

Time-saving embedded tools

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# Current 6 Click





#### PID: MIKROE-4914

**Current 6 Click** is a compact add-on board providing a precise and accurate current sensing solution. This board features the MAX40080, a fast-response bi-directional current-sense amplifier from Analog Devices. The device features ultra-low 5uV input offset voltage, very-low 0.2% gain error, and includes an analog-to-digital converter with programmable sample rate and 12-bit resolution featuring I2C compatible interface. It also features a wake-up current-threshold and auto-shutdown mode when the I2C is inactive, both designed to minimize power consumption. The current-shunt monitor can measure voltage signals on common-mode voltages ranging from -0.1V (ground sensing) to 36V, independent of the supply voltage. This Click board<sup>™</sup> delivers higher performance to industrial control and automation applications, load and power supplies monitoring, telecom equipment, and many more.

Current 6 Click is supported by a <u>mikroSDK</u> compliant library, which includes functions that simplify software development. This <u>Click board</u> comes as a fully tested product, ready to be used on a system equipped with the <u>mikroBUS</u> 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. OHSA5 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).



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## Specifications

Туре	Current sensor,Measurements
Applications	Can be used for industrial control and automation applications, load and power supplies monitoring, telecom equipment, and many more
On-board modules	MAX40080 - high-precision, fast sample-rate digital current-sense amplifier from Analog Devices
Key Features	Wide input common-mode range up to 36V, I2C interface with smart modes, low power consumption, bi-directional current sensing, alert interrupt, and more
Interface	12C
ClickID	No
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V or 5V,External

### Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board<sup>™</sup> Catalog

Click boards<sup>™</sup>

### **Downloads**

Current 6 click example on Libstock

MAX40080 datasheet

Current 6 click 2D and 3D files

Current 6 click schematic

LTC4301L datasheet

ADP151 datasheet

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