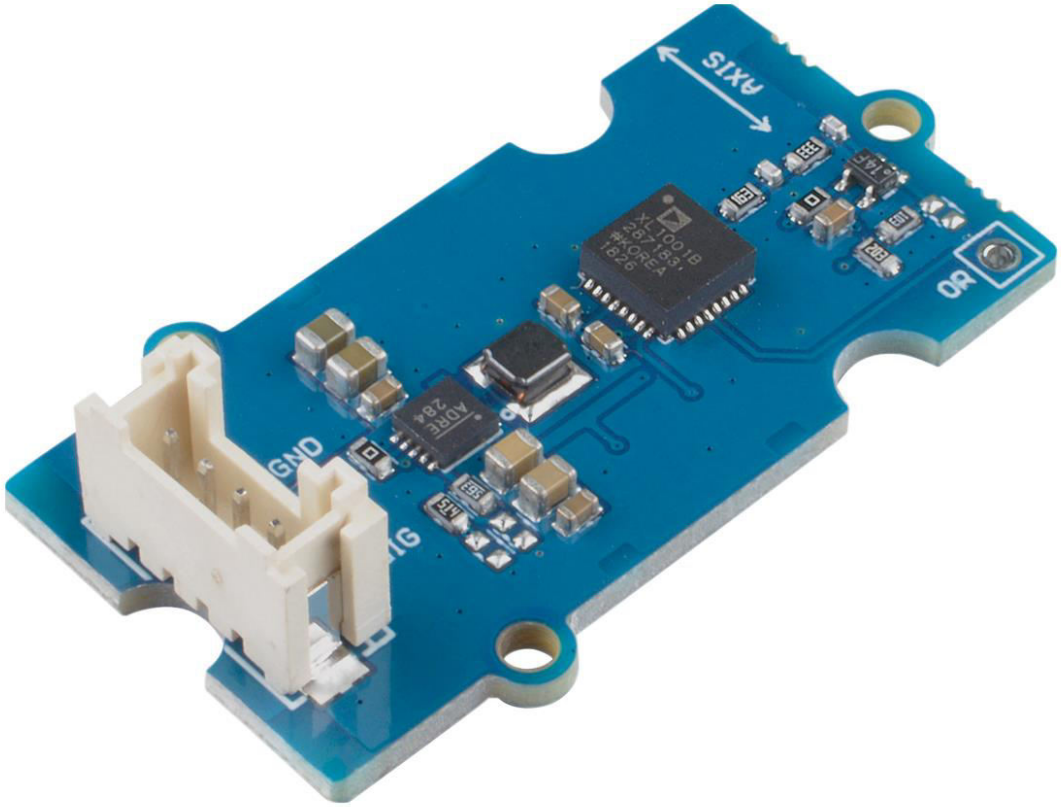


The Grove - Single Axis Analog Accelerometer ±100g (ADXL1001) is an ultralow noise, high frequency, high G, industrial grade MEMS accelerometer, based on the ADI ADXL1001.

The ADXL1001 has typical noise densities of 30 μg/√Hz and a linear frequency response range from dc to 11 kHz (3 dB point). The ADXL1001 also has an integrated full electrostatic self-test (ST) function and an over-range (OR) indicator that allows advanced system-level features and is useful for embedded applications.

With low power and single-supply operation of 3.3 V to 5.25 V and power saving selectable standby mode, the ADXL1001 also enables wireless sensing product design.

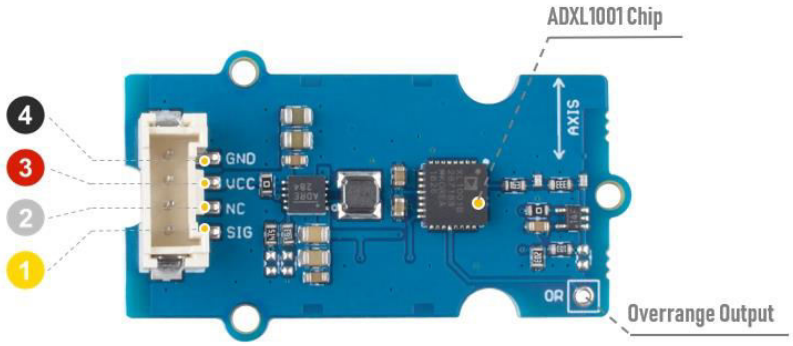
Features

- Single in plane axis accelerometer with analogue output
- Linear frequency response range from dc to 11 kHz (3 dB point), resonant frequency of 21 kHz
- Ultralow noise density: 30 µg/√Hz in ±100g range
- Complete electromechanical self-test
- Linearity to ±0.1% of full-scale range
- Sensitivity stability over temperature 5%
- Cross axis sensitivity ±1% (ZX), ±1% (YX)

Applications

- Condition monitoring
- Predictive maintenance
- Asset health
- Test and measurement
- Health usage monitoring system (HUMS)

Hardware Overview



4 GND: connect this module to the system GND
3 VCC: you can use 5V or 3.3V for this module
2 NC: not connected
1 SIG: analog output voltage

Overrange Output

This pin instantaneously indicates when the overrange detection circuit identifies significant overrange activity.

Figure 1. *hardware overview*

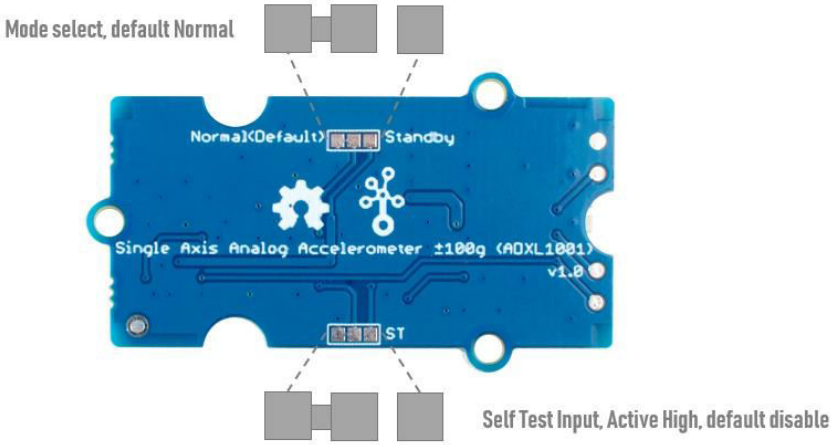


Figure 2. *hardware overview back*

ECCN/HTS

HSCODE	9031900090
USHSCODE	90319091