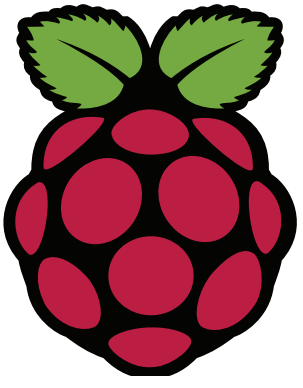
Introducing Raspberry Pi



Discover more about Raspberry Pi online at **raspberrypi.org**

The Raspberry Pi is an inexpensive computer built on a single printed-circuit board. It was developed in the UK by the Raspberry Pi Foundation to encourage the teaching of basic computer science in schools and to put the fun back into learning about computing. The foundation recognized that the school ICT curriculum had changed, placing emphasis on the use of applications, such as Word and Excel, or to writing web pages. Additionally, they noticed that the home PC and games console had replaced the Amigas, BBC Micros, Spectrum ZX and Commodore 64 machines that people of an earlier generation learned to program on. Nowadays, young people have become merely passive users of computers who the foundation considers could benefit from knowing how computers work and how to program them – so they created the cheap, accessible Raspberry Pi computer.

In order to keep the price low, the Raspberry Pi 3 Model B has some innovative design features:

- At its heart is an ARM processor that has System-on-Chip (SoC) architecture to integrate several traditionally separate components onto a single chip. The ARM processor runs at 1.2GHz. Typically, ARM processors have previously been used mainly in cellphones.

- Unlike traditional computer design, the Raspberry Pi does not have a hard drive but instead employs a Micro SD card to contain the operating system and to store the files you create. The operating system can be one of several specially optimized variants of the Linux operating system or Windows 10 IoT.

- The Raspberry Pi 3 Model B has a total memory of just 1GB – which is small compared to that of today's traditional computers. Even with this limitation, surprisingly good performance is achieved as neither the processor nor the operating system are "memory hungry". This in turn allows programs running on the Raspberry Pi to use very low amounts of memory.

- Most noticeably, each Raspberry Pi is supplied without a case so it can be easily built into another device, such as a monitor, and its components can be easily identified.

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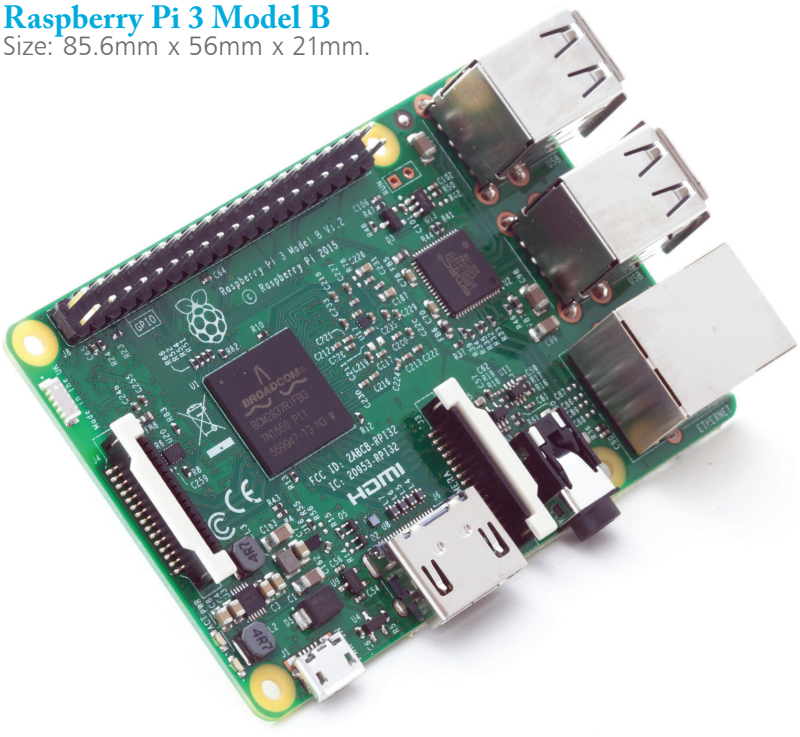
Raspberry Pi 3 Model B

Size: 85.6mm x 56mm x 21mm.



The Raspberry Pi 3 has an identical form factor to the previous Pi 2 (and Pi 1 Model B+) and has complete compatibility with Raspberry Pi 1 & 2.

Component:	Specification:
CPU	1.2GHz 64-bit Quad-core ARMv8
SoC	Broadcom BCM2837 chipset
GPU	Dual-core VideoCore 4 3D
RAM	1GB LPDDR2
Network	802.11 b/g/n Wireless LAN 10/100 Ethernet port (RJ45) Bluetooth 4.1 (Classic & Low Energy)
USB	4 x USB 2.0 ports
GPIO	40 header pins
Video	Full HDMI port
Audio	3.5mm jack and composite video
Camera	Camera Serial Interface (CSI)
Display	Display Serial Interface (DSI)
Storage	Micro SD card slot (push-pull)

The Raspberry Pi 3 Model B is recommended for use in schools and for general use, but the Pi Zero and the Pi 1 Model A+ are useful for embedded projects that require low power.