

Server Portfolio
April 2016

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/R110h-1 	Express5800/R120g-1E NEW  * Available in June, 2016	Express5800/R120g-1M NEW 
Positioning	Performance network and web infrastructure server	Entry business application and front-end application server	Entry scalable enterprise system for memory-intensive workloads
Form factor / height	1U Rack	1U Rack	1U Rack
Number of processors	1	1 to 2	1 to 2
Processor(s)	Intel® Pentium® Processor G4000 Series Intel® Xeon® Processor E3-1200 v5 Product Family	Intel® Xeon® Processor E5-2600 v4 Product Family	Intel® Xeon® Processor E5-2600 v4 Product Family
Maximum memory	64 GB	1 TB	1.5 TB
Maximum internal drive bays	8 Hot plug 2.5-inch or 4 Hot plug 3.5-inch	8 Hot plug 2.5-inch	8 Hot plug 2.5-inch
Expansion slots	1 PCIe 3.0 x16 1 PCIe 3.0 x4 1 PCIe 3.0 x4 for a RAID controller	2 PCIe 3.0 x8, 1 PCIe 3.0 x8 for a RAID controller, 1 PCIe 3.0 x8 for a flexible integrated NIC	2 PCIe 3.0 x8, 1 PCIe 3.0 x8 for a RAID controller, 1 PCIe 3.0 x8 for a flexible integrated NIC

MODEL	Express5800/R120g-2E Standard NEW 	Express5800/R120g-2E Storage Rich NEW 	Express5800/R120g-2M NEW 
Positioning	Performance business application server	Scalable network attached storage for small to medium sized business	Scalable enterprise system for memory- and processor-intensive workloads
Form factor / height	2U Rack	2U Rack	2U Rack
Number of processors	1 to 2	1 to 2	1 to 2
Processor(s)	Intel® Xeon® Processor E5-2600 v4 Product Family	Intel® Xeon® Processor E5-2600 v4 Product Family	Intel® Xeon® Processor E5-2600 v4 Product Family
Maximum memory	1 TB * 512 GB until 1 TB is available later in 2016	1 TB * 512 GB until 1 TB is available later in 2016	1.5 TB
Maximum internal drive bays	8 to 16 Hot plug 2.5-inch	16 to 26 Hot plug 2.5-inch or 12 Hot plug 3.5-inch plus 2 Hot plug 2.5-inch	8 to 16 Hot plug 2.5-inch
Expansion slots	2 PCIe 3.0 x16, 2 PCIe 3.0 x8, 1 PCIe 2.0 x4	2 PCIe 3.0 x16, 2 PCIe 3.0 x8, 1 PCIe 2.0 x4	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/T110h-S 	Express5800/T110h 	Express5800/T120g NEW 
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	Mini Tower / 5U Rack
Number of processors	1	1	1 to 2
Processor(s)	Intel® Pentium® Processor G4000 Series Intel® Core™ i3-6300 Desktop Processor Series Intel® Xeon® Processor E3-1200 v5 Product Family	Intel® Celeron® Processor G3000 Series Intel® Pentium® Processor G4000 Series Intel® Core™ i3-6300 Desktop Processor Series Intel® Xeon® Processor E3-1200 v5 Product Family	Intel® Xeon® Processor E5-2600 v4 Product Family
Maximum memory	64 GB	64 GB	1 TB * 512 GB until 1 TB is available later in 2016
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 8 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	2 PCIe 3.0 x16, 2 PCIe 3.0 x8, 1 PCIe 2.0 x4

Modular Server



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

MODEL	Express5800/E120g-M NEW 
Positioning	Scalable network and application service infrastructure system
Form factor / height	1U half width
Number of processors	1 to 2
Processor(s)	Intel® Xeon® Processor E5-2600 v4 Product Family
Maximum memory	1 TB
Maximum internal drive bays	4 Hot plug 2.5-inch
Expansion slots	1 PCIe 3.0 x16, 1 PCIe 3.0 x8 for a dedicated PCI card



Blade Systems

Based on NEC's high density design and superior system management technologies, NEC's Blade server systems provide a versatile infrastructure to quickly deliver services to your business.

Server Blades



MODEL	Express5800/B120f	Express5800/B120g-h NEW
		
Positioning	Performance business application, database, collaboration server	High performance datacenter-class database, virtualization, or application server
Form factor / height	One bay height	One bay height
Number of processors	1 to 2	1 to 2
Processor(s)	Intel® Xeon® Processor E5-2600 v3 Product Family	Intel® Xeon® Processor E5-2600 v4 Product Family
Maximum memory	384 GB	1152 GB
Maximum internal drive bays	2 Hot plug 2.5-inch	2 Non-hot plug 2.5-inch for SSD
Expansion slots	1 Type I Mezzanine, 1 Type II Mezzanine, 1 PCIe for a flexible integrated NIC	1 Type I Mezzanine, 1 Type II Mezzanine, 1 PCIe for a flexible integrated NIC

Blade Enclosures

MODEL	Blade Enclosure M	Blade Enclosure H v2
		
Positioning	Server infrastructure for medium enterprise	Server infrastructure for large enterprise
Form factor / height	6U Rack	10U Rack
Blade bays	8	16
Switch module bays	6	8
Power supply bays	4	6
Cooling	Up to 5 active cooling fans	Up to 10 active cooling fans
Switch modules	1Gb / 10Gb L3 Switch, 1Gb Pass-Through Card, 8Gb FC Switch	1Gb / 10Gb L3 Switch, 1Gb Pass-Through Card, 8Gb FC Switch



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/R320e	Express5800/R320d, R320c
		
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 E5-2600 v3 Product Family	Intel® Xeon® Processor E5-2600 v2 Product Family Intel® Xeon® Processor E5-2600 Product Family
Maximum memory	512 GB (Logical)	256 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 / R320e-M4, 2 PCIe 3.0 x4 / R320e-E4	2 PCIe 2.0 x8, 2 PCIe 2.0 x4 / R320d-M4, 2 PCIe 2.0 x4 / R320d-E4, 2 PCIe 2.0 x8, 2 PCIe 2.0 x4 / R320c-M4, 2 PCIe 2.0 x4 / R320c-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/A1040c	Express5800/A2000
		
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 v3 Product Family Intel® Xeon® Processor E7-4800 v3 Product Family	Intel® Xeon® Processor E7-8800 v3 Product Family Intel® Xeon® Processor E7-4800 v3 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

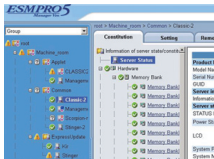
NEC Hardware Management Software

The EXPRESSSCOPE Engine is a specially designed baseboard management controller (BMC) chipset to provide extensive remote management capabilities from monitoring the health of remote server components including CPUs, memory, and cooling fans, to remotely controlling and powering on/off the servers regardless of the status of the server's power or operating system.



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.

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.



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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