

8

7

6

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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

02

421247

ENGINEERING RELEASED

01/19/06

SCHEM , SYMPHONY , M9

EVT

1 / 19 / 06

PDF PAGE

CSA PAGE

CONTENTS

SYNC MASTER

DATE

1

1

Table of Contents

N/A

N/A

2

2

Block Diagram

SIREN

01/06/2006

3

4

BOM CONFIGURATION

(MASTER)

(MASTER)

4

6

Aliases

SIREN

01/06/2006

5

51

Left USB Port

SIREN

01/06/2006

6

53

ExpressCard Connector

SIREN

01/06/2006

7

54

PCI-E MiniCard Connector

SIREN

01/06/2006

8

55

MLB I/O Board Connector

SIREN

01/06/2006

9

64

Left ALS

SIREN

01/06/2006

10

68

AUDIO: CODEC

AUDIO_M9_PRO_LIO

01/06/2006

11

70

AUDIO: LINE IN

AUDIO_M9_PRO_LIO

01/06/2006

12

71

AUDIO: HEADPHONE AMP

AUDIO_M9_PRO_LIO

01/06/2006

13

72

AUDIO: SPEAKER AMP

AUDIO_M9_PRO_LIO

01/06/2006

14

73

AUDIO: JACKS

AUDIO_M9_PRO_LIO

01/19/2006

15

74

AUDIO: JACK TRANSLATORS

AUDIO_M9_PRO_LIO

01/06/2006

16

78

3.3V Supply

SIREN

01/06/2006

17

82

DC-In & Battery Connectors

SIREN

01/06/2006

18

84

LEFT I/O POWER CONNECTOR

SIREN

01/06/2006

19

85

Cross Reference Page

20

86

Cross Reference Page

21

87

Cross Reference Page

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Indonesia

PART#

QTY

DESCRIPTION

REFERENCE DESIGNATOR(S)

BOM OPTION

051-7066

1

SCHEM, SYMPHONY, NEW, M9

SCH1

820-1970

1

PCBF, SYMPHONY, M9

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 , SYMPHONY , NEW , M9

DRAWING NUMBER

051-7066

REV.

02

SHT

1

OF

87

8

7

6

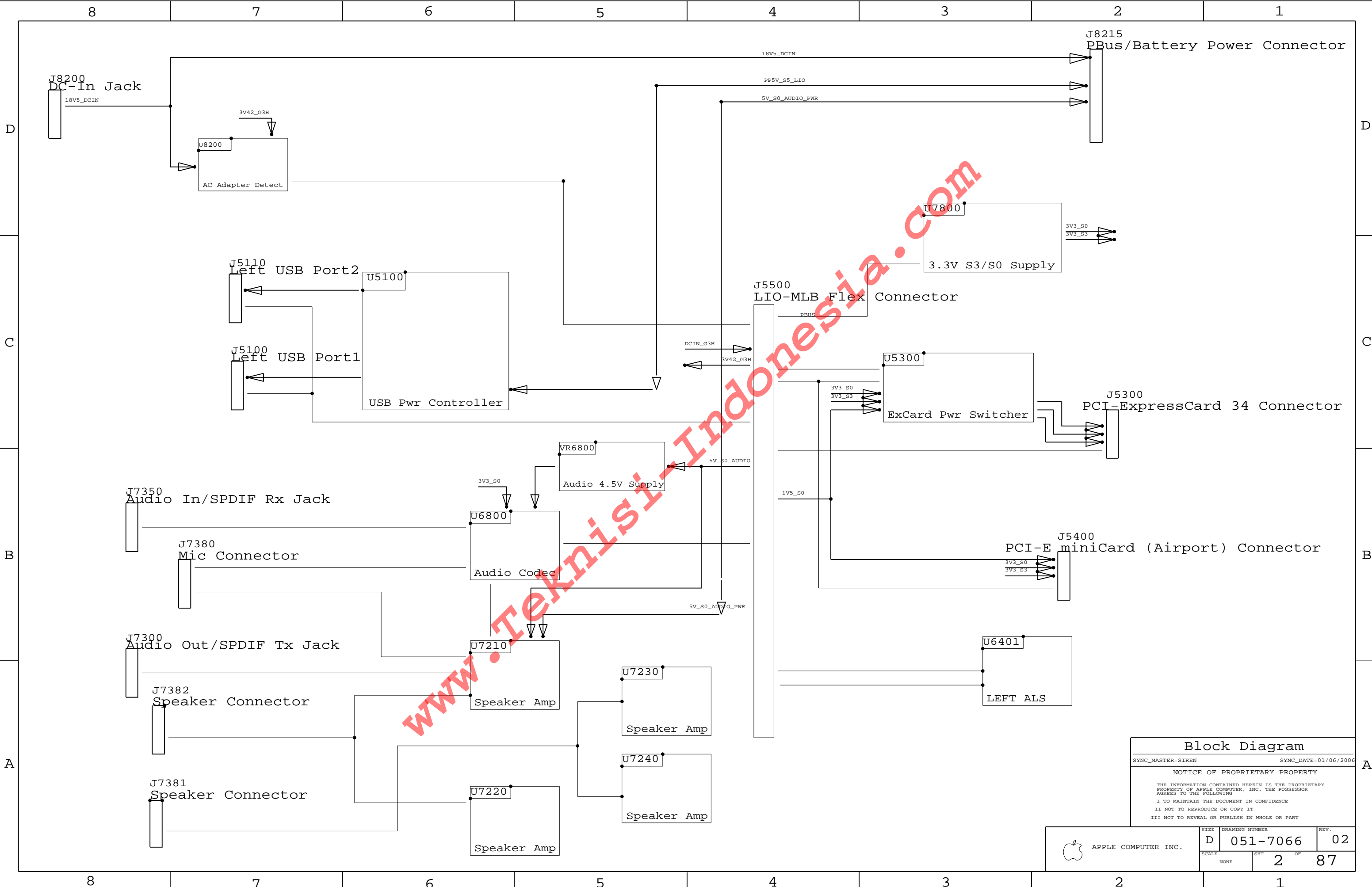
5

4

3

2

1



Block Diagram

SYNC_MASTER=SIREN

SYNC_DATE=01/06/2006

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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7066	02
SCALE		SHT	OF
NONE		2	87

8

7

6

5

4

3

2

1

BOM NUMBER	BOM NAME		BOM OPTIONS		
630-7510	PCBA, SYMPHONY, NEW, M9		075-0199, 075-0200		
075-0200	PROJ_PTS, SYMPHONY, NEW, M9		COMMON, EXCARD_3CNTL, ONEWIRE_DIV, ONEWIRE_PWRCTL		
075-0199	LEMENU_PTS, SYMPHONY, NEW, M9		LEMENU		

PHANTOM BOM #'S

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
075-0200	1	PROJ_PTS, SYMPHONY, M9	BOM1		075-0200
075-0199	1	LEMENU_PTS, SYMPHONY, M9	BOM2		075-0199

BAR CODE LABEL / EEE# 'S

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
000-0041	1	PLACEHOLDER FOR EEE/CCC INFO	[EEE:V3P]	CRITICAL	

A

B

C

D

8

7

6

5

4

3

2

1

APPLE COMPUTER INC.

SIZE

D

DRAWING NUMBER

051-7066

REV.

