

Gyro 6 Click



PID: MIKROE-4827

Gyro 6 Click is a compact add-on board that contains a high-performance gyroscope. This board features the IAM-20380, a 3-axis, digital-output X-, Y-, and Z-axis angular rate sensor (gyroscope) from TDK InvenSense. It has a full-scale programmable range of $\pm 250\text{DPS}$, $\pm 500\text{DPS}$, $\pm 1000\text{DPS}$, and $\pm 2000\text{DPS}$ with a factory-calibrated initial sensitivity and configurable host interface that supports both SPI and I2C serial communication. It also features a 512-byte FIFO that can lower the traffic on the serial bus interface and reduce power consumption by allowing the host to burst-read sensor data and then go into a low-power mode. This Click board™ is suitable for various applications such as angular velocity sensing, angle sensing and control mechanisms, automotive, industrial and navigational systems, telematics, and many more.

Gyro 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	Gyroscope, Motion
Applications	Can be used for various applications such as angular velocity sensing, angle sensing and control mechanisms, automotive, industrial and navigational systems, telematics, and many more
On-board modules	IAM-20380 - high-performance 3-axis gyroscope from TDK InvenSense
Key Features	Low power consumption, full-scale programmable range up to ± 2000 dps, integrated 16-bit ADCs, user-programmable digital filters, embedded temperature sensor, programmable interrupts, high performance, reliability, and more
Interface	I2C, PWM, 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

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

[Gyro 6 click schematic](#)

[Gyro 6 click example on Libstock](#)

[IAM-20380 datasheet](#)

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