EXPAND 6 Click

PID: MIKROE-4243

EXPAND 6 Click is a compact add-on board that contains an I2C configurable multi-port I/O expander with independently configurable pins as bi-directional input/outputs or PWM outputs. This board features the CY8C9520A, 20-bit I/O expander with EEPROM, and 4 independently configurable 8-bit PWM outputs from Infineon. The CY8C9520A operates as two I2C slave devices, first as a multi-port I/O expander, and second as a serial EEPROM with 3 Kbyte address space. It has a user default storage, flexible I2C address configuration, and a programmable interrupt function that indicates input pin level changes and PWM state changes. This Click board™ can be used to monitor and control LEDs and system intrusion detection devices, but also as a storage for information such as error codes or board manufacturing data for diagnostic purposes.

EXPAND 6 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.

Specifications

Type	Port expander
Applications	Can be used to monitor and control LEDs and system intrusion detection devices, but also as a storage for information such as error codes or board manufacturing data for diagnostic purposes.
On-board modules	EXPAND 6 Click is based on the CY8C9520A, 20-bit I/O expander with EEPROM, and 4 independently configurable 8-bit PWM outputs from Cypress Semiconductor.
Key Features	20-bit, 100kHz I2C port expander, flexible I2C address configuration, internal 3Kbyte EEPROM, user default storage, 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 6 click example on Libstock](#)

[EXPAND 6 click 2D and 3D files](#)

[CY8C9520A datasheet](#)

[EXPAND 6 click schematic](#)