

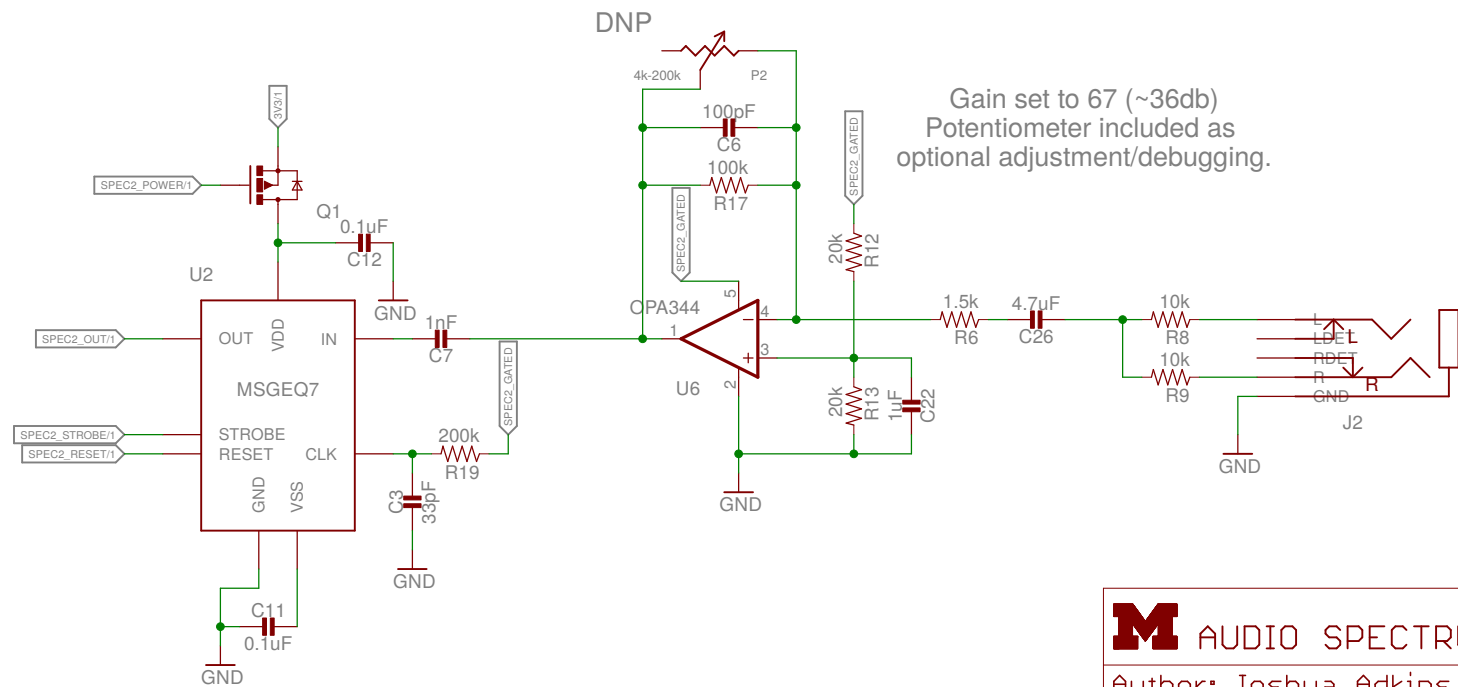
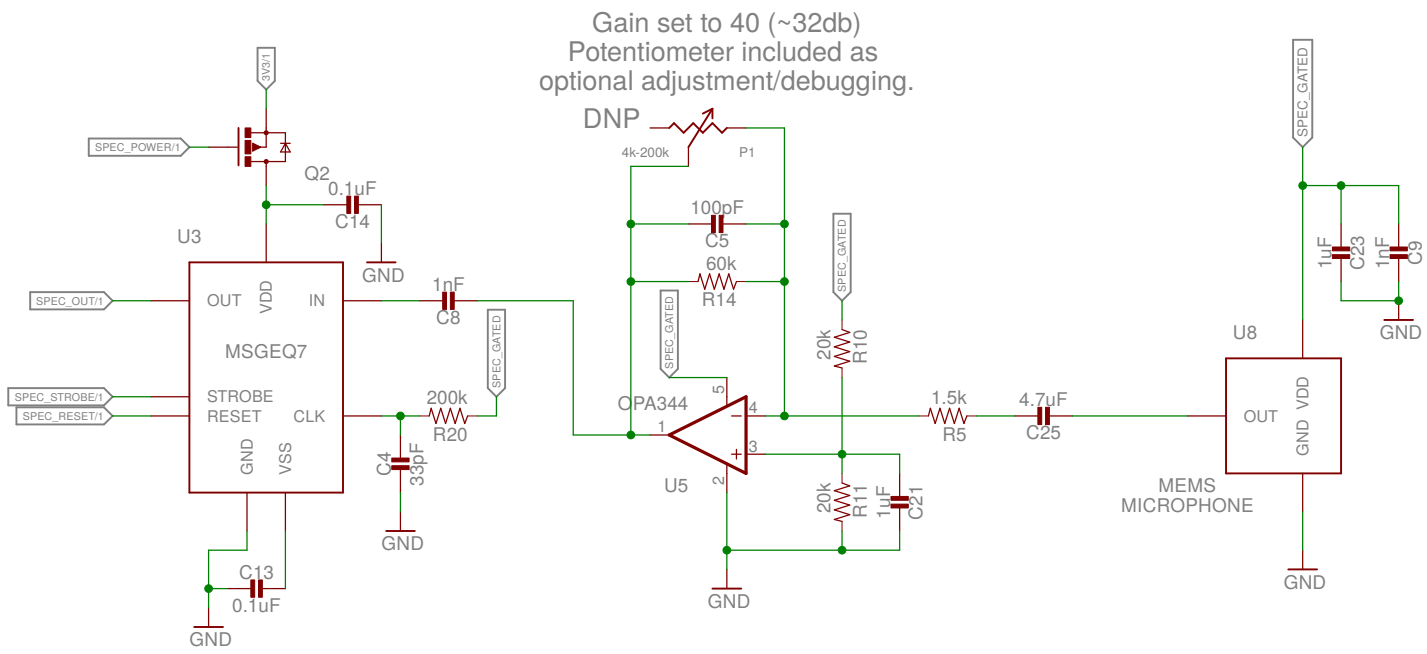
M AUDIO SPECTRUM MODULE

