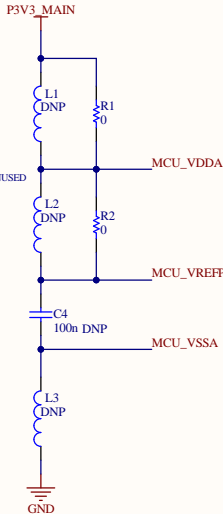
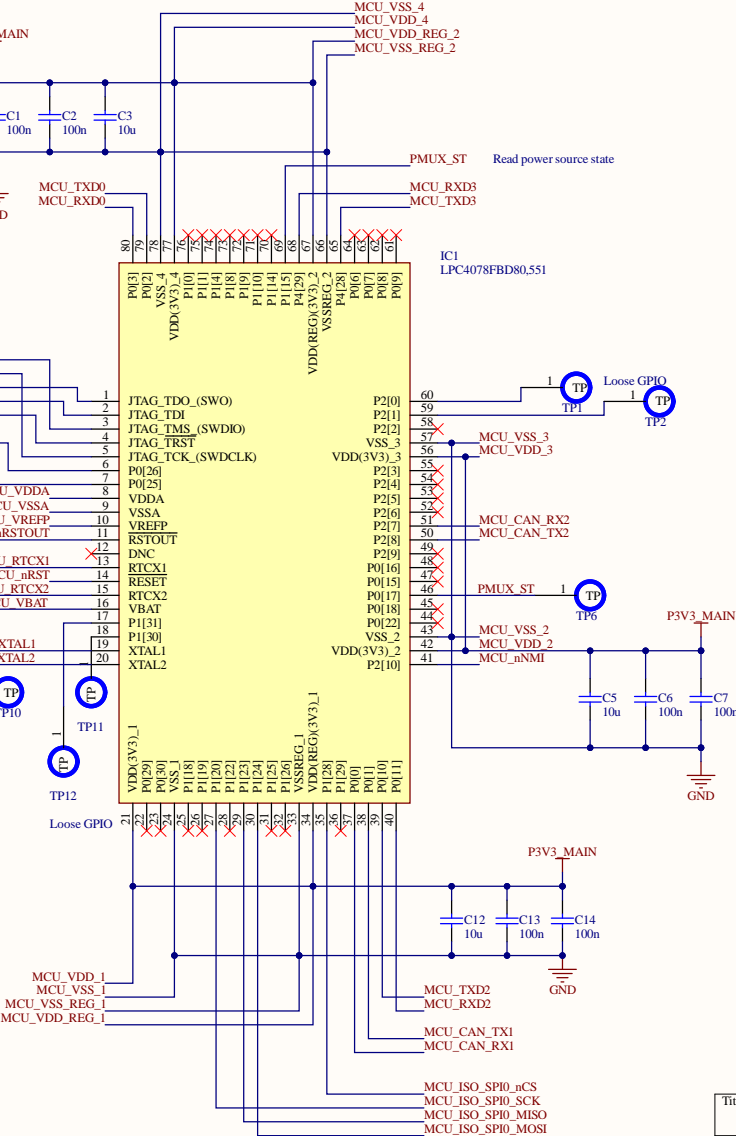
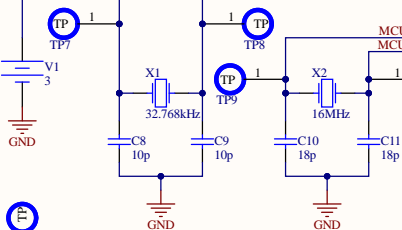
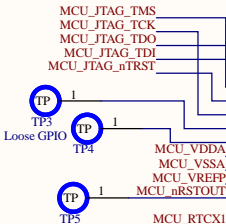
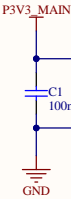
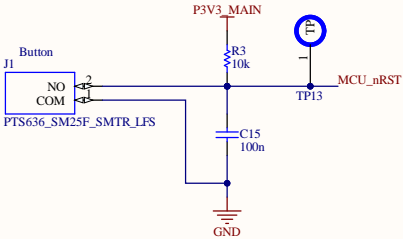


