

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

A

418830

PRODUCTION RELEASED

01/06/06

?

SCHEM, LIO/AUDIO, M1

01/06/06

PDF PAGE

CSA PAGE

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SYNC MASTER

DATE

1

1

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(Master)

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(Master)

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(Master)

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(Master)

(Master)

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PCI-E MiniCard Connector

(Master)

(Master)

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(Master)

(Master)

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68

AUDIO: CODEC

LENGO_M1_LIO

01/06/2006

10

72

AUDIO:SPEAKER AMP

LENGO_M1_LIO

01/06/2006

11

73

AUDIO: JACKS

LENGO_M1_LIO

01/06/2006

12

74

AUDIO: JACK TRANSLATORS

LENGO_M1_LIO

01/06/2006

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3.3V Supply

(Master)

(Master)

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(Master)

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(Master)

(Master)

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(Master)

(Master)

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Cross Reference Page

PART#

QTY

DESCRIPTION

REFERENCE DESIGNATOR(S)

CRITICAL

BOM OPTION

051-6951

1

SCHEM, LIO/AUDIO, M1

SCH1

820-1699

1

PCBF, LIO/AUDIO, M1

PCB1

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

Apple Computer Inc.

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TITLE

SCHEM, LIO/AUDIO, M1

DRAWING NUMBER

051-6951

REV.

A

SHT 1 OF 86

8

7

6

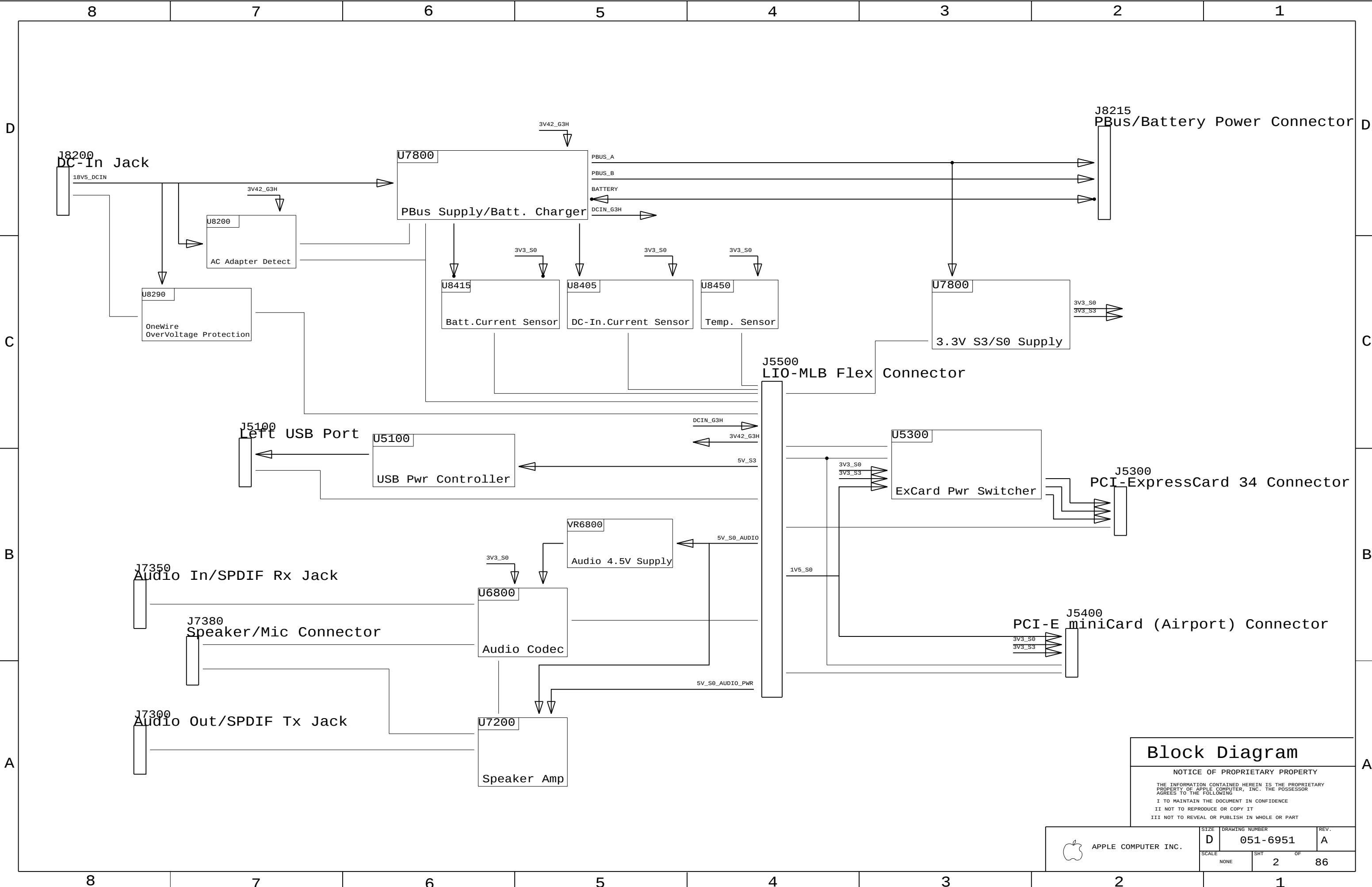
5

4

3

2

1



Block Diagram

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APPLE COMPUTER INC.	SIZE D	DRAWING NUMBER 051-6951	REV. A
	SCALE NONE	SHT 2	OF 86

BOM NUMBER	BOM NAME	BOM OPTIONS
630-7249	PCBA, LIO_AUDIO, M1	COMMON, EEE_TY6, M1_COMMON

BOM GROUP	BOM OPTIONS
M1_COMMON	EXCARD_3CNTL, M1_PARTS, ONEWIRE_DIV, ONEWIRE_PULLUP, ONEWIRE_PU_PROT, ONEWIRE_PWRCTL, STA9220

