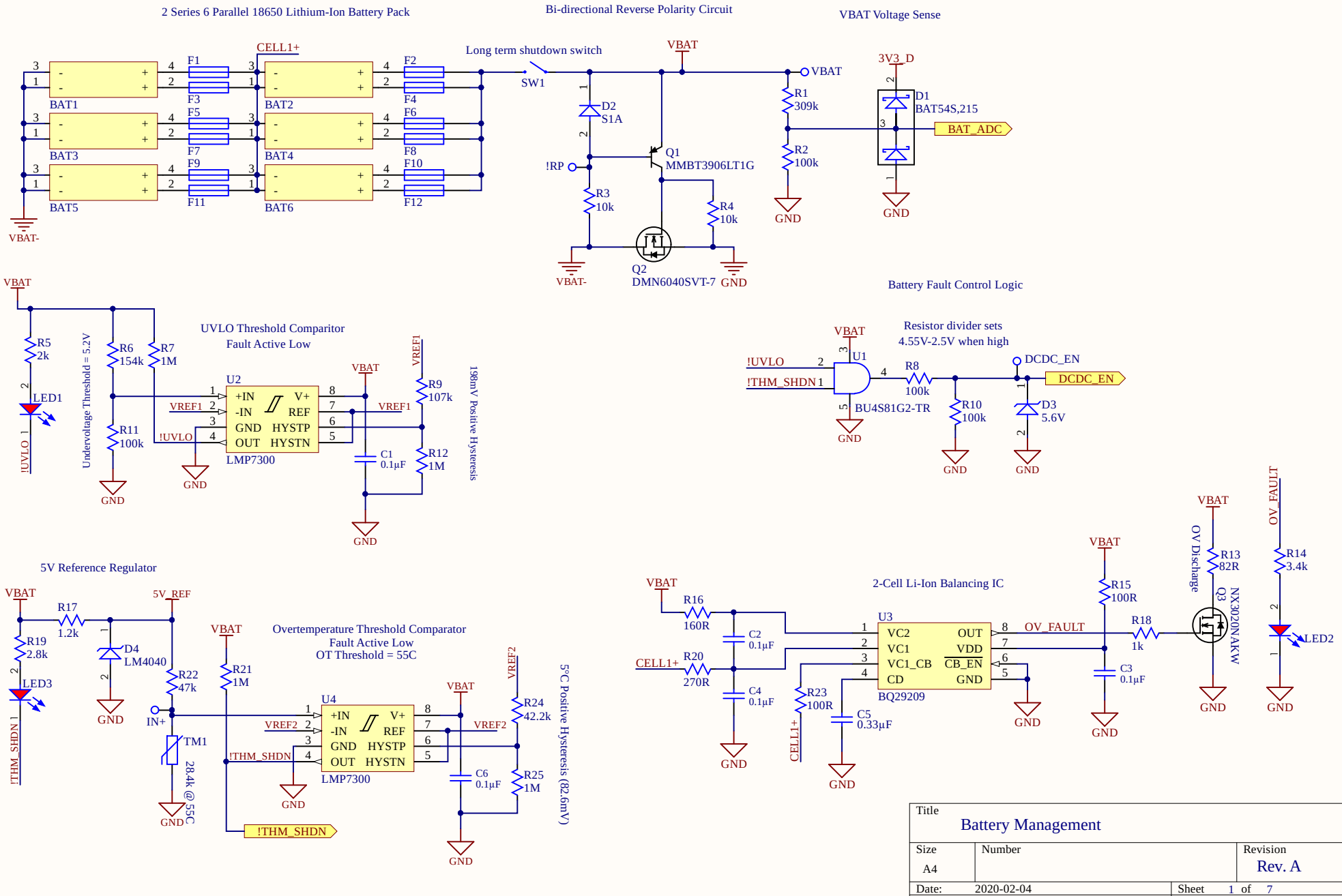
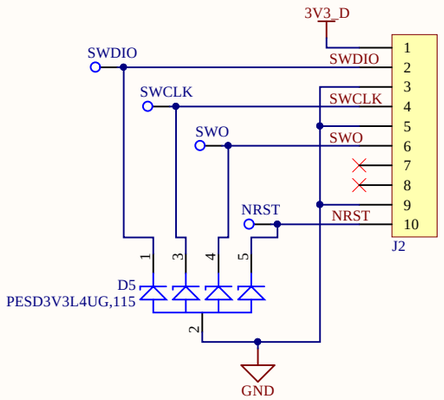
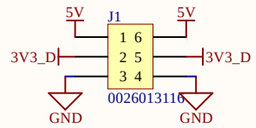


