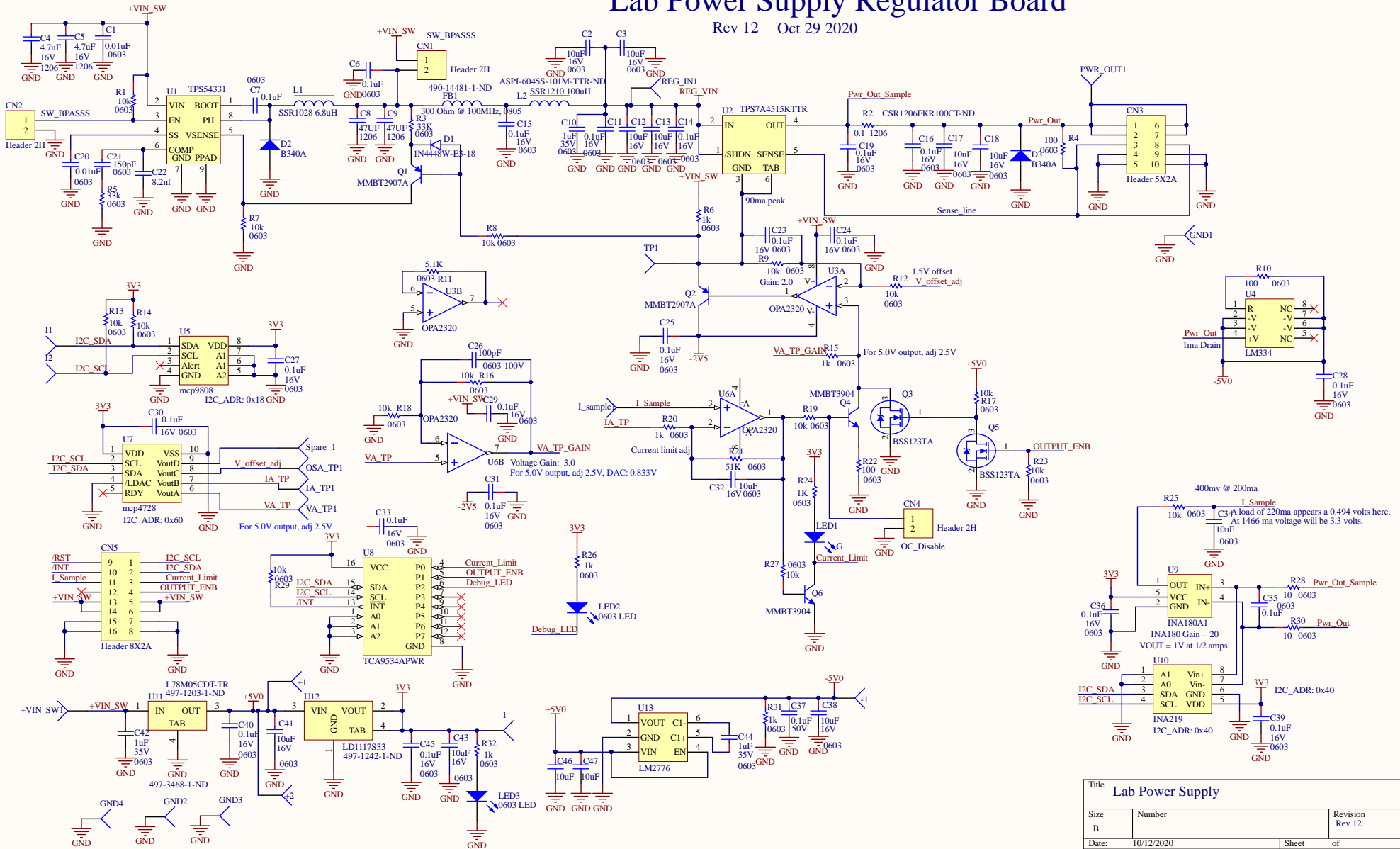
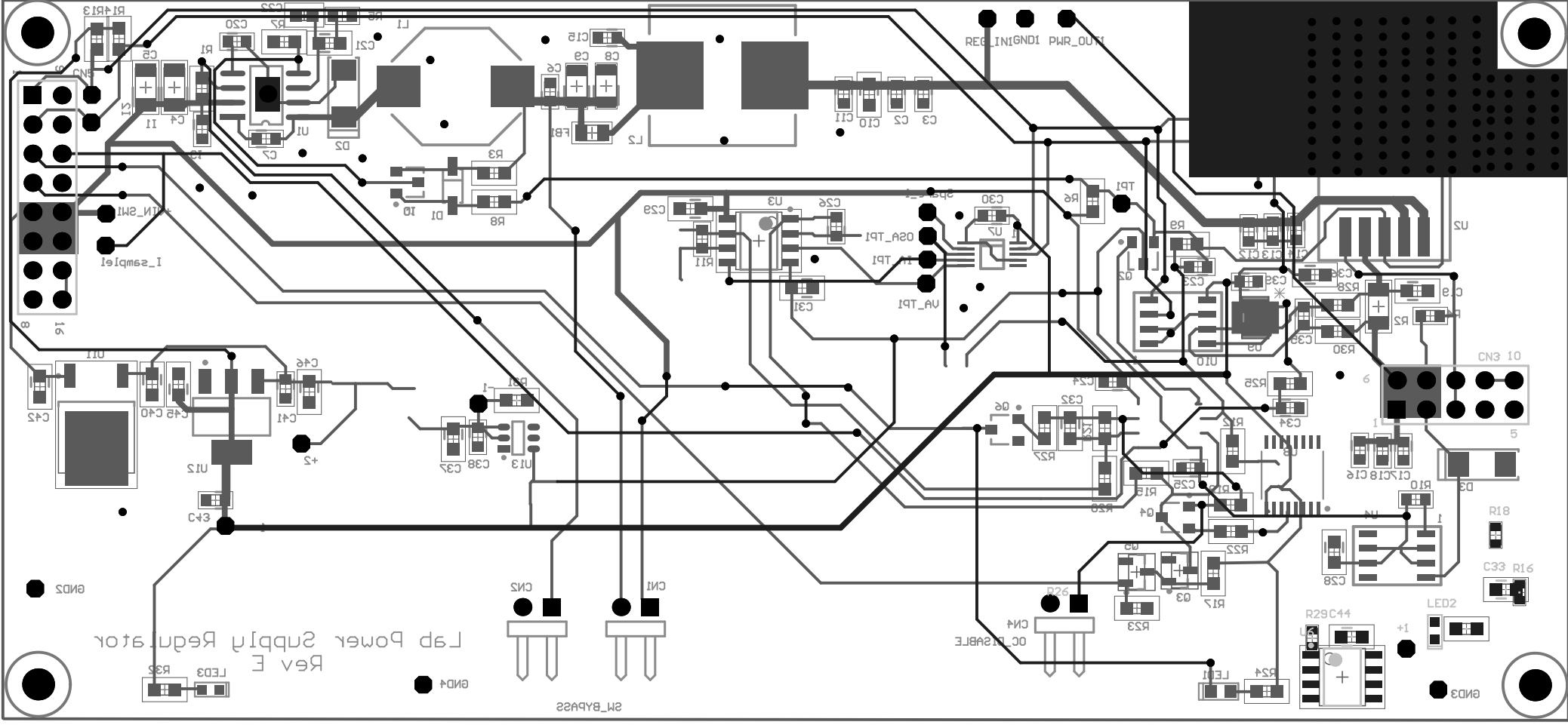


Lab Power Supply Regulator Board

Rev 12 Oct 29 2020



Title		
Lab Power Supply		
Size	Number	Revision
B		Rev 12
Date:	10/12/2020	Sheet of
File:	C:\circuits\lps_regulator_rev_12.SchDoc	Drawn By:



Comment	Description	Designator	Footprint	LibRef	Quan
TestPoint_BLK	Test Point - Black	-1, +1, +2, +VIN_SW	TestPoint-TH 42 mil	CMP-005-0210-01	
0.01uF	CAP CER 0.01uF 50V	C1, C20	CAPC0603(1608)_N	CMP-007-0028-08, C	
10uF	CAP CER 10UF 16V X	C2, C3, C12, C13, C1	CAPC0603(1608)_N	CMP-001-0603-12	
4.7uF	CAP CER 4.7UF 50V	C4, C5	CAPC1206(3216)_N	CMP-007-0147-08	
0.1uF	CAP CER 0.1UF 16V	C6, C7, C11, C14, C1	CAPC0603(1608)_N	CMP-007-0042-08	
47UF	CAP CER 47UF 25V 1	C8, C9	CAPC1206(3216)_L	CMP-001-0623-11	
1uF	CAP CER 1UF 35V 10	C10, C42, C44	CAPC0603(1608)_M	CMP-007-0109-08	
0.1uF	CAP CER 0.1UF 16V	C19, C27, C28, C29,	CAPC0603(1608)_M	CMP-007-0042-08	
150pF	CAP CER 1UF 35V 10	C21	CAPC0603(1608)_M	CMP-007-0109-08	
