

# **2U Short-Depth Edge FPGA Server**

Ideal for harsh environments

The Terabox 200DE enables world-class FPGA acceleration to be deployed in the more challenging, harsh environments demanded of edge applications. The 200DE is NEBS compliant, 2U short-depth server with an extended operating temperature range based on the new DELL PowerEdge™ XE2420. It can be populated with a range of BittWare accelerator products featuring the latest FPGAs from Achronix, Intel and Xilinx to support the increasingly complex demands of highly specialized workloads.





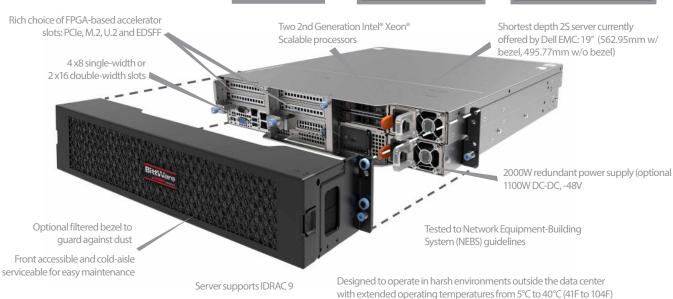
# key features



# Harsh Environment

Extended temperature range 5C to 40C

**3-year**Single comprehensive warranty



## TeraBox 200DE

2U Short-Depth Edge FPGA Server

## **Purchase Directly From Dell**

Customers can purchase the TeraBox 200DE with FPGA accelerators preintegrated directly from Dell Technologies via the Dell OEM program. The system includes Dell certification – a single comprehensive warranty covers server and BittWare FPGA accelerator cards. Dell can supply and support custom configurations.

## **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 200DE 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	1/0	Processing
S7t-VG6	Achronix Speedster7t	2	4 banks GDDR6 (up to 8 GBytes)	450 Gbits/sec     6x 100/50/40/25/10 GbE	692K 6-input lookup tables (LUTs)     375 Mbits embedded RAM
520N-MX	Intel Stratix 10 MX	2	<ul><li>2 banks DDR4 (up to 256 Gbytes)</li><li>2 banks QDRII+ (up to 1152 Mbits)</li><li>16 GBytes HBM2</li></ul>	250 Gbits/sec     4x 100/50/40/25/10 GbE	2.1 million system logic elements     3,960 DSP blocks
XUP-P3R	Xilinx UltraScale+VU9P	2	4 banks DDR4 (up to 512 Gbytes)     4 banks QDRII+ (up to 2304 Mbits)	<ul> <li>250 Gbits/sec</li> <li>4x 100/50/40/25/10 GbE</li> <li>Clock output, 1PPS output, trigger input/output</li> </ul>	2.5 million system logic cells     Up to 6,840 DSP slices

<sup>\*</sup> Other certified cards available. Additional expansion capabilities are also available via M.2, U.2, and ESDFF. Contact BittWare for details.







#### **Server Configurations**

#### Low

- 48GB DDR4
- · (2) 960GB SSD
- (2) Xeon Silver 4216 Processors

#### Medium

- 96GB DDR4
- · (2) 960GB SSD
- (2) Xeon Gold 6234 Processors

## High

- 192GB DDR4
- · (2) 960GB SSD
- (2) Xeon Gold 6252 Processors

Contact Sky Blue or Zerif for additional server configuration options.

Rev 2020.06.04 | June 2020

© BittWare 2020

Speedster is a registered trademark of Achronix Semiconductor Corp. UltraScale+ is a registered trademark of Xilinx Corp. Stratix 10 is a registered trademark of Intel Corp. All other products are the trademarks or registered trademarks of their respective holders.



International Distributors



Sky Blue Microsystems GmbH Geisenhausenerstr. 18 81379 Munich, Germany +49 89 780 2970, info@skyblue.de www.skyblue.de



In Great Britain:
Zerif Technologies Ltd.
Winnington House, 2 Woodberry Grove
Finchley, London N12 0DR
+44 115 855 7883, info@zerif.co.uk
www.zerif.co.uk