

Heart Rate 11 Click



PID: MIKROE-5170

Heart Rate 11 Click is a compact add-on board suitable for heart rate monitoring applications. This board features the [OB1203](#), a multi-channel light sensor (LS/CS), a proximity sensor (PS), and a photoplethysmography sensor (PPG) from [Renesas](#). It can be configured as an ambient light sensor to measure ambient light similar to the human eye experience or as an RGB color sensor. The OB1203 establishes communication to and from the module entirely through a standard I2C compatible interface and has a fully integrated biosensor for reflective photoplethysmography. With the appropriate algorithm, this Click board™ can determine human heart rate (HR), oxygen saturation (SpO2), respiration rate, and heart rate variability (a measure of stress).

Heart Rate 11 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	Biometrics,Heart Rate
Applications	This Click board™ can determine human heart rate (HR), oxygen saturation (SpO2), respiration rate, and heart rate variability (a measure of stress)
On-board modules	OB1203 - fully integrated all-in-one biosensor module that measures heart rate and blood oxygen levels from Renesas
Key Features	SpO2 measurement behind IR transmissive but visibly dark ink, high illuminance accuracy across various light sources, high sensitivity and resolution, low power consumption, object movement detection, and more
Interface	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

[Heart Rate 11 click example on Libstock](#)

[OB1203 datasheet](#)

[Heart Rate 11 click 2D and 3D files](#)

[Heart Rate 11 click schematic](#)

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