

OPEN.



FOR
BUSINESS.



OCP
SUMMIT



Building OCP Server Solutions with Project Olympus Building Blocks

Raymond Miles / VP Architecture / ZT Systems

Mark Chubb / Director Architecture / ZT Systems

Scott Aylor / CVP and GM / AMD Datacenter and
Embedded Solutions Group

OPEN. FOR BUSINESS



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

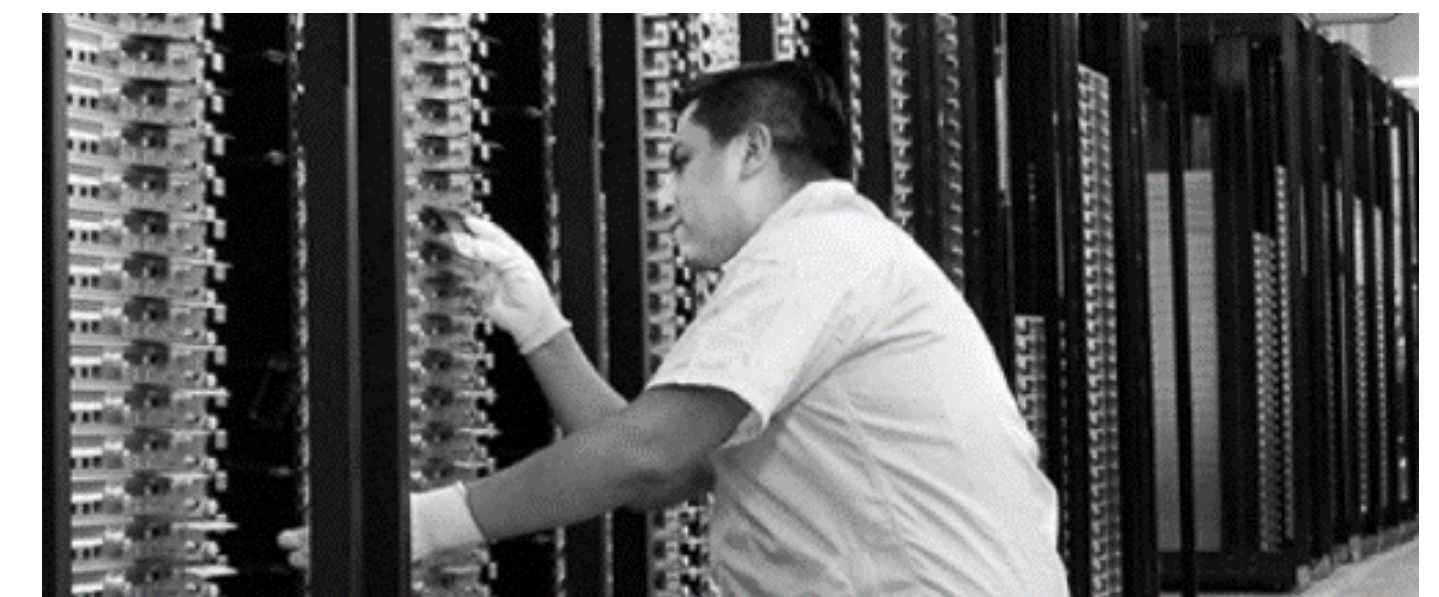
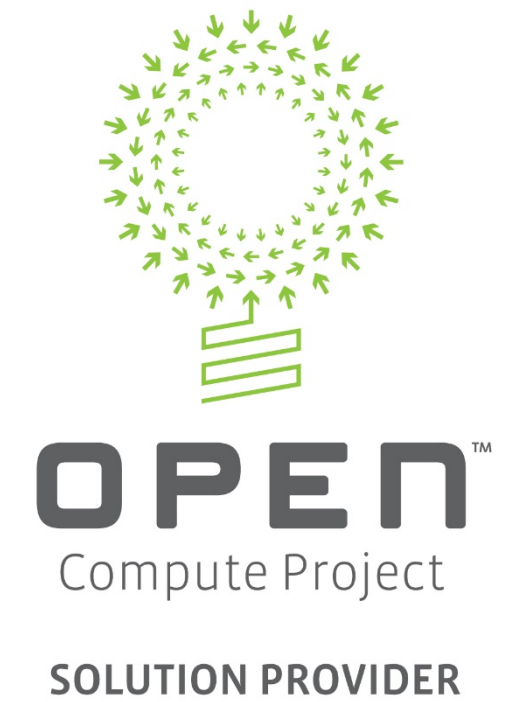
Built for Hyperscale

