



MSA301 3DoF Motion Sensor Breakout

- PIM456

A simple 3 Degrees of Freedom accelerometer breakout that measures acceleration in three axes - X, Y, and Z. If you need simple and reliable motion detection for your project, then this is a great choice!

This accelerometer has a few nifty features built-in too. It has interrupts for motion in each axis, double-tap detection, and freefall detection. This built-in support means that you can detect each of these types of motion with a single line of code, rather than having to code a whole function yourself.

The MSA301 3DoF breakout has an I2C interface and is 3.3V or 5V compatible. Like our other Pimoroni breakouts, we've designed it so that you can solder a piece of right-angle header onto it and then pop it straight onto the bottom left 5 pins on your Raspberry Pi's GPIO header (pins 1, 3, 5, 6, 9).

It's also compatible with our fancy Breakout Garden, where using breakouts is as easy as just popping it into one of the six slots and starting to grow your project, create, and code.

Features

- MSA301 3DoF Motion Sensor
- $\pm 2/\pm 4/\pm 8/\pm 16$ g linear acceleration
- 3.3V or 5V compatible
- I2C interface (address 0x26)
- Reverse polarity protection
- Raspberry Pi-compatible pinout (pins 1, 3, 5, 7, 9)
- Compatible with Raspberry Pi 3B+, 3, 2, B+, A+, Zero, and Zero W
- Compatible with Arduino
- Python library

Kit includes

- MSA301 3DoF Motion Sensor Breakout
- 1x5 male header
- 1x5 female right angle header

Software

We've put together a Python library that you can use to read data from your MSA301 3DoF Breakout, and an easy one-line installer to install everything.

Our software does not support Raspbian Wheezy.

Notes

- Dimensions: 19x19x3mm

