

PRESS RELEASE

PRESS RELEASEJanuary 4, 2017 || Page 1 | 3

Fraunhofer IIS Brings Immersive Sound to Consumers' Homes through MPEG-H Enabled 3D Soundbar

ERLANGEN, Germany/LAS VEGAS, Nevada – Fraunhofer IIS, main inventor of the mp3 and AAC audio codecs, uses Texas Instruments (TI's) 66AK2G02 DSP + ARM System on Chip (SoC) to transform the consumers' audio experience. In early 2017, Fraunhofer IIS will introduce an MPEG-H enabled immersive soundbar and audio video receiver (AVR) reference design allowing convenient delivery of 3D sound into consumers' homes, bringing audio quality to new levels.

In Spring 2017, the MPEG-H TV Audio system will officially be on the air in South Korea's new terrestrial UHD TV system based on ATSC 3.0. MPEG-H, now also part of the DVB standard, is intended to push television broadcasting globally to new heights with its interactive, immersive features, and universal delivery to a multitude of consumer devices.

In an effort to make the AVR reference design available to original equipment manufacturers, Fraunhofer is implementing MPEG-H and Fraunhofer's 3D soundbar processing technology on TI's 66AK2G02 SoC, an industry-leading platform for AVRs and soundbars.

The MPEG-H system offers a wide range of benefits to consumers, including:

- **Immersive Sound:** MPEG-H adds 3D audio components to deliver a truly immersive experience;
- **Interactive Audio:** Consumers will have the ability to adjust the sound mix to their preferences, for example, choosing between different commentators in a sporting event;
- **Universal Delivery:** MPEG-H will tailor playback to sound best on a range of devices and environments.

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The advanced capabilities of the MPEG-H system enable the delivery of streaming and television audio content at comparably low bit rates, which provides a cost-effective benefit for broadcasters and streaming services.

“Our 66AK2G02 SoC featuring ARM® Cortex®-A15 core and C66x DSP is a great balance and match for the feature-rich MPEG-H system. Leveraging TI’s Processor SDK based framework for audio, Fraunhofer is able to bring up MPEG-H and Fraunhofer 3D soundbar processing technology on the platform quickly,” said John Smrstik, marketing manager, TI processors. “Our 66AK2G02 SoC is well positioned for 3D audio applications found in soundbars and AV receivers where performance, flexibility and ease of development need to be top of mind.”

“The combination of MPEG-H and our soundbar processing in one device brings true immersive sound conveniently into the living room. This will support manufacturers with making MPEG-H enabled devices widely available,” said Jan Nordmann, Senior Director, New Media at Fraunhofer USA Digital Media Technologies.

Invited guests will have the opportunity to experience MPEG-H and the soundbar reference design at Fraunhofer’s booth 20944 in South Upper Hall during CES 2017 from January 5 – 8, 2017 in Las Vegas, Nevada.

PRESS RELEASEJanuary 4, 2017 || Page 2 | 3

About Fraunhofer

When it comes to innovative audio technologies for the rapidly evolving media world, Fraunhofer IIS stands alone. For more than 25 years, digital audio technology has been the principal focus of the Audio and Media Technologies division of the Fraunhofer Institute for Integrated Circuits IIS. From the creation of mp3 and the co-development of AAC to the future of audio entertainment for broadcast, Fraunhofer IIS brings innovations in sound to reality.

Today, technologies such as Fraunhofer Cingo for virtual surround sound, Fraunhofer Symphoria for automotive 3D audio, AAC-ELD and EVS for telephone calls with CD-like audio quality, and MPEG-H Audio that allows television viewers to adjust dialogue volume to suit their personal preferences are among the division's most compelling new developments.

Fraunhofer IIS technologies enable more than 8 billion devices worldwide. The audio codec software and application-specific customizations are licensed to more than 1,000 companies. The division's mp3 and AAC audio codecs are now ubiquitous in mobile multimedia systems.

Fraunhofer IIS is based in Erlangen, Germany and is a division of Fraunhofer-Gesellschaft. With 24,000 employees worldwide, Fraunhofer-Gesellschaft is comprised of 67 institutes and research units making it Europe's largest application-oriented research organization.

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