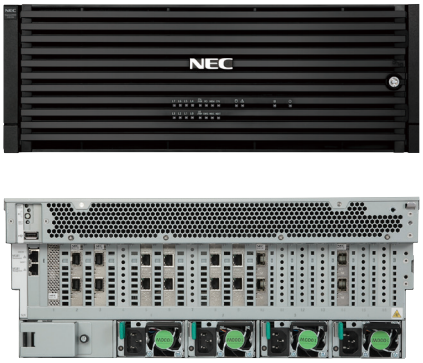
Empowered by Innovation

The scalable enterprise server

NEC Express5800/A1040b

EXCEPTIONAL PERFORMANCE WITH EASY MANAGEMENT AND HIGH EFFICIENCY



EXCEPTIONAL PERFORMANCE

EASY MANAGEMENT

HIGH EFFICIENCY

Exceptional Performance

NEC Express5800/A1040b is an enterprise-class quad-socket 4U rack server based on the Intel® Xeon® Processor E7 v2 Product 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.

Manageability and Efficiency

NEC Express5800/A1040b, 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.

Exceptional Performance

- NEC Express5800/A1040b 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 v2 Product Family, inheriting the supercomputer high performance technology, the NEC's sixth generation enterprise server supports up to 4 processors / 60 cores / 120 threads, 4.0 terabyte of memory, and 16 PCIe 3.0 slots.

Easy Management

- Influenced by mainframe architectures, NEC Express5800/A1040b 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.

High Efficiency

- NEC Express5800/A1040b 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.

HARDWARE SPECIFICATION

MODEL	Express5800/A1040b
Form factor / height	4U rack
Number of Processors	1 to 4
Processors	Intel® Xeon® Processor E7-4890 v2 (2.8 GHz/15-core/37.5 MB) Intel® Xeon® Processor E7-4870 v2 (2.3 GHz/15-core/30 MB) Intel® Xeon® Processor E7-4860 v2 (2.6 GHz/12-core/30 MB) Intel® Xeon® Processor E7-4830 v2 (2.2 GHz/10-core/20 MB) Intel® Xeon® Processor E7-4820 v2 (2.0 GHz/8-core/16 MB) Intel® Xeon® Processor E7-4809 v2 (1.9 GHz/6-core/12 MB) Intel® Xeon® Processor E7-8891 v2 (3.2 GHz/10-core/37.5 MB) Intel® Xeon® Processor E7-8893 v2 (3.4 GHz/6-core/37.5 MB)
Memory Type	DDR3L-1600 Registered DIMM (8/16 GB), DDR3L-1600 Load Reduced DIMM (32 GB), DDR3L-1333 Load Reduced DIMM (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)	2328 VA / 2281 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	54 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® 2008 R2 (SP1 or later) Standard / Enterprise / Datacenter Microsoft® Windows Server® 2012 Standard / Datacenter Microsoft® Windows Server® 2012 R2 Standard / Datacenter Red Hat® Enterprise Linux® 6.4 or later (x86_64) Oracle® Linux 6.4 / UEK R2 or later (x86_64) VMware® ESXi™ 5.1 Update 2 VMware® ESXi™ 5.5

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NEC Corporation
www.nec.com

Asia (APAC)
NEC Corporation

7-1, Shiba 5-chome Minato-ku
Tokyo 108-8001 Japan

www.nec.com/express

Europe (EMEA)
NEC Enterprise Solutions

Olympia 4
1213 NT Hilversum
The Netherlands
+31 35 6899111

www.nec-enterprise.com

North America
NEC Corporation of America

3151 Jay Street, Ste. 110,
Santa Clara, CA 95054 U.S.
+1 866 632 3226

www.necam.com/servers