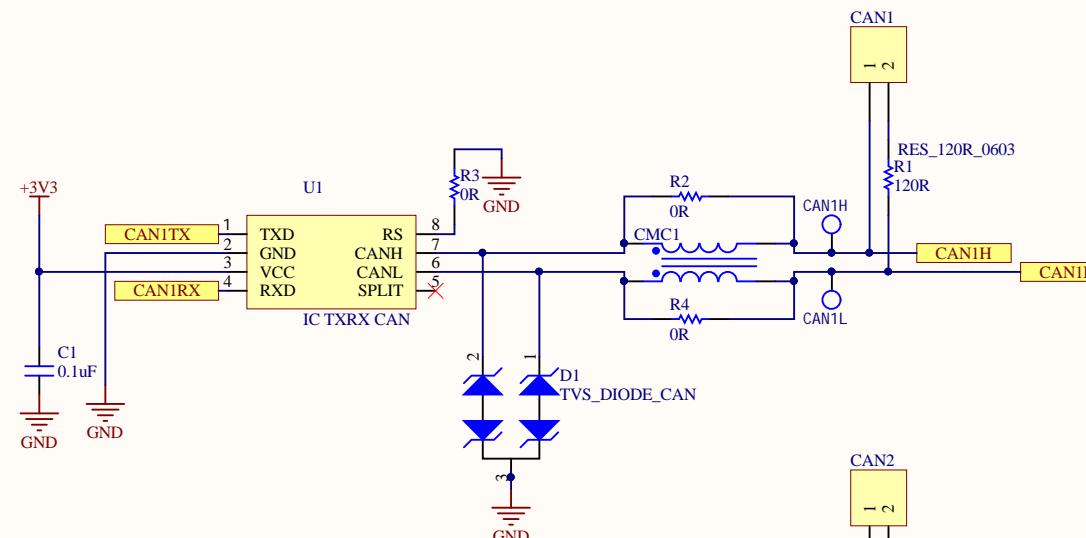
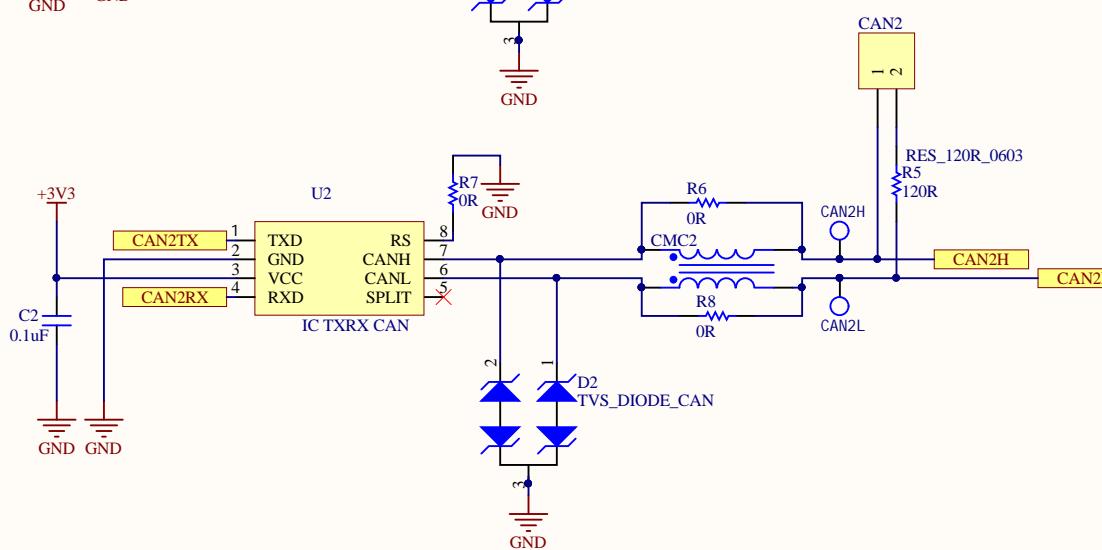


A



A

B



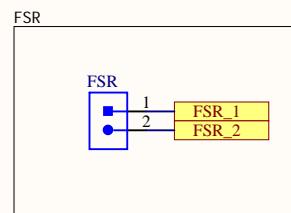
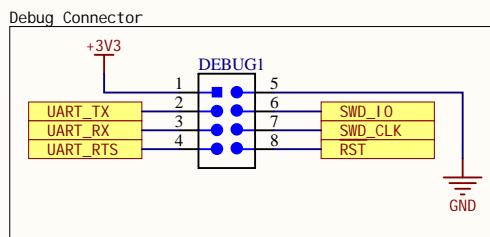
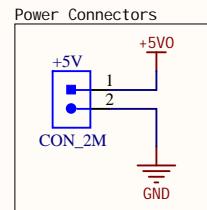
B

