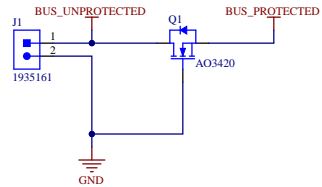
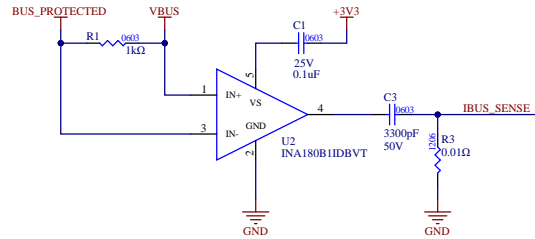


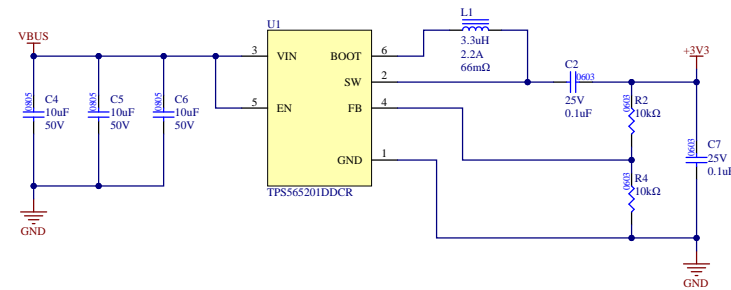
Bus Connector & RPP



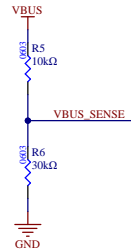
Bus Current Sense



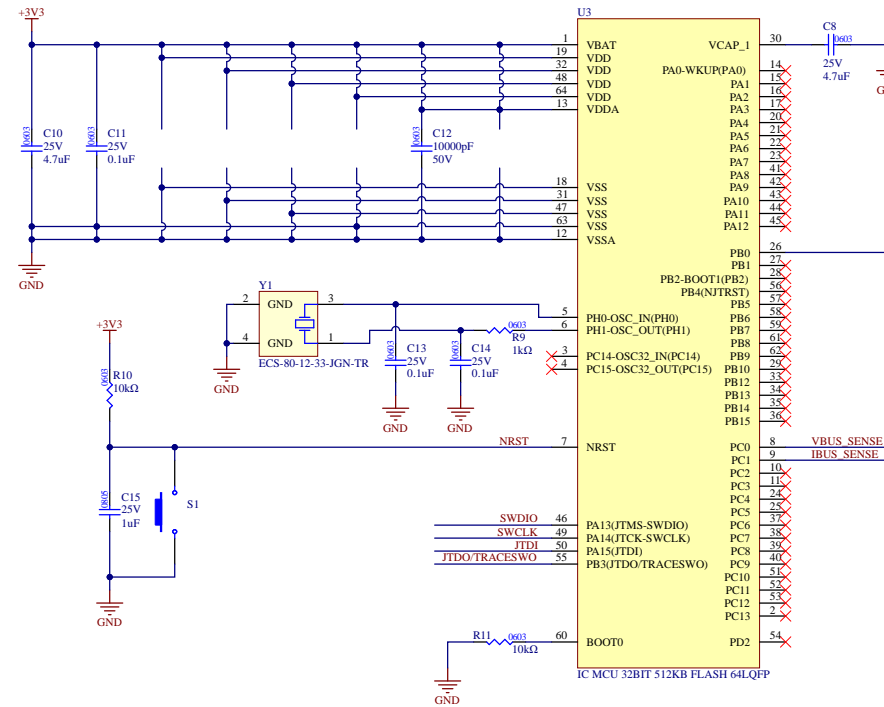
3V3-4SV @ 2A Max. Boost Converter



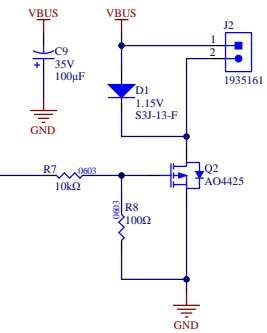
Bus Voltage Sense



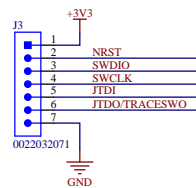
Microcontroller



BDC Motor Connector



IO Connector



		Waterloo Aerial Robotics Group 200 University Ave W Waterloo, Ontario, Canada N2L 3G1		
PROJECT		REVISION		
WARG EE Bootcamp.PrjPcb, [No Variations]		*		
DOCUMENT		MODIFIED		
WARG EE Bootcamp.SchDoc		2022-06-21		
ENGINEER		REVIEWER		
*		*		
		SHEET		1 OF 1

