

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

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

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AUDIO: SPEAKER AMP

AUDIO_M9_PRO_LIO

01/06/2006

14

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AUDIO: JACKS

AUDIO_M9_PRO_LIO

01/19/2006

15

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AUDIO: JACK TRANSLATORS

AUDIO_M9_PRO_LIO

01/06/2006

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3.3V Supply

SIREN

01/06/2006

17

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DC-In & Battery Connectors

SIREN

01/06/2006

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LEFT I/O POWER CONNECTOR

SIREN

01/06/2006

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Cross Reference Page

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Cross Reference Page

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87

Cross Reference Page

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

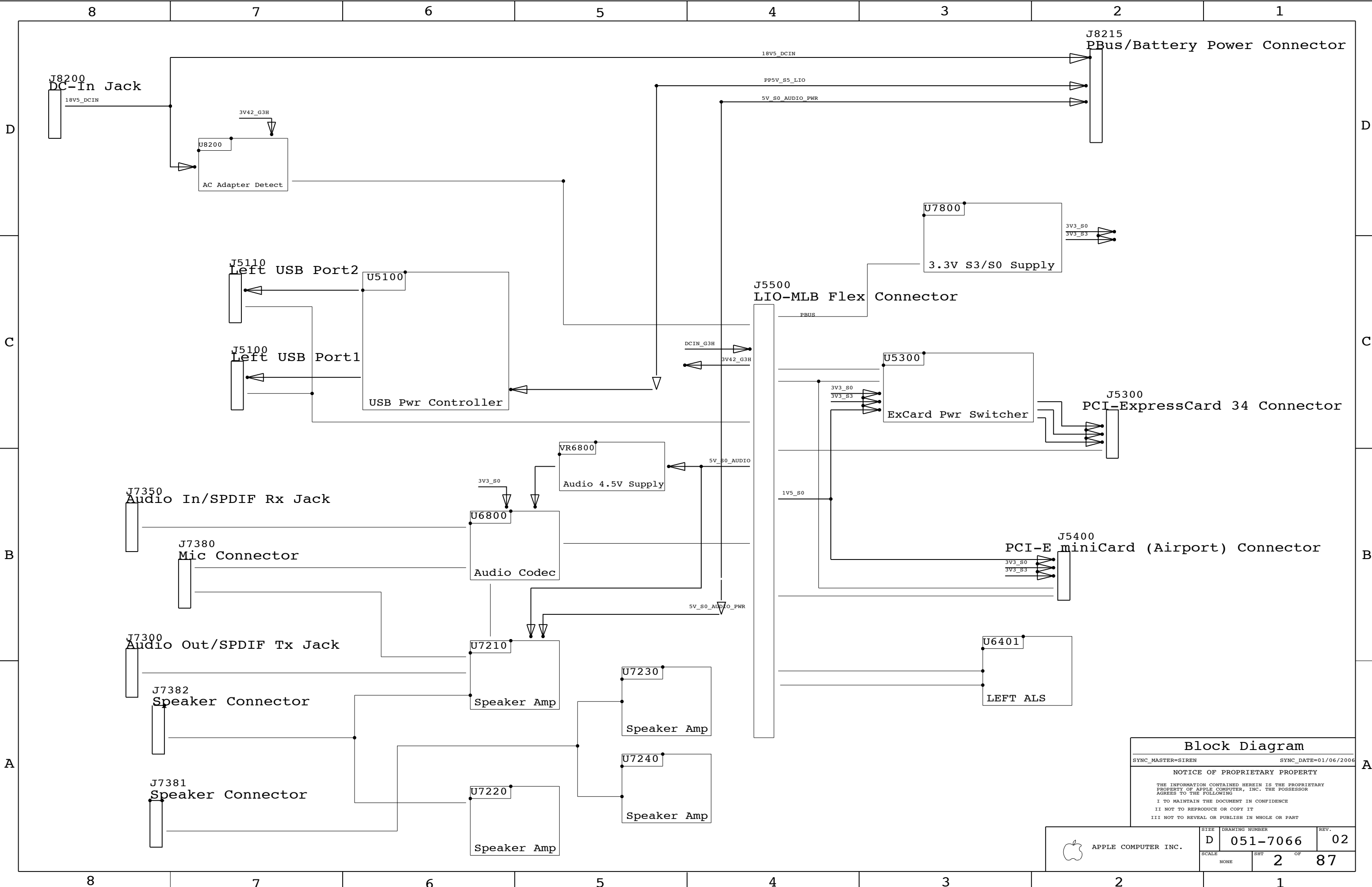
5

4

3

2

1



Block Diagram

SYNC_MASTER=SIREN

SYNC_DATE=01/06/2006

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	D	051-7066		02
SCALE		SHR	OF	
NONE		2	87	

D

C

B

A

87654321

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

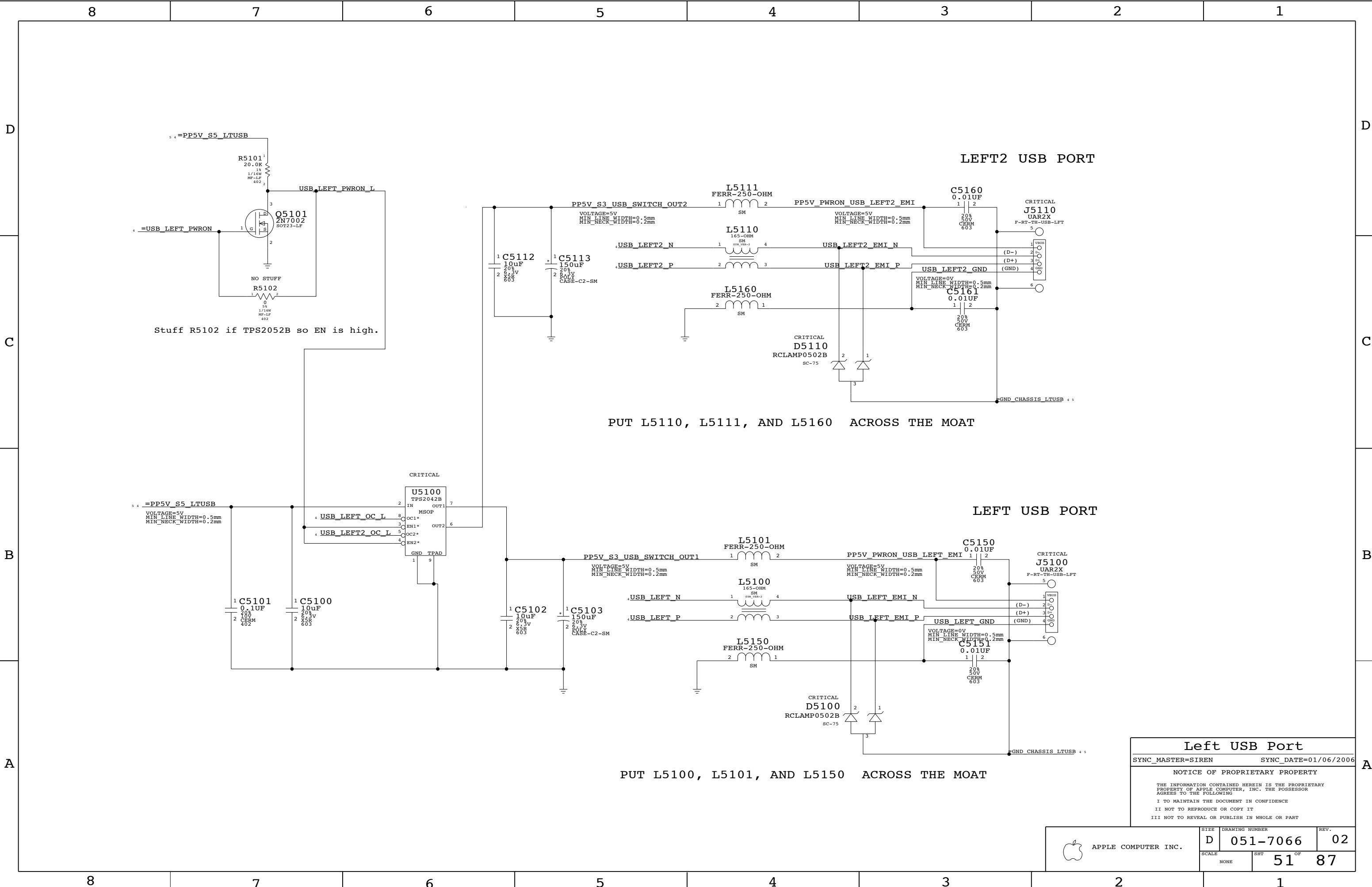
PART NUMBER	QTY	DESCRIPTION	REFERENCE DES	CRITICAL	BOM OPTION
075-0200	1	PROJ PTS,SYMPHONY,M9	BOM1		075-0200
075-0199	1	LEMENU PTS,SYMPHONY,M9	BOM2		075-0199

