

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. SCHEM, DINO, Q41A 12/17/03 <table><tr><td>PART#</td><td>QTY</td><td>DESCRIPTION</td><td>REFERENCE DESIGNATOR(S)</td><td>BOM OPTION</td></tr><tr><td>815-7053</td><td>1</td><td>ALS DUST COVER</td><td>DC1</td><td>?</td></tr></table>												PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION	815-7053	1	ALS DUST COVER	DC1	?	REV	ZONE	ECN	DESCRIPTION OF CHANGE	CK APPD DATE	ENG APPD DATE																							
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01		308080	ENGINEERING RELEASED	12/19/03	?																																													
PAGE CONTENTS 1 TITTLE PAGE AND CONTENTS 2 PCB NOTES 3 USB / SENSOR 4 POWER CONNECTOR 5 SIGNAL CONSTRAINTS 6 POWER CONSTRAINTS 7 COMPONENT LOCATIONS 8 SIGNAL LOCATIONS																																																		
<table><tr><td>PART#</td><td>QTY</td><td>DESCRIPTION</td><td>REFERENCE DESIGNATOR(S)</td><td>BOM OPTION</td></tr><tr><td>051-6600</td><td>1</td><td>SCHEM, DINO, Q41A</td><td>SCH1</td><td></td></tr><tr><td>820-1617</td><td>1</td><td>PCBF, DINO, Q41A</td><td>PCB1</td><td></td></tr></table> DIMENSIONS ARE IN MILLIMETERS XX : _____ X.XX : _____ X.XXX : _____ ANGLES : _____ DO NOT SCALE DRAWING  THIRD ANGLE PROJECTION METRIC <table><tr><td>DRAFTER</td><td>/</td><td>DESIGN CK</td><td>/</td></tr><tr><td>ENG APPD</td><td>/</td><td>MFG APPD</td><td>/</td></tr><tr><td>QA APPD</td><td>/</td><td>DESIGNER</td><td>/</td></tr><tr><td>RELEASE</td><td>/</td><td>SCALE</td><td>NONE</td></tr><tr><td colspan="2">MATERIAL/FINISH NOTED AS APPLICABLE</td><td>SIZE</td><td>D</td></tr></table>  Apple Computer Inc. 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 TITLE SCHEM, DINO, Q41A DRAWING NUMBER 051-6600 REV. 01 SHT 1 OF 8																PART#	QTY	DESCRIPTION	REFERENCE DESIGNATOR(S)	BOM OPTION	051-6600	1	SCHEM, DINO, Q41A	SCH1		820-1617	1	PCBF, DINO, Q41A	PCB1		DRAFTER	/	DESIGN CK	/	ENG APPD	/	MFG APPD	/	QA APPD	/	DESIGNER	/	RELEASE	/	SCALE	NONE	MATERIAL/FINISH NOTED AS APPLICABLE		SIZE	D
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8		7		6		5		4		3		2		1																																				

PCB SPECS

THICKNESS : 1.2 MM / 0.047 IN
1/2 OZ CU THICKNESS: 0.7 MILS
1.0 OZ CU THICKNESS: 1.4 MILS

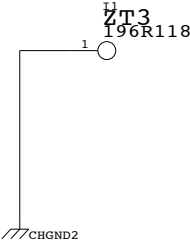
IMPEDANCE : 50 OHMS +/- 10%
DIELECTRIC: FR-4
LAYER COUNT: 12
SIGNAL TRACE WIDTH: 4 MILS
SIGNAL TRACE SPACING: 4 MILS
PREPREG THICKNESS: 2-3 MILS

SEE PCB CAD FILES FOR MORE SPECIFIC INFO.

