

6DOF IMU 8 Click



PID: MIKROE-3447

6DOF IMU 8 click is an advanced 6-axis motion tracking Click board™, which utilizes the ISM330DLC, a high-performance System in Package (SiP), equipped with a 3-axis gyroscope, and a 3-axis accelerometer. A combination of the two most commonly used motion sensors allows for full 6D sensing. Tailored towards the Industry 4.0, the ISM330DLC is equipped with many smart features used to optimize the firmware and the power consumption. These features include a powerful interrupt engine capable of detecting several different events, 4K of FIFO buffer, configurable signal processing, and support for both I2C and SPI communication interfaces.

6DOF IMU 8 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).

Specifications

Type	Motion
Applications	6DOF IMU 8 click can be used for development of different types of motion-based applications, including industrial, IoT, and connected devices, robotics, drones, antenna alignment applications, optical image stabilization, and similar Industry 4.0 related applications.
On-board modules	ISM330DLC, a 3D accelerometer and 3D gyroscope with digital output for industrial applications, produced by STMicroelectronics.
Key Features	Extensive interrupt engine that can be used to signal a number of recognizable events over two dedicated interrupt pins, high robustness and reliability suitable for industrial use, fully configurable options, two independent sensors allow full 6D sensing...
Interface	I2C,SPI
ClickID	Manifest,No
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click Boards™](#)

Downloads

[6DOF IMU 8 click example on Libstock](#)

[6DOF IMU 8 click schematic](#)

[ISM330DLC datasheet](#)

[6DOF IMU 8 click 2D and 3D files](#)

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