

Devices: Raspberry Pi Projects, RISC-V, and More

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- [Awesome Raspberry Pi automatic guitar tuner project](#) [2]

Musicians and Raspberry Pi enthusiasts may be interested in a new project published to the official Raspberry Pi blog this week documenting a new project using the small Raspberry Pi Pico mini PC that can automatically tune your guitar. The Pico powered guitar tuning box has been created by Redditor u/thataintthis otherwise known as Guyrandy Jean-Gilles and makes it easy for you to perfectly tune your guitar. The project is perfect for beginners or those looking for a little help to remove the boredom of tuning your axe before a session.

- [First RISC-V computer chip lands at the European Processor Initiative](#) [3]

The European Processor Initiative (EPI) has run the successful first test of its RISC-V-based European Processor Accelerator (EPAC), touting it as the initial step towards homegrown supercomputing hardware.

EPI, launched back in 2018, aims to increase the independence of Europe's supercomputing industry from foreign technology companies. At its heart is the adoption of the free and open-source RISC-V instruction set architecture for the development and production of high-performance chips within Europe's borders.

The project's latest milestone is the delivery of 143 samples of EPAC chips, accelerators designed for high-performance computing applications and built around the free and open-source RISC-V instruction set architecture. Designed to prove the processor's design, the 22nm test chips ? fabbed at GlobalFoundries, the not-terribly-European semiconductor manufacturer spun out of AMD back in 2009 ? have passed initial testing, running a bare-metal "hello, world" program as proof of life.

- [FPGA Retrocomputer: Return To Moncky](#) [4]

This project, called the Moncky project, is a step above the usual 8-bit computer builds as it is actually a 16-bit computer. It is built around an Arty Spartan-7 FPGA dev board running around 20 MHz and has access to 2 x 128 kB dual-port RAM for memory. To access the outside world there is a VGA output, PS/2 capability, SPI, and uses an SD card as a hard drive. This project really shines in the software, though, as the project creator [Kris Demuynck] builds everything from scratch in order to illustrate how everything works for educational purposes, and is currently working on implementing a C compiler to make programming the computer easier.

- [Elderly Remote Keeps Things Simple | Hackaday](#) [5]

If you are lucky, you've never experienced the heartbreak of watching a loved one lose their ability to do simple tasks. However, as hackers, we have the ability to customize solutions to make everyday tasks more accessible. That's what [omerrv] did by creating a very specific function remote control. The idea is to provide an easy-to-use interface for the most common remote functions.

[Hardware](#)

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