BOARD STACK-UP AND CONSTRUCTION

20R10 TH VIA OR VIA IN PAD		
1	SIGNAL (1/3 OZ + COPPER PLATING)	
2	PREPREG (3MIL)	GROUND (1/2 OZ)
3	LAMINATE (4MIL)	SIGNAL (1/2 OZ)
4	PREPREG (3MIL)	SIGNAL (1/2 OZ)
5	LAMINATE (4MIL)	GROUND (1/2 OZ)
6	PREPREG (2MIL)	CUT POWER PLANE(1 OZ)
7	LAMINATE (3MIL)	CUT POWER PLANE(1 OZ)
8	PREPREG (2MIL)	GROUND (1/2 OZ)
9	LAMINATE (4MIL)	SIGNAL (1/2 OZ)
10	PREPREG (3MIL)	SIGNAL (1/2 OZ)
11	LAMINATE (4MIL)	GROUND (1/2 OZ)
12	PREPREG (3MIL)	SIGNAL (1/3 OZ + COPPER PLATING)

BOARD HOLES



PCB BOARD STANDOFFS

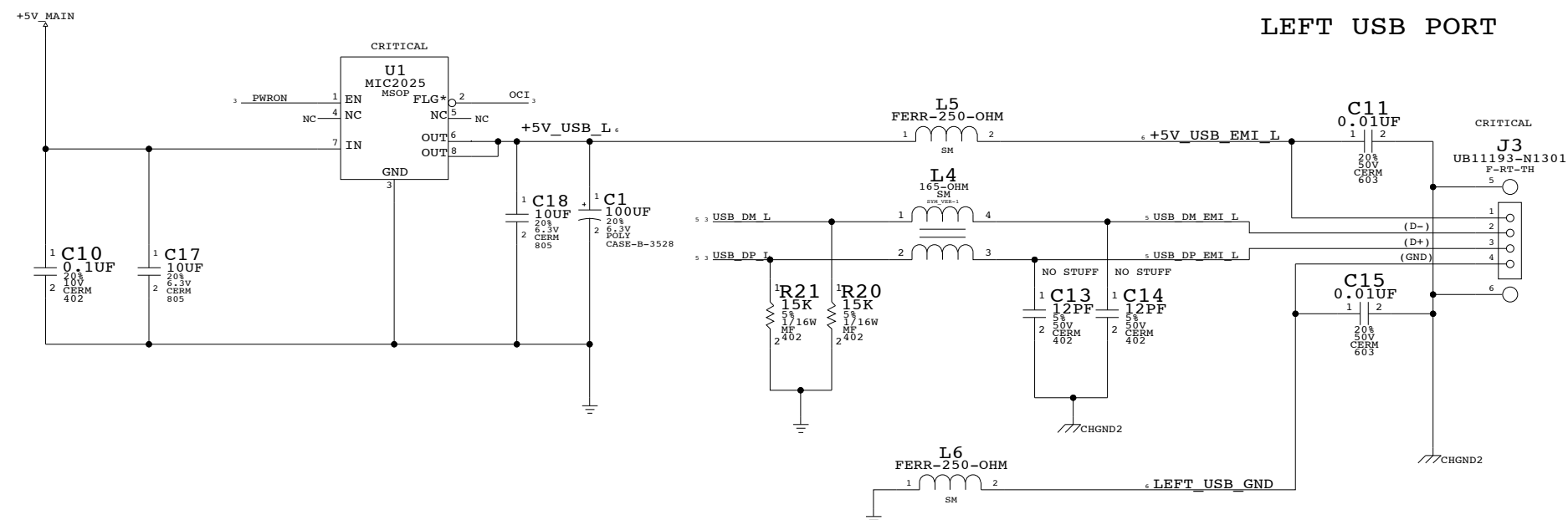
BOARD INFORMATION

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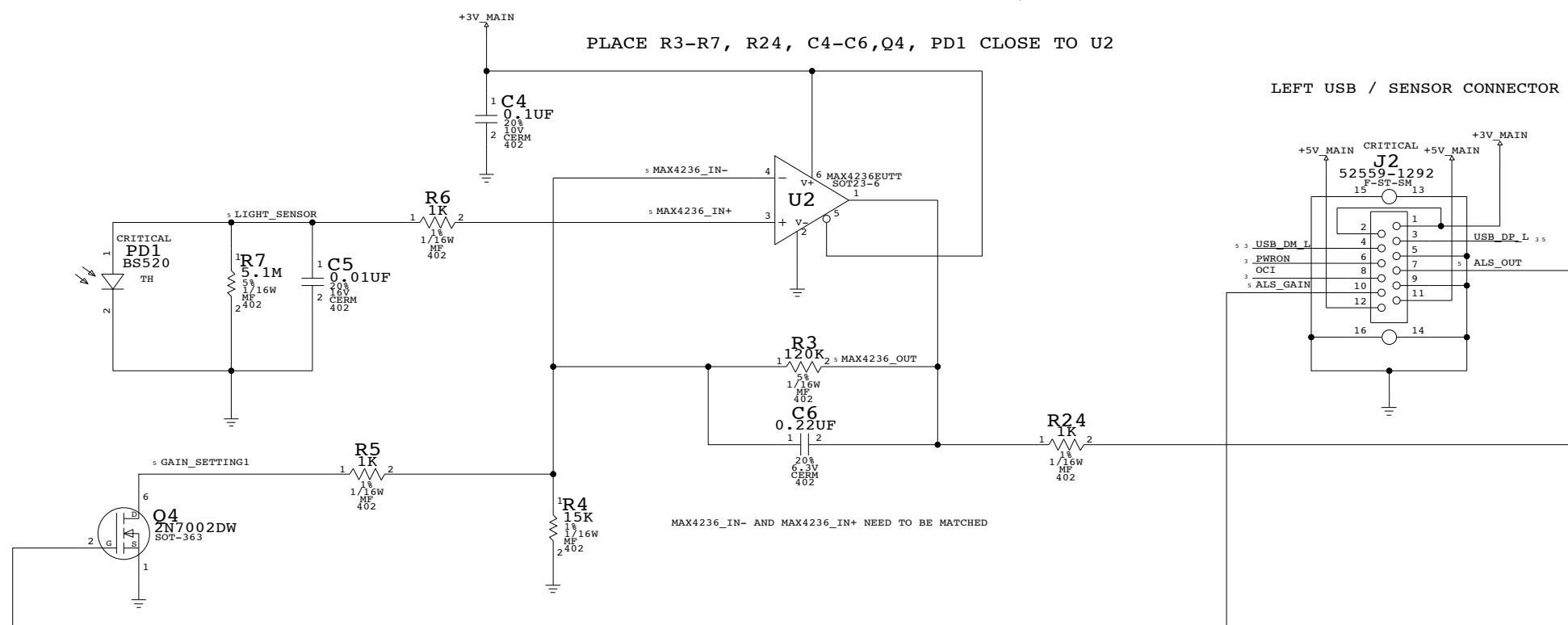


APPLE COMPUTER INC.

SIZE	D	DRAWING NUMBER	051-6600	REV.	01
SCALE	NONE	SHT	2	OF	8



PUT L4, L5 AND L6 ACROSS THE MOAT



USB & ALS

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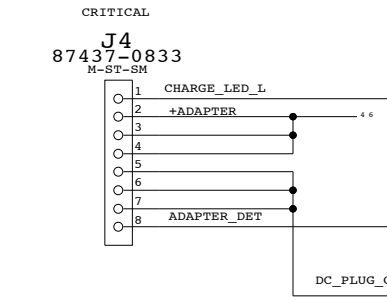


APPLE COMPUTER INC.

