Press Contact



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FOR IMMEDIATE RELEASE

VersaLogic releases compact embedded computer

Tualatin, OR—October 25, 2016—the embedded industry's most trusted computer company, has announced Raven—a compact and rugged embedded computer built around the Intel Bay Trail processor. This is VersaLogic's fourth product released in the Embedded Processing Unit (EPU) format. EPU's combine processor, memory, video, and system I/O into an extremely compact full function embedded computer.

The Raven was engineered to meet the military, avionic, and medical industries' evolving requirements for smaller, lighter, and more powerful embedded systems. Approximately four inches square and one inch thick, the Raven is a member of the VersaLogic family of small, light, ultra-rugged embedded x86 computers. It combines the rugged 4th generation Intel® Atom™ "Bay Trail" processor, with system interfaces, in a compact 95 x 95 x 27 mm form factor designed to withstand extreme temperature, impact, and vibration.

Raven is available in single-, dual-, and quad-core versions. It provides great performance and I/O for its size, moderate power consumption (6 to 8W is typical, depending on model), and a compact size. The Raven provides compatibility with a broad range of standard x86 application development tools for reduced development time.

The board includes an extensive set of features including an on-board Trusted Platform Module (TPM) security chip. The Raven's powerful feature set, combined with a low-power draw and compact footprint, enables the next generation of intelligent medical, military, and industrial systems to be smaller, lighter, and more energy efficient.

"The new wide-range on-board power supply accepts 8 to 30 VDC input to accommodate both fixed and mobile 12 and 24 volt systems. Additionally, protection is provided for damaging transient voltages, over voltage, and RF intrusion." said Gary Harris, VersaLogic's Director of Technology. "We went the extra mile to guard the embedded system from several common types of power induced malfunction and damage."

The Raven features an industrial temperature Intel Atom E38xx processor optimized for performance and power balance.

Built-In Security

The Raven's on-board Trusted Platform Module (TPM) security chip can be used to lock out unauthorized hardware and software access. It provides a secure processing environment for applications in Defense, Medical, and Industrial Control that require enhanced hardware-level security functions. Additional security is provided through built-in AES (Advanced Encryption Standard) processor instructions.

Powerful Video Processing

Raven supports a Mini DisplayPort++ output as well as a single-channel LVDS display output. Intel's advanced Gen 7 HD graphics engine provides outstanding graphics performance and is capable of supporting two simultaneous 1080p video streams. On-board hardware acceleration is available for encode/decode of H.264, MVC, VP8, VC1/WMV9, and other standards. The graphics engine also supports DirectX 11, Open GL 4.0, full HD video playback, dual display support, and resolution up to 2560 x 1600 @ 60Hz.



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High Performance I/O Capabilities

Raven's I/O connectivity includes dual Gigabit Ethernet ports with network boot capability. One USB 3.0 and four USB 2.0 host ports, four serial ports, and three 16-bit timer/counters are available. A SATA 3 Gbits/s interface supports high-capacity rotating or solid-state drives. Two Mini PCIe sockets (one with mSATA capability), a microSD socket, and on-board eMMC (on select models) provide flexible solid-state drive (SSD) options. Eight channels of programmable 12-bit Analog Inputs, eight Digital I/O lines, I2C and SPI interfaces round out the on-board device I/O.

Systems can be enhanced by leveraging the Mini PCIe sockets with plug-in Wi-Fi modems, GPS receivers, MIL-STD-1553, Ethernet, Firewire, and other mini PCIe cards/modules.

Designed, Manufactured and Tested for Extreme Environments

Designed and tested for industrial temperature (-40° to +85°C) operation, the Raven also meets MIL-STD-202G specs for impact and vibration.

Raven's on-board power filtering adds an important layer of protection for glitches caused by dirty or unstable power sources. The wide input voltage range (8 to 30 VDC) greatly simplifies system power supply requirements. Reverse Voltage Protection, and Over Voltage Protection enhances field durability and reliability. The Raven is fully compatible with 12 or 24V vehicle applications.

Soldered-on RAM and fanless thermal solutions provide additional ruggedization for use in harsh environments.

Long-term Availability

The Raven is covered by VersaLogic's 5+ year availability guarantee and a 5-year product warranty. VersaLogic's Life Extension programs typically keep products available for 10+ years. Customization services to help customers create unique solutions are available for the Raven, even in low OEM quantities. Customization options include conformal coating, revision locks, custom labeling, customized testing and screening, and more.

Pricing and Availability

The Raven (part number VL-EPU-3312) is now in stock at both VersaLogic and Digi-Key Corporation. OEM quantity pricing starts at \$854 for the single-core model with 2 GB RAM. Contact Sales@VersaLogic.com or visit www. VersaLogic.com or www.Digikey.com for more information.

About VersaLogic Corporation

VersaLogic Corp. built its reputation on very high reliability products and superior service. A 40-year history of consistency has earned VersaLogic the reputation of being the industry's most trusted embedded computer company. VersaLogic delivers state-of-the-art embedded computers, coupled with expert technical support, for critical markets such as the medical and defense industries. For more information, visit www.VersaLogic.com.

Press Release Photos

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