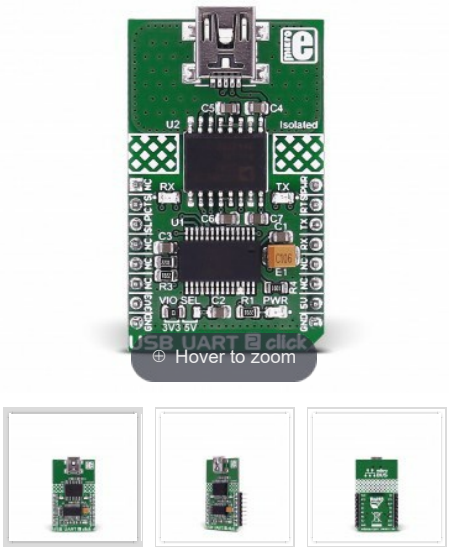

USB UART 2 Click

PID: MIKROE-2674

Weight: 35 g

USB UART 2 click provides USB isolation and carries the ADUM4160BRWZ USB port isolator.

The click is designed to run on either 3.3V or 5V power supply. It communicates with the target microcontroller over UART interface, with additional functionality provided the following pins on the mikroBUS™ line: RST, CS, PWM, INT.

Quantity

1 - +

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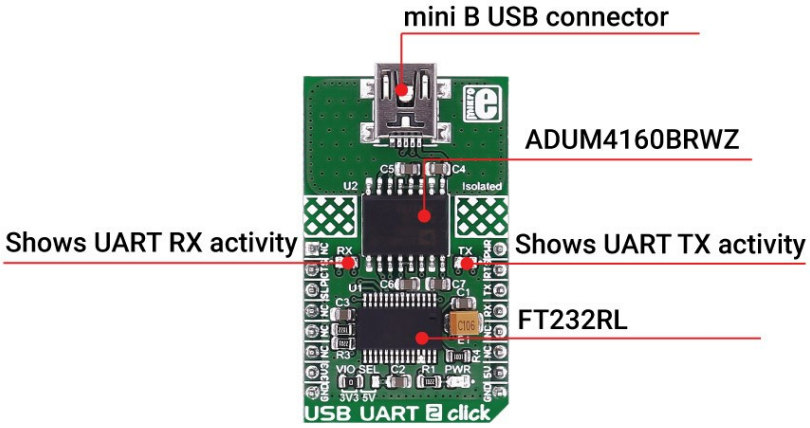
USB UART 2 click provides USB isolation and carries the ADUM4160BRWZ USB port isolator. The click is designed to run on either 3.3V or 5V power supply. It communicates with the target microcontroller over UART interface, with additional functionality provided the following pins on the mikroBUS™ line: RST, CS, PWM, INT.

Use the USB UART 2 click for isolating USB communication, and preventing voltage spikes from destroying sensitive equipment.



ADUM4160BRWZ features

ADUM4160BRWZ is a USB port isolator, based on Analog Devices, Inc., iCoupler® technology. Combining high-speed CMOS and monolithic air core transformer technology, these isolation components provide outstanding

performance characteristics and are easily integrated with low and full speed USB-compatible peripheral devices.

The ADUM4160BRWZ uses the edge detection based iCoupler technology in conjunction with internal logic to implement a transparent, easily configured, upstream facing port isolator. Isolating an upstream facing port provides several advantages in simplicity, power management, and robust operation.

How the click works

The click takes power both from the development system and from the USB, so both sides of the isolator can function.

The FT232RL chip on board to act as a USB-UART converter.

Specifications

Type	USB
Applications	USB peripheral isolation, isolated USB hub, etc.
On-board modules	ADUM4160BRWZ USB port isolator, FT232 IC
Interface	GPIO,UART,USB
Input Voltage	3.3V or 5V
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)

Pinout diagram

This table shows how the pinout on **USB UART 2 click** corresponds to the pinout on the mikroBUS™ socket (the latter shown in the two middle columns).

Notes	Pin	mikroBUS				Pin	Notes
	NC	1	AN	PWM	16	**CBUS3**	Factory PWR EN
Clear to send	**CTS**	2	RST	INT	15	**RTS**	Request to send
Factory Sleep	**CBUS4**	3	CS	TX	14	**TXD**	UART transmit data
	NC	4	SCK	RX	13	**RXD**	UART receive data
	NC	5	MISO	SCL	12	NC	
	NC	6	MOSI	SDA	11	NC	

Power supply	**+3.3V**	7	3.3V	5V	10	**+5V**	Power supply
Ground	**GND**	8	GND	GND	9	**GND**	Ground

Jumpers and settings

Designator	Name	Default Position	Default Option	Description
JP1	PWR.SEL.	Left	3V3	Power Supply Voltage Selection 3V3/5V, left position 3V3, right position 5V

LEDs and buttons

Designator	Name	Type	Description
TX		LED	Shows UART TX activity
RX		LED	Shows UART RX activity

Downloads

- mikroBUS™ Standard specification
- ADUM4160BRWZ datasheet
- USB UART 2 click schematic
- Click Boards™ Catalog

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