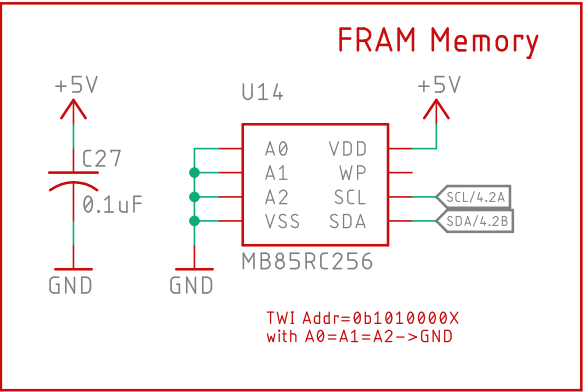
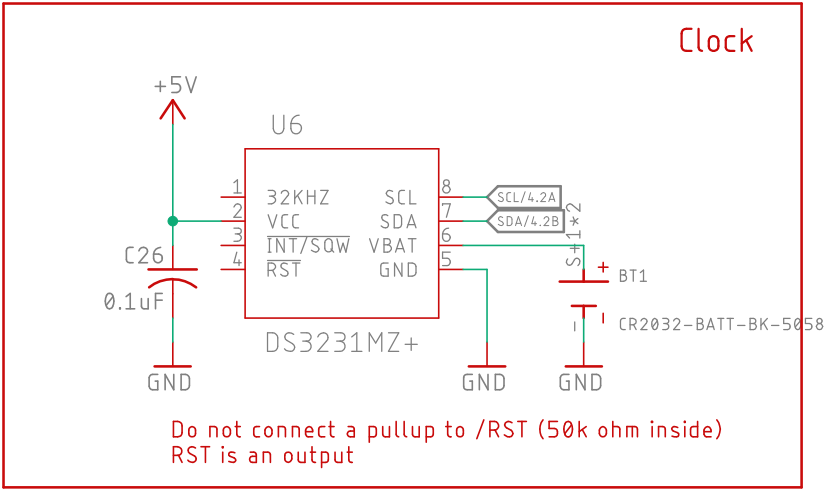
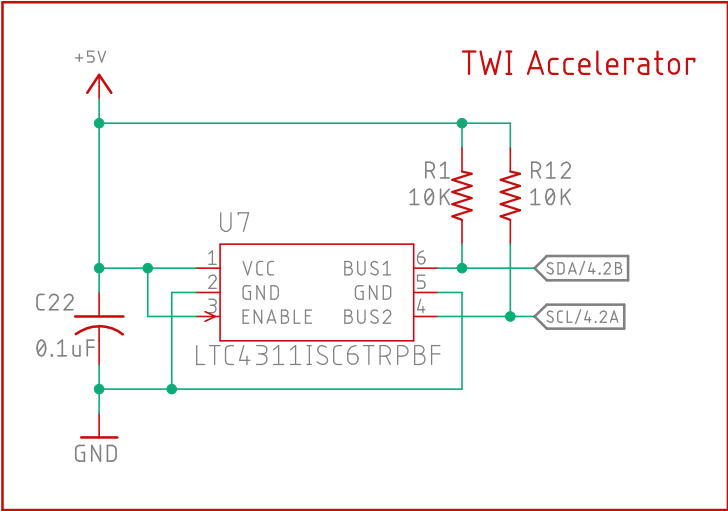
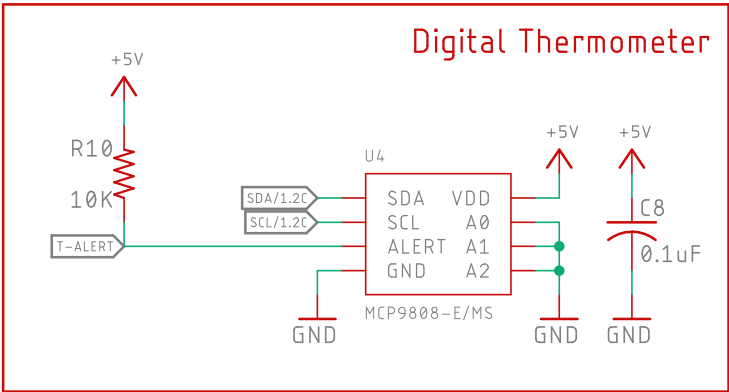
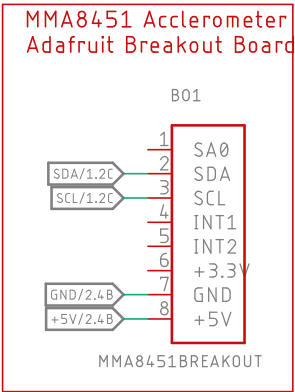