- 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
is an
OCP Accepted™
Specification



OPEN
ACCEPTED™

Project Olympus Server Solutions

Compute

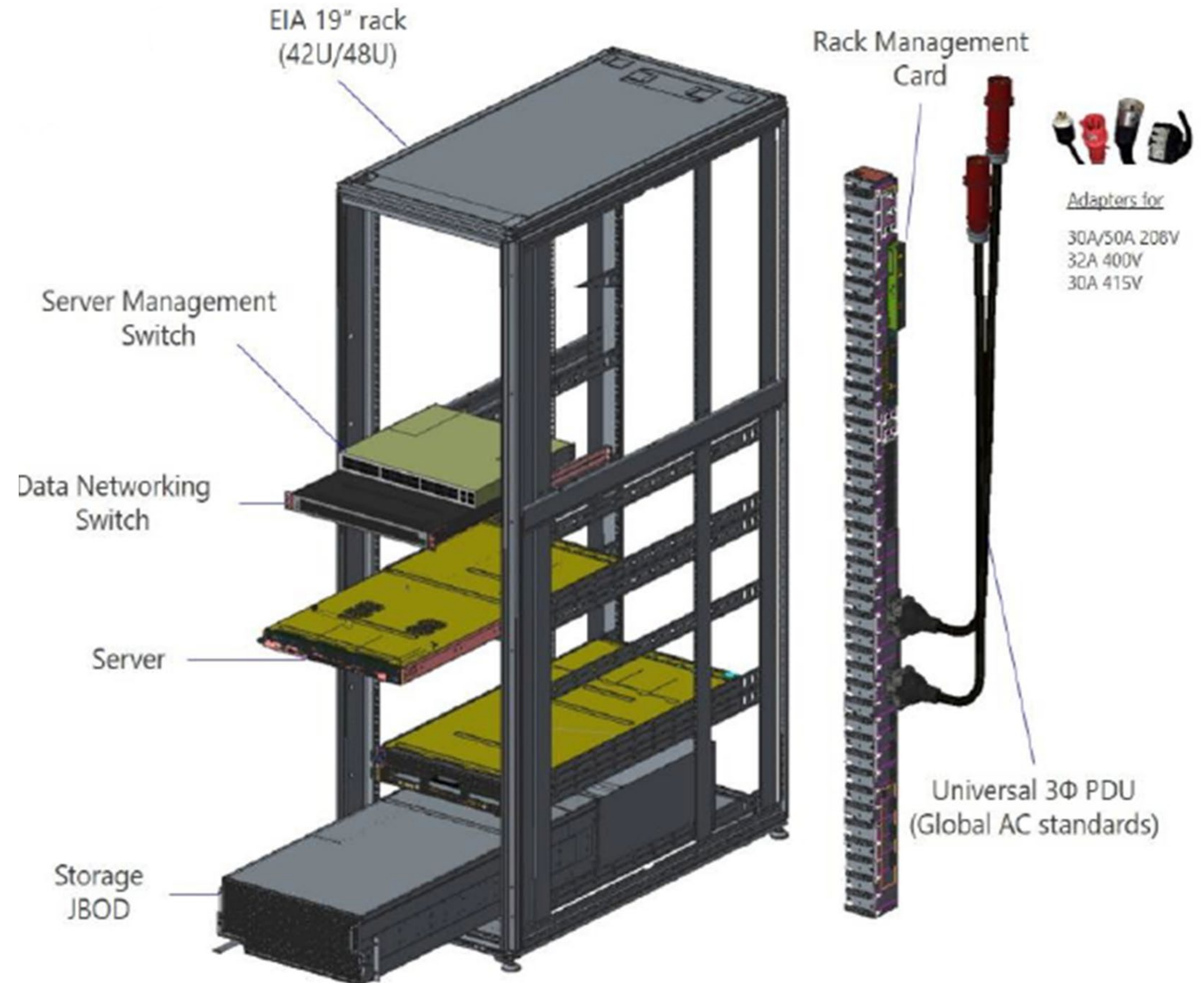
- US1-XSP (Intel)
- US1-EPYC (AMD)
- US1-THX2 (Cavium)
- US1-Centriq (Qualcomm)