REV:
A

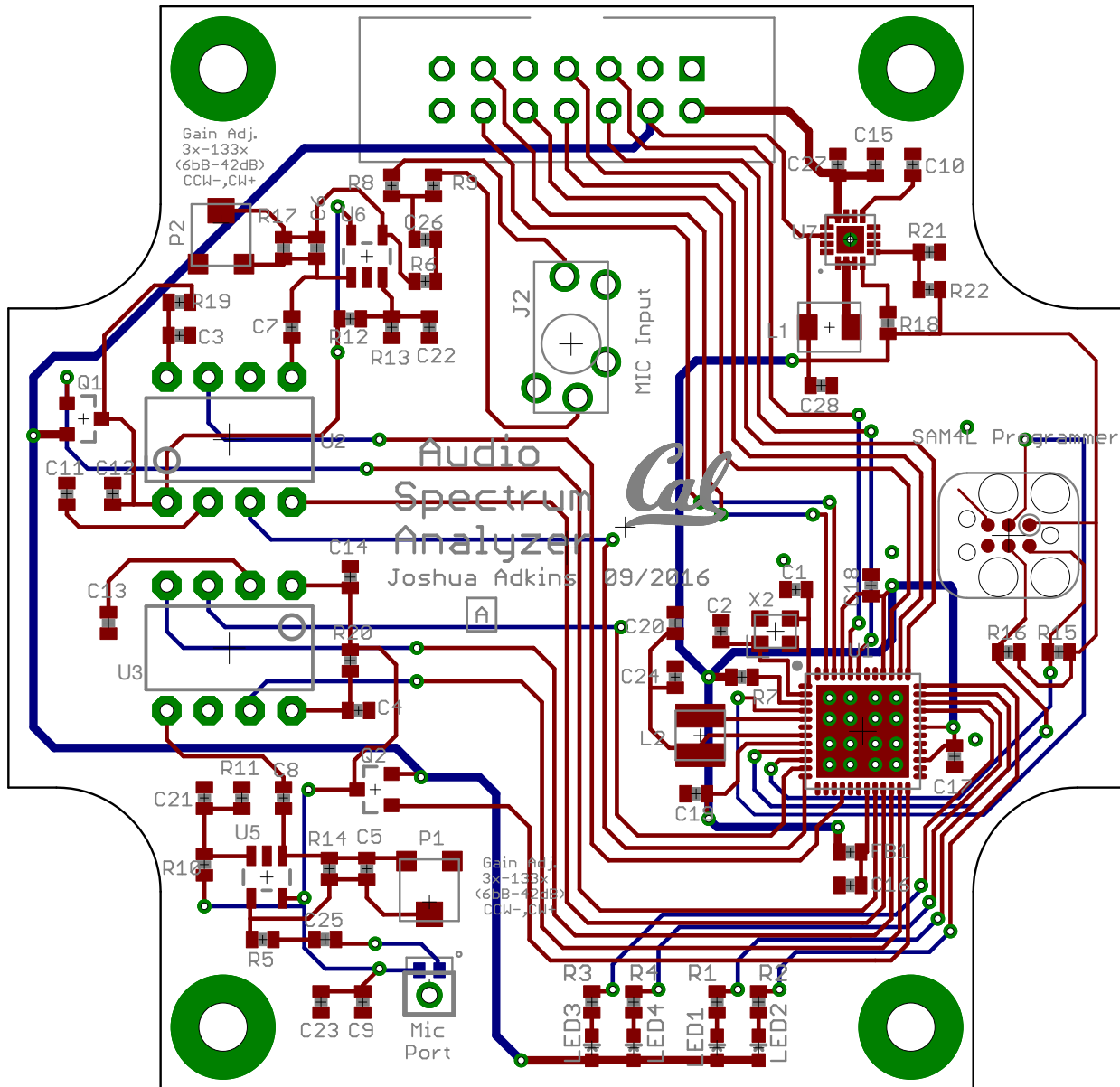
Author: Joshua Adkins

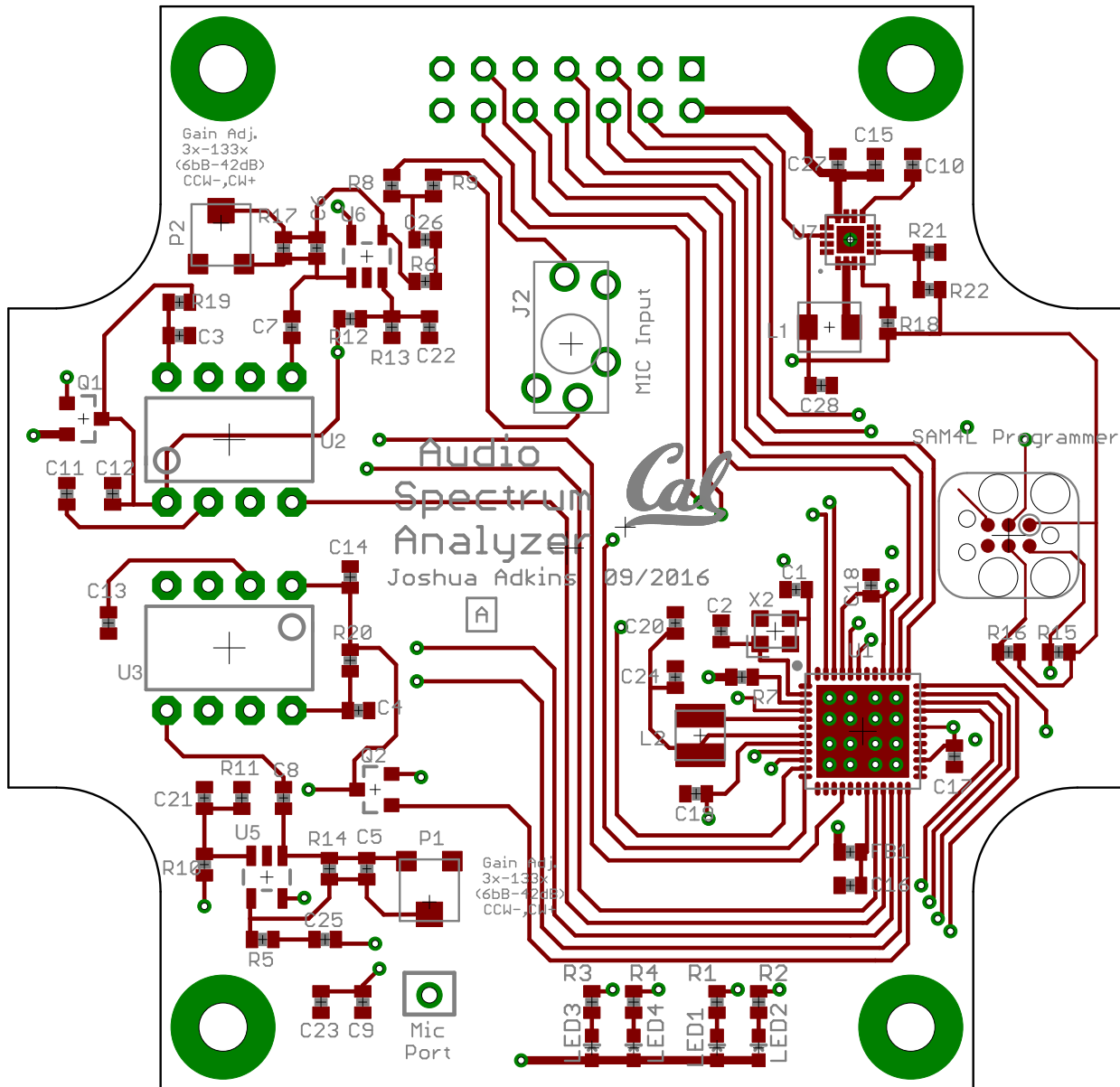