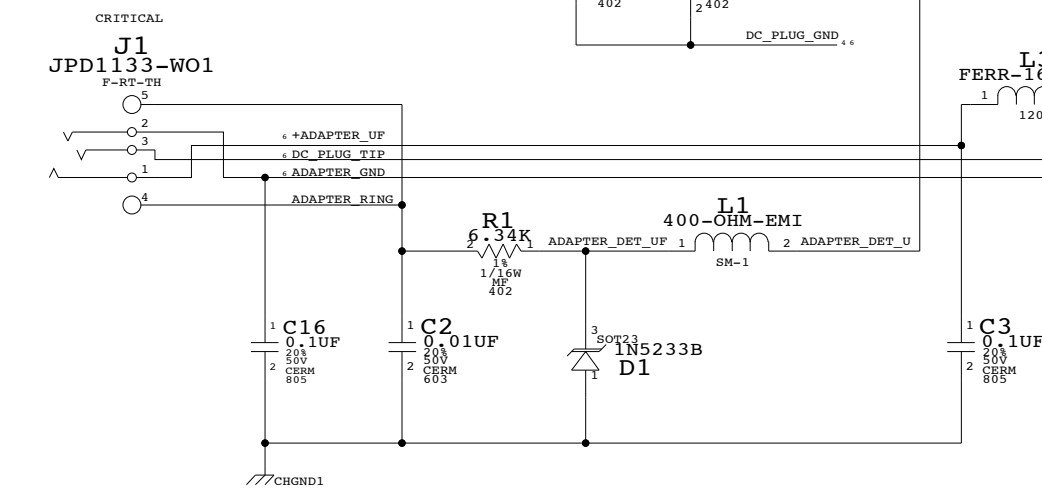
SIZE	DRAWING NUMBER	REV.
D	051-6600	01
SCALE	SHT	OF
NONE	3	8

