

I2C MUX 4 Click



PID: MIKROE-4240

I2C MUX 4 Click is a compact add-on board that contains a dual bidirectional translating switch dedicated for applications with I2C slave address conflicts. This board features the TCA9543APWR, a low voltage 2-channel I2C bus switch with interrupt logic from Texas Instruments. The master SCL/SDA signals are directed to two downstream pairs, or channels, where either individual SCL/SDA channel or both channels can be selected by setting the programmable control register. It has two interrupts and a Reset input which allows the TCA9543A to recover from a situation where one of the downstream I2C buses is stuck in a low state. This Click board™ is suitable to work with I2C interfaces for applications such as fault isolation, address conflict, level translation, or broadcast communication.

I2C MUX 4 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 with I2C interfaces for applications such as fault isolation, address conflict, level translation, or broadcast communication.
On-board modules	I2C MUX 4 Click is based on the TCA9543APWR, a 2-channel, bidirectional translating I2C switch from Texas Instruments.
Key Features	1-of-2 bidirectional translating switches, low Stand-By current, support hot insertion, deselected channels during Power-Up, and more.
Interface	I2C
ClickID	No
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V or 5V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

[I2C MUX 4 click 2D and 3D files](#)

[TCA9543A datasheet](#)

[AP7331 datasheet](#)

[I2C MUX 4 click example on Libstock](#)

[I2C MUX 4 click schematic](#)

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