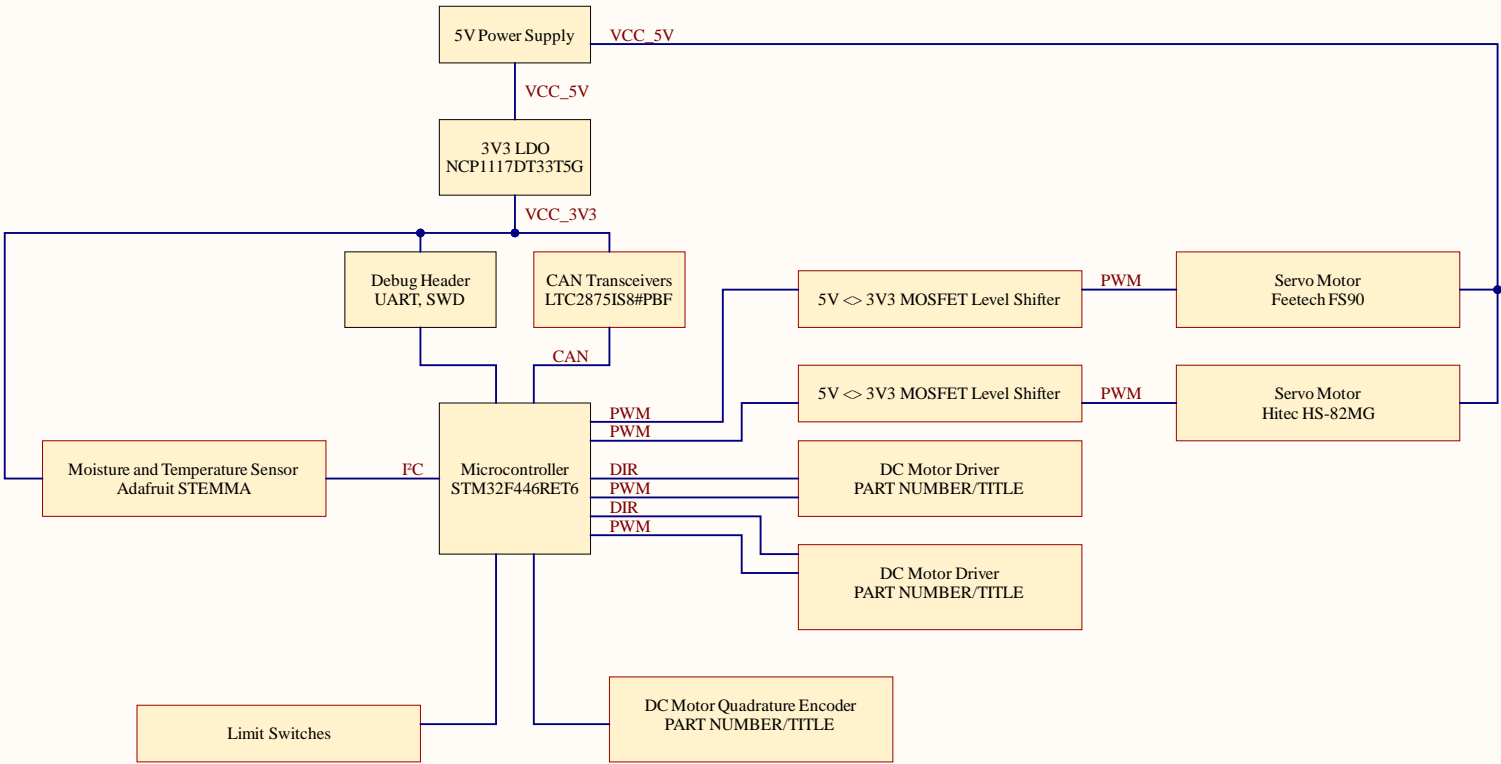
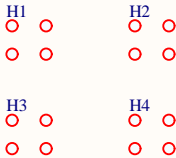
