Bipolar Measurement Input 8ch

J1

2-84981-0

MP2
MP1

IC6 IC7 IC8 IC9
TPD4E1B06DCKR

GND

U_ADC_1
ADC_1.SchDoc

CIN1_1P
CIN1_1N
CIN1_2P
CIN1_2N
CIN1_3P
CIN1_3N
CIN1_4P
CIN1_4N
CIN1_5P
CIN1_5N
CIN1_6P
CIN1_6N
CIN1_7P
CIN1_7N
CIN1_8P
CIN1_8N
SRB1

RESET
DRDY
SPI_SCK
SPI_CS
SPI_MOSI
SPI_MISO
SPI_DAISY
ADC_CLK

U_MCU
MCU.SchDoc

IMU_SCL
IMU_SDA

U_IMU
IMU.SchDoc

Testpoints
Testpoints.SchDoc

J17

105-0752-001

U_ADC_REF
ADC_REF.SchDoc

REF_IN
SRB1

BMS
BMS.SchDoc

Unipolar Measurement Input 16ch
Reference is SRB1

J2

IC12 IC13 IC14 IC15
TPD4E1B06DCKR

U_ADC_2
ADC_2.SchDoc

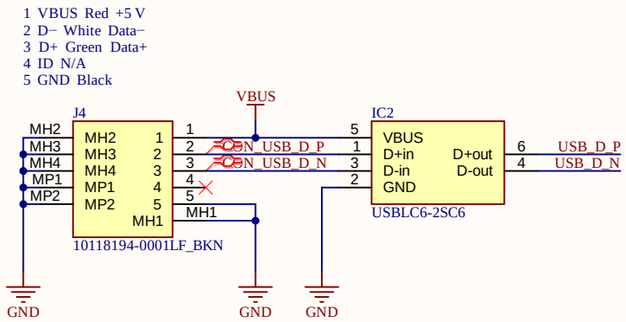
CIN2_1P
CIN2_2P
CIN2_3P
CIN2_4P
CIN2_5P
CIN2_6P
CIN2_7P
CIN2_8P

J6

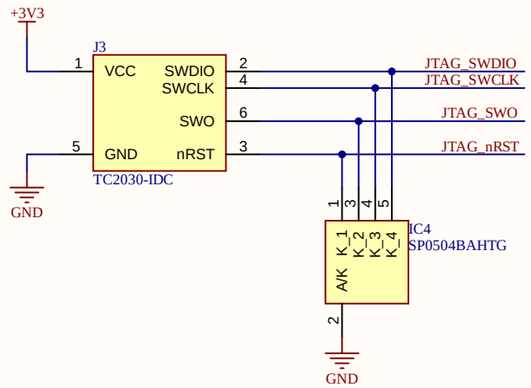
S2B-XH-A(LF)(SN)

VBAT

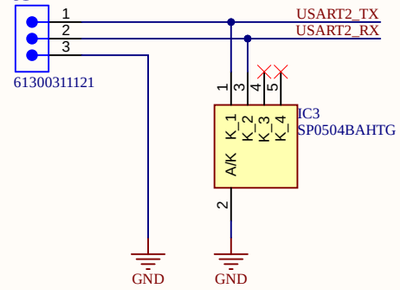
Title: Embedded Real-Time Muscle Monitoring System		
Size: A3	Number: Schematic_1	Revision: A
Date: 6/04/2025	Sheet 1 of 8	
File: Top_Level.SchDoc	Drawn By: KGE Checked: JL	



