

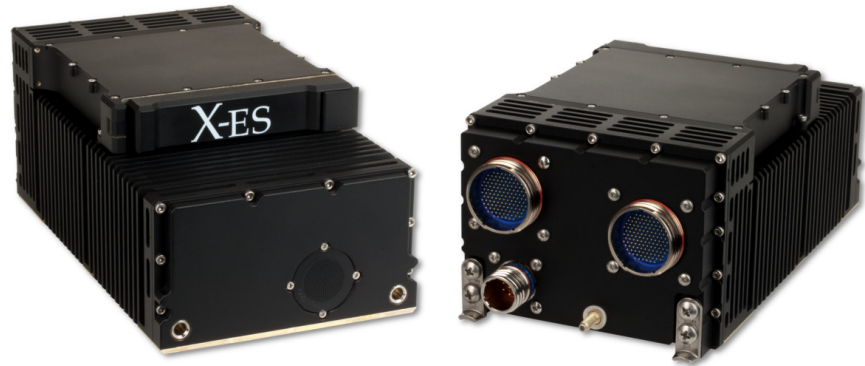
XPand6208

End of Life

5th Gen Intel® Core™ i7-Based Rugged Small Form Factor (SFF) COTS System with 10 GbE Switch and Router

Please contact X-ES Sales

- ▶ Supports 5th generation (Broadwell-H) and 4th generation (Haswell) Intel® Core™ i7 processors
- ▶ XPedite5205 Cisco IOS® Gigabit Ethernet Embedded Services Router (optional)
- ▶ 10 Gigabit Ethernet switch
- ▶ Layer 2 switching and Layer 3 routing management with extensive IEEE protocol and IETF RFC support (optional)
- ▶ VICTORY Infrastructure Switch and Router support (optional)
- ▶ Small Form Factor (SFF) sub-½ ATR system
- ▶ Conduction- or convection-cooled chassis
- ▶ Physical dimensions of 8.90 in. (L) x 4.88 in. (W) x 3.61 in. (H)
- ▶ Includes the XPedite7570 5th generation Intel® Core™ i7-based 3U VPX module
- ▶ Includes the XPort3301 dual 10 Gigabit Ethernet XMC module
- ▶ Includes the XChange3018 Gigabit and 10 Gigabit Ethernet switch
- ▶ Removable Memory Bay (RMB) for XPort6193 ruggedized 2.5 in. SATA SSD memory module (optional)
- ▶ Integrated 28 VDC power supply
- ▶ MIL-STD-461 E/F EMI filtering
- ▶ Environmentally sealed
- ▶ Circular connector support



XPand6208

The XPand6208 is a true Commercial-Off-The-Shelf (COTS) rugged system based on the 5th generation Intel® Core™ i7 (formerly Broadwell-H) processor and a 10 Gigabit Ethernet switch. With a compact design and weighing less than nine pounds, the XPand6208 maximizes processing and networking performance while minimizing SWaP. The XPand6208 provides a SWaP-optimized alternative to traditionally larger slot-based systems; it is an actual Small Form Factor (SFF) system based on COTS 3U VPX modules.

The XPand6208's first slot supports the XPedite7570 3U VPX 5th generation Intel® Core™ i7-based SBC mated with the XPort3301 dual 10 Gigabit Ethernet XMC. The XPand6208's second slot supports the XChange3018 3U VPX 10 Gigabit Ethernet switch. The XChange3018 can be configured as a fully managed Layer 2 switch or Layer 3 router. The XChange3018 delivers full wire-speed across all of its ports and supports jumbo packets up to 12 kB. It supports IPv6 and a comprehensive set of IETF RFCs and IEEE protocols. The XChange3018 optionally supports compliance with the VICTORY specification as an Infrastructure Switch and Router. The XPedite5205 Cisco IOS® Router XMC can be installed on the XChange3018 to provide highly secure data, voice, and video communications to stationary and mobile network nodes.

The system also supports the XPort6193 removable high-density SATA SSD memory module for highly secure and encrypted solid-state storage. The XPand6208 supports the rear I/O from the installed VPX modules with two 130-pin circular connectors. This fully ruggedized system is designed to meet the rigorous standards of MIL-STD-810 and DO-160, while integrating the latest power-saving and performance-enhancing technology. The heat from the internal conduction-cooled modules is conducted to sidewall heat exchangers, where it is dissipated to the ambient environment by convection cooling or to an attached cold plate by conduction cooling. The system includes an integrated MIL-STD-704 28 VDC power supply and MIL-STD-461 EMI filtering.

X-ES

Extreme Engineering Solutions

*“Fast, Flexible, Customer-Focused
Embedded Solutions”*

Extreme Engineering Solutions

9901 Silicon Prairie Parkway • Verona, WI 53593
Phone: 608.833.1155 • Fax: 608.827.6171
sales@xes-inc.com • <https://www.xes-inc.com>

Physical Characteristics

- 8.90 in. (L) x 4.88 in. (W) x 3.61 in. (H)
- Weighs approx. 8.9 lbs. with typical payload cards/RMB (5.8 lbs. without payload cards/RMB)

**First Slot (XPedite7570 and XPort3301)
Front Panel I/O via J2**

- XPedite7570 5th generation Intel® Core™ i7 processor-based 3U VPX SBC
- XPort3301 dual 10 Gigabit Ethernet XMC
- Two 10GBASE-T 10 Gigabit Ethernet ports
- Two RS-232/422/485 ports
- Two USB ports
- One external DisplayPort interface (optional)

**Second Slot (XChange3018 and XPedite5205)
I/O via J3**

- Four 10GBASE-T 10 Gigabit Ethernet ports
- Six 10/100/1000BASE-T Gigabit Ethernet ports
- XChange3018 10 Gigabit Ethernet 3U VPX switch
- IPv4 and IPv6 support
- Support for jumbo frames up to 12 kB
- Advanced cable open/short detection
- Non-blocking, full wire-speed
- IEEE 1588v2 and SyncE support (optional)

Ethernet Management Features (Optional)

- Layer 2 switching and Layer 3 routing
- Extensive IEEE protocol and IETF RFC support
- Configuration through CLI or SNMP
- 196 MB packet buffer
- VICTORY Infrastructure Switch and Router support
- XPedite5205 Cisco IOS® Gigabit Ethernet Embedded Services Router XMC

Power Supply

- Integrated power supply
- MIL-STD-704 28 VDC input voltage support
- MIL-STD-461 EMI filtering
- Additional power supply options available

Thermal

- The system is designed and tested to operate in ambient temperatures down to -40°C and extreme high temperatures. Maximum operating temperature is dependent on configuration and usage. Contact X-ES for further information

Removable Memory

- XPort6193 ruggedized 2.5 in. SSD module
- Up to 512 GB of SLC NAND flash
- High reliability rugged connector
- AES 256-bit encryption
- ATA Secure Erase support
- Declassification support