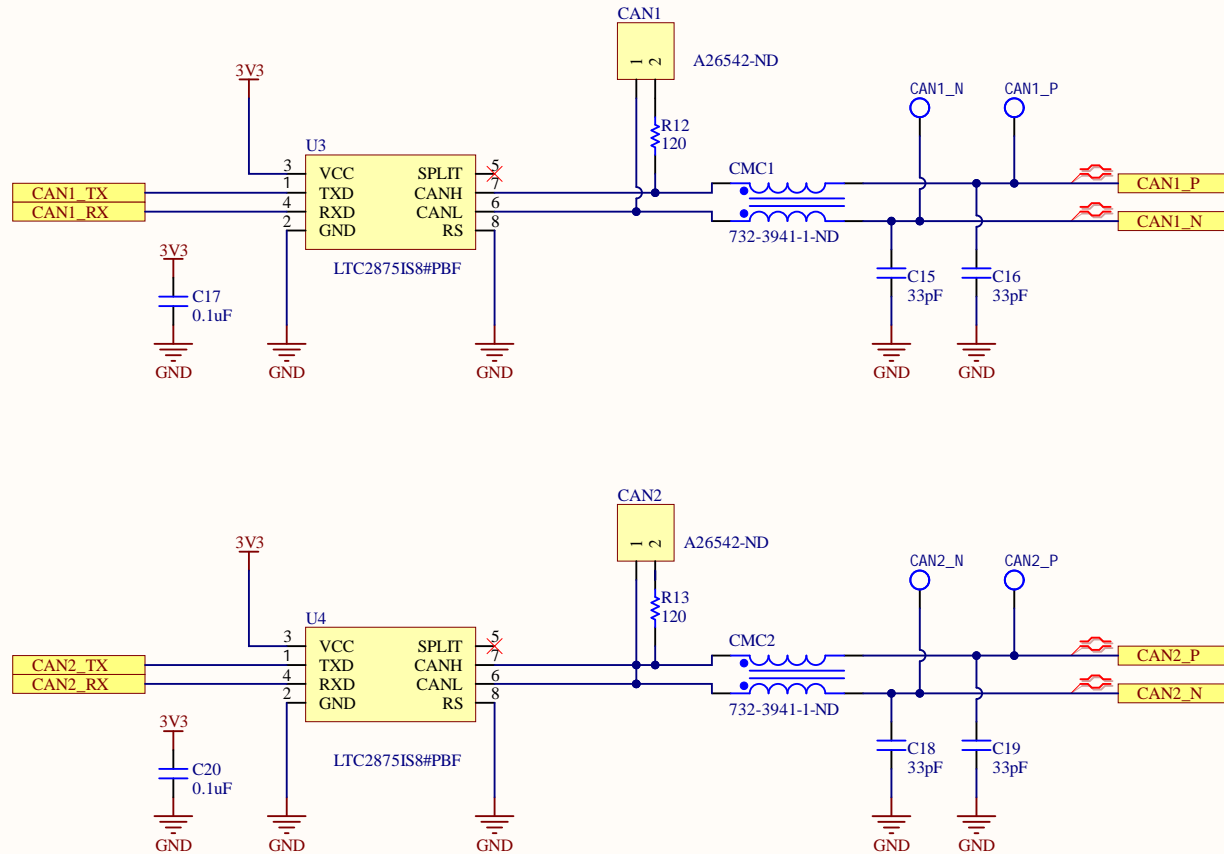


