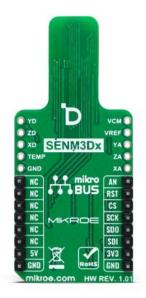


Time-saving embedded tools

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

# 3D Hall 4 Click





#### PID: MIKROE-5925

**3D Hall 4 Click** is a compact add-on board that can detect the strength of a magnetic field in all three dimensions. This board features the SENM3Dx, a 3D Hall magnetic sensor from SENIS. It is a CMOS-integrated magnetic field sensor that allows the acquisition of all three magnetic field components at the same time and in the same spot. The sensor is equipped with on-chip EPROM to hold initialization, calibration data, and other settings and definitions. This Click board<sup>™</sup> makes the perfect solution for the development of a wide range of magnetic sensing, including robotics position sensing, angle measurement at the end of the shaft and out-of-shaft configurations, and many more.

3D Hall 4 Click is fully compatible with the mikroBUS<sup>™</sup> socket and can be used on any host system supporting the <u>mikroBUS<sup>™</sup></u> standard. It comes with the <u>mikroSDK</u> open-source libraries, offering unparalleled flexibility for evaluation and customization. What sets this Click board<sup>™</sup> 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. OHSA5 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	Magnetic
Applications	Can be used for the development of a wide range of magnetic sensing, including robotics position sensing, angle measurement at the end of the shaft and out-of-shaft configurations, and many more
On-board modules	SENM3Dx - 3D Hall magnetic sensor from SENIS
Key Features	Real 3D magnetic-field measurement, possibility to select the active sensitivity axis, high magnetic field resolution, high analog frequency bandwidth, built-in temperature sensor, on-chip correction of sensitivity, offset, noise, and more
Interface	Analog,SPI
ClickID	Yes
Compatibility	mikroBUS™
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V

### Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board<sup>™</sup> Catalog

Click boards™

**ClickID** 

TXB0104 datasheet

### Downloads

3D Hall 4 click example on Libstock

SENM3Dx datasheet

TXB0104 datasheet

3D Hall 4 click 2D and 3D files

3D Hall 4 click schematic

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).