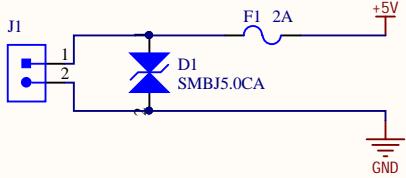


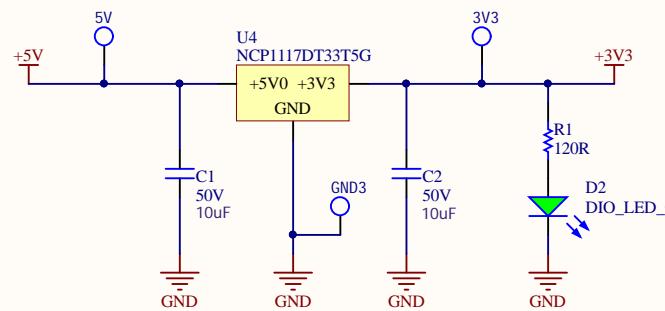
A

A

## Power In



## LDO Voltage Regulator



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

B

B

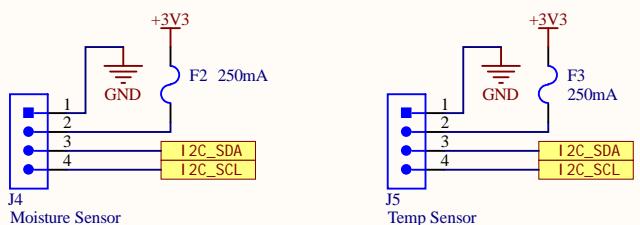
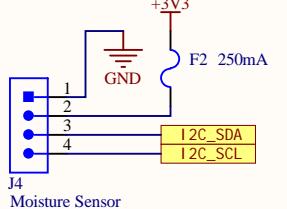
C

C

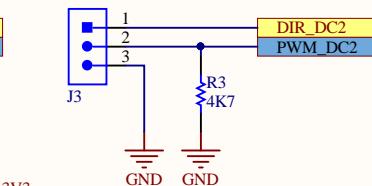
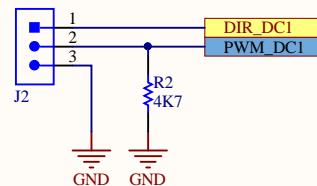
D

D

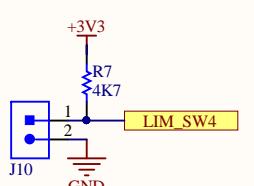
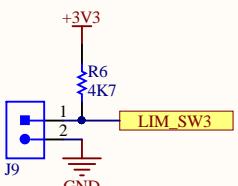
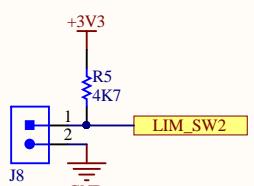
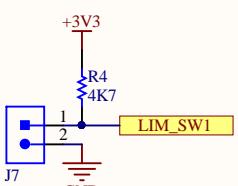
## Sensors



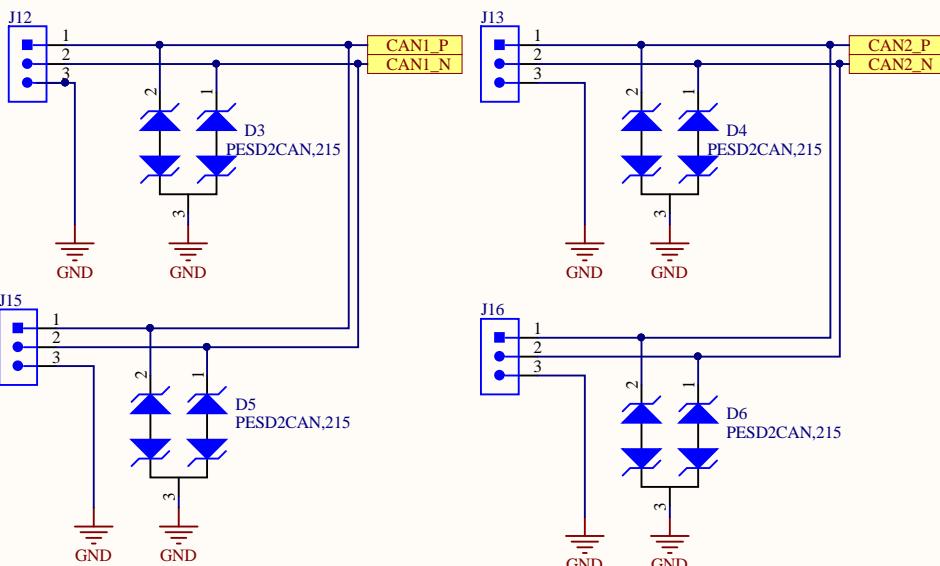
## DC Motors



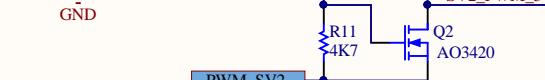
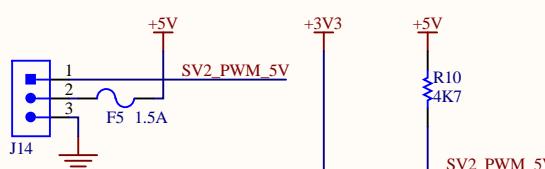
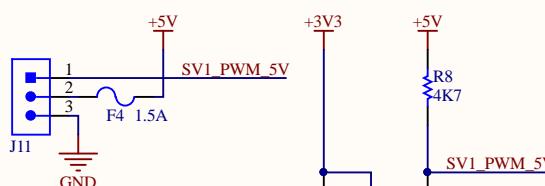
## Limit Switches



