

A

A

B

B

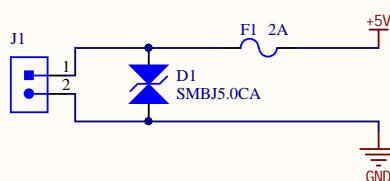
C

C

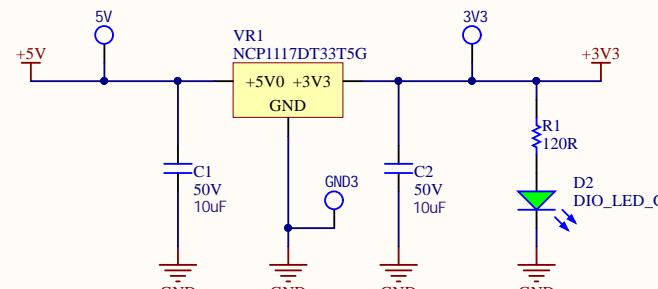
D

D

Power In



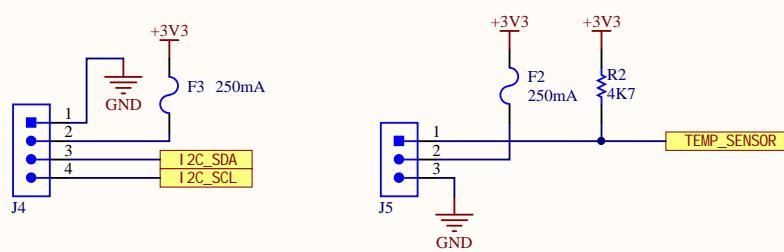
LDO Voltage Regulator



- V2: Replace LDO with an LDO with less ESR requirements
- Explore adding bulk capacitor

