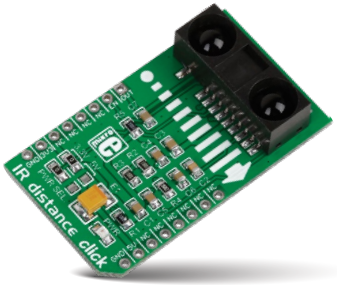
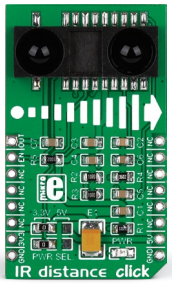
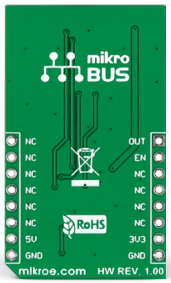


# IR distance click



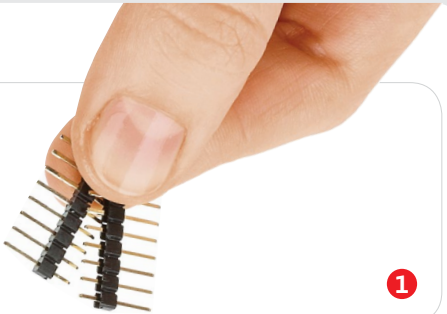


## 1. Introduction

*IR distance click* carries **Sharp's GP2Y0A60SZ0F** distance measuring sensor. The sensor module comprises an integrated PSD (position sensitive detector), an infrared LED and a signal processing circuit. The measuring range is between 10 and 150 cm. The click board outputs an analog voltage corresponding to the distance of the object (through the mikroBUS™ AN pin). An Enable (EN) pin is also utilized. The board is designed to use either a 3.3V or a 5V power supply.

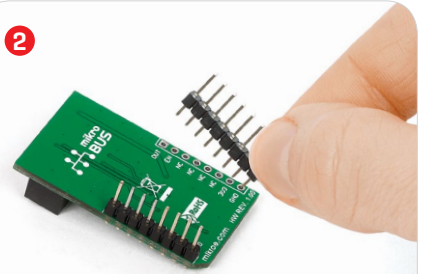
## 2. Soldering the headers

Before using your click board™, make sure to solder 1x8 male headers to both left and right side of the board. Two 1x8 male headers are included with the board in the package.



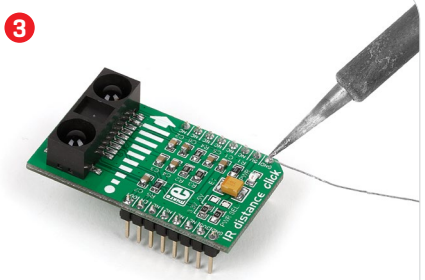
1

2

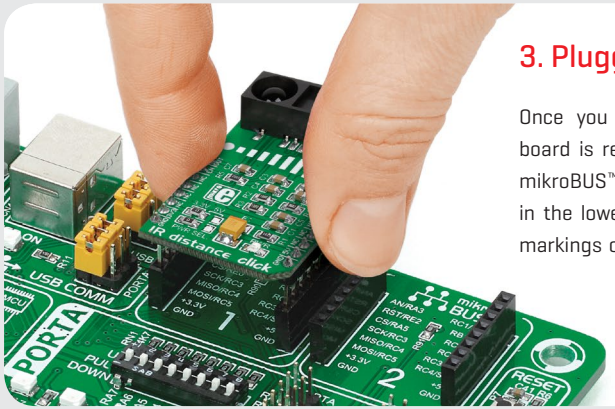


Turn the board upside down so that the bottom side is facing you upwards. Place shorter pins of the header into the appropriate soldering pads.

3

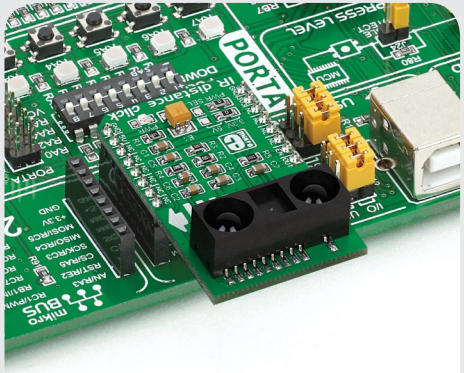


Turn the board upward again. Make sure to align the headers so that they are perpendicular to the board, then solder the pins carefully.



