

Buck 12 Click



PID: MIKROE-3652

Buck 12 Click is a high-efficiency step-down converter which provides 3.3V on its output, derived from the connected power supply voltage, in the range from 4.2V to 18V. Buck 12 click is based on the MPQ8632, a highly efficient DC-DC step-down converter. In addition, Buck 12 click offers monitoring the stability of the input and output voltage by employing an additional A/D converter circuit. Due to its high efficiency, MPQ8632 allows the Click board™ to easily deliver up to 4A of current. It features a package which enables a low noise performance, high efficiency, and very compact size, while maintaining compability with higher current ICs from the family.

Buck 12 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	It can be used for a wide range of applications that require 3.3V, including field embedded applications, sensors, PLC modules, video surveillance systems, and similar applications that require step-down voltage conversion.
On-board modules	MPQ8632, a synchronous step-down converter, from MPS; MCP3202, a Dual Channel 12-Bit A/D Converter from Microchip.
Key Features	Low power dissipation due to high efficiency, over-current, under-voltage, and thermal protection, wide range for the input supply voltage, ADC for measuring the output voltage accuracy, etc.
Interface	SPI
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	5V

Resources

[mikroBUS™ Standard specification](#)

[LibStock: mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™ Standard Page](#)

Downloads

[Buck 12 click example on Libstock](#)

[Buck 12 click 2D and 3D files](#)

[MPQ8632 datasheet](#)

[Buck 12 click schematic](#)

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