

Buck 19 Click



PID: MIKROE-5451

Buck 19 Click is a compact add-on board that steps down the voltage from its input (supply) to its output (load). This board features the STPD01, a programmable synchronous buck converter from STMicroelectronics, providing power supply in applications following USB power delivery specifications. The STPD01 provides the desired voltage levels required by USB power delivery systems (USB PD 3.0) via I2C serial interface up to 60W output power, more precisely voltages in the range of 3V to 20V with a step of 20mV minimum, and currents from 0.1A to 3A with a minimum in steps of 50mA. It also offers advanced protection features such as overvoltage, overcurrent, and overtemperature detections. This Click board™ is used to derive the required input voltage from a higher voltage source for AC adapters, USB hubs, USB-PD power distribution, and many more.

Buck 19 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	Buck
Applications	Can be used for AC adapters, USB hubs, USB-PD power distribution, and more
On-board modules	STPD01 - programmable synchronous buck converter from STMicroelectronics
Key Features	Wide input voltage range, internal power MOS synch rectification, configurable output voltage and current, embedded discharge function, I2C interface, protection features, and more
Interface	I2C
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V

Resources

[mikroBUS™](#)
[mikroSDK](#)
[Click board™ Catalog](#)
[Click Boards™](#)

Downloads

[Buck 19 click example on Libstock](#)
[STPD01 datasheet](#)
[Buck 19 click 2D and 3D files](#)
[Buck 19 click schematic](#)

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