

## I2C MUX Click



PID: MIKROE-4048

**I2C MUX Click** is an quad bidirectional translating I2C and SMBus switch with reset function, intended for applications with I2C slave address conflicts (multiple, identical temp sensors). It features a quad bidirectional translating switch controlled via the I2C bus, labeled as [TCA9546A](#) from [Texas Instruments](#). Click has three address jumpers, allowing up to eight TCA9546A devices on the same bus. I2C MUX click allows voltage translation between 1.8V, 2.5V, 3.3V, and 5V buses, and also supports hot insertion. The TCA9546A can work on a 0 - 400 kHz clock frequency range and is ideal for communication with numerous devices that share the identical slave address on the same bus.

I2C MUX 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     | Servers, Routers (telecom switching equipment), Factory automation, Products with I2C slave address conflicts (multiple, identical temp sensors) |
| On-board modules | I2C MUX Click uses the TCA9546A IC, a quad bidirectional translating switch, from Texas Instruments  |
| Key Features     | Voltage translation between 1.8V, 2.5V, 3.3V, and 5V buses, hot insertion, 0 - 400 kHz clock frequency range                                     |
| Interface        | I2C  |
| ClickID          | No   |
| Compatibility    | mikroBUS   |
| Click board size | M (42.9 x 25.4 mm)   |
| Input Voltage    | 3.3V or 5V   |

## Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click Boards™](#)

## Downloads

[I2C MUX click example on Libstock](#)

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

[TCA9546A datasheet](#)

[I2C MUX click schematic](#)

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