

## Grove - 3-Axis Digital Accelerometer $\pm 40g$ (ADXL357)

SKU 101020639

The Grove - 3-Axis Digital Accelerometer  $\pm 40g$  (ADXL357) is a digital output MEMS Accelerometer. This sensor has three different selectable measuring ranges and accuracies:  $\pm 10g@51200$  LSB/g,  $\pm 20g@25600$  LSB/g,  $\pm 40g@12800$  LSB/g.

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.

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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)	$\pm 10$ $\pm 20g$	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: $22\mu A$

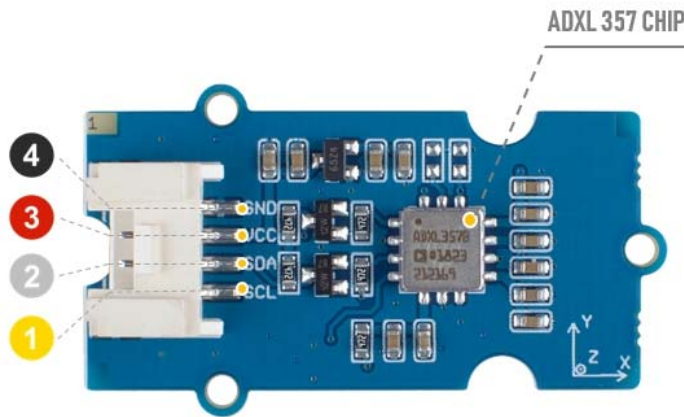
## Features

- Industry leading noise, minimal offset drift over temperature, and long-term stability, enabling precision applications with minimal calibration.
- Hermetic package offers excellent long-term stability 0 g offset vs. temperature (all axes):  $0.75 \text{ mg}/^\circ\text{C}$  maximum
- Ultralow noise density (all axes):  $80 \mu\text{g}/\sqrt{\text{Hz}}$
- Build-in 20-bit analog-to-digital converter (ADC)
- Low drift, low noise, and low power
- Support two channel interrupt output
- Support FIFO(96\*21-bit)

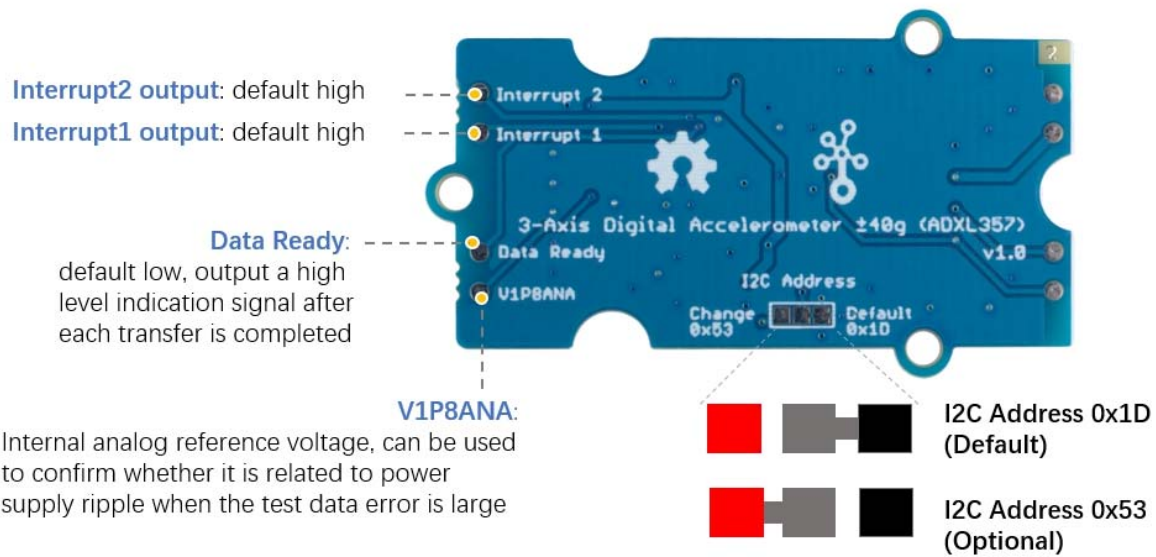
## Applications

- Inertial measurement units (IMUs)/altitude and heading reference systems (AHRs)
- Platform stabilization systems
- Condition monitoring
- Seismic imaging
- Tilt sensing
- Robotics

