

# HEART RATE HAT

SKU:U118

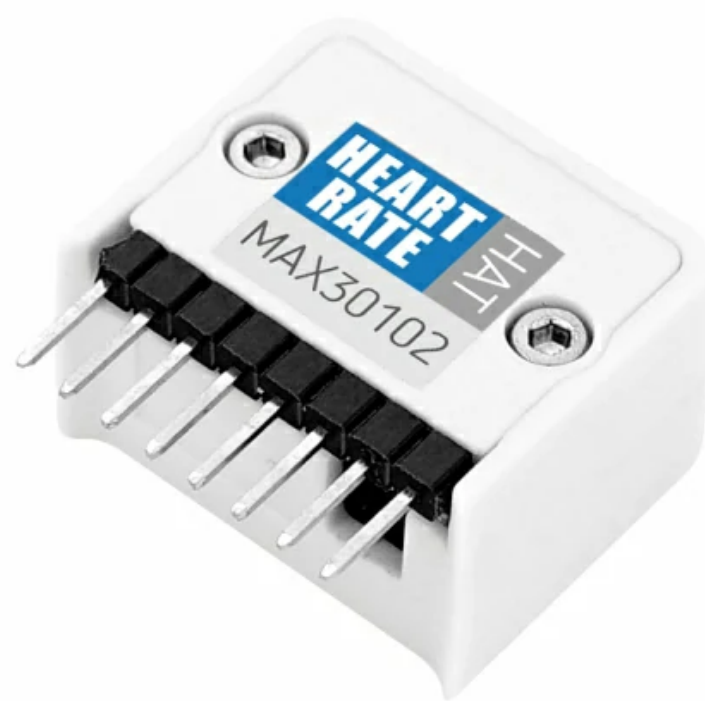
HAT  
HEART RATE



MAX30102

MAX30102  
ADDRESS: 0x57

I2C  
INTERFACE



## Description

**HEART RATE HAT** is a blood oxygen heart rate sensor. Integrate **MAX30102** to provide a complete pulse oximeter and heart rate sensor system solution. This is a non-pluggable blood oxygen heart rate sensor. The sensor uses I2C communication interface, internally integrates infrared light-emitting diodes, photodetectors, optical components and low-noise electronic equipment. A certain amount of ambient light suppression function can make the measurement results more accurate. .

**Instructions:** After the program is running, place your finger on the test area with a stable and fixed pressure.

## Product Features

- Heart rate monitor and pulse oximeter sensor
- LED reflective solutions
- Integrated protective glass, sturdy and durable performance
- Programmable sampling rate and LED current
- Fast data output capability
- High sampling rate
- Strong elasticity of motion artifacts
- High signal-to-noise ratio

## Include

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- 1x HEART RATE HAT
- 1x Double-sided tape

## Applications

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- Wearable device
- Heart rate blood oxygen collector
- Smart Medical

## Specification

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| Resources              | Parameter      |
|------------------------|----------------|
| Sensor model           | MAX30102       |
| Communication protocol | I2C: 0x57      |
| Operating Voltage      | 3.3V           |
| Net weight             | 5.1g           |
| Gross weight           | 12.7g          |
| Product Size           | 25*24*14mm     |
| Package Size           | 40*40*30mm     |
| Case Material          | Plastic ( PC ) |

## Related Link

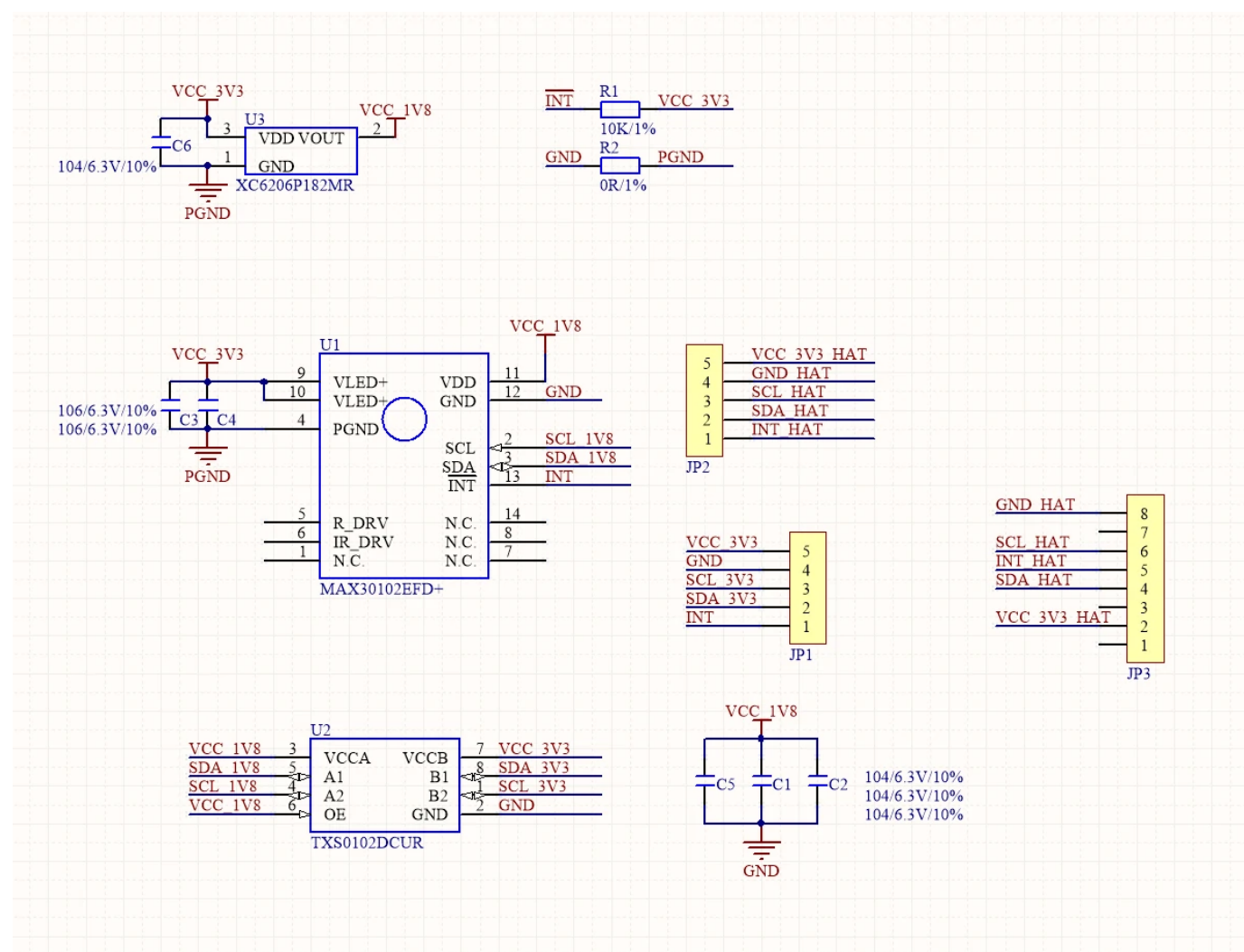
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- [Datasheet](#)
- [MAX30102](#)

## PinMap

|                |        |       |      |     |
|----------------|--------|-------|------|-----|
| M5StickC       | GPIO26 | GPIO0 | 3.3V | GND |
| HEART RATE HAT | SCL    | SDA   | 3.3V | GND |

## Schematic



## Example

### Arduino

- [Arduino Example Code / M5StickC Plus with HEART RATE HAT](#)