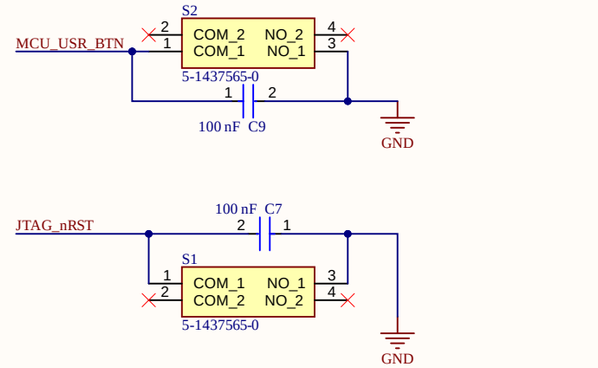
USB Connector



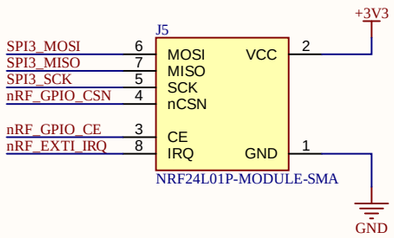
SWD_JTAG



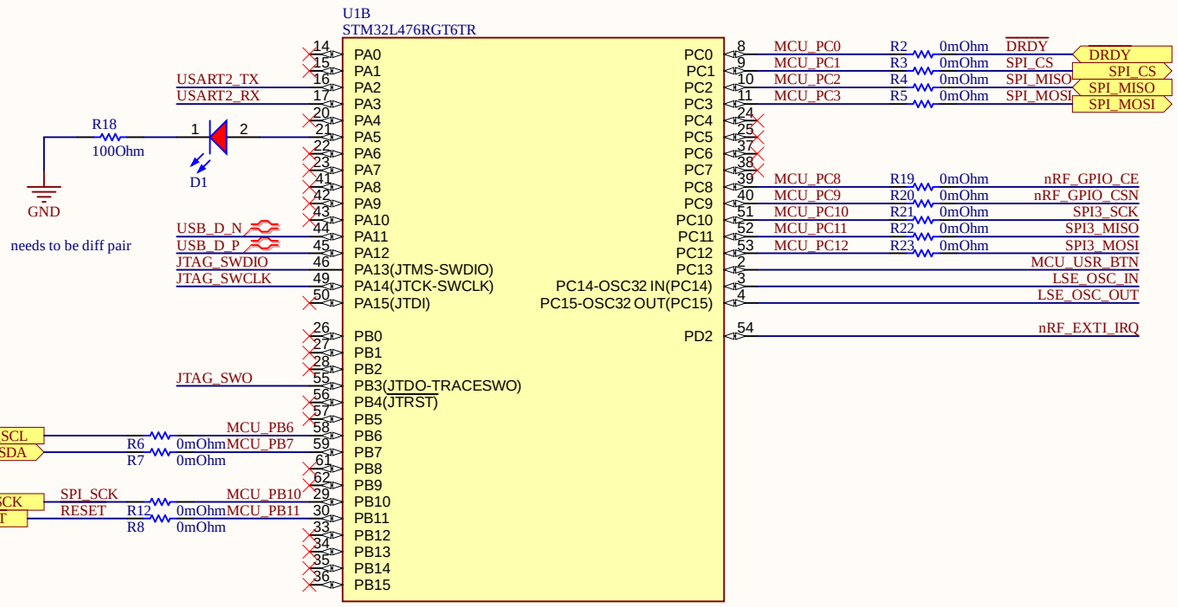
UART

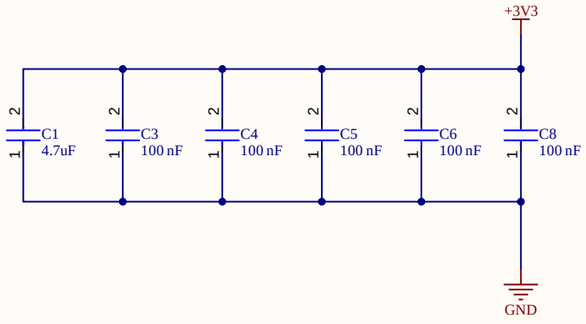


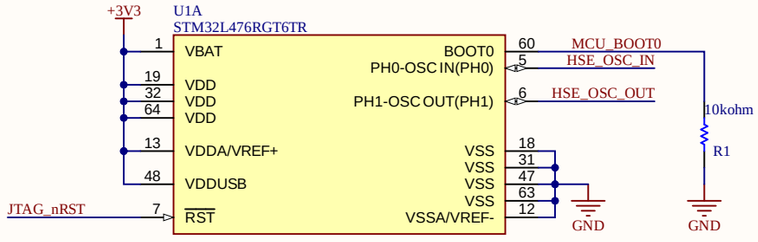
Buttons

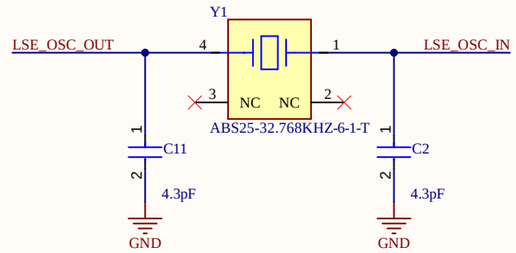


Wireless Module

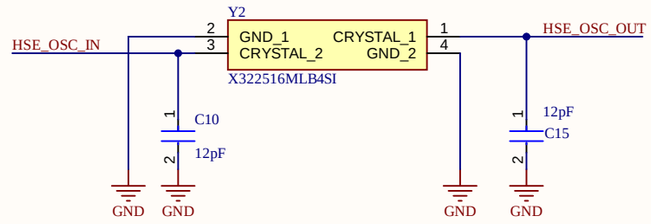






