

The flexible, compact rack server

# NEC Express5800/R120f-2E



## Key Features

- Support for the latest Intel® Xeon E5-2600 v3 product family
- Increased I/O throughput with DDR4-2133 memory and 12Gb/s SAS drives.
- Increased performance with the latest RAID controller supporting large cache memory and LSI CacheVault technology
- Agent-less management with improved EXPRESSCOPE Engine 3
- Support for high ambient temperature operation up to 40° C (104° F)

## Overview

The Express5800/R120f-2E, a flexible dual-socket 2U rack server, offers the right balance of performance, scalability, and manageability in a compact chassis. Supporting the new high-performance and energy efficient Intel Xeon E5-2600 v3 product

family, large storage and memory capability, and high-performance RAID controller supporting large cache memory and 12Gb/s SAS interface, the R120f-2E is ideal for virtualization solutions, database servers, and consolidation of business-critical application servers.

## Features

### Perfect Fit for Data Centers

The Express5800/R120f-2E is designed to meet the essential requirements of data centers. With up to two 12-core Xeon E5-2600 v3 processors, 16 DIMM slots for DDR4-2133 memory, 16 hot-plug drive bays, integrated remote management capability, and NEC's power management technologies, the R120f-2E delivers an optimal balance of performance and features for corporate and public data centers.

### Meet Growing Business Needs

The Express5800/R120f-2E offers enterprise-class flexibility, expandability, and reliability to meet your business needs. A choice of RAID controllers enables you to select the appropriate controller based on your performance and feature requirements. With four PCIe Gen3 and one PCIe Gen2 slots, two integrated gigabit NICs, and up to 32 TB of drive capacity, the R120f-2E offers flexible network connectivity and storage expandability. The redundant storage, fan, and power supply options support business continuity.

### OpEx Savings Through Efficiency

The Express5800/R120f-2E offers solutions to reduce operational expense. Combining ambient temperature operation up to 40° C (104° F), intelligent cooling technology, redundant power supplies with cold-standby mode, and 94 percent energy efficiency, the R120f-2E helps to minimize energy bills. The remote KVM feature powered by the EXPRESSCOPE Engine 3 minimizes administrator time and effort by allowing staff to operate servers with a web-based console. NEC ESM PRO, NEC's web-based management suite, provides simple administration by monitoring complete server status in a single window.

## HARDWARE SPECIFICATIONS

MODEL	NEC Express5800/R120f-2E
<b>Form factor / height</b>	2U Rack
<b>Number of processors</b>	1 to 2
<b>Processors</b>	Intel® Xeon® Processor E5-2603 v3 (1.60 GHz/6-core/15 MB) Intel® Xeon® Processor E5-2620 v3 (2.40 GHz/6-core/15 MB) Intel® Xeon® Processor E5-2630 v3 (2.40 GHz/8-core/20 MB) Intel® Xeon® Processor E5-2650 v3 (2.30 GHz/10-core/25 MB) Intel® Xeon® Processor E5-2660 v3 (2.60 GHz/10-core/25 MB) Intel® Xeon® Processor E5-2680 v3 (2.50 GHz/12-core/30 MB) Intel® Xeon® Processor E5-2690 v3 (2.60 GHz /12-core/30 MB)
<b>Memory type</b>	DDR4-2133 ECC RDIMM DDR4-2133 ECC LRDIMM
<b>Memory slots</b>	16
<b>Maximum memory</b>	512 GB
<b>Storage type</b>	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
<b>Maximum internal drive bays</b>	8 to 16 with optional drive cage
<b>Maximum internal storage</b>	32 TB
<b>Removable media</b>	1 bay for optical drive 1 bay for internal tape drive
<b>Expansion slots</b>	2 PCIe x16 Gen 3 2 PCIe x8 Gen 3 1 PCIe x4 Gen 2
<b>Video (VRAM)</b>	Integrated in the server management controller (32 MB)
<b>Network</b>	2 1000BASE-T plus 1 1000BASE-T for management
<b>Redundant power supply</b>	Optional, hot plug
<b>Redundant cooling fan</b>	Optional, hot plug
<b>Power supplies</b>	460 Watt, 800 Watt
<b>Systems management</b>	EXPRESSSCOPE Engine 3
<b>Interface</b>	2 VGA, 1 to 2 serial, 4 USB 3.0 (plus 1 internal), 2 USB 2.0, 2 LAN, 1 management LAN
<b>Dimensions (W x D x H) and maximum weight</b>	448.0 x 683.8 x 87.2 mm / 17.6 x 26.9 x 3.4 in 27 kg / 59.52 lbs.
<b>Temperature and humidity conditions (non-condensing)</b>	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%
<b>Operating systems and virtualization software</b>	Microsoft® Windows Server® 2008 (x86) Standard / Enterprise 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 VMware® ESXi™ 5 VMware® ESXi™ 6

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