

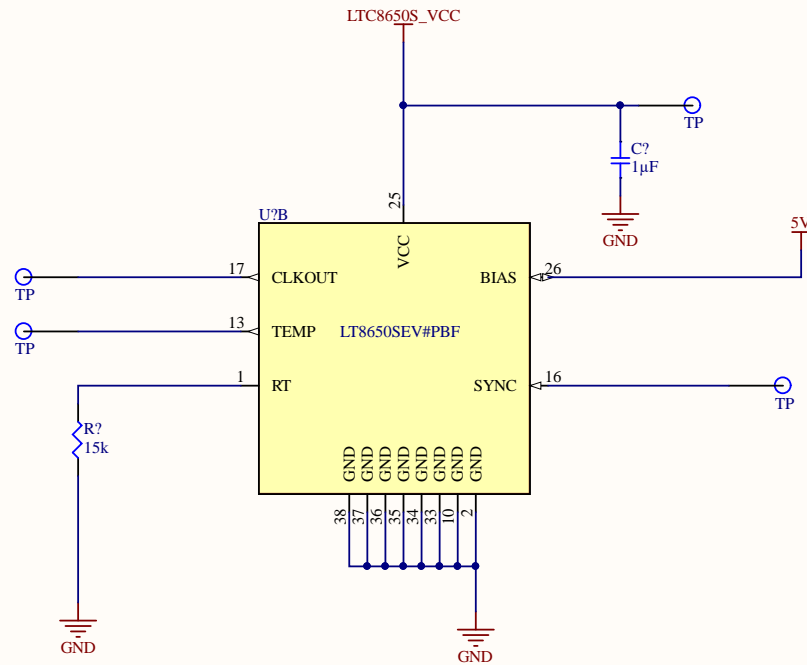
VBUS --> 5V  
VBUS --> 3V3  
CONTROL


Design: Soft-Start Time TBD  
Design: Switching Frequency 2MHz  
Design: FCM W/O SSM OR SYNC  
Design: Do we want power cycling?

