

# Fermion: I<sup>2</sup>C LIS331HH Triple Axis Accelerometer

SEN0407

## Product Overview

11/11/2022

For the most up-to-date information, visit [www.mouser.com](http://www.mouser.com) or the supplier's website.

## Description

DFRobot Fermion: I<sup>2</sup>C LIS331HH Triple Axis Accelerometer is an ultra-low-power high precision triple-axis linear accelerometer with 16-bit data output. This board has user-selectable full scales of  $\pm 6g/\pm 12g/\pm 24g$  and is capable of measuring accelerations with output data from 0.5Hz to 1kHz. The LIS331HH accelerometer power consumption is as low as 10 $\mu$ A. This board contains two programmable independent interrupt engines that can recognize dedicated inertial events, which makes it more playable. Applications include navigation, smart agriculture, robotic technology, and VR/AR.



## Features

- Selectable scale range of  $\pm 6g/\pm 12g/\pm 24g$
- Two programmable interrupts
- Smart sleep-to-wake-up function that allows advanced power saving
- 16-bit data output

## Kit Contents

- 1x Fermion: LIS331HH Triple Axis Accelerometer (Breakout)
- 2x 2.54-4P Black Single Row Pin Header

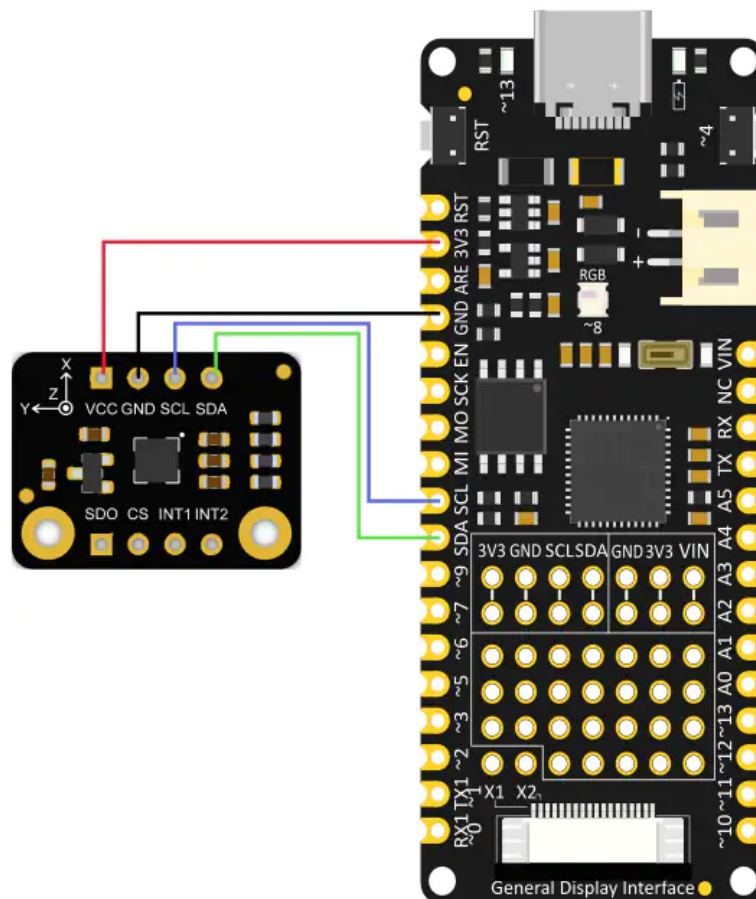
## Applications

- Navigation
- Smart agriculture
- Robotic technology
- VR/AR

## Specifications

- 3.3V operating voltage
- Operating current:
  - 10 $\mu$ A~140 $\mu$ A (Low-power mode)/0.3 mA~0.4 mA (Normal mode)
- Interface:
  - I<sup>2</sup>C/SPI
- I<sup>2</sup>C Address:
  - 0x19 (Default)/0x18 (Selectable)
- $\pm 6g/\pm 12g/\pm 24g$  selectable scale range
- 16-bit data output
- 0.5Hz to 1KHz frequency range
- -40°C to +85°C operating temperature range
- 10000g high shock survivability
- ECOPACK®RoHS and “Green” Compliant
- 15\*20 (mm)/0.59\*0.79” dimensions

## Connection Diagram



## Mouser Part Number

[View Part](#)

To learn more, visit <https://www.mouser.com/new/dfrobot/dfrobot-fermion-i2c-accelerometer/>