

# An Introduction to Raspberry Pi

UNIGROUP Presentation

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# Raspberry Pi

## Overview

- History
- Hardware Lineup
- Software
- Applications
- Ecosystem
- Demo

# Raspberry Pi

## History

- Incoming students lack computing knowledge
- Previous generation had the BBC Micro
- Solution: Develop a low cost system for youngsters

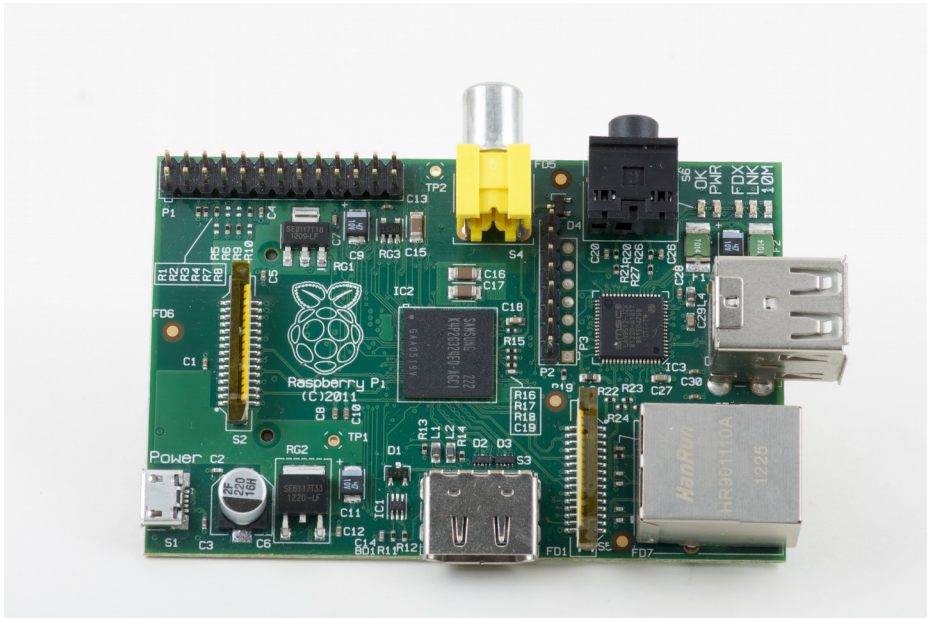
# Raspberry Pi

## Hardware Lineup

- A variety of configurations
- Several revisions

# Raspberry Pi

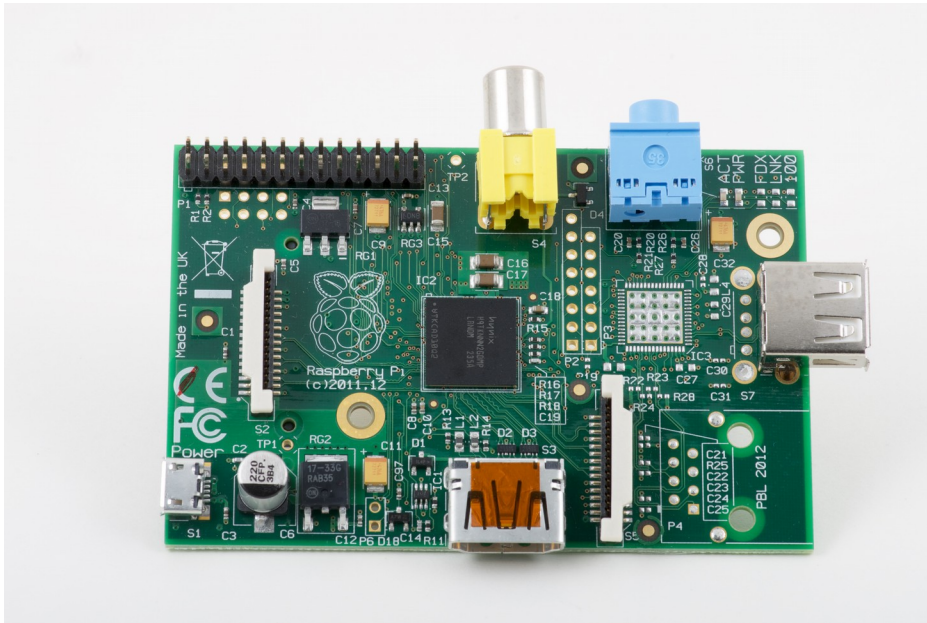
## Model B



- 512MB RAM
- Two USB Ports
- Ethernet via USB
- SD Card Slot

# Raspberry Pi

## Model A



- 256MB RAM
- One USB Port
- No Ethernet
- SD Card Slot
- Low Power
- Light Weight

