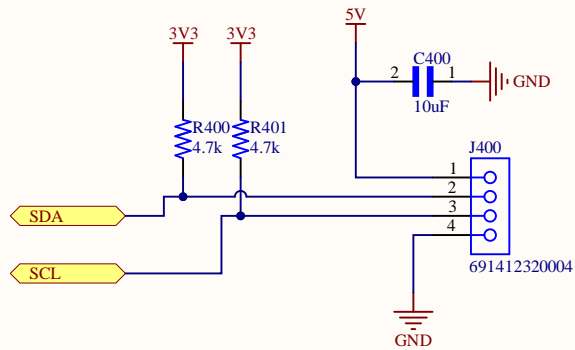
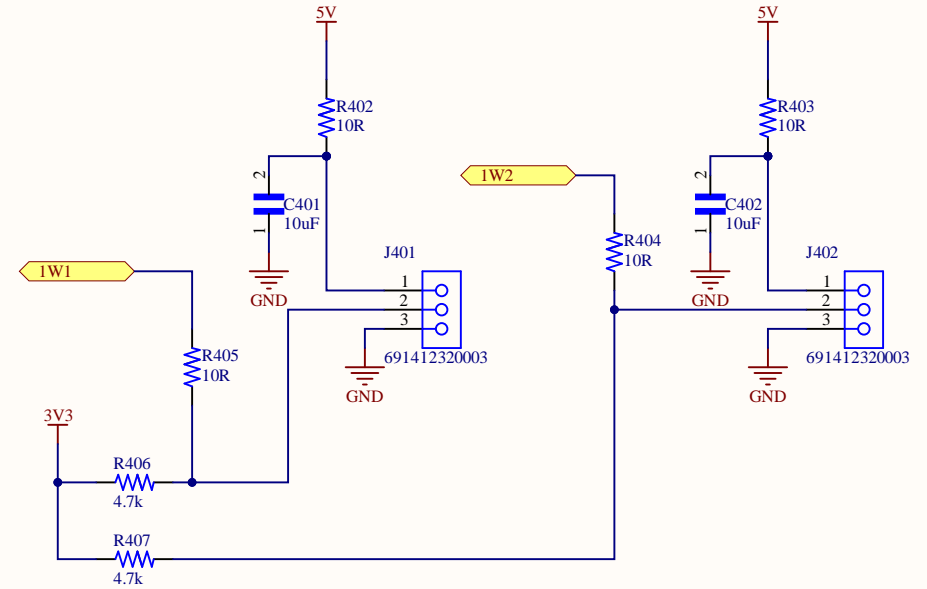


Title <i>RV Essential: Relay Channel</i>			* * * *	Made available under the CERN OHL v1.2 blueacro.com github.com/blueacro
Size: A4	Number: 1	Revision: A		
Date: 7/30/2023	Time: 5:35:06 PM	Sheet 2 of 5		
File: rv_pwr_es_relay.SchDoc				
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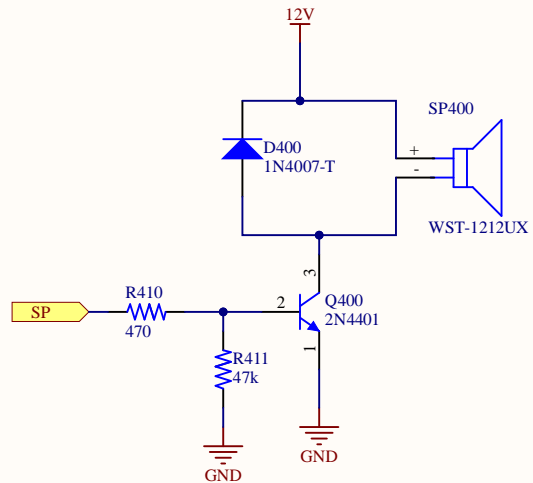
I2C Connector



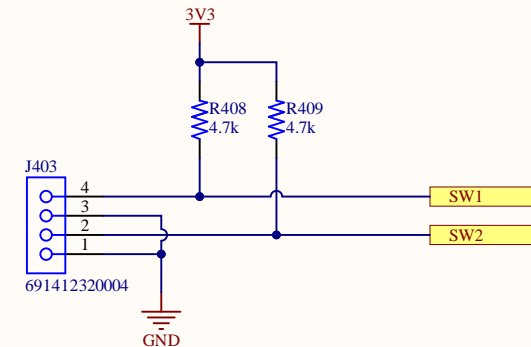
1Wire Ports



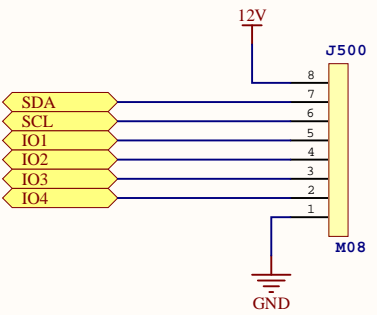
Sensor



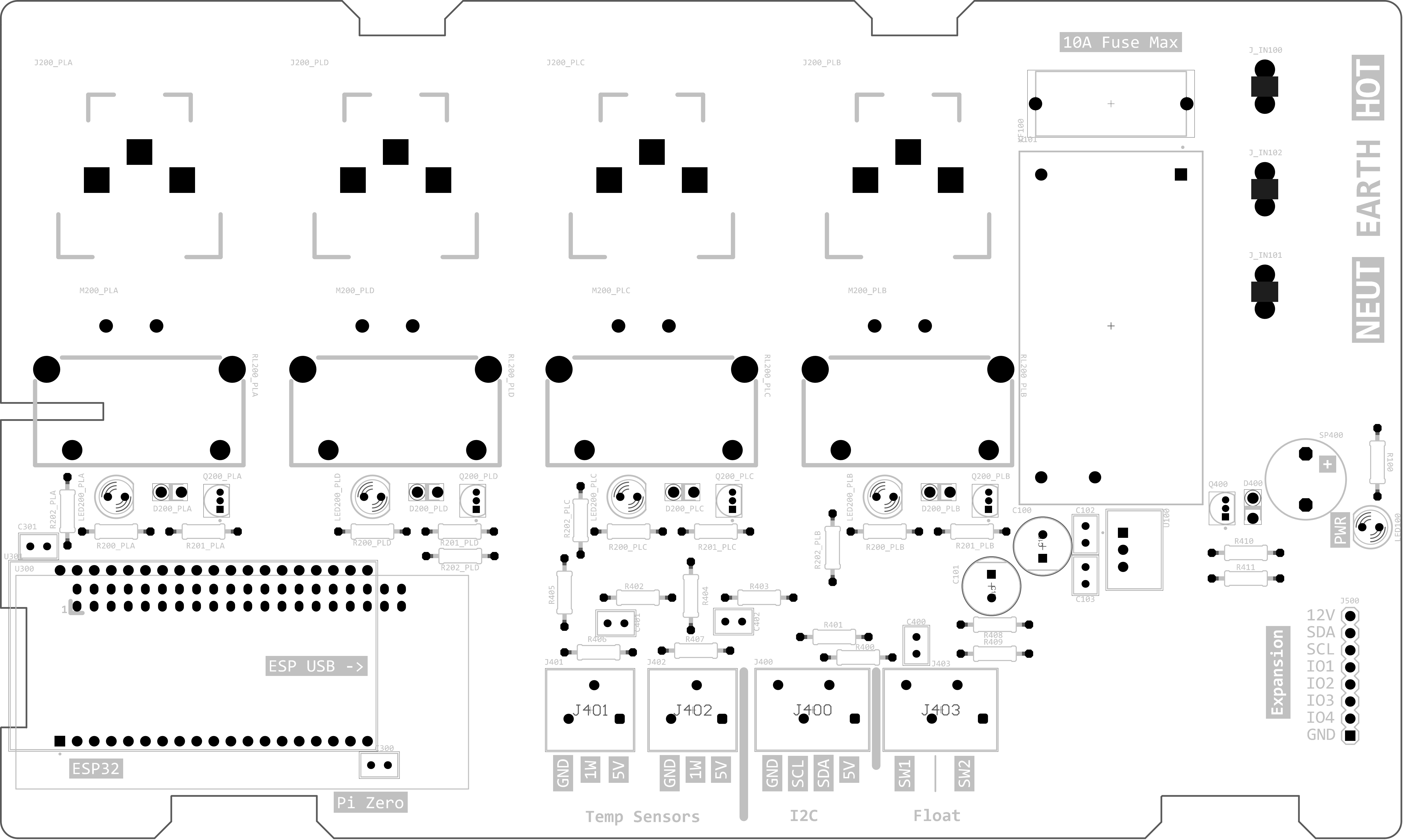
Switch Input

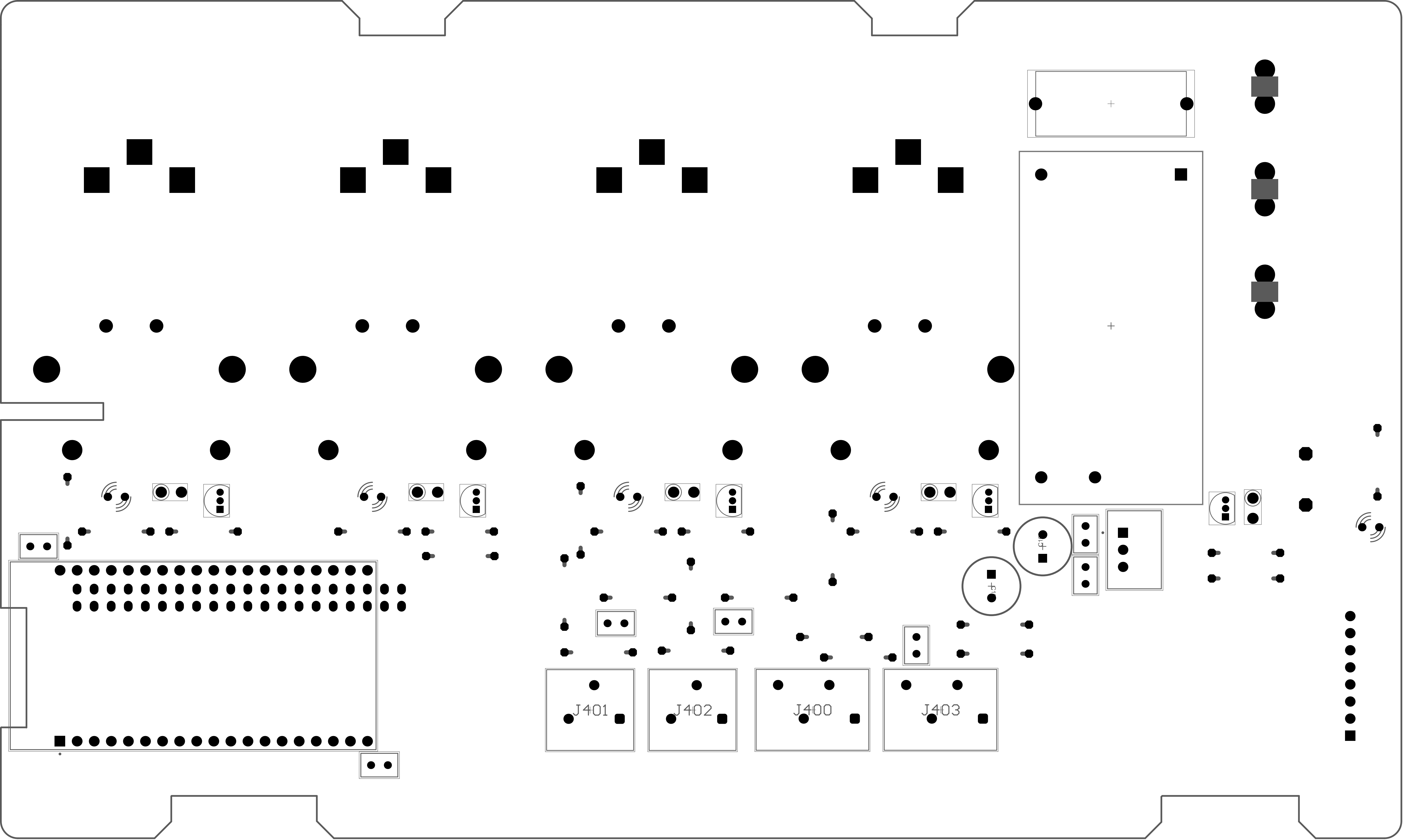
Title ***RV Essential: Sensors and IO***Size: **A4**Number: **4**Revision: **A**Date: **7/30/2023**Time: **5:35:06 PM** Sheet **4** of **5**File: **rv_pwr_es_sensor.SchDoc***
*
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Title <i>RV Essential: Expansion</i>			* * * * *	Made available under the CERN OHL v2.0 blueacro.com github.com/blueacro
Size: A4	Number: 1	Revision: A		
