

Proximity 18 Click



PID: MIKROE-5300

Proximity 18 Click is a compact add-on board that contains a close-range proximity sensing solution. This board features the VCNL3036X01, a high-resolution digital proximity sensor from [Vishay Semiconductors](#). Besides the proximity sensor, the VCNL3036X01 also integrates a mux and a driver for three external LEDs, which are located near the chip on the board, photodiodes, amplifiers, and analog to digital converting circuits into a single chip by CMOS process. It allows absolute distance measurement, whatever the target color and reflectance, providing an accurate range of up to 50cm. This Click board™ is suitable for proximity/optical switch applications for consumer, computing, automotive, and industrial purposes.

Proximity 18 Click is supported by a [mikroSDK](#) compliant library, which includes functions that simplify software development. This [Click board™](#) comes as a fully tested product, ready to be used on a system equipped with the [mikroBUS™](#) 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).

Specifications

Type	Proximity
Applications	Can be used for proximity/optical switch applications for consumer, computing, automotive, and industrial purposes
On-board modules	VCNL3036X01 - close-range digital proximity sensor from Vishay Semiconductors
Key Features	Fast and accurate distance ranging sensor, fully integrated module, low-power consumption, I2C interface, programmable interrupt, up to 500mm ranging, various basic proximity function settings, and more
Interface	I2C
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V,5V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

[Proximity 18 click example on Libstock](#)

[VSMD66694 datasheet](#)

[VCNL3036X01 datasheet](#)

[VLMTG1300 datasheet](#)

[Proximity 18 click 2D and 3D files](#)

[Proximity 18 click schematic](#)

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