

The high-density rack server

NEC Express5800/R120d-1M

POWERFUL AND ENERGY EFFICIENT SERVERS FOR HIGH-DENSITY DRIVEN ENVIRONMENTS











- **HIGH PERFORMANCE**
- SUPERIOR ENERGY EFFICIENCY
- SIMPLIFIED MANAGEABILITY

Scalable and Green

The Express5800/R120d-1M enables high-density mounting and combines outstanding performance, reliability, and simplified management with industry-leading green technology. In addition, the platform features large memory and hard drive capacity to support business growth. The server operates in temperatures as high as 40 degrees Celsius (104 degrees Fahrenheit), which reduces the total power consumption by lowering cooling requirements.

High-density Compute Power

The Express5800/R120d-1M is an Intel® processor-based dual-socket 1U rack server perfect when space is limited but high performance is still required. The R120d-1M is perfect for the most demanding applications such as virtualization solutions, mid-size database servers, and consolidation of business-critical applications which process high data volumes in the background while running primary tasks.

High Performance

- Support for the latest Intel® Xeon® E5-2600 product family 8-core processors for maximum energy efficiency and performance
- Up to 768 GB memory—ideal for virtualization solutions
- 10 Gb network controller and RAID controller with dual-core I/O processor for high I/O throughput

Superior Energy Efficiency

- Industry-leading intelligent fan control to minimize cooling power with individually optimized fan speeds
- 80 PLUS® Platinum certified power supply
- Selectable power supply units (450 Watt, 800 Watt) and cold-standby mode maximize AC/DC efficiency for any size system

Simplified Manageability

- Integrated EXPRESSSCOPE Engine 3 technology provides extensive remote management capabilities enabling direct access to the controller without special software
- EXPRESSBUILDER and ESMPRO suite enable easy installation, configuration, and remote monitoring

HARDWARE SPECIFICATION

MODEL	Express5800/R120d-1M
Form factor / height	1U Rack
Number of processors	1 to 2
Processors	Intel® Xeon® Processor E5-2609 (2.40 GHz/4-core/10 MB) Intel® Xeon® Processor E5-2620 (2 GHz/6-core/15 MB) Intel® Xeon® Processor E5-2630L (2 GHz/6-core/15 MB) Intel® Xeon® Processor E5-2630L (2.50 GHz/6-core/15 MB) Intel® Xeon® Processor E5-2640 (2.50 GHz/6-core/20 MB) Intel® Xeon® Processor E5-2650L (1.80 GHz /8-core/20 MB) Intel® Xeon® Processor E5-2670 (2.60 GHz/8-core/20 MB) Intel® Xeon® Processor E5-2690 (2.90 GHz/8-core/20 MB)
Memory type	DDR3-1333 ECC LV UDIMM, DDR3-1600 ECC LV RDIMM, DDR3-1333 ECC LV LRDIMM
Memory slots	24
Maximum memory	768 GB
Storage type	Hot plug 2.5-inch SAS and SATA HDD, Hot plug 2.5-inch SAS SSD
Maximum internal drive bays	6 to 8 with optional drive cage
Maximum internal storage	9.6 TB
Removable media	1 bay for optical drive
Expansion slots	1 PCle x16 Gen 3, 1 PCle x8 Gen 3, 1 PCle x8 Gen 3 for a RAID controller, 1 PCle x8 Gen 3 for a dedicated network controller
Video (VRAM)	Integrated in the server management controller (32 MB)
Network	2 1000BASE-T plus 1 100BASE-TX for management
Maximum power consumption	660 VA / 650 Watt (at 100 VAC)
Redundant power supply	Optional, hot plug
Redundant cooling fan	Standard, non-hot plug
Power supplies	450 Watt, 800 Watt
Systems management	EXPRESSSCOPE Engine 3
Interface	2 VGA, 1 to 2 serial, 6 USB 2.0 (plus 3 internal USB 2.0), 2 LAN, 1 management LAN
Dimensions (W x D x H) and maximum weight	440.0 x 720.0 x 43.4 mm / 17.3 x 28.3 x 1.7 in / 23 kg / 50.70 lbs.
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% * In specific configurations, the operable ambient temperature is up to 35° C/95°F
Operating systems and virtualization software	Microsoft® Windows Server® 2003 R2, Standard Edition / Enterprise Edition Microsoft® Windows Server® 2003 R2, Standard x64 Edition / Enterprise x64 Edition Microsoft® Windows Server® 2008 Standard / Enterprise Microsoft® Windows Server® 2008 Standard (x64) / Enterprise (x64) Microsoft® Windows Server® 2008 R2 Standard / Enterprise Microsoft® Windows Server® 2012 Standard / Datacenter Red Hat® Enterprise Linux® 5.7 Red Hat® Enterprise Linux® 6.1 VMware® ESX™i 4

 $Note: For Linux support, go to the NEC website at \ http://www.nec.com/global/prod/express/linux/, or contact our sales representative$

©Copyright 2013 NEC Corporation. The information and specifications contained in this publication are subject to modification without prior notice. Microsoft and Windows Server are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Intel, Intel Logo, Pentium, Pentium Inside, Xeon, and Xeon Inside are trademarks of Intel Corporation in the U.S. and/or 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 names of products and brands cited are the property of their respective owners. NEC is not responsible for photographic or twing errors.

Windows Server 2008 R2





Asia (APAC) NEC Corporation

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

www.nec.com/express

Europe (EMEA) NEC Enterprise Solutions

Anton Philipsweg 1 1223 KZ Hilversum The Netherlands +31 35 6899111 www.nec-itplatform.com North America NEC Corporation of America Information Technology Group

2880 Scott Blvd. Santa Clara, CA 95050 U.S. +1 866 632 3226

www.necam.com/servers