C

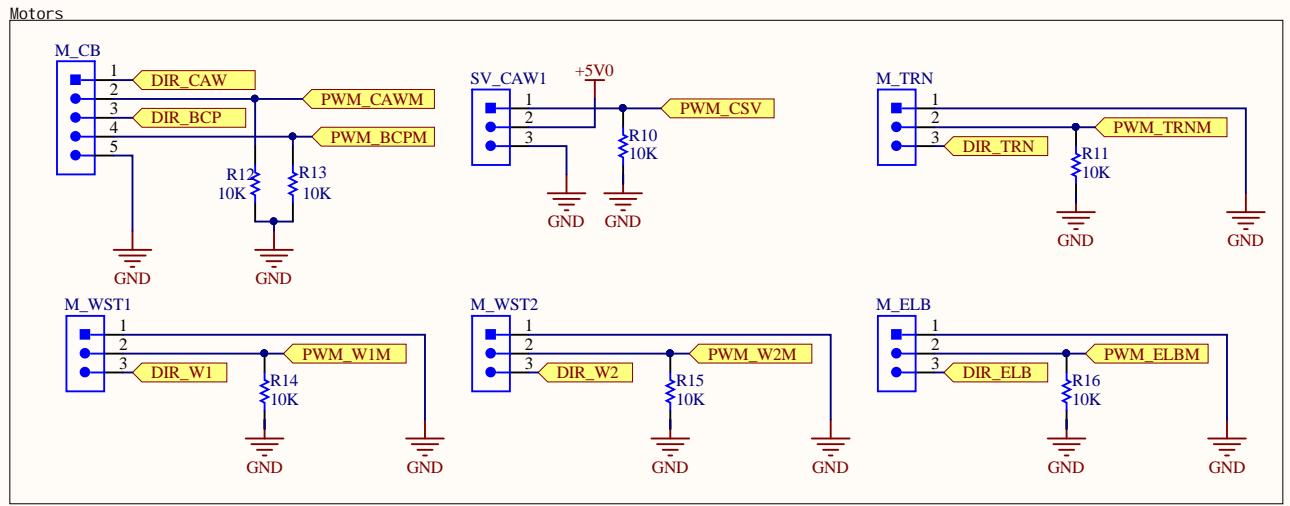
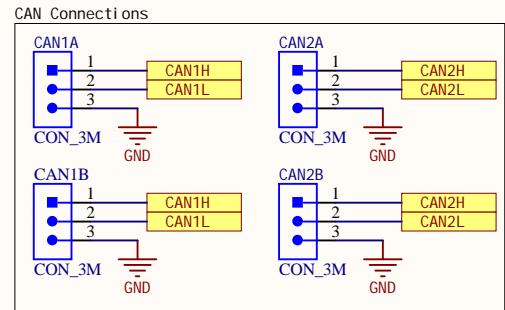
Title Transceiver		UW Robotics 200 University Avenue Waterloo Ontario Canada N2L 3G6
Size: Letter Drawn By: Princely Onai fo		
Date: 12/20/2019 Sheet of		
File: C:\Users\kyileh\Desktop\Works\UWRT\MarsRover2020-PCB\Projects\Arm\Rev1\sch\CAN.SchDoc		



