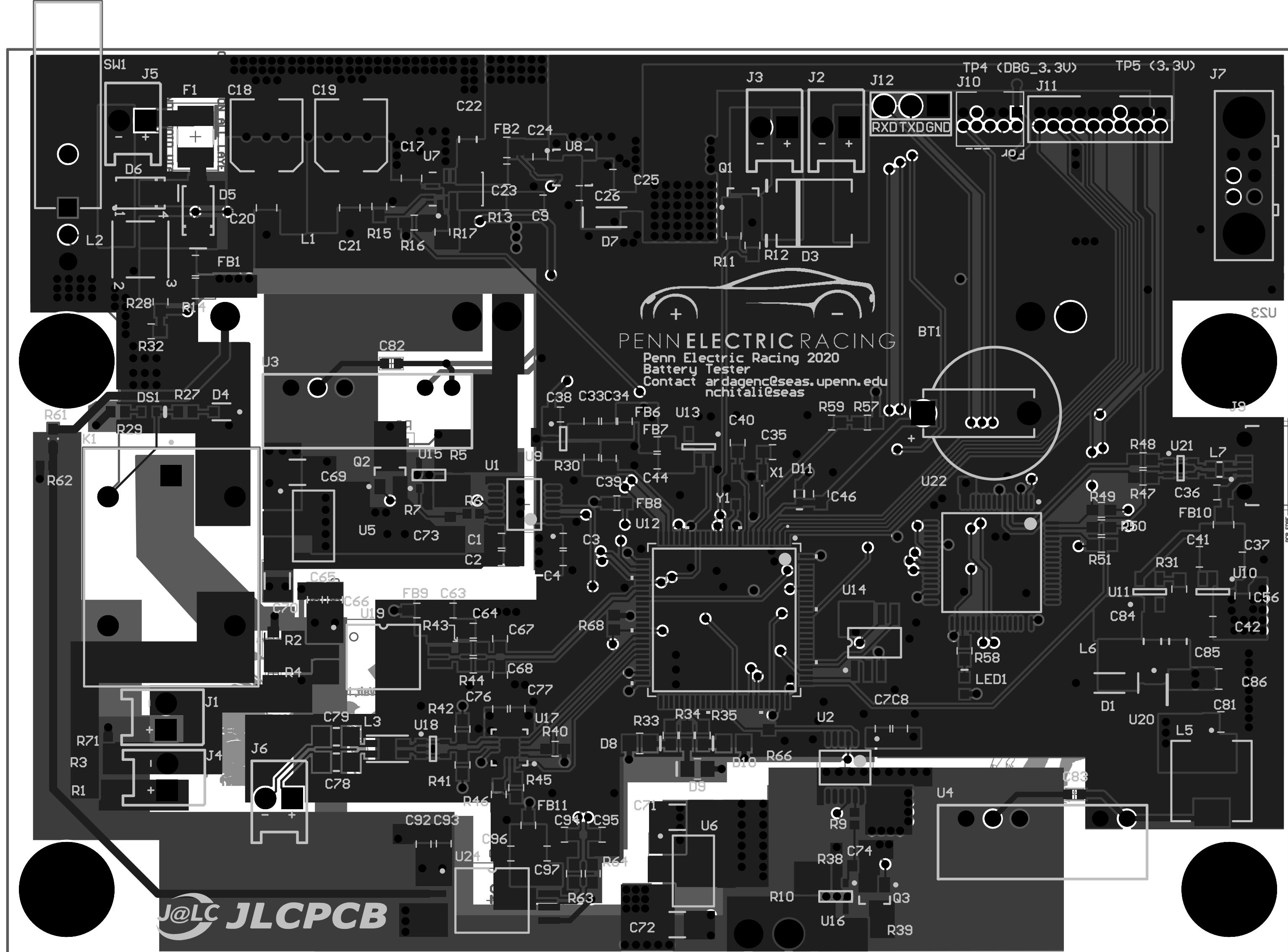


PENN ELECTRIC RACING
Penn Electric Racing 2020
Battery Tester
Contact ardague@seas.upenn.edu
nchifali@seas



