MIKROELEKTRONIKA D.O.O, Batajnički drum 23, 11000 Belgrade, Serbia
VAT: SR105917343 Registration No. 20490918
Phone: + 381 11 78 57 600 Fax: + 381 11 63 09 644 E-mail: office@mikroe.com
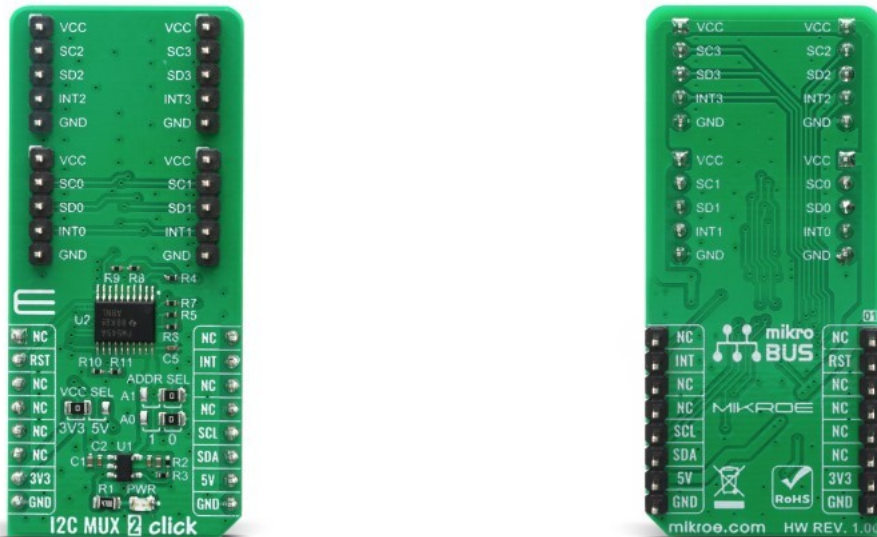www.mikroe.com

I2C MUX 2 Click

PID: MIKROE-4094

I2C MUX 2 Click is a quad bidirectional translating I2C and SMBus switch with reset and interrupt functions, intended for applications with I2C slave address conflicts. It features a quad bidirectional translating switch controlled via the I2C bus, labeled as TCA9545A from Texas Instruments. Four interrupt inputs (INT3–INT0), one for each of the downstream pairs, are provided on click board. One interrupt (INT) output acts as an AND of the four interrupt inputs. Click has two address jumpers, allowing up to four TCA9545A devices on the same bus. I2C MUX 2 click allows voltage translation between 1.8V, 2.5V, 3.3V, and 5V buses, and also supports hot insertion. The TCA9546A can work on a 0 - 400 kHz clock frequency range and is ideal for communication with numerous devices that share the identical slave address on the same bus.

I2C MUX 2 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	Servers, Routers (telecom switching equipment), Factory automation, Products with I2C slave address conflicts (multiple, identical temp sensors)
On-board modules	I2C MUX 2 Click uses the TCA9545A IC, a quad bidirectional translating switch, from Texas Instruments
Key Features	The 1-of-4 Bidirectional translating switches, Allows voltage-level translation between 1.8-V, 2.5-V, 3.3-V, and 5-V buses
Interface	I2C
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V,5V

Resources

mikroBUS™

mikroSDK

Click board™ Catalog

Click Boards™

Downloads

I2C MUX 2 click example on Libstock

I2C MUX 2 click 2D and 3D files

TCA9545A datasheet

I2C MUX 2 click schematic