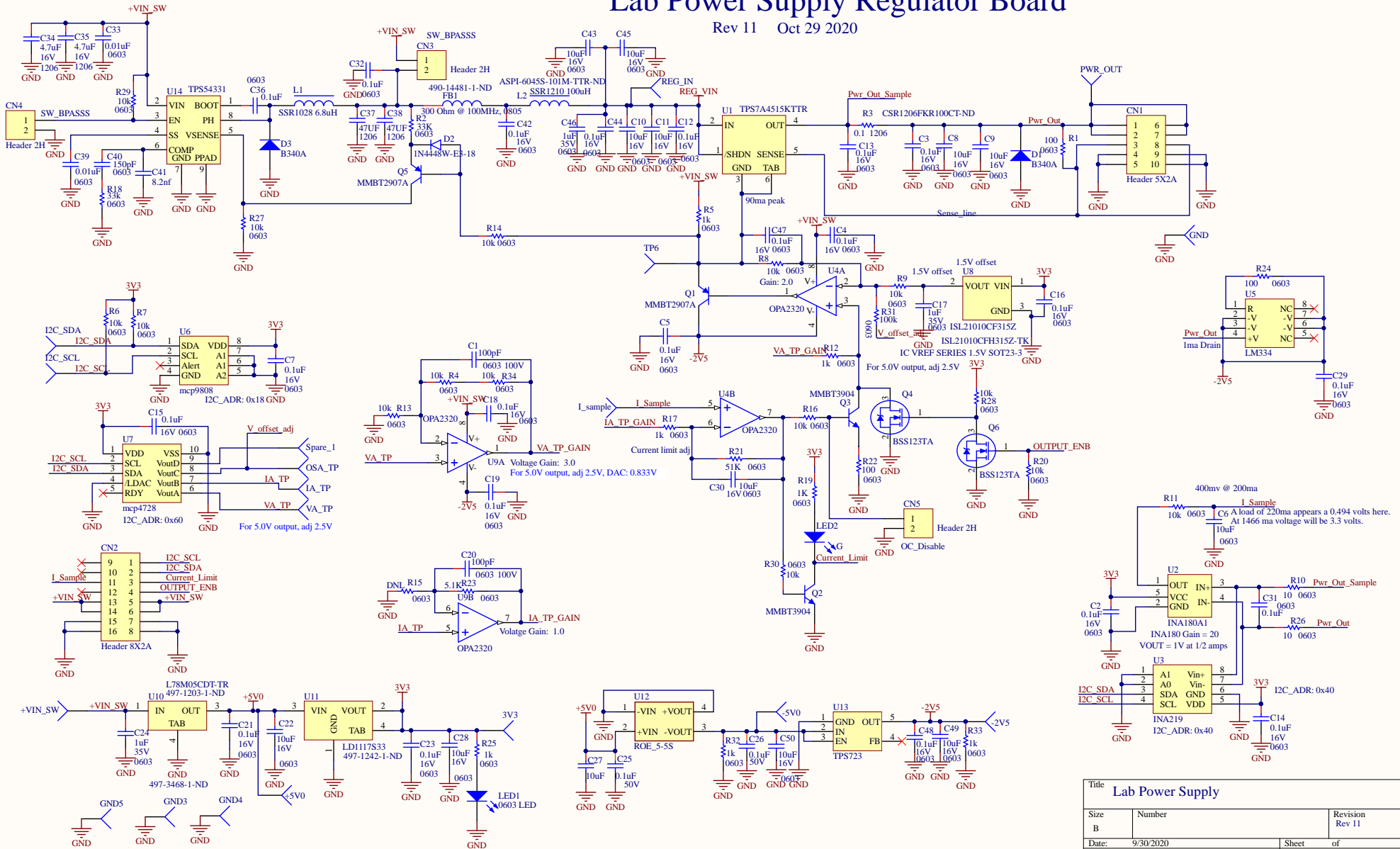
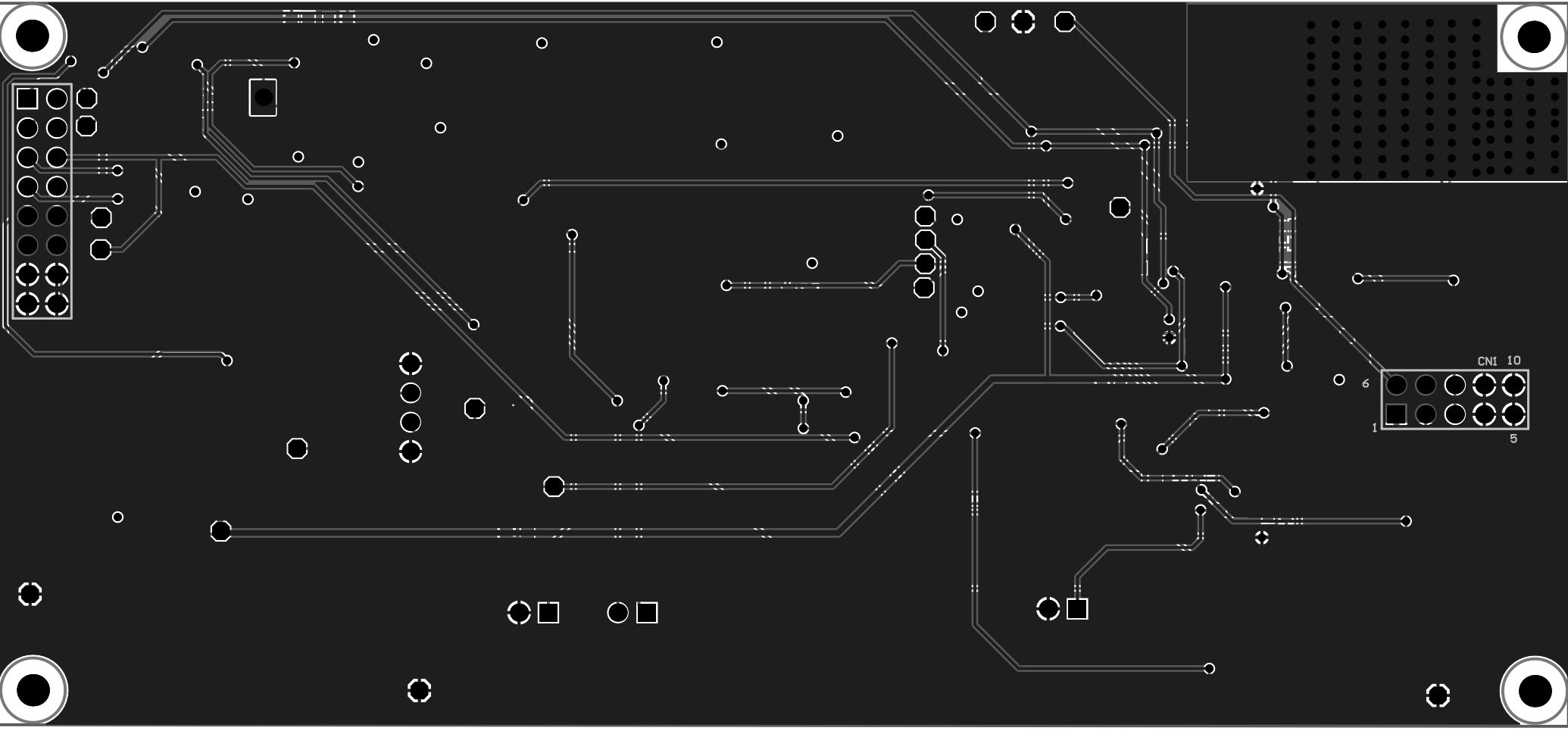


# Lab Power Supply Regulator Board

Rev 11 Oct 29 2020



Title		
Lab Power Supply		
Size	Number	Revision
B		Rev 11
Date:	9/30/2020	Sheet of
File:	C:\circuits\lps_regulator_rev_11.SchDoc	Drawn By:



Comment	Description	Designator	Footprint	LibRef	Quantity
TestPoint_BLK	Test Point - Black	-2V5, -5V0, +5V0, +	TestPoint-TH 42 mil	CMP-005-0210-01	
100pF	CAP CER 100PF 50V	C1, C20	CAPC0603(1608)_N	CMP-007-0074-08	
0.1uF	CAP CER 0.1UF 16V	C2, C7, C13, C18, C19	CAPC0603(1608)_M	CMP-007-0042-08	
0.1uF	CAP CER 0.1UF 16V	C3, C4, C5, C12, C14	CAPC0603(1608)_N	CMP-007-0042-08	
10uF	CAP CER 10UF 16V X	C6, C8, C9, C10, C11	CAPC0603(1608)_N	CMP-001-0603-12	
1uF	CAP CER 1UF 35V 10	C17, C24, C46	CAPC0603(1608)_M	CMP-007-0109-08	
0.1uF	0.1uF 0805 50V	C25, C26	CAPC0805(2012)_N	CAP CER 0.1UF 50V	
10uF	10UF 0805 16V	C27	CAPC0805(2012)_M	CAP CER 10UF 16V	
10uF	CAP CER 0.1UF 16V	C30	CAPC0603(1608)_M	CMP-007-0042-08	
