

## 6DOF IMU 12 Click



PID: MIKROE-4073

**6DOF IMU 12 Click** carries the ultra-low-power [BMI270](#) from [Bosch Sensortec](#), inertial measurement unit optimized for wearables providing precise acceleration, angular rate measurement and intelligent on-chip motion-triggered interrupt features. The 6-axis sensor combines a 16-bit tri-axial gyroscope and a 16-bit tri-axial accelerometer featuring Bosch's automotive-proven gyroscope technology. The BMI270 includes several functionalities such as an integrated plug-and-play step counter/detector for wrist-worn devices. Moreover, the IMU is suitable for hearables, smart clothes, smart shoes, smart glasses and ankle bands.

6DOF IMU 12 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	An ideal choice for wearables, hearables, smart clothing, augmented / virtual reality.
On-board modules	6DOF IMU 12 Click uses the BMI270 IC, a low power inertial measurement unit, from Bosch Sensortec.
Key Features	16-bit triaxial gyroscope and a 16-bit triaxial accelerometer, ensuring post-soldering sensitivity errors down to $\pm 0.4\%$ .
Interface	I2C,SPI
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V

## Resources

[mikroBUS™](#)

[mikroSDK](#)

[mikroSDK](#)

[Click boards™](#)

## Downloads

[6DOF IMU 12 click schematic](#)

[6DOF IMU 12 click example on Libstock](#)

[6DOF IMU 12 click 2D and 3D files](#)

[BMI270 datasheet](#)

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