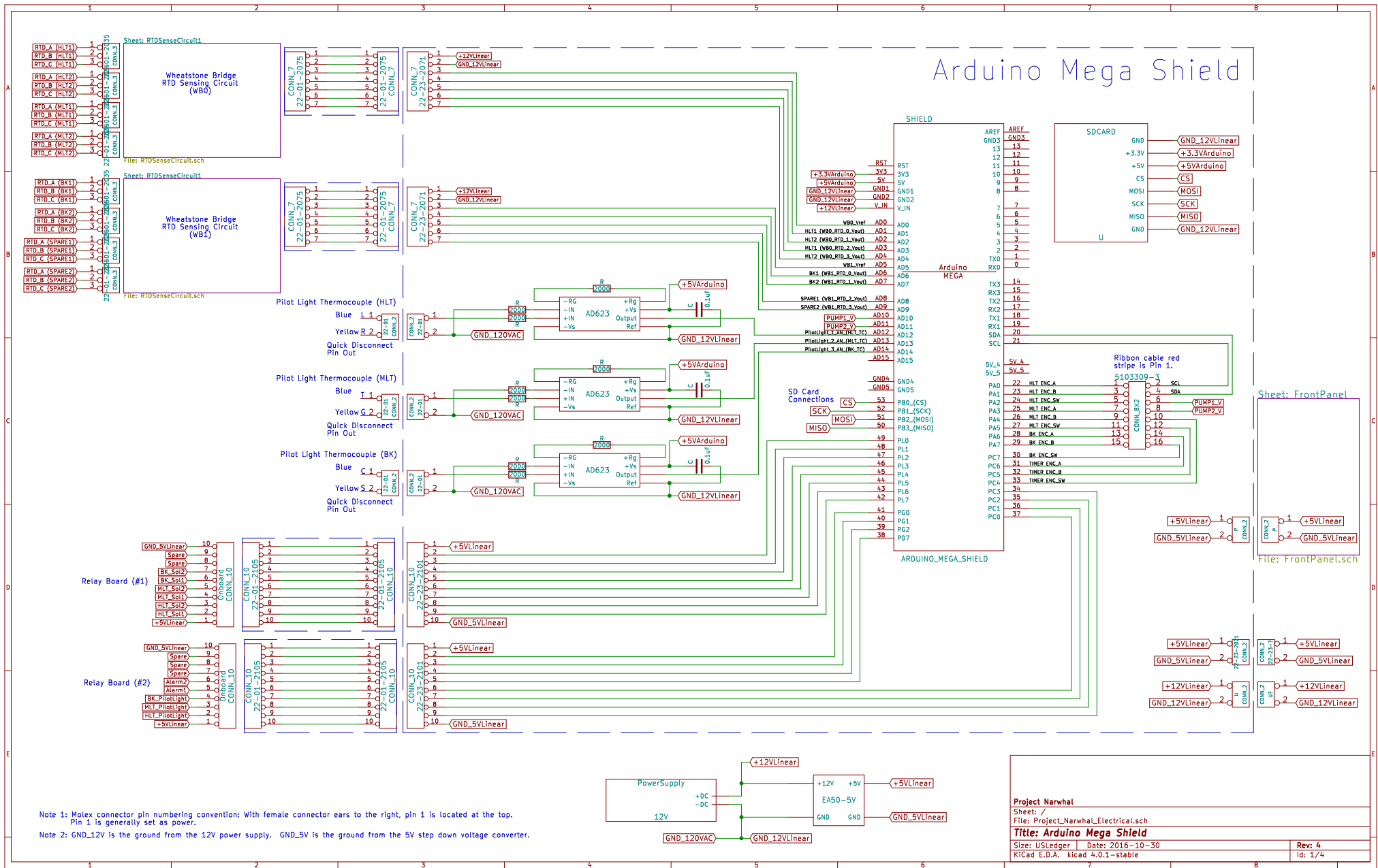


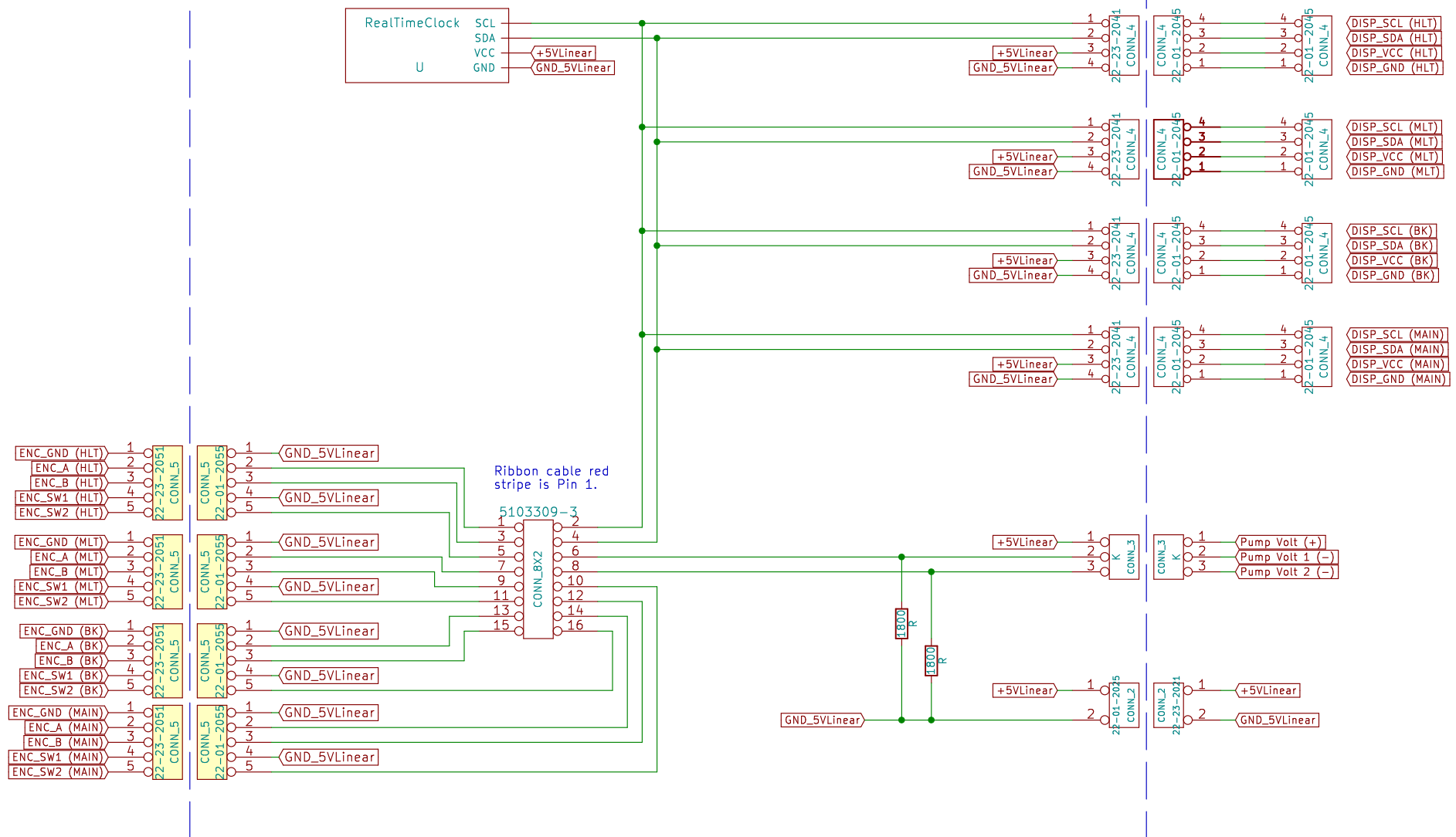
Arduino Mega Shield



Note 1: Molex connector pin numbering convention: With female connector ears to the right, pin 1 is located at the top.
Pin 1 is generally set as power.

Note 2: GND_12V is the ground from the 12V power supply. GND_5V is the ground from the 5V step down voltage converter.

Front Panel Connection Board



Note 1: Molex connector pin numbering convention: With female connector ears to the right, pin 1 is located at the top. Pin 1 is generally set as power.

Note 2: GND_5V is the ground from the 5V step down voltage converter.

