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6

5

4

3

2

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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.

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PCB NOTES AND HOLES

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SNAPPER (AUDIO) CONTROL INTERFACE

4

SPEAKER AMP

5

HEADPHONE & MICROPHONE AMP

6

LINE-IN AMP

7

SIGNAL CONSTRAINTS

8

SIGNAL LOCATIONS

9

PART LOCATIONS

REV

ZONE

ECN

DESCRIPTION OF CHANGE

CK APPD
DATE

ENG APPD
DATE

01

?

?

?

?

P84

TUBA

DVT

12/11/2002

PART#

QTY

DESCRIPTION

REFERENCE DESIGNATOR(S)

BOM OPTION

051-6256

1

SCHEM, TUBA, P84

SCH1

820-1373

1

PCBF, TUBA, P84

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

NONE

MATERIAL/FINISH
NOTED AS
APPLICABLE

D

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TITLE

SCHEM, TUBA, P84

EVT

DRAWING NUMBER

405599

REV. 0A

SHT

1

OF

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CR-2

87654321

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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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SIZE
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DRAWING NUMBER
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0A

SCALE
NONE

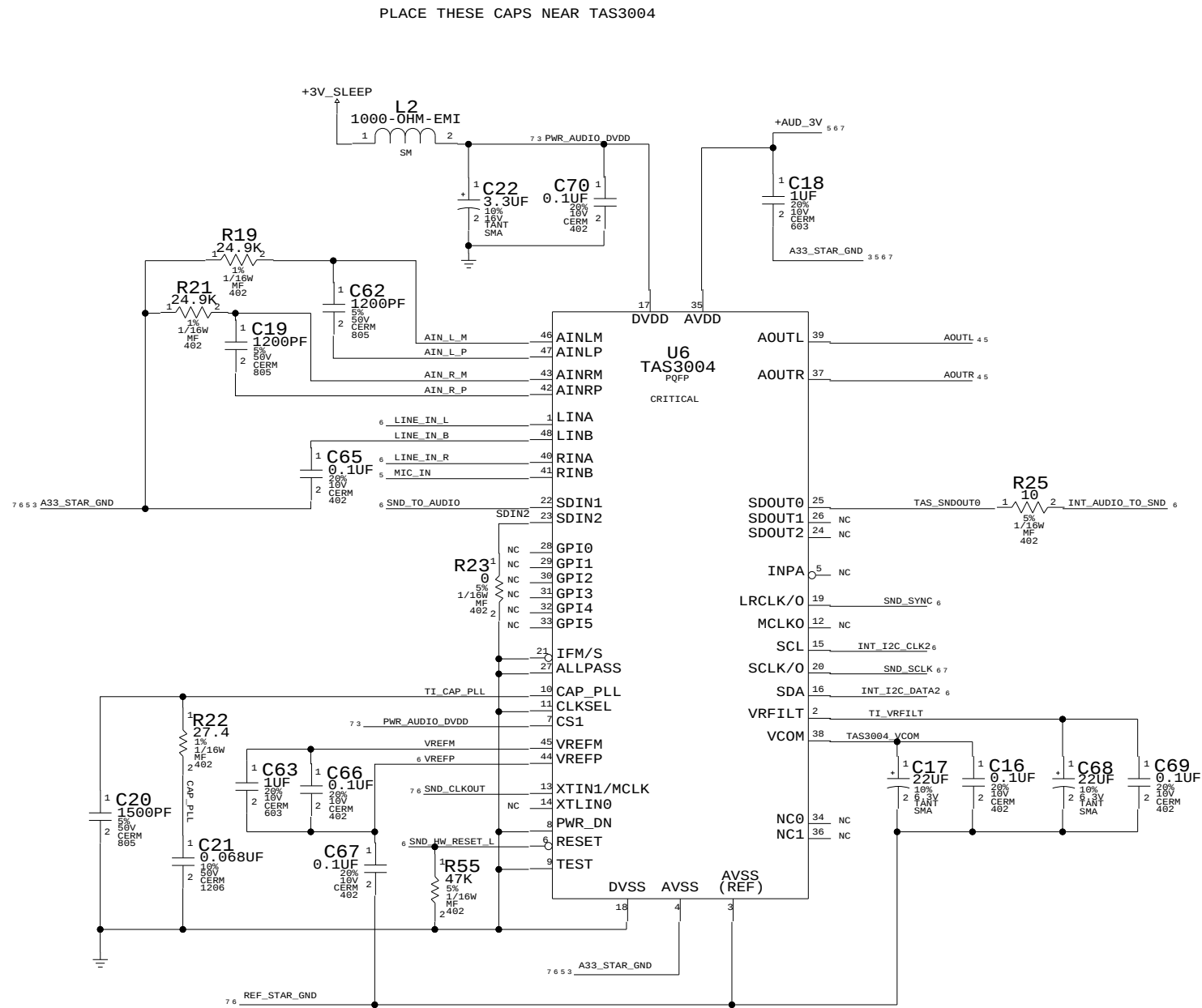
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SNAPPER (AUDIO CODEC W/ EQ)



