

# 6DOF IMU 17 Click



PID: MIKROE-4785

**6DOF IMU 17 Click** is a compact add-on board that contains a 6-axis inertial measurement unit. This board features the [IIM-42652](#), a 6-axis SmartIndustrial™ MotionTracking device that supports an extended operating temperature range for industrial applications from [TDK InvenSense](#). It combines a 3-axis gyroscope and a 3-axis accelerometer featuring a 2K-byte FIFO that can lower the traffic on the serial bus interface (SPI or I2C) and reduce power consumption by allowing the system processor to burst read sensor data and then go into a low-power mode. This Click board™ represents an excellent choice for applications like tilt sensing, navigation, orientation measurement, platform stabilization, robotics, and many more.

6DOF IMU 17 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	Can be used for applications like tilt sensing, navigation, orientation measurement, platform stabilization, robotics, and many more
On-board modules	IIM-42652 - 6-axis SmartIndustrial™ MotionTracking device that supports an extended operating temperature range for industrial applications from TDK InvenSense
Key Features	Low power consumption, digital-output X-, Y-, and Z-axis angular rate sensors with programmable full-scale range, user-programmable interrupts, 20.000g shock tolerant, and more
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 17 click example on Libstock](#)

[6DOF IMU 17 click 2D and 3D files](#)

[IIM-42652 datasheet](#)

[6DOF IMU 17 click schematic](#)

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