BittWare | FPGA ACCELERATION

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TeraBox 1501B
1U FPGA Server

Extreme Density FPGA Server

1U, 4 card, PCIe Gen5 x16, AMD EPYC 9004 series

At the extreme of FPGA server density, the TeraBox 1501B gives the highest level of compute and network capability in a 1U chassis. This server provides twice the density of the typical 4U server and the power of 4 of our largest Achronix, AMD, or Intel FPGAs.

This innovative product supports PCIe Gen5 and features an AMD EPYC processor in a standard rack depth chassis.
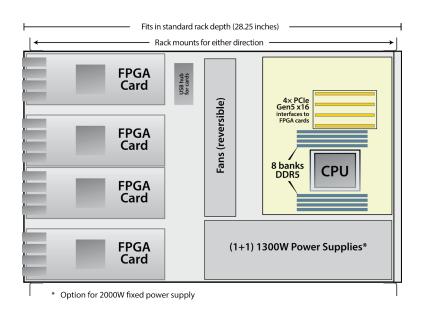
4× Double-Width FPGA Cards in 1U Chassis

key features

Up to
12x 400G
48× 100G
or 96× 10/25G

PCIe Gen5
with support for
CXL

1U
4 FPGAs in a
standard-depth
1U server

Fits in standard rack depth (28.25 inches)

Rack mounts for either direction

FPGA Card	USB hub for cards	Fans (reversible)	4× PCIe Gen5 x16 interfaces to FPGA cards
FPGA Card			
FPGA Card		8 banks DDR5 — CPU	
FPGA Card		(1+1) 1300W Power Supplies*	

* Option for 2000W fixed power supply

chassis key specs

1U depth, 28.25 in (71.75 cm)

Processor: (1) AMD EPYC 9004 Series Processor

Ethernet: 2 RJ45 (10GbE) by Intel® X550-AT2

Memory: Up to 8 DDR5 DIMM slots

Storage: up to 2x M.2 (PCIe5 x4)

Slots: 4x front panel PCIe Gen5 x16

Power supply: 1+1 AC 1300W, 110/220V

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BittWare FPGA Cards

The TeraBox 1501B supports up to four dual-slot BittWare PCIe FPGA cards. Choose from a variety of cards based on Achronix, AMD, and Intel FPGAs. System specs will vary greatly, depending on the FPGA card you select. For example, with four BittWare For example, with four BittWare Intel Agilex PCIe cards, which support up to 3x 400GbE interfaces each, the chassis can support as many as 12x 400GbE interfaces. With four Agilex cards using breakout cables, each chassis supports 48x 100GbE.

BittWare 1U Server

The TeraBox 1501B server featuring AMD EPYC processor is exclusive to BittWare and is the ideal platform to unleash the energy-efficient acceleration of BittWare's FPGA cards. This FPGA-optimized 1U server delivers unrivaled performance density and value for a range of compute-intensive applications, including machine learning.

The server is assembled in the USA, is TAA compliant, and offers a 3-year warranty.

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.
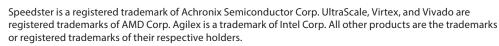
Server Configuration

Standard
- (1) AMD EPYC 9354 (3.2 GHz, 32C/64T) 256MB Cache Processor
- 128GB DDR5 4800MHz (8x 16GB)
- (2) 1TB M.2 (RAID1)
- (1+1) 1300W power supplies **

**Option for 2000W fixed power supply

Contact BittWare if this configuration is not exactly what you are looking for. BittWare can work with you to come up with a server configuration that suits your exact needs.

To learn more, visit **www.BittWare.com**

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