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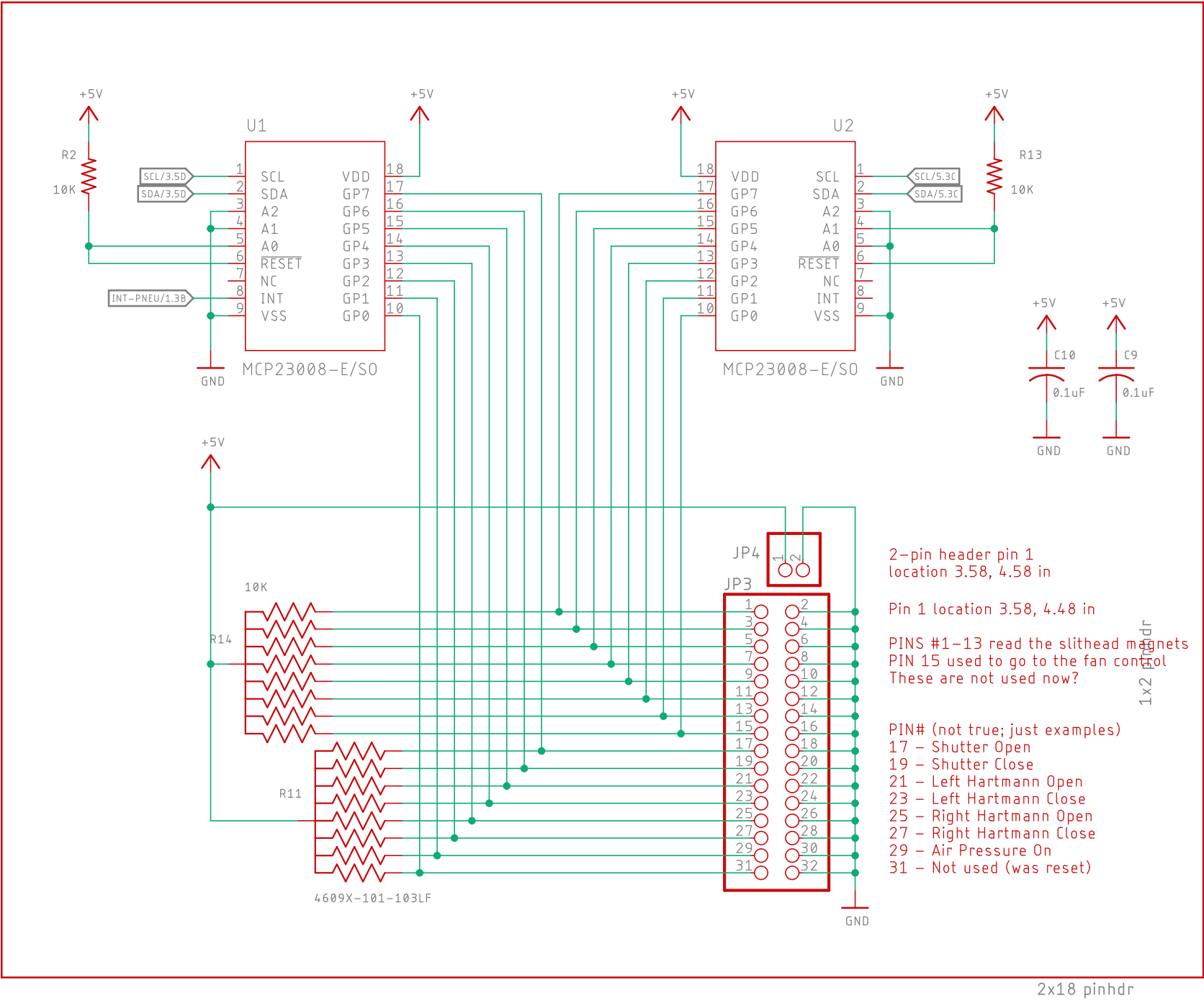


On-board miscellaneous peripherals

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2-pin header pin 1
location 3.58, 4.58 in

Pin 1 location 3.58, 4.48 in

PINS #1-13 read the slithead magnets
PIN 15 used to go to the fan control
These are not used now?