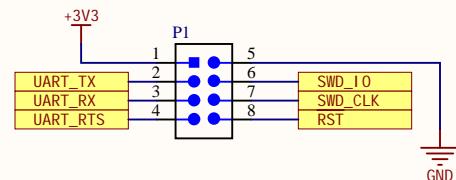
## CAN Connectors



## Servos



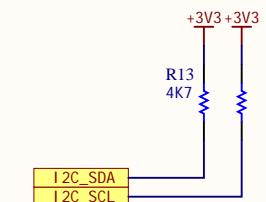
## Debug/Programming



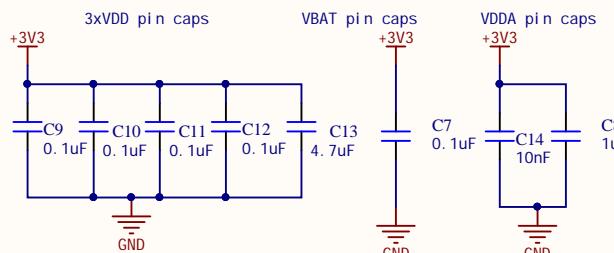
## Testpoints



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



## Decoupling Caps



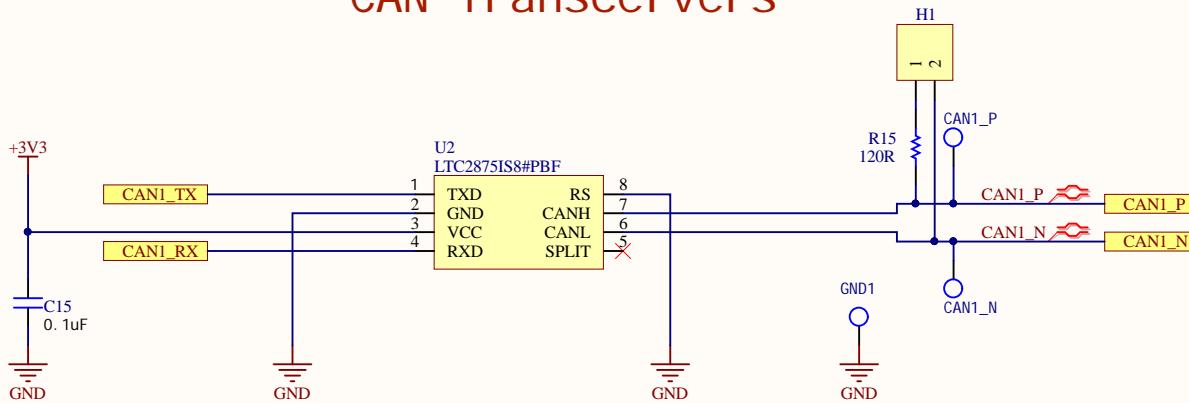
A

A

## CAN Transceivers

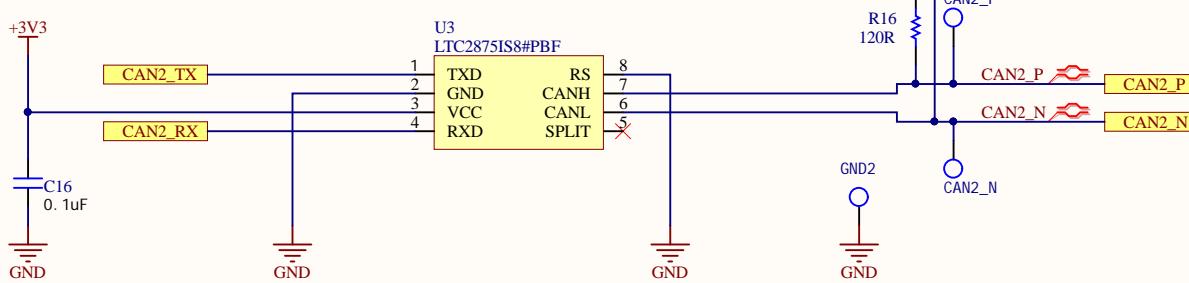
B

B



C

C

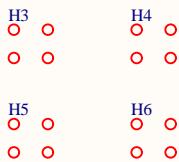


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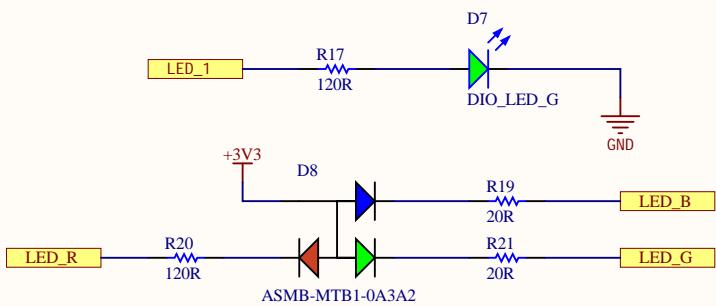
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Date: 2020-02-05	Sheet 4 of 5	
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## Mounting Holes



## 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

