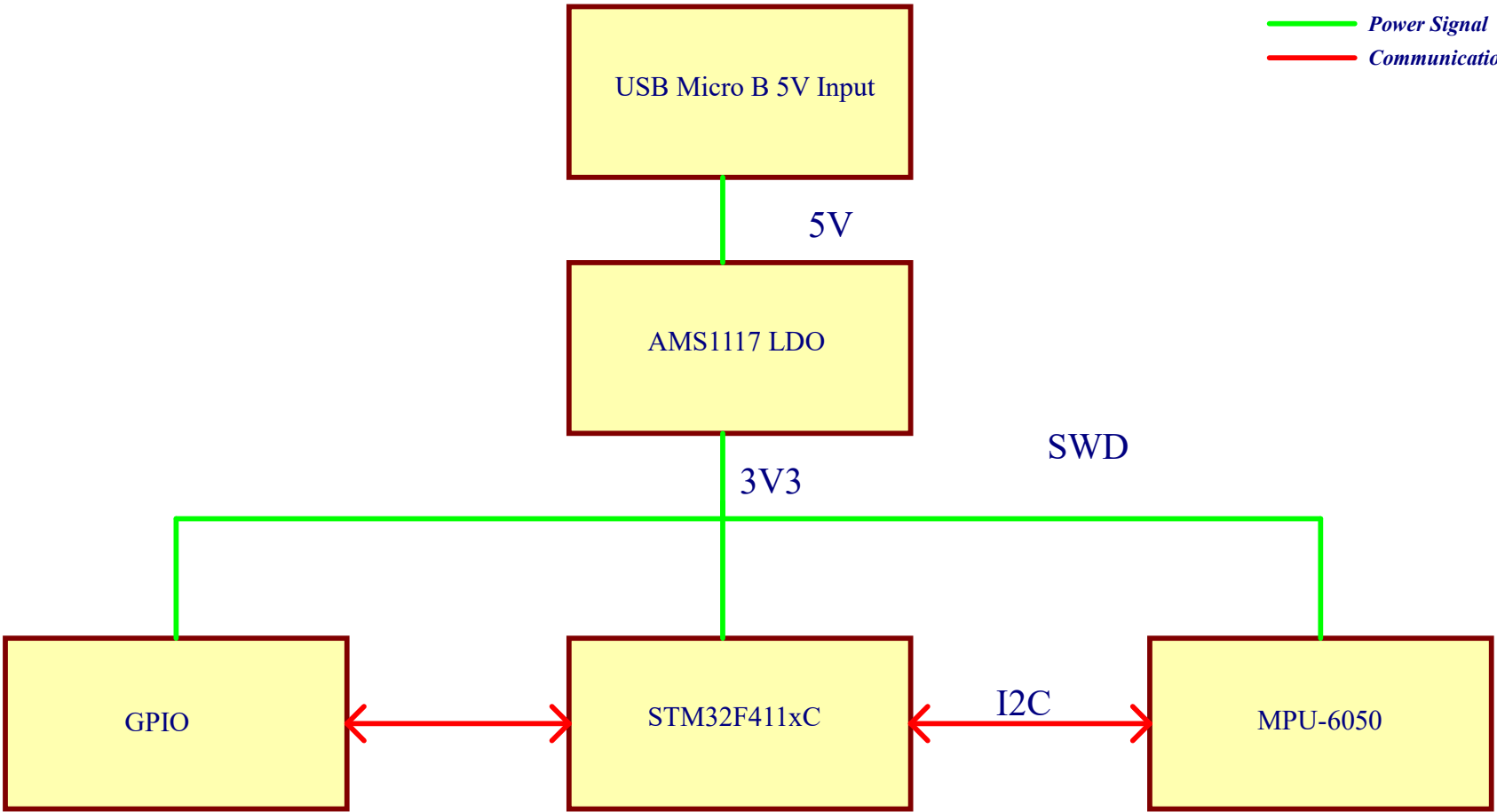


*Block Diagram of IMU*

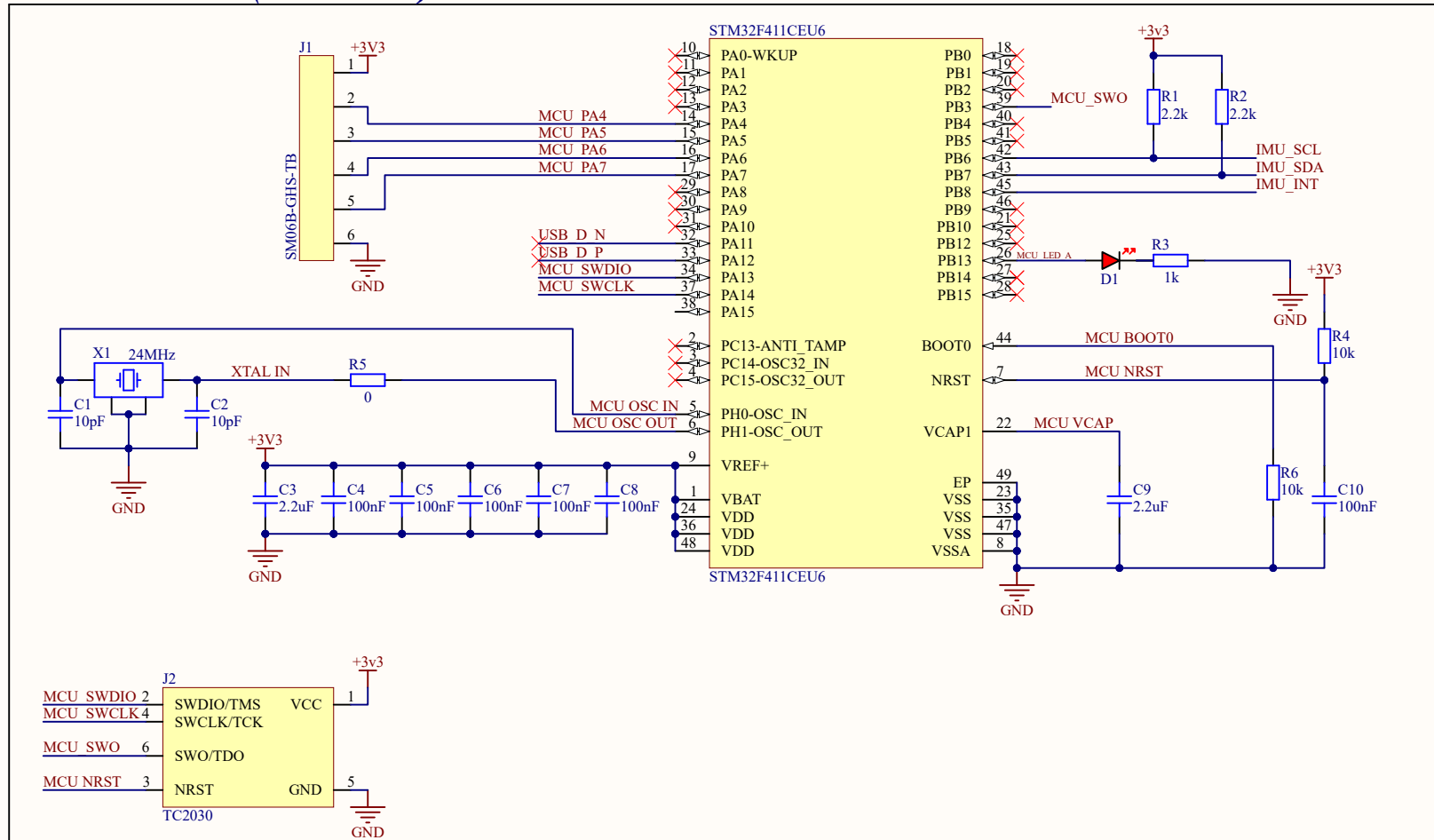
 *Power Signal*  
 *Communication*



Title Block Diagram		
Size A4	Number 1	Revision
Date:	2-04-2026	Sheet of
File:	C:\Users\...\Block-Diagram.SchDoc	Drawn By: Nilay N

