

3-D Printing and Open Hardware: MakerBot, AAScan and RISC-V

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- [MakerBot Targets Schools With Rebranded Printers](#) [2]

MakerBot was poised to be one of the greatest success stories of the open source hardware movement. Founded on the shared knowledge of the RepRap community, they created the first practical desktop 3D printer aimed at consumers over a decade ago. But today, after being bought out by Stratasys and abandoning their open source roots, the company is all but completely absent in the market they helped to create. Cheaper and better printers, some of which built on that same RepRap lineage, have completely taken over in the consumer space; forcing MakerBot to refocus their efforts on professional and educational customers.

- [3D-Printed 3D Scanner made to work with your phone](#) [3]

An Arduino-based 3D scanner was created by an industrious 3D printing enthusiast and released open source this week for all to enjoy. This open source project was made to take out the most time-consuming component of the 3D scan process, giving said process instead to an Android phone combined with 3D-printed parts, a cheap motor, and an Arduino. This is not the first time such a system has been attempted, but it does appear to be the most complete and ready-to-roll system to date.

- [AAScan open source Arduino 3D scanner utilizes the power of your smartphone](#) [4]

Using the power of Arduino and utilising the camera and powerful performance of a

smartphone QLRO has created a fantastic 3D scanner aptly named the AAScan. Check out the video below to learn more about the Android 3D scanner which is open source and fully automated.

- [Video: RISC-V momentum around the world, from edge to HPC](#) [5]

In this keynote talk from the 2020 HiPEAC conference, RISC-V Foundation Chief Executive Calista Redmond explains how the RISC-V open-source instruction set architecture is gathering momentum around the world, finding applications across the compute continuum from edge to high-performance computing.

- [Weekend Discussion: How Concerned Are You If Your CPU Is Completely Open?](#) [6]

For some interesting Sunday debates in the forums, how important to you is having a completely open CPU design? Additionally, is POWER dead? This comes following interesting remarks by an industry leader this weekend.

Stemming from discussions on Twitter about Raptor's new OpenBMC firmware with a web GUI in tow, one of the discussions ended up shifting to that of open CPU designs and the belief that secretive CPU startup NUVIA could be having an open-source firmware stack.

[Hardware](#)

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Links:

[1] <http://www.tuxmachines.org/taxonomy/term/39>

[2] <https://hackaday.com/2020/02/19/makerbot-targets-schools-with-rebranded-printers/>

[3] <https://www.slashgear.com/3d-printed-3d-scanner-made-to-work-with-your-phone-17610034/>

[4] <https://www.geeky-gadgets.com/arduino-3d-scanner-19-02-2020/>

[5] <https://insidehpc.com/2020/02/video-risc-v-momentum-around-the-world-from-edge-to-hpc/>

[6] https://www.phoronix.com/scan.php?page=news_item&px=How-Open-CPU-Importance