Bar Code Label / EEE #'s

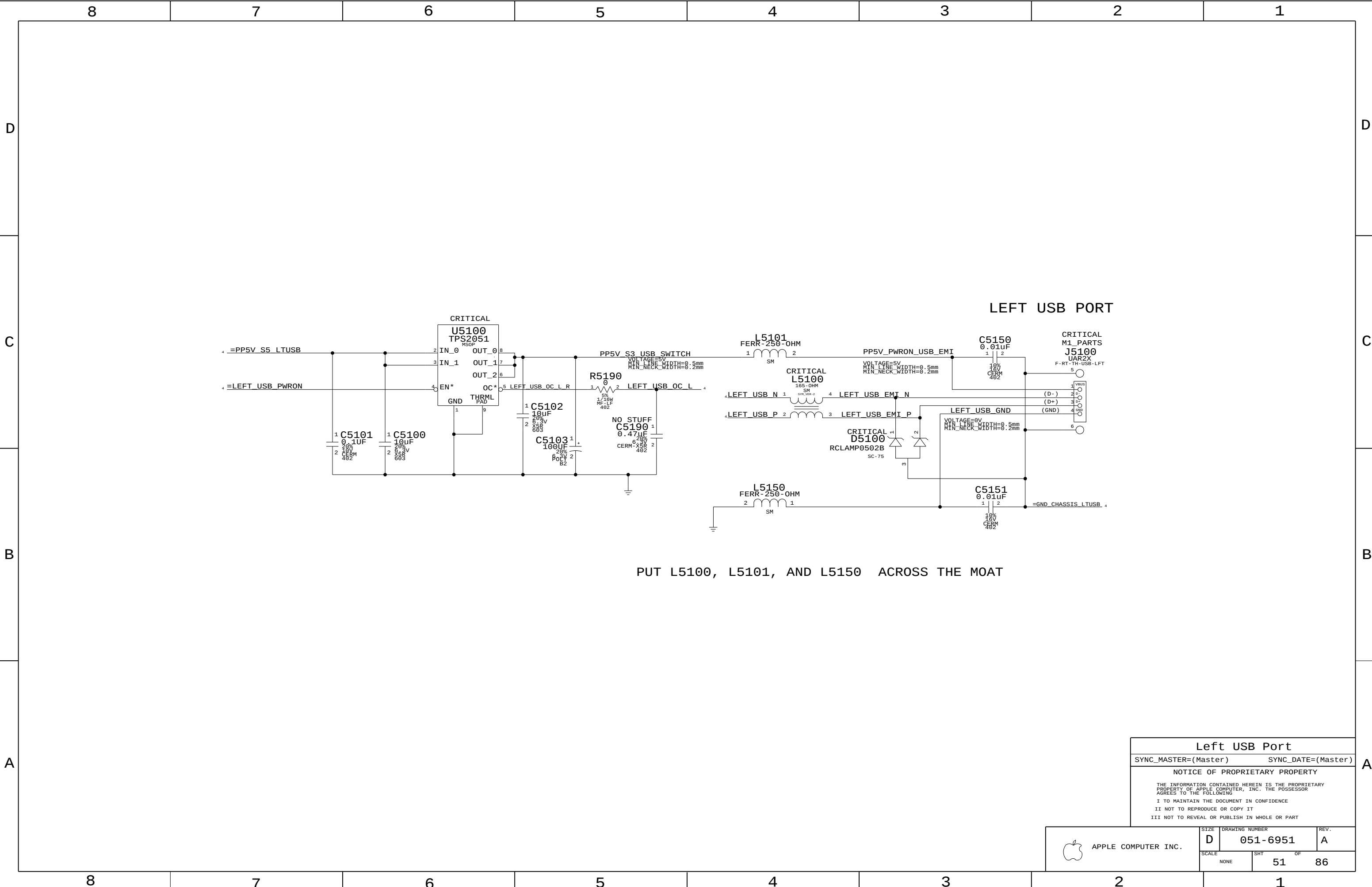
PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
000-0041	1	PLACEHOLDER FOR EEE/CCC INFO	[EEE:TY6]	CRITICAL	EEE_TY6

M1A Parts Reserved for future use

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
514-0306	1	CONN, RCPT, R/A, 3.6 CL, BLK	J5100	CRITICAL	M1A_PARTS
514-0307	1	CONN, RCPT, RT ANG, MPM, 10A, 5P, BLK	J8200	CRITICAL	M1A_PARTS
514-0308	1	CONN, RCPT, OPT-COPPER, SPDIF RX, 3.5MM, BLK	J7350	CRITICAL	M1A_PARTS
514-0309	1	CONN, RCPT, OPT-COPPER, SPDIF TX, 3.5MM, BLK	J7300	CRITICAL	M1A_PARTS

BOM Configuration	
SYNC_MASTER=(Master)	SYNC_DATE=(Master)
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	SCALE	SHT	OF
	NONE	4	86



PUT L5100, L5101, AND L5150 ACROSS THE M0AT

Left USB Port

SYNC_MASTER=(Master) SYNC_DATE=(Master)

