Silicon Studio and EIZO

New HDR solution for Hybrid Log-Gamma collaborative development
~HDR content software and hardware production support~

Tokyo, Japan, (April 15, 2016) - Innovative gaming technology company Silicon Studio Corporation has announced a collaboration with visual display developer EIZO Corporation (HQ: Ishikawa Prefecture Hakusan) to develop HDR solutions for Hybrid Log-Gamma (HLG) allowing for an advancement in image expression that cannot be reproduced by current conventional monitors.

Including solutions for HLG, the collaboration will also seek to target other various types of HDR output such as Dolby Vision.

- Collaboration Overview
Silicon Studio will be responsible for content development for the HDR technology, and EIZO will develop the HLG/ HDR monitors. Combining the two companies' technologies and products enable the development of new HDR solutions that can support content production on both the hardware and software sides. The collaboration aims to target the broadcasting, gaming, video, automotive, and manufacturing industries.

- HDR solutions the collaboration aims to achieve
Currently conventional monitors cannot properly express some CG or photo imaged content, such as the glitter of metal with a glossiness close to real life or the paint colors of certain cars that do not fall within the Adobe RGB color gamut. With proper solutions, these can be reproduced and displayed at a very high degree. As a result, it will be possible to eliminate the gaps that often occur in product visualization CG design time due to difference from the actual shade or representation of a product.

- Publication of Collaborative HDR Solutions
Silicon Studio is currently producing real-time CG content demos to be displayed on HDR monitor prototypes made by EIZO. These product and content demos will debut at "The 24th 3D & Virtual Reality Expo" held from
June 22nd to 24th 2016 and then exhibited at the "The 2nd Advanced Content Technology Expo" held from June 29th to July 1st.

■ About HDR
HDR (High Dynamic Range) is a technology that expands the range of brightness in video imagery. Compared to the current standard SDR (Standard Dynamic Range), approximately 100 times the luminance signal can be recorded; shades that have been crushed into black are made visible, and clearly display areas of sunlight without overexposure. Video recorder in HDR will be properly represented on HDR monitors bringing the visual expression on the monitor close to that you can see with the naked eye in real life.

■ About Hybrid Log-Gamma
HLG is one of the HDR systems NHK (Japan Broadcasting Corporation) and the BBC (British Broadcasting Corporation) are cooperatively promoting. Not only is it capable of HDR representation, it can also be used for live broadcasts, and features that maintain a high compatibility with conventional television systems. On NHK, test broadcasts of 4K・8K on BS are scheduled to start some time in 2016. In order for this technology to begin usage, the development of broadcasting standardization and facilities are underway.

■ Comparison of HDR and SDR (Left : HDR, Right : SDR)
In comparison, HDR is much better at representing the detail of bright and dark areas than SDR.

※The SDR (right) image, is a reference image that has been subjected to post-processing in order to visualize easy-to-understand effects of HDR.

■ About Silicon Studio
Silicon Studio

Silicon Studio is a Japan-based game engine and middleware company providing quality rendering, optical effects, and post-effects solutions for game development. Silicon Studio also publishes games across mobile, PC and consoles, and develops games for third parties.

■ About EIZO Corporation

EIZO Corporation, since its inception as a Visual Technology Company in 1968, has cultivated its know-how and its own integrated development and production systems. EIZO offers state-of-the-art high quality video solutions to various markets around the world, producing devices for not only the graphics market but also general office use, medical, e-sports, air traffic control, and shipping and railway industries.

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