A

A

B

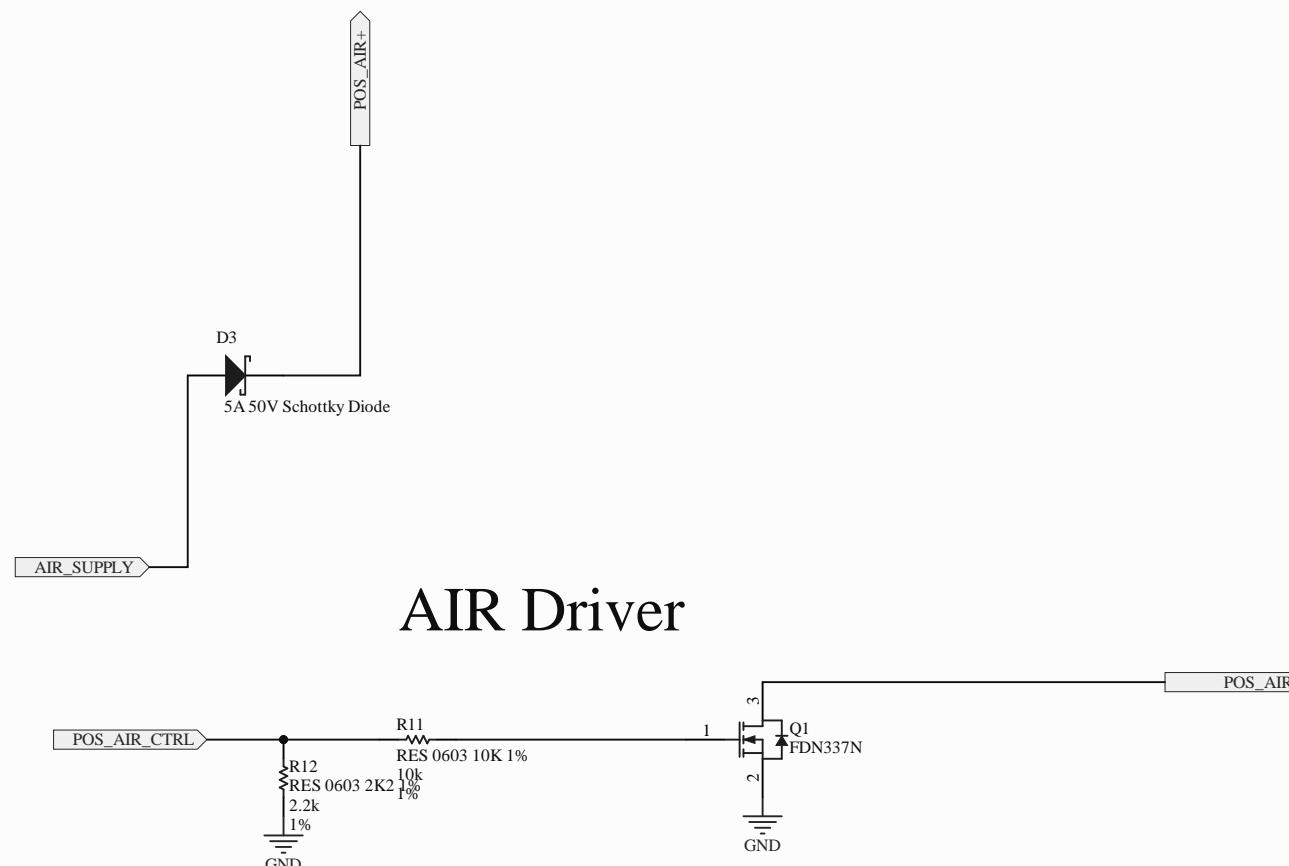
B

C

C

D

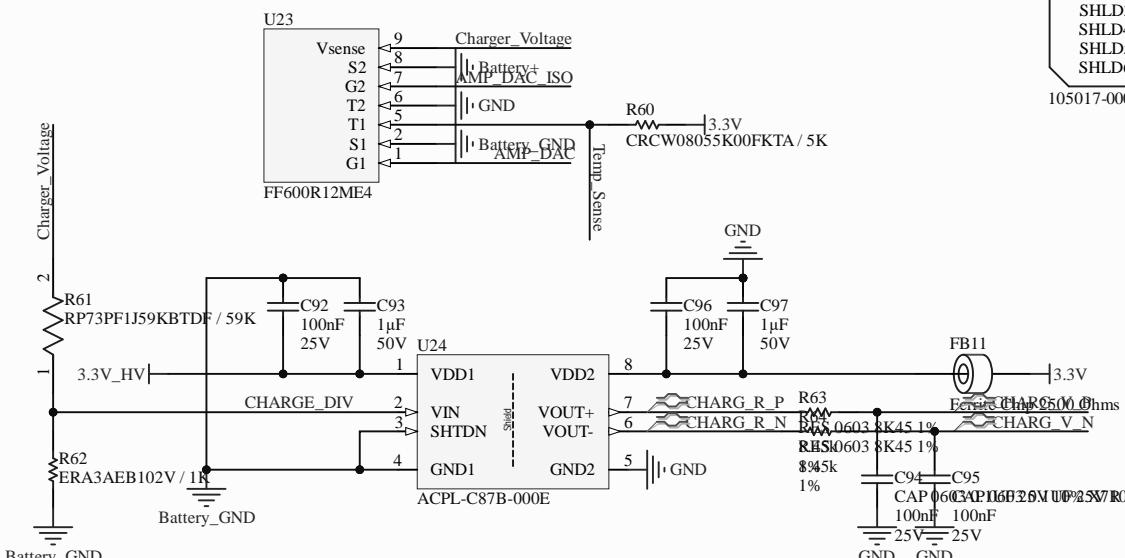
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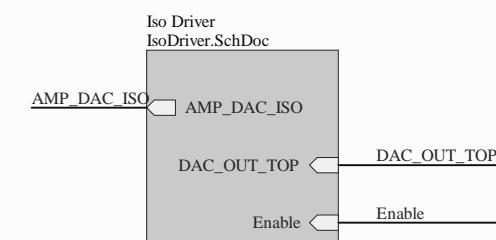
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Date: 10/19/2020	7:19:02 PM	Sheet * of *				
File: C:\Users\Public\Documents\Altium\REV6_BatteryTester\AIR.SchDoc						

isoSPI is used when we are testing a substack with a slave on top

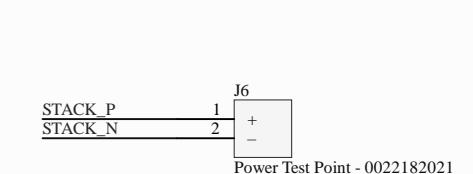
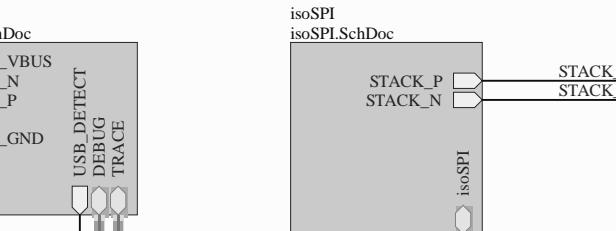
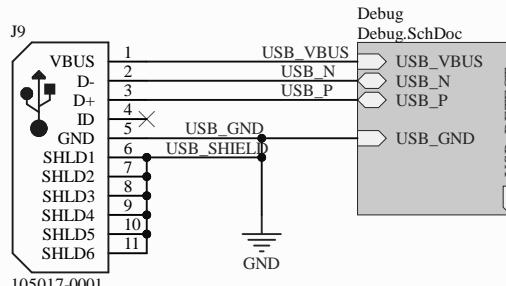
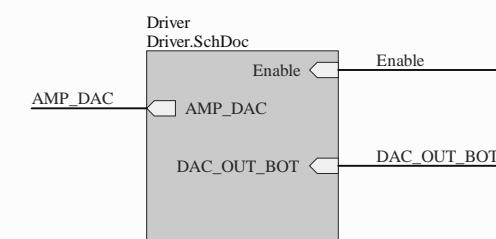
This is the igbt



