

Title			
Science Board CAN			
Size	Number		Revision
A4			*
Date:	2019-01-27	Sheet	* of *
File:	C:\Users\...\can.SchDoc	Drawn By:*	

A

B

C

D

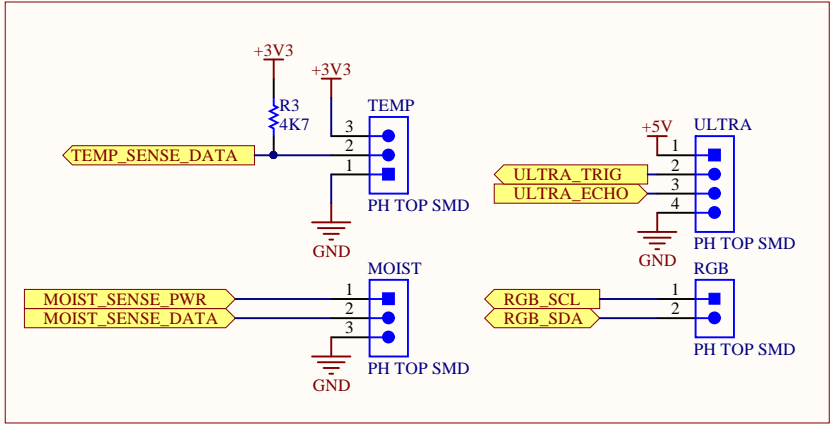
A

B

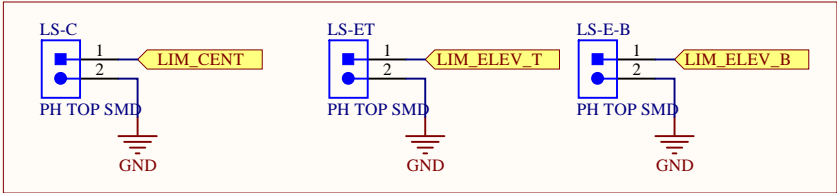
C

D

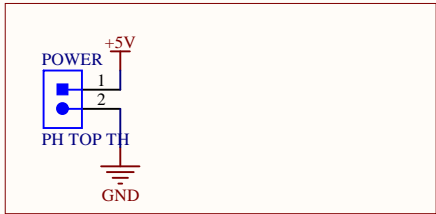
Sensors



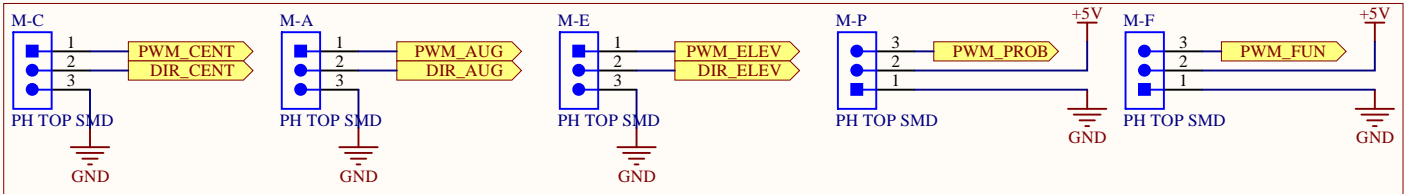
Limit switches



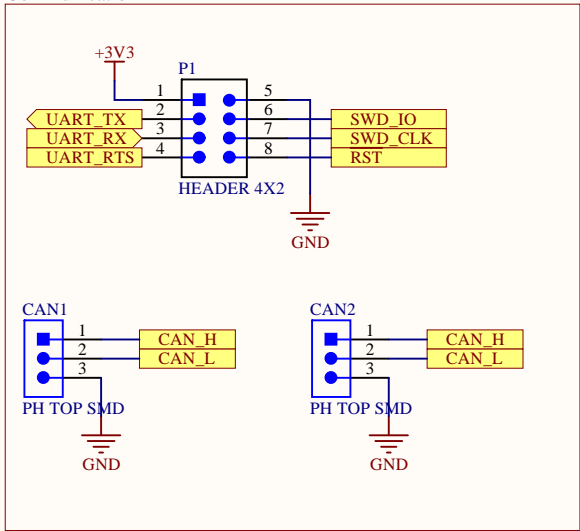
Power



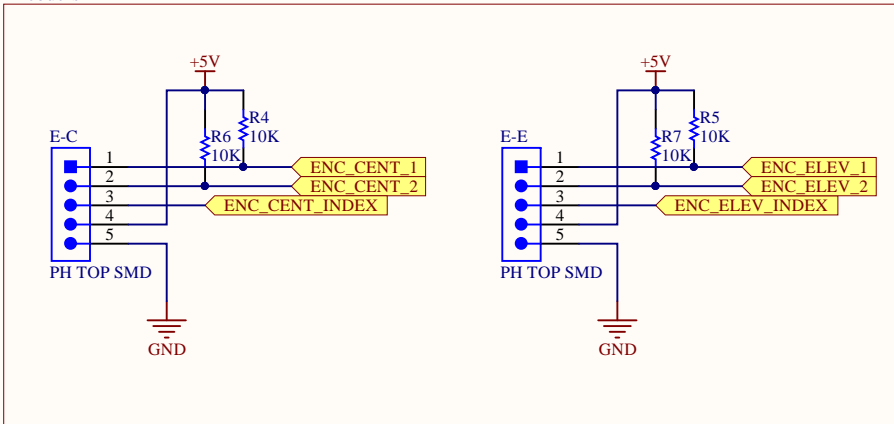
Motors



Communication



Encoders



Title		
Science Board Connectors		
Size	Number	Revision
A4		*
Date:	2019-01-27	Sheet * of *
File:	C:\Users\...\connectors.SchDoc	Drawn By:Adrianna Ascalon

