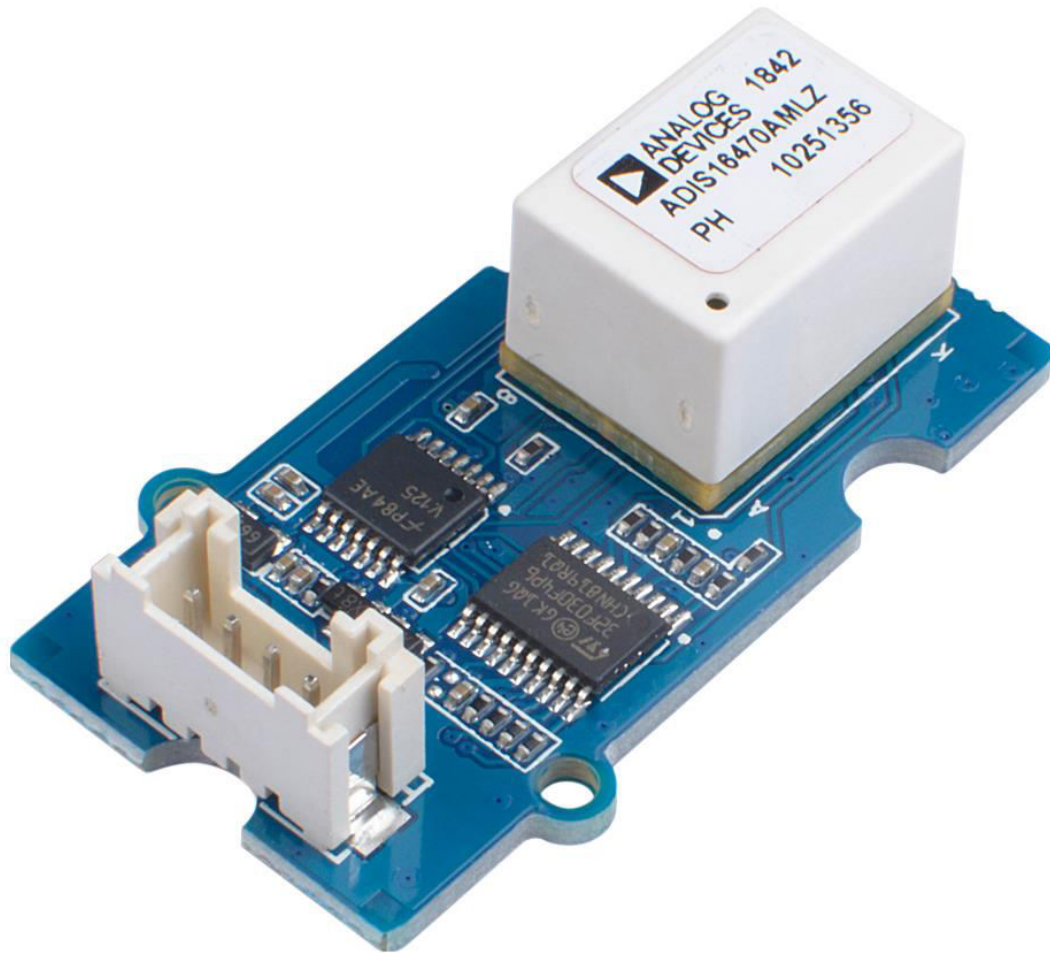




seeed studio
The IoT Hardware Enabler



The Grove - 6-Axis Digital Accelerometer&Gyroscope $\pm 40g$ (ADIS16470) is a wide dynamic range, 6-Axis Miniature MEMs sensor, which includes a triaxial gyroscope and a triaxial accelerometer. This sensor is based on the ADI ADIS16470 IMU, each inertial sensor in the ADIS16470 combines with signal conditioning that optimizes dynamic performance.

The ADIS16470 provides a simple, cost-effective method for integrating accurate, multi-axis inertial sensing into industrial systems, especially when compared with the complexity and investment associated with discrete designs. All necessary motion testing and calibration are part of the production process at the factory, greatly reducing system integration time.

