

FRAUNHOFER INSTITUTE FOR INTEGRATED CIRCUITS IIS

PRESS RELEASE

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PIXTREE Integrates Fraunhofer's MPEG-H TV Audio System in Realtime UHD Broadcast Encoder

ERLANGEN, Germany/LAS VEGAS, Nevada – PIXTREE, Inc., a South Korean digital multimedia solution provider, makes an industry-leading move as an early supporter of the MPEG-H TV Audio System, a next generation audio technology mainly developed by the world-renowned audio experts at Fraunhofer IIS. The PixHEVC-E4600HA Realtime UHD Encoder will be among the first professional broadcast encoders in South Korea to support the MPEG-H system in the marketplace.

The adoption of the technology in the PixHEVC-E4600HA encoder is timely as South Korea prepares for the launch of 4K/UHD television in February 2017. The MPEG-H TV Audio System will be the first next-generation audio system used over the air for television broadcasts based on ATSC 3.0. Thanks to its integration in PIXTREE's PixHEVC-E4600HA encoder, broadcast professionals and consumers will benefit from the following unique capabilities:

- 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, and;
- **Immersive sound:** Comparable to moving from stereo to surround sound, the system adds sound from above to deliver a truly immersive experience.

Furthermore, the MPEG-H TV Audio System enables cost effective delivery of streaming and television audio at comparably low bit rates for broadcasters and streaming services.

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"The integration of MPEG-H Audio represents PIXTREE's commitment to delivering a captivating entertainment experience with high quality audio," said YB Thomas Kim, Vice-President of PIXTREE, Inc. "We're delighted to work with the audio experts at Fraunhofer IIS, especially in advance of the launch of 4K TV in South Korea" YB Thomas Kim continued.

PIXTREE, Inc. provides specialized products to customers including UHD media, HEVC total solutions (UHD Realtime Encoder, UHD Transcoder, MPEG-2 TS Player, UHD Service Monitor), mobile DTV (T-DMB, S-DMB, ATSC Mobile DTV), headend equipment, multimedia framework engines and A/V codec solutions for smart devices. PIXTREE adopted the MPEG-H TV Audio software for its Realtime UHD encoder, PixHEVC-E4600HA, which supports UHD broadcasting – IPTV, Cable, DVB-T2 and ATSC 3.0 – as well as LTE broadband, in an effort to advance the product by integrating immersive and interactive capabilities.

"Including our MPEG-H TV Audio System in PIXTREE's PixHEVC-E4600HA encoder will allow professional broadcasters to easily deliver content to viewers with all of the features of next-generation audio, including the ability to personalize the listening experience through the system's interactive audio capabilities," said Robert Bleidt, Division General Manager at Fraunhofer USA.

In addition to being part of the A/342 proposed audio standard for ATSC 3.0, the MPEG-H TV Audio System is integrated in the next-generation DVB UHDTV broadcast standard.

For more information, visit <u>www.iis.fraunhofer.de/tvaudio</u> and <u>www.pixtree.com</u>.



PIXTREE's Realtime UHD Broadcast Encoder supports MPEG-H Audio ©PIXTREE

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About PIXTREE, Inc.

PIXTREE, Inc. is a digital multimedia solution provider established in July 2002 by a group of world-class audio / video / system experts in the MPEG industry. PIXTREE provides specialized solutions and equipment to customers in the multimedia streaming and broadcasting industries with cutting-edge technologies such as their UHD 4K/8K broadcasting systems, Cloud Media Platform solution, High Density Software Defined Video Transcoding platform and Mobile Multimedia Framework solutions. The PIXTREE UHD 4K/8K Encoder is one of the major equipment that provides integrated immersive capabilities, i.e., MPEG-H Audio, 4K/8K Ultra resolution with HDR Video.

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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