

The high-density rack server

NEC Express5800/R120f-1M

POWERFUL AND ENERGY EFFICIENT SERVERS FOR HIGH-DENSITY ENVIRONMENTS



HIGH PERFORMANCE

SUPERIOR ENERGY EFFICIENCY

SIMPLIFIED MANAGEABILITY

High Performance and Density

The Express5800/R120f-1M, a high-density dual-socket 1U rack server, offers outstanding performance, scalability, and simplified manageability. Supporting the new high-performance and energy efficient Intel® Xeon® E5-2600 v3 product family, high speed DDR4-2133, and a 12Gbp/s SAS interface, the R120f-1M is ideal for the most demanding applications such as virtualization solutions, mid-size database servers, and high performance computing applications.

High-Density Compute Power

The Express5800/R120f-1M maximizes performance, scalability and flexibility in a limited space. The R120f-1M can hold up to two 18-core and 145 watt processors, 24 DIMM slots, eight hot-plug drive bays, and three PCIe 3.0 slots including a dedicated RAID slot in a 44.5 mm (1.75-inch) height chassis. Supporting flexible integrated NIC technology and selectable power supply units, the R120f-1M provides superior flexibility for any type and size of business.

High Performance

- Supports the latest Intel® Xeon® E5-2600 v3 series 18-core processors for maximum energy efficiency and performance
- Supports up to 768 GB memory and 2133 MHz speeds, up to 16 TB drive capacity, four PCI Gen3 slots, which is ideal for virtualization solutions as well as high performance computing

Superior Energy Efficiency

- Industry-leading intelligent fan control to minimize cooling power with individually optimized fan speeds
- 80 PLUS® Titanium or Platinum certified power supply
- Selectable power supply units (460 Watt, 800 Watt) and cold-standby mode maximize power conversion efficiency for any size system

Simplified Manageability

- Supports agent-less management capability with EXPRESSSCOPE Engine3 that offers extensive remote management and control regardless of the server status
- Equipped with EXPRESSBUILDER and ESMPRO suite which enable easy installation, configuration, and remote monitoring

HARDWARE SPECIFICATION

MODEL	Express5800/R120f-1M
Form factor / height	1U Rack
Number of processors	1 to 2
Processors	Intel® Xeon® Processor E5-2603 v3 (1.60 GHz/6-core/15 MB) Intel® Xeon® Processor E5-2609 v3 (1.90 GHz/6-core/15 MB) Intel® Xeon® Processor E5-2620 v3 (2.40 GHz/6-core/15 MB) Intel® Xeon® Processor E5-2640 v3 (2.60 GHz/8-core/20 MB) Intel® Xeon® Processor E5-2650L v3 (1.80 GHz/12-core/30 MB) Intel® Xeon® Processor E5-2660 v3 (2.60 GHz/10-core/25 MB) Intel® Xeon® Processor E5-2670 v3 (2.30 GHz/12-core/30 MB) Intel® Xeon® Processor E5-2690 v3 (2.60 GHz /12-core/30 MB) Intel® Xeon® Processor E5-2695 v3 (2.30 GHz /14-core/35 MB) Intel® Xeon® Processor E5-2697 v3 (2.60 GHz/14-core/35 MB) Intel® Xeon® Processor E5-2698 v3 (2.30 GHz/16-core/40 MB) Intel® Xeon® Processor E5-2699 v3 (2.30 GHz/18-core/45 MB)
Memory type	DDR4-2133 ECC RDIMM, DDR4-2133 ECC LRDIMM
Memory slots	24
Maximum memory	1.5 TB
Storage type	Hot plug 2.5-inch SAS and SATA HDD, Hot plug 2.5-inch SAS and SATA SSD
Maximum internal drive bays	8
Maximum internal storage	16 TB
Removable media	1 bay for optical drive
Expansion slots	2 PCIe x8 Gen 3, 1 PCIe x8 Gen 3 for a RAID controller, 1 PCIe x8 Gen 3 for a flexible integrated NIC * The slot mix changes by installing optional riser cards
Video (VRAM)	Integrated in the server management controller (32 MB)
Network	1 1000BASE-T for management
Redundant power supply	Optional, hot plug
Redundant cooling fan	Standard, hot plug
Power supplies	460 Watt, 800 Watt
Systems management	EXPRESSSCOPE Engine 3
Interface	2 VGA, 1 to 2 serial, 4 USB 3.0, 2 USB 2.0 (plus 1 internal USB 2.0), 1 management LAN
Dimensions (W x D x H) and maximum weight	439.8 x 720.0 x 43.4 mm / 17.3 x 28.3 x 1.7 in / 21.2 kg / 46.73 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%
Operating systems and virtualization software	Microsoft® Windows Server® 2008 Standard (x86) Microsoft® Windows Server® 2008 Enterprise (x86) Microsoft® Windows Server® 2008 R2 Standard Microsoft® Windows Server® 2008 R2 Enterprise Microsoft® Windows Server® 2012 Standard Microsoft® Windows Server® 2012 Datacenter Microsoft® Windows Server® 2012 R2 Standard Microsoft® Windows Server® 2012 R2 Datacenter Red Hat® Enterprise Linux® 6 VMware® ESXi™ 5 VMware® ESXi™ 6

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

©Copyright 2015 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 typing errors.



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