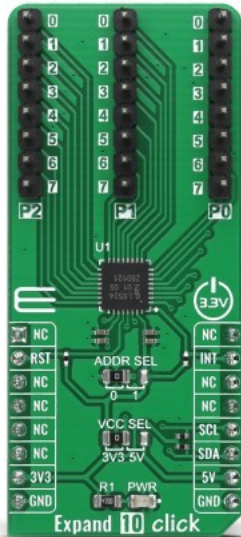


Expand 10 Click



PID: MIKROE-4801

Expand 10 Click is a compact add-on board that contains a multi-port I/O expander. This board features the PCAL6524, a 24-bit general-purpose I/O expander providing remote I/O expansion for most MCU's families via the Fast-mode Plus I2C-serial interface from NXP Semiconductors. The PCAL6524 has a built-in level shifting feature that makes it highly flexible in power supply systems where communication between incompatible I/O voltages is required. It allows seamless communications with next-generation low voltage microprocessors and microcontrollers on the interface and peripherals at a higher voltage on the port side. 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 10 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 system monitoring applications, industrial controllers, portable equipment, and many more
On-board modules	PCAL6524 - 24-bit ultra-low-voltage translating general-purpose I/O expander from NXP Semiconductors
Key Features	Low power consumption, bidirectional voltage-level translation, Agile I/O features, Fast-mode Plus I2C-serial interface, reset and interrupt feature, and more
Interface	I2C
ClickID	No
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

[Expand 10 click example on Libstock](#)

[Expand 10 click 2D and 3D files](#)

[PCAL6524 datasheet](#)

[Expand 10 click schematic](#)

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).