02

SCALE

NONE

SHT

4

OF

87

BOM CONFIGURATION

SYNC_MASTER=(MASTER)

SYNC_DATE=(MASTER)

NOTICE OF PROPRIETARY PROPERTY

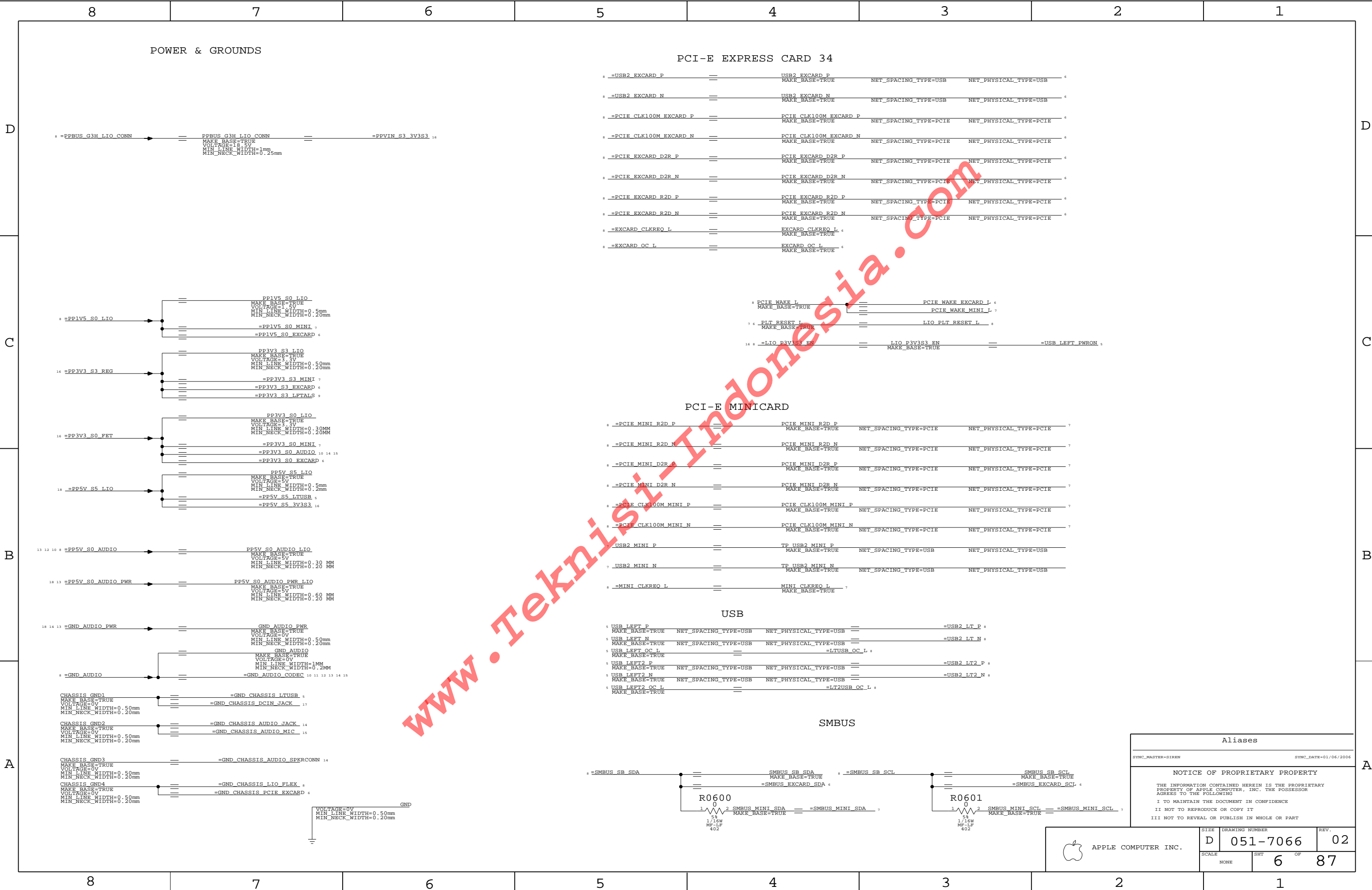
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