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FOR BUSINESS.
Building OCP Server Solutions with Project Olympus Building Blocks

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Agenda

• ZT Overview

• Project Olympus Building Blocks

• New Server Solutions

• Building Blocks Advantage
ZT Systems Overview

Leading provider of optimized servers and storage servers for hyperscale data centers

- Founded in 1994 starting with desktops and SMB servers, 2004 shifted focus to DC Servers
- Private company for maximum customer confidentiality
- US based with global operations

Built for Hyperscale

- Maximum design flexibility—"Partnering from Whiteboard to Data Center"
- Custom supply chain management programs

High volume manufacturing

- Flexible manufacturing with ability to scale up and down

Open Compute Solution Provider and longtime member of the Open Compute Project.
Project Olympus HW Building Blocks

- **Motherboards**: flexible expansion
- **Power Supply**: 1KW three-phase
- **Universal PMDU**: AC power cord adaption
- **Rack**: 19” EIA-310 standard
- **Rack Manager**: restful API or Redfish via Ethernet
Project Olympus Server Solutions

Compute
- US1-XSP (Intel)
- US1-EPYC (AMD)
- US1-THX2 (Cavium)
- US1-Centriq (Qualcomm)

Storage
- HX-88
- FX-16

GPU
- HGX-1
ZT Server Solution: 3U PCIe Expansion

- Project Olympus Building Blocks
  - US1-XSP (Intel) motherboard
  - US1-EPYC (AMD)
  - 1U remote CPU heatsink
  - Power supply
  - Universal PMDU
  - Rack
  - Rack manager

- ZT-Developed
  - Two versions of 3U chassis
  - PCIe Gen3 riser cards
  - Thermal/ducting solution
  - PDB (connecting 3xProject Olympus PSUs)
ZT Server Solution: 3U PCIe Expansion

- **Project Olympus Rack Fully Compatible**
- **3 x Load Balanced 1kW PSUs**
- **Power Distribution Board (PDB)**
- **6 x 60mm Dual Rotor Fans (room for 8 Fans)**
- **2.5”/3.5” SSD or HDD**
- **Removable Shelf for Rear Bay Customization**
- **Supports Project Olympus motherboards**
- **PSUs Blind mate into Rack PMDU**

**Options:****

- **OR**
  - **6 x FHFL, Double-wide 300W x16 PCIe Cards**
  - **+ 1 x FHHL Single-wide 75W x16 PCIe Card**

- **OR**
  - **12 x FHFL, Single-wide 75W x16 PCIe Cards**
  - **+ 1 x FHHL Single-wide 75W x16 PCIe Card**
XPO200 3U PCIe Expansion System featuring NVidia Technology

- **Intel Xeon / NVidia P4 System**
- **Model #:** ZT-XPO200-3UN1810
- **Processor:** 2 x Intel® Xeon® Processor Scalable Family Platinum 8168 (24 core, 2.7 Ghz)
- **Memory** 384GB 2666MHz DDR4 ECC (12 x 32GB RDIMM), expandable to 1536GB (24 total slots)
- **M.2 Storage:** 1 x 960GB M.2 NVMe PCIe SSD (expandable to 4 total M.2 modules on-board)
- **Networking:** 10G Single port SFP+ PCIe 2.0 x8 5GT/s
- **GPU:** 12 x Nvidia P4 GPU Cards
- **Dimensions:** Height: 5.20in (13.20cm) Width: 17.36in (44.10cm) Depth: 37.20in (94.50cm) – 3U 19” Rack
- **Weight:** 90lbs (40.8 Kg)
- **OS Support:** Windows® Server 2016
- **Expansion:**
  - Option 1: 12 (PCIe x16) FHFL Single-Wide slots, 1 (PCIe x16) FHHL slot
  - Option 2: 6 (PCIe x16) FHFL Double-Wide slots, 1 (PCIe x16) FHHL slot
- **Power Supply** 1000W Non-LES (Project Olympus rack with PMDU required)

Designed to deliver a powerful, flexible and cost-effective solution for GPU-intensive scale-out computing.
XPO200 3U PCIe Expansion System featuring AMD Technology

- **AMD EPYC / AMD MI25 system**
- **Model #**: ZT-XPO200-3UA1810
- **Processor**: 2 x AMD EPYC™ 7551 Processors
  32C, 180W, 2GHz
- **GPU**: 4 x AMD Radeon Instinct™ MI25 GPU Cards,
  16GB Memory (5th card can be substituted in place of M.2 AVA Riser)
- **Memory**: 512GB 2666MHz DDR4 ECC (16 x 32GB RDIMM),
  expandable to 1024GB (32 total slots)
- **M.2 Storage**: 8 x 960GB M.2 NVMe PCIe SSD (4 on-board w/ 4 on an AVA Riser Card)
- **Networking**: 10G Single port SFP+ PCIe 2.0 x8 5GT/s
- **Dimensions**: Height: 5.20in (13.20cm) Width: 17.36in (44.10cm)
  Depth: 37.20in (94.50cm) – 3U 19” Rack
- **Weight**: 90lbs (40.8 Kg)
- **OS Support**: Windows® Server 2016
- **Expansion**: 5 (PCIe x16) FHFL Double-Wide slots, 1 (PCIe x16) FHHL slot
- **Power Supply**: 1000W Non-LES (Project Olympus rack with PMDU required)

Outstanding flexibility, performance and value for GPU-intensive scale-out computing and Virtual Desktop Infrastructure applications.
PROJECT OLYMPUS IS EPYC
SUPERCHARGE VDI INFRASTRUCTURE WITH AMD

Up to 22% Lower TCO for Virtual Infrastructure

ZERO End-User Licenses

PERFORMANCE   PREDICTABILITY   SECURITY   MASSIVE TCO SAVINGS
Building Blocks Advantage

• Flexible configuration of server solutions utilizing hardened server building blocks (HW and FW)

• Targeted HW and FW development
  • Use building blocks as the foundation → only develop necessary “pieces”
  • Lower risk and development costs while delivering optimized solutions

Success in the cloud requires speed and flexibility → Achieve both with Project Olympus building blocks
Q&A

• Systems on display in the Microsoft booth B1
• Learn more at www.ztsystems.com/ocp