ADC/DAC Analog Supply

ONLY POPULATE 0 OHMS IF ADC/DAC UNUSED
AND DEPOPULATE FERRITE BEADS/CAP IF ADC/DAC UNUSED

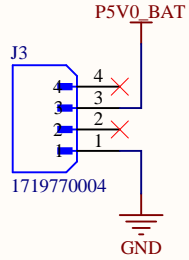


Reset Circuit
Also resettable via USB

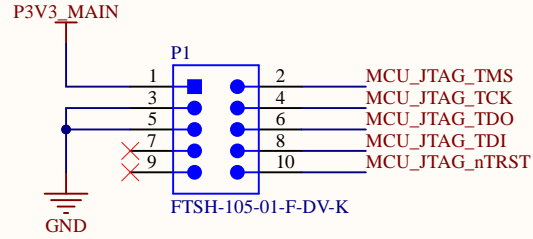


Title Main/MCU Sheet		
Size B	Number	Revision
Date: 5/04/2023	Sheet of 1	Spartan Racing & SRSU
File: C:\Users\...bmsMaster_main.SchDoc	Drawn By: Vincent Saw	

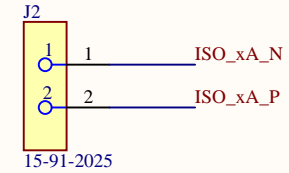
Power Connector



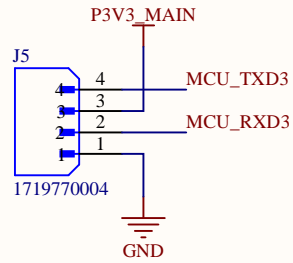
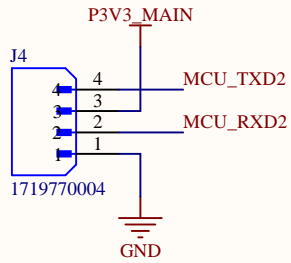
JTAG Debug Connector



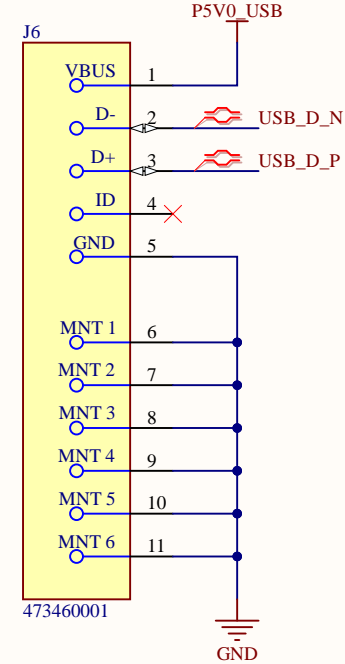
isoSPI Connector (to 1st Slave)



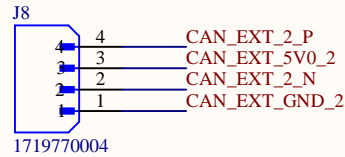
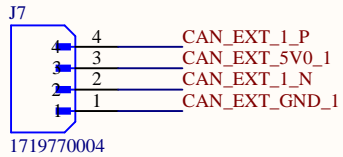
UART/Serial Connectors



