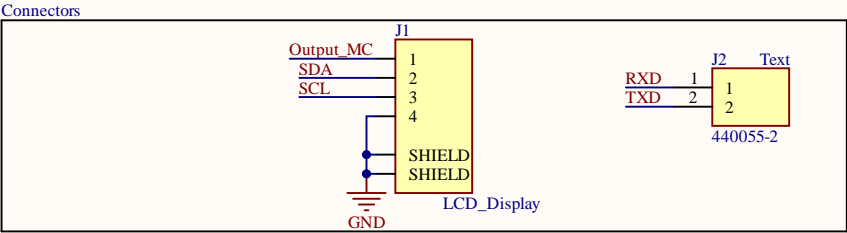
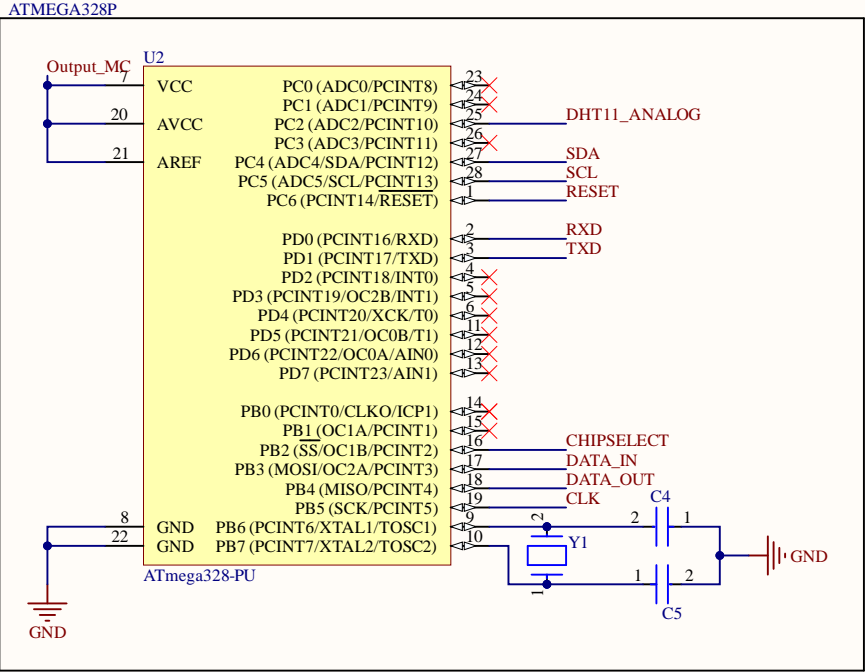
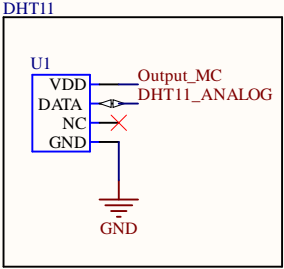
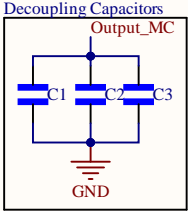
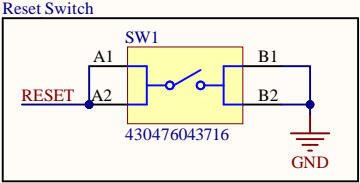


1	2	3	4
A			A
B	<div>U_CellCircuit CellCircuit.SchDoc</div> <div></div>	<div>U_LT6812 LT6813.SchDoc</div> <div></div>	<div>U_WireHarness WireHarness.SchDoc</div> <div></div>
C	<div>U_Microcontroller Microcontroller.SchDoc</div> <div></div>	<div>U_PowerConversion PowerConversion.SchDoc</div> <div></div>	
D			<div><div>TitleTeam1p618</div><div><div>SizeA4</div><div>NumberBMS48Volts using LTC6813</div><div>Revision0.1</div></div><div><div>Date3-31-2024</div><div>Sheet ofTeam1.618</div></div><div><div>FileC:\Joshua DATA\...\BMS48Voltsv0.1.SchDoc</div><div>Drawn ByJoshua Anthony(R&D)</div></div></div>
1	2	3	4



Title		
Size	Number	Revision
A4		
Date:	3-31-2024	Sheet of
File:	C:\Joshua DATA\.\Microcontroller.SchDoc	Drawn By:

