

FRAUNHOFER-INSTITUT FOR INTEGREATED CIRCUITS IIS

PRESS RELEASE

Fraunhofer to Launch Advanced HDR Camera Technologies at IBC 2013

Fraunhofer IIS, the world's renowned source for audio and multimedia technologies, today announces its Department of Moving Picture Technologies to unveil new innovative camera and acquisition technologies for high dynamic range video (HDR) at IBC. The Institute is introducing two different ways for HDR imaging: a specialized HDR camera and new camera array to provide brilliant HDR images for the most challenging lighting conditions on set.

The new camera and the HDR camera array are specifically developed to drive the next generation of HDR image acquisition. Both technologies result in an enhanced HDR image requiring less touch-up during postproduction, as well as creative freedom and a streamlined production process that lowers technical production costs.

"Fraunhofer IIS developments in HDR allow digital cinema professionals to leverage the most advanced technologies so they can focus on what they do best, creativity and storytelling," said Dr. Siegfried Foessel, head of Moving Picture Technologies department at Fraunhofer IIS. "Our most recent developments demonstrate and support the convergence of the production and postproduction processes, helping professionals stay competitive in today's market."

Using a special filter mask in front of the sensor, the HDR camera records different exposure intensities with one single shot, which are then combined during processing. In addition, Fraunhofer designed its new camera array to utilize several standard cameras with different neutral density filters. The array of shots is then combined with high-performing rectification algorithms.

Further presenting its expertise in HDR, Fraunhofer Digital Cinema Alliance scientist Dr. Joachim Keinert, chief scientist at IIS, will participate in the IBC session "The advancement in HDR video" on Thursday, September 12 at 11:00 a.m. in the Emerald Room. IBC attendees can also see demonstrations at the Fraunhofer Digital Cinema Alliance booth 8.B80. Fraunhofer's scientists will be available at the booth for one-on-oneconversations.

Head of Press and Public Relations

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Editorial notes

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Fraunhofer IIS and the Department of Moving Picture Technologies are part of the Fraunhofer Digital Cinema Alliance. The Alliance provides a network of deep expertise and intelligence for the development of scalable technologies and international standards that allow customers to stay ahead the market.

Further information is available at: http://www.dcinema.fraunhofer.de/en/.

About Fraunhofer IIS

Founded in 1985 the Fraunhofer Institute for Integrated Circuits IIS in Erlangen, - today with more than 780 staff members, ranks first among the Fraunhofer Institutes concerning headcount and revenues. As the main inventor of mp3 and universally credited with the co-development of AAC audio coding standard, Fraunhofer IIS has reached worldwide recognition. It provides research services on contract basis and technology licensing. The Fraunhofer IIS organization is part of Fraunhofer-Gesellschaft, based in Munich, Germany.

For more information, contact Angela Raguse, <u>angela.raguse@iis.fraunhofer.de</u>, or visit http://www.iis.fraunhofer.de/en/abt/bewegt/.

About the Department Moving Picture Technologies

The Department Moving Picture Technologies develops new innovative imaging systems and procedures based on High Dynamic Range (HDR), Lightfield and 3D capturing methods. Main application areas are the motion picture and TV industry, but also other areas will be covered. The algorithms will be used to extend technical and creative opportunities on the set and in the postproduction. To achieve practical use specific components like image processing ASICs, software tools or complete prototypes and devices will be developed.

Well known software developments will be used, e.g. easyDCP for creation, play back and control of Digital Cinema Packages. Actual and future extensions will work for enhanced 3D distribution packages, multi-format mastering or archiving of media content. The department is well connected to other organizations and associations and is working in several international standardization organizations.

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About Fraunhofer

The **Fraunhofer-Gesellschaft** is the leading organization for applied research in Europe. At present, the Fraunhofer-Gesellschaft maintains 66 institutes and independent research units. The majority of the more than 22,000 staff are qualified scientists and engineers, who work with an annual research budget of 1.9 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.