

Server Portfolio
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Orchestrating a brighter world

NEC

Maximum power efficiency, reliability and performance for the smart enterprise

NEC Express5800 Servers Portfolio Guide



Express5800

The NEC Express5800 server family delivers proven performance and reliability

Standard Rack Servers

With their high reliability, scalability, manageability and serviceability, NEC's rack servers are designed to perform the most demanding applications for any kind of business.

MODEL	Express5800/R110i-1 	Express5800/R120h-1E 	Express5800/R120h-1M 
Positioning	Performance network and web infrastructure server	Entry business application and front-end application server	Scalable enterprise system for processor-intensive workloads
Form factor / height	1U Rack	1U Rack	1U Rack
Number of processors	1	1 to 2	1 to 2
Processor(s)	Intel® Xeon® Processor E3-1200 v6 Product Family Intel® Pentium® Processor G4560	Intel® Xeon® Processor Scalable Family	Intel® Xeon® Processor Scalable Family
Maximum memory	64 GB	1 TB	3 TB
Maximum internal drive bays	8 Hot plug 2.5-inch or 4 Hot plug 3.5-inch	8 to 10 Hot plug 2.5-inch or 4 Hot plug 3.5-inch	8 to 11 Hot plug 2.5-inch or 4 Hot plug 3.5-inch
Expansion slots	1 PCIe 3.0 x16, 1 PCIe 3.0 x4, 1 PCIe 3.0 x4 for a RAID controller	1 PCIe 3.0 x16, 1 PCIe 3.0 x8, 1 PCIe 3.0 x16 or 1 PCIe 3.0 x8 for a RAID controller, 1 dedicated slot for a flexible integrated NIC	3 PCIe 3.0 x16, 1 PCIe 3.0 x8 for a RAID controller, 1 PCIe 3.0 x8 for a flexible integrated NIC

MODEL	Express5800/R120h-2E 	Express5800/R120h-2M 
Positioning	Performance business application server and scalable network storage server	Scalable enterprise system with expandability for storage-intensive workloads
Form factor / height	2U Rack	2U Rack
Number of processors	1 to 2	1 to 2
Processor(s)	Intel® Xeon® Processor Scalable Family	Intel® Xeon® Processor Scalable Family
Maximum memory	1 TB	3 TB
Maximum internal drive bays	8 to 26 Hot plug 2.5-inch 8 Hot plug 3.5-inch	8 to 30 Hot plug 2.5-inch or 8 to 19 Hot plug 3.5-inch
Expansion slots	6 PCIe 3.0 x8, 1 PCIe 3.0 x8 for a RAID controller, 1 dedicated slot for a flexible integrated NIC	2 PCIe 3.0 x16, 6 PCIe 3.0 x8, 1 PCIe 3.0 x8 for a RAID controller, 1 PCIe 3.0 x8 for a flexible integrated NIC

Standard Tower Servers

With their reliability and availability at affordable prices, NEC's tower servers are designed to address any business environment, from work groups and small businesses to medium enterprises.

MODEL	Express5800/T110i-S 	Express5800/T110i 	Express5800/T120h 
Positioning	Entry branch office and remote office server, store / factory infrastructure	Entry branch office and remote office server	Branch office server for medium to large enterprise
Form factor / height	Slim Tower / 3U Rack	Mini Tower / 4U Rack	Tower / 5U Rack
Number of processors	1	1	1 to 2
Processor(s)	Intel® Xeon® Processor E3-1200 v6 Product Family Intel® Core™ i3-7300 Processor Intel® Pentium® Processor G4560	Intel® Xeon® Processor E3-1200 v6 Product Family Intel® Core™ i3-7300 Processor Intel® Pentium® Processor G4560 Intel® Celeron® Processor G3930	Intel® Xeon® Processor Scalable Family
Maximum memory	64 GB	64 GB	1.5 TB
Maximum internal drive bays	4 to 6 Hot plug 2.5-inch or 2 Non-hot plug 3.5-inch plus 2 hot plug 2.5-inch	8 Hot plug 2.5-inch or 4 Hot plug 3.5-inch or 4 Non-hot plug 3.5-inch	8 to 24 Hot plug 2.5-inch or 4 to 12 Hot plug 3.5-inch
Expansion slots	1 PCIe 3.0 x16, 1 PCIe 3.0 x4, 1 PCIe 3.0 x2, 1 PCIe 3.0 x1	1 PCIe 3.0 x16, 1 PCIe 3.0 x4, 1 PCIe 3.0 x2, 1 PCIe 3.0 x1	4 PCIe 3.0 x16, 2 PCIe 3.0 x8, 2 PCIe 2.0 x4, 1 PCIe 3.0 x8 for a RAID controller

Modular Server

Incorporating highly density mounting and extreme power efficiency, NEC's modular servers provide scale-out computing solution for data center.

