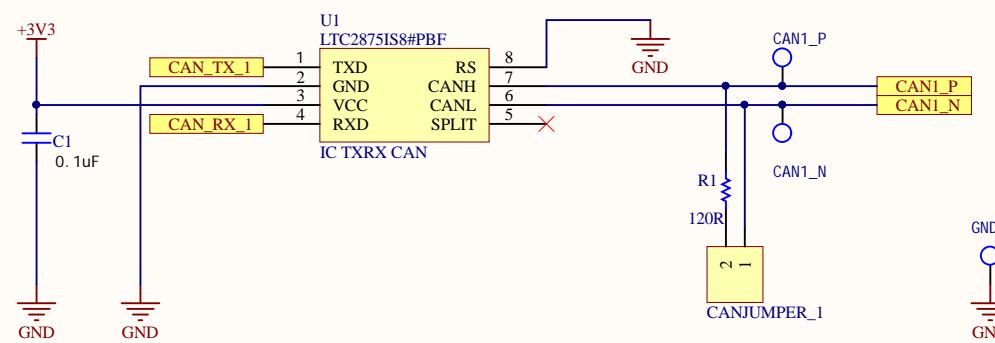
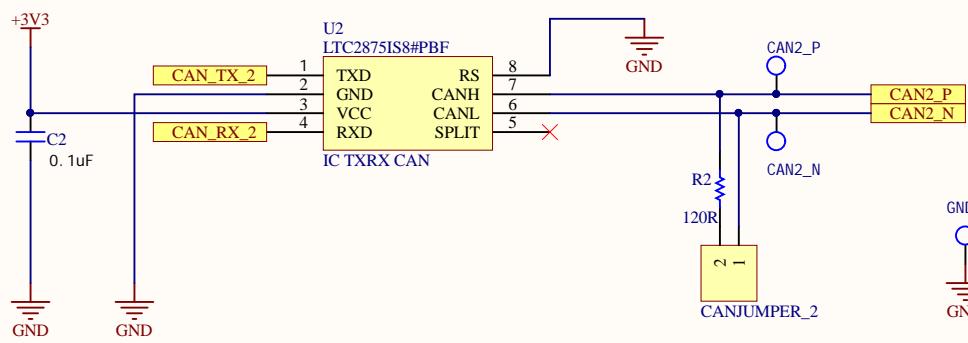


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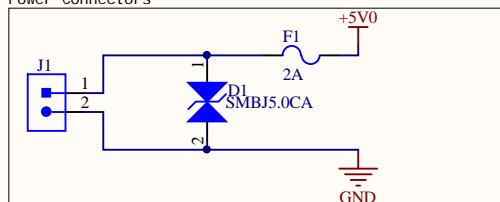
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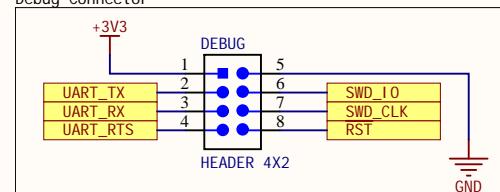
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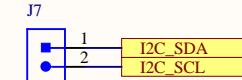
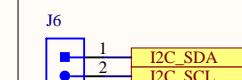
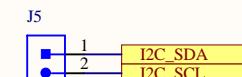
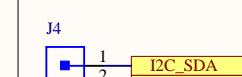
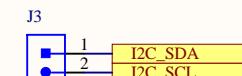
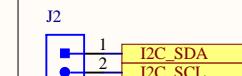
Power Connectors



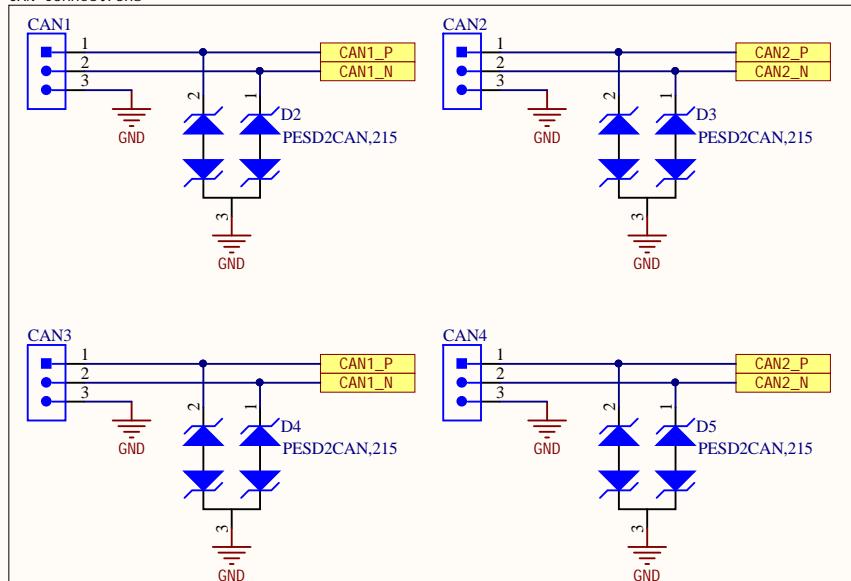
Debug Connector