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SCALE		SHT	OF	
NONE		51	86	

D



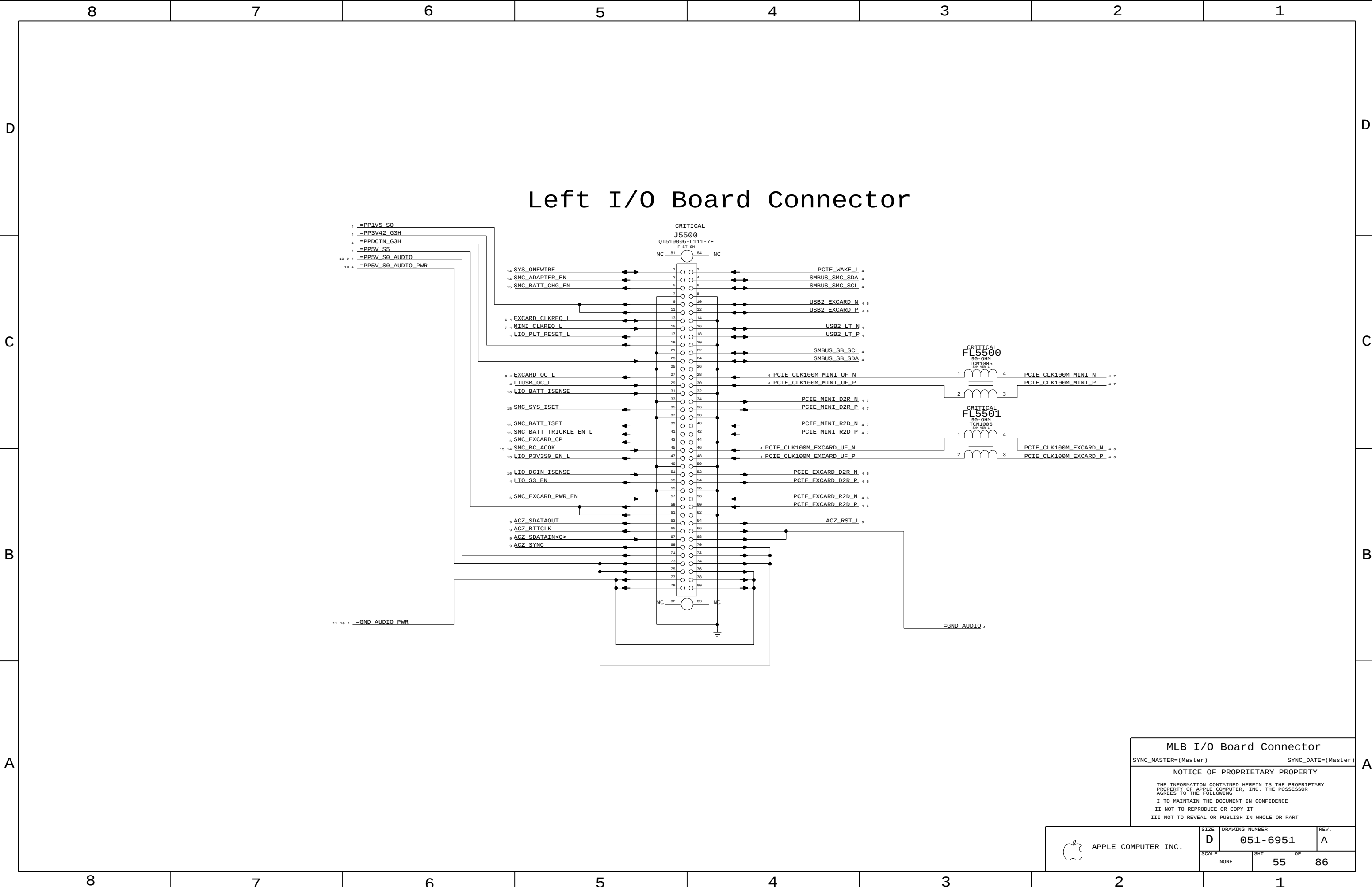
NONE	53	86
------	----	----

The diagram illustrates the pin configuration for the CRITICAL J5400 connector (AS0B226-T99N-7F). The connector has 54 pins, with pins 53 and 54 marked as NC (Not Connected). The signals are organized as follows:

- Power and Ground:**
 - PP3V3 S0 MINI: Connected to pins 1 and 2.
 - PP3V3 S3 MINI: Connected to pins 3 and 4.
 - PP1V5 S0 MINI: Connected to pins 5 and 6.
- PCIE Signals:**
 - PCIE WAKE MINI L: Connected to pin 1.
 - MINI CLKREQ L: Connected to pin 2.
 - PCIE CLK100M MINI N: Connected to pin 3.
 - PCIE CLK100M MINI P: Connected to pin 4.
 - PCIE MINI D2R N: Connected to pin 5.
 - PCIE MINI D2R P: Connected to pin 6.
 - PCIE MINI R2D N: Connected to pin 7.
 - PCIE MINI R2D P: Connected to pin 8.
- Reserved Signals:**
 - RESERVED: Connected to pins 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52.
- Other Signals:**
 - NC UIM PWR: Connected to pin 1.
 - NC UIM DATA: Connected to pin 2.
 - NC UIM CLK: Connected to pin 3.
 - NC UIM RESET: Connected to pin 4.
 - NC UIM VPP: Connected to pin 5.
 - NC W_DISABLE L: Connected to pin 6.
 - PLT RESET L: Connected to pin 7.
 - =SMBUS MINI_SCL: Connected to pin 8.
 - =SMBUS MINI_SDA: Connected to pin 9.
 - USB2 MINI N: Connected to pin 10.
 - USB2 MINI P: Connected to pin 11.
 - NC LED WPAN L: Connected to pin 12.
 - NC LED WLAN L: Connected to pin 13.
 - NC LED WWAN L: Connected to pin 14.

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	SCALE	SHT	OF	
	NONE	54	86	





Left I/O Board Connector

MLB I/O Board Connector

SYNC_MASTER=(Master)SYNC_DATE=(Master)

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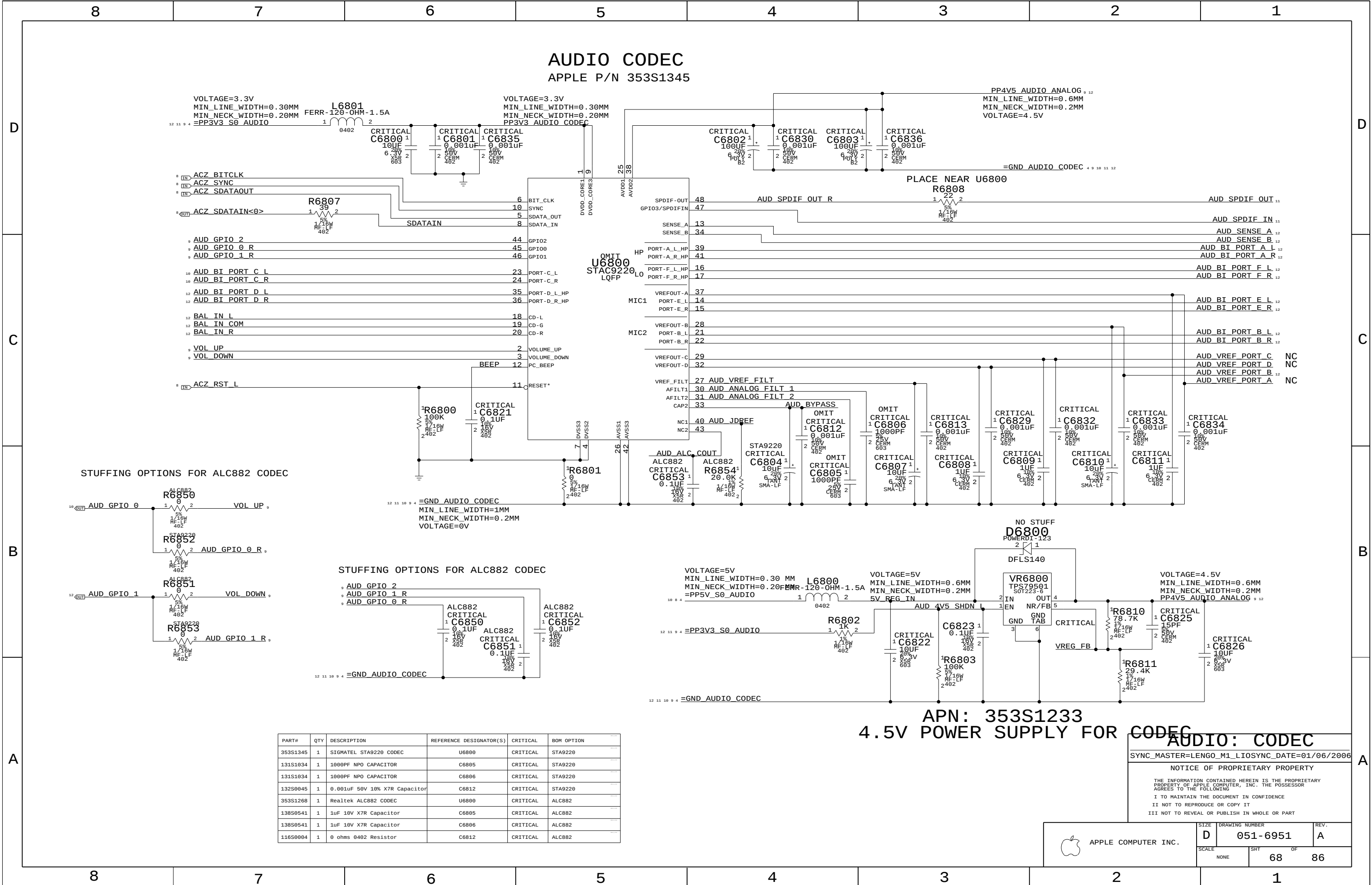
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SCALE		SHT	OF
NONE		55	86



