

UPS 3 Click



PID: MIKROE-4479

UPS 3 Click is a compact add-on board that represents a bidirectional active charge/balancing solution. This board features the [LTC3110](#), a bidirectional buck-boost DC/DC regulator/charger combination with selectable operation modes for charging and system backup from [Analog Devices](#). It can autonomously transition from Charge to Backup mode or switch modes based on an external command. A proprietary low noise switching algorithm optimizes efficiency with capacitor/battery voltages above, below, or equal to the system output voltage. Additional features include voltage supervisors for direction control and end of a charge and a general-purpose comparator with open-collector output for interfacing with MCU. This Click board™ is suitable for a backup power source for a wide range of battery-operated embedded applications.

UPS 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 a backup power source for a wide range of battery-operated embedded applications
On-board modules	LTC3110 - bidirectional buck-boost DC/DC regulator with capacitor charger and balancer from Analog Devices
Key Features	High accuracy, selectable switchover from Charge to Backup mode, low-noise switching frequency algorithm, high efficiency, ideally suited for backup applications, and more.
Interface	GPIO
ClickID	No
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

[LTC3110 datasheet](#)

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

[UPS 3 click schematic](#)

[UPS 3 click example on Libstock](#)

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