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## **Heart Rate 2 Click**





PID: MIKROE-4037

**Heart Rate 2 Click** is an add-on board based on <u>MAXM86161</u> from <u>Analog Devices</u> a complete, integrated, optical data acquisition system, ideal for optical pulse oximetry and heart-rate detection applications. The optical readout has a low-noise signal conditioning analog front-end (AFE), including 19-bit ADC, an industry-lead ambient light cancellation (ALC) circuit, and a picket fence detect and replace algorithm. It also includes high-resolution optical readout signal processing channels with robust ambient light cancellation and high-current LED driver DACs to form a complete optical readout signal chain.

Heart Rate 2 Click board  $^{\text{\tiny TM}}$  is supported by a mikroSDK compliant library, which includes functions that simplify software development. This Click board  $^{\text{\tiny TM}}$  comes as a fully tested product, ready to be used on a system equipped with the mikroBUS  $^{\text{\tiny TM}}$  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.





health and safety management system.



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## **Specifications**

Туре	Biometrics,Heart Rate
Applications	Ideal solution for the development of various wearable health-related devices, Optimized for In-Ear Applications, Miniature Package for Mobile Applications
On-board modules	MAXM8616 - Single-Supply Integrated Optical Module for HR and SpO2 Measurement
Key Features	Complete Single-Channel Optical Data Acquisition System, Built-In Algorithm Further Enhances Rejection of Fast Ambient Transients, Optimized Architecture for Reflective Heart Rate and SpO2 Monitoring
Interface	I2C
ClickID	No
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V,5V

## Resources

<u>mikroBUS™</u>

**mikroSDK** 

Click board™ Catalog

Click Boards™

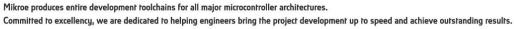
## **Downloads**

Heart Rate 2 click example on Libstock

Heart Rate 2 click 2D and 3D files

MAXM86161 datasheet

Heart Rate 2 click schematic







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