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NEC

The high-density rack server

NEC Express5800/R120g-1M

Key Features

- Support for the latest Intel® Xeon® E5-2600 v4 product family
- Up to 1.5 TB of high speed DDR4 memory
- 4 PCIe slots in a 1U form factor
- Agent-less management with improved EXPRESSCOPE Engine 3
- Wide range of operating ambient temperature from 5 to 45°C (41 to 113°F)

Overview

The Express5800/R120g-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 v4 product family, high speed DDR4-2400 memory, and up to 16 TB of storage capacity, the R120g-1M is ideal for the most demanding applications such as virtualization solutions, mid-size database servers, and high performance computing applications.

Features

Distinguished Performance and Capability

Featuring the Intel® Xeon® Processor E5-2600 v4 product family with up to 22-core and 55 MB last level cache, up to 1.5 TB memory with 2400 MHz speed, and up to 16 TB of storage capacity, the R120g-1M is ideal for the most demanding applications such as virtualization solutions, mid-size database servers, and high performance computing applications.

Flexible and Dense

The R120g-1M delivers enterprise-class flexibility and expandability in a limited space. The platform features a wide range of server and upgrade options with 24 memory slots, 8 2.5-inch drive bays, 1 PCIe slot for a flexible integrated NIC, 1 PCIe slot for a dedicated RAID controller, and 2 PCIe slots in a 1U form factor for various computing needs and future business growth. The redundant storage, fan, and power supply options make the system reliable to support business continuity.

Operational Cost Savings and Efficiency

NEC's innovative green design concepts and industry leading fan control technology allows the R120g-1M to operate at temperatures up to 45°C (113°F), therefore reducing cooling requirements. In addition, dual hot plug power supplies with cold-standby mode enable further energy savings.

Manage easy setup and deployment with NEC EXPRESSBUILDER and leverage easy management with NEC's EXPRESSSCOPE Engine 3 together with NEC ESMPRO. The extensive remote management capabilities untangle the complexities in operating and maintaining the server to alleviate the burden of administrative tasks.

Hardware Specifications

MODEL	Express5800/R120g-1M
Form factor / height	1U Rack
Number of processors	1 to 2
Processors	Intel® Xeon® Processor E5-2603 v4 (1.70 GHz/6-core/15 MB) Intel® Xeon® Processor E5-2620 v4 (2.10 GHz/8-core/20 MB) Intel® Xeon® Processor E5-2623 v4 (2.60 GHz/4-core/10 MB) Intel® Xeon® Processor E5-2630 v4 (2.20 GHz/10-core/25 MB) Intel® Xeon® Processor E5-2637 v4 (3.50 GHz/4-core/15 MB) Intel® Xeon® Processor E5-2640 v4 (2.40 GHz/10-core/25 MB) Intel® Xeon® Processor E5-2650 v4 (2.20 GHz/12-core/30 MB) Intel® Xeon® Processor E5-2650L v4 (1.70 GHz/14-core/35 MB) Intel® Xeon® Processor E5-2667 v4 (3.20 GHz/8-core/25 MB) Intel® Xeon® Processor E5-2680 v4 (2.40 GHz/14-core/35 MB) Intel® Xeon® Processor E5-2690 v4 (2.60 GHz /14-core/35 MB) Intel® Xeon® Processor E5-2697 v4 (2.30 GHz/18-core/45 MB) Intel® Xeon® Processor E5-2697A v4 (2.60 GHz/16-core/40 MB) Intel® Xeon® Processor E5-2698 v4 (2.20 GHz/20-core/50 MB) Intel® Xeon® Processor E5-2699 v4 (2.20 GHz/22-core/55 MB)
Memory type	DDR4-2400 ECC RDIMM
Memory slots	24
Maximum memory	1.5 TB
Storage type	Hot plug 2.5-inch SAS HDD Hot plug 2.5-inch SATA HDD Hot plug 2.5-inch SAS SSD Hot plug 2.5-inch 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	Flexible integrated NIC plus 1 1000BASE-T for management
Redundant power supply	Optional, hot plug
Redundant cooling fan	Standard, hot plug
Power supplies	460 Watt, 800 Watt 100-240 VAC ± 10% 50 / 60 Hz ± 3 Hz
Systems management	EXPRESSSCOPE Engine 3
Interface	2 VGA, 1 to 2 serial, 4 USB 3.0 (plus 1 internal), 2 USB 2.0 (plus 1 internal), Flexible integrated NIC, 1 management LAN
Dimensions (W x D x H) and maximum weight	439.8 x 722.0 x 43.4 mm / 17.3 x 28.4 x 1.7 in 21.2 kg / 46.73 lbs.
Temperature and humidity conditions (non-condensing)	Operating: 5 to 40 °C / 41 to 104 °F or 5 to 45°C / 41 to 113 °F (Optional), 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 Standard / Enterprise Microsoft® Windows Server® 2012 Standard / Datacenter Microsoft® Windows Server® 2012 R2 Standard / Datacenter Red Hat® Enterprise Linux® 6 Red Hat® Enterprise Linux® 7 VMware® ESXi™ 5.5 VMware® ESXi™ 6

Note: For Linux support, visit the NEC website at http://www.nec.com/en/global/prod/express/linux/, or contact your sales representative

For further information please contact your local NEC representative or:

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