

Abaco Systems Launches its First VNX+ Product

[Abaco Systems](#) introduces the [VNX382](#), the company's first VNX+ product, extending rugged embedded computing into size-, weight-, and power-constrained applications without compromising functional safety, security or edge processing. Aligned with the VITA 90 / VNX+ standard and built on the NXP i.MX95 system-on-chip, the VNX382 delivers high performance in a low-SWaP envelope.



Six lockstep-capable Arm Cortex-A55 cores, a dedicated Cortex-M7 safety domain, and support for multiple real-time operating systems make the architecture well suited to safety-oriented, mission-critical applications. An onboard Arm Mali GPU and integrated NPU add 2 TOPS of AI performance, running common edge inference tasks such as object detection, sensor fusion and situational awareness locally to reduce latency and

dependence on external compute.

The VNX382 supports a broad range of interfaces, including 1GbE and 10GbE networking with TSN, USB and CANbus. This makes it ideal for tactical edge computing, secure communications, autonomous systems, flight control, UAS/UAV payloads, electronic warfare, ISR, rugged displays and sensor fusion, deployable in uncrewed vehicles and portable or wearable platforms.

Security is built in. The i.MX95's NXP EdgeLock® Secure Enclave supports post-quantum cryptography and inline encryption of sensitive data at rest and in transit, and hardware-enforced resource partitioning addresses the isolation demands of mission-critical systems.

"The VNX382 answers a growing customer need for platforms that combine security, functional safety and AI acceleration within tightly constrained SWaP," said [Simon Collins](#), Director of Product Management at Abaco Systems. "It also establishes the foundation for Abaco's broader VNX+ and certifiable systems roadmap."

Developed by VITA and the Open Group SOSA community and ratified by ANSI in 2026, VNX+ extends the open-standards approach of VPX into significantly lower-SWaP applications. The VNX382 is available as a SOSA-aligned VNX+ module in VITA 90.0 sidewall-cooled or VITA 90.4 wedgelock-cooled formats, or as a mezzanine System-on-Module (SOM) for the most size-constrained platforms.

Visit booth #751 at the [AUSA Annual Meeting](#), October 12–14 in Washington, DC for a live demonstration. To request a briefing or evaluation unit, visit [Abaco.com](https://www.abaco.com) or contact your Abaco representative.

About Abaco Systems

Abaco Systems is a global leader in commercial open architecture computing and rugged embedded electronics. With

more than 40 years of experience in aerospace & defense, industrial, energy, medical, communications, and other critical sectors, Abaco's innovative solutions align with open standards to accelerate customer success. Abaco Systems is a business unit of AMETEK, Inc., a leading global provider of industrial technology solutions serving a diverse set of attractive niche markets with annual sales of approximately \$9.0 billion.