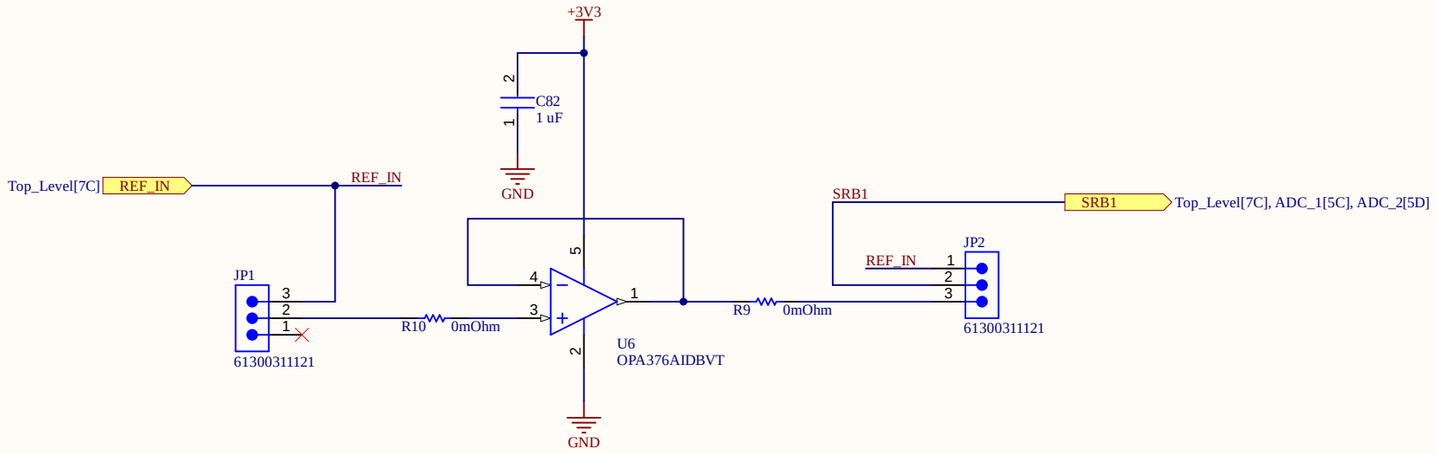


Low frequency oscillator

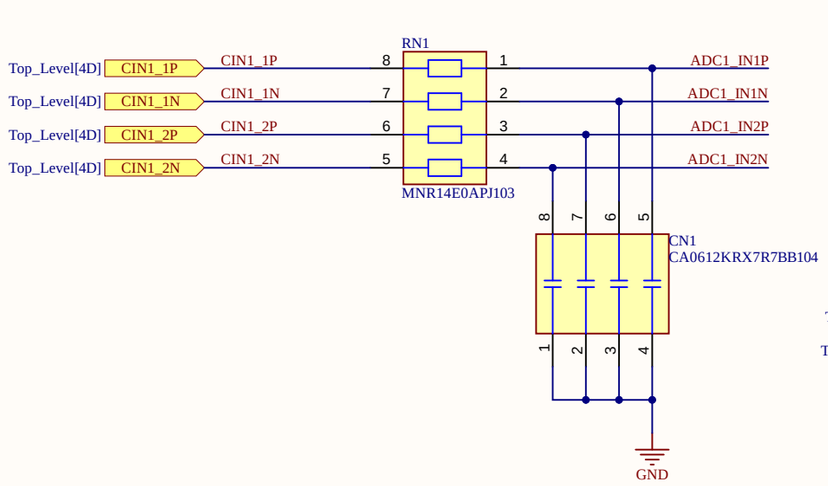


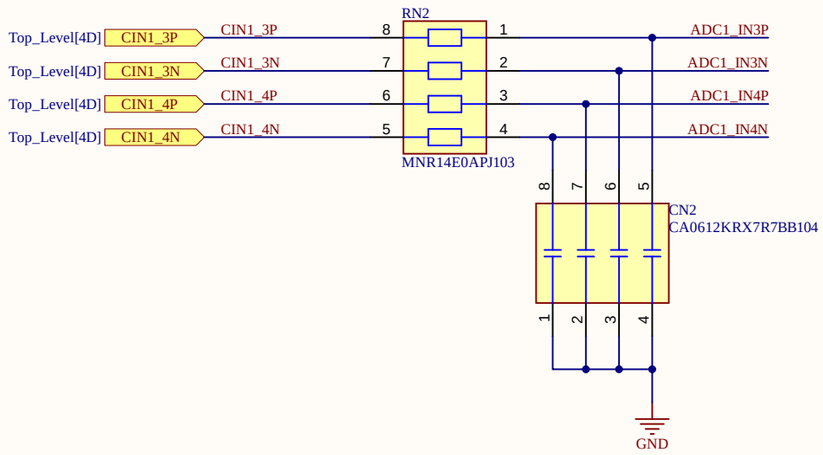
High frequency oscillator

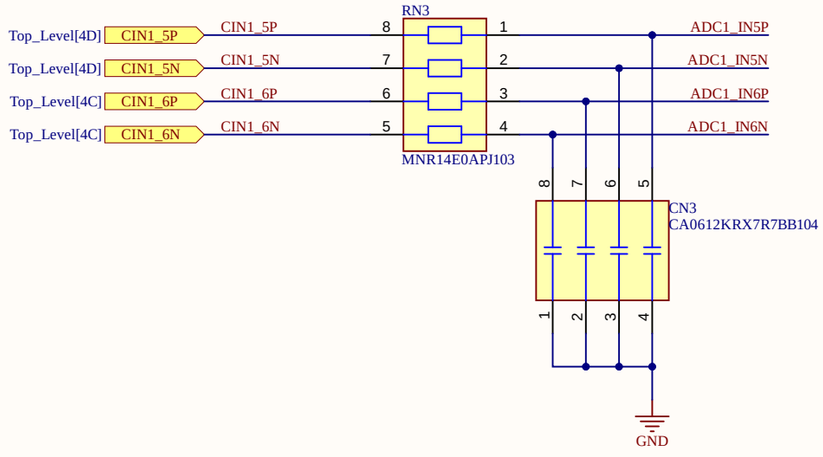
Title: Embedded Real-Time Muscle Monitoring System		
Size: A3	Number: Schematic_1	Revision: A
Date: 6/04/2025	Sheet 2 of 8	
File: MCU.SchDoc	Drawn By: KGE	Checked: JL