Title	Battery Management	
Size: A4	Number:	Revision: Rev. A
Date: 2020-02-04	Sheet 1 of 7	
File: C:\Users\..\Battery Management.SchDoc	Drawn By: G. Goodwin-Wilson	

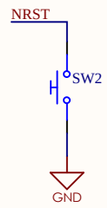
SWD Programming Header



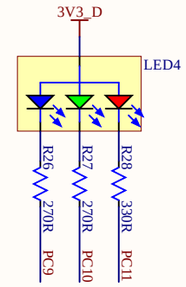
External Power



Reset Button

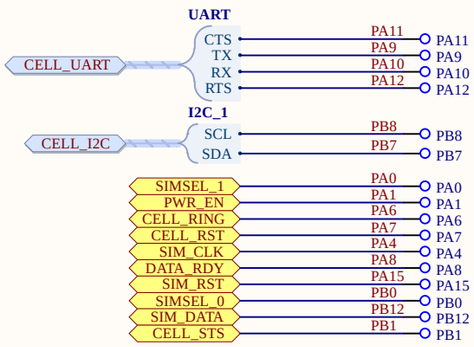


General Purpose RBG LED

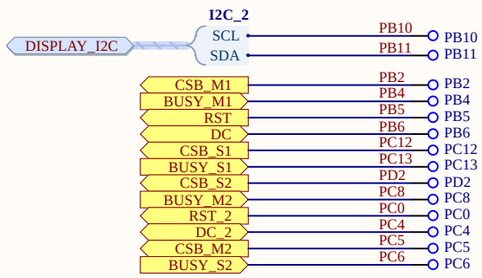


UART (From USB)

