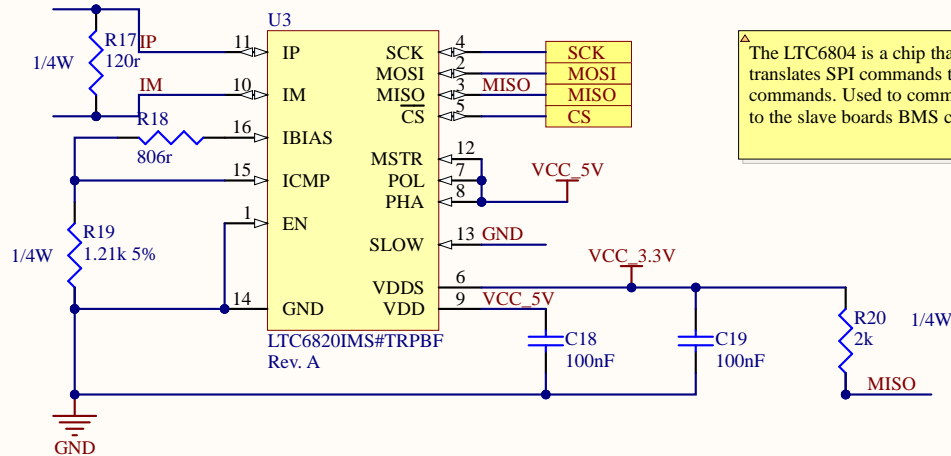
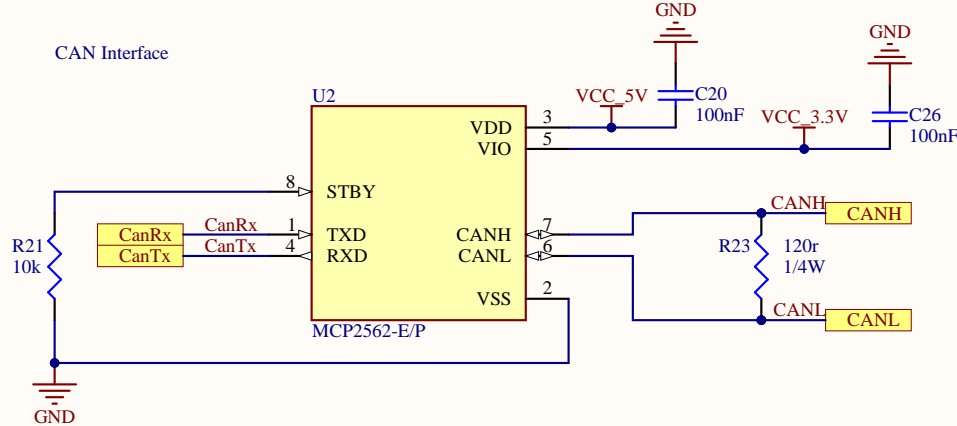


ISOSpi Interface

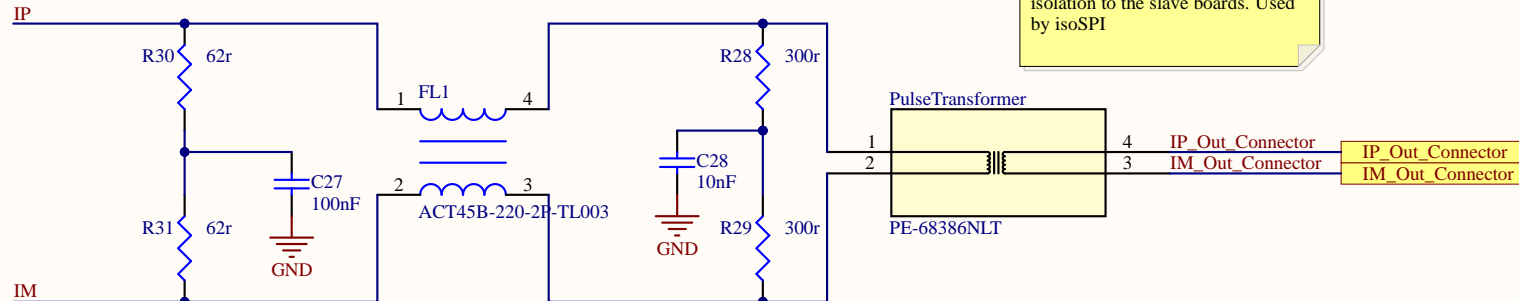


The LTC6804 is a chip that translates SPI commands to isoSPI commands. Used to communicate to the slave boards BMS chips.

