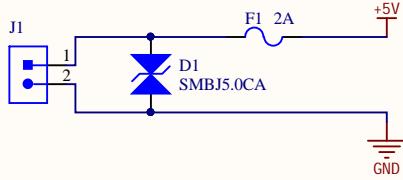


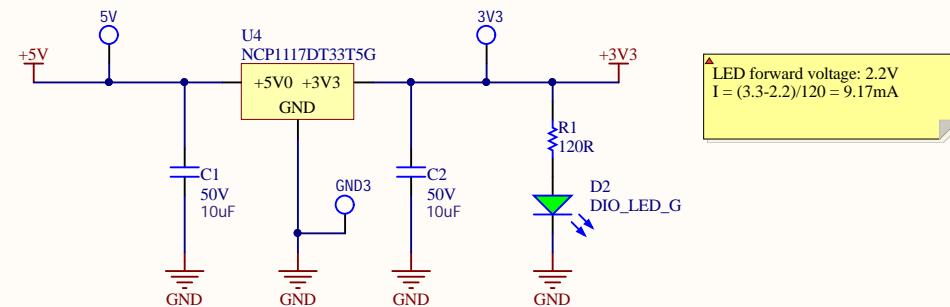
A

A

## Power In



## LDO Voltage Regulator



B

B

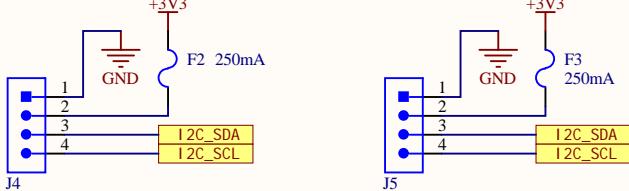
C

C

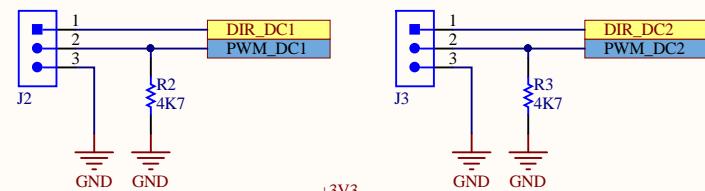
D

D

