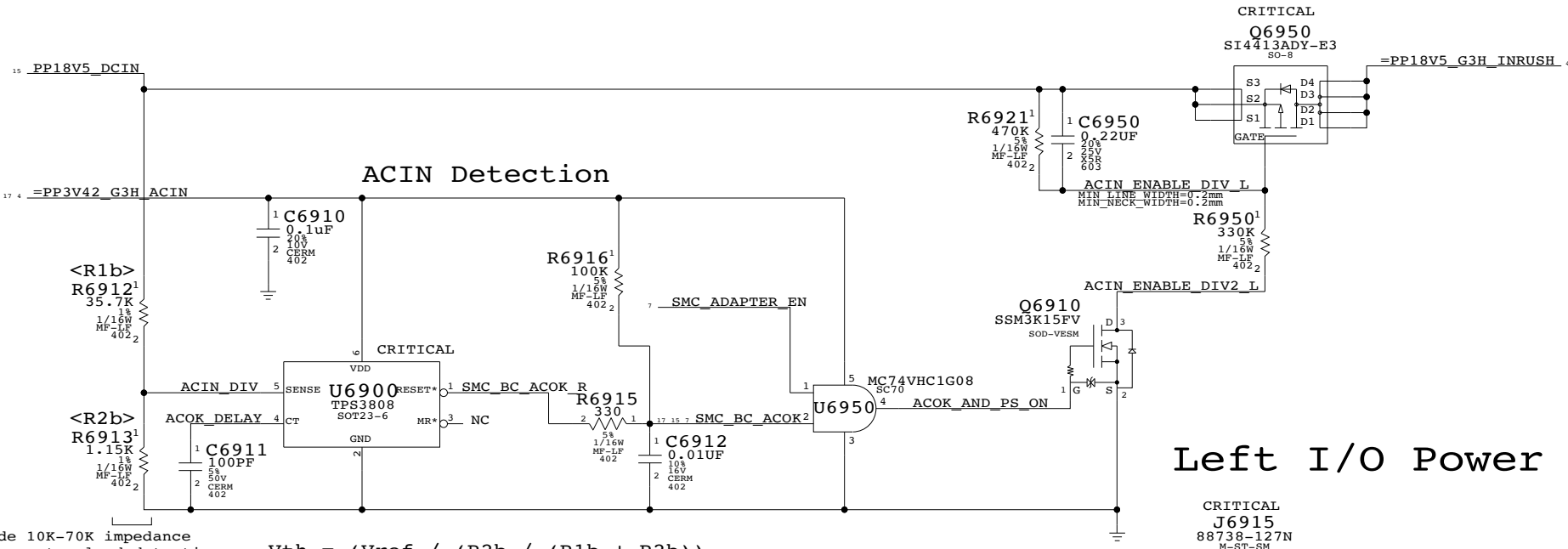


R6904 should be stuffed if GND\_CHASSIS\_DCIN\_JACK does not have another connection to digital GND in the system, such as in an acrylic. The chassis ground will otherwise float and can send transients onto ADAPTER\_SENSE when AC is connected.

1-Wire OverVoltage Protection



Inrush Limiter

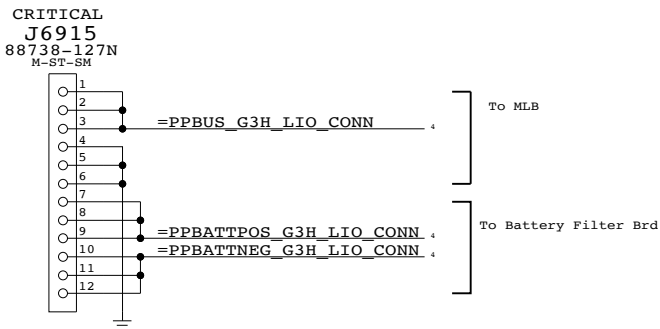


System must provide 10K-70K impedance to A52 adapter for system load detection. REQ OF R6912 & R6913 IS 36.9K.

$$V_{th} = (V_{ref} / (R_{2b} / (R_{1b} + R_{2b})))$$
$$V_{REF} = 0.405V$$
$$V_{TH} = 13.0V$$

Assuming 1% variance for R6912-R6913 and 3.42V:  
Worst case Vth: min: 12.47V, max: 13.54V