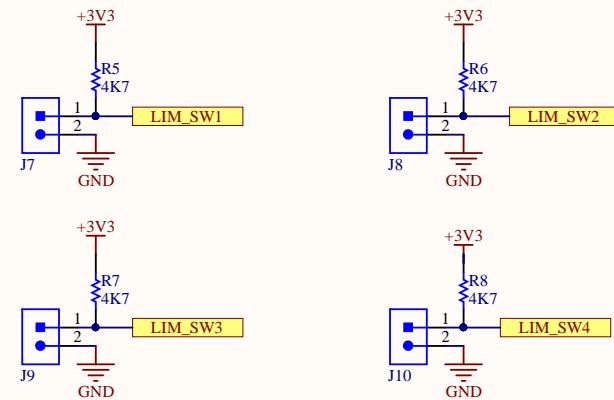
Sensors

A



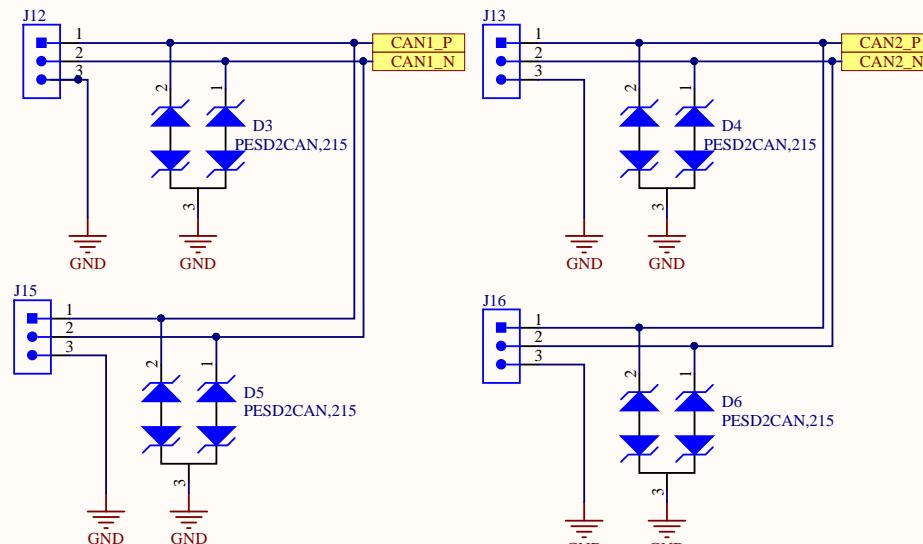
Limit Switches

B



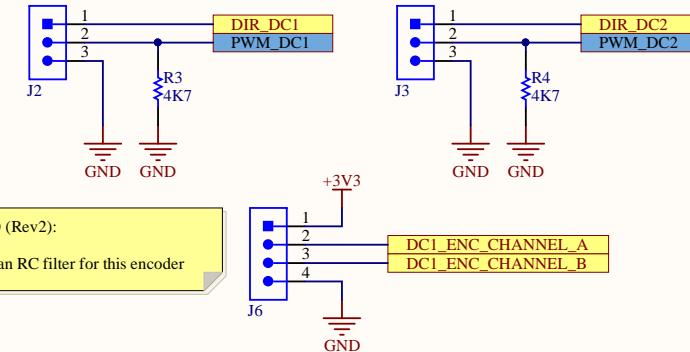
CAN Connectors

C



DC Motors

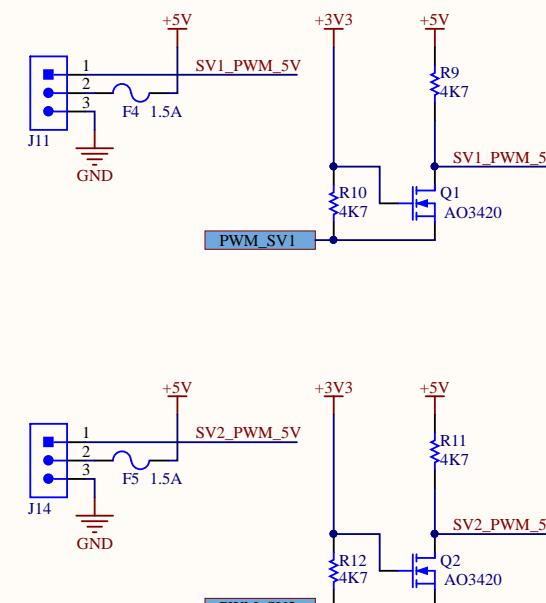
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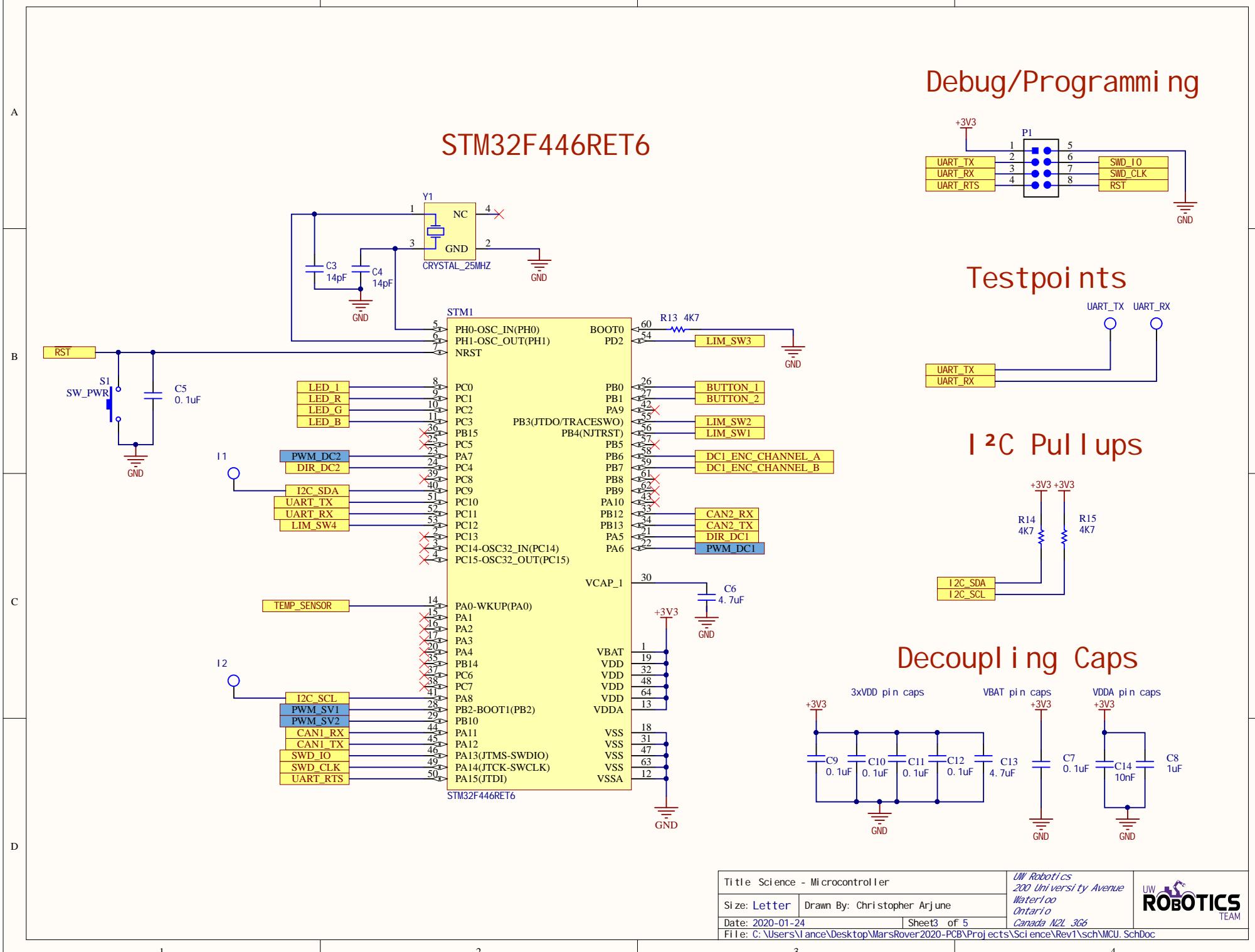