This IC isolates analog signals

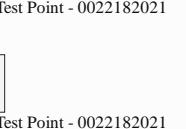
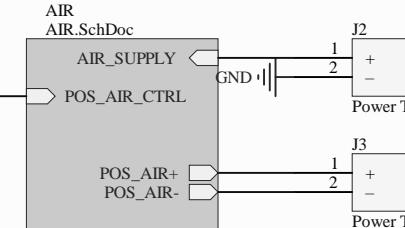


These signals drive the igbt



MCU
MCU.SchDoc

POS_AIR_CTRL

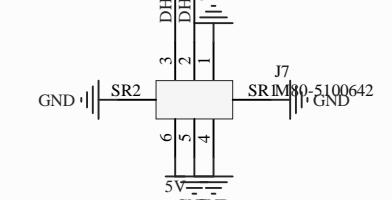
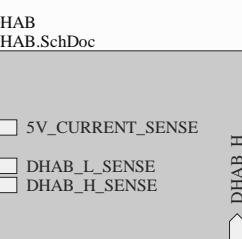
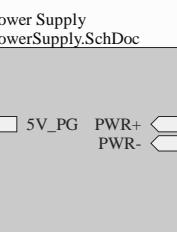


Temp_Sense
CHARG_V_P
CHARG_V_N

Temp_Sense
CHARG_V_P
CHARG_V_N

Temp_Sense
CHARG_V_P
CHARG_V_N

5V_PG

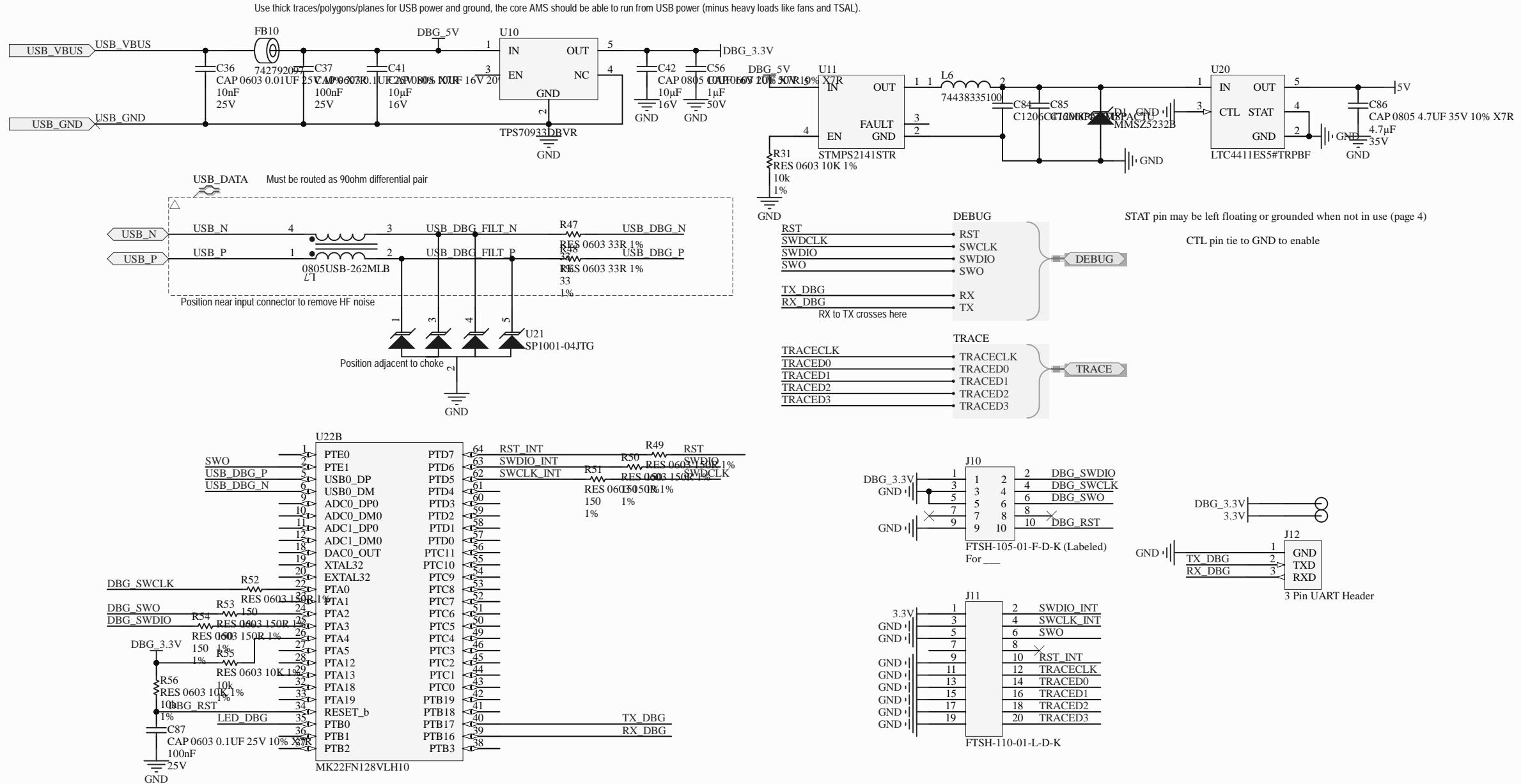


Check when doing pcb should the mounts be grounded

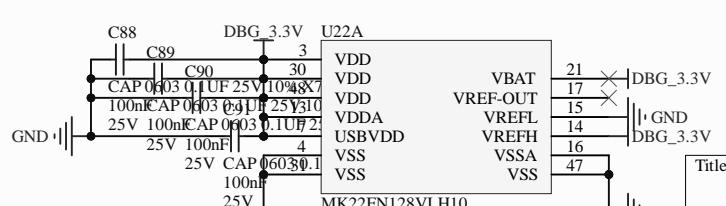