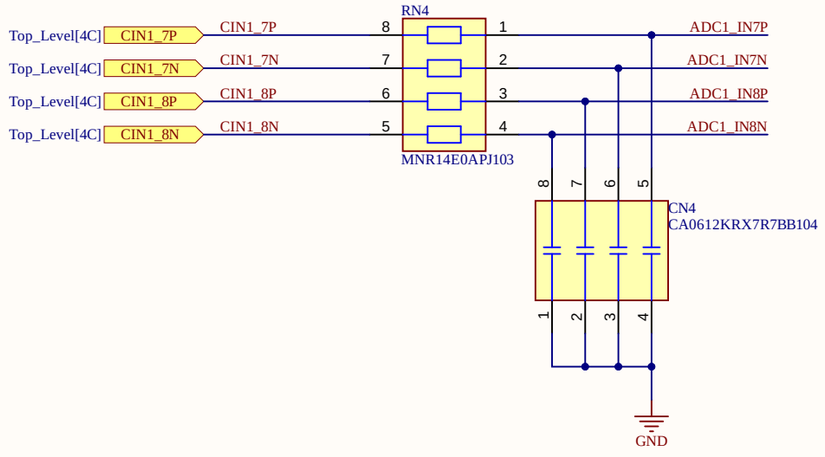


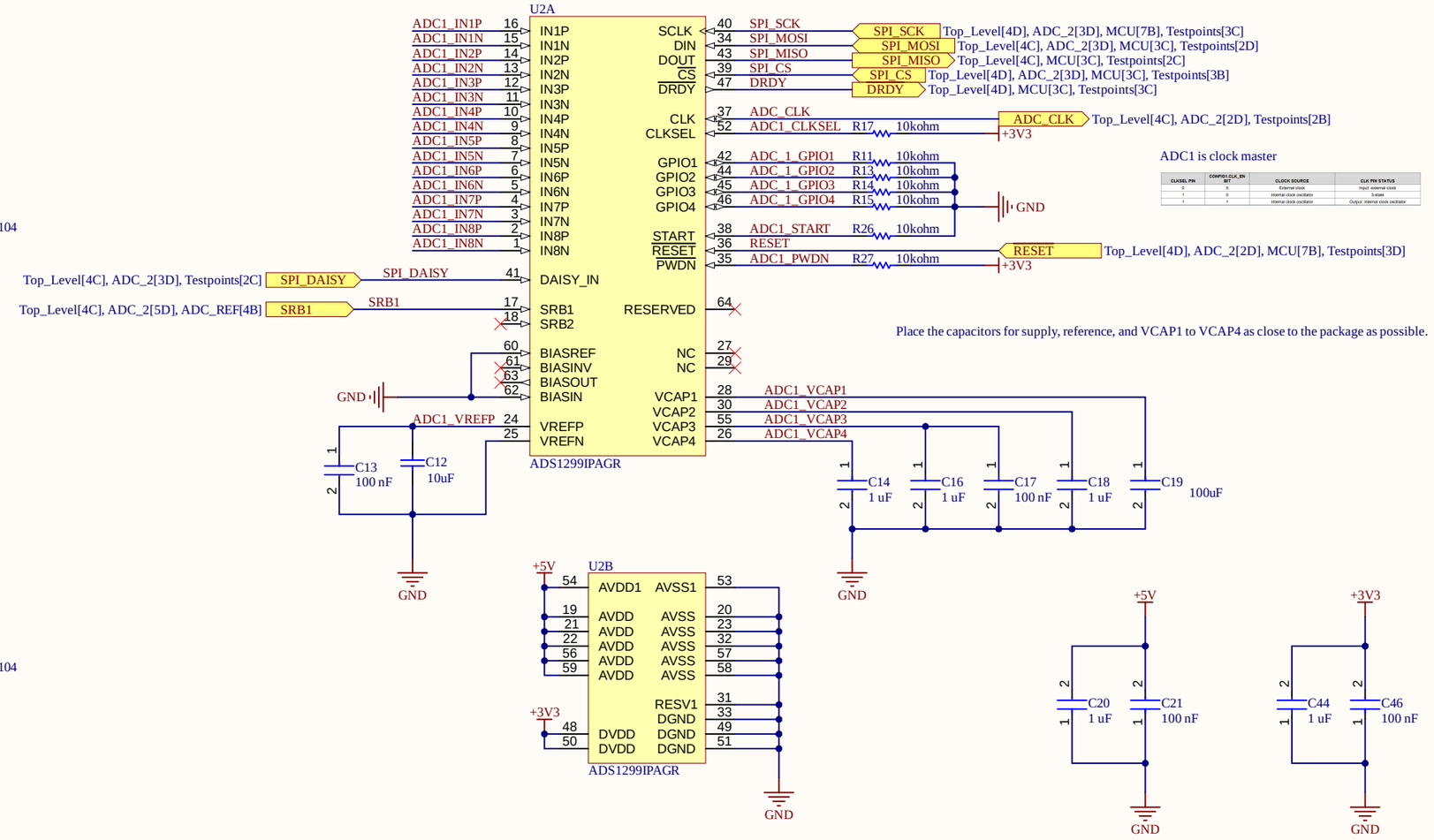
Title	Embedded Real-Time Muscle Monitoring System	
Size: A3	Number: Schematic_1	Revision: A
Date: 6/04/2025		Sheet 3 of 8
File: ADC_REF.SchDoc		Drawn By: KGE Checked: JL



