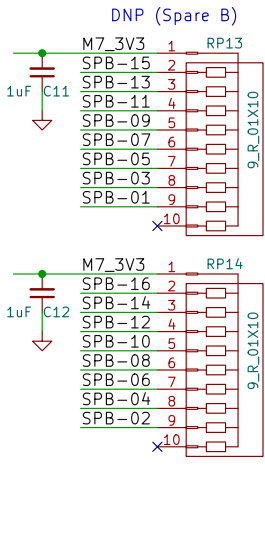
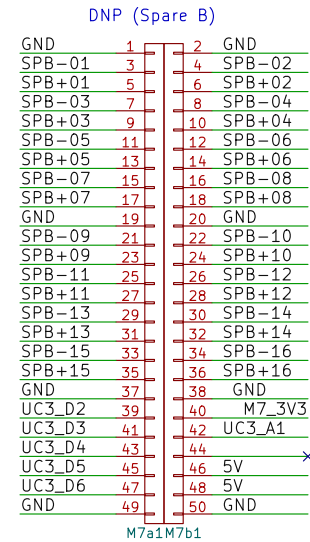
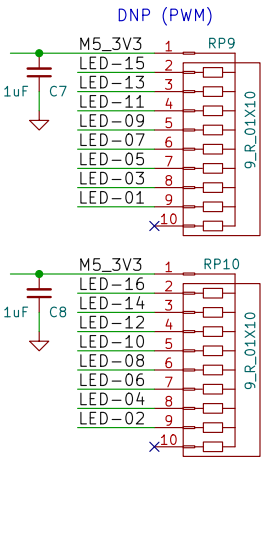
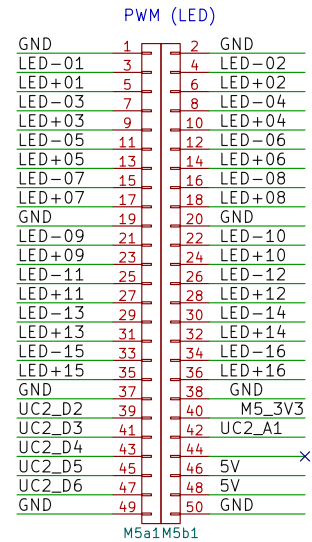
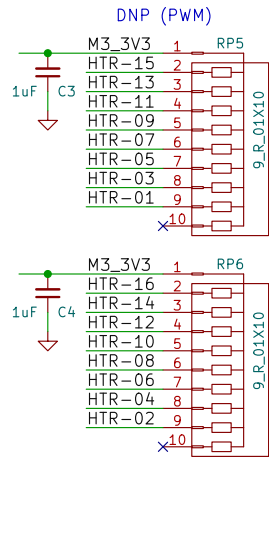
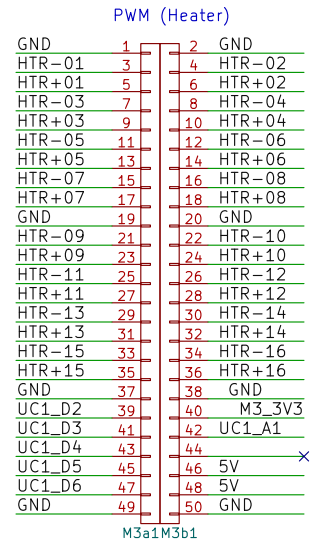
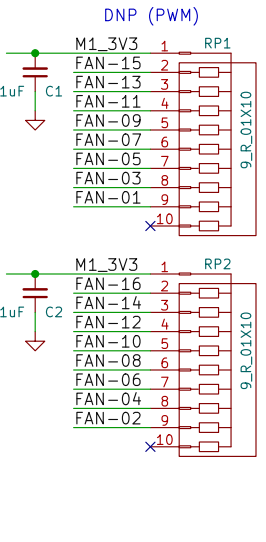
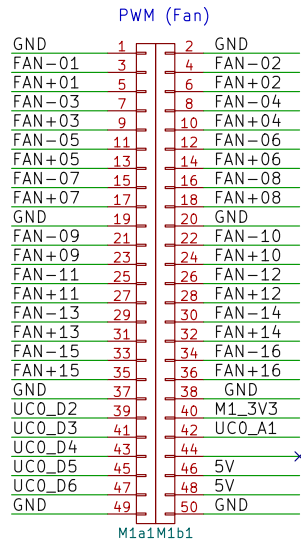
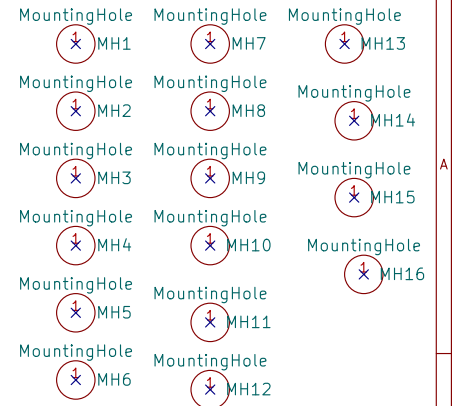
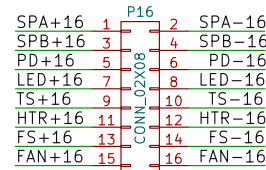
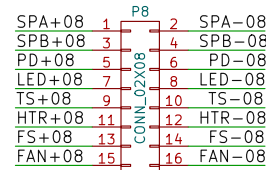
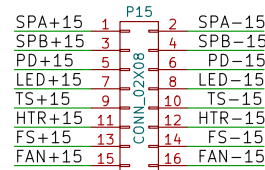
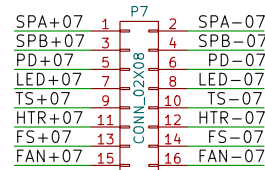