8.2nf	CAP CER 820PF 50V	C22	CAPC1608X87X35ML	CMP-001-0751-01	
100pF	CAP CER 100PF 50V	C26	CAPC0603(1608)_N	CMP-007-0074-08	
10uF	CAP CER 0.1UF 16V	C32	CAPC0603(1608)_M	CMP-007-0042-08	
0.1uF	0.1uF 0805 50V	C37	CAPC0805(2012)_N	CAP CER 0.1UF 50V 1	
10uF	10UF 0805 16V	C46, C47	CAPC0805(2012)_M	CAP CER 10UF 16V 10	
Header 2H	Header, 2-Pin, Right	CN1, CN2, CN4	HDR1X2H	CMP-001-0287-01	
Header 5X2A	Header, 5-Pin, Dual r	CN3	HDR2X5_CEN	CMP-001-0310-01	
Header 8X2A	Header, 8-Pin, Dual r	CN5	HDR2X8_CEN	CMP-001-0325-01	
1N4448W-E3-18	Diodes - General Pur	D1	SOD123	CMP-001-0983-02	
B340A	DIODE SCHOTTKY 60	D2, D3	DO-214AC	CMP-001-0130-02	
300 Ohm @ 100MHz	600 Ohms @ 100MHz	FB1	RESC0805(2012)_N	CMP-007-0197-02	
SSR1028 6.8uH	INDUCTOR 6.8uH SM	L1	SRU1028	CMP-001-0686-01	
SSR1210 100uH	INDUCTOR 100uH 2.2	L2	SRR1210	CMP-001-0686-01	
G	0603 SMD LED	LED1	SM-LED-0603	0603 LED	
0603 LED	0603 SMD LED	LED2, LED3	SM-LED-0603	CMP-001-0009-04	
