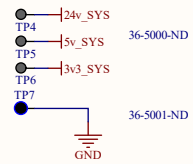


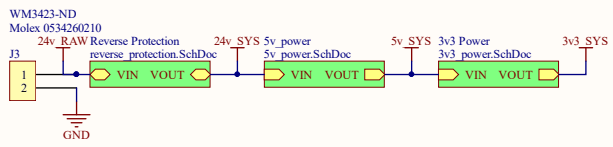
Test Points



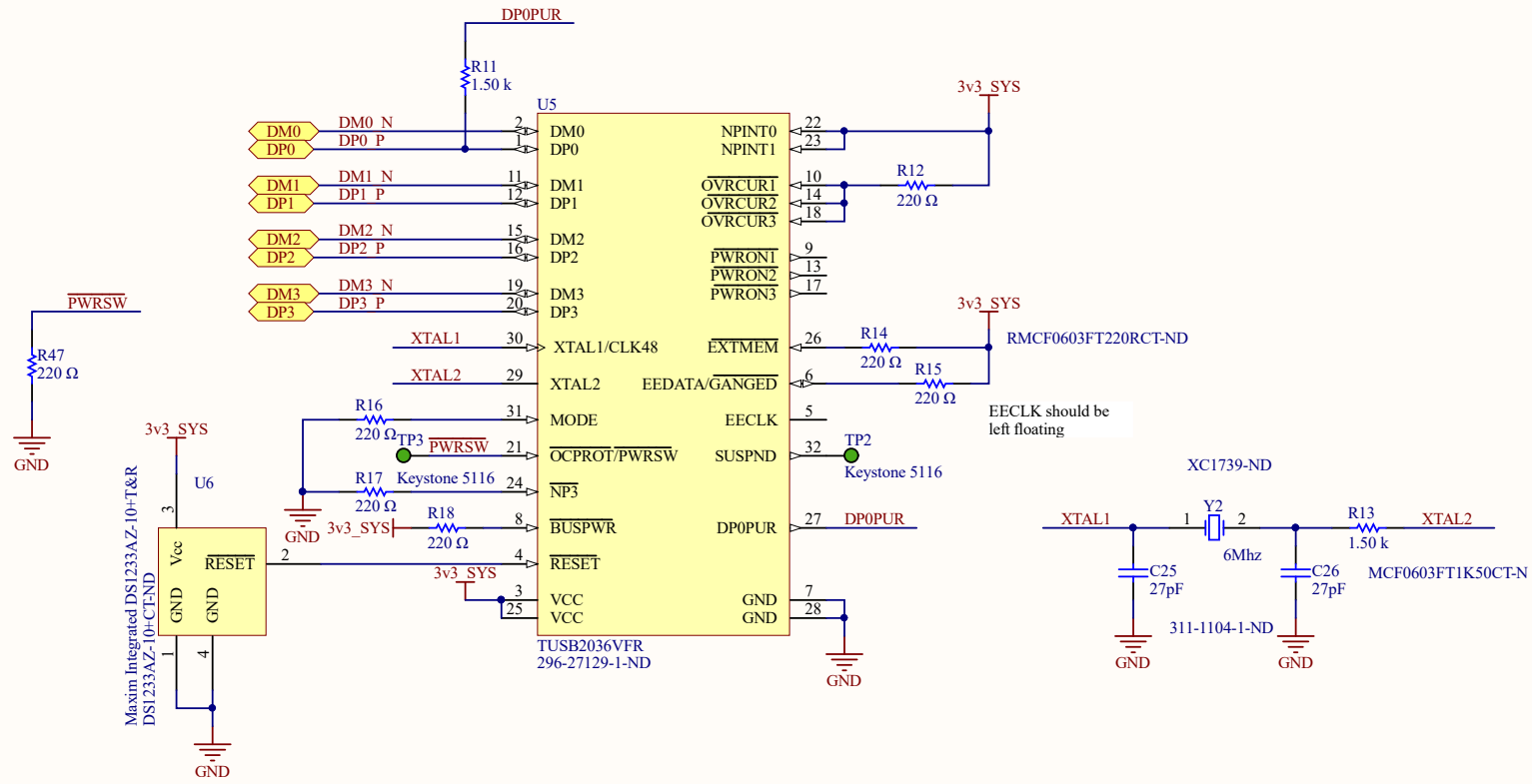
Short circuit current for each 485 transceiver is 250mA which would dictate a 2.5A supply, however this was eschewed in favor of assuming a failure rate of 2 devices would be acceptable.
 2 failed devices + 8 nominally operating devices
 500ma + 400mA + 100mA Buffer