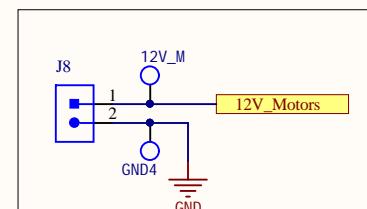
I2C Current Sensors



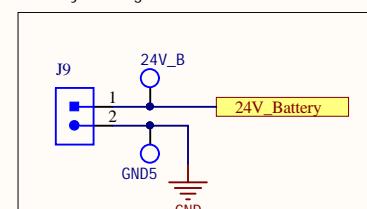
CAN Connections



Motor Voltage Sensors



Battery Voltage Sensors



Title Connectors

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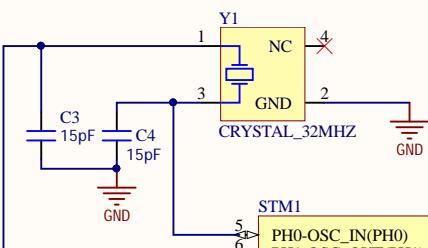
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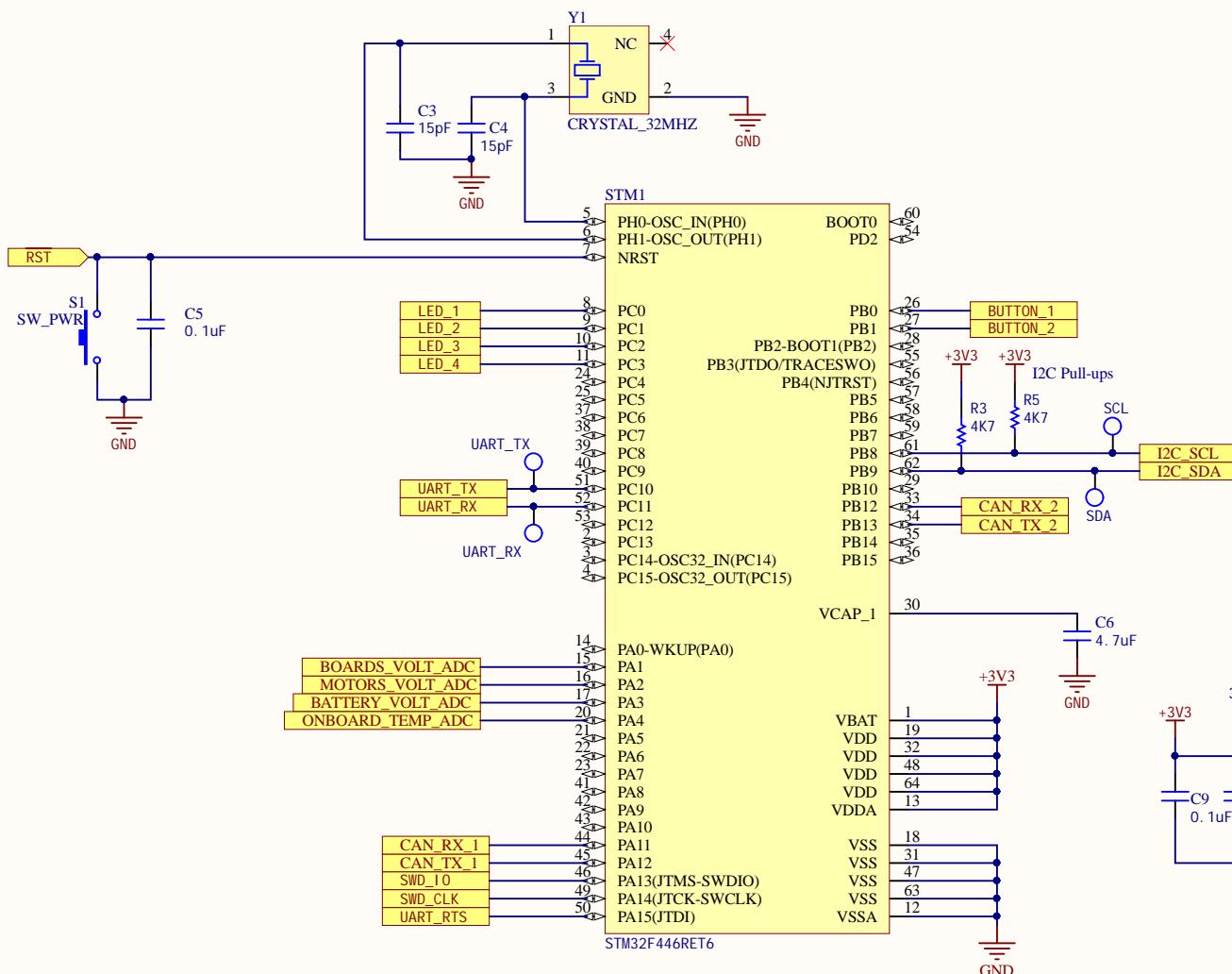
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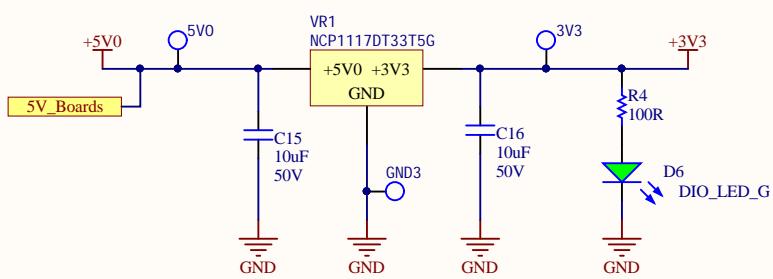
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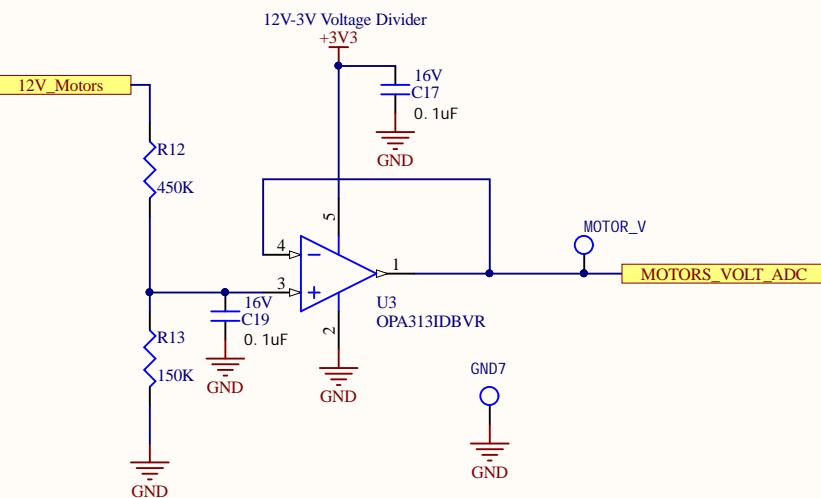
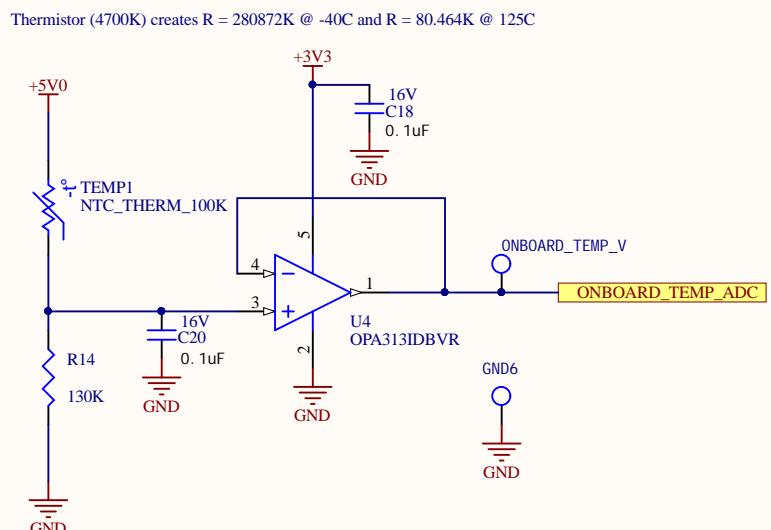
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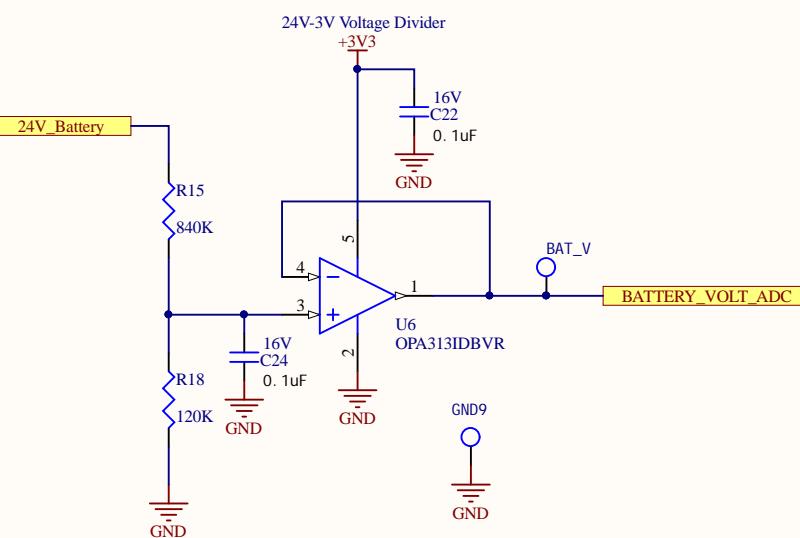