PIN# (not true; just examples)
17 - Shutter Open
18 - Shutter Close
19 - Shutter Close
21 - Left Hartmann Open
23 - Left Hartmann Close
25 - Right Hartmann Open
27 - Right Hartmann Close
29 - Air Pressure On
31 - Not used (was reset)

Parallel I/O Port

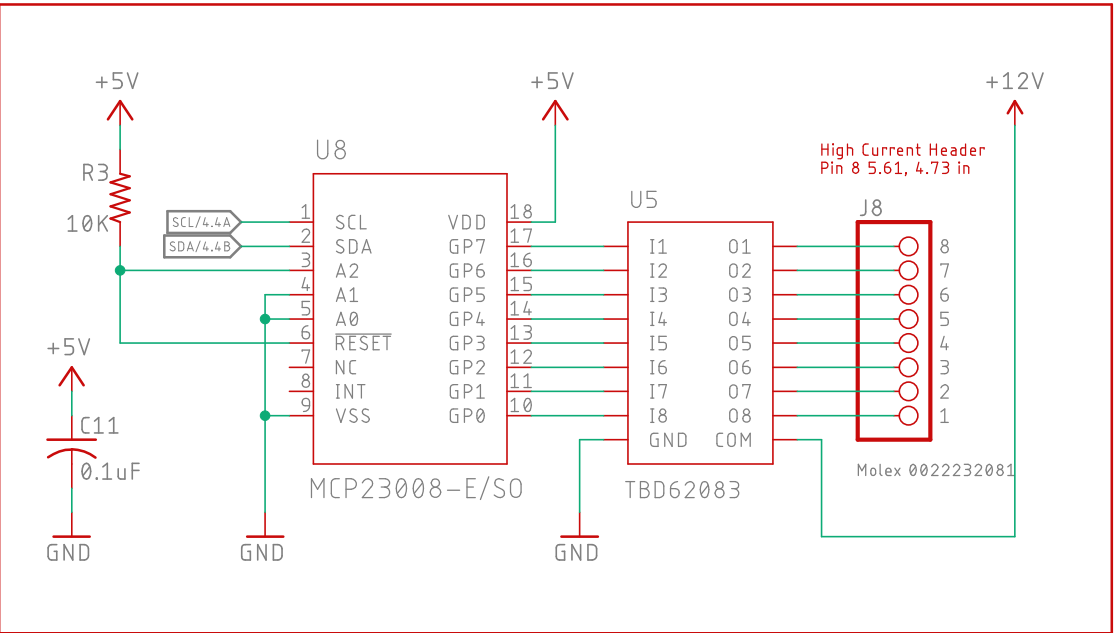
