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## Color 4 Click





PID: MIKROE-2220

**Color 4 Click** is a compact add-on board providing an accurate color-sensing solution. This board features the <u>VEML6040</u>, a 16-bit RGBW color sensor offering spectral response through a compatible I2C interface from <u>Vishay Semiconductors</u>. The VEML6040 is based on the Filtron<sup>™</sup> technology achieving the closest ambient light spectral sensitivity to real-human eye responses. Alongside the color sensor, this IC also incorporates a signal conditioning circuit consisting of photodiodes, amplifiers, and A/D circuits placed into a single chip using the CMOS process. It provides a selectable measurement range up to 16.496lx with the highest sensitivity of 0.007865lx/step. This Click board <sup>™</sup> is suitable for color sensing with maximum flexibility in industrial, mechanical, and consumer applications.

Color 4 Click is supported by a  $\underline{\mathsf{mikroSDK}}$  compliant library, which includes functions that simplify software development. This  $\underline{\mathsf{Click}}$  board  $\underline{\mathsf{mikroBUS}}^{\mathsf{m}}$  comes as a fully tested product, ready to be used on a system equipped with the  $\underline{\mathsf{mikroBUS}}^{\mathsf{m}}$  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.







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## **Specifications**

Туре	Color Sensing
Applications	Can be used for industrial, mechanical, and consumer applications
On-board modules	VEML6040 - advanced RGB/ambient light sensor from Vishay Semiconductors
Key Features	Integrated RGBW and signal conditioning, Filtron™ technology provides real-human eye responses, supports low transmittance (dark) lens, high resolution, selectable detection range, high sensitivity, I2C interface, and more
Interface	I2C
ClickID	Yes
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V

## Resources

<u>mikroBUS™</u>

**mikroSDK** 

Click board™ Catalog

Click boards™

**ClickID** 

## **Downloads**

Color 4 click example on Libstock

VEML6040 datasheet

Color 4 click 2D and 3D files

Color 4 click schematic

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