The scalable enterprise server
NEC Express5800/A2000 Series

EXCEPTIONAL PERFORMANCE, FLEXIBILITY AND AVAILABILITY FOR ENTERPRISE USE

EXCEPTIONAL PERFORMANCE

HIGH AVAILABILITY

ADVANCED FLEXIBILITY

Perfect Fit for Enterprise Use

The NEC Express5800/A2000 Series server 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, availability, and flexibility for compute-intensive and memory-hungry applications in mission critical and virtualized environments.

Flexible for Optimized Use

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. 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, memory module, and IO cards offers flexibility to fit your business needs.

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 v2 Product Family and inheriting NEC's 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.

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 enable or disable cores based on performance requirements.

- Provide pay as you grow configurations

HARDWARE SPECIFICATION

MODEL	Express5800/A2000 Series (A2040b, A2040b COPT, A2020b, A2010b)
Form factor / height	4U rack
Number of Processors	A2040b: 2 to 4 (configurable), A2020b: 2 (fixed), A2010b: 1 (fixed)
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 (in case of A2010b: 32)
Maximum memory	4 TB (2 TB for A2010b)
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 A2010b: 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)	A2040b: 2335 VA / 2288 Watt, A2020b: 2208 VA / 2164 Watt, A2010b: 1435 VA / 1406 Watt
Interface	5x USB 2.0 (3x front, 1x rear, 1x internal), 1x VGA (front), 1x 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	A2040b: 55 kg, A2020b: 55 kg, A2010b: 49 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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