

I2C MUX 5 Click



PID: MIKROE-4453

I2C MUX 5 Click is a compact add-on board with translating I2C and SMBus switch intended for applications with I2C slave address conflicts. This board features the [LTC4306](#), a 4-channel, 2-wire bus multiplexer with bus buffers to provide capacitive isolation between the upstream and downstream buses from [Analog Devices](#). Through software control, the LTC4306 splits the I2C bus into four sub-branches and connects the upstream 2-wire bus to any desired combination of downstream buses. It has a programmable disconnect from stuck bus function, provides four alert inputs for fault reporting, and two GPIO pins configurable as inputs, open-drain, or push-pull outputs. This Click board™ is suitable for a wide range of applications from industrial to medical, communications, and automotive systems.

I2C MUX 5 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 a wide range of applications from industrial to medical, communications, and automotive systems.
On-board modules	I2C MUX 5 Click is based on the LTC4306, a 4-channel, 2-wire bus multiplexer with bus buffers to provide capacitive isolation between the upstream and downstream buses from Analog Devices.
Key Features	Multiplexer with capacitance buffering, programmable disconnect from stuck bus, compatible with I2C and SMBus standards, several fault reporting pins, and more.
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 5 click 2D and 3D files](#)

[LTC4306 datasheet](#)

[I2C MUX 5 click schematic](#)

[I2C MUX 5 click example on Libstock](#)

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