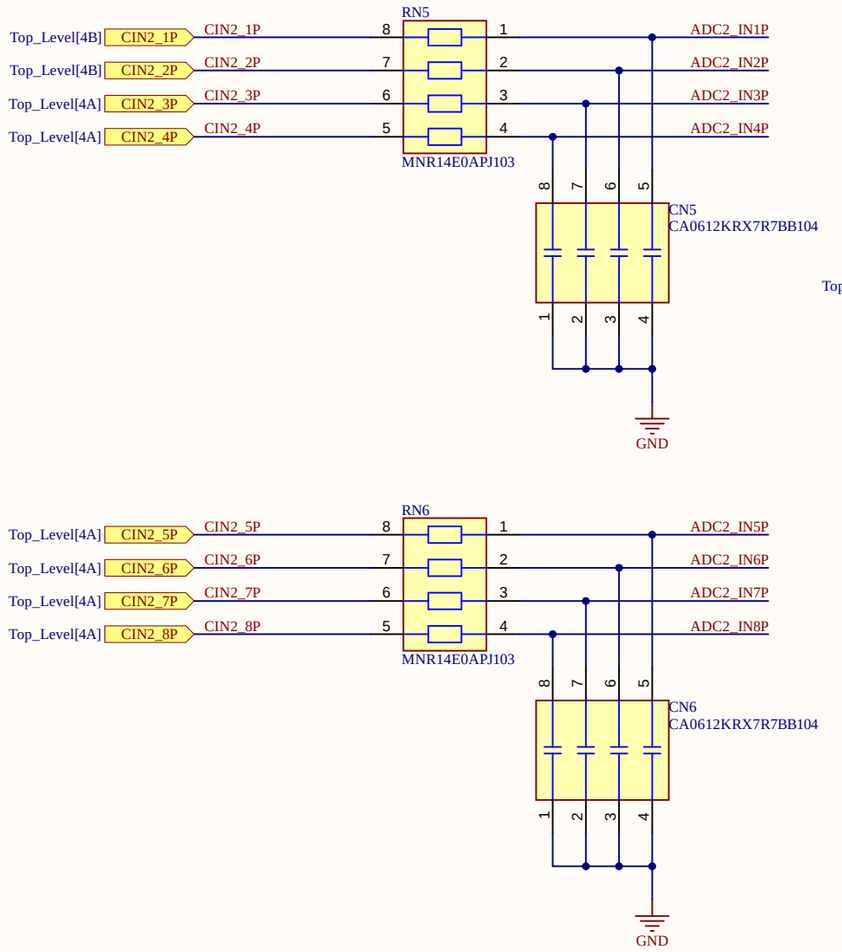


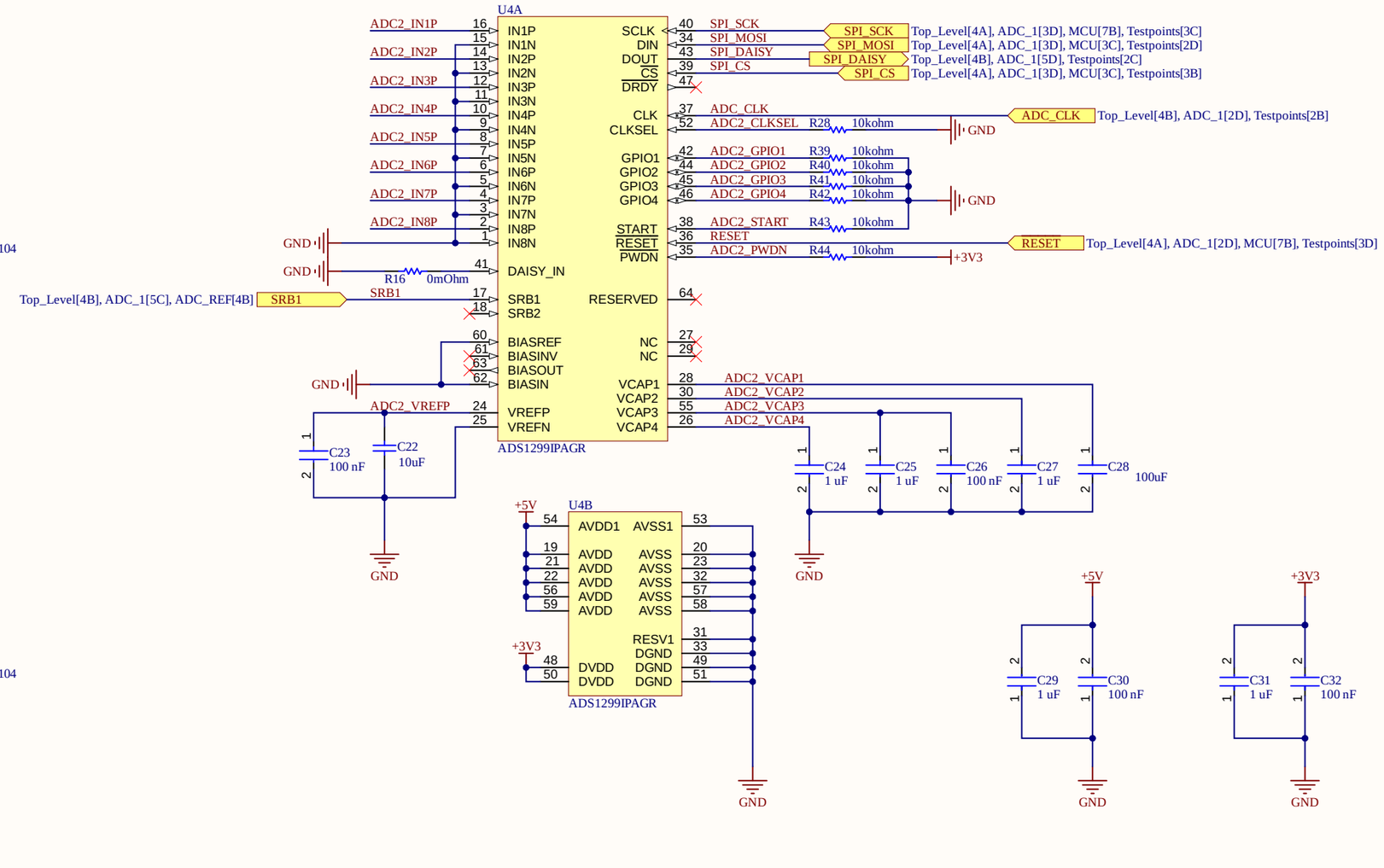




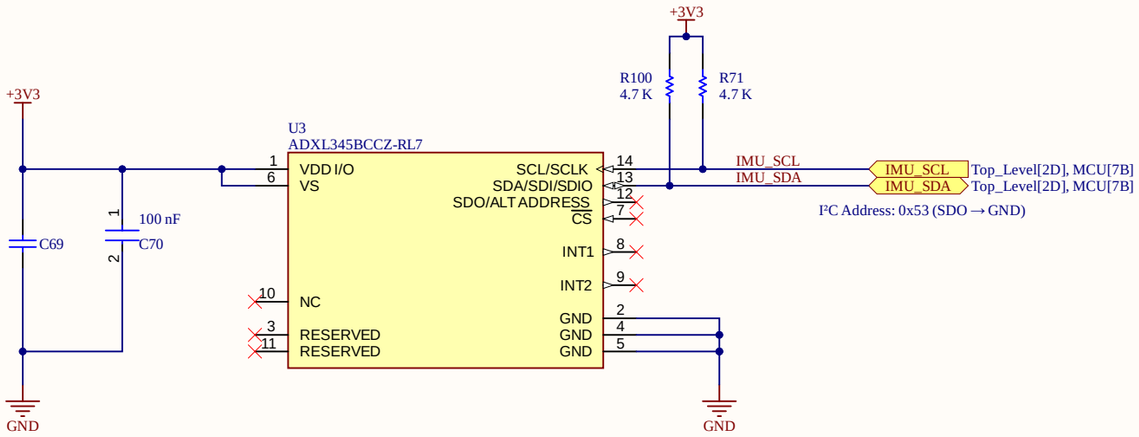


Title	Embedded Real-Time Muscle Monitoring System	
Size: A3	Number: Schematic_1	Revision: A
Date: 6/04/2025		Sheet 4 of 8
File: ADC_1.SchDoc		Drawn By: KGE Checked: JL



