HEART

Description

HEART is built using the **MAX30100** chipset.

MAX30100 is a complete pulse oximetry and heart-rate sensor system solution designed for the demanding requirements of wearable devices.

The MAX30100 provides very small total solution size without sacrificing optical or electrical performance. Minimal external hardware components are needed for integration into a wearable device.

- How do we use this Unit to test the heart rate ?

Put your finger on the detection area.

- What is the communication protocol between M5 core and this unit?

I2C(0x57).

Product Features

- Programmable Sample Rate and LED Current for Power Savings
- Ultra-Low Shutdown Current (0.7μA, typ)
- Advanced Functionality Improves Measurement Performance
- High Sample Rate Capability
- Fast Data Output Capability
- GROVE interface
- Software Develop platform: Arduino
- Two Lego-compatible holes

Include

- 1x HEART Unit
- 1x Grove Cable

Specification

Resources	Parameter
Communication protocol	I2C：0x57
Operating Voltage	1.8V-3.3V
Net weight	5g
Gross weight	18g
Product Size	32*24*8mm
Package Size	67*53*12mm

EasyLoader

EasyLoader is a concise and fast program writer, which has a built-in case program related to the product. It can be burned to the main control by simple steps to perform a series of function verification.

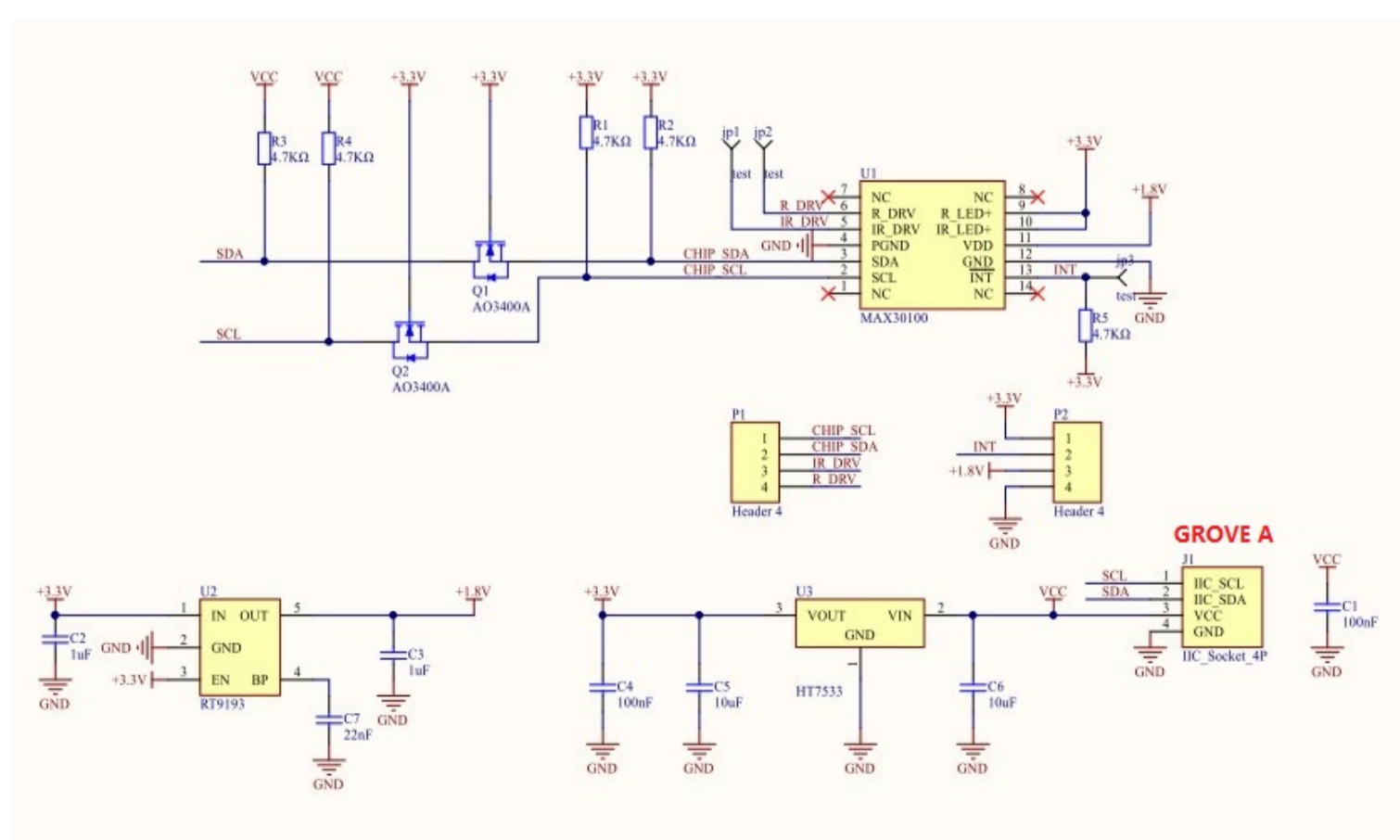Download Windows Version Easyloader   Download MacOS Version Easyloader

Description:
The screen displays the blood oxygen heart rate sensor detection value.