Design: LT8650S

Vout1: 5V 4A

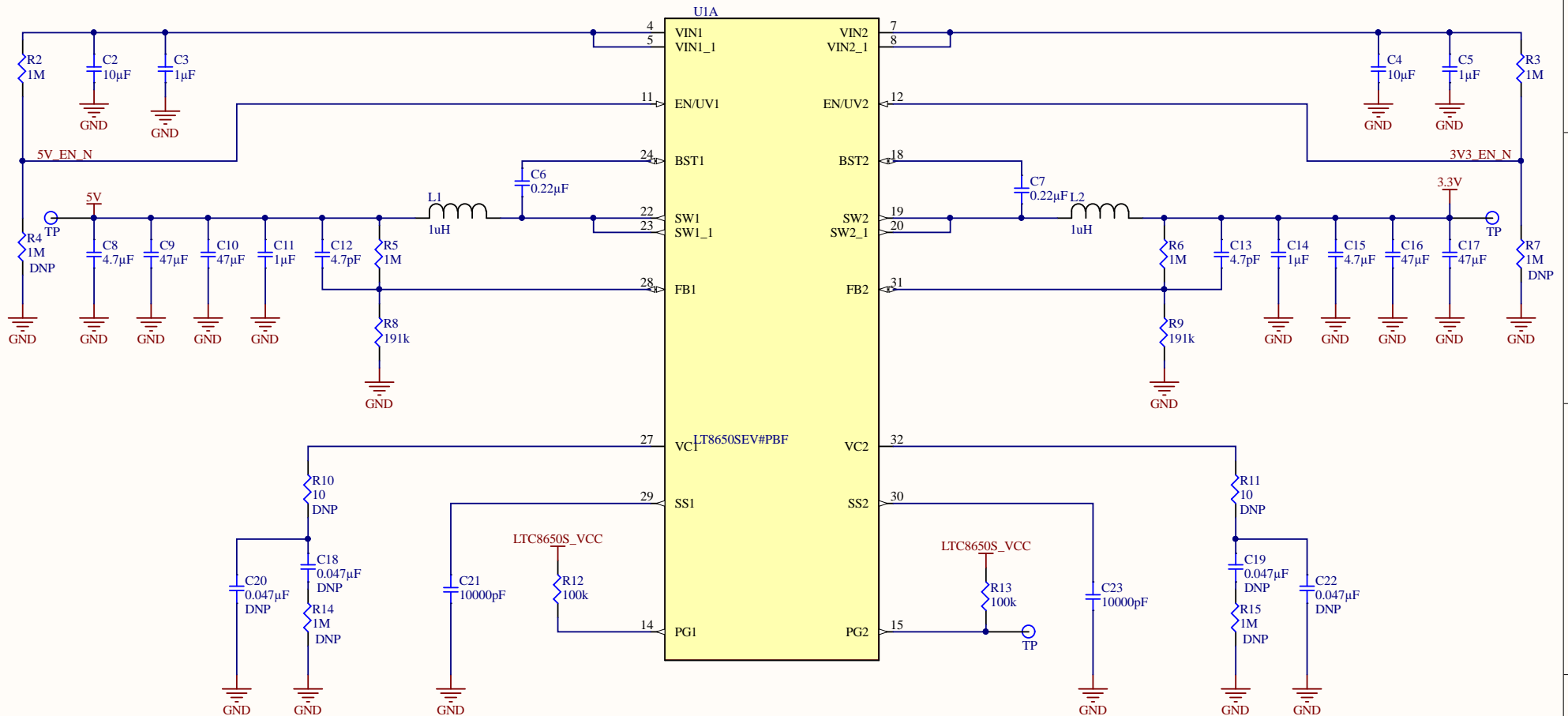
Vout2: 3.3V 4A




Title <i><b>power_CTL.schdoc</b></i>			Badgerloop 133 Engineering Research Building Madison, WI 53715 
Size: <b>A4</b>	Number: <b>1</b>	Revision: <b>A</b>	
Date: <b>9/28/2018</b>	Time: <b>11:39:45 PM</b>	Sheet <b>1</b> of <b>2</b>	
File: C:\Users\Ryan Castle\Documents\git_repos\podiv-altium\src\prj\sch\power_CTL.schdoc			


VBUS --> 5V  
PWR

VBUS --> 3V3  
PWR



Title <i><b>POSSV.schdoc</b></i>			Badgerloop 133 Engineering Research Building Madison, WI 53715 
Size: <b>A4</b>	Number: 1	Revision: <b>A</b>	
Date: <b>9/28/2018</b>	Time: <b>11:39:46 PM</b>	Sheet <b>1</b> of <b>2</b>	
File: C:\Users\Ryan Castle\Documents\git_repos\podiv-altium\src\prj\sch\power_PWR.schdoc			

	1	2	3	4
A				
B				
C				
D				
	1	2	3	4

Title <b>nav_main_connector.schdoc</b>			Badgerloop 133 Engineering Research Building Madison, WI 53715	
Size: <b>A4</b>	Number: 1	Revision: <b>A</b>		
Date: 9/28/2018	Time: 11:39:46 PM	Sheet 2 of 2		
File: C:\Users\Ryan Castle\Documents\git_repos\podiv-altium\src\prj\sch\power_main_connector.SchDoc				



Comment	Description	Designator	Footprint	LibRef	Quantity
10µF	CAP CER 10UF 50V X5R 1206	C2, C4	SMD- 1206C	GRM31C R61H106 KA12L	2
1µF	CAP CER 1UF 50V X7R 0805	C3, C5	SMD- 0805C	GCJ21BR 71H105K A01L	2
0.22µF	CAP CER 0.22UF 25V X7R 0603	C6, C7	SMD- 0603C	GCJ188R 71E224K A12D	2
4.7µF	CAP CER 4.7UF 25V X5R 0603	C8, C15	SMD- 0603C	GRM188 R61E475 KE11D	2
47µF	CAP CER 47UF 10V X5R 1206	C9, C10, C16, C17	SMD- 1206C	GRM31C R61A476 ME15L	4
1µF	CAP CER 1UF 50V X5R 0603	C11, C14, C7	SMD- 0603C	GRM188 R61H105 KAALD	3
4.7pF	CAP CER 4.7PF 50V NPO 0603	C12, C13	SMD- 0603C	GRM1885 C1H4R7C A01D	2
0.047µF	CAP CER 0.047UF 16V X7R 0402	C18, C19, C20, C22	SMD- 0402C	GCM155 R71C473 KA37D	4
10000pF	CAP CER 10000PF 25V X7R 0603	C21, C23	SMD- 0603C	GRM188 R71E103 KA01D	2
1uH	XFL5030- 102ME	L1, L2	IND_TAIY O_CBC20 1	IND 1.0uH 5.48x5.28 x3.1mm 5mOhm ESR	2
1M	RES SMD 1M OHM 1% 1/10W 0402	R2, R3, R4, R5, R6, R7, R14, R15	SMD- 0402-RES	ERJ- 2RKF100 4X	8
191k	RES SMD 191K OHM 1% 1/10W 0402	R8, R9	SMD- 0402-RES	ERJ- 2RKF191 3X	2
10	RES SMD 10 OHM 5% 1/10W 0402	R10, R11	SMD- 0402-RES	ERJ- 2GEJ100X	2
100k	RES SMD 100K OHM 5% 1/10W 0402	R12, R13	SMD- 0402-RES	ERJ- 2GEJ104X	2
15k	RES SMD 15K OHM 5% 1/10W 0402	R7	SMD- 0402-RES	ERJ- 2GEJ153X	1
TP		TP1, TP6, TP7, TP?	Test Point	TP	7
LT8650SE V#PBF	LT8650S - Dual Channel 4A, 42V, Synchron ous Step- Down Silent Switcher 2 with 6.2ÂµA Quiescent Current	U1, U?	QFN50P6 00X400X 103- 32N240X 440	LT8650SE V#PBF	2