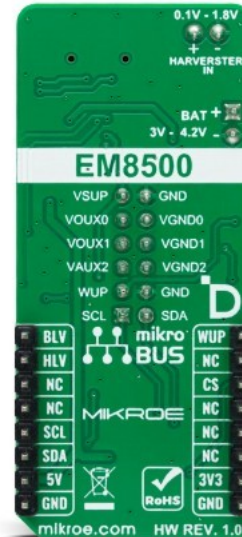


Solar Energy 2 Click



PID: MIKROE-5594

Solar Energy 2 Click is a compact add-on board that can recharge a battery by harvesting the solar power of the Sun or by other means. This board features the [EM8500](#), a power management controller with an energy harvesting interface from EM Microelectronic. The controller is specifically designed for efficient harvesting over various DC sources such as photovoltaic (solar) or thermal electric generators (TEG). It can recharge the connected LiPo battery or supercapacitor (or even a conventional capacitor). In addition, the EM8500 can use the same battery as a power source for powering the connected system. This Click board™ makes the perfect solution for powering wireless sensor networks, environmental monitoring devices, portable and wearable health monitoring devices, battery operating platforms, and similar low-power self-sustained devices.

Solar Energy 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.

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,Solar Charger
Applications	Can be used for powering wireless sensor networks, environmental monitoring devices, portable and wearable health monitoring devices, battery operating platforms, and similar low-power self-sustained devices
On-board modules	EM8500 - power management controller with an energy harvesting interface from EM Microelectronic
Key Features	Variety of DC harvesting sources including thermal electric generators (TEG) or photovoltaic (solar), sources in the μ W to mW range, flexible operation with primary cell battery, gold capacitors, and supercapacitors, auxiliary voltage output, programmable thresholds, onboard EEPROM, and more
Interface	I2C
ClickID	Yes
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

[Solar Energy 2 click example on Libstock](#)

[Solar Energy 2 click schematic](#)

[Solar Energy 2 click 2D and 3D files](#)

[PCA9306 datasheet](#)

[EM8500 datasheet](#)

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