SCALE	SHT	OF
NONE	3	8

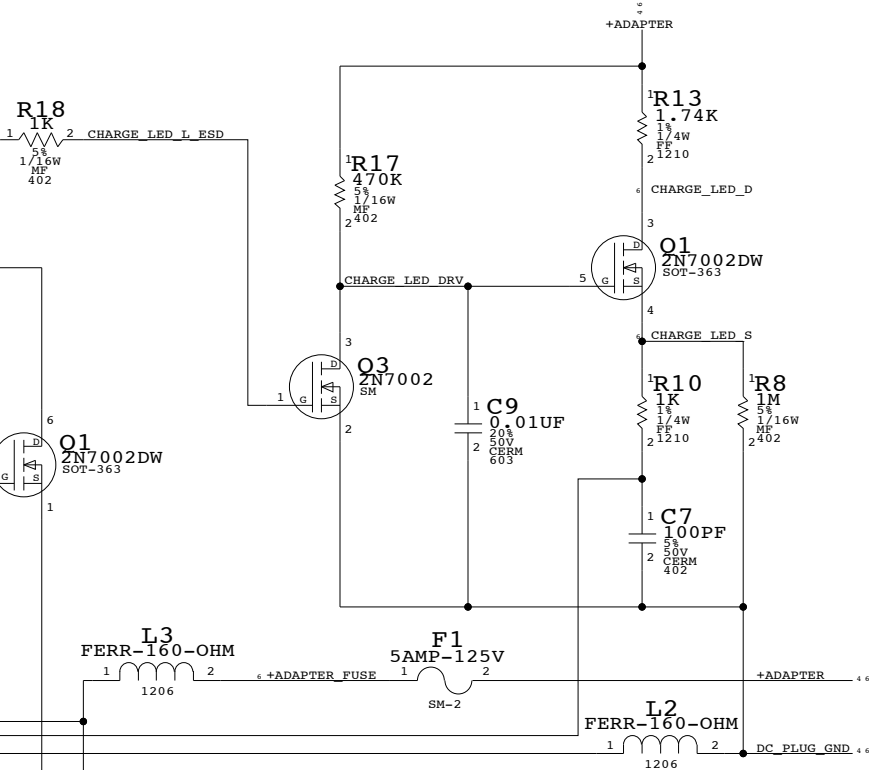
POWER CONNECTOR



DC POWER JACK



CHARGE LED SUPPORT



PLACE C2, C3 AND C16 CLOSE TO J1
PLACE L1, L2 AND L3 CLOSE TO J1

DC POWER INTERFACE

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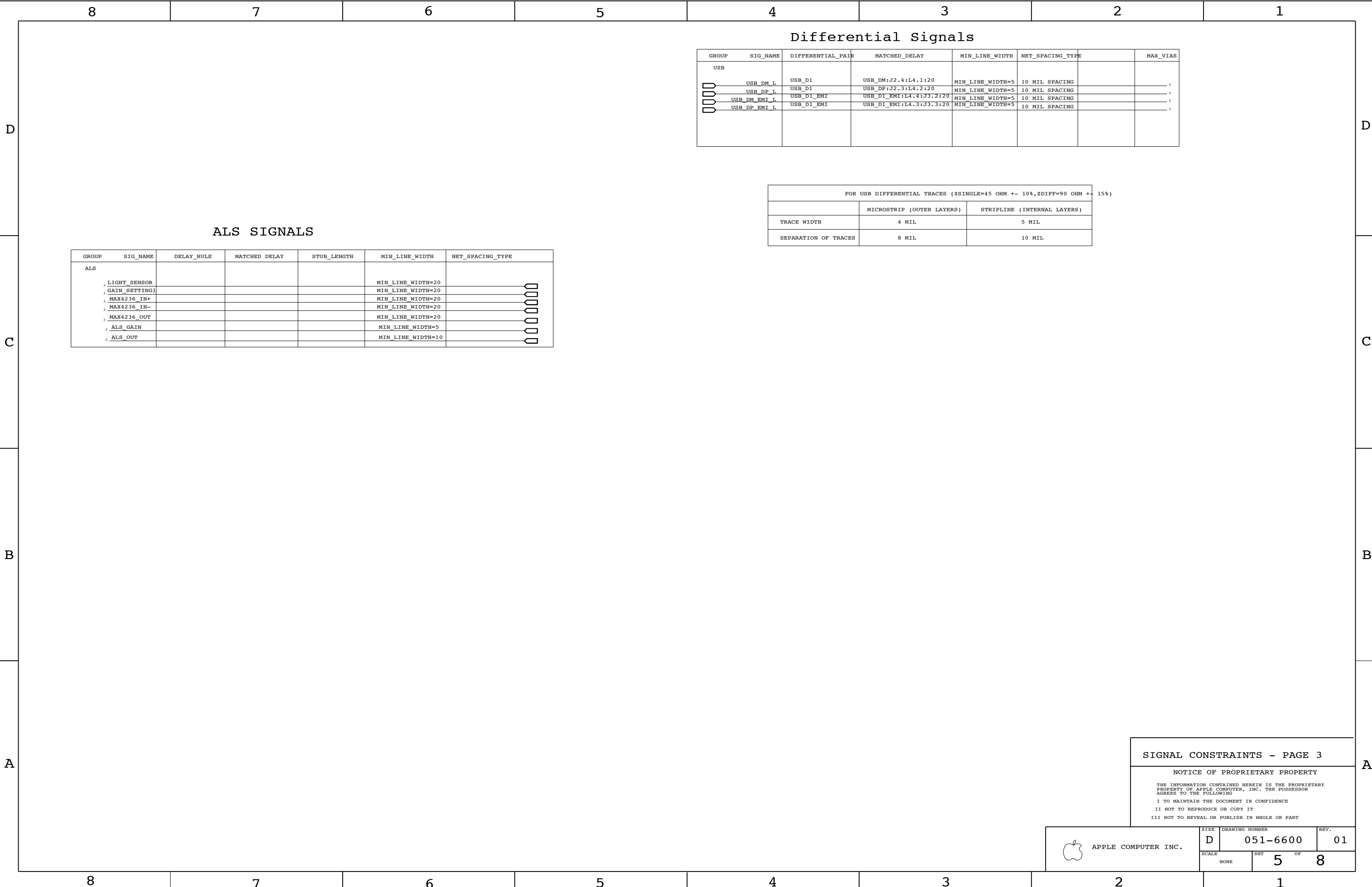
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APPLE COMPUTER INC.	SIZE	DRAWING NUMBER		REV.
	D	051-6600		01
SCALE		SHT	OF	
NONE		4	8	

