



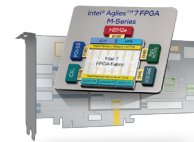
**BittWare**  
a molex company

## TeraBox 2202D 2U FPGA Server

### 2U FPGA Server with PCIe Gen5

We've integrated one of the most popular 2U data center servers from Dell EMC with our full lineup of Achronix, Intel, and Xilinx FPGA-based cards. BittWare's TeraBox 2202D combines a high-powered dual-CPU (4th Generation Intel Xeon Scalable) host with high-density FPGA resources.

Configurations include two of BittWare's large double-width cards using Achronix Speedster 7t, Intel Agilex, or AMD Xilinx FPGAs. The system can also be configured with up to sixteen of BittWare's U.2 accelerators. No matter which configuration you choose, you're getting BittWare's installation and support, plus options for Dell server support.



Up to **two** double-wide FPGA cards can be configured  
or **six\*\*** low-profile cards

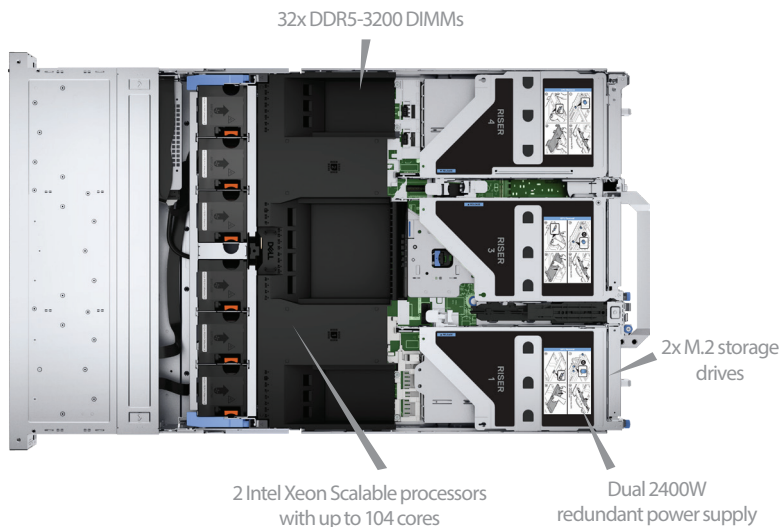


### key features

Up to  
**6 QSFP-DDs**  
for 6x 400G,  
24x 100G or 48x  
10/25/50G

**PCIe  
Gen5**

Support for BittWare's full  
range of FPGA cards



### chassis key specs

2U, depth 27.58 in (700.7mm)

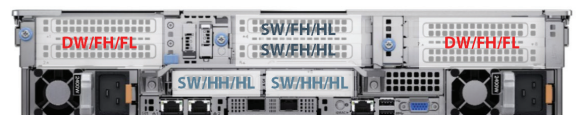
**Processor:** (2) 4th Generation Intel® Xeon® Scalable processors

**Memory:** 32x ECC DDR5-4800 MT/s DIMMs

**Slots:** (2) DW/FH/FL Gen 5 x16 PCIe slots, (2) SW/HH/HL Gen 4 x16 PCIe slots, (2) SW/FH/HL Gen 4 x8 PCIe slot

**Storage:** (2) M.2 drives removable from rear (BOSS-N1)

**Power supply:** Platinum up to 2400W, redundant (1+1)



# TeraBox 2202D

## 2U FPGA Server

The TeraBox 2202D is a 2U FPGA server based on the Dell PowerEdge R760 chassis. This server offers dual 4th generation Intel Xeon Scalable CPUs along with high PCIe slot density. With configurations of up to six low-profile cards or two of BittWare's large double-width cards, this server is an excellent premium option for the 2U form factor. Dell ProSupport options are also available.

### System Management

For system management, BittWare's FPGA cards are equipped with a Board Management Controller (BMC), which accepts PLDM commands. Use it along with BittWare's Software Development Kit to program the FPGA over USB, monitor card power and temperature, and re-program the onboard clocks. You'll also be able to set points to shut down the card when it gets too hot, access JTAG, or access the software tools remotely.

