Data Sheet
October 2016

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The scalable enterprise server

NEC Express5800/A1040d

Key Features

- Enterprise-class 4-socket/4U rack server
- Support for the Intel® Xeon® Processor E7 v4 Family
- Easy manageability with integrated EXPRESSSCOPE® Engine SP3
- Operation-able in 40°C (104°F)

Overview

NEC Express5800/A1040d 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, easy management and efficiency needed for compute-intensive and memory-hungry applications in physical and virtualized environments.

NEC Express5800/A1040d, armed with the NEC EXPRESSSCOPE® Engine SP3, a specially designed baseboard management controller, provides extensive remote management capabilities. The server offers high power efficiency as well, with industry leading intelligent power management with 80 PLUS® Platinum certified power supply enabling the high power efficiency operation.

Features

Exceptional Performance

NEC Express5800/A1040d is a scale-up server designed with massive resource pool to support compute-intensive and memory-hungry applications in physical and virtualized environment.
Powered by the Intel® Xeon® Processor E7 v4 Family, inheriting the 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 Efficiency

NEC Express5800/A1040d offers high power efficiency in 4U design. Industry-leading intelligent power management with 80 PLUS® Platinum certified power supply enable the high power efficiency operation. The server operates in temperatures as high as 40 degrees Celsius, which reduces the total power consumption by lowering cooling requirements.

Easy Management

Influenced by mainframe architectures, NEC Express5800/A1040d is armed with the EXPRESSSCOPE® Engine SP3, a specially designed baseboard management controller. This provides extensive remote management capabilities, including ultra granular component health monitoring, remote controlling of the system, and BID (built-in-diagnostics), allowing for quick diagnostics of faulted components.

Hardware Specifications

MODEL	Express5800/A1040d
Form factor / height	4U rack
Number of processors	1 to 4
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
Maximum memory	4 TB
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 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	1x 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)	2351 VA / 2304 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 891.0 x 175.5 mm (including protruding objects and guide rails)
Maximum weight	53 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

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Cat.No. E03-16100009E