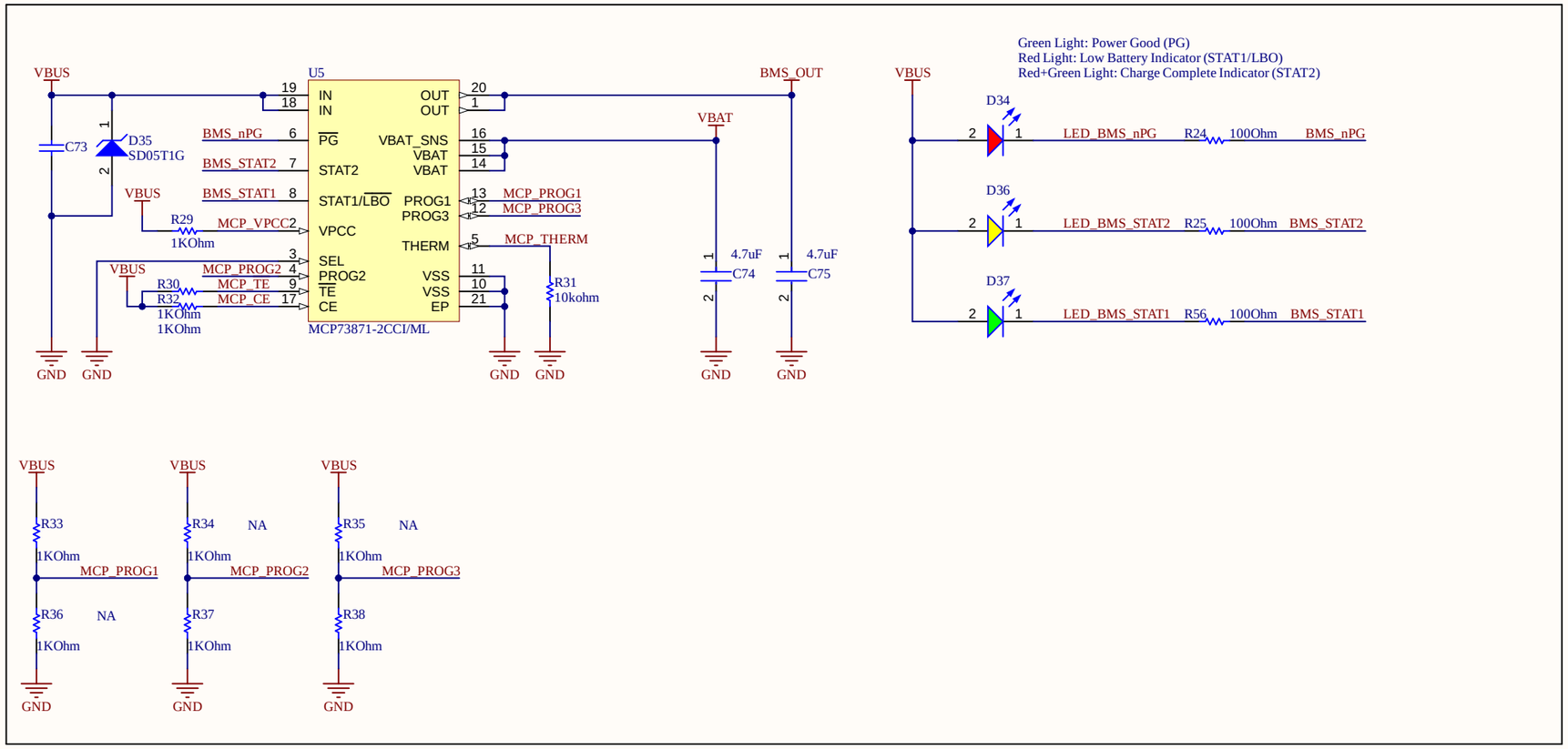


Title	Embedded Real-Time Muscle Monitoring System	
Size: A3	Number: Schematic_1	Revision: A
Date: 6/04/2025		Sheet 5 of 8
File: ADC_2.SchDoc		Drawn By: KGE Checked: JL

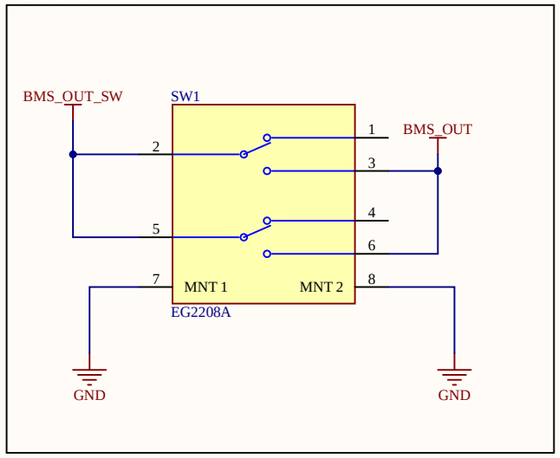


Title	Embedded Real-Time Muscle Monitoring System	
Size: A3	Number: Schematic_1	Revision: A
Date: 6/04/2025		Sheet 6 of 8
File: IMU.SchDoc		Drawn By: KGE Checked: JL

