

FRAUNHOFER INSTITUTE FOR INTEGRATED CIRCUITS IIS

PRESS RELEASE

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Fraunhofer Technology Selected as a Reference for Future MPEG Standard for Delivery of High-Quality 3D Audio Content

The selection continues a tradition of excellence for audio codec technology

ERLANGEN, Germany (September 3, 2013) – Following a rigorous testing and selection process that included a total of ten test labs worldwide, more than 50 listeners and more than 41,000 subjective responses, the standardization body Moving Picture Experts Group (MPEG) selected the Fraunhofer IIS channel/object-based proposal to provide a basis for the future MPEG-H 3D Audio standard for the delivery of high-quality 3D audio content.

Submissions from leading audio research facilities across the globe were considered and tested for two use-cases: channel/object-based and scene-based audio signals. Fraunhofer's proposal consisted of an Extended HE-AAC based audio codec and a 3D rendering engine. This technology supports the efficient transmission of 3D audio signals and flexible rendering for the playback of 3D audio in a wide variety of listening scenarios. These include 3D home theater setups, 22.2 loudspeaker systems, automotive entertainment systems and playback over headphones connected to a tablet or smartphone.

"Fraunhofer IIS is proud to develop leading audio technologies that meet the high standards of MPEG," Harald Popp, head of the Audio & Multimedia Business department at Fraunhofer IIS, stated. "Similar to previous standardization activities of MPEG, Fraunhofer IIS's proposal was selected once again for its superior audio quality and performance," he added.

The winning channel/object-based and scene-based proposals will be merged in the future standardization process to be finalized in early 2015. This technology represents the latest stage in a successful history of audio innovation for Fraunhofer.

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The acoustics lab of Fraunhofer IIS was one of ten labs where the MPEG listening tests were conducted. © Fraunhofer IIS/Kurt Fuchs | Image available for download: www.iis.fraunhofer.de/pr.

About Fraunhofer

The Audio and Multimedia division of Fraunhofer Institute for Integrated Circuits IIS, based in Erlangen, Germany, has been working in compressed audio technology for more than 25 years and remains a leading innovator of technologies for cutting-edge multimedia systems. Fraunhofer IIS is universally credited with the development of mp3 and co-development of the AAC (Advanced Audio Coding) as well as technologies for the media world of tomorrow, including Fraunhofer Cingo for virtual surround, Fraunhofer Symphoria for automotive 3D audio, AAC-ELD for telephone calls with CD-like audio quality, and Dialog Enhancement to allow TV viewers to adjust dialog loudness as they desire.

Through the course of more than two decades, Fraunhofer IIS has licensed its audio codec software and application-specific customizations to at least 1,000 companies. Fraunhofer estimates that it has enabled more than 6 billion commercial products worldwide using its mp3, AAC and other media technologies.

The Fraunhofer IIS organization is part of Fraunhofer-Gesellschaft, based in Munich, Germany. Fraunhofer-Gesellschaft is Europe's largest applied research organization and is partly funded by the German government. With 22,000 employees worldwide, Fraunhofer-Gesellschaft is composed of 66 Institutes conducting research in a broad range of research areas.

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