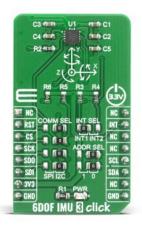


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## 6DOF IMU 3 Click





PID: MIKROE-4086

6 DOF IMU 3 Click is a complete 6-axis detection development board suitable for movement and position tracking devices. This Click board features the compact FXOS8700CQ motion sensor from NXP, an integrated 3-axis linear accelerometer and 3-axis magnetometer combined in one package. The device supports selectable I2C or point-to-point SPI serial interface with 14-bit accelerometer and 16-bit magnetometer which are combined with a highperformance 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.

Mikroe produces entire development toolchains for all major microcontroller architectures. Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.





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## **Specifications**

Туре	Acceleration, Magnetic, 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
ClickID	No
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V

## **Resources**

<u>mikroBUS™</u>

**mikroSDK** 

Click board™ Catalog

Click Boards™

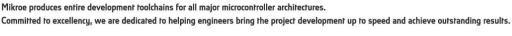
## **Downloads**

6DOF IMU 3 click 2D and 3D files

FXOS8700CO datasheet

6DOF IMU 3 click example on Libstock

6DOF IMU 3 click schematic







health and safety management system.