CAN Interface



Pulse transformer used to provide isolation to the slave boards. Used by isoSPI

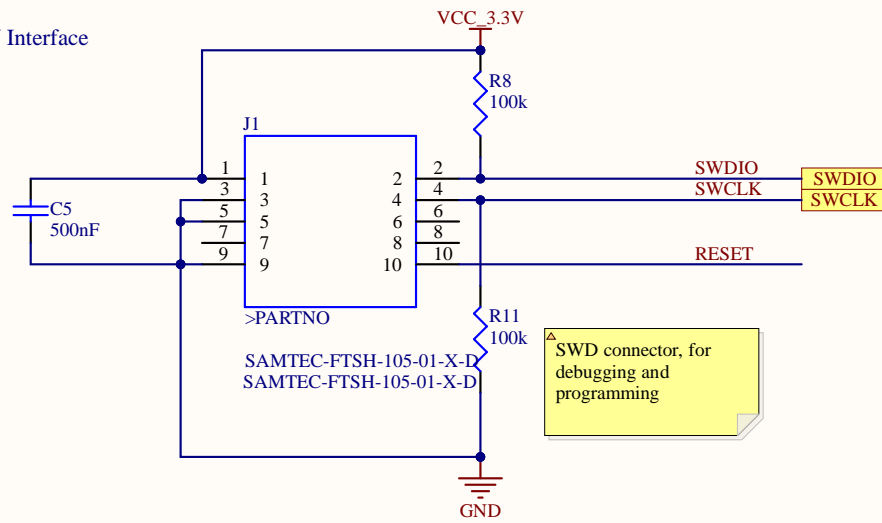


Common Mode Choke (CMC) used to reduce noise on isoSPI line

COMMUNICATIONS

Title		
Size	Number	Revision
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Date:	1/27/2021	Sheet of
File:	C:\Users\...\COMMUNICATIONS.SchDoc	
Drawn By:		

SW Interface



TP1



1

RandomSignal1



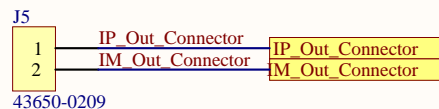
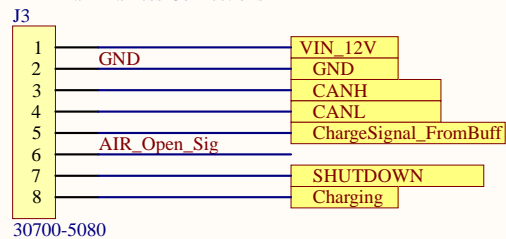
TP2

1

RandomSignal2

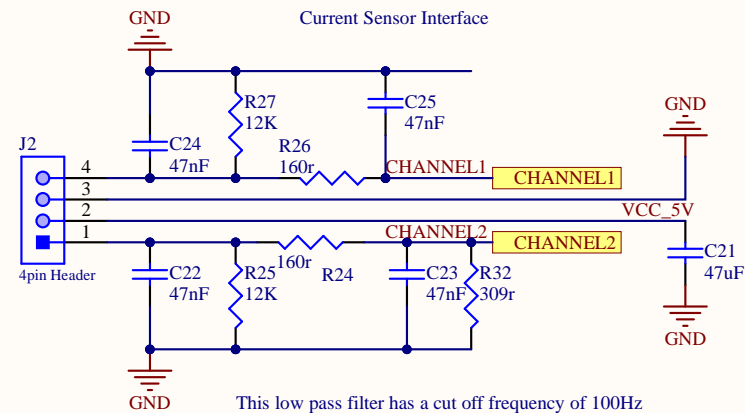
Test points connected to GPIO of processor. To be used for testing if an extra signal is needed

Main Harness Connections



isoSPI interface connector

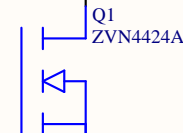
Current Sensor Interface



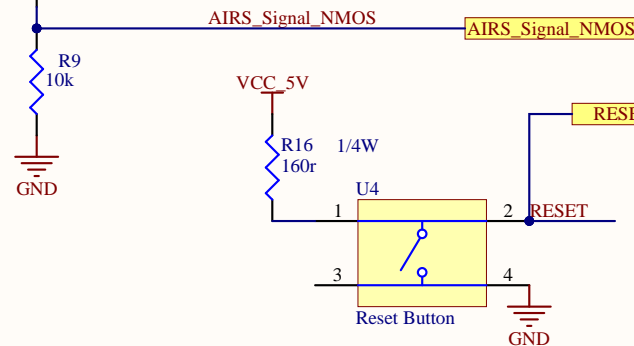
This low pass filter has a cut off frequency of 100Hz