70ma per FTDI chip
 50ma for USB hub

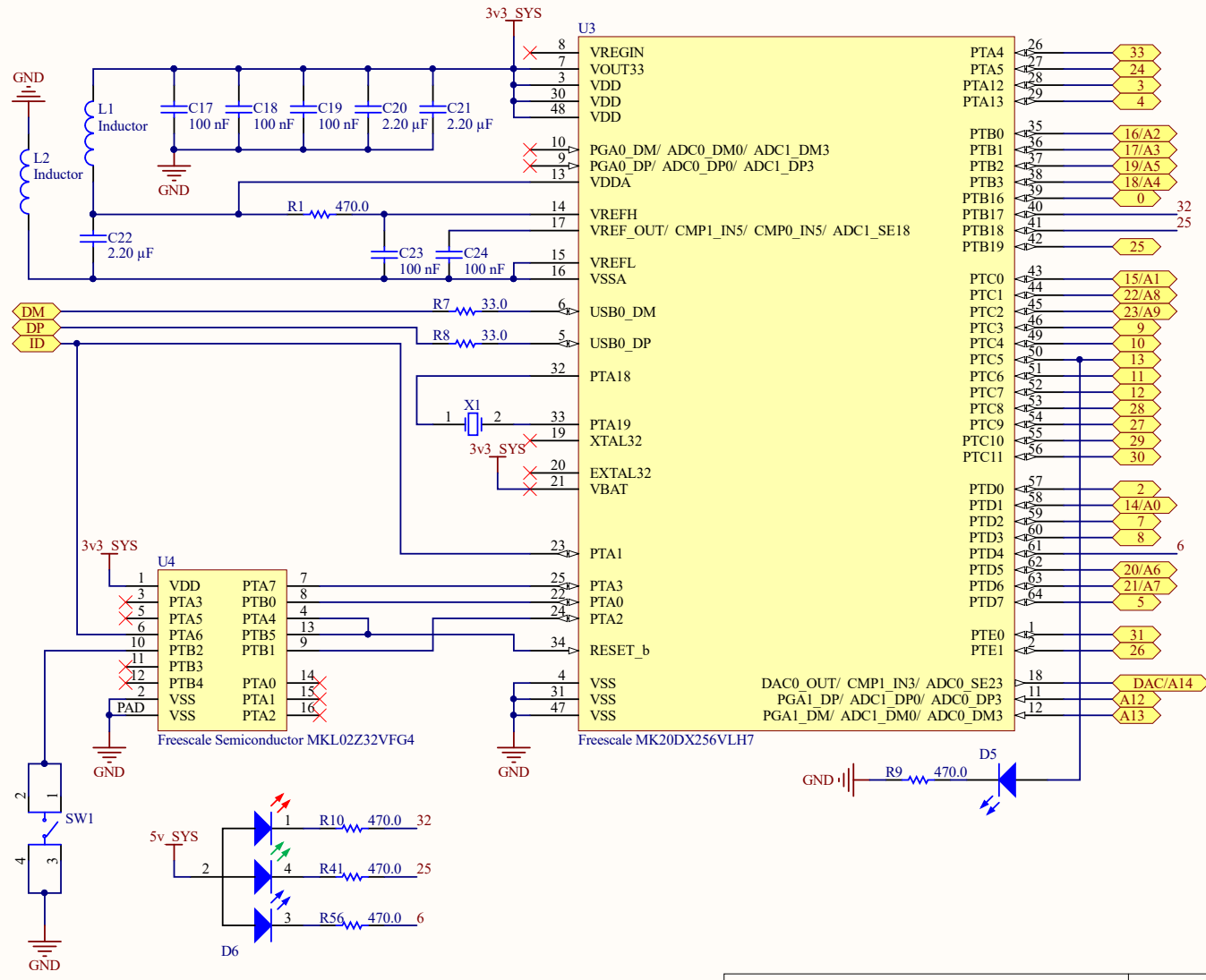
Power Management



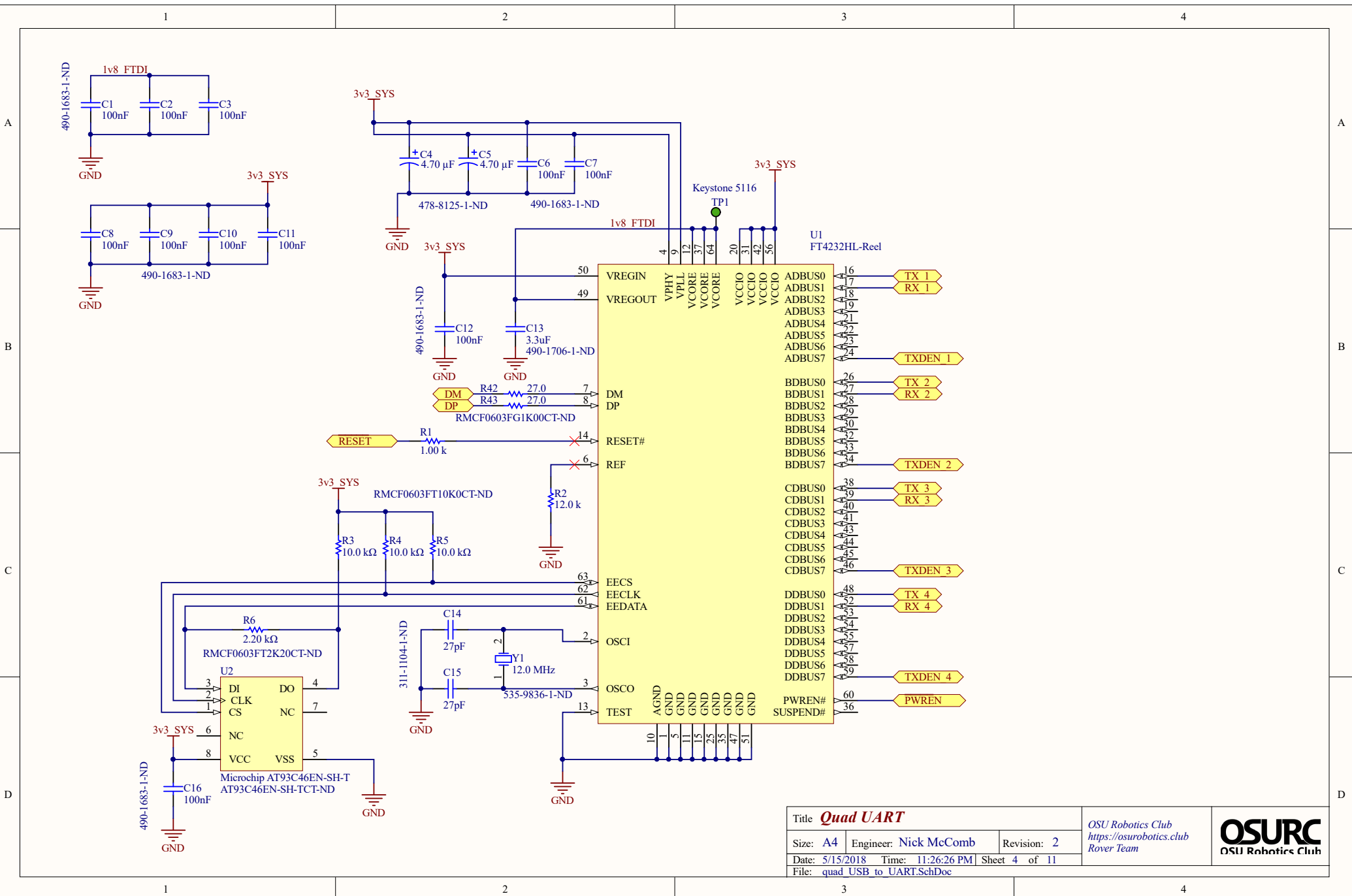
Title Main			OSU Robotics Club https://osurobotics.club Rover Team	OSURC OSU Robotics Club
Size: A4	Engineer: Nick McComb	Revision: 2		
Date: 5/15/2018	Time: 11:26:25 PM	Sheet 1 of 11		
File: Main.SchDoc				