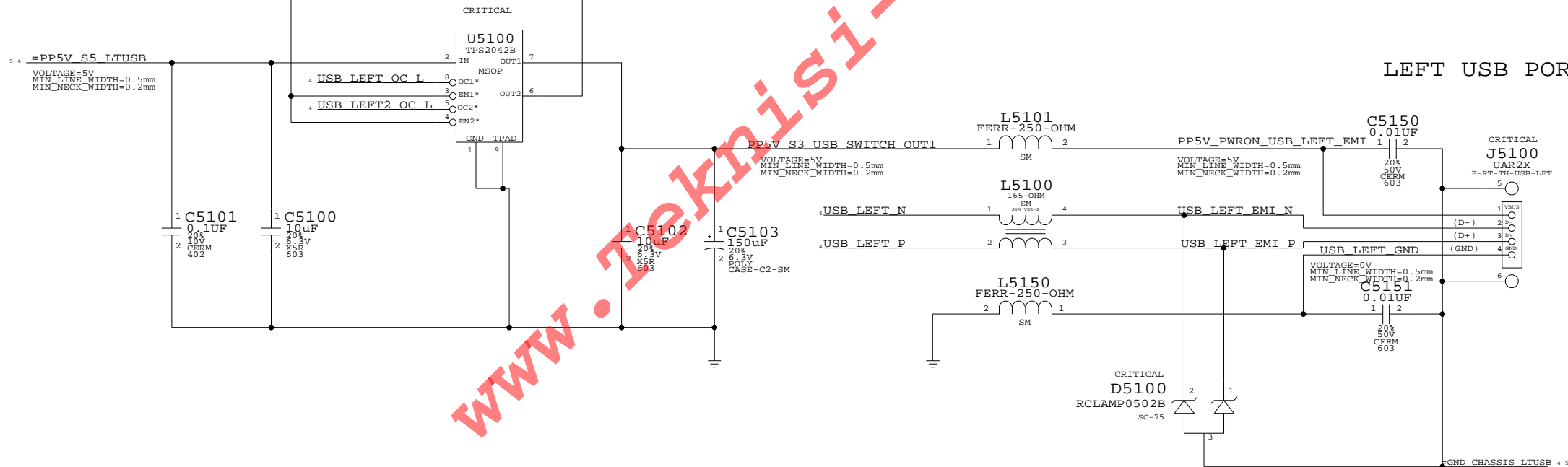
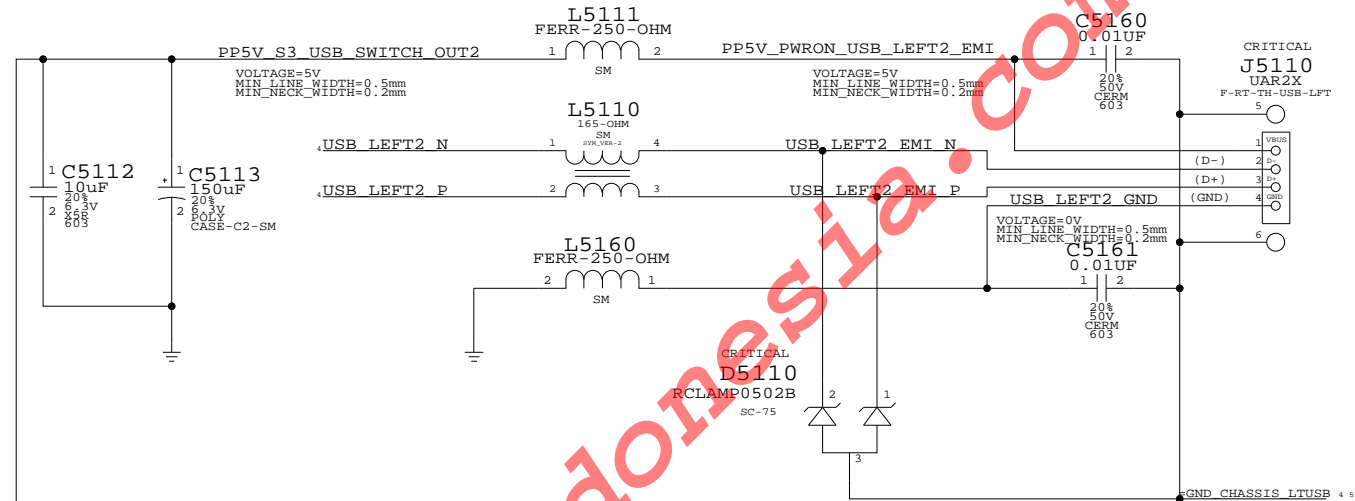
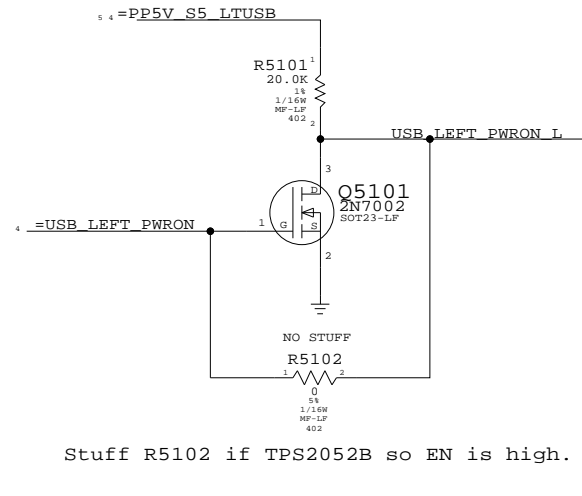
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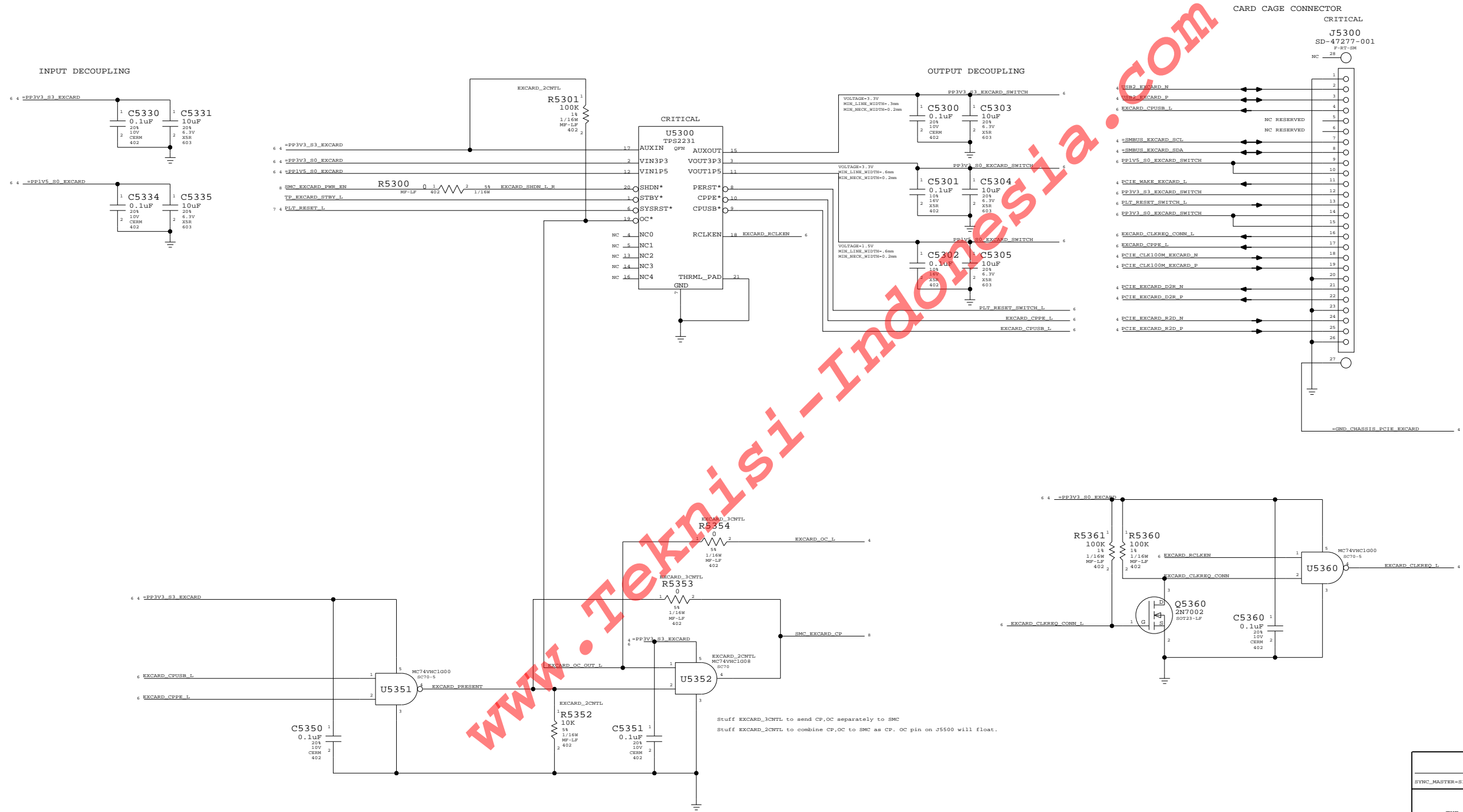




