Raspberry Pi and other delights

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What is the Raspberry Pi?

- The Raspberry Pi is a credit-card sized computer that plugs into your TV and a keyboard. It is a capable little computer which can be used in electronics projects, and for many of the things that your desktop PC does, like spreadsheets, word-processing and games. It also plays high-definition video.

A little history….

- Eben Upton, Rob Mullins, Jack Lang and Alan Mycroft at the University of Cambridge's Computer Laboratory

- Kids weren't allowed to hack…..

- Processors/memory used by smart-phones dropped dramatically in price

- Made 10,000 in first batch - Initial sales commenced 29 February 2012 at 06:00 UTC. (sold out in minutes) 500,000 pre-orders on first day. November 2013 they announced that the two millionth Pi had been sold

The Hardware

Two models (A and B)

Processor - Broadcom BCM2835 system on a chip (SoC),[3] which includes an ARM1176JZF-S 700 MHz processor, VideoCore IV GPU
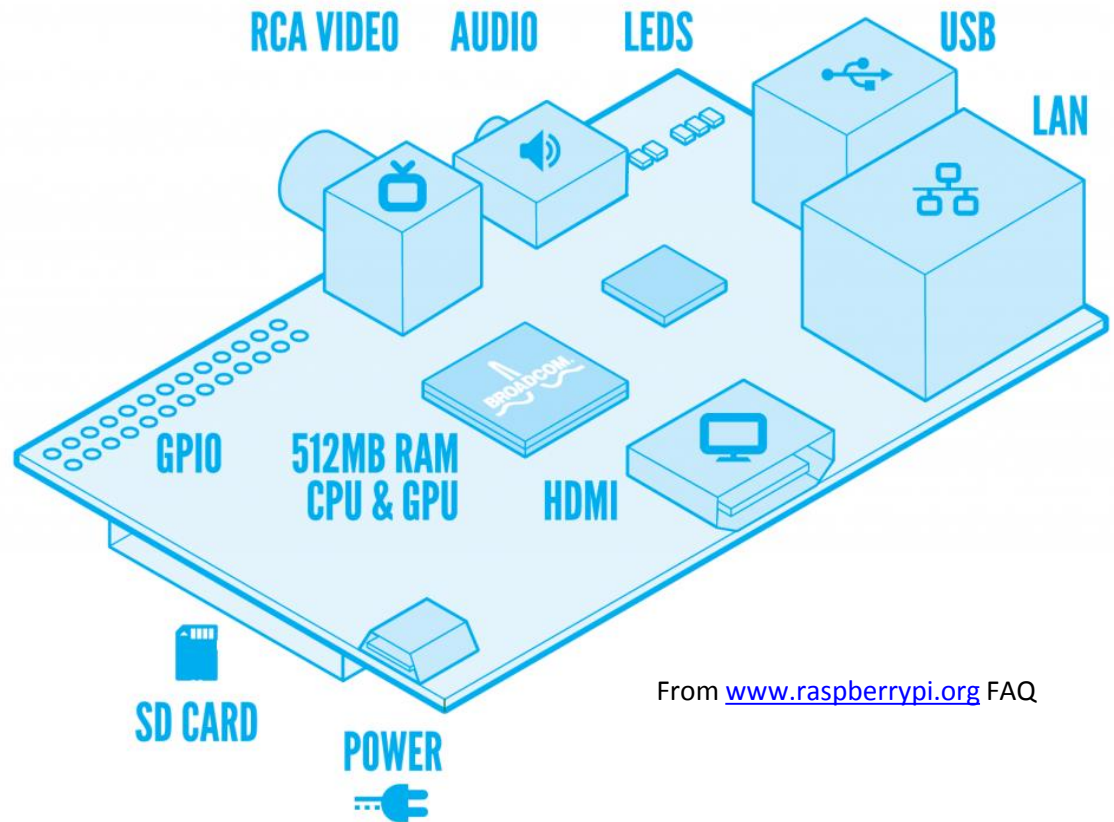
Keyboard/Mouse – USB

Video/Audio – HDMI or composite to display on a television

Network – Ethernet (on Model B) or WIFI via USB

Operating Software – SD Card

Sensors, motors, relays, etc. – Analog/Digital ports on GPIO

RASPBERRY PI MODEL B

RCA VIDEO   AUDIO   LEDS   USB   LAN

GPIO   512MB RAM CPU & GPU   HDMI

SD CARD   POWER

From www.raspberrypi.org FAQ

Software

- No Windows
- Linux Distributions
  - Raspbian - A community-created port of Debian wheezy, optimized for the Raspberry Pi
  - Pidora - a Fedora Remix optimized for the Raspberry Pi
  - OpenELEC - a fast and user-friendly XBMC Media Center distribution
  - RaspBMC, Risc OS, Arch Linux, others
- PI Store

Where to buy

- Centennial Electronics
- Newark
- Ebay/Amazon
- Microcenter

Where to learn more

- www.raspberrypi.org
- www.wikipedia.org
- www.stackoverflow.com
- www.newark.com
- www.meetup.com   http://denvermakerfaire.com/
- www.kickstarter.com
- www.wsprnet.org
- www.sparkfun.com
- www.adafruit.com

What you need to get

- Cables
  - HDMI (or RCA for Composite and 2.5MM audio)
  - Micro USB (for power), can also power via USB
- USB Hub – Powered
- A television
- KBD/Mouse – USB
- WIFI Dongle
- Oh ---- and a case