XPand4206

End of Life

Rugged Intel® Core™ i7-Based Multiprocessor COTS System with 10 Gigabit Ethernet Fabric   Please contact X-ES Sales

- Sub-½ ATR footprint: 4.88 in. (W) x 8.76 in. (L)
- Outer dimensions: 5.88 in. (W) x 13.39 in. (L) x 7.36 in. (H)
- 3U OpenVPX™-based (VITA 65) architecture
- Three quad-core Intel® Core™ i7 processors
- Intel® Active Management Technology (AMT) support
- Toolless, high-reliability, removable SSD memory modules
- 10 Gigabit Ethernet switched fabric
- Three external 10 Gigabit Ethernet interfaces
- Layer 2 managed network fabric (optional)
- Twelve high-speed CAN bus 2.0 A/B channels
- Twelve external Gigabit Ethernet ports
- Sixteen serial ports
- Six USB ports
- 28 VDC MIL-STD-704 or MIL-STD-1275 input power

XPand4206

The XPand4206 is a high-performance computing and networking platform for environmentally demanding, SWaP-restricted avionics and vetronics applications. The XPand4206 LRU maximizes processing performance with three quad-core Intel® Core™ i7 processors, each capable of operating at up to 2.1 GHz. The XPand4206 provides a number of external I/O interfaces, including three 10 Gigabit Ethernet interfaces for high-throughput communication with other systems and sensors. The system also provides twelve high-speed CAN bus 2.0 A/B channels, twelve Gigabit Ethernet ports, sixteen serial ports, and six USB ports.

The internal 3U OpenVPX™ processor modules can communicate with each other, as well as with external devices, over a 10 Gigabit Ethernet switched fabric. The 10 Gigabit Ethernet fabric delivers full wire-speed across all of its ports and supports jumbo packets up to 12 kB. It also supports IPv6, Energy Efficient Ethernet (EEE), and a comprehensive set of IETF RFCs and IEEE protocols.

The XPand4206 includes two removable SATA solid-state drive (SSD) flash memory modules. The system's toolless, removable SSD implementation has been tested and deployed in the most stressful environmental conditions. These memory modules include 256-bit AES hardware encryption, high-reliability connectors capable of thousands of insertions and extractions, and zeroization support.

The XPand4206 can be configured to support Intel's Active Management Technology (AMT), which allows developers and installers to remotely access diagnostic information and perform system maintenance on each processor module via a single secure network connection. This drastically simplifies developing, installing, and upgrading multiprocessor platforms by eliminating the need for separate user-accessible serial ports or keyboard, video, and mouse ports from individual processor modules.

X-ES
Extreme Engineering Solutions

...Always Fast

Processors

- Three XPedite7477 3U OpenVPX™-based Intel® Core™ i7 processor SBCs
- Each SBC includes a quad-core Intel® Core™ i7 processor
- Each processor can operate at up to 2.16 GHz
- 8 GB of DDR3 SDRAM per processor

Ethernet Fabric

- 10 Gigabit Ethernet switched fabric via 3U VPX XChange3018 and XChange3019
- Layer 2 managed network fabric (optional)

External I/O

- Three 10 Gigabit Ethernet ports
- Twelve high-speed CAN bus 2.0 A/B channels
- Twelve 10/100/1000BASE-T Gigabit Ethernet interfaces
- Sixteen serial ports
- Six USB ports

Removable Memory Modules

- Two XPort6193 SATA Solid-State Drive (SSD) modules
- High-reliability connector
- Toolless insertion and extraction
- Up to 1 TB per module
- 256-bit AES hardware encryption
- Zeroize support

Power Input

- XPm2222 VITA 62 3U VPX Power Supply
- 28 VDC per MIL-STD-704 or MIL-STD-1275

Physical Characteristics

- Footprint: 8.76 in. (L) x 4.88 in. (W)
- Outer dimensions: 13.39 in. (L) x 5.88 in. (W) x 7.36 in. (H)