

NEC Express5800/100 Series R120a-1



NEC Express5800/R120a-1

NEC

Highlights

■ Slim, high-performance 2-socket rack server (1U)

The R120a-1 delivers uncompromising performance at an affordable price for space-constrained environments.

- Up to two Intel® Xeon® processors 5500 series
- Up to 192GB of memory
- Up to three 3.5-inch SAS/SATA or six 2.5-inch SAS/SATA disk drives, with optional RAID 5 and 6 capability
- PCI Express 2.0, with twice the bandwidth of the previous generation
- 80PLUS® energy efficient power supply for reduced AC/DC loss
- A front display port, a pull-out tab, and tool-free guide rails to provide ease of maintenance

■ Dynamic scalability

Powered by Intel® Xeon® 5500 series with QuickPath Interconnect (QPI) technology, the R120a-1 achieves significant throughput performance improvement. The latest processor features include:

- Enhanced performance of individual processor cores to process more instructions per clock cycle
- Integrated Memory Controller to allow each processor to access its own dedicated memory
- High-speed QuickPath interconnects to link processors to memory and I/O without the conflict between processors

■ Simplified deployment and management

The R120a-1 offers integrated setup and management tools.

- The EXPRESSBUILDER setup support tool provides step-by-step guides via intuitive graphic interface and automates the setup process with the Express Setup function, dramatically reducing hands-on management of the server.
- The ESMPRO management software and the EXPRESSSCOPE Engine 2 remote management controller interact to monitor, control and troubleshoot from a remote console, with no need to travel for on-site operational tasks.



Ideal Environments and Applications

The R120a-1 is optimized for small to medium businesses needing high compute performance and reliable data storage, along with maintainability and space-efficiency.

- File server to consolidate and centrally manage distributed files and data, optimize IT resources and drive business efficiency
- Application server to consolidate business-critical and general office applications, and process high volumes of data in tandem with a backend database
- Web server to handle increasing user access requirements, while enhancing business efficiency by interacting with groupware and an application server

Specification Overview

Processors

Quad-core processors

Intel® Xeon® Processor X5570 (2.93GHz/8MB L3 Cache)

Intel® Xeon® Processor X5550 (2.66GHz/8MB L3 Cache)

Intel® Xeon® Processor E5520 (2.26GHz/8MB L3 Cache)

Intel® Xeon® Processor E5504 (2GHz/4MB L3 Cache)

Dual-core processor

Intel® Xeon® Processor E5502 (1.86GHz/4MB L3 Cache)

Memory

DDR3 DIMM with ECC

Up to 192GB (12 x 16GB)

Maximum storage

3.5-inch SATA : 3TB (3 x 1TB)

3.5-inch SAS : 1.35TB (3 x 450GB)

2.5-inch SATA : 3TB (6 x 500GB)^{*1}

2.5-inch SAS : 1.8TB (6 x 300GB)

Removable media

1 x DVD-ROM drive (CD: max. X24 DVD: max. X8)

1 x floppy disk drive (optional)

Expansion slots

Total: 3 slots

1 x PCI Express 2.0 X16^{*2}

1 x PCI Express 2.0 X8

1 x dedicated slot for a RAID controller

Video

Integrated in the Server Management Controller (32MB)

Network

2 x 1000BASE-T (100BASE-TX is supported)

Power consumption

112VA/106W up to 710VA/700W

Redundant power supply

Supported (hot plug)

Redundant cooling fan

Supported

External interfaces

2 x VGA, 1 x keyboard, 1 x mouse, 4 x USB 2.0, 1 x serial

2 x LAN, 1 x management LAN

Dimensions (mm) and weight

428W x 722D x 44H (1U) *485W x 823D x 44H (including front bezel, inner rails and protruding objects)

Std: 16kg Max:21kg

Operating systems

Microsoft® Windows Server® 2003, Standard/Enterprise Editions (SP1 or later)

Microsoft® Windows Server® 2003 R2, Standard/Enterprise Editions (x64)

Microsoft® Windows Server® 2008 Standard/Enterprise (x64)

Microsoft® Windows Server® 2008 R2 Standard/Enterprise

Red Hat® Linux™

VMware® ESXi™ 4

Note:

For Linux support, contact your local NEC sales office, or go to the NEC website at:
<http://www.nec.com/global/prod/express/linux/index.html>

*1 300GB (6 x 50GB) with Solid State Drives (SATA)

*2 Becomes a 64bit/133MHz PCI-X slot by replacing the standard riser card with an optional Riser Card [N8116-23].

NEC EXPRESS5800

For further information, please contact:

- Microsoft and Windows Server are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- Intel and Xeon are registered trademarks or trademarks of Intel Corporation in the United States and other countries.
- Linux is a trademark of Linus Torvalds.
- Red Hat is a registered trademark of Red Hat, Inc. in the U.S.
- VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions.
- All other products, brands, or trade names used in this document are trademarks or registered trademarks of their respective holders.
- Specifications are subject to change without notice.