

# XPand9011

Intel® Xeon® E5-2600 v4 Family Processor-Based Secure 2U Rackmount Server with Dual 40GbE and Six PCI Express Expansion Sites

- ▶ Secure 2U rackmount server with front I/O
- ▶ Supports dual Intel® Xeon® E5-2600 v4 family of processors (formerly Broadwell-EP)
- ▶ Integrated Xilinx Kintex® UltraScale™ security FPGA (XCKU060 or XCKU095)
- ▶ Six PCI Express expansion sites
- ▶ Ruggedized design
- ▶ Up to 128 GB of DDR4-2400 ECC SDRAM across eight channels
- ▶ Two 40 Gigabit Ethernet ports
- ▶ Three 3.5 in. Hot Swap SATA drive bays
- ▶ Two RS-232/422/485 serial ports
- ▶ IPMI support
- ▶ Redundant power supplies
- ▶ X-ES Enterprise Linux (XEL) BSP
- ▶ Contact factory for additional OS support



## XPand9011

The XPand9011 provides an industry-leading combination of security, performance, and flexibility for a rackmount server. It features dual Intel® Xeon® E5-2600 family v4 (formerly Broadwell-EP) processors with a tightly coupled Xilinx Kintex® UltraScale™ security FPGA, two 40 Gigabit Ethernet ports, and six PCI Express Gen3-capable expansion sites.

The XPand9011 is designed and manufactured in the USA, using COTS components from trusted domestic supply chains. Supporting a standard 2U rackmount form factor with six PCI Express expansion slots, it is a true Open Systems Architecture (OSA) design. The XPand9011 also integrates ruggedization features that enable it to perform in environmentally challenging applications without modifications or enhancements.

X-ES Enterprise Linux (XEL) BSP is standard, please contact the factory for additional OS support options.

# X-ES

Extreme Engineering Solutions

*...Always Fast*

### 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>

**Processor**

- Dual Intel® Xeon® E5-2600 v4 family processors (formerly Broadwell-EP)
- Default configuration utilizes E5-2648L v4 processors
- Up to 128 GB of DDR4-2400 ECC SDRAM across eight channels

**Front I/O**

- Two 40 Gigabit Ethernet ports
- Four 10/100/1000BASE-T Ethernet ports
- One FPGA 10/100/1000BASE-T Ethernet port
- One IPMI 10/100BASE-T Ethernet ports (one IPMC)
- Two USB 3.0 ports (can be disabled)
- Two USB 2.0 ports (can be disabled)
- Two RS-232/422/485 serial ports (can be disabled)
- DVD-ROM drive

**Internal Storage**

- Three 3.5 in. Hot Swap SATA drive bays
- One mSATA site capable of 6 Gb/s

**IPMI**

- PICMG 3.0 R3.0-based IPMI support

**PCI Express Expansion Sites**

- Two low-profile x16 PCI Express Gen3-capable interfaces
- Three low-profile x8 PCI Express Gen3-capable interfaces
- One low-profile x4 PCI Express Gen2-capable interface

**FPGA**

- Xilinx Kintex® UltraScale™ security FPGA (XCKU060 or XCKU095)
- 8 GB DDR4 ECC SDRAM
- External Gigabit Ethernet interface
- SATA interface (optional)
- 128 MB configuration flash
- Two x8 and one x4 PCI Express Gen3-capable interfaces to processor subsystem

**Physical Characteristics**

- 2U short depth rackmount server (17.7" deep)
- Air-cooled
- Dimensions: 17.7 in. (L) x 17.2 in. (W) x 3.5 in. (H)

**Environmental Requirements**

Contact factory if your requirements are outside of our advertised levels.

- Operating temperature range of 0°C to 35°C
- Storage temperature of -40°C to +85°C ambient
- Conformal coating available as an ordering option for the motherboard

**Software Support**

- X-ES Enterprise Linux (XEL) BSP
- Contact factory for additional OS support

**Power**

- Redundant power supplies
- Power will vary based on configuration and usage. Please consult factory

