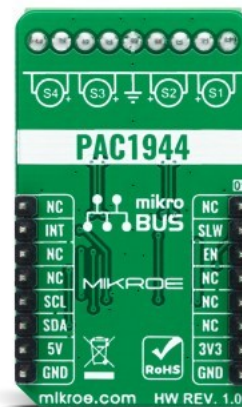


## PAC1944 Click



PID: MIKROE-4478

**PAC1944 Click** is a compact add-on board that contains an energy monitoring solution. This board features the PAC1944, a multi-channel DC power/energy monitor from Microchip Technology. It uses real-time calibration to minimize offset and gain errors with no input filters required for this device. One major feature of the PAC1944 design is a set of digital comparators that allows the user to detect over/under voltage, over/undercurrent, and overpower against user-programmed limits for each channel and generate an alert when the threshold is exceeded. This Click board™ performs power calculations and energy accumulation, enabling energy monitoring with integration periods up to one year or longer.

PAC1944 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	Measurements
Applications	This Click board™ performs power calculations and energy accumulation, enabling energy monitoring with integration periods up to one year or longer.
On-board modules	PAC1944 - four-channel, bidirectional, high-side current-sensing solution with precision voltage measurement capabilities, DSP for power calculation and a power accumulator from Microchip Technology
Key Features	High-side current monitor, real-time auto-calibration of offset and gain errors for voltage and current, 1% power measurement accuracy over a wide dynamic range, alert feature, and more.
Interface	I2C
ClickID	No
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V or 5V

## Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

## Downloads

[PAC1944 click 2D and 3D files](#)

[PAC1944 datasheet](#)

[PAC1944 click schematic](#)

[PAC1944 click example on Libstock](#)

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