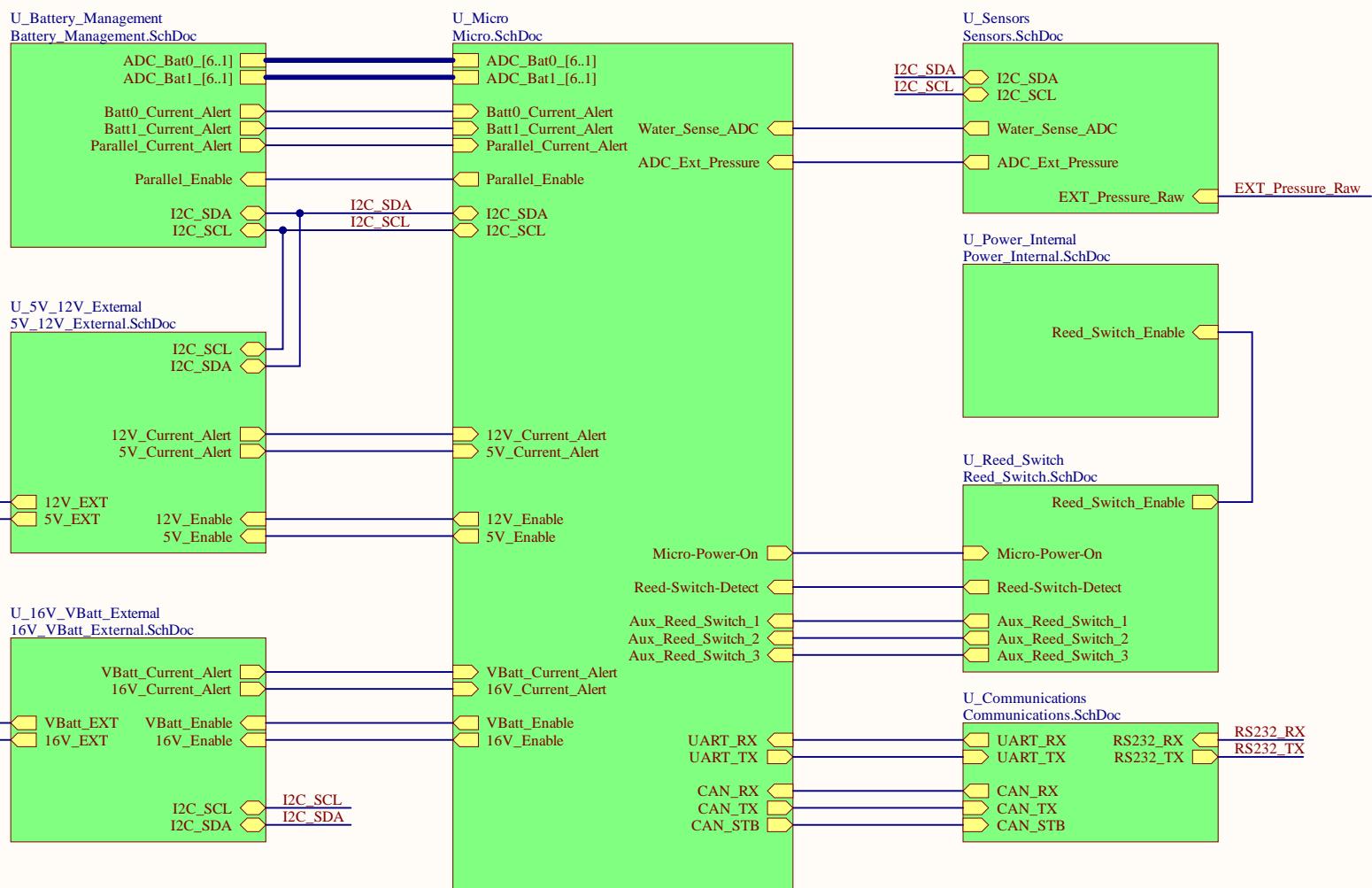


A



B

C

D

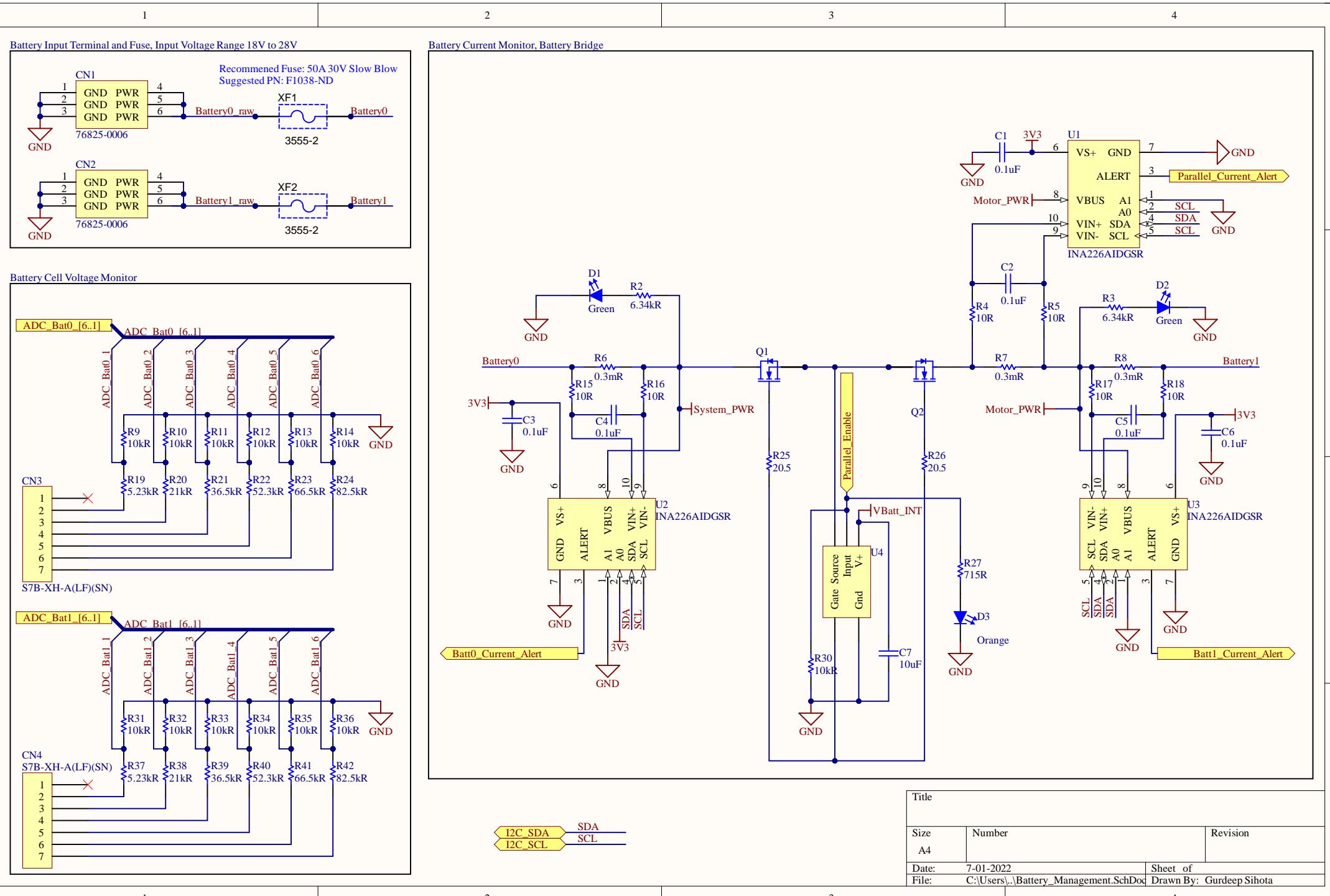
A

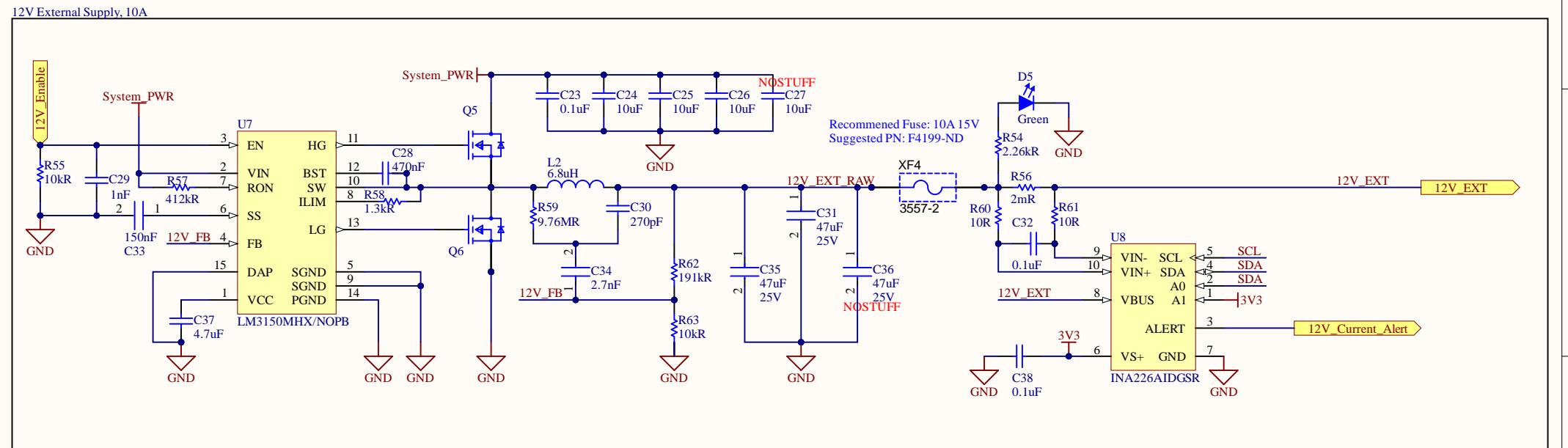
