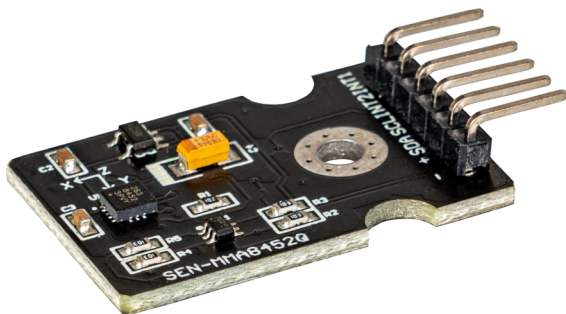# JOY-IT

3-AXIS DIGITAL ACCELERATION SENSOR

SEN-MMA8452Q

This digital, intelligent and capacitive MEMS- acceleration sensor is powerful and an absolute all-rounder regarding output, voltage supply and interface voltage. The MMA8352Q offers freely selectable measurement ranges up to 8g with high-pass filtered Data as well as unfiltered data in real-time.

The device can be configured, so that it produces inertial wake-up signals out of arbitrary combinations of the configurable embedded functions, which enable the MMA8452Q to surveil events and remain in an energy saving mode during the periods of inactivity.

MAIN FEATURES

Dynamic measurement	± 2g, ± 4g, ± 8g
Output data range (ODR)	1,56 Hz - 800 Hz
Application areas	Robotic, microcontroller projects
Compatible with	Raspberry Pi, Arduino. etc.
Special features	Full-scale measurement range, flexible ODR, lag compensation for direction detection, automatic arousal and auto-dormant (ODR)
Dimensions	35 x 20 x 07 mm
Items delivered	SEN-MMA8452Q

FURTHER SPECIFICATIONS

Supply voltage	1,95 - 3,6 V
Interface voltage	1,6 - 3.6 V
Digital output	12 Bit and 8 Bit
I2C interface frequency	2,25 MHz with 4.7 kΩ Pullup
Two programmable interrupt pins	enable 6 Interrupt sources
Movement detection in embedded channels	Free Fall, pulse and shaking detection
Orientation with pre-set hysteresis	portrait and landscape format
Current	6 µA - 165 µA
Noise	99µg/√Hz

FURTHER DETAILS

Article No.	SEN-MAA8452Q
EAN:	4250236820026
Customs Tariff No.	8473302000