A

B

C

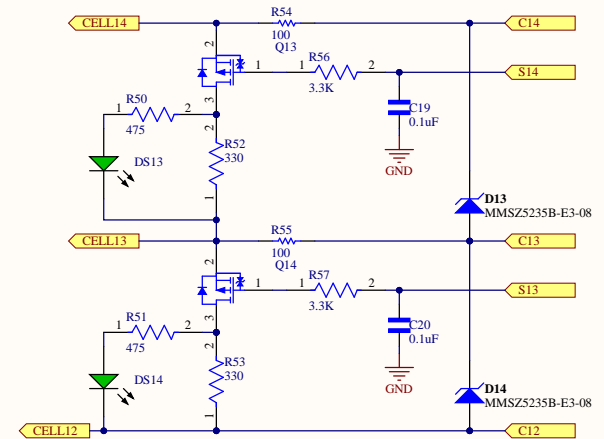
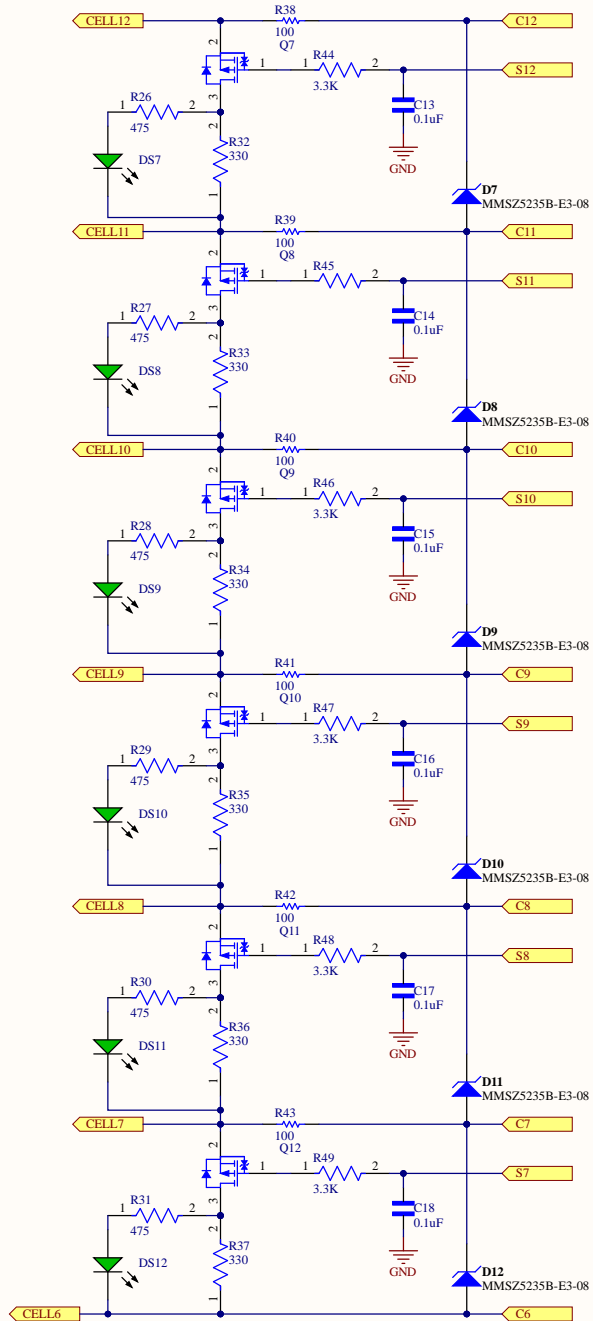
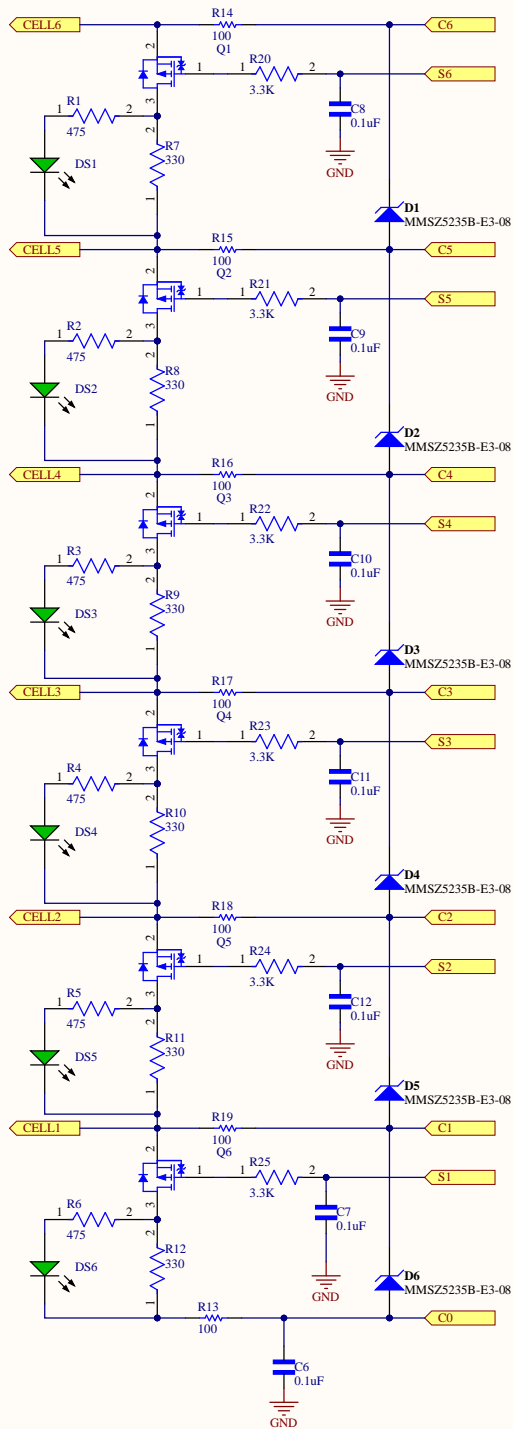
D

