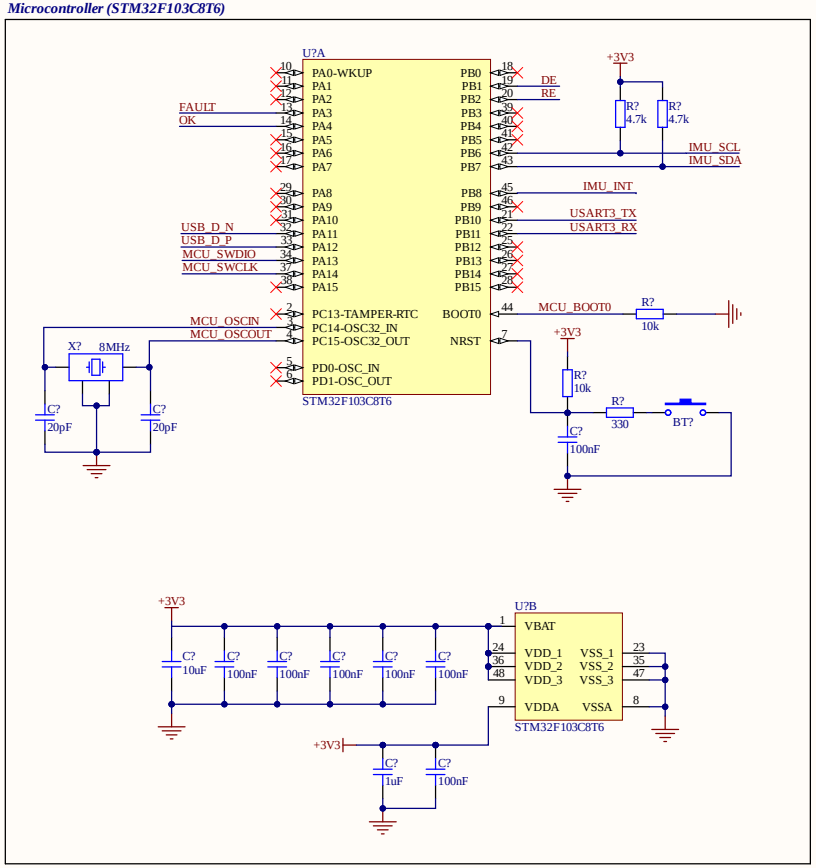
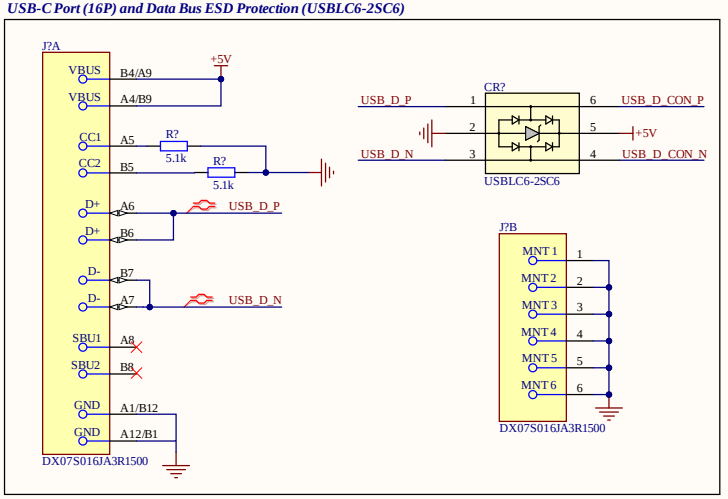
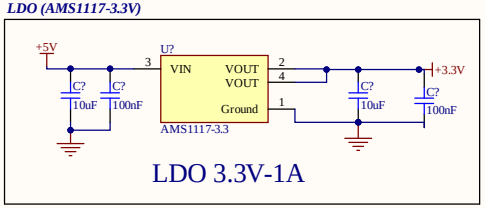
### Microcontroller (STM32F103C8T6)



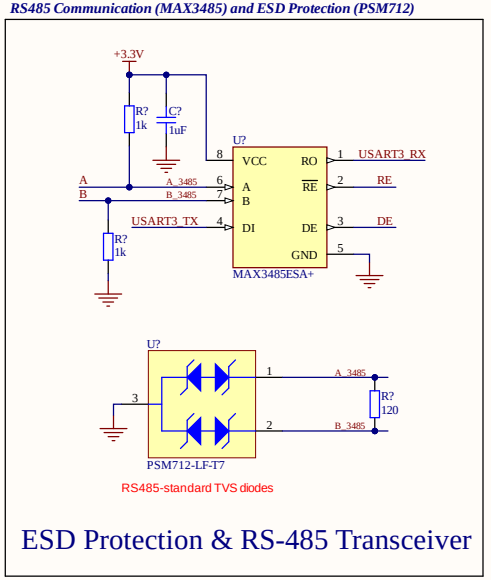

### USB-C Port (16P) and Data Bus ESD Protection (USBLC6-2SC6)



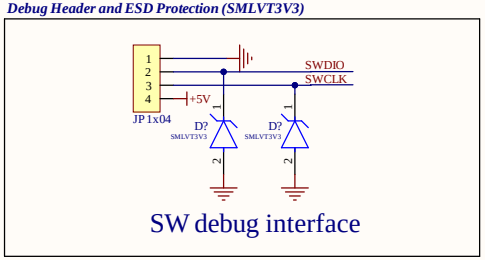

### LDO (AMS1117-3.3V)



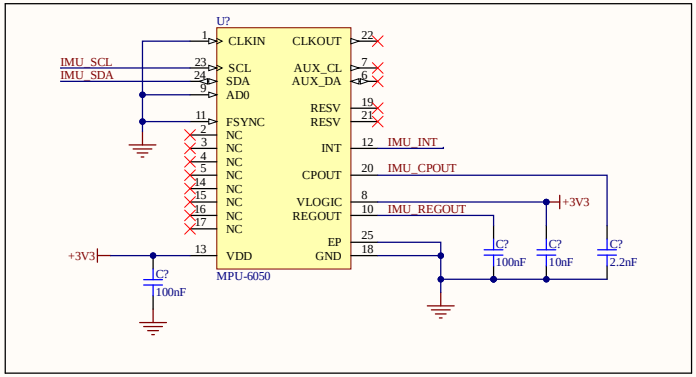

### RS485 Communication (MAX3485) and ESD Protection (PSM712)




### Debug Header and ESD Protection (SMLVT3V3)

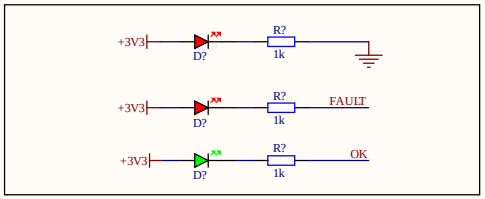



### Intertial Measurement Unit (MPU-6050)




I2C Address: 0x68

### Key LEDs (Power-on, Fault, and Normal Status)




| | | |
|---|---|---|
| Title | IMU Sensor Module Board V1.0 | |
| Size: A3 | Number | Revision |
| Date: 1/24/2026 | Sheet of | |
| File: D:\Mechatronics\..\S4V_IMU_Sensor_Board_V1.0\Schematic.SchDoc | Drawn By: | |

STEAM FOR VIETNAM

# Board Stack Report