

eFuse 3 Click



PID: MIKROE-4630

eFuse 3 Click is a compact add-on board that contains an electronic eFuse. This board features the NIS6150, a resettable fuse that can significantly enhance the reliability of a USB application from both catastrophic and shutdown failures from ON Semiconductor. It is designed to buffer the load device from the excessive input voltage, which can damage sensitive circuits and protect the input side from reverse currents. It includes an over-voltage clamp circuit that limits the output voltage during transients but doesn't shut the unit down, allowing the load circuit to continue its operation. This Click board™ is suitable for automotive infotainment, overcurrent surge protection, and robust resettable fault protection.

eFuse 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	Power Switch
Applications	Can be used for automotive infotainment, overcurrent surge protection, and robust resettable fault protection.
On-board modules	NIS6150 - self-protected, resettable electronic fuse from ON Semiconductor MCP3551 - 22bit sigma-delta ADC from Microchip MCP1541 - 4.096V reference voltage from Microchip
Key Features	Integrated reverse current protection, adjustable current limit, current monitoring, increased efficiency, automotive qualified, and more.
Interface	SPI
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

[MCP3551 datasheet](#)

[MCP1541 datasheet](#)

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

[eFuse 3 Click schematic](#)

[NIS6150 datasheet](#)

[eFuse 3 click example on Libstock](#)

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