Comment	Description	Designator	Footprint	LibRef	Quantity
CAP CER 0.1UF 25V X7R ±10% 0603	CAP CER 0.1UF 25V X7R ±10% 0603	C1, C2, C7, C11, C13, C14	CAP0603	GCM188R71E104KA57 D	6
CAP CER 3300PF 50V C0G/NP0 0603	CAP CER 3300PF 50V C0G/NP0 0603	C3	CAP0603	GRM1885C1H332JA01 D	1
CAP CER 10UF 50V X5R ±10% 0805	CAP CER 10UF 50V X5R ±10% 0805	C4, C5, C6	CAP0805	GRM21BR61H106KE43 L	3
CAP CER 4.7UF 25V X6S ±10% 0603	CAP CER 4.7UF 25V X6S ±10% 0603	C8, C10	CAP0603	GRM188C81E475KE11 D	2
CAP ALUM 100UF 20% 35V SMD	CAP ALUM 100UF 20% 35V SMD	C9	RADIAL_CORNELL_D	35TKV100M8X10.5	1
CAP CER 10000PF 50V X7R 0603	CAP CER 10000PF 50V X7R 0603	C12	CAP0603	C0603C103J5RAC7867	1
CAP CER 1UF 25V X7R ±10% 0805	CAP CER 1UF 25V X7R ±10% 0805	C15	CAP0805	GCM21BR71E105KA56 L	1
DIODE GEN PURP 600V 3A SMC	DIODE GEN PURP 600V 3A SMC	D1	SMC	S3J-FDICT-ND	1
CON_2POS_SCREW_T ERM	CONN SCREW TERMINAL 2X1 5MM RA TH	J1, J2	1935161	1935161	2
CONN HEADER VERT 7POS 2.54MM	CONN HEADER VERT 7POS 2.54MM	J3	0022284070	0022032071	1
FIXED IND 3.3UH 2.2A 66 MOHM SMD	FIXED IND 3.3UH 2.2A 66 MOHM SMD	L1		SRN4018-3R3M	1
MOSFET N-CH 20V 6A SOT23-3L	MOSFET N-CH 20V 6A SOT23-3L	Q1	SOT23-3	AO3420	1
MOSFET P-CH 38V 14A 8SOIC	MOSFET P-CH 38V 14A 8SOIC	Q2	8-SOIC	AO4425	1
RES 1K OHM 1% 1/10W 0603	RES 1K OHM 1% 1/10W 0603	R1, R9	RES0603	RC0603FR-071KL	2
RES 10K OHM 1% 1/10W 0603	RES 10K OHM 1% 1/10W 0603	R2, R4, R5, R7, R10, R11	RES0603	RC0603FR-0710KL	6
RES 0.01 OHM 1% 1/4W 1206	RES 0.01 OHM 1% 1/4W 1206	R3	RES1206	PF1206FRF070R01L	1
RES 30K OHM 1% 1/10W 0603	RES 30K OHM 1% 1/10W 0603	R6	RES0603	RC0603FR-0730KL	1
RES 100 OHM 1% 1/10W 0603	RES 100 OHM 1% 1/10W 0603	R8	RES0603	RC0603FR-07100RL	1
435151014824	SMT 3.0 X 2.6 MM TACT SWITCH WIT	S1	435151014824	435151014824	1
IC REG BUCK ADJ 5A TSOT23-6	IC REG BUCK ADJ 5A TSOT23-6	U1	SOT23-6	TPS565201DDCR	1
IC CURR SENSE 1 CIRCUIT SOT23-5	IC CURR SENSE 1 CIRCUIT SOT23-5	U2	SOT23-5	INA180B1IDBVT	1
IC MCU 32BIT 512KB FLASH 64LQFP	IC MCU 32BIT 512KB FLASH 64LQFP	U3	STM_LQFP64_N	STM32F446RET6	1
CRYSTAL 8MHZ 12PF SMD	8 MHz ±20ppm Crystal 12pF 400 Ohms 4-SMD	Y1		ECS-80-12-33-JGN-TR	1