

Welcome!

Pi-Curious Intro to Raspberry Pi and RetroPie

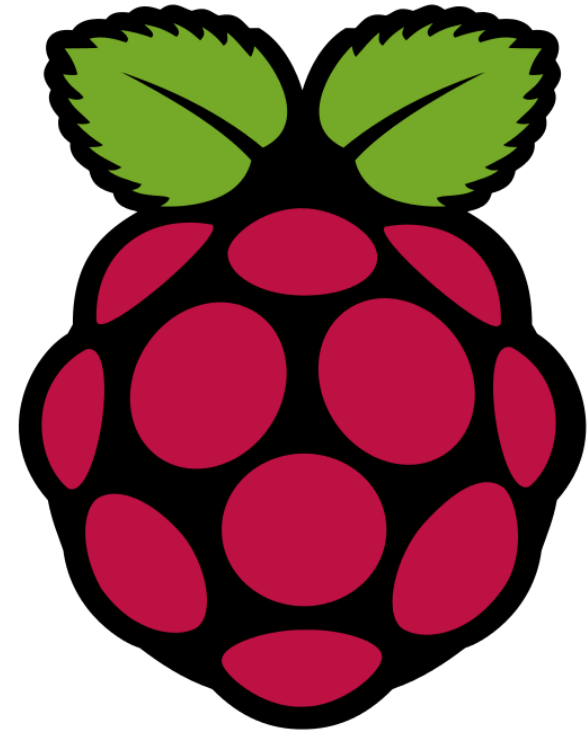
June 10th, 2017

W. Bryant Campbell



ASP.NET

What is a Raspberry Pi?



Raspberry Pi

From Wikipedia, the free encyclopedia

"RPI" redirects here. For other uses, see [RPI](#).

"Raspberry pie" redirects here. For the dessert, see [List of pies, tarts and flans § Raspberry pie](#).