Features

- Triaxial, digital gyroscope, $\pm 2000^\circ/\text{sec}$ dynamic range, $0.008^\circ/\text{sec}/\sqrt{\text{Hz}}$ rms rate noise density, $8^\circ/\text{hr}$ in run bias stability
- Triaxial, digital accelerometer dynamic range: $\pm 40\text{ g}$, $13\ \mu\text{g}$ in run bias stability
- Factory calibrated sensitivity, bias, and axial alignment, Calibration temperature range: -10°C to $+75^\circ\text{C}$
- 2000 g mechanical shock survivability
- On demand self-test of inertial sensors
- On demand self-test of flash memory
- Automatic and manual bias correction controls

Applications

- Navigation, stabilization, and instrumentation
- Unmanned and autonomous vehicles
- Smart agriculture/construction machinery
- Factory/industrial automation, robotics
- Virtual/augmented reality
- Internet of Moving Things

Hardware Overview

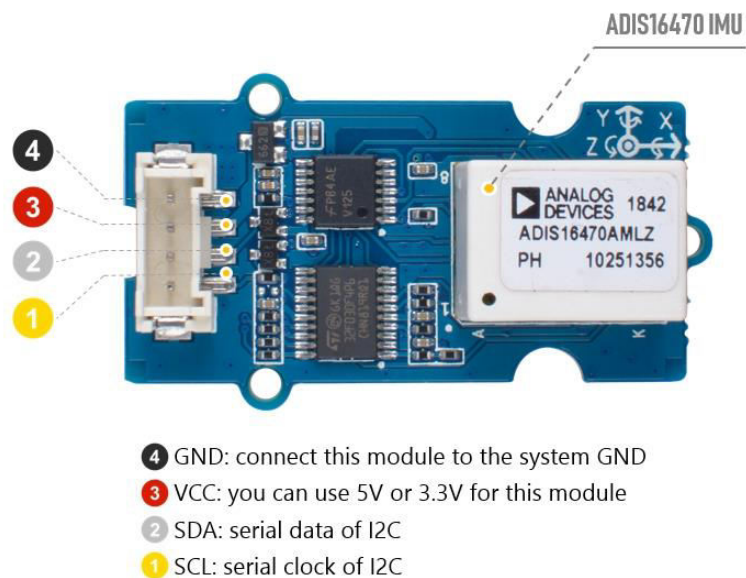


Figure 1. hardware overview

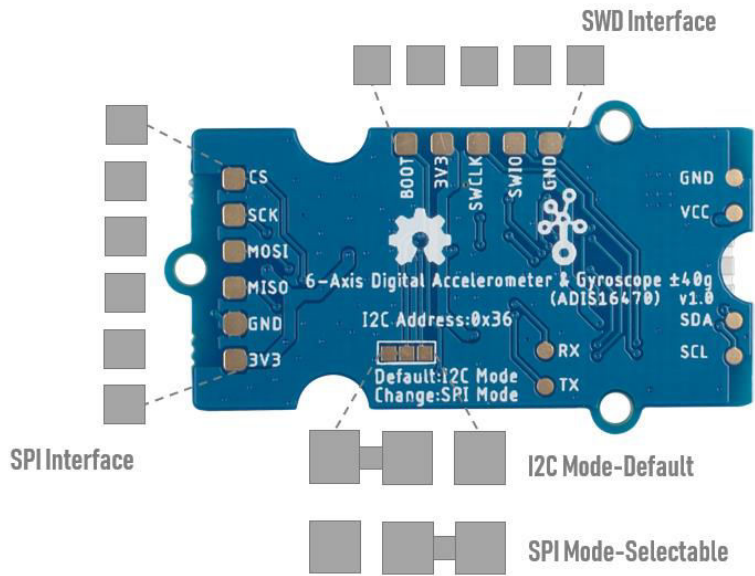


Figure 2. *hardware overview back*

ECCN/HTS

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