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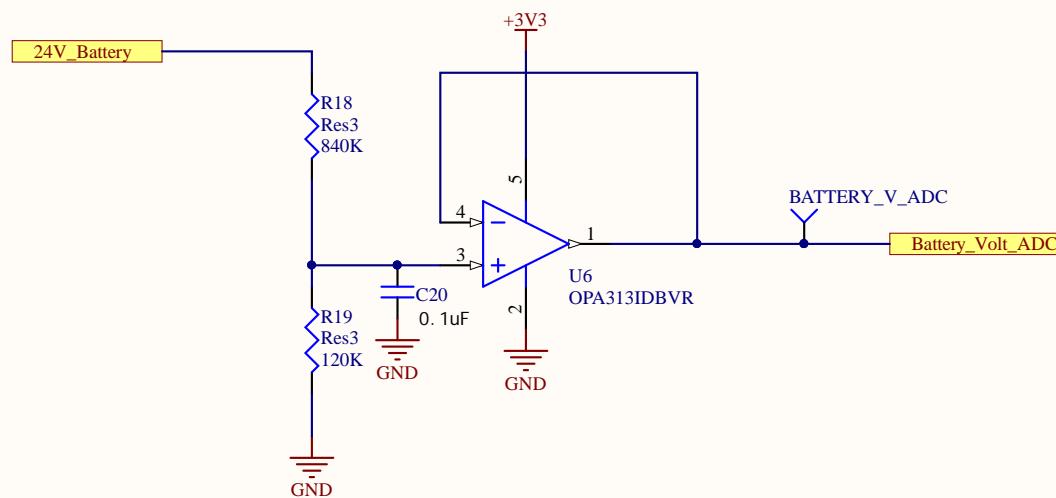
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24V-3V Voltage Divider



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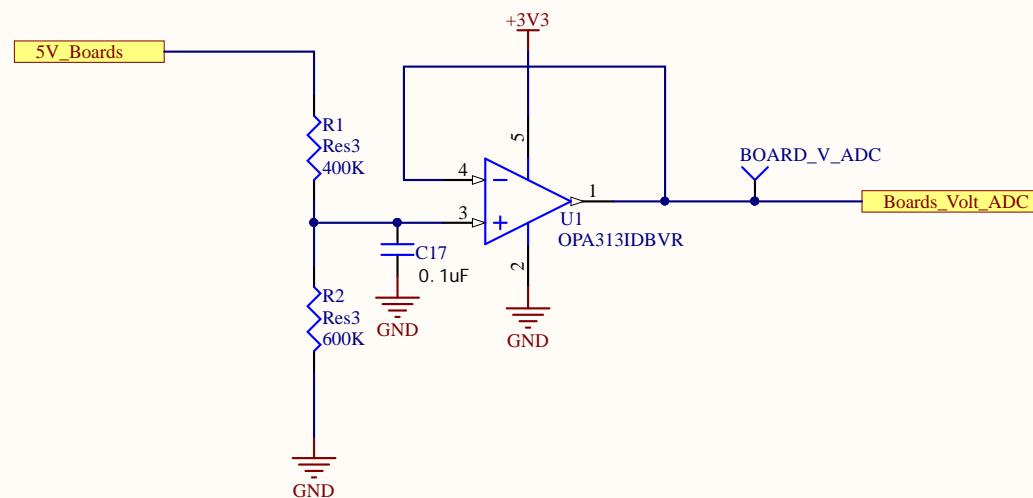
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5V-3V Voltage Divider