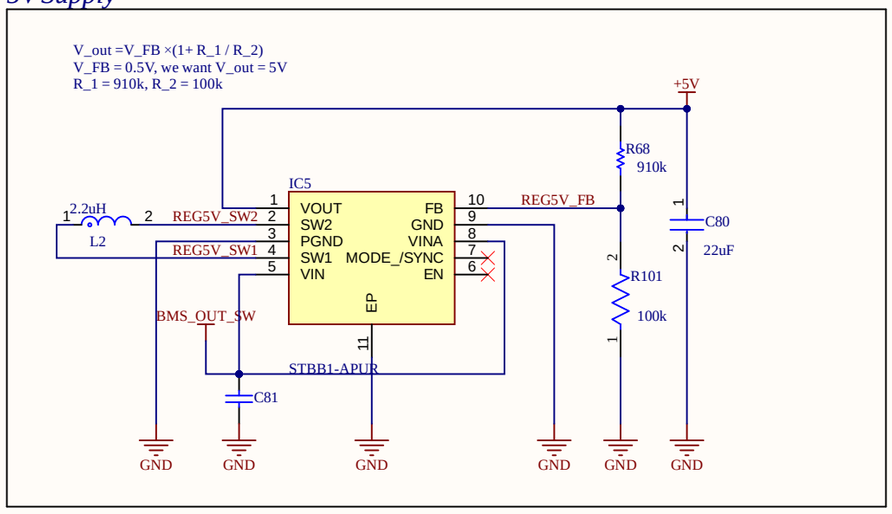
BMS



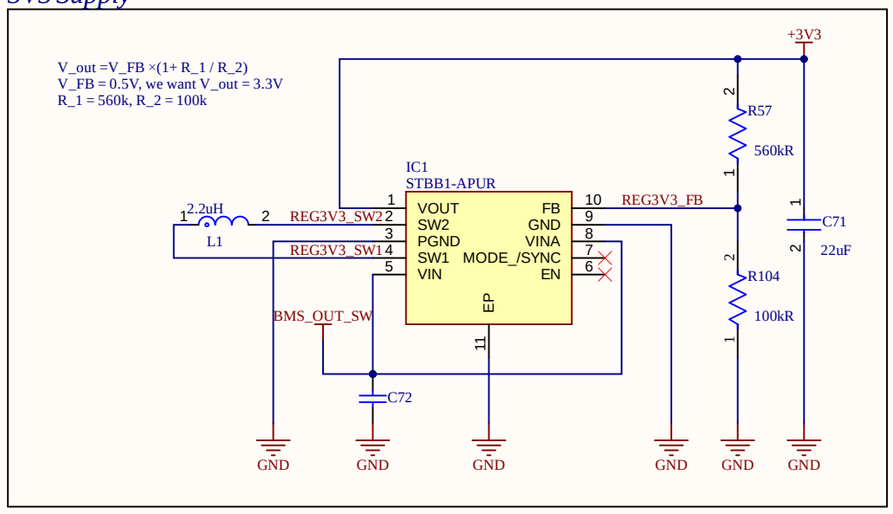
Power Switch



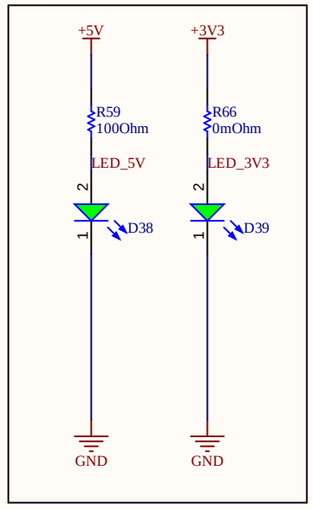
5V Supply



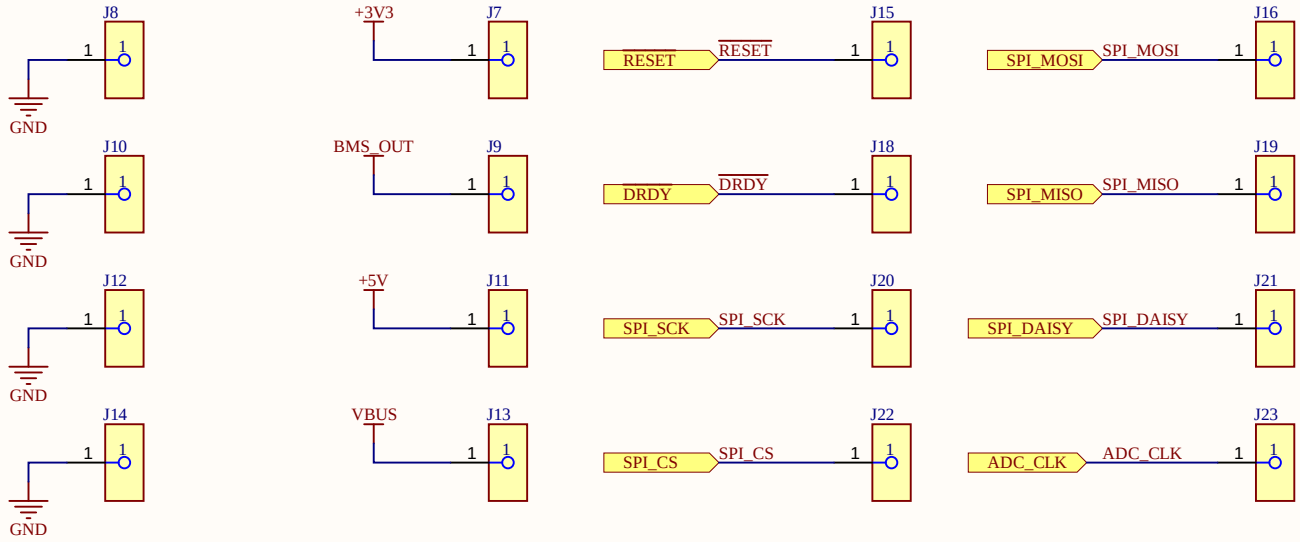
3V3 Supply



LEDs



Title: Embedded Real-Time Muscle Monitoring System		
Size: A3	Number: Schematic_1	Revision: A
Date: 6/04/2025	Sheet 7 of 8	
File: BMS.SchDoc	Drawn By: KGE Checked: JL	



Title: Embedded Real-Time Muscle Monitoring System		
Size: A	Number: Schematic_1	Revision: A
Date: 6/04/2025		Sheet 8 of 8
File: Testpoints.SchDoc		Drawn By: KGE Checked: JL