

# Phoronix on: Kernel, Graphics

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Submitted by Rianne Schestowitz on Saturday 31st of October 2015 11:28:11 PM Filed under [Graphics/Benchmarks](#) [1]  
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- [Linux 4.3 Is Near With Its Polished Intel Skylake Support & More](#) [3]

While there was still a fair amount of code churn this week, if Linus remains comfortable with the state of the kernel, Linux 4.3 will be released this weekend.

- [AMD Stoney APU Support Is Going Into The Linux 4.4 Kernel](#) [4]

Alex Deucher sent in another pull request of new AMDGPU/Radeon DRM material for landing in DRM-Next to in turn make it into Linux 4.4.

- [Intel Is Working On Faster Linux Encryption For AVX2 CPUs, Up To 5.8x Throughput](#) [5]

Intel has published a new set of patches for speeding up AES-CBC encryption for processors having the AVX2 instruction set extension.

- [Mesa's DRI3 Support For EGL Still Baking, The State Of DRI3 For X.Org Drivers](#) [6]

Martin Peres at Intel has sent out the latest revised patches for supporting Direct Rendering Infrastructure 3 (DRI3) with EGL.

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[PRIME Synchronization Is Still Being Worked On To Fix Tearing](#) [7]

Alex Goins of NVIDIA posted the patches yesterday evening as version two of PRIME synchronization for the i915 DRM. The patches aren't big but will hopefully fix tearing for those using PRIME on dual GPU systems.

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[Allwinner A10 DRM Display Support Being Worked On](#) [8]

Maxime Ripard of Free Electrons published a set of nineteen patches yesterday for adding Allwinner A10 display engine support via a new DRM driver for the Linux kernel.

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[ARB\\_shader\\_clock Lands For Intel's Mesa Driver](#) [9]

The Mesa i965 DRI driver enables ARB\_shader\_clock support for Intel Ivy Bridge "Gen 7" graphics and newer. This work will be part of Mesa 11.1.

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[Intel Broadwell/Skylake Graphics Performance For Steam Linux Gaming](#) [10]

Complementing yesterday's [Are The Open-Source Graphics Drivers Good Enough For Steam Linux Gaming?](#) article is a look at the Steam Linux gaming performance for three different Intel Linux systems running Ubuntu 15.10 and firing up the latest Steam client. This is the last of the planned series that began one week ago with the a 22-way comparison of NVIDIA/AMD GPUs on SteamOS.

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[CPU/GPU Usage Between NVIDIA & AMD Linux Drivers](#) [11]

Following the [4K AMD/NVIDIA High-End GPU Comparison On SteamOS Linux and 22-Way Comparison Of NVIDIA/AMD Graphics Cards On SteamOS For Steam Linux Gaming](#) articles, a few Phoronix readers were inquiring about the CPU and GPU utilization metrics during testing.

So I started work on some follow-up tests to look at the CPU/GPU utilization during testing to try to answer that question. The Phoronix Test Suite is able to do so by simply setting `MONITOR=cpu.usage,gpu.usage` as an environment variable prior to running any benchmarks (or see `phoronix-test-suite system-sensors` or `MONITOR=all` for the other system sensors supported through Phodevi - The Phoronix Device Interface).

- [Nouveau Adds ARB\\_copy\\_image, Intel Adds Another OpenGL 4.3 Extension Too](#) [12]

- [The Size Of The Different Open-Source Linux DRM/Mesa Graphics Drivers](#) [13]

As there's been some discussion lately about the "size" of the different open-source Linux graphics drivers, here are some fresh looks at the rough code size of each of the main DRM/KMS kernel drivers as well as the Mesa/Gallium3D user-space drivers.

- [Are The Open-Source Graphics Drivers Good Enough For Steam Linux Gaming?](#) [14]

Over the past week on Phoronix have been several featured articles looking at the performance of SteamOS with the proprietary AMD/NVIDIA graphics drivers: 22-Way Comparison Of NVIDIA/AMD Graphics Cards On SteamOS, 4K AMD/NVIDIA High-End GPU Comparison On SteamOS, and Is SteamOS Any Faster Than Ubuntu 15.10 Linux? One of the frequent questions that have come up since then is how the open-source driver performance compares to that of the binary blobs on SteamOS, so here are some of those benchmarks.

## [Graphics/Benchmarks Linux](#)

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**Source URL:** <http://www.tuxmachines.org/node/81812>

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[13] [http://www.phoronix.com/scan.php?page=news\\_item&px=Mesa-DRM-2015-LOC-Size](http://www.phoronix.com/scan.php?page=news_item&px=Mesa-DRM-2015-LOC-Size)

[14] <http://www.phoronix.com/scan.php?page=article&item=steamos-open-ubuntu&num=1>