Gravity MAX30102 Heart Rate & Oximeter Sensor

SEN0518

Product Overview

02-03-2023

For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

The Gravity MAX30102 Heart Rate and Oximeter Sensor from DFRobot integrate the Maxim MAX30102 chip and an MCU with heart rate and blood oxygen algorithm. The MAX30102 uses PPG (PhotoPlethysmoGraphy) to measure data. This is converted into heart rate and oximetry values when processed by the MCU. It is then output through I²C or UART, making the sensor easy to use and significantly reducing the resource occupation of the central controller.

Features

- Microcontroller with algorithm integrated
- Data can be read directly through the host computer

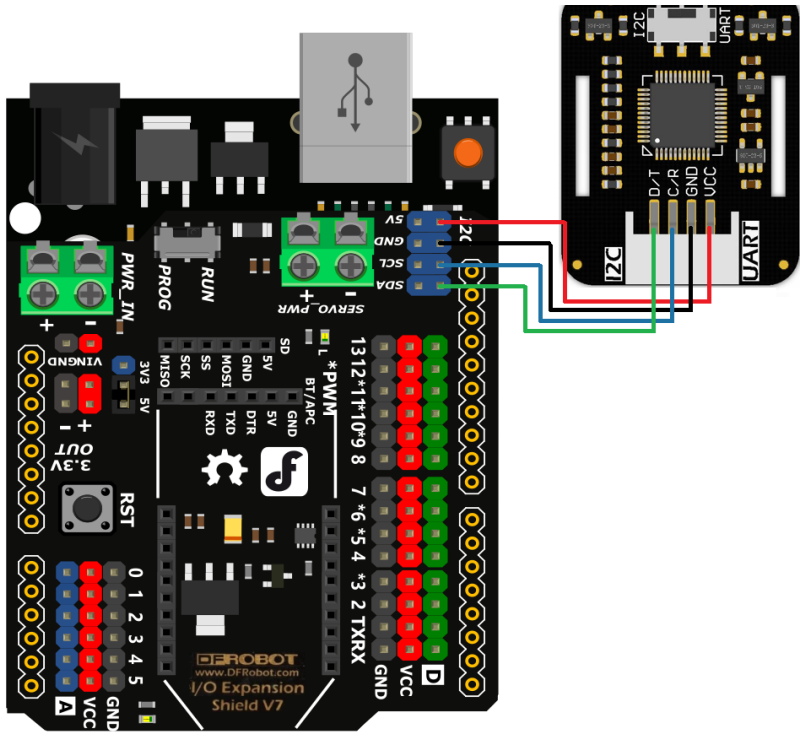
Specifications

- 3.3V/5V power supply voltage
- <15mA working current
- Communication Method:
  - I²C/UART
- I²C Address: 0x57
- 9600 serial port baud rate
- -40°C~85°C Operating temperature range
- Product Size:
  - 25.5mm × 32mm/0.98" × 1.26"

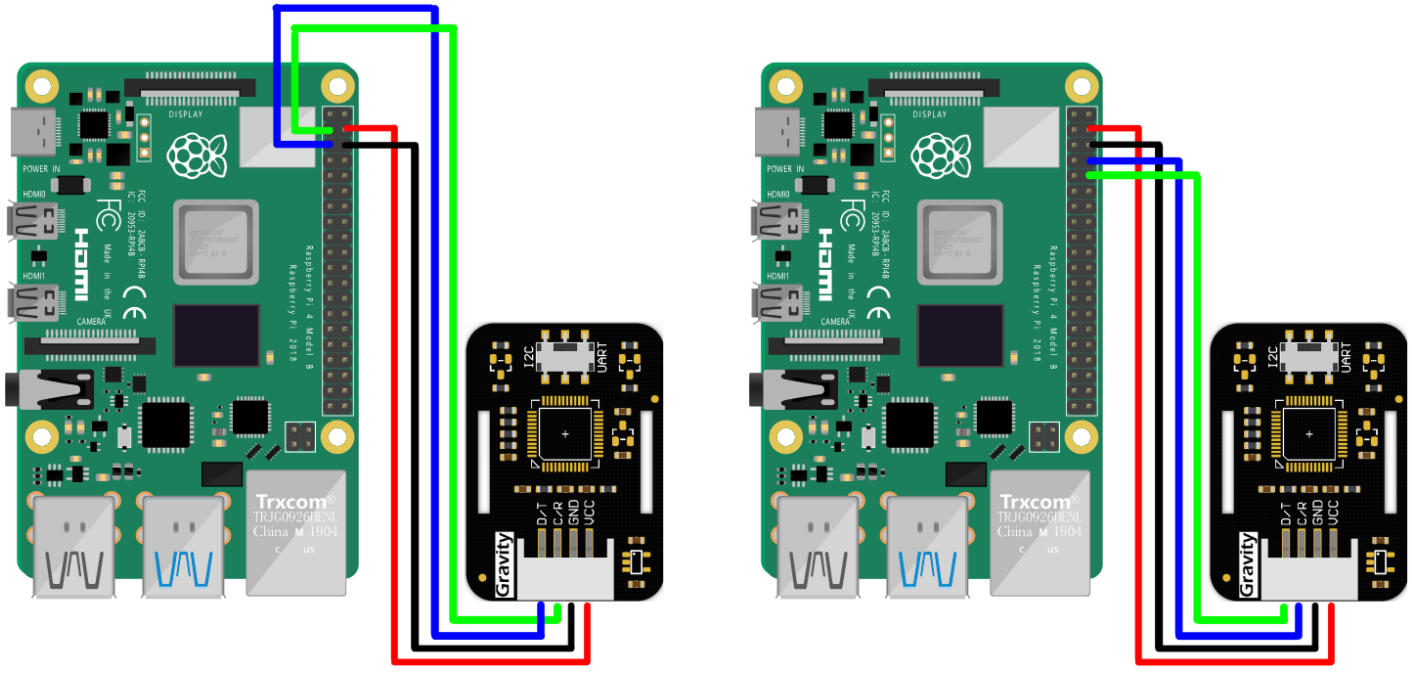
Kit Contents

- 1x Gravity: MAX30102 Heart Rate and Oximeter sensor
- 1x Gravity-4P I²C/UART sensor connector
- 1x Strap

Connection Diagrams



Connect with DFRduino UNO R3



Connect with Raspberry Pi

Applications

- Heart rate blood oxygen project
- Home heart rate oximeter
- Long-term heart rate and blood oxygen monitoring project

Mouser Part Number

View Part

To learn more, visit https://www.mouser.com/new/dfrobot/dfrobot-gravity-max30102-sensor/