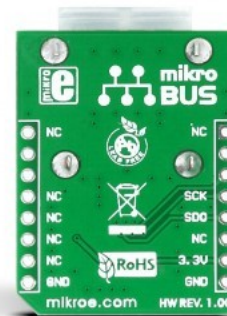


## THERMO Click



PID: MIKROE-1197

THERMO Click is a compact add-on board that provides accurate temperature measurements. This board features the MAX31855K, a thermocouple-to-digital converter from Analog Devices, as well as a PCC-SMP connector for K-type thermocouple probe. Combination of MAX31855K and PCC-SMP connector results in high-accuracy temperature measurement in a temperature range between  $-270$  and  $1372^{\circ}\text{C}$  with a sensitivity of about  $41\mu\text{V}/^{\circ}\text{C}$ . The device also contains cold-junction compensation sensing and correction providing temperature data to the host controller over an SPI interface (read-only). This Click board™ is suitable for thermostatic, process-control, monitoring applications, and many more.

THERMO 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.

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	Temperature & humidity
Applications	Can be used for thermostatic, process-control, monitoring applications, and more
On-board modules	MAX31855K - thermocouple-to-digital converter from Analog Devices
Key Features	Cold-junction compensation, 14-bit - 0.25°C resolution, detects thermocouple shorts to GND or VCC, on-board PCC-SMP connector for K-type thermocouple probes, high accuracy, low power consumption, and more
Interface	SPI
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V

## Resources

[mikroBUS™](#)

[Click board™ Catalog](#)

[Click Boards™](#)

## Downloads

[THERMO click example on Libstock](#)

[MAX31855K datasheet](#)

[THERMO click schematic](#)

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

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