**ARIES Embedded Welcomes Emcraft Systems to Partner Network**

**Easy Access for US Customers to System-on-Modules with Microchip’s PolarFire® SoC Architecture**

Fuerstenfeldbruck (Germany) September 6, 2023 – With their new sales partner Emcraft Systems (US-based embedded systems provider), ARIES Embedded (specialist in embedded services and products) expands its activities in the US market to meet increasing demand. “Our cooperation with Emcraft Systems allows US costumers to profit from easy access to our embedded solutions based on the PolarFire® architecture from Microchip Technology,” stated Andreas Widder, Managing Director of ARIES Embedded. “Especially for our system-on-modules M100PF and M100PFS, the interest from US companies is rising.” Through Emcraft Systems, ARIES Embedded now provides direct and quick delivery within the US.

“The System-on-Modules from ARIES Embedded, based on FPGA and RISC-V technology, complement our embedded portfolio to support our clients more comprehensively for their industrial applications,” added Kent Meyer, CEO of Emcraft Systems. “Our strategic partnership allows an upgrade path for customers of our SmartFusion and SmartFusion2 SoMs to move to PolarFire.” In addition to sales services, Emcraft Systems support their customers as software development partners focusing on this product line from ARIES Embedded.

Located in California, Emcraft Systems designs, manufactures, and sells system-on-modules (SoMs) based on Arm Cortex-M microcontrollers and Cortex-A microprocessors. They offer a wide selection of embedded systems in stock and ready for shipment. The SoMs are self-maintained Linux Board Support Packages (BSPs) and have been deployed in thousands of systems across a wide range of customer applications. Their modules are the solution to high-reliability, low-power, and long product life-cycle requirements.

**Low Power with High Performance**

With the platforms M100PF and M100PFS, ARIES Embedded successfully provides reliable embedded systems for secure, power-efficient computation. The wide range of applications involves smart embedded vision, industrial automation, communications, and IoT. The modules are available in the commercial temperature range, with 0 °C to +70 °C, as well as in the industrial temperature range, with -40 °C to +85 °C. For a quick and easy project start, ARIES Embedded provides evaluation platforms for both SoMs.

The M100PF SoM family implements the PolarFire FPGA from Microchip and spans from 100K logic elements (LEs) to 300K LEs. It features 12.7G transceivers and offers up to 50 percent lower power than competing mid-range FPGAs. The M100PF combines most FPGA features on a 74 mm by 42 mm footprint. The board-to-board interconnect is implemented by using two high-quality connectors, which expose 360 pins.

The M100PFS SoM integrates a hardened real-time, Linux capable, RISC-V-based MPU subsystem on Microchip’s mid-range PolarFire SoC-FPGA family, bringing low power consumption, thermal efficiency, and defense grade security to embedded systems. The PolarFire SoC onboard the SoM combines a Quad 64-bit RISC-V 64GC core and a 64-bit RISC-V 64 IMAC monitor core. The 74 by 42 mm small M100PFS runs with low device static power, low inrush current and low-power transceivers. The PolarFire FPGA technology stands out for its reliability with single-event upset (SEU) immunity, built-in SECDED, and LSRAM memory interleaving built into the FPGA fabric.

Words: 499

More information:

<https://www.emcraft.com>

<https://www.aries-embedded.com/system-on-module/fpga/microchip>

Keywords: Aries Embedded, Andreas Widder, Emcraft Systems, Kent Meyer, Microchip, Polarfire, FPGA, RISC-V, embedded system, industrial, embedded vision

**Images**

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| Ein Bild, das Windmühle, Generator, Himmel, draußen enthält.  Automatisch generierte Beschreibung | Image 1: ARIES Embedded partners with Emcraft Systems to deliver Microchip PolarFire SoMs to US market  Copyright: ARIES Embedded GmbH, Shutterstock  Download: https://www.ahlendorf-news.com/media/news/images/aries-embedded-emcraft-systems-H.jpg |
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**About ARIES Embedded**

ARIES Embedded provides hardware and software development and standard products for industrial and agricultural sectors. The 2001 founded embedded specialist headquartered in Fuerstenfeldbruck, Germany, focuses on FPGA technology and open-source software. The portfolio comprises of modular systems for flexible and fast use in functional prototypes, pilot series and mass production. On customer request, ARIES Embedded individually customizes standard products in accordance with project requirements. Further information is available at www.aries-embedded.com.

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