

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

# Hall Switch 2 Click





#### PID: MIKROE-4788

Hall Switch 2 Click is a compact add-on board that represents a magnetic field-activated dualrelay Click board<sup>™</sup>. This board features the <u>MHA100KN</u>, a high-performance, low-power Hall-Effect sensor from <u>MEMSIC</u>. This Hall switch is a fully integrated CMOS IC that outputs a highlow signal following magnetic field changing. It works with a magnet and detects the magnet's close/away position. Two high-quality compact relays allow switching of high voltages and can cut or establish a connection on the main side of the circuit. This Click board<sup>™</sup> is suitable for various applications activated by the magnetic field, such as contactless switches, lids or tray position detecting switches, or other similar applications that require contactless switching of the relay contacts.

Hall Switch 2 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

## Specifications

Туре	Magnetic
Applications	Can be used for various applications activated by the magnetic field, such as contactless switches, lids or tray position detecting switches, or other similar applications that require contactless switching of the relay contacts
On-board modules	MHA100KN - high-performance, low-power Hall- Effect sensor from MEMSIC
Key Features	Low power consumption, reliable contactless switching by the magnetic field, separate sensors for both south and north pole magnetic fields, high-quality compact relays, and more
Interface	GPIO
ClickID	No
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™

### Downloads

MHA100KN datasheet

Hall Switch 2 click 2D and 3D files

Hall Switch 2 click schematic

Hall Switch 2 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).