Title USB Hub			OSU Robotics Club https://osurobotics.club Rover Team	
Size: A4	Engineer: Nick McComb	Revision: 2		
Date: 5/15/2018	Time: 11:26:25 PM	Sheet 2 of 11		
File: USB hub.SchDoc				



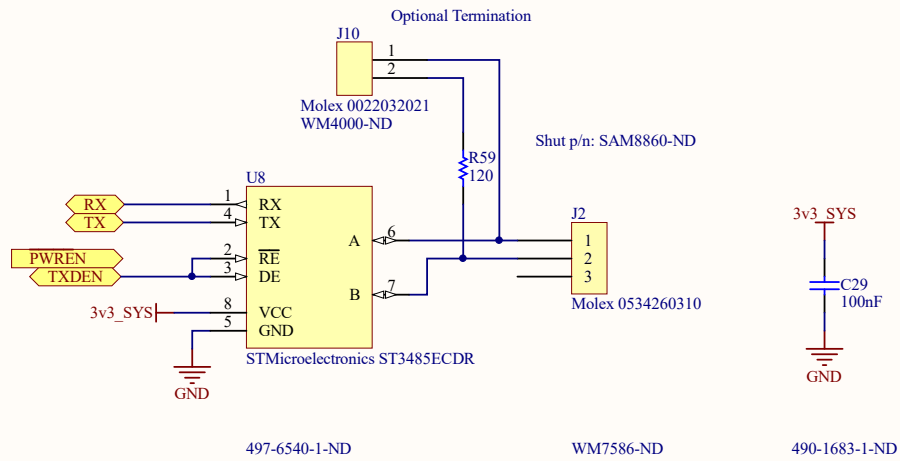
Title Teensy 3.2 MCU			OSU Robotics Club https://osurobotics.club Rover Team	
Size: A4	Engineer: Nick McComb	Revision: 2		
Date: 5/15/2018	Time: 11:26:25 PM	Sheet 3 of 11		
File: meu.SchDoc				



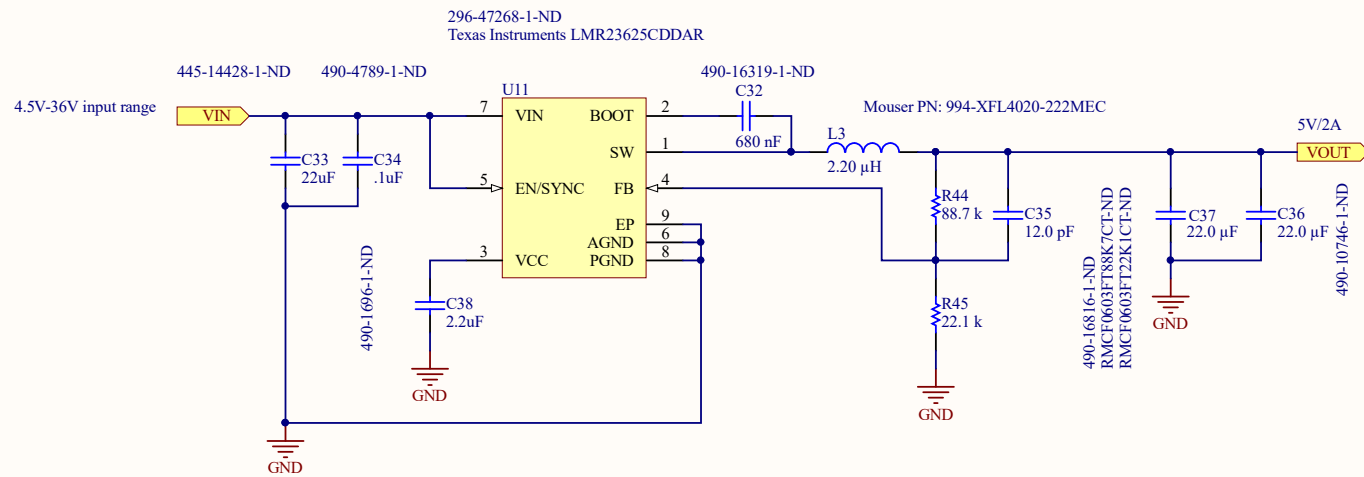
Title Quad UART		
Size: A4	Engineer: Nick McComb	Revision: 2
Date: 5/15/2018	Time: 11:26:26 PM	Sheet 4 of 11
File: quad USB to UART.SchDoc		