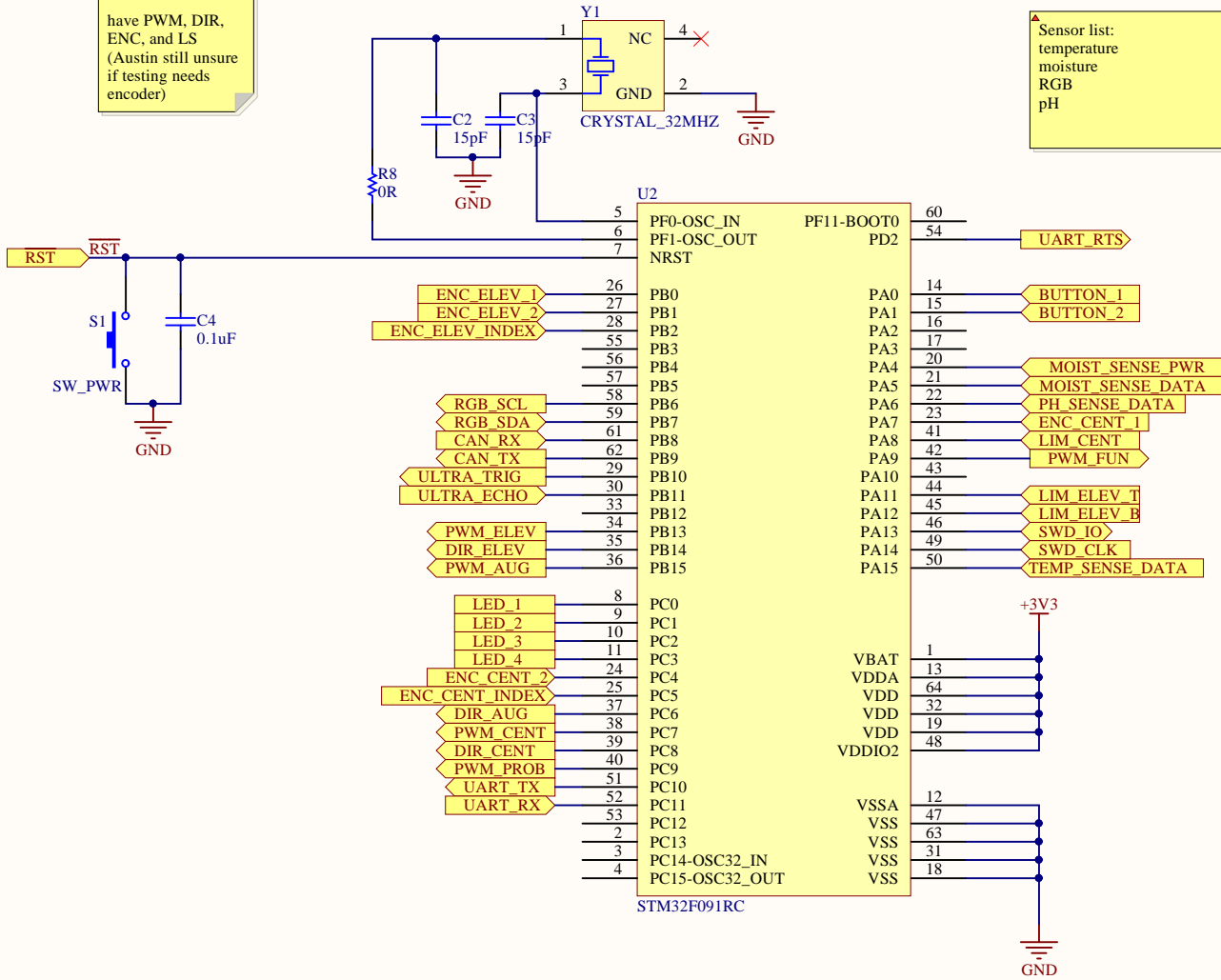
A

A

▲ motors:
testing
elevator
auger

have PWM, DIR,
ENC, and LS
(Austin still unsure
if testing needs
encoder)

▲ Sensor list:
temperature
moisture
RGB
pH



▲ moisture sensor powered with digital pin set to HIGH every time a reading needs to be taken; this will apparently extend its lifespan