MMBT2907A	PNP General Purpose	Q1, Q2	SOT23	CMP-012-0075-02	
BSS123TA	MOSFET N-CH 100V	Q3, Q5	SOT23-3L	CMP-012-0021-01	
MMBT3904	NPN General Purpose	Q4, Q6	SOT23	MMBT3904	
10K	RES 10K OHM 1/10W	R1, R3, R6, R7, R8, R	RESC0603(1608)_M	CMP-007-0359-12	
0.33	RES 0.33 OHM 1% 1/	R2	RESC1206(3216)_N	CMP-007-0323-14	
100	RES 100 OHM 1% 1/1	R4, R10, R11	RESC0603(1608)_N	CMP-007-0349-12	
33K	RES 33K OHM 1/10W	R5	RESC0603(1608)_N	CMP-007-0480-12	
1.0K	RES 1K OHM 1% 1/1	R15, R19, R20, R22,	RESC0603(1608)_M	CMP-007-0404-12	
10k	RES 10K OHM 0.1%	R16, R18, R29	RESC0603(1608)_L	CMP-007-0357-12	
100K	RES 100K OHM 1% 1	R21	RESC0603(1608)_M	CMP-007-0353-12	
TPS54331	TPS54331	U1	TPS54331	TPS54331	
TPS7A4515KTTR	TPS7A4515KTTR, line	U2	TPS7A4515KTTR	TPS7A4515KTTR	
OPA2320	Dual Single Supply R	U3, U6	SOIC-8_NoPad	CMP-006-0027-01	
LM334	LM334, Current sourc	U4	LM334	LM334	
mcp9808		U5	8MSOP	mcp9808	
mcp4728	MCP4728	U7	MCP4728	mcp4728	
TCA9534APWR	IC I/O EXPANDER I2C	U8	TCA9534APWR-Footp	CMP-001-1190-01	