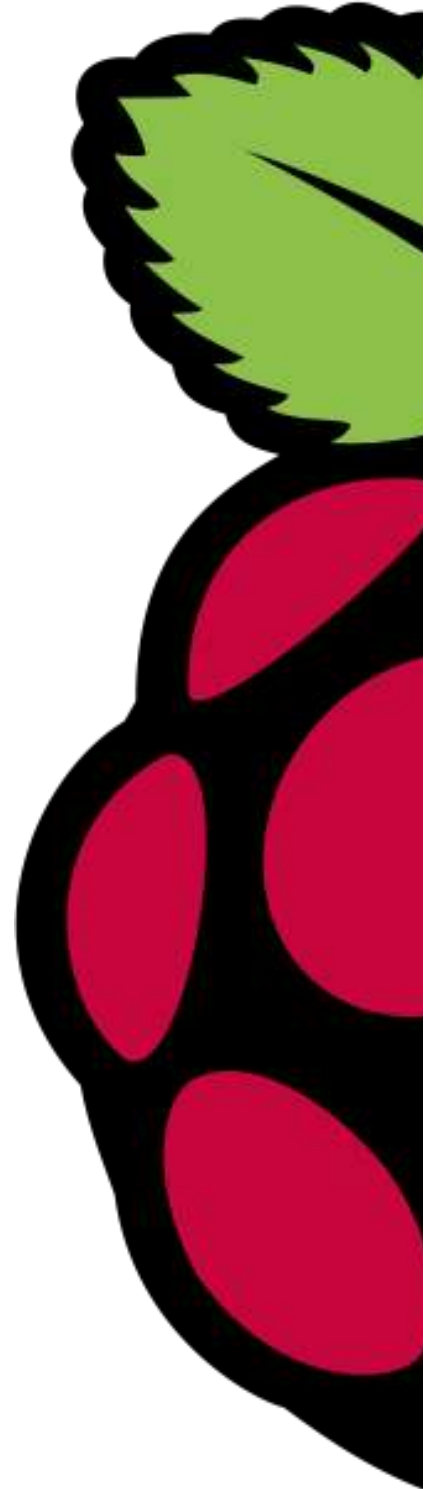
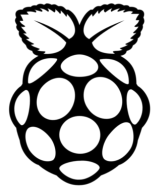


**Raspberry Pi**

# **Hackea tu casa con Raspberry Pi**

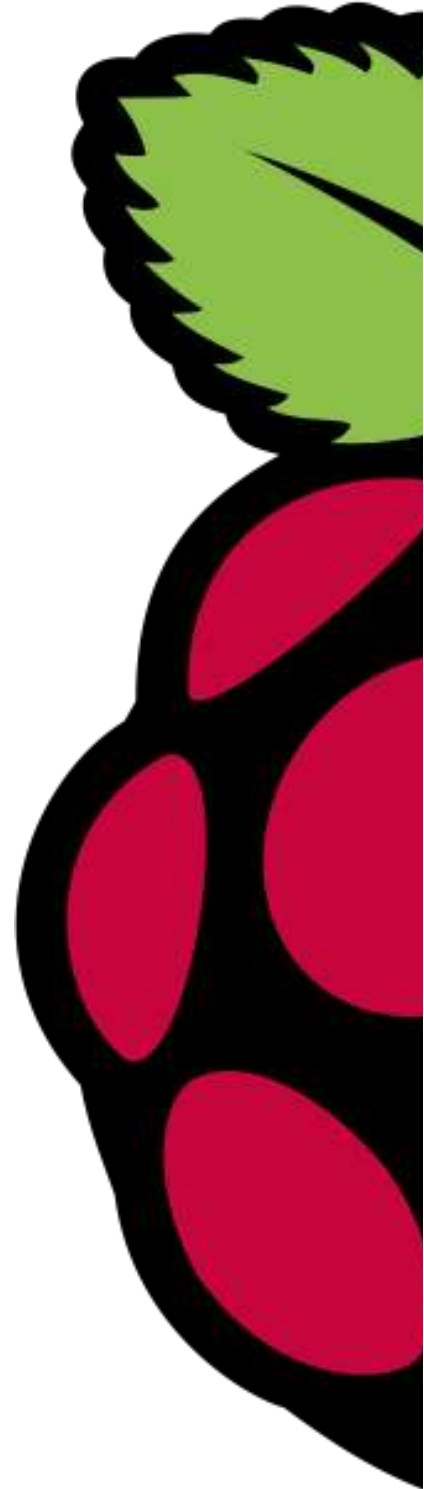
**Por Fran Ación**

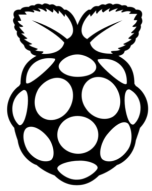




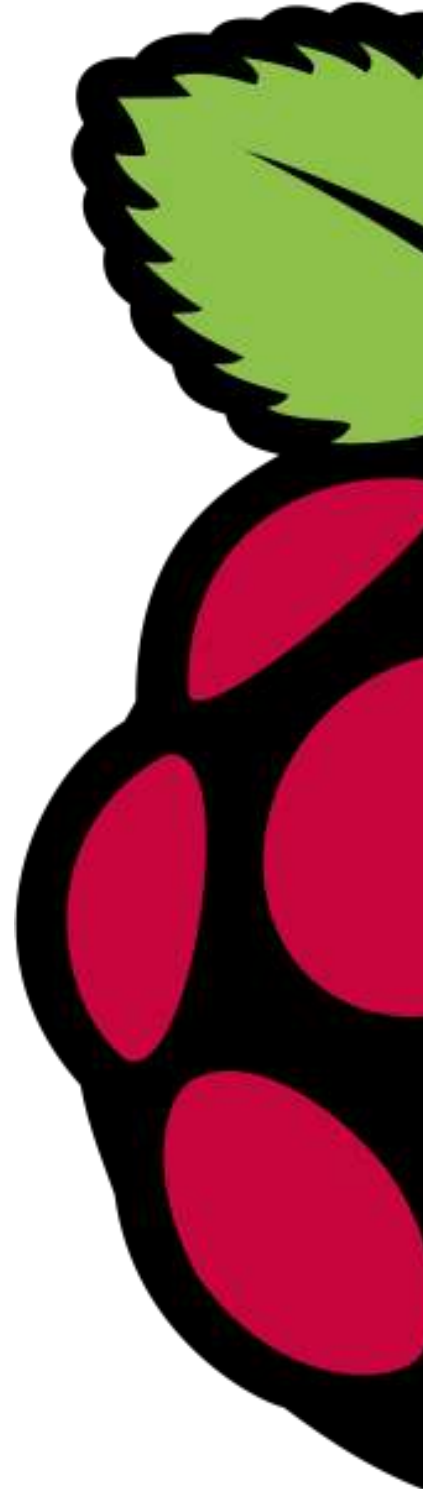
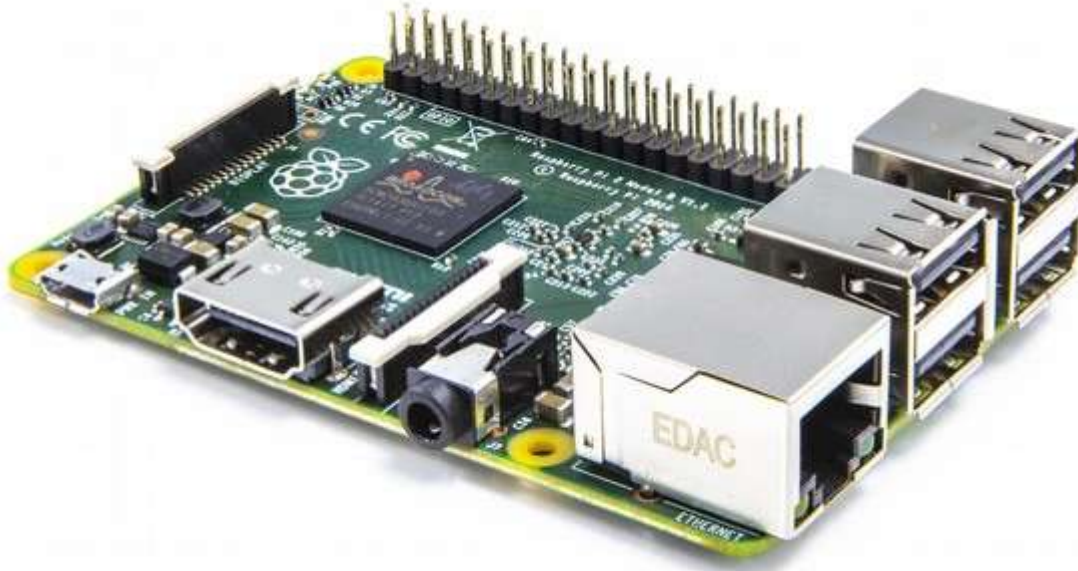
# Raspberry Pi

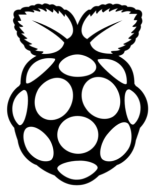
## Presentación



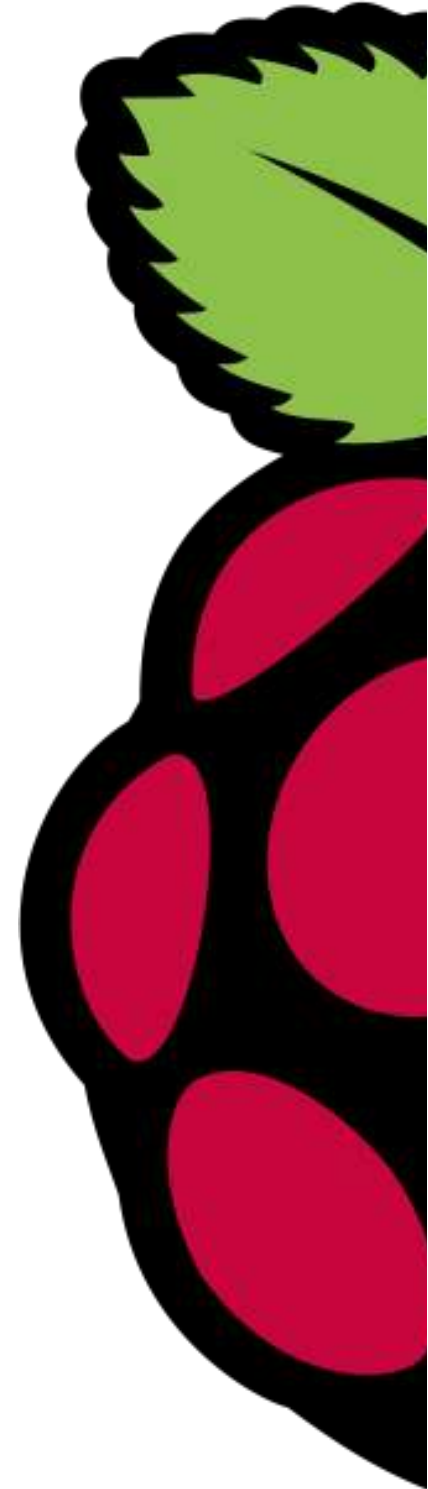
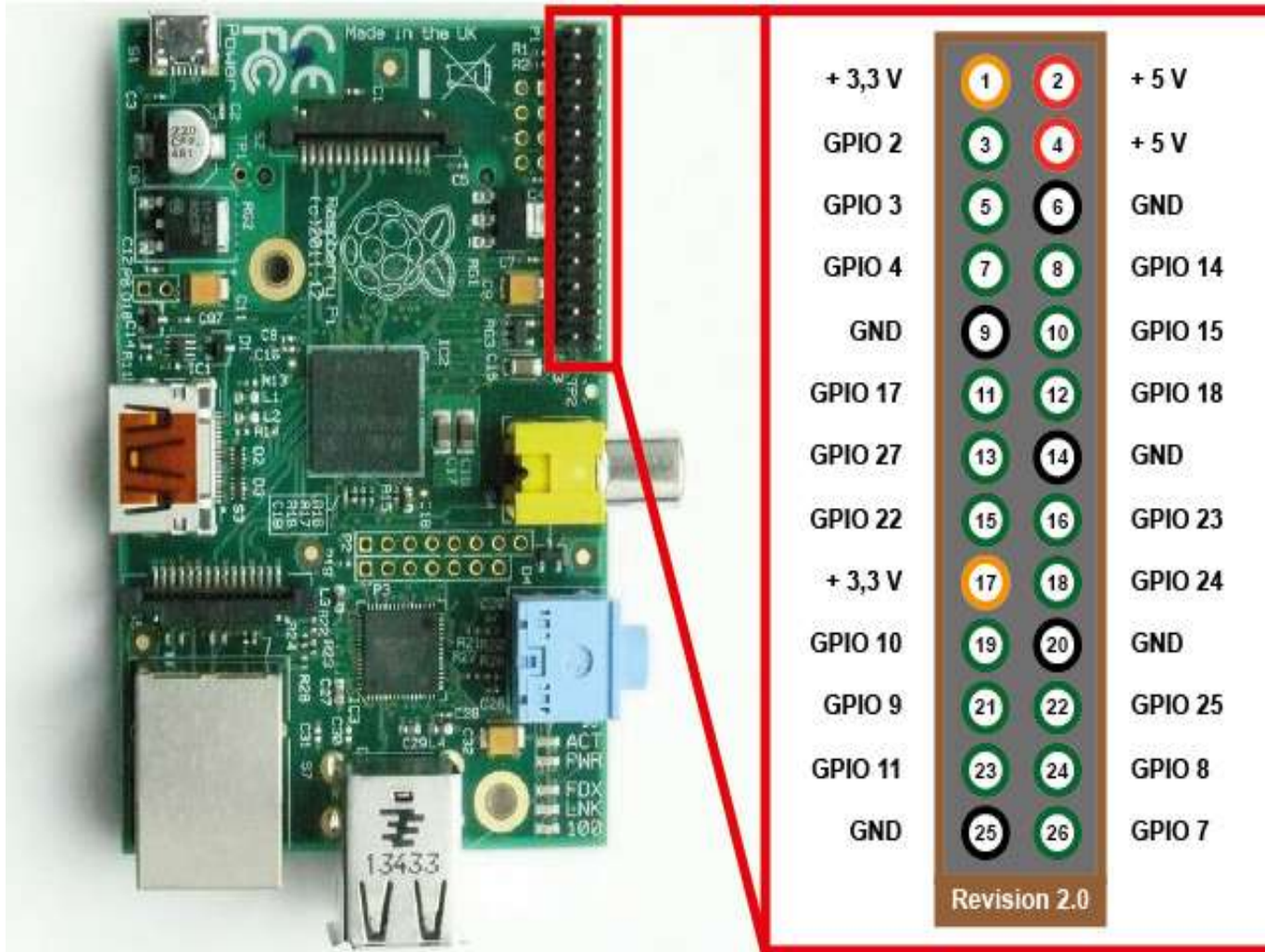


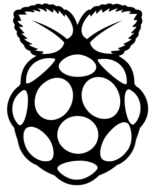
**Raspberry Pi**





# Raspberry Pi





# Raspberry Pi

**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



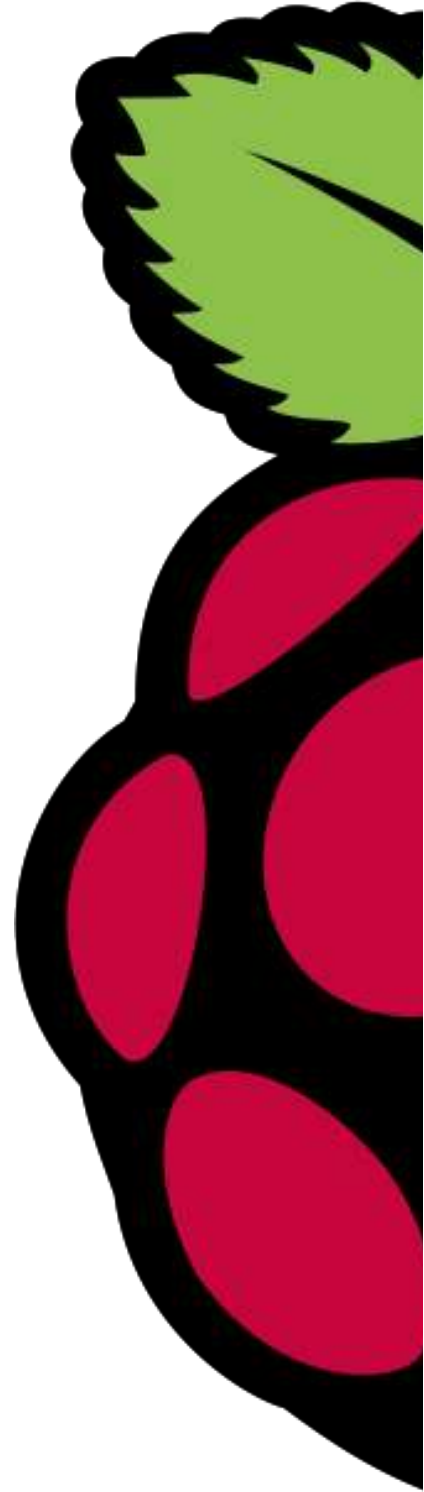
**3B**  
a02082

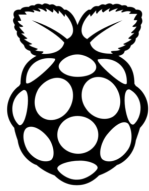


**Raspberry Pi<sup>®</sup>  
family**

Feb 29th 2016

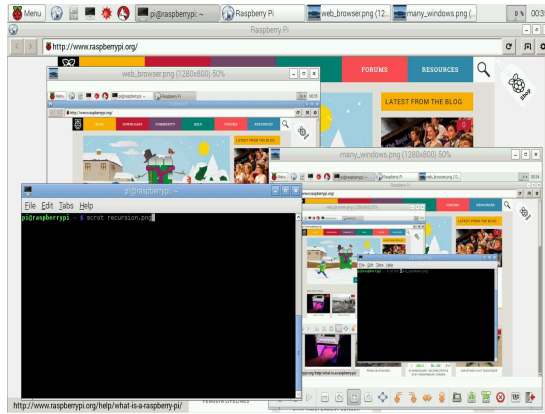
**RasPi.TV**





# Raspberry Pi

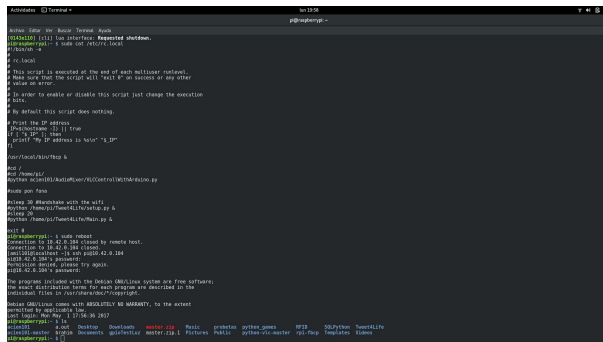
## Raspbian



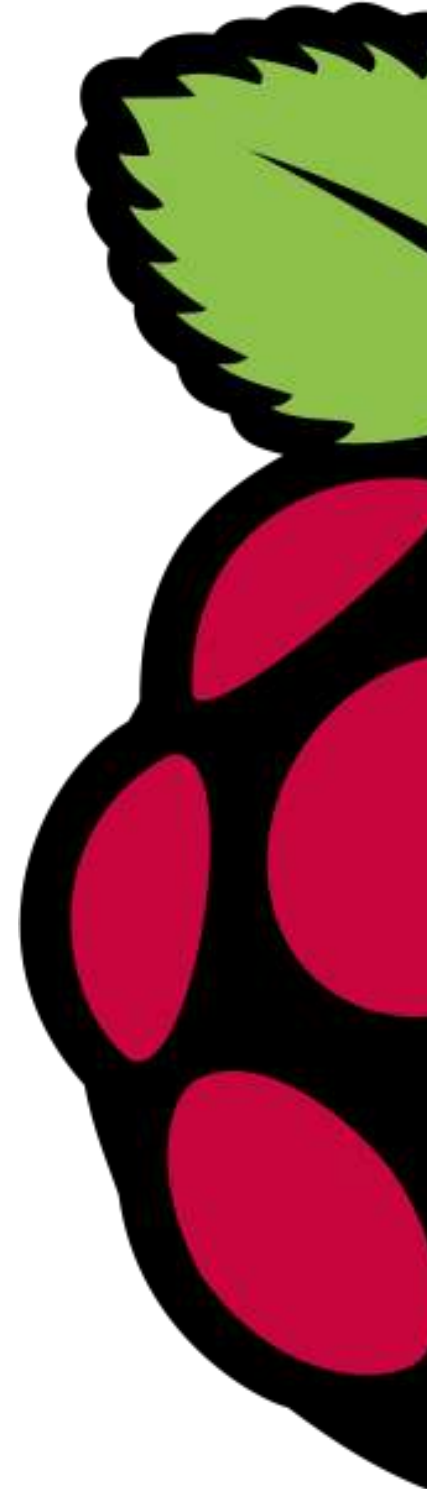
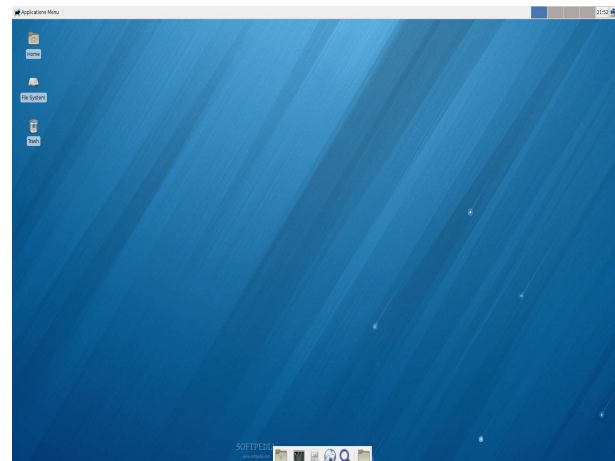
## Ubuntu mate