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	

BOM CONFIGURATION		
SYNC_MASTER=(MASTER)		SYNC_DATE=(MASTER)
NOTICE OF PROPRIETARY PROPERTY THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY PROPERTY OF APPLE COMPUTER, INC. THE POSSESSOR AGREES TO THE FOLLOWING I TO MAINTAIN THE DOCUMENT IN CONFIDENCE II NOT TO REPRODUCE OR COPY IT III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART		
APPLE COMPUTER INC.	SIZE D	DRAWING NUMBER 051-7066
	SCALE NONE	SHT 4 OF 87
		REV. 02

87654321



Stuff R5102 if TPS2052B so EN is high.

PUT L5110, L5111, AND L5160 ACROSS THE MOAT

PUT L5100, L5101, AND L5150 ACROSS THE MOAT

Left USB Port

SYNC_MASTER=SIREN

SYNC_DATE=01/06/2006

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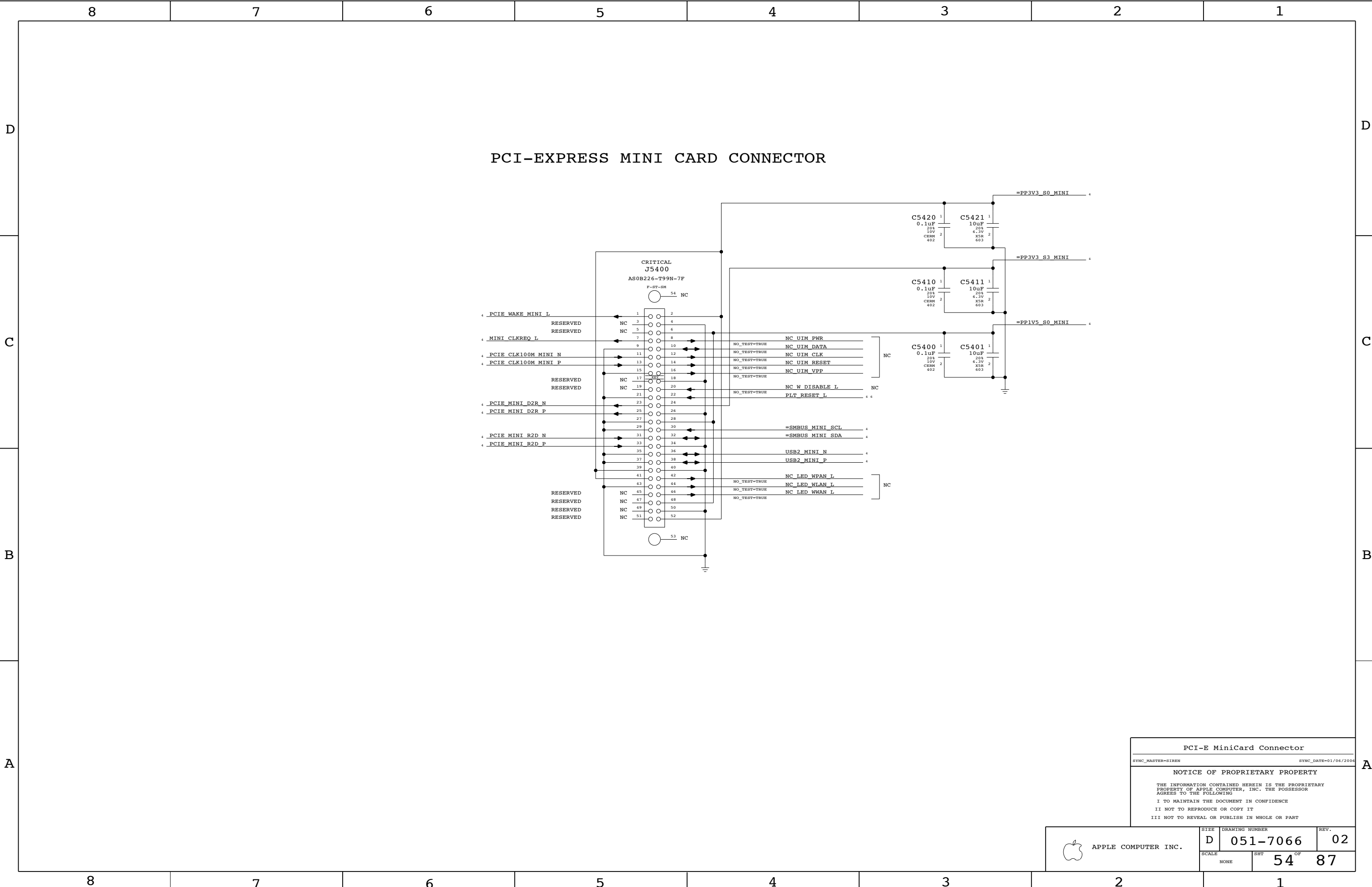
II NOT TO REPRODUCE OR COPY IT