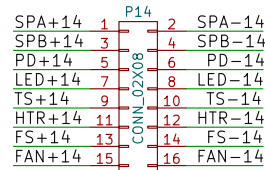
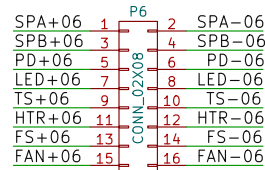
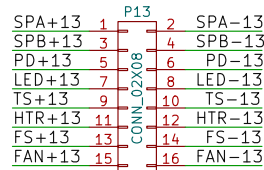
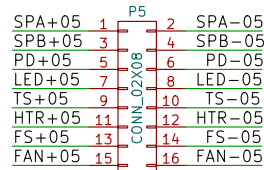
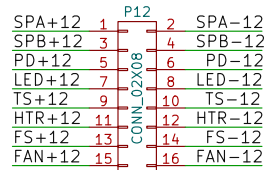
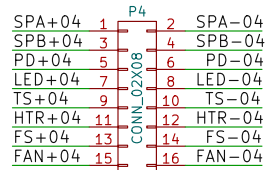
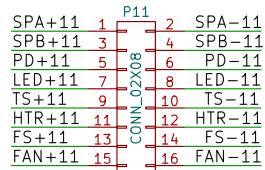
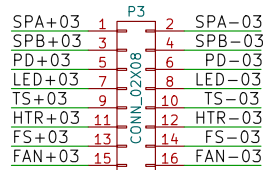
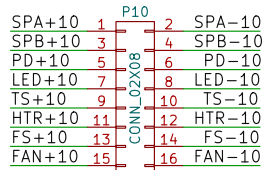
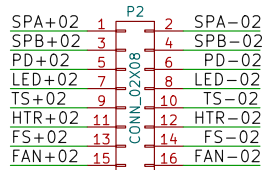
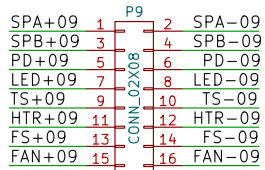
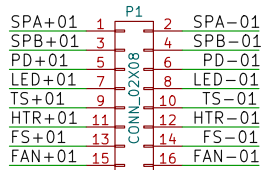
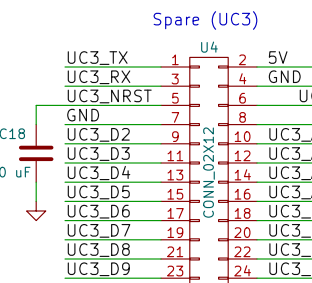
