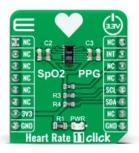


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Heart Rate 11 Click





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 $\underline{\mathsf{mikroSDK}}$ compliant library, which includes functions that simplify software development. This $\underline{\mathsf{Click}}\ \mathsf{board}^{\,\mathsf{TM}}$ comes as a fully tested product, ready to be used on a system equipped with the $\underline{\mathsf{mikroBUS}^{\,\mathsf{TM}}}$ 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.







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Specifications

Туре	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™

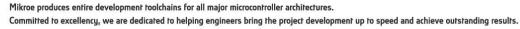
Downloads

Heart Rate 11 click example on Libstock

OB1203 datasheet

Heart Rate 11 click 2D and 3D files

Heart Rate 11 click schematic







health and safety management system.