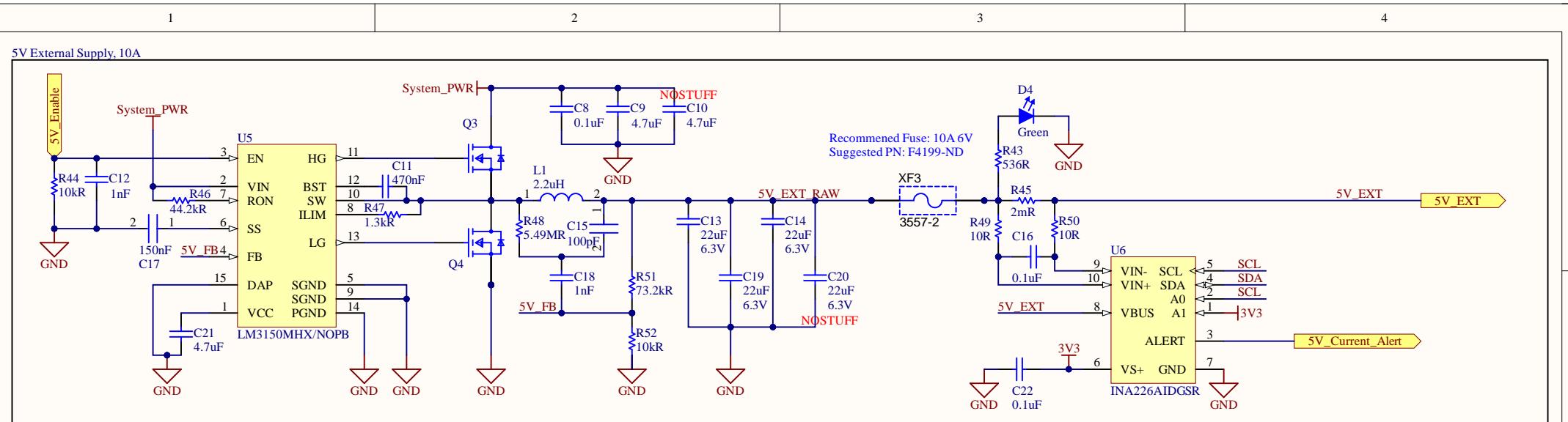
B

C

D

Title		
Size	Number	Revision
A4		
Date: File:	7-01-2022 C:\Users\.\Master.SchDoc	Sheet of Drawn By:

