NEC Servers

BETTER SERVERS FOR THE ENTERPRISE

Powerful. Intelligent.

Powerful. Intelligent.

- » Performance
- » Scalability
- » Availability
- » Quality

NEC Express5800 servers are designed for data center class performance with high system level resilience especially suited for business critical environments. Available in a wide variety of models, NEC servers are based on industry-leading Intel® CPU technology. NEC server family capabilities include non-stop fault tolerant processing and extreme scaling up to 16 sockets and 96 cores with a single system image. With our long history of technology innovation, you can trust NEC to consistently deliver high quality and value.

SigmaBlade Servers

Express5800/B100 series

- Designed for virtualization
- High performance
- Fully modular solution

SIGMABLADE Chassis

- Flexible configurations for up to 8 or 16 blades
- Redundant components for high availability
- Integrated switch modules

Rack Servers

Express5800/R100 series

- Fast performance with the latest Intel technology
- High quality two-socket servers
- Energy efficient

Express5800/R300 series

- Non-stop hardware failure protection
- Hot-swappable server modules
- Lowest total cost of ownership

Enterprise Servers

Express5800/A1160 series

- Intel Xeon® 4- & 6-core processors
- Record-breaking performance
- Simple to maintain
- Highly scalable 1-16 sockets

Express5800/1320Xf series

- Intel Itanium® processors
- Mainframe-class performance
- Dynamic partitioning

Empowered by Innovation NEC

EXPRESS5800 SERVERS

NEC Express5800 Servers

The NEC's Express5800 series offers a full range of highly reliable enterprise-class servers. All NEC Express5800 servers are designed for longevity, high availability, and high performance in a wide choice of configurations and formats. NEC servers comprise a broad Intel Xeon-based product line that includes fault tolerant two-socket models and enterprise class 4 to 16 socket servers. With extremely high quality ratings, NEC servers outlast other servers delivering the best overall total cost of ownership and value.

Exceptional Performance and Scalability

NEC servers have been uniquely designed to run data center solutions. With the availability of popular operating systems and hypervisors for NEC servers, IT users will be able to run clustered and standard applications, databases, and many other applications at high performance. Express5800 servers also support popular hypervisor solutions providing you with a dynamic, scalable, manageable, and energy efficient data center.

High Quality and Value

NEC servers are designed, engineered and manufactured with great attention to engineering and quality. NEC ensures Express5800 servers will run at their maximum designed performance over the life of their service. With pricing designed to compete deployment in data centers, NEC delivers high-quality servers and excellent total cost of ownership.

Greener

With diverse energy reduction hardware technology embedded in each system, NEC hardware solutions are designed to reduce server power overhead. These improvements include lower power processors and memory, better power supplies, and cost-effective formats. NEC is moving quickly to provide greener products and solutions for the next-generation data center.

SigmaBlade Servers

NEC Express5800/B120a

General purpose two-socket server, ideal for any data center solution

NEC Express5800/B120a-d

General purpose two-socket server designed for virtualization solutions with SAN storage

NEC Express5800/AD106a

Storage blade to complement server blades, adding more storage for databases and storage-heavy applications

NEC Express5800/B140a-T

High-end general purpose blade for heavy processing and virtualization solutions.

Number of processors	1-2	1-2	N/A	1-4
Maximum number of cores	8	8	N/A	16
Processors supported	Dual- and Quad-core Intel Xeon processors: up to 2.93GHz	Dual- and Quad-core Intel Xeon processors: up to 2.93GHz	N/A	Quad-core Intel Xeon processors: up to 2.93GHz
Maximum memory	64GB	96GB	N/A	128GB
Network ports	2	2	2	4
Maximum internal storage	600GB SAS, 1TB SATA	N/A	1.8TB SAS, 3TB SATA	1.2TB SAS, 2TB SATA
I/O expansion	2 PCIe mezzanine slots	2 PCIe mezzanine slots	2 PCIe mezzanine slots	4 PCIe mezzanine slots
Form factor	SigmaBlade M or H Chassis	SigmaBlade M or H Chassis	SigmaBlade M or H Chassis	SigmaBlade H Chassis
Warranty	3 years	3 years	3 years	3 years

NEC Related Offerings

SIGMABLADE Chassis

The NEC SIGMABLADE system chassis is designed to enable high-density system integration and cost optimization in your increasingly complex and expanding enterprise systems. With both 8 or 16 blade chassis system choices, the NEC SIGMABLADE system can be designed to exactly fit your needs.

