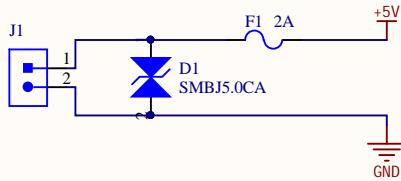


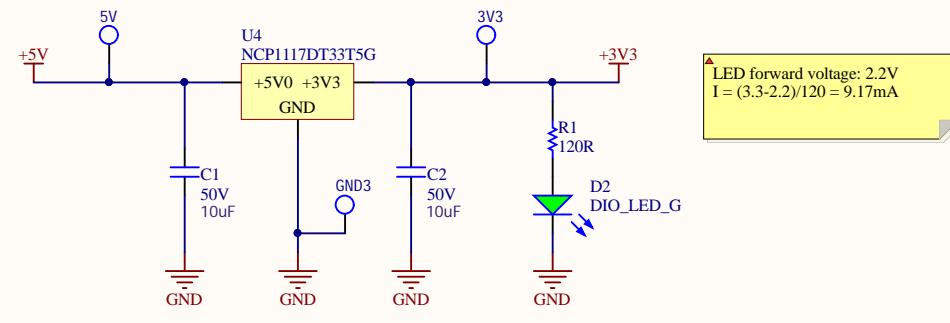
A

A

Power In



LDO Voltage Regulator



B

B

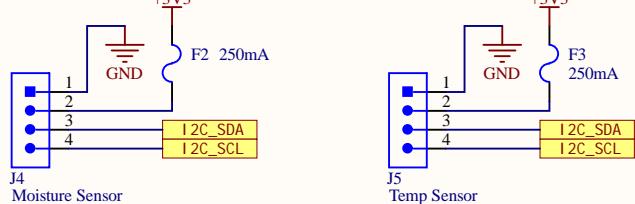
C

C

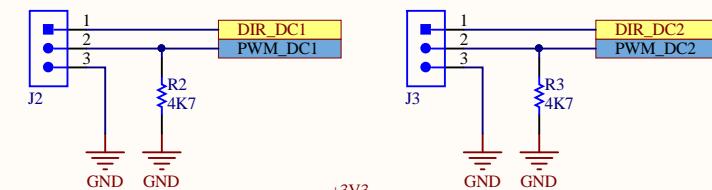
D

D