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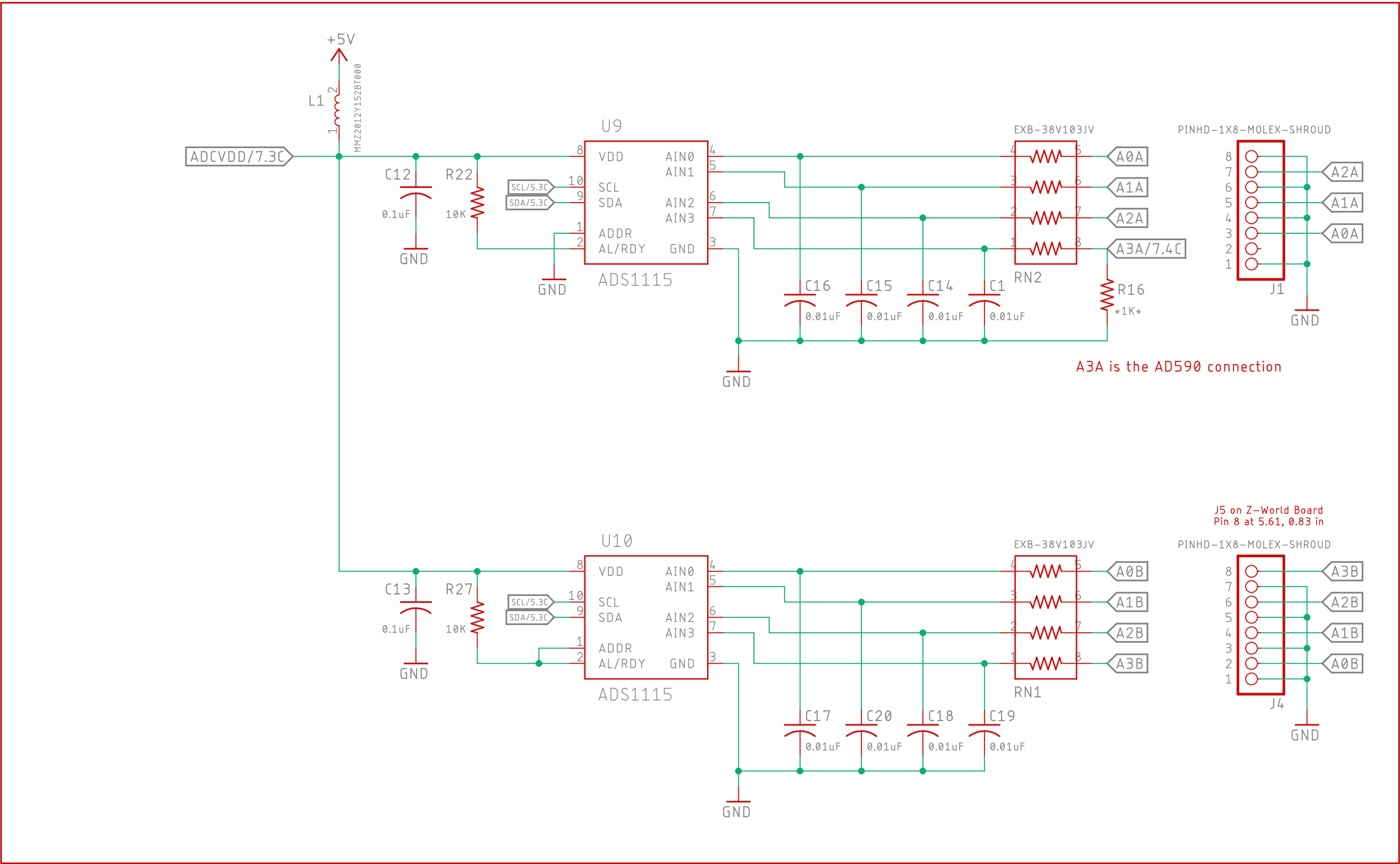
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High Current Driver Select	
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1K resistor is low TCR resistor