Title

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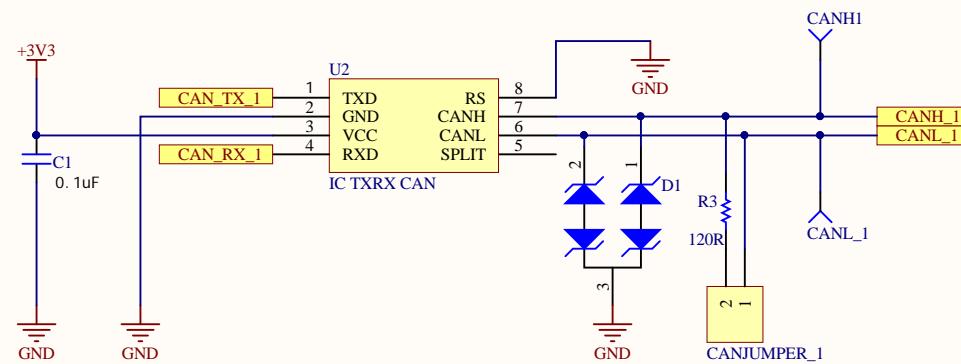
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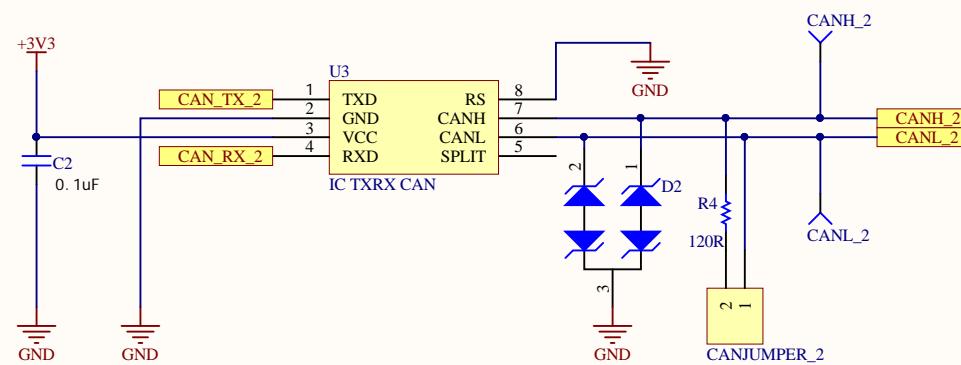
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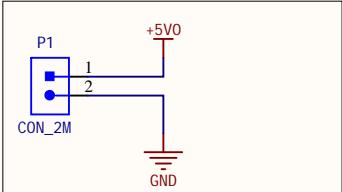


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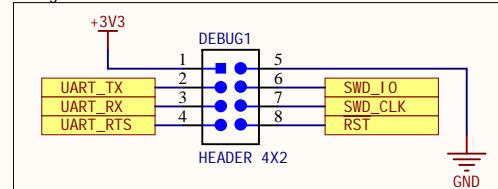
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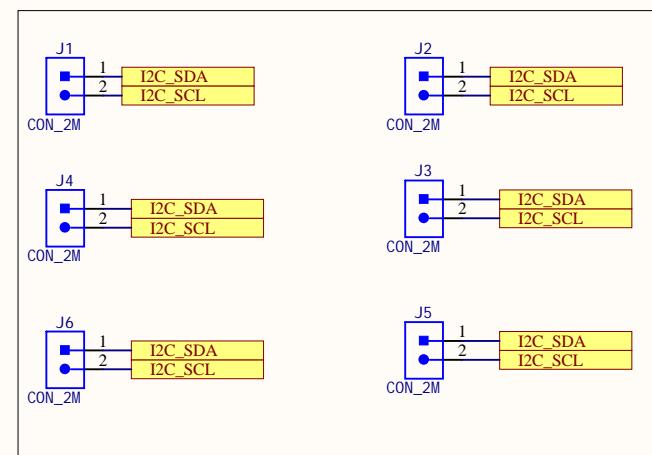
Power Connectors