SNAPPER CONTROL

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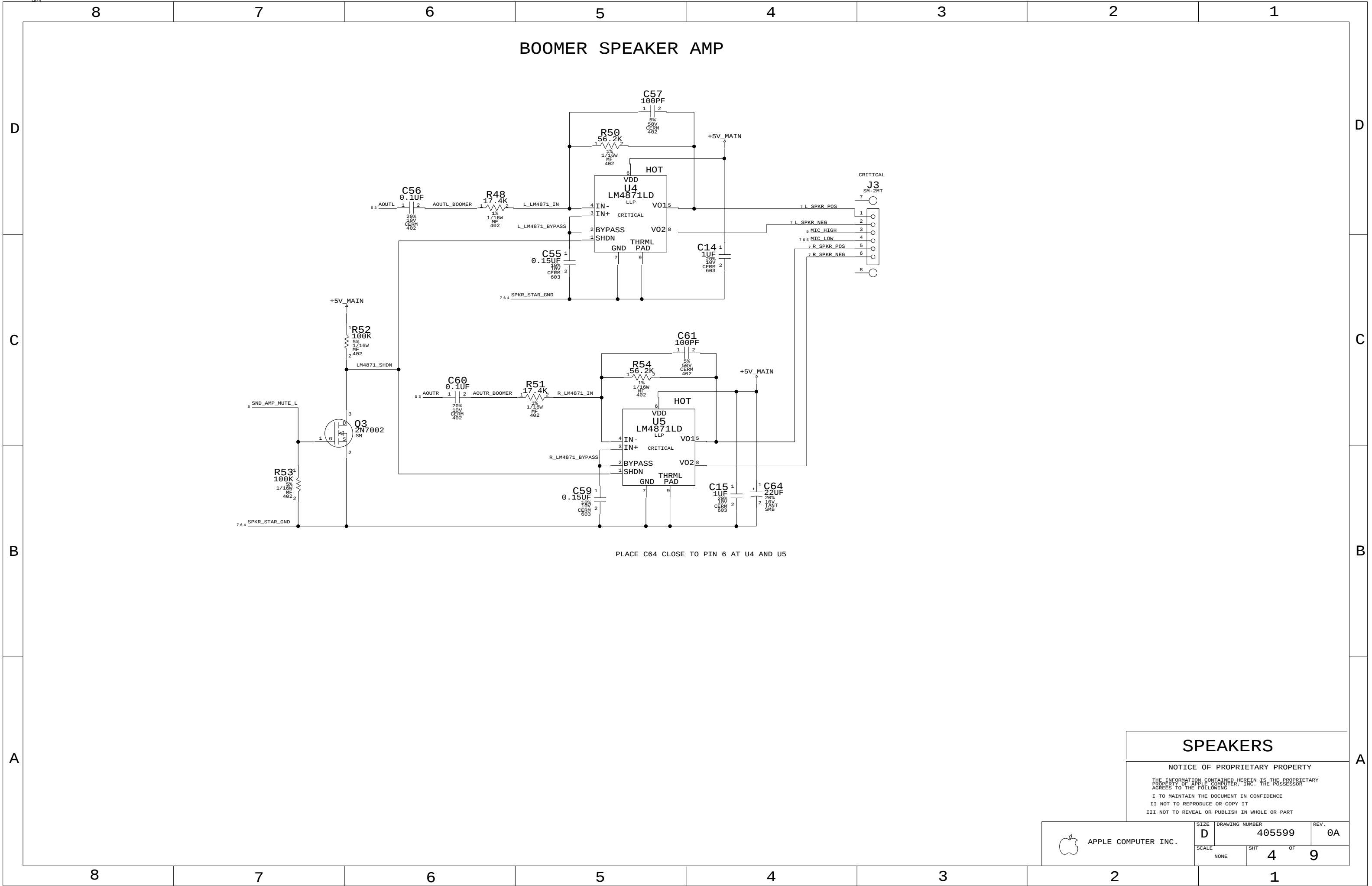
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SPEAKERS

