

Expand 11 Click



PID: MIKROE-5532

Expand 11 Click is a compact add-on board that contains a multi-port I/O expander. This board features the [TCA9536](#), a general-purpose remote I/O expansion for most microcontroller families from [Texas Instruments](#). The TCA9536 comes in a 4-port configuration and allows easy addition of I/O through a standard I2C serial interface. Each port is user-configurable to either a logic input or logic output by writing to the I/O configuration register bits. The data for each input or output is kept in the corresponding input or output register. There is an additional special function register that port P3, in addition to its standard I/O function, can also configure as an interrupt feature. 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 11 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 system monitoring applications, industrial controllers, portable equipment, and more
On-board modules	TCA9536 - general-purpose I/O expander from Texas Instruments
Key Features	I2C to GPIO expander, wide supply range, 5V tolerant I/O ports, reset feature via serial interface, P3 port configurable as interrupt, polarity inversion, low power consumption, and more
Interface	I2C
ClickID	Yes
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™](#)

[ClickID](#)

Downloads

[Expand 11 click 2D and 3D files](#)

[Expand 11 click example on Libstock](#)

[TCA9536 datasheet](#)

[Expand 11 click schematic](#)

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