Storage

- HX-88
- FX-16

GPU

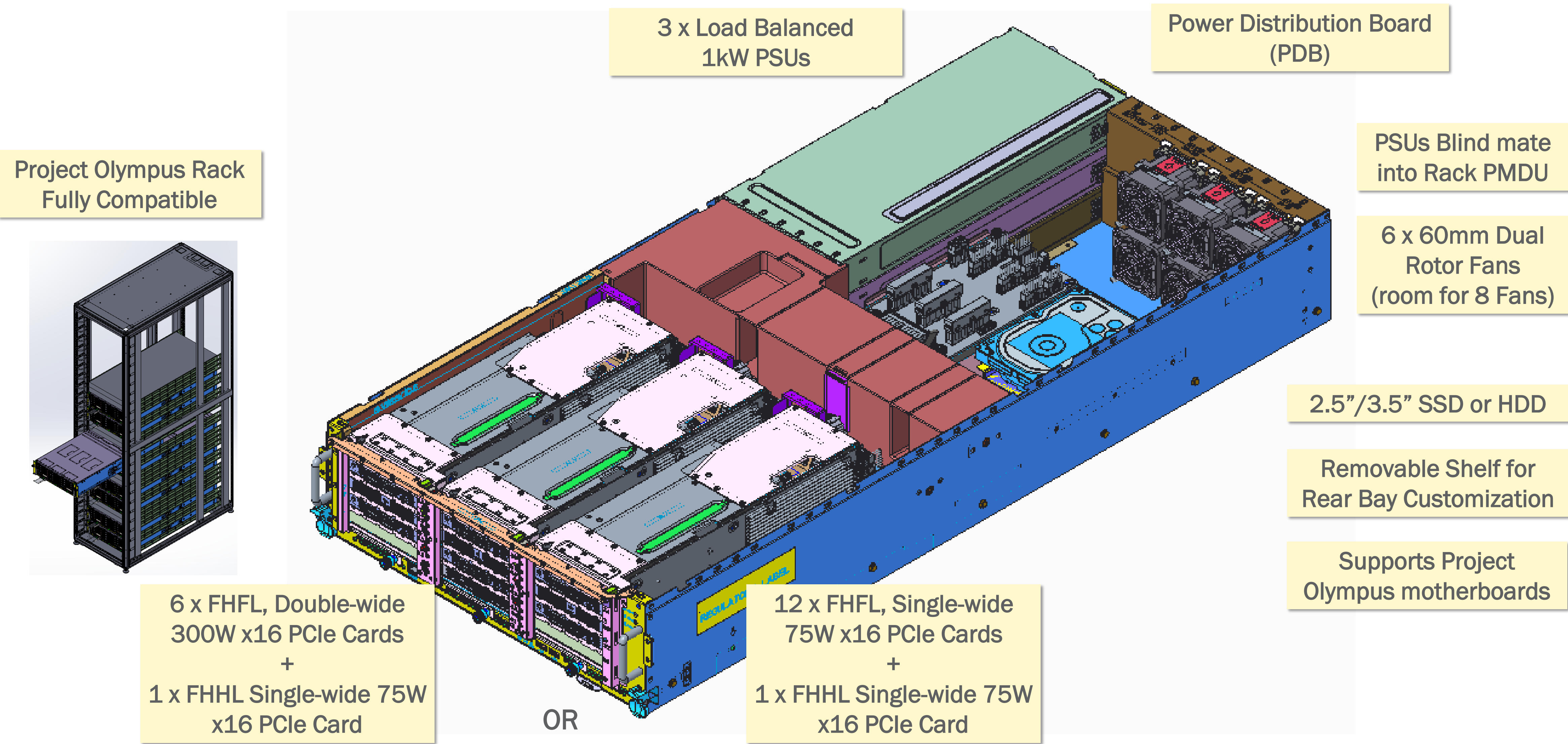
- HGX-1



ZT Server Solution: 3U PCIe Expansion

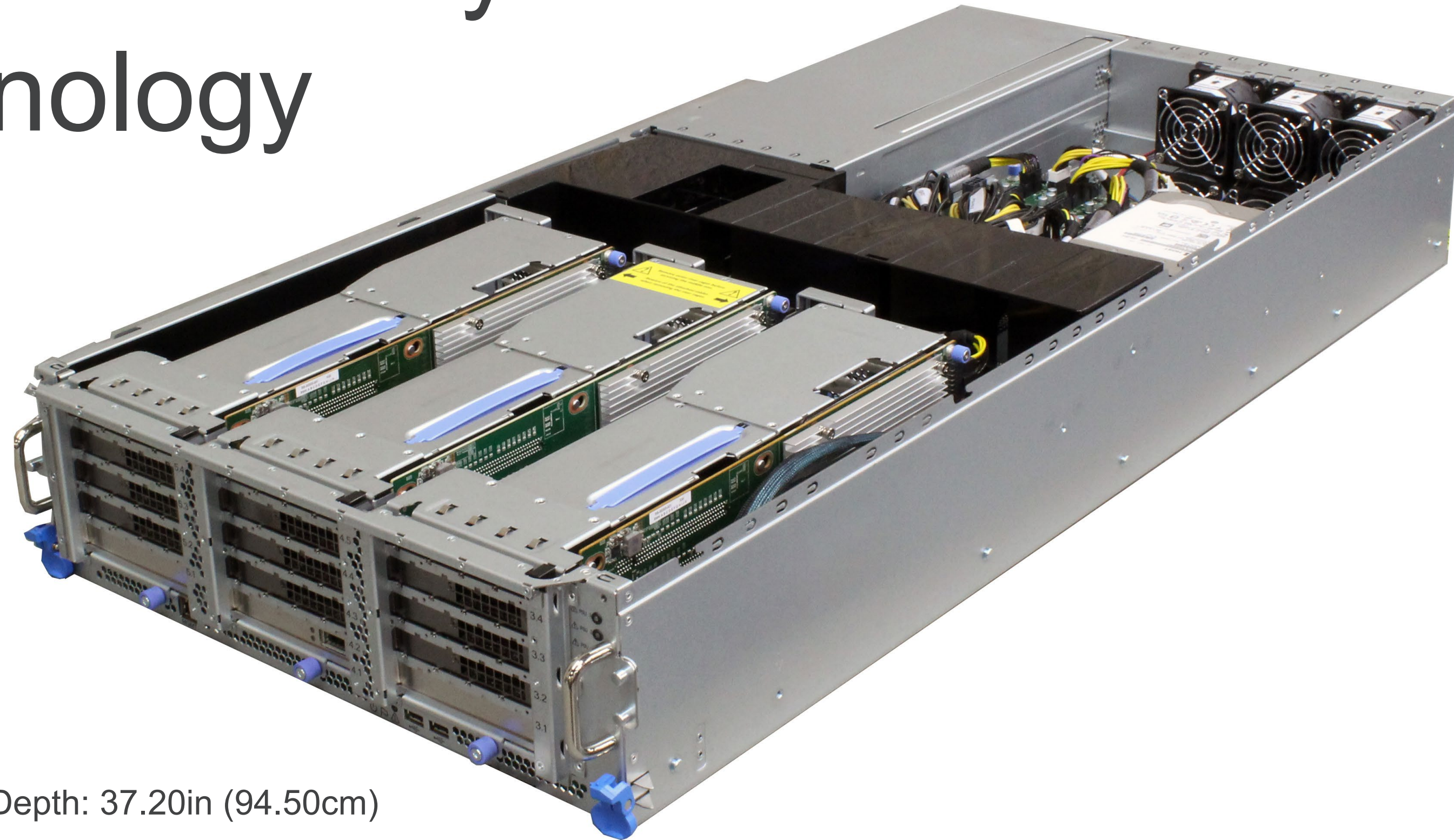
- Project Olympus Building Blocks
 - US1-XSP (Intel) motherboard
 - US1-EPYC (AMD)
 - 1U remote CPU heatsink
 - Power supply
 - Universal PMDU
 - Rack
 - Rack manager
- ZT-Developed
 - Two versions of 3U chassis
 - PCIe Gen3 riser cards
 - Thermal/ducting solution
 - PDB (connecting 3xProject Olympus PSUs)

