Fraunhofer IIS brings comprehensive MPEG audio codec suite to NXP Semiconductors

Erlangen, Germany: Fraunhofer Institute for Integrated Circuits IIS, inventor of mp3 and primary developer of the xHE-AAC and MPEG-H Audio standards, announced that NXP® Semiconductors will leverage Fraunhofer’s MPEG audio SDK. This software package covers four generations of audio codecs: legacy MPEG Layer-1/2/3 as well as the next-generation MPEG-H 3D Audio standard and the AAC codec family, including xHE-AAC. NXP will incorporate these codecs into its multimedia system solutions, which raise the bar for audio quality in home entertainment products, such as set-top boxes, soundbars or smart speakers.

Fraunhofer IIS has more than 30 years of experience in the development and optimization of audio codecs and has already licensed its software to over 1000 companies. “NXP’s SoC products provide a compelling platform for Fraunhofer’s MPEG audio decoder SDKs and will drive the rapid market adoption of our audio solutions by the leading consumer electronics manufacturers,” said Dr. Nikolaus Färber, Head of Audio for Embedded Systems department of Fraunhofer IIS.

“The MPEG audio codecs from Fraunhofer IIS are an excellent fit for our high-quality multimedia systems solutions,” said Rob Oshana, Vice President of Software Engineering R&D from NXP. “We plan to fully integrate MPEG-H 3D Audio, xHE-AAC and the legacy codecs into our Immersiv3D™ audio solution for i.MX 8M SoCs.”

NXP also plans to leverage the Fraunhofer MPEG-H Audio System Trademark Program to test its MPEG-H decoder implementation. This will indicate to manufacturers that NXP’s decoder implementation fulfills all mandatory requirements of Fraunhofer’s MPEG-H Audio System trademark program.
About Fraunhofer IIS

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 and moving picture production. Starting with the creation of mp3 and continuing with the co-development of AAC and the Digital Cinema Initiative test plan, almost all consumer electronic devices, computers and mobile phones are equipped with systems and technologies from Erlangen today. Meanwhile, a new generation of best-in-class media technologies – such as MPEG-H Audio, xHE-AAC, EVS, LC3/LC3plus, Symphoria, Sonamic and upHear – is elevating the user experience to new heights. Always taking into account the demands of the market, Fraunhofer IIS develops technology that makes memorable moments.

About MPEG-H Audio

MPEG-H Audio, substantially developed by Fraunhofer IIS, is the industry’s most advanced audio system for UHD-TV and streaming. It supports both immersive sound and the ability for users to adjust elements in the audio to their preferences. MPEG-H has been on the air since 2017 on all TV networks in South Korea under the new ATSC 3.0 standard. It has also been selected for new broadcast standards to be launched in China and Brazil and is the distribution format of the new immersive music streaming service 360 Reality Audio. Fraunhofer offers MPEG-H software implementations for many popular CPU, SoC and DSP platforms. It is widely deployed today in TV sets, premium soundbars and high-end smart speakers.

About xHE-AAC

xHE-AAC is the ideal solution for digital radio broadcasting and for adaptive audio and video streaming services over the Internet, thanks to its coding efficiency (with a bit rate range from 12 kbit/s to 500 kbit/s and above for stereo services) combined with seamless bit rate switching over DASH and HLS as well as mandatory MPEG-D DRC loudness and dynamic range control. The codec is natively supported by the Android 9 and 10 operating systems, as well as iOS 13 and Amazon Fire OS 7.