microUSB Type B Connector

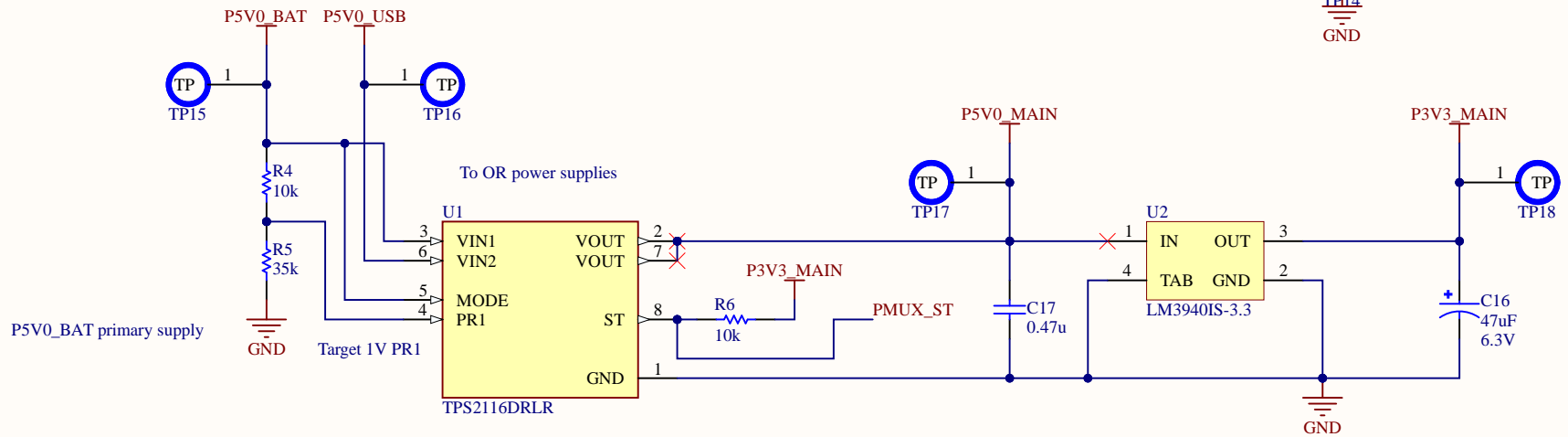


CAN Connectors



Connector Sheet

Size	Number	Revision
A		
Date:	5/04/2023	Sheet of Spartan Racing & SJSU
File:	C:\Users\...\bmsMaster_conn.SchDoc	Drawn By: Vincent Saw



V _{REF}	PR1 reference voltage	1	-40°C to 105°C	0.92	1	1.08	V
------------------	-----------------------	---	----------------	------	---	------	---

Title Power Sheet		
Size A	Number	Revision
Date: 5/04/2023	Sheet of Spartan Racing & SJSU	
File: C:\Users\...\bmsMaster_power.SchDoc	Drawn By: Vincent Saw	

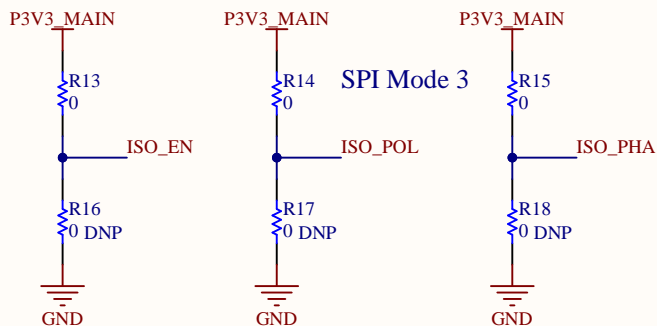
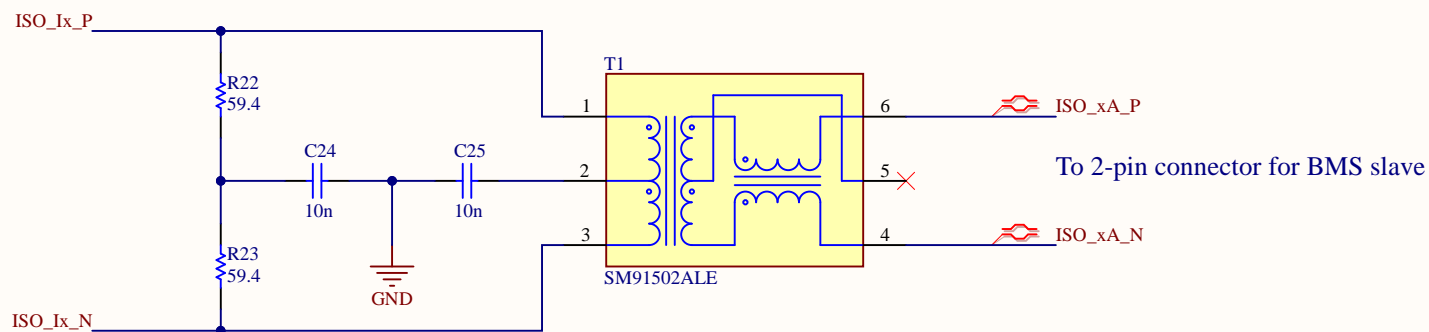
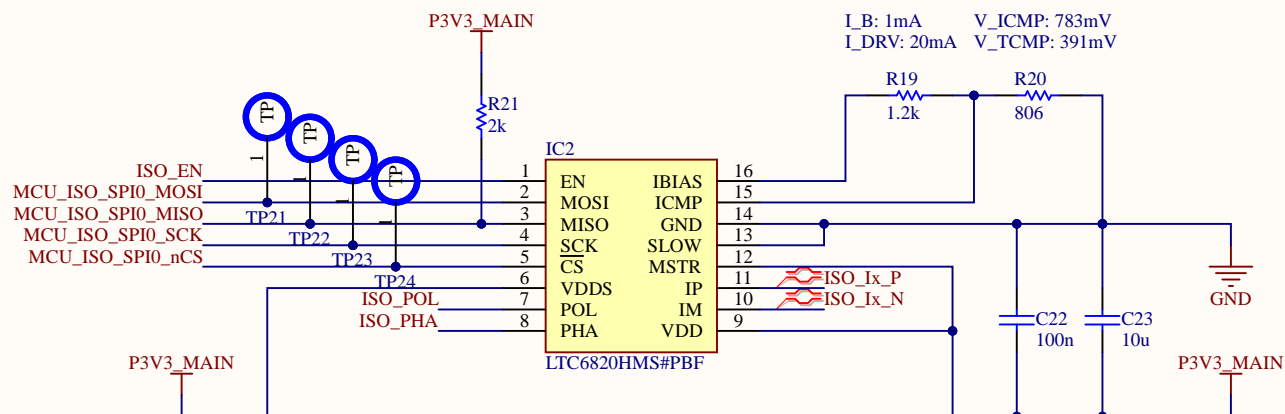