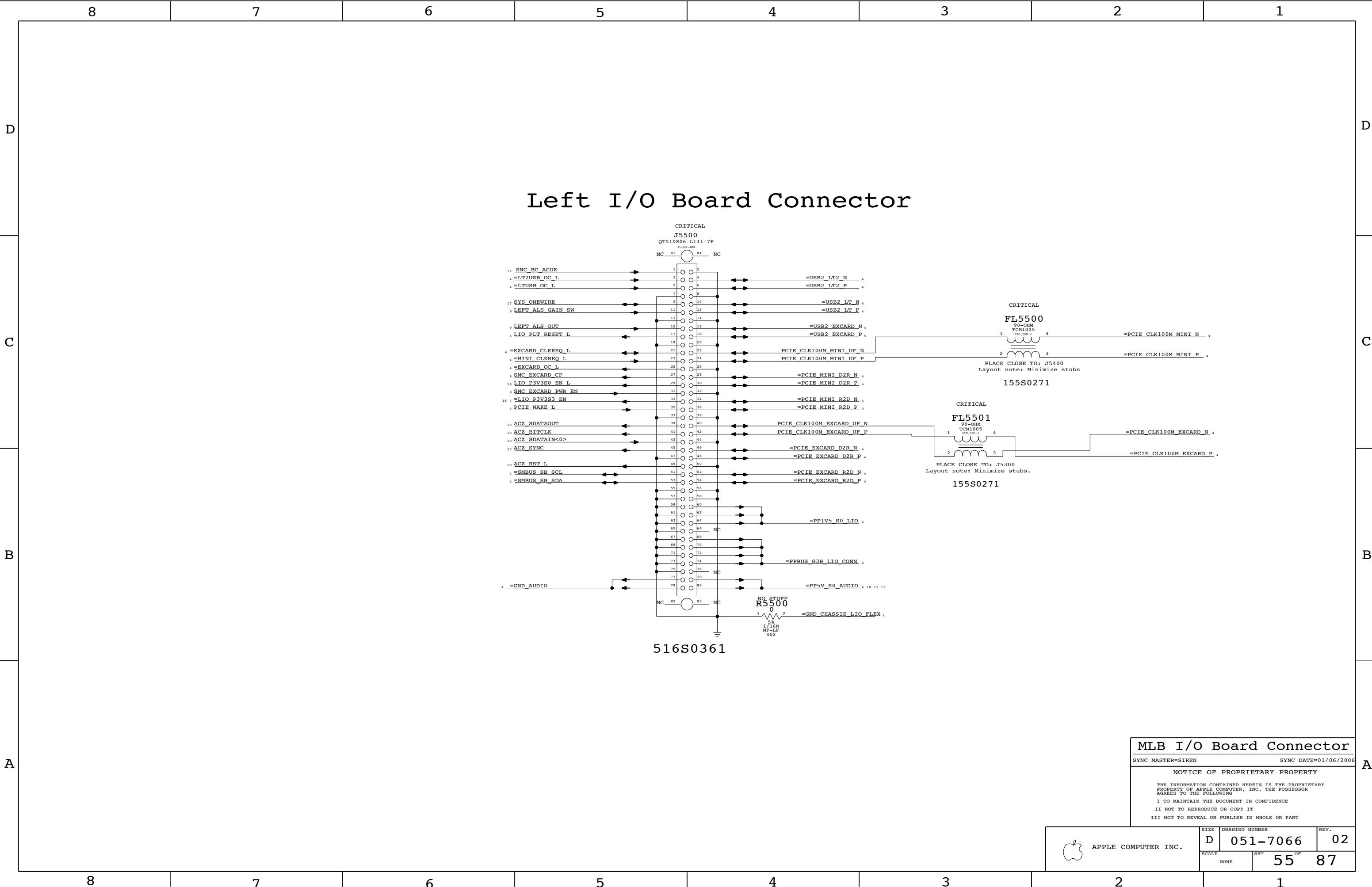
III NOT TO REVEAL OR PUBLISH IN WHOLE OR PART

APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7066	02
SCALE		SHT	51 OF 87
NONE			