B

B

C

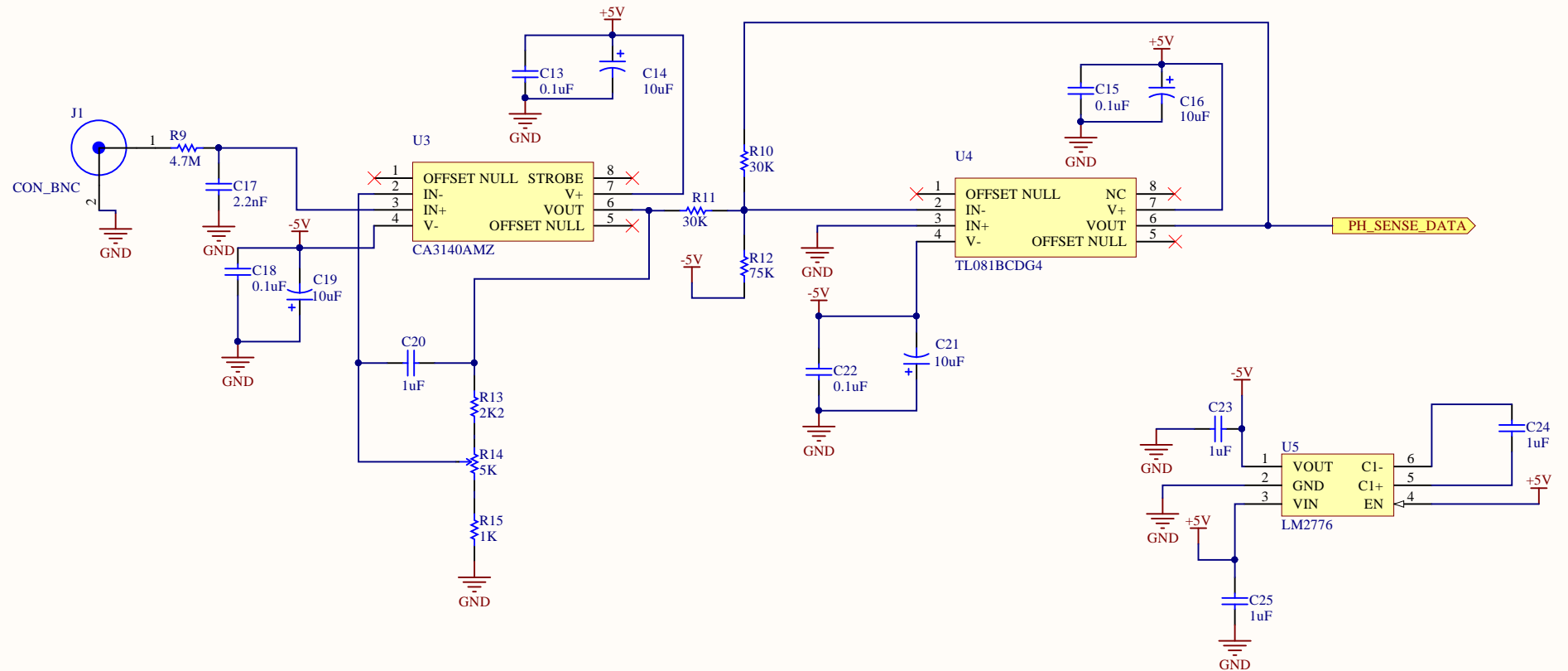
C

D

D

Title		
Science Board MCU		
Size	Number	Revision
A4		*
Date:	2019-01-27	Sheet * of *
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▲ This is a replica of the signal conditioning circuit on the breakout board of the DFRobot SEN0249



Title		
Science Board pH Sensing		
Size A4	Number	Revision *
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A