## 3. Plugging the board in

Once you have soldered the headers your board is ready to be placed into the desired mikroBUS™ socket. Make sure to align the cut in the lower-right part of the board with the markings on the silkscreen at the mikroBUS™ socket. If all the pins are aligned correctly, push the board all the way into the socket.



## 4. Essential features

The sensor on IR distance click is not easily influenced by variations caused by the reflectivity of the object whose distance is measured (it won't be able, however, to detect the distance of a mirror). For optimal operation the lens should be kept clean, because dust, water or oil on its surface can impact the precision of the sensor. With these precautions in mind, the IR distance can be used for designing touch-less switches, various energy-saving devices, but it's also suitable for robotics.

click BOARDS™

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IR distance click Manual v100

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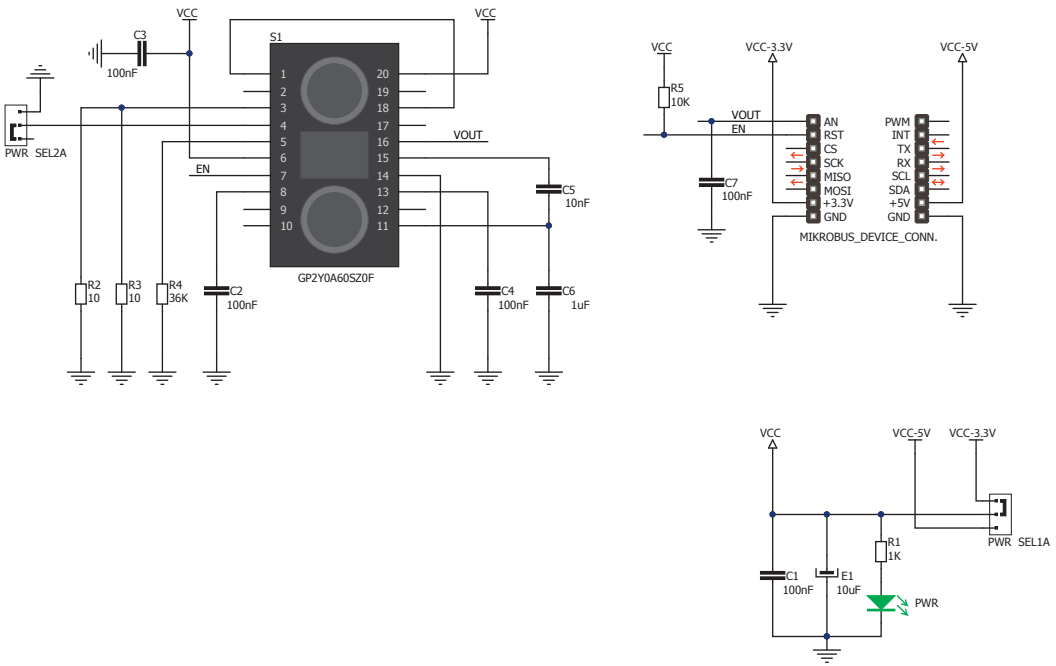
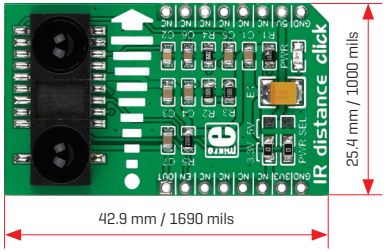
## 5. Schematic



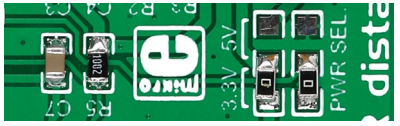

## 6. Dimensions




| | mm | mils |
|---|---|---|
| LENGTH | 42.9 | 1690 |
| WIDTH | 25.4 | 1000 |
| HEIGHT* | 3.9 | 154 |

* without headers

## 7. SMD jumpers



IR distance click features an SMD jumper (zero ohm resistor) that let's you switch between a 3.3V or a 5V power supply.

## 8. Code examples

Once you have done all the necessary preparations, it's time to get your click board™ up and running. We have provided examples for mikroC™, mikroBasic™ and mikroPascal™ compilers on our **Libstock** website. Just download them and you are ready to start.

LIBSTOCK.com

## 9. Support

MikroElektronika offers **free tech support (www.mikroe.com/support)** until the end of the product's lifetime, so if something goes wrong, we're ready and willing to help!

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DEVELOPMENT TOOLS | COMPILERS | BOOKS

## 10. Disclaimer

MikroElektronika assumes no responsibility or liability for any errors or inaccuracies that may appear in the present document. Specification and information contained in the present schematic are subject to change at any time without notice.

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