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NEC

The scalable enterprise server

NEC Express5800/A2000 Series

Key Features

- Enterprise-class 4-socket/4U rack server
- Support for the Intel® Xeon® Processor E7 v4 Family
- High reliability, availability and serviceability (RAS) features.
- Operation-able in 40°C (104°F)

Overview

The NEC Express5800/A2000 Series server is an enterprise-class quad-socket 4U rack server based on the Intel® Xeon® Processor E7 v4 Family. The server offers the highest level of performance, availability, and flexibility for compute-intensive and memory-hungry applications in mission critical and virtualized environments.

The NEC Express5800/A2000 Series server is highly flexible to support ever demanding and dynamically changing on-premise or cloud workloads for large databases, analytics, and large-scale virtualization.

Features

Exceptional Performance

The NEC Express5800/A2000 Series server is a scale-up server designed with a massive resource pool to support compute-intensive and memory-hungry applications in mission critical and virtualized environments.
Powered by the Intel® Xeon® Processor E7 v4 Family and inheriting NEC's supercomputer high performance technology, the NEC's sixth generation enterprise server supports up to 4 processors / 96 cores / 192 threads, 4.0 terabyte of memory, and 16 PCIe 3.0 slots.

High Availability

The NEC Express5800/A2000 Series server offers industry-leading reliability, availability, and serviceability (RAS) features required to support business-critical workloads for enterprise computing.
Combining Intel's Run Sure technology with NEC's mainframe inspired advanced RAS features, the Express5800/A2000 Series server with built-in service processors and redundant components offers exceptional availability and serviceability on standard operating systems.

Advanced Flexibility

The NEC Express5800/A2000 Series server is highly flexible to support ever demanding and dynamically changing on-premise or cloud workloads for large databases, analytics, and large-scale virtualization. Custom configurations offer ability to populate 2, 3 or 4 sockets, and Capacity Optimization (COPT) provides ability to flexibly optimize the resources by allowing cores to be enabled dynamically. On-line addition of resources such as CPU cores, and IO cards offers flexibility to fit your business needs, providing pay as you grow configurations.

Hardware Specifications

MODEL	Express5800/A2000 Series (A2040d, A2040d COPT, A2020d, A2010d)
Form factor / height	4U rack
Number of processors	A2040d: 2 to 4 (configurable), A2020d: 2 (fixed), A2010d: 1 (fixed)
Processors	Intel® Xeon® Processor E7-8890v4 (2.2 GHz/24-core/60MB) Intel® Xeon® Processor E7-8880v4 (2.2 GHz/22-core/55MB) Intel® Xeon® Processor E7-8867v4 (2.4 GHz/18-core/45MB) Intel® Xeon® Processor E7-8855v4 (2.1 GHz/14-core/35MB) Intel® Xeon® Processor E7-4820v4 (2.0 GHz/10-core/25MB) Intel® Xeon® Processor E7-4809v4 (2.1 GHz/ 8-core/20MB) Intel® Xeon® Processor E7-8891v4 (2.8 GHz/10-core/60MB) Intel® Xeon® Processor E7-8893v4 (3.2 GHz/ 4-core/60MB)
Memory type	DDR4-2133 Registered DIMM (8/16/32 GB), DDR4-2133 Load Reduced DIMM (32/64 GB)
Memory slots	64 (in case of A2010d: 32)
Maximum memory	4 TB (2 TB for A2010d)
Storage type	Hot plug 2.5-inch SAS HDD, Hot-plug 2.5-inch SAS SSD
Maximum internal drive bays	8
Maximum internal storage	HDD: 9.6 TB, SSD: 3.2 TB
Removable media	Internal or external drive (option)
Expansion slots	14x (in case of A2010d: 7x) PCI Express 3.0 (x8 lane, x8 socket) (Low Profile, 167.6 mm in length) 2x PCI Express 3.0 (x4 lane, x8 socket) (Low Profile, 167.6 mm in length)
Video (VRAM)	Embedded in management controller chip (8 MB)
Network	2x Management LAN connector (1000 BASE-T / 100 BASE-TX / 10 BASE-T, RJ45, rear)
Power	Up to 4 80 PLUS® Platinum certified power supply / Redundancy and hot plug supported
Maximum power consumption (200V)	A2040d: 2358 VA / 2311 Watt, A2020d: 2223 VA / 2179 Watt, A2010d: 1425 VA / 1396 Watt
Interface	5 x USB 2.0 (3x front, 1x rear, 1x internal), 1 x VGA (front), 1 x SUV (2x USB, 1x VGA, 1x Serial, rear)
Dimensions (W x D x H)	443.0 x 719.3 x 174.5 mm (4U rack height) 482.6 x 892.5 x 175.5 mm (including protruding objects and guide rails)
Maximum weight	A2040d: 54 kg, A2020d: 54 kg, A2010d: 48 kg
Temperature and humidity conditions (non-condensing)	Operating: 10 to 40 °C / 50 to 104 °F, 20 to 80% Non-operating: -10 to 55 °C / 14 to 131 °F, 20 to 80%
Operating systems and virtualization software	Microsoft® Windows Server® 2012 R2 Standard / Datacenter Red Hat® Enterprise Linux® 6.8 or later (x86_64) VMware® ESXi™ 6.0 Update2

For further information please contact your local NEC representative or:

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