

Time-saving embedded tools

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# LDO Click



### PID: MIKROE-5645

**LDO Click** is a compact add-on board designed to regulate the output voltage of a power supply to a lower level with a very low dropout voltage. This board features the TPS7A83A, a low-noise, low-dropout linear regulator (LDO) from Texas Instruments capable of sourcing 2A with only 200mV of maximum dropout. The TPS7A8300A has a pin-programmable output voltage from 0.8V-3.95V with a 50mV resolution, or it can be adjustable from 0.8V-5.2V using an external resistor divider. The combination of low noise, high PSRR, and high output current capability makes this Click board<sup>™</sup> an excellent choice to power noise-sensitive components such as serializer and deserializer, ADCs, DACs, and RF components because the high performance of the TPS7A83A limits power-supply-generated phase noise and clock jitter.

LDO Click is supported by a <u>mikroSDK</u> compliant library, which includes functions that simplify software development. This <u>Click board</u>  $\stackrel{\text{m}}{\longrightarrow}$  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,Linear
Applications	Can be used to power noise-sensitive components such as serializer and deserializer, ADCs, DACs, and RF components
On-board modules	TPS7A83A - low-dropout linear regulator from Texas Instruments
Key Features	High accuracy, low output voltage noise, wide input voltage range, pin-programmable and adjustable output voltage, excellent load transient response, bias supply to improve performance, and more
Interface	12C
ClickID	Yes
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V

### Resources

<u>mikroBUS</u>™

mikroSDK

Click board<sup>™</sup> Catalog

Click Boards<sup>™</sup>

<u>ClickID</u>

#### Downloads

LDO click example on Libstock

LDO click schematic

LDO click 2D and 3D files

TPS7A83A datasheet

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