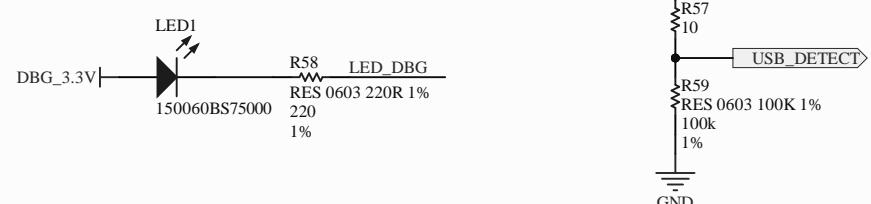
This is used to measure the voltage

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Desc: -		
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Date: 10/19/2020	7:19:02 PM	Sheet * of *
File: C:\Users\Public\Documents\Altium\REV6_BatteryTester\SchDoc		www.pennelectricracing.com
		www.seas.upenn.edu

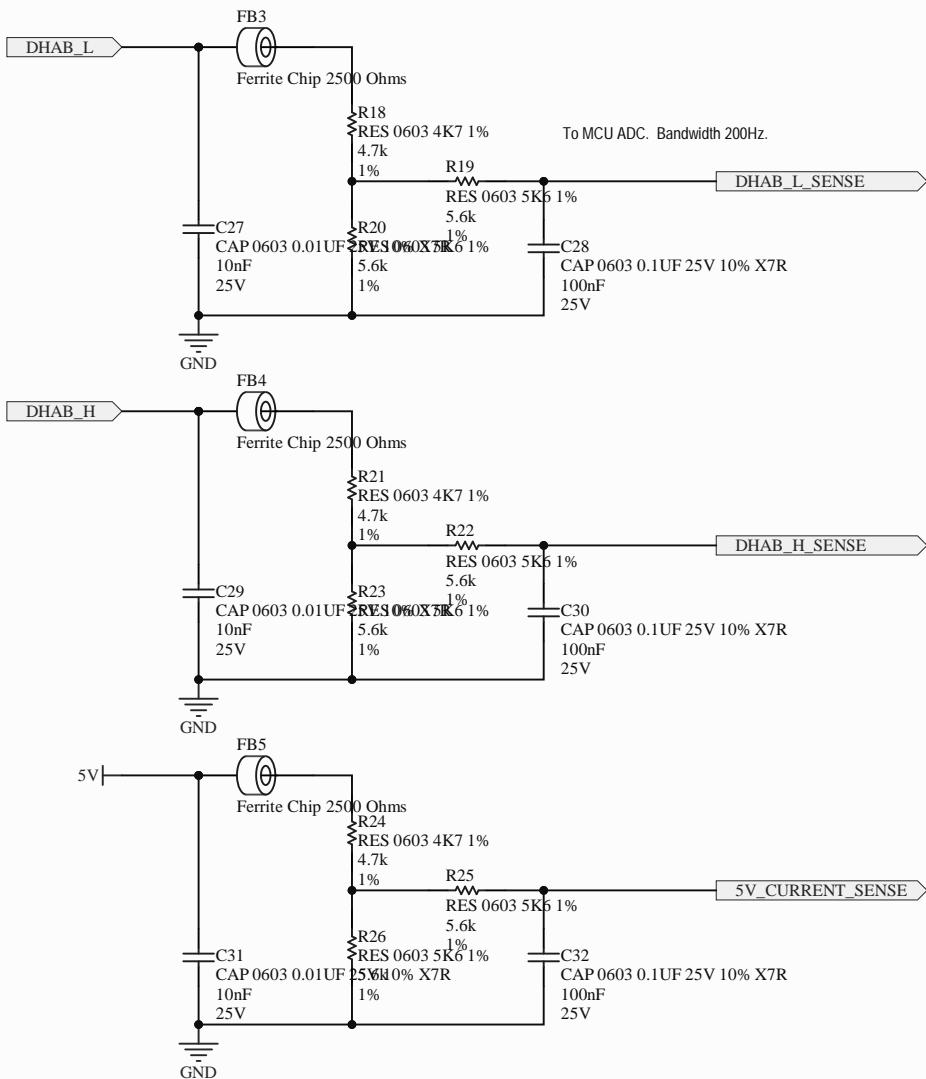




Hold debugger in reset unless 5V usb cable plugged in



Number	Revision
10/19/2020	Sheet of
C:\Users\.\Debug.SchDoc	Drawn By:



