



## Raspberry Pi 4 Model B (4 GB)

DEV-15447

★★★★☆ 3

[DESCRIPTION](#)[FEATURES](#)[DOCUMENTS](#)

- Broadcom BCM2711, quad-core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz
- 4GB LPDDR4-2400 SDRAM
- 2.4 GHz and 5.0 GHz IEEE 802.11b/g/n/ac wireless LAN, Bluetooth 5.0, BLE
- True Gigabit Ethernet
- 2 × USB 3.0 Ports, 2 × USB 2.0 Ports
- Fully backwards compatible 40-pin GPIO header
- 2 × micro HDMI ports supporting up to 4K 60fps video resolution
- 2-lane MIPI DSI/CSI ports for camera and display
- 4-pole stereo audio and composite video port
- Micro SD card slot for loading operating system and data storage
- Requires 5.1V, 3A power via USB Type C or GPIO
- PoE (Power over Ethernet) enabled (requires PoE HAT)

### Tags

[4GB](#) [BLUETOOTH](#) [DEVELOPMENT](#) [GPIO](#) [IOT](#) [MACHINE LEARNING](#)  
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## Raspberry Pi 4 Model B (4 GB) Product Help and Resources

[TUTORIALS](#)[SKILLS NEEDED](#)

### Computer Vision and Projection Mapping in Python

FEBRUARY 6, 2019

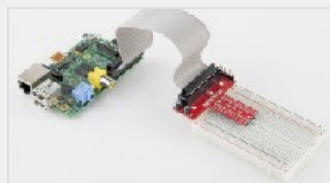
Use computer vision to detect faces and project images on top of them.



### How to Run a Raspberry Pi Program on Startup

SEPTEMBER 18, 2018

In this tutorial, we look at various methods for running a script or program automatically whenever your Raspberry Pi (or other Linux computer) boots up.



### Raspberry gPiO

OCTOBER 29, 2015

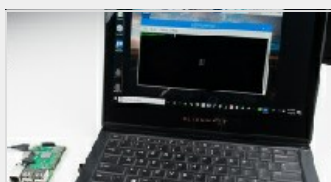
How to use either Python or C++ to drive the I/O lines on a Raspberry Pi.



### Headless Raspberry Pi Setup

APRIL 23, 2018

Configure a Raspberry Pi without a keyboard, mouse, or monitor.



## Raspberry Pi SPI and I2C Tutorial

OCTOBER 29, 2015

Learn how to use serial I2C and SPI buses on your Raspberry Pi using the wiringPi I/O library for C/C++ and spidev/smbus for Python.

## How to Use Remote Desktop on the Raspberry Pi with VNC

JULY 9, 2018

Use RealVNC to connect to your Raspberry Pi to control the graphical desktop remotely across the network.

## Qwiic Kit for Raspberry Pi Hookup Guide

JULY 4, 2019

Get started with the CCS811, BME280, VCNL4040, and microOLED via I2C using the Qwiic system and Python on a Raspberry Pi! Take sensor readings from the environment and display them on the microOLED, serial terminal, or the cloud with Cayenne!

## Qwiic pHAT for Raspberry Pi Hookup Guide

MAY 23, 2019

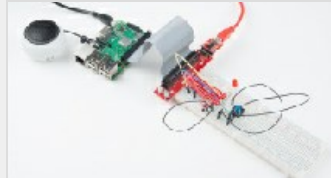
Get started interfacing your Qwiic enabled boards with your Raspberry Pi. The Qwiic pHAT connects the I2C bus (GND, 3.3V, SDA, and SCL) on your Raspberry Pi to an array of Qwiic connectors.



### Setting up a Raspberry Pi 3 as an Access Point

APRIL 23, 2018

This guide will show you how to configure a Raspberry Pi as an access point and connect it to your local Ethernet network to share Internet to other WiFi devices.



### Python Programming Tutorial: Getting Started with the Raspberry Pi

JUNE 27, 2018

This guide will show you how to write programs on your Raspberry Pi using Python to control hardware.



### Python GUI Guide: Introduction to Tkinter

AUGUST 13, 2018

Tkinter is the standard graphical user interface package that comes with Python. This tutorial will show you how to create basic windowed applications as well as complete full-screen dashboard examples complete with live graph updates from matplotlib.

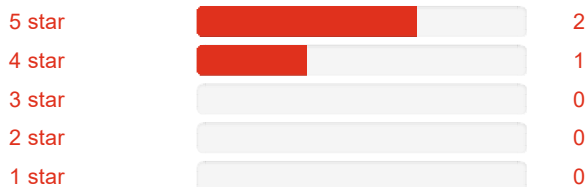
COMMENTS 4

REVIEWS ★★★★★ 3

## Customer Reviews

★★★★★ 4.7 out of 5

Based on 3 ratings:



Currently viewing all customer reviews.

### ★★★★★ Sparkfun keeps the fun alive

about 5 months ago by **Member #1085861** verified purchaser

My new Pi's from Sparkfun are running my whole house automation shockingly well. Home Assistant (HA) is an open-source solution built to run as a docker image, making it easy to get running and keep it up-to-date with the latest features.

The HA solution eliminates the need for ANY external vendor cloud services (Philips Hue, smartthings, xiaomi ...) allowing me to run entirely air-gapped if desired. Sorry to sound like an advertisement/fan-boy but has really been a game-changer for me.

The first Pi is running HassOS, a customized Pi distro of BuildRoot, which is designed and hardened for embedded systems. The packaged installer image called HassIO (HassOS + HA) makes this simple to get running. I started out with just one Pi for the whole system... but started breaking things apart to improve

performance and scalability.

A second pi is set up as a docker host to run node-red and mqtt for message routing and triggers. And a third is running grafana and sqlite - offloading the automation servers from the logging and reporting duties. Sure... I could run the whole thing in a NUC, but why bother when Pi's are so cheap?

Custom sensor using 8266 (Thing boards,...) pushing mqtt message makes any custom sensors and actuators easy.

This is getting fun people. Too fun actually...budget your time wisely - once you get started it's hard to stop.

### ★★★★☆ A great little SBC


about 3 months ago by [linuxguy](#) ✓ verified purchaser

I bought the 4G version so I could have a better general-purpose computer. It is my only computer and it is working out much better than the rPi 3 I was using because it has more RAM. I have mine in an Adafruit heat sink case (no fans), and it has not frozen up on me yet. I can run 10+ tabs in Chromium now, in addition to other tasks.



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In 2003, CU student Nate Seidle fried a power supply in his dorm room and, in lieu of a way to order easy replacements, decided to start his own company. Since then, SparkFun has been committed to sustainably helping our world achieve electronics literacy from our headquarters in Boulder, Colorado.

No matter your vision, SparkFun's products and resources are designed to make the world of electronics more accessible. In addition to over 2,000 open source components and widgets, SparkFun offers curriculum, training and online tutorials designed to help demystify the wonderful world of embedded electronics. We're here to help you start something.

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