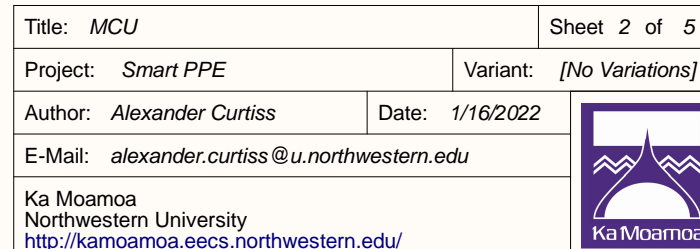
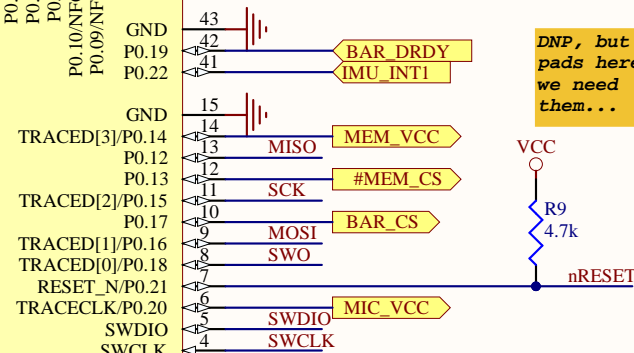
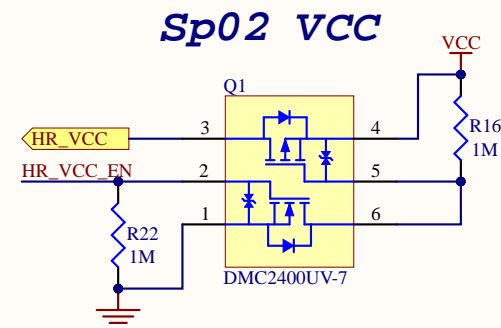
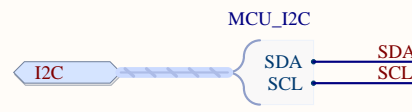
Title: *Top*

Sheet 1 of 5

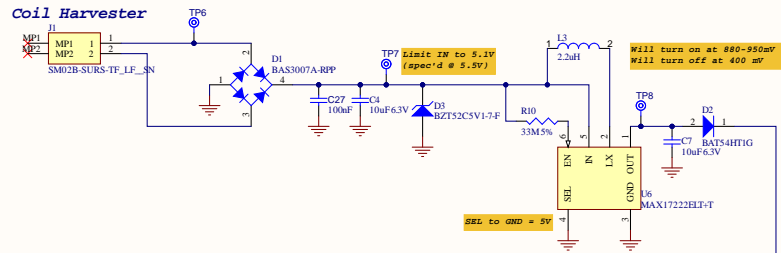
Project: *Smart PPE*Variant: *[No Variations]*Author: *Alexander Curtiss*Date: *1/16/2022*E-Mail: *alexander.curtiss@u.northwestern.edu*

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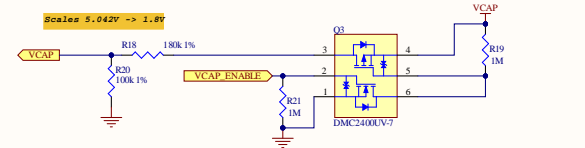




