



## TeraBox 2000H

2U FPGA Server

## Preliminary Product Info

### Reliable, Proven 2U FPGA Server Integrated into HPE ProLiant DL385 with AMD

We've integrated one of the world's highest performance servers from HPE with our latest generation of FPGA accelerators to help customers address the most demanding data center applications. The TeraBox™ 2000H is a 2U rack mount server based on the HPE ProLiant DL385 Gen10. It combines two PCIe Gen 4 capable AMD EPYC processors with up to three full-size PCIe BittWare accelerators featuring the latest FPGAs from Achronix, Intel and Xilinx.



Up to **three** double-wide FPGA cards can be configured



### key features

Up to  
**12 QSFPs** for  
24x 100G or 96x  
10/25G

**Gen4  
PCIe**

**3-year**  
Single comprehensive  
warranty



### chassis key specs

- 2U, depth 28.7 in (73cm)
- Processor:** 2 AMD EPYC 7xx2 Series Processors
- Memory:** 32x ECC DDR4-2666 DIMMs
- Slots:** (3) DW/FH/FL Gen 4x16 PCIe slots
- Storage:** (2) 1.6TB SAS SSD drives
- Power supply:** Platinum up to 1600W, redundant (1+1)

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## System Management

For system management, BittWare's FPGA cards are equipped with a Board Management Controller (BMC), which accepts IPMI 2.0 commands. Use it along with BittWare's BittWorks II Toolkit 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.

## Certified Cards

The TeraBox 2000H 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	I/O	Processing
<b>S7t-VG6</b>	Achronix Speedster7t	3	<ul style="list-style-type: none"><li>4 banks GDDR6 (up to 8 GBytes)</li></ul>	<ul style="list-style-type: none"><li>450 Gbits/sec</li><li>6x 100/50/40/25/10 GbE</li></ul>	<ul style="list-style-type: none"><li>692K 6-input lookup tables (LUTs)</li><li>375 Mbits embedded RAM</li></ul>
<b>520N-MX</b>	Intel Stratix 10 MX	3	<ul style="list-style-type: none"><li>2 banks DDR4 (up to 256 Gbytes)</li><li>2 banks QDRII+ (up to 1152 Mbits)</li><li>16 GBytes HBM2</li></ul>	<ul style="list-style-type: none"><li>250 Gbits/sec</li><li>4x 100/50/40/25/10 GbE</li></ul>	<ul style="list-style-type: none"><li>2.1 million system logic elements</li><li>3,960 DSP blocks</li></ul>
<b>XUP-VV8</b>	UltraScale+ VU13P	3	<ul style="list-style-type: none"><li>4 banks DDR4 (up to 512 GBytes)</li><li>8 banks QDRII+ (up to 2.3 Gbits)</li></ul>	<ul style="list-style-type: none"><li>800 Gbits/sec</li><li>8x 100/50/40/25/10 GbE</li></ul>	<ul style="list-style-type: none"><li>3.8 million system logic cells</li><li>Up to 12,288 DSP slices</li></ul>

\* Other certified cards available. Additional expansion capabilities are also available via M.2 and U.2. Contact BittWare for details.



## Server Configurations

### Low

- (2) AMD EPYC 7262 processors
- 64GB DDR4 Memory
- (2) 1.6TB SSD SAS
- (1+1) 1600W Power Supplies

### Medium

- (2) AMD EPYC 7302 processors
- 128GB DDR4
- (2) 1.6TB SSD SAS
- (1+1) 1600W Power Supplies

### High

- (2) AMD EPYC 7542 processors
- 256GB DDR4
- (2) 1.6TB SSD SAS
- (1+1) 1600W Power Supplies

### Ultra

- (2) AMD EPYC 7742 processors
- 512GB DDR4
- (2) 1.6TB SSD SAS
- (1+1) 1600W Power Supplies

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

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