Fraunhofer Surround Sound: Redefining Mobile Entertainment in the Home and on the Go

Entertainment has gone mobile with phones and tablets acting as mobile media centers for easy, real-time access to music, movies and games. The organization behind ensuring excellent audio quality of most of those multimedia services is Germany’s R&D powerhouse Fraunhofer IIS, the inventor of mp3 and co-developer of AAC. Fraunhofer’s audio technologies not only enable excellent music sound of smartphones and tablets, but also allow them to play back videos with high-quality, movie theater-like surround sound. At CeBIT and Mobile World Congress, Fraunhofer IIS demonstrates how surround sound and mobile devices go hand in hand.

Since Android 4.1, Fraunhofer Surround Sound software is natively integrated in Android delivering a great surround experience right into the living room via smartphones and tablets. Fraunhofer Surround Sound software includes the High-Efficiency AAC (HE-AAC) audio codec, today’s most efficient, high-quality multi-channel and stereo audio codec. This codec transforms Android smart phones and tablets into true media centers for the home. With a simple HDMI connection to a home theater, mobile devices can stream high-quality content with surround sound into the living room for a theater-like experience in the comfort of home.

HE-AAC is the global standard for broadcast and streaming

HE-AAC has emerged as the global standard for streaming multimedia content, including Internet radio or web TV, digital radio and digital television. Examples include Digital Radio DAB+ in Germany, digital television in Europe and South America or streaming services such as YouTube and Pandora. The codec is integrated into operating systems and streaming platforms, and can be found in more than 5 billion consumer electronic devices. With a range of supported bit-rates as low as 64 to 160 kbit/s for 5.1 surround sound, the freedom of choice of the channel configuration from mono to stereo to 7.1 surround, and up to 48 channels, HE-AAC is unmatched in efficiency, flexibility and quality making it the perfect choice for adaptive streaming applications.

Surround sound over headphones

To preserve the cinematic experience of surround sound even while on the go, Fraunhofer IIS also offers tools that enable surround sound playback on mobile devices with any pair of stereo headphones. This software is available for mobile device manufacturers and providers of multimedia services.
Fraunhofer is demonstrating streaming high-quality multimedia content with surround sound into the living room and on the go at Mobile World Congress, hall 7, stand 7D60 in Barcelona, February, 25–28, 2013 and at CeBIT, hall 9, stand E08 in Hannover, March, 5–9, 2013.

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 22,000 employees worldwide, Fraunhofer-Gesellschaft is composed of 60 Institutes conducting research in a broad range of research areas.

For further information
Matthias Rose | Phone +49 9131 776-6175 | matthias.rose@iis.fraunhofer.de | Fraunhofer Institute for Integrated Circuits IIS | www.iis.fraunhofer.de
Jan Nordmann | Phone +1 408 573 9900 | Cell +1 408 390 6698 | press@dm.fraunhofer.org | Fraunhofer USA, Inc. | Digital Media Technologies* | 100 Century Center Court | Suite 504 | San José, California 95112 | www.dmt.fraunhofer.org

* Fraunhofer USA Digital Media Technologies, a division of Fraunhofer USA, Inc., promotes and supports the products of Fraunhofer IIS in the U.S.