Fraunhofer IIS Introduces Light-Field Plug-In Suite for The Foundry’s Nuke

Erlangen/Amsterdam, NL, September 9, 2015 – IBC, Hall 8, Booth B.80: The Fraunhofer Institute for Integrated Circuits IIS today at IBC demos the integration of its light-field plug-in suite in The Foundry’s Nuke. The integration provides professionals with an easy-to-use tool to meet the rapidly growing need for processing multi-camera data in today’s professional film sets. Fraunhofer IIS’ light-field technology enables professionals to take advantage of multi-camera array data based on a single shot in post-production to provide advanced editing, special effects and other creative possibilities previously only possible with CGI.

“Fraunhofer IIS’ research is dedicated to providing easy-to-use, cost-effective and future-proof solutions that will open any digital media or cinema workflow to new creative possibilities that provide audiences with the high quality and immersive viewing experiences they demand,” said Frederik Zilly, head of group Computational Imaging of Fraunhofer IIS.

Today, there is barely a film that makes it to theaters or the television screen without some type of editing or the addition of special effects. To make this process simpler and less resource-intensive, many are turning to the use of multi-camera systems. The cameramen, in addition to the main camera system, use arrays consisting of multiple cameras in various arrangements. This enables multiple viewpoints to be recorded on set in a single shot. With the right technology, data from the multiple camera streams can be manipulated in post-production to enhance the main shot in various steps, or can be used to adapt or change the scene. Fraunhofer IIS’ light-field technology does just that.

Fraunhofer IIS’ light-field plug-in suite enables various camera views to be calculated to create virtual camera movement, a change in the depth of field or a shift in zoom all in post. Images from multi-camera arrays in a grid-like arrangement can be used as input material. Furthermore, data from these arrays is processed via disparity maps, which can be used as the basis for producing new depth maps for color correction and matting for flawless virtual backlots. Relighting is also possible.

IBC attendees can receive a demo of Fraunhofer IIS’s light-field plug-in suite for Nuke, along with an overview of how to license this technology at the Fraunhofer booth hall 8 B.80.
Fraunhofer IIS is looking for professional first adopters who would like to test the tools in their productions. A test-shoot with Stuttgart Media University, titled “Coming Home,” showcasing the capabilities of light-field technology for live-action filming can be viewed at: www.iis.fraunhofer.de/lightfield.

Fraunhofer Institute for Integrated Circuits IIS

FRAUNHOFER INSTITUTE FOR INTEGRATED CIRCUITS IIS

The Fraunhofer-Gesellschaft is the leading organization for applied research in Europe. Its research activities are conducted by 66 institutes and research units at locations throughout Germany. The Fraunhofer-Gesellschaft employs a staff of nearly 24,000, who work with an annual research budget totaling more than 2 billion euros.

The Fraunhofer Institute for Integrated Circuits IIS is one of the world’s leading application-oriented research institutions for microelectronic and IT system solutions and services. It ranks first among all Fraunhofer Institutes. With the creation of mp3 and the co-development of AAC, Fraunhofer IIS has reached worldwide recognition. In close cooperation with partners and clients the Institute provides research and development services in the following areas: Audio & Multimedia, Imaging Systems, Energy Management, IC Design and Design Automation, Communication Systems, Positioning, Medical Technology, Sensor Systems, Safety and Security Technology, Supply Chain Management and Non-destructive Testing. About 880 employees conduct contract research for industry, the service sector and public authorities. Founded in 1985 in Erlangen, Fraunhofer IIS has now 13 locations in 10 cities: Erlangen (headquarters), Nuremberg, Fürth, Dresden, further in Bamberg, Waischenfeld, Coburg, Würzburg, Ilmenau and Deggendorf. The budget of 120 million euros is mainly financed by projects. 23 percent of the budget is subsidized by federal and state funds.