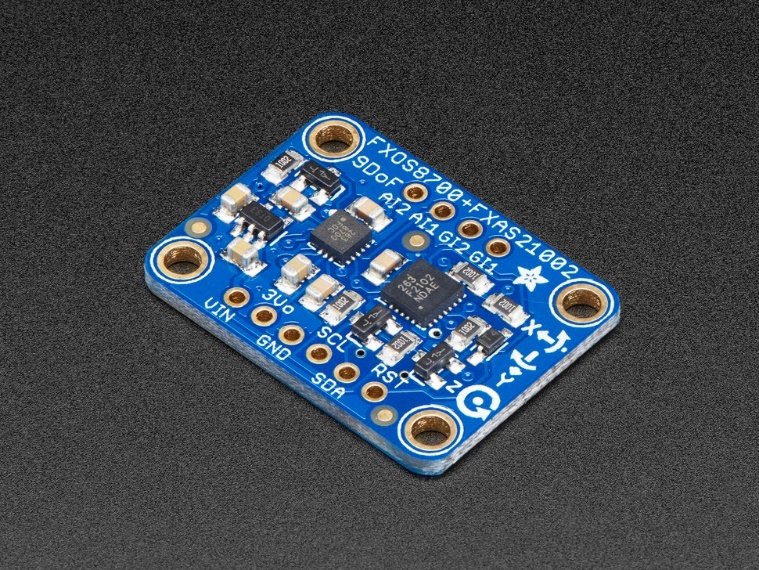
Datalogging

Adafruit Precision NXP 9-DOF Breakout Board - FXOS8700 + FXAS21002 $14.95



## **Technical Details**

The NXP Precision 9DoF board consists of two separate ICs, described in detail below:

**FXOS8700 3-Axis Accelerometer/Magnetometer**

* 2-3.6V Supply
* ±2 g/±4 g/±8 g adjustable acceleration range
* ±1200 µT magnetic sensor range
* Output data rates (ODR) from 1.563 Hz to 800 Hz
* 14-bit ADC resolution for acceleration measurements
* 16-bit ADC resolution for magnetic measurements

**FXAS21002 3-Axis Gyroscope**

* 2-3.6V Supply
* ±250/500/1000/2000°/s configurable range
* Output Data Rates (ODR) from 12.5 to 800 Hz
* 16-bit digital output resolution
* 192 bytes FIFO buffer (32 X/Y/Z samples)

Benefits: time, temp, accel(x,y,z), gyro(x,y,z), mag(x,y,z), Ability to increase accuracy of acceleration with accelerometer on cpb

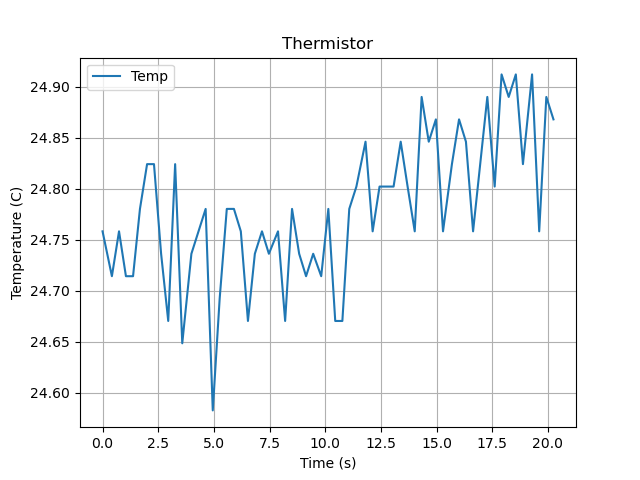
SUCCESFULL LOG ON CPB AND BLUETOOTH UART

Format: (time, gyro (x,y,z), mag(x,y,z), accel(x,y,z), temp)

Raw Code:

<https://github.com/TheJus10Dyer/10/blob/main/Aerospace/NPX9DOFCPBlogger.py>

Raw Data:: GYRO,MAG,ACCEL from IMU, Temp and Time from CPB

<https://github.com/TheJus10Dyer/10/blob/main/Aerospace/CPB_Datalog_NXP9DOF_test.txt>

Plot