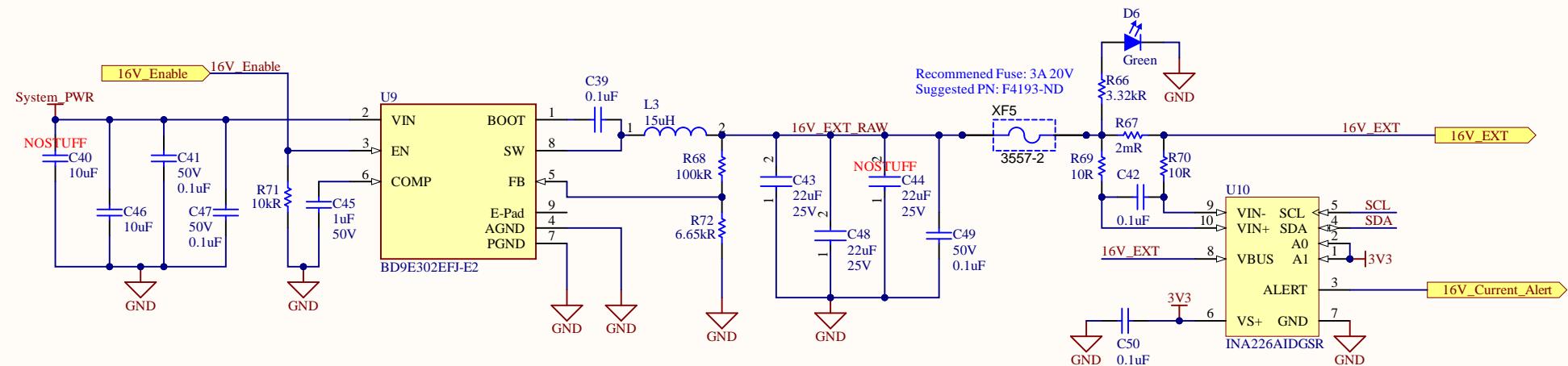




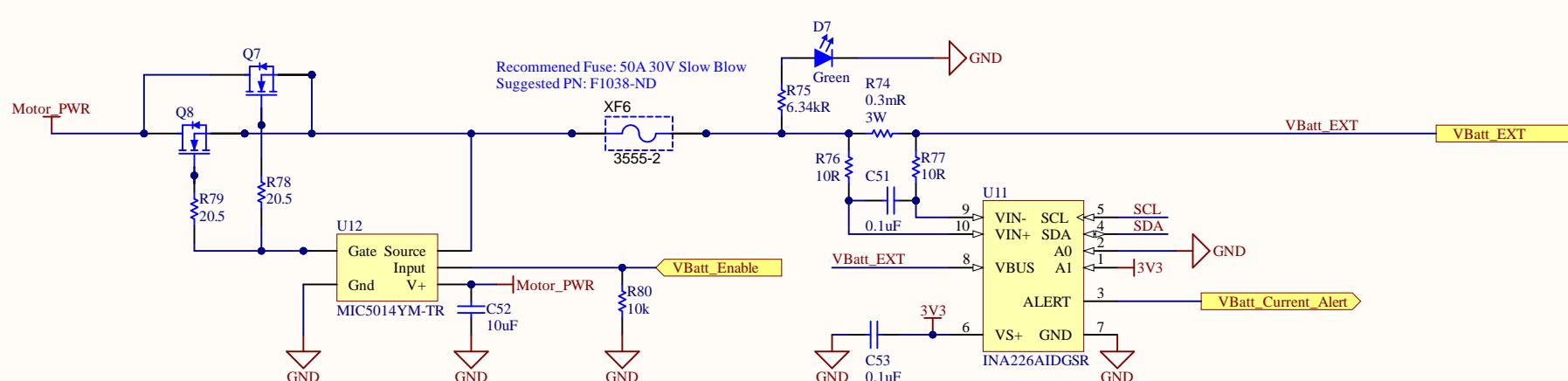
I2C\_SCL → SCL  
I2C\_SDA → SDA

Title		
Size	Number	Revision
A4		
Date:	7-01-2022	Sheet of
File:	C:\Users\.\5V_12V_External.SchDoc	Drawn By: Poorna Chander Kalidas