0.01uF	CAP CER 0.01uF 50V	C33, C39	CAPC0603(1608)_N	CMP-007-0028-08, C	
4.7uF	CAP CER 4.7UF 50V	C34, C35	CAPC1206(3216)_N	CMP-007-0147-08	
47UF	CAP CER 47UF 25V 1	C37, C38	CAPC1206(3216)_L	CMP-001-0623-11	
150pF	CAP CER 1UF 35V 10	C40	CAPC0603(1608)_M	CMP-007-0109-08	
8.2nf	CAP CER 820PF 50V X	C41	CAPC1608X87X35ML	CMP-001-0751-01	
Header 5X2A	Header, 5-Pin, Dual r	CN1	HDR2X5_CEN	CMP-001-0310-01	
Header 8X2A	Header, 8-Pin, Dual r	CN2	HDR2X8_CEN	CMP-001-0325-01	
Header 2H	Header, 2-Pin, Right	CN3, CN4, CN5	HDR1X2H	CMP-001-0287-01	
B340A	DIODE SCHOTTKY 60	D1, D3	DO-214AC	CMP-001-0130-02	
1N4448W-E3-18	Diodes - General Purp	D2	SOD123	CMP-001-0983-02	
300 Ohm @ 100MHz	600 Ohms @ 100MH	FB1	RESC0805(2012)_N	CMP-007-0197-02	
SSR1028 6.8uH	INDUCTOR 6.8uH SN	L1	SRU1028	CMP-001-0686-01	
SSR1210 100uH	INDUCTOR 100uH 2	L2	SRR1210	CMP-001-0686-01	
0603 LED	0603 SMD LED	LED1	SM-LED-0603	CMP-001-0009-04	
G	0603 SMD LED	LED2	SM-LED-0603	0603 LED	