MODEL	Express5800/D120h
	
Positioning	Scalable network and application service infrastructure system
Form factor / height	1U half width or 2U half width
Number of processors	1 to 2
Processor(s)	Intel® Xeon® Processor Scalable Family
Maximum memory	2 TB
Maximum internal drive bays	6 or 12 Hot plug 2.5-inch (per module)
Expansion slots	1 PCIe 3.0 x16, 1 PCIe 3.0 x8, 1 LAN Mezzanine / 1U half width, 2 PCIe 3.0 x16, 1 PCIe 3.0 x8, 1 LAN Mezzanine / 2U half width

Fault Tolerant Servers

With their dual modular redundancy design, NEC's fault tolerant servers deliver 99.999% system uptime and operational simplicity for the most important applications requiring 24/7 operations.

MODEL	Express5800/R320f	Express5800/R320e
		
Positioning	Performance business application server requiring continuous uptime	Performance business application server requiring continuous uptime
Form factor / height	4U Rack	4U Rack
Number of processors	1 to 2	1 to 2
Processor(s)	Intel® Xeon® Processor E5-2671 v4 Intel® Xeon® Processor E5-2630 v4	Intel® Xeon® Processor E5-2670 v3 Intel® Xeon® Processor E5-2630 v3
Maximum memory	512 GB (Logical)	512 GB (Logical)
Maximum internal drive bays	8 Hot plug 2.5-inch	8 Hot plug 2.5-inch
Expansion slots	2 PCIe 3.0 x8, 2 PCIe 3.0 x4 / R320f-M4, 2 PCIe 3.0 x4 / R320f-E4	2 PCIe 3.0 x8, 2 PCIe 3.0 x4 / R320e-M4, 2 PCIe 3.0 x4 / R320e-E4

Scalable Enterprise Servers

Combining record-breaking performance with exceptional configuration flexibility, capacity, reliability and availability, NEC's enterprise servers deliver the best solution for diverse mission-critical business.

MODEL	Express5800/A1040d	Express5800/A2000 Series
		
Positioning	Scalable enterprise server for compute-intensive and memory-hungry applications in physical and virtualized environment.	Scalable enterprise server for mission-critical tasks, heavy transactional workloads, and large-scale virtual infrastructure environments
Form factor / height	4U Rack	4U Rack
Number of processors	1 to 4	2 to 4 (model dependent)
Processor(s)	Intel® Xeon® Processor E7-8800 v4 Product Family Intel® Xeon® Processor E7-4800 v4 Product Family	Intel® Xeon® Processor E7-8800 v4 Product Family Intel® Xeon® Processor E7-4800 v4 Product Family
Maximum memory	4 TB	4 TB (model dependent)
Maximum internal drive bays	8 Hot plug 2.5-inch	8 Hot plug 2.5-inch
Expansion slots	14 PCIe 3.0 x8, 2 PCIe 3.0 x4	14 PCIe 3.0 x8, 2 PCIe 3.0 x4 (model dependent)

NEC Deeply Involved In Eco Design

NEC's Express5800 Server Family delivers innovative features that address today's complex IT infrastructure computing needs and Eco constraints. NEC has particularly worked on the power efficiency of its servers to deliver real solutions to reduce procurement and operations costs.

Depending upon the models, NEC servers benefit from the following features:

- An NEC's optimized cooling technology and intelligent fan control to support operation in up to 45 or 48 degree Celsius (113 or 118 degree Fahrenheit) environment to minimize cooling costs

- 80 PLUS® Platinum or Titanium certified power supplies to maximize power efficiency
- Shared power supply design and redundant power supplies with cold-standby feature to sustain a maximum power conversion efficiency

NEC Hardware Management Software

The ESMPRO software suite facilitates daily IT service operations. ESMPRO provides the automatic deployment of BIOS and firmware updates on the servers and centralized management capabilities of servers, as well as advanced power management capability to monitor and control power consumption of servers.



The EXPRESSBUILDER is an automated software integration tool to simplify the process of installing and configuring NEC Express5800 servers. It provides a flexible, guided installation process for system administrators to install software operating systems. The software also includes utilities that ensure consistent and effective server setup.

Some models are not available in all countries. Please contact your local NEC representative for availability in your country. For further information please contact your local NEC representative or:

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