Related Link

○ **Datasheet**

   ○ MAX30100

   ○ MAX30100lib

Schematic

PinMap

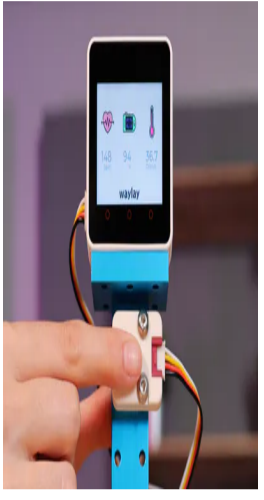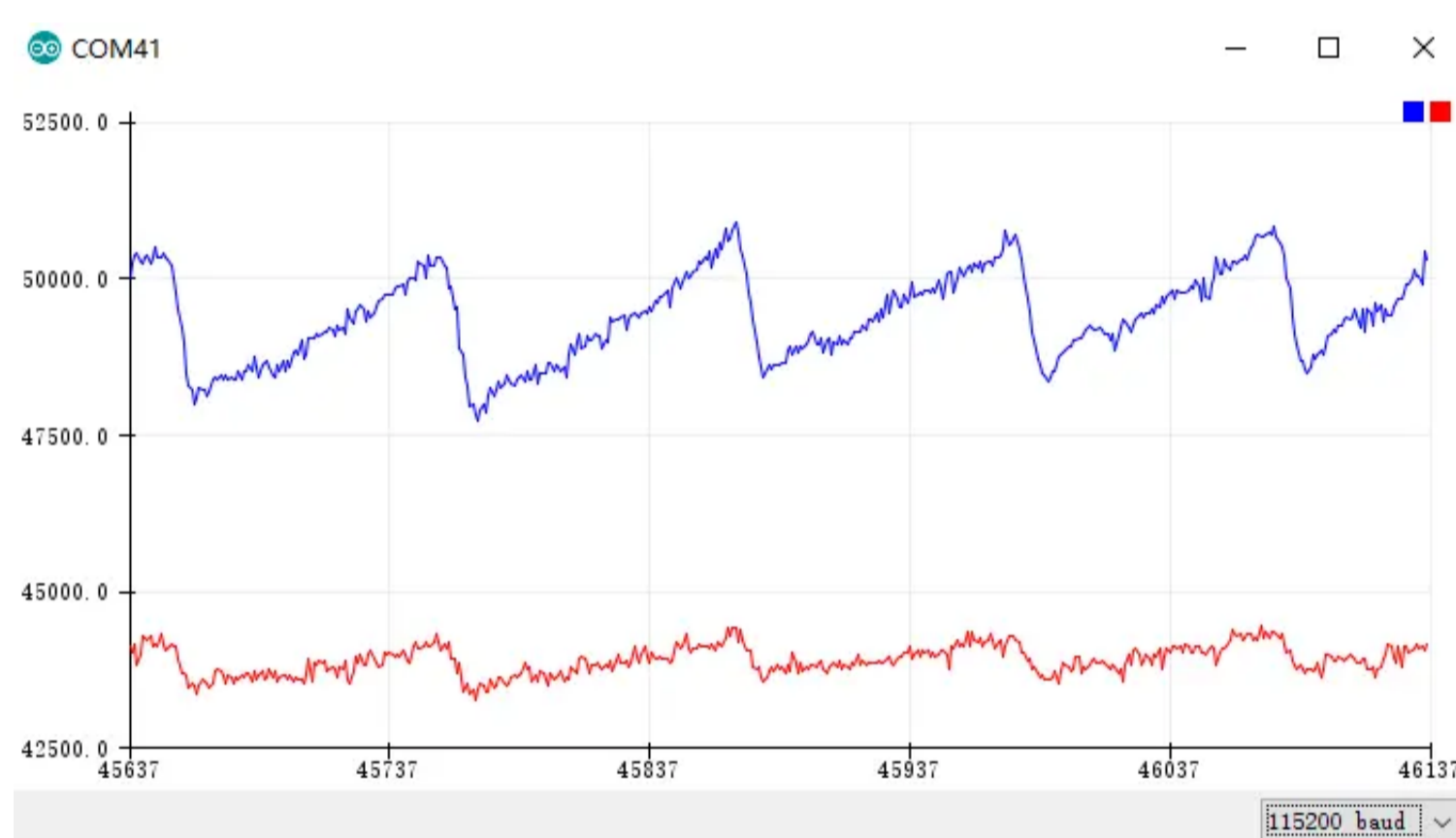| M5Core(GROVE A)	GPIO22	GPIO21	5V	GND
HEART Unit	SCL	SDA	5V	GND

Learn

Health monitor - Waylay IO
Health monitoring using the M5Stack Mini Heart Rate Unit and Non-Contact Infrared Thermometer Unit and the Waylay IO IoT platform.

Example

Arduino

To get the code, please click here

UIFlow

○ Click here to download the UIFlow example