

Color 14 Click



PID: MIKROE-4793

Color 14 Click is a compact add-on board that represents an accurate color sensing solution. This board features the APDS-9151, an integrated RGB, ambient light sensing, IR LED, and a complete proximity detection system from Broadcom Limited. This Click board™, an I2C configurable color sensor, uses four individual red, green, blue, and IR (RGB+IR) channels in a specially designed matrix arrangement, allowing optimal angular response and accurate RGB spectral response with high lux accuracy over various light sources. The proximity detection feature operates well from bright sunlight to dark rooms. This Click board™ is suitable for accurately measuring the subtlest changes in light, ambient light, and proximity detection allowing for maximum flexibility in applications.

Color 14 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	Color Sensing,Optical
Applications	Can be used for accurately measuring the subtlest changes in light, ambient light, and proximity detection allowing for maximum flexibility in applications
On-board modules	APDS-9151 - digital I2C compatible interface ambient light sensor (ALS), RGB, and proximity sensor with IR LED from Broadcom Limited
Key Features	Low power consumption, high precision, individual channels for red, green, blue, and infrared, approximates human eye response with green channel, light output proportional to light intensity, works well under different light source conditions, low light sensitivity, programmable interrupt, and more
Interface	I2C
ClickID	No
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V or 5V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

[APDS-9151 datasheet](#)

[SN74LVC1T45 datasheet](#)

[Color 14 click 2D and 3D files](#)

[Color 14 click schematic](#)

[PCA9306 datasheet](#)

[Color 14 click example on Libstock](#)

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