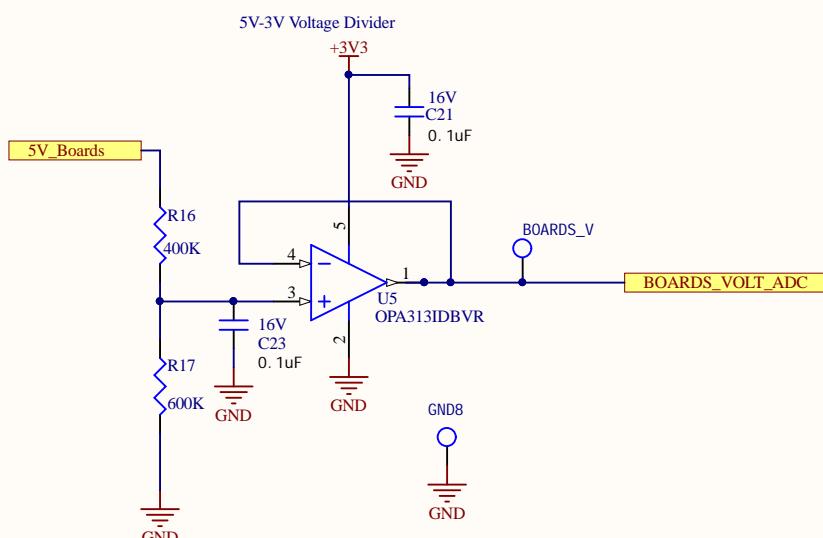


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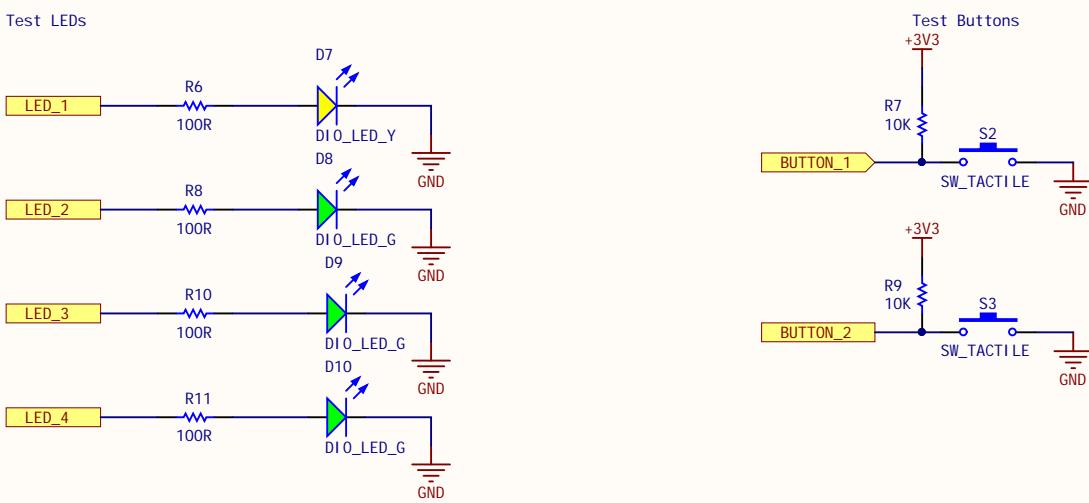


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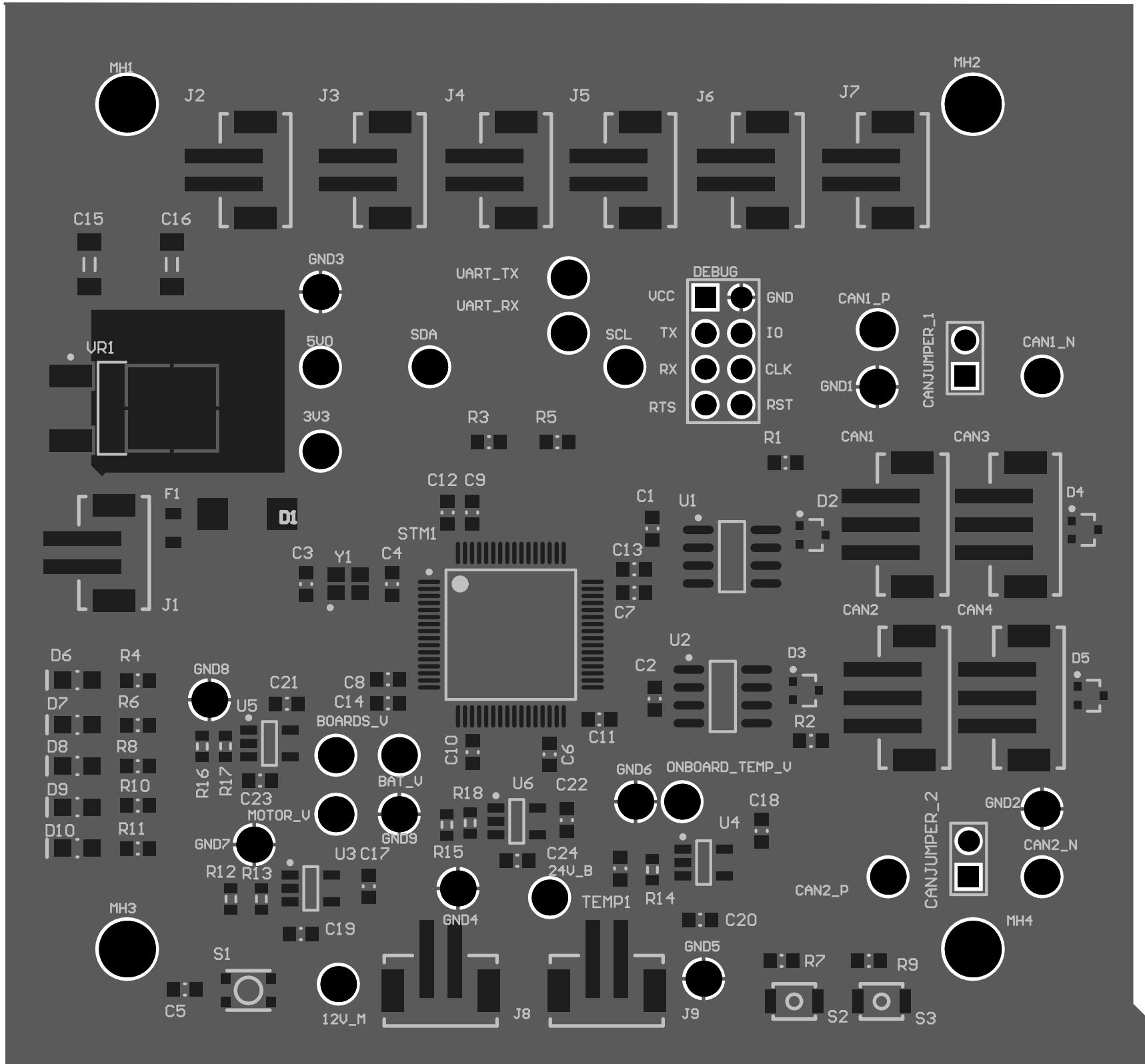
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Title Support		UW Robotics 200 University Avenue Waterloo Ontario Canada N2L 3G6	UW ROBOTICS TEAM
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Comment	Description	Designator	Footprint	LibRef
3v3	Loop testpoint through	3V3	TESTPOINT_LOOP	TESTPOINT_LOOP
5V0	Loop testpoint through	5V0	TESTPOINT_LOOP	TESTPOINT_LOOP