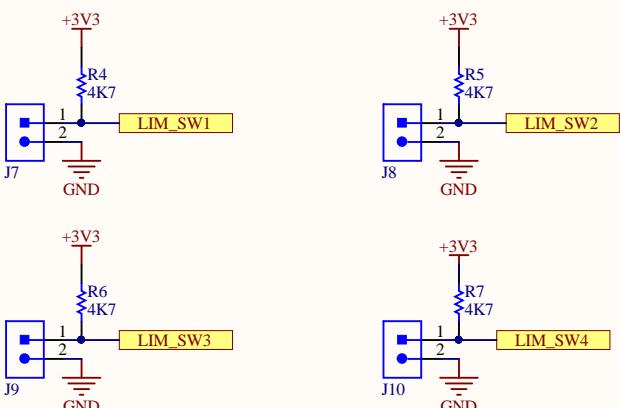
## Sensors



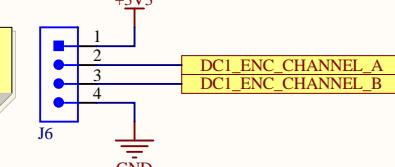
## DC Motors



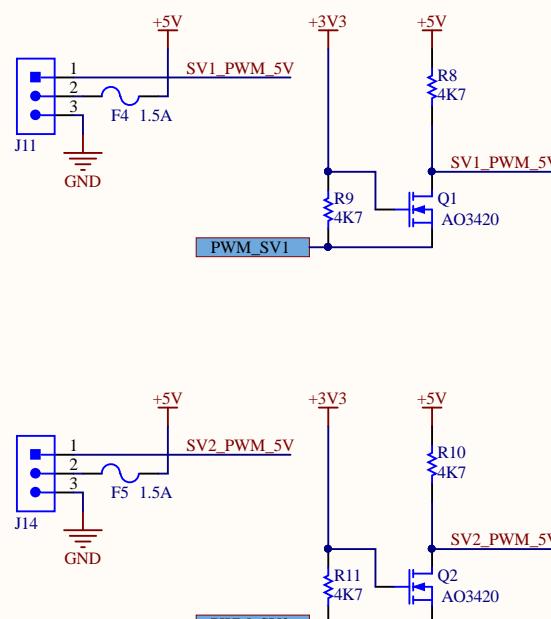
## Limit Switches



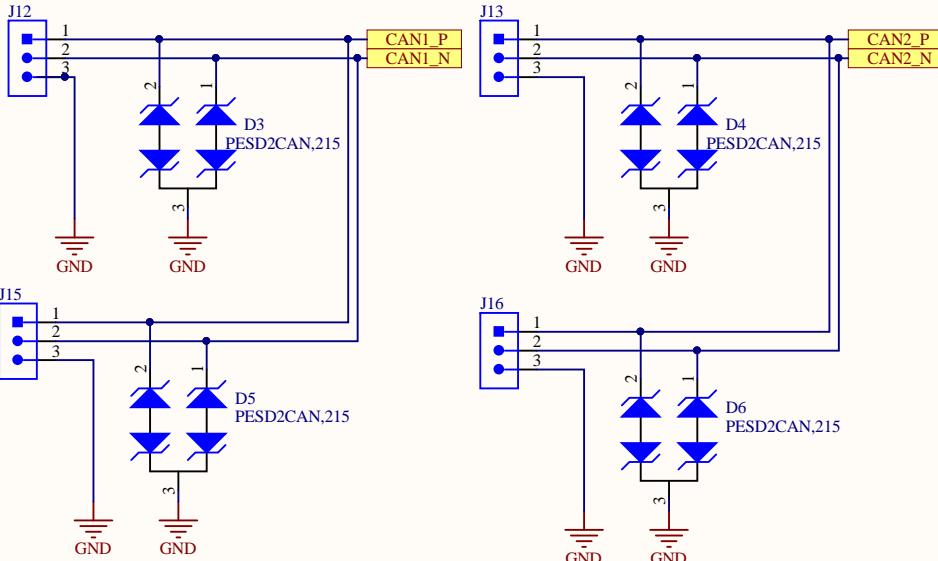
**TODO (Rev2):**  
- Add an RC filter for this encoder



