

LED Driver 12 Click



PID: MIKROE-4977

LED Driver 12 Click is a compact add-on board that simplifies the control of multiple LEDs. This board features the [PCA9532](#), a 16-bit I2C-configurable I/O expander optimized for dimming LEDs in 256 discrete Red/Green/Blue (RGB) steps from [NXP Semiconductors](#). The PCA9532 offers high efficiency, supporting up to 16 LED channels and delivering a maximum of up to 25mA of LED current per channel. It contains an internal oscillator with two user-programmable blink rates and duty cycles coupled to the output PWM. Any bits not used for controlling the LEDs can be used for GPIO expansion, which provides a simple solution when additional I/O is needed for some sensors, push-buttons, or alarm monitoring. This Click board™ is suitable for color mixing and backlight application for amusement products, LED status signalization, home automation projects, and many more.

LED Driver 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	LED Drivers
Applications	Can be used for color mixing and backlight application for amusement products, LED status signalization, home automation projects, and many more
On-board modules	PCA9532 - 16-bit I2C-configurable LED dimmer from NXP Semiconductors
Key Features	Low power consumption, 16 channels, ON/OFF LED channels control, two selectable fully programmable blink rates, supports hot insertion, drive LEDs to 25mA, and more
Interface	I2C
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V

Resources

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

Downloads

[LED Driver 12 click example on Libstock](#)
[PCA9532 datasheet](#)
[LED Driver 12 click schematic](#)
[LED Driver 12 click 2D and 3D files](#)

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