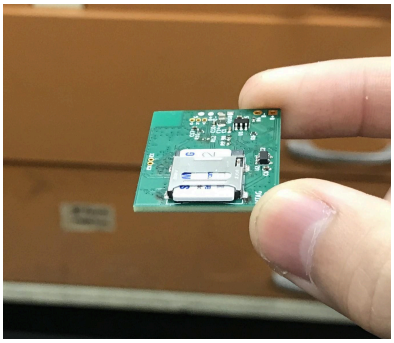
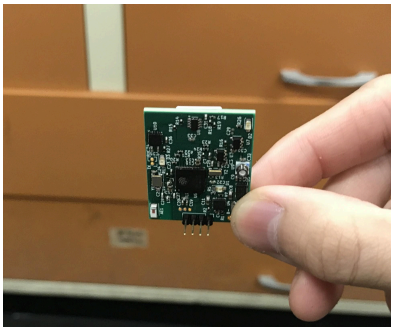
1. Clone estar-lab/mtag2-dev branch ‘verification’ to get the firmware
    - git@github.com:estar-lab/mtag2-dev.git
    - https://github.com/estar-lab/mtag2-dev.git
2. Open the project in PlatformIO
    - In src/main.cpp make sure that OPERATING_MODE is set to 5 (as of 8/18/24 this is line 46)
    - Flash the project to the board
3. If there is a blinking blue LED, the code is running correctly
4. Hold the board in **P1**, **P2**, and **P3** for 5 seconds each in order
    - To avoid any complicated battery stuff just use USB power. The cable here is not attached to declutter the pictures
    - The point of this is just to hit all of the axes on the accelerometer

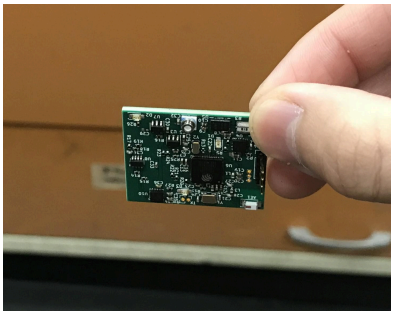
P1



P2



P3



5. Depower the board and take out the SD card
6. The firmware writes files to the SD card numbering them from 1-255 and then wraps back around to 1. Usually I clear the SD card when you start having a lot of files, so it’s pretty easy to find the correct data file. The data will only be in one file.
7. Clone estar-lab/tysons-tag-analysis-toolbox to get the data processing script
    - git@github.com:estar-lab/tysons-tag-analysis-toolbox.git
    - https://github.com/estar-lab/tysons-tag-analysis-toolbox.git
8. Run mtag2_verification.m
    - Change the file pathing stuff on lines 9 and 10
    - Follow the descriptions in the plots to verify the data
        i. For the acceleration plot, the axes should go “high” in the correct order
        ii. For the temperature plot, the temperatures from the IMU and the pressure sensors should be relatively the same