

CAST Makes Evaluating 32-bit Processor IP Easier with Talos for BA20 Plus FreeRTOS

Embedded World — Nuremberg, Germany — February 24, 2015 — System designers looking to improve their product's competitiveness or decrease its costs by making the smartest processor choice can find the best alternative quicker thanks to advances in the Talos™ Series Evaluation Kits from semiconductor IP provider CAST, Inc.

- The new, ultra-low-power PipelineZero™ BA20™ Processor Core developed by Beyond Semiconductor has joined the rest of the BA2x™ Processor Family in running on the Talos Series. This makes it easy for potential customers to “try before you buy,” running their own code and measuring benchmarks as they wish in their own facility.
- The FreeRTOS™ real-time operating system—available across the whole BA2x processor family—is now easy to run on the Talos Series. Available are a design example, a ready to run FreeRTOS application, and a sample project setup prepared in the BeyondStudio™ Integrated Development Environment (IDE), facilitating evaluation and helping designers quickly harness one of most popular embedded real-time OSs when starting development.

“We have one of the most experienced IP technical sales teams around, but even the best pre-sales consulting can't match an engineer having the processor running in his or her own hands,” said Nikos Zervas, chief executive officer for CAST. “The processor IP market has become a bit like the old desktop computer days when it was said ‘nobody ever got fired for buying IBM,’ but for system designers seeking the greatest competitive edge, Talos makes it easy to explore the fit and reduce the risk of the often more optimum BA2x processors.”

The [Talos Series Evaluation Kits](#) are ready-to-run packages that combine a processor core implemented in an FPGA reference design board, a hardware debug adapter with connectors, and software including example designs.

The BA2x Talos Series Kits feature the high-performance Beyond Debug Key, which connects to a PC via USB and to the board via a standard JTAG or a proprietary Serial Debug interface. Designers program and monitor the processor system on the board using BeyondStudio, an Eclipse-based IDE that extends the GNU C/C++ tools for the BA2™ instruction set architecture and includes special libraries and functions to simplify the coding and debugging of BA2x-based systems.

Talos Series Kits for BA2x with the BeyondStudio IDE now also include a complete, no-cost FreeRTOS application so that designers can immediately try out the processor running this popular real-time operating system. FreeRTOS leads the market in embedded system RTOS installations—running in millions of deployments in multiple application areas—and is also well-positioned for use in Internet of Things (IoT), mobile, and other low-power systems for which the BA2x Family is especially effective. (Learn more at FreeRTOS.org™.)

About the BA20 PipelineZero Processor Core

Support by Talos and FreeRTOS now make it easy for designers to evaluate the benefits of the [recently introduced BA20 PipelineZero Processor Core](#).

This 32-bit processor uses a zero-stage execution pipeline and delivers hazards-free single-cycle execution, extreme code density, small silicon area, and significant power savings to yield one of the most performance- and energy-efficient 32-bit processors available. The BA20 is a smart choice for wearable devices, IoT sensors, and other mobile products requiring significant processing capability but also demanding ultra-low energy consumption. It joins the [BA2x Processor Family](#), which ranges from deeply embedded through full Android or Linux application processors and is sourced from Beyond Semiconductor.

Learn more about Beyond Semiconductor by visiting www.beyondsemi.com.

Getting Talos Series Evaluation Kits

The full line of Talos Series kits is shipping now. Embedded World attendees are invited to see a BA20 Talos Series demonstration running FreeRTOS in CAST's booth (stand 2-501).

Qualified potential customers can get a Talos Series Evaluation Kit by contacting Sales (email info@cast-inc.com or call +1 201-391-8300) or through their [local CAST representative](#).

About CAST, Inc.

CAST is a twenty-year-old developer, integrator, and provider of IP cores for ASICs and FPGAs. The company offers some of the best available choices for low-power, high-value IP, including 8051s and BA2x 32-bit Processors; video, image, and data compression; security, interfaces and other functions needed for complete system on chip designs. To learn more about CAST and its product line call +1 201.391.8300, visit www.cast-inc.com, or follow [@castcores](#) on Twitter.

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