TESTPOINT_LOOP	Loop testpoint through	12V_M, 24V_B, BAT_	TESTPOINT_LOOP	TESTPOINT_LOOP
	CAP CER 0.1uF 16V	X C1, C2, C17, C18, C19	CAPC0603(1608)_55_N	CAP_0.1uF_16V_0603
CAP_15pF_0603	CAP CER 15PF 250V	N C3, C4	CAPC0603(1608)_55_N	CAP_15pF_0603
CAP_0.1uF_16V_0603	CAP CER 0.1uF 16V	X C5, C7, C9, C10, C11,	CAPC0603(1608)_55_N	CAP_0.1uF_16V_0603
CAP_4.7uF_0603	CAP CER 4.7uF 6.3V	X C6, C12	CAPC0603(1608)_55_N	CAP_4.7uF_0603
CAP_1uF_16V_0603	CAP CER 1uF 16V	Y Y5 C8	CAPC0603(1608)_55_N	CAP_1uF_16V_0603
CAP_10nF_0603	CAP CER 10000PF 16	C14	CAPC0603(1608)_55_N	CAP_10nF_0603
10uF	CAP CER 10uF 50V	X C15, C16	CAPC1206(3216)	CAP_10uF_50V_1206
CON_3M_SM4		CAN1, CAN2, CAN3,	JST-B3B-SM4-TB	CON_3M_SM4
