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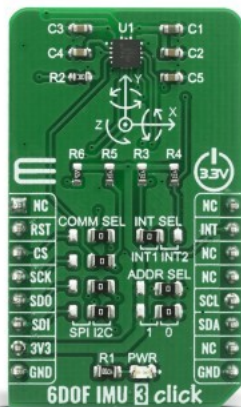www.mikroe.com

6DOF IMU 3 Click

PID: MIKROE-4086

The 6 DOF IMU 3 Click is a Click board™ equipped with the FXOS8700CQ 6-axis sensor with integrated linear accelerometer and magnetometer. The 14-bit accelerometer and 16-bit magnetometer are combined with a high-performance ASIC to enable an eCompass solution capable of a typical orientation resolution of 0.1° and sub-5° compass heading accuracy for many applications.

6 DOF IMU 3 Click is supported by a mikroSDK compliant library, which includes functions that simplify software development. This Click board™ comes as a fully tested product, ready to be used on a system equipped with the mikroBUS™ socket.

Specifications

Type	Motion
Applications	For security, like motion detection, door opening, smart home applications, robotics, and unmanned aerial vehicles (UAVs) with electronic compass (e-compass) function, medical, like patient monitoring, fall detection, and rehabilitation, augmented reality (AR), gaming, and real-time activity analysis, etc.
On-board modules	FXOS8700CQ is a small, low-power, 3-axis, linear accelerometer and 3-axis, magnetometer combined into a single package
Key Features	The 14-bit accelerometer and 16-bit magnetometer are combined with a high-performance ASIC to enable an eCompass solution capable of a typical orientation resolution of 0.1° and sub-5° compass heading accuracy
Interface	I2C,SPI
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V

Resources

mikroBUS™ Standard specification

LibStock: mikroSDK

Click board catalog

Click boards™ Standard Page

Downloads

6DOF IMU 3 click 2D and 3D files

FXOS8700CQ datasheet

6DOF IMU 3 click example on Libstock

6DOF IMU 3 click schematic