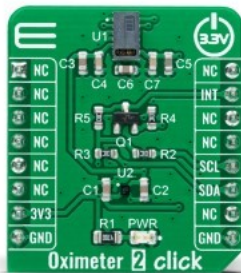


Oximeter 2 Click



PID: MIKROE-4292

Oximeter 2 Click is a compact add-on board suitable for measuring blood oxygen saturation. This board features the ADPD144RI, a PPG optical sensor for photoplethysmography detection of blood oxygenation from Analog Devices. It combines LED emitters and sensitive 4-channel photodiodes with a custom ASIC that provides optical isolation between the integrated LED emitters and the detection photodiodes to improve the signal-to-noise ratio (SNR). PPG detection of blood oxygenation is achieved by synchronous detection in red and infrared wavelengths. Synchronous measurement allows rejection of both DC and AC ambient light interference with low power consumption. This Click board™ makes it an excellent choice for applications such as optical pulse oximetry and health monitoring.

Oximeter 2 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 |
| Applications | Can be used for applications such as optical pulse oximetry and health monitoring. |
| On-board modules | ADPD144RI - highly integrated photometric front end optimized for photoplethysmography (PPG) detection of blood oxygenation from Analog Devices ADP160 - ultralow quiescent current linear regulator from Analog Devices |
| Key Features | Integrated optical components, fully integrated AFE, ADC, LED drivers, and timing core, low power consumption, designed for ultralow direct optical reflections, 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

[Oximeter 2 click 2D and 3D files](#)

[Oximeter 2 click schematic](#)

[ADPD144RI datasheet](#)

[ADP160 datasheet](#)

[Oximeter 2 click example on Libstock](#)

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