Title

Size
A

Number

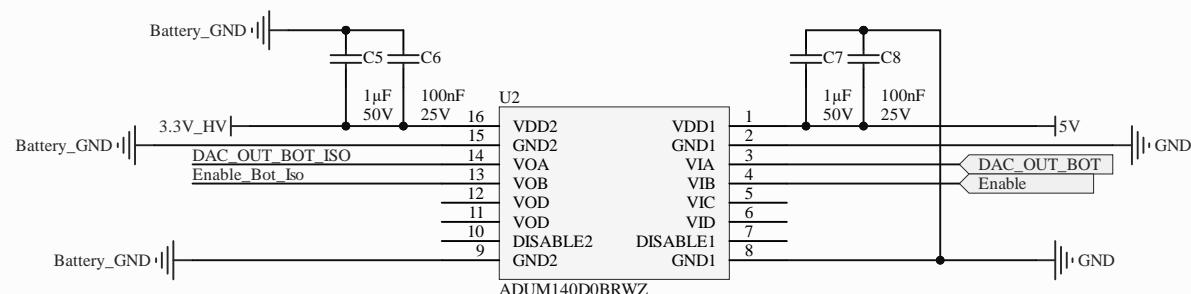
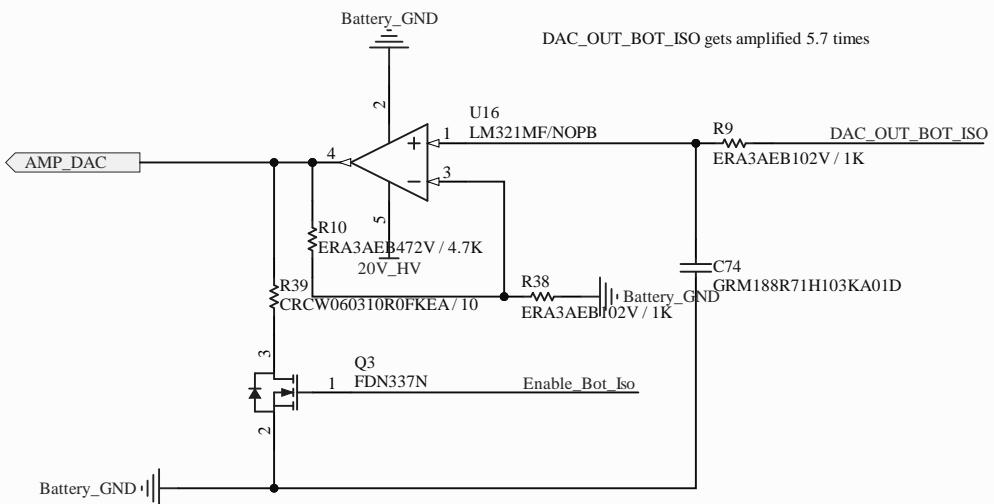
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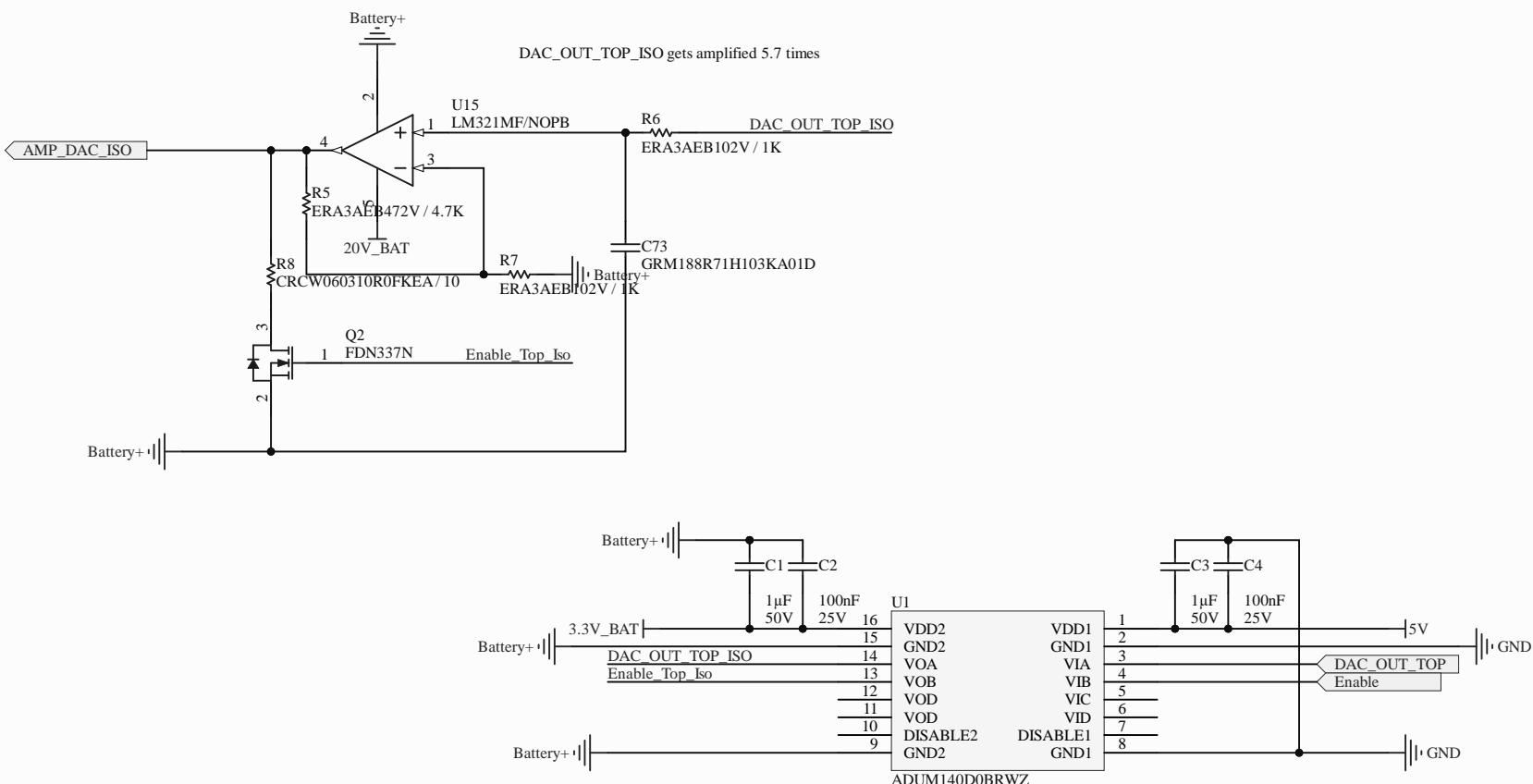
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