TODO (Rev2):
- Add an RC filter for this encoder

Servos

B





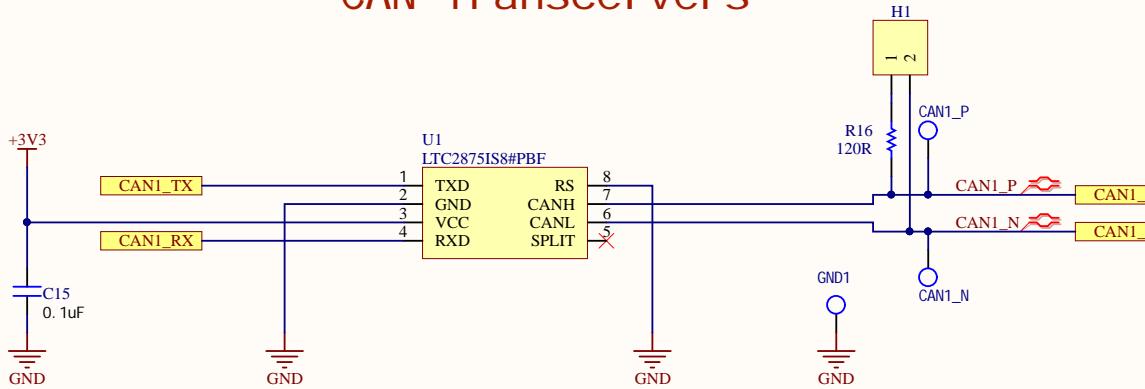
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CAN Transceivers

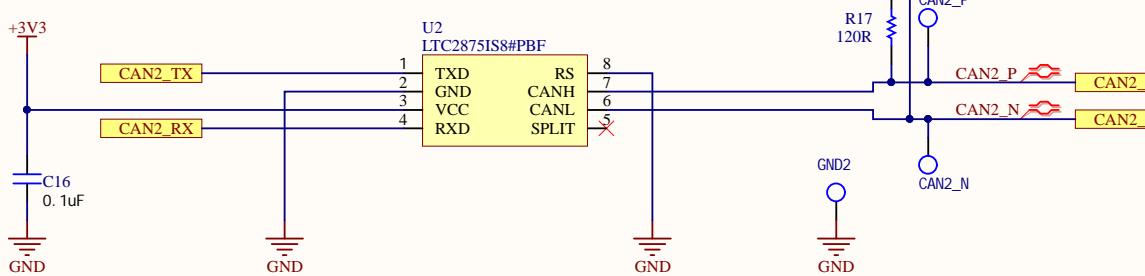
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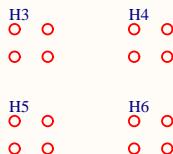


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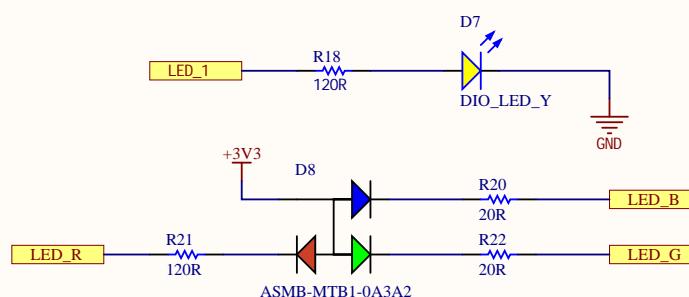
D

Title: Science - CAN		UW Robotics 200 University Avenue Waterloo Ontario Canada N2L 3G6	
Size: Letter		Drawn By: Christopher Arjune	
Date: 2020-01-24		Sheet 4 of 5	
File: C:\Users\lance\Desktop\MarsRover2020-PCB\Projects\Science\Rev1\sch\CAN.SchDoc			

Mounting Holes



Test LEDs



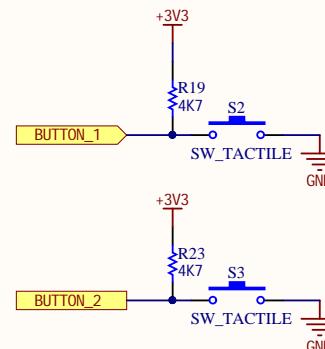
Current Calculations

Yellow LED voltage drop: 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



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D

Title: Science - Support

Size: Letter | Drawn By: Christopher Arjune

Date: 2020-01-24 | Sheet 5 of 5

File: C:\Users\lance\Desktop\MarsRover2020-PCB\Projects\Science\Rev1\sch\Support.SchDoc

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