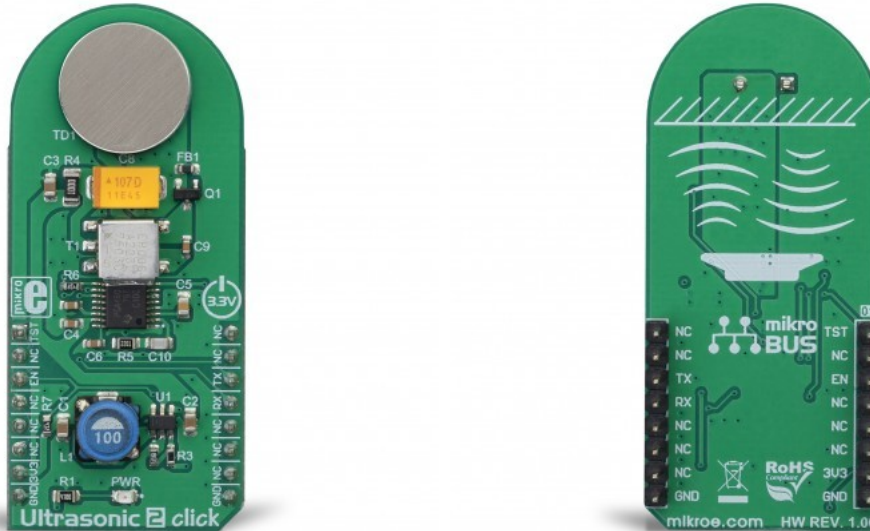


Ultrasonic 2 Click



PID: MIKROE-3302

The **Ultrasonic 2 click** is an ultrasonic range detection Click board™, capable of detecting both near-field and far-field objects. It is equipped with the PGA460, a highly-integrated system-on-chip (SoC), based on SONAR principle. This SoC consists of a low-noise analog front end (AFE) with a programmable time-varying gain stage, a digital signal processor (DSP), and an integrated transducer driver. The PGA460 offers a very accurate and reliable range detection, regardless of the position of an object: the incoming echo signal is conditioned and dynamically amplified over time before it is digitized, so that the optimal signal-to-noise ratio can be achieved.

It comes in the package which also includes the mikroSDK™ software and a library with all the functions. The Click board™ comes as a fully tested and approved prototype, making it a reliable device ready to use on the development board.

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 | Miscellaneous |
| Applications | It can be used for park assist, collision detection, lane departure warning (LDW), and similar automotive-related applications, object distance and position sensing, presence and proximity detection, drone landing assist and obstacle detection applications, etc. |
| On-board modules | PGA460, an integrated ultrasonic signal processor and transducer driver by Texas Instruments; TLV61046, a 28V output voltage boost converter by Texas Instruments |
| Key Features | A highly Integrated SoC with advanced DSP processing functions which allow very accurate and reliable object range detection, processed distance data available on the output, a complete ultrasonic range detection solution supported by software libraries for rapid development, non-volatile parameter storage for a fast initialization... |
| Interface | UART |
| Compatibility | mikroBUS |
| Click board size | M (42.9 x 25.4 mm) |
| Input Voltage | 3.3V,5V |

Resources

[mikroBUS™ Standard specification](#)

[LibStock: mikroSDK](#)

[Click board catalog](#)

[Click boards™ Standard Page](#)

Downloads

[Ultrasonic 2 click example on Libstock](#)

[Ultrasonic 2 click 2D and 3D files](#)

[PGA460-Q1 datasheet](#)

[Ultrasonic 2 click schematic](#)

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