

Notes by Caio Moreno

Date: Oct, 18, 2016

Buy Raspberry Pi 3 Model B.

<http://tiendas.mediamarkt.es/p/placa-base-pc-raspberry-pi-3-modelo-b-1319843>

Price: 44.95 euros

I will recommend to buy the Pack Mini PC - Raspberry Pi 3 Modelo B + MicroSD 8GB + Caja rojo y blanco + Fuente de alimentación for 83.50 euros.

<http://tiendas.mediamarkt.es/p/pack-mini-pc-raspberry-pi-3-modelo-b-microsd-caja-fuente-alimentacion-1329484>

I had to spend some time figuring out the correct SD Card to use and power supply.

In this page <https://www.rs-online.com/designspark/what-you-need-to-get-your-raspberry-pi-up-and-running> is required for Pi 3 Model B to use a 5.1V - 2.5A (2500mA) Power Supply for best results.

So I decided to use my power supply from my old Motorola Android from 2009.

In the link below I found more information about Power Supply:

<https://www.raspberrypi.org/documentation/hardware/raspberrypi/power/README.md>

In future I will buy the power supply below for 6.29 pounds or 12.99 euros.

<http://uk.rs-online.com/web/p/products/9098126/>

[http://tiendas.mediamarkt.es/p/raspberry-pi-9098135-psu-micusb-5v-2-5-1323187?](http://tiendas.mediamarkt.es/p/raspberry-pi-9098135-psu-micusb-5v-2-5-1323187?gclid=CKHo473X3c8CFUS3GwodJWUMUg)

[gclid=CKHo473X3c8CFUS3GwodJWUMUg](http://tiendas.mediamarkt.es/p/raspberry-pi-9098135-psu-micusb-5v-2-5-1323187?gclid=CKHo473X3c8CFUS3GwodJWUMUg)

<https://www.raspberrypi.org/products/universal-power-supply/>

I also want to buy a case for 5.50 pounds.

<http://uk.rs-online.com/web/p/products/9098132/>

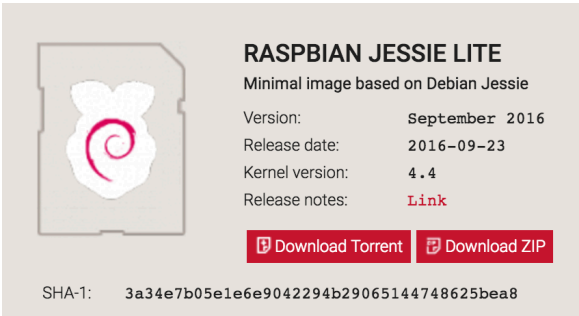
Setup Raspberry Pi 3 Model B.

First thing go to page www.designspark.com/raspberrypi and read it to understand about every component in your new mini computer.

INSTALLING OPERATING SYSTEM IMAGES ON MAC OS

Download RASPBIAN JESSIE LITE (2016-09-23-raspbian-jessie-lite.zip)

RASPBIAN JESSIE LITE
Minimal image based on Debian Jessie
Version: September 2016
Release date: 2016-09-23
Kernel version: 4.4



The image shows a screenshot of the Raspbian Jessie Lite download page. On the left, there is a logo of a Raspberry Pi with the Raspbian logo on it. To the right of the logo, the text reads 'RASPBIAN JESSIE LITE' followed by 'Minimal image based on Debian Jessie'. Below this, there is a table with the following information: Version: September 2016, Release date: 2016-09-23, Kernel version: 4.4, and Release notes: Link. At the bottom of the table, there are two buttons: 'Download Torrent' and 'Download ZIP'. Below the buttons, the SHA-1 hash is displayed: 3a34e7b05e1e6e9042294b29065144748625bea8.