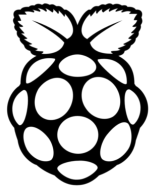


## Raspbian lite



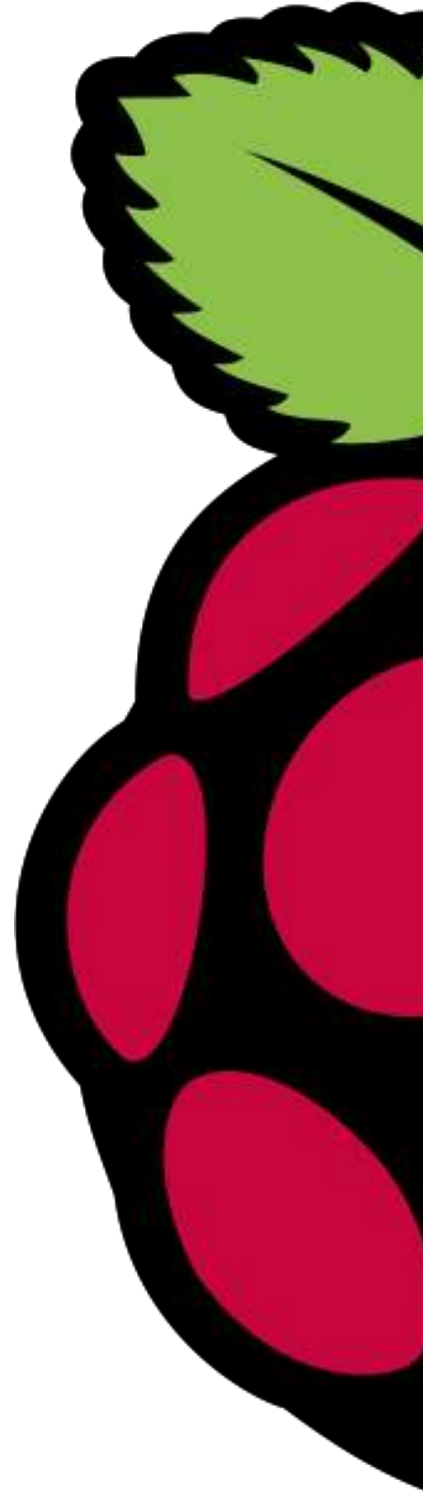
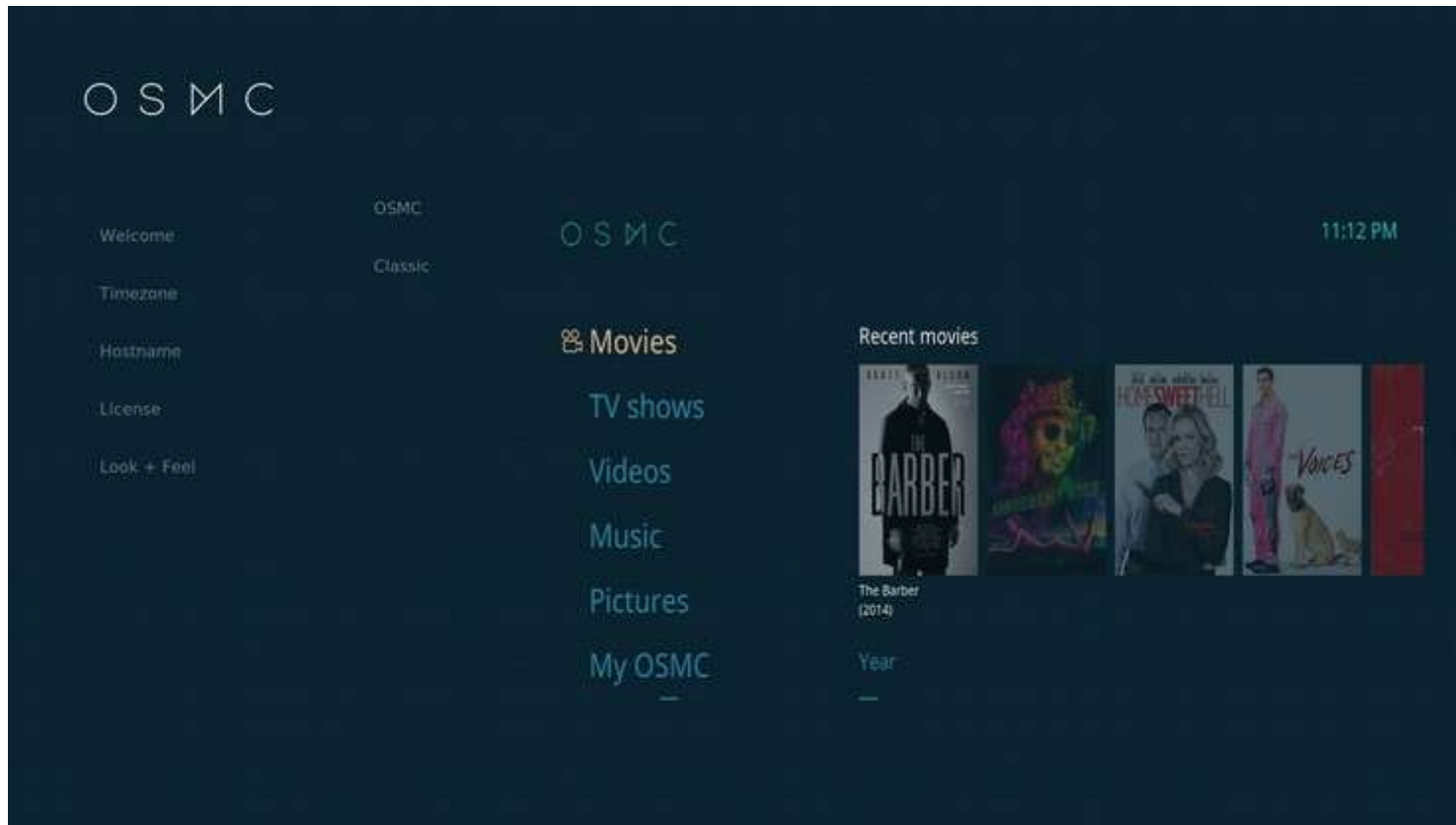
## Arch Linux

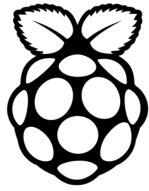




# Raspberry Pi

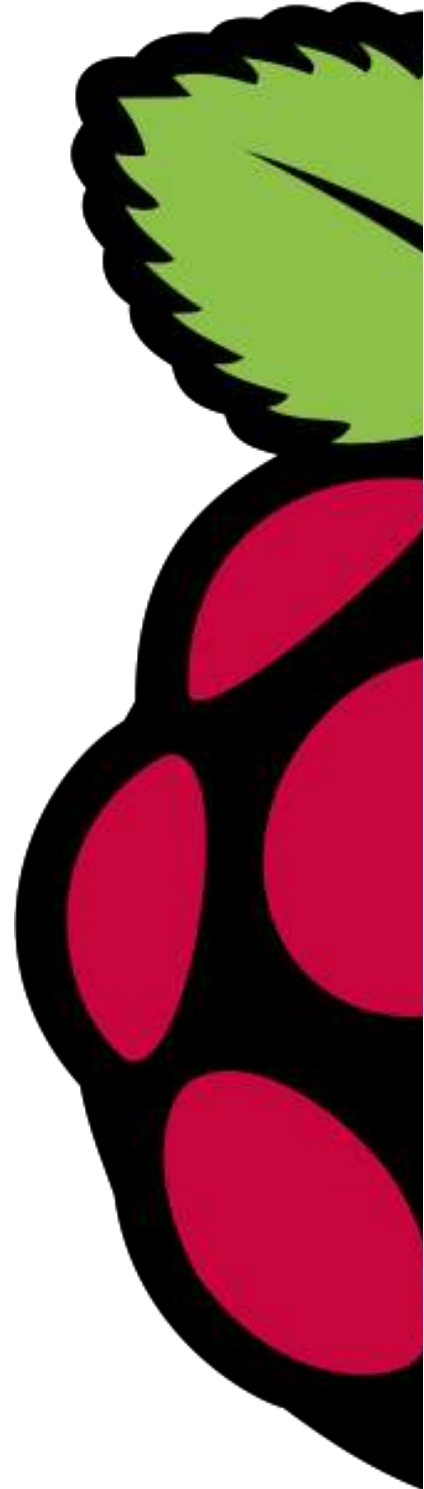
## OSMC



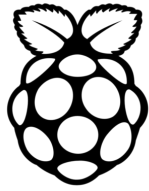


# Raspberry Pi

## KODI

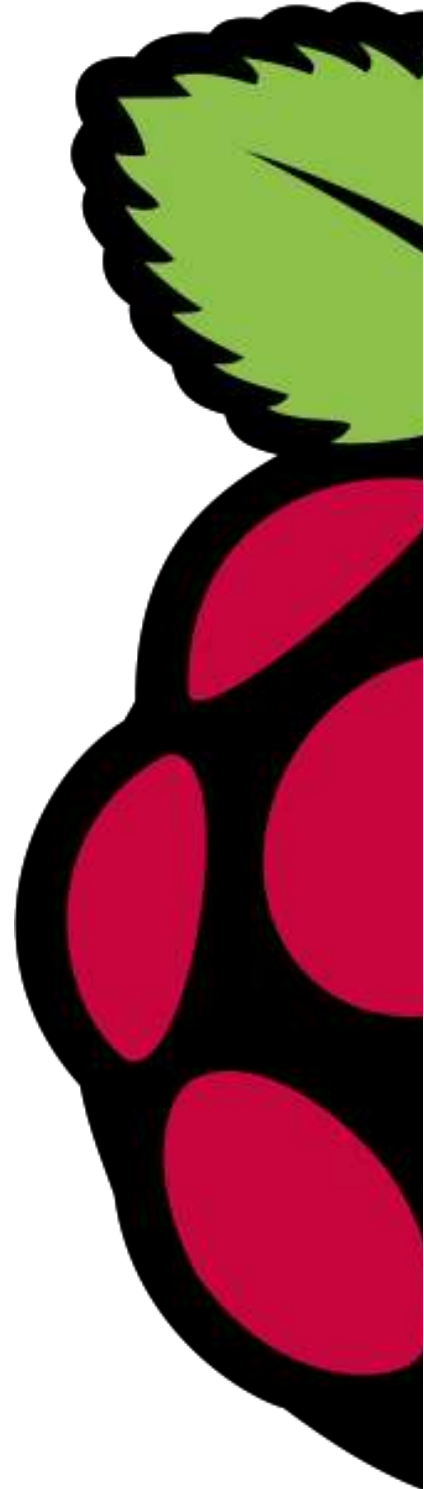


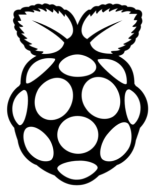




# Raspberry Pi

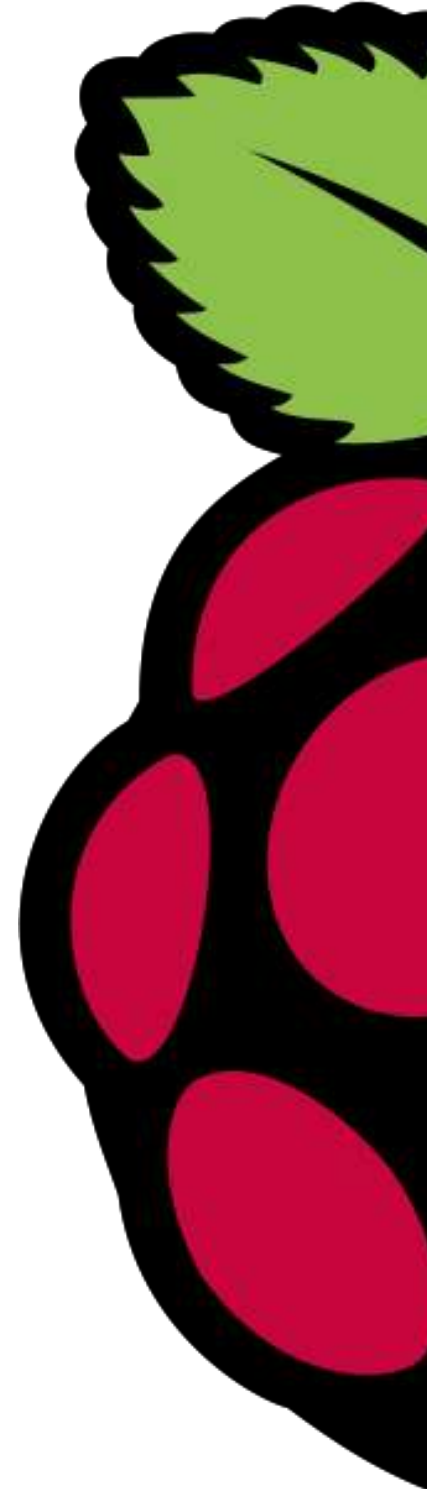
## Lakka

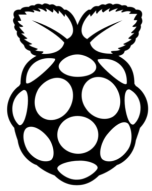




Raspberry Pi

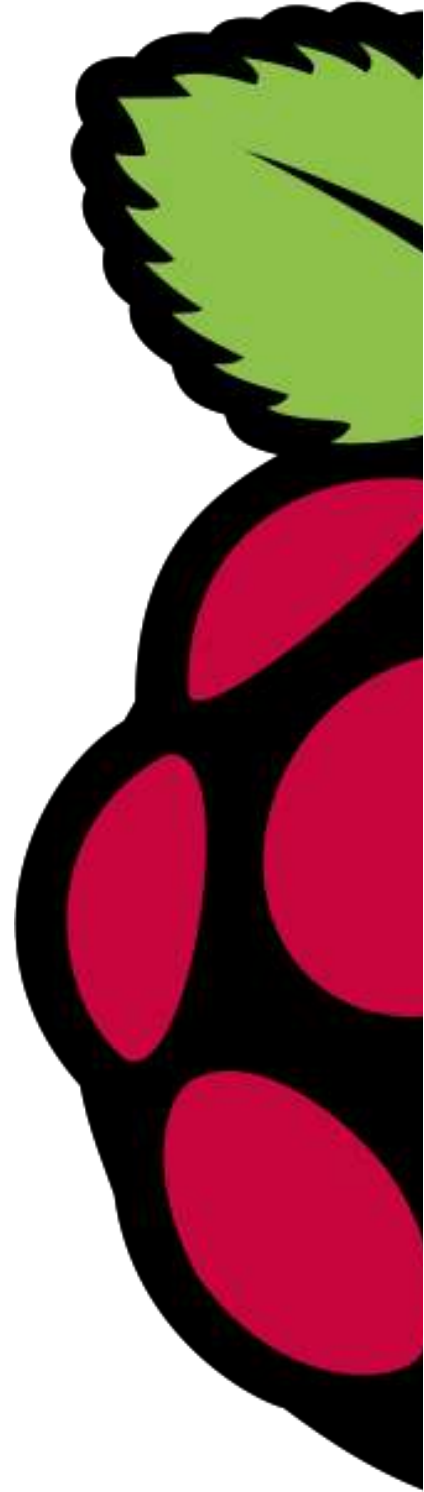
Recalbox/RetroPie

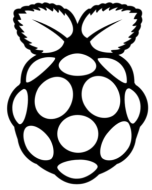




**Raspberry Pi**

**Y... ¿Qué se puede hacer?**

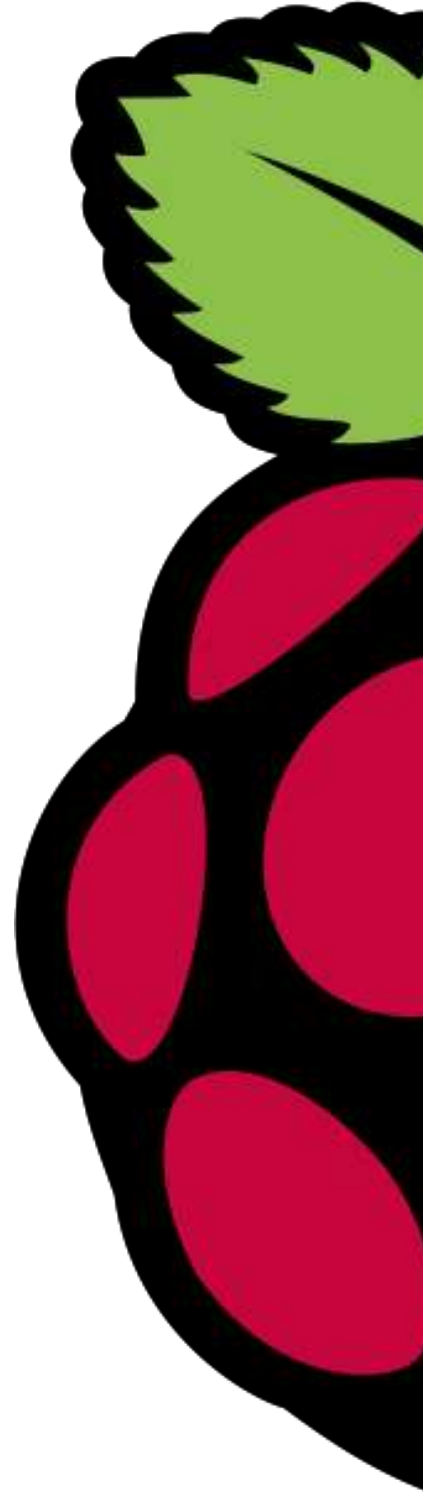


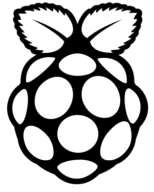


**Raspberry Pi**

# **Eso depende de tí...**

pero estos son algunos ejemplos

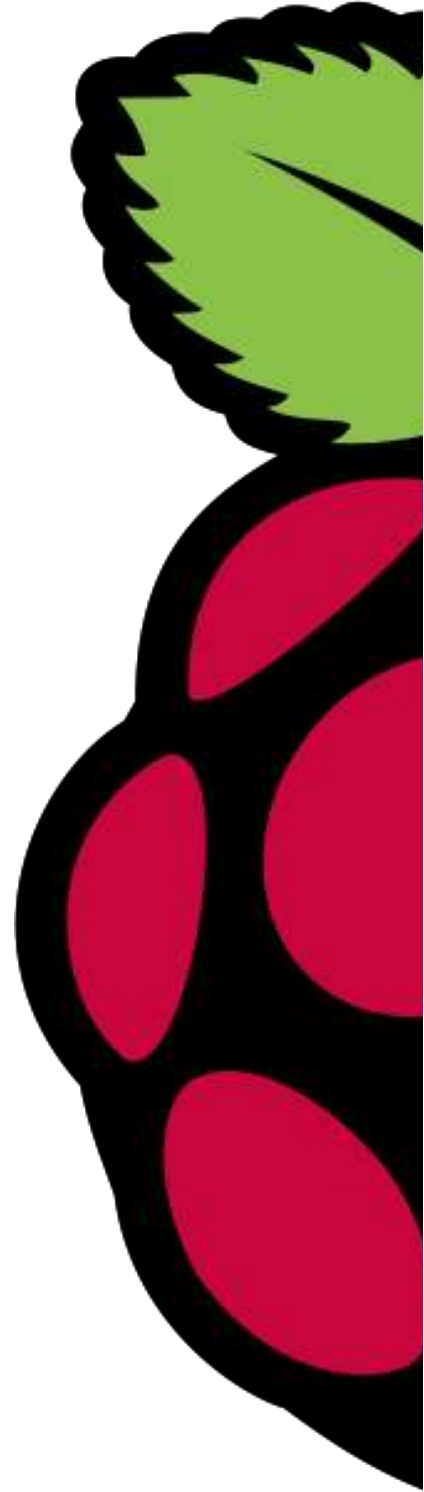


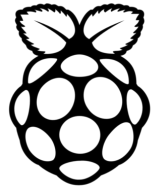


**Raspberry Pi**

## **NFC's + Arduino + Raspberry Pi**

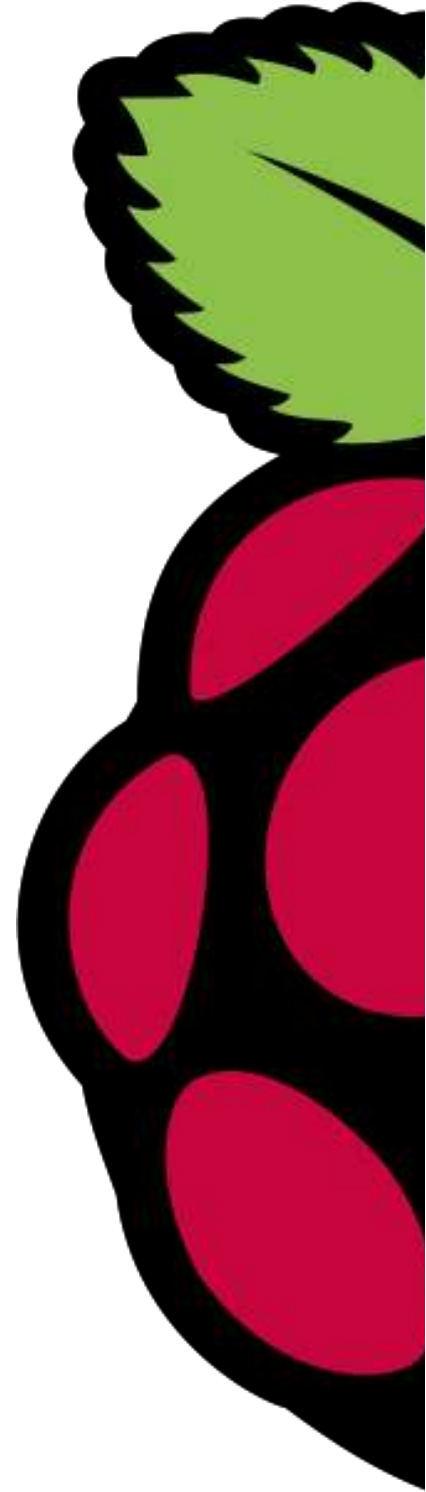
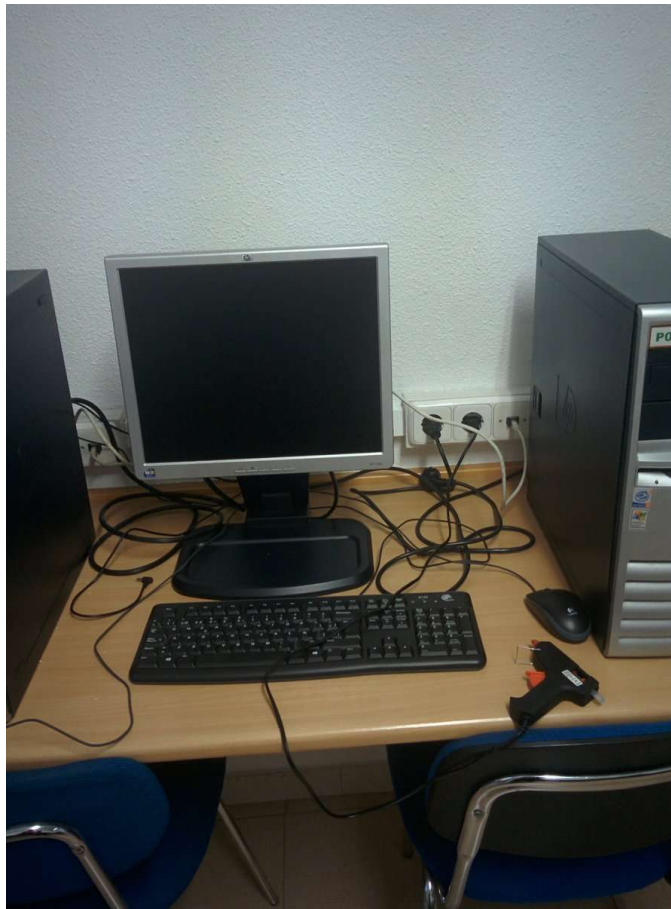
//video