D

C

B

A

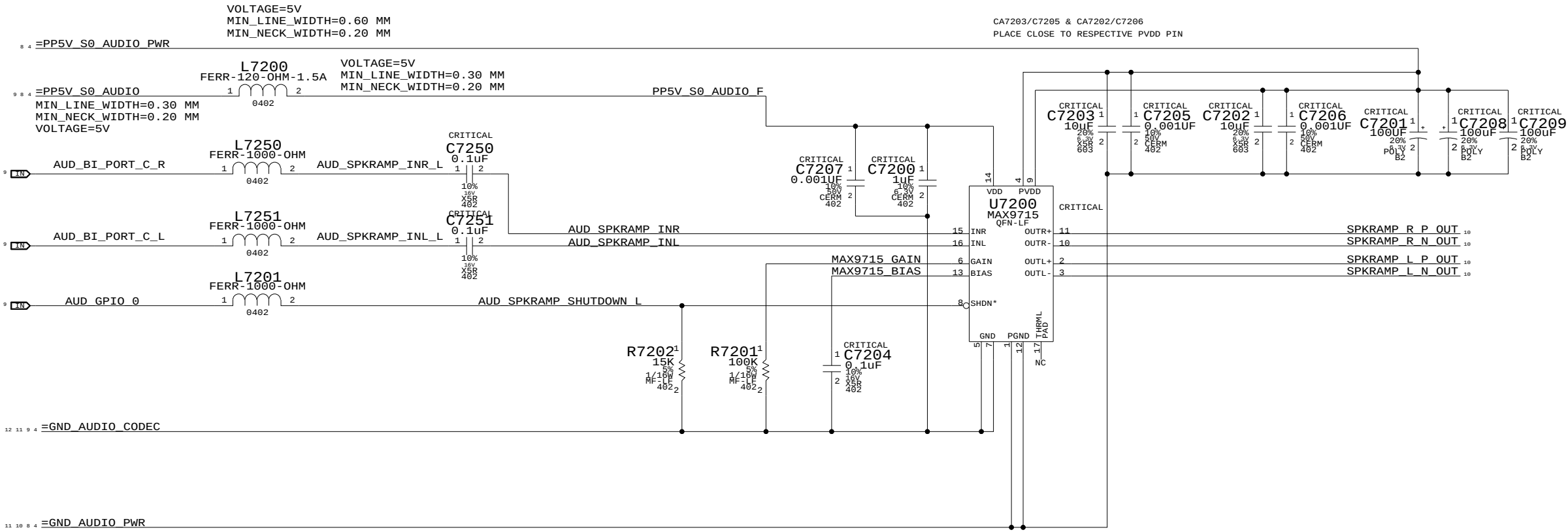
D

C

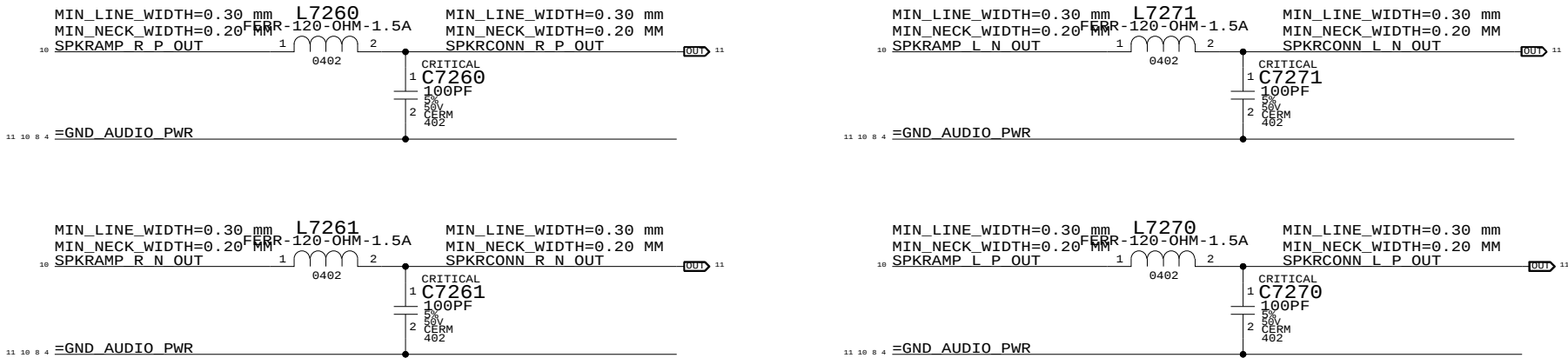
B

A

STEREO SPEAKER AMPLIFIERS (MAX9715)
APN: 353S1283
Gain = 10.5dB
118 < FC < 245Hz



EMI FILTERS FOR AMPLIFIER OUTPUTS



AUDIO:SPEAKER AMP

SYNC_MASTER=LENGO_M1_L1 SYNC_DATE=01/06/2006

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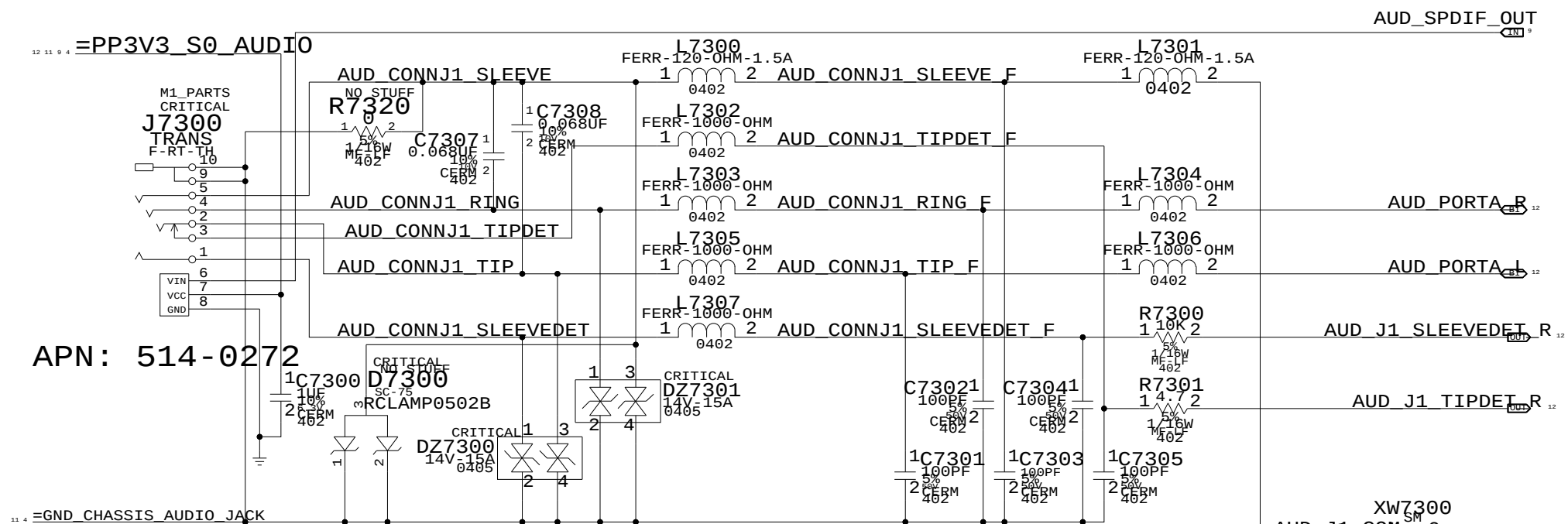
