

Git Gud at PCBs #1

Design a Sensor Board

Objectives: Design a PCB with an RP2040 which includes ICs to read 9-axis of sensor data (yaw, pitch, roll, acceleration, gyro, etc)m barometric pressure and temperature.

Design requirements:

- USB-C must be included. Pay attention to VBUS as that's your power input
- RP2040
- 9-axis measurement
- Pressure sensing
- Temperature sensing
- LCSC/JLC part # included for all symbols used (i.e C2040)
- Bonus points for **readable schematics** and **compact layout!!!!**

Questions

- What communication protocols did you use and why?
- Were there any components that required a different routing technique? If so, why?
- What is meant by Basic vs Extended Parts?
- What improvements can you make to your design?

Hints

- LCSC and JLCPCB/parts is where you should search
- [Learn with datasheets](#)