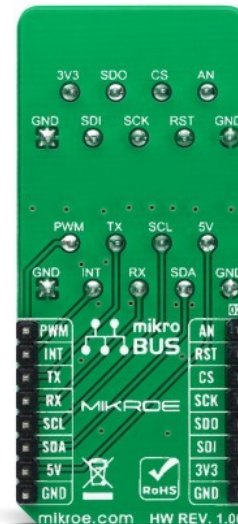


Terminal 2 Click



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.

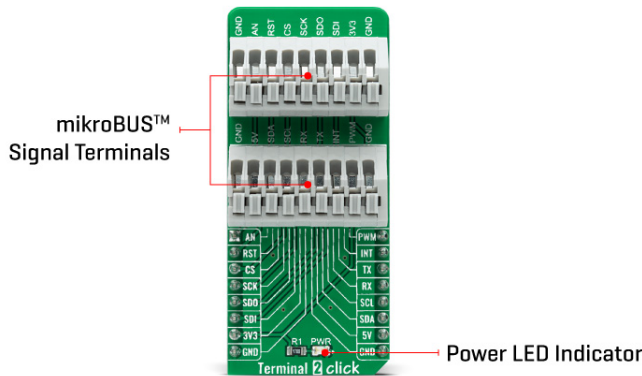
Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.



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).



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
Feature	No ClickID
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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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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