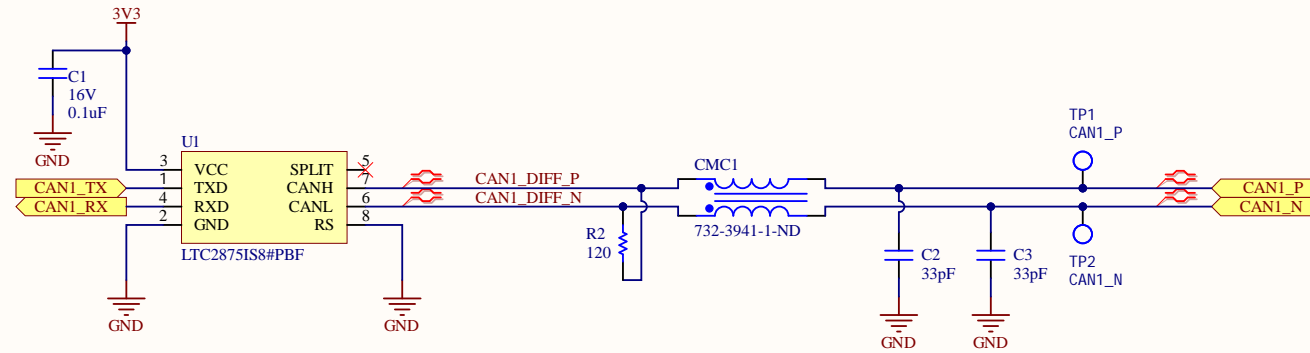
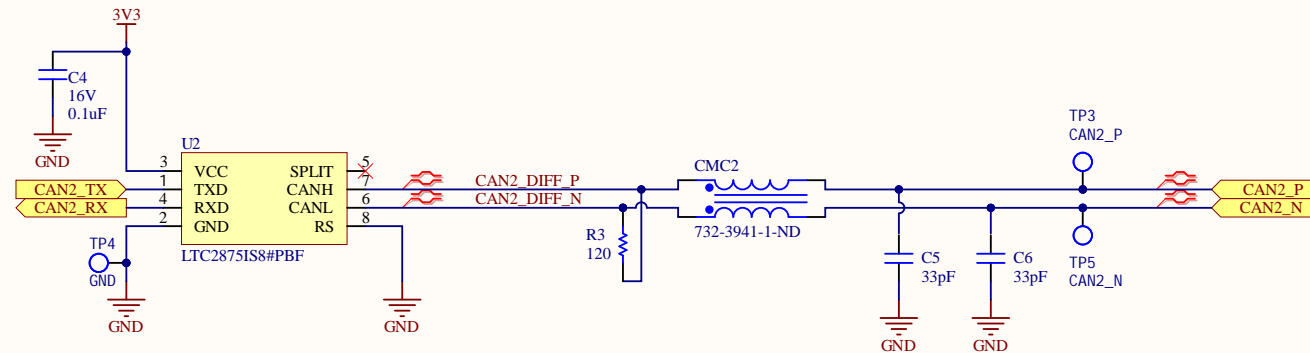


Title	Battery Manager	*
Size:	Letter	Drawn By: Ayesha Ebrahim
Date:	2020-05-12	Sheet* of *
File: C:\Users\yayesh\Documents\GitHub\MarsRover2020-PCB\Projects\BMS\Rev1\Battery Manager.SchDoc		

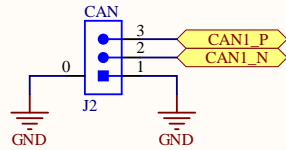
CAN 1



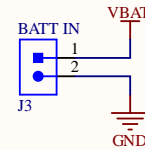
CAN 2



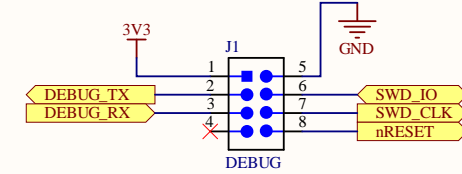
CAN



Battery In

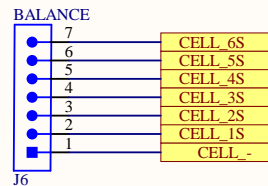


Debug/Programing

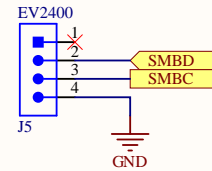


Double check balance connector direction (which pin is GND) and that footprint for xt90 is okay. Also check pin ordering on ev2400 (make sure its no mirrored or smthg)