B

C

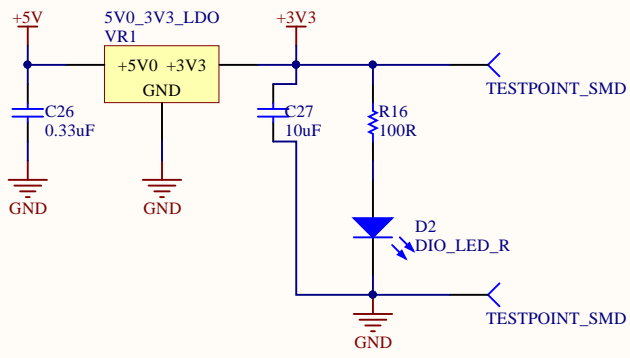
D

A

B

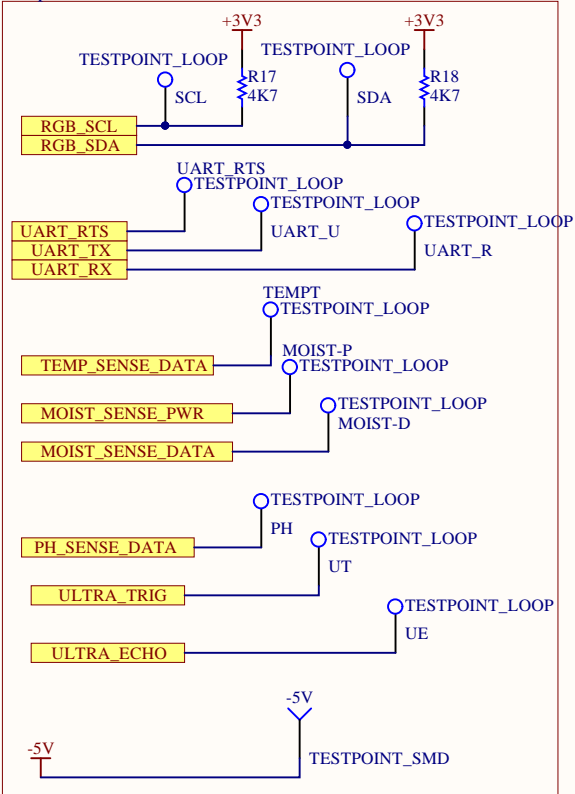
C

D

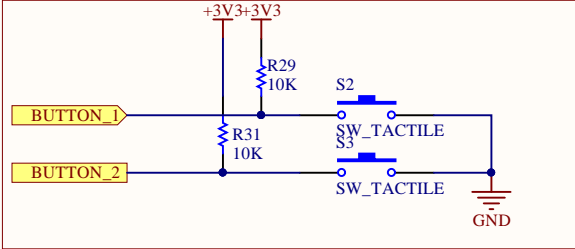


Title			
Power			
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A4			*
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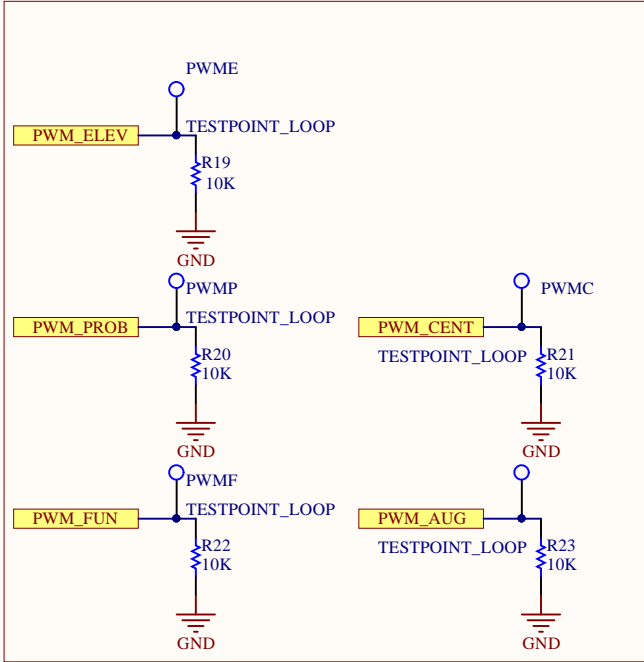
Testpoints



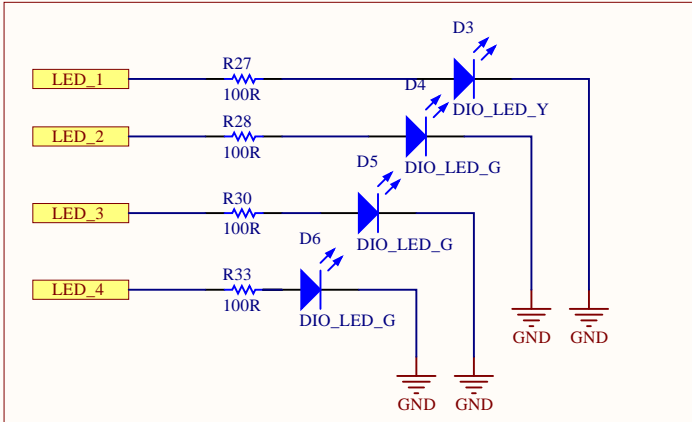
Test Buttons