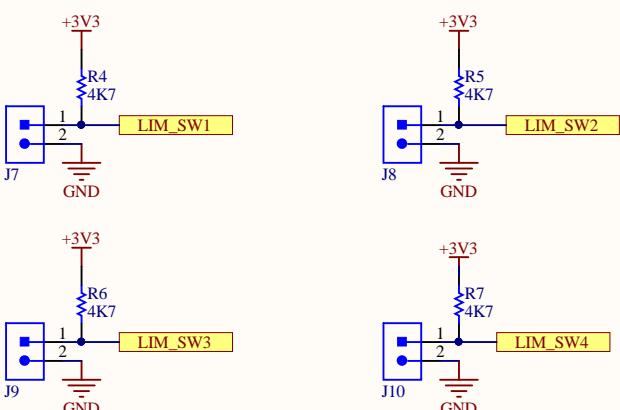
Sensors



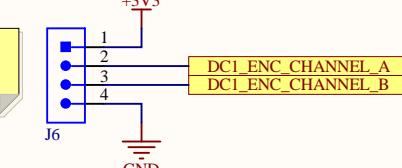
DC Motors



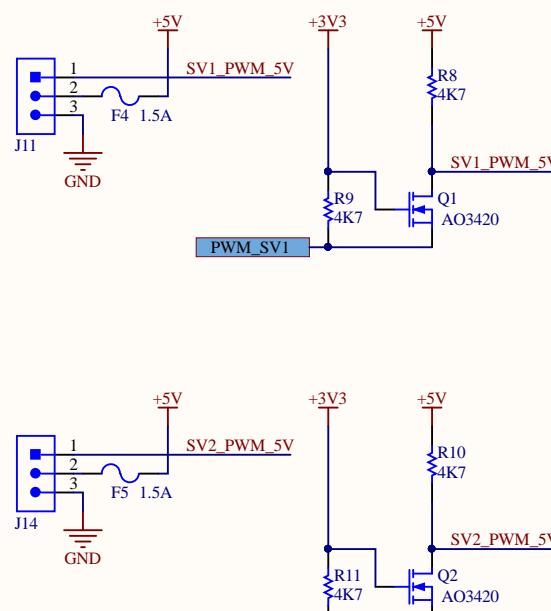
Limit Switches



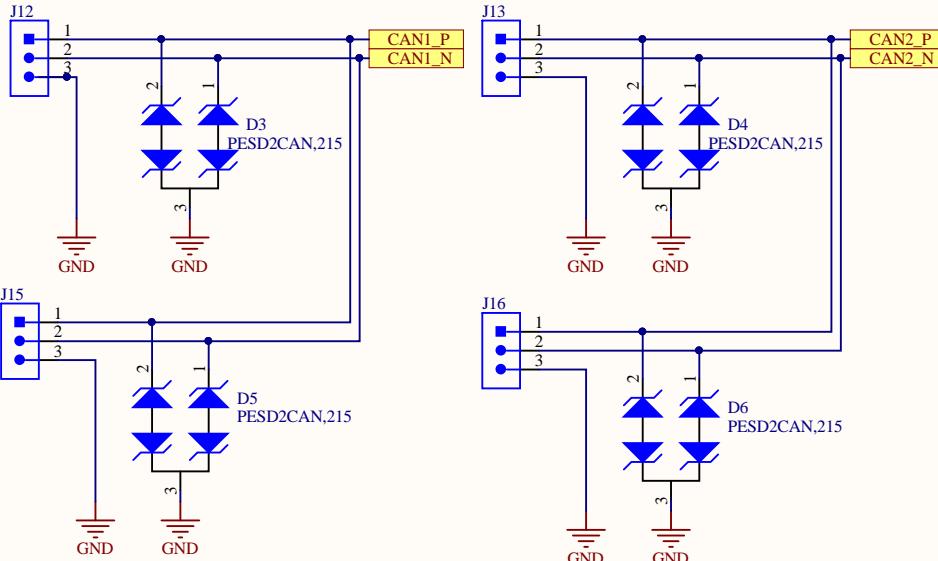
TODO (Rev2):
- Add an RC filter for this encoder