## Pinout

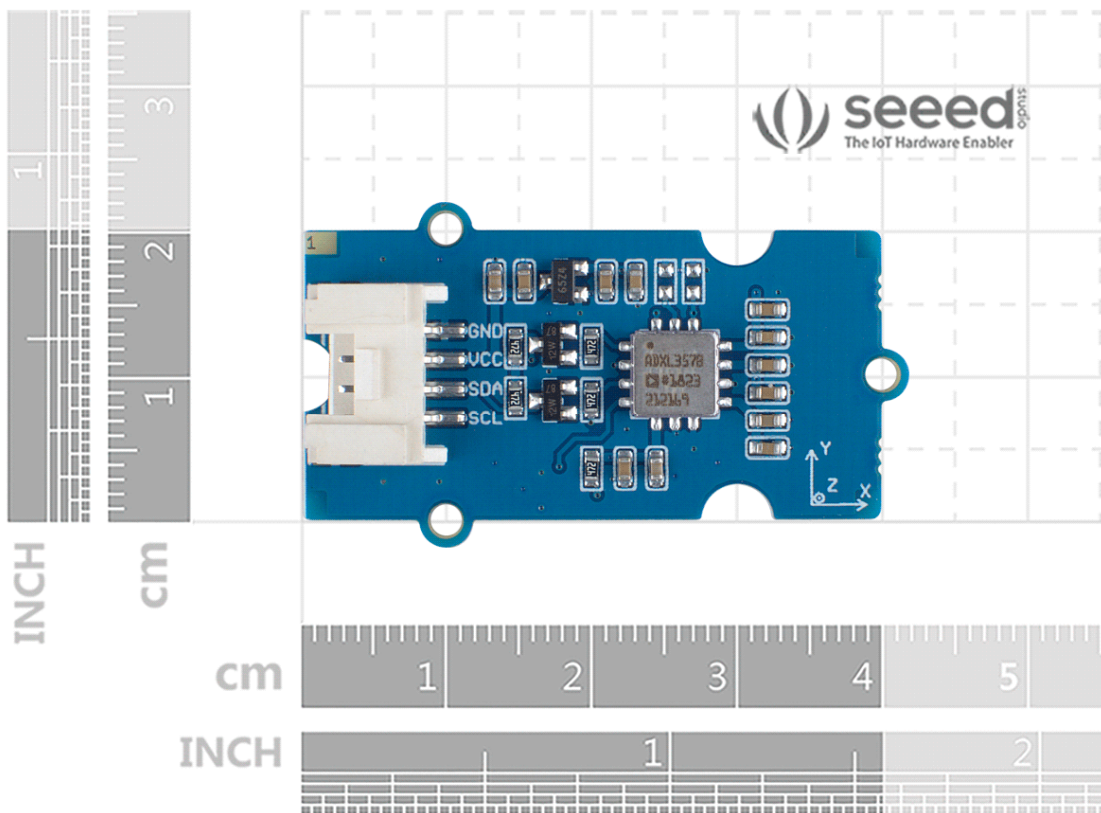
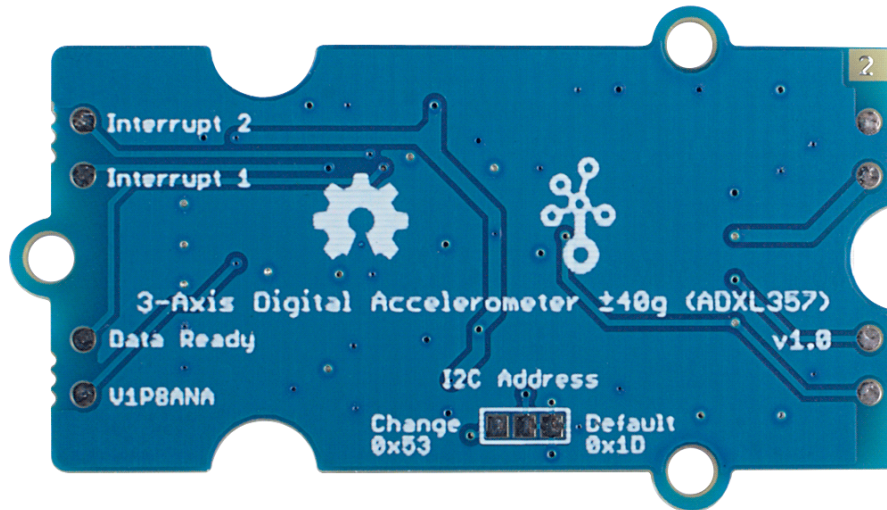


- 4 GND:**  
connect this module to the system GND
- 3 VCC:**  
you can use 5V or 3.3V for this module
- 2 SDA:**  
I<sup>2</sup>C serial data
- 1 SCL:**  
I<sup>2</sup>C serial clock



## ECCN/HTS

ECCN	7A994
HSCODE	9031900090
UPC	



<https://www.seeedstudio.com/Grove-3-Axis-Digital-Accelerometer-40g-ADXL357-p-4005.html/5-15-19>