Table 4. SPI Modes

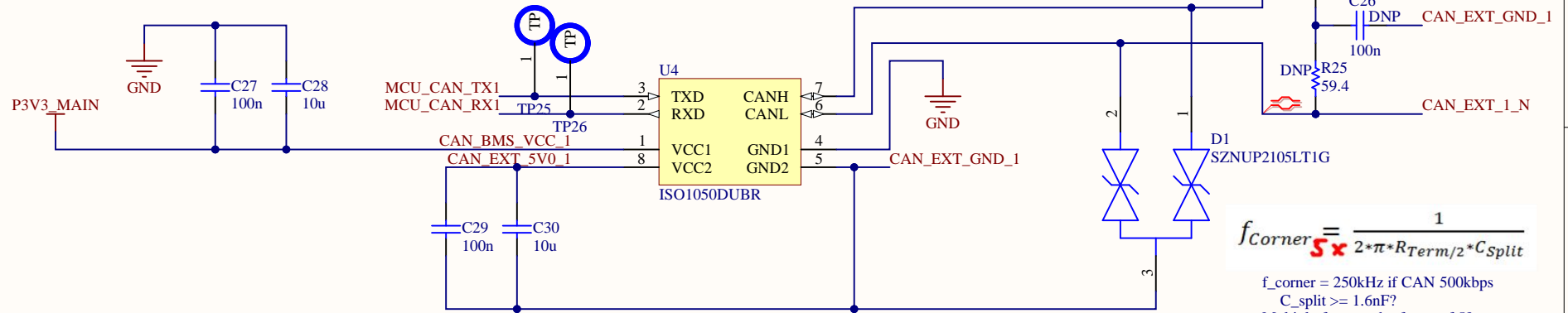
MODE	POL	PHA	DESCRIPTION
0	0	0	SCK Idles Low, Latches on Rising (1st) Edge
1	0	1	SCK Idles Low, Latches on Falling (2nd) Edge
2	1	0	SCK Idles High, Latches on Falling (1st) Edge
3	1	1	SCK Idles High, Latches on Rising (2nd) Edge

Title **IsoSPI Sheet**

Size	Number	Revision
A		
Date:	5/04/2023	Sheet of Spartan Racing & SJSU
File:	C:\Users\...\bmsMaster_isospi.SchDoc	Drawn By: Vincent Saw

