

Time-saving embedded tools

MIKROELEKTRONIKA D.O.O, Batajnički drum 23, 11000 Belgrade, Serbia VAT: SR105917343 Registration No. 20490918 Phone: + 381 11 78 57 600 Fax: + 381 11 63 09 644 E-mail: office@mikroe.com www.mikroe.com

# Color 15 Click





#### PID: MIKROE-5121

Color 15 Click is a compact add-on board representing an accurate color sensing solution. This board features the CLS-16D24-44-DF8/TR8, a low power, high sensitivity, color light sensor from Everlight Electronics. This Click board<sup>™</sup>, with an I2C configurable color sensor, senses red, green, blue, white (RGBW), and infrared light and converts them to digital values. The RGBW sensor is designed to reject IR in light sources allowing the device to operate in environments from sunlight to dark rooms. The integrating ADC rejects 50Hz and 60Hz flickers caused by artificial light sources. This Click board<sup>™</sup> is suitable for automatic residential and commercial lighting management, contrast enhancement, detection of ambient for backlight control, and more.

Color 15 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             | Color Sensing,Optical  |
|------------------|--|
| Applications     | Can be used for automatic residential and<br>commercial lighting management, contrast<br>enhancement, detection of ambient for<br>backlight control, and more  |
| On-board modules | CLS-16D24-44-DF8/TR8 - color light sensor<br>from Everlight Electronics  |
| Key Features     | Low power consumption, parallel output for<br>red, green, blue, white and infrared, high<br>resolution and sensitivity, works well under<br>different light source conditions,<br>programmable interrupt, and more |
| Interface        | 12C  |
| ClickID          | No   |
| Compatibility    | mikroBUS   |
| Click board size | S (28.6 x 25.4 mm)   |
| Input Voltage    | 3.3V or 5V   |

### Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board<sup>™</sup> Catalog

Click boards<sup>™</sup>

### **Downloads**

Color 15 click example on Libstock

PCA9306 datasheet

CLS-16D24-44-DF8\_TR8 datasheet

MAX8511 datasheet

Color 15 click 2D and 3D files

Color 15 click schematic

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