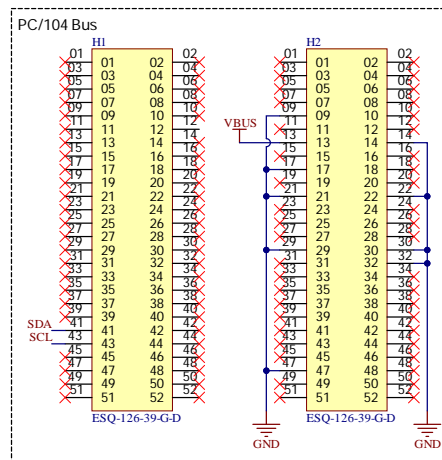
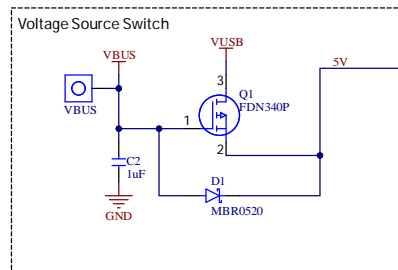
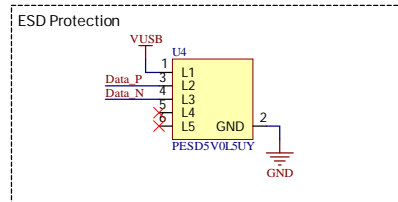
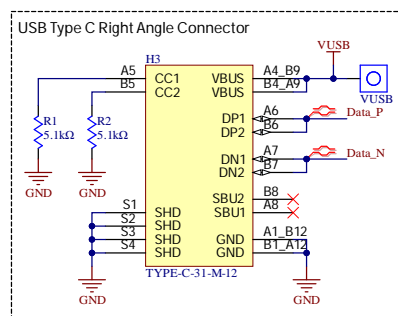
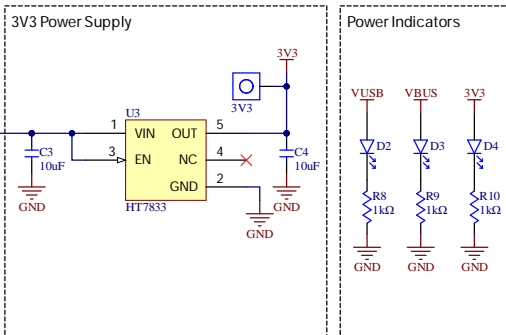
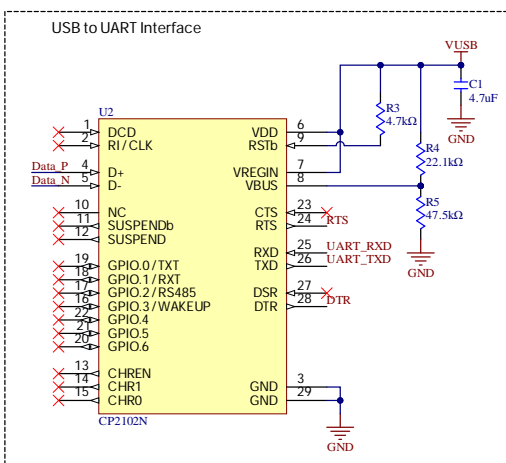