OSU Robotics Club
<https://osurobotics.club>
 Rover Team





Title RS485 Transceiver			OSU Robotics Club https://osurobotics.club Rover Team	
Size: A4	Engineer: Nick McComb	Revision: 2		
Date: 5/15/2018	Time: 11:26:26 PM	Sheet 5 of 11		
File: rs485_transceiver.SchDoc				



<http://www.ti.com/lit/ds/symlink/lmr23625.pdf>

Title 5V Power Regulator		
Size: A4	Engineer: Nick McComb	Revision: 2
Date: 5/15/2018	Time: 11:26:26 PM	Sheet 6 of 11
File: 5v_power.SchDoc		

OSU Robotics Club
<https://osurobotics.club>
Rover Team



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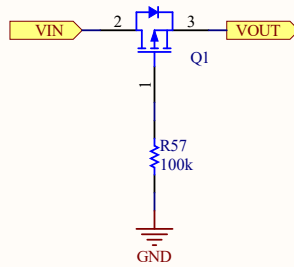
B

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C

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D



Title Reverse Protection			OSU Robotics Club https://osurobotics.club Rover Team	
Size: A4	Engineer: Nick McComb	Revision: 2		
Date: 5/15/2018	Time: 11:26:26 PM	Sheet 7 of 11		
File: reverse_protection.SchDoc				

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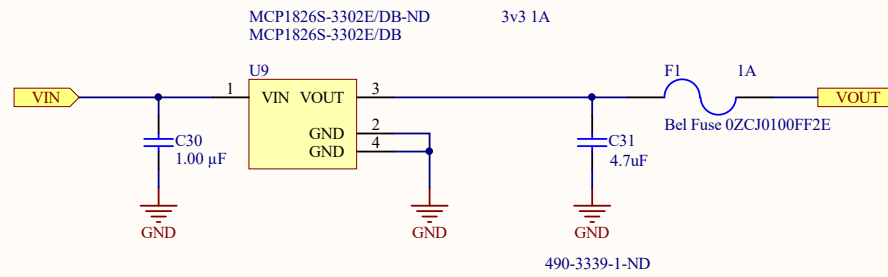
B

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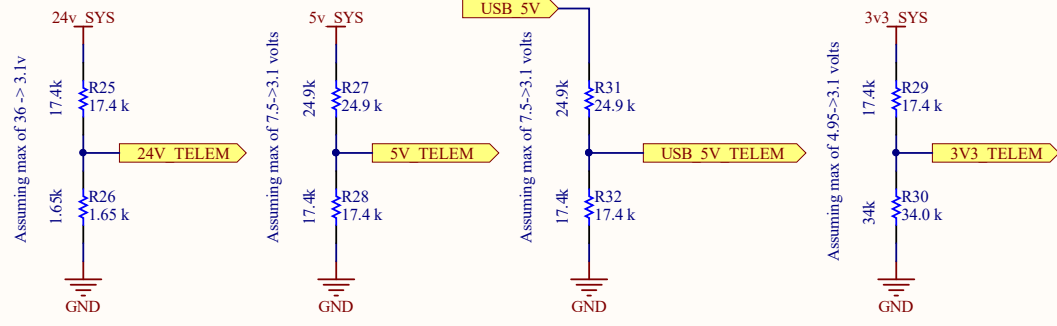
Title 3v3 Power Regulator			OSU Robotics Club https://osurobotics.club Rover Team	
Size: A4	Engineer: Nick McComb	Revision: 2		
Date: 5/15/2018	Time: 11:26:26 PM	Sheet 8 of 11		
File: 3v3_power.SchDoc				