Date: 9/26/16 7:52 PM

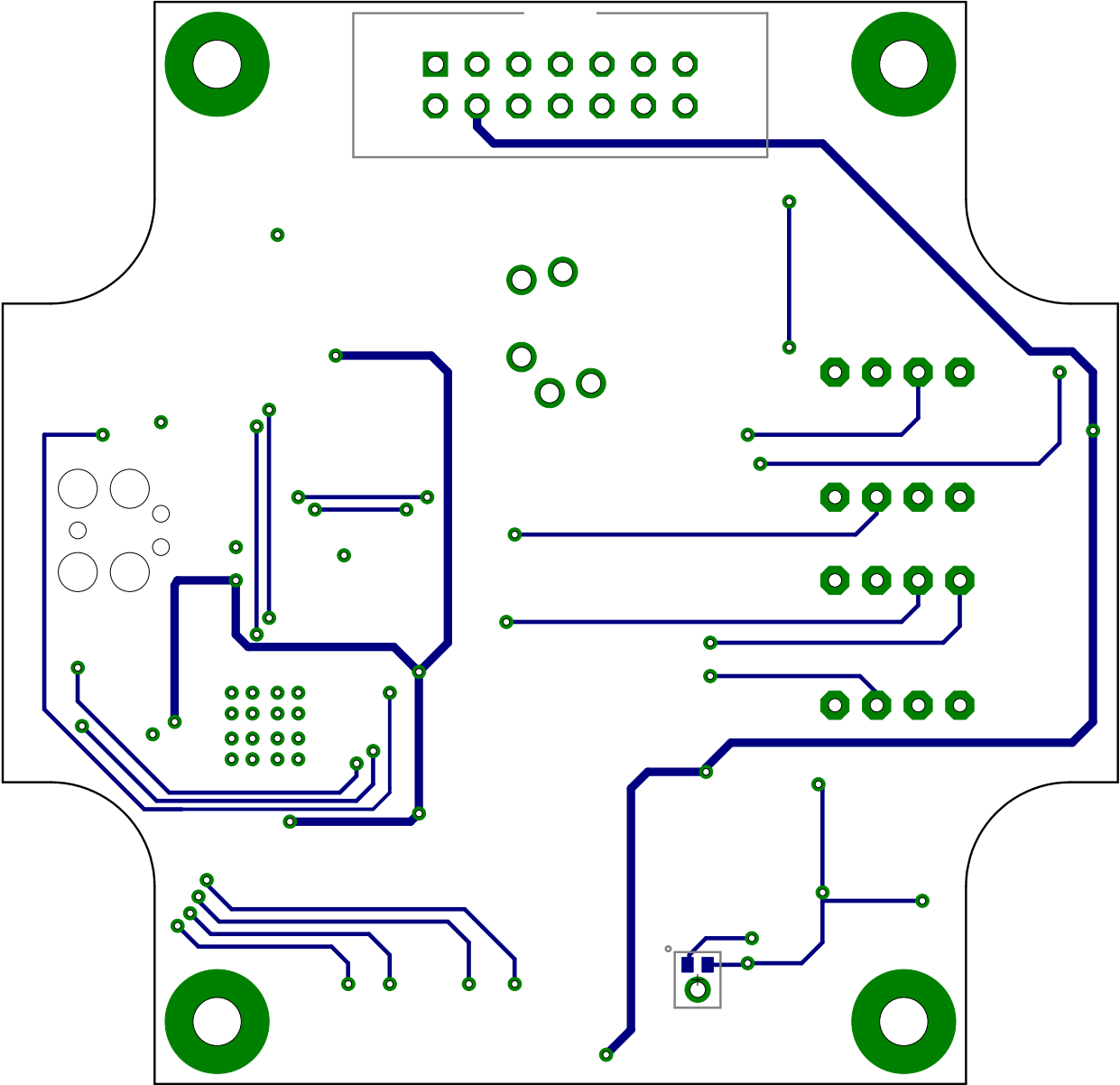
Sheet: 1/2

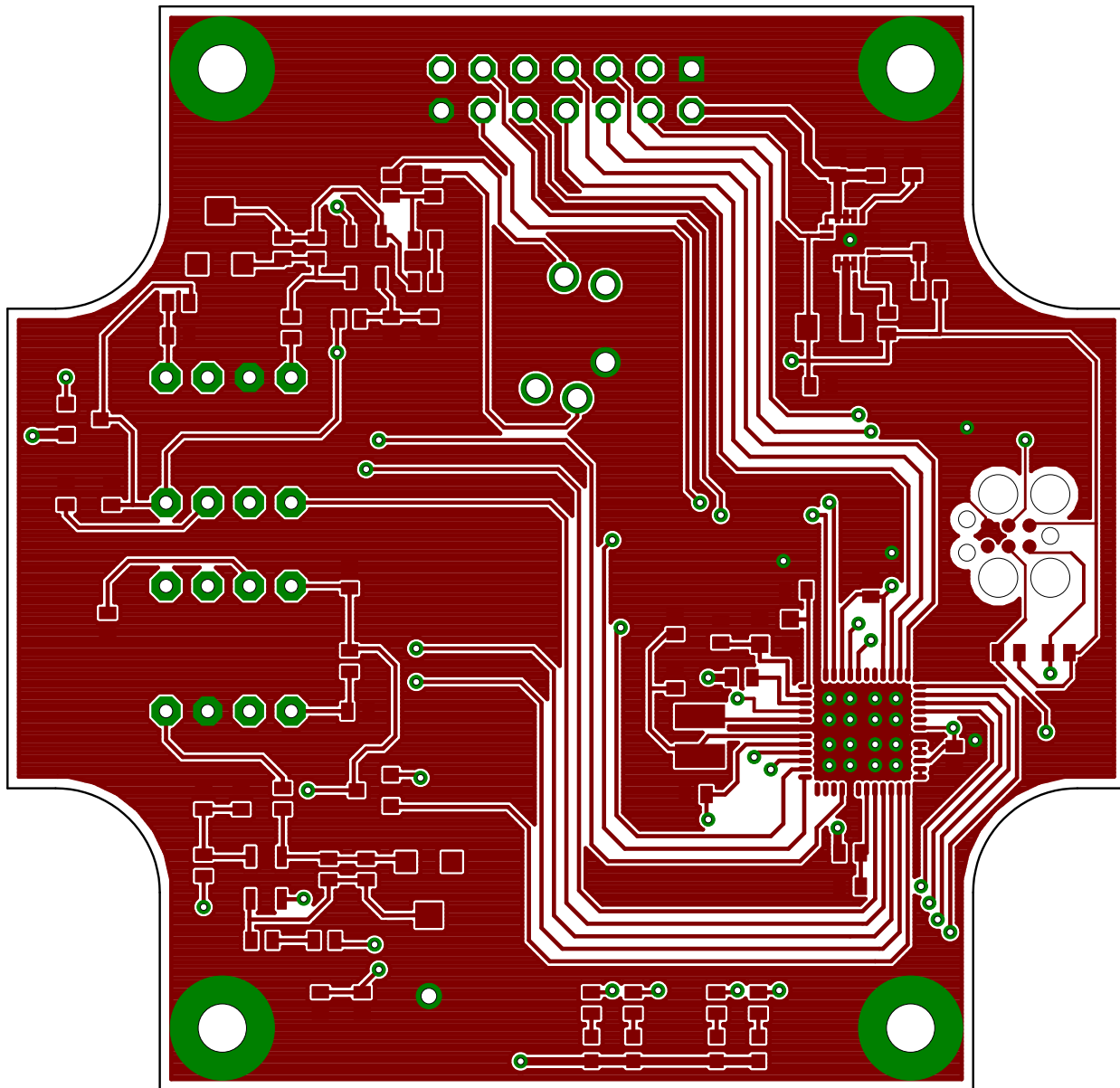


M AUDIO SPECTRUM MODULE	REV: A
Author: Joshua Adkins	
Date: 9/26/16 7:52 PM	Sheet: 2/2

