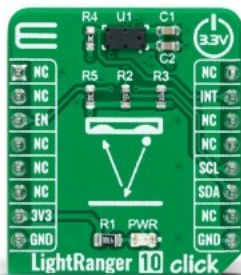# LightRanger 10 Click

PID: MIKROE-5206

LightRanger 10 Click is a compact add-on board suitable for range-finding and distance sensing applications. This board features the VL53L4CX, a ToF (time of flight) optical distance sensor with an extended target detection range from STMicroelectronics. Specifically designed for long-range and multi-target measurements, the VL53L4CX provides very accurate distance measurements up to 6m with excellent results over short distances and 18° FoV (Field of View), which improves performances under ambient light. Data processing is performed inside the VL53L4CX, providing distance information and confidence values through its I2C interface. This Click board™ is suitable for presence (object) detection, distance measurement, industrial ranging, inventory control, and many other applications.

LightRanger 10 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.

Specifications

Type	Optical
Applications	Can be used for presence (object) detection, distance measurement, industrial ranging, inventory control, and more
On-board modules	VL53L4CX - ToF (Time-of-Flight) optical distance sensor from STMicroelectronics
Key Features	Fast and accurate distance ranging, major improvement in long distance-ranging performance across all targets and light levels, multiobject detection capability, targets beyond 80 cm range are immune to crosstalk from cover glass, and more
Interface	I2C
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V

Resources

mikroBUS™

mikroSDK

Click board™ Catalog

Click boards™

Downloads

LightRanger 10 click example on Libstock

LightRanger 10 click 2D and 3D files

VL53L4CX datasheet

LightRanger 10 click schematic