### The TeraBox Advantage

Choosing a TeraBox FPGA server means knowing you are getting a pre-configured and tested solution. This includes setup and installation of your FPGA cards and associated hardware, your choice of operating system, and development tools. Your TeraBox arrives ready for use—giving your team more time for development and deployment.

### Example System Configuration

The TeraBox 2202D supports many of BittWare's Achronix, Intel, or Xilinx FPGA-based PCIe cards. The table below lists specifications for some of our certified cards\*:

	FPGA	Cards per Server	Memory	Front Panel System I/O	Processing
<b>VectorPath</b>	Achronix Speedster7t	2	• 4 banks GDDR6 (up to 16 GBytes)	• 1x QSFP-DD, 1x QSFP • 6x 100/50/40/25/10 GbE	• 692K 6-input lookup tables (LUTs) • 375 Mbits embedded RAM
<b>IA-860m</b>	Agilex AGM039	2	• 32 GBytes HBM2e	• 2x QSFP-DDs • 2x 400 GbE, 8x 100GbE, 16x 50 GbE	• 3.9M system logic elements • CXL support, ARM HPS
<b>IA-440i</b>	Agilex AGI023	4**	• 2 banks DDR4 (up to 32 GBytes)	• 1x QSFP-DD • 1x 400 GbE, 4x 100GbE, 8x 50 GbE	• 2.3M system logic elements • CXL support, ARM HPS
<b>IA-220-U2</b>	Agilex AGF014	16***	• 2 banks DDR4 (up to 16 GBytes)		• 1.4M system logic elements • Up to 4,510 DSP blocks

\* Subject to availability. Contact BittWare for additional FPGA card options.

\*\* 2 cards will be Gen5 x16, 2 cards will be Gen4 x16, 2 cards will be Gen4 x8

\*\*\* 16 cards possible but will lose the (2) 960GB storage drives



### Server Configurations

#### Low

- (2) Intel Xeon Silver 4410Y (2GHz, 12C/24T) Processors
- 32GB DDR5-4800 Memory
- BOSS-N1 controller card+ with (2) M.2 Sticks 480GB (RAID 1) Drives
- (2) 960GB Data Center NVMe Read Intensive AG Drive U2 Gen4
- (1+1) 2400W Power supplies
- ReadyRails sliding rails
- ProSupport and Next Business Day Onsite Service

#### Medium

- (2) Intel Xeon Gold 5415+ (2.9GHz, 8C/16T) Processors
- 64GB DDR5-4800 Memory
- BOSS-N1 controller card+ with (2) M.2 Sticks 480GB (RAID 1) Drives
- (2) 960GB Data Center NVMe Read Intensive AG Drive U2 Gen4
- (1+1) 2400W Power supplies
- ReadyRails sliding rails
- ProSupport and Next Business Day Onsite Service

#### High

- (2) Intel Xeon Gold 6448Y (2.1GHz, 32C/64T) Processors
- 128GB DDR5-4800 Memory
- BOSS-N1 controller card+ with (2) M.2 Sticks 480GB (RAID 1) Drives
- (2) 960GB Data Center NVMe Read Intensive AG Drive U2 Gen4
- (1+1) 2400W Power supplies
- ReadyRails sliding rails
- ProSupport and Next Business Day Onsite Service

#### Ultra

- (2) Intel Xeon Platinum 8470 (2GHz, 52C/104T) Processors
- 1T DDR5-4800 Memory
- BOSS-N1 controller card+ with (2) M.2 Sticks 480GB (RAID 1) Drives
- (2) 960GB Data Center NVMe Read Intensive AG Drive U2 Gen4
- (1+1) 2400W Power supplies
- ReadyRails sliding rails
- ProSupport and Next Business Day Onsite Service

To learn more, visit [www.BittWare.com](http://www.BittWare.com)

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