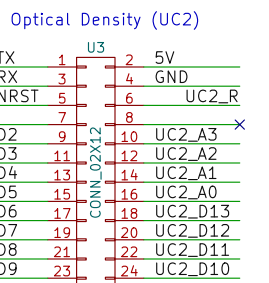
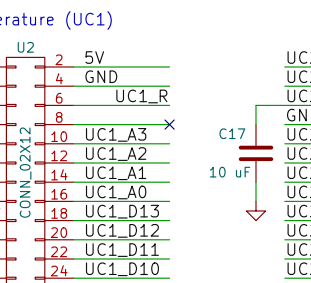
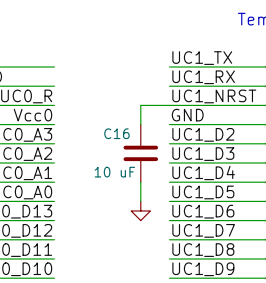
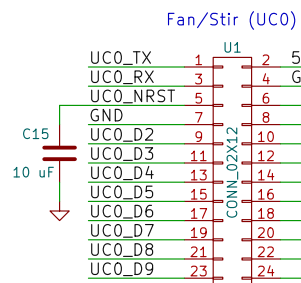
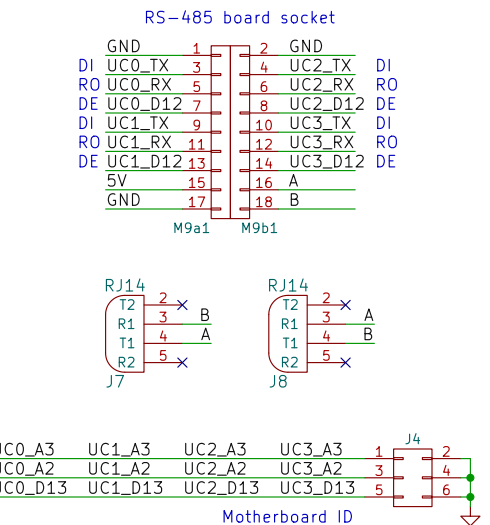
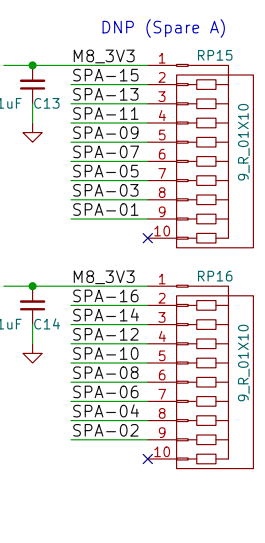
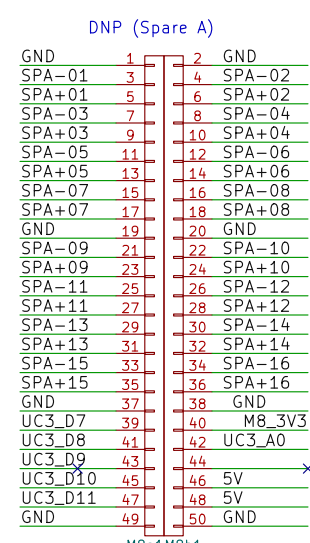
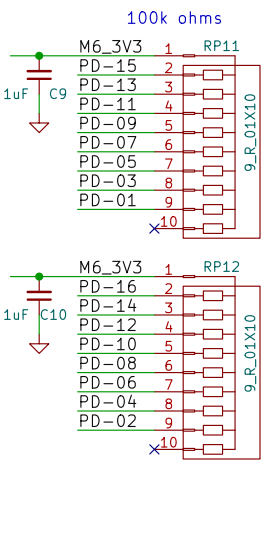
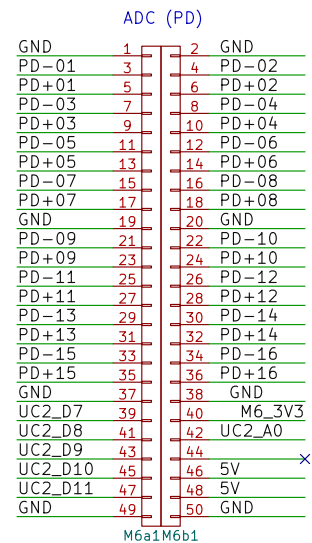
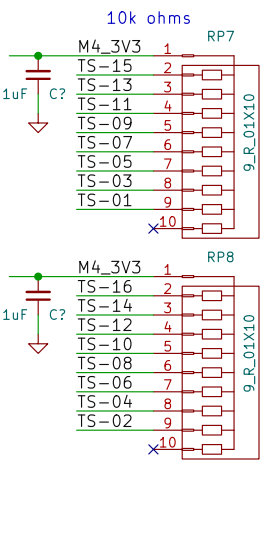
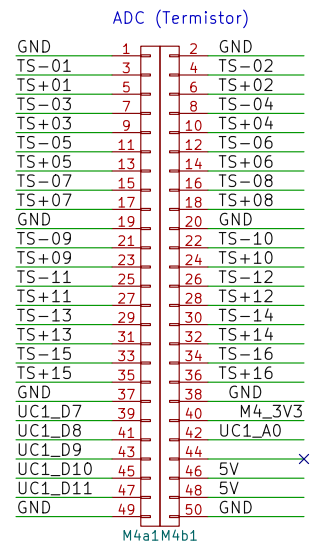
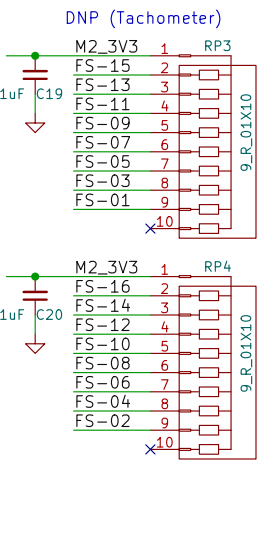
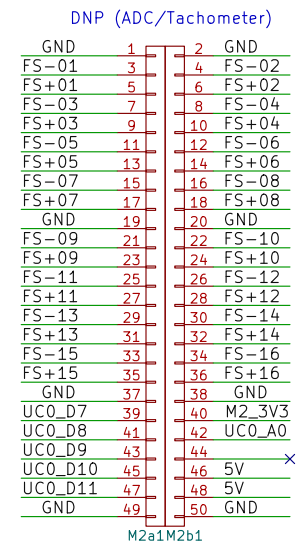