Left USB Port		
SYNC_MASTER=SIREN		SYNC_DATE=01/06/2006
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	D	051-7066	02
SCALE		SHT	51 OF 87
NONE			

PCI-EXPRESS CARD 34 TOP MOUNT CONNECTOR



ExpressCard Connector

SYNC_MASTER=SIREN SYNC_DATE=01/06/2006

NOTICE OF PROPRIETARY PROPERTY

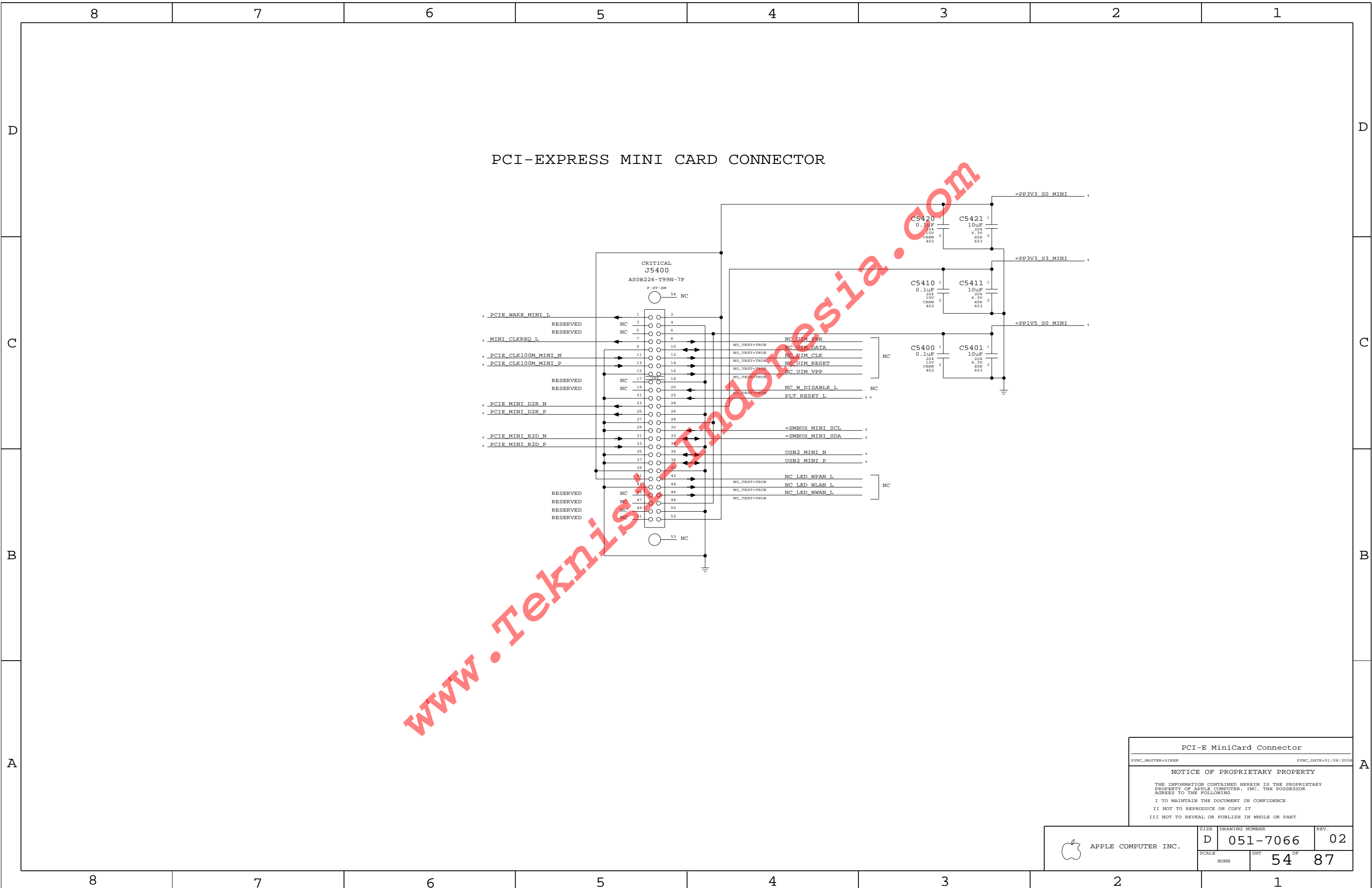
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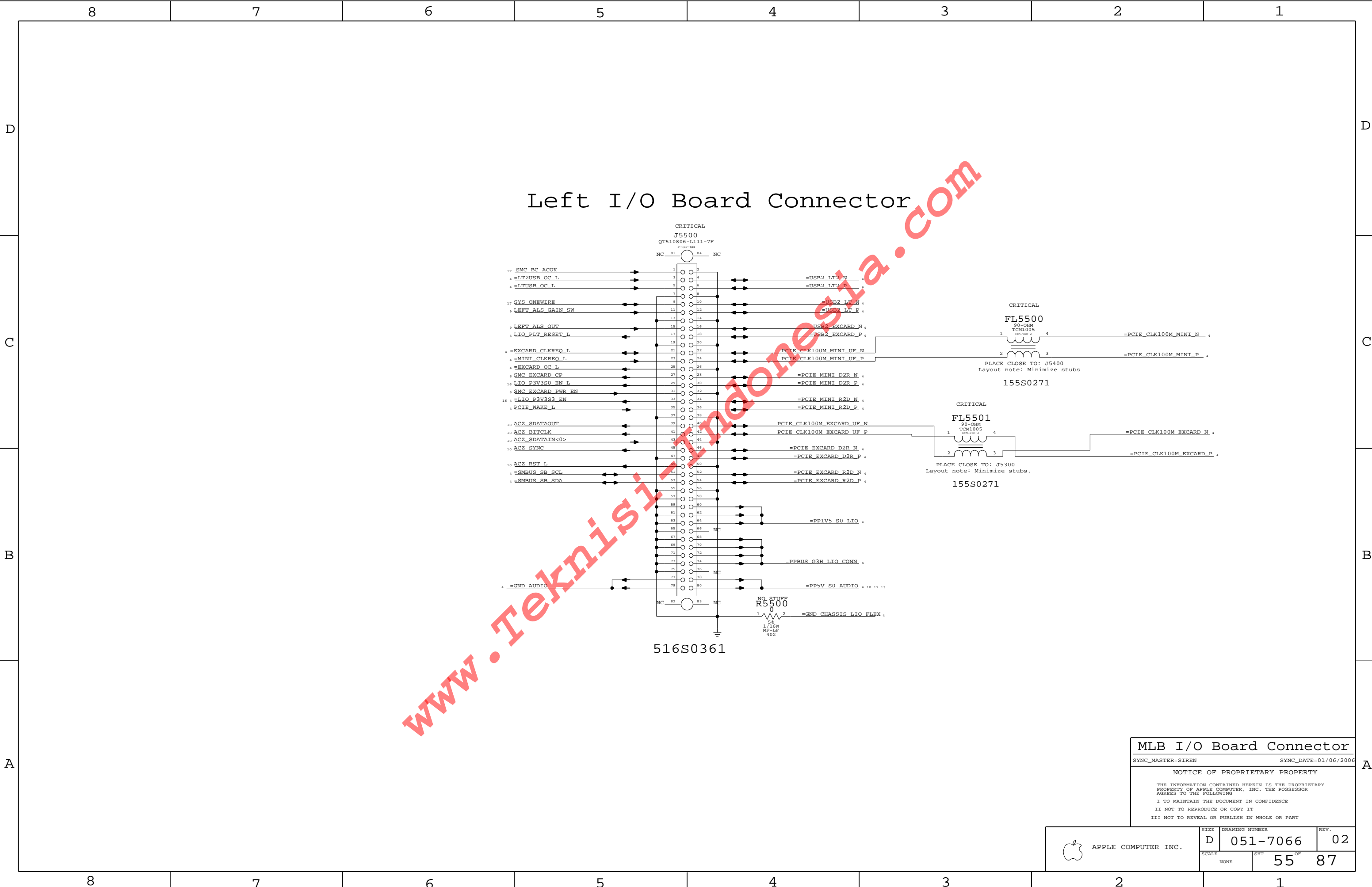
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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7066	02
SCALE		SHT	53 OF 87
NONE			





