

XPand9020

Intel® Xeon® D-2700 Processor-Based 2U Rackmount Server with Dual 100GbE and Four PCI Express Expansion Sites

- ▶ 2U rackmount server
- ▶ Supports dual Intel® Xeon® D-2700 series (formerly Ice Lake-D) processors
- ▶ Integrated Xilinx Versal® Prime VM1402 security ACAP
- ▶ Four PCI Express expansion sites across seven slots
- ▶ Ruggedized design
- ▶ Up to 128 GB of DDR4 ECC SDRAM across four channels per socket, for a total of 256 GB
- ▶ Two 100 Gigabit Ethernet ports
- ▶ Three 3.5 in. Hot Swap SATA drive bays
- ▶ Four RS-232 serial ports
- ▶ IPMI support
- ▶ Redundant power supplies
- ▶ X-ES Enterprise Linux (XEL) BSP for Xeon-D subsystems
- ▶ Linux Yocto BSP for Versal® subsystem
- ▶ Contact factory for additional OS support



XPand9020

The XPand9020 provides an industry-leading combination of security, performance, and flexibility for a rackmount server. It features dual Intel® Xeon® D-2700 series (formerly Ice Lake-D) processors with a tightly coupled Xilinx Versal® Prime VM1402 security ACAP, and two 100 Gigabit Ethernet ports.

Supporting a standard 2U rackmount form factor with four PCI Express Gen4-capable expansion sites across seven slots, the XPand9020 is a true Open Systems Architecture (OSA) design. It also integrates ruggedization features that enable it to perform in environmentally challenging applications without modifications or enhancements.

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

X-ES

Extreme Engineering Solutions

*“Fast, Flexible, Customer-Focused
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Extreme Engineering Solutions

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Processor

- Dual Intel® Xeon® D-2700 series (formerly Ice Lake-D) processors
- Up to 128 GB of DDR4 ECC SDRAM across four channels per socket, for a total of 256 GB

Rear I/O

- Two 100 Gigabit Ethernet ports to QSFP cages
- Two 1000BASE-BX Ethernet ports to SFP cages
- One FPGA 1000BASE-X Ethernet port to SFP cage
- Two IPMC 10/100BASE-TX Ethernet ports
- Two USB 3.0 ports
- Four RS-232 serial ports

Internal Storage

- Three 3.5 in. Hot Swap SATA drive bays
- Two x4 PCI Express Gen4-capable interfaces to M.2 sites

IPMI

- PICMG 3.0 R3.0-based IPMI support

PCI Express Expansion Sites

- Four x8 PCI Express Gen4-capable sites
- Expandability to up to seven PCI Express sites

FPGA

- Xilinx Versal® Prime VM1402 security ACAP
- 16 GB LPDDR4 ECC SDRAM
- External Gigabit Ethernet interface to SFP cage
- 512 MB configuration flash
- One x8 PCI Express Gen3-capable interface to each processor subsystem (two total)

Physical Characteristics

- 2U short depth rackmount server (17.7 in. 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 TBD (contact factory for details)
- 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 for Xeon-D subsystems
- Linux Yocto BSP for Versal® subsystem
- Contact factory for additional OS support

Power

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