D

A





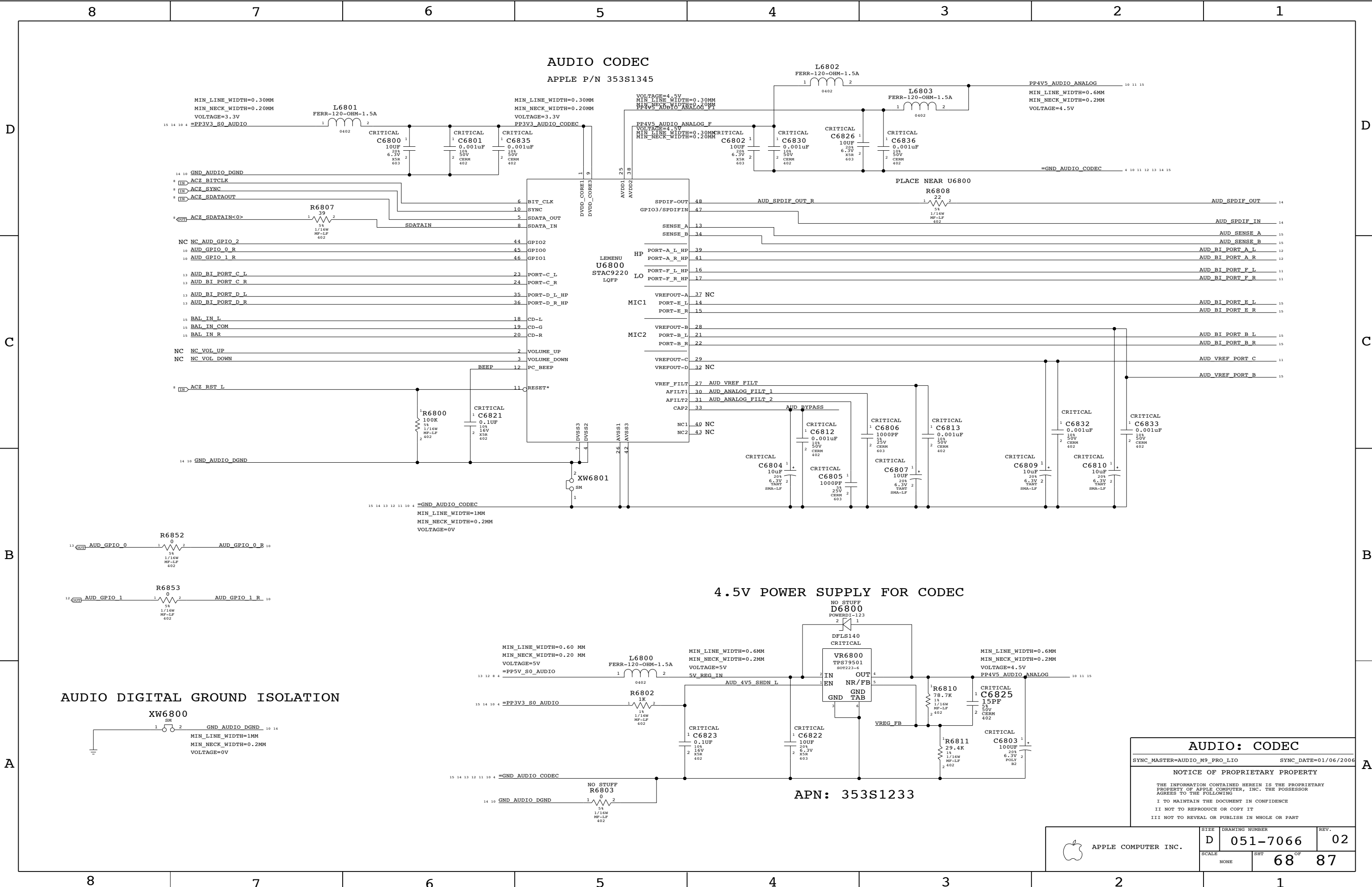
MLB I/O Board Connector

SYNC_MASTER=SIREN SYNC_DATE=01/06/2006

NOTICE OF PROPRIETARY PROPERTY

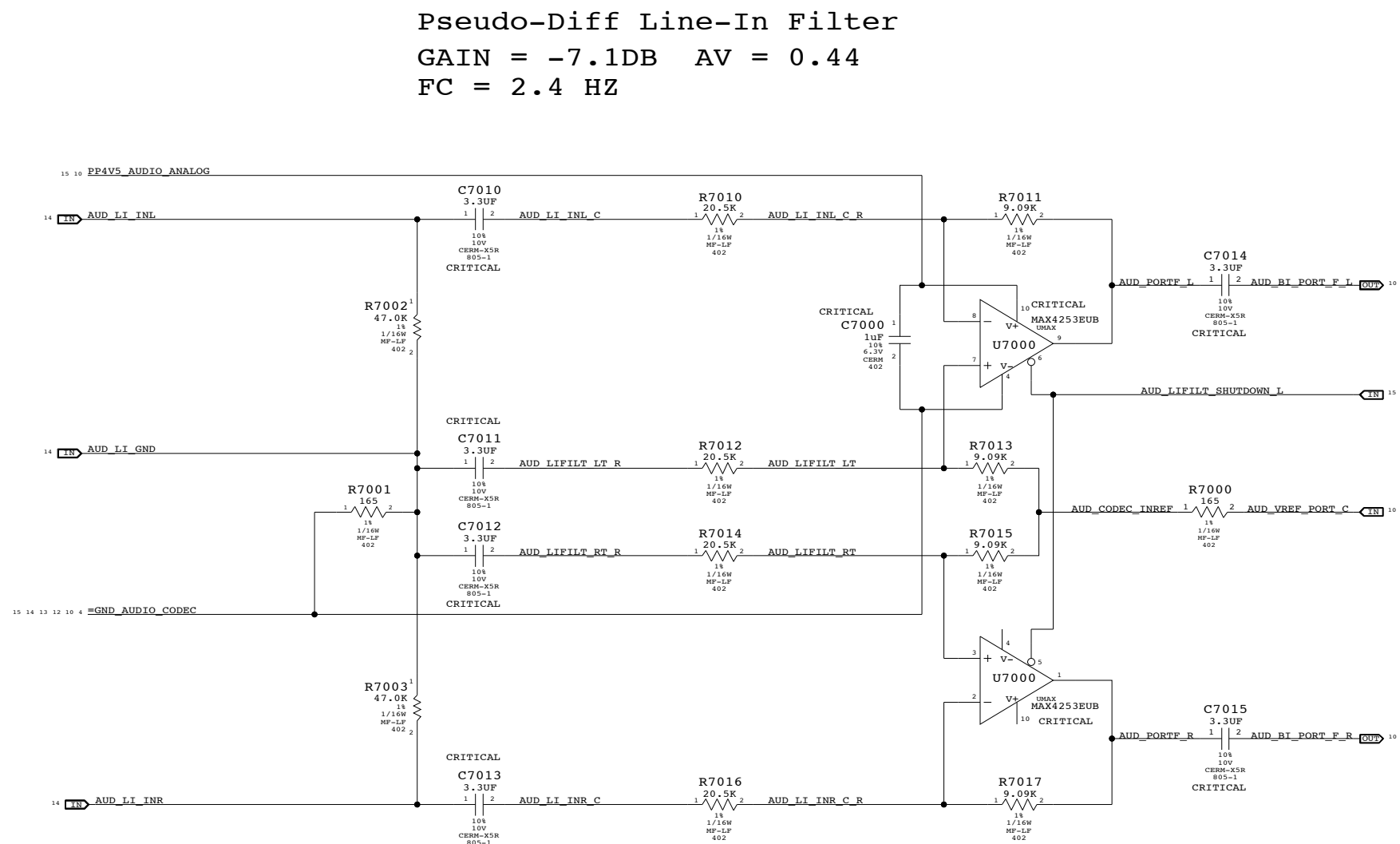
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APPLE COMPUTER INC.	SIZE D	DRAWING NUMBER 051-7066	REV. 02
	SCALE NONE	SHT 55 OF	87



AUDIO: CODEC		
SYNC_MASTER=AUDIO_M9_PRO_LIO		REV.
NOTICE OF PROPRIETARY PROPERTY		02
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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER	REV.
	D	051-7066	02
SCALE		SHT	68 OF 87
NONE			



AUDIO: LINE IN

SYNC_MASTER=AUDIO_M9_PRO_LIO SYNC_DATE=01/06/2006	7
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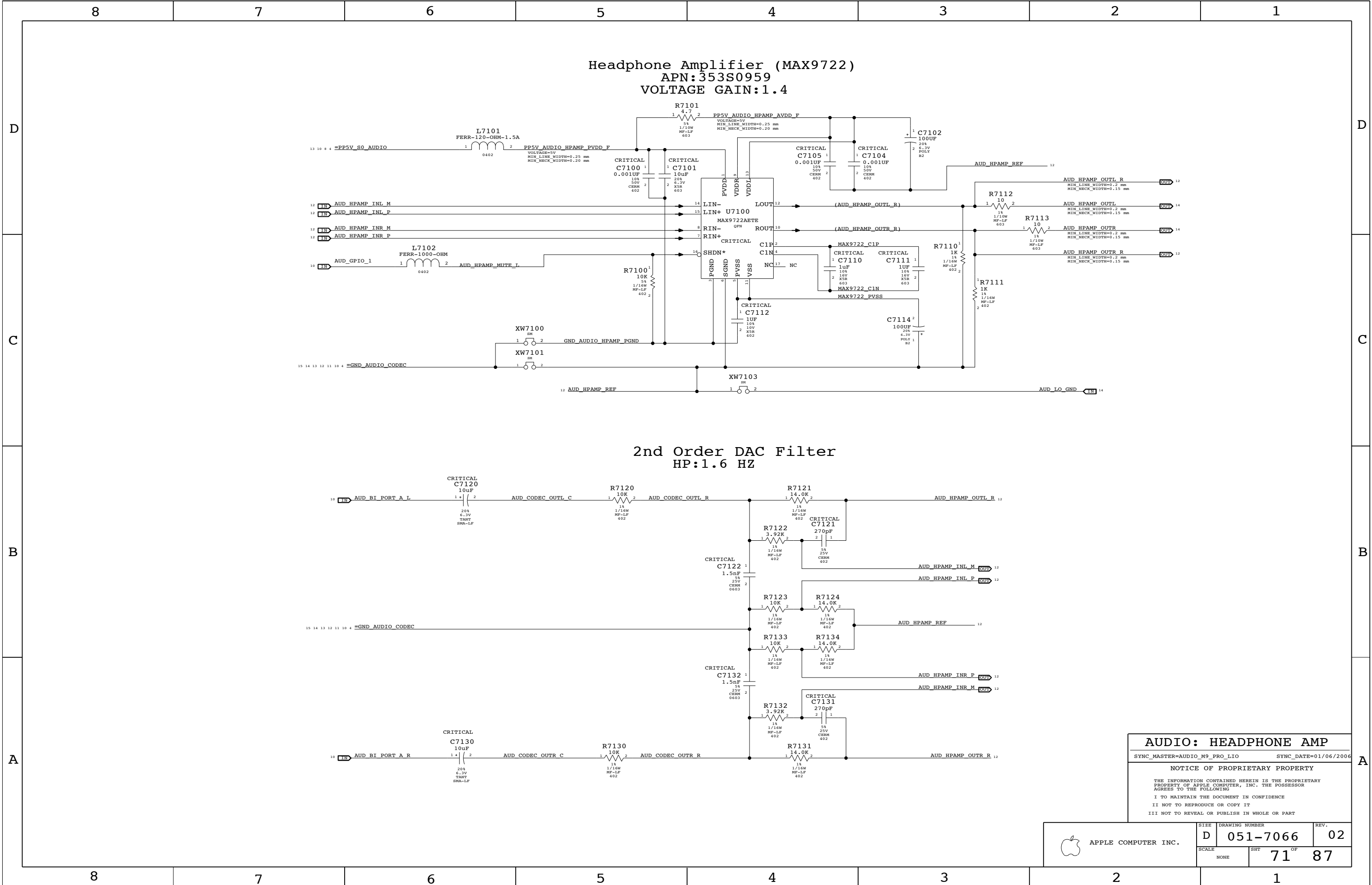