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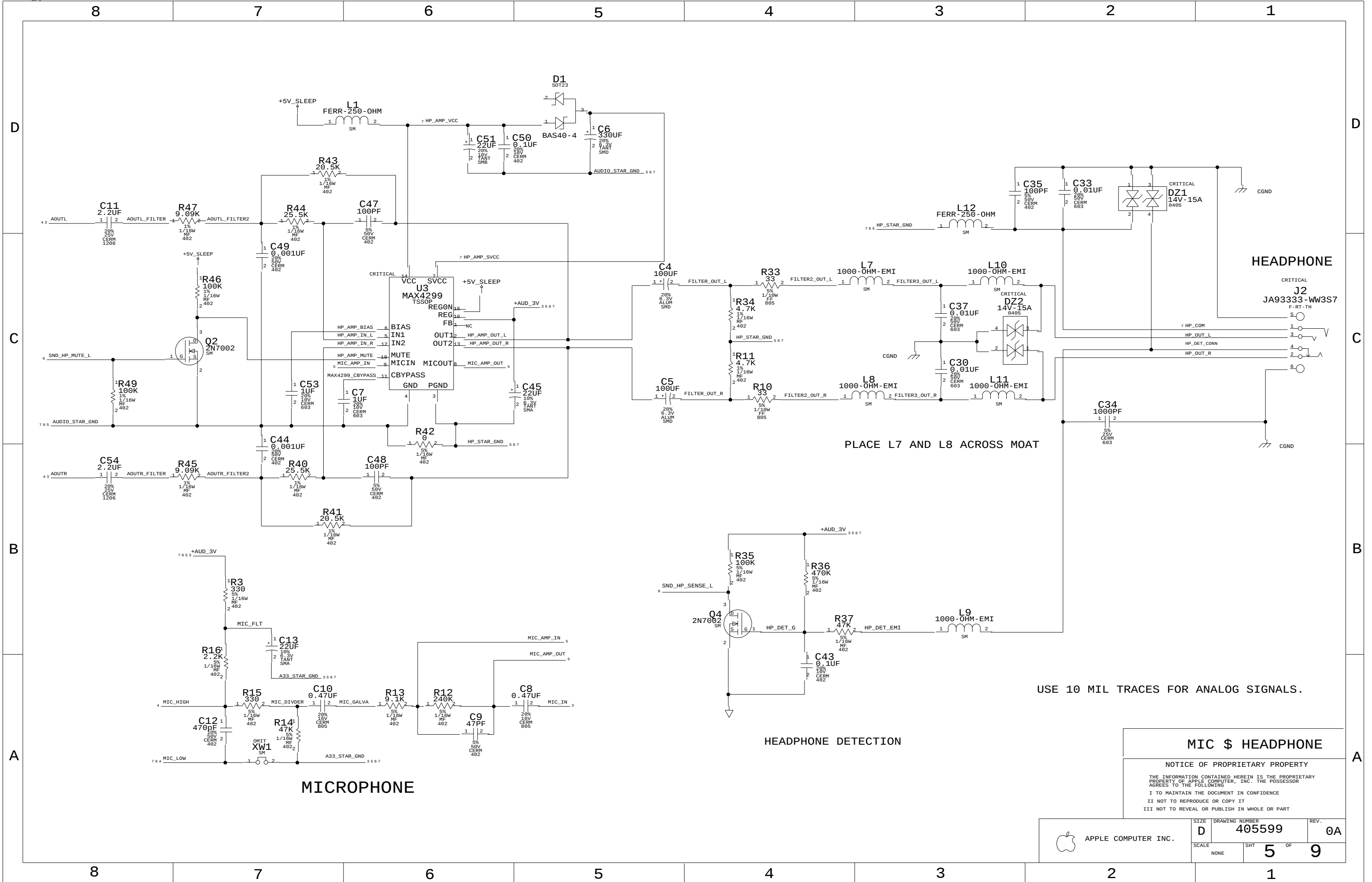
NONE