## 16V External Supply, 3A



## VBatt External Supply, 18V to 28V, 60A

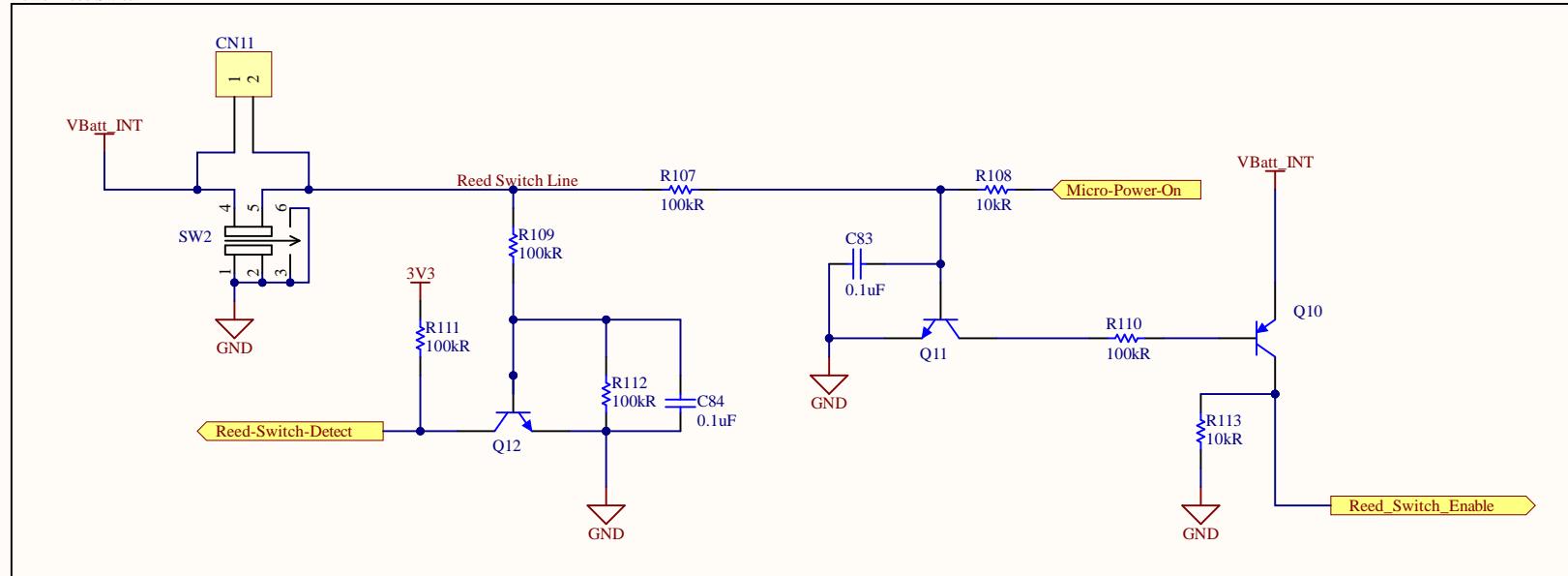


I2C\_SCL → SCL  
I2C\_SDA → SDA

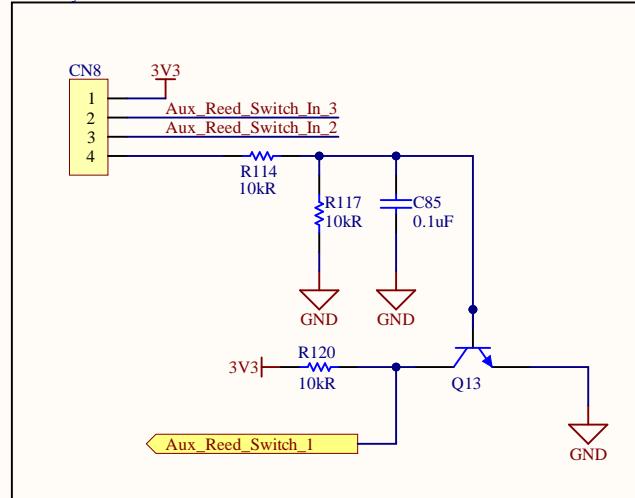
Title		
Size	Number	Revision
A4		
Date: 7-01-2022	Sheet of	
File: C:\Users\.\16V_VBatt_External.SchDoc		Drawn By: Poorna Chander Kalidas

1 2 3 4

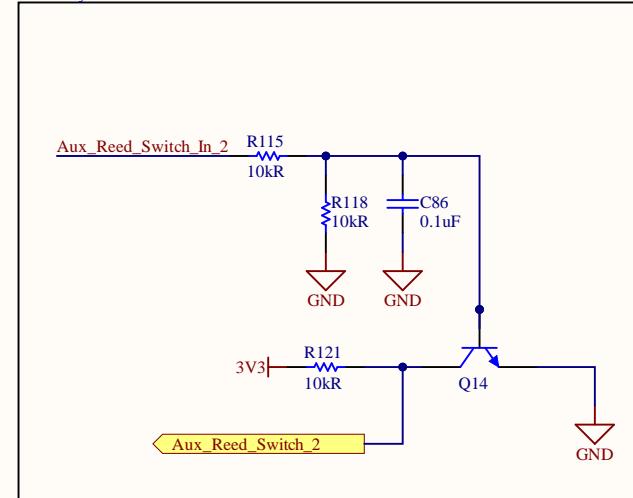