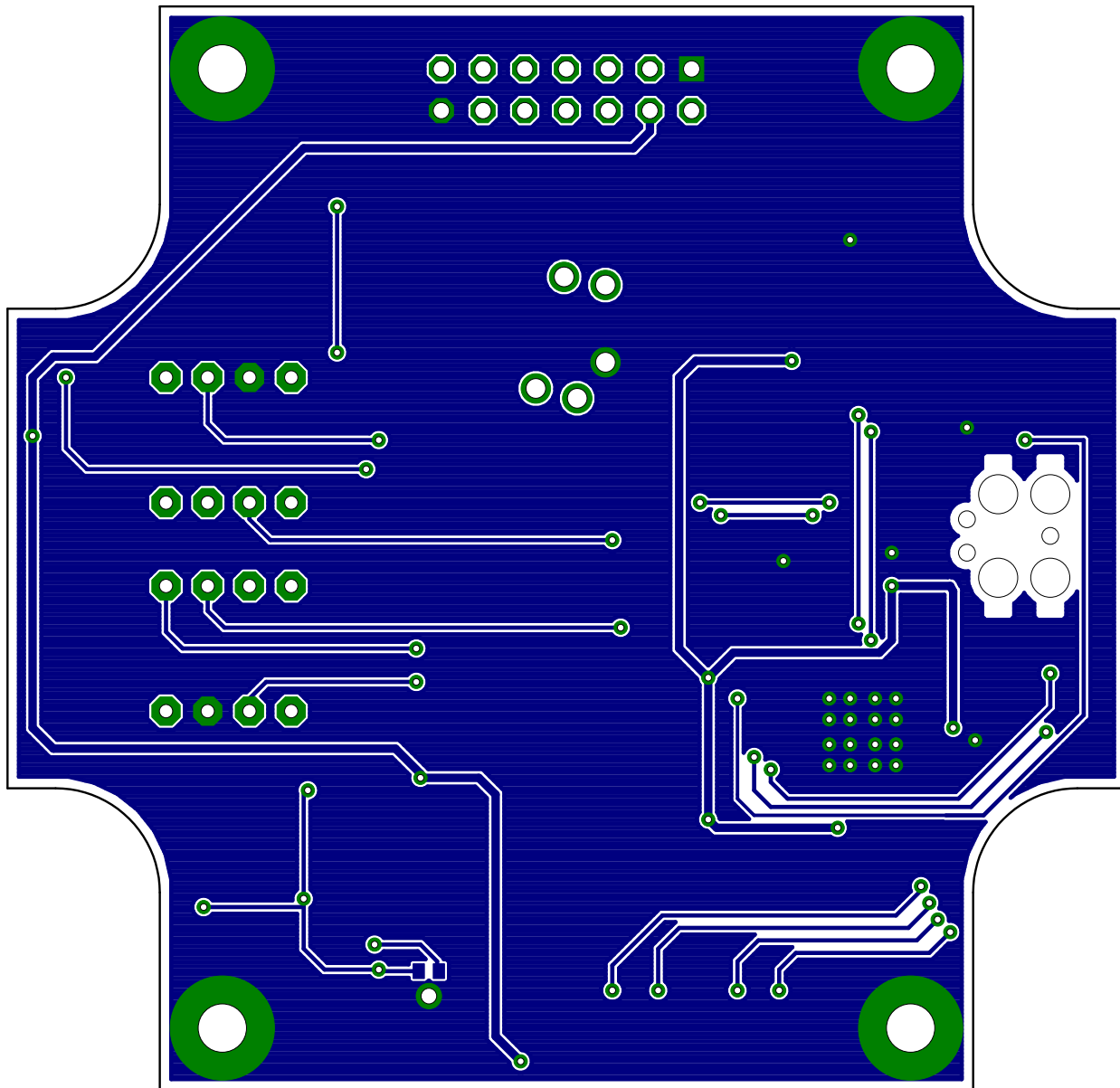


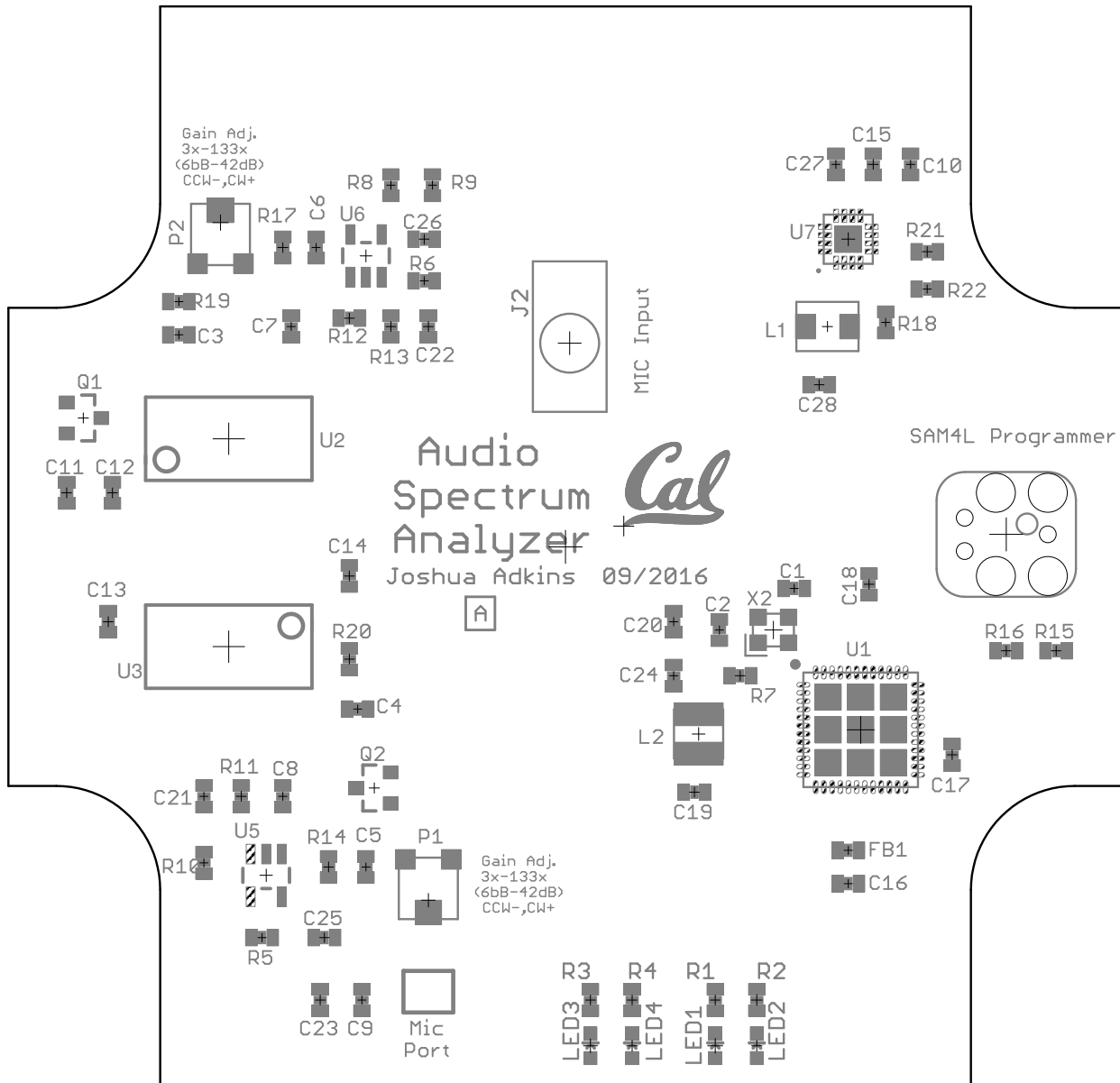


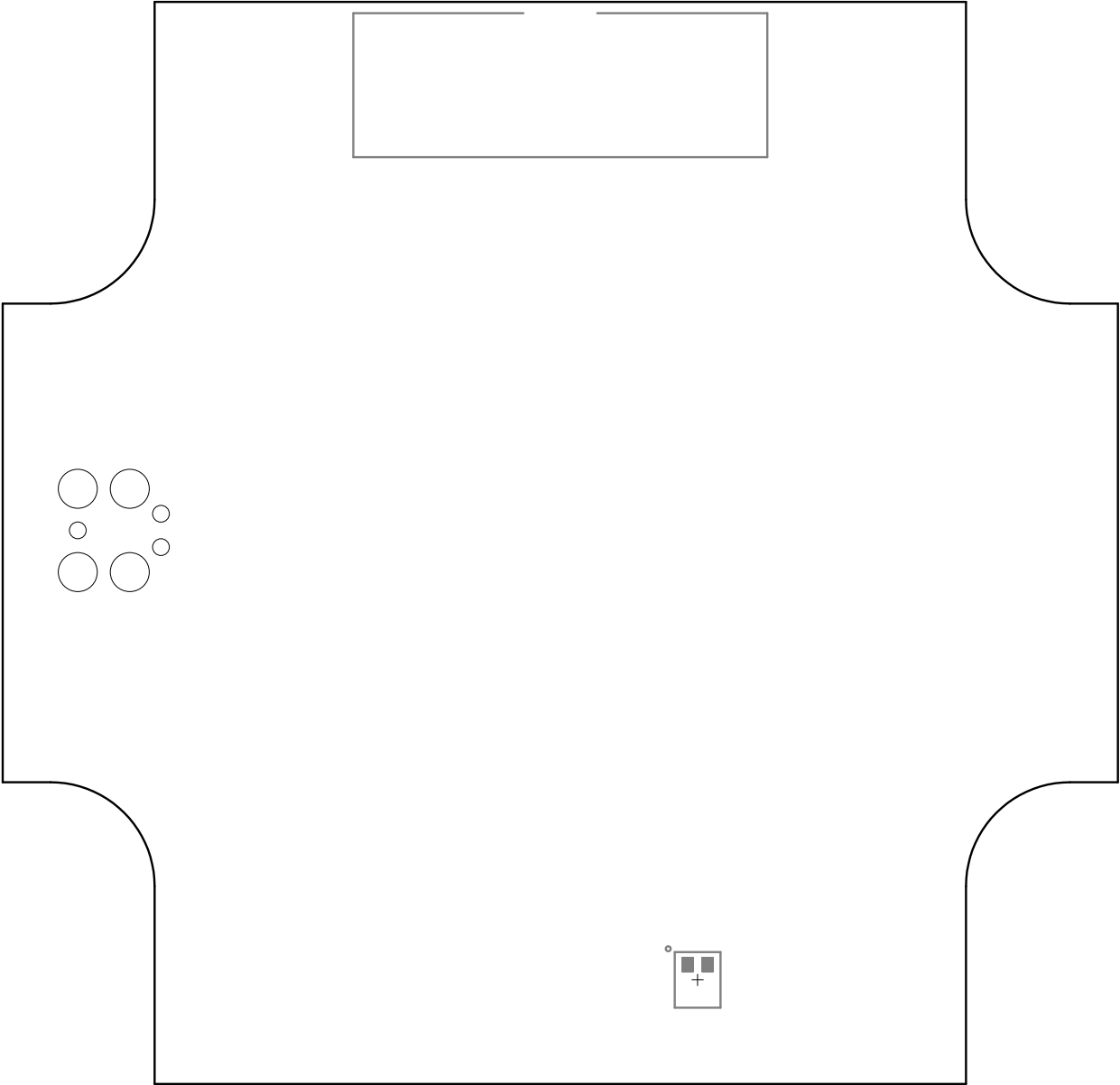




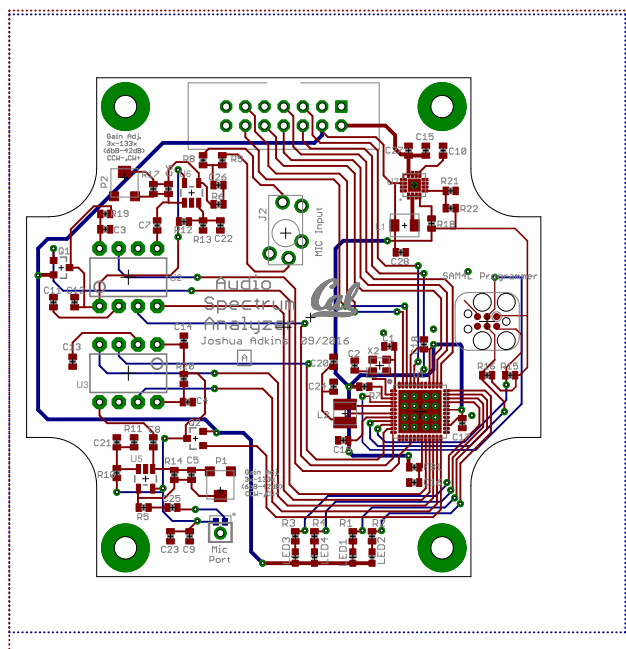
Bottom Copper Layer

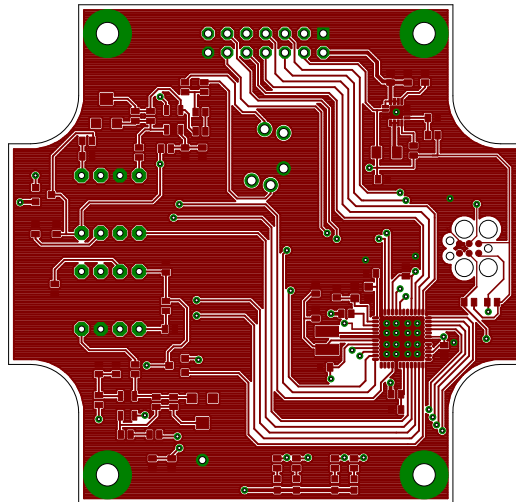




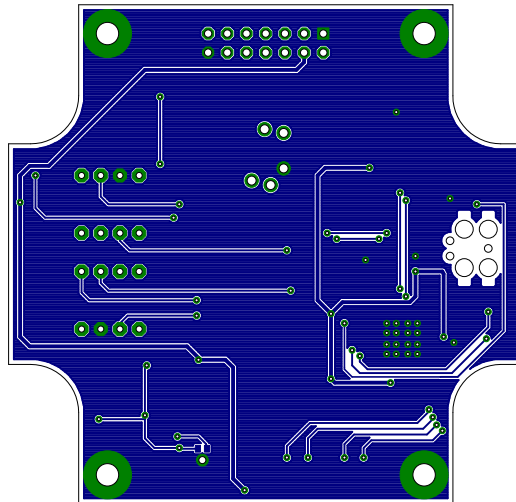


Top and Bottom Layers 1:1 Scale





Bottom Copper Layer 1:1 Scale



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Part	Value	Device	Package	Description
C1	8pF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C2	8pF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C3	33pF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C4	33pF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C5	100pF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C6	100pF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C7	1nF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C8	1nF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C9	1nF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C10	3.3nF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C11	0.1uF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C12	0.1uF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C13	0.1uF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C14	0.1uF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C15	