

6DOF IMU 6 Click



PID: MIKROE-4044

6DOF IMU 6 Click features a 6-axis MotionTracking device that combines a 3-axis gyroscope, a 3-axis accelerometer, and a Digital Motion Processor™ (DMP) labeled as ICM-20689. The [ICM-20689](#) from company [TDK InvenSense](#) includes on-chip 16-bit ADCs, programmable digital filters, an embedded temperature sensor, and programmable interrupts. The gyroscope and accelerometer are full-scale range, user-programmable sensors with factory-calibrated initial sensitivity for reduced production-line calibration requirements.

6DOF IMU 6 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 | Acceleration,Gyroscope,Motion |
| Applications | Excellent choices for applications include mobile phones, tablets, drones, handset and portable gaming, motion-based game controllers, wearable sensors for health, fitness and sports and 3D remote controls for internet-connected DTVs and set-top boxes and 3D mice |
| On-board modules | ICM-20689, a 6-axis MotionTracking device that combines a 3-axis gyroscope, a 3-axis accelerometer, and a Digital Motion Processor™ (DMP), from TDK InvenSense |
| Key Features | Includes on-chip 16-bit ADCs, programmable digital filters, an embedded temperature sensor, and programmable interrupts. |
| Interface | I2C,SPI |
| ClickID | No |
| Compatibility | mikroBUS |
| Click board size | S (28.6 x 25.4 mm) |
| Input Voltage | 3.3V |

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click Boards™](#)

Downloads

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

[ICM-20689 datasheet](#)

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

[6DOF IMU 6 click schematic](#)

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