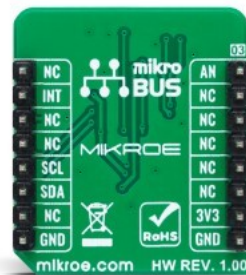


Spectrometer 2 Click



PID: MIKROE-5167

Spectrometer 2 Click is a compact add-on board that collects light waves. This board features the VD6283TX, a color sensor with advanced light flicker extraction from STMicroelectronics. The VD6283TX performs fast and accurate light measurements thanks to an individual ADC and a readout for each color channel - red, green, blue, IR, clear, and visible. It uses hybrid color filters with precise responses allowing accurate computation of the correlated color temperature (CCT) and Lux information. Its patented architecture and a high-performance photodiode design can also extract light-flickering frequencies to avoid “banding effects” or check that they are safe for the human eye. This Click board™ is suitable for screen brightness adjustment and white balance color assistance, lux and CCT measurement, or light frequency extraction for flicker correction assistance.

Spectrometer 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.

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	Optical
Applications	Can be used for screen brightness adjustment and white balance color assistance, lux and CCT measurement, or light frequency extraction for flicker correction assistance
On-board modules	VD6283TX - hybrid filter multispectral sensor with light flicker engine from STMicroelectronics
Key Features	Advanced hybrid filters with high photocount response, parallel sensing of all six channels, innovative readout architecture to extract AC light flicker signal, from 100Hz to 2kHz frequency detection - sine or square wave, low power consumption, and more
Interface	Analog,I2C
ClickID	No
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

[Spectrometer 2 click example on Libstock](#)

[VD6283TX datasheet.](#)

[Spectrometer 2 click 2D and 3D files](#)

[Spectrometer 2 click schematic](#)

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