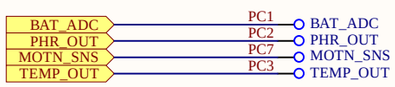
Cellular Module



Display Interface

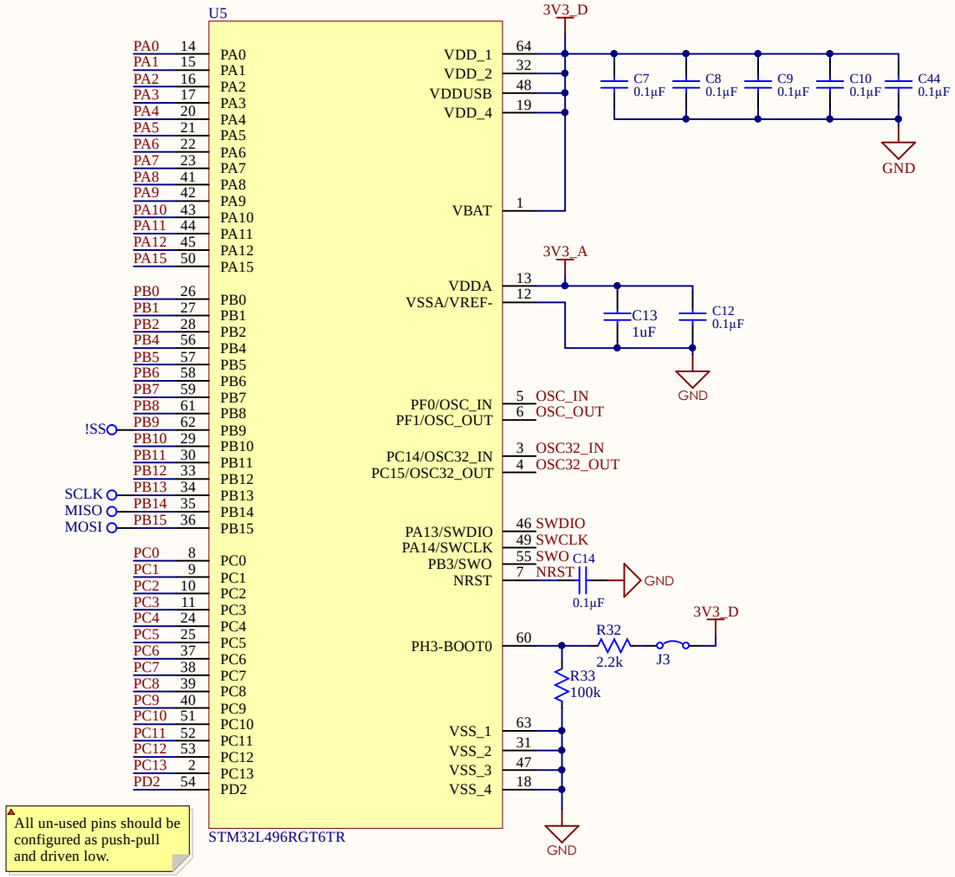


Sensor Signals

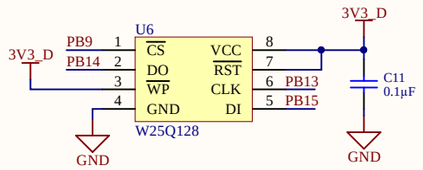


LED Output

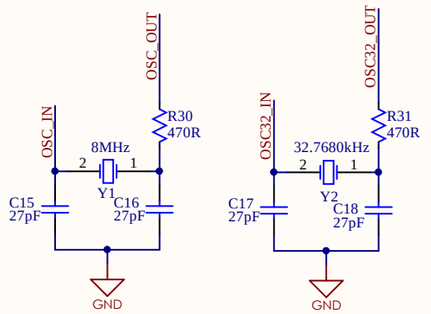
Microcontroller



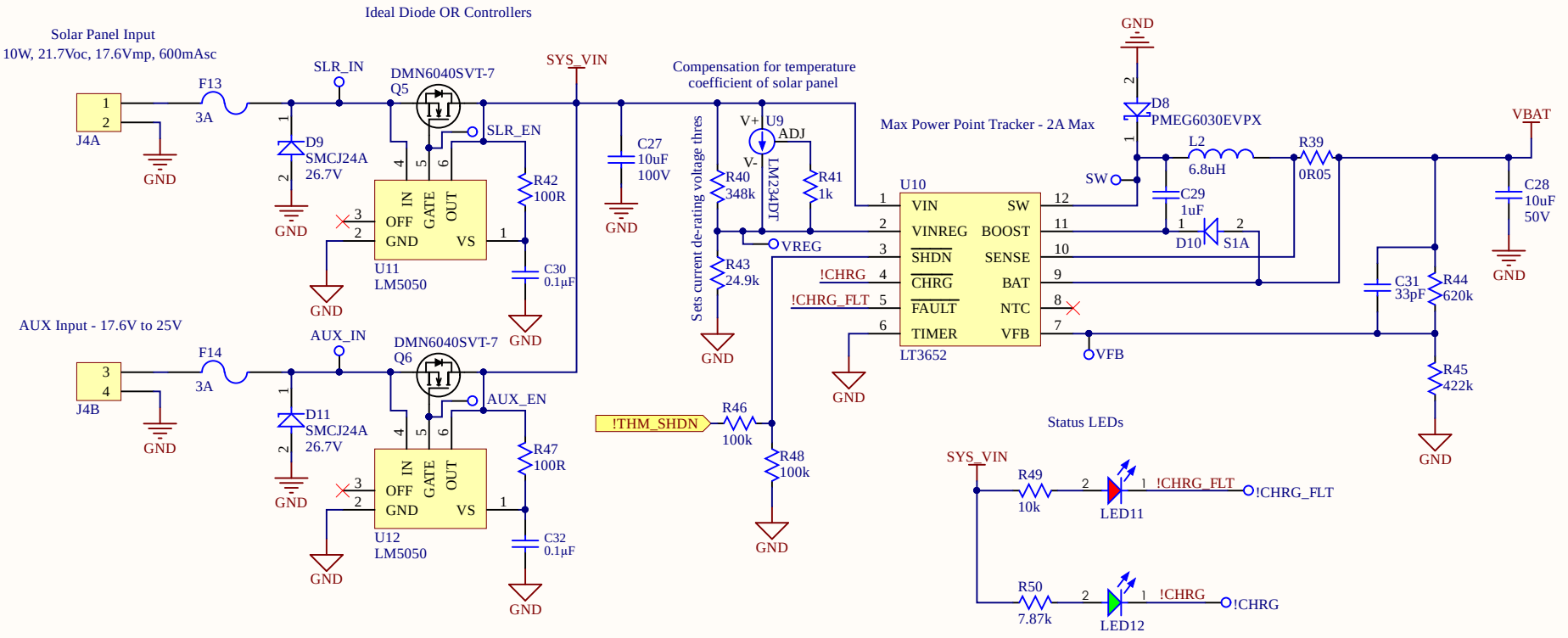
128M-Bit Serial Flash Memory