Servos

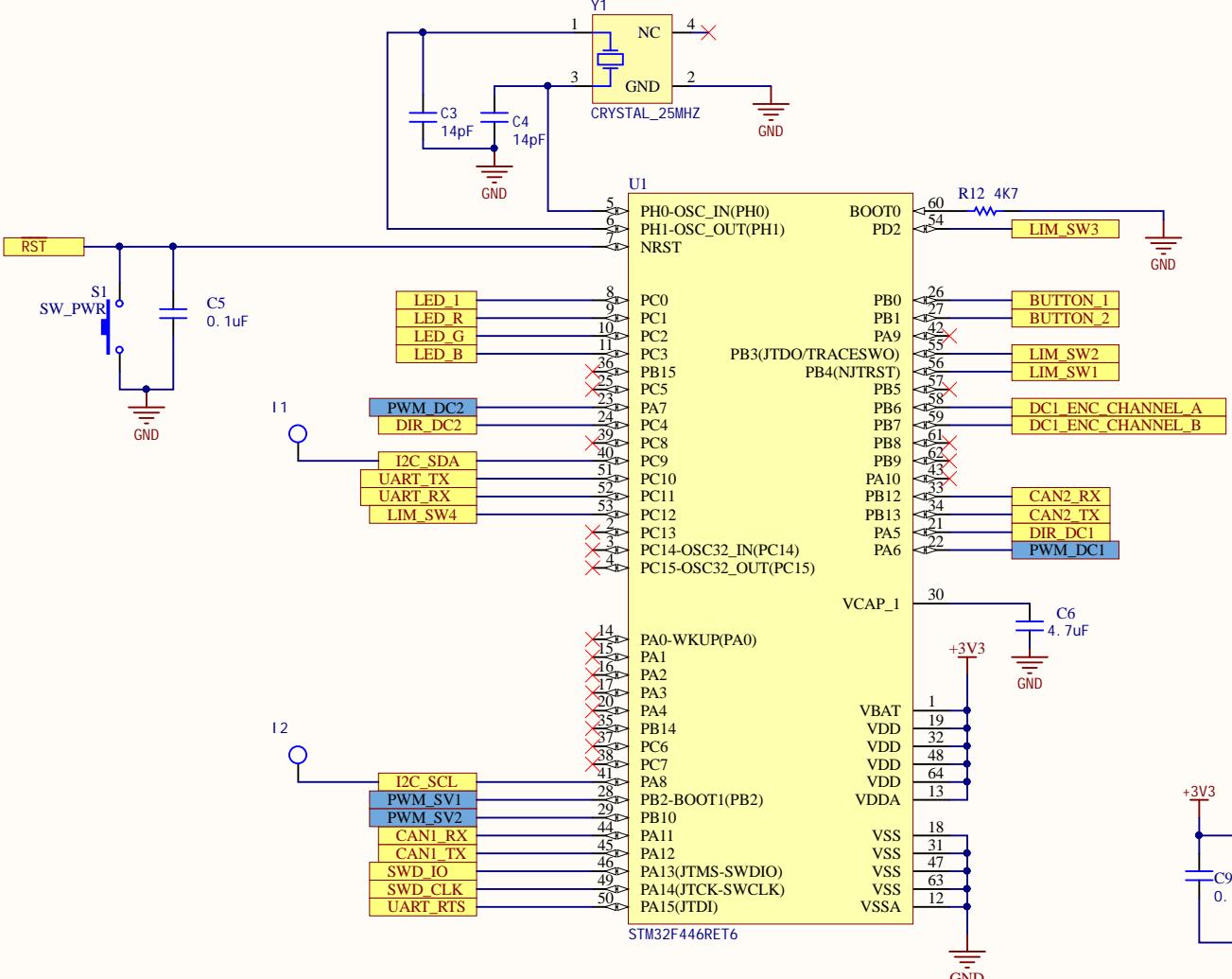


CAN Connectors



Debug/Programming

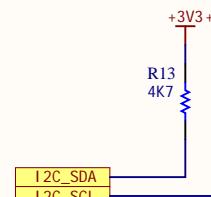
STM32F446RET6



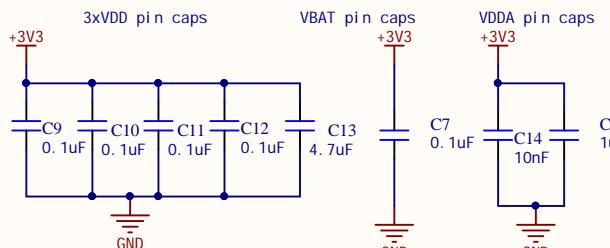
Testpoints



| ²C Pullups



Decoupling Caps



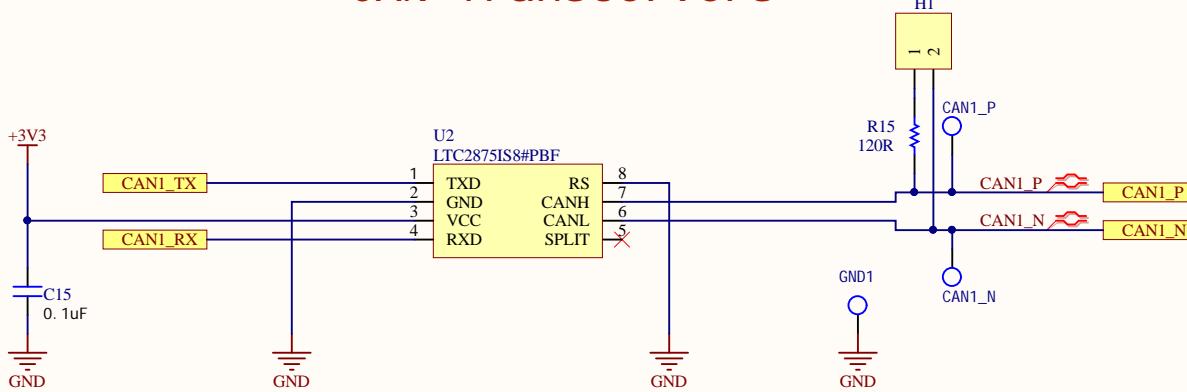
A

A

CAN Transceivers

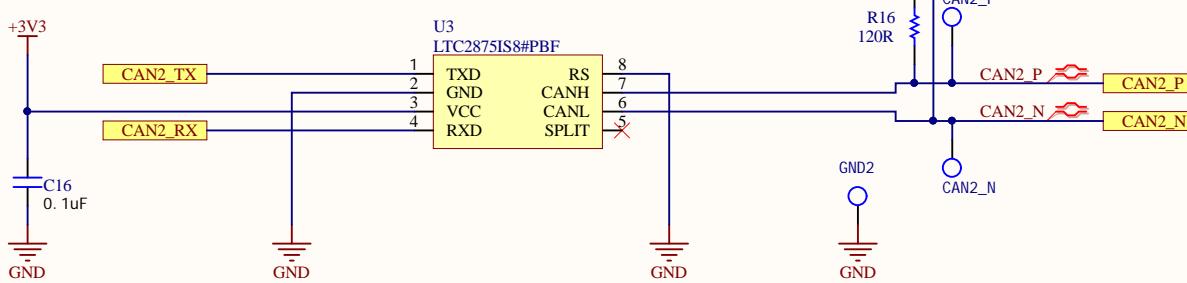
B

B



C

C

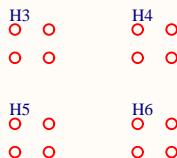


D

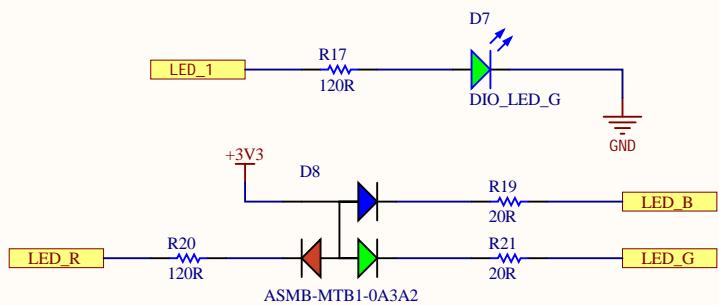
D

Title: Science - CAN		UW Robotics 200 University Avenue Waterloo Ontario Canada N2L 3G6
Size: Letter	Drawn By: C. Arjune	
Date: 1/28/2020	Sheet 4 of 5	
File: C:\Users\kyleh\Desktop\Works\UWRT\MarsRover2020-PCB\Projects\Science\Rev1\sch\CAN.SchDoc		UW ROBOTICS TEAM

Mounting Holes



Test LEDs



Current Calculations

Green LED voltage drop: 2.2V
 $- I = (3.3-2.2V)/120 = 10.83mA$

RGB LED voltage drops:

- Red: 2.1V: $I = (3.3-2.1V)/120 = 10mA$
- Blue: 3.1V: $I = (3.3-3.1V)/20 = 10mA$
- Green: 3.1V: $I = (3.3-3.1V)/20 = 10mA$

Test Buttons

