

Microchip Expands PolarFire® FPGA Smart Embedded Video Ecosystem with New SDI IP Cores and Quad CoaXPress™ Bridge Kit

Solution stacks deliver broadcast-quality video, SLVS-EC to CoaXPress bridging and ultra-low power operation for next-generation medical, industrial and robotic vision applications

CHANDLER, Ariz., Jan. 19, 2026 (GLOBE NEWSWIRE) -- Microchip Technology (**Nasdaq: MCHP**) has expanded its [PolarFire® FPGA smart embedded video](#) ecosystem to support developers who need reliable, low-power, high-bandwidth video connectivity. The embedded vision solution stacks combine hardware evaluation kits, development tools, IP cores and reference designs to help streamline development, strengthen security and accelerate time to market. The stacks include Serial Digital Interface (SDI) Receive (Rx) and Transmit (Tx) IP cores and a [quad CoaXPress™ \(CXP™\) board](#) to support complete video pipelines for applications ranging from medical diagnostics and low-latency imaging to real-time camera connectivity for intelligent systems.

Microchip is currently the only known FPGA provider offering a quad CoaXPress FPGA-based solution, enabling direct SLVS-EC (up to 5 Gbps/lane) and CoaXPress 2.0 (up to 12.5 Gbps/lane) bridging without the need for third-party IP. SDI Rx/Tx IP cores deliver Society of Motion Picture and Television Engineers (SMPTE) compliant 1.5G, 3G, 6G and 12G-SDI video transport for broadcast and embedded imaging applications. Additionally, the ecosystem includes HDMI-to-SDI and SDI-to-HDMI bridging capabilities, supporting 4K and 8K video formats to enable high-resolution, high-bandwidth video transport across a range of professional and embedded applications.

By harnessing the ultra-low-power, secure, programmable, non-volatile architecture of PolarFire FPGAs, Microchip delivers integrated solution stacks that enable OEMs to create compact, fanless and high-performance video systems. The solutions are designed to help lower bill of material (BOM) costs, streamline design complexity and incorporate layered security across hardware, design and data using advanced anti-tamper protection and embedded security features.

“Next-generation medical, industrial and robotic vision systems demand not only exceptional video quality but also uncompromising energy efficiency,” said Shakeel Peera, vice president of marketing for Microchip’s FPGA business unit. “The expansion of our PolarFire FPGA embedded video ecosystem underscores our commitment to delivering low-power solutions that are designed to enable customers to develop reliable and high-performance systems with robust connectivity and minimized energy consumption.”

With native support for Sony SLVS-EC sensors, the solution provides an upgrade path for designs affected by discontinued components. Developers can leverage Microchip's Libero[®] Design Suite and SmartHLS[™] high-level synthesis tool to reduce complexity and shorten time to market. Visit the website to learn more about Microchip's collection of [FPGA-based solution stacks](#) or contact a Microchip [sales representative or authorized worldwide distributor](#).

Resources

High-res images available through Flickr or editorial contact (feel free to publish):

- Application image:
<https://www.flickr.com/photos/microchiptechnology/55024432557/sizes/o/>

About Microchip Technology:

Microchip Technology Inc. is committed to making innovative design easier through total system solutions that address critical challenges at the intersection of emerging technologies and durable end markets. Its easy-to-use development tools and comprehensive product portfolio supports customers throughout the design process, from concept to completion. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support and delivers solutions across the industrial, automotive, consumer, aerospace and defense, communications and computing markets. For more information, visit the Microchip website at www.microchip.com.

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