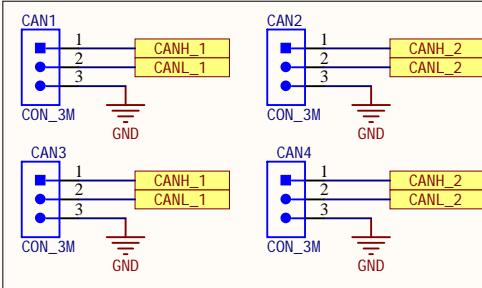
Debug Connector



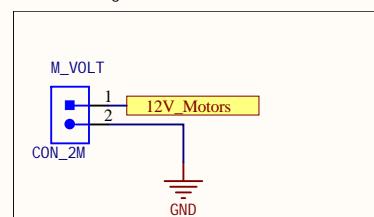
I2C Current Sensors



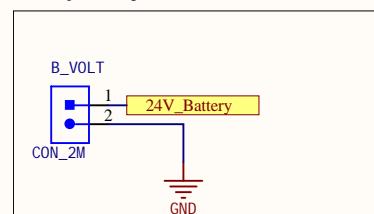
CAN Connections



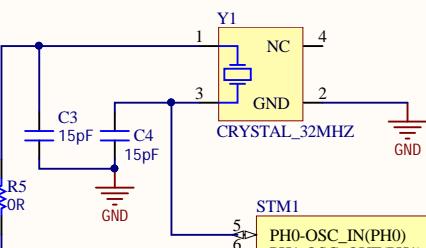
Motor Voltage Sensors



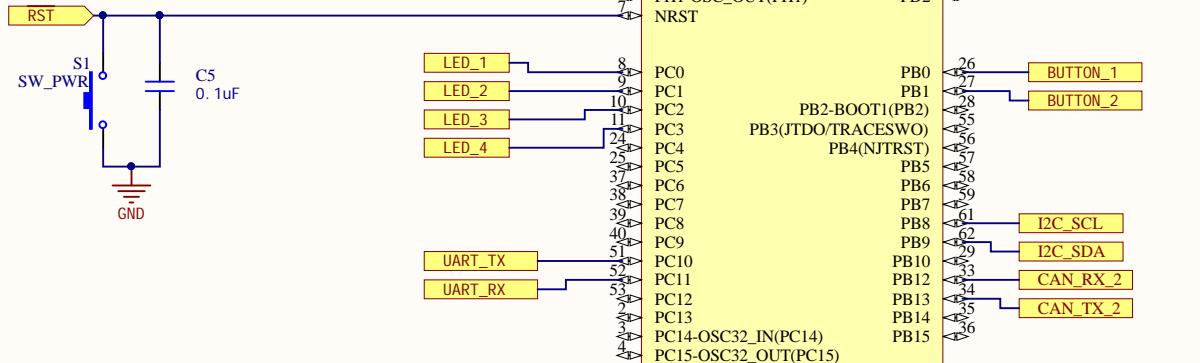
Battery Voltage Sensors



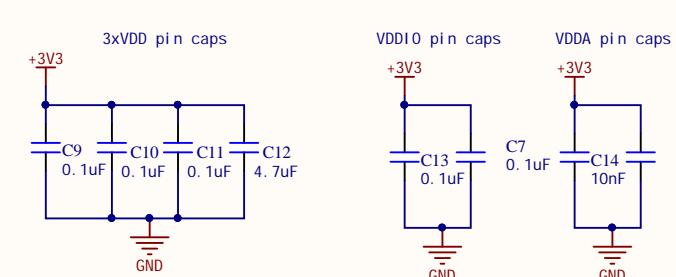
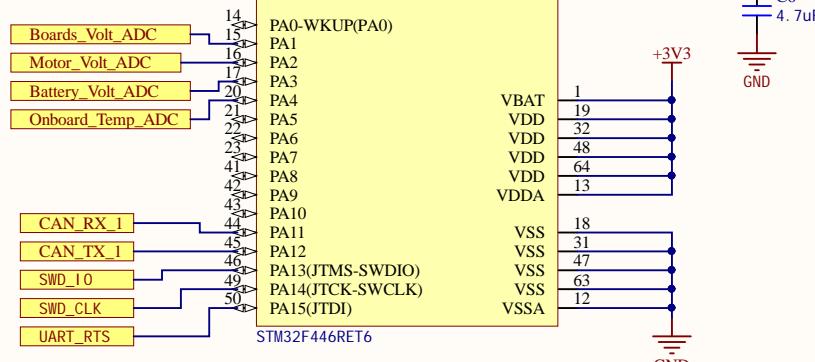
