

Buck & Boost Click



PID: MIKROE-4354

Buck & Boost Click is a compact add-on board that contains a configurable power management device. This board features the MIC7401, a highly-integrated power-management IC featuring five synchronous buck regulators, one boost regulator, and a high-speed I2C interface with an internal EEPROM memory from Microchip. The MIC7401 offers two distinct modes of operation (Standby and Normal) and includes a global enable pin to shut down the device for additional power savings. Some features of this Click board™ like an energy-optimized solution, flexibility, and high-performance make it an excellent choice for portable handheld and infotainment applications.

Buck & Boost 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-Boost
Applications	Can be used for portable handheld and infotainment applications.
On-board modules	Buck & Boost Click is based on the MIC7401, a powerful highly-integrated configurable power management (PMIC) featuring buck and boost regulators and a high-speed I2C interface with an internal EEPROM memory and micro-power shutdown function from Microchip.
Key Features	High-density five buck channels, one independent boost channel, 93% peak efficiency, fast transient response, short-to-ground fault detection, and more.
Interface	I2C
ClickID	No
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	5V, External

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

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

[MIC7401 datasheet](#)

[Buck & Boost click example on Libstock](#)

[Buck & Boost click schematic](#)

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