A

B

C

D

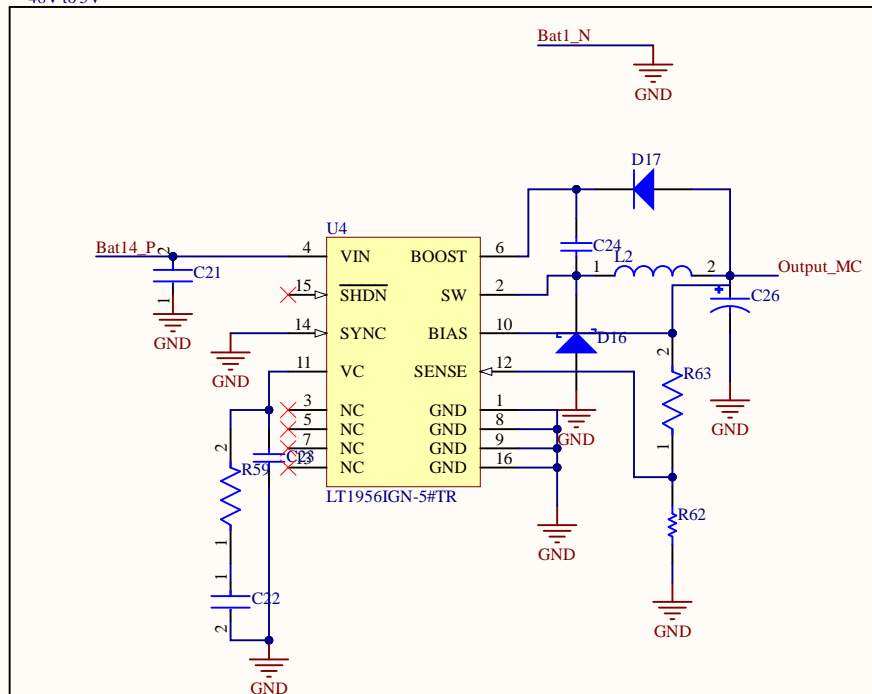


Changes since KICad version
1. Removed the extra resistors around the pins in LTC6812
2. Removed the optional capacitor
3. Added Zener diode of 6.8V as defined in the datasheet since the capacitance is greater than 0.1μF

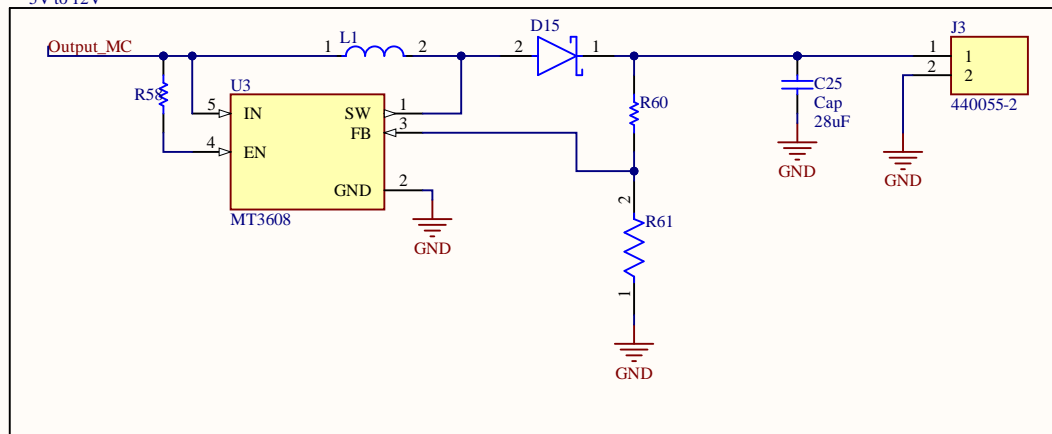


Title Cell Circuit		
Size A3	Number BMS48V01	Revision 0.1
Date: 3-31-2024	Sheet of Drawn By: Joshua Anthony(R&D)	
File: C:\Joshua DATA\CellCircuit.SchDoc		

48V to 5V



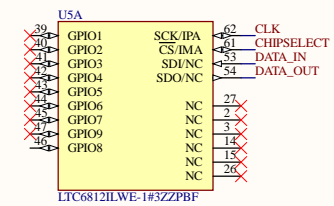
5V to 12V



Found Buck Converter that converted 60V to 5V, 1A.
For future iteration, consider 60V to 12V and then parallel power the FAN rather than this method.
Get Feedback from seniors or other personnel



Title		
Size	Number	Revision
A4		
Date:	3-31-2024	Sheet of
File:	C:\Joshua DATA\..PowerConversion.Sch	Drawn By:



Board Stack Report