At the close of a challenging year, AOMedia continues to share success stories, starting with our members’ presentation at IBC 2020. AOMedia members Amazon, Facebook, Google, Intel, Netflix, and Tencent presented on the commercial readiness and benefits of AV1 now being deployed across their video on demand and live streaming services. The remote conference itself highlighted the importance of video conferencing applications and the codecs required to power them. Streaming media technologies depend on effective compression and also known cost structures, including clear royalty terms. An understated benefit of AV1 is that the royalty-free, open source, licensing terms remove cost uncertainty for the companies and services developing the modern web.

The panel also highlighted the importance of high-end video on lower-end devices, which are incredibly important for the users in the fastest growing internet markets. A royalty-free structure enables the industry to make affordable devices and products without layering expensive media technology on top. To make sure that everybody everywhere has access to the very best media experiences and video conferencing, we need to have technologies that can be deployed for free.

Beyond just services, we are now seeing AV1 encoding and decoding support gaining momentum. To help users get an amazing entertainment experience, Intel’s AV1-enabled 11th Gen Intel® Core™ processors and Intel® Iris® Xe MAX GPUs all now include dedicated AV1 hardware decoders to enable power-efficient support for up to 8K HDR streaming experiences for thin-and-light laptops, even in constrained bandwidth environments. YouTube and Netflix reference AV1 GPU-accelerated software decoder for Xbox One game consoles – based on the libaom AV1 reference decoder is now available and supports AV1 decoding up to 2K 30fps. MediaTek’s newly announced AV1-enabled Dimensity 1000 5G SoC is part of the U.S. version of T-Mobile’s LG Velvet, which enables AV1 video streams for Netflix, YouTube and Twitch. To help video providers ramp up AV1 content production, NVIDIA’s AV1-enabled GeForce RTX 30 Series GPUs now use a dedicated AV1 hardware decoder to tackle up to 8K HDR streams for the next generation of game streaming, NVIDIA shared that AV1 will enable Twitch viewers to watch at up to
1440p 120 FPS at 8mbps, a feasible bitrate that can reach most home-broadband and 5G users. As we head toward 2021, we anticipate more adoption.

Regards,

Matt Frost,
AOMedia VP of Communications and Membership
Director at Google

IBC 2020: AV1 Panel on Commercial Readiness

Panel discussion with Amazon, Facebook, Google, Intel, Netflix, and Tencent

Hear how AOMedia member companies are facing the growing challenges of video deployments to deliver pristine Video on Demand and live streaming services. The panelists talk about the commercial readiness and benefits of AOM/AV1-compliant products and solutions now being deployed.

Watch the IBC AV1 Panel On Demand

AOMedia and AV1 in the News
870 million monthly users in Asia depend on next-generation codecs like AV1 - Streaming Media Blog**

With the emergence of third-party AV1 codecs, AOMedia, Visionular, and Intel/Netflix- have increased both the quality and encoding speed of the AV1 codec - Streaming Media

MediaTek's Dimensity 1000C enables AV1 HDR on Netflix, and AV1 video streaming on YouTube. MediaTek is also working with Twitch, the world's leading live streaming channel, to bring AV1 video streaming to mobile. - MediaTek

ANI News, MediaTek empowers Indian smart devices ecosystem, focuses on R&D to reiterate commitment to 'Make in India'

Tech Shout, MediaTek Dimensity 1000C 5G Chip Debuts on T-Mobile LG Velvet Phone Kodi 19, a successor to Xbox Media Center, will offer AV1 support- Explica

ZTE has taken the lead to introduce AV1 to its new-generation STBs, providing better image quality. - ZTE

**Edited to amend language.

AOMedia Member AV1 News

- Intel's AV1-enabled 11th Gen Intel® Core™ processors and Intel® Iris® Xe MAX GPUs all now include dedicated AV1 hardware decoders to enable power-efficient support for up to 8K HDR streaming experiences for thin-and-light laptops, even in constrained bandwidth environments
- YouTube and Netflix reference AV1 GPU-accelerated software decoder for Xbox One game consoles - based on the libaom AV1 reference decoder is now available and supports AV1 decoding up to 2K 30fps
- Microsoft’s hardware partners are rolling out hardware accelerated AV1 video support on new Windows 10 systems with the latest GPUs.
- After over a half year working on this new version, Rav1e 0.4 is on the way but first is the alpha milestone out today with much faster performance for Rust AV1 encoding.
- Roku is adding support for the AV1 codec, which video platforms are increasingly starting to adopt.
- Google engineers have added an AVX2-optimized high bit-depth temporal filter for the AOM-AV1 video encoder.
- NVIDIA announced that its GeForce RTX 30 Series GPUs: Ushering In A New Era of Video Content With AV1 Decode
- Cisco announced it is delivering Rich, High-Quality Video for Everyone by implementing the AV1 codec in virtual meetings, further reducing the amount of bandwidth used
- Intel’s Lynn A. Comp: ‘Addressing the exponential growth in visual workloads’ and the potential of the AV1 coding format as part of Intel’s IBC Showcase sessions

AV1 Resources

The following are AOMedia member AV1 dedicated resource pages.

- Bitmovin: https://bitmovin.com/av1/
- Intel: https://github.com/OpenVisualCloud/SVT-AV1
- Mozilla: https://research.mozilla.org/av1-media-codecs/
- Visionular: https://www.visionular.com/#portfolio
- Vimeo Staff Picks channel will be delivered using the AV1 codec on supported platforms (including the recent versions of Chrome and Firefox). Check out David Jervidal's Staff Picked film “Capture the North,” which is just one example of one of the many videos that will be leveraging AV1.