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SIZE	DRAWING NUMBER	REV.
D	051-6951	A
SCALE	SHT	OF
NONE	72	86

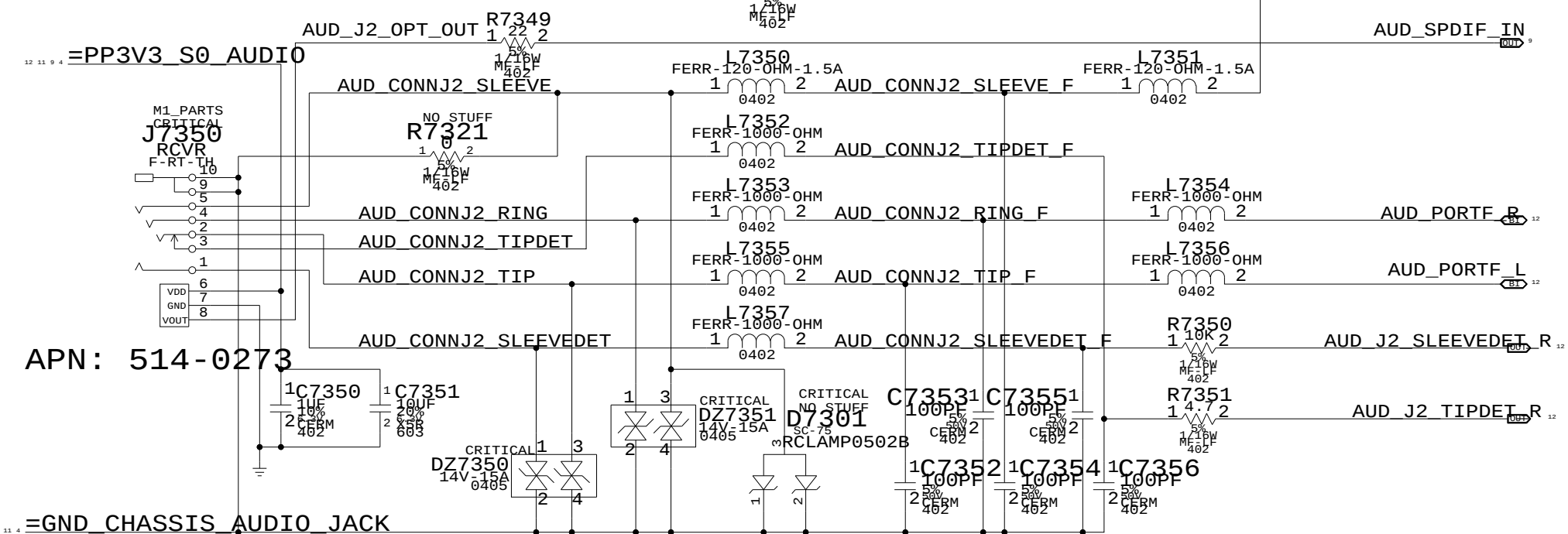
AUDIO JACK 1/DEFAULT LO/HP CONNECTOR, SPDIF TX



APN: 514-0272

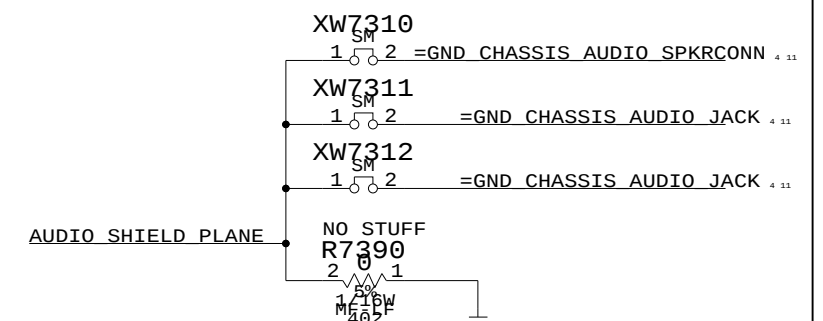
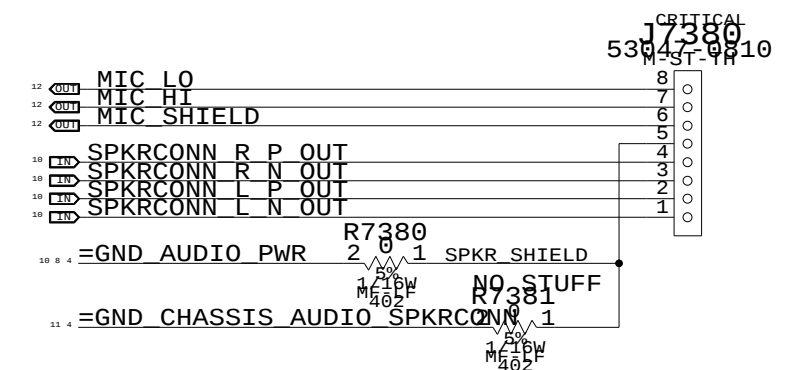
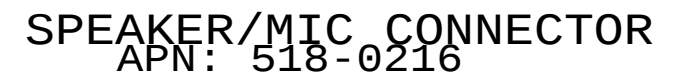
PLACE AT GROUND MOAT