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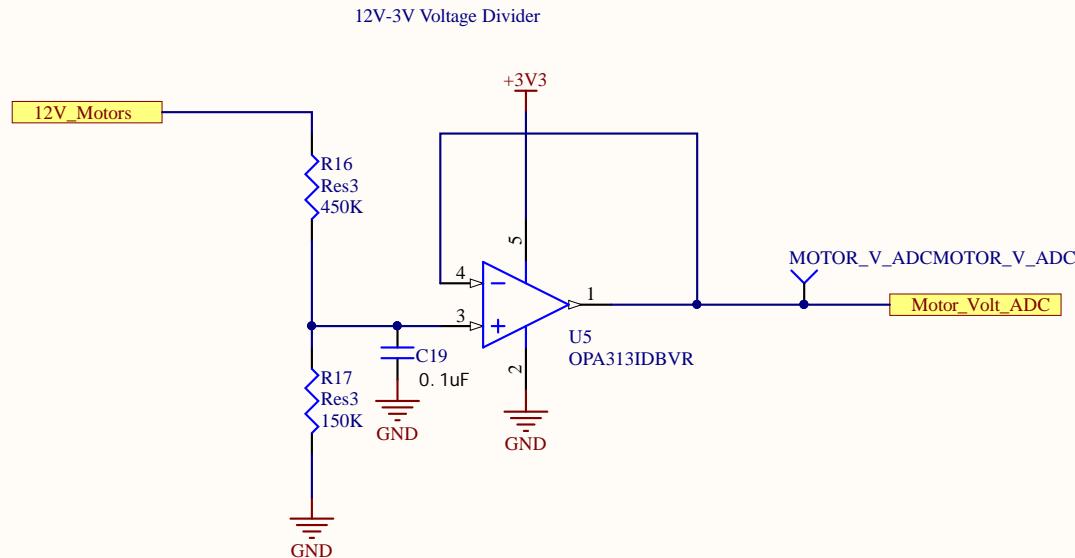
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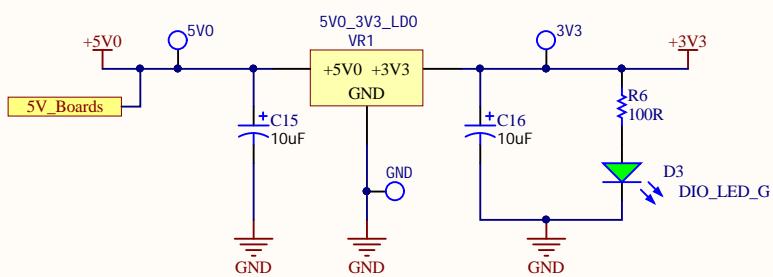
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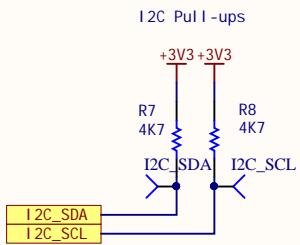
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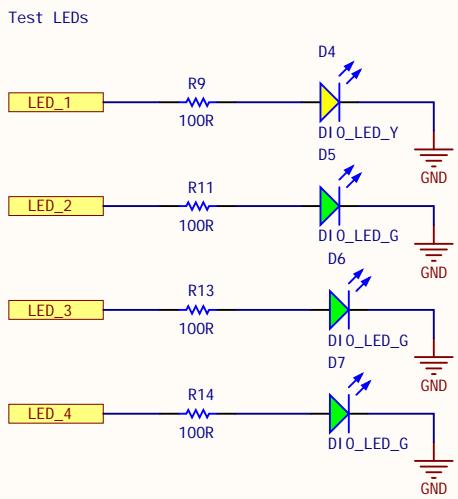