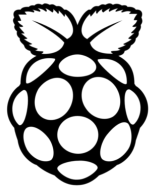




# Raspberry Pi

En mi colegio mayor





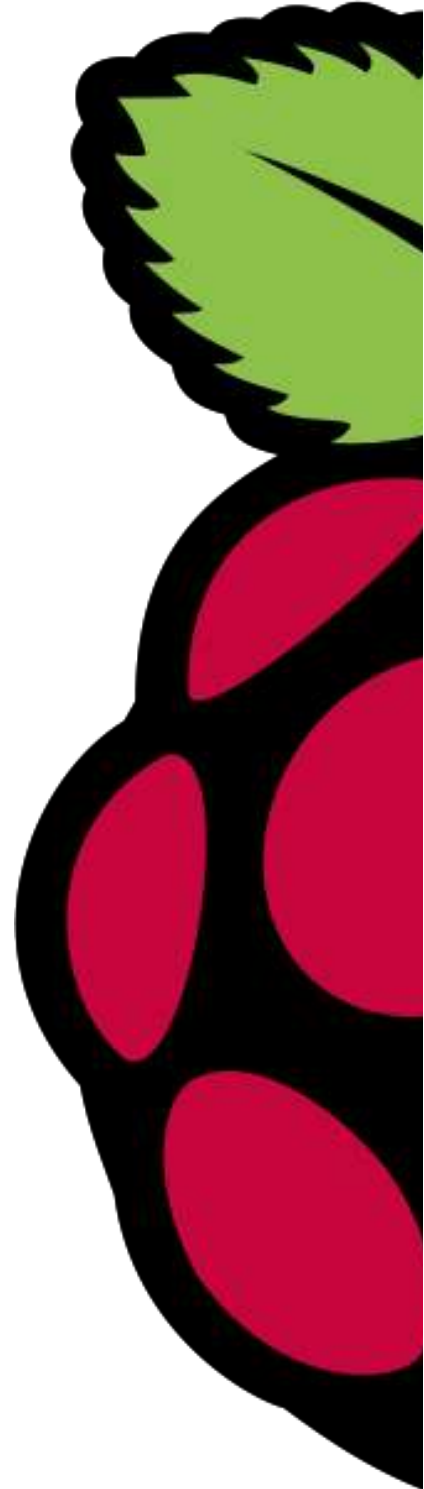
# Raspberry Pi

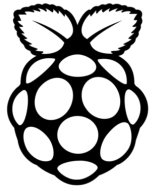
**Sitio:** Sala de informática de mi colegio mayor

**Servicios que tiene:**

- \* Samba
- \* FTP
- \* DLNA
- \* Bot de twitter
- \* Transmission
- \* Flexget
- \* VNC
- \* SSH, para cuando estoy aburrido y quiero hacer Nmap o cosas así
- \* IDE en la nube (cloud9)

Basicamente, intento utilizar todos los protocolos que me deja mi red





# Raspberry Pi

## Samba

### ¿Qué es?

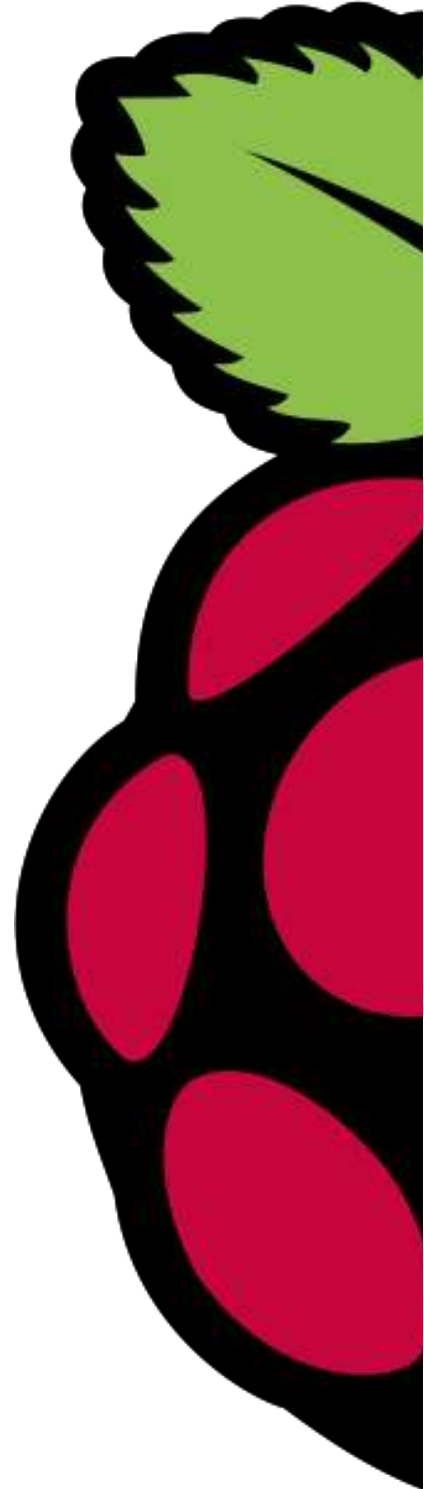
Es un protocolo para compartir archivos entre ordenadores de la misma red. Hay gran cantidad de exploradores de ficheros compatibles con Samba, en Android, IOS, Windows, Linux, etc.

### ¿Cómo se instala?

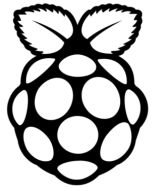
```
sudo apt-get install samba samba-common-bin  
sudo nano -w /etc/samba/smb.conf
```

#### [Torrent]

```
path = /root/torrent  
comment = Directory for torrents  
writable = yes  
browseable = yes  
guest ok = yes  
create mask = 0777  
directory mask = 0777
```



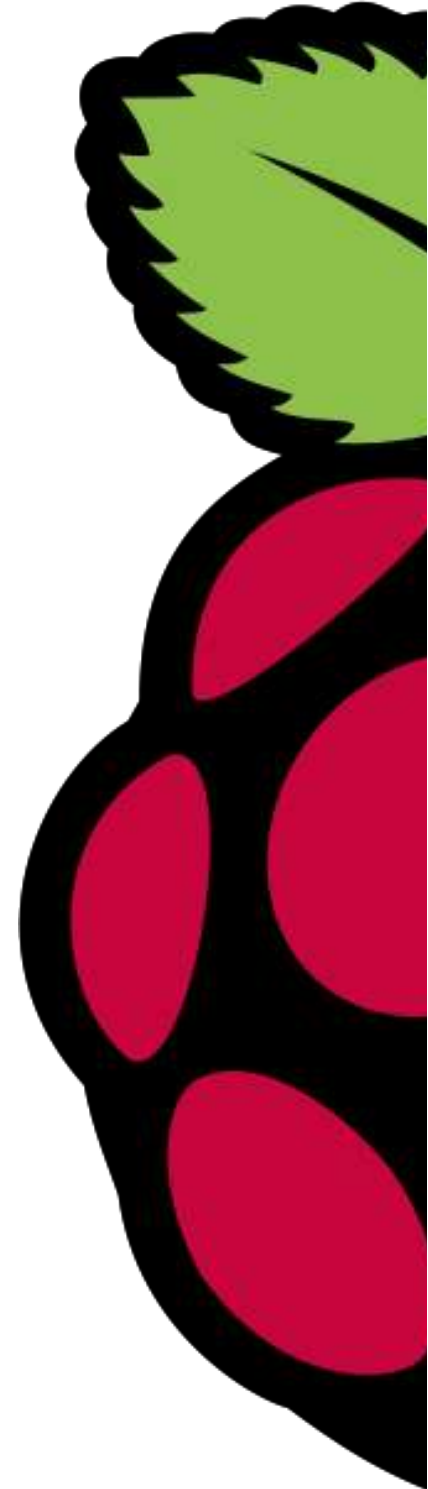
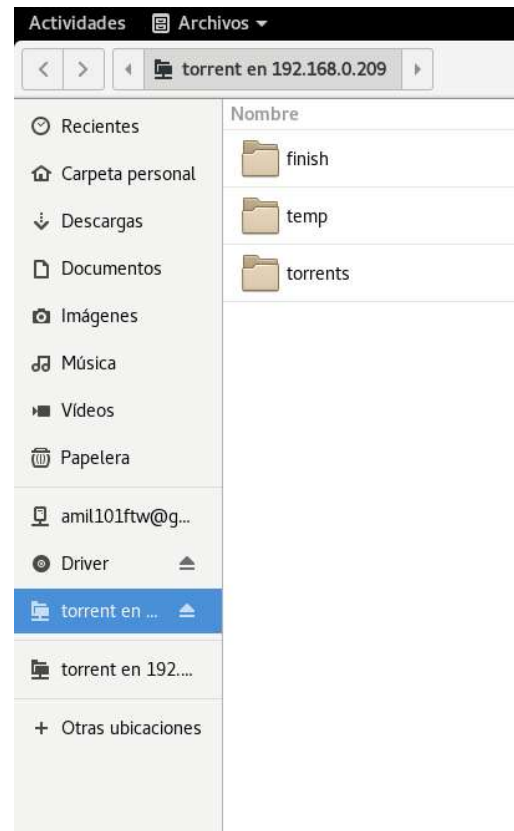
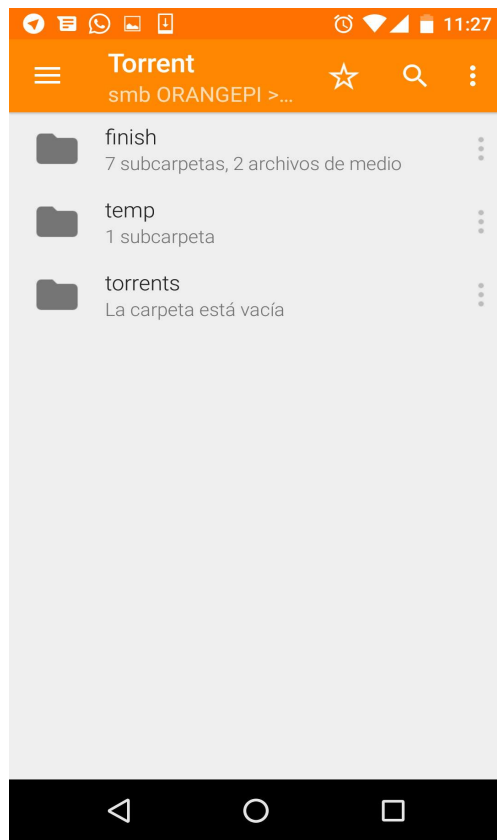


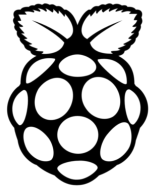


# Raspberry Pi

## Samba

### Resultado:

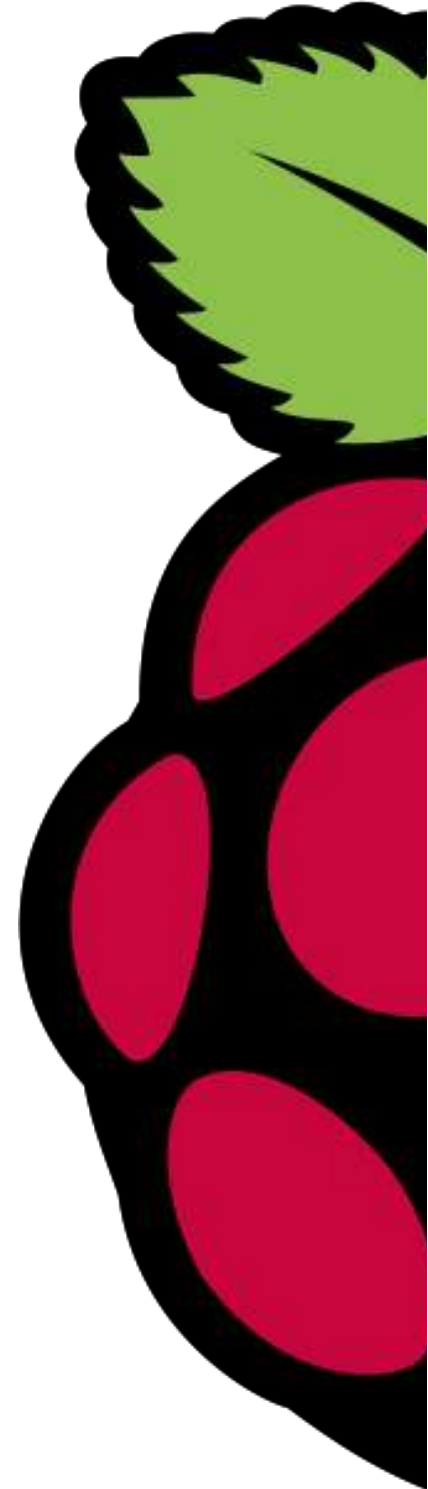
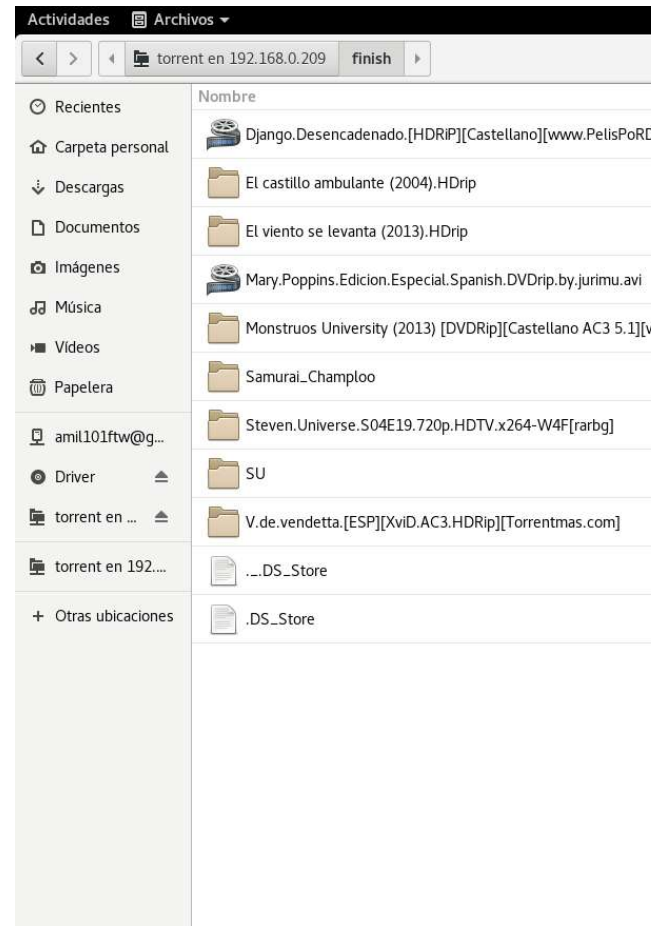
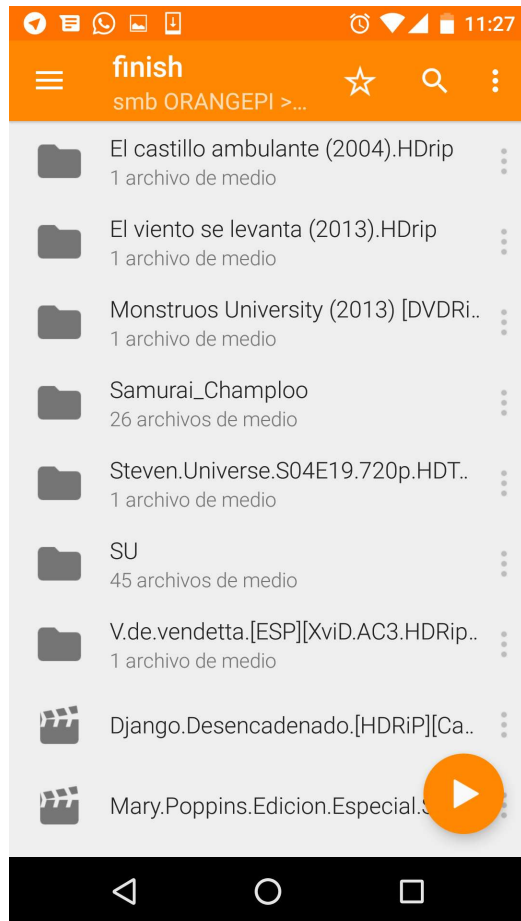