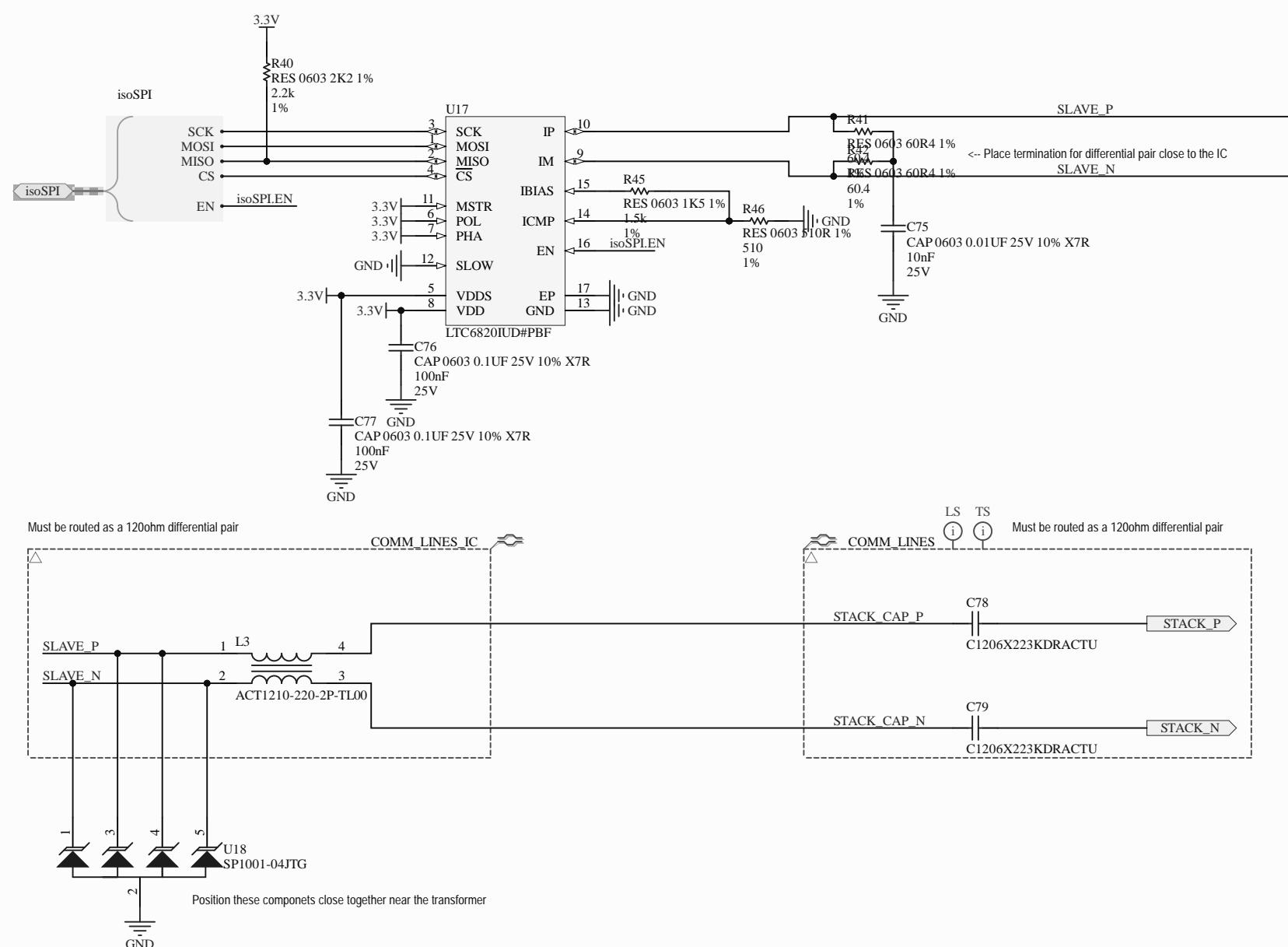
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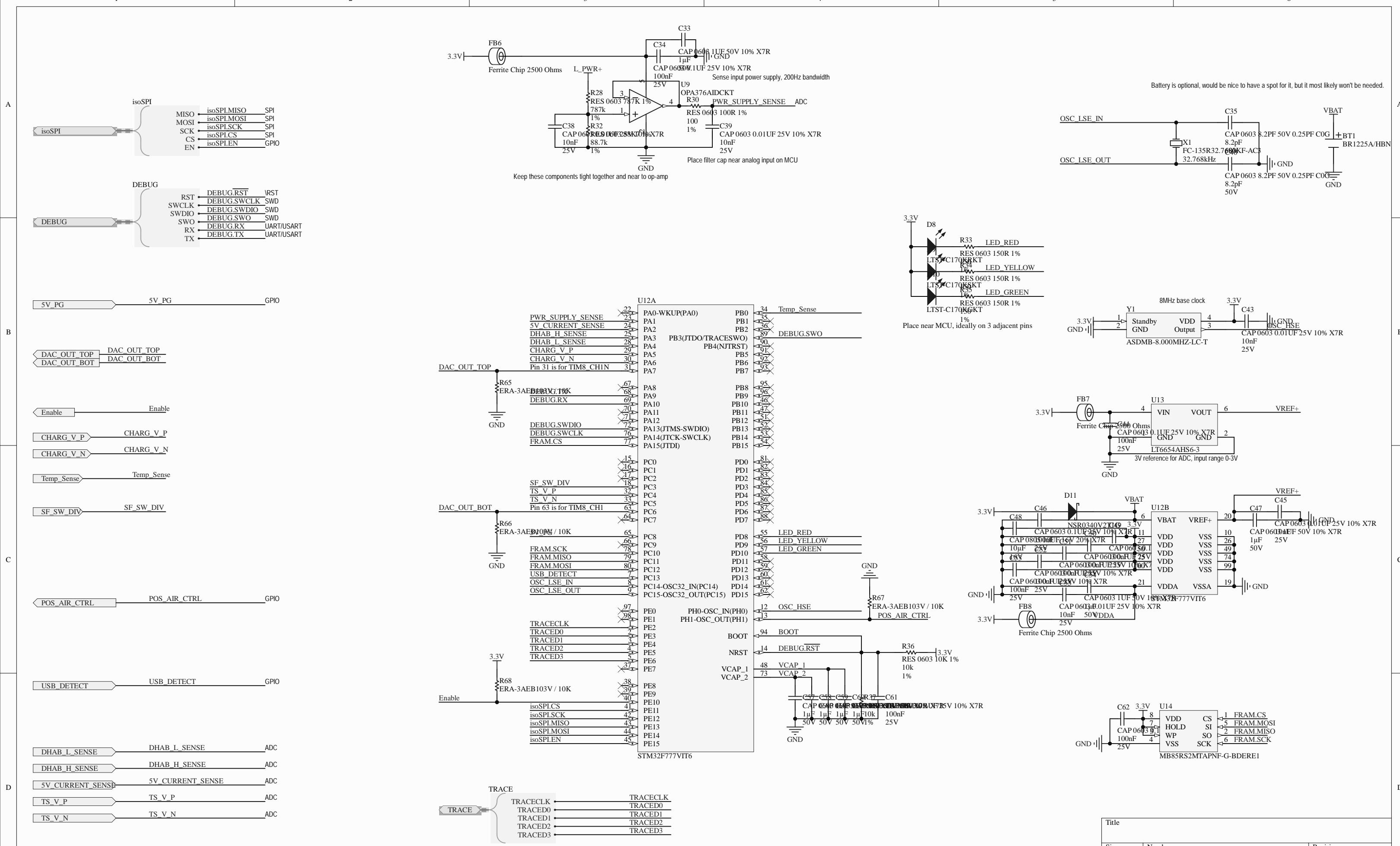
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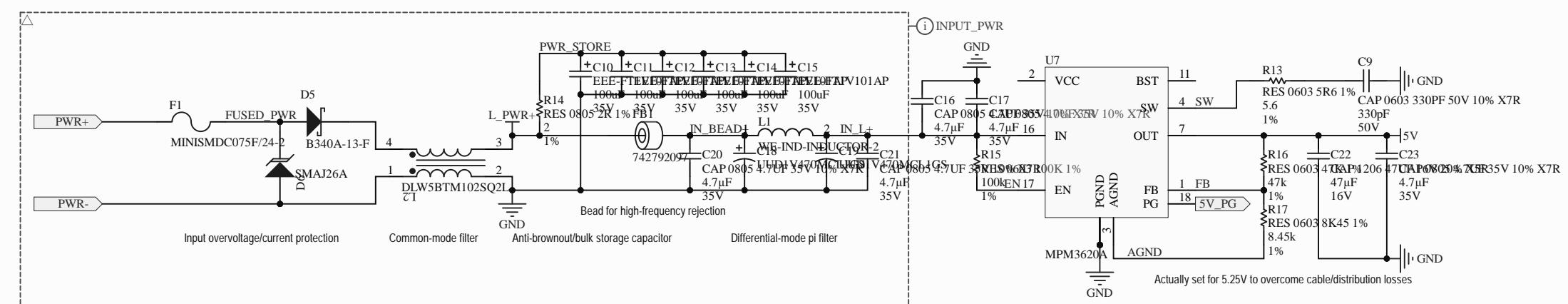