# Raspberry Pi

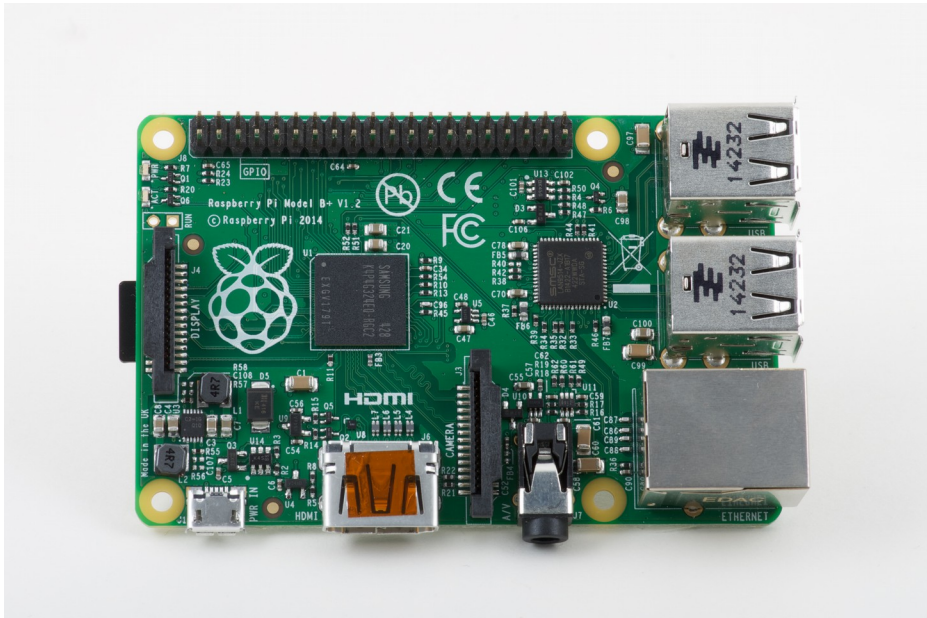
## Compute Module

- 512MB RAM
- One USB Port
- SO-DIMM
- 4GB built-in flash



# Raspberry Pi

## Model B+

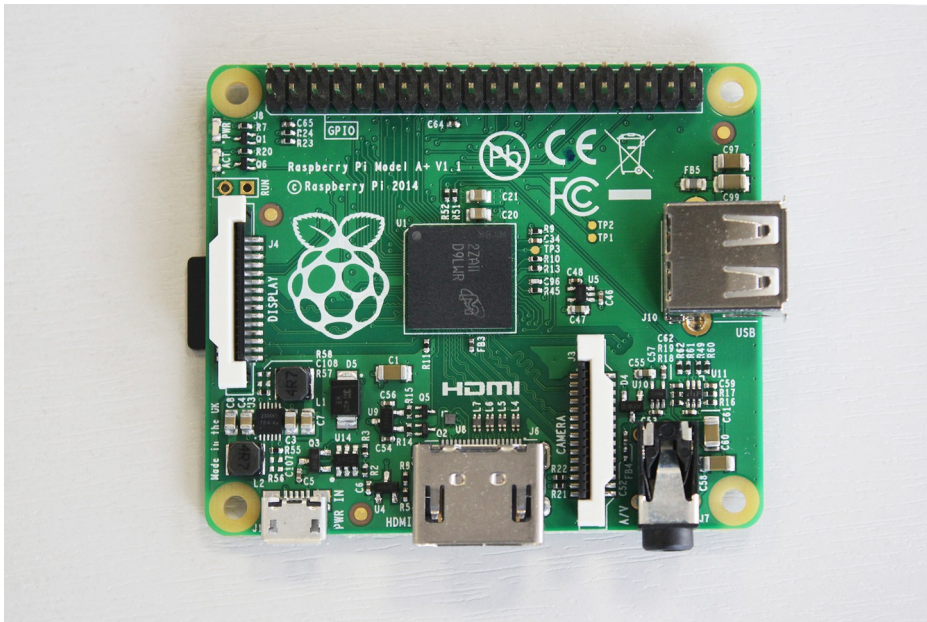


- 512MB RAM
- Four USB Ports
- Ethernet via USB
- MicroSD Card Slot
- More GPIO Pins
- Revised AV and Power