11 4 =GND CHASSIS AUDIO JACK =GND AUDIO CODEC



APN: 514-0273

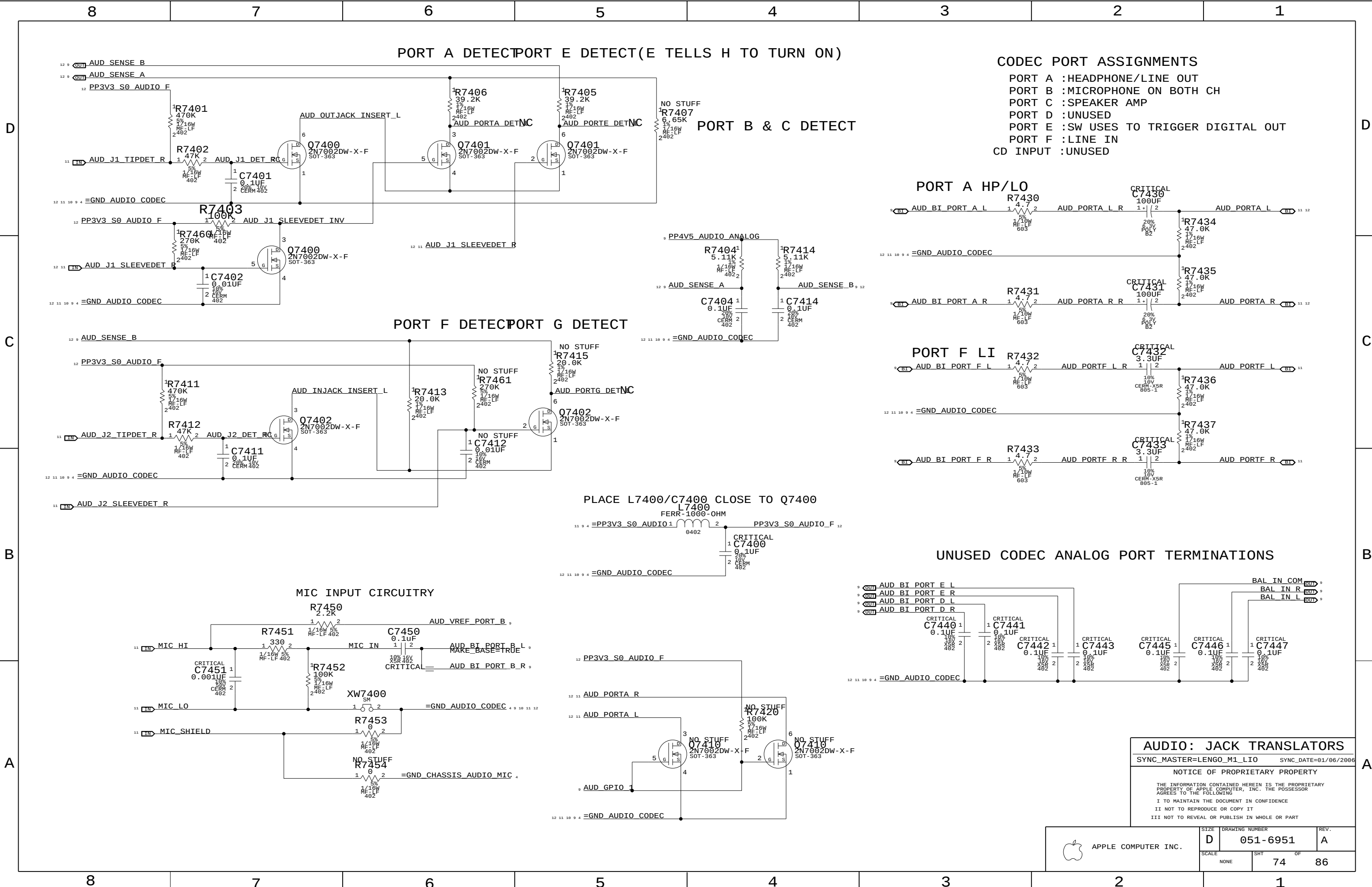
AUDIO JACK 2/DEFAULT LINE IN CONNECTOR, SPDIF RX



AUDIO SHIELD
(FILLED SHAPE)

AUDIO: JACKS
SYNC_MASTER=LENGO_M1_SYNC_DATE=01/06/2006
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	SCALE NONE	SHT 73	OF 86



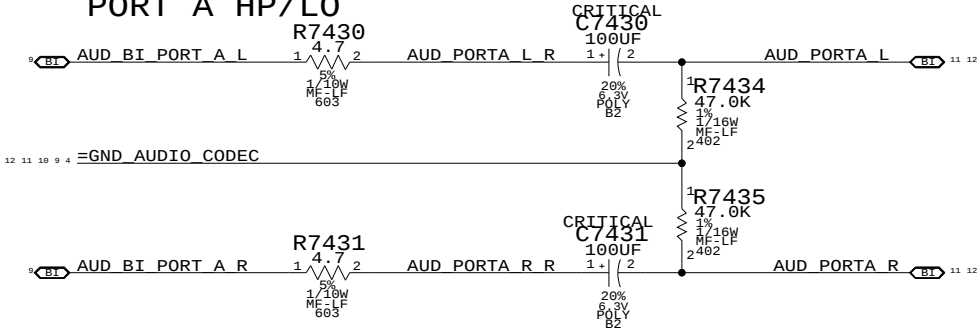
PORT A DETECTPORT E DETECT(E TELLS H TO TURN ON)

PORT B & C DETECT

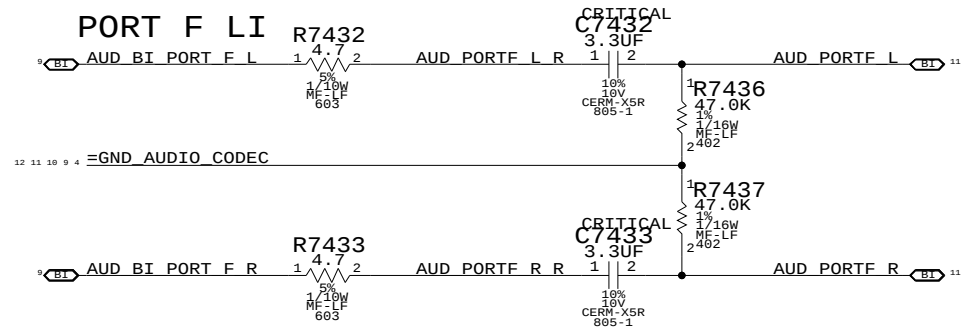
CODEC PORT ASSIGNMENTS

- PORT A :HEADPHONE/LINE OUT
- PORT B :MICROPHONE ON BOTH CH
- PORT C :SPEAKER AMP
- PORT D :UNUSED
- PORT E :SW USES TO TRIGGER DIGITAL OUT
- PORT F :LINE IN
- CD INPUT :UNUSED