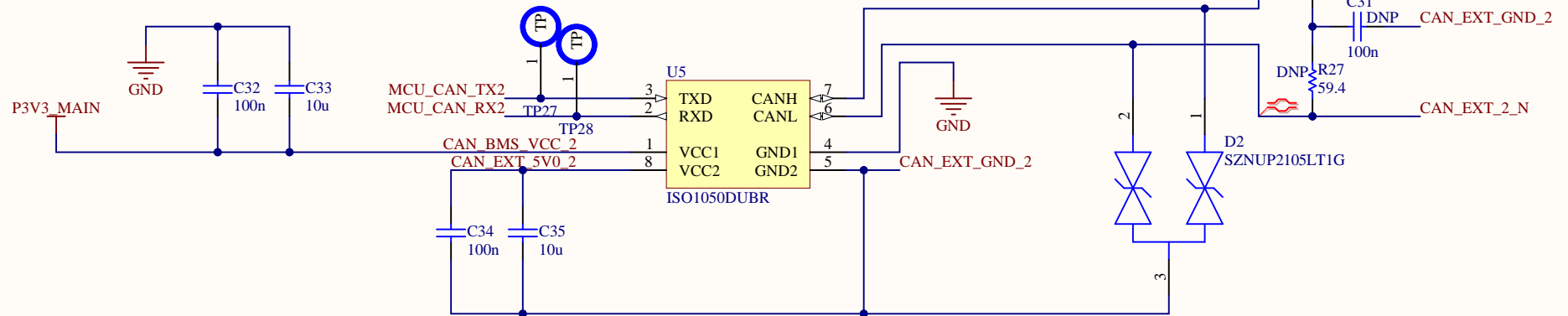
Isolated CAN Transceiver 1

Requires external 5V and GND for isolation purposes
TODO: Add on-board isolated power for VCC2/GND2



Isolated CAN Transceiver 2

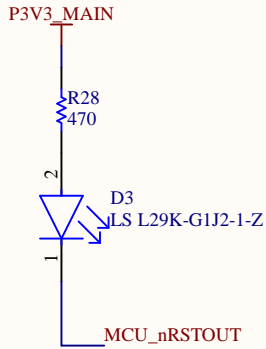
Requires external 5V and GND for isolation purposes
TODO: Add on-board isolated power for VCC2/GND2



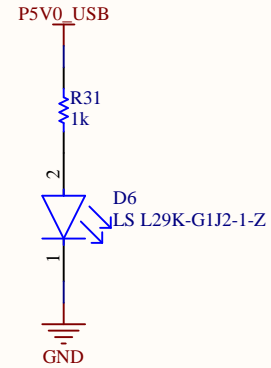
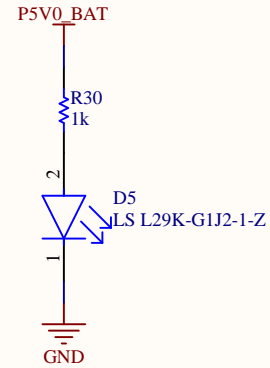
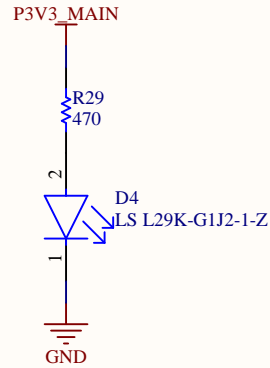
Title CAN Bus Sheet

Size	Number	Revision
A		
Date:	5/04/2023	Sheet of Spartan Racing & SJISU
File:	C:\Users\...\bmsMaster_can.SchDoc	Drawn By: Vincent Saw

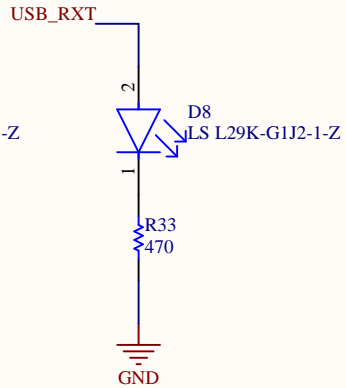
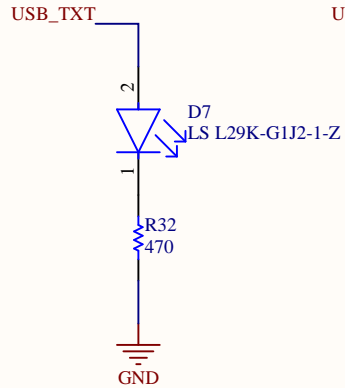
Reset Indicator LED (nRSTOUT)



Power Debug LEDs



USB/UART0 Activity Indication LEDs



Title LED Sheet		
Size A	Number	Revision
Date: 5/04/2023	Sheet of Spartan Racing & SJSU	
File: C:\Users\...\bmsMaster_led.SchDoc	Drawn By: Vincent Saw	

Board Stack Report