

# Rugged Multifunction Processing

SWaP-optimized OpenVPX, high performance processing with BuiltSECURE technologies

## 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  
lifecycle support

**3×**  
more  
memory

**4×**  
DMIPS

## Featured Product HDS6705



HDS6705 highly optimized, rugged, 6U OpenVPX board brings secure, data center processing capability to the tactical edge

SWaP-optimized, high performance processing with built-in security

**EDGE APPLICATIONS**

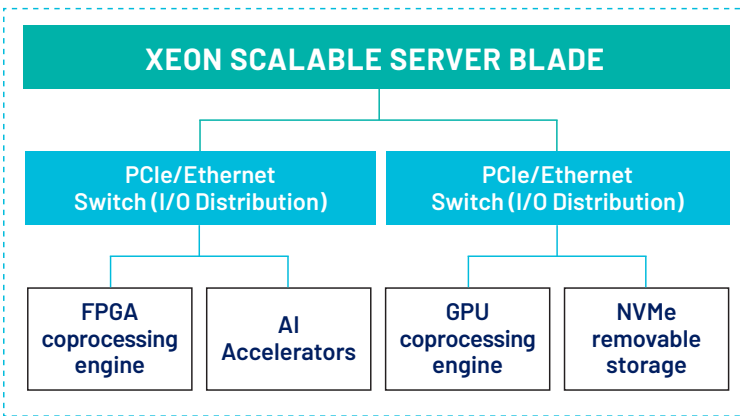
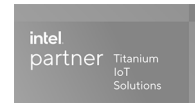
- Artificial intelligence
- Big data analytics
- C4ISR
- E0/IR
- Image processing
- Radar processing
- Sensor fusion
- Signals intelligence

**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 SOSA-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

**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](http://mrcy.com/embedded-subsystems)



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