

## Expand 14 Click



PID: MIKROE-5241

**Expand 14 Click** is a compact add-on board that contains a multi-port I/O expander. This board features the [CAT9555](#), a CMOS device that provides 16-bit parallel input/output port expansion from [ON Semiconductor](#). The CAT9555 contains two 8-bit configuration ports (input or output), input, output, and polarity inversion registers, alongside an I2C-compatible serial interface. Any of the sixteen I/Os can be configured as an input or output by writing to the configuration register. It also features an active-low interrupt output, indicating to the host controller that an input state has been changed. This Click board™ provides a simple solution when additional I/Os are needed while keeping interconnections to a minimum in system monitoring applications, industrial controllers, portable equipment, and many more.

Expand 14 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	Port expander
Applications	Can be used for sensors, power switches, LEDs, pushbuttons, and fans
On-board modules	CAT9555 - general-purpose I/O expander from ON Semiconductor
Key Features	16 I/O Pins that default to inputs at Power-Up, 5V Tolerant I/Os, high drive capability, individual I/O configuration, polarity inversion register, interrupt, and more
Interface	I2C
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V

## Resources

[mikroBUS™](#)
[mikroSDK](#)
[Click board™ Catalog](#)
[Click boards™](#)

## Downloads

[CAT9555 datasheet](#)
[Expand 14 click schematic](#)
[Expand 14 click 2D and 3D files](#)
[Expand 14 click example on Libstock](#)

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