## Power Reed Switch



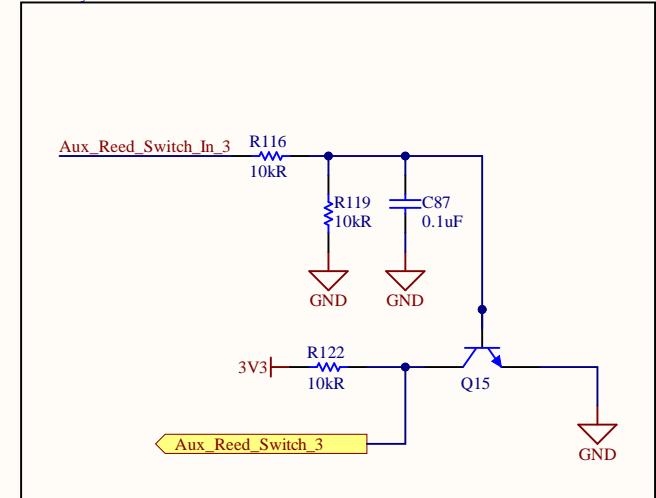
## Auxiliary Reed Switch 1



## Auxiliary Reed Switch 2



## Auxiliary Reed Switch 3

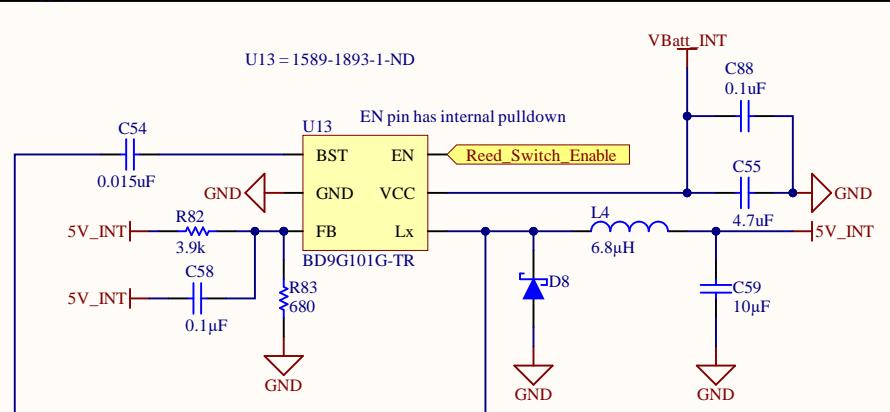


Title

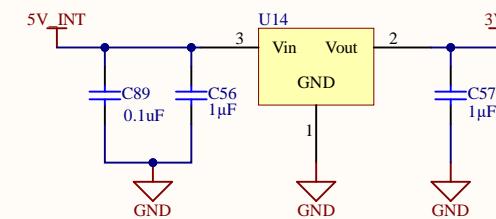
Size	Number	Revision
A4		
Date: 7-01-2022	Sheet of	
File: C:\Users\..\Reed_Switch.SchDoc		Drawn By: Jessica Jiang