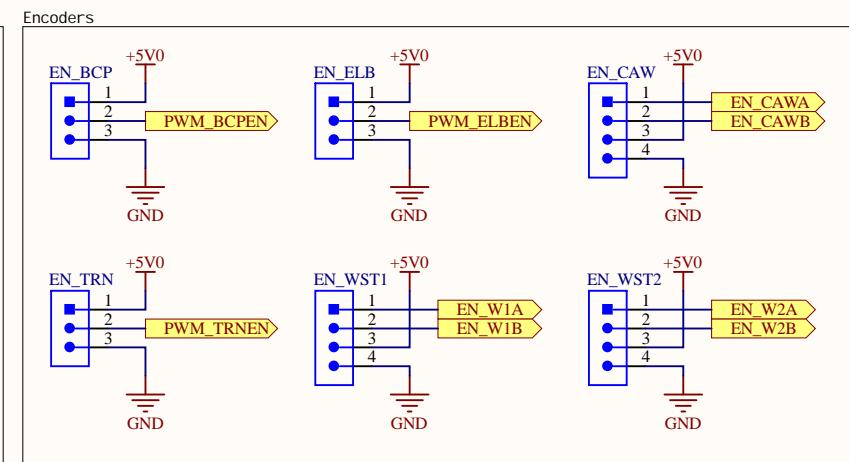
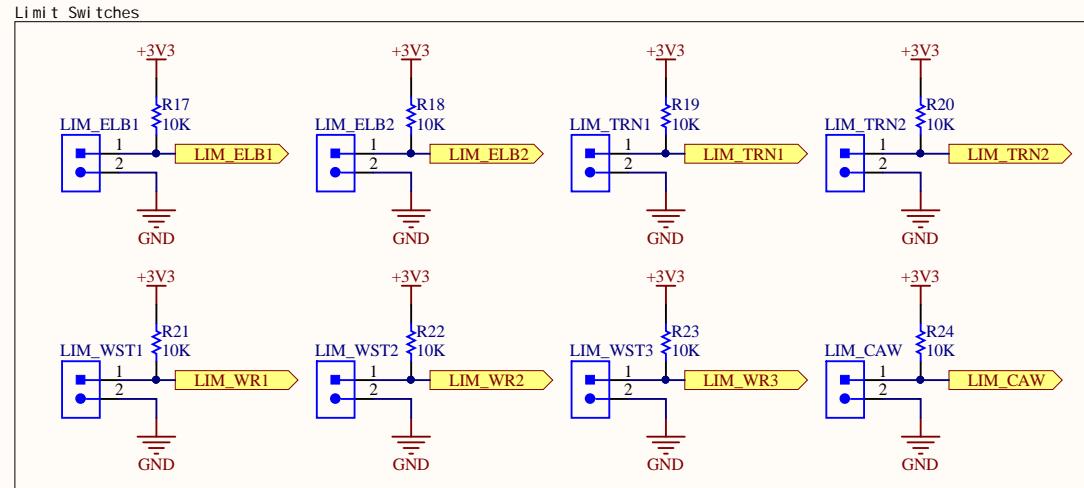
A



B



C

**Title Connectors**

Size: Letter | Drawn By: Kyle Hong, Noah Chapman

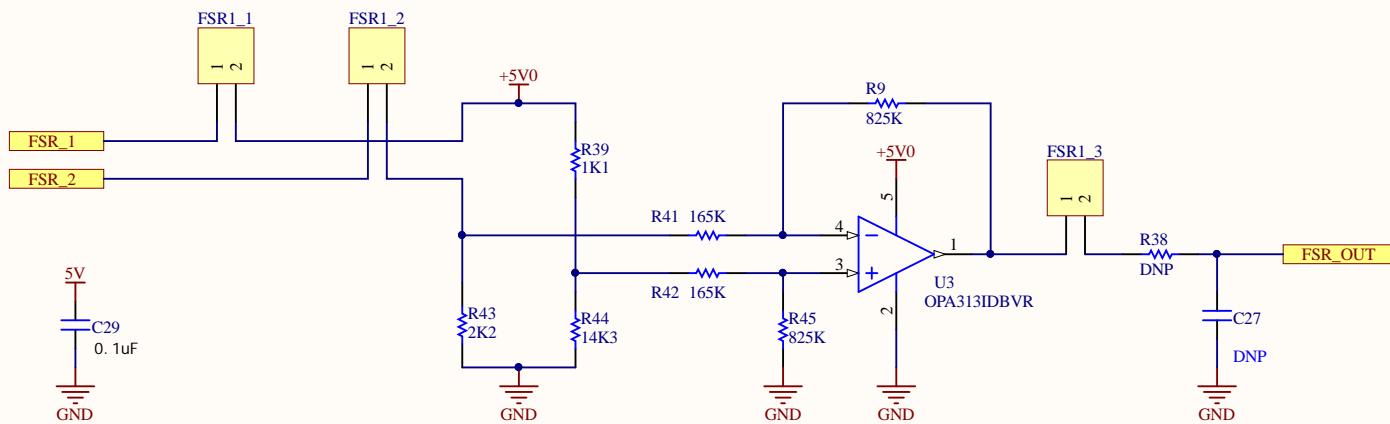
Date: 12/20/2019

File: C:\Users\kyleh\Desktop\Works\UWRT\MarsRover2020-PCB\Projects\Arm\Rev1\sch\Connectors.SchDoc