In addition to a lowpass filter this also acts as a current divider to divide 5V from sensor into 3.3V for processor

VCC 3.3V

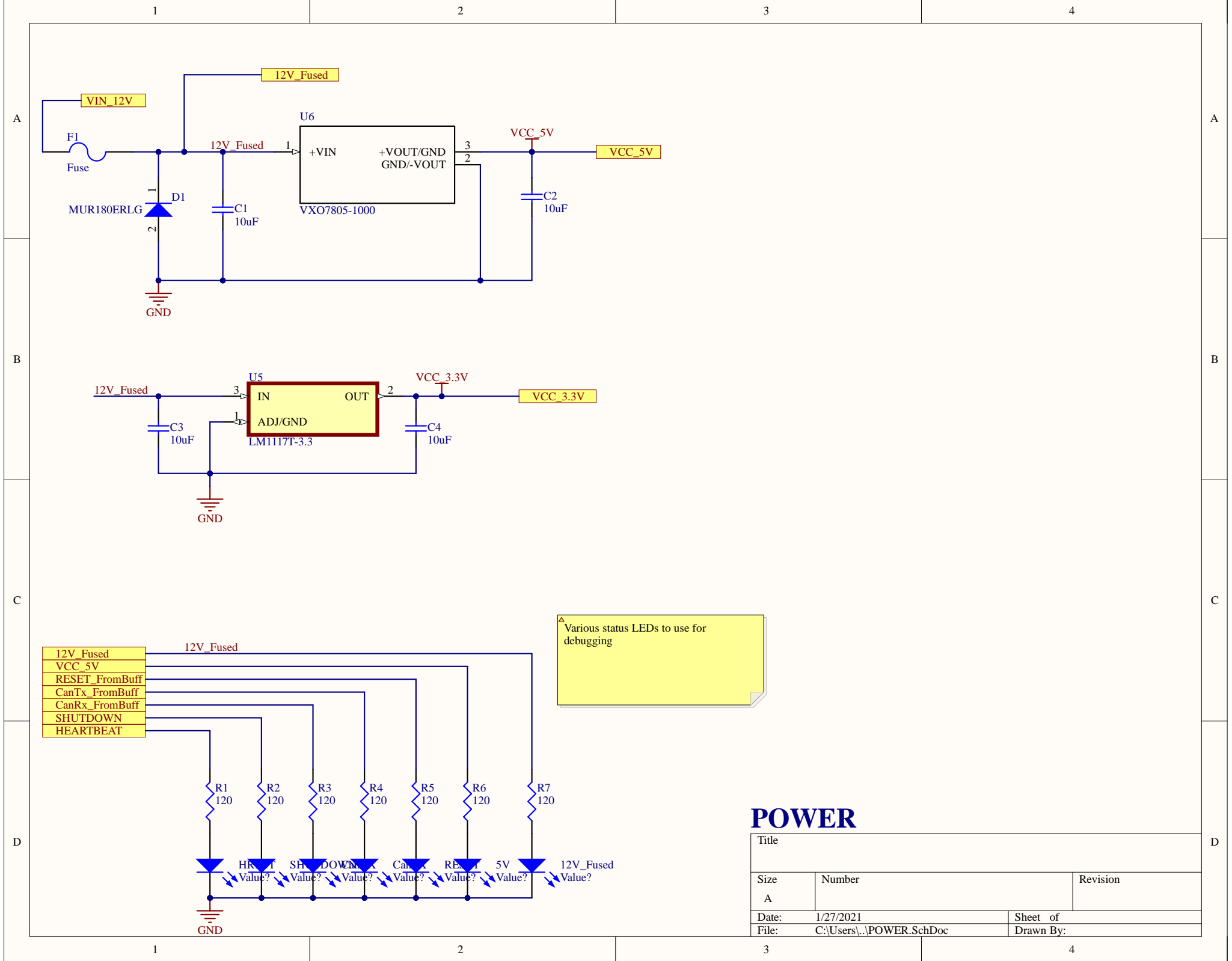


Level shift 12V signal to 3.3V



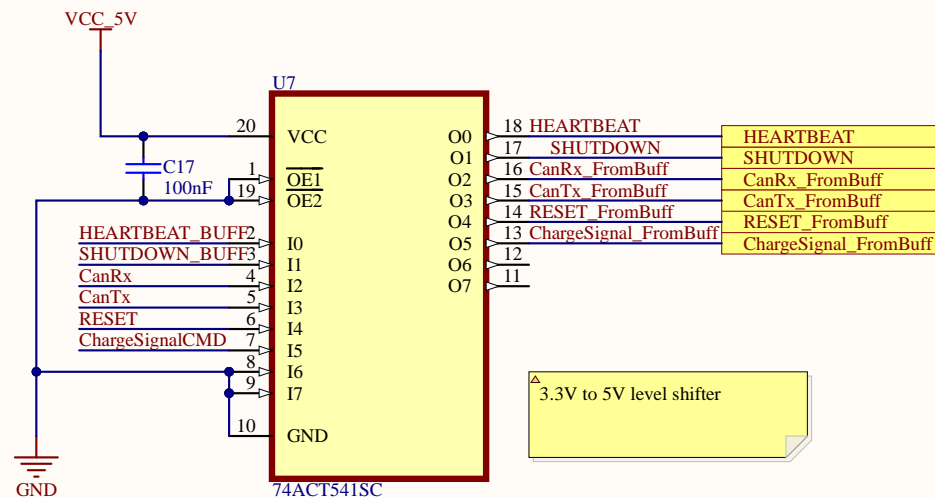
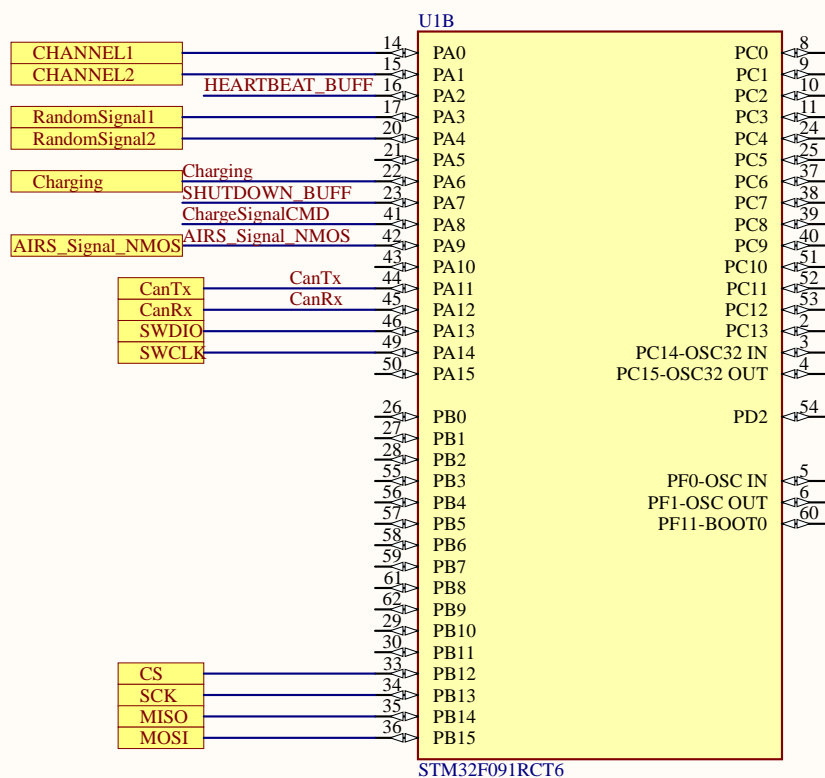
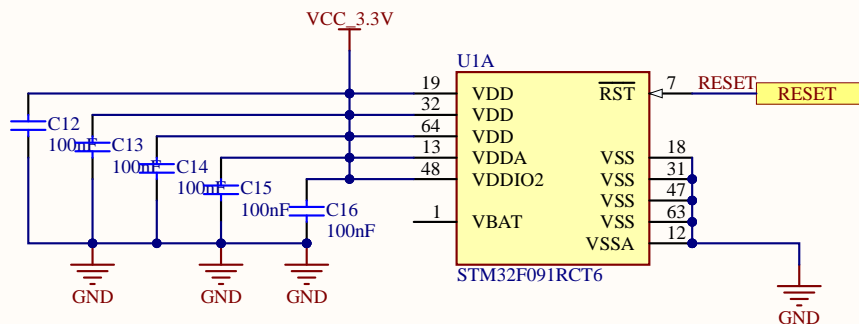
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POWER

Title		
Size A	Number	Revision
Date:	1/27/2021	Sheet of
File:	C:\Users\...\POWER.SchDoc	Drawn By:



PROCESSOR

Title		
Size	Number	Revision
A		
Date:	1/27/2021	Sheet of
File:	C:\Users\...\PROCESSOR.SchDoc	Drawn By:

RIT RACING
BMS Master Board Rev 0.9

TP2 TP1