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MICROPHONE

HEADPHONE DETECTION

HEADPHONE

MIC \$ HEADPHONE

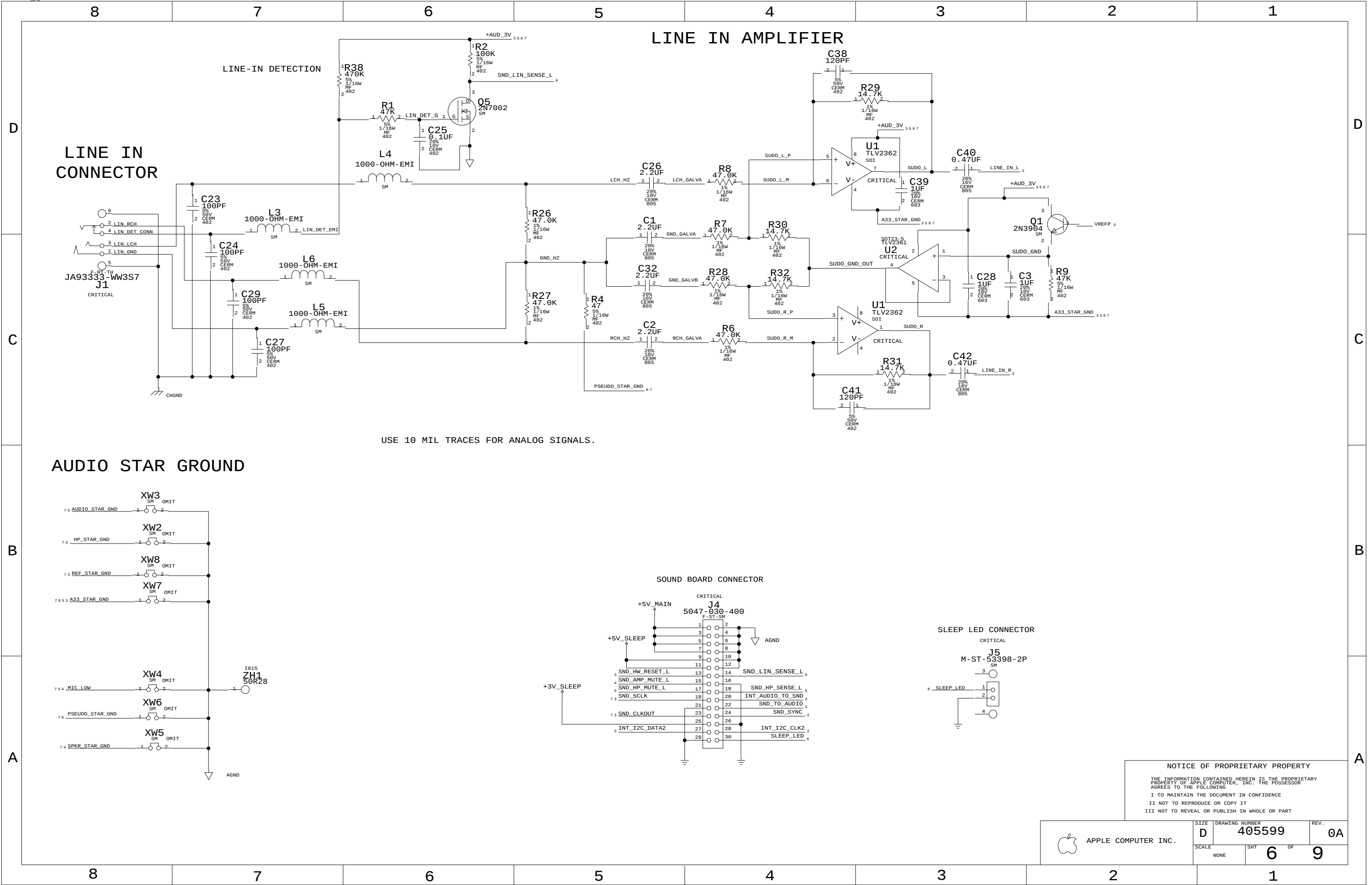
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NONE	5	9