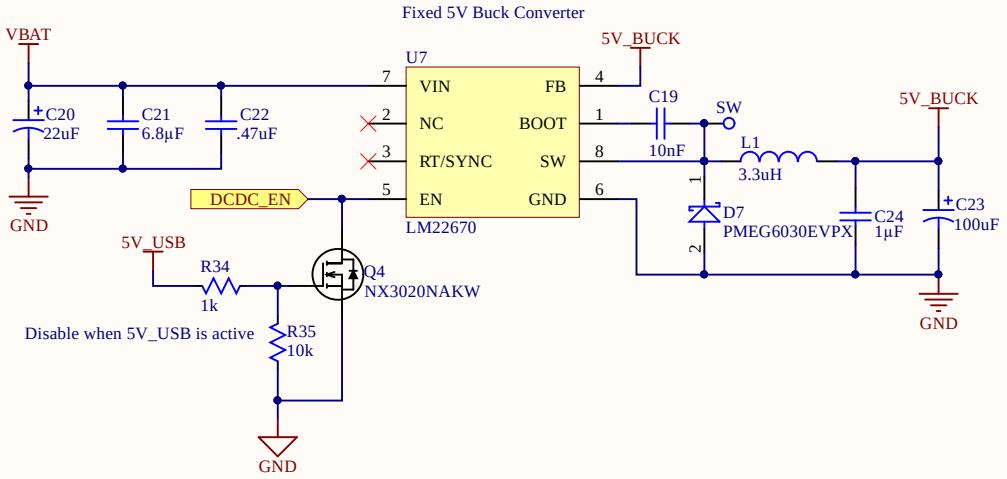
External Oscillators

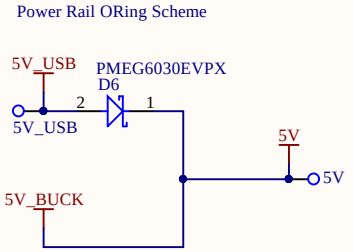


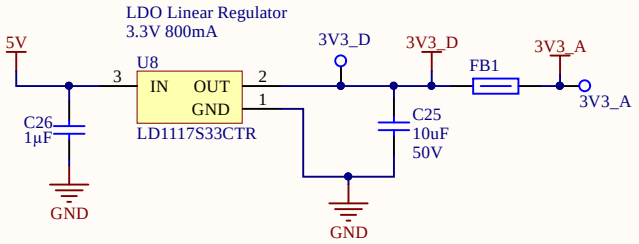
Title: Microcontroller I/O		
Size: A3	Number:	Revision: Rev. A
Date: 2020-02-04		Sheet 2 of 7
File: C:\Users\..\MCU IO.SchDoc		Drawn By: G. Goodwin-Wilson