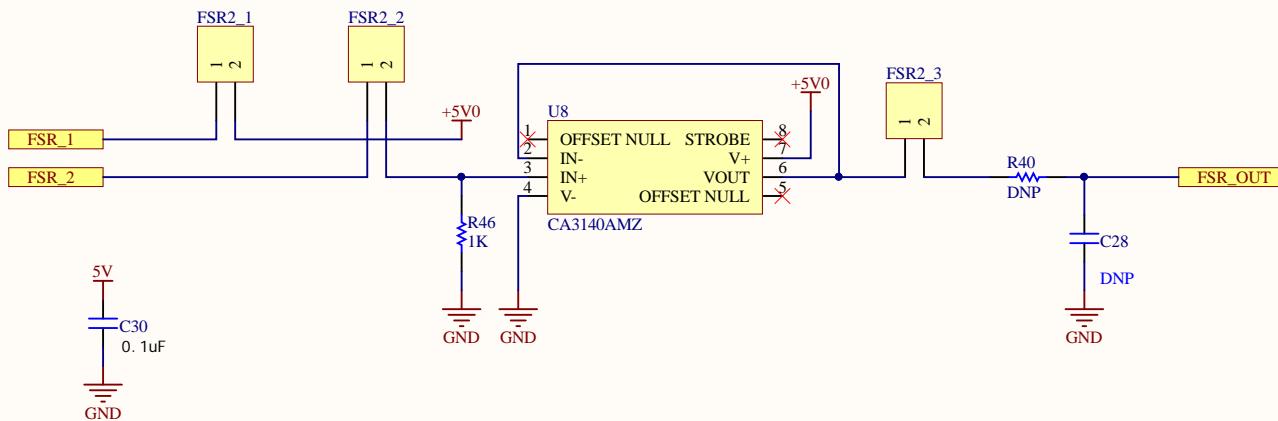
UW Robotics  
200 University Avenue  
Waterloo  
Ontario  
Canada N2L 3G6



A



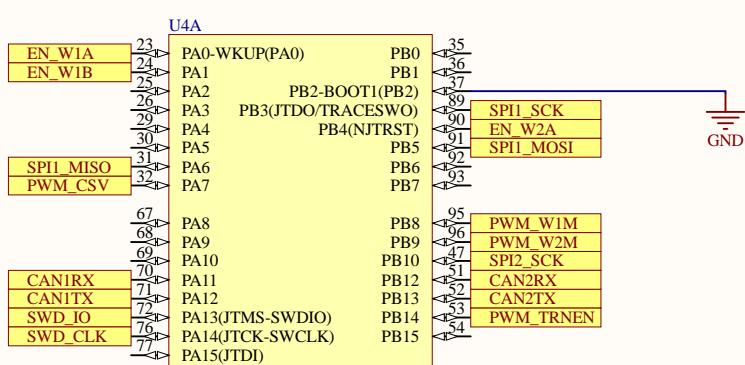
B



C

Title Claw Force Sensor		UW Robotics 200 University Avenue Waterloo Ontario Canada N2L 3G6
Size: Letter	Drawn By: K. Hong, N. Chapman, A. Ebrahimi	
Date: 12/20/2019	Sheet* of *	
File: C:\Users\kyleh\Desktop\Works\UWRT\MarsRover2020-PCB\Projects\Arm\Rev1\sch\FSR.SchDoc		UW ROBOTICS TEAM

A

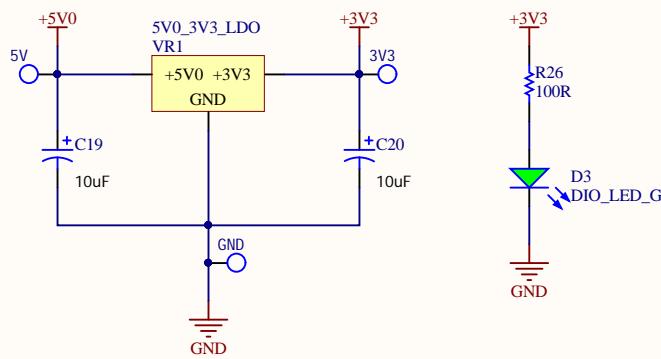


A

B

C

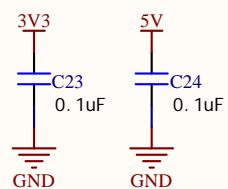
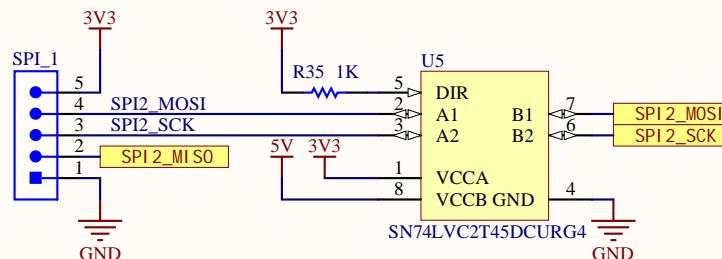
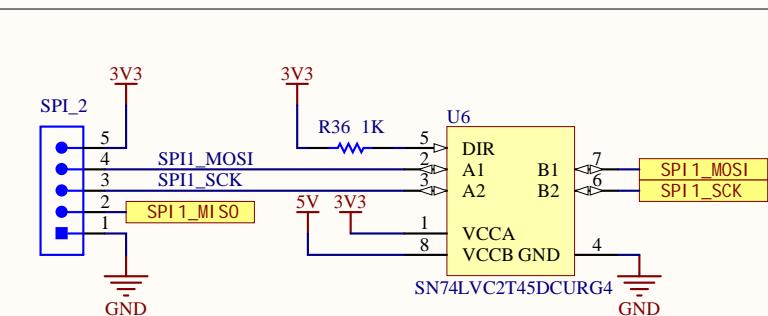
D