ZT Server Solution: 3U PCIe Expansion



XPO200 3U PCIe Expansion System featuring NVidia Technology

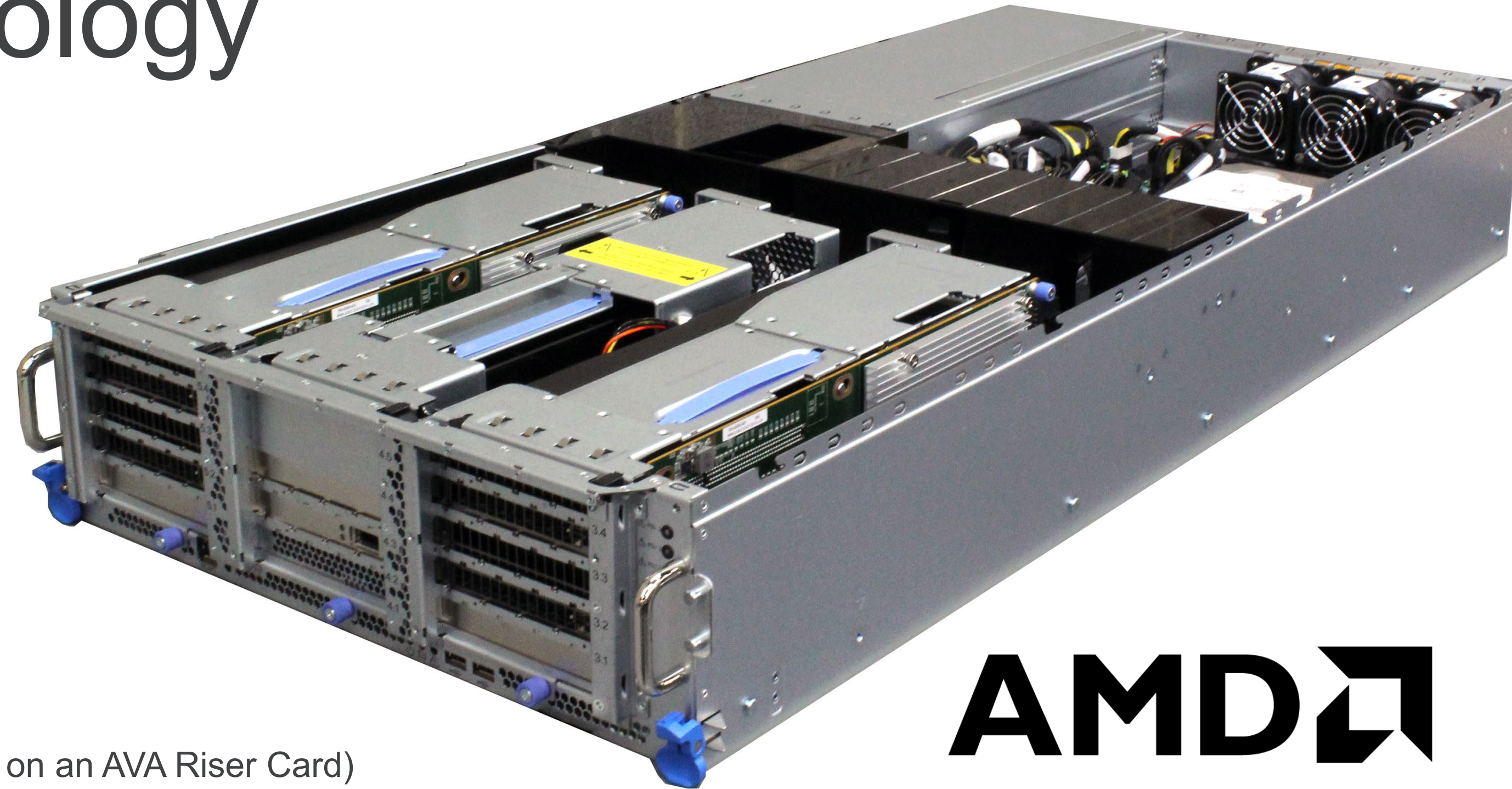
- **Intel Xeon / NVidia P4 System**
- **Model #:** ZT-XPO200-3UN1810
- **Processor:** 2 x Intel® Xeon® Processor Scalable Family Platinum 8168 (24 core, 2.7 Ghz)
- **Memory** 384GB 2666MHz DDR4 ECC (12 x 32GB RDIMM), expandable to 1536GB (24 total slots)
- **M.2 Storage:** 1 x 960GB M.2 NVMe PCIe SSD (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)