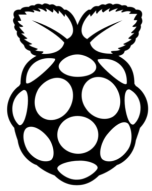


# Raspberry Pi

## Samba

### Resultado:

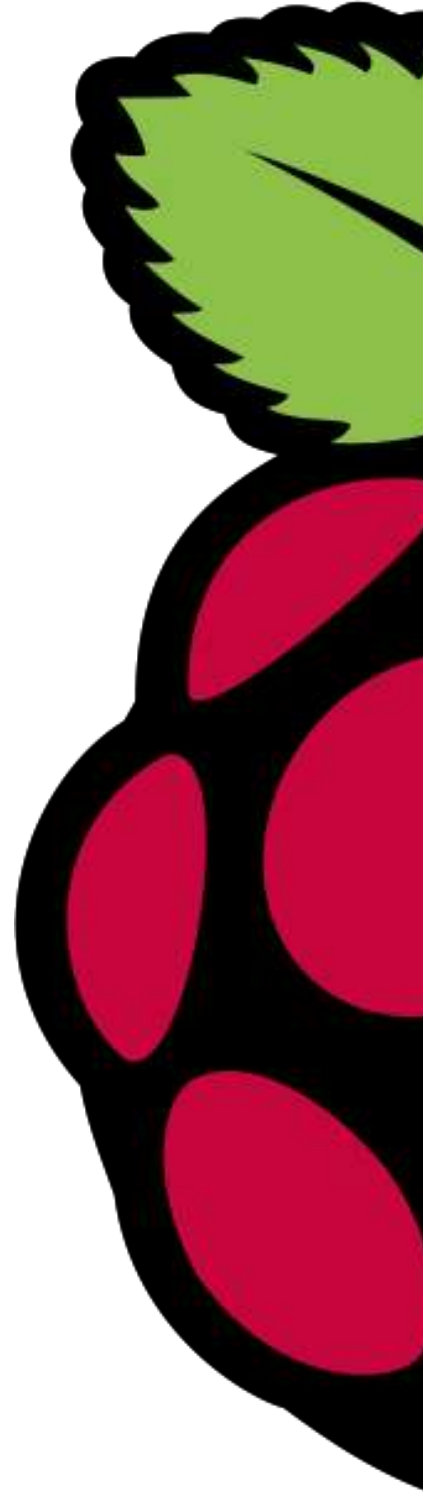
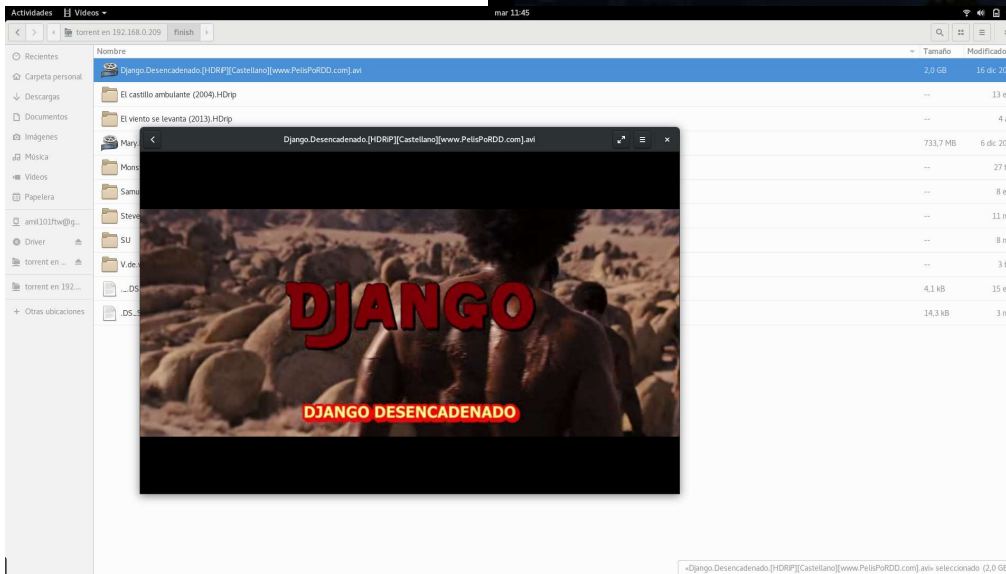
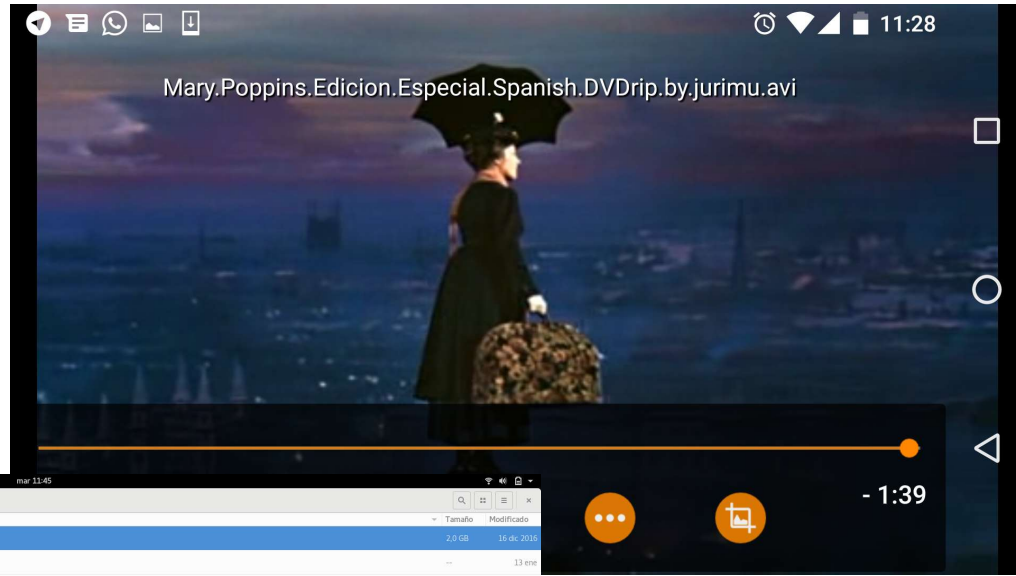


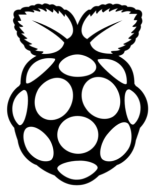


# Raspberry Pi

## Samba

## Resultado:





# Raspberry Pi

## DLNA/UPnP

¿Qué es?

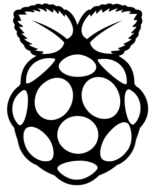
DLNA (Digital Living Network Alliance) es una organización fundada por Sony en 2003. Define unos standards para permitir compartir archivos en la misma red. DLNA está basado en UpnP. Lo divertido es que hay más de 9000 dispositivos con este protocolo, y posiblemente tu Smart TV lo tenga!

¿Cómo se instala?

```
apt-get install minidlna  
sudo nano/etc/minidlna.conf
```

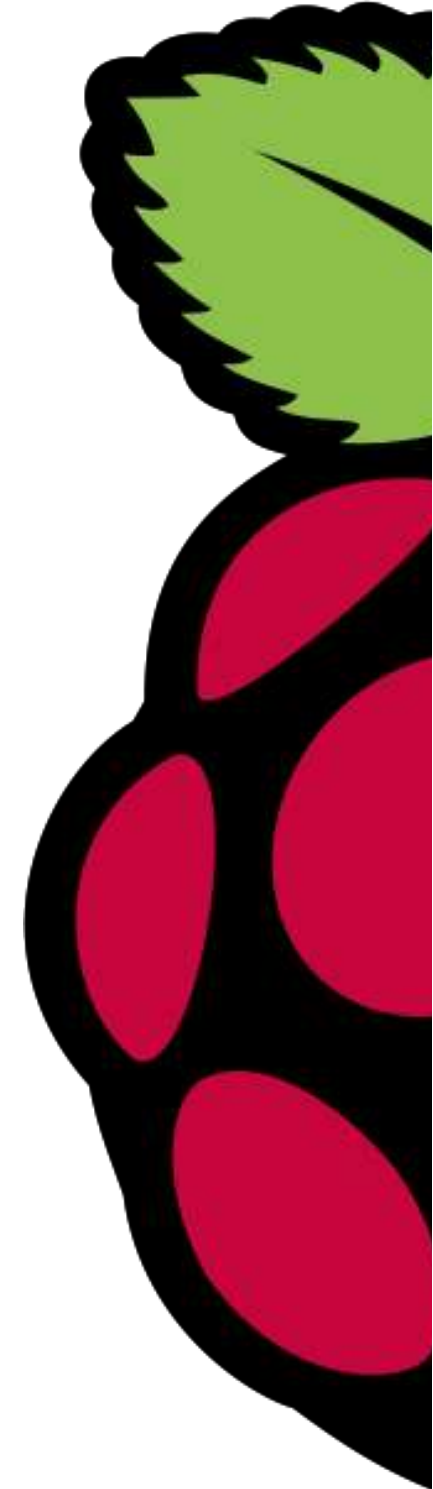
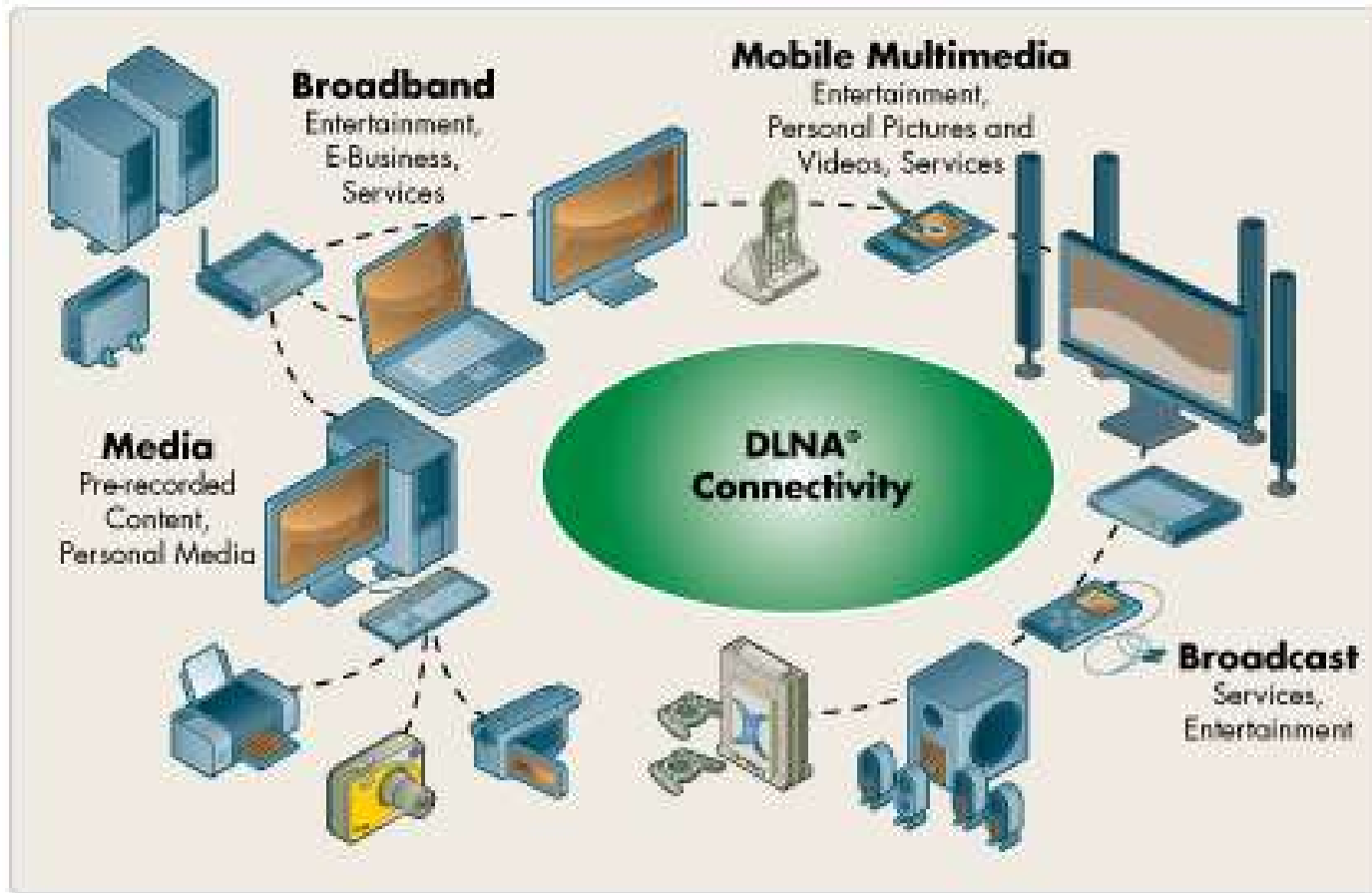
```
media_dir=A,/mnt/ext/Music  
media_dir=P,/mnt/ext/Pictures  
media_dir=V,/mnt/ext/Videos  
friendly_name=Raspberry Pi  
inotify=yes
```

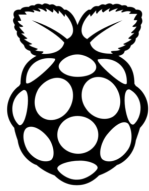




# Raspberry Pi

## DLNA/UPnP





# Raspberry Pi

## Transmission y Flexget

¿Qué es?

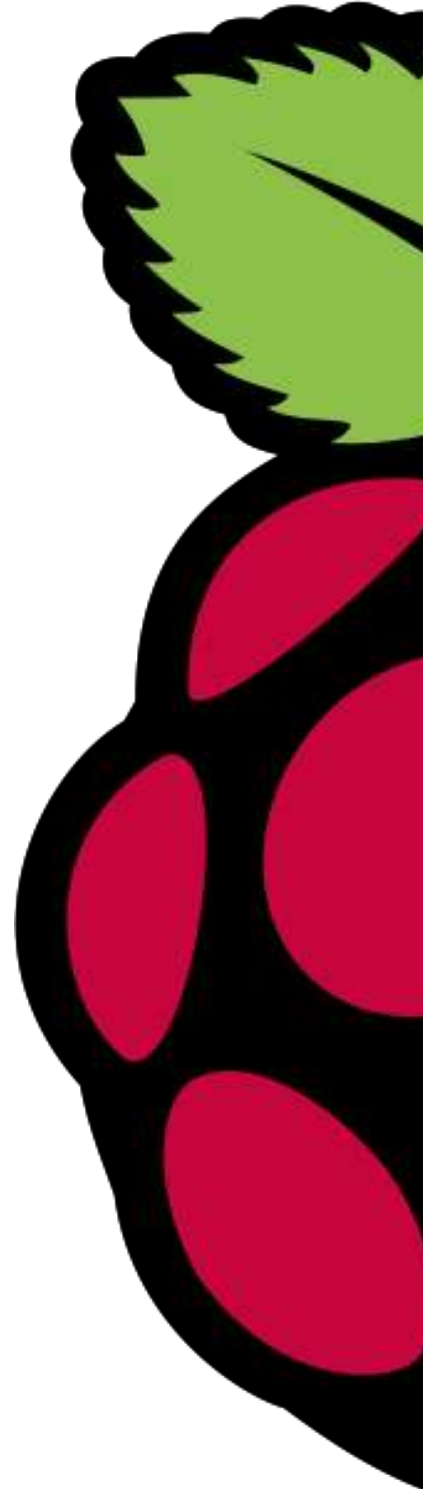
Transmission es un cliente P2P.

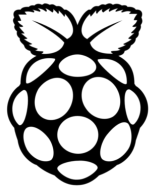
Flexget es un sistema de automatización de descarga de torrents escrito en python, que se suscribe a un rss con los links de descarga, y cuando sale una publicación nueva directamente se la descarga.

¿Cómo se instala?

```
sudo apt-get install transmission-daemon  
sudo nano /etc/transmission-daemon/settings.json
```

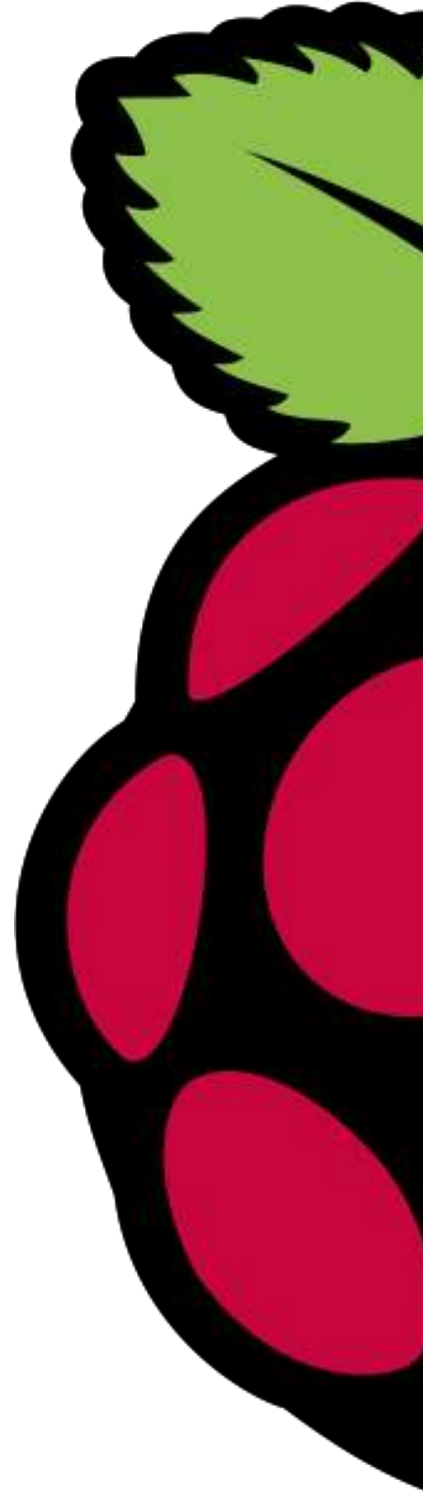
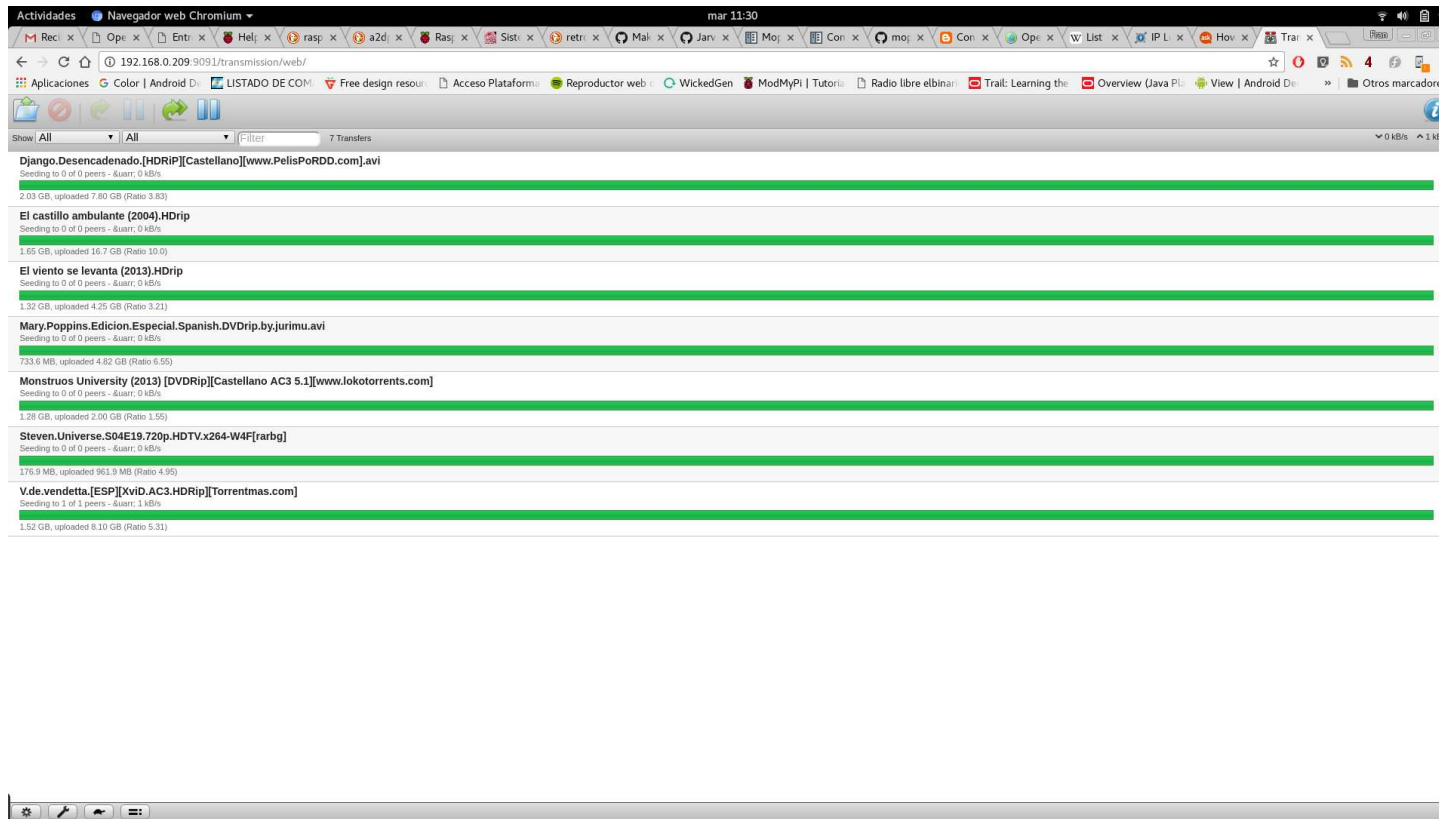
```
sudo pip install flexget  
sudo mkdir /home/pi/.flexget  
sudo chown -R pi /home/pi/.flexget  
sudo chgrp -R pi /home/pi/.flexget  
nano /home/pi/.flexget/config.yml
```

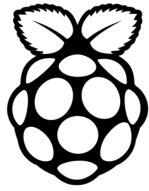




# Raspberry Pi

## Transmission y Flexget



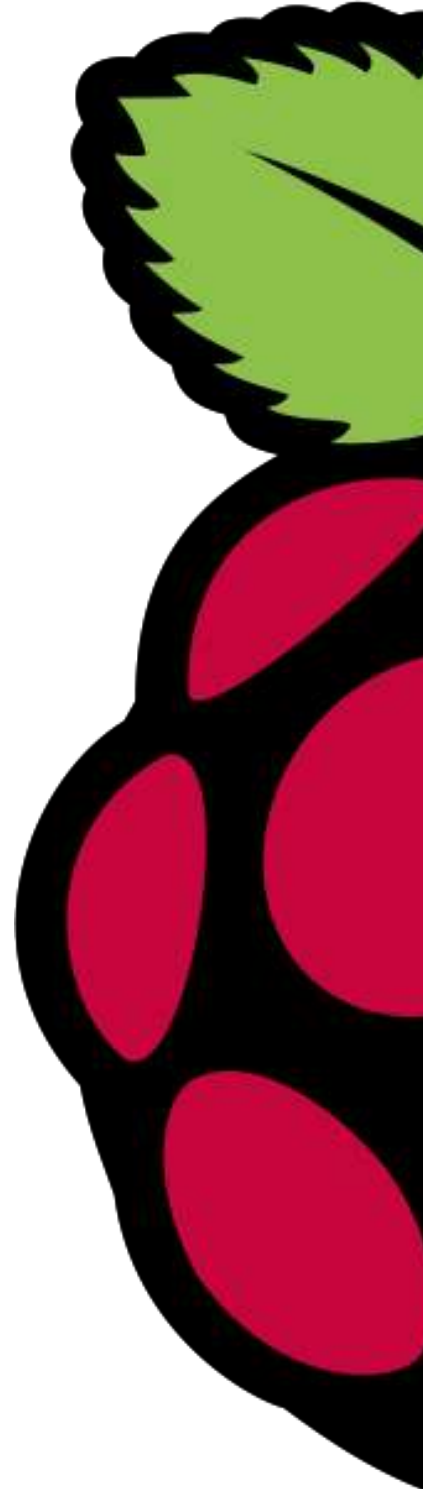


# Raspberry Pi

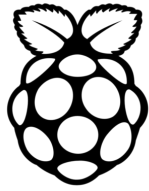
## Transmission y Flexget

### Flexget:

```
tasks:  
  test task:  
    rss: http://showrss.info/show/589.rss  
    all_series: yes  
    transmission:  
      host: localhost  
      port: 9091  
      username: "  
      password: "  
      ratio: -1  
      main_file_only: yes  
      path: /root/torrent/finish  
      addpaused: no  
      skip_files:  
        - '*.nfo'  
        - '*.sfv'  
        - '*[sS]ample*'  
        - '*.txt'
```