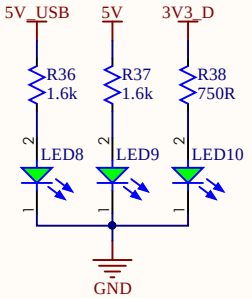


Title: Solar Charging		
Size: A4	Number:	Revision: Rev. A
Date: 2020-02-04		Sheet 3 of 7
File: C:\Users\..\Solar Charging.SchDoc		Drawn By: G. Goodwin-Wilson



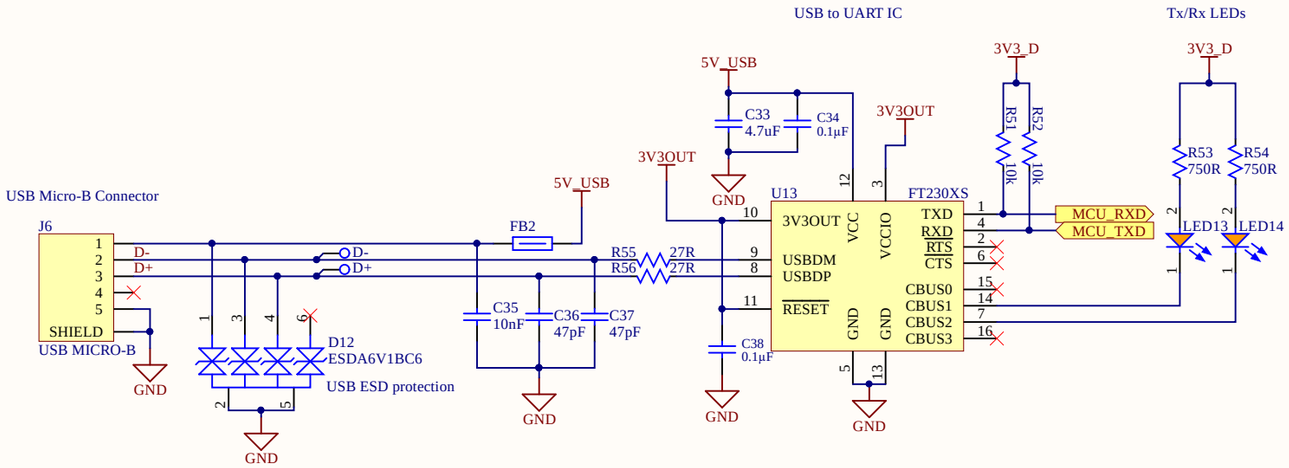






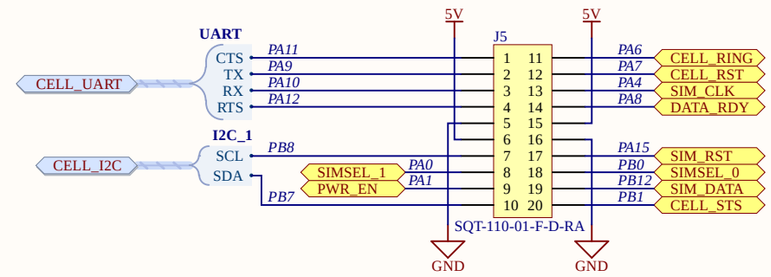
Title: Power		
Size: A4	Number:	Revision: Rev. A
Date: 2020-02-04		Sheet 4 of 7
File: C:\Users\..\Power.SchDoc		Drawn By: G. Goodwin-Wilson