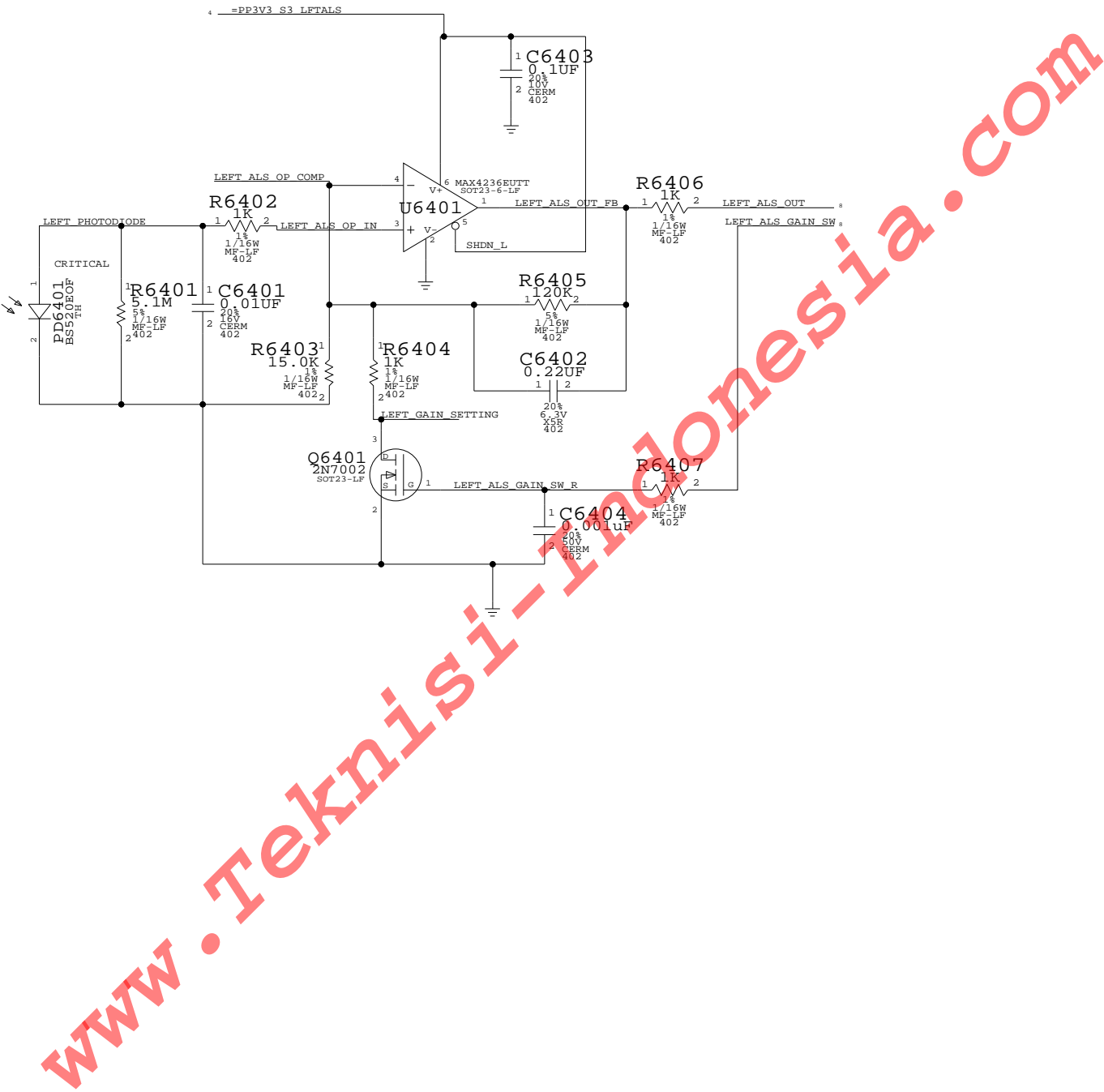
MLB I/O Board Connector

SYNC_MASTER=SIREN SYNC_DATE=01/06/2006

NOTICE OF PROPRIETARY PROPERTY

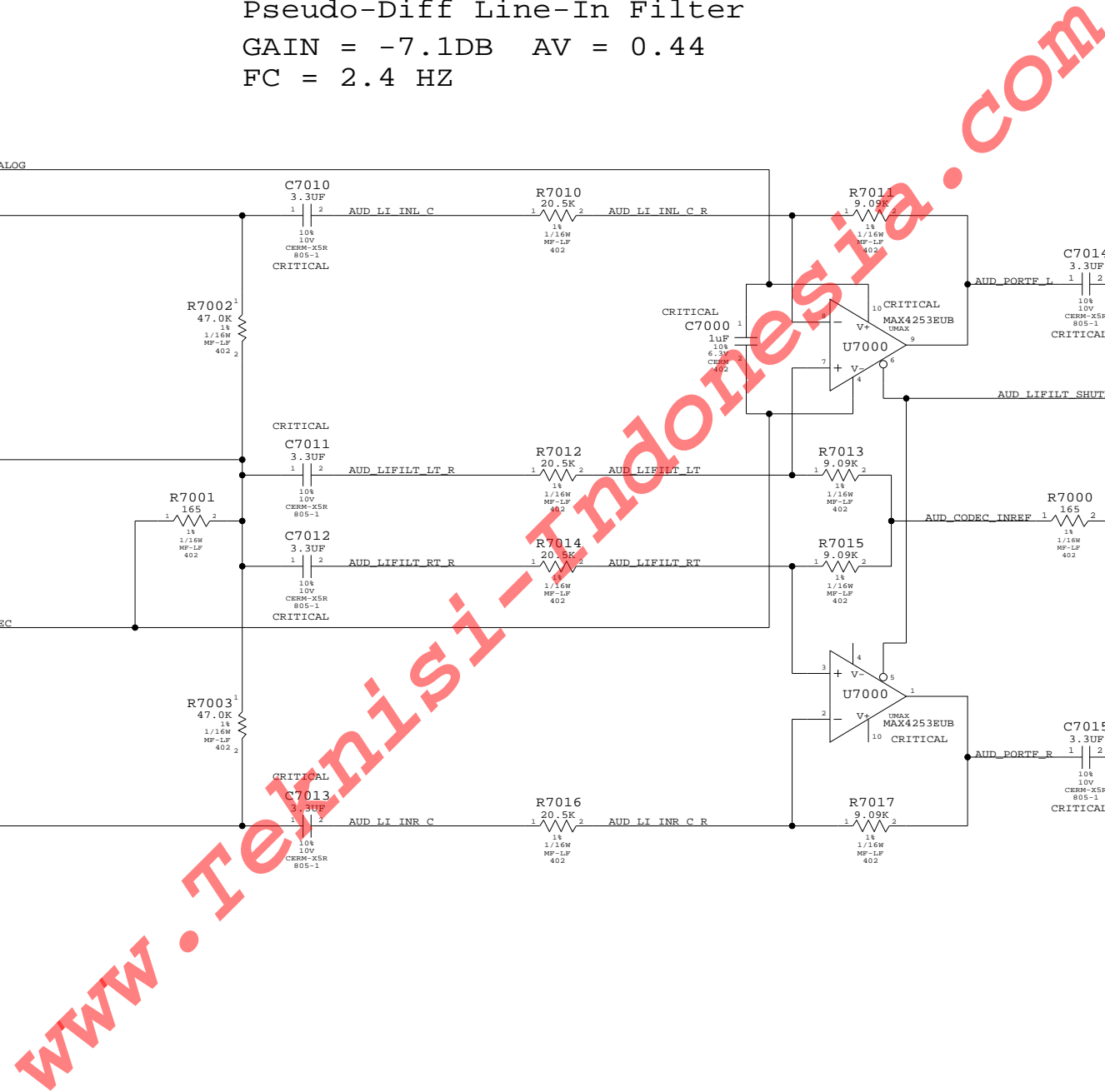
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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7066	02
	SCALE	SHT	55 OF 87
	NONE		



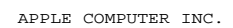
Left ALS		
SYNC_MASTER=SIREN		SYNC_DATE=01/06/2006
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	D	051-7066	02
SCALE		SHT	64 OF 87
NONE			

