

Time-saving embedded tools

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Mag&Accel Click





PID: MIKROE-6027

Mag&Accel Click is a compact add-on board representing a moving object and magnetic switch as a single solution. This board features the <u>NMH1000</u>, a Hall-effect magnetic field switch, and the <u>FXLS8974CF</u>, a 3-axis low-g accelerometer, both from <u>NXP Semiconductor</u>. These two sensors are high-performance, low-power devices covering all of Earth's surface elevations. By combining the magnetic field and acceleration data, you can easily determine your application's moving and magnetic field sensing. This Click board[™] makes the perfect solution for the development of various industrial and home applications where magnetic field detection and the acceleration of the object are the essence.

Mag&Accel Click is fully compatible with the mikroBUS[™] socket and can be used on any host system supporting the <u>mikroBUS[™]</u> standard. It comes with the <u>mikroSDK</u> open-source libraries, offering unparalleled flexibility for evaluation and customization. What sets this <u>Click board[™]</u> apart is the groundbreaking <u>ClickID</u> feature, enabling your host system to seamlessly and automatically detect and identify this add-on board.

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).



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Specifications

Туре	Acceleration, Magnetic, Motion
Applications	Can be used for the development of various industrial and home applications where the magnetic field detection and the acceleration of the object is an essence
On-board modules	NMH1000 - Hall-effect magnetic field switch from NXP Semiconductor FXLS8974CF - 3-axis low-g accelerometer both from NXP Semiconductor
Key Features	Selectable threshold, selectable sample rate, output indicates of absence of a magnetic field as compared to an internally set threshold, consists of a state machine, analog-to-voltage conversion, generation of a bi-state output, arranged in linear succession, user-selectable, full-scale measurement ranges, high precision, FIFO buffers, flexible sensor data change detection function, and more
Interface	Analog,I2C
ClickID	Yes
Compatibility	mikroBUS™
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V

Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board[™] Catalog

Click boards[™]

Downloads

FXLS8974CF datasheet

NMH1000 datasheet

Mag&Accel click schematic

Mag&Accel click 2D and 3D files

Mag&Accel click example on Libstock

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