

Graphics: RISC-V, WebRender, SVT-AV1/Intel, AMD and X.Org

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Submitted by Roy Schestowitz on Tuesday 21st of May 2019 03:25:53 PM Filed under [Graphics/Benchmarks](#) [1]

- [SiFive RISC-V SoCs Can Now Be Paired With A GPU... Imagination's PowerVR](#) [2]

If you want a SiFive SoC for the royalty-free, open-source RISC-V architecture it's now possible to pair it with graphics. Unfortunately, the graphics option is about as far from open-source as possible.

- [WebRender newsletter #45](#) [3]

WebRender is a GPU based 2D rendering engine for web written in Rust, currently powering Mozilla's research web browser servo and on its way to becoming Firefox's rendering engine.

- [Mozilla GFX: Graphics Team ships WebRender MVP!](#) [4]

After many months of hard work and preparation, I'm pleased to announce the general availability of WebRender for selected Windows 10 devices. WebRender is a major rewrite of the Firefox rendering architecture using the same kind of GPU-based acceleration techniques used by games.

- [SVT-AV1 0.5 Released As Intel's Speedy AV1 Video Encoder](#) [5]

While we have been reporting on and benchmarking the Intel SVT video encoders since February, they were only officially announced last month and this Sunday marks their first tagged release for the AV1 encoder in the form of SVT-AV1 0.5.0.

SVT-AV1 0.5 is easily one of the fastest AV1 CPU-based video encoders and has been performing excellent in our tests, including continued daily benchmarks of it in keeping track of its performance.

- [Intel Graphics Compiler 1.0.4 Released With Fixes & Improvements](#) [6]

Less than one month after releasing the Intel Graphics Compiler 1.0.3, the Intel team maintaining "IGC" today released version 1.0.4.

The only changes to this LLVM-based graphics compiler for Intel GEN graphics hardware are "minor fixes and improvements."

- [RadeonSI Primitive Culling Lands In Mesa 19.2](#) [7]

The past few months AMD's Marek Ol?ák has been working on primitive culling support for the RadeonSI Gallium3D driver and last week that code was merged into the Mesa 19.2 development code.

Marek has been working on primitive culling via asynchronous compute prior to the vertex shader process to eliminate geometry that ends up being invisible. Marek found that this functionality helps in workloads like the workstation ParaView software we use as part of our OpenGL test suite.

- [X.Org's XDC2019 Issues Call For Proposals On Wayland, Mesa, X.Org, Etc](#) [8]

X.Org's annual event, the X.Org Developers' Conference, is running like a well-oiled machined these days. While there are still months to go until XDC2019 in Montreal, a Call for Proposals has been issued for those wishing to speak at this annual gathering that pertains to Wayland, Mesa, libinput, Cairo, and related components as well, yes, the X.Org Server.

[Graphics/Benchmarks](#)

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