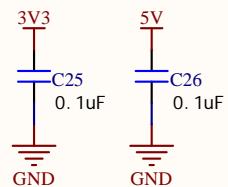
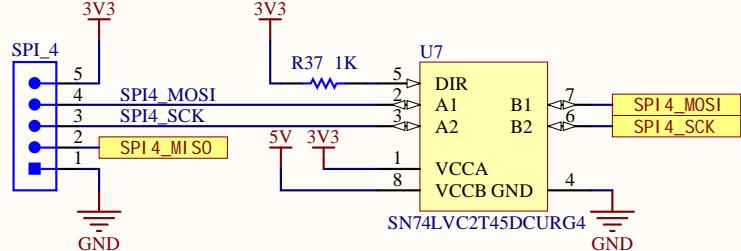
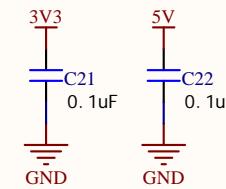
Title Power		<i>UW Robotics 200 University Avenue Waterloo Ontario Canada N2L 3G6</i>	
Size: Letter Drawn By: Kyle Hong			
Date: 12/20/2019 Sheet of			
File: C:\Users\kyleh\Desktop\Works\UWRT\MarsRover2020-PCB\Projects\Arm\Rev1\sch\POWER.SchDoc			

A

## SPI Connectors



▲ Used level shifter because MCU SPI connectors are 5V tolerant and registers voltages greater than 3V3 as high. Didn't shift MISO because SPI can handle that level of input.



C

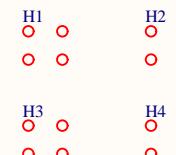
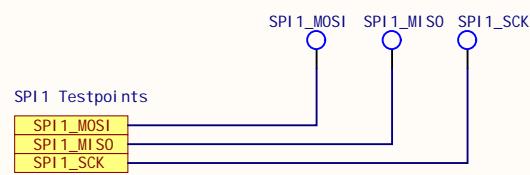
A

B

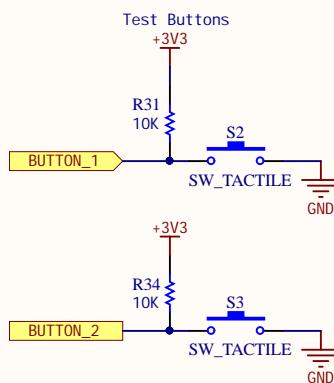
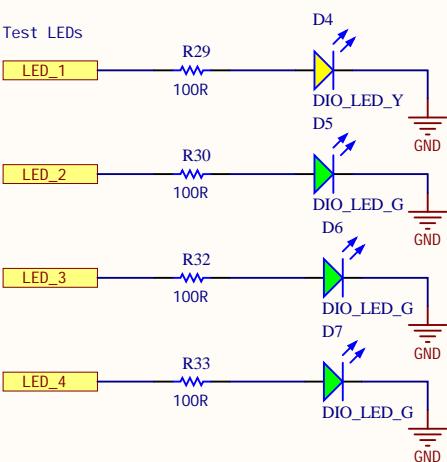
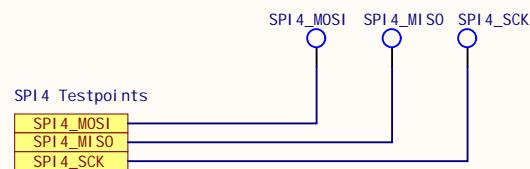
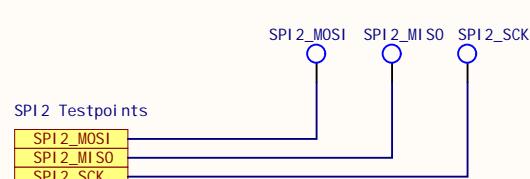
C

D

A



B



D