1 2 3 4

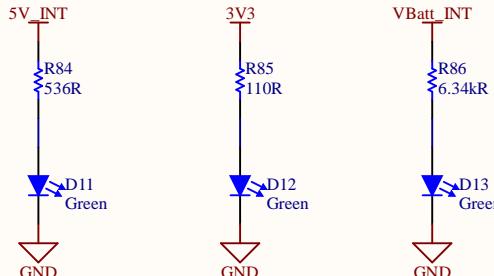
## 5V Internal Supply, 500mA



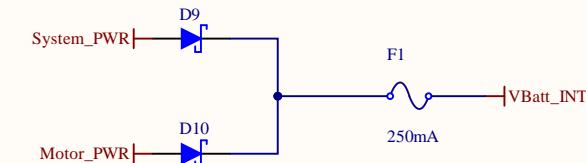
## 3V3 Internal Supply, 250mA



## Status LEDs

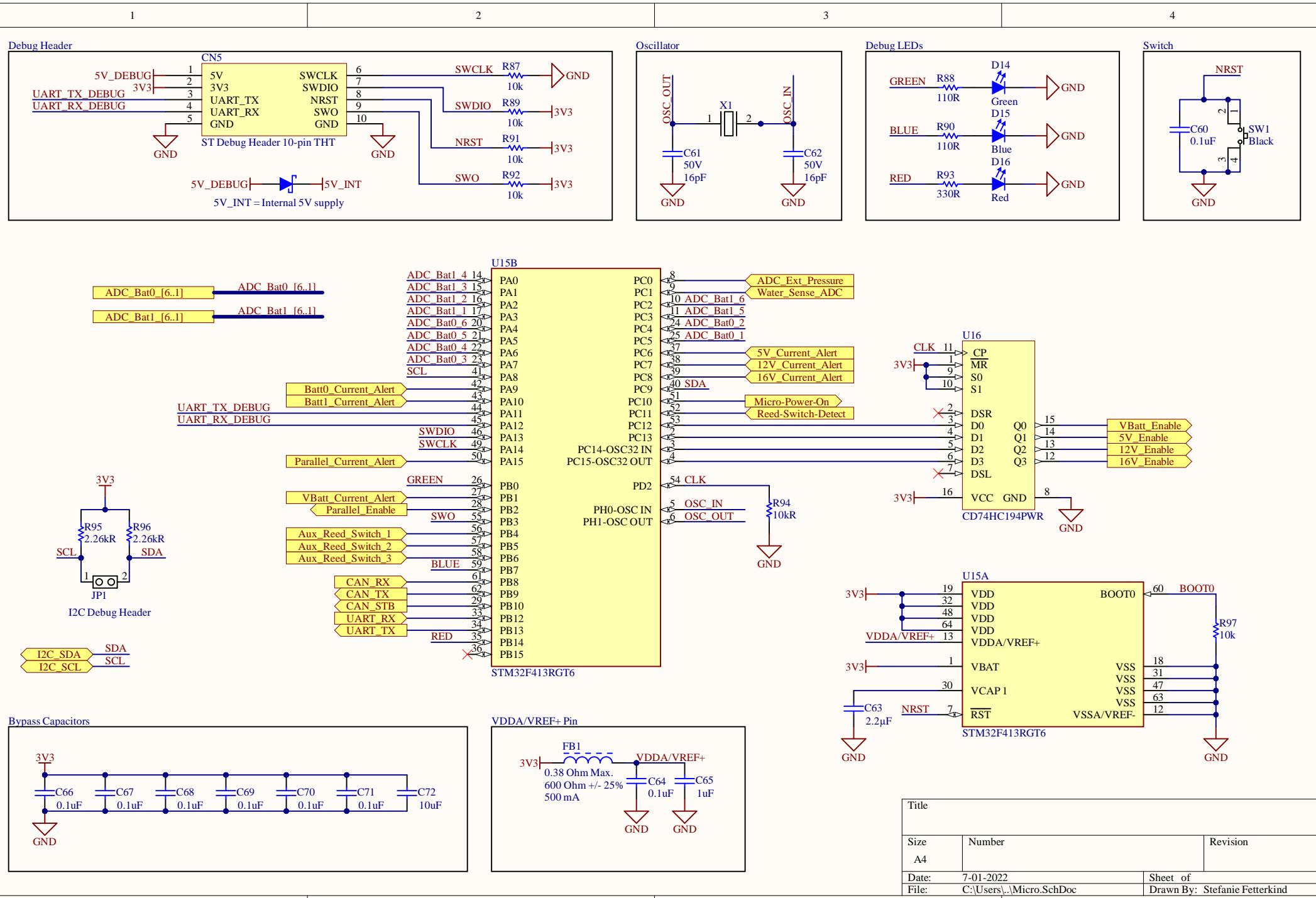


## VBatt Internal Supply, 500mA



Title

Size	Number	Revision
A4		
Date:	7-01-2022	Sheet of
File:	C:\Users\.\Power_Internal.SchDoc	Drawn By: Poorna Chander Kalidas