# Mounting Holes

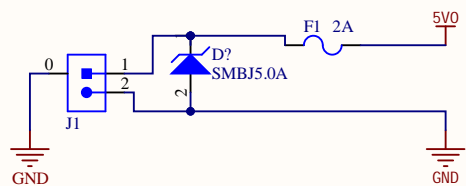




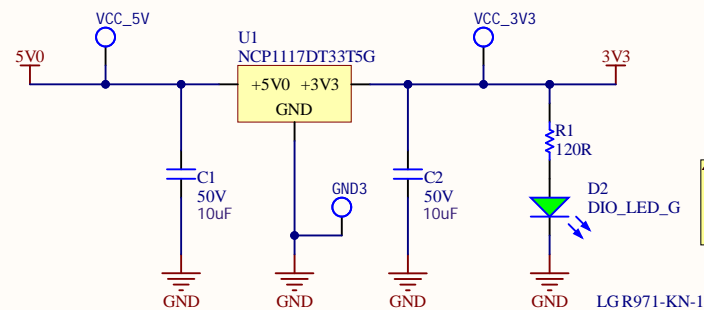
# CAN Transceivers



## Power In



## 5V -> 3V3 LDO



LED forward voltage: 2.2V  
 $I = (3.3 - 2.2) / 120 = 9.17\text{mA}$

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

1

2

3

4

A

A

B


B

C

C

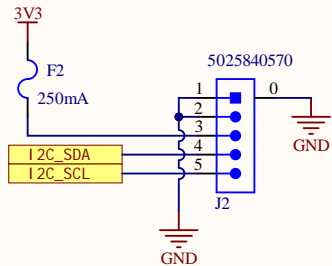
D

D

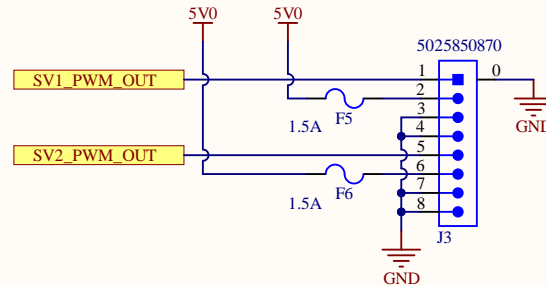
Title Science - Support			<i>UW Robotics</i> <i>200 University Avenue</i>		
Size: Letter	Drawn By: C. Arjune, K. Hong				
Date: 6/2/2020	Sheet 5 of 5				
File: C:\Users\badpr\al titanium_projects\MarsRover2020-PCB\Projects\Science\Rev2\Support . SchDoc					



