

Charger 3 Click



PID: MIKROE-4449

Charger 3 Click is a compact add-on board that represents a standalone battery charger with thermal regulation. This board features the TP4056, a complete constant-current/constant-voltage linear charger for single-cell lithium-ion batteries from Nanjing Top Power ASIC Corp. The charge voltage of the TP4056 is specified at 4.2V with the charge current programmable via an onboard digital potentiometer, automatically terminating the charge cycle when the charging current drops to 1/10th the programmed value. It also features current monitoring, under-voltage lockout, automatic recharge, and two LEDs to indicate charge termination and the presence of an input voltage. This Click board™ is a perfect solution for the development of multiple Li-ion battery cell charging applications.

Charger 3 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	Battery charger
Applications	Can be used for the development of multiple Li-ion battery cell charging applications
On-board modules	TP4056 - complete constant-current/constant-voltage linear charger for single-cell lithium-ion batteries from NanJing Top Power ASIC Corp AD5175 - single-channel digital potentiometer from Analog Devices
Key Features	Programmable charge current up to 1000mA, complete linear charger for single-cell Lithium-ion batteries, constant-current/constant-voltage, two charge status indicators, and more
Interface	I2C
ClickID	No
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V or 5V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

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

[TP4056 datasheet](#)

[AD5175 datasheet](#)

[Charger 3 click schematic](#)

[Charger 3 click example on Libstock](#)

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