

FRAUNHOFER INSTITUTE FOR INTEGRATED CIRCUITS IIS

PRESS RELEASE

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Fraunhofer Showcases HE-AAC Multichannel in Live TV Broadcasting Chain at IBC

MPEG HE-AAC audio codec for low bit-rate, high-quality 5.1 surround audio in TV broadcasting

Amsterdam – September 7, 2012 – IBC booth 8.B80 – Fraunhofer IIS, the world's renowned source for audio and multimedia technologies, at IBC shows a complete real-time DVB-T2 live broadcasting chain with the MPEG audio codec HE-AAC for 5.1 surround audio signal transmission. HE-AAC is today globally established in TV and radio broadcasting because of its efficiency, high audio quality, and convenient availability in major broadcasting devices from professional audio encoders to TV sets and set-top boxes.

The broadcasting chain consists of all necessary elements to bring high-quality multichannel content to the end user's TV set over DVB-T2 terrestrial TV, including encoder, multiplexer, and modulator on the transmission side, as well as set-top box, and TV set on the reception side. Thomson Video Networks and Rohde & Schwarz have provided equipment for this demo, which are the Thomson's ViBE EM4000 Multichannel Encoder and the Thomson's NetProcessor 9030/40 Multiplexer and the Rohde & Schwarz SFC Compact Modulator. All the devices shown in the broadcasting chain are available on the market today and support HE-AAC.

HE-AAC is the most efficient audio codec available for TV broadcasting today. With a bit-rate of only 160kbit/s for high-quality 5.1 surround sound and freedom of choice of the channel configuration from mono to stereo to 5.1 surround, up to 48 channels, HE-AAC is unmatched in efficiency, flexibility and quality. As a consequence, HE-AAC is the mandatory audio codec in most countries, which recently introduced the second generation of terrestrial TV, for example, UK and Sweden. And it is the mandatory audio codec for HbbTV.

Show attendees can see other HE-AAC related presentations at the Fraunhofer's IBC booth 8.B80, including Dialogue Enhancement for improved speech intelligibility in radio and TV as well as HE-AAC multi-channel playback on Android 4.1.

For more information, visit www.iis.fraunhofer.de/amm



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About Fraunhofer

The Fraunhofer IIS Audio and Multimedia division, based in Erlangen, Germany, has been working in compressed audio technology for more than 20 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 AAC (Advanced Audio Coding) as well as technologies for the media world of tomorrow, including MPEG Surround and the Fraunhofer Audio Communication Engine.

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 5 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 20,000 employees worldwide, Fraunhofer-Gesellschaft is composed of 60 Institutes conducting research in a broad range of research areas. For more information, contact Matthias Rose, matthias.rose@iis.fraunhofer.de, or visit www.iis.fraunhofer.de/amm.

The **Fraunhofer-Gesellschaft** is the leading organization for applied research in Europe. Its research activities are conducted by 60 Fraunhofer Institutes at over 40 different locations throughout Germany. The Fraunhofer-Gesellschaft employs a stuff of around 20,000 who work with an annual research budget totaling 1,8 billion euros. Roughly two thirds of this sum is generated through contract research on behalf of industry and publicly funded research projects. Branches in the USA and Asia serve to promote international cooperation.

For further information

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