

## Grove - 3-Axis Digital Accelerometer $\pm 200g$ (ADXL372)

SKU 101020632

The Grove - 3-Axis Digital Accelerometer  $\pm 200g$  (ADXL372) is a ultra-low power digital output MEMS Accelerometer, it can provide a 12-bit output at 100 mg/LSB scale factor.

You can find a variety of [3-axis accelerometers](#) on our website that can meet different scenarios and needs. This time, we bring you the industrial grade, high stability, high precision, and low power ADI ADXL series three-axis accelerometers.

The Grove - 3-Axis Digital Accelerometer  $\pm 200g$  (ADXL372) is a ultra low power digital output [MEMS](#) Accelerometer, it can provide a 12-bit output at 100 mg/LSB scale factor. The most notable feature of this sensor is its ultra-low power consumption(only  $22\mu A$  in measurement mode) and large measurement range( $\pm 200g$ ). All the data output via the Grove I2C port, the I2C address is changeable. In order to meet a wider range of measurement needs, the sampling rate can be selected from 400Hz/800Hz/1600Hz/3200Hz/6400Hz, and the bandwidth can be selected from 200Hz/400Hz/800Hz/1600Hz/3200Hz. In addition to being used as an acceleration measurement, you can also use this module to do impact and shock detection.

The ADI ADXL Series Accelerometer includes four products that will meet your different range and output needs:

Product	Measurement Range	Output Port	Power Consumption
Grove - 3-Axis Analog Accelerometer $\pm 20g$ (ADXL356B)	$\pm 10g$ $\pm 20g$	Analog	measurement mode: $150 \mu A$ standby mode: $21 \mu A$
Grove - 3-Axis Analog Accelerometer $\pm 40g$ (ADXL356C)	$\pm 10g$ $\pm 40g$	Analog	measurement mode: $150 \mu A$ standby mode: $21 \mu A$
Grove - 3-Axis Digital Accelerometer $\pm 40g$ (ADXL357)	$\pm 10g @ 51200$ LSB/g $\pm 20g @ 25600$ LSB/g $\pm 40g @ 12800$ LSB/g	Digital I2C	measurement mode: $200 \mu A$
Grove - 3-Axis Digital Accelerometer $\pm 200g$ (ADXL372)	$\pm 200g$	Digital I2C	measurement mode: $22 \mu A$

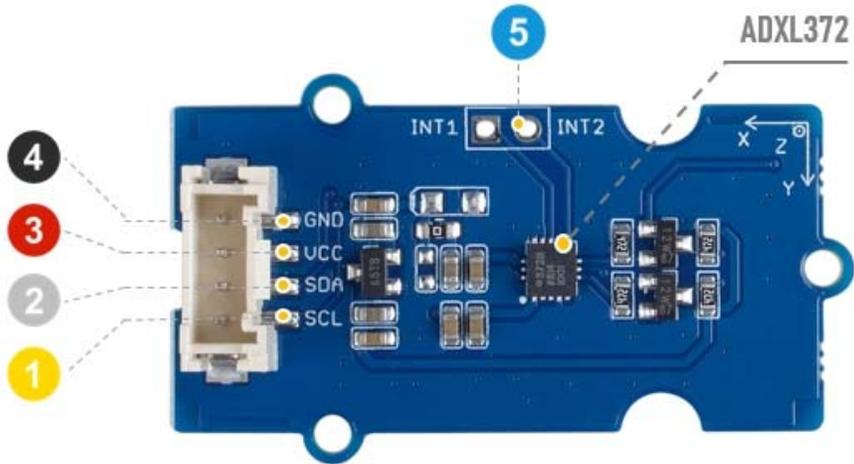
### Features

- Large measuring range:  $\pm 200g$
- Ultralow power consumption:  $22 \mu A$  at 3200 Hz ODR
- Selectable oversampling ratio and bandwidth
- Deep embedded FIFO to minimize host processor load
- Build-in 12-bit analog-to-digital converter (ADC)

### Applications

- Portable Internet of Things (IoT) edge nodes
- Concussion and head trauma detection
- Impact and shock detection
- Asset health assessment

## Pinout



4 **GND**: connect this module to the system GND

3 **VCC**: you can use 5V or 3.3V for this module

2 **SDA**: serial data of I2C

1 **SCL**: serial clock of I2C

5 **Interrupt Output**: two channel interrupt output



I2C Address 0x53  
(Default)

I2C Address 0x1D  
(Optional)

## ECCN/HTS

ECCN	7A994
HSCODE	9031900090
UPC	