0.1uF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C16	100nF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C17	100nF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C18	100nF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C19	100nF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C20	100nF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C21	1uF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C22	1uF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C23	1uF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C24	4.7uF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C25	4.7uF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C26	4.7uF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C27	10uF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
C28	22uF	CAPACITOR0603_CAP	0603_CAP	0402 Capacitor
FB1	1.5k	FERRITE_BEAD0603	0603_CAP	
J1	MODULE_GENERIC	MODULE_GENERIC	MODULE_GENERIC	Module header ar
J2	AUDIO-JACK-VERTICAL	AUDIO-JACK-VERTICAL	AUDIO-JACK-VERTICAL	A vertical audio ja
L1	2.2uH	INDUCTOR0603	IHL-1212BZ-11	A very specific inc
L2	22uH	LHQ3NP		1212 LHQ3NP Inductor
LED1	LED0603	LED0603	LED-0603	LED
LED2	LED0603	LED0603	LED-0603	LED
LED3	LED0603	LED0603	LED-0603	LED
LED4	LED0603	LED0603	LED-0603	LED
P1	4k-200k	POTTC33X	TC33X-2	Potentiometer
P2	4k-200k	POTTC33X	TC33X-2	Potentiometer
Q1	NX3008PBK	NX3008PBK	SOT23-3	MOSFET - P Cha
Q2	NX3008PBK	NX3008PBK	SOT23-3	MOSFET - P Cha
R1	1k	RESISTOR0603_RES	0603-RES	Resistor
R2	1k	RESISTOR0603_RES	0603-RES	Resistor
R3	1k	RESISTOR0603_RES	0603-RES	Resistor
R4	1k	RESISTOR0603_RES	0603-RES	Resistor
R5	1.5k	RESISTOR0603_RES	0603-RES	Resistor
R6	1.5k	RESISTOR0603_RES	0603-RES	Resistor
R7	10k	RESISTOR0603_RES	0603-RES	Resistor

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R8	10k	RESISTOR0603_RES	0603-RES	Resistor
R9	10k	RESISTOR0603_RES	0603-RES	Resistor
R10	20k	RESISTOR0603_RES	0603-RES	Resistor
R11	20k	RESISTOR0603_RES	0603-RES	Resistor
R12	20k	RESISTOR0603_RES	0603-RES	Resistor
R13	20k	RESISTOR0603_RES	0603-RES	Resistor
R14	60k	RESISTOR0603_RES	0603-RES	Resistor
R15	100k	RESISTOR0603_RES	0603-RES	Resistor
R16	100k	RESISTOR0603_RES	0603-RES	Resistor
R17	100k	RESISTOR0603_RES	0603-RES	Resistor
R18	100k	RESISTOR0603_RES	0603-RES	Resistor
R19	200k	RESISTOR0603_RES	0603-RES	Resistor
R20	200k	RESISTOR0603_RES	0603-RES	Resistor
R21	240k	RESISTOR0603_RES	0603-RES	Resistor
R22	750k	RESISTOR0603_RES	0603-RES	Resistor
U1	SAM4LC8AA	SAM4LC8AA	QFN-48-7MM	Atmel SAM4L mic
U2	MSGEQ7	MSGEQ7	DIP-8	A CMOS spectrun
U3	MSGEQ7	MSGEQ7	DIP-8	A CMOS spectrun
U5	OPA344	OPA344	SOT23-5	Single gate rail-t
U6	OPA344	OPA344	SOT23-5	Single gate rail-t
