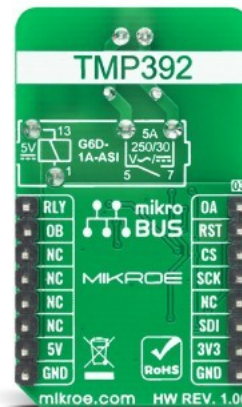


## Thermostat 4 Click



PID: MIKROE-4194

**Thermostat 4 Click** is complete solution that senses the temperature of a physical system and can performs actions so that the system's temperature is maintained near a desired setpoint. It's based on [Texas Instruments TMP392](#), a resistor programmable temperature switch that enable protection and detection of system thermal events from 30°C to 130°C. It offers dual overtemperature (hot and warm) detection. The trip temperatures option is programmed by changing trimmer resistance value for channel A and digital potentiometer resistance value over SPI interface for channel B. The Thermostat 4 Click also contains a high-quality relay from [Omron](#), that can be used to open or close an electric circuit. Despite its small size, it can be used with voltage up to 30VDC/220AC and current up to 5A.

Thermostat 4 Click board™ 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	Thermostat 4 Click can be used for a wide range of applications that have to be thermally controlled: various home appliances, air conditioners, cooling fans, small heaters, etc
On-board modules	TMP392
Key Features	Dual outputs for overtemperature detection, Trip test function enables in-system testing, Resistor tolerances contribute zero error
Interface	GPIO, SPI
ClickID	No
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V or 5V

## Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

## Downloads

[TMP392 datasheet](#)

[Thermostat 4 click 2D and 3D files](#)

[Thermostat 4 click schematic](#)

[Thermostat 4 click example on Libstock](#)

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