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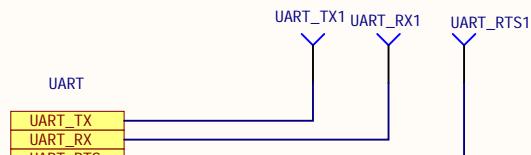
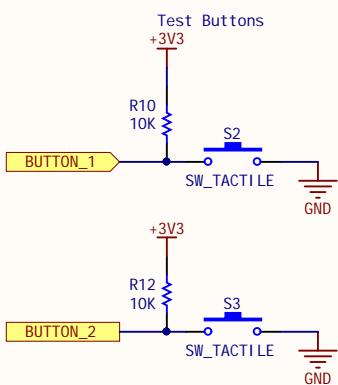
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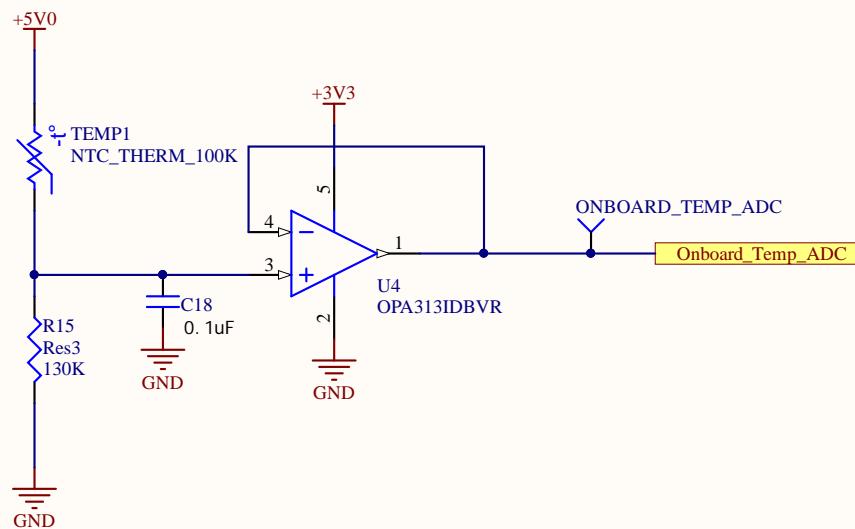
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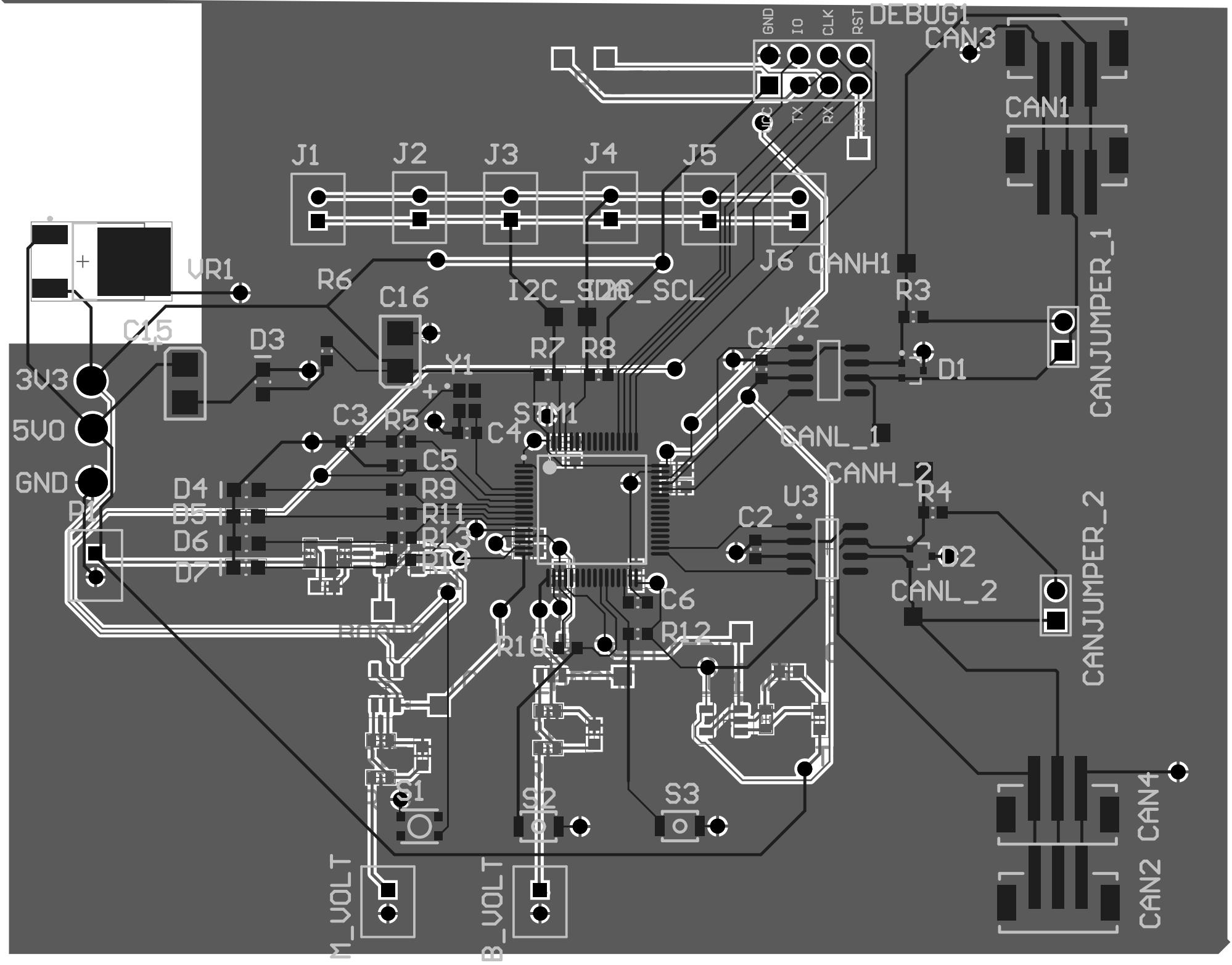
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Thermistor (4700K) creates R = 280872K @ -40C and R = 80.464K @ 125C