ESTPOINT_LOOP	Loop testpoint through	CAN1_N, CAN1_P, CA	TESTPOINT_LOOP	TESTPOINT_LOOP
JUMPER_2	HEADER 2X1	CANJUMPER_1, CANJ	HDR1X2	JUMPER_2
TVS_DIODE_BIDIRED	TVS DIODE 5V 9.2V	D D1	TVS_DIODE_BIDIRED	TVS_DIODE_BIDIRED
TVS_DIODE_CAN	TVS DIODE 24V 41V	D2, D3, D4, D5	NXP-SOT323-3	TVS_DIODE_CAN
DIO_LED_G	LED GREEN DIFFUSE	D6, D8, D9, D10	LED_0805_LINE	DIO_LED_G
DIO_LED_Y	LED YELLOW DIFFUSE	D7	LED_0805_LINE	DIO_LED_Y
HEADER_4X2	Header, 4-Pin Dual row	DEBUG	HEADER_2X4	HEADER_4X2
FUSE_2A_0603	FUSE SMD 2A 32V	F1	FUSE_0603	FUSE_2A_0603
GND	Loop testpoint through	GND1, GND2, GND3,	TESTPOINT_LOOP	TESTPOINT_LOOP
CON_2M_SM4		J1, J2, J3, J4, J5, J6,	JST-B2B-SM4-TB	CON_2M_SM4
	RES SMD 120 OHM 5%	R1, R2	RESC0603(1608)_N	RES_120R_0603
RES_4K7_0603	RES SMD 4.7K OHM 5%	R3, R5	RESC0603(1608)_N	RES_4K7_0603
RES_100R_0603	RES SMD 100 OHM 1%	R4, R6, R8, R10, R11	RESC0603(1608)_N	RES_100R_0603
RES_10K_0603	RES SMD 10K OHM 5%	R7, R9	RESC0603(1608)_N	RES_10K_0603
Res3	Resistor	R12, R13, R14, R15, R	J1-0603	Res3
SW_PWR	Power Switch (Red)	S1	PTS830GM140	SW_PWR
SW_TACTILE	Tactile Switch (Grey)	S2, S3	B3U-1100P	SW_TACTILE
STM32F446RET6	ARM Cortex-M4 32-bit	STM1	STM-LQFP64_L	MCU_STM32F446RET
NTC_THERM_100K	Therm NTC 100Kohm	TEMP1	RESC0603(1608)_N	NTC_THERM_100K
IC_TDRVX_CAN	IC_TDRVX_CAN 4MBPS	U1, U2	LT_S8_N	LTC2875