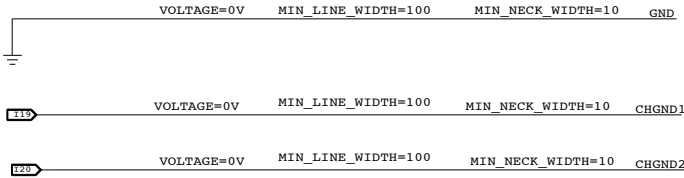


POWER NET CONSTRAINTS

GROUP	SIG_NAME	VOLTAGE	MIN_LINE_WIDTH	MIN_NECK_WIDTH
ADAPTER	+5V_MAIN	VOLTAGE=5V	MIN_LINE_WIDTH=25	MIN_NECK_WIDTH=10
	+3V_MAIN	VOLTAGE=3.3V	MIN_LINE_WIDTH=25	MIN_NECK_WIDTH=10
	+ADAPTER_UF	VOLTAGE=24V	MIN_LINE_WIDTH=100	MIN_NECK_WIDTH=10
	+ADAPTER_FUSE	VOLTAGE=24V	MIN_LINE_WIDTH=100	MIN_NECK_WIDTH=10
	+ADAPTER	VOLTAGE=24V	MIN_LINE_WIDTH=100	MIN_NECK_WIDTH=10
	ADAPTER_GND	VOLTAGE=0V	MIN_LINE_WIDTH=100	MIN_NECK_WIDTH=10
	CHARGE_LED_D	VOLTAGE=	MIN_LINE_WIDTH=20	MIN_NECK_WIDTH=10
	CHARGE_LED_S	VOLTAGE=	MIN_LINE_WIDTH=20	MIN_NECK_WIDTH=10
	DC_PLUG_TIP	VOLTAGE=	MIN_LINE_WIDTH=20	MIN_NECK_WIDTH=10
	DC_PLUG_GND	VOLTAGE=0V	MIN_LINE_WIDTH=100	MIN_NECK_WIDTH=10
USB	+5V_USB_L	VOLTAGE=5V	MIN_LINE_WIDTH=20	MIN_NECK_WIDTH=10
	+5V_USB_EMI_L	VOLTAGE=5V	MIN_LINE_WIDTH=20	MIN_NECK_WIDTH=10
	LEFT_USB_GND	VOLTAGE=0V	MIN_LINE_WIDTH=20	MIN_NECK_WIDTH=10

CHANGE HISTORY

- 1.IMPORTED 051-6474
- 2.CHANGED LM3526 TO MIC2025
3. ADDED ASL DUST COVER (815-7053) FOR THE BOM



SIGNAL CONSTRAINTS - PAGE 4

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APPLE COMPUTER INC.

SIZE

D

DRAWING NUMBER

051-6600

REV.