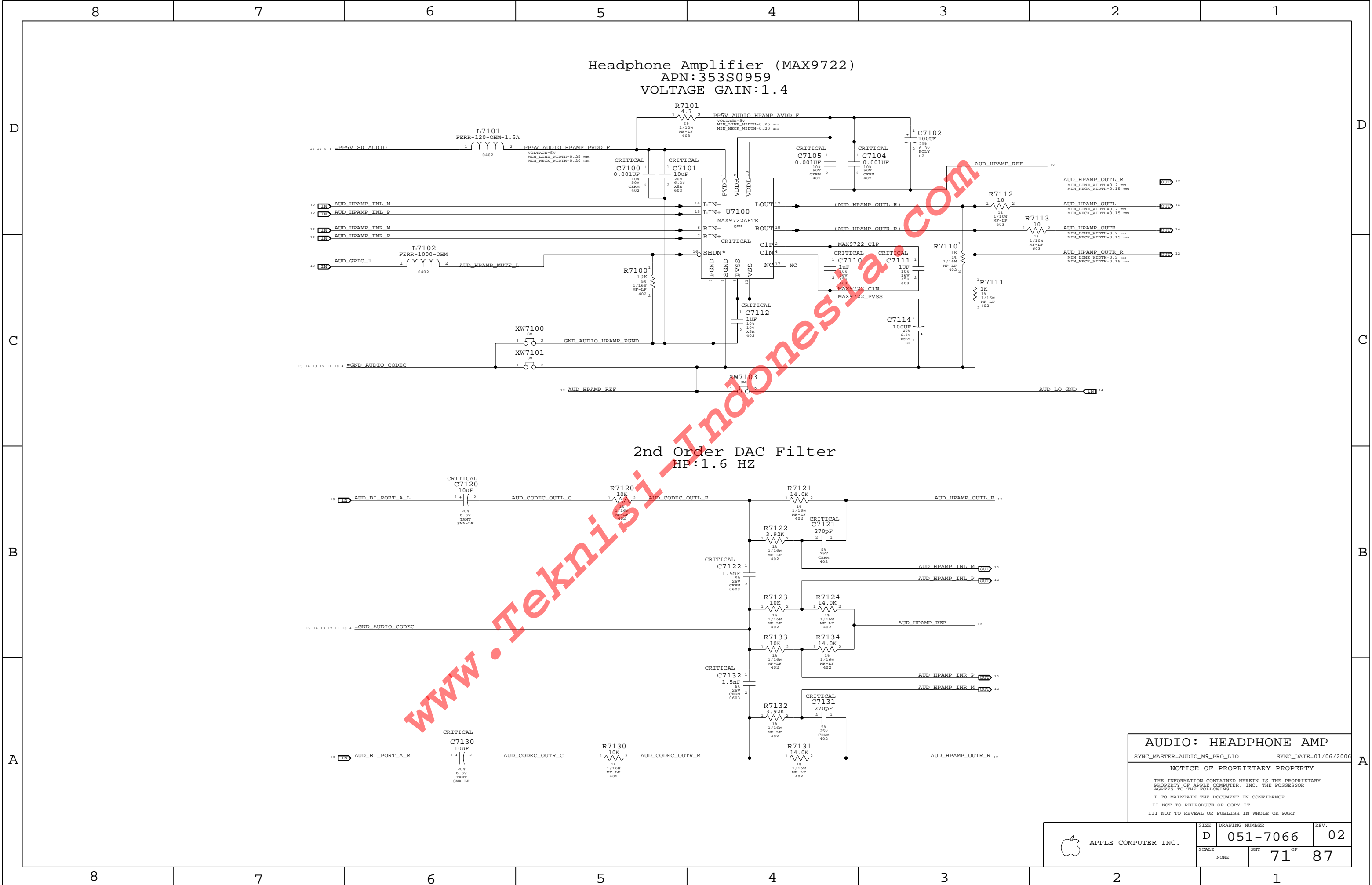
$$F_C = 2.4 \text{ Hz}$$


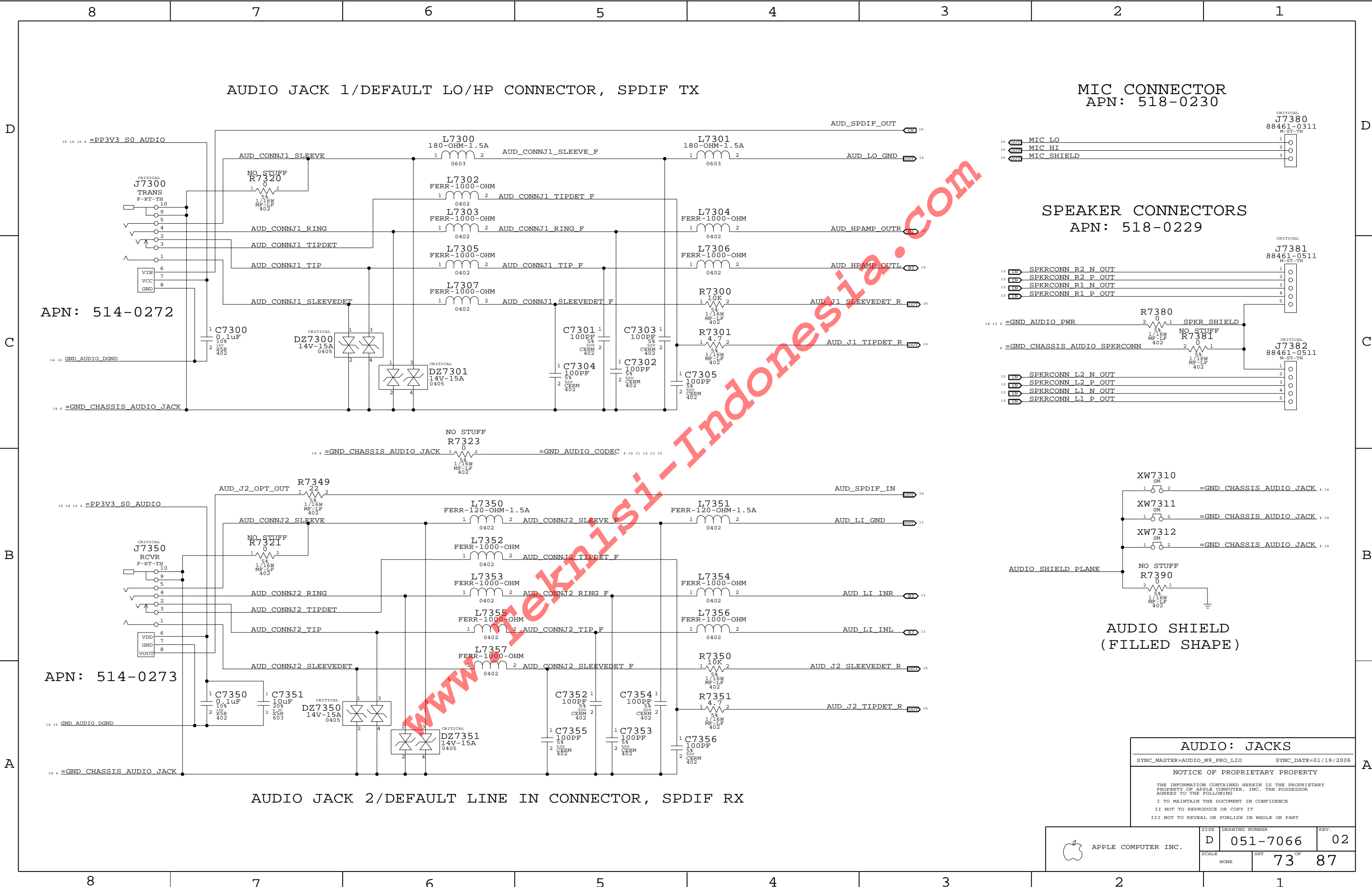
SYNC_MASTER=AUDIO_M9_PRO_LIO SYNC_DATE=01/06/2006

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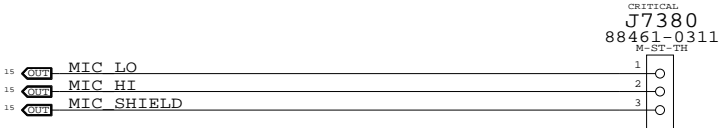


SIZE	DRAWING NUMBER	REV.
D	051-7066	02
SCALE	SHT	OF
NONE	70	87

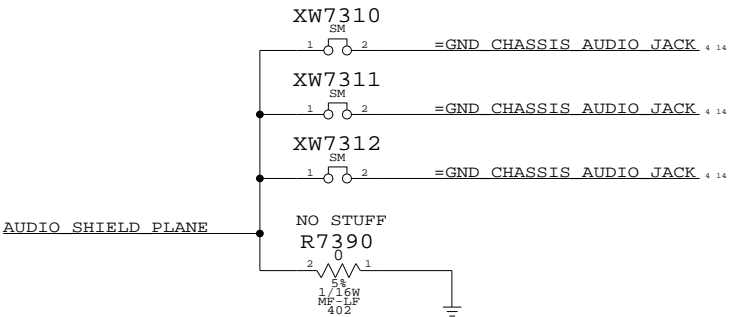
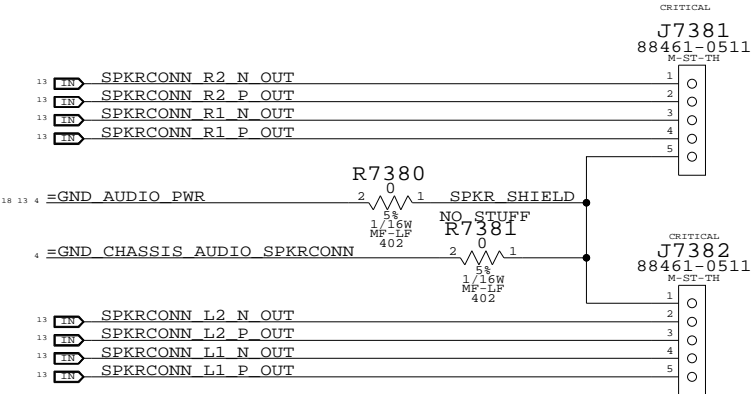




