

I2C Isolator 3 Click



PID: MIKROE-4467

I2C Isolator 3 Click is a compact add-on board that offers completely isolated bidirectional communication. This board features the CPC5902, a dual optically isolated bidirectional logic-bus repeater from IXYS Integrated Circuits Division. The CPC5902 pass DC signals and don't need to be clocked periodically to sustain the logic states. It supports I2C clock stretching while providing 3750Vrms of galvanic isolation. When different supply voltages are applied on both power sides of the CPC5902, it can also function as a logic level translator for levels as low as 2.7V or as high as 5.5V. This Click board™ is ideal for Power-over-Ethernet applications, providing buffering and isolation of the clock and data signals between MCU and the Power Supply Equipment (PSE) controller, and also suitable as an I2C bus length extender and logic-level translator.

I2C Isolator 3 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, Isolators
Applications	Can be used for Power-over-Ethernet applications, providing buffering and isolation of the clock and data signals between MCU and the Power Supply Equipment (PSE) controller, and also suitable as an I2C bus length extender and logic-level translator.
On-board modules	CPC5902 - a dual optically isolated bidirectional logic-bus repeater from IXYS Integrated Circuits Division
Key Features	Optically isolated bidirectional logic-bus repeater, supports I2C clock stretching, it offers glitch-free operation as well as excellent reliability and a very long operational life.
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 Isolator 3 click 2D and 3D files](#)

[CPC5902 datasheet](#)

[I2C Isolator 3 click schematic](#)

[I2C Isolator 3 click example on Libstock](#)

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