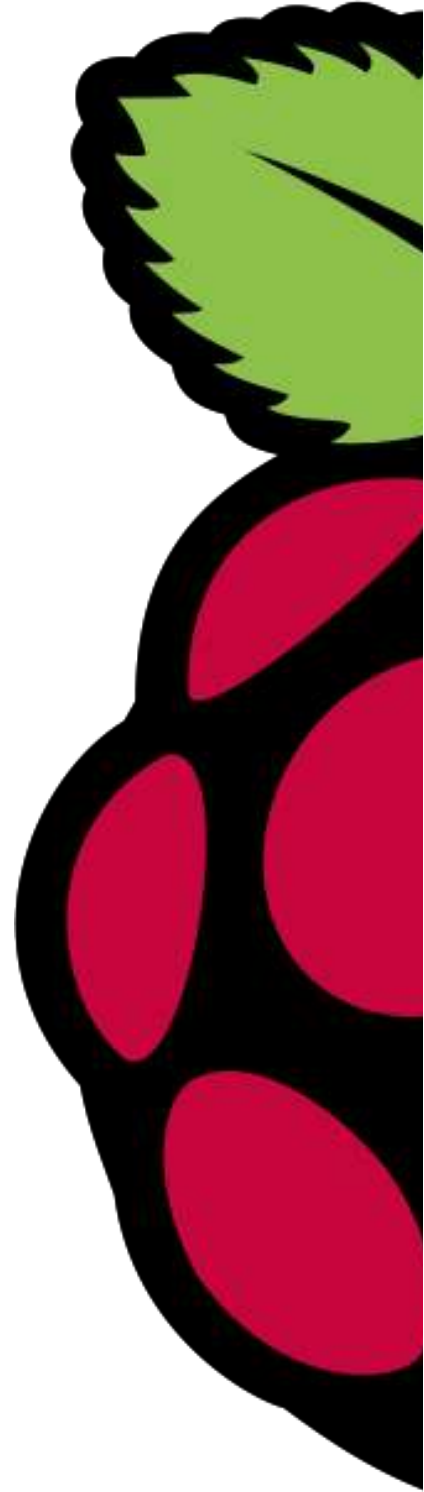
# Raspberry Pi

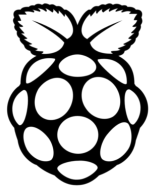
## Transmission y Flexget

### Flexget:

```
Actividades  Navegador web Chromium  mai
Reci x  Ope x  Entr x  Hel: x  rasp x  a2d: x  Ras: x  Sist: x  retr: x  Mak x  Jarv x
showrss.info/show/589.rss
Aplicaciones  Color | Android D  LISTADO DE COM  Free design resour  Acceso Plataforma  Reproductor web c  WickedGe

This XML file does not appear to have any style information associated with it. The document tree is shown below.
<?xml version="1.0" encoding="UTF-8" ?>
<rss xmlns:tv="http://showrss.info" version="2.0">
  <channel>
    <title>showRSS feed: Steven Universe</title>
    <link>http://showrss.info</link>
    <ttl>30</ttl>
    <description>showRSS show feed for Steven Universe</description>
  </channel>
  <item>
    <title>Steven Universe 4x19 Room for Ruby</title>
    <link>
      magnet:?xt=urn:btih:CB27FF3AB10C0FDF51B5B1B667B1C846E165CBA9&dn=Steven+Universe+S04E19+HDTV+x264+W4F&tr=
      paradise.org%3A6969%2Fannounce&tr=udp%3A%2F%2Ftracker.opentrackr.org%3A1337%2Fannounce&tr=http%3A%2F%2F
      </link>
    <guid isPermaLink="false">e3f1a58e38189bceb5d5651d269734051d3242a</guid>
    <pubDate>Sat, 11 Mar 2017 07:00:15 +0000</pubDate>
    <description>
      New episode: Steven Universe S04E19 HDTV x264 W4F. Link: <a href="magnet:?
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      paradise.org%3A6969%2Fannounce&tr=udp%3A%2F%2Ftracker.opentrackr.org%3A1337%2Fannounce&tr=http%3A%2F%2F
      xt=urn:btih:CB27FF3AB10C0FDF51B5B1B667B1C846E165CBA9&dn=Steven+Universe+S04E19+HDTV+x264+W4F&tr=udp%3A%
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    <tv:external_id>1615</tv:external_id>
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    paradise.org%3A6969%2Fannounce&tr=udp%3A%2F%2Ftracker.opentrackr.org%3A1337%2Fannounce&tr=http%3A%2F%2F
    </item>
  </item>
  <title>Steven Universe 4x19 Room for Ruby 720p</title>
```





# Raspberry Pi

## VNC

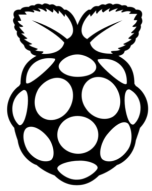
¿Qué es?

VNC es un software que nos permite tomar el control del ordenador servidor remotamente a través de un ordenador cliente, es decir, un escritorio remoto.

¿Cómo se instala?

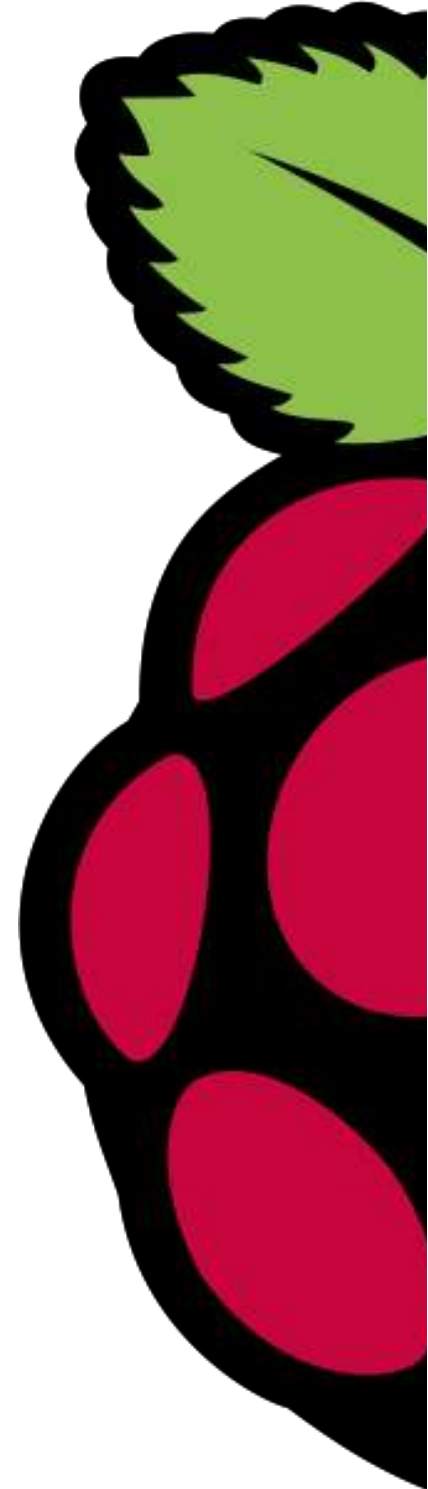
```
sudo apt-get install tightvncserver  
tightvncserver  
sudo reboot  
vncserver :0
```

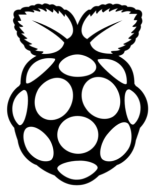




# Raspberry Pi

## VNC





# Raspberry Pi

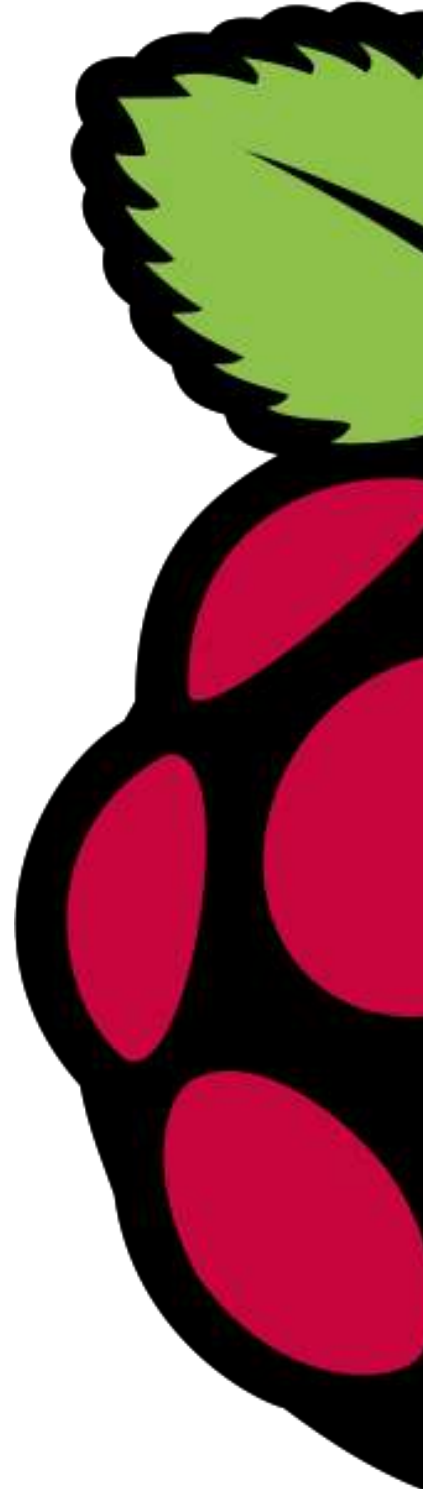
## IDE en la nube, Cloud9

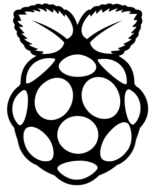
¿Qué es?

Un IDE en la nube es cómo el típico IDE que utilizamos para programar pero que accedemos a él desde el navegador. Cloud9 es una empresa de software libre que nos da el servicio de IDE en la nube, pero además, de poder descargarlo y hacerlo funcionar desde nuestra raspberry.

¿Cómo se instala?

```
wget http://nodejs.org/dist/v0.10.28/node-v0.10.28-linux-arm-pi.tar.gz
cd /usr/local
tar -xzf ~/node-v0.10.28-linux-arm-pi.tar.gz --strip=1
export NODE_PATH="/usr/local/lib/node_modules"
git clone git://github.com/c9/core.git c9sdk
cd c9sdk
scripts/install-sdk.sh
```





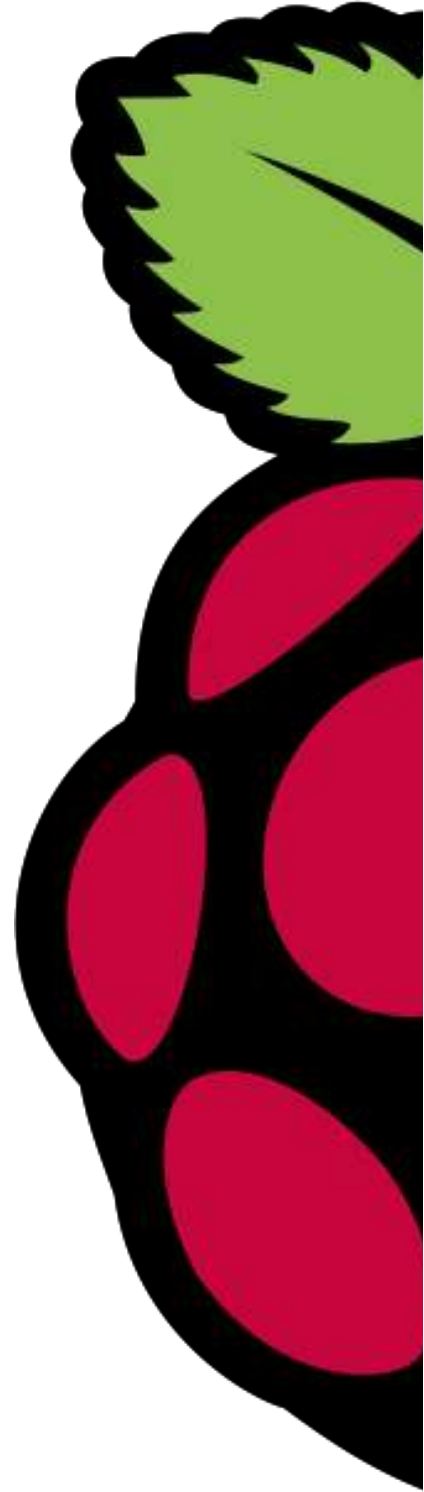
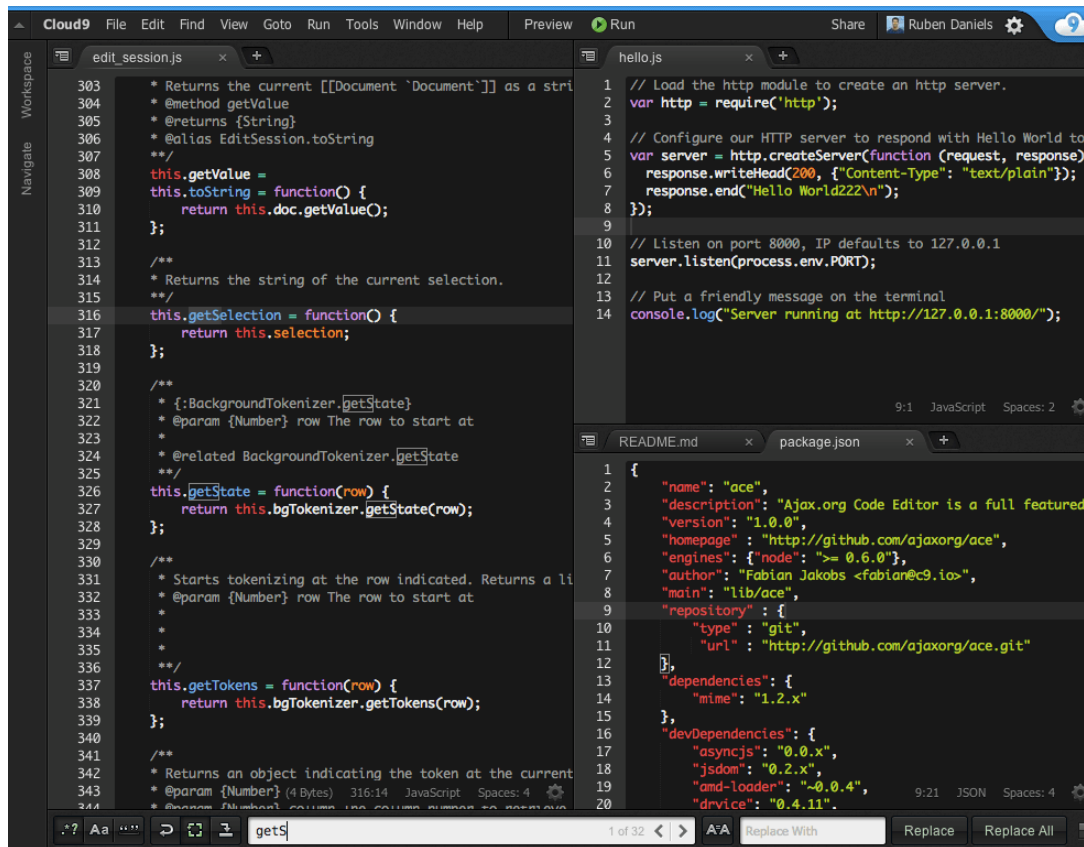
# Raspberry Pi

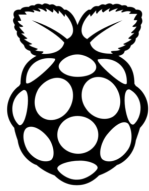
## IDE en la nube, Cloud9

Hacemos ...

```
./server.js -l 0.0.0.0
```

y boalá





# Raspberry Pi

## Bot de Twitter

¿Qué hace?

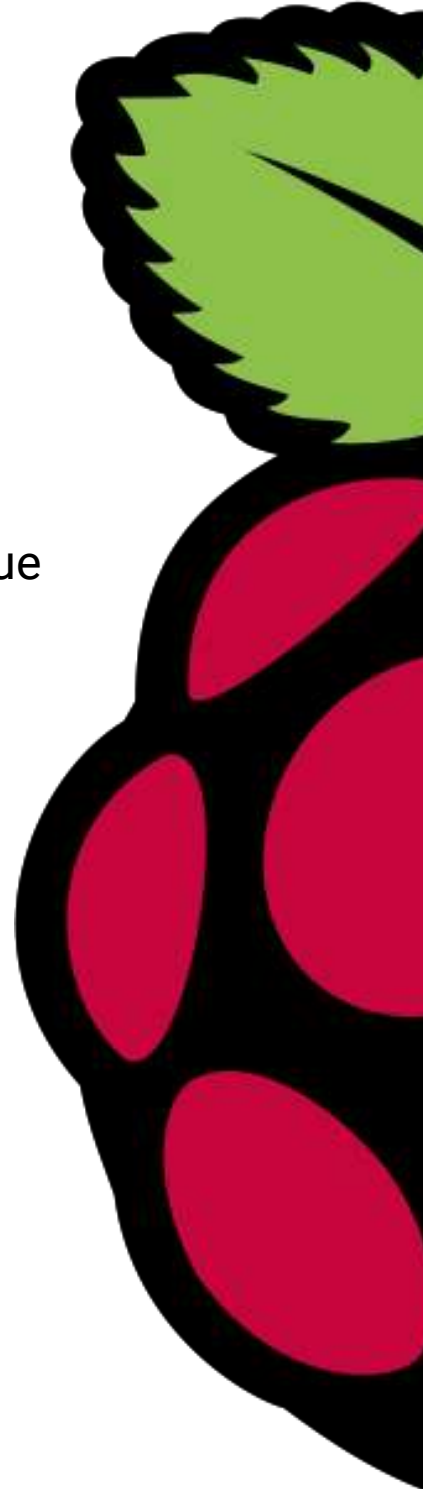
Me escribe un mensaje con la dirección IP de la placa para que sea mucho más sencillo saber donde está conectada.