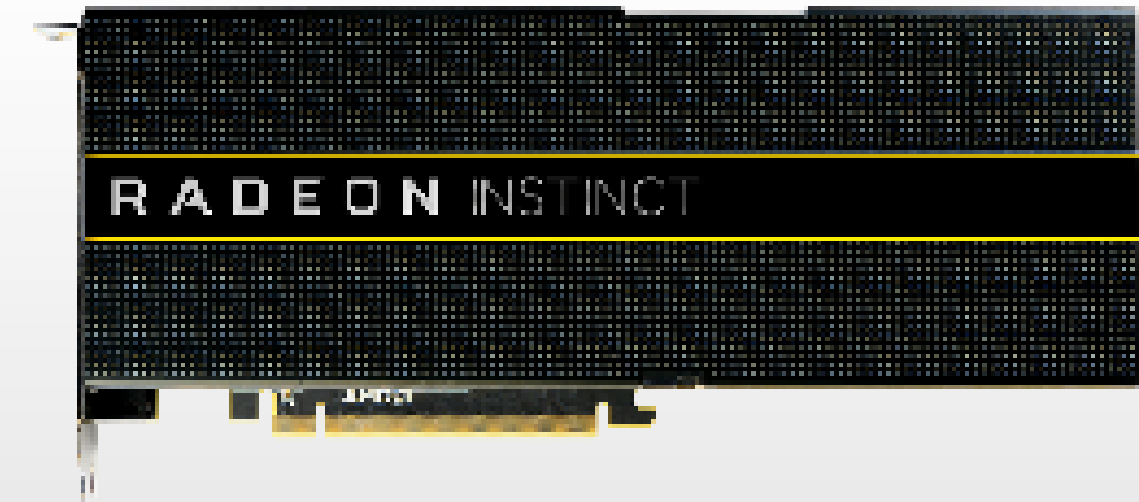
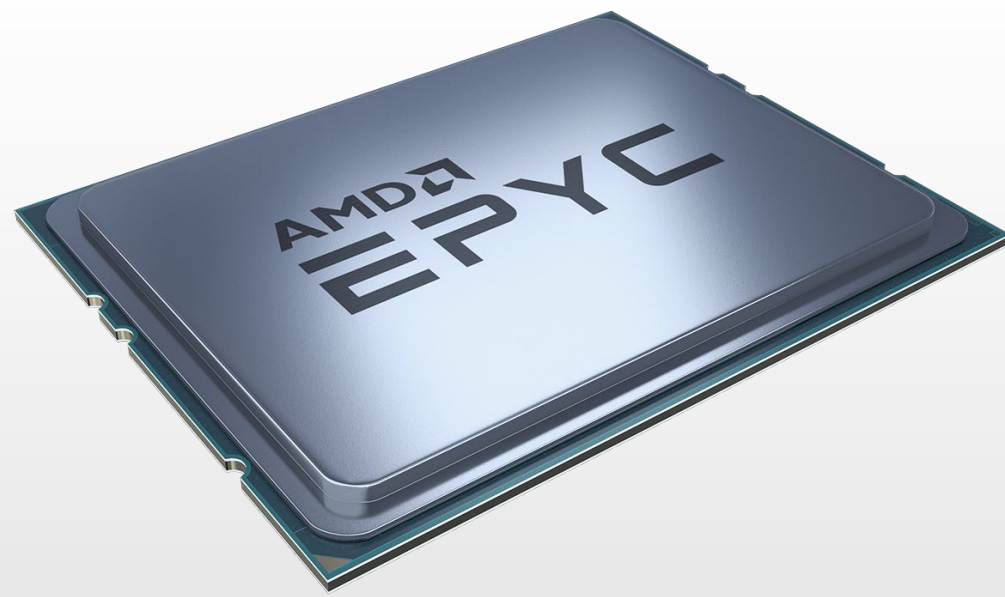


AMD

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

OPEN.



FOR
BUSINESS.



OCP
SUMMIT