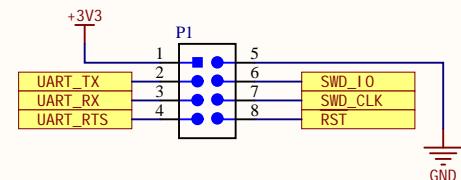
## Servos



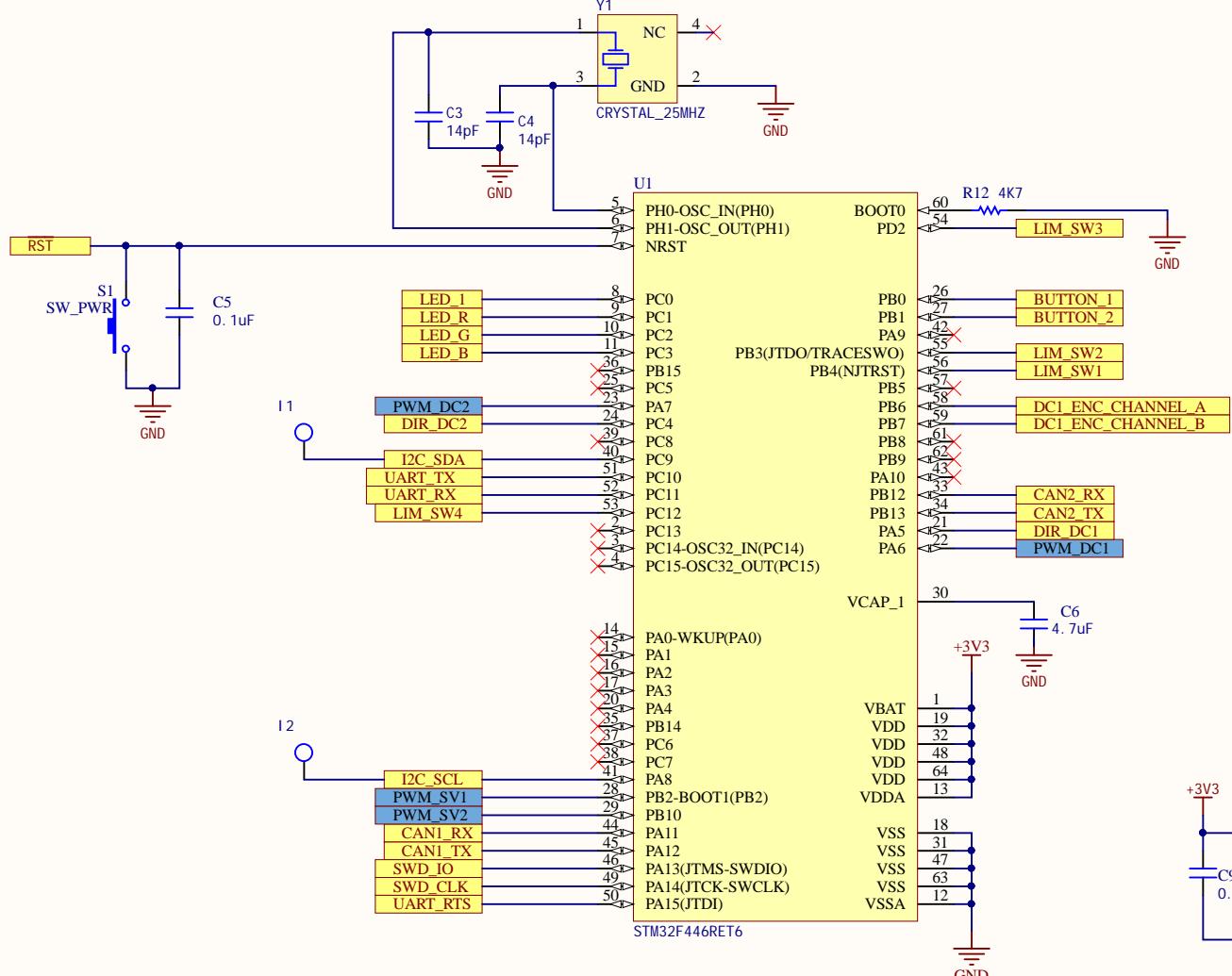
## CAN Connectors



## Debug/Programming



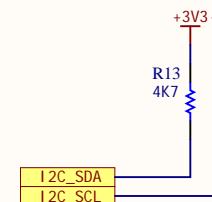
## STM32F446RET6



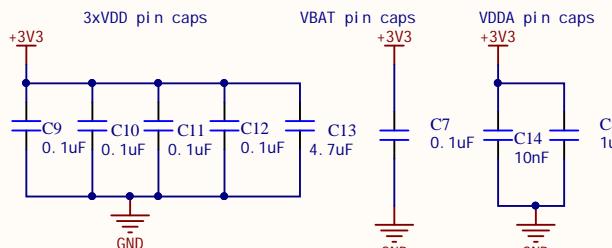
## Testpoints



## I<sup>2</sup>C Pullups



## Decoupling Caps



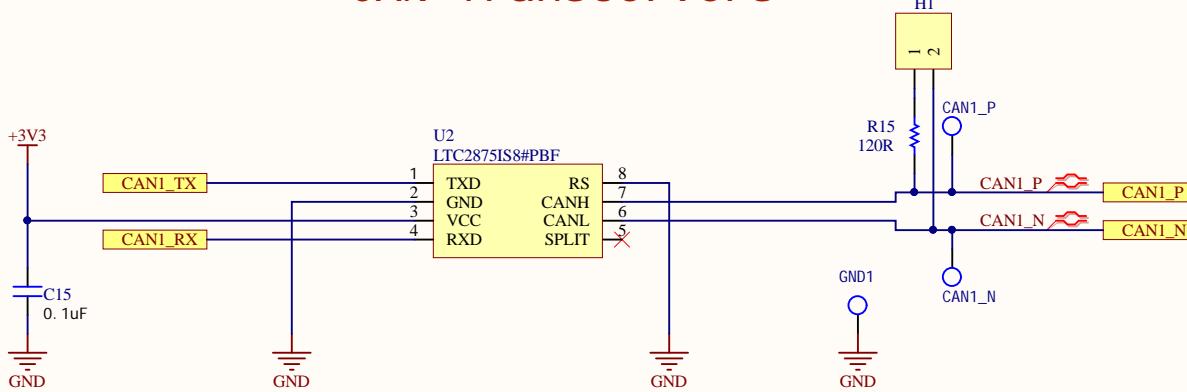
A

A

## CAN Transceivers

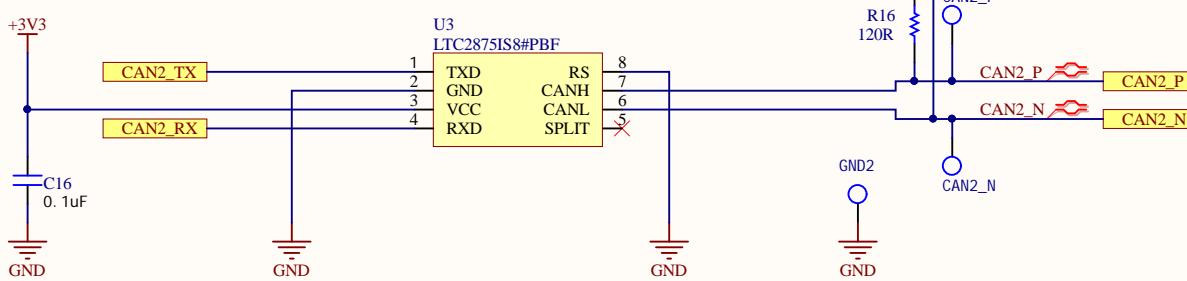
B

B



C

C

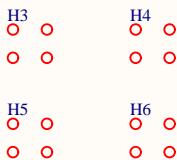


D

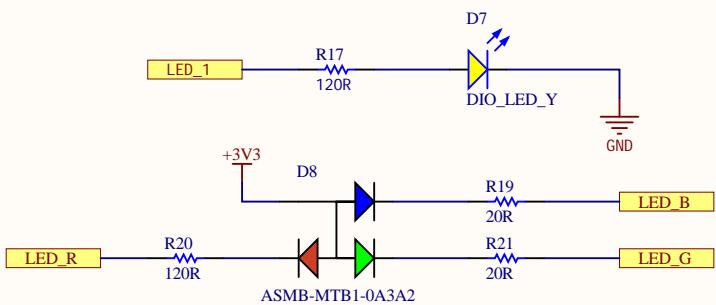
D

Title: Science - CAN		UW Robotics 200 University Avenue Waterloo Ontario Canada N2L 3G6
Size: Letter	Drawn By: Christopher Arjune	
Date: 1/26/2020	Sheet 4 of 5	
File: C:\Users\kyleh\Desktop\Works\UWRT\MarsRover2020-PCB\Projects\Science\Rev1\sch\CAN.SchDoc		<b>UW ROBOTICS TEAM</b>

## Mounting Holes



## Test LEDs



### Current Calculations

Yellow LED voltage drop: 2V  
 $- I = (3.3 - 2.2V) / 120 = 10.83\text{mA}$

### RGB LED voltage drops:

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

## Test Buttons

