

PRESS RELEASE

PRESS RELEASEApril 14, 2023 || Page 1 | 2

MainConcept and Fraunhofer IIS collaborate on MPEG-H Audio and xHE-AAC encoding for video and audio streaming services

Erlangen, Germany – Fraunhofer IIS, primary developer of the xHE-AAC and MPEG-H Audio codecs, and MainConcept, a leading provider of video and audio codecs, plugins, and applications to the production, streaming, and broadcast industries, are pleased to announce that MainConcept’s Live Encoder and FFmpeg Plugins now support Fraunhofer’s industry-leading MPEG-H Audio and xHE-AAC software encoders. Many service providers around the world rely on FFmpeg for their ingest and encoding frameworks. Complementing its already existing xHE-AAC plugin, MainConcept now also provides the most flexible FFmpeg plugin for MPEG-H Audio. The plugin can easily be integrated into existing workflows and seamlessly used in FFmpeg-based environments, enabling the encoding and streaming of content with personalized and immersive audio.

In addition to the plugin, MPEG-H Audio has also been integrated into the MainConcept Live Encoder. The powerful all-in-one encoding engine simplifies widespread broadcast and OTT video workflows. An intuitive user interface allows the packaging of content for multiscreen delivery using common input sources in real time.

“The addition of MPEG-H Audio to MainConcept’s Live Encoder and the FFmpeg plugins for xHE-AAC and MPEG-H Audio delivers huge benefits to providers, particularly for the live streaming of sports events and concerts, which can now be delivered in immersive audio and even be personalized by the audience,” explains Marc Gayer, Head of Business Department & Deputy Division Director Audio and Media Technologies at Fraunhofer IIS.

“We are constantly working to ensure our customers can deliver the highest standards of audiovisual quality and performance,” says Thomas Kramer, Vice President, Business Development and Strategy at MainConcept. “Partnering with Fraunhofer IIS for the xHE-AAC and MPEG-H Audio FFmpeg plugins and the integration of MPEG-H Audio into our Live Encoder makes these tools a perfect match for future broadcast infrastructures, for example the Brazilian next-generation broadcast system (TV 3.0), that requires VVC together with MPEG-H Audio and deployment is expected to start in 2025.”

Head of Corporate Communications

Thoralf Dietz | Phone +49 9131 776-1630 | thoralf.dietz@iis.fraunhofer.de | Fraunhofer Institute for Integrated Circuits IIS | Am Wolfsmantel 33 | 91058 Erlangen, Germany | www.iis.fraunhofer.de

Editorial notes

Mandy Garcia | Phone +49 9131 776- 6178 | audio-info@iis.fraunhofer.de | Fraunhofer Institute for Integrated Circuits IIS | www.iis.fraunhofer.de/audio

About xHE-AAC

xHE-AAC, the latest generation of the AAC codec family, offers several benefits to service operators and consumers. It can operate over a wide bitrate range, with seamless switching between bitrates for adaptive bitrate delivery using DASH or HLS protocols. It offers an improved quality at lower bitrates on speech content and improved stereo imaging. The codec comes with a mandatory loudness and dynamic range control for consistent playback loudness, and thanks to the Live Automatic Loudness feature in the encoder this works also for live inputs (such as streaming of concerts, sports events or news streams). xHE-AAC is supported in the latest Apple, Android, Amazon, and Microsoft operating systems. Fraunhofer estimates that two billion hours of on-demand xHE-AAC content are currently streamed each month by content providers including Netflix, Facebook and Instagram.

About MPEG-H Audio

From stereo to multichannel to immersive 3D audio, MPEG-H Audio has all the features needed to enhance viewer loyalty and advertising revenue. Already on the air in Brazil and South Korea, the Fraunhofer technology also powers Sony's 360 Reality Audio music streaming available on Amazon Music, nugs.net, Sony Select, and Tidal. MPEG-H Audio also enables the delivery of personalized audio complete with custom UI on the device. And all of this is fully under the creator's control in a single stream with seamless, realtime switching.

About MainConcept

Since 1993, MainConcept has provided best-of-breed video/audio codec solutions that fuel creativity and business globally for professional video production, multimedia, broadcast, digital signage, gaming, medical and security industries. Our software development kits, transcoding applications and plugins are used across industry verticals to meet an ever-expanding list of use cases. With world-class engineering, exquisite attention to detail, and best-in-class support and professional services, we are constantly innovating to deliver you the simplicity you need with the customer experience you deserve. MainConcept codecs are engineered to surpass the challenges of even the most demanding use cases and are used by organizations such as Adobe, AVID, Autodesk, Corel, Dalet, Endeavor Streaming, Globo, Grass Valley, Intel, MAGIX, Nikon, PlayBox, Soliton, Sony, Telestream, V-Nova and Wowza. MainConcept is a subsidiary of Endeavor, a global sports and entertainment company.

About Fraunhofer IIS

Fraunhofer IIS, based in Erlangen, Germany, is the largest institute within Fraunhofer-Gesellschaft, Europe's leading application-oriented research organization. For over 30 years, the institute's Audio and Media Technologies division has been shaping the globally deployed standards and technologies in the fields of audio coding and moving picture production. Fraunhofer IIS systems and tools help create, transmit and provide excellent audio and video content as well as enable high-quality real-time communication. Today, almost all computers, mobile phones and consumer electronic devices are equipped with technologies from Erlangen and are used by billions of people around the world every day.

It all started with the creation of mp3, then evolved with the co-development of AAC and HE-AAC. Now the fourth generation of best-in-class audio technologies – MPEG-H Audio, EVS, LC3/LC3plus and xHE-AAC – elevates the media experience to new heights. In terms of audio signal processing, Symphoria and the Sonamic product family provide enveloping and enhanced sound in cars, while the upHear product family dramatically improves 3D audio playback or recording quality of professional and consumer devices. Fraunhofer technologies also power digital radio: first and foremost in the form of the ContentServer, combining audio encoding, multimedia data management and multiplexing. In the field of moving picture technologies, establishing the Digital Cinema Initiative test plan boosted the creation of professional tools for digital film and media production, such as easyDCP, Realception and JPEG XS.

The interdisciplinary team transforms science into best-in-class applications with new functionalities for end users as well as optimum efficiency, reducing transmission costs while increasing reliability. Always taking into account the demands of the market, Fraunhofer IIS develops technology that makes memorable moments. We hear the bigger picture.

PRESS RELEASEApril 14, 2023 || Page 2 | 2