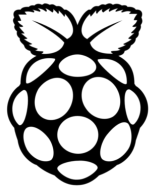
```
import DATA
import tweepy
import sys

auth = tweepy.OAuthHandler(consumer_key,
consumer_secret)
auth.set_access_token(access_token,
access_token_secret)

api = tweepy.API(auth)

api.send_direct_message(user = "amil101", text =
sys.argv[1])
```

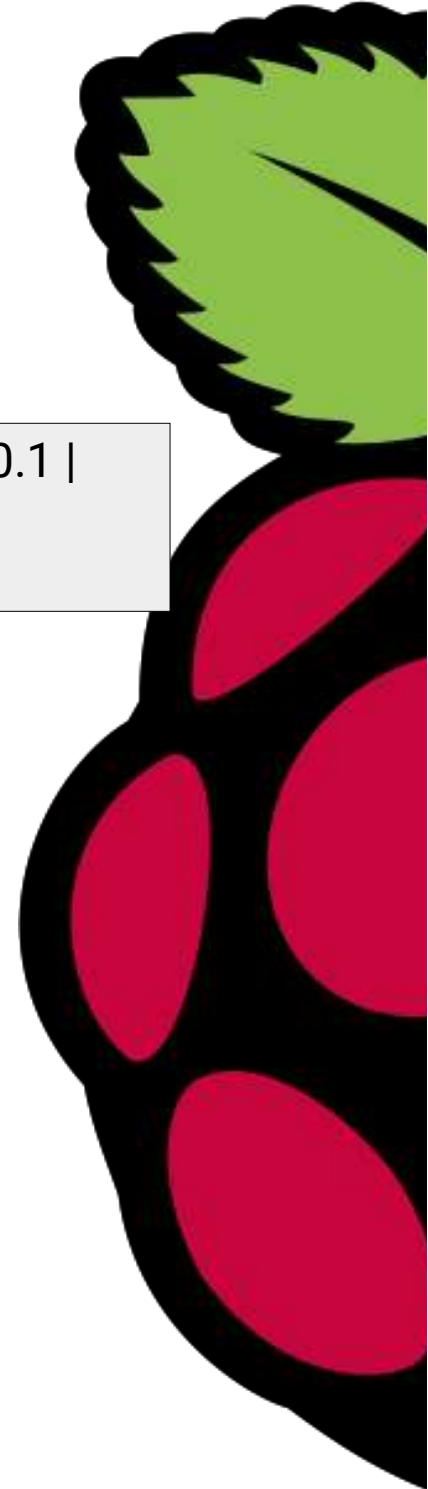
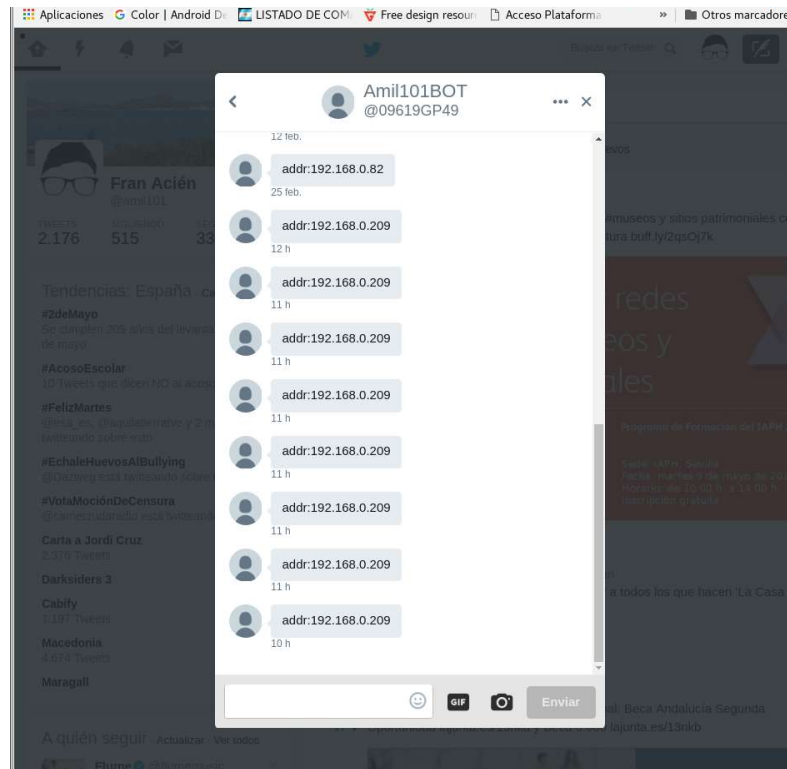


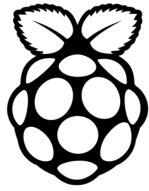


# Raspberry Pi

## Bot de Twitter

```
python /root/sendIP.py `sudo ifconfig | grep "inet " | grep -Fv 127.0.0.1 |  
awk '{print $2}'`
```





# Raspberry Pi

## A2DP

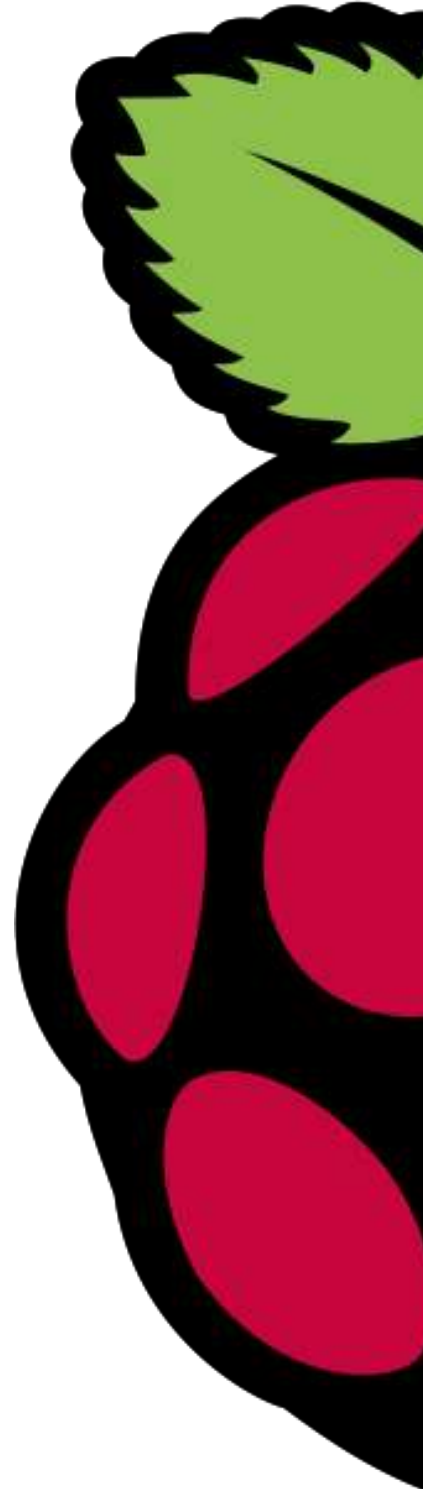
### ¿Qué es?

A2DP, Advanced Audio Distribution Profile, es un perfil de Bluetooth que nos permite compartir audio remotamente a través de bluetooth desde un emisor A2DP (un smartphone, linux, etc.) a un receptor A2DP (nuestra Raspberry Pi).

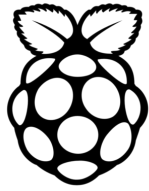
### ¿Cómo instalarlo?

Para instalarlo primero necesitamos nuestro módulo bluetooth y configurar los drivers.

<https://gist.github.com/oleq/24e09112b07464acbda1>

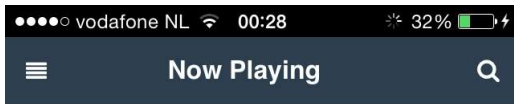






# Raspberry Pi

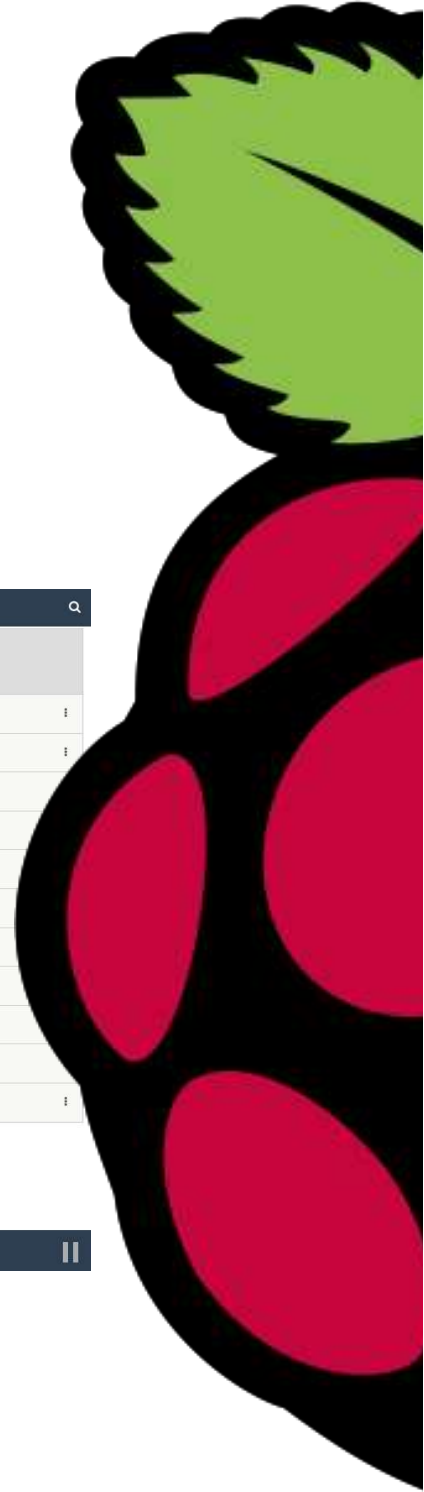
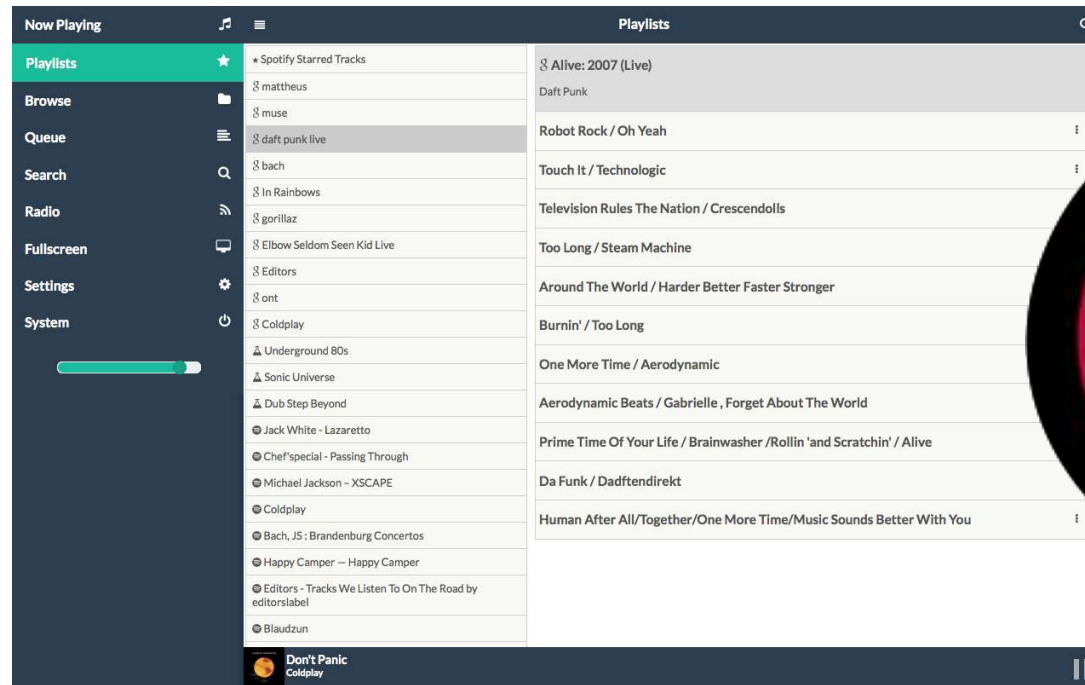
## Pi Music Box / Mopidy

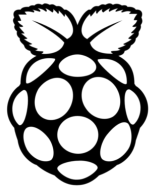


Three Women

Jack White - Lazaretto

1:15 3:57





# Raspberry Pi

## Pi Music Box / Mopidy

¿Cómo se instala?

```
wget -q -O - https://apt.mopidy.com/mopidy.gpg | sudo apt-key add -  
sudo wget -q -O /etc/apt/sources.list.d/mopidy.list https://apt.mopidy.com/jessie.list  
sudo apt-get update  
sudo apt-get install mopidy
```

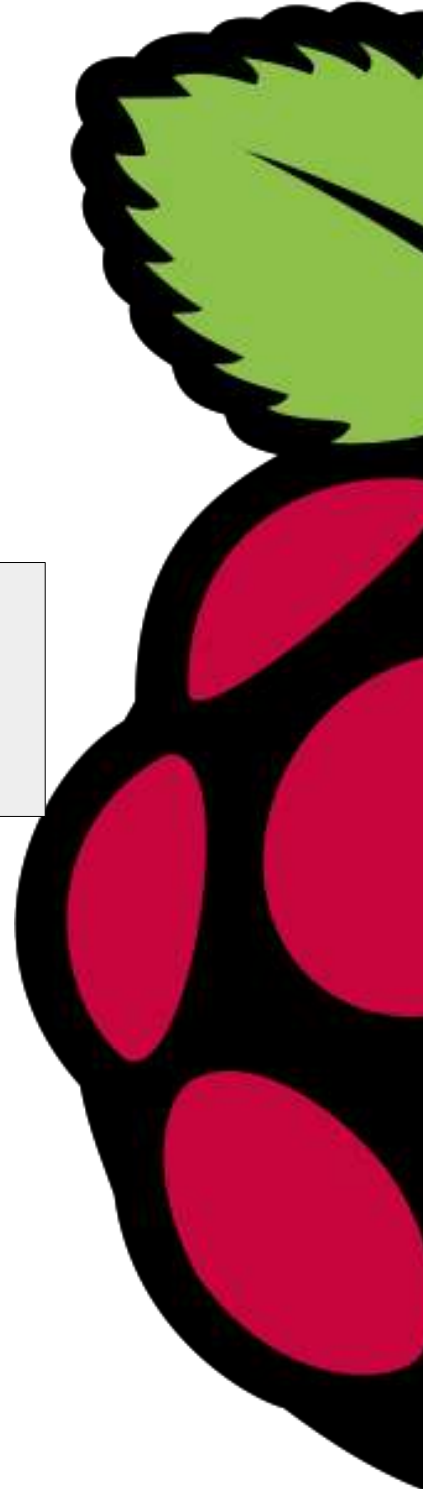
¿Cómo se configura?

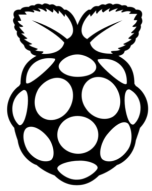
Para instalar una extensión, como por ejemplo la de spotify:

```
sudo apt-get install mopidy-spotify
```

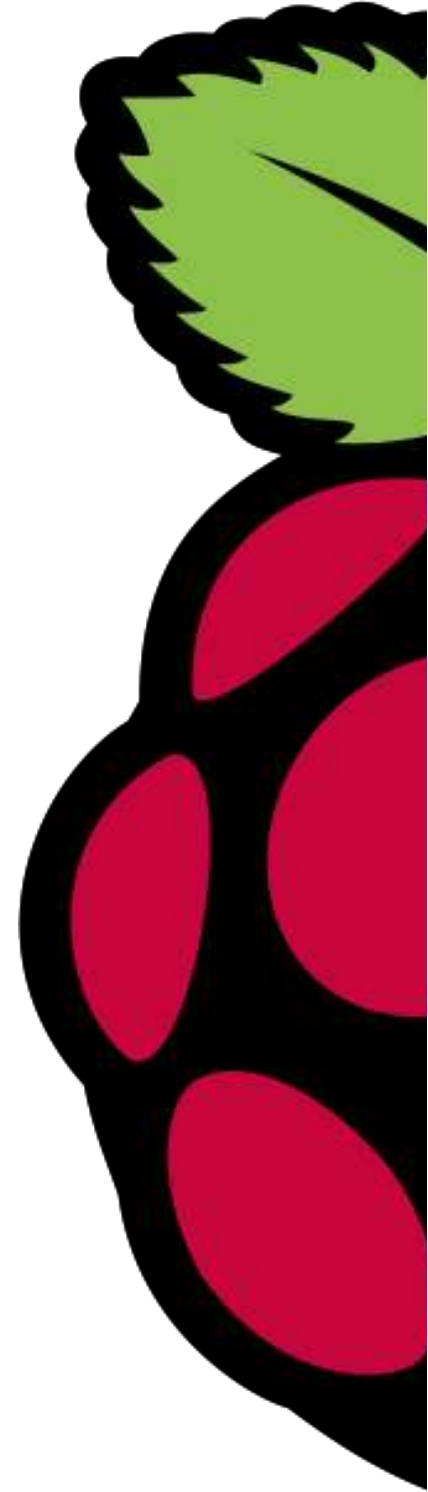
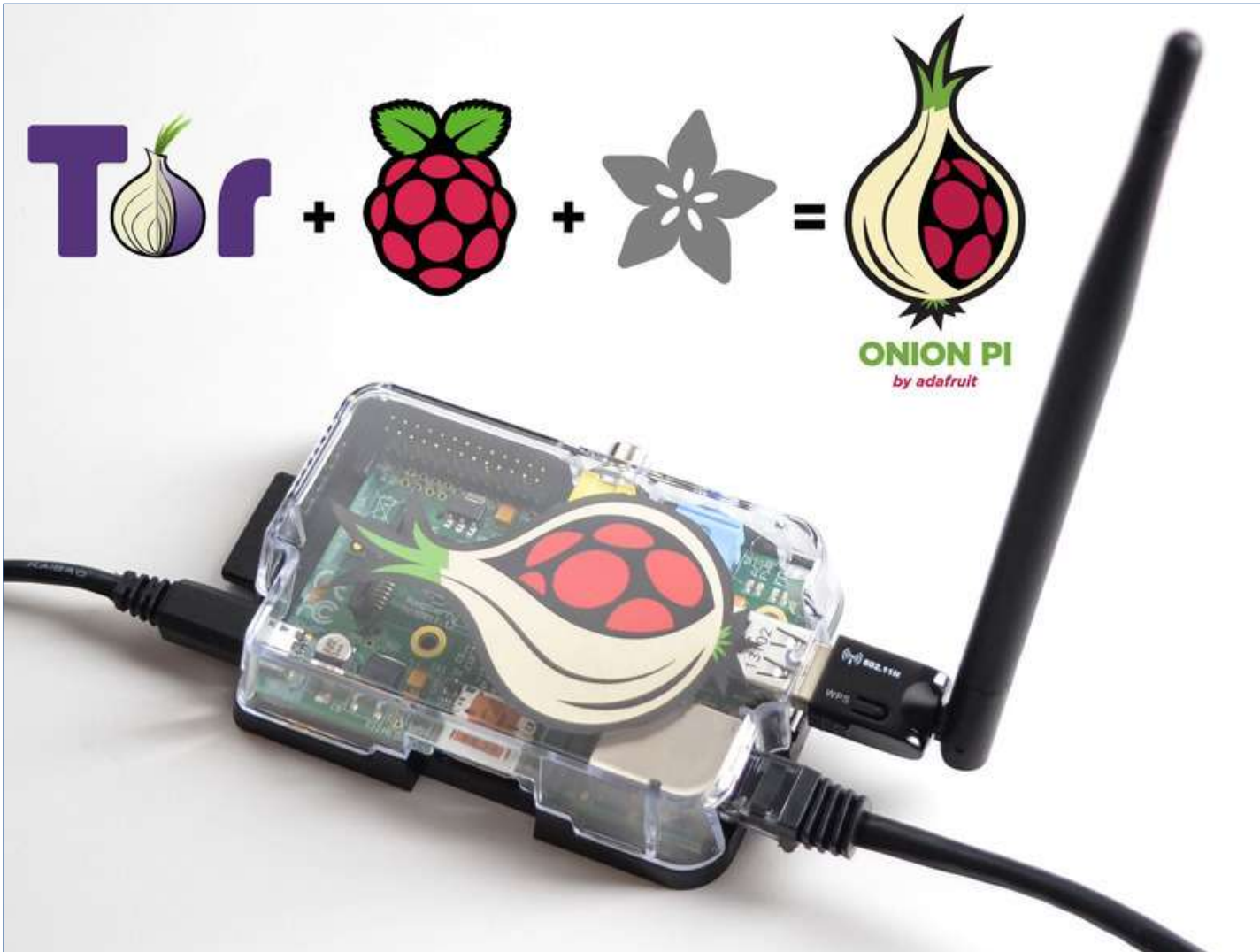
Nos vamos a `~/.config/mopidy/mopidy.conf` y añadimos

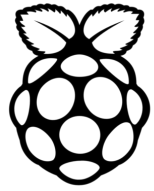
```
[spotify]  
username = alice  
password = secret
```



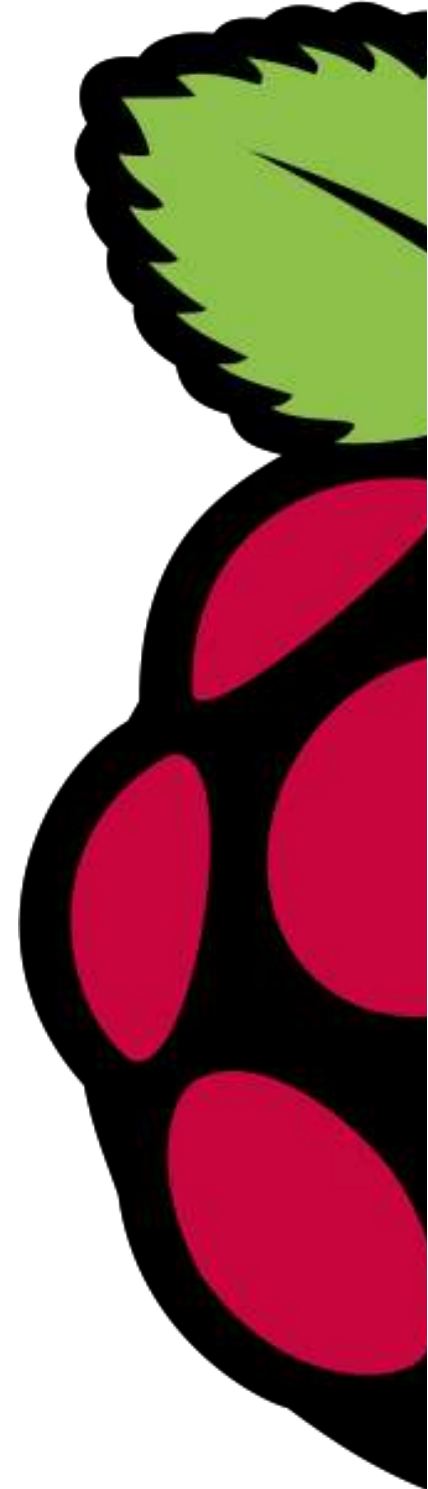


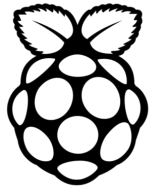
Raspberry Pi





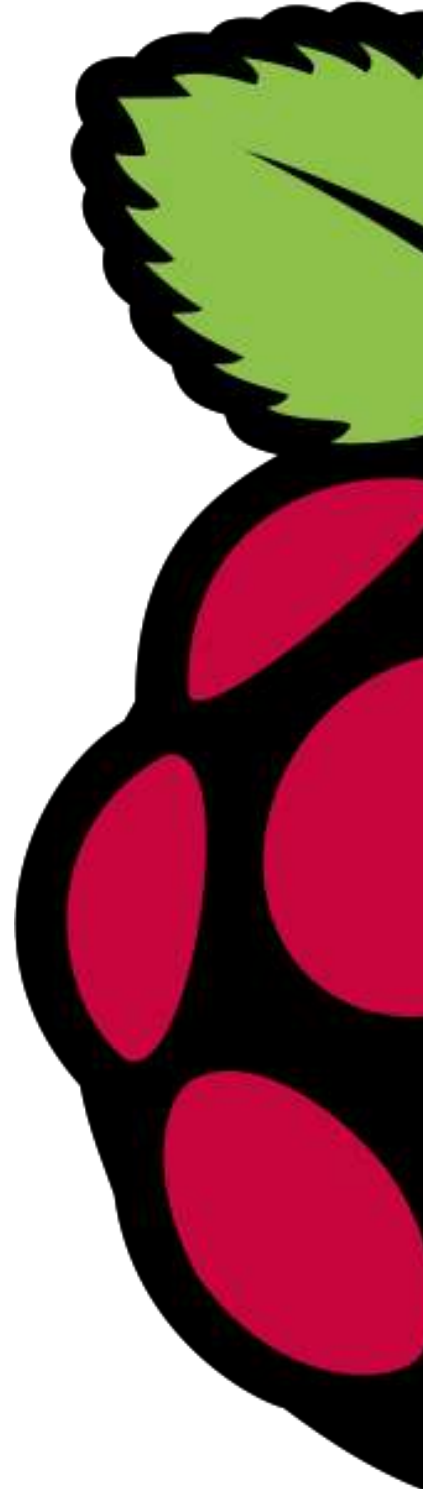
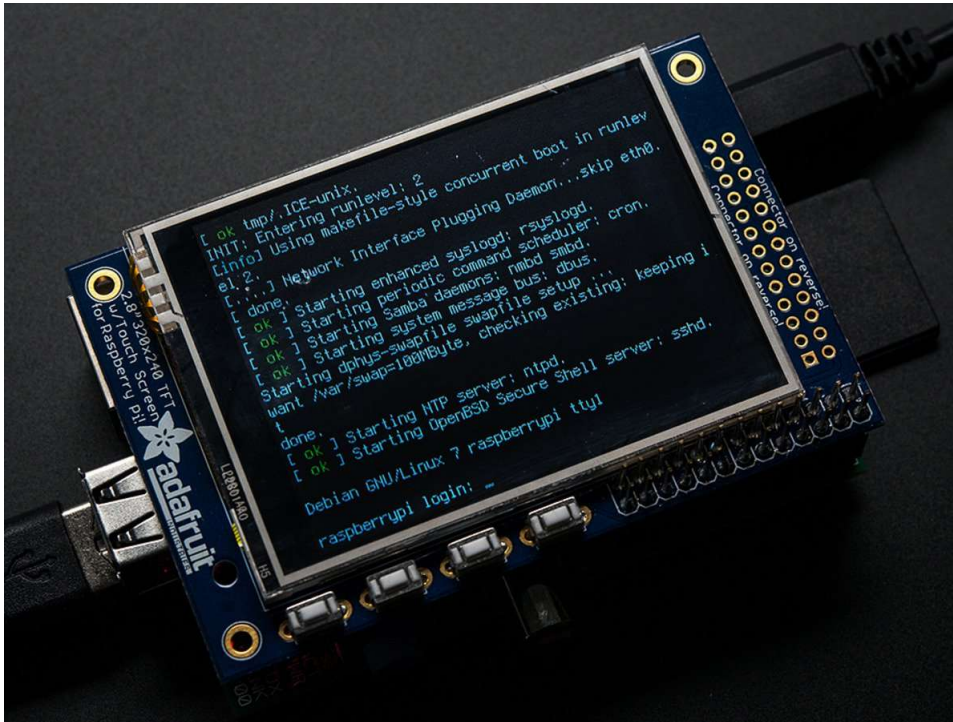
Raspberry Pi

