

Smart Sens 2 Click



PID: MIKROE-5207

Smart Sens 2 Click is a compact add-on board that contains a smart sensor system with an integrated IMU sensor. This board utilizes the [BHI260AP](#), [BME688](#), [BMP390](#), and [BMM150](#), an ultra-low-power programmable smart sensor, environmental and pressure sensor, and a magnetometer from [Bosch Sensortec](#). The BHI260AP includes a powerful 32-bit MCU and a 6-axis IMU (3-axis accelerometer and 3-axis gyroscope) alongside an event-driven software framework. In addition to its internal functions also perform signal data processing from several onboard sensors performing measurements of various parameters such as an environmental and magnetic field. In addition to these primary functions, this Click board™ allows users to select the desired serial interface, use the debug interface, and select BOOT mode. This Click board™ represents an ideal solution for always-on sensor data processing algorithms at the lowest power consumption.

Smart Sens 2 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	Environmental, Motion
Applications	Can be used for always-on sensor data processing algorithms at the lowest power consumption
On-board modules	BHI260AP - Programmable smart sensor from Bosch Sensortec BME688 - Environmental sensor from Bosch Sensortec BMP390 - Pressure sensor from Bosch Sensortec BMM150 - Magnetometer from Bosch Sensortec
Key Features	Smart sensor hub with integrated IMU sensor, onboard magnetometer, environmental and pressure sensor, boot mode selection, selectable communication, event interrupt indication, JTAG debugging, and more
Interface	I2C, SPI
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click Boards™](#)

Downloads

[Smart Sens 2 click example on Libstock](#)

[BMP390 datasheet](#)

[BHI260AP datasheet](#)

[BME688 datasheet](#)

[BMM150 datasheet](#)

[Smart Sens 2 click 2D and 3D files](#)

[Smart Sens 2 click schematic](#)

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