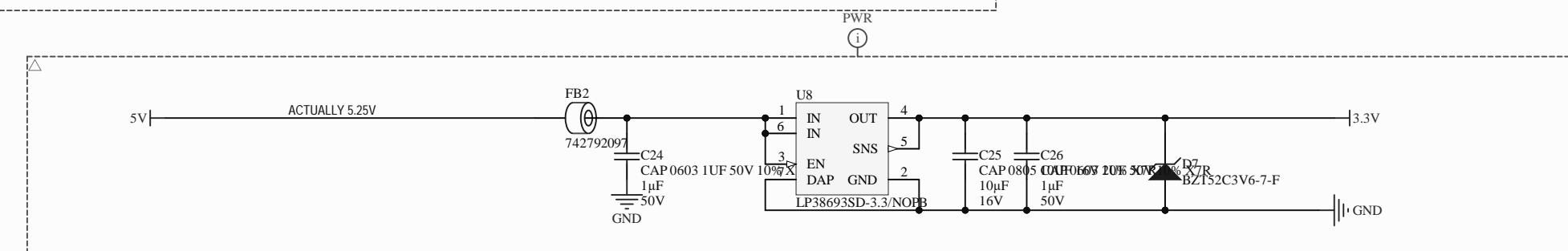
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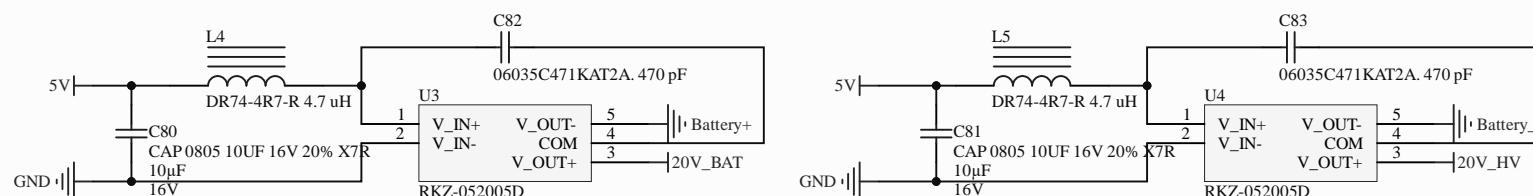
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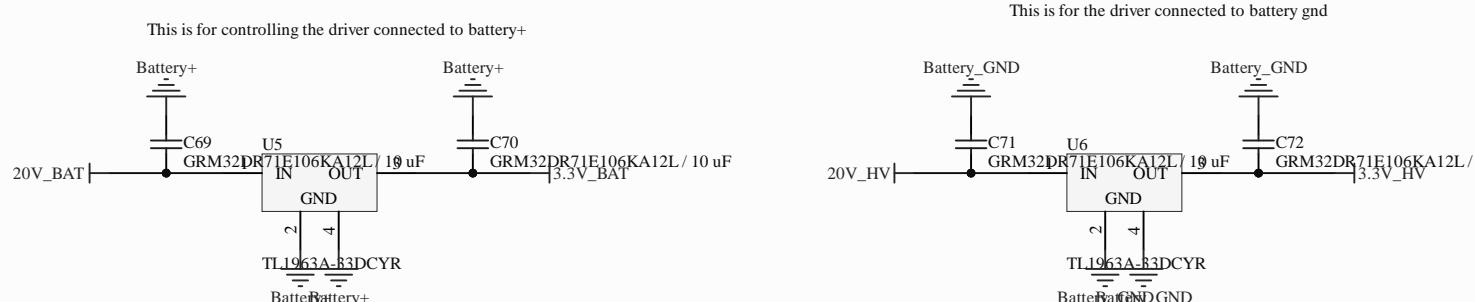
B



