

FRAUNHOFER INSTITUTE FOR INTEGRATED CIRCUITS IIS

PRESS RELEASE

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Fraunhofer Immersive Audio Technology on LG 360 VR

LG 360 VR users to experience unrivaled audio quality for virtual reality with Fraunhofer Cingo and the HE-AAC codec

Erlangen, Germany/Barcelona, Spain (February 22, 2016) – At Mobile World Congress 2016, Fraunhofer IIS presents an immersive audio technology solution for enhancing the audio on the innovative LG 360 VR. It comes with Fraunhofer Cingo, the leading immersive audio rendering solution for virtual reality. The delivery of surround audio to LG 360 VR is made possible by today's most efficient high-quality surround and stereo codec co-developed by Fraunhofer IIS, High Efficiency AAC (HE-AAC).

The combination of Cingo and HE-AAC delivers a truly authentic audio experience essential for virtual reality. Cingo renders stereo, surround and immersive sound over headphones incorporating head movements. Thus, movies in the LG 360 VR applications will immerse users and transport them in different virtual environments with perfectly matching audio properties for the success of the illusion.

"Spatial audio is the central ingredient in creating a truly authentic and realistic audio presence in virtual reality," says Jan Nordmann, Senior Director of Business Development, New Media at Fraunhofer USA Digital Media Technologies. "Fraunhofer Cingo and the HE-AAC audio codec on the LG 360 VR make the audio experience for virtual reality sound better than reality."

Android devices natively support HE-AAC and with Cingo's spatial audio capabilities, virtual reality devices with high quality surround sound can be tailored for the optimum listening experience.

Fraunhofer IIS, the world-renowned experts in audio and multimedia technologies, developed Cingo to achieve optimized sound quality and best possible user experience when playing stereo, surround and 3D sound on virtual reality and mobile devices. Cingo dramatically improves the entertainment experience, by delivering natural and clear sound that creates the experience of "being there".

Cingo is available from Fraunhofer as a product-ready software implementation for mobile device manufacturers, chip set vendors and providers of multimedia services.



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HE-AAC is today's most efficient high-quality surround and stereo codec, deployed in over 8 billion devices and used in TV, radio and streaming services worldwide.

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Show attendees can experience immersive sound for VR devices at Fraunhofer's booth at Mobile World Congress 2016 (Hall 7 Stand 7G31).

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 Multimedia division of the Fraunhofer Institute for Integrated Circuits IIS. From the creation of mp3 and the co-development of the 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 for telephone calls with CD-like audio quality, and Dialogue Enhancement 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 more than 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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