MIC CONNECTOR
APN: 518-0230



SPEAKER CONNECTORS
APN: 518-0229



AUDIO: JACKS

SYNC_MASTER=AUDIO_M9_PRO_LIO SYNC_DATE=01/19/2006

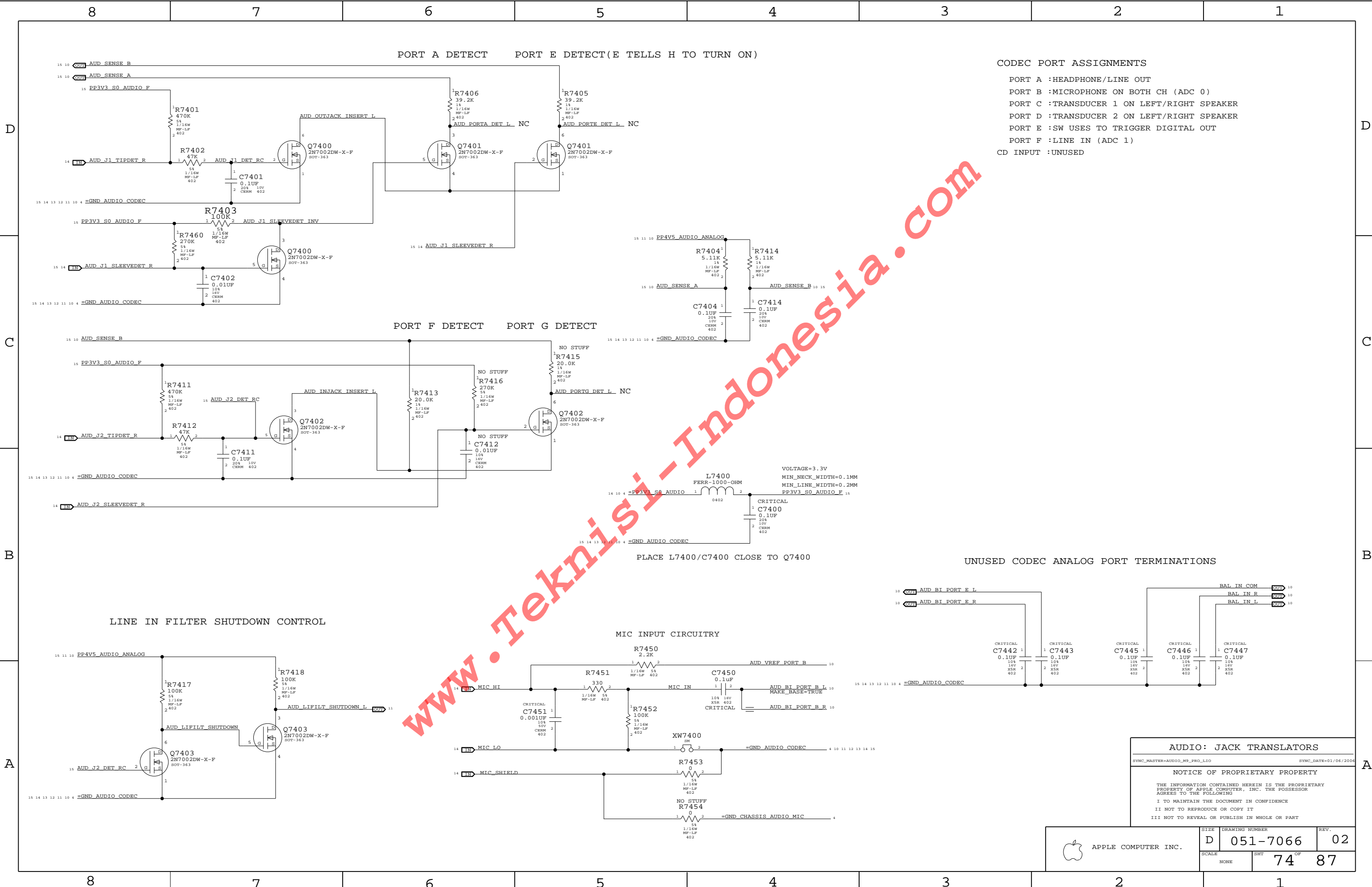
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APPLE COMPUTER INC.

SIZE	DRAWING NUMBER	REV.
D	051-7066	02
SCALE	SHT	OF
NONE	73	87



CODEC PORT ASSIGNMENTS

PORT A : HEADPHONE/LINE OUT

PORT B : MICROPHONE ON BOTH CH (ADC 0)

PORT C : TRANSDUCER 1 ON LEFT/RIGHT SPEAKER

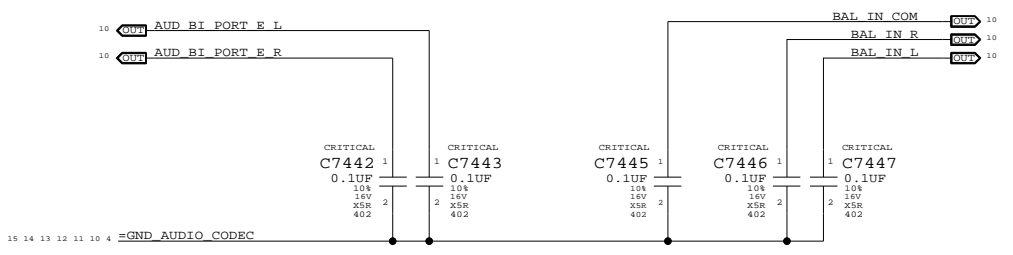
PORT D : TRANSDUCER 2 ON LEFT/RIGHT SPEAKER

PORT E : SW USES TO TRIGGER DIGITAL OUT

PORT F : LINE IN (ADC 1)

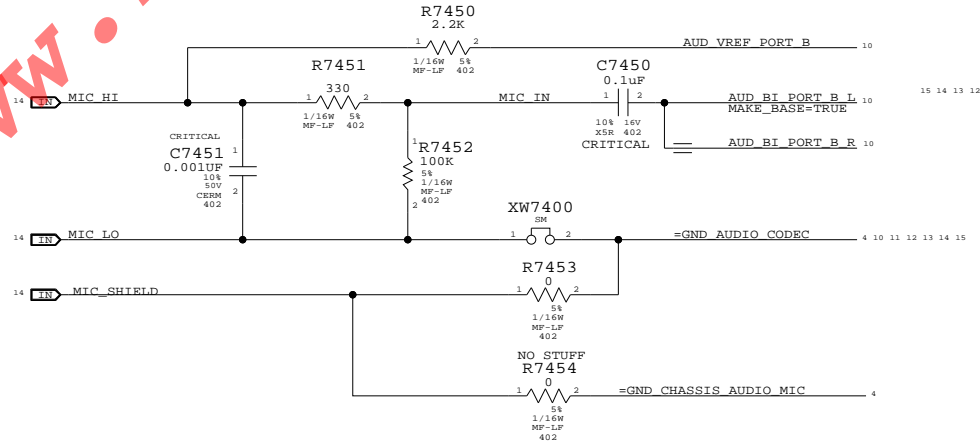
CD INPUT : UNUSED

UNUSED CODEC ANALOG PORT TERMINATIONS

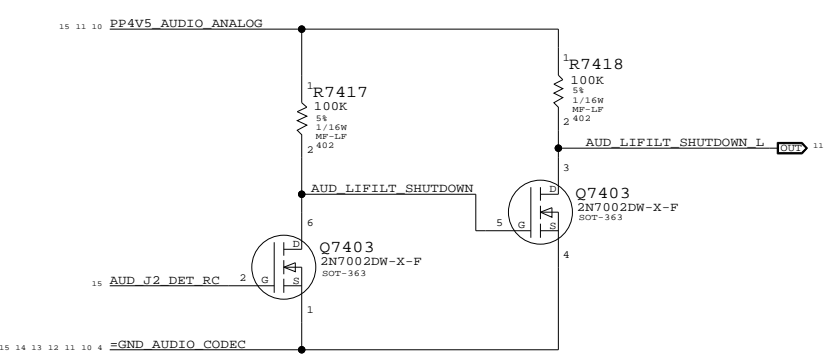


PLACE L7400/C7400 CLOSE TO Q7400

MIC INPUT CIRCUITRY



LINE IN FILTER SHUTDOWN CONTROL



AUDIO: JACK TRANSLATORS

SYNC_MASTER=AUDIO_M9_PRO_L10 SYNC_DATE=01/06/2006

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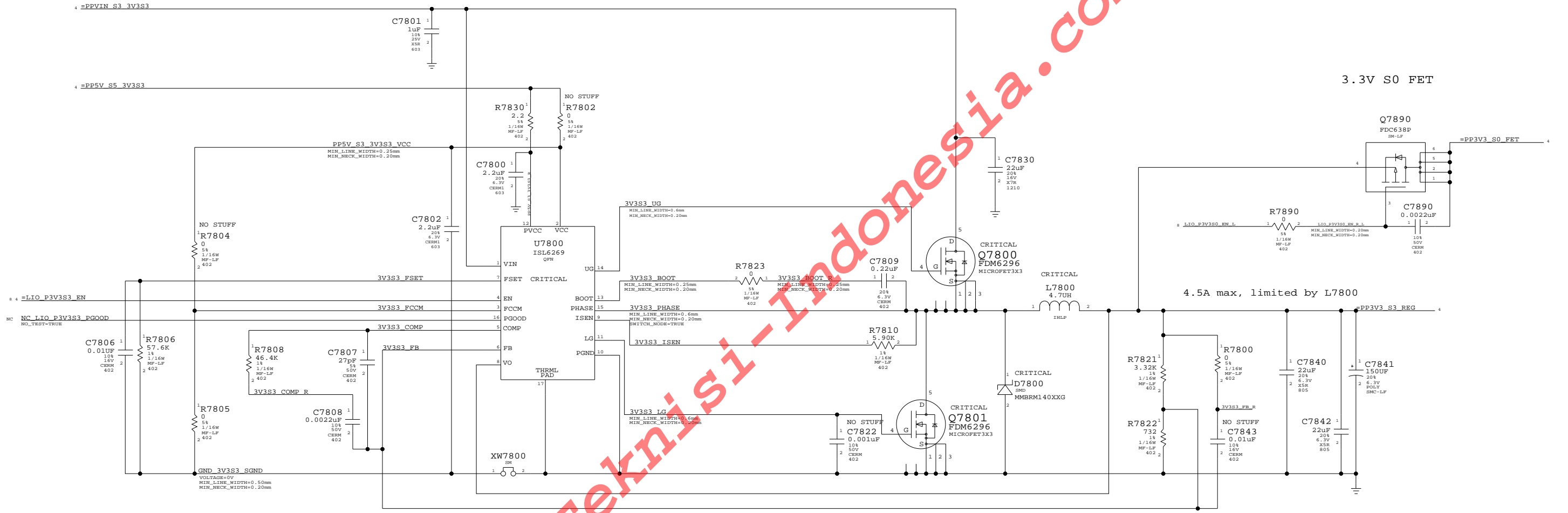
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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7066	02
SCALE	NONE	SHT	74 OF 87

