

Kernel: Bootlin, Mediatek, XWayland, and More

By *Roy Schestowitz*

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- [Embedded Linux Boot time optimization: training and webinar](#) [2]

Bootlin has been helping its customers optimize the boot time of embedded Linux systems for many years, ensuring that these systems meet their startup time requirements. Thanks to this, Bootlin has accumulated a significant experience in this field.

- [Mediatek Posts 8k Lines Of New Linux Kernel Driver Code For AI Processing Unit Support - Phoronix](#) [3]

For a number of months Mediatek engineers have been posting some Linux kernel driver code for bringing up the AI Processing Unit (APU) within the MT8192 SoC while out this weekend is the complete patch series at more than eight thousand lines of code.

There has been some APU power handling and IOMMU patches previously posted while on Saturday was the complete set of patches for bringing up the MT8192 APU with power control, tinysys controller (a micro-controller on the APU), and middleware support. In total it's 8.1k lines of new kernel code.

- [xwayland 21.1.2.901](#) [4]

This is a release candidate for Xwayland 21.1.3.
Most notable change is a fix for the GBM backend to work with the Nvidia driver series 495.
Unless any major issues turn up, I'm planning to make the final release

in the coming weeks.

James Jones (1):

Use EGL_LINUX_DMA_BUF_EXT to create GBM bo EGLImages

Olivier Fourdan (5):

xwayland/shm: Avoid integer overflow on large pixmaps

xwayland: Set GLVND driver based on GBM backend name

xwayland: Clear tablet cursor pending frame cb

xwayland/test: Don't catch errors in run-piglit.sh

Bump version to 21.1.2.901

Povilas Kanapickas (1):

glamor: Fix handling of 1-bit pixmaps

Simon Ser (1):

xwayland: fix xdg_output leak

git tag: xwayland-21.1.2.901

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[XWayland 21.1.3 Nears With Support For NVIDIA 495 Driver's GBM - Phoronix](#) [5]

The release candidate to XWayland 21.1.3 is out today with just a few changes but made significant by support for the NVIDIA 495 series driver GBM code path.

XWayland 21.1.3 is the next point release to this code that is spun out from the upstream X.Org Server for delivering standalone XWayland releases separate from tagged xorg-server versions. XWayland 21.3. has only a handful of fixes like an XDG_Output memory leak fix, fixed handling of 1-bit pixmaps in GLAMOR, avoiding possible integer overflows on large pixmaps, and other maintenance items.

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[Vulkanised Fall 2021 Material Available - Autodesk Has Begun Using MoltenVK - Phoronix](#) [6]

Last week was the virtual Vulkanised Fall 2021 event hosted by The Khronos Group. The two-day event was focused on all things Vulkan and for those that missed it all of the slide decks and other material are now available.

This was a two-day virtual affair focused on the high performance graphics and compute API featuring a current status update around features like ray-tracing and video encode/decode, interesting usages of Vulkan, and related work like Arm's astcenc encoder, HLSL shader compilation, and more.

[Linux](#)

Source URL: <http://www.tuxmachines.org/node/157124>

Links:

[1] <http://www.tuxmachines.org/taxonomy/term/63>

- [2] <https://bootlin.com/blog/embedded-linux-boot-time-optimization-training-and-webinar/>
- [3] https://www.phoronix.com/scan.php?page=news_item&px=Mediatek-MT8192-APU-Driver
- [4] <https://lists.x.org/archives/xorg/2021-October/060798.html>
- [5] https://www.phoronix.com/scan.php?page=news_item&px=XWayland-21.1.3-RC
- [6] https://www.phoronix.com/scan.php?page=news_item&px=Vulkanised-Fall-2021-Materials