# Raspberry Pi

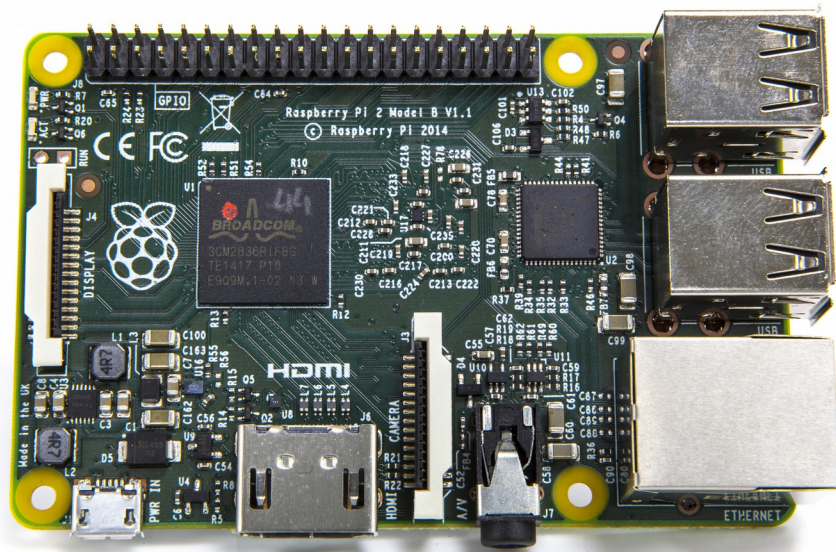
## Model A+



- 256MB RAM
- One USB Port
- No Ethernet
- MicroSD Card Slot
- Lower Power
- More GPIO Pins

# Raspberry Pi

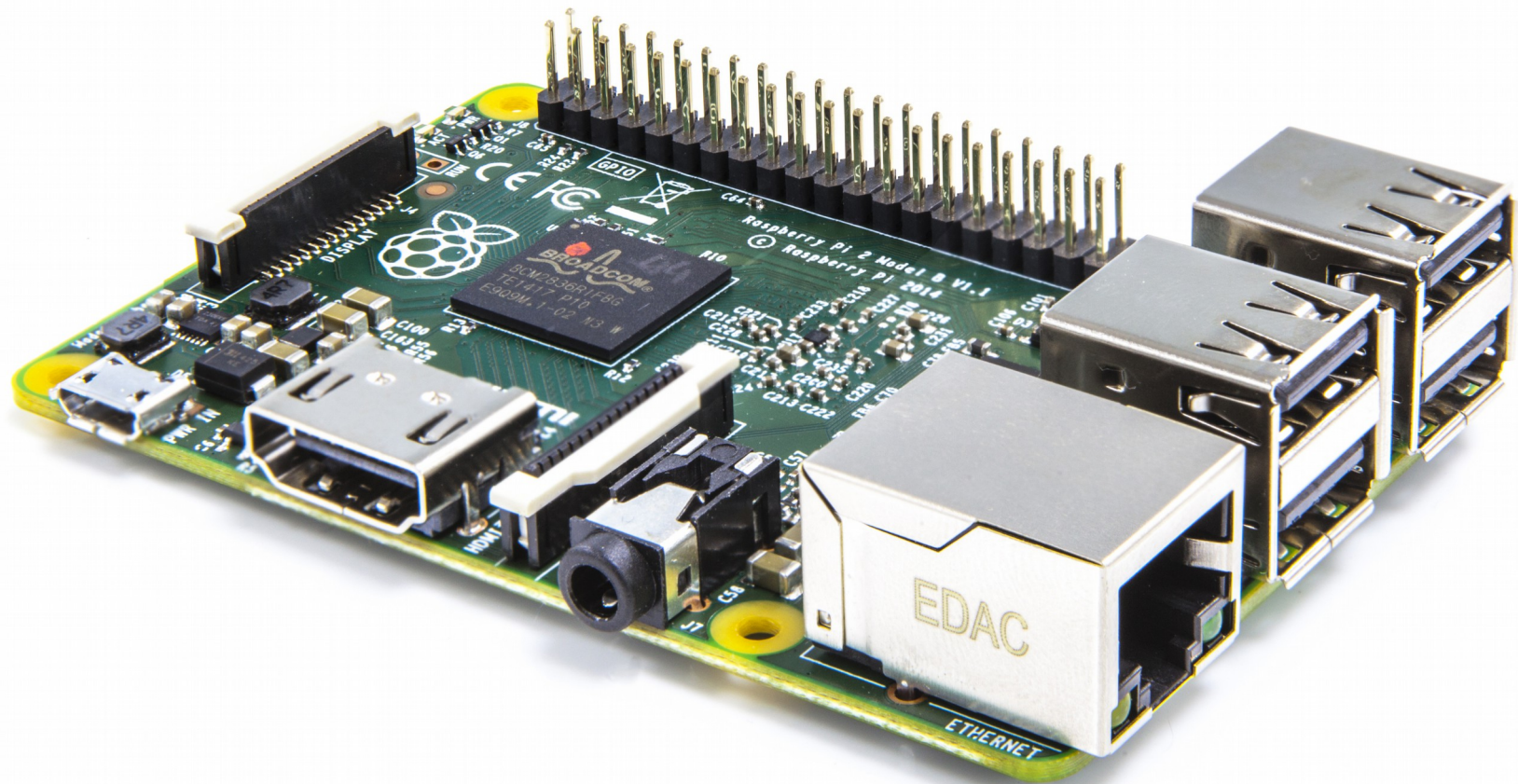
## 2 Model B



- 1GB RAM
- Four USB Ports
- Ethernet via USB
- MicroSD Card Slot
- More GPIO Pins
- Quad Core SoC

