Triple Axis Digital Accelerometer Breakout
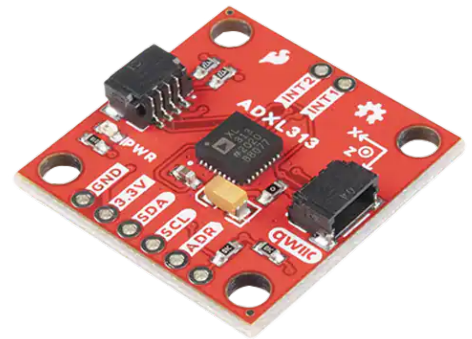## ADXL313

Product Overview
05-16-2022
For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

SparkFun ADXL313 Triple Axis Digital Accelerometer Breakout is a low power (0.1µA in standby mode), high-resolution (up to 13-bits) accelerometer for measurements up to ±4g. This breakout board measures the static acceleration of gravity in tilt-sensing applications, as well as dynamic acceleration resulting from motion or shock. The ADXL313 breakout offers 150µg/√Hz low noise and self-test functionality. The digital output data is formatted as a 16-bit two's complement and is accessible through the onboard Qwiic connectors (I²C) or SPI. Typical use cases for the ADXL313 from Analog Devices include a car alarm, Hill Start Aid (HSA) systems, electronic parking brakes, and data recorders applications (black boxes).
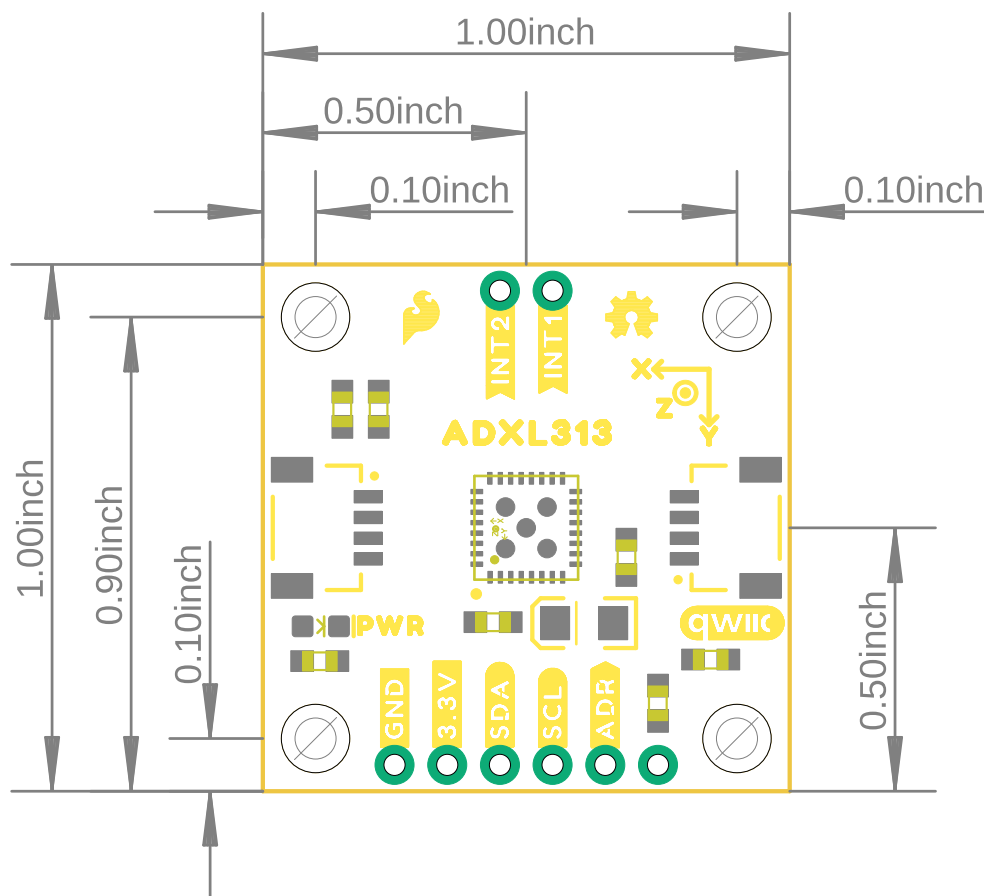

Features

- ±0.5g, ±1g, ±2g, and ±4g measurement range
- Up to 13-bit high resolution
- Low power:
  - <300µA at a maximum data rate
  - 0.1µA in standby mode
- 150µg/√Hz low noise
- 7-bit I²C address:
  - 0x1D (default), 0x53
- 2x Qwiic connectors
- Self-test functionality
- Built-in sensing functions:
  - Activity (presence of motion) and inactivity (absence of motion)
  - User-defined acceleration level on any axis
  - Functions can be mapped to interrupt pins
  - 32 level FIFO for reduced processor intervention and system power consumption
- SPI available on PTH header pins (3-wire and 4-wire modes)

Applications

- Car alarms
- Hill Start Aid (HSA) systems
- Electronic parking brakes
- Data recorders applications (blank boxes)

Dimension Diagram

Mouser Part Number

[View Part](link)

To learn more, visit
https://www.mouser.com/new/sparkfun/sparkfun-adxl313-accelerometer-breakout/