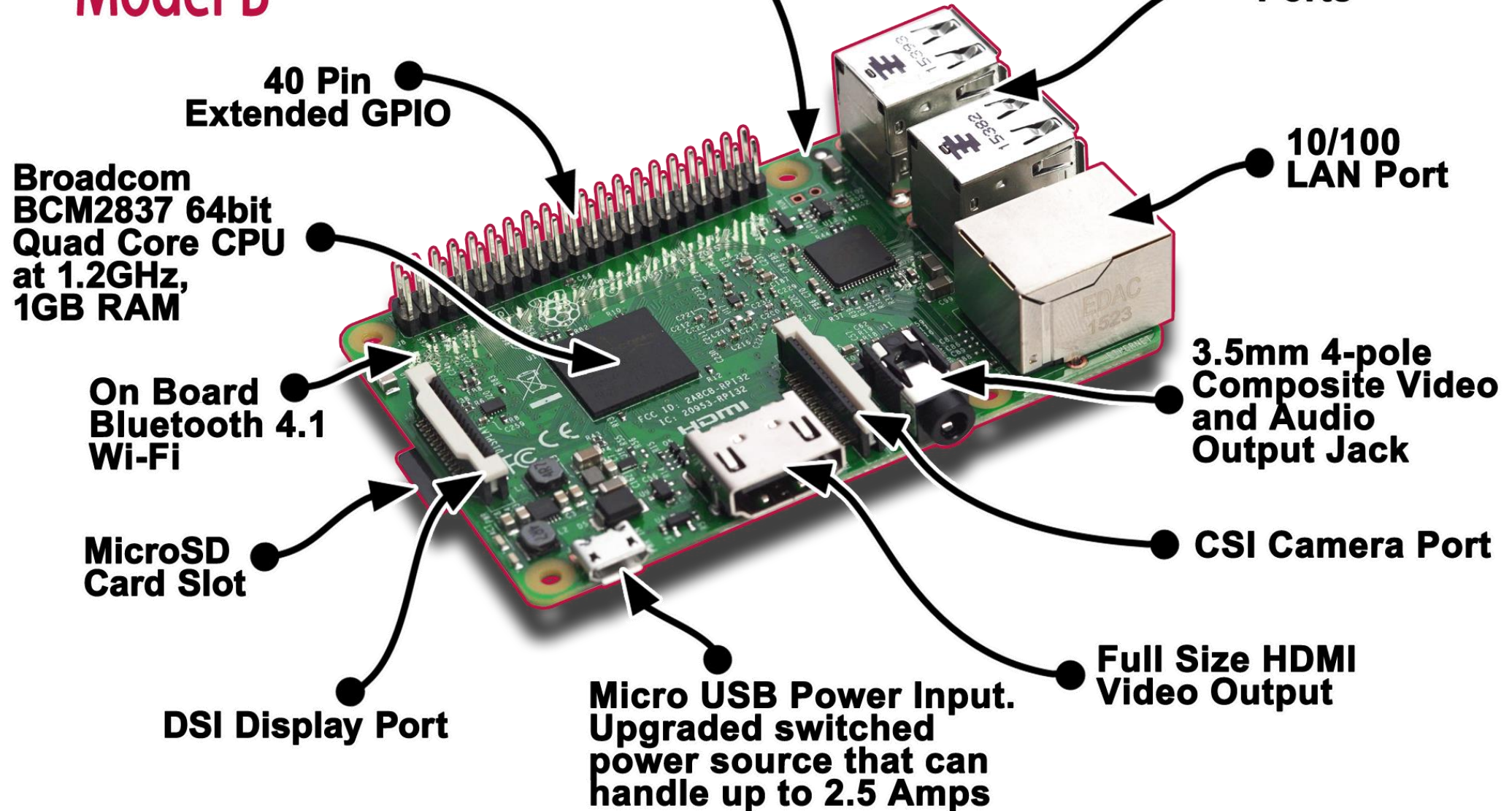
The **Raspberry Pi** is a series of small [single-board computers](#) developed in the [United Kingdom](#) by the [Raspberry Pi Foundation](#) to promote the teaching of basic [computer science](#) in schools and in [developing countries](#).^{[4][5][6]} The original model became far more popular than anticipated,^[7] selling outside of its [target market](#) for uses such as [robotics](#). Peripherals (including [keyboards](#), [mice](#) and [cases](#)) are not included with the Raspberry Pi. Some accessories however have been included in several official and unofficial bundles.^[7]

According to the Raspberry Pi Foundation, over 5 million Raspberry Pis have been sold before February 2015, making it the best-selling [British computer](#).^[8] By November 2016 they had sold 11 million units.^{[9][10]}