## Vial Connectors

Pin 1,2 M8 (Spare A)  
Pin 3,4 M7 (Spare B)  
Pin 5,6 M6 (Photodiode)  
Pin 7,8 M5 (LED)  
Pin 9,10 M4 (Termistor)  
Pin 11,12 M3 (Heater)  
Pin 13,14 M2 (Tachometer)  
Pin 15,16 M1 (Fan)

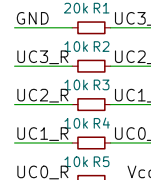


ADC	PWM	CONN	PWM	ADC
OPIN_1	GND	1	GND	GND
OPIN_2	OUT_0	3	OUT_1	OPIN_4
GND	+12V	5	+12V	GND
OPIN_5	OUT_2	7	OUT_3	OPIN_3
GND	+12V	9	+12V	GND
OPIN_6	OUT_4	11	OUT_5	OPIN_8
GND	+12V	13	+12V	GND
OPIN_9	OUT_6	15	OUT_7	OPIN_7
GND	+12V	17	+12V	GND
OPIN_10	OUT_8	19	OUT_9	OPIN_12
GND	+12V	21	+12V	GND
OPIN_13	OUT_10	23	OUT_11	OPIN_11
GND	+12V	25	+12V	GND
OPIN_14	OUT_12	27	OUT_13	OPIN_16
GND	+12V	29	+12V	GND
OPIN_15	OUT_14	31	OUT_15	OPIN_15
GND	+12V	33	+12V	GND
M_0	GSCCLK	35	x	+3V3
M_1	XLAT	37	BLANK	M_OUT
M_2	SCLK	39	x	x
M_3	SIN	41	+5V	+5V
x	SOUT	43	+5V	+5V
GND	GND	45	GND	GND



Note: The uC in this section is only connected to one socket, so many of its pins are not connected.