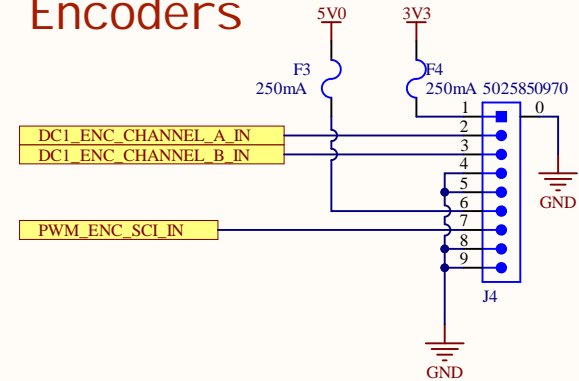
## I<sup>2</sup>C Sensors



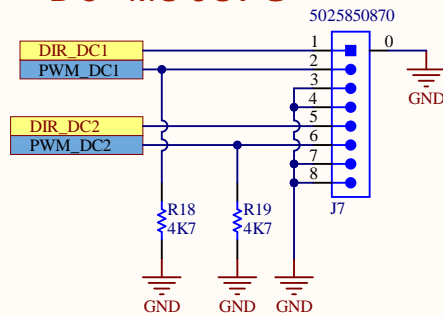
## Servos



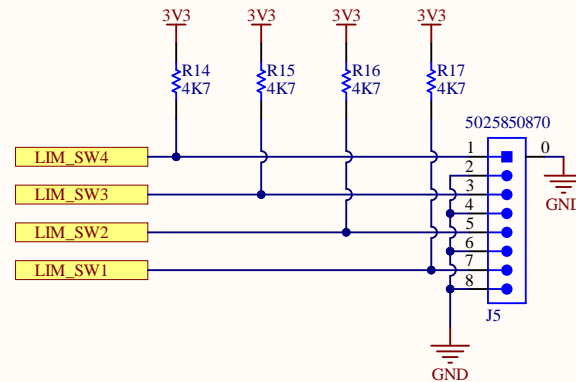
## Encoders



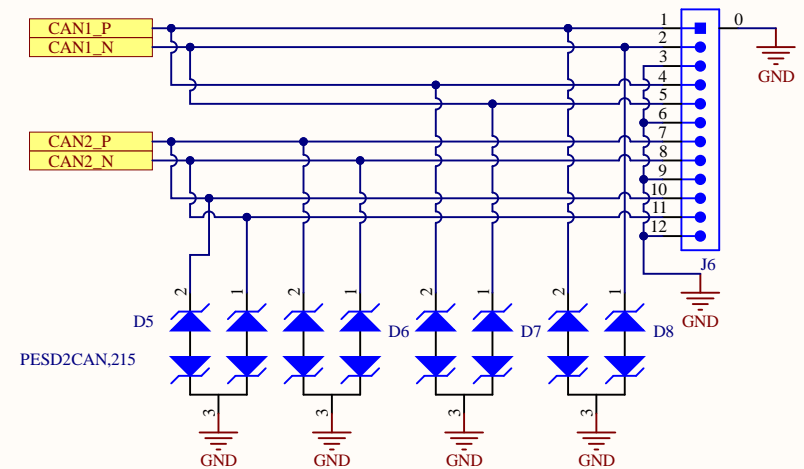
## DC Motors



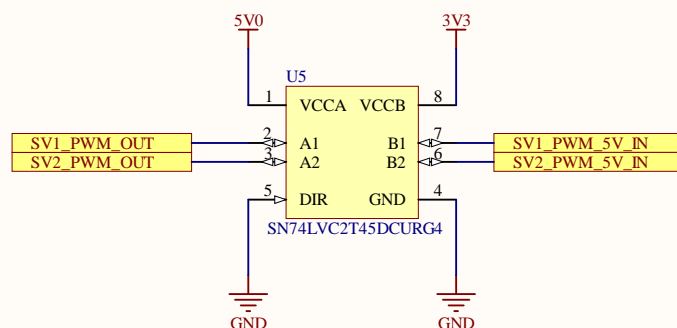
## Limit Switches



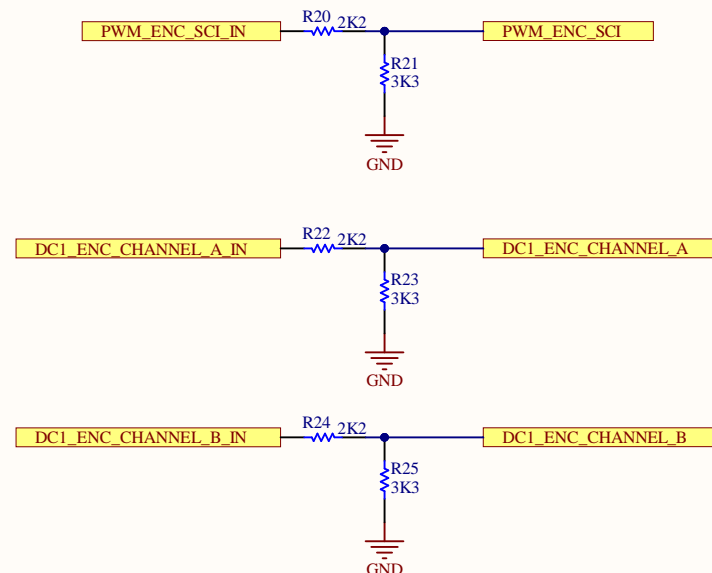
## CAN



## Servo Level Shifters



## Encoder Voltage Dividers



Low-pass filter cutoff frequency:  
 $f_c = 1 / (2 * \pi * 3.3k * ?)$   
 = ? Hz

Voltage Division:  
 $V_{out} = 5 * 3.3k / (2.2k + 3.3k)$