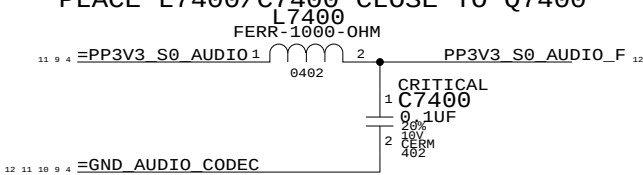
PORT A HP/LO



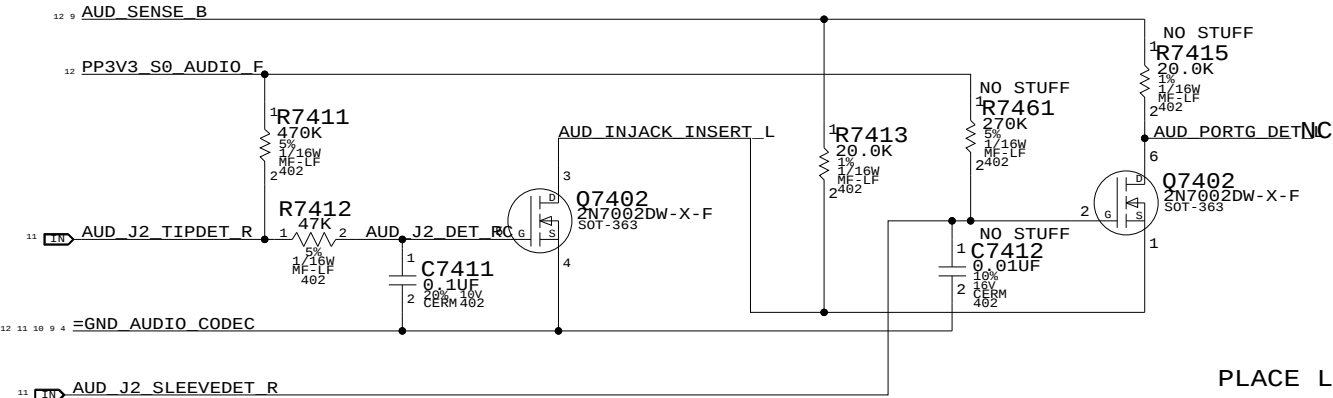
PORT F LI



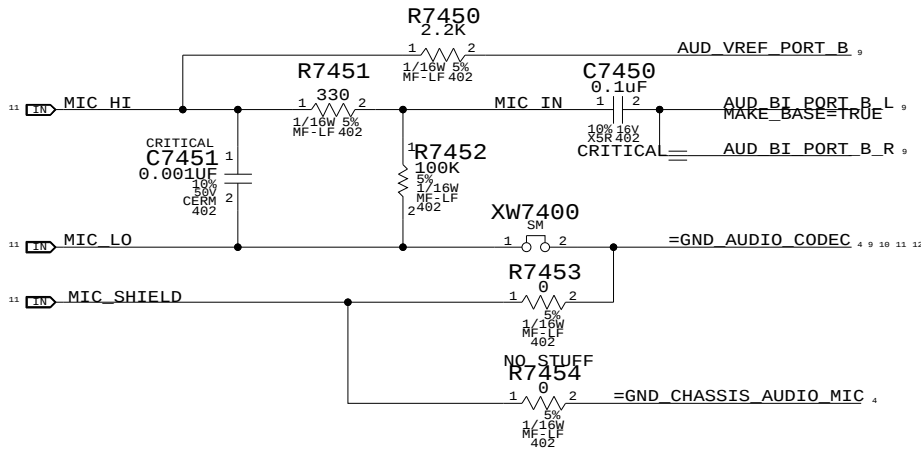
PLACE L7400/C7400 CLOSE TO Q7400



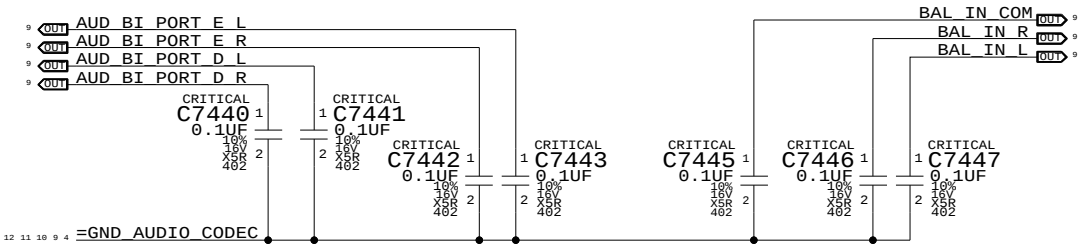
PORT F DETECTPORT G DETECT



MIC INPUT CIRCUITRY



UNUSED CODEC ANALOG PORT TERMINATIONS



AUDIO: JACK TRANSLATORS

SYNC_MASTER=LENGO_M1_LIO SYNC_DATE=01/06/2006

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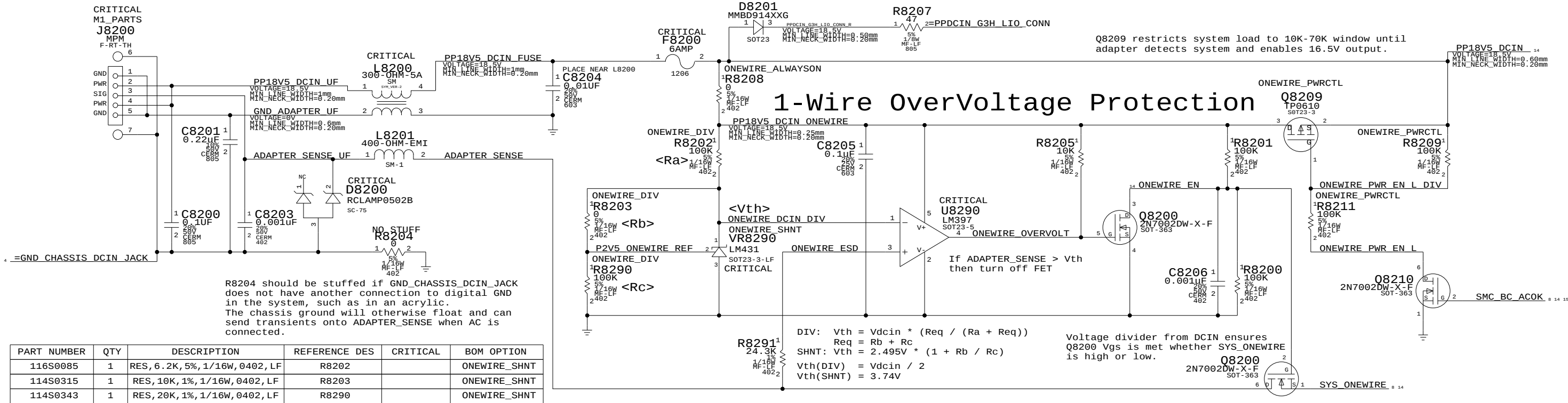