Date: 7/30/2023	Time: 5:35:07 PM	Sheet 5 of 5		
File: rv_pwr_addon.SchDoc				
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Line #	Name	Description	Designator	Quantity	Manufacturer 1	Manufacturer Part Number 1	Manufacturer Lifecycle 1	Supplier 1	Supplier Part Number 1	Supplier Unit Price 1	Supplier Subtotal 1
	CAP 100uF 25V Aluminum 8mm Through Hole	Cap Aluminum 100uF 25V 20% (8 X 11.5mm) Radial 3.5mm 500mA 2000 hr 125°C Bulk	C100, C101	2	Panasonic	EEUTA1E101	Volume Production	Digi-Key	P19501-ND	0.91	1.82
	CAP 10uF 25V TH X7R	FG Series 10 uF 25 V ±10% Tolerance X7R Radial Multilayer Ceramic Capacitor	C102, C103, C300, C301, C400, C401, C402	7	TDK	FG16X7R1E106KRT06	Volume Production	Digi-Key	445-173156-1-ND	0.67	4.69
	1N4007-T	VR-1000V IF=1A 8pF	D200_PLA, D200_PLB, D200_PLC, D200_PLD, D400	5	Diodes	1N4007-T	Volume Production	Digi-Key	1N4007DICT-ND	0.2	1
	3-213598-2		I200_PLA, I200_PLB, I200_PLC, I200_PLD	4	TE Connectivity	3-213598-2	Volume Production	Digi-Key	3-213598-2-ND	2.7	10.8