U7	TLV62130	TLV62130	TQFN-16/3MM	High Efficient 3A
U8	MP23AB02B	MP23AB02B	MP23AB02B	A pretty normal
X2	16MHz	FH1600015	FHXXX	Pericom Type FH

DIGIKEY	MOUSER
490-9670-1-ND	
490-9670-1-ND	
490-1415-1-ND	
490-1415-1-ND	
490-1427-1-ND	
490-1427-1-ND	
490-1494-1-ND	
490-1494-1-ND	
490-1494-1-ND	
490-1503-1-ND	
490-1532-1-ND	
490-1532-1-ND	
490-1532-1-ND	
490-1532-1-ND	
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490-1532-1-ND	
490-1536-1-ND	
490-1536-1-ND	
490-1536-1-ND	
490-3297-1-ND	
490-3297-1-ND	
490-3297-1-ND	
490-6405-1-ND	
490-13241-1-ND	
490-5216-1-ND	
S9170-ND	
ck	806-STX-3790-5N
541-1322-1-ND	
490-5350-1-ND	
160-1446-1-ND	
160-1447-1-ND	
160-1446-1-ND	
160-1447-1-ND	
TC33X-2-204ECT-ND	
TC33X-2-204ECT-ND	
568-10499-1-ND	771-NX3008PBK,215
568-10499-1-ND	771-NX3008PBK,215
RHM1.0KCGCT-ND	
RHM1.0KCGCT-ND	
RHM1.0KCGCT-ND	
RHM1.0KCGCT-ND	
RHM1.5KCGCT-ND	
RHM1.5KCGCT-ND	
RHM10.0KHCT-ND	

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RHM10.0KHCT-ND
RHM10.0KHCT-ND
RHM20KCGCT-ND
RHM20KCGCT-ND
RHM20KCGCT-ND
RHM20KCGCT-ND
RHM60.4KCLCT-ND
RHM100KCGCT-ND
RHM100KCGCT-ND
RHM100KCGCT-ND
RHM100KCGCT-ND
RHM200KCFCT-ND
RHM200KCFCT-ND
RHM240KCFCT-ND
RHM750KCFCT-ND
ATSAM4LC8AA-MU-ND
1568-1335-ND
1568-1335-ND
OPA344NACT-ND
OPA344NACT-ND
296-35978-1-ND
497-14947-1-ND
FH1600015CT-ND