

Grove 3-Axis Digital Accelerometer

LIS3DHTR

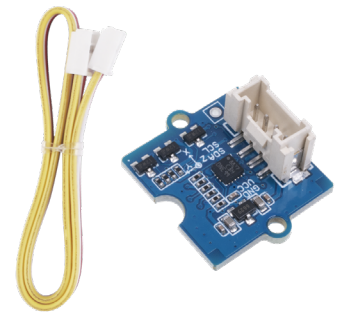
Product Overview

08/18/2022

For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

Seeed Studio Grove 3-Axis Digital Accelerometer is designed based on the LIS3DHTR chip with multiple ranges and interface selections. This grove 3-axis digital accelerometer is an ultra-low-power and high-performance linear accelerometer powered by LIS3DHTR(ST), with a dynamically selectable scale and multiple digital output interfaces. The 3-axis digital accelerometer supports a -40°C to 85°C working temperature range and allows the user to check the functioning of the sensor in the final application.



The grove 3-axis accelerometer supports I²C, SPI, and ADC GPIO interfaces. This 3-axis accelerometer exhibits dynamically user-selectable full scales of $\pm 2g$, $\pm 4g$, $\pm 8g$, and $\pm 16g$ and is capable of measuring accelerations with output data rates from 1Hz to 5.3kHz. This accelerometer can also monitor the surrounding temperature. The 3-axis accelerometer is used in applications such as free-fall detection devices, motion detection devices, and intelligent power saving for handheld devices.

Features

- Super low-cost:
 - 3-Axis sensor with cost-effective chip
- Ultra-low-power consumption:
 - Supports ultra-low-power operational modes
 - Allows advanced power saving and smart embedded functions
- Dynamically user-selectable full scales:
 - Multiple ranges selections with $\pm 2g$, $\pm 4g$, $\pm 8g$, and $\pm 16g$ provided
- Multiple interface standard output options:
 - Grove I²C interface
 - SPI interface
 - ADC interface supported.
- Adjustable embedded temperature sensor

Specifications

- 3.3V/5V power supply
- Default 0 x 19 I²C address
- 0V to 3.3V ADC GPIO Power Input
- Reversed interruption pin
- -40°C to 85°C operating temperature range

Applications

- Free-fall detection
- Motion detection
- Intelligent power saving for handheld devices
- Gaming and virtual reality input devices
- Vibration monitoring and compensation
- Impact recognition and logging

Mouser Part Number

[View Part](#)

To learn more, visit <https://www.mouser.com/new/seeed-studio/seeed-grove-3-axis-digital-accelerometer/>