	691412320004	Tb, Wire To Brd, 4Way, 16Awg Rohs Compliant: Yes Wurth Elektronik 691412320004	J400, J403	2	Wurth Electronics	691412320004	Unknown	Digi-Key	732-11129-ND	1.3	2.6
	691412320003	Tb, Wire To Brd, 3Way, 16Awg Rohs Compliant: Yes Wurth Elektronik 691412320003	J401, J402	2	Wurth Electronics	691412320003	Unknown	Digi-Key	732-11128-ND	1.39	2.78
	M08		J500	1							
	TAB_QUICKCON	Molex 0197054203	J_IN100, J_IN101, J_IN102	3	Molex	19705-4203	Volume Production	Digi-Key	WM3984CT-ND	0.14	0.42
		LED100, LED200_PLA, LED200_PLB, LED200_PLC, LED200_PLD		5	Cree	C503B-RCN-CW020AA2	Volume Production	Digi-Key	C503B-RCN-CW020AA2CT-ND	0.18	0.9
	GMOV		M200_PLA, M200_PLB, M200_PLC, M200_PLD	4	Bourns	GMOV-14D301K	Unknown	Digi-Key	GMOV-14D301K-ND	1.84	7.36
	2N4401	Transistor NPN Silicon 40V IC=600ma TO-92 Case General Purpose Amplifier And Switch	Q200_PLA, Q200_PLB, Q200_PLC, Q200_PLD, Q400	5	ON Semiconductor / Fairchild	2N4401TA	Volume Production	Digi-Key	2N4401TAF5CT-ND	0.37	1.85
