

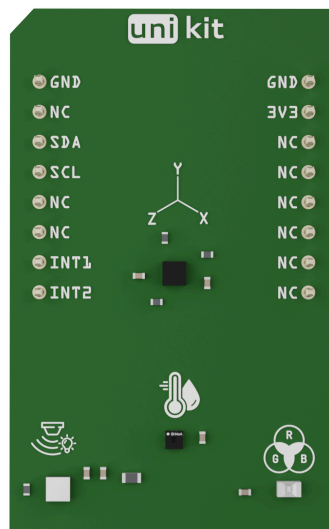
## Uni-Kit Breakout Board - Sensor - Light

**PID:** UKBB-0004

**Document Version:** UKBB-0004-10-06-25

Uni-kit Breakout Sensor is a compact add-on board for accuracy, high reliability, and long-term stability in humidity, temperature and ambient light measurements. This board features the VEML6030 from Vishay. This board makes the perfect solution for developing light sensing applications required for home and industrial automation

Uni-Kit Breakout Board Sensor is supported by the uni-SDK library, which includes functions that simplify software development.



**Figure:** Uni-Kit Breakout Board Sensor

## HOW DOES IT WORK?

Uni-kit Breakout Sensor has sensor onboard VEML6030, an ambient light sensor.

The sensor communicates with the host MCU using an I2C interface over the mikroBUS™ socket, with communication speeds of up to 1 MHz.

This Breakout Board can operate with 3.3 V logic voltage. However, the Breakout Board comes equipped with a library containing easy-to-use functions and an example code that can be used, as a reference, for further development.

## SPECIFICATIONS

<b>Type</b>	Ambient Light
<b>Applications</b>	Can be used for the development of light sensing applications in the Smart Home or Smart Offices for optimisation of the power consumption.
<b>On-board modules</b>	VEML6030, an ambient light sensor.
<b>Interface</b>	I2C
<b>Compatibility</b>	mikroBUS™
<b>Board size</b>	M (42.9 x 25.4 mm)
<b>Input Voltage</b>	3.3V

## PINOUT DIAGRAM

This table shows how the pinout on the Uni-Kit Breakout Board Sensor corresponds to the pinout on the mikroBUS™ socket (the latter shown in the two middle columns).

Notes	Pin					Pin	Notes
	NC	1	AN	PWM	16	NC	
Reset	<b>RST</b>	2	RST	INT	15	<b>INT</b>	Interrupt
	NC	3	CS	RX	14	NC	
	NC	4	SCK	TX	13	NC	
	NC	5	MISO	SCL	12	<b>SCL</b>	I2C Clock
	NC	6	MOSI	SDA	11	<b>SDA</b>	I2C Data
Power Supply	<b>3.3V</b>	7	3.3V	5V	10	<b>5V</b>	Power Supply
Ground	<b>GND</b>	8	GND	GND	9	<b>GND</b>	Ground

## ELECTRICAL SPECIFICATIONS

Description	Min	Typ	Max	Unit
Supply Voltage	-	3.3	-	V

## **SOFTWARE SUPPORT**

A library for the Uni-Kit Breakout Board is available as a demo application (example). The demo can run on all the Uni-Kit development boards.