

RaspberryPi Laptop

Updates

Nov 6, 2012

Some ultra-low wattage SoCs/microcontrollers: http://www.linuxfordevices.com/c/a/News/Freescale-iMX28-and-MCF5441x-/http://www.linuxfordevices.com/c/a/News/TI-C674x-DSPs-and-OMAPL138-SoC/http://www.freescale.com/webapp/sps/site/prod_summary.jsp?code=i.MX508&tid=vanIMX508 (for e-readers) <http://www.ecnmag.com/products/2011/10/development-kit-features-giant-gecko-cortex-m3-microcontrollershttp://www.radiolocman.com/news/new.html?di=64911> http://www.well-known.com/web/en/passive_bauelemente_standard/produkte_pb/demoboards/energy_harvesting/energy_harvesting.php

Nov 1, 2012

Hi, I saw this page and thought I'd add a very similar project summary that I'm interested in. It combines components and concepts from low-cost, ubiquitous sources to assemble an ultra low-wattage solar laptop that uses <5.5 watts, but I will include other processors/platforms such as the Allwinner A10 SoC by Rhombus Tech because the goal is to produce a low-cost notebook regardless of the components if it can be made affordable enough to users who would choose it over one that is completely open, like the BenNanoNote (quite impractical unless one is a developer- although, I would list in my components section, a wifi device such as the 802.15.4 WPAN is interesting because it uses so few watts: <http://pinoytutorial.com/techtorial/ben-nanonote-6lowpan-how-to-create-open-source-wlan-guide-and-tutorial/>)

Here is a list of parts that I find interesting in a potential raspberry laptop. These are not parts that *should* be used. They are merely suggestions. Raspberry Pi: \$25 (3.5 watts on active) HDMI to LVDS adapter: \$35 from Chalkboard Electronics Pixel Qi LCD to LVDS DIY kit: \$299 from TinCanTools; works with Pandaboard ES without pin modifications (unlike the non-ES Pandboard), not sure about R-pi (2 watts in color, 0.5 watts in B&W mode) 5W Solar Panel: \$31 from Bootstrap Solar (+charge controller, not chosen, but available on Bootstrap solar) 12V 7Ah Lithium Iron Phosphate Battery with BMS: \$139 from K2 Energy K2B12V7EB Casing design (a kickstarter project could offer a vote on the most popular case, which could be 3D printed)

Alternative components: E-ink Triton active color matrix E-ink Pearl display (used in e-readers, but newer models have been hacked to display video with a relatively fast refresh rate (<https://www.youtube.com/watch?v=24srQXX81Oc>), and would make affordable screens for less than \$60 (with a total price for a black & white solar netbook for about \$300 USD using the above list, replacing the Pixel Qi LCD)- average price for the 6" screens Ebay, for example). I wrote more on my solar laptop idea yesterday at the Rasp-pi forum here: <http://www.raspberrypi.org/phpBB3/viewtopic.php?f=64&t=21723> I also read about the EOMA-68 motherboards and wiki page [\[\[1\] \(\[http://elinux.org/Embedded_Open_Modular_Architecture/PCMCIA\]\(http://elinux.org/Embedded_Open_Modular_Architecture/PCMCIA\)\)](http://elinux.org/Embedded_Open_Modular_Architecture/PCMCIA), the OLPC Open-EC, and the Lima drivers, which are great projects that sound very encouraging.

Sep 3, 2012 -Despite this post on the Raspberry Pi blog:

by hackery21 » Mon May 28, 2012 4:49 pm

Yay, thanks for copying my idea(which I posted about a month ago) but taking the easy way out, buying a lapdock. You didn't make it, you bought it. Now I just cannot wait till my pi arrives so I can show you guys A REAL pi laptop. :geek:

Hackery 21 has failed to show us his LEET H4X00R SKILLZ> Still waiting, Hack.

May 22, 2012 - Whew!, we have been busy! Doing interviews, ordering parts, etc. all we need now is the RasPi. We ordered in the mid April and expect it by mid July. Also needed is the screen. We are still selecting one.

May 5, 2012 - 90% Parts ordered! 90% of parts have been ordered! This includes keyboards,SD Card extenders, Touchpads, Battery, USB Hub, etc.

May 4, 2012 - Website created! <http://raspberrypilaptop.tk>

May 3, 2012 - Yup! Our first update! We originally thought that we needed to get a loan to get the project going or go to kickstarter (After Finished Prototype) ,But It turns out that somebody has volunteered to be a potential investor if the prototype works! Thanks to Raiyan Memon for volunteering! You will not be dissapointed!

Suggestions! Leave suggestions here!

Suggestions from [Gus3](#):

- multiple system options (Debian, Arch, Fedora, Bodhi, perhaps others, perhaps non-Linux)
- send a stated percentage back to the Raspberry Pi Foundation

(Good ideas! I will talk to the others about them!-hackery21, to Gus3)

Suggestions from [User:Celtic_hackr](#):

My daughter and I will be building PiPads this summer.

- Case design - aluminum?
- touchscreen
- in-case rechargeable LiPo slim batteries
- docking station?

(are these suggestions for us or are you talking about your project? Thanks! -hackery21 to Celtic_hackr)

Suggestions from [User:prpplague](#)

- list of components ordered
- block diagram of component connections

(Ok I will put up a list of components ordered soon. What do you mean by block diagram? Thanks! -hackery21 to prpplague)

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