

Expand 9 Click



PID: MIKROE-4853

Expand 9 Click is a compact add-on board that contains a multi-port I/O expander. This board features the SX1509QB, the world's lowest voltage level shifting GPIO expander from Semtech Corporation. The SX1509QB comes in a 16-channel configuration and allows easy serial expansion of I/O through a standard I2C serial interface. It also has a built-in level shifting feature making it highly flexible in power supply systems where communication between incompatible I/O voltages is required, an integrated LED driver for enhanced lighting, and a keypad scanning engine to implement keypad applications up to 8x8 matrix. This Click board™ provides a simple solution when additional I/Os are needed, suitable for low-power portable equipment, keypad scanning, driving LEDs, and many more.

Expand 9 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 low-power portable equipment, keypad scanning, driving LEDs, and many more
On-board modules	SX1509QB - 16-channel lowest voltage level shifting GPIO expander from Semtech Corporation
Key Features	Low power consumption, integrated LED driver for enhanced lighting, on-chip keypad scanning engine, interrupt and reset feature, selectable I2C slave address, and more
Interface	I2C
ClickID	No
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

[AP2112 datasheet](#)

[SX1509QB datasheet](#)

[Expand 9 click 2D and 3D files](#)

[Expand 9 Click schematic](#)

[Expand 9 click example on Libstock](#)

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