**Ralph Sutter’s Raspberry Pi Notes**Linux SIG - 02/11/16

**NOTE**: If this page doesn’t display properly, view the document as an HTML file at [www.fullbean.com/linux/raspberry-pi-notes.html](http://www.fullbean.com/linux/raspberry-pi-notes.html)

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| [Raspberry Pi 2 Basic StarterKit](http://www.amazon.com/gp/product/B00DG9D6IK/ref%3Ds9_al_bw_g147_i2) $44.99 from Amazon | [Raspberry Pi 2 Complete Starter Kit](http://www.amazon.com/gp/product/B008XVAVAW/ref%3Ds9_al_bw_g147_i3)$69.99 from Amazon | [Raspberry Pi 2 - Ultimate Starter Kit](http://www.amazon.com/gp/product/B00G1PNG54/ref%3Ds9_al_bw_g147_i4)$84.99 from Amazon |
| Raspberry Pi 2 - Basic Starter Kit | Raspberry Pi 2 - Complete Starter Kit | Raspberry Pi 2 - Ultimate Starter Kit  |
| Kit Includes: 1 x Raspberry Pi 2 (RPi2) Model B Quad-Core 900 MHz with 1 GB RAM1 x CanaKit 2.5A USB Power Supply with Micro USB Cable and Noise Filter - Specially designed for the Raspberry Pi 2 (UL Listed)1 x CanaKit Quick-Start Guide | Kit Includes: 1 x Raspberry Pi 2 (RPi2) Model B Quad-Core 900 MHz with 1 GB RAM1 x CanaKit 2.5A USB Power Supply with Micro USB Cable and Noise Filter - Specially designed for the Raspberry Pi 2 (UL Listed)1 x CanaKit Quick-Start Guide1 x 8 GB SD Card - Raspberry Pi SD Card pre-loaded with NOOBS (Class 10)1 x CanaKit WiFi Adapter 150 Mbps - Supports Access Point Mode (AP) to allow for WiFi Hotspot hosting1 x CanaKit 2.5A USB Power Supply with Micro USB Cable and Noise Filter - Specially designed for the Raspberry Pi 2 (UL Listed)1 x High Quality Raspberry Pi 2 Case,1 x Premium Quality HDMI Cable,2 x Heat Sinks1 x GPIO Quick Reference Card | Kit Includes: 1 x Raspberry Pi 2 (RPi2) Model B Quad-Core 900 MHz with 1 GB RAM1 x CanaKit 2.5A USB Power Supply with Micro USB Cable and Noise Filter - Specially designed for the Raspberry Pi 2 (UL Listed)1 x CanaKit Quick-Start Guide1 x 8 GB SD Card - Raspberry Pi SD Card pre-loaded with NOOBS (Class 10)1 x CanaKit WiFi Adapter 150 Mbps - Supports Access Point Mode (AP) to allow for WiFi Hotspot hosting1 x CanaKit 2.5A USB Power Supply with Micro USB Cable and Noise Filter - Specially designed for the Raspberry Pi 2 (UL Listed)1 x High Quality Raspberry Pi 2 Case,1 x Premium Quality HDMI Cable,2 x Heat Sinks1 x GPIO Quick Reference Card1 x Breadboard1 x 40-pin GPIO Ribbon Cable1 x 40-pin T-Shaped GPIO to Breadboard Interface Board2 x Push Button Switches1 x RGB LED2 x Red LEDs2 x Green LEDs2 x Yellow LEDs2 x Blue LEDs10 x 180 Ohm Resistors5 x 10K Ohm Resistors |
| **Common specs for all of the listed Raspberry P1 2 Model B kits**900MHz quad-core ARM Cortex-A7 CPU1GB RAM4 USB ports40 GPIO pinsFull HDMI portEthernet portCombined 3.5mm audio jack and composite videoCamera interface (CSI)Display interface (DSI)Micro SD card slotVideoCore IV 3D graphics core---I purchased the [Raspberry Pi 2 Complete Starter Kit](http://www.amazon.com/gp/product/B008XVAVAW/ref%3Ds9_al_bw_g147_i3)I also bought the following items **Raspberry Pi 8GB Preloaded (NOOBS) SD Card** $11.78<http://www.amazon.com/gp/product/B00ENPQ1GK> **Inateck Bluetooth 4.0 USB Wireless Bluetooth Dongle** $9.99<http://www.amazon.com/gp/product/B00N2E3ZHG> 1byone WireWireless Bluetooth Keyboard with built-in multi-touch touchpad $22.99<http://www.amazon.com/gp/product/B00VRC6D3S>  | Because it has an **ARMv7 processor**, it can run the full range of **ARM GNU/Linux** distributions, including **Snappy Ubuntu Core**, as well as **Microsoft Windows 10** **Useful links****Respberry Pi on Wikipedia:** <https://en.wikipedia.org/wiki/Raspberry_Pi>**Raspberry Pi Opening Page**: <https://www.raspberrypi.org/> **Canakit**: <http://www.canakit.com/> - This is a retail site for purchasing Raspberry Pi related products**NOOBS Operating System Download Page**: <https://www.raspberrypi.org/help/noobs-setup/>**Additional Operating Systems Download Site**: <https://www.raspberrypi.org/downloads/> **OpenELEC Documentation**: - Covers installation of Openelec on multiple operating systems<http://wiki.openelec.tv/index.php?title=Installation> **Installing OpenELEC on Raspberry** Pi: <http://wiki.openelec.tv/index.php/Raspberry_Pi>The above URL contains a link to the site listed belowHOW-TO:Installing OpenELEC/Writing The Disk Image: [http://wiki.openelec.tv/index.php/HOW-TO:Installing\_OpenELEC/Writing\_The\_Disk\_Image#tab=Windows](http://wiki.openelec.tv/index.php/HOW-TO%3AInstalling_OpenELEC/Writing_The_Disk_Image#tab=Windows) |