USB to UART IC

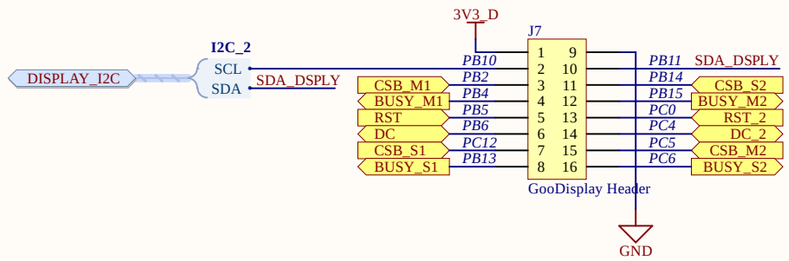


Tx/Rx LEDs

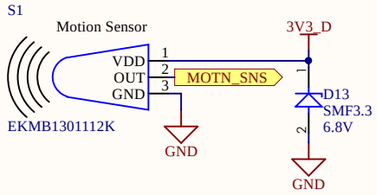
Cellular Module Header



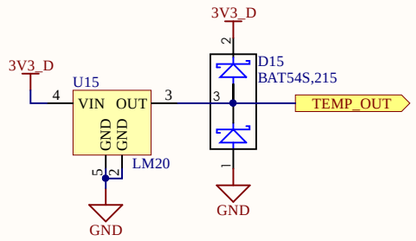
GooDisplay Header



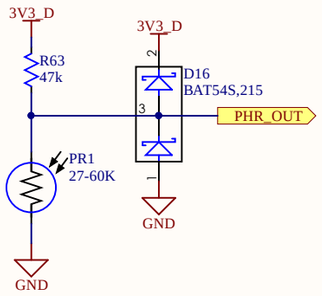
S1



Temperature sensor IC - linear analog output

