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Proximity 16 Click





PID: MIKROE-5286

Proximity 16 Click is a compact add-on board that contains a close-range proximity sensing solution. This board features the <u>VL53L5CX</u>, a Time-of-Flight (ToF) multizone ranging sensor from <u>STMicroelectronics</u>. The VL53L5CX integrates a SPAD array, physical infrared filters, and diffractive optical elements (DOE) to achieve the best-ranging performance in various ambient lighting conditions with different cover glass materials. It allows absolute distance measurement, whatever the target color and reflectance, provides accurate ranging up to 400cm, and can work at fast speeds (60Hz). Also, multizone distance measurements are possible with either 4x4 or 8x8 separate zones with broad 63° diagonal software-configurable Field-of-View (FoV). This Click board ™ is suitable for multizone and multi-object distance detection, content management, gesture recognition, and various consumer and industrial applications.

Proximity 16 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.

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Specifications

Туре	Proximity
Applications	Can be used for multizone and multi-object distance detection, content management, gesture recognition, and various consumer and industrial applications
On-board modules	VL53L5CX - multi-zone Time-of-Flight sensor from STMicroelectronics
Key Features	Fast and accurate multizone distance ranging sensor, fully integrated module, wide field of view, ranging output with either 4x4 or 8x8 separate zones, low-power mode with programmable interrupt, up to 400cm ranging, and more
Interface	12C
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V

Resources

<u>mikroBUS™</u>

mikroSDK

Click board™ Catalog

Click boards™

Downloads

Proximity 16 click example on Libstock

Proximity 16 click 2D and 3D files

VL53L5CX datasheet

Proximity 16 click schematic

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