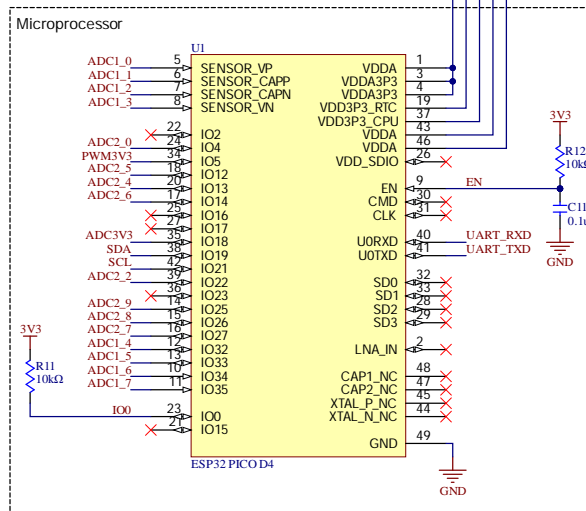
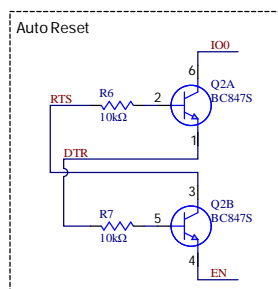
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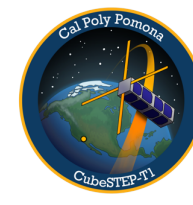
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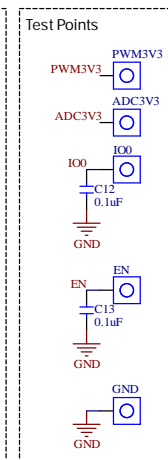
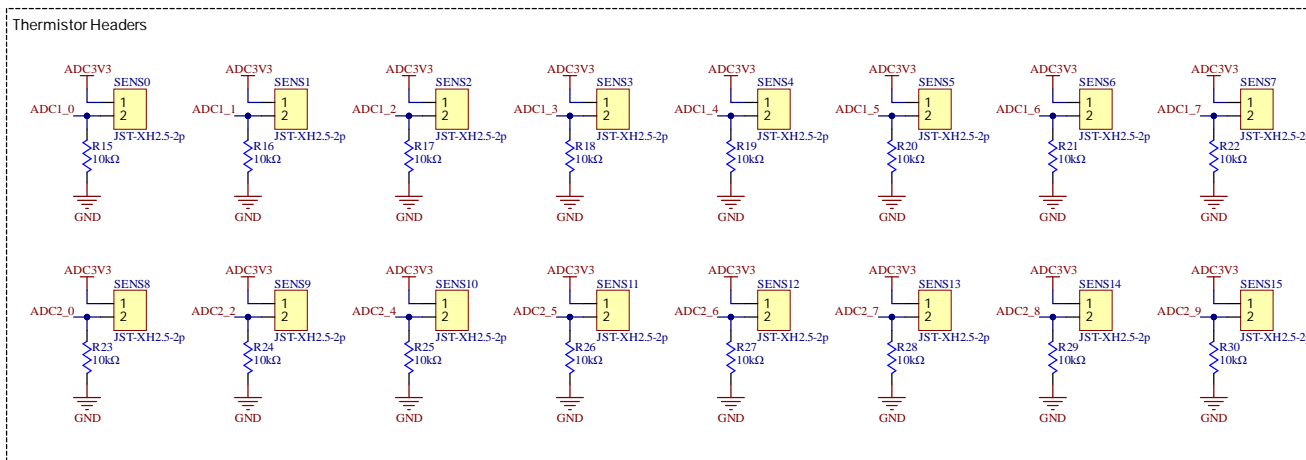
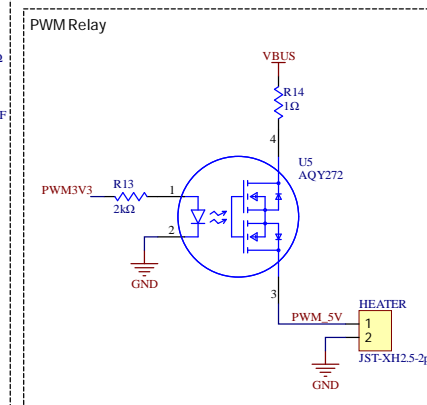
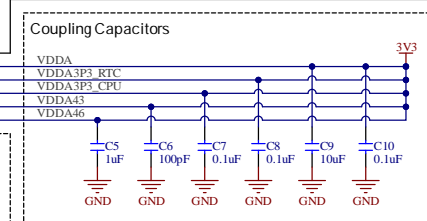


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CubeSat Technology Exploration Project
California State Polytechnic University, Pomona

Designed to be used as an interface for the OBC's 16 temperature sensors and heating cartridge. See the accompanying firmware and its documentation for more information: [GitHub \(23navin/CubeSTEP-payload-firmware\)](#)

