

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

Ambient 15 Click





PID: MIKROE-4967

Ambient 15 Click is a compact add-on board used to measure the amount of the present ambient light. This board features the TSL2584TSV, a very-high sensitivity light-to-digital converter with an I2C interface that transforms light intensity into a digital output signal from AMS-AG. The TSL2584TSV's near-photopic response produces a highly accurate lux measurement up to 33klx even when mounted behind dark glass. Filtering out unwanted IR light enables the sensor to measure the ambient light more accurately, thus producing a nearphotopic response. It is designed to control the brightness in various applications based on ambient light availability, brightness for optimum visibility, and energy efficiency. Operation in a temperature range of -40°C to 85°C ensures stable operation under extreme conditions. This Click board[™] is the most suitable for obtaining ambient light data for adjusting brightness in applications that require power saving and better visibility.

Ambient 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	Optical
Applications	Can be used for obtaining ambient light data for adjusting brightness in applications that require power saving and better visibility
On-board modules	TSL2584TSV - high sensitivity light-to-digital converter that transforms light intensity into a digital output signal 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 with selectable slave address, wide illumination range, stable performance over temperature, and more
Interface	I2C
ClickID	No
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V

Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board[™] Catalog

Click boards™

Downloads

TSL2584TSV datasheet

Ambient 15 click 2D and 3D files

Ambient 15 click schematic

Ambient 15 click example on Libstock

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