Raspberry Pi Links

FORMATTING AN SDXC CARD FOR USE WITH NOOBS – Instructions here
<https://www.raspberrypi.org/documentation/installation/sdxc_formatting.md>

**NOTE**: If your SD card is 32Gb or larger, Windows formats it as exFAT. Raspberry Pi doesn’t understand that configuration and must be formatted as FAT32

**SOLUTION**
Insert SD card and download **SD Formatter**
<https://www.sdcard.org/downloads/formatter_4/>

Format the SD card with **FORMAT** **SIZE** **ADJUSTMENT** set to **ON**

Download **FAT32 Format** (which downloads as a single file named **guiformat.exe**)
<http://www.ridgecrop.demon.co.uk/index.htm?guiformat.htm>

Using **guiformat.exe**, format the SD card to FAT32

Download **NOOBS** from <https://www.raspberrypi.org/downloads>, choosing [NOOBS](https://www.raspberrypi.org/downloads/noobs/) from the operating systems offered

Extract **NOOBS** to a folder and paste the contents of the folder to the SD card

Run **NOOBS**, following the instructions at
<https://www.raspberrypi.org/documentation/installation/noobs.md>

You will be offered a one-time menu that offers to install any one of the following operating systems on your Raspberry Pi

[Raspbian](http://raspbian.org/)
[Pidora](http://pidora.ca/)
[OpenELEC](http://wiki.openelec.tv/index.php?title=Raspberry_Pi_FAQ)
[OSMC](http://osmc.tv/)
[RISC OS](https://www.riscosopen.org/wiki/documentation/show/Welcome%20to%20RISC%20OS%20Pi)
[Arch Linux](http://archlinuxarm.org/platforms/armv6/raspberry-pi)

I chose **OpenELEC**. Setup instructions for that OS are found at <http://wiki.openelec.tv/index.php?title=Raspberry_Pi_FAQ> and
[http://wiki.openelec.tv/index.php/HOW-TO:Installing\_OpenELEC/Writing\_The\_Disk\_Image](http://wiki.openelec.tv/index.php/HOW-TO%3AInstalling_OpenELEC/Writing_The_Disk_Image)

Offer to do a live install of OpenELEC
DEMO OpenELEC on my Raspberry Pi showing
Network setup/WiFi Setup
Bluetooth keyboard setup
Content creation
Demo Music/Video/Pictures from attached Flash Drive (Mushkin)
Slideshow options and Playlists

**Unsolved items**
How do I create a single slideshow with files in more than one folder?
Is it possible to display .doc or .html files inside Kodi?