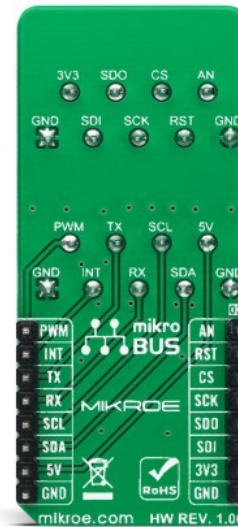


Terminal 2 Click



PID: MIKROE-4951

Terminal 2 Click is an adapter Click board™ used as a mikroBUS™ socket expansion board. It provides an easy and elegant solution for adding the external connection capability to the Click board™, plugged on a mikroBUS™ socket. Featuring two 9-position 2.54mm pitch terminal blocks makes it an easy way to expand the development system's connectivity with the mikroBUS™ socket while keeping the bus free to use with any Click board™.

Terminal 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.

How does it work?

Terminal 2 Click is an adapter Click board™ used as a mikroBUS™ socket expansion board. This Click board™ provides an easy and elegant solution for adding the external connection capability to the Click board™ and can be connected to the mikroBUS™ socket like any other Click board™. On the central area of the Terminal 2 Click, two 9-position 2.54mm pitch terminal blocks are placed. Each of the terminal pins corresponds to a pin on the mikroBUS™ socket. Thanks to these terminals, the connection with the Click board™ remains firm and stable, retaining a perfect connection quality at all times.

Mikroe produces entire development toolchains for all major microcontroller architectures.

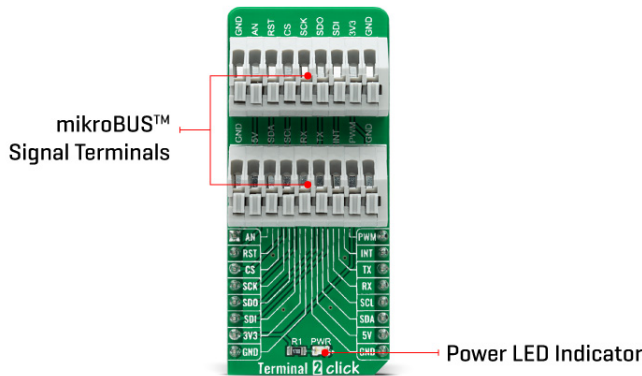
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ISO 27001: 2013 certification of informational security management system.
 ISO 14001: 2015 certification of environmental management system.
 OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).



Lines of the mikroBUS™ socket to which Terminal 2 Click is attached are shared through the onboard connectors, which mirrors the connected mikroBUS™ socket pins. Therefore, care should be taken when working with the Terminal 2 Click and connecting an external device to it, because the same pins on the mikroBUS™ are shared, either for the communication (SPI, UART, I2C) or for some other purpose (RST, INT, or other pins used as GPIO).

This Click board™ can operate with both 3.3V and 5V logic voltage levels. This way, it is allowed for both 3.3V and 5V capable MCUs to use the communication lines properly. A green LED visually detects the presence of an active power supply, labeled as PWR. However, the Click board™ comes equipped with a library containing easy-to-use functions and an example code that can be used, as a reference, for further development.

Specifications

Type	Adapter
Applications	Can be used as a mikroBUS™ socket expansion board
On-board modules	None
Key Features	Easy and elegant solution for adding the external connection capability to the Click board™
Interface	Analog,GPIO,I2C,SPI,UART
ClickID	No
Compatibility	mikroBUS™
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V

Pinout diagram

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

Notes	Pin	Pin	Notes
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		mikro™ BUS					
Analog Input	AN	1	AN	PWM	16	PWM	PWM Output
Reset	RST	2	RST	INT	15	INT	Interrupt
SPI Chip Select	CS	3	CS	RX	14	TX	UART TX
SPI Clock	SCK	4	SCK	TX	13	RX	UART RX
SPI Data OUT	SDO	5	MISO	SCL	12	SCL	I2C Clock
SPI Data IN	SDI	6	MOSI	SDA	11	SDA	I2C Data
Power Supply	3.3V	7	3.3V	5V	10	5V	Power Supply
Ground	GND	8	GND	GND	9	GND	Ground

Onboard settings and indicators

Label	Name	Default	Description
LD1	PWR	-	Power LED Indicator

Software Support

We provide a library for the Terminal 2 Click as well as a demo application (example), developed using MikroElektronika [compilers](#). The demo can run on all the main MikroElektronika [development boards](#).

Package can be downloaded/installed directly from NECTO Studio Package Manager(recommended way), downloaded from our [LibStock™](#) or found on [Mikroe github account](#).

Library Description

This library contains API for Terminal 2 Click driver.

Key functions

- terminal2_set_all_pins_high This function sets all terminal pins to high logic level.
- terminal2_set_all_pins_low This function sets all terminal pins to low logic level.
- terminal2_toggle_pin This function toggles the specified pin logic level.

Example Description

This example demonstrates the use of Terminal 2 click board by toggling all its pins.

The full application code, and ready to use projects can be installed directly from NECTO Studio Package Manager(recommended way), downloaded from our [LibStock™](#) or found on [Mikroe github account](#).

Other Mikroe Libraries used in the example:

- MikroSDK.Board
- MikroSDK.Log
- Click.Terminal2

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Additional notes and informations

Depending on the development board you are using, you may need [USB UART click](#), [USB UART 2 Click](#) or [RS232 Click](#) to connect to your PC, for development systems with no UART to USB interface available on the board. UART terminal is available in all MikroElektronika [compilers](#).

mikroSDK

This Click board™ is supported with [mikroSDK](#) - MikroElektronika Software Development Kit. To ensure proper operation of mikroSDK compliant Click board™ demo applications, mikroSDK should be downloaded from the [LibStock](#) and installed for the compiler you are using.

For more information about mikroSDK, visit the [official page](#).

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

[Terminal 2 click 2D and 3D files](#)

[Terminal 2 click schematic](#)

[Terminal 2 click example on Libstock](#)

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