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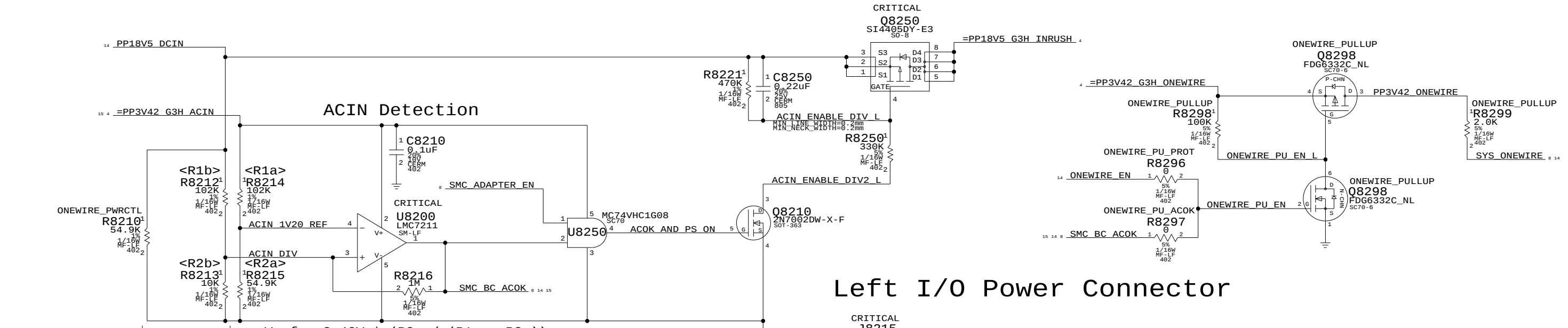
APPLE COMPUTER INC.

SIZE	DRAWING NUMBER	REV.
D	051-6951	A
SCALE	SHT	OF
NONE	74	86

DC Power Jack



Inrush Limiter



Left I/O Power Connector

DC-In & Battery Connectors

SYNC_MASTER=(Master) SYNC_DATE=(Master)

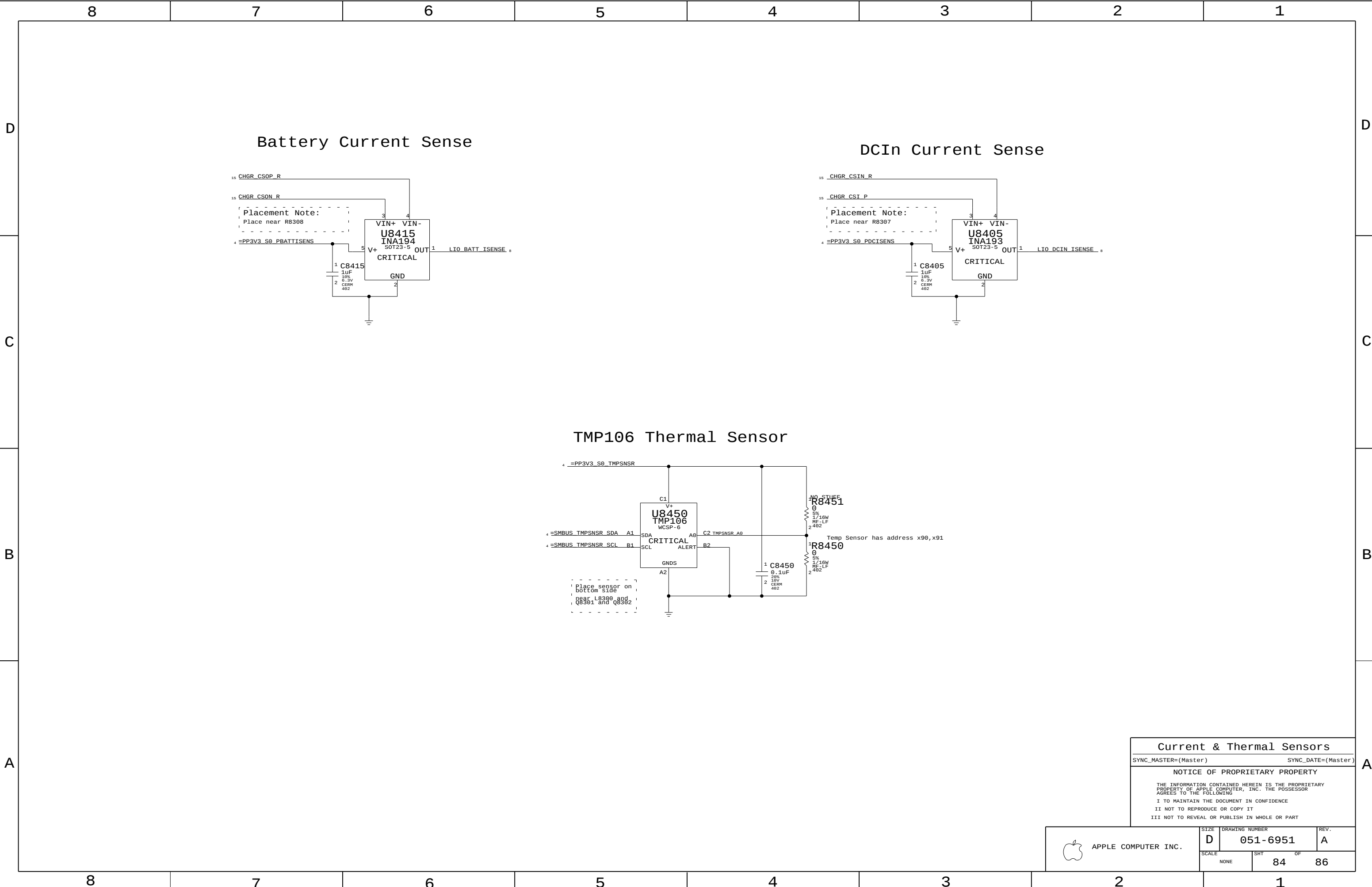
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