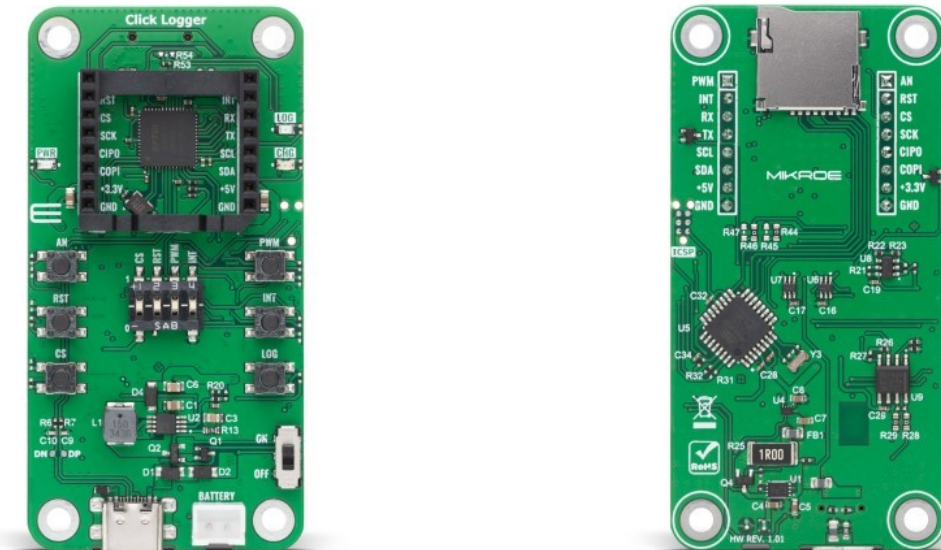


Click Logger



PID: MIKROE-6548

Click Logger is a specialized development tool designed for data logging and real-time monitoring of [mikroBUS™](#)-compatible [Click boards™](#). It functions as both a UART Logger, capturing and storing data from the mikroBUS™ TX line onto a microSD card via an [ATmega328P](#) microcontroller, and a mikroBUS™ to USB adapter for serial communication using the [FT4232H](#) chip. With additional features like a power monitoring for real-time voltage, current, and power measurements, a built-in Li-Po battery charger for portable use, and versatile GPIO control, Click Logger is an essential tool for developers working on Click board-based projects, ensuring reliable data acquisition and streamlined debugging in both lab and field environments.

For more information about **Click Logger** visit the official [product page](#).

How does it work?

Click Logger is a versatile tool for Click board™ development, combining **USB connectivity** and **UART data** logging into a single compact board. It serves two primary functions:

- **mikroBUS™ to USB Adapter** – Enables seamless communication with mikroBUS™ modules (Click boards) via USB using the FT4232H chip, ensuring reliable **serial-to-USB conversion** and real-time data access.
- **UART Logger** – Captures and logs UART data from the mikroBUS™ TX line onto a microSD card using an ATmega328P microcontroller. A LOG LED indicator provides visual feedback on logging activity, while the MCU can be reprogrammed via an ICSP connector for custom firmware updates.

Mikroe produces entire development toolchains for all major microcontroller architectures.

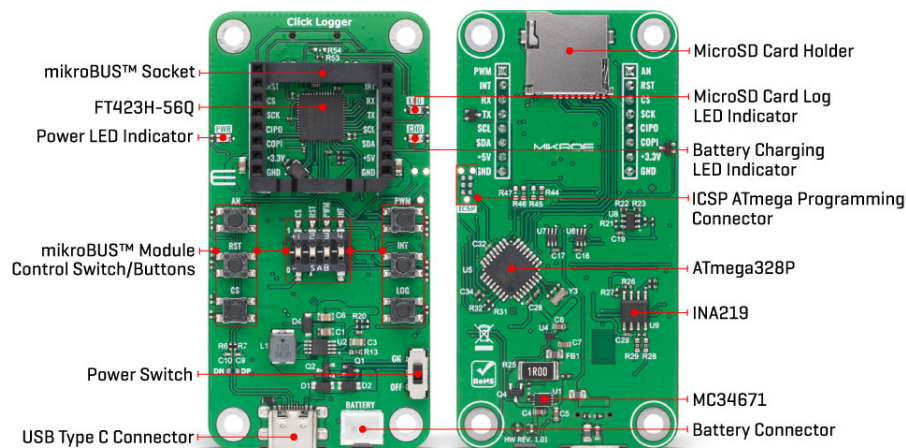
Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.



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).



Key features

- **Power monitoring** – Integrated INA219BIDR enables real-time measurement of voltage, current, and power consumption.
- **Battery support** – Built-in Li-Po charging (MC34671 IC) for standalone operation in field applications.
- **GPIO control** – Four-position DIP switch used for default voltage level control. The switch sets the initial state of the CS, RST, PWM, and INT lines, while the six control buttons (AN, RST, CS, PWM, INT, LOG) allow dynamic state changes during operation, giving developers enhanced flexibility for signal management.
- **u-blox compatibility** – Direct support for u-blox modules, with USB-based integration for real-time tracking using the [u-center](#) application.

With its combination of **real-time monitoring, data logging, and flexible connectivity**, Click Logger is an essential tool for engineers and developers working with **mikroBUS™-based hardware**.

Specifications

Type	Shield
Applications	Ideal for real-time data monitoring, efficient logging, and testing of mikroBUS™-compatible hardware in both lab and field application
On-board modules	FT4232H - USB to UART converter from FTDI ATmega328P - 8-bit AVR MCU from Microchip
Key Features	mikroBUS™ to USB Adapter, UART logger functionality, ATmega328P for UART logging and data storage, USB MIKROE VID and LOGGER PID parameters, battery support, LED indicators, GPIO control, ICSP connector for MCU reprogramming, power monitor, compact and portable, and more
Interface	Analog,GPIO,I2C,PWM,SPI,UART,USB
Feature	No ClickID
mikroBUS No.	1

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Supply Voltage	Battery, USB
Category	Bundles-Kits-Sheilds

Pinout diagram

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

Notes	Pin	mikroBUS				Pin	Notes
Analog Output	AN	1	AN	PWM	16	PWM	PWM Signal
Reset / ID SEL	RST	2	RST	INT	15	INT	Interrupt
SPI Select / ID COMM	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	CHG	-	Battery Charging LED Indicator
LD2	PWR	-	Power LED Indicator
LD2	LOG	-	MicroSD Card Log LED Indicator
T1-T5	AN/CS/RST/PWM/INT	-	mikroBUS™ Module Control Buttons
T6	LOG	-	Logging Process Control Button
SW1	-	-	mikroBUS™ Module Control Switches

Click Logger electrical specifications

Description	Min	Typ	Max	Unit
USB Supply Voltage	-	5	-	V
Battery Supply Voltage	3.4	4.1	4.2	V

Software Support

MIKROE does not currently provide software support for Click Logger board in the form of libraries, functions, or example code. For additional information or assistance, we recommend reaching out to u-blox. Find more details at the following resources:

- For general inquiries and technical support materials, visit the u-blox [Contact Us page](#), where you can submit a support ticket for further assistance.
- Additional support can be found on the u-blox official [Support Community page](#), where you can find answers, ask questions and connect with community of u-blox users from around the world.

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Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

[ClickID](#)

Downloads

[Click Logger 2D and 3D files v101](#)

[ATmega328P datasheet](#)

[FT4232H datasheet](#)

[Click Logger schematic v101](#)

[Click Logger board - u-blox driver](#)

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