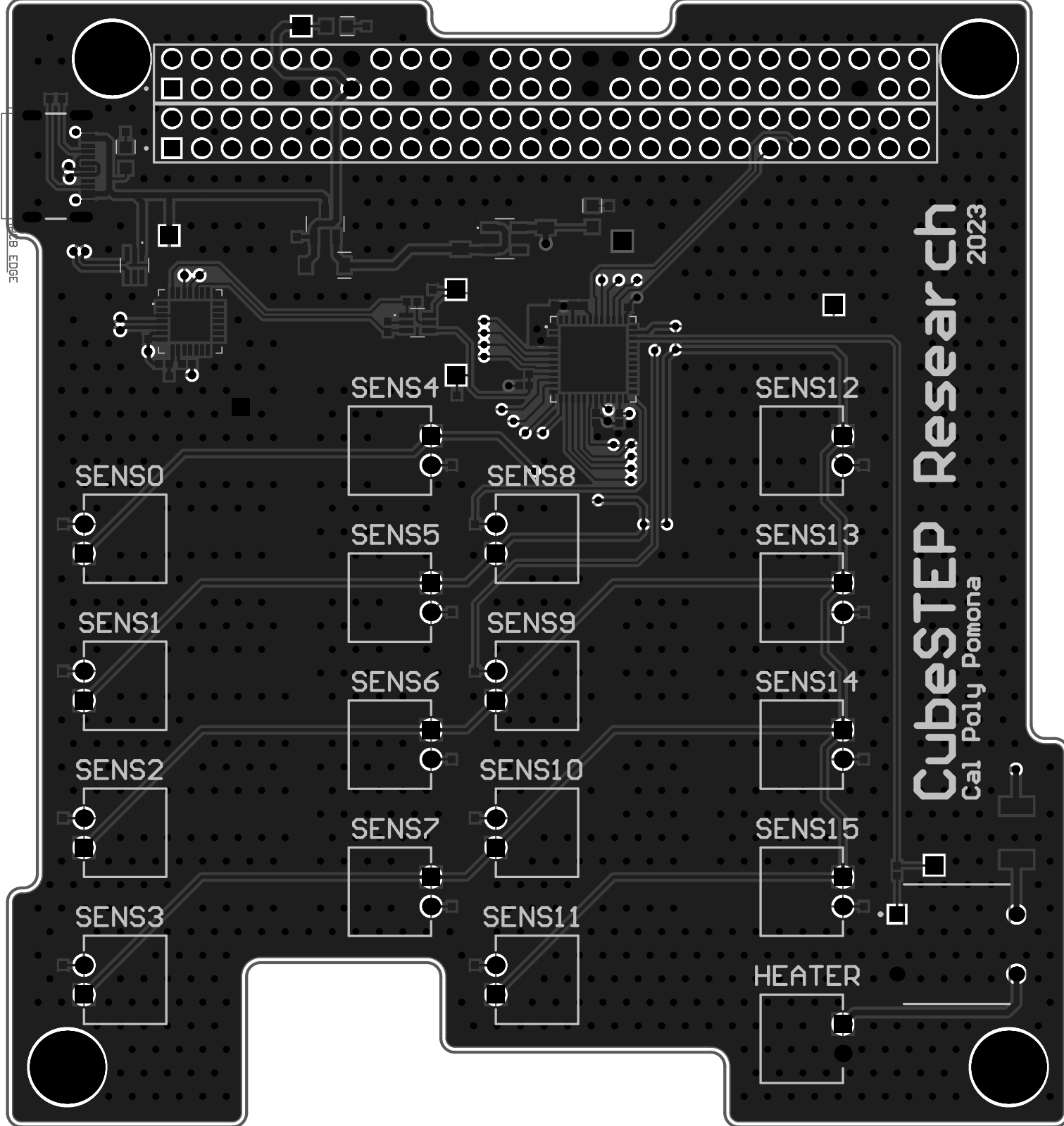


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CubeSTEP Research
Cal Poly Pomona 2023

Name	Designator	Footprint	JLCPCB Part #
Test Point	3V3, ADC3V3, EN, GND, IO0, PWM3V3, VBUS, VUSB	Test Point-Footprint-1	
4.7uF	C1	0402_Capacitor	C697614
1uF	C2, C5	0402_Capacitor	C77006
10uF	C3, C4, C9	0805_Capacitor_Murata	C162317
100pF	C6	0402_Capacitor	C541374
0.1uF	C7, C8, C10, C11, C12, C13	0402_Capacitor	C344190
MBR0520	D1	SOD-123_Diode_Onsemi	C475717
NCD0603R2	D2, D3, D4	0603_LED	C90692
ESQ-126-39-G-D	H1, H2	ESQ-126-39-G-D	
TYPE-C-31-M-12	H3	TYPE-C-31-M-12-Footprint-1	C165948
JST-XH2.5-2p	HEATER, SENS0, SENS1, SENS2, SENS3, SENS4, SENS5, SENS6, SENS7, SENS8, SENS9, SENS10, SENS11, SENS12, SENS13, SENS14, SENS15	2.5_2p_Header	C132479
FDN340P	Q1	SOT-23	C347510
BC847S	Q2	SC-70-6(SOT-363)	C148112
5.1kΩ	R1, R2	0402_Resistor	C423276
4.7kΩ	R3	0402_Resistor	C105871
22.1kΩ	R4	0402_Resistor	C163478
47.5kΩ	R5	0402_Resistor	C137974
10kΩ	R6, R7, R11, R12, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30	0402_Resistor	C258091
1kΩ	R8, R9, R10	0402_Resistor	C106235
2kΩ	R13	0402_Resistor	C100291
1Ω	R14	2010_Resistor	C137062
ESP32 PICO D4	U1	QFN-48-EP(7x7)	C193707
CP2102N	U2	QFN-28-EP(5x5)	C964632
HT7833	U3	SOT-23-5	C3011187
PESD5VOL5UY	U4	SOT-363	C2831528
AQY272	U5	DIP4_AQY272_Panasonic	C62652