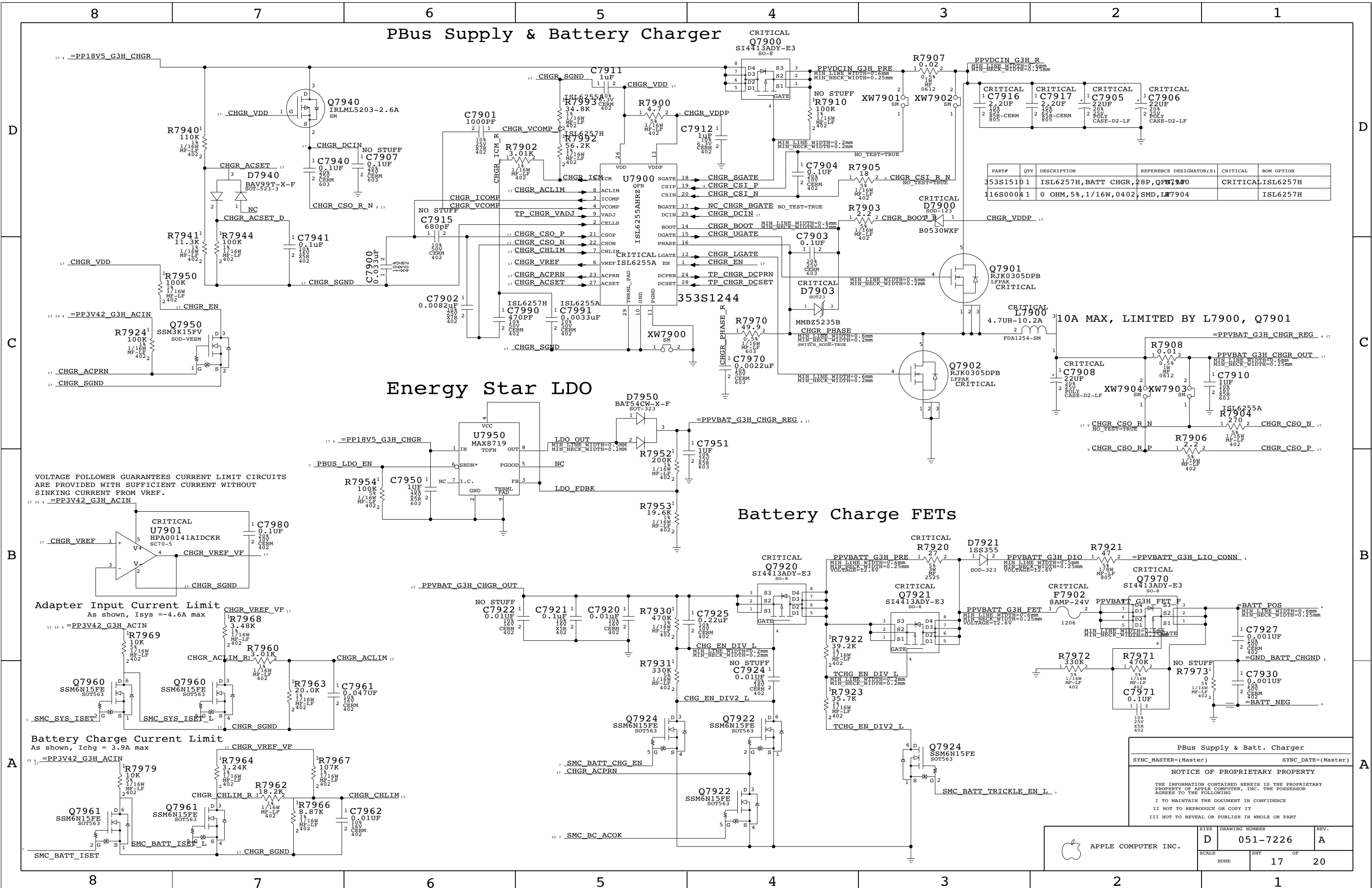
Left I/O Power Connector



| DC-In & Battery Connectors                                                                                                 |  |                    |
|----------------------------------------------------------------------------------------------------------------------------|--|--------------------|
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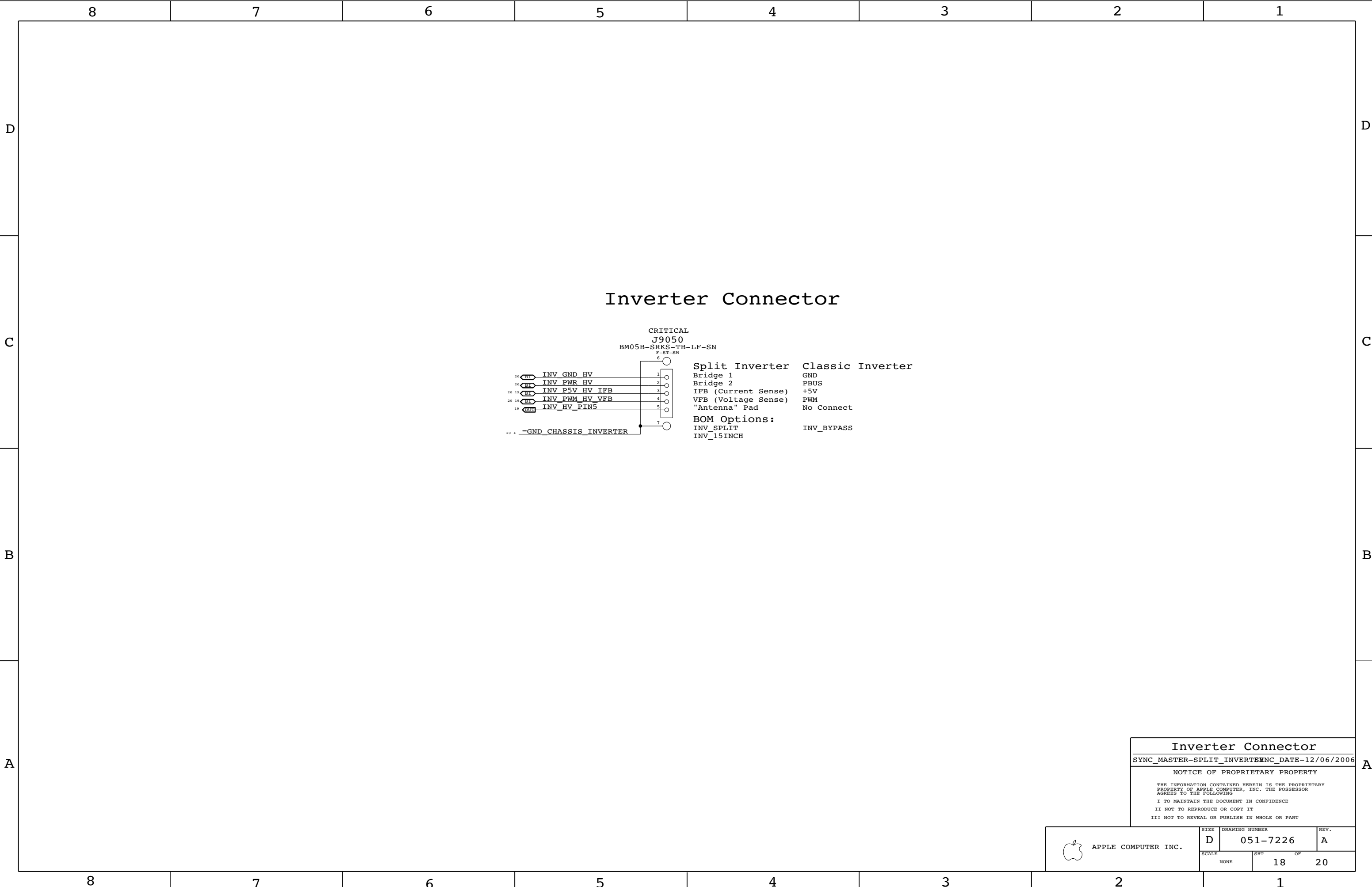
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|---------------------|------|----------------|------|
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| SCALE               |      | SBT            | OF   |
| NONE                |      | 15             | 20   |





| PART#    | QTY | DESCRIPTION                     | REFERENCE DESIGNATOR(S) | CRITICAL | BOM OPTION |
|----------|-----|---------------------------------|-------------------------|----------|------------|
| 353S1510 | 1   | ISL6257H,BATT CHGR, 28P,QFN,200 |                         | CRITICAL | ISL6257H   |
| 116S0004 | 1   | 0 OHM,5%,1/16W,0402             | SMD,LE7904              |          | ISL6257H   |

| PART#    | QTY | DESCRIPTION                     | REFERENCE DESIGNATOR(S) | CRITICAL | BOM OPTION |
|----------|-----|---------------------------------|-------------------------|----------|------------|
| 353S1510 | 1   | ISL6257H,BATT CHGR, 28P,QFN,200 |                         | CRITICAL | ISL6257H   |
| 116S0004 | 1   | 0 OHM,5%,1/16W,0402             | SMD,LE7904              |          | ISL6257H   |



