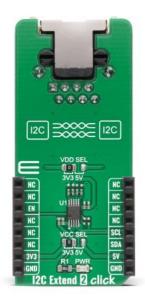MIKROELEKTRONIKA D.O.O, Batajnički drum 23, 11000 Belgrade, Serbia
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I2C Extend 2 Click

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.

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
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

I2C Extend 2 click 2D and 3D files

PCA9615 datasheet

I2C Extend 2 click example on Libstock

I2C Extend 2 click schematic