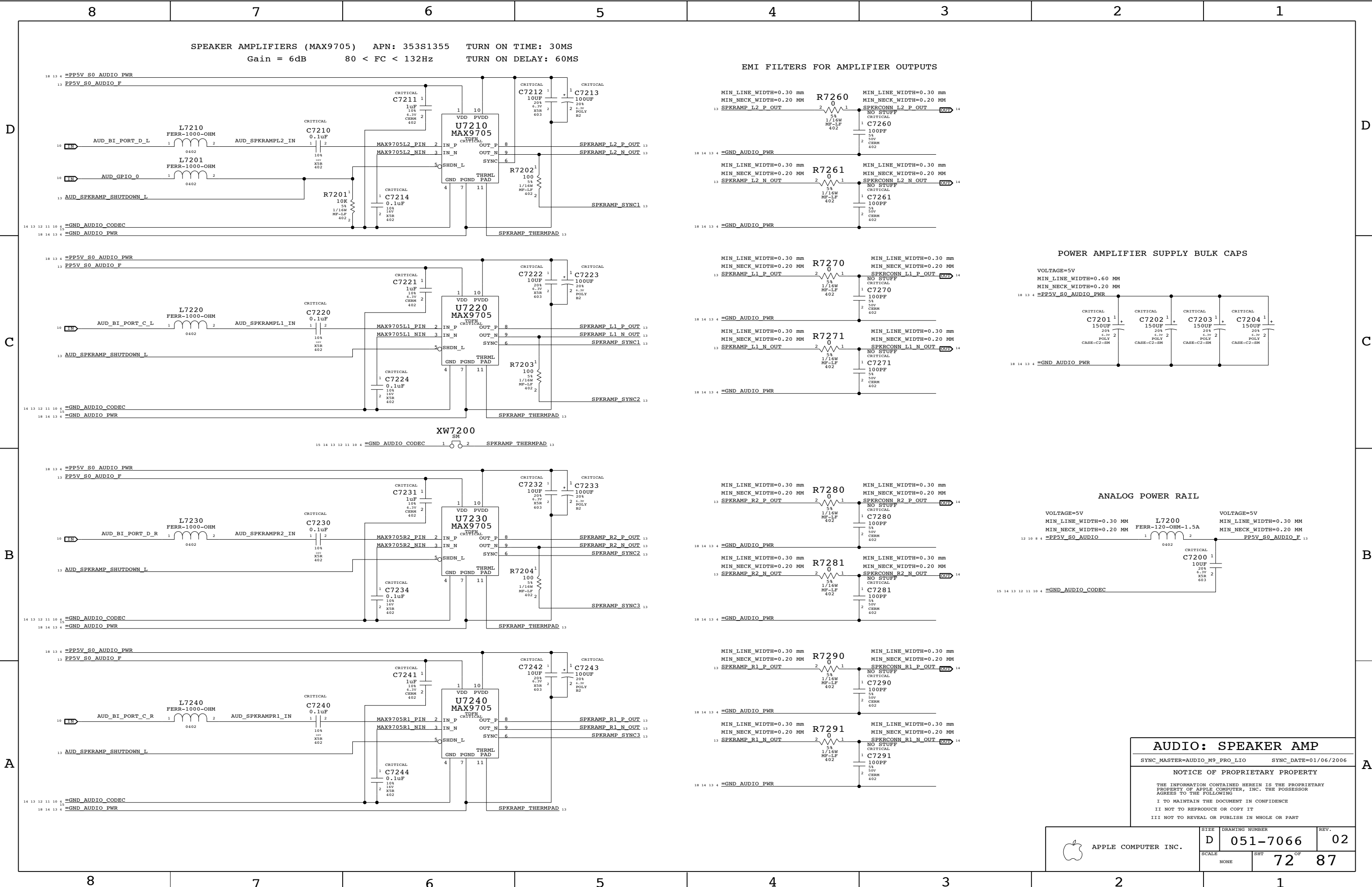
APPLE COMPUTER INC.

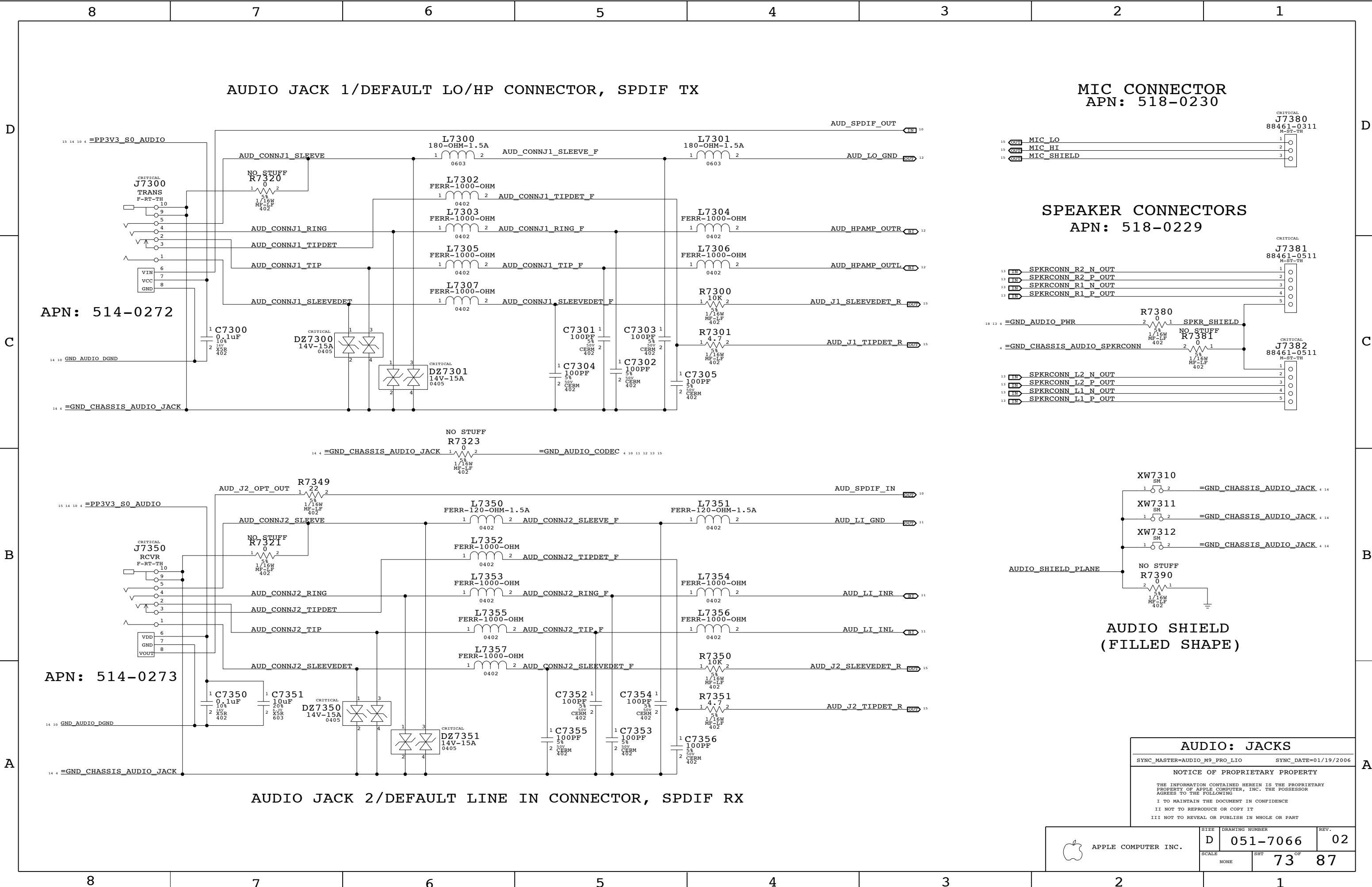
SIZE	DRAWING NUMBER	REV.
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D	051-7066	02
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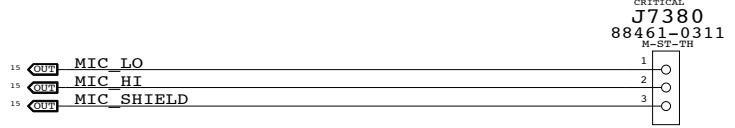
SCALE	SHT	70	OF	87
NONE				