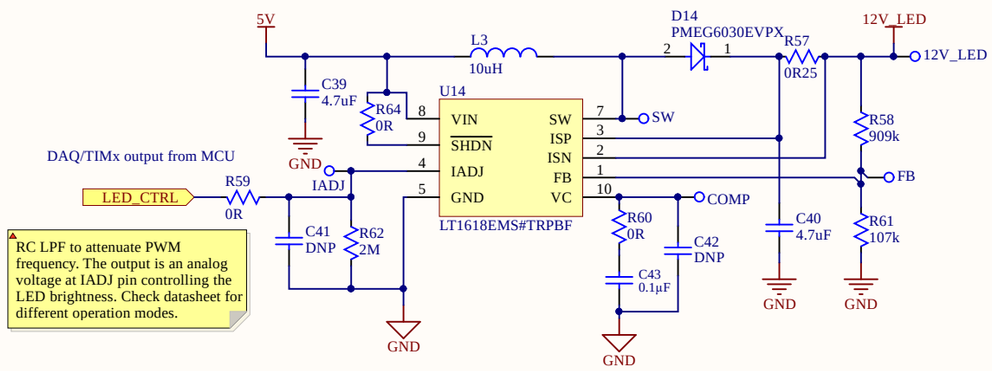


Photoresistor Analog Output

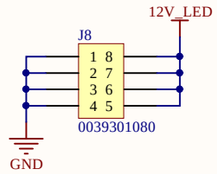


Constant Current Boost Converter

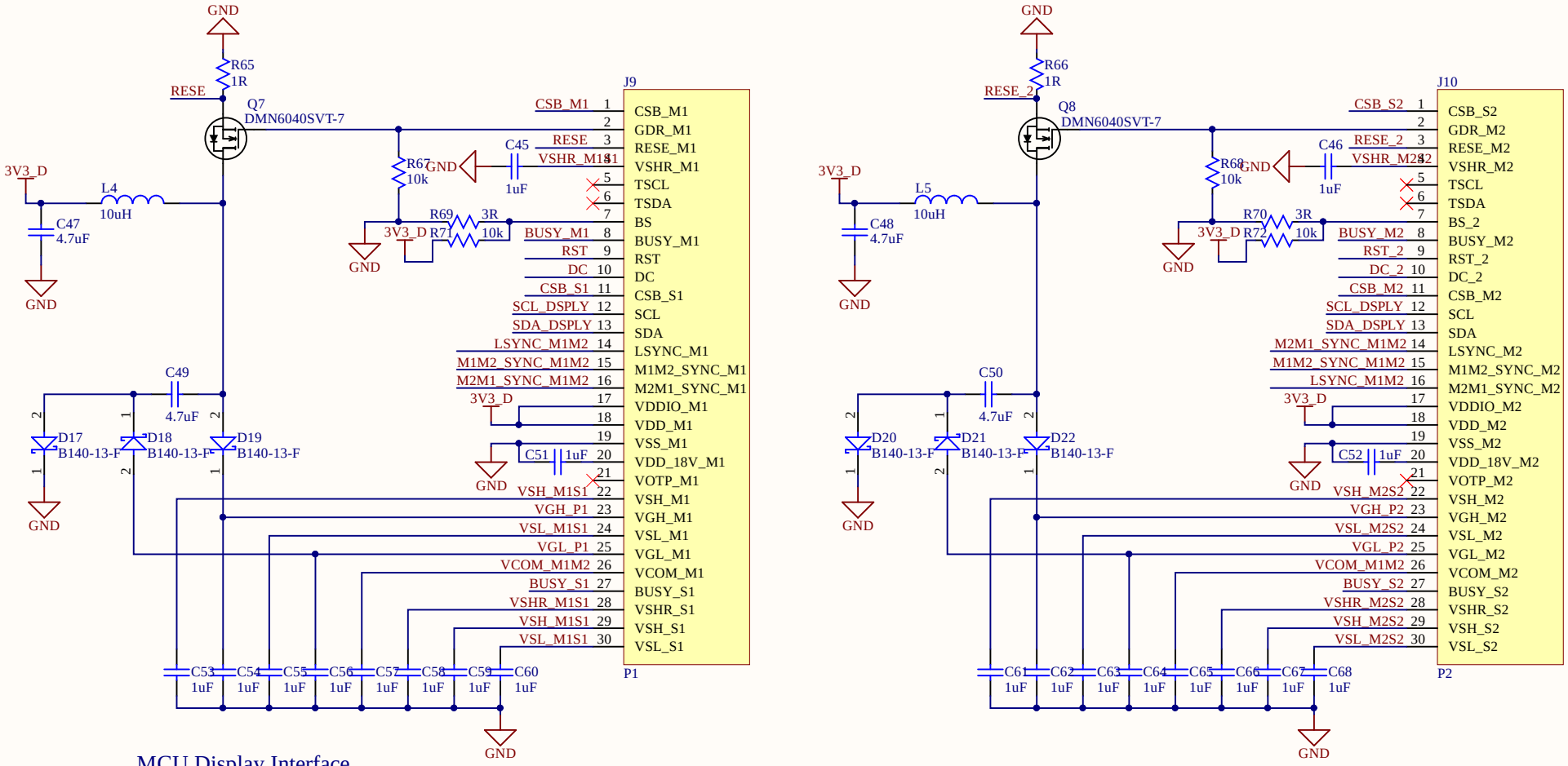
Current sense resistor set for 200mA output max



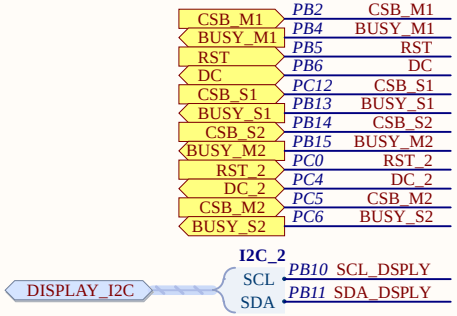
LED Strip Output (OVQ12S30W7)