RASPBIAN JESSIE LITE	
Minimal image based on Debian Jessie	
Version:	September 2016
Release date:	2016-09-23
Kernel version:	4.4
Release notes:	Link
Download Torrent Download ZIP	
SHA-1: 3a34e7b05e1e6e9042294b29065144748625bea8	

<https://www.raspberrypi.org/downloads/raspbian/>
https://downloads.raspberrypi.org/raspbian_lite_latest
<https://www.raspberrypi.org/documentation/installation/installing-images/>

After downloading the .zip file, unzip it to get the image file (.img) for writing to your SD card.

Image file name installed: 2016-09-23-raspbian-jessie-lite.img

To install I followed the commands below available in the link below:

<https://www.raspberrypi.org/documentation/installation/installing-images/mac.md>

Commands on Mac OS

```
$ diskutil list
$ diskutil unmountDisk /dev/disk4
$ sudo dd bs=1m if=/Users/caiomsouza/Desktop/2016-09-23-raspbian-jessie-lite.img of=/dev/rdisk4
$ sudo diskutil eject /dev/rdisk4
```

Real output:

```
Caios-MacBook-Pro:data-integration caiomsouza$ diskutil list
```

```
/dev/disk0 (internal, physical):
```

#:	TYPE	NAME	SIZE	IDENTIFIER
0:	GUID_partition_scheme		*251.0 GB	disk0
1:	EFI	EFI	209.7 MB	disk0s1
2:	Apple_CoreStorage	Macintosh HD	250.1 GB	disk0s2
3:	Apple_Boot	Recovery HD	650.0 MB	disk0s3

```
/dev/disk1 (internal, virtual):
```

#:	TYPE	NAME	SIZE	IDENTIFIER
0:	Macintosh HD		+249.8 GB	disk1
		Logical Volume on disk0s2		
		726CE9D2-066A-465D-B7D0-AD5F83EF1764		
		Unencrypted		

```
/dev/disk2 (disk image):
```

#:	TYPE	NAME	SIZE	IDENTIFIER
0:	Apple_partition_scheme		+19.7 MB	disk2
1:	Apple_partition_map		32.3 KB	disk2s1
2:	Apple_HFS	Flash Player	19.7 MB	disk2s2

```
/dev/disk4 (internal, physical):
```

#:	TYPE	NAME	SIZE	IDENTIFIER
0:	FDisk_partition_scheme		*7.9 GB	disk4
1:	Windows_FAT_32	boot	66.1 MB	disk4s1
2:	Linux		1.3 GB	disk4s2

```
Caios-MacBook-Pro:data-integration caiomsouza$ diskutil unmountDisk /dev/disk4
```

```
Unmount of all volumes on disk4 was successful
```

```
Caios-MacBook-Pro:data-integration caiomsouza$ sudo dd bs=1m if=/Users/caiomsouza/Desktop/2016-09-23-raspbian-jessie-lite.img of=/dev/rdisk4
```

```
1325+0 records in
```

```
1325+0 records out
```

```
1389363200 bytes transferred in 178.964704 secs (7763336 bytes/sec)
```

```
Caio-MacBook-Pro:data-integration caiomsouza$
```

```
Caio-MacBook-Pro:data-integration caiomsouza$ sudo diskutil eject /dev/rdisk4
```

```
Disk /dev/rdisk4 ejected
```

```
Caio-MacBook-Pro:data-integration caiomsouza$
```

Access RASPBERRY Pi 3 by SSH

I found that the default user is **pi** and password is **raspberrypi**

To connect use the command:

```
ssh pi@<IP>
```

```
ssh pi@192.168.0.32
```

```
Caio-MacBook-Pro:data-integration caiomsouza$ ssh pi@192.168.0.32
pi@192.168.0.32's password:
```

```
The programs included with the Debian GNU/Linux system are free
software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
```

```
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
```

```
Last login: Sat Oct 15 21:34:06 2016 from 192.168.0.15
```

```
pi@raspberrypi:~ $
```

Reference:

<https://www.raspberrypi.org/documentation/remote-access/ssh/unix.md>

<https://www.raspberrypi.org/documentation/remote-access/ssh/windows.md>

Admin commands

To restart

```
sudo reboot
```

To shutdown

```
sudo sudo shutdown -h now
```