1

2

3

4

1

2

3

4

A

A

B

B

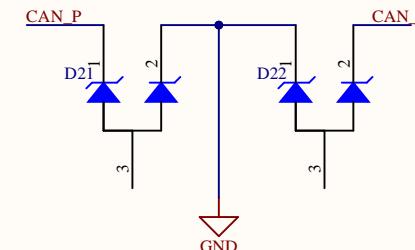
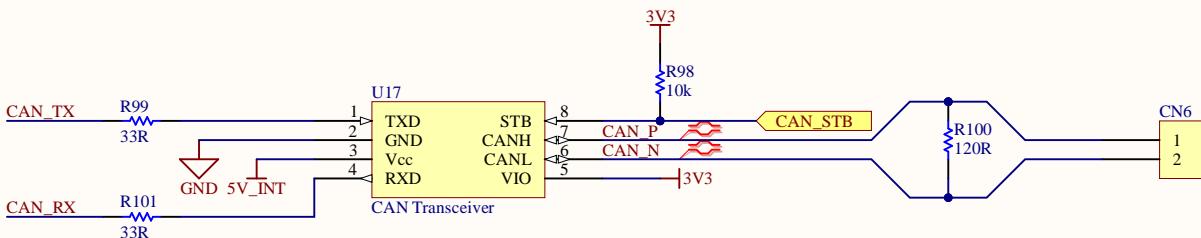
C

C

D

D

## CAN Tranceiver

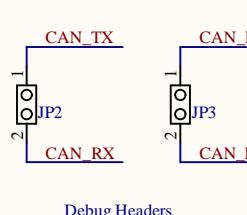
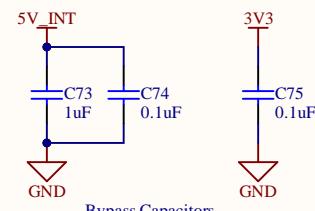


A

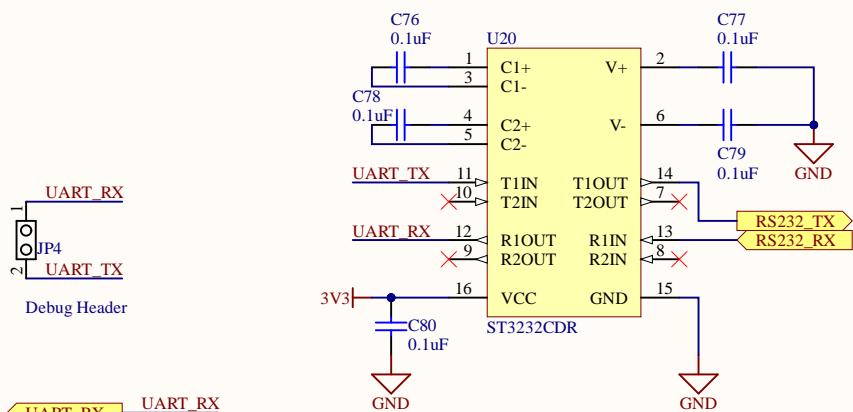
A

B

B



## RS232 Tranceiver



C

C

D

D

Title

Size

A4

Number

Revision

Date: 7-01-2022

Sheet of

File: C:\Users\..\Communications.SchDoc

Drawn By: Stefanie Fetterkind

## Water Sensor

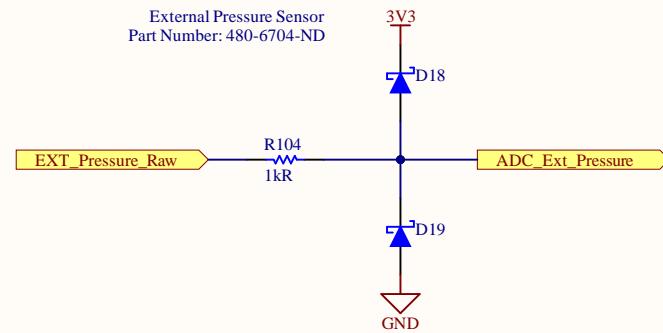
4 External water sensors in parallel

CN7  
1x2 Shrouded Right Angle

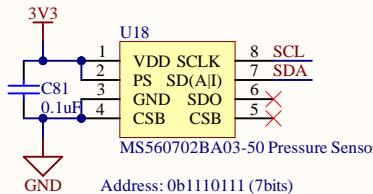
The Water Sensor section shows four parallel connections from four external water sensors (labeled A, B, C, D) to a central node. This node is connected to the Water\_Sense\_ADC via a resistor R102 (100kR). The Water\_Sense\_ADC is connected to 3V3 and GND. The ground connection for the sensors is labeled GND.