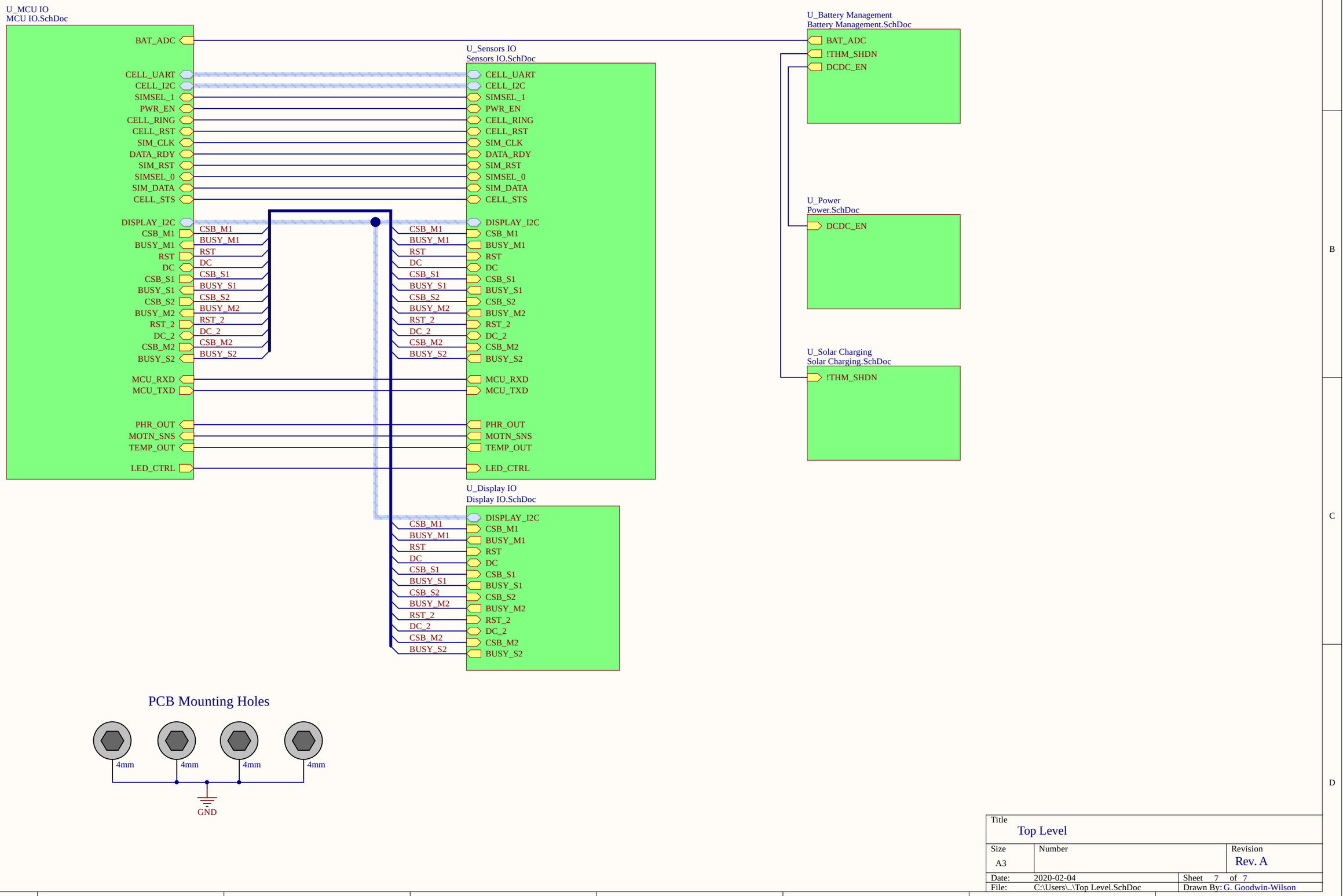
Title: Sensors & IO		
Size: A3	Number:	Revision: Rev. A
Date: 2020-02-04		Sheet 5 of 7
File: C:\Users\..\Sensors IO.SchDoc		Drawn By: G. Goodwin-Wilson



MCU Display Interface



Title: Display IO		
Size: A4	Number:	Revision: Rev. A
Date: 2020-02-04		Sheet 6 of 7
File: C:\Users\..\Display IO.SchDoc		Drawn By: G. Goodwin-Wilson



PCB Mounting Holes

Title: Top Level		
Size: A3	Number:	Revision: Rev. A
Date: 2020-02-04		Sheet 7 of 7
File: C:\Users\..\Top Level.SchDoc		Drawn By: G. Goodwin-Wilson