Xilinx and Leading Broadcast and AV System and IP Integrators Deliver Complete, Production-Ready Multimedia Streaming End-Point Solutions

Powered by Xilinx adaptive SoCs, highly integrated streaming solutions are ready-to-ship or customize by customers for a simpler, faster time-to-market and deployment

SAN JOSE, Calif., Oct. 26, 2021 – Xilinx, Inc. (NASDAQ: XLNX), the leader in adaptive computing, today announced it is leveraging its IP and system integrator ecosystem to provide the industry's first and only production-ready multimedia streaming endpoint solutions for broadcast and professional audio/video (AV) applications. These complete solutions feature powerful Xilinx® Zynq® UltraScale+™ EV Multi-Processor (MP) system-on-a-chip (SoC) and Zynq-7000 SoC devices, with integrators contributing FPGA IP, media framework software and production-ready products. The highly integrated solutions are ready-to-ship, or ready to customize, making it significantly faster and easier for customers to bring broadcast and professional AV products to market.

Multimedia streaming requires flexible AV interfaces, real-time video processing, support for different professional-grade video codecs, and a reliable high-bandwidth Ethernet transport layer for AV-over-IP, all of which are provided by Xilinx Zynq devices. AV-over-IP is at the heart of broadcast endpoints and infrastructure, keyboard-video-mouse technologies, streaming endpoints, AV routers and switchers, video wall controllers and collaboration equipment.

The complete streaming solutions featuring Zynq devices, include:

- Adeas and Nextera Video IP Cores – For vendors seeking to integrate a complete, but fully customizable ST 2110 AV-over-IP system into their own designs, Adeas and Nextera Video provide a fully-integrated hardware/software IP core set for ST 2110, ST 2059, ST 2022-6/8, IPMX, and NMOS (Networked Media Open Specification used for plug-and-play, system-level control of ST 2110 devices). All cores are modular for easy customization, enabling excellent resource efficiency while being resolution- and network-speed independent, and supporting up to 8K+ and from 1G to 100G+.

- Macnica Technology ME10 SoC – For equipment providers wanting to integrate a chip-level or system-on-module (SoM) solution for AV-over-IP, the ME10 SoC is the industry's first single-chip, full-stack solution for the AIMS IPMX standard. Based on Xilinx technology, the ME10 SoC transports 4K HDMI video, audio and control data over 1GbE networks and offers the only interoperable, scalable and vendor-independent AV-over-IP solution. The ME10 SoC is at the heart of the related Macnica MPA1000 SoM, and the same development kit is used for both. This gives more flexibility and dramatically reduces the cost of adoption.

- Osprey Video Talon Encoders and Decoders – Already used by broadcasters for live streaming of sports, Talon products offer real-time broadcast-quality encoding of 10-bit 4K UHD video between HDMI/SDI and reliable IP transport streaming. The low-power Zynq UltraScale+ EV MPSoC implementation for H.264/H.265 encoding and decoding enables the Talon products to be fanless. The complete Talon encoder and decoder products are available for OEM adoption with varying levels of customization possible.

- XVTEC XVC-ULTRA Encoder – Delivering real-time, broadcast-quality H.264/H.265 encoding of up to 4K UHD video streaming over IP, the XVC-ULTRA encoder leverages the ultra-low-latency mode of the Zynq UltraScale+ EV MPSoC codec, resulting in an end-to-end latency of less than 40ms. The XVC-ULTRA encoder can be deployed as OEM products with various customization options available.

The Zynq UltraScale+ MPSoC is the industry's only single-chip, broadcast-grade codec system for 4K UHD with the lowest end-to-end latency. The Zynq family provides the first single-chip solutions to support the latest standards for interoperability in multimedia streaming: AIMS IPMX in professional AV and SMPTE ST 2110 in broadcast. In addition, unlike ASICs and ASSPs, the Zynq devices are fully programmable and can support AV streaming applications ranging from less than 1Gbps to more than 100Gbps.

"Xilinx is excited to work with our integrator ecosystem and bring to market complete solutions supporting an adaptable multimedia pipeline from input to output," said Ramesh Iyer, senior director, Pro AV, Broadcast and Consumer business at Xilinx. "These new, interoperable solutions are production ready so customers can focus on adding differentiated features and reducing their time to deployment. Time saved in installation and deployment is money saved in broadcast and pro AV."

Xilinx is a leader in semiconductors for the broadcast and professional AV markets. For over two decades, the company has offered flexible, differentiated and standards-based solutions that combine software programmability, real-time video and audio processing, hardware optimization and any-to-any media connectivity.

More information on the Xilinx Broadcast and Pro AV portfolio can be found at https://www.xilinx.com/broadcast.

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About Xilinx
Xilinx, Inc. develops highly flexible and adaptive processing platforms that enable rapid innovation across a variety of technologies - from the cloud, to the edge, to the endpoint. Xilinx is the inventor of the FPGA and adaptive SoCs (including our adaptive compute acceleration platform, or ACAP), designed to deliver the most dynamic computing technology in the industry. We collaborate with our customers to create scalable, differentiated, and intelligent solutions that enable the adaptable, intelligent, and connected world of the future. For more information, visit xilinx.com.

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