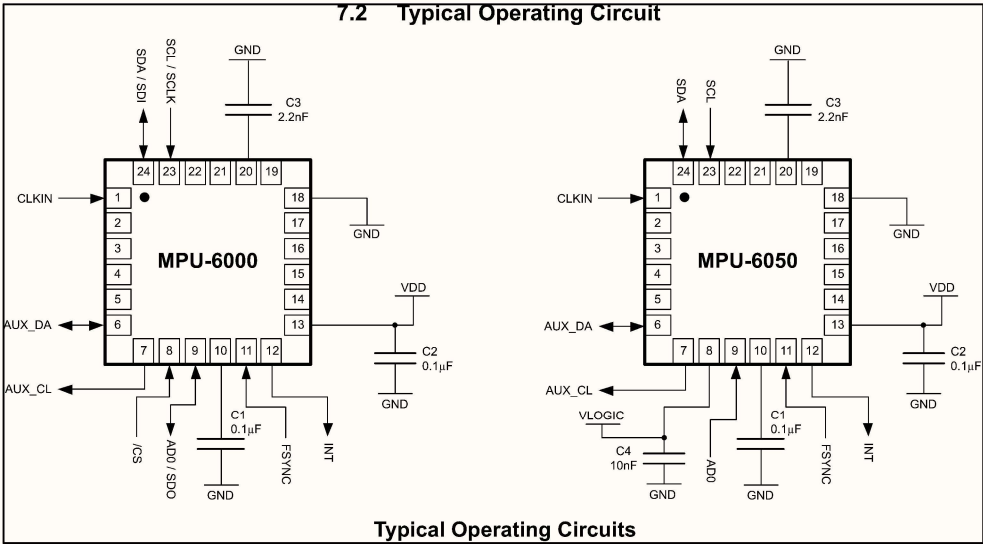
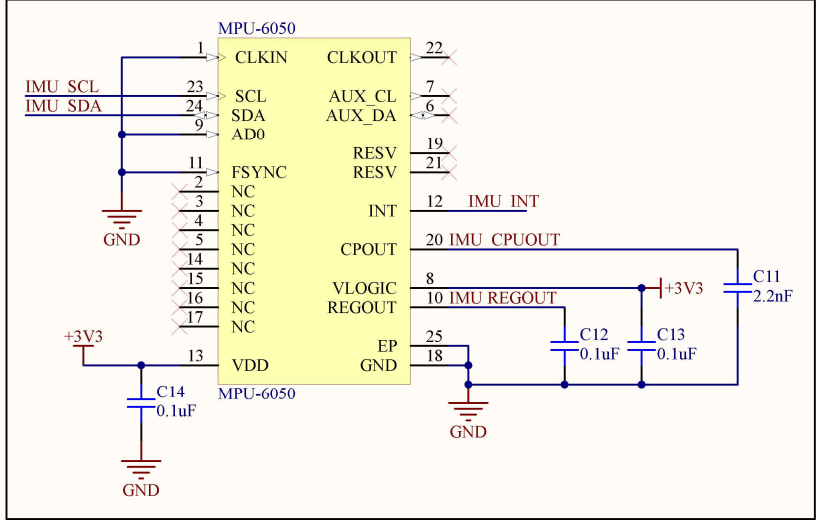


## Microcontroller(STM32F4)



Title Microcontroller(STM32F4)		
Size A4	Number	Revision
Date: 2-04-2026	Sheet of	
File: C:\Users\...\STM32 MCU.SchDoc	Drawn By: Nilay N	

# Inertial Measurement Unit (MPU-6050)



## 7.3 Bill of Materials for External Components

Component	Label	Specification	Quantity
Regulator Filter Capacitor (Pin 10)	C1	Ceramic, X7R, 0.1µF ±10%, 2V	1
VDD Bypass Capacitor (Pin 13)	C2	Ceramic, X7R, 0.1µF ±10%, 4V	1
Charge Pump Capacitor (Pin 20)	C3	Ceramic, X7R, 2.2nF ±10%, 50V	1
VLOGIC Bypass Capacitor (Pin 8)	C4*	Ceramic, X7R, 10nF ±10%, 4V	1

\* MPU-6050 Only.

Title MPU 6050		
Size A4	Number	Revision
Date: 2-04-2026	Sheet of	
File: C:\Users\...\MPU-6050.SchDoc	Drawn By:	

[illegible]

Title: <b>USB and LDO</b>		
Size A4	Number	Revision
Date: 2-04-2026	Sheet of	
File: C:\Users\...\Power.SchDoc	Drawn By:	