LINE IN CONNECTOR

LINE IN AMPLIFIER

AUDIO STAR GROUND

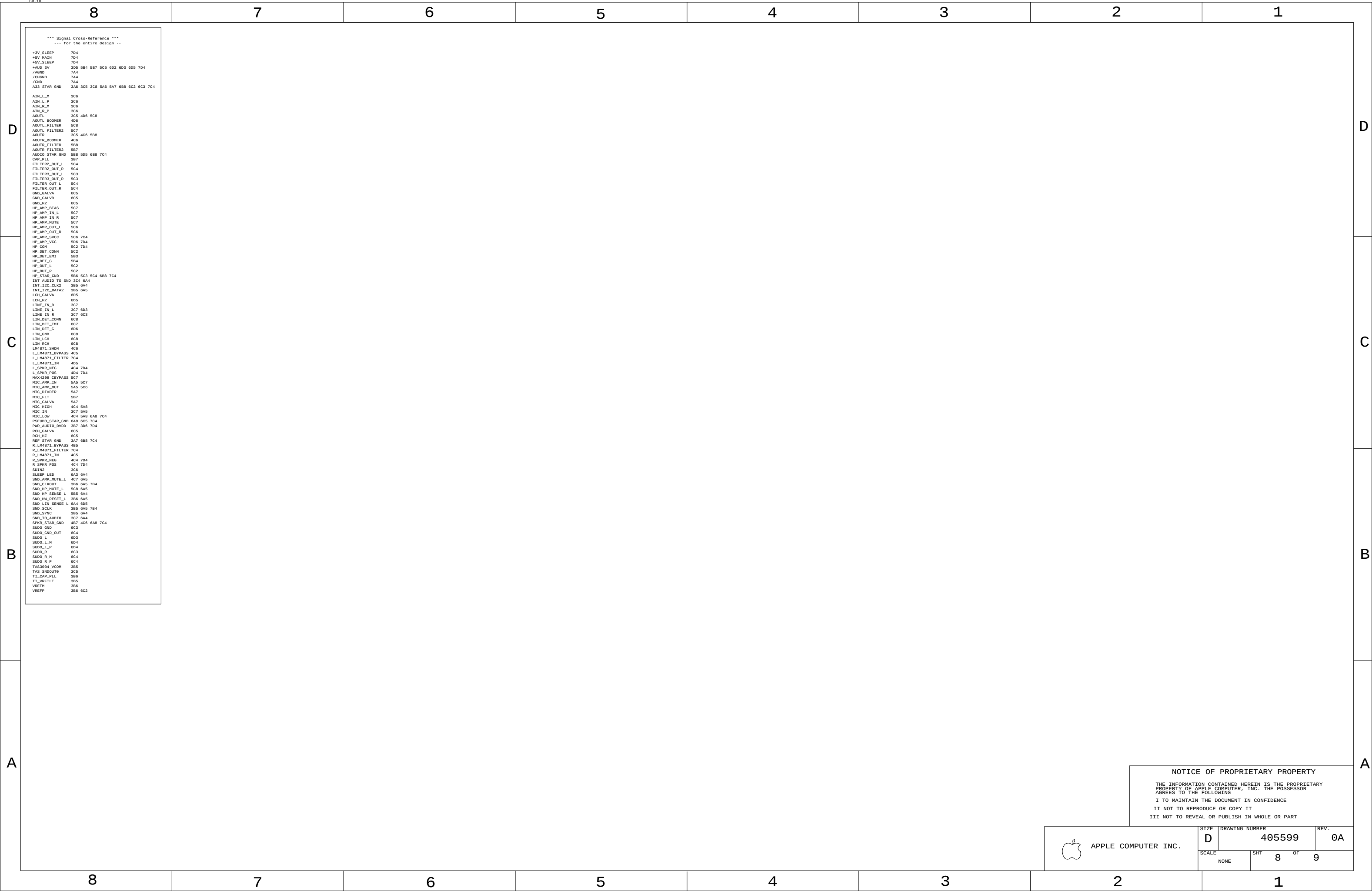
SOUND BOARD CONNECTOR

SLEEP LED CONNECTOR

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D	*** Unit Cross-Reference *** --- For the entire design --- C1 CAP 6C5 C2 CAP 6C5 C3 CAP 6C3 C4 CAP_P 5C5 C5 CAP_P 5C5 C6 CAP_P 5D5 C7 CAP 5C6 C8 CAP 5A5 C9 CAP 5A6 C10 CAP 5A7 C11 CAP 5D8 C12 CAP 5A7 C13 CAP_P 5A7 C14 CAP 4C4 C15 CAP 4B4 C16 CAP 3B5 C17 CAP_P 3B5 C18 CAP 3C5 C19 CAP 3C7 C20 CAP 3B7 C21 CAP 3B7 C22 CAP_P 3C6 C23 CAP 6D7 C24 CAP 6C7 C25 CAP 6D6 C26 CAP 6D5 C27 CAP 6C7 C28 CAP 6C3 C29 CAP 6C7 C30 CAP 5C3 C32 CAP 6C5 C33 CAP 5D2 C34 CAP 5C2 C35 CAP 5D3 C37 CAP 5C3 C38 CAP 6D4 C39 CAP 6D3 C40 CAP 6D3 C41 CAP 6C4 C42 CAP 6C3 C43 CAP 5A4 C44 CAP 5B7 C45 CAP_P 5C5 C47 CAP 5D6 C48 CAP 5B6 C49 CAP 5C7 C50 CAP 5D6 C51 CAP_P 5D6 C53 CAP 5C7 C54 CAP 5B8 C55 CAP 4C5 C56 CAP 4D6 C57 CAP 4D5 C59 CAP 4B5 C60 CAP 4C6 C61 CAP 4C4 C62 CAP 3C7 C63 CAP 3B7 C64 CAP_P 4B4 C65 CAP 3C7 C66 CAP 3B7 C67 CAP 3B7 C68 CAP_P 3B4 C69 CAP 3B4 C70 CAP 3C6 D1 DIODE_SCHOT_3P 5D5 D21 SUPPR_TRANSIENT_4P1 5D2 D22 SUPPR_TRANSIENT_4P1 5C3 J1 CON_F4RT_S2MT_TH3 6C8 J2 CON_F4RT_S2MT_TH3 5C1 J3 CON_WRT_WRTB 