ADS1115 VDD bypass cap should be MLCC type with low ESR & low ESL

ADC ADS1115

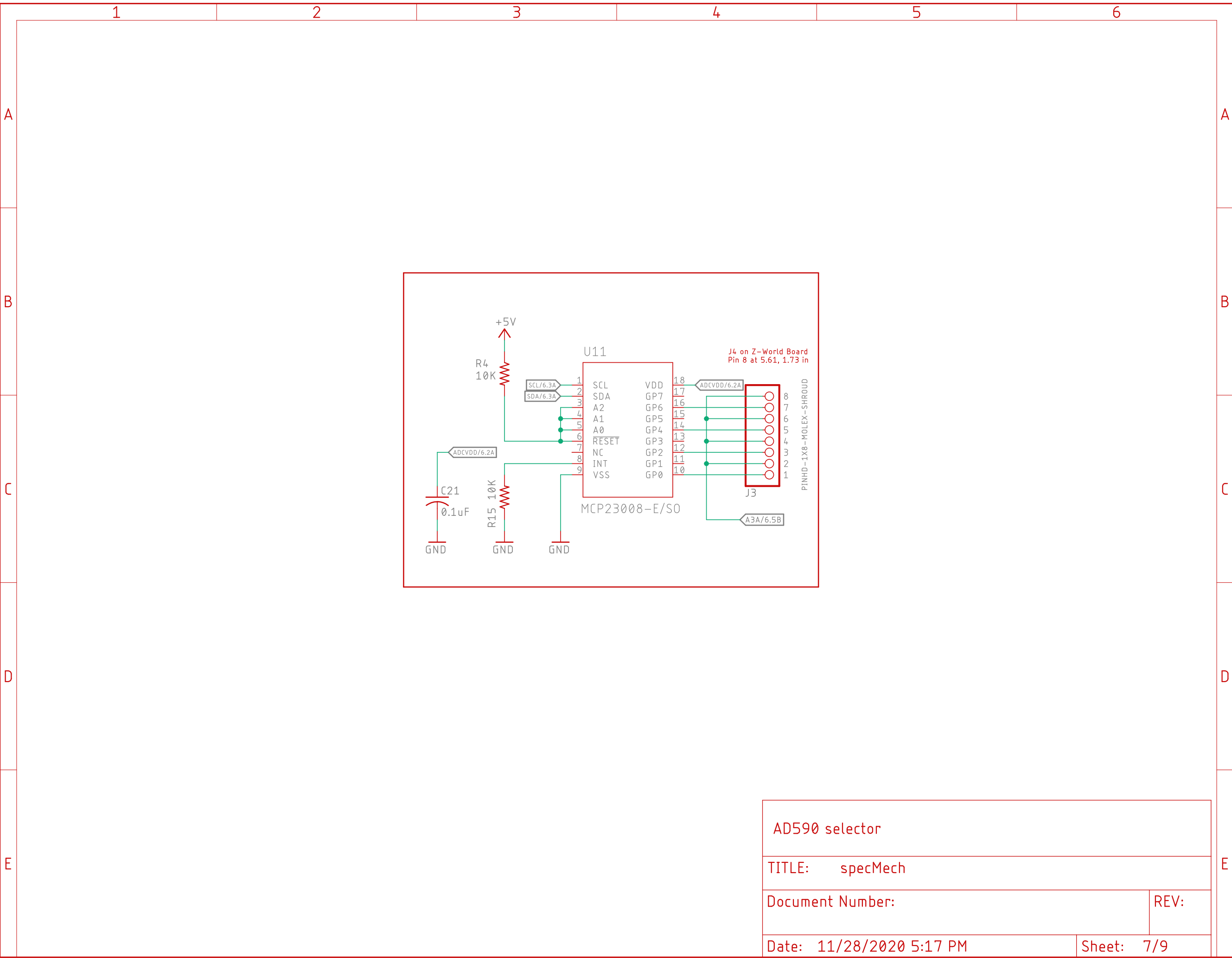
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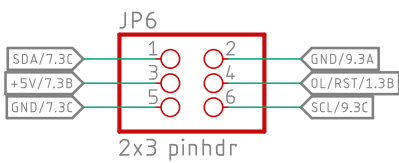
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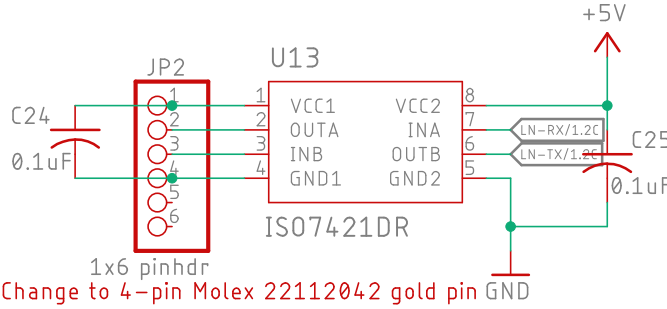
Header to OLED display board on front panel (TWI)



