

Heart Rate 10 Click



PID: MIKROE-4724

Heart Rate 10 Click is a compact add-on board suitable for heart rate monitoring applications. This board features the [MAX86916](#), an integrated optical sensor with applications in bio-sensing, proximity, and color from [Analog Devices](#). The module includes internal LEDs, photodetectors, and low-noise electronics with ambient-light-rejection circuitry and establishes communication to and from the module entirely through a standard I2C compatible interface. It operates on a 1.8V supply voltage with a possibility to be shut down through software with a near-zero standby current, allowing the power rails to remain powered at all times. This Click board™ is suitable for optical pulse oximetry and heart-rate detection applications.

Heart Rate 10 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	Can be used for optical pulse oximetry and heart-rate detection applications.
On-board modules	MAX86916 - multipurpose optical sensor with applications in Heart Rate (HR) monitoring and as a medical-grade pulse oximeter from Maxim Integrated
Key Features	Low power consumption, ultra-low shutdown current, optical-grade glass for long-term performance, reflective heart rate monitor, medical-grade pulse oximeter, bio-optical sensor platform, and more.
Interface	I2C
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V or 5V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

[Heart Rate 10 click 2D and 3D files](#)

[PCA9306 datasheet](#)

[MAX86916 datasheet](#)

[Heart Rate 10 click schematic](#)

[Heart Rate 10 click example on Libstock](#)

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).