

FRAUNHOFER INSTITUTE FOR INTEGRATED CIRCUITS IIS

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PRESS RELEASE

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Fraunhofer IIS offers JPEG XS plugin for NVIDIA's Holoscan for Media Architecture

Erlangen, Germany/NAB, Las Vegas: The Fraunhofer Institute for Integrated Circuits IIS today announces it has developed JPEG XS plugins and microservices especially designed for seamless data processing and exchange with NVIDIA Holoscan for Media Architecture, a software defined platform that enables developers to easily build and deploy live media applications. By combining Fraunhofer IIS' JPEG XS SDKs (software development kit) with NVIDIA Holoscan for Media Architecture, developers can realize ubiquitous solutions for cloud and on-premises systems. Both companies combine their strength to allow a direct data transfer from network interface cards (NICs) to graphic cards and Fraunhofer IIS JPEG XS SDKs.

Fraunhofer IIS offers JPEG XS SDKs for various platforms, including x86, Arm and NVIDIA processors. Now, with the inclusion of their new JPEG XS plugins and microservices help expand the NVIDIA Holoscan for Media platform, facilitating seamless data processing and exchange. Holoscan for Media provides a platform for software-defined broadcasting by combining high-performance NICs with graphic cards and application-supporting SDKs. Together with the NVIDIA Rivermax SDK and CUDA toolkits, IP-based solutions including SMPTE ST 2110, AMWA NMOS, RIST and SRT can be built. While Holoscan for Media originally addressed both uncompressed and low-bit-rate streaming workflows, the integration of Fraunhofer's JPEG XS SDKs provides a way to deliver an IP-based low-latency mezzanine video compression transport.

Developers profit from a ubiquitous solution

By combining these SDKs with NVIDIA Holoscan for Media Architecture, a ubiquitous solution for cloud and on-premises systems can be realized. The Fraunhofer IIS JPEG XS SDKs provide an interface and API that fit directly into the Holoscan for Media platform. If customers want to implement a cloud-based cluster system for ST2110-22 with JPEG XS processing, or an embedded solution using the NVIDIA Jetson platform, this is the ideal way to go.

"This optimized data processing pipeline combines NVIDIA's expertise in high-data throughput IP interfaces and accelerated computing with the coding technologies of Fraunhofer IIS," explains Siegfried Foessel, Head of the moving picture technology department at Fraunhofer IIS.

Head of Corporate Communications

Thoralf Dietz | Phone +49 9131 776-1630 | thoralf.dietz@iis.fraunhofer.de | Fraunhofer Institute for Integrated Circuits IIS | Am Wolfsmantel 33 | 91058 Erlangen, Germany | www.iis.fraunhofer.de

Editorial notes

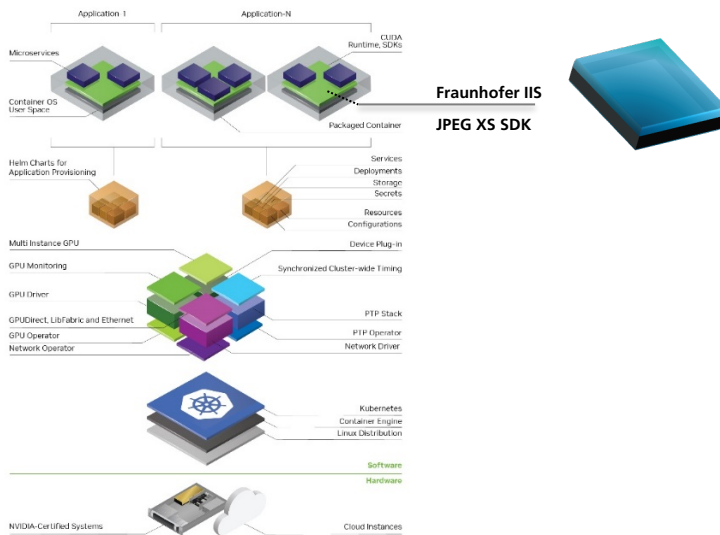
Angela Raguse Phone +49 9131 776-5105 | angela.raguse@iis.fraunhofer.de | Fraunhofer Institute for Integrated Circuits IIS | www.iis.fraunhofer.de

Nir Nitzani, Senior Director of Networking Media and Entertainment Product Marketing Management at NVIDIA, adds: "NVIDIA GPUDirect and Direct Packet Placing allow a direct data transfer from the NIC to the GPU. This is where the Fraunhofer JPEG XS plugin comes in, unpacking and decoding the JPEG XS RTP stream to eliminate time-consuming processing by the CPU and bottlenecks in workflows and data pipelines." And by using a Docker container-based architecture, the processing and services can be used on many different platforms.

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Visit us to get a demo of our SDKs at NAB, Las Vegas Convention Center, Booth W2857, West Hall.



The Fraunhofer IIS JPEG XS SDK and NVIDIA Holoscan for Media Architecture

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The **Fraunhofer-Gesellschaft**, headquartered in Germany, is the world’s leading applied research organization. Its research activities are conducted by 75 institutes and research units at locations throughout Germany. The Fraunhofer-Gesellschaft employs a staff of 29,000, who work with an annual research budget totaling more than 2.8 billion euros. The **Fraunhofer Institute for Integrated Circuits IIS**, headquartered in Erlangen, Germany, conducts world-class research on microelectronic and IT system solutions and services. Today, it is the largest institute of the Fraunhofer-Gesellschaft. For over 30 years, the institute’s Audio and Media Technologies division has been shaping the globally deployed standards and technologies in the fields of audio and moving picture production. Starting with the creation of mp3 and continuing with the co-development of AAC and the Digital Cinema Initiative test plan, almost all consumer electronic devices, computers and mobile phones are equipped with systems and technologies from Erlangen today. Meanwhile, a new generation of best-in-class media technologies – such as MPEG-H Audio, xHE-AAC, EVS, LC3/LC3plus, Symphoria, Sonamic and upHear – is elevating the user experience to new heights. **Detailed information on:** www.iis.fraunhofer.de/en