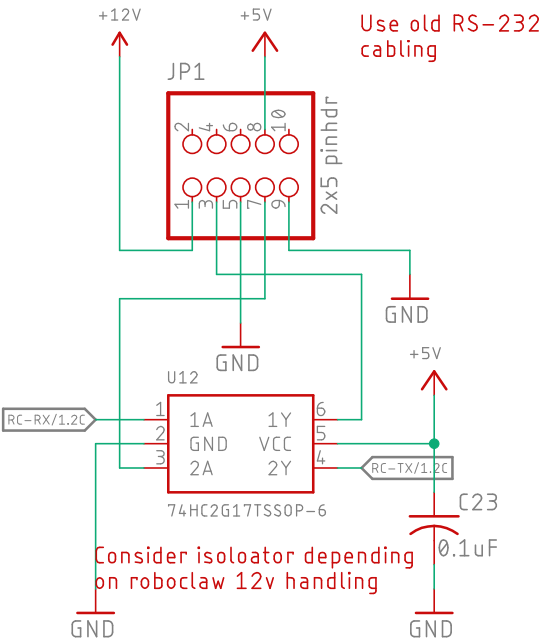
Newhaven NHD-0216AW-1B3 2x16 OLED Display.
VDD_SEL must be NC for +5VDC operation.
SA0 = address pin (LOW->3C, HIGH->3D).

Use Amphenol 68685-307LF receptacle as a socket for temporary use.

LN2 Controller Comm

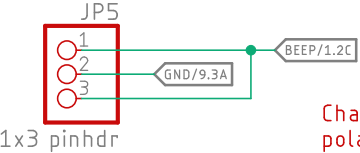


Collimator Motor Power & Comm



Consider isolator depending on roboclaw 12v handling

Beeper

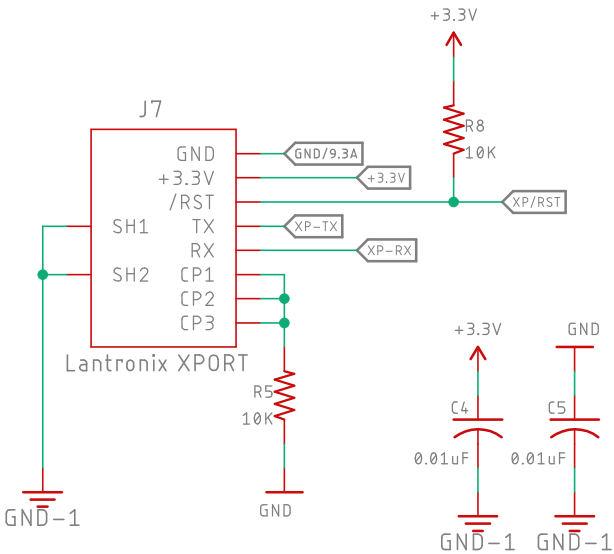


Change to 2-pin polarized header

EtherNET Interface:

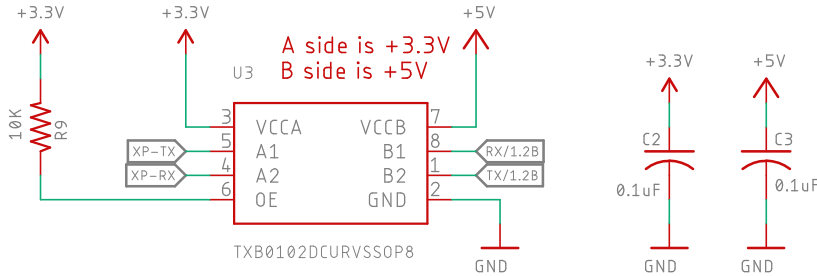
Lantronix XPORT for EtherNET to serial
TI TXB0102 3.3V to 5V Level Shifter
CUI P7805-Q24-S3-S DC-DC Converter

Lantronix XPORT

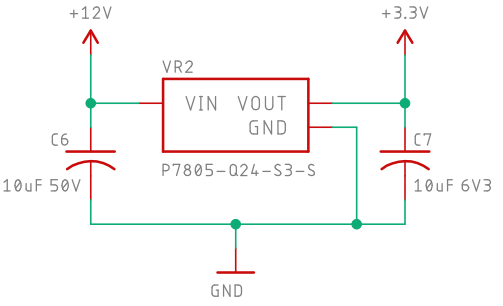


0.01 uF filter caps. 200 V, low ESR, from chassis ground to signal ground and from chassis ground to +3.3 V. Spikes from chassis ground are shared to maintain 3.3 V signaling.

Level Shifter



+3.3V



Off-board Interfaces

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