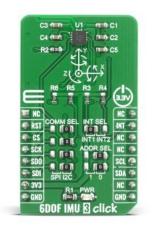


Time-saving embedded tools

MIKROELEKTRONIKA D.O.O, Batajnički drum 23, 11000 Belgrade, Serbia VAT: SR105917343 Registration No. 20490918 Phone: + 381 11 78 57 600 Fax: + 381 11 63 09 644 E-mail: office@mikroe.com www.mikroe.com

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 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.

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.



ISO 27001: 2013 certification of informational security management system. ISO 14001: 2015 certification of environmental management system. OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).



Time-saving embedded tools

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>™

<u>mikroSDK</u>

Click board[™] Catalog

Click Boards[™]

Downloads

6DOF IMU 3 click 2D and 3D files

FXOS8700CQ datasheet

6DOF IMU 3 click example on Libstock

6DOF IMU 3 click schematic

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.

> ISO 27001: 2013 certification of informational security management system. ISO 14001: 2015 certification of environmental management system. OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).