	1k TH 0207 5% 0.25W	Res Carbon Film 1K Ohm 5% 1/4W - 500ppm/°C to 350ppm/°C Conformal AXL Thru-Hole Paper T/R	R100, R200_PLA, R200_PLB, R200_PLC, R200_PLD	5	Yageo	CFR-25JR-52-1K	Volume Production	Digi-Key	13-CFR-25JR-52-1KCT-ND	0.1	0.5
	470 TH 0207 5% 0.25W	Res Carbon Film 470 Ohm 5% 1/4W - 500ppm/°C to 350ppm/°C Conformal AXL Thru-Hole Paper T/R	R201_PLA, R201_PLB, R201_PLC, R201_PLD, R410	5	Yageo	CFR-25JR-52-470R	Volume Production	Digi-Key	13-CFR-25JR-52-470RCT-ND	0.1	0.5
	47k TH 0207 5% 1/4W	Res Carbon Film 47K Ohm 5% 1/4W - 500ppm/°C to 350ppm/°C Conformal AXL Thru-Hole Paper T/R	R202_PLA, R202_PLB, R202_PLC, R202_PLD, R411	5	Yageo	CFR-25JR-52-47K	Volume Production	Digi-Key	13-CFR-25JR-52-47KCT-ND	0.1	0.5
	4.7k TH 0207 5% 1/4W	Res Carbon Film 4.7K Ohm 5% 1/4W - 500ppm/°C to 350ppm/°C Conformal AXL Thru-Hole Paper T/R	R400, R401, R406, R407, R408, R409	6	Yageo	CFR-25JR-52-4K7	Volume Production	Digi-Key	13-CFR-25JR-52-4K7CT-ND	0.1	0.6
	10R TH 0207 5% 1/4W	Res Carbon Film 10 Ohm 5% 1/4W - 500ppm/°C to 350ppm/°C Conformal AXL Thru-Hole Paper T/R	R402, R403, R404, R405	4	Yageo	CFR-25JR-52-10R	Volume Production	Digi-Key	13-CFR-25JR-52-10RCT-ND	0.1	0.4