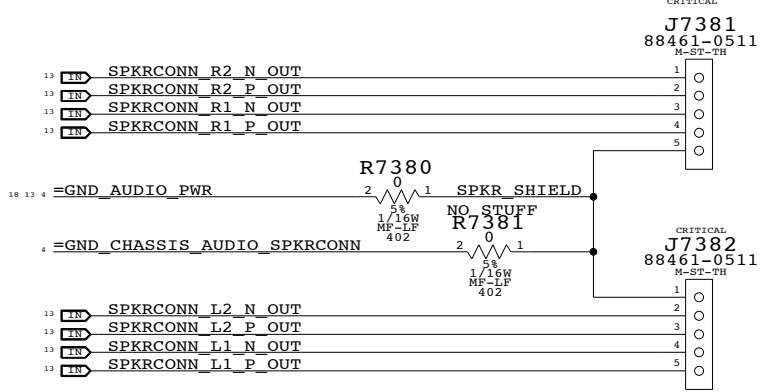




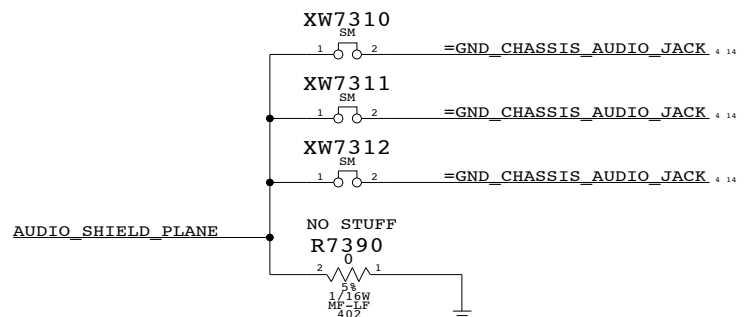
MIC CONNECTOR
APN: 518-0230



SPEAKER CONNECTORS
APN: 518-0229



AUDIO SHIELD
(FILLED SHAPE)



