

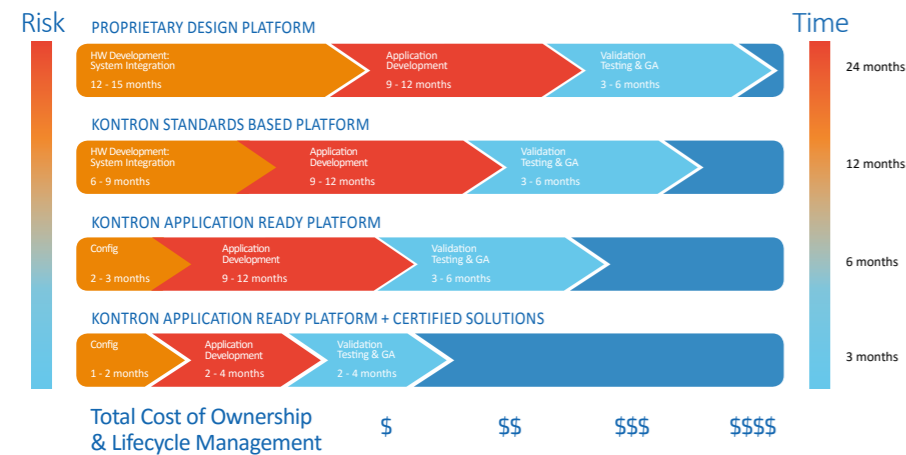
ADVANCING NEXT GENERATION MIL-AERO APPLICATIONS



Kontron offers the industry's largest selection of military computing hardware solutions including application-ready COTS boards and platforms and rugged enclosures. Partnering with Kontron, defense contractors have access to the full breadth of our rugged computing expertise. As a technology innovator and global solutions provider, Kontron is able to offer an extensive services portfolio that includes enhanced repair services, extended warranty, testing and after-market technical support.

- ▶ Certification, full system integration and extended product lifecycle management
- ▶ Be the first to leverage the latest technologies through Kontron's strategic partnerships
- ▶ Superior support from dedicated military teams located around the globe

SHORTEST ROUTE TO DEPLOYMENT WITH COTS OPEN ARCHITECTURE PLATFORMS



About Kontron | Member of the S&T Group

Kontron is a global leader in IoT/embedded computing technology (ECT). As a part of technology group S&T, Kontron offers a combined portfolio of secure hardware, middleware and services for Internet of Things (IoT) and Industry 4.0 applications. With its standard products and tailor-made solutions based on highly reliable state-of-the-art embedded technologies, Kontron provides secure and innovative applications for a variety of industries. As a result, customers benefit from accelerated time-to-market, reduced total cost of ownership, product longevity and the best fully integrated applications overall.

About the Intel® Internet of Things Solutions Alliance

From modular components to market-ready systems, Intel and the 400+ global member companies of the Intel® Internet of Things Solutions Alliance provide scalable, interoperable solutions that accelerate deployment of intelligent devices and end-to-end analytics. Close collaboration with Intel and each other enables Alliance members to innovate with the latest IoT technologies, helping developers deliver first-in-market solutions.



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EXPANDING DEFENSE CAPABILITIES RUGGED EMBEDDED COMPUTING SOLUTIONS



- ▶ **MODULAR BUILDING BLOCKS**
Boards and modules to full system designs
- ▶ **RUGGED 'BY DESIGN'**
Secure mission computers and custom integrated systems
- ▶ **APPLICATION-READY**
Accelerate Development to Deployment Schedules

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SECURE MISSION COMPUTERS ENABLING CONNECTED MILITARY SYSTEMS



Kontron's feature-rich and technically advanced military hardware solutions are proven to meet harsh environment reliability, survivability and SWAP-C requirements. Achieved through decades of experience engineering rugged, high performance embedded computers, boards and rugged enclosures for industries such as industrial, avionics, medical and transportation, Kontron excels at delivering COTS application-ready platforms and customized systems specifically designed to accelerate time to market.

HIGH PERFORMANCE EMBEDDED COMPUTING (HPEC)

Kontron's HPEC systems give military developers the advanced rugged architectures that balance processor power with I/O bandwidth to meet these needs. Kontron offers modular HPEC systems optimized for deep learning applications based on the Intel® Xeon® D Processors.



S2000
Development Platform

- ▶ Consolidating workloads onto a single machine using parallel virtual machine (VM) execution
- ▶ High performance computing and I/O bandwidth that meet defense simulation and operational warfare systems demands
- ▶ Reliable support for PCI Express Gen3 and 10 Gigabit Ethernet between all boards in the backplane across the full operational domain of a rugged computer design

RUGGED SYSTEMS



COBALT™ small form factor with no ITAR restrictions

- ▶ Cobalt 901|100 series - Intel® Dual-Core™ i5-4422E, configurable front panel I/O
- ▶ Cobalt™ 901|400 series - Intel® Quad Core™ E3-1505L
- ▶ Cobalt 901|400 with MIL-STD-1553 - L2 Ethernet switch, and two dual-redundant MIL-STD-1553A/B channels
- ▶ COBALT™ 902 - Situational Awareness Quad Channel H.264 Encoder/Intel® Core™ i7 Processor



ApexVX- Multi mission computer system

- ▶ Pre-qualified COTS solution
- ▶ Flexible design, conduction-cooled structure
- ▶ 5-slot 3U VPX Computer System
- ▶ System management and PBIT System Test



STARVX- Pre-Qualified HPEC Platform

- ▶ Compact 3U VPX Air Cooled solutions
- ▶ Turn-Key linux parallel system with 8 core Broadwell DE blades
- ▶ Balanced I/O and CPU power
- ▶ Up to 4GB/s board to board with TCP/IP sockets
- ▶ System management and runtime system monitoring



COBALT™ S1901 Rugged High Performance Platform

- ▶ ComExpress Intel® High Performance Processor
- ▶ Expansion slots for multiple GPU, FPGA accelerators, or video modules
- ▶ Multiple I/O high speed interfaces and high capacity storage options
- ▶ Wireless connectivity options for cellular and wifi
- ▶ Ruggedized & modular platform for defense deployments



Kontron inside real-world applications

- ▶ Mission computing for UAVs, fixed-wing, rotary-wing aircraft and ground vehicles
- ▶ Sensor processing and other high performance applications for combat ready systems
- ▶ Autonomous vehicle components for missile systems
- ▶ Communications, Command, Control and Intelligence (C4ISR)
- ▶ Video surveillance embedded computers for air, land and sea

RUGGED BOARDS AND MODULES



VPX

Breakthrough VPX (VITA 46)/OpenVPX (VITA 65) products offer superior processing and I/O performance, making them ideal building blocks for advanced defense platforms, especially those with SOSA™ requirements.



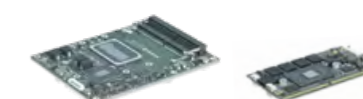
VME

Kontron's continual VME technology evolution has kept VME a proven platform choice with ongoing advancements to processor migration, extending I/O capabilities on the backplane, and supporting higher bandwidth applications.



CompactPCI

Broadest portfolio of CompactPCI boards giving developers enhanced design flexibility for scalable, modular and highly ruggedized platforms.



COM EXPRESS/SMARC

Highly scalable, Kontron's COM Express and SMARC modules streamline design customization and offer a rich feature set and proven high reliability in a wide range of form factors.