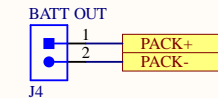
Battery Balancing



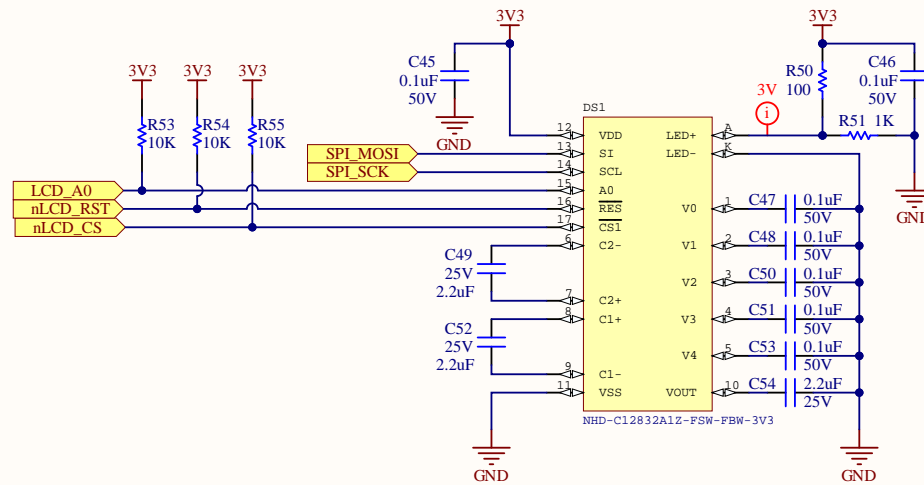
EV2400



Pack Out



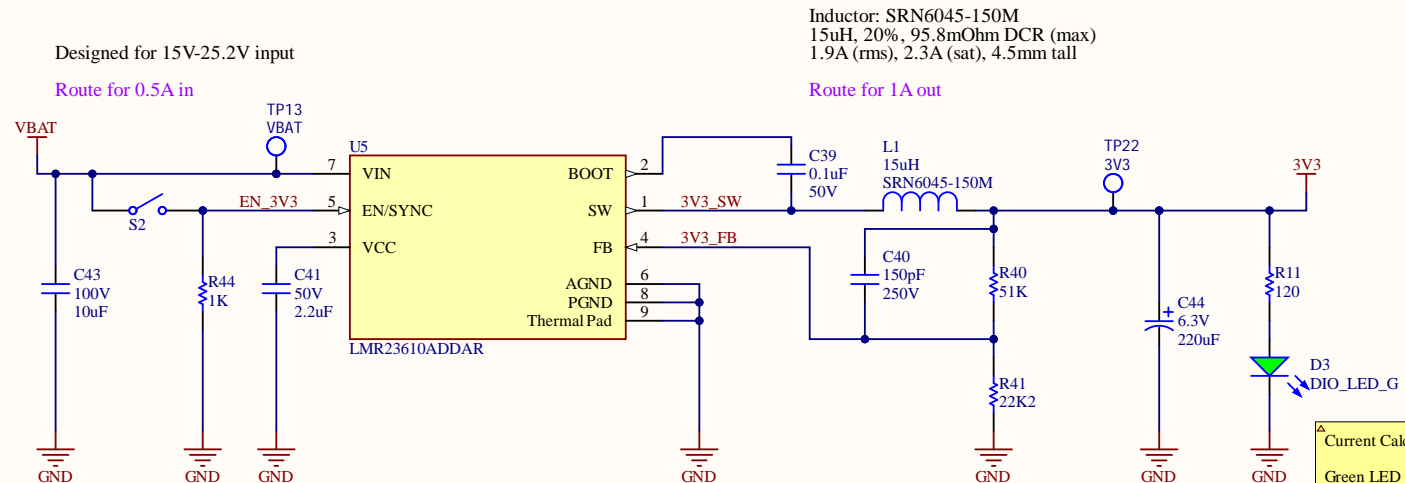
LCD



Title LCD		*
Size: Letter	Drawn By: *	*
Date: 2020-05-12	Sheet* of *	*
File: C:\Users\ayesh\Documents\GitHub\MarsRover2020-PCB\Projects\BMS\Rev1\LCD. SchDoc		



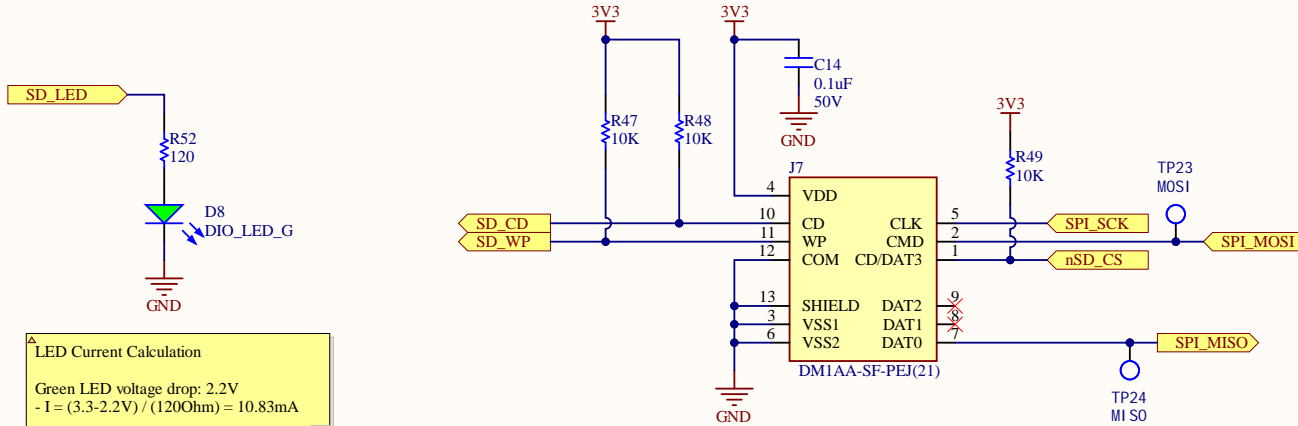
Battery Voltage to 3V3 Buck @ 1A Max



Max expected power on output = 1.65W
Max current = 0.5A
Expected Efficiency at 1A > 87.7%


Current Calculations
Green LED voltage drop: 2.2V
 $I = (3.3 - 2.2V) / 120 = 10.83mA$

SD Card Connector



LED Current Calculation

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

Title: SD Card		
Size: Letter	Drawn By: Ayesha Ebrahim	
Date: 2020-05-12	Sheet * of *	
File: C:\Users\ayesh\Documents\GitHub\marsrover2020-PCB\Projects\BMS\Rev1\SD Card_SchDoc		