

GNU/Linux Devices: Raspberry Pi, AAEON and Librem 5

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- [Raspberry Pi 4 B+ - PCI Express](#) [4]

Without much exaggeration, the new Raspberry Pi is likely the largest single-step improvement on the Pi family since the early changes of the form factor. Although Pi3 introduced 64bit capability, it's been pretty limited in practice due to lack of memory. Pi4 introduces 4GB RAM, USB 3.0 and Gigabit Ethernet.

Most importantly for our purposes, the USB 3.0 (and 2.0) chip is attached via the PCI Express interface - that means, if we were to remove it, we can gain access to the underlying bus. So, without further ado, the sacrificial goat.. uhm, chip.

- [Modder Connects External PCIe To Raspberry Pi 4](#) [5]

Raspberry Pi is a low-cost computer designed for tech enthusiasts, students, and engineers who wish to make extreme use of limited hardware. Just two weeks ago, the Raspberry Pi 4

was unveiled, which caught the attention of technology enthusiasts.

The latest version of Raspberry Pi is a big improvement over the previous version despite its faulty USB-C port design. It relies on PCI Express for USB chips. However, there isn't any provision to connect external devices on the Raspberry Pi 4.

- [AAEON Launches BOXER-8150AI Compact Embedded Box PC Features 8 USB 3.0 Ports](#) [6]

The BOXER-8150AI is able to support up to eight USB connected cameras or devices, each operating independently of one another.

- [Runs on the Librem 5 Smartphone ? Week 3](#) [7]

We've been showcasing a different piece of software running on the Librem 5 Smartphone Development Kit every day for the last twenty days. Twenty. In a row.

And we're not done. Because, holy smokes, do we have a lot more to show. And, let's be honest, these are just plain fun. Daily videos kick back off tomorrow (July 11th) with video number 21.

You can enjoy Days 15 through 20 below ? and Days 1 through 14 in the Week 1 and 2 posts.

- [Purism and the Linux 5.2 Kernel](#) [8]

Hello again. Following up on our report for the Linux 5.1 kernel, here's a list of contributions for the Linux 5.2 kernel cycle, for which our team recently contributed with 14 patches?including a new driver for the Librem 5 devkit's panel...

[GNU Linux Gadgets](#)

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[1] <http://www.tuxmachines.org/taxonomy/term/144>

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[4] <http://mloduchowski.com/en/blog/raspberry-pi-4-b-pci-express/>

[5] <https://fossbytes.com/connec-external-pci-express-to-raspberry-pi-4/>

[6] <https://www.cnx-software.com/2019/07/11/aaeon-boxer-8150ai-embedded-box-pc-8-usb-3-0-ports/>

[7] <https://puri.sm/posts/runs-on-the-librem-5-smartphone-week-3/>

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