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Proximity 18 Click





PID: MIKROE-5300

Proximity 18 Click is a compact add-on board that provides a close-range proximity sensing solution. This board features the <u>VCNL3036X01</u>, a high-resolution digital proximity sensor from <u>Vishay Semiconductors</u>. Besides the proximity sensing element, 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 conversion circuits into a single CMOS chip. Proximity 18 Click provides absolute distance measurement, whatever the target color and reflectance, and is accurate 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 $\frac{\text{mikroSDK}}{\text{compliant library}}$, which includes functions that simplify software development. This $\frac{\text{Click board}^{\intercal}}{\text{comes}}$ comes as a fully tested product, ready to be used on a system equipped with the $\frac{\text{mikroBUS}^{\intercal}}{\text{mikroBUS}^{\intercal}}$ 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.







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Specifications

Туре	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
ClickID	No
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V,5V

www.mikroe.com

Resources

<u>mikroBUS™</u>

mikroSDK

Click board™ Catalog

Click boards™

Downloads

Proximity 18 click example on Libstock

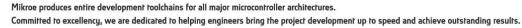
VSMD66694 datasheet

VCNL3036X01 datasheet

VLMTG1300 datasheet

Proximity 18 click 2D and 3D files

Proximity 18 click schematic



health and safety management system.