Title		
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Comment	Description	Designator	Footprint	LibRef	Qua
3v3	Loop testpoint through 3V3	TESTPOINT_LOOP	TESTPOINT_LOOP		
5V0	Loop testpoint through 5V0	TESTPOINT_LOOP	TESTPOINT_LOOP		
CON_2M	B_VOLT, J1, J2, J3,	JST-B2B-PHSK	CON_2M		
BATTERY_V_ADC	TESTPOINT_SMD	BATTERY_V_ADC	TESTPOINT	TESTPOINT_SMD	
BOARD_V_ADC	TESTPOINT_SMD	BOARD_V_ADC	TESTPOINT	TESTPOINT_SMD	
CAP_0.1uF_16V_0603	CAP CER 0.1uF 16V	C1, C2, C17, C18, C1	CAPC0603(1608)55	CAP_0.1uF_16V_0603	
CAP_15pF_0603	CAP CER 15PF 250V	C3, C4	CAPC0603(1608)55	CAP_15pF_0603	
CAP_0.1uF_16V_060	CAP CER 0.1uF 16V	C5, C7, C9, C10, C11	CAPC0603(1608)55	CAP_0.1uF_16V_060	
CAP_4.7uF_0603	CAP CER 4.7uF 6.3V	C6, C12	CAPC0603(1608)55	CAP_4.7uF_0603	
CAP_1uF_16V_0603	CAP CER 1uF 16V	Y5	CAPC0603(1608)55	CAP_1uF_16V_0603	
CAP_10nF_0603	CAP CER 10000PF	16	C14	CAPC0603(1608)55	CAP_10nF_0603
CAP_10uF_1411_POL	CAP TANT 10uF 20%	C15, C16	AVX-CAPC3528 V	CAP_10uF_1411_POL	
CON_3M		CAN1, CAN2, CAN3, CAN4	JST-B3B-SM4-TB	CON_3M	
CANH_1	TESTPOINT_SMD	CANH1	TESTPOINT	TESTPOINT_SMD	
CANH_2	TESTPOINT_SMD	CANH_2	TESTPOINT	TESTPOINT_SMD	
Header_2	Header, 2-Pin	CANJUMPER_1, CANL	HDR1X2	Header_2	
CANL_1	TESTPOINT_SMD	CANL_1	TESTPOINT	TESTPOINT_SMD	
CANL_2	TESTPOINT_SMD	CANL_2	TESTPOINT	TESTPOINT_SMD	
	TVS DIODE 24V 41V	D1, D2	NXP-SOT323-3	TVS_DIODE_CAN	
DIO_LED_G	LED GREEN DIFFUSE	D3, D5, D6, D7	LED_0805_LINE	DIO_LED_G	
DIO_LED_Y	LED YELLOW DIFFUSE	D4	LED_0805_LINE	DIO_LED_Y	
HEADER_4X2	Header, 4-Pin Dual row	DEBUG1	HEADER_2X4	HEADER_4X2	
GND	Loop testpoint through GND	GND	TESTPOINT_LOOP	TESTPOINT_LOOP	
I2C_SCL	TESTPOINT_SMD	I2C_SCL	TESTPOINT	TESTPOINT_SMD	
I2C_SDA	TESTPOINT_SMD	I2C_SDA	TESTPOINT	TESTPOINT_SMD	
MOTOR_V_ADC	TESTPOINT_SMD	MOTOR_V_ADCMOT	TESTPOINT	TESTPOINT_SMD	
ONBOARD_TEMP_AD	TESTPOINT_SMD	ONBOARD_TEMP_AD	TESTPOINT	TESTPOINT_SMD	
Res3	Resistor	R1, R2, R15, R16, R17	J1-0603	Res3	
	RES SMD 120 OHM 5%	R3, R4	RESC0603(1608)_N	RES_120R_0603	
RES_OR_0603	RES SMD 0 OHM JUMPER	R5	RESC0603(1608)_N	RES_OR_0603	
RES_100R_0603	RES SMD 100 OHM 1%	R6, R9, R11, R13, R1	RESC0603(1608)_N	RES_100R_0603	
RES_4K7_0603	RES SMD 4.7K OHM 5%	R7, R8	RESC0603(1608)_N	RES_4K7_0603	
RES_10K_0603	RES SMD 10K OHM 5%	R10, R12	RESC0603(1608)_N	RES_10K_0603	
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-LOP64_L	MCU_STM32F446RET6	
NTC_THERM_100K	Therm NTC 100Kohm	TEMP1	RESC0603(1608)_N	NTC_THERM_100K	
OPA313IDBVR	1-MHz, Micropower	U1, U4, U5, U6	DBV0005A_M	OPAMP	