

Greetings!

Over the course of Q3, the Alliance for Open Media worked to advance AV1 technology by attending industry events, welcoming new member Bitmovin and advancing AV1 with Graphcore to introduce Argon Streams.

Alliance Momentum

There is increasing support for AV1 throughout the video industry, and it is currently used by a number of video services, including both linear and nonlinear workflows. An Alliance for Open Media Progress Report was published in the September 2022 issue of the SMPTE Motion Imaging Journal. The report provides updates from Alliance Working Groups (including the Video Codec Working Group, Storage and Transport Formats Working Group, Software Implementation Working Group, and Volumetric Visual Media Working Group) as well as AV1 progress and implementations. Authored by: Andrey Norkin; Adrian Grange; Cyril Concolato; Ioannis Katsavounidis; Hassene Tmar; Khaled Mammou; Shan Liu; Roshan Baliga

The Alliance also recently welcomed new member <u>Bitmovin</u>, a leading provider of video streaming infrastructure. Bitmovin will collaborate with <u>Alliance members</u> to promote the development of open web media experiences and accelerate the delivery of royalty-free, open web media standards.

Graphcore has open-sourced <u>Argon Streams AV1</u>, a comprehensive verification tool supporting next-generation video compression and delivery over the web. Argon Streams AV1 is now freely available via the Alliance for Open Media. Argon Streams AV1 provides a set of test bit-streams for AV1 video decoders based on formal verification techniques and is the only product to offer IP and ASIC designers full test coverage of their decoder directly against the AV1 specification. As a result, Argon Streams AV1 can give users full confidence that their decoders are fully verified against the specification and fully compatible with current and future AV1 encoder technology.

Industry Spotlight & IBC 2022

At the 2022 IBC Show in Amsterdam, Alliance members presented and demonstrated AV1

video codec advances and real-world implementations. I was fortunate to have attended the show and greatly appreciated the opportunity to network with experts in the space about AV1 and our path forward.

Alliance members were well-represented at this year's event. We're proud to share that Alliance member <u>iSIZE was awarded</u> a Best of Show Award at IBC 2022 for its BitClear Al-based video processing technology, integrated with AV1.

Additionally, at the Linux Foundation's Open Source Summit Europe, I gave a presentation on how commercial media's migration to the open web is impacting standards and open-source development:

We are witnessing a rapid, sea-change transformation of that industry, a shift from broadcast to broadband, and a move to a more open, flexible, user-centric media delivery infrastructure – a change so wide-ranging and ubiquitous that it is easy to underestimate its true scale. This sea change will carry in its wake broad business consequences – some are obvious – such as enabling more media service competition – but others are less obvious, such as enabling more flexible means to recoup the cost of standard essential patents development.

"Commercial Media and the Open Web," Sept 14, 2022, John Simmons, Executive Director, Alliance for Open Media

Regards,

John Simmons
Alliance for Open Media Executive Director

AOMedia and AV1 in the News

Check out the latest news and updates:

- AOMedia is delivering on SVT-AV1's promise and appears to have caught up with libaom in quality, with very definite performance advantages
- The Alliance for Open Media has announced that <u>Bitmovin has joined the</u> organization at the Promoter-level.
- <u>ZTE and Amlogic launched high-end DVB STB with far-field voice</u>, featuring high performance, low power consumption, great processing capability and support for AV1 decoding.
- <u>Netflix's Andrey Norkin, Co-Chair of the Video Codec Working Group</u>, and Streaming Learning Center's Jan Ozer talked about the future of Libaom-AV1. Watch the full interview <u>here</u>.
- As of Apple's iOS 16, mobile browsers will gain support for AVIF. Developed by the Alliance for Open Media, the use of AVIF could result in significantly faster page load times as well as higher-quality imagery across all Web browsers on iOS and iPadOS.
- AWS Media Services is <u>optimizing compression settings for cost efficiencies</u> and noted that AV1 performs exceptionally well at very low bitrates, even for larger resolutions
- Intel presents a <u>video transcoding solution that is based on SVT-AV1</u> through an end-to-end AVC premium video-to-AV1 transcoder that is used to generate a set of 8 bitstreams that can be used effectively by a VOD streaming service.

- An industry first, <u>full AV1 hardware acceleration</u> is included in Intel® Arc™ Pro A-Series Graphics.
- <u>AV1 Hardware Solutions</u> were prominent at IBC 2022 featuring NETINT, RealSprint, and the future of 4K AV1 video streaming.
- Amazon Web Services and iSIZE were among the <u>best of Show at IBC 2022</u> <u>winners announced</u> in the TVBEurope category.

AV1 Resources

The following are AOMedia member AV1 dedicated resource pages.

- AOMedia Summit: https://aom-summit.livevideostack.com/
- SVT-AV1: https://gitlab.com/AOMediaCodec/SVT-AV1
- Mozilla: https://research.mozilla.org/av1-media-codecs/
- Visionular: https://www.visionular.com/#portfolio
- <u>Vimeo Staff Picks</u> channel will be delivered using the AV1 codec on supported platforms (including the recent versions of Chrome and Firefox). Check out <u>David Jervidal's</u> Staff Picked film "Capture the North," which is just one example of one of the many videos that will be leveraging AV1.

Share your AV1 Successes