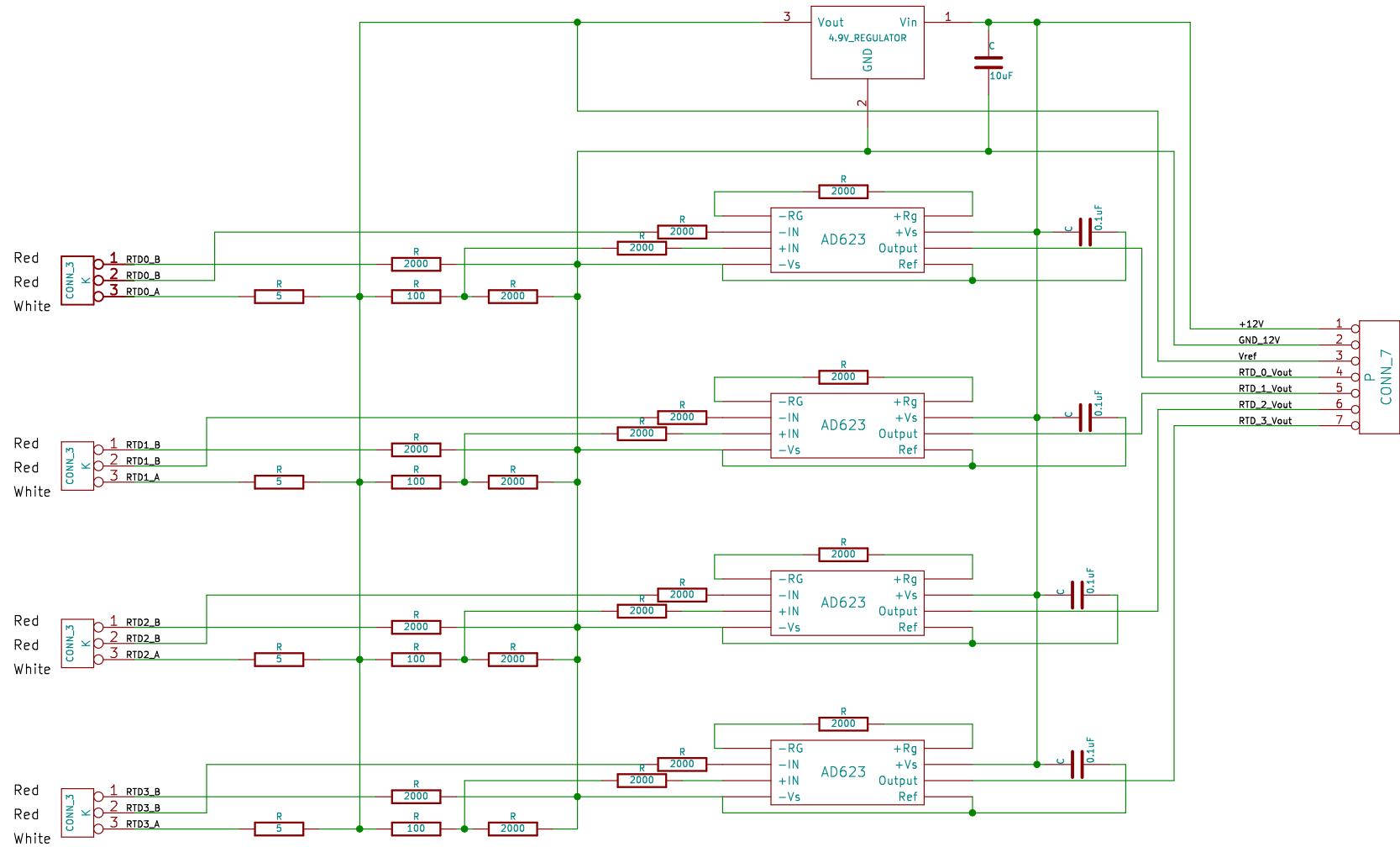
Project Narwhal

Sheet: /FrontPanel/
File: FrontPanel.sch

Title: Front Panel Connection Board

Size: USLetter Date: 2016-10-30
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Rev: 5
Id: 2/4



Note 1: Molex connector pin numbering convention: With female connector ears to the right, pin 1 is located at the top.
Pin 1 is generally set as power.

Note 2: GND_12V is the ground from the 12V power supply.

Note 3: Molex #1 connector is #2 on RTD cable (white wire).

Note 4: 5 Ohm resistor added such that zero deg C equals a positive voltage allowing for calibration in the software
(Arduino cannot read negative voltage)

Constant voltage 3-wire 100 Ohm RTD circuit

Project Narwhal

Sheet: /RTDSenseCircuit1/

File: RTDSenseCircuit.sch

Title: RTD Wheatstone Bridge Sensing Circuit

Size: USLetter Date: 2016-11-05

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Rev: 4

Id: 4/4