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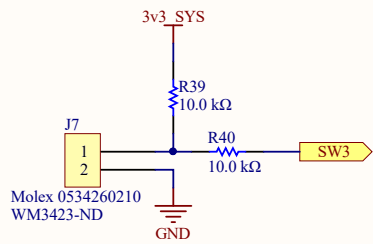
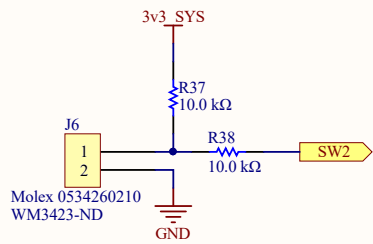
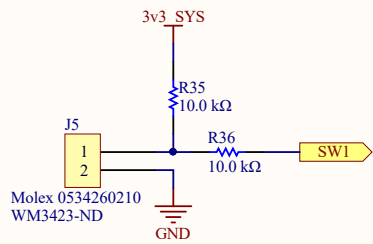
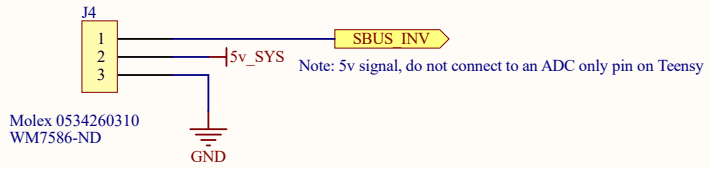
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Title Telemetry			OSU Robotics Club https://osurobotics.club Rover Team	OSURC OSU Robotics Club
Size: A4	Engineer: Nick McComb	Revision: 2		
Date: 5/15/2018	Time: 11:26:26 PM	Sheet 9 of 11		
File: Telemetry.SchDoc				



Title MCU Interface			OSU Robotics Club https://osurobotics.club Rover Team	
Size: A4	Engineer: Nick McComb	Revision: 2		
Date: 5/15/2018	Time: 11:26:26 PM	Sheet 10 of 11		
File: MCU Interface.SchDoc				

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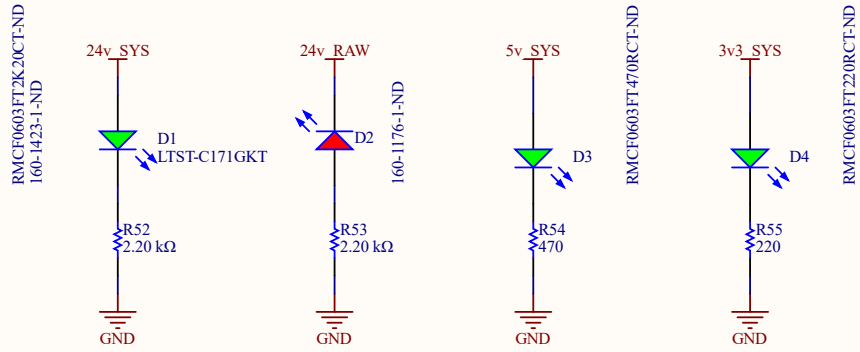
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Title Indicators			OSU Robotics Club https://osurobotics.club Rover Team	OSURC OSU Robotics Club
Size: A4	Engineer: Nick McComb	Revision: 2		
Date: 5/15/2018 Time: 11:26:26 PM Sheet 11 of 11				
File: LED_Indicators.SchDoc				

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