

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

# **Environment 3 Click**





### PID: MIKROE-4893

**Environment 3 Click** is a compact add-on board that contains a four-in-one environmental measurement solution. This board features BME688, a first gas sensor with Artificial Intelligence (AI), and integrated high-linearity/high-accuracy pressure, humidity, and temperature sensors from <u>Bosch Sensortec</u>. The <u>BME688</u> can detect Volatile Organic Compounds (VOCs), Volatile Sulfur Compounds (VSCs), and other gases such as carbon monoxide and hydrogen in part per billion (ppb) range. It provides absolute temperature accuracy, typical of ±1°C, and best performance when operated within the pressure, temperature, and humidity range of 300-110hPa, 0-65°C, and 10-90%RH. Also, it comes with a configurable host interface that supports both SPI and I2C serial communication. This Click board<sup>™</sup> is suitable for indoor and outdoor air quality measurement, detection of unusual gases and smells, and various temperature and humidity-related applications.

Environment 3 Click is supported by a <u>mikroSDK</u> compliant library, which includes functions that simplify software development. This <u>Click board</u><sup>m</sup> comes as a fully tested product, ready to be used on a system equipped with the <u>mikroBUS</u><sup>m</sup> 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).



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

## Specifications

Туре	Environmental
Applications	Can be used for indoor and outdoor air quality measurement, detection of unusual gases and smells, and various temperature and humidity- related applications
On-board modules	BME688 - air quality MEMS sensor that combines gas, humidity, temperature, and barometric pressure sensing from Bosch Sensortech
Key Features	Four-in-one environmental measurement solution, wide-ranging gas detection, high- linearity, high-accuracy and precision, low power consumption, configurable host interface, and more
Interface	I2C,SPI
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<sup>™</sup> Catalog

Click Boards™

### **Downloads**

Environment 3 click example on Libstock

Environment 3 click schematic

BME688 datasheet

Environment 3 click 2D and 3D files

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).