## External Pressure Sensor

External Pressure Sensor  
Part Number: 480-6704-ND

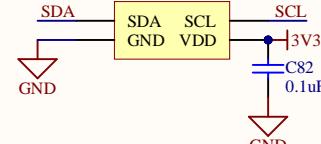


## Internal Pressure Sensor (Housing Pressure)



## Internal Pressure Sensor (Housing Pressure)

Address: 0b1000000 (7bits)



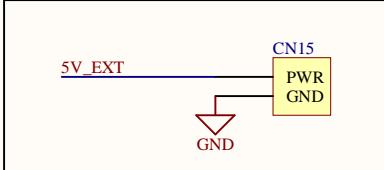
I2C\_SCL      SCL  
I2C\_SDA      SDA

Title

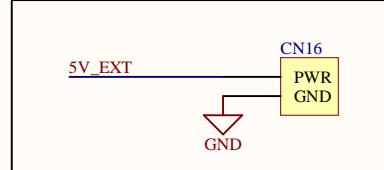
Size	Number	Revision
A4		
Date:	7-01-2022	Sheet of
File:	C:\Users\..\Sensors.SchDoc	Drawn By: Jessica Jiang

**5V**

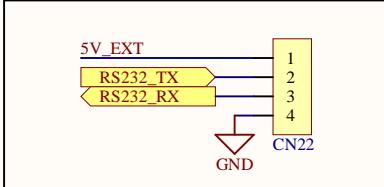
LCD Board, 5V @ 4A



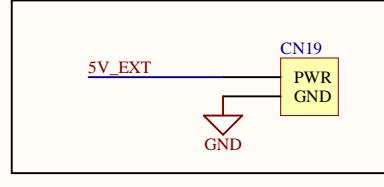
Unallocated, 5V



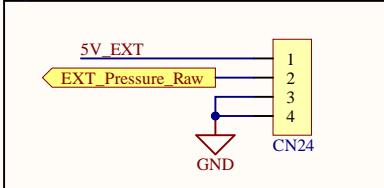
IMU, 5V @ 500mA



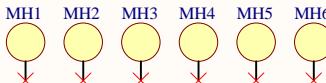
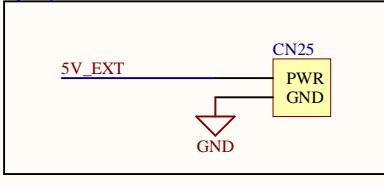
Unallocated, 5V



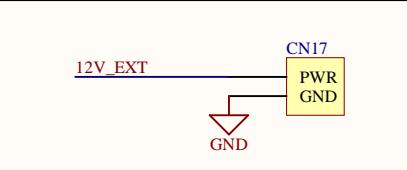
Depth Sensor, 5V @ 3mA



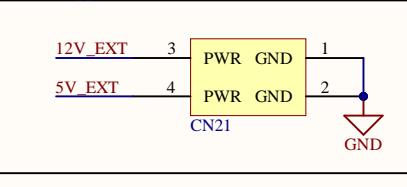
Hydrophones, 5V @ 250mA

**12V**

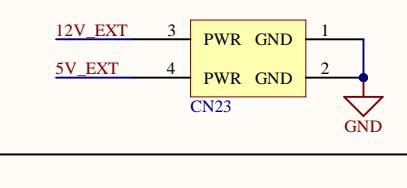
DVL, 12V @ 3A



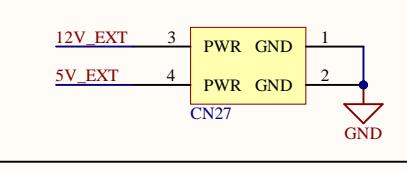
Ball Dropper and Grabber Arm, 12V @ 3A



Unallocated, 12V

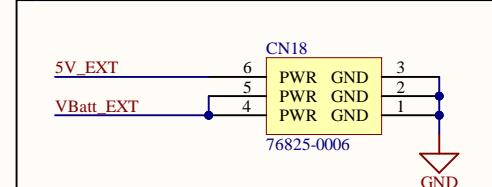


Unallocated, 12V

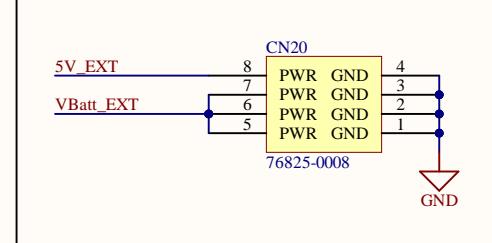
**VBatt**

18V to 28V

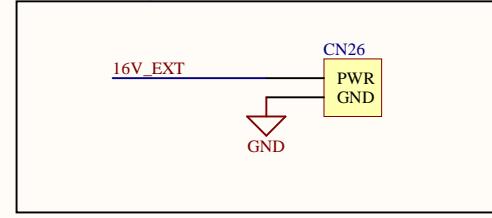
Topedo Board, VBatt @ 30A, 5V @ 250mA



Motor Controller, VBatt @ 60A, 5V @ 250mA

**16V**

Nvidia Jetson TX2, 16V @ 3A



Title

Size

A4

Number

Revision

Date:

7-01-2022

Sheet of

File: C:\Users\.\External\_Connections.SchDoc Drawn By: Poorna Chander Kalidas