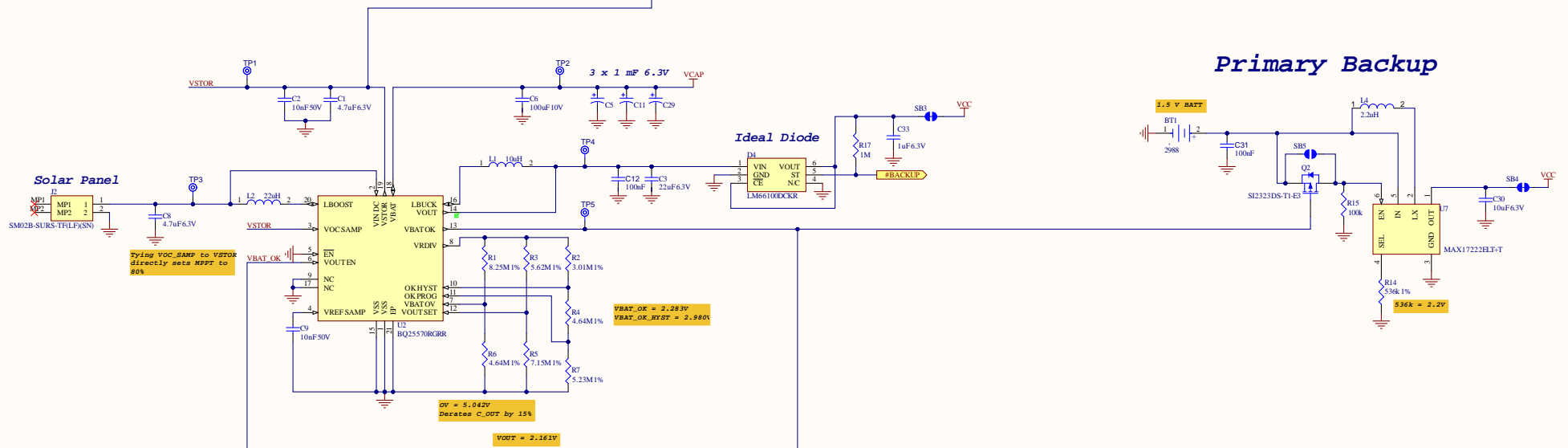
## Coil Harvester



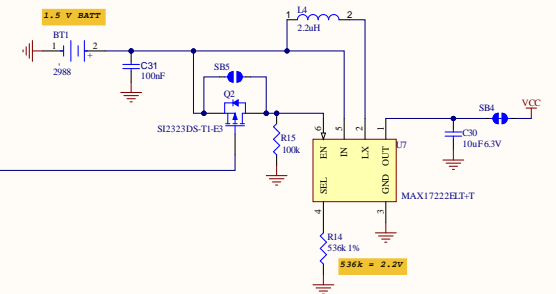
## Capacitor Monitoring



## Power Harvesting

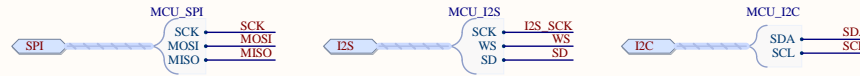


## Primary Backup



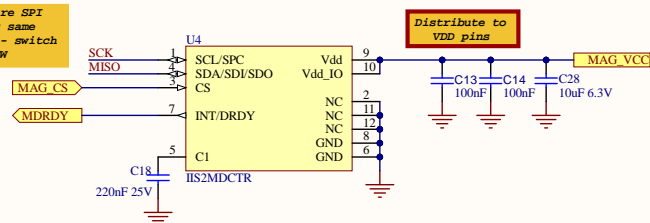
## Communication Buses

I2C pulled high on MCU

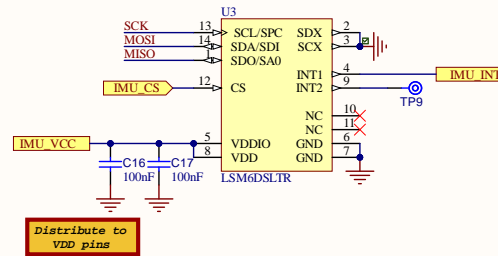


## Magnetometer

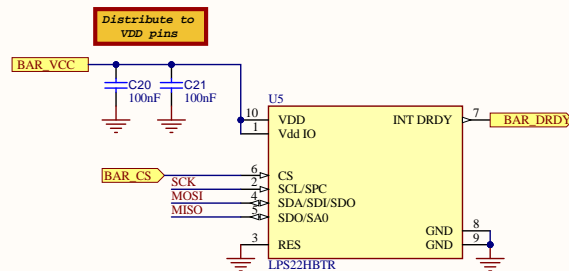
3-Wire SPI uses same bus - switch in SW



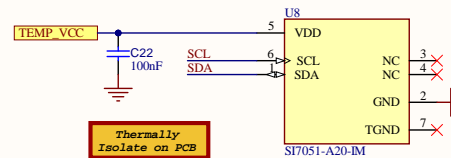
## IMU



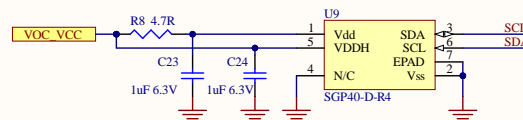
## Barometer



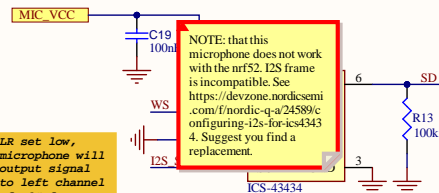
## Temperature



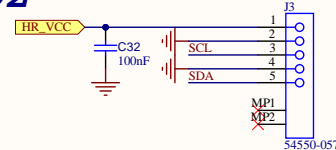
## Air Quality



## Microphone



## PPM/SpO2



Title: <i>Sensors</i>		Sheet 4 of 5	
Project: <i>Smart PPE</i>		Variant: <i>[No Variations]</i>	
Author: <i>Alexander Curtiss</i>		Date: <i>1/16/2022</i>	
E-Mail: <i>alexander.curtiss@u.northwestern.edu</i>			
Ka Moamoa Northwestern University <a href="http://kamoamoa.eecs.northwestern.edu/">http://kamoamoa.eecs.northwestern.edu/</a>		 Ka Moamoa	

A

A

B

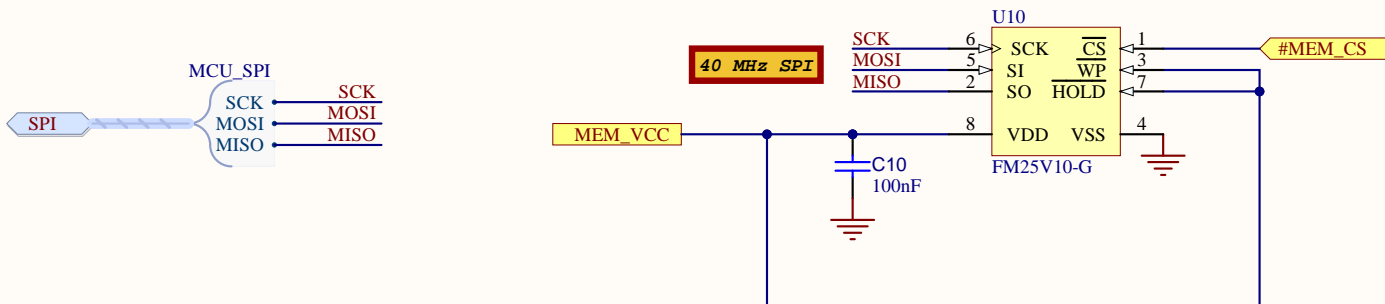
B

C

C

D

D



Title: <i>Memory</i>		Sheet 5 of 5
Project: <i>Smart PPE</i>		Variant: <i>[No Variations]</i>
Author: <i>Alexander Curtiss</i>	Date: <i>1/16/2022</i>	
E-Mail: <i>alexander.curtiss@u.northwestern.edu</i>		
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