Inverter Connector

SYNC\_MASTER=SPLIT\_INVERTER

SYNC\_DATE=12/06/2006

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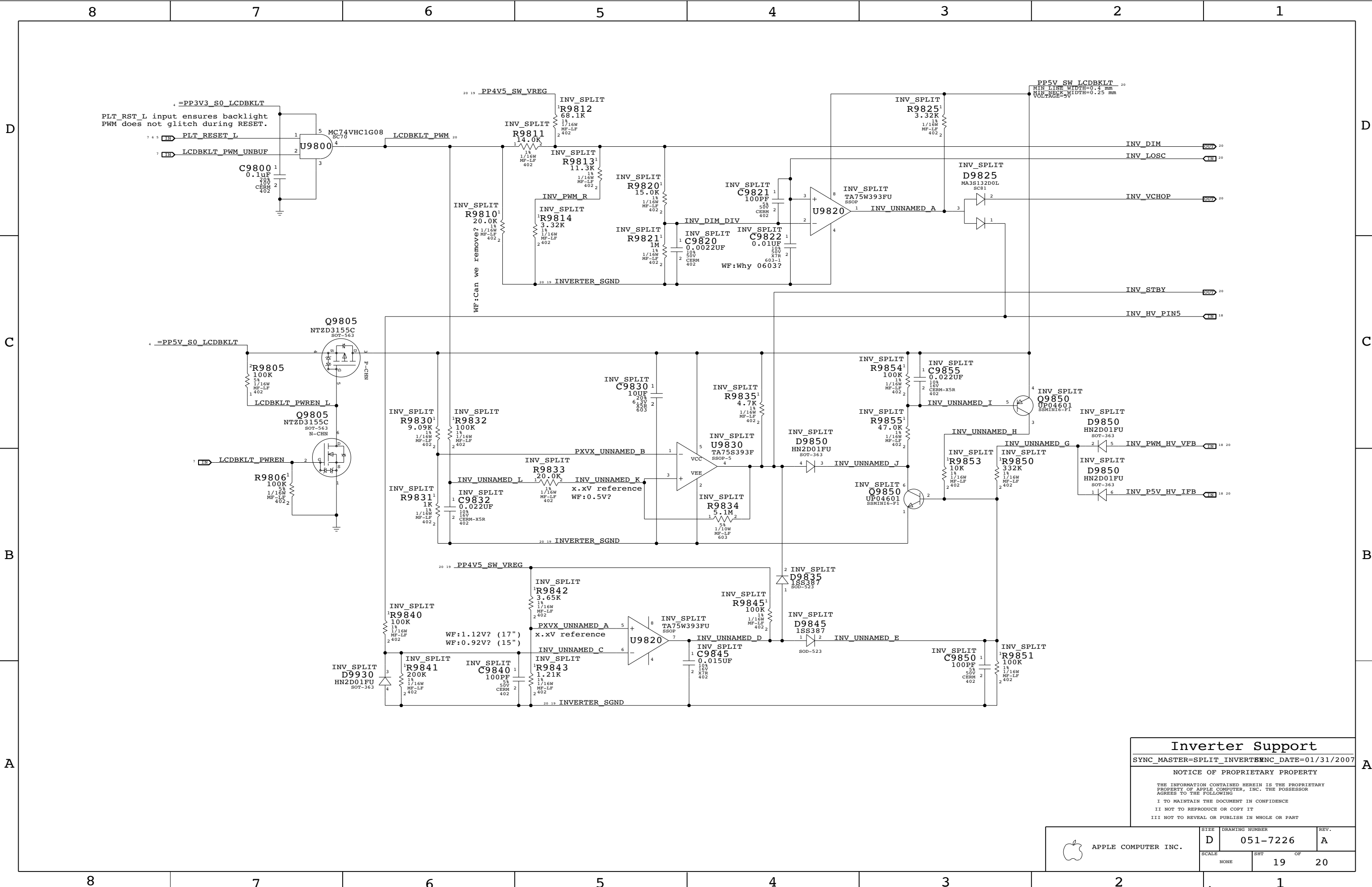
APPLE COMPUTER INC.