Modules

The SIGMABLADE switches work with the NEC Express5800 blade servers, and the NEC SIGMABLADE enclosure models. Supports up to 10Gb switch and Fibre Channel options.

Storage

For internal enclosure storage, choose the Express5800 AD106a storage blade. All SIGMABLADE solutions are also fully expandable to external storage options with NEC D-Storage series.

Rack Servers

NEC Express5800/R120a-1

General purpose two-socket server, ideal for any data center solution

NEC Express5800/R120a-2

General purpose two-socket server designed for any data center solution requiring more storage and expansion

NEC Express5800/R320a & NEC Express5800/320Fd

General purpose two-socket fully redundant fault tolerant server, for any solution requiring non-stop operations even in the event of hardware failure

Number of processors	1-2	1-2	1-2
Maximum number of cores	8	8	8
Processors supported	Dual- & Quad-core Intel Xeon processors: up to 2.93GHz	Dual- & Quad-core Intel Xeon processors: up to 2.93GHz	Quad-core Intel Xeon processors: up to 3.0GHz
Maximum memory	96GB	96GB	96GB R320a (24GB 320Fd)
Network ports	2	2	2
Maximum internal storage	1.35TB SAS, 3TB SATA	2.7TB SAS, 6TB SATA	2.7TB SAS R320a (900GB 320Fd)
I/O expansion	2 PCIe expansion slots	5 PCIe expansion slots	4 PCIe expansion slots R320a (3 PCI Expansion Slots 320Fd)
Form factor	1U	2U	4U
Warranty	3 years	3 years	3 years

Enterprise Servers

NEC Express5800/A1160

High performance datacenter-class database, virtualization, or application server that unleashes exceptional capabilities within a very compact, modular, power efficient, and scalable design.

NEC Express5800/1320Xf

On-Demand, Always-on dynamically scalable server for environments requiring mainframe-class performance, availability, and resiliency.

Number of processors	4 per module, 16 maximum	1-32
Maximum number of cores	24 per module, 96 maximum	64
Processors supported	4- & 6-core Intel Xeon (Dunnington) processors: up to 2.66GHz	Dual-core Intel Itanium processors: up to 1.6GHz
Maximum memory	256GB per module, 1TB maximum	1TB
Network ports	2 per module, 8 maximum	(use I/O expansion)
Maximum internal storage	1.8TB SAS storage per module, 7.2TB maximum	9.6TB SCSI storage maximumand
I/O expansion	6 hot-swappable PCIe slots per module, 24 hot-swappable PCIe slots total	64 hot-swappable PCIx slots
Form factor	4U per module, 16U maximum	37U standalone rack
Warranty	3 years	1 year

NEC SigmaSystemCenter

NEC's SigmaSystemCenter incorporates system management of server, storage and network switches to create a dynamic and robust IT infrastructure. Using SigmaSystemCenter helps businesses maintain high service levels and enables easy deployment of multiple systems as the technology automates system restoration for recovery; dynamically optimizes resource allocation; and unifies the management of physical and logical resources. In cooperation with various management products, SigmaSystemCenter also sustains physical and virtual environment support.

NEC Hardware Management Software

The ESMPRO software suite facilitates daily IT service operations. ESMPRO ensures the automatic deployment of disk images, OS, applications, patches and BIOS updates on the servers and the network PCs, as well as advanced client administration and efficient software distribution.

EXPRESSBUILDER is an automated software integration tool to simplify the process of installing and configuring NEC 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.

EXPRESSSCOPE is a software integration tool that communicates with servers chipsets to perform Baseboard Management Controller functions, which enable extensive remote management functionality. EXPRESSSCOPE can be used to monitor the health of remote server components, such as CPUs, memory, and cooling fans, as well as to to remotely operate the servers, regardless of power and operating system status.

Fault Tolerant Servers | Rack & Blade Servers | Enterprise Servers | Supercomputers

NEC Express 5800

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