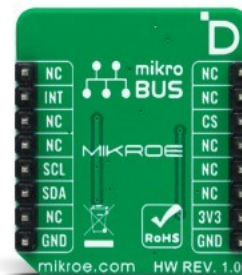# Ambient 21 Click

PID: MIKROE-5529

Ambient 21 Click is a compact add-on board used to measure the amount of the present ambient light. This board features ams AG's TSL2591, a very-high sensitivity light-to-digital converter that transforms light intensity to a digital signal output capable of the direct I2C interface. It combines one broadband photodiode (visible plus infrared) and one infrared-responding photodiode on a single CMOS integrated circuit, providing a flexible and wide operating range of up to 88klx with an excellent responsivity close to the human eyes' response. The TSL2591 also has a programmable interrupt function and an integrated filter to reduce unwanted IR signals from the environment, improving lux accuracy across various light sources. This Click board™ is the most suitable for obtaining ambient light data in applications such as automatic residential and commercial lighting management.

Ambient 21 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	Optical
Applications	Can be used for obtaining ambient light data in applications such as automatic residential and commercial lighting management
On-board modules	TSL2591 - light-to-digital converter from ams AG
Key Features	Low power consumption, corresponds to a dark window because of high sensitivity, close responsivity to the human eye, I2C interface, wide and flexible operational range, stable performance over temperature, and more
Interface	I2C
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

Ambient 21 click 2D and 3D files

TSL2591 datasheet

Ambient 21 click schematic

Ambient 21 click example on Libstock