

Time-saving embedded tools

MIKROELEKTRONIKA D.O.O, Batajnički drum 23, 11000 Belgrade, Serbia VAT: SR105917343 Registration No. 20490918 Phone: + 381 11 78 57 600 Fax: + 381 11 63 09 644 E-mail: office@mikroe.com www.mikroe.com

Smart Sens Click





PID: MIKROE-4926

Smart Sens Click is a compact add-on board that contains an smart sensor system with an integrated IMU sensor. This board utilizes the <u>BHI260</u> and <u>BMM150</u>, an ultra-low-power programmable smart sensor and magnetometer from <u>Bosch Sensortec</u>. The BHI260 includes a programmable and powerful 32-bit MCU, a 6-axis IMU, and a robust software framework. In addition to its internal functions, it also performs signal data processing from the BMM150 that performs measurements of the magnetic field in three perpendicular axes. 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 running always-on sensor data processing algorithms at the lowest power consumption.

Smart Sens Click is supported by a <u>mikroSDK</u> compliant library, which includes functions that simplify software development. This <u>Click board</u> comes as a fully tested product, ready to be used on a system equipped with the <u>mikroBUS</u> 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).



Time-saving embedded tools

MIKROELEKTRONIKA D.O.O, Batajnički drum 23, 11000 Belgrade, Serbia VAT: SR105917343 Registration No. 20490918 Phone: + 381 11 78 57 600 Fax: + 381 11 63 09 644 E-mail: office@mikroe.com www.mikroe.com

Specifications

Туре	Motion
Applications	Can be used for always-on sensor data processing algorithms at the lowest power consumption
On-board modules	BHI260 - programmable smart sensor combining accelerometer, gyroscope, and fusion software from Bosch Sensortec BMM150 - standalone geometric sensor from Bosch Sensortec
Key Features	Smart sensor hub with integrated IMU sensor, environmental sensor and magnetometer, bus master interface selection, boot mode selection, selectable communication, 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

<u>mikroBUS</u>™

mikroSDK

Click board[™] Catalog

Click boards[™]

Downloads

BHI260AB datasheet

BMM150 datasheet

Smart Sens click 2D and 3D files

Smart Sens click schematic

Smart Sens click example on Libstock

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).