NEXT GENERATION AI INFRASTRUCTURE / GROUNDBREAKING ML CAPABILITIES / ADDS 16 SINGLE-WIDE OR 10 DOUBLE-WIDE PCIe GPUs TO THE 4U DELL EMC SERVER

Tracewell T-XE8545

BASED ON: The Dell EMC PowerEdge XE8545 Server. Built for the most complex and demanding workloads from the traditional data center to the edge and multi-cloud environments where high-performance and maximum storage is required.

USE CASE: Ideal for customers that require a platform that adds significant PCIe capabilities – and the diversity, flexibility and innovation of the PCIe ecosystem – to their complex compute and storage intensive workloads.

SYSTEM:
6.9"H x 19"W x 41.6"D
(rack depth: 40.2"D)

FORM FACTOR HIGHLIGHTS

Breakthrough design makes it possible to add 16 single-wide or 10 double-wide PCIe GPUs to a PowerEdge XE8545 (with up to 300W per card).

The powerful PCIe enhanced system creates a new frontier in modern computing, including maximizing compute intensive workload efficiencies, supporting greater flexibility in leveraging increasingly powerful AI, ML and data analytics algorithms and making it possible to deploy a whole host of emerging specialty computing and workloads.

MAXIMUM CONFIGURATION

Processor: 128 cores.
Memory: 2TB. Storage (SSD):
8, 2.5" drives, 3.2TB NVMe.
PCIe slots: 16 for GPUs plus 5
for System I/O.

Benefits

DELL TECHNOLOGIES

Newest addition to the Dell EMC PowerEdge product family purpose built to deliver modern compute workloads, such as cutting-edge machine learning in a 2-socket, 4U rack server that supports up to 4x NVIDIA A100s and NVLink in an air-cooled chassis.

TRACEWELL PLATFORMS

All of the benefits of the Dell EMC PowerEdge XE8545 with greater PCIe capabilities, including 16 single-wide or 10 double-wide PCIe GPUs. The T-XE8545 also features two (2) 3rd Generation AMD EPYC processors and up to 64 cores per processor.

DELL+TRACEWELL

Electrically identical to standard Dell PowerEdge products. "Plug and play" components between Dell PowerEdge products and Tracewell platforms. Order through Dell (Dell PowerEdge part number) and eligible for Dell PowerEdge warranty, service, support and secure supply chain.

The Tracewell T-XE8545 Specifications Summary

The Tracewell T-XE8545 accepts standard Dell EMC hardware configurations.

STANDARD DELL EMC PRODUCT CONFIGURATIONS

FRONT AND REAR ACCESSIBLE I/O	**Front:** One VGA port, one USB 2.0 compliant port, one Micro-USB 2.0 iDRAC Direct management port. **Rear:** One USB 3.0 compliant port, one USB 2.0 compliant port, one iDRAC dedicated port, one VGA port, NIC port 1 & 2.
PROCESSOR TYPE	Two (2) 3rd Generation AMD EPYC processors, up to 64 cores per processor.
MEMORY ARCHITECTURE	32 DDR4 slots, supports up to 3200 MT/s, 2048GB Max DDR4.
STORAGE	Up to 10 HD/SSD SATA/SAS 2.5-inch drives. Up to 8 NVMe drives. Hot Swappable drives.
RAID CONTROLLER	HW RAID: H745, H755 RAID: 5, 6, 50, 60; BOSS S1V5 RAID 1.
VIDEO	Integrated Matrox G200 graphics controller with 16 MB of video frame buffer.
SYSTEM MANAGEMENT	Integrated Dell Remote Access Controller (iDRAC9) with Dell Lifecycle Controller. Optional Quick Sync 2 wireless module.
ENVIRONMENTAL	Normal operating temp: 10°C to 35°C (50°F to 95°F) with restrictions. Storage temp: -40°C to 65°C (-40°F to 149°F).
POWER SUPPLY	Up to four (4) power supplies supported. Available in 2400W and 3200W output (per PS). N+1 (2400W) and N+N (3200W) capable. 2400W AC PSU: High-line operation up to 2400W per PSU, low line operation to 1400W per PSU. Input voltage: 100-264 VAC 50/60Hz, Max input current 16-13.5A. 3200W AC PSU: High-line only (277VAC nominal) operation up to 3200W per PSU. Input voltage: 277 VAC 50/60Hz, Max input current 13A. 2400W DC PSU: 240VDC operation up to 2400W per PSU. Input voltage: 240 VDC, Max input current 11.2A.
COOLING	Twelve (12) front high-performance fans (GPUs) and six (6) internal high performance fans (System).
PCIe I/O	**Rear bay:** Supports up to five (5) PCIe Gen4 cards (i.e., NICs, BOSS, etc.). Up to two (2) full-height, half-length (FHHL) x16 cards, two (2) full-height, half-length (FHHL) 2x8 Socket Direct cards and one (1) low profile (LP) x16 card; up to 75W per card. Supports one (1) OCP 3.0 x16 card, PCIe Gen4; up to 25W.

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TRACEWELL SYSTEMS PRODUCT CONFIGURATIONS

CHASSIS CONSTRUCTION	Bonded aluminum low-mass chassis for rigidity with minimum weight. For more information, see the Tracewell T-XE2420 Data Sheet.
PCIe / GPUs	**Front bay:** Supports up to sixteen (16) full-size, high-performance PCIe Gen4 cards (i.e., GPUs, FPGAs, etc.). Up to (16) single-wide or (10) double-wide full height, full length (FHFL) x16 cards; up to 300W per GPU.
DIMENSIONS	Form Factor Size: 41.6"D (rack depth: 40.2") x 19.0"W x 6.9"H
INSTALLATION AND OPTIONS	19" rack mount per EIA specification; rack mount slides; removable front bezel included.

For more information, see the Tracewell T-XE2420 Data Sheet.

ABOUT TRACEWELL SYSTEMS

For more than 40 years Tracewell has enabled the nation's largest military and commercial organizations to deliver powerful and reliable computing solutions in environments where size, weight, power and other constraints present challenges that cannot be met by standard computing systems. Tracewell Systems have been recognized by the top names in the defense and technology sectors for their commitment to Trusted Innovation – a process where the company solves previously impossible, sensitive, mission-critical platform challenges through customer solution design, engineering and manufacturing, all under one roof.
More information: www.tracewell.com.