Empowered by Innovation

NEC

The scalable compact rack server

NEC Express5800/R120d-2M

POWERFUL AND ENERGY EFFICIENT SERVERS FOR THE MOST DEMANDING APPLICATIONS





ENERGY STAR

80 PLUS PLATINUM

intel inside Xeon

HIGH PERFORMANCE

SUPERIOR ENERGY EFFICIENCY

SIMPLIFIED MANAGEABILITY

Scalable and Green

The Express5800/R120d-2M combines outstanding performance, reliability, and energy savings with green technology. In addition, the platform features internal scalability and large memory capacity for future 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.

For Compute-intensive Environments

The Express5800/R120d-2M is an Intel® processor-based dual-socket 2U rack server designed for memory- and processor-intensive applications. The R120d-2M is perfect for virtualization solutions, database servers and consolidation of business-critical applications which all 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, 1000 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-2M
Form factor / height	2U 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 E5-2640 (2.50 GHz/6-core/15 MB) Intel® Xeon® Processor E5-2643 (3.30 GHz/4-core/10 MB) Intel® Xeon® Processor E5-2650 (2 GHz/8-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 and SATA SSD
Maximum internal drive bays	8 to 16 with optional drive cage
Maximum internal storage	16 TB
Removable media	1 bay for optical drive, 1 bay for internal tape drive
Expansion slots	3 PCIe x8 Gen 3, 2 PCIe x4 Gen 3, 1 PCIe x8 Gen 3 for a RAID controller, 1 PCIe x8 Gen 3 for a dedicated network controller *** The slot mix changes by installing optional riser cards**
Video (VRAM)	Integrated in the server management controller (32 MB)
Network	2 1000BASE-T plus 1 100BASE-TX for management
Maximum power consumption	960 VA / 950 Watt (at 100 VAC)
Redundant power supply	Optional, hot plug
Redundant cooling fan	Optional, hot plug
Power supplies	450 Watt, 800 Watt, 1000 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	448.0 x 735.0* x 87.2 mm / 17.6 x 28.9* x 3.4 in / 33 kg / 72.75 lbs. *** 770.0 mm / 30.3 in depth with 1000 Watt PSU**
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 Red Hat® Enterprise Linux® 5 Red Hat® Enterprise Linux® 6 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

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