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3.3V S3/S0 Power Supply



3.3V Supply

SYNC_MASTER=SIREN SYNC_DATE=01/06/2006

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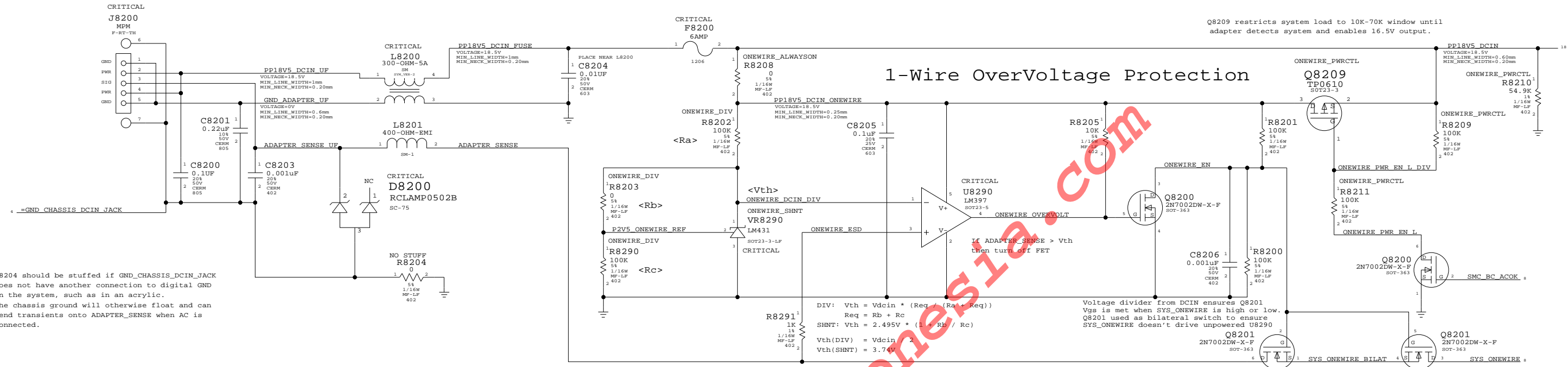
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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7066	02
SCALE	NONE		78 OF 87

DC Power Jack



R8204 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.

PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
116S0085	1	RES,6.2K,5%,1/16W,0402,LF	R8202		ONEWIRE_SHNT
114S0315	1	RES,10K,1%,1/16W,0402,LF	R8203		ONEWIRE_SHNT
114S0343	1	RES,20K,1%,1/16W,0402,LF	R8290		ONEWIRE_SHNT

ONEWIRE_SHNT BOM option allows the use of an adjustable shunt voltage regulator to provide the reference to the LM397 comparator. This allows the protection circuit to enforce a ~3.7V max signal on ADAPTER_SENSE instead of the voltage divider DCIN/2 approach.
R8202 value ensures 1mA current for DCIN >= 13.4V per LM431 spec.

DC-In & Battery Connectors

SYNC_MASTER=SIREN SYNC_DATE=01/06/2006

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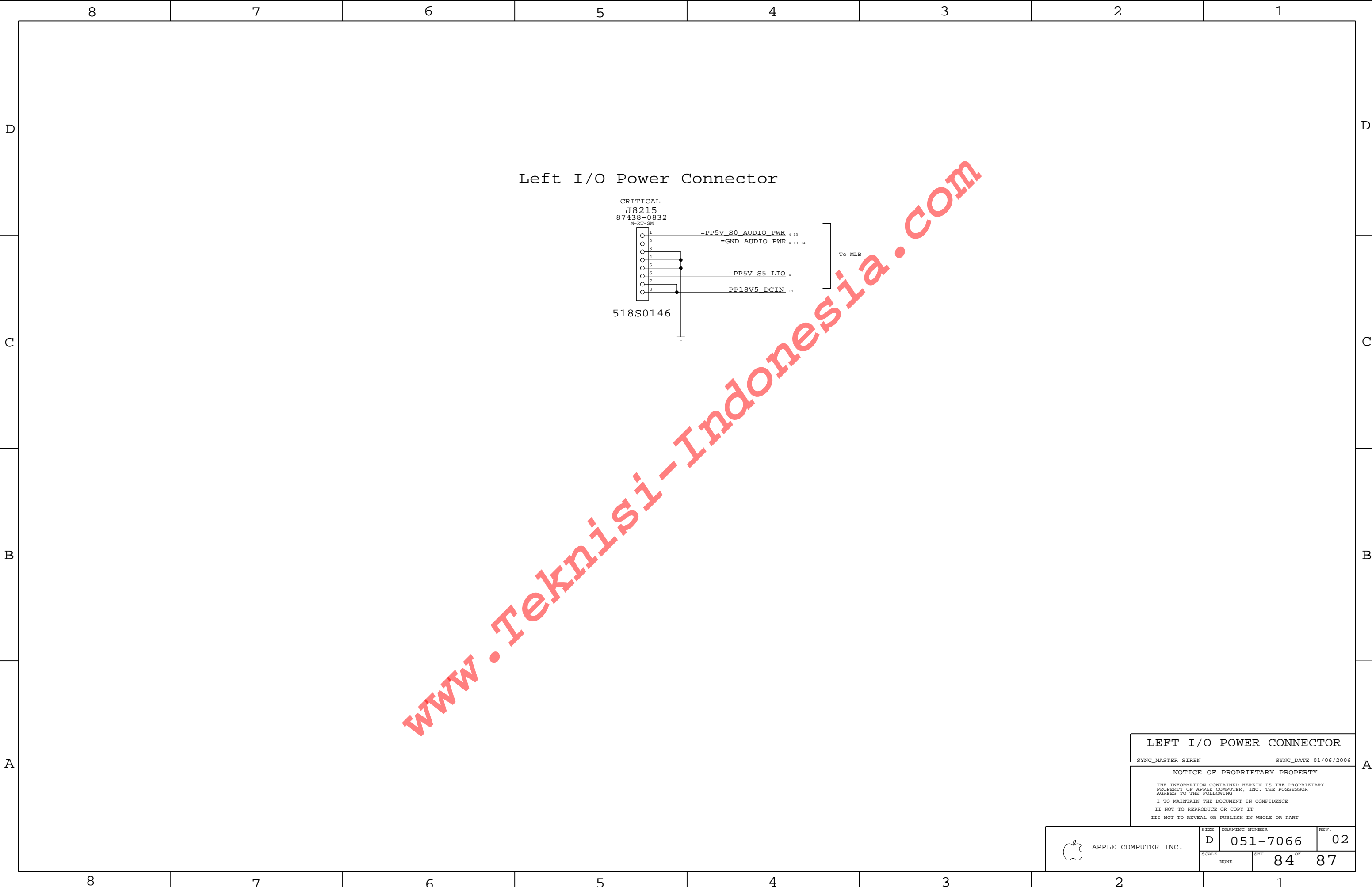
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APPLE COMPUTER INC.

SIZE D DRAWING NUMBER 051-7066 REV. 02

SCALE NONE SHT 82 OF 87



LEFT I/O POWER CONNECTOR

SYNC_MASTER=SIREN

SYNC_DATE=01/06/2006


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 APPLE COMPUTER INC.	SIZE	DRAWING NUMBER		REV.
	D	051-7066		02
SCALE		SHT		
NONE		84	OF 87	

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