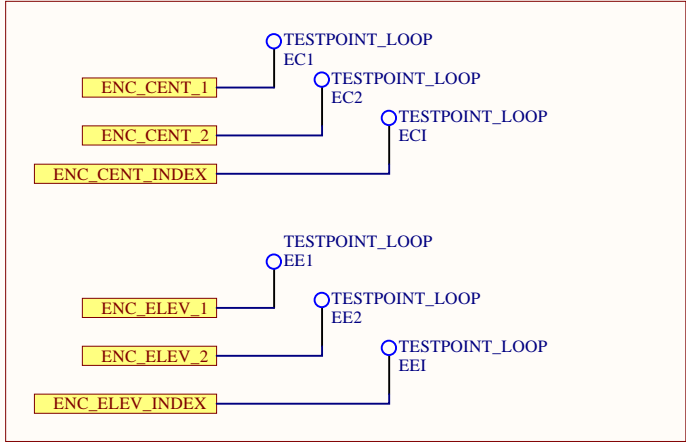
PWM



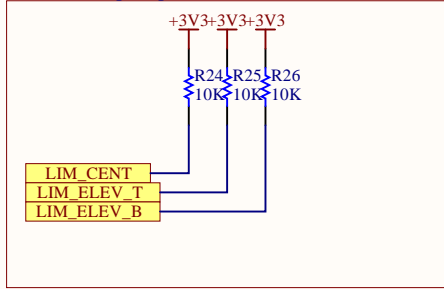
Test LEDs



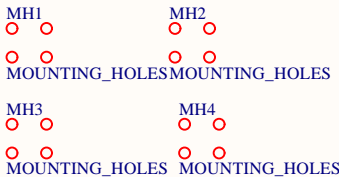
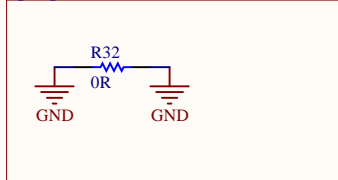
Encoders



Limit switch pullups



Split plane connection



Title			
Support			
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File:	C:\Users\...\support.SchDoc	Drawn By:	Adrianna Ascalon