# Raspberry Pi

## Hardware Overview



# Raspberry Pi

## Software

- Multiple Boot options
- Multiple OS options

# Raspberry Pi

## Boot Options

- FAT partition plus OS
- NOOBS
- BerryBoot
- PiNET

# Raspberry Pi

## OS Options

- Raspbian
- Risc OS
- Windows 10 IoT Core
- OpenELEC
- FreeBSD

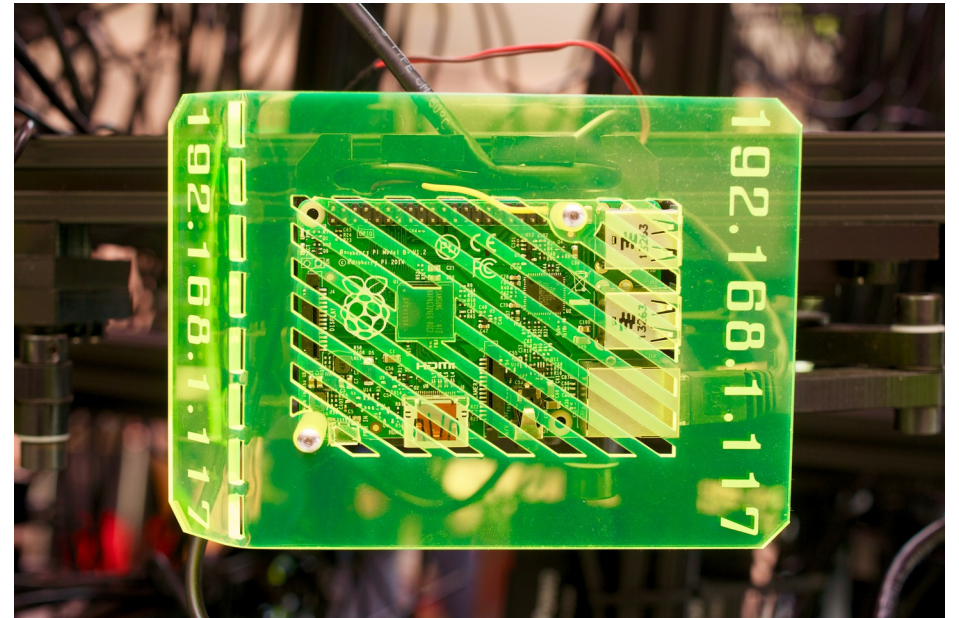
# Raspberry Pi

## Applications

- Education
- Hacking
- Industrial Control
- Products



# Raspberry Pi



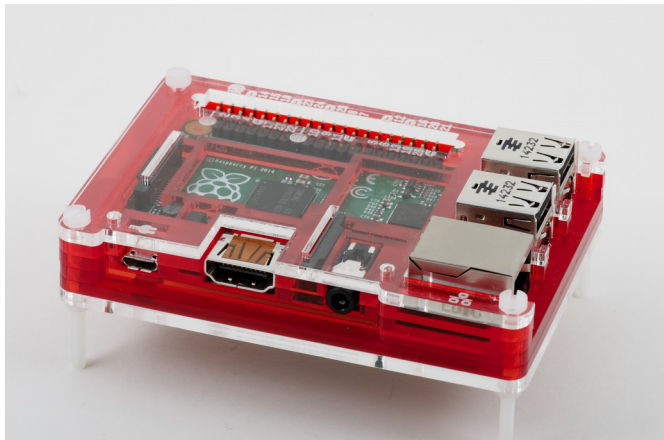


# Raspberry Pi

## Ecosystem

- Cases
- Hardware Add-Ons
- Magazines

# Raspberry Pi



# Raspberry Pi

Demo

# Raspberry Pi

## Resources

- [Raspberry Pi Foundation](#)
- [The MagPi](#)
- [RPi Hub](#)
- [BerryBoot](#)
- [RasPi.TV](#)
- [The Raspberry Pi Guy](#)
- [/r/raspberry\\_pi/](#)
- [comp.sys.raspberry-pi](#)
- [Adafruit](#)