

## I2C to CAN Click



PID: MIKROE-4644

I2C to CAN Click is a compact add-on board that contains I2C to CAN-physical transceiver, which extends a single-master I2C bus through harsh or noisy environments. This board features the LT3960 (<https://www.analog.com/en/products/lt3960.html#product-overview>), a robust high-speed transceiver that extends a single-master I2C bus up to 400kbps using the CAN-physical layer from Analog Devices. One LT3960 from SCL and SDA I2C lines creates equivalent differential buses (CAN) on two twisted pairs, while the second LT3960 recreates the I2C bus locally for any slave I2C devices on the other end of the twisted pairs. A built-in 3.3V LDO powers both the I2C and CAN lines from a single input supply from 4V to 60V. This Click board™ is suitable for industrial and automotive networking, remote sensor applications, and more.

I2C to CAN 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	CAN
Applications	Can be used for industrial and automotive networking, remote sensor applications, and more.
On-board modules	LT3960 - I2C to CAN-Physical transceiver used to send and receive I2C data up to 400kbps using the CAN-Physical layer for differential signaling over twisted pair connections from Analog Devices
Key Features	High speed I2C to CAN-physical transceiver, up to 400kbps I2C communications, up to 60V power supply, low current Shutdown mode, and more.
Interface	I2C
ClickID	No
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V or 5V, External

## Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click Boards™](#)

## Downloads

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

[I2C to CAN click schematic](#)

[LT3960 datasheet](#)

[I2C to CAN click example on Libstock](#)

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