SAMD21	PWM	ADC
D2 D7	GSCCLK	M_0
D3 D8	XLAT	M_1
D4 D9	SCLK	M_2
D5 D10	SIN	M_3
D6 D11	SOUT	x
A1 A0	BLANK	M_OUT

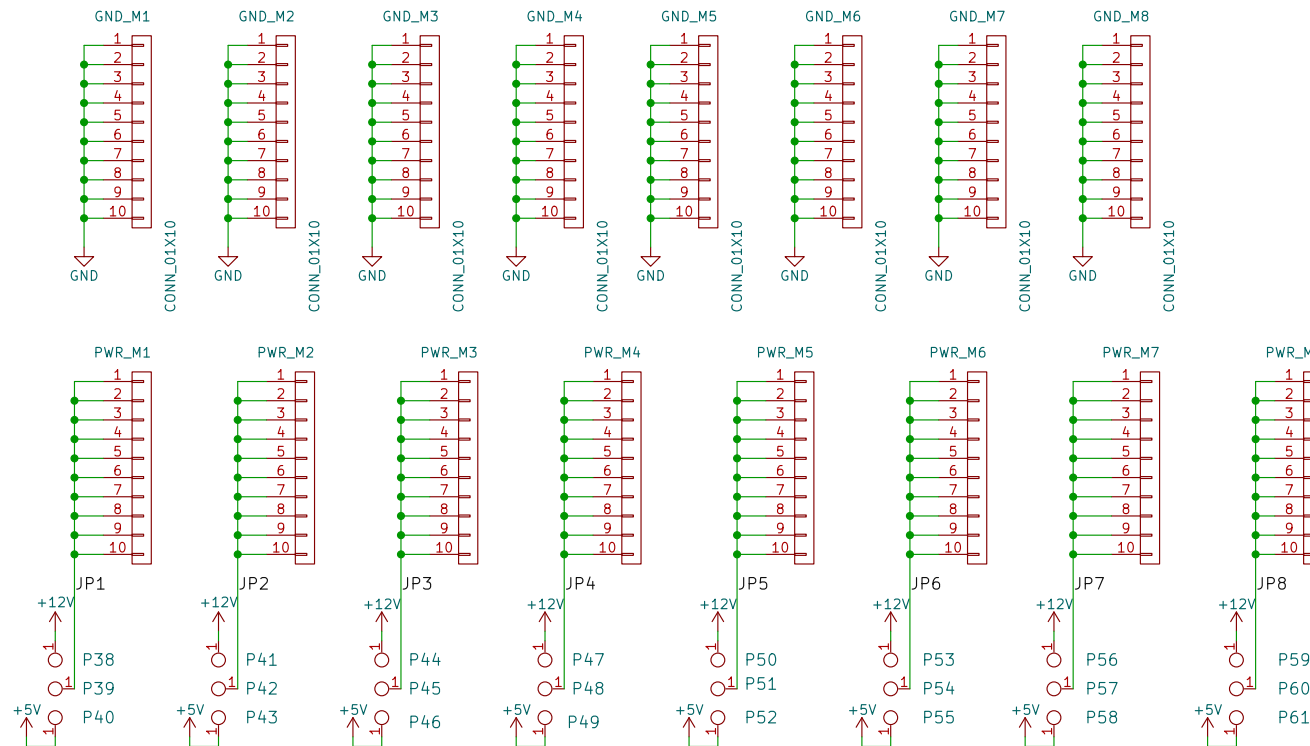


power  
POWER  
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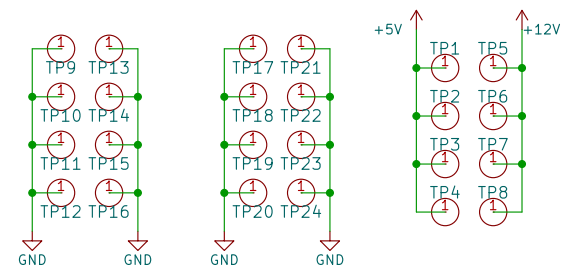
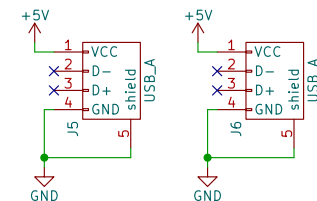
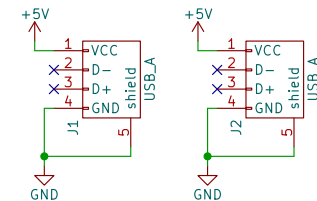
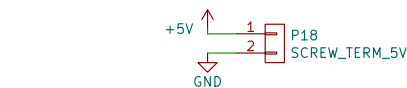
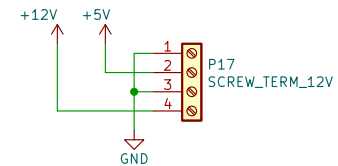
Sheet 1 of 2  
E. Hazen  
**Boston University EDF**  
Sheet: /  
File: Motherboard.kicad\_sch  
**Title: eVOLVER Motherboard**

Size: B	Date: 22 jun 2016	Rev: A
KiCad E.D.A.	eeschema 6.0.2+dfsg-1	Id: 1/2

Extra power for PWM boards  
(put on all sites for flexibility)



P38:61 are receptacles that plug into JP1:8;  
In turn, parts associated with JP1:8 are not stuffed but placed into P38:61 to jumper either power to the supply of each connector.



Sheet: /power/  
File: power.kicad\_sch

**Title:**

Size: A4

Date:

KiCad E.D.A. eeschema 6.0.2+dfsg-1

**Rev:**

Id: 2/2