	RelaySPST		RL200_PLA, RL200_PLB, RL200_PLC, RL200_PLD	4	Omron	G6GE-1A-DC12	Unknown	Digi-Key	Z11676-ND	6.99	27.96
	WST-1212UX	Audio Magnetic Xdr 9-15V Th	SP400	1	Soberlton	WST-1212UX	Volume Production	Digi-Key	433-1049-ND	1.42	1.42
	P78E05-1000	1 A Output Current, 6-36 Vdc Input, 3 Pin SIP, Non-Isolated, Dc-Dc Converter	U100	1	CUI	P78E05-1000	Unknown	Digi-Key	102-5018-ND	3.09	3.09
	IRM-20-12	Single Output Encapsulated Type, 12 V, 1.8 A, 21.6 W, -40 to 85 degC, 4-Pin THD, RoHS	U101	1	Mean Well	IRM-20-12	Volume Production	Digi-Key	1866-3038-ND	11.05	11.05
	RPI Zero		U300	1							
	ESP32-DEVKITC-32D	WiFi Development Tools (802.11) ESP32 General Development Kit, ESP32-WROOM-32D on the board	U301	1	Espressif Systems	ESP32-DEVKITC-32E	Unknown	Digi-Key	1965-ESP32-DEVKITC-32E-ND	9.8	9.8
	696103201002	WR-FSH Fuse Holder Blocks Fuse Holder Blocks Clip Cover for PCB - THR Version	XF100	1	Wurth Electronics	696103201002	Unknown	Digi-Key	732-11372-ND	1.26	1.26