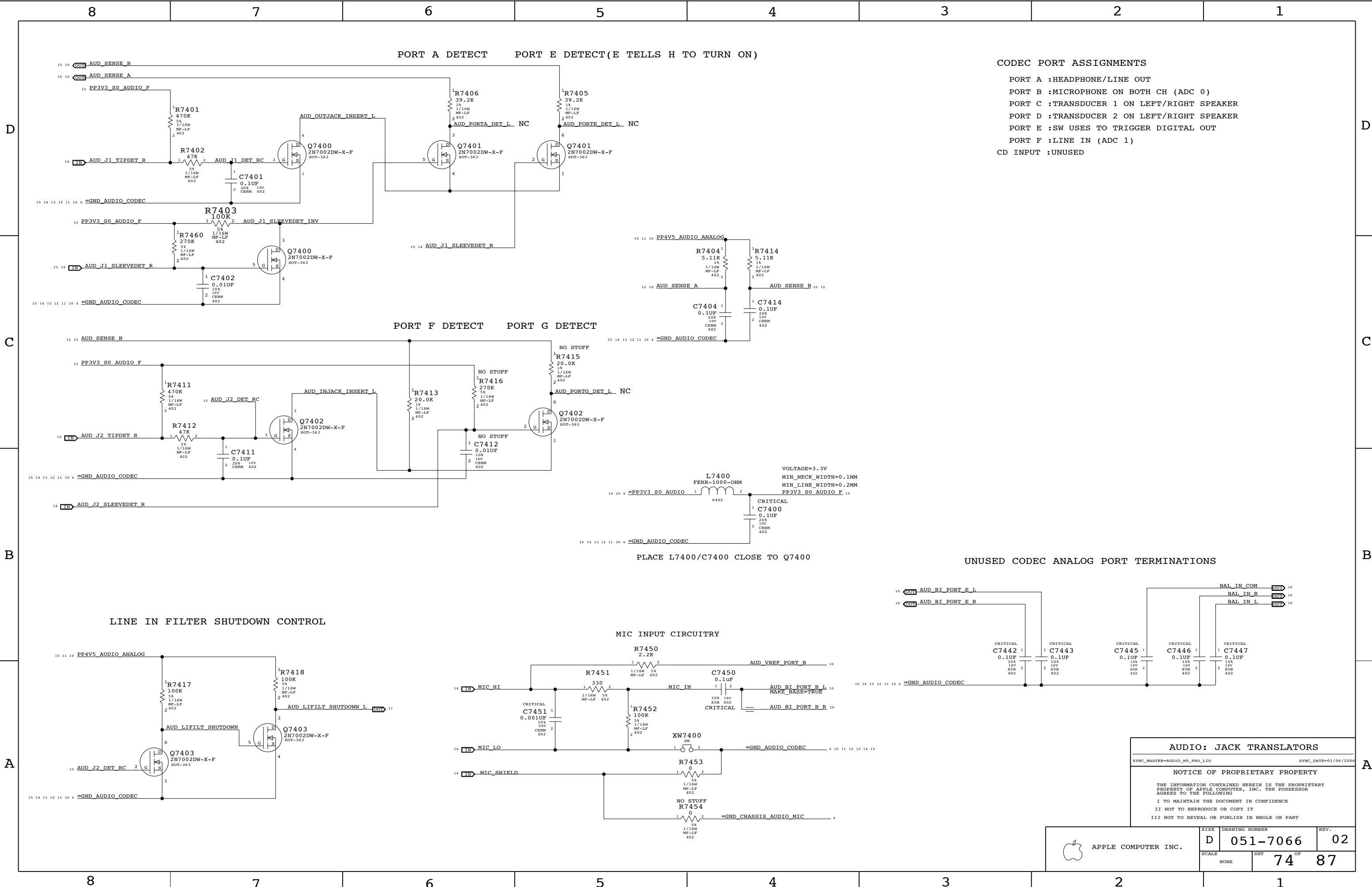
AUDIO: JACKS

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	NONE		SBT
	73		OF 87



D



C

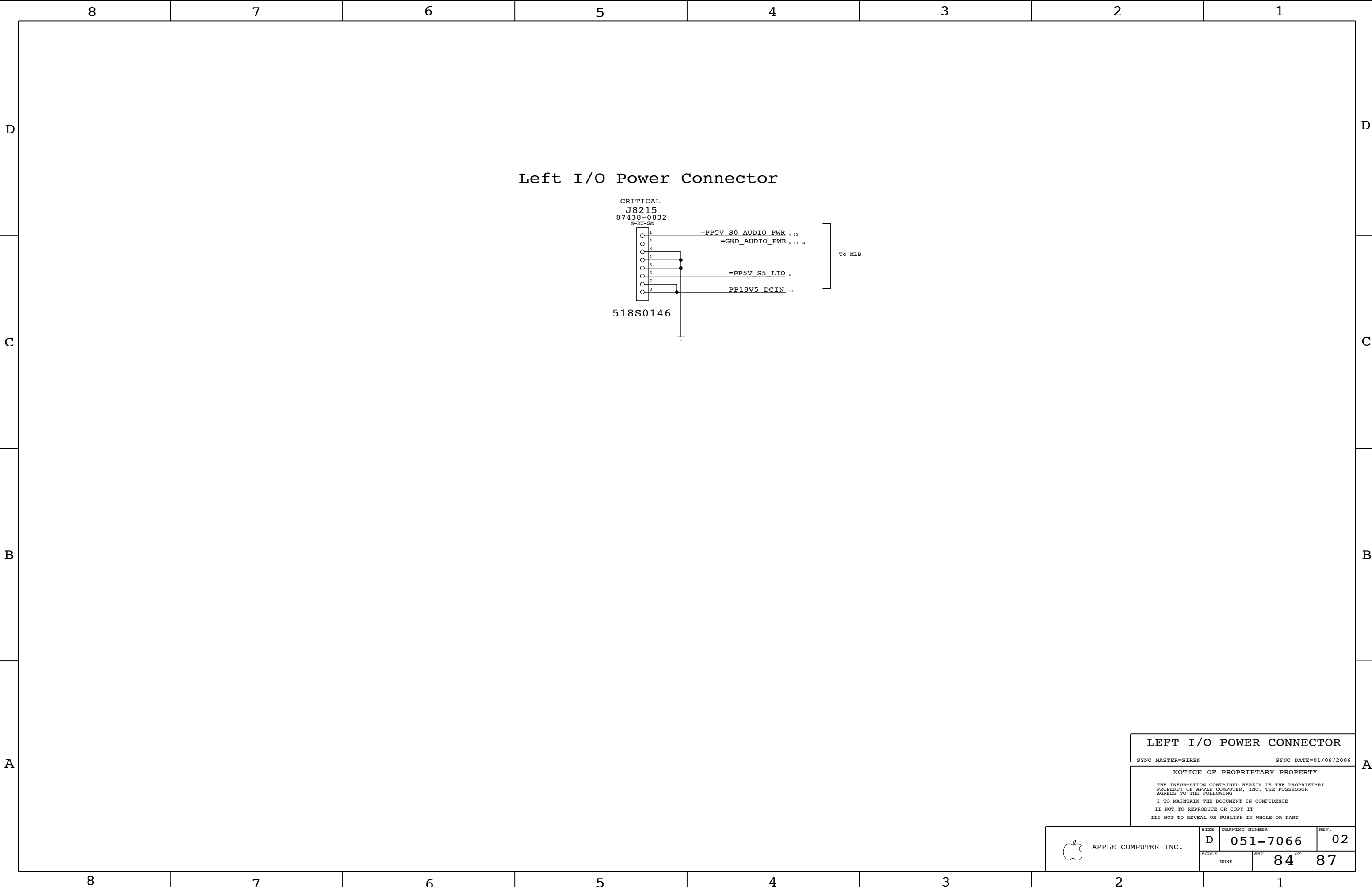
C

B

B

A

SIZE	DRAWING NUMBER	REV.
D	051-7066	02
SCALE	SHT	OF
NONE	82	87



LEFT I/O POWER CONNECTOR

SYNC_MASTER=SIREN

SYNC_DATE=01/06/2006

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

8		7		6		5		4		3		2		1	
D	C	B	A	MIC_SHIELD	MIC_SHIELD - @alt_l1o_lib.ALT_L1O	14D3	15A6	SPKRCONN_L2_P_OUT	@alt_l1o_lib.ALT_L1O	13D3	14C3	D	C	B	A
				NC_AUD_GPIO_2	NC_AUD_GPIO_2 - @alt_l1o_lib.ALT_L1O	10C7		SPKRCONN_R1_N_OUT	@alt_l1o_lib.ALT_L1O	13A3	14C3				
				NC_LED_WLAN_L	NC_LED_WLAN_L - @alt_l1o_lib.ALT_L1O	7B3		SPKRCONN_R1_P_OUT	@alt_l1o_lib.ALT_L1O	13A3	14C3				
				NC_LED_WPAN_L	NC_LED_WPAN_L - @alt_l1o_lib.ALT_L1O	7B3		SPKRCONN_R2_N_OUT	@alt_l1o_lib.ALT_L1O	13B3	14C3				
				NC_LED_WWAN_L	NC_LED_WWAN_L - @alt_l1o_lib.ALT_L1O	7B3		SPKRCONN_R2_P_OUT	@alt_l1o_lib.ALT_L1O	13B3	14C3				
				NC_L1O_P3V3S3_PGOOD	NC_L1O_P3V3S3_PGOOD - @alt_l1o_lib.ALT_L1O	16B8		SPKR_SHIELD	SPKR_SHIELD - @alt_l1o_lib.ALT_L1O	14C2					
				NC_UIM_CLK	NC_UIM_CLK - @alt_l1o_lib.ALT_L1O	7C3		SYS_ONEWIRE	SYS_ONEWIRE - @alt_l1o_lib.ALT_L1O	8C6	17C1				
				NC_UIM_DATA	NC_UIM_DATA - @alt_l1o_lib.ALT_L1O	7C3		SYS_ONEWIRE_BILAT	@alt_l1o_lib.ALT_L1O	17C2					
				NC_UIM_PWR	NC_UIM_PWR - @alt_l1o_lib.ALT_L1O	7C3		TP_EXCARD_STBY_L	TP_EXCARD_STBY_L - @alt_l1o_lib.ALT_L1O	6C7					
				NC_UIM_RESET	NC_UIM_RESET - @alt_l1o_lib.ALT_L1O	7C3		TP_USB2_MINI_N	TP_USB2_MINI_N - @alt_l1o_lib.ALT_L1O	4B2					
C	B	A	A	NC_UIM_VFP	NC_UIM_VFP - @alt_l1o_lib.ALT_L1O	7C3		TP_USB2_MINI_P	TP_USB2_MINI_P - @alt_l1o_lib.ALT_L1O	4B2		D	C	B	A
				NC_VOL_DOWN	NC_VOL_DOWN - @alt_l1o_lib.ALT_L1O	10C7		USB_LEFT2_EMI_N	USB_LEFT2_EMI_N - @alt_l1o_lib.ALT_L1O	5C4					
				NC_VOL_UP	NC_VOL_UP - @alt_l1o_lib.ALT_L1O	10C7		USB_LEFT2_EMI_P	USB_LEFT2_EMI_P - @alt_l1o_lib.ALT_L1O	5C4					
				NC_W_DISABLE_L	NC_W_DISABLE_L - @alt_l1o_lib.ALT_L1O	7C3		USB_LEFT2_GND	USB_LEFT2_GND - @alt_l1o_lib.ALT_L1O	5C3					
				ONEWIRE_DCIN_DIV	ONEWIRE_DCIN_DIV - @alt_l1o_lib.ALT_L1O	17C5		USB_LEFT_EMI_N	USB_LEFT_EMI_N - @alt_l1o_lib.ALT_L1O	5B4					
				ONEWIRE_EN	ONEWIRE_EN - @alt_l1o_lib.ALT_L1O	17D3		USB_LEFT_EMI_P	USB_LEFT_EMI_P - @alt_l1o_lib.ALT_L1O	5B4					
				ONEWIRE_ESD	ONEWIRE_ESD - @alt_l1o_lib.ALT_L1O	17C4		USB_LEFT_GND	USB_LEFT_GND - @alt_l1o_lib.ALT_L1O	5B3					
				ONEWIRE_OVERVOLT	ONEWIRE_OVERVOLT - @alt_l1o_lib.ALT_L1O	17C4		USB_LEFT_PWRON_L	USB_LEFT_PWRON_L - @alt_l1o_lib.ALT_L1O	5D7					
				ONEWIRE_PWR_EN_L	ONEWIRE_PWR_EN_L - @alt_l1o_lib.ALT_L1O	17C2		VREG_FB	VREG_FB - @alt_l1o_lib.ALT_L1O	10A3					
				ONEWIRE_PWR_EN_L_DIV	ONEWIRE_PWR_EN_L_DIV - @alt_l1o_lib.ALT_L1O	17D2									
B	A	A	A	P2V5_ONEWIRE_REF	P2V5_ONEWIRE_REF - @alt_l1o_lib.ALT_L1O	17C5						D	C	B	A
				PCIE_CLK100M_EXCARD_UF_N	PCIE_CLK100M_EXCARD_UF_N - @alt_l1o_lib.ALT_L1O	8C4									
				PCIE_CLK100M_EXCARD_UF_P	PCIE_CLK100M_EXCARD_UF_P - @alt_l1o_lib.ALT_L1O	8B4									
				PCIE_CLK100M_MINI_UF_N	PCIE_CLK100M_MINI_UF_N - @alt_l1o_lib.ALT_L1O	8C4									
				PCIE_CLK100M_MINI_UF_P	PCIE_CLK100M_MINI_UF_P - @alt_l1o_lib.ALT_L1O	8C4									
				PCIE_WAKE_EXCARD_L	PCIE_WAKE_EXCARD_L - @alt_l1o_lib.ALT_L1O	4C3	6C3								
					@alt_l1o_lib.ALT_L1O	4C4	8C6								
					@alt_l1o_lib.ALT_L1O	4C3	7C6								