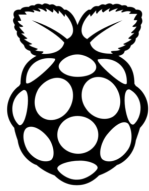




# Raspberry Pi

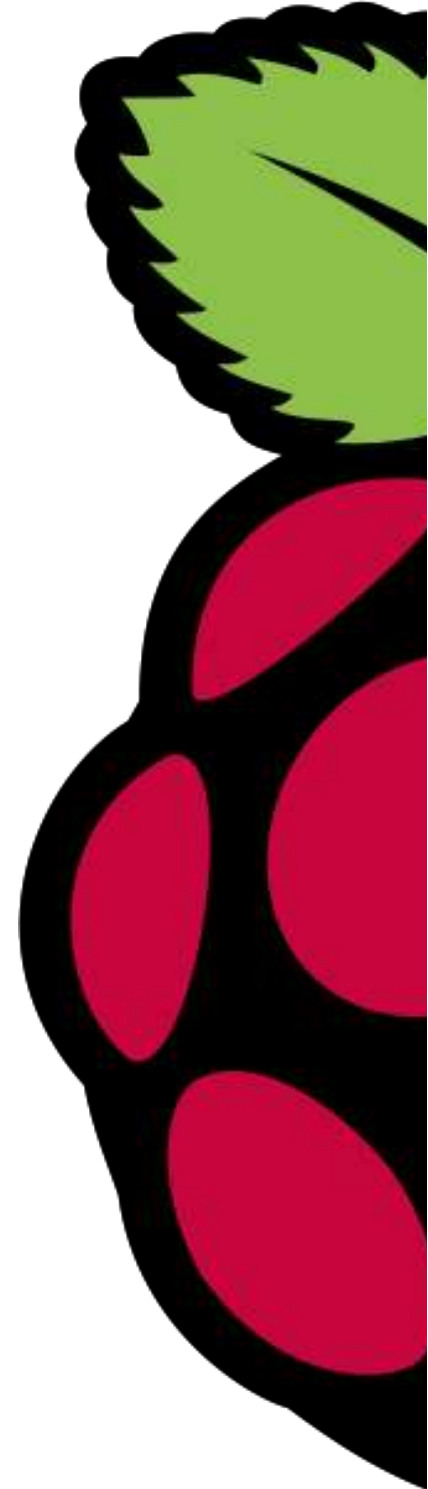
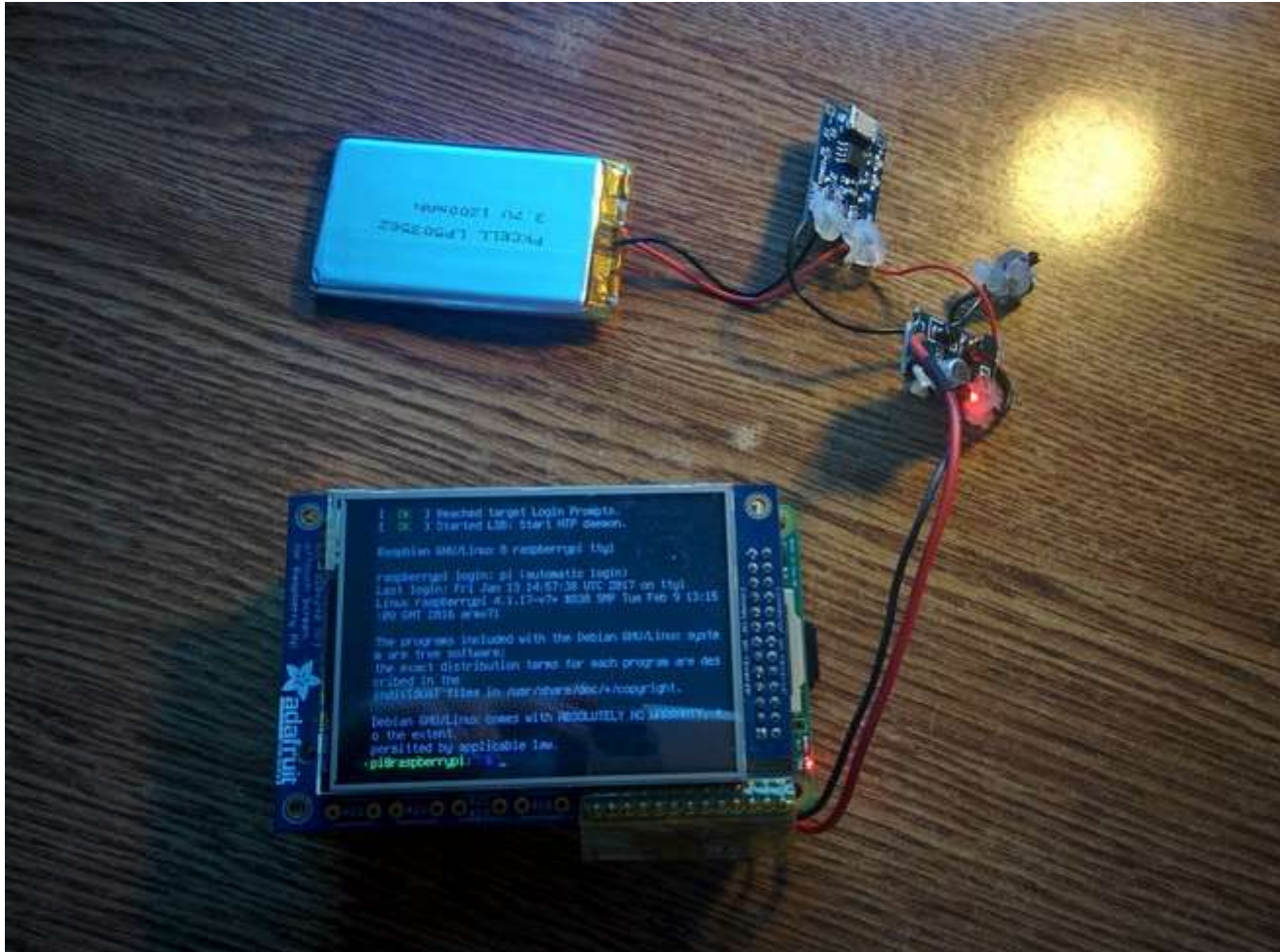
## Raspberry + TFT

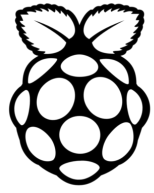




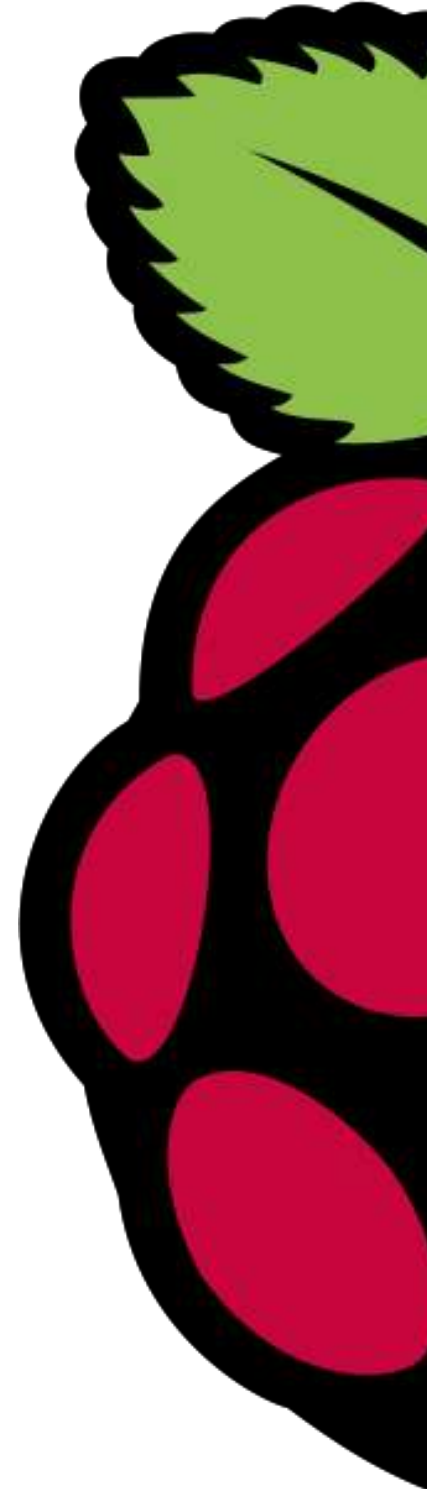
# Raspberry Pi

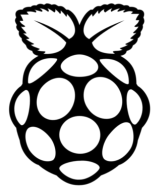
## Raspberry + TFT



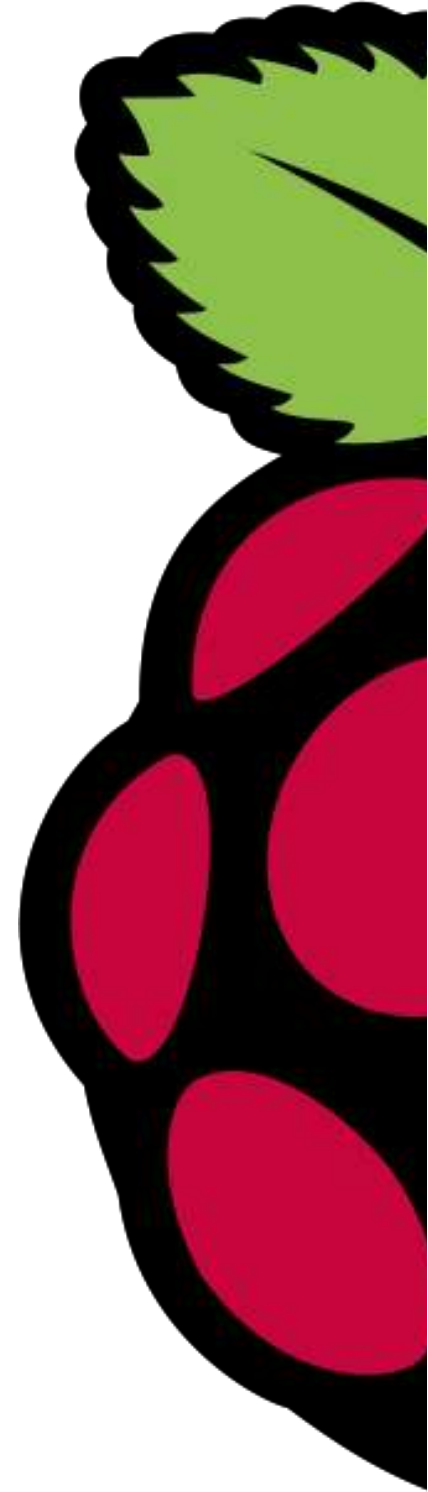


Raspberry Pi

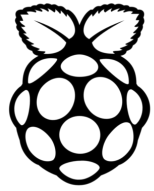




**Raspberry Pi**

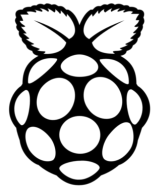




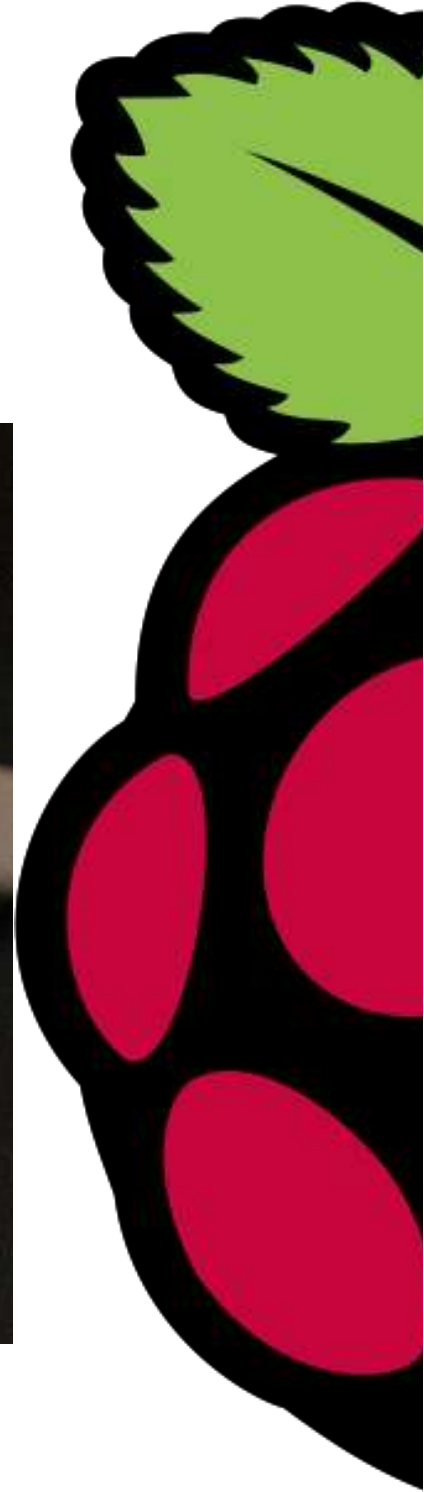


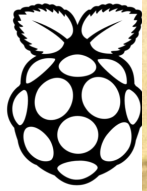
Raspberry Pi





# Raspberry Pi



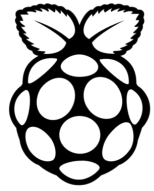




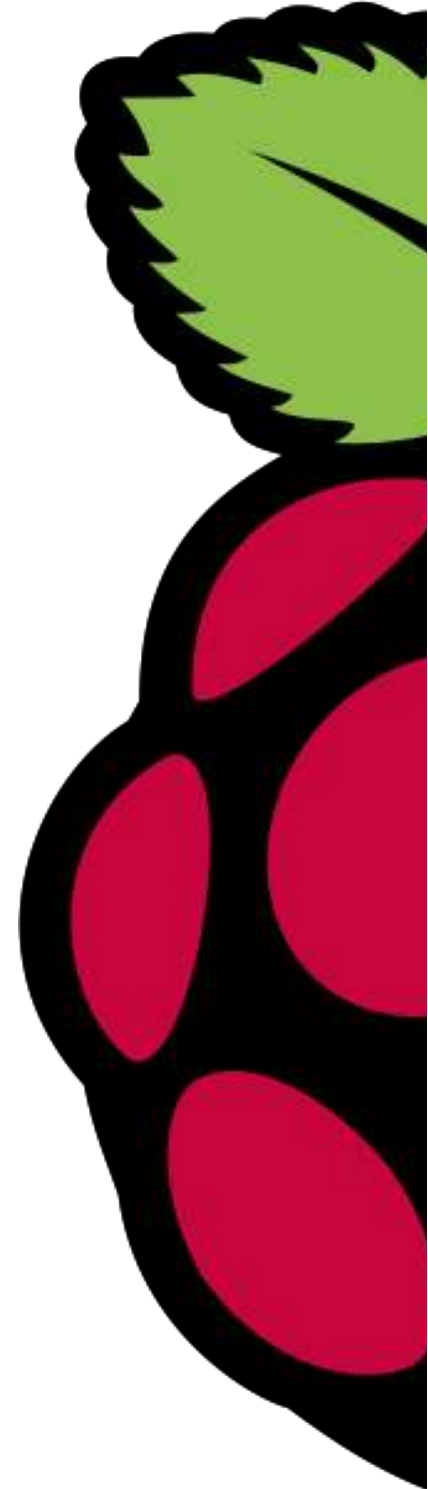
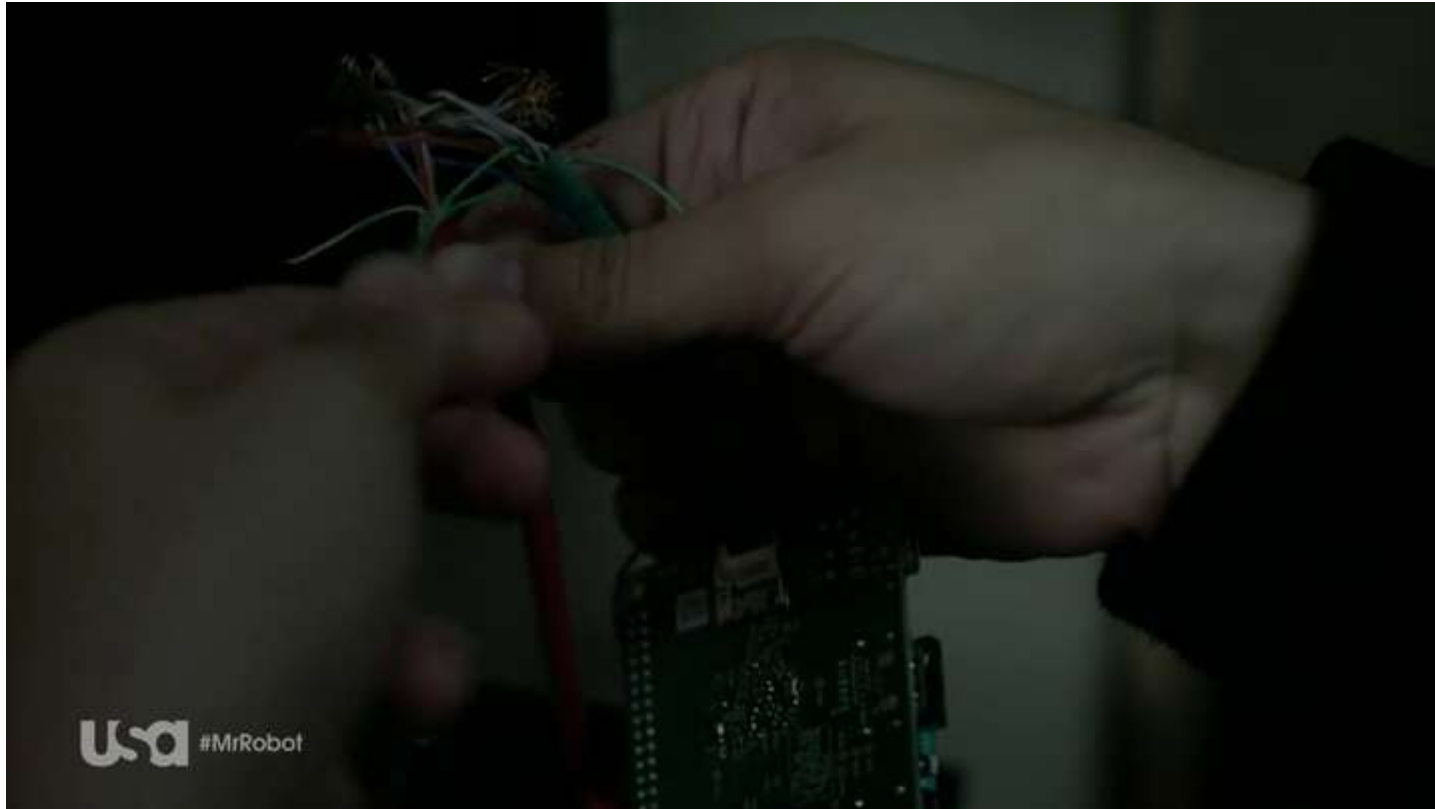
Raspberry Pi

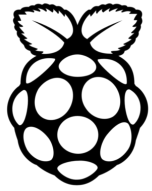


WE ARE MALICIOUS AND HOSTILE. WE ARE RELENTLESS.  
WE DO NOT COMPROMISE. WE DO NOT NEGOTIATE.

