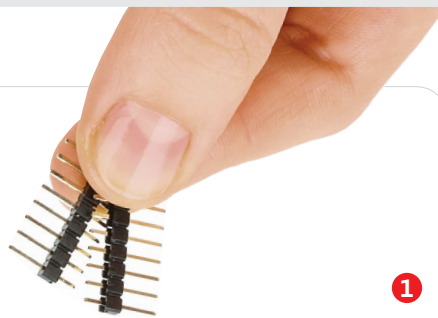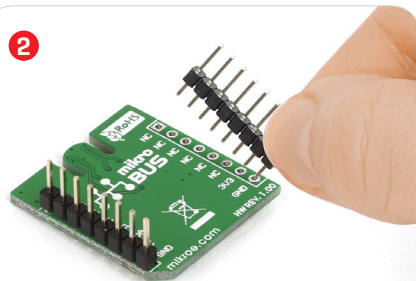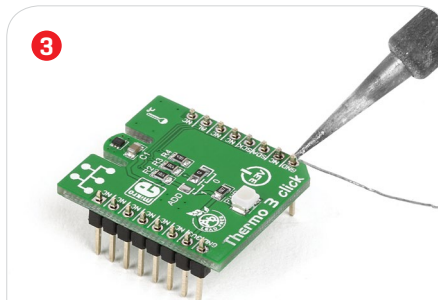# Thermo 3 click™

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.
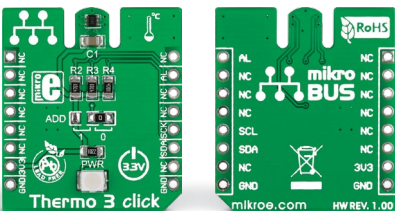
1

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.

4. Essential features

Because of its accuracy, *Thermo 3 click*™ is ideal for thermal-management and thermal protection applications, especially for extended measurements (in thermostats, office machines, industrial instrumentation applications). You can set up an overtemperature alert using the ALERT pin (which sends an interrupt to the target board MCU). The sensor creates a highly linear output and therefore simple to use.
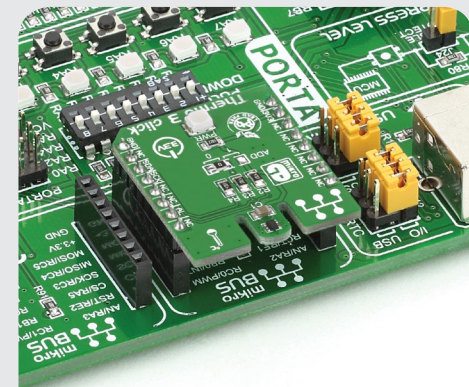
1. Introduction

Thermo 3 click™ carries **TMP102**, a digital temperature sensor IC with a tiny footprint of only 1.6mm x 1.6mm. Without requiring calibration, TMP102 is accurate within 0.5°C. Measurement range is between -25°C to 85°C. An integrated 12-bit ADC allows for measurement resolutions down to 0.0625°C. *Thermo 3 click*™ communicates with the target board MCU through **mikroBUS**™ I²C pins (SCL, SDA), and an additional Alert pint (INT on the default mikroBUS™ configuration). The board is designed to use a 3.3V power supply only.
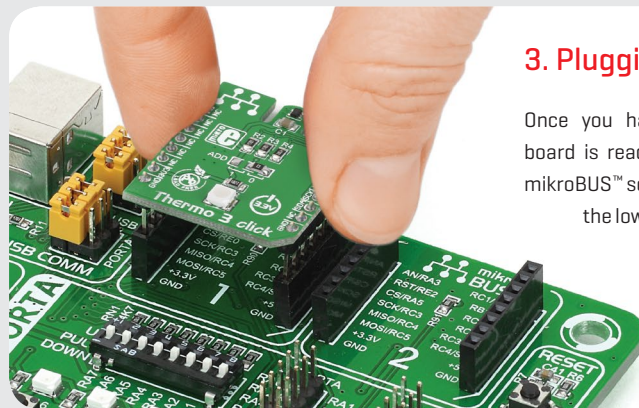
3. Plugging the board in

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.

click™
BOARD
www.mikroe.com

5. Schematic

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.

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!

6. Dimensions

28.6 mm / 1125 mils

	mm	mils
LENGTH	28.6	1125
WIDTH	25.4	1000
HEIGHT*	3.3	130

* without headers

7. The ADD SEL jumper

Thermo 3 click™ has an ADD onboard jumper (zero ohm resistor) for specifying the I^2C address.

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.