					@alt_l1o_lib.ALT_L1O	4C4	8C6								
				PLT_RESET_SWITCH_L	PLT_RESET_SWITCH_L - @alt_l1o_lib.ALT_L1O	6C3	6C3								
A	A	A	A	PP1V5_S0_EXCARD_SWIT	PP1V5_S0_EXCARD_SWIT - @alt_l1o_lib.ALT_L1O	6C3	6C3					D	C	B	A
				PP3V3_AUDIO_CODEC	PP3V3_AUDIO_CODEC - @alt_l1o_lib.ALT_L1O	10D6									
				PP3V3_S0_AUDIO_F	PP3V3_S0_AUDIO_F - @alt_l1o_lib.ALT_L1O	15B4	15C8	15C8	15D8						
				PP3V3_S0_EXCARD_SWIT	PP3V3_S0_EXCARD_SWIT - @alt_l1o_lib.ALT_L1O	6C3	6C3								
				PP3V3_S3_EXCARD_SWIT	PP3V3_S3_EXCARD_SWIT - @alt_l1o_lib.ALT_L1O	6C3	6C3								
				PP4V5_AUDIO_ANALOG	PP4V5_AUDIO_ANALOG - @alt_l1o_lib.ALT_L1O	10A2	10D2	11C7	15A8	15C5					
				PP4V5_AUDIO_ANALOG_F	PP4V5_AUDIO_ANALOG_F - @alt_l1o_lib.ALT_L1O	10D5									
				PP4V5_AUDIO_ANALOG_F1	PP4V5_AUDIO_ANALOG_F1 - @alt_l1o_lib.ALT_L1O	10D5									
				PP5V_AUDIO_HPAMP_AVD	PP5V_AUDIO_HPAMP_AVD - @alt_l1o_lib.ALT_L1O	12D4									
				PP5V_AUDIO_HPAMP_FVD	PP5V_AUDIO_HPAMP_FVD - @alt_l1o_lib.ALT_L1O	12D5									
A	A	A	A	PP5V_PWRON_USB_LEFT2	PP5V_PWRON_USB_LEFT2 - @alt_l1o_lib.ALT_L1O	5D4						D	C	B	A
				PP5V_PWRON_USB_LEFT	PP5V_PWRON_USB_LEFT - @alt_l1o_lib.ALT_L1O	5B4									
				PP5V_S0_AUDIO_F	PP5V_S0_AUDIO_F - @alt_l1o_lib.ALT_L1O	13A8	13B1	13B8	13C8	13D8					
				PP5V_S3_3V3S3_R	PP5V_S3_3V3S3_R - @alt_l1o_lib.ALT_L1O	16C6									
				PP5V_S3_3V3S3_VCC	PP5V_S3_3V3S3_VCC - @alt_l1o_lib.ALT_L1O	16C7									
				PP5V_S3_USB_SWITCH_O	PP5V_S3_USB_SWITCH_OUT1 - @alt_l1o_lib.ALT_L1O	5B5									
				PP5V_S3_USB_SWITCH_O	PP5V_S3_USB_SWITCH_OUT2 - @alt_l1o_lib.ALT_L1O	5D5									
				PP18V5_DCIN	PP18V5_DCIN - @alt_l1o_lib.ALT_L1O	17D1	18C4								
				PP18V5_DCIN_FUSE	PP18V5_DCIN_FUSE - @alt_l1o_lib.ALT_L1O	17D6									
				PP18V5_DCIN_ONEWIRE	PP18V5_DCIN_ONEWIRE - @alt_l1o_lib.ALT_L1O	17D5									
A	A	A	A	PP18V5_DCIN_UF	PP18V5_DCIN_UF - @alt_l1o_lib.ALT_L1O	17D7						D	C	B	A
				SDATAIN	SDATAIN - @alt_l1o_lib.ALT_L1O	10C6									
				SMC_BC_ACOK	SMC_BC_ACOK - @alt_l1o_lib.ALT_L1O	8C6	17C1								
				SMC_EXCARD_CP	SMC_EXCARD_CP - @alt_l1o_lib.ALT_L1O	6A4	8C6								
				SMC_EXCARD_PWR_EN	SMC_EXCARD_PWR_EN - @alt_l1o_lib.ALT_L1O	6C7	8C6								
				SPKRAMP_L1_N_OUT	SPKRAMP_L1_N_OUT - @alt_l1o_lib.ALT_L1O	13C4	13C5								
				SPKRAMP_L1_P_OUT	SPKRAMP_L1_P_OUT - @alt_l1o_lib.ALT_L1O	13C4	13C5								
				SPKRAMP_L2_N_OUT	SPKRAMP_L2_N_OUT - @alt_l1o_lib.ALT_L1O	13D4	13D5								
				SPKRAMP_L2_P_OUT	SPKRAMP_L2_P_OUT - @alt_l1o_lib.ALT_L1O	13D4	13D5								
				SPKRAMP_R1_N_OUT	SPKRAMP_R1_N_OUT - @alt_l1o_lib.ALT_L1O	13A4	13A5								
A	A	A	A	SPKRAMP_R1_P_OUT	SPKRAMP_R1_P_OUT - @alt_l1o_lib.ALT_L1O	13A4	13A5					D	C	B	A
				SPKRAMP_R2_N_OUT	SPKRAMP_R2_N_OUT - @alt_l1o_lib.ALT_L1O	13B4	13B5								
				SPKRAMP_R2_P_OUT	SPKRAMP_R2_P_OUT - @alt_l1o_lib.ALT_L1O	13B4	13B5								
				SPKRAMP_SYNC1	SPKRAMP_SYNC1 - @alt_l1o_lib.ALT_L1O	13C5	13D5								
				SPKRAMP_SYNC2	SPKRAMP_SYNC2 - @alt_l1o_lib.ALT_L1O	13B5	13C5								
				SPKRAMP_SYNC3	SPKRAMP_SYNC3 - @alt_l1o_lib.ALT_L1O	13A5	13B5								
				SPKRAMP_THERMPAD	SPKRAMP_THERMPAD - @alt_l1o_lib.ALT_L1O	13A5	13B5	13B5	13C5	13C5					
				SPKRCONN_L1_N_OUT	SPKRCONN_L1_N_OUT - @alt_l1o_lib.ALT_L1O	13C3	14C3								
				SPKRCONN_L1_P_OUT	SPKRCONN_L1_P_OUT - @alt_l1o_lib.ALT_L1O	13C3	14C3								
				SPKRCONN_L2_N_OUT	SPKRCONN_L2_N_OUT - @alt_l1o_lib.ALT_L1O	13D3	14C3								

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