

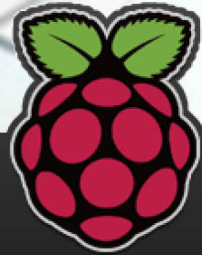


Raspberry Pi

An ARM GNU/Linux box for \$25. Take a byte!

The Raspberry Pi Foundation produces an ultra-low-cost credit-card sized GNU/Linux computer for teaching computer programming to children.

Datasheet 001 EN Raspberry Pi Foundation



The Raspberry Pi Foundation

The idea behind a tiny and cheap computer for children came in 2006, when Eben Upton was lecturing and working in admissions at Cambridge University. Eben had noticed a distinct drop in the skills levels of the A Level students applying to read Computer Science in each academic year when he came to interview them.

From a situation in the 1990s where most of the children applying were coming to interview as hobbyist programmers, the landscape in the 2000s was very different; a typical applicant now had experience only with web design, and sometimes not even with that. Fewer people were applying to the course every year. Something had changed the way children were interacting with computers.

The History

Eben and colleagues from the university like Rob Mullins and Alan Mycroft (both now trustees of the Raspberry Pi Foundation) batted around ideas about what had happened in schools to cause this change. A number of problems were identified:

The colonisation of the ICT curriculum with lessons on using Word and Excel, or writing webpages

The end of the dot-com boom

The rise of the home PC and games console to replace the Amigas, BBC Micros, Spectrum ZX and Commodore 64 machines that people of an earlier generation learned to program on.

The Challenge

There isn't much any small group of people can do to address problems like an inadequate school curriculum or the end of a financial bubble.

But we felt that we could try to do something about the situation where computers had become so expensive and arcane that programming experimentation on them had to be forbidden by parents; and to find a platform that, like those old home computers, could boot into a programming environment.

Over the next few years, Eben, having left Cambridge University to work in the electronics industry, then worked on building prototypes of what has now become the Raspberry Pi in his spare time.

Modern devices

By 2008, processors designed for mobile devices were becoming more affordable, and powerful enough to provide excellent multimedia (a Raspberry Pi can play Blu-Ray-quality video), a feature we felt makes the board desirable to children who aren't initially interested in a raw programming device.

The project started to look very realisable. Eben came together with a group of friends and old colleagues with a wide-ranging group of skills, some of whom were already wrestling with the problem of what to do about producing new young programmers.

The Raspberry Pi Foundation Trustees

These people became the Raspberry Pi board of trustees:

Eben Upton, project founder and lead designer (Liz Upton is also a full time volunteer).

David Braben, a star game designer and Cambridgeshire entrepreneur with a book of contacts as long as your arm

Jack Lang, a local academic and business angel who worked on the original BBC Micro project.

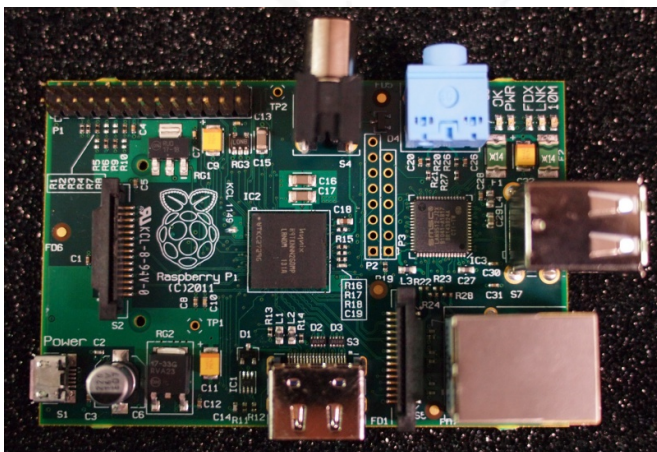
Pete Lomas, MD of a hardware design and manufacture company where our earliest boards have been designed and built.

Professor Alan Mycroft and Dr Rob Mullins from the Cambridge University Computer Lab, who have provided a lot of the educational direction of the project.

Three years later

We are almosty at the end of our first run of development – although it's just the beginning of the Raspberry Pi story.

David has been tireless in raising press awareness and finding us sponsorship. Pete has designed and built our first batch of boards for test; Jack runs the business end of things and has a warehouse we've filled with hundreds of thousands of pounds-worth of components ready to turn into our first boards.



Worldwide interest for the Raspberry Pi

We've had enormous interest, support and help from the educational community, and we've been delighted and a little humbled by the number of enquiries from agencies and people far away from our original targets for the device.

Developing countries are interested in the Raspberry Pi as productivity devices in areas that simply can't afford the power and hardware needed to run a traditional desktop PC; hospitals and museums have contacted us to find out about using the Raspberry Pi to drive display devices.

Parents of severely disabled children have talked to us about monitoring and accessibility applications; and there seem to be a million and one people out there with hot soldering irons who want to make a robot.

We don't claim to have all the answers

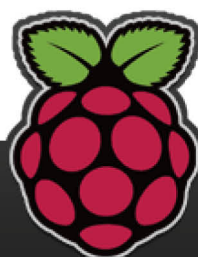
We don't think that the Raspberry Pi is a fix to the entire world's computing issues; we do believe that we can be a catalyst.

We want to see cheap, accessible, programmable computers everywhere; we actively encourage other companies to clone what we're doing.

Making a difference

We want to break the paradigm where without spending hundreds of pounds on a PC, families can't use the internet. We want owning a truly personal computer to be normal for children. We think that 2012 is going to be a very exciting year.

The Raspberry Pi Foundation is a UK registered charity (Registration Number 1129409)



Official Website: www.raspberrypi.org
Official Forums: www.raspberrypi.org/forum
Official Store: www.raspberrypi.com

Community Website: www.frambozenbier.org
Community Forums: www.edugeek.net/raspi
Community Wiki: www.elinux.org/R-Pi_Hub

Could you write an article, datasheet or mini-guide? Please send your ideas or content to [articles @ Frambozenbier.org](mailto:articles@Frambozenbier.org)

These datasheets are community generated documentation that are licensed under a Creative Commons Attribution-ShareAlike 3.0 Unported License. They are produced with the help of the Raspberry Pi community, the Raspberry Pi Foundation, eLinux.org, EduGeek.net and Frambozenbier.org.