4D3 J4 CON_F36ST_D_SM 6B4 J5 CON_M2ST_S2MT_SM 6A3 L1 IND 5D6 L2 IND 3D6 L3 IND 6C7 L4 IND 6D6 L5 IND 6C7 L6 IND 6C7 L7 IND 5C3 L8 IND 5C3 L9 IND 5B3 L10 IND 5C3 L11 IND 5C3 L12 IND 5D3 Q1 TRA_2N3904 6C2 Q2 TRA_2N7002 5C7 Q3 TRA_2N7002 4B6 Q4 TRA_2N7002 5B4 Q5 TRA_2N7002 6D6 R1 RES 6D6 R2 RES 6D6 R3 RES 5B7 R4 RES 6C5 R6 RES 6C4 R7 RES 6C4 R8 RES 6D4 R9 RES 6C2 R10 RES 5C4 R11 RES 5C4 R12 RES 5A6 R13 RES 5A6 R14 RES 5A7 R15 RES 5A7 R16 RES 5A7 R19 RES 3C7 R21 RES 3C7 R22 RES 3B7 R23 RES 3B6 R25 RES 3C5 R26 RES 6C5 R27 RES 6C5 R28 RES 6C4 R29 RES 6D3 R30 RES 6C4 R31 RES 6C3 R32 RES 6C4 R33 RES 5C4 R34 RES 5C4 R35 RES 5B4 R36 RES 5B4 R37 RES 5B4 R38 RES 6D6 R40 RES 5B7 R41 RES 5B7 R42 RES 5B6 R43 RES 5D7 R44 RES 5D7 R45 RES 5B7 R46 RES 5C7 R47 RES 5D7 R48 RES 4D6 R49 RES 5C8 R50 RES 4D5 R51 RES 4C5 R52 RES 4C6 R53 RES 4B7 R54 RES 4C5 R55 RES 3B6 U1 OPAMP_TLV2362 6C3 6D3 U2 OPAMP_TLV2361 6C3 U3 MAX4299 5C6 U4 AUDIO_LM4871LD 4D5 U5 AUDIO_LM4871LD 4C5 U6 TAS3904 3C6 XW1 SHORT 5A7 XW2 SHORT 6B8 XW3 SHORT 6B8 XW4 SHORT 6A8 XW5 SHORT 6A8 XW6 SHORT 6A8 XW7 SHORT 6B8 XW8 SHORT 6B8 Z11 MTHOLE 6A7 Z12 MTHOLE 2D2														D	C	B	A
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