C



D



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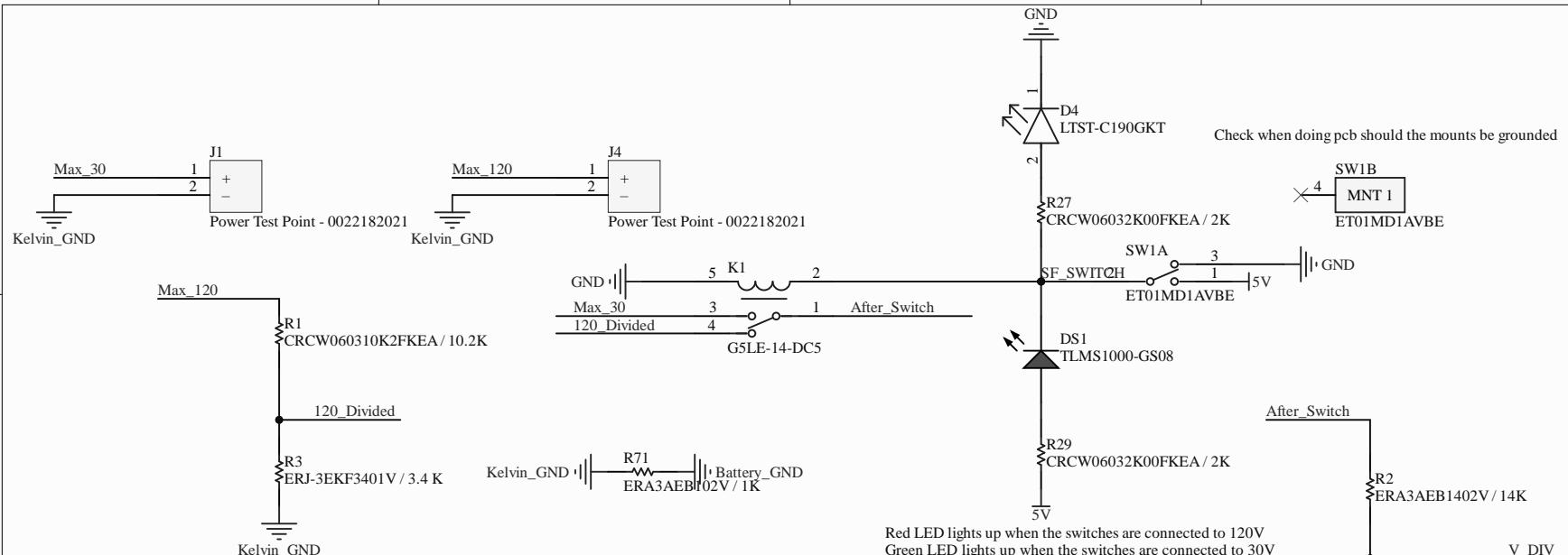
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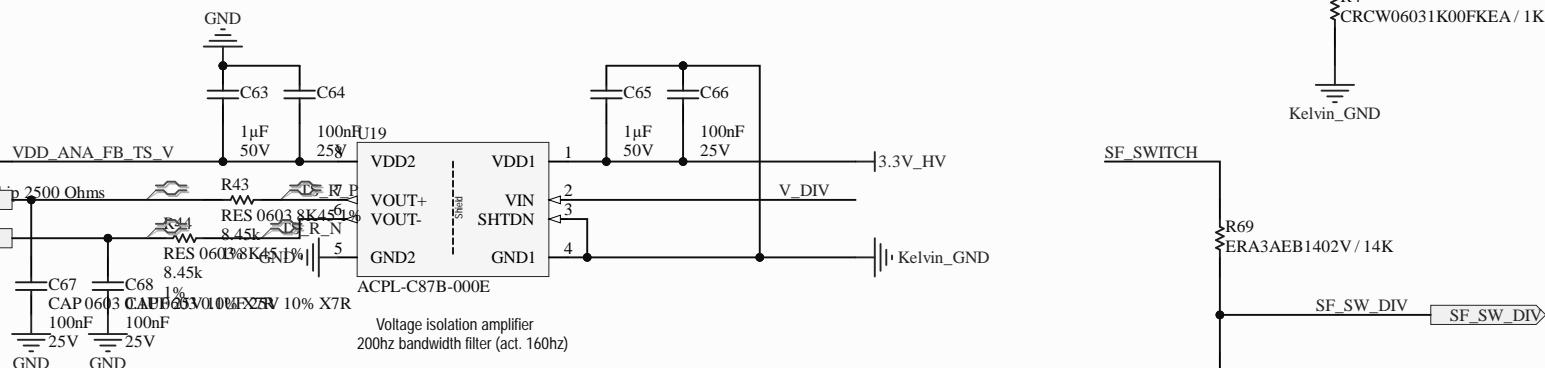
A



B

SW1A controls the other two switches which select which connector the positive terminal comes from

C



D

Title

Size	Number	Revision
A		

Date: 10/19/2020
File: C:\Users\...\VoltageSelect.SchDoc

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