SCALE: NONE

DRAWING NUMBER: 051-7226

REV: A

SHT: 18 OF 20



Inverter Support

SYNC\_MASTER=SPLIT\_INVERT&MNC\_DATE=01/31/2007

NOTICE OF PROPRIETARY PROPERTY

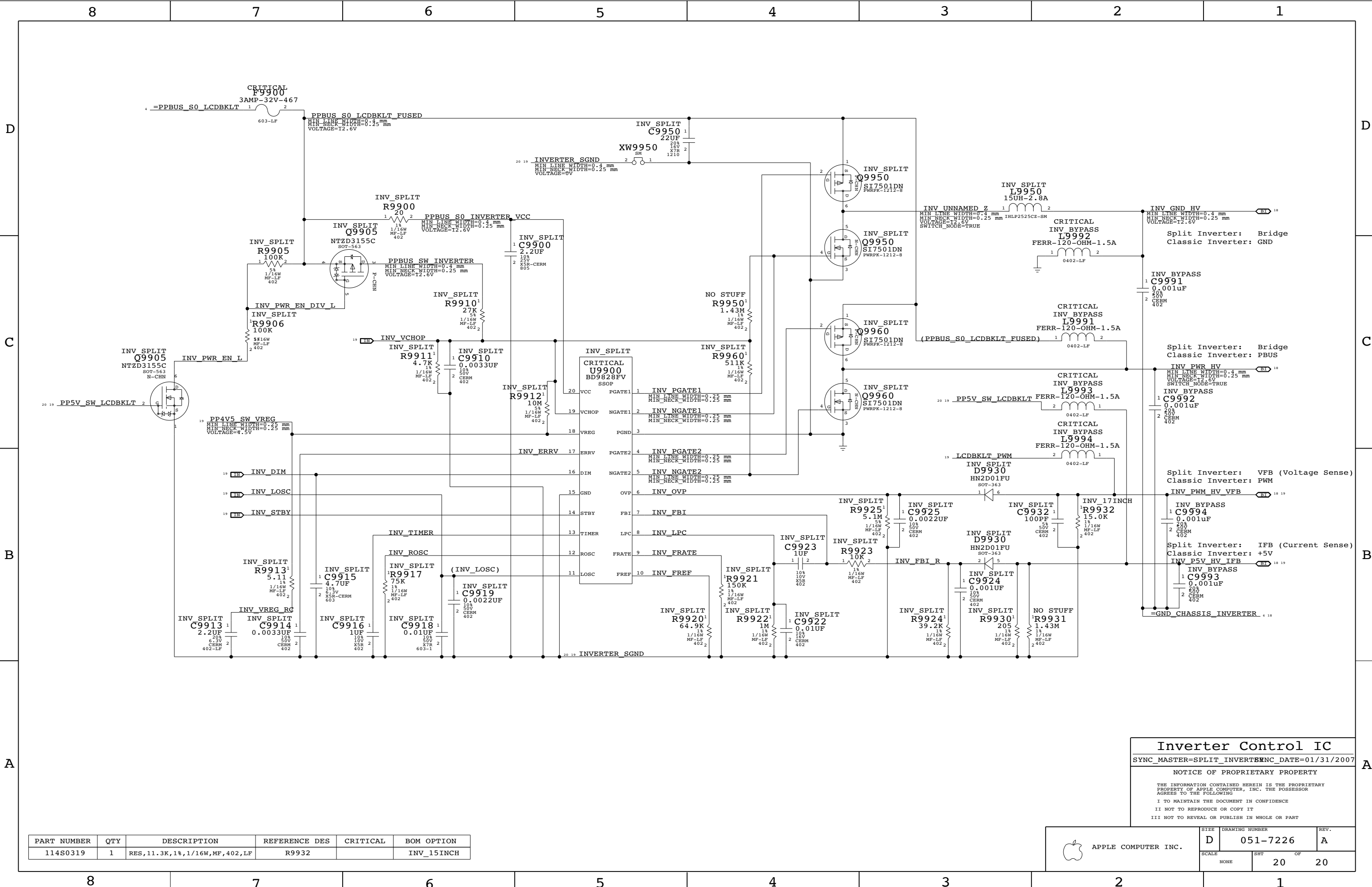
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|---------------------|------|----------------|------|
| APPLE COMPUTER INC. | SIZE | DRAWING NUMBER | REV. |
|                     | D    | 051-7226       | A    |
| SCALE               |      | SBT            | OF   |
| NONE                |      | 19             | 20   |



| PART NUMBER | QTY | DESCRIPTION                  | REFERENCE DES | CRITICAL | BOM OPTION |
|-------------|-----|------------------------------|---------------|----------|------------|
| 114S0319    | 1   | RES,11.3K,1%,1/16W,MF,402,LF | R9932         |          | INV_15INCH |

Inverter Control IC

SYNC\_MASTER=SPLIT\_INVERTER;MNC\_DATE=01/31/2007

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|---------------------|------|----------------|------|
| APPLE COMPUTER INC. | SIZE | DRAWING NUMBER | REV. |
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| SCALE               |      | SBT            | OF   |
| NONE                |      | 20             | 20   |