01

SCALE

NONE

SHT

6

OF

8

8								7								6								5								4								3								2								1																																																																																			
D	*** Signal Cross-Reference for the entire design *** <table><tr><td>+3V_MAIN</td><td>6D6></td></tr><tr><td>+5V_MAIN</td><td>6D6></td></tr><tr><td>+5V_USB_EMI_L</td><td>3C3<> 6C6></td></tr><tr><td>+5V_USB_L</td><td>3D5<> 6C6></td></tr><tr><td>+ADAPTER</td><td>4B3< 4C3< 4C5< 4C7<> 6D6></td></tr><tr><td>+ADAPTER_FUSE</td><td>4B4< 6D6></td></tr><tr><td>+ADAPTER_UP</td><td>4B6<< 6D6></td></tr><tr><td>ADAPTER_DET</td><td>4C7<></td></tr><tr><td>ADAPTER_DET_F</td><td>4C6<></td></tr><tr><td>ADAPTER_DET_G</td><td>4C6<></td></tr><tr><td>ADAPTER_DET_U</td><td>4B5<></td></tr><tr><td>ADAPTER_DET_UP</td><td>4B6<></td></tr><tr><td>ADAPTER_GND</td><td>4B6<< 6C6></td></tr><tr><td>ADAPTER_RING</td><td>4B6<></td></tr><tr><td>ALS_GAIN</td><td>3B4<> 5C8<</td></tr><tr><td>ALS_OFF</td><td>3B3<> 5C8<</td></tr><tr><td>CHARGE_LED_D</td><td>4C3<> 6C6></td></tr><tr><td>CHARGE_LED_DWV</td><td>4C4<></td></tr><tr><td>CHARGE_LED_L</td><td>4C7<></td></tr><tr><td>CHARGE_LED_L_ESD</td><td>4C5<</td></tr><tr><td>CHARGE_LED_S</td><td>4C3<> 6C6></td></tr><tr><td>CHGHD1</td><td>6C6></td></tr><tr><td>CHGHD2</td><td>6C6></td></tr><tr><td>DC_PLDO_GND</td><td>4B3< 4B5< 4C6<> 6C6></td></tr><tr><td>DC_PLDO_TIP</td><td>4B6<< 6C6></td></tr><tr><td>GAIN_SETTING1</td><td>3A7<> 5C8<</td></tr><tr><td>LEFT_USB_GND</td><td>3C3<> 6C6></td></tr><tr><td>LIGHT_SENSOR</td><td>3B7<> 5C8<</td></tr><tr><td>MAX4236_IN+</td><td>3B5< 5C8<</td></tr><tr><td>MAX4236_IN-</td><td>3B5< 5C8<</td></tr><tr><td>MAX4236_OUT</td><td>3B5<> 5C8<</td></tr><tr><td>OCT</td><td>3B4<> 3D5></td></tr><tr><td>PWRON</td><td>3B4<> 3D6<</td></tr><tr><td>USB_DM_EMI_L</td><td>3C3<> 5D2></td></tr><tr><td>USB_DM_L</td><td>3B4<> 3C4<> 5D2></td></tr><tr><td>USB_DP_EMI_L</td><td>3C3<> 5D2></td></tr><tr><td>USB_DP_L</td><td>3B3<> 3C4<> 5D2></td></tr></table>																																																																+3V_MAIN	6D6>	+5V_MAIN	6D6>	+5V_USB_EMI_L	3C3<> 6C6>	+5V_USB_L	3D5<> 6C6>	+ADAPTER	4B3< 4C3< 4C5< 4C7<> 6D6>	+ADAPTER_FUSE	4B4< 6D6>	+ADAPTER_UP	4B6<< 6D6>	ADAPTER_DET	4C7<>	ADAPTER_DET_F	4C6<>	ADAPTER_DET_G	4C6<>	ADAPTER_DET_U	4B5<>	ADAPTER_DET_UP	4B6<>	ADAPTER_GND	4B6<< 6C6>	ADAPTER_RING	4B6<>	ALS_GAIN	3B4<> 5C8<	ALS_OFF	3B3<> 5C8<	CHARGE_LED_D	4C3<> 6C6>	CHARGE_LED_DWV	4C4<>	CHARGE_LED_L	4C7<>	CHARGE_LED_L_ESD	4C5<	CHARGE_LED_S	4C3<> 6C6>	CHGHD1	6C6>	CHGHD2	6C6>	DC_PLDO_GND	4B3< 4B5< 4C6<> 6C6>	DC_PLDO_TIP	4B6<< 6C6>	GAIN_SETTING1	3A7<> 5C8<	LEFT_USB_GND	3C3<> 6C6>	LIGHT_SENSOR	3B7<> 5C8<	MAX4236_IN+	3B5< 5C8<	MAX4236_IN-	3B5< 5C8<	MAX4236_OUT	3B5<> 5C8<	OCT	3B4<> 3D5>	PWRON	3B4<> 3D6<	USB_DM_EMI_L	3C3<> 5D2>	USB_DM_L	3B4<> 3C4<> 5D2>	USB_DP_EMI_L	3C3<> 5D2>	USB_DP_L	3B3<> 3C4<> 5D2>	D
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