Raspberry Pi 3 Model B

Dimensions
85.6mm x 56mm x 21mm

element14



B Rev 1
0002



B Rev 1 links
0003



A
0008



B Rev 2 (256 MB)
0004



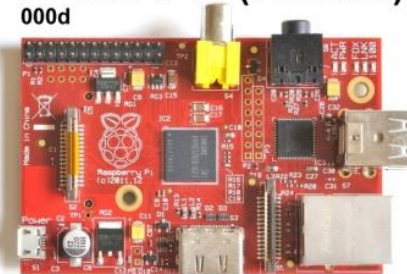
B Rev 2 (China)
000f



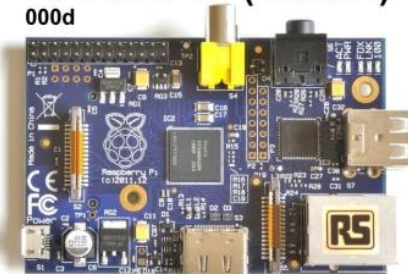
B Rev 2.1 (UK)
000e



B Rev 2 (Chinese)
000d



B Rev 2 (Blue Pi)
000d



**Compute
Module**
000d



B+
0010



B+ (Chinese)
0010



A+
0012



2B
a01041



Zero
900092



3B
a02082



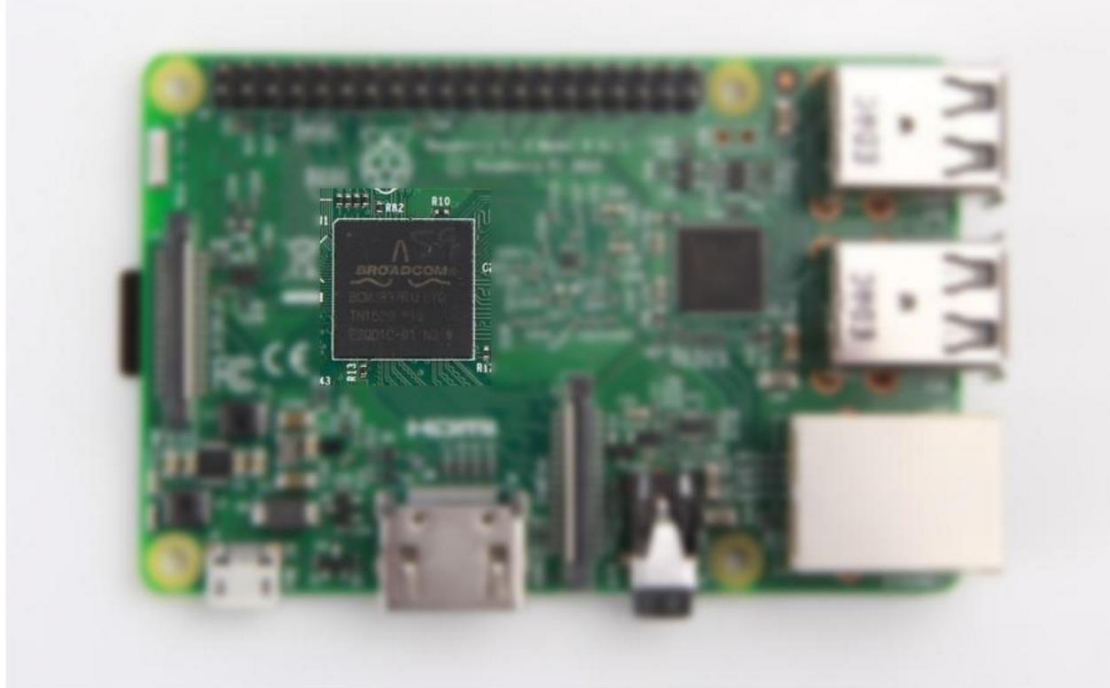
**Raspberry Pi®
family**

Feb 29th 2016

RasPi.TV

Closer Look at Pi 3 Model B

- Application Processor
 - 64 bit
 - Quad Core
 - 1.2 GHz
 - ARM Cortex-A53 Processor (ARM V8 ISA)
- GPU
 - 400 MHz
 - Videocore IV Multimedia Co-Processor



Chip Antenna

A ceramic chip antenna is used by WiFi and Bluetooth 4.1 SoC BCM43438. The chip antenna moves the indicator LEDs that were present in Pi 2 to the lower side of PCB.



GPIO



Alternate Function					Alternate Function
	3.3V PWR	1		2	5V PWR
I2C1 SDA	GPIO 2	3		4	5V PWR
I2C1 SCL	GPIO 3	5		6	GND
	GPIO 4	7		8	UART0 TX
	GND	9		10	UART0 RX
	GPIO 17	11		12	GPIO 18
	GPIO 27	13		14	GND
	GPIO 22	15		16	GPIO 23
	3.3V PWR	17		18	GPIO 24
SPI0 MOSI	GPIO 10	19		20	GND
SPI0 MISO	GPIO 9	21		22	GPIO 25
SPI0 SCLK	GPIO 11	23		24	GPIO 8
	GND	25		26	GPIO 7
	Reserved	27		28	Reserved
	GPIO 5	29		30	GND
	GPIO 6	31		32	GPIO 12
	GPIO 13	33		34	GND
SPI1 MISO	GPIO 19	35		36	GPIO 16
	GPIO 26	37		38	GPIO 20
	GND	39		40	GPIO 21

Raspbian Jesse & Linux

