Secure, actionable information when you need it, where you need it

Mercury’s environmentally protected OpenVPX boards provide smart, autonomous applications the on-platform multifunction processing capability and security needed to solve the most complex data problems in the most inhospitable environments.

Our 6U OpenVPX modules feature the same Intel® Xeon® Scalable processors that power modern data centers and the proven BuiltSECURE™ security framework – built-in not bolted on – to deliver secure, high performance processing anywhere. These rugged multifunction processing modules are the key building blocks for developing software-agnostic embedded AI-capable processing systems that function at the tactical edge. Based on an interoperable, flexible open architecture design approach, the modules enable rapid modernization for competitive advantage and long, program life sustainment.

Highlights

- Manages big data workloads in physical and environmentally challenged platforms
- Provides on-platform data confidentiality/integrity hardware protections even if the platform is compromised
- Delivers SWaP-optimization and advanced ruggedization the highest possible performance with the highest MTBF for consistent and efficient operation – anywhere

Compared to Xeon D-based 6U OpenVPX boards, Xeon-SP based boards deliver:

- 150% more memory bandwidth
- 22% improved power efficiency
- 11 additional years of life cycle support
- 3× more memory
- 4× DMIPS

Featured Product

HDS6705 highly optimized, rugged, 6U OpenVPX board brings secure, data center processing capability to the tactical edge
RUGGED MULTIFUNCTION PROCESSING
SWaP-optimized, high performance processing with built-in security

EDGE APPLICATIONS
Artificial intelligence
Big data analytics
C4ISR
EO/IR
Image processing
Radar processing
Sensor fusion
Signals intelligence

FEATURES
Intel® Xeon® SP (Scalable Processor) Architecture
BuiltSECURE® system security engineering (SSE) with FPGA complex to support secure boot and application load options. Also available without built-in security features
6U OpenVPX form factor
Up to 192 GB DDR4 SDRAM per module
Up to 100 Gb/s Ethernet high speed switch fabrics
Optional MOTS+ rugged packaging for extreme environmental protection
Optional SOSP-aligned profile
Open software environment
System management (out-of-band) for remote monitoring, alarm management, and hardware revision and health status
Designed, manufactured, coded and tested in trusted DMEA-accredited facilities

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Partnering with

MERCURY’S PROCESSING ECOSYSTEM
From an extensive portfolio of processor, coprocessor, network switches, I/O, storage, and ruggedized chassis, we build the most powerful open system architecture-based subsystems available for embedded processing applications operating at the tactical edge.

Learn more about our edge-ready subsystems, visit: mrcy.com/embedded-subsystems

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