

NEC EXPRESS5800/320LC FAULT TOLERANT SERVER

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- Up to 99.999% continuous uptime
- Rapid processing and improved application availability
- Streamlined installation and management
- High-performance solution for better ROI



Empowered by Innovation

NEC

Increased CPU performance in an affordable fault tolerant solution

Next in NEC's family of Intel® Xeon™ processor-based fault tolerant servers, the Express5800/320Lc delivers higher performance and added protection against downtime at the application level. Now enterprises running mission-critical Microsoft® Windows® applications can benefit from greater processing speeds without breaking the budget, and still achieve up to 99.999% continuous availability. NEC's Fault Tolerant servers deliver maximum uptime and ample storage capacity to meet the most demanding enterprise server requirements.

ENHANCED PERFORMANCE FOR FASTER PROCESSING

NEC has expanded its line of fault-tolerant (FT) servers to include a high-performance, mid-range option for demanding, mission-critical environments. The Express5800/320Lc provides faster processing speeds and higher availability with dual 2.8GHz CPUs and NEC ExpressCluster Self Recovery Edition (SRE). Designed with Dual Modular Redundancy (DMR), the NEC Express5800/320Lc FT servers feature redundant CPU modules with Hyper-Threading enabled Intel Xeon processors. This configuration means data instructions are handled in parallel, instead of individually, to accommodate heavier workloads and produce faster response times for better overall performance.

NEXT-GENERATION FT TECHNOLOGY DELIVERS HIGH AVAILABILITY

The Express5800/320Lc achieves up to 99.999% continuous uptime. Innovative lockstep technology employs duplicate fault-tolerant hardware components, so that the active spare components continue normal operation, even if a hardware component fails. All components are hot-swappable for rapid replacement, without interrupting operations. Because there is no single point of failure, downtime is nearly eliminated and data remains secure.

IMPROVED UPTIME FOR APPLICATIONS

Now included with all NEC FT server models, ExpressCluster SRE monitors the performance of most application processes and restarts applications if failures occur. It can also reboot the

server if applications fail to restart after a customer-set number of retries. SRE even monitors Windows OS resources and drivers and reboots the server should one of these components fail. With ExpressCluster SRE as a standard feature of the 320Lc, customers benefit from automated application restart and added OS protection—features that result in greater uptime and peace of mind that mission-critical applications will be available. Given that software failures account for almost 20 percent of all server failures, this added layer of protection at the application level significantly reduces downtime, creating a more reliable, highly available software environment.

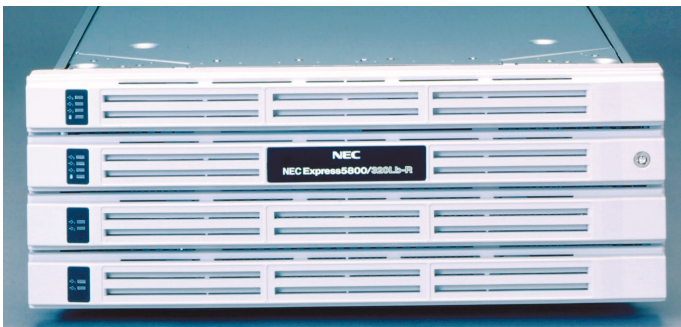


NEC Express5800/320Lc-R 4U rack-mount version



INNOVATIVE MANAGEMENT SOFTWARE ADDS VALUE

NEC's FT servers include innovative software that increases the platform's availability. Hardened drivers detect and prevent writing beyond physical memory allocation. These drivers provide diagnostic capabilities, as well as support for duplex and hot-swap operations. They are also certified for compliance and digitally signed for authenticity using Microsoft procedures and tools. NEC's Express5800/320Lc includes NEC ESM^{PRO} Server Management Suite, which allows remote monitoring, analysis and management of all connected NEC servers in a lights-out environment. Also included is NEC EXPRESSBUILDER installation software for easy setup and system management.



COMPACT DESIGN SAVES SPACE AND SIMPLIFIES MANAGEMENT

With an all-hardware, single-server server solution with automatic software restart and full fault tolerance, the Express5800/320Lc maintains affordability and a compact footprint. With a total chassis height of 7 inches and standard 19-in rack width, the rack-mountable 4U platform easily accommodates space constraints without compromising performance. An all-in-one solution complete with management and installation software, the Express5800/320Lc reduces support and maintenance costs typically associated with multiple-server solutions and cluster configurations.

AMPLE STORAGE CAPACITY WITH NEC EXTERNAL SUPPORT

The Express5800/320Lc supports flexible storage options from leading storage providers, as well as NEC's own RAID fibre channel disk arrays. The NEC S2800, for example, delivers high-end class performance and functionality at an affordable price with 8 host ports (standard) and the ability to scale up to 27TB of storage capacity and 16GB cache (8GBytes per controller). With RAID6 double-parity technology, the S2800 achieves total redundancy, even when two disk drives fail, providing greater reliability and performance.

Key Features

- Dual Modular Redundancy (DMR) design featuring redundant, hot-swappable CPU and I/O modules for full hardware redundancy
- Automatic software restart for added protection at the application level
- Dual logical 2.8GHz Intel Xeon processors for increased performance
- Up to 99.999% application uptime
- External support of up to 27TB with NEC S2800 fibre channel disk array.
- Compact, 4U footprint saves space
- FT Management Software v3.0 with Rapid Disk Replication technology
- EXPRESSBUILDER simplifies setup and configuration
- ESM^{PRO} enables remote management and analysis

CPU Module

CPU

- 2 Intel® Xeon 2.8GHz processors (Hyper-threading 2.8 enabled)
- 512KB L2 cache
- 400 MHz front side bus

Chipset

- ServerWorks GC-LE + CSB5

Memory

- Maximum — 6GB logical
- DIMM
- Low profile DDR200 SDRAM (Registered)
- 256/512MB/1GB DIMM
- ECC — yes

LED

- Front 2

Fan

- 3 x fixed

Power Supply

- 300W fixed

I/O Module

LAN

- 1 x 10/100/BASE-TX,
- 1 x 10/100/1000/BASE-T

I/O Slots

- Total 3 slots [2] (VGA card uses 1 slot)
- 64bit/33MHz PCI x 2, 32bit/33MHz x 1

Device Bays

- 3.5" — 3 (1" height)
- 5.25" — 1 CD-ROM

HDD

- Maximum
- SCSI I/F: 3 x 146GB
- 36GB/73GB/146GB 10Krpm
- 18GB 15Krpm
- 73GB 15Krpm drives

SCSI I/F

- Hot Plug — yes
- Non Raid — 1 channel

Graphics (VRAM)

- 640 x 480 – 1280 x 1024 (2MB)

LED

- Front 4
- Rear 5

Fan

- 5 x fixed

Power Supply

- 250W fixed

Common Module

(Back plane and included in I/O Module)

FDD

- 1 x External USB 3.5" FDD

External I/O Interconnect

- Rear
- 1 x CRT, 2 x USB (KB/M, FDD)
- 2 x Serial (DB9)

Switch

- Power, Dump

Front Key

- Yes

LED

- Front — Power, System Status, HDD
- Rear — PCI Slot

Chassis Type (W x D x H)

- Pedestal 222 x 795 x 560 mm
- Rack: 19" 4U Rack (480 x 790 x 177mm)

Power Supply

- 120/240 Volts Auto sensing (In Each Module)

Warranty

- 1 year limited hardware and software warranty

Regulatory & Safety

- Safety — UL950, CSA22.2, CE EN60950, EN55022A, EN50082-1
- Emmissions — FCC Class

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