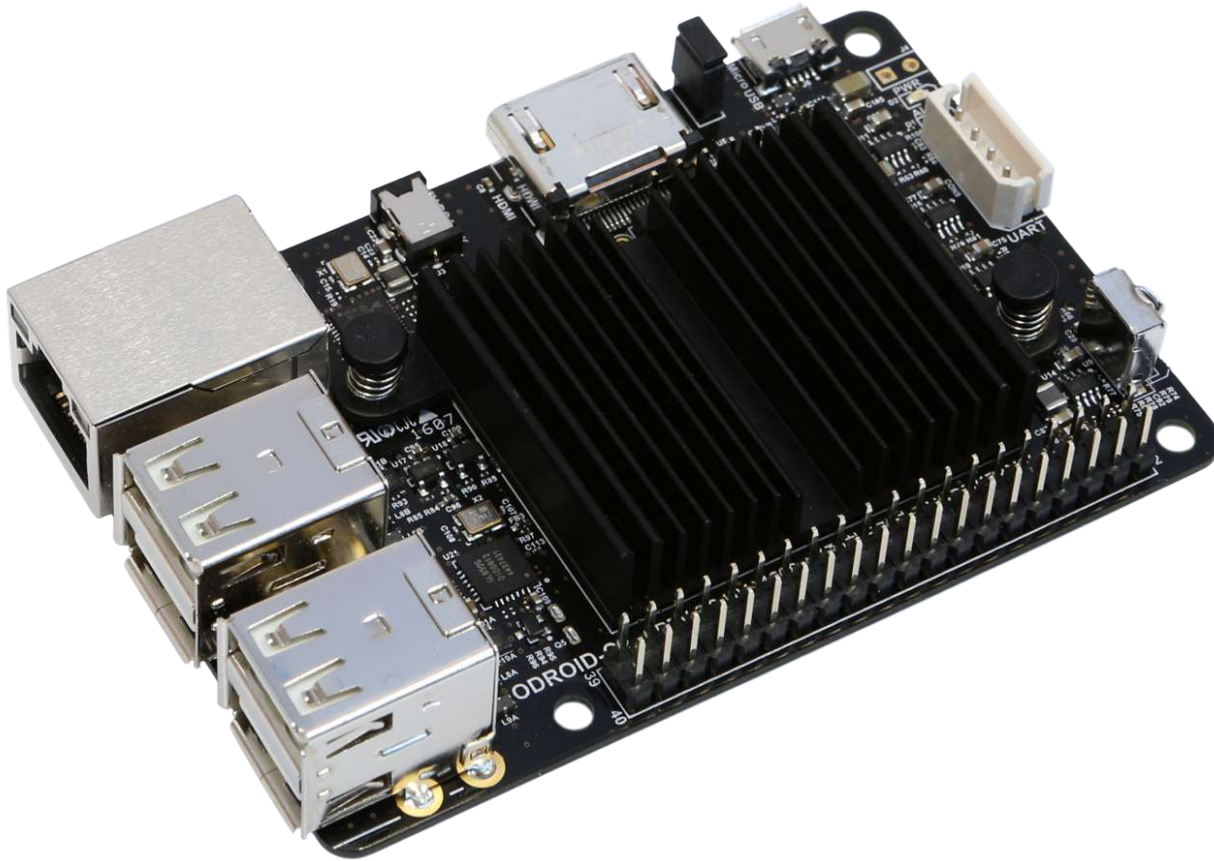


Raspberry Pi





**Raspberry Pi**

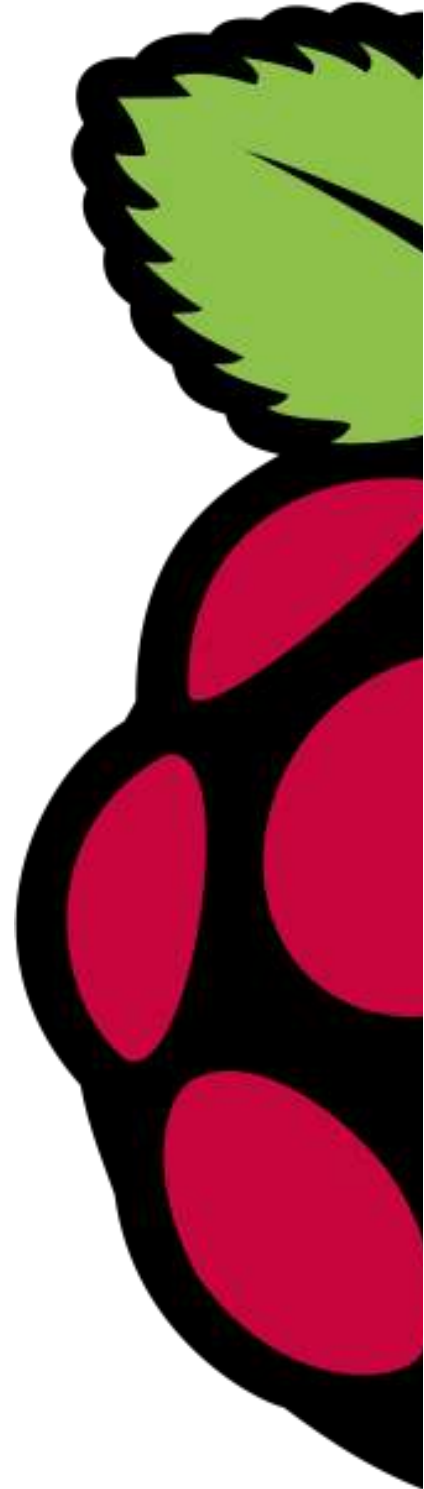


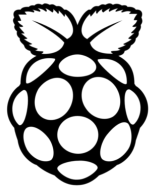
**ODROID-C2**

ARMv8 - 1.5Ghz quad core CPUs (64 bits)

2Gb DDR3 SDRAM

\$46.00





**Raspberry Pi**



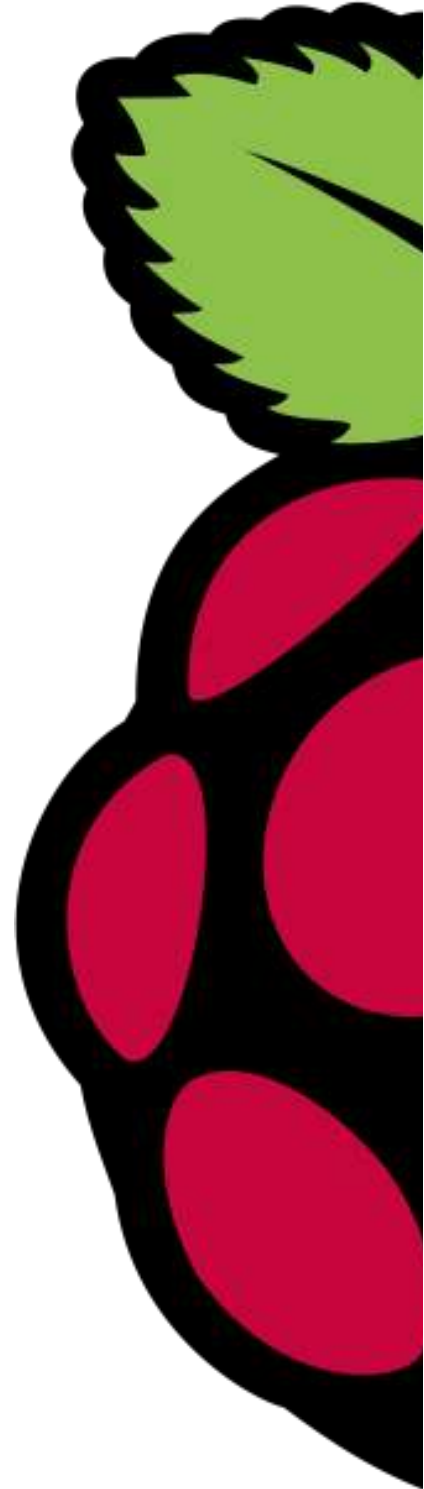
**ASUS Tinker Board**

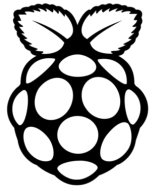
1.8Ghz Cortex A-17 Processor

GPU quad-core ARM 600 Mhz

2 GB LPDDR3 RAM

\$60.0

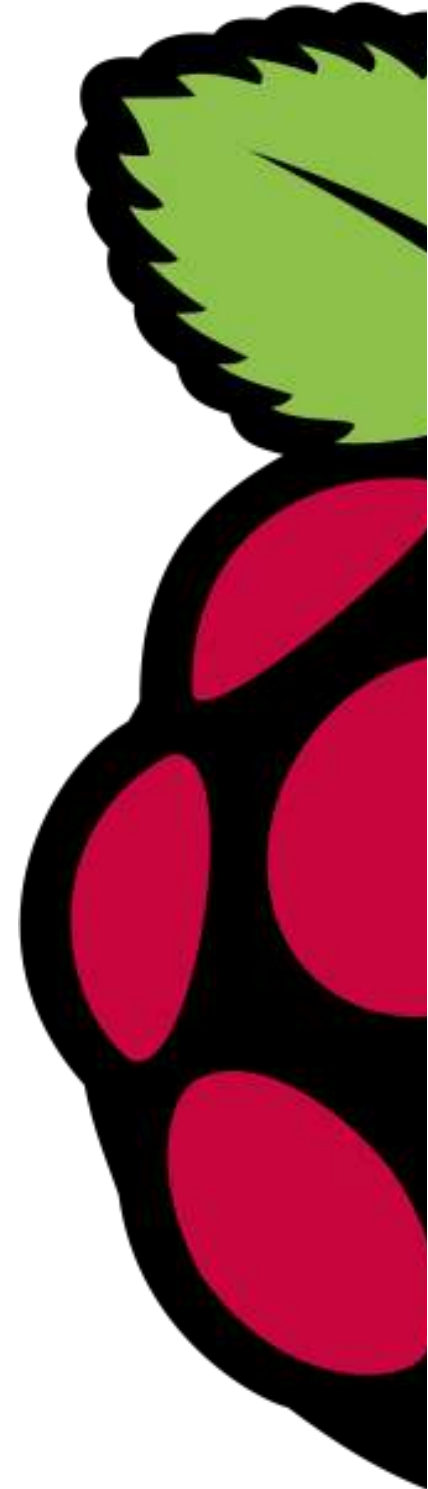
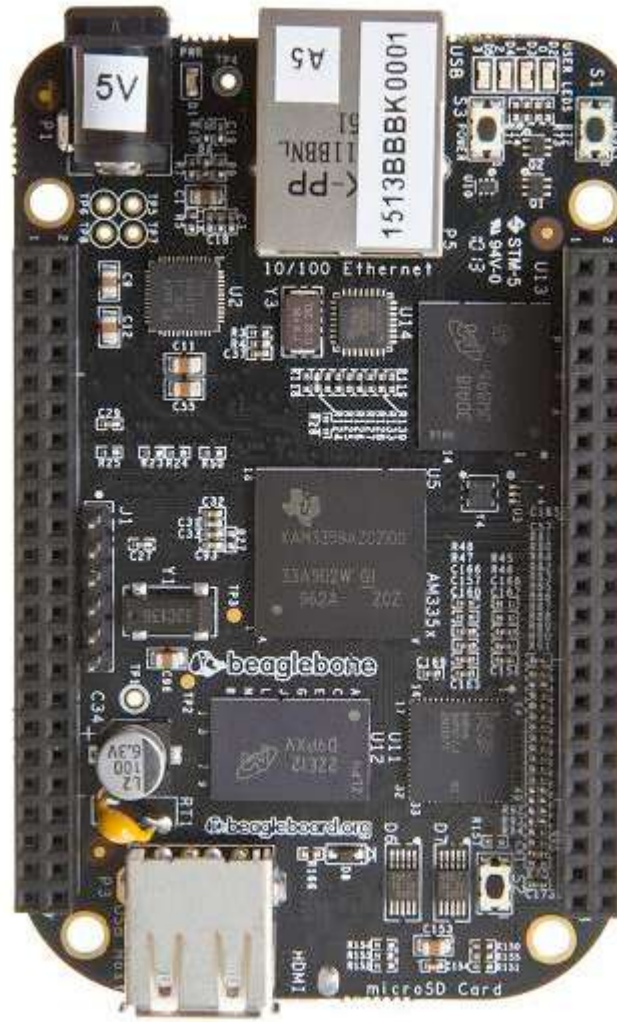




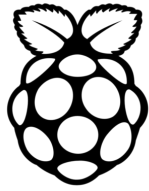
# Raspberry Pi

**BeagleBone Black**  
1GHz ARM Cortex-A8  
processor  
512MB DDR3 RAM  
4GB on-board flash  
storage

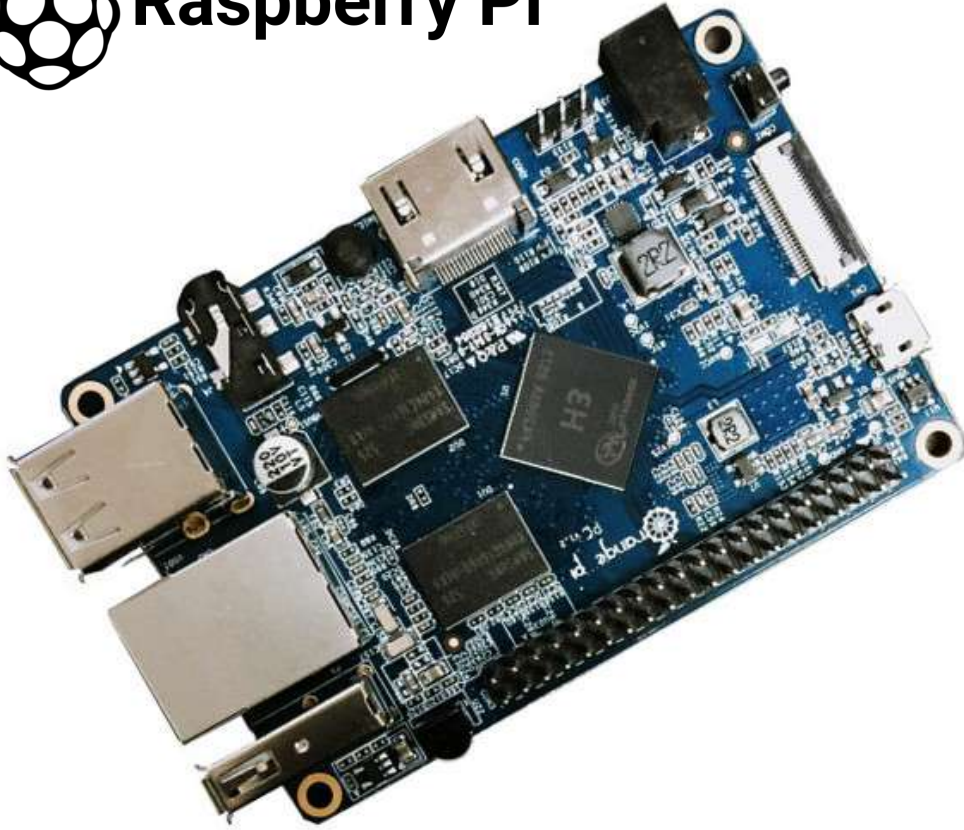
\$40.0-45.0







**Raspberry Pi**

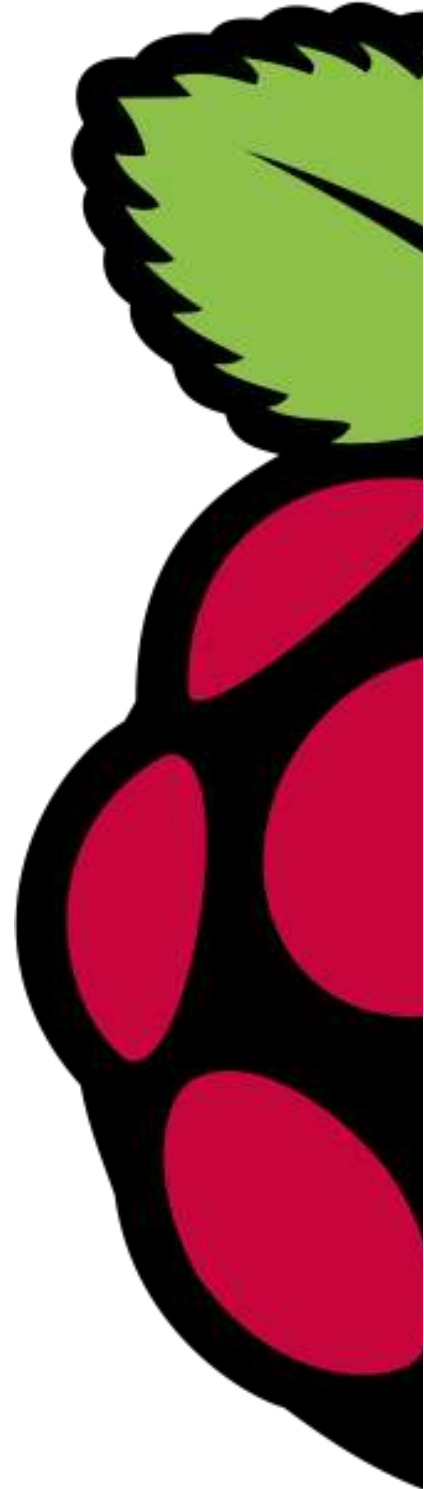


**Best seller Naranja pi pc h3 apoyo el  
lubuntu linux y android mini PC Más Allá  
de Frambuesa Pi 2 Comercio Al Por Mayor  
es disponible**

Quad-core Cortex-A7 1.6GHz

1 GB DDR3 RAM

14.01€

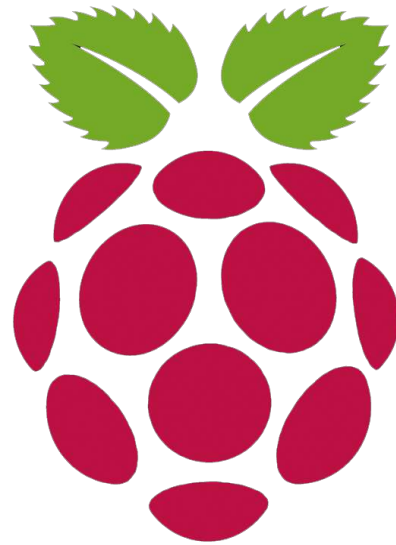




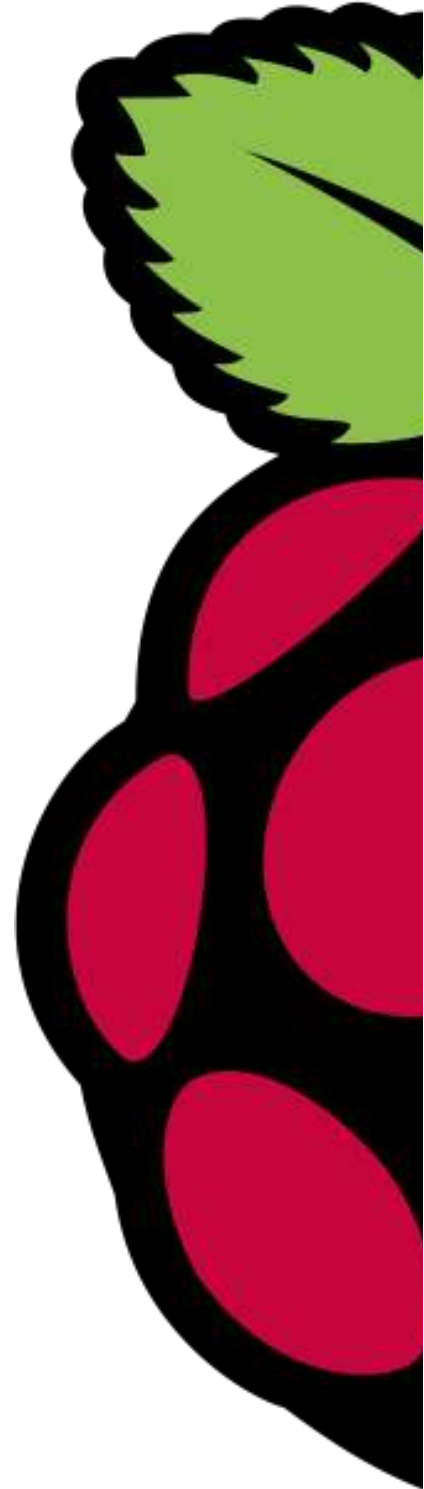
adafruit

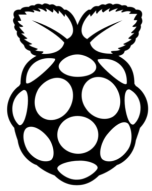
#irc

element14



Raspberry Pi Forum





Raspberry Pi

