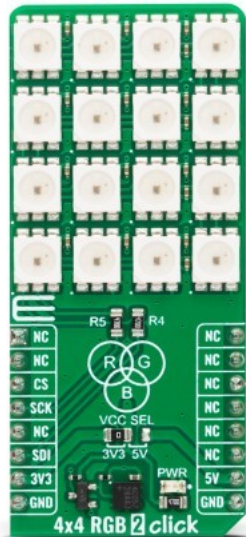# 4x4 RGB 2 Click

PID: MIKROE-5661

4x4 RGB 2 Click is a compact add-on board that contains a matrix of 16 "intelligent" RGB LEDs, forming a 4x4 display screen. This board features 16 IN-PC55TBTRGB, 5x5mm RGB LEDs with an integrated IC from Inolux. The LEDs feature an 8-bit color control in 256 steps (256-level greyscale) and a 5-bit brightness control in 32 steps. The intelligent LEDs are cascaded (daisy-chained); thus, every one of them can communicate with the host MCU using the same data lines. This Click board™ makes the perfect solution for the development of LED-shaped screens, color LED string lights, scene lighting, and more.

4x4 RGB 2 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.

Specifications

Type	LED Matrix
Applications	Can be used for the development of LED-shaped screens, color LED string light, scene lighting, and more
On-board modules	IN-PC55TBTRGB - RGB LED with an integrated IC from Inolux
Key Features	Intelligent LEDs, high brightness, built-in support uninterrupted oscillation PWM output, 8-bit (256) color, 5-bit (32) brightness, double data transmission, constant current drive for all channels, self-detection function-specific signal, and more
Interface	SPI
ClickID	Yes
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™](#)

[ClickID](#)

Downloads

[4x4 RGB 2 click example on Libstock](#)

[4x4 RGB 2 click 2D and 3D files](#)

[IN-PC55TBTRGB datasheet](#)

[4x4 RGB 2 click schematic](#)

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).