MMBT2907A	PNP General Purpose	Q1, Q5	SOT23	CMP-012-0075-02	
MMBT3904	NPN General Purpose	Q2, Q3	SOT23	MMBT3904	
BSS123TA	MOSFET N-CH 100V	Q4, Q6	SOT23-3L	CMP-012-0021-01	
100	RES 100 OHM 1% 1/	R1, R23, R24	RESC0603(1608)_N	CMP-007-0349-12	
10K	RES 10K OHM 1%/10	R2, R5, R6, R7, R8, R	RESC0603(1608)_M	CMP-007-0359-12	
0.33	RES 0.33 OHM 1% 1/	R3	RESC1206(3216)_N	CMP-007-0323-14	
10k	RES 10K OHM 0.1%	R4, R13, R34	RESC0603(1608)_L	CMP-007-0357-12	
1.0K	RES 1K OHM 1% 1/1	R12, R15, R16, R17,	RESC0603(1608)_M	CMP-007-0404-12	
33K	RES 33K OHM 1%/10	R18	RESC0603(1608)_N	CMP-007-0480-12	
100K	RES 100K OHM 1% 1	R21	RESC0603(1608)_M	CMP-007-0353-12	
TPS7A4515KTTR	TPS7A4515KTTR, lin	U1	TPS7A4515KTTR	TPS7A4515KTTR	
INA180A1		U2	SOT-23-5_MC	INA180A1	
INA219	Current Monitor IC	U3	INA219	INA219	
OPA2320	Dual Single Supply Op	U4, U9	SOIC-8_NoPad	CMP-006-0027-01	
LM334	LM334, Current sourc	U5	LM334	LM334	
mcp9808		U6	8MSOP	mcp9808	
mcp4728	MCP4728	U7	MCP4728	mcp4728	
ISL21010CF315Z		U8	SOT23	ISL21010CF315Z	