

Time-saving embedded tools

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UART to I2C Click





PID: MIKROE-5508

UART to I2C Click is a compact add-on board allowing connections to UART controllers and I2C targets for protocol conversion. This board features the <u>SC18IM704</u>, a bridge between the standard UART host interface and a serial I2C bus from <u>NXP Semiconductors</u>. The SC18IM704 provides a high-speed UART interface with a baud rate of up to 460.8 kbit/s and 256-byte FIFO for the transfer/receive data process, alongside several user-configurable GPIO pins. The host MCU communicates with the SC18IM704 with ASCII messages protocol, allowing it to control all the specific I2C-bus sequences, protocol, arbitration, and timing. This Click board[™] is suitable for use in multiple industrial applications such as communication bridges, process and automation control, I2C bus support, and many more.

UART to I2C Click is supported by a <u>mikroSDK</u> compliant library, which includes functions that simplify software development. This <u>Click board</u>TM comes as a fully tested product, ready to be used on a system equipped with the <u>mikroBUS</u>TM 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).



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Specifications

Туре	12C
Applications	Can be used for industrial applications such as communication bridges, process and automation control, I2C bus support, and more
On-board modules	SC18IM704 - bridge between UART port and a serial I2C bus from NXP Semiconductors
Key Features	High speed UART host interface, programmable I/O pins, 256-byte TX/RX FIFO, programmable baud rate, Power-down mode, UART ASCII messages protocol, Reset, and more
Interface	UART
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V

Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board[™] Catalog

Click Boards™

Downloads

UART to I2C click example on Libstock

UART to I2C click schematic

SC18IM704 datasheet

UART to I2C click 2D and 3D files

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