

Time-saving embedded tools

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Step Down 5 Click





PID: MIKROE-5572

Step Down 5 Click is a compact add-on board that converts a higher voltage into a lower voltage level. This board features the TPS628510, a high-efficiency, easy-to-use, synchronous step-down DC/DC converter from Texas Instruments. The TPS628510 can provide up to 500mA output current with an input voltage ranging from 2.7V to 6V, specifically designed for applications where high efficiency is crucial. Its switching frequency is internally fixed at 2.25MHz, can select forced-PWM or PWM/PFM mode of operation, has selectable output voltage from 0.6V to 5.5V set via I2C-configurable digital potentiometer, and a Power Good signal to indicate stabilized output voltage. This Click board[™] is suitable for power conversion solutions in automation and control applications, industrial sensors, test and measurement equipment, portable low-power devices, and more.

Step Down 5 Click is supported by a <u>mikroSDK</u> compliant library, which includes functions that simplify software development. This <u>Click board</u> comes as a fully tested product, ready to be used on a system equipped with the <u>mikroBUS</u> 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	Buck
Applications	Can be used for power conversion solutions in automation and control applications, industrial sensors, test and measurement equipment, portable low-power devices, and more
On-board modules	TPS628510 - synchronous step-down converter from Texas Instruments
Key Features	Based on a peak current mode control topology, output current up to 0.5A, selectable output voltage via digital potentiometer, high accuracy and efficiency, fixed switching frequency, forced PWM or PWM/PFM operation, power good indicatior, and more
Interface	I2C,PWM
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V or 5V

Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board[™] Catalog

Click Boards[™]

Downloads

Step Down 5 click example on Libstock

MCP4661 datasheet

TPS628510 datasheet

Step Down 5 click 2D and 3D files

Step Down 5 click schematic

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