

I2C Extend 2 Click



PID: MIKROE-4419

I2C Extend 2 Click is a compact add-on board suitable for I2C communication bus extension. This board features the PCA9615, a 2-channel multipoint differential I2C bus buffer with hot-swap logic from NXP Semiconductors. The PCA9615 converts the two default I2C signals into four differential signals, two for SCL and two for SDA. The differential signals allow the I2C signals to reach distances of up to 3m while maintaining their signal integrity sent over an Ethernet cable through the onboard RJ-45 connector. This Click board™ is suitable for various applications that require extending the I2C bus over a long distance, such as commercial lighting and industrial control, control of power supplies in a high noise environment, and more.

I2C Extend 2 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	I2C
Applications	Can be used for various applications that require extending the I2C bus over a long distance, such as commercial lighting and industrial control, control of power supplies in a high noise environment, and more.
On-board modules	I2C Extend 2 Click is based on the PCA9615, a Fast-Mode Plus (FM+) I2C bus buffer that extends the single-ended I2C bus through electrically noisy environments from NXP Semiconductor.
Key Features	Low power consumption, improved resistance to system noise, hot swap, supports arbitration and clock stretching, bus idle detect, 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

[I2C Extend 2 click 2D and 3D files](#)

[PCA9615 datasheet](#)

[I2C Extend 2 click example on Libstock](#)

[I2C Extend 2 click schematic](#)

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