

Raspberry Pi 4 Benchmarked with 32-bit and 64-bit Debian OS

By *Rianne Schestowitz*

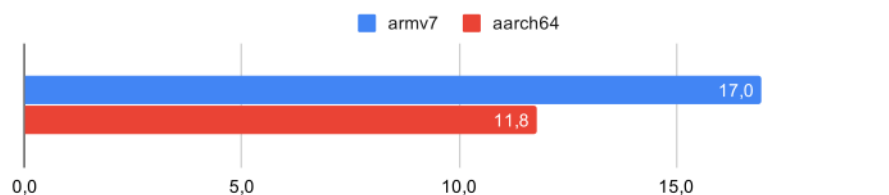
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Submitted by Rianne Schestowitz on Wednesday 29th of January 2020 10:36:59 AM Filed under [Graphics/Benchmarks](#)

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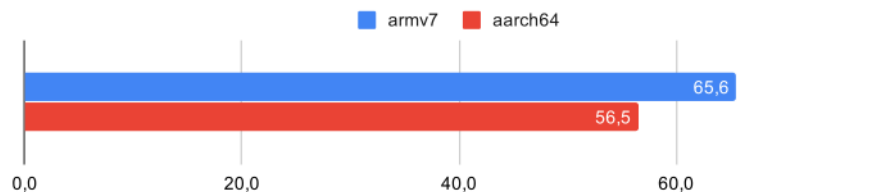
sha1sum

seconds (lower is better)



lame mp3

seconds (lower is better)



The first Raspberry Pi board with a 64-bit Arm processor was Raspberry Pi 3 Model B, and all new models including the latest Raspberry Pi 4 come with four Arm Cortex-A 64-bit cores.

But in order to keep backward software compatibility with the original Raspberry Pi and Raspberry Pi 2, the Raspberry Pi foundation decided to keep provided 32-bit OS image, so nearly everybody is now running a 32-bit OS on 64-bit

hardware, and Eben Upton famously claimed it did not matter.

We already wrote that 64-bit Arm (Aarch64) boosted performance by 15 to 30% against 32-bit Arm (Aarch32) several years ago, but Matteo Croce decided to try it out himself on Raspberry Pi 4 board first running benchmarks on Raspbian 32-bit before switching to a lightweight version of Debian compiled as aarch64.

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