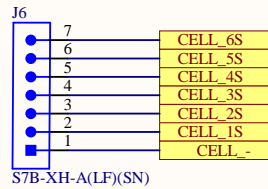
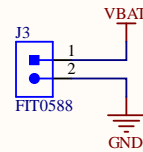


## Battery Balancing

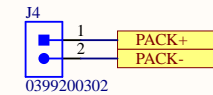


## Battery In

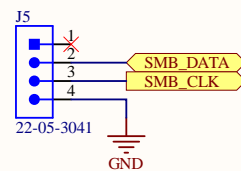


Double check balance connector direction (which pin is GND) and that footprint for xt90 is okay. Also check pin ordering on ev2400 (make sure its no mirrored or smthg)

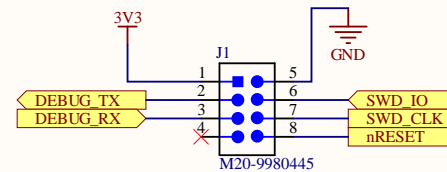
## Pack Out




## EV2400

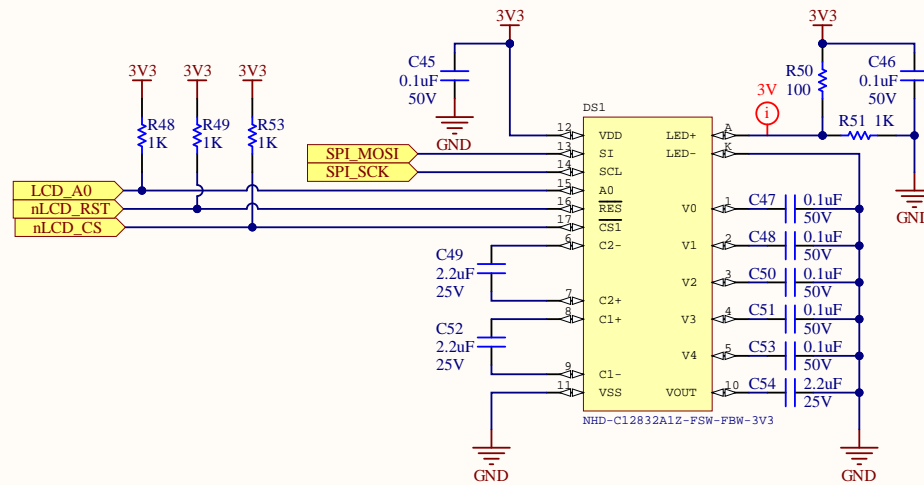


## Debug/Programing



Title Connectors		UW Robotics 200 University Avenue Waterloo Ontario Canada N2L 3G6		
Size: Letter	Drawn By: Ayesha Ebrahim			
Date: 2020-05-12	Sheet of			
File: C:\Users\ayesh\Documents\GitHub\MarsRover2020-PCB\Projects\BMS\Rev1\Connectors.SchDoc				

# LCD

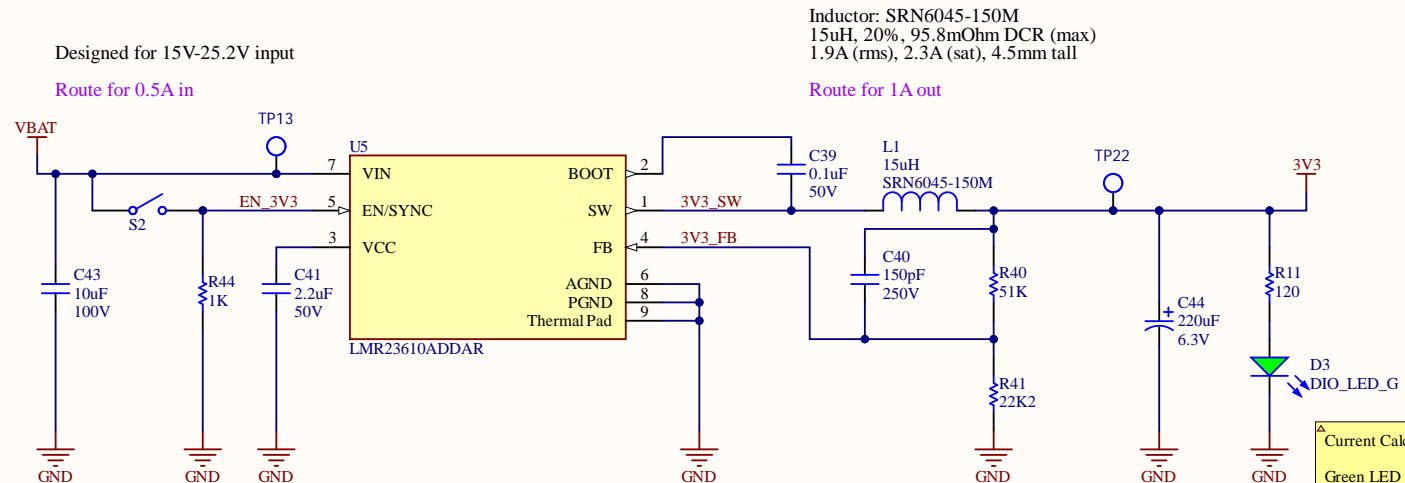


Title LCD		*
Size: Letter	Drawn By: Ayesha Ebrahim	*
Date: 2020-05-12	Sheet* of *	*
File: C:\Users\ayesh\Documents\GitHub\MarsRover2020-PCB\Projects\BMS\Rev1\LCD. SchDoc		





# Battery Voltage to 3V3 Buck @ 1A Max



Current Calculations

Green LED voltage drop: 2.2V

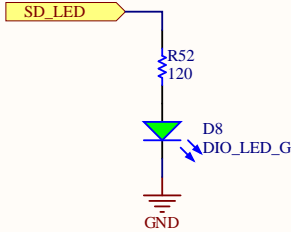
$I = (3.3 - 2.2V) / 120 = 10.83mA$

Max expected power on output = 1.65W


Max current = 0.5A

Expected Efficiency at 1A > 87.7%

## SD Card Connector



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		