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Microsemi PolarFire FPGAs Enable Smallest, Lowest Power DisplayPort Implementations with New IP from Bitec

IP Gives Customers More Options for Customizing DisplayPort 1.4a Designs

ALISO VIEJO, Calif., July 24, 2018 /PRNewswire/ -- **Microsemi Corporation**, a wholly owned subsidiary of Microchip Technology, Inc. (Nasdaq: MCHP), today announced the availability of [Bitec's](#) DisplayPort™ intellectual property (IP) core optimized for [PolarFire™](#) field programmable gate arrays (FPGAs). Compared to alternative solutions, the core gives designers the ability to take advantage of the PolarFire family's smaller size and 50 percent lower power to enable stunning image quality in small formfactor embedded displays and monitors.



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"Bitec's targeting of our award-winning PolarFire FPGAs with its IP enables designers to easily meet requirements for small size and low power when implementing their DisplayPort 1.4a interfaces," said Ted Marena, director of business development and outbound marketing for Microsemi. "The DisplayPort IP adds to the HDMI 2.0b display IP Bitec is already providing Microsemi customers as part of our Accelerate Ecosystem Partner Program and we are pleased to be collaborating again to expand our market opportunities."

Supporting resolutions as high as 8K (7680 x 4320 pixel) ultra-high definition (UHD) video, the newly available IP supports up to four streams so multiple monitors can use a single DisplayPort connection, lowering system costs and speeding time to market. The IP supports from one, two and four data lanes with rates up to 8.1 Gbps, providing designers with a cost-effective, scalable industry standard for internal and external LCD panel connections.

"Given today's shrinking product lifecycles, it's imperative for manufacturers to speed their time to market," said Andy Robertson, director, Bitec. "By targeting PolarFire FPGAs, we provide customers the ability to customize their designs and get to market quickly using programmable devices optimized for the lowest power and cost, as well as offering the highest levels of reliability with exceptional security."

Bitec's core gives designers optional high-bandwidth digital content protection (HDCP) 1.3/2.2, supporting the latest standard for protecting digital media. Bitec offers a DisplayPort FPGA mezzanine card (FMC) which can be used with the [PolarFire Evaluation Kit](#) to accelerate development. Leveraging the Bitec IP makes Microsemi's PolarFire FPGAs ideal for a wide variety of display-based applications within the [industrial](#), [defense](#), [medical](#), consumer and avionics markets, including virtual reality (VR) headsets, avionic cockpits, [medical imaging](#), industrial displays and heads up displays.

Availability

Microsemi's PolarFire FPGAs and Bitec's DisplayPort IP are available now. For more information, visit <https://www.microsemi.com/polarfire> and <https://www.microsemi.com/product-directory/intellectual-property-partners/5111-bitec> or email sales.support@microsemi.com.

About Microsemi's Accelerate Ecosystem Partner Program

Microsemi's [Accelerate Ecosystem Partner Program](#) facilitates collaboration between Microsemi and leading firms in the semiconductor integrated circuit (IC), IP, systems, software, tools and design spaces to integrate, test and deliver pre-validated designs and system-level solutions for end customers in Microsemi's key vertical markets—aerospace and defense, data center, communications and industrial. The Accelerate Ecosystem is designed to reduce time-to-market for end customers and time-to-revenue for Microsemi and ecosystem members via technology alignment, joint marketing and sales acceleration.

About PolarFire FPGAs

Microsemi's new cost-optimized PolarFire FPGAs deliver the industry's lowest power at mid-range densities with exceptional security and reliability. The product family features 12.7 Gbps transceivers and offer up to 50 percent lower power than competing FPGAs. Densities span from 100K to 500K logic elements (LEs) and are ideal for a wide range of applications within wireline [access](#) networks and [cellular infrastructure](#), [defense](#) and [commercial aviation](#) markets, as well as industry 4.0 which includes the [industrial](#) automation and internet of things (IoT) markets. The non-volatile PolarFire product family consumes 10 times less static power than competitive devices and features an even lower standby power referred to as Flash*Freeze. For more information, visit www.microsemi.com/polarfire.

About Microsemi

Microsemi Corporation, a wholly owned subsidiary of Microchip Technology Inc. (Nasdaq: MCHP), offers a comprehensive portfolio of semiconductor and system solutions for aerospace & defense, communications, data center and industrial markets. Products include high-performance and radiation-hardened analog mixed-signal integrated circuits, FPGAs, SoCs and ASICs; power management products; timing and synchronization devices and precise time solutions, setting the world's standard for time; voice processing devices; RF solutions; discrete components; enterprise storage and communication solutions, security technologies and scalable anti-tamper products; Ethernet solutions; Power-over-Ethernet ICs and midspans; as well as custom design capabilities and services. Microsemi is headquartered in Aliso Viejo, California. Learn more at www.microsemi.com.

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