

Time-saving embedded tools

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# Magneto 6 Click





#### PID: MIKROE-4139

**Magneto 6 Click** features low power three dimensional Hall effect sensor, TLI493D-A2B6, designed for magnetic sensing applications. It measures the magnetic field in X, Y, and Z direction. Each X, Y and Z Hall probe is connected sequentially to a multiplexer, which is then connected to an Analog to Digital Converter (ADC). Optional, the temperature can be determined as well after the three Hall channels. The data measurement is provided in digital format to the microcontroller over the standard I2C interface. Some of the benefits of this Click board<sup>™</sup> are wide application range addressable due to high flexibility and component reduction due to the 3D magnetic measurement principle. Magneto 6 Click is ideal for use in various applications, such as robotics, stick position sensing, control elements for navigation systems, anti-tampering in smart meters, and more.

Magneto 6 Click is supported by a mikroSDK compliant library, which includes functions that simplify software development. This Click board<sup>™</sup> comes as a fully tested product, ready to be used on a system equipped with the mikroBUS<sup>™</sup> 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).



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## Specifications

Туре	Magnetic
Applications	The TLI493D-A2B6 is designed for all kinds of sensing applications, it can be used for multi function knobs, joystick and gimbals, robotics position sensing.
On-board modules	Magneto 6 Click uses the TLI493DA2B6 IC, a high accuracy magnetic sensor, from Infineon Technologies.
Key Features	Low-power oscillator, basic biasing, accurate restart, undervoltage detection, fast oscillator, HALL biasing, HALL probes with multiplexers, successive tracking ADC, temperature sensor, I2C interface
Interface	GPIO,I2C
ClickID	No
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<sup>™</sup> Catalog

Click Boards<sup>™</sup>

### Downloads

Magneto 6 click example on Libstock

TLI493D-A2B6 datasheet

Magneto 6 click 2D and 3D files

Magneto 6 click schematic

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