

Time-saving embedded tools

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# **Current Limit Click**





#### PID: MIKROE-4271

**Current Limit Click** is a compact add-on board that contains a low-voltage, P-channel MOSFET power switch intended for high-side load switching applications. This board features the MAX890L, a low-resistance power switch with the adjustable, accurate current limit system, and thermal shutdown from Analog Devices. Its internal current-limiting circuitry protects the input supply against overload, while thermal protection limits power dissipation. The maximum current limit is 1.2A and can be programmed through a digital potentiometer MAX5401. The quiescent supply current has a low value of  $10\mu$ A in the active state, while in its off state the supply current decreases to  $0.1\mu$ A. This Click board<sup>TM</sup> is suitable for applications in some portable equipment, access bus slots, or with power supplies, protecting them in cases of a short circuit or other overload conditions.

Current Limit Click is supported by a mikroSDK compliant library, which includes functions that simplify software development. This Click board<sup>m</sup> comes as a fully tested product, ready to be used on a system equipped with the mikroBUS<sup>m</sup> 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).



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## Specifications

Туре	Power Switch
Applications	Can be used for applications in some portable equipment, access bus slots, or with power supplies, protecting them in cases of a short circuit or other overload conditions.
On-board modules	Current Limit Click is based on the MAX890L, a high-side low-resistance P-channel switch with the adjustable, accurate current limit system, and thermal shutdown from Maxim Integrated.
Key Features	Low power consumption, programmable current limit, thermal shutdown, fault indicator output, low quiescent current, and more.
Interface	SPI
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 Limit click example on Libstock

MAX890L datasheet

MAX5401 datasheet

Current Limit click 2D and 3D files

Current Limit click schematic

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