

Fault Tolerant Server

NEC Express5800/R320a/R320b

DELIVERING THE HIGHEST LEVELS OF AVAILABILITY, AFFORDABLY



HIGHEST AVAILABILITY

OPERATIONAL SIMPLICITY

EASY MAINTENANCE

Highest Levels of Availability

NEC Fault Tolerant (FT) servers provide an innovative solution to address planned and unplanned downtime for your most important applications. The Express5800/R320a/R320b servers deliver continuous availability for 99.999% system uptime (5 minutes of downtime per year) through its fully redundant modular hardware featuring 4 or 6-Core Intel® Xeon® processors, as fifth generation FT server technology for Intel.

Perfect For Virtualization

The NEC FT servers can deliver continuous availability for VMware vSphere by using internal storage and standard management software. Advantages of virtualization with the NEC FT server include proven scalable vCPU performance, integrated high availability storage for CapEX savings, and simplified virtualization deployment for CapEX and OpEX savings.

Total Cost of Ownership Savings

The FT server can deliver a lower total cost of ownership compared to traditional high availability and traditional server solutions. The FT server only requires one copy of the operating system and application software license and no professional services to setup or configure the server.

Highest Availability

- Lockstep operation maintains memory / CPU state and system integrity protection.
- The optional EXPRESSCLUSTER X SingleServerSafe, enhances software high availability.

Operational Simplicity

- GeminiEngine™, an NEC-engineered LSI chipset for fault tolerance control delivers simplified hardware high availability, simple operation and easy repair without interrupting operation.
- Compatibility with existing operating systems and applications significantly reduces the complexity associated with other forms of high availability solutions.

Easy Maintenance

- The Dual Modular Redundant (DMR) design allows easy replacement of major subsystems without shutting the system down, by supporting hot plug of modules.
- Integrated EXPRESSSCOPE Engine 2 technology provides extensive remote management capabilities regardless of the status of the server's power or operating system.

HARDWARE SPECIFICATION

MODEL	Express5800/R320b-M4	Express5800/R320a-E4
Form factor / height	4U rack	
Number of logical processors	1 to 2	
Processors	Intel® Xeon® Processor X5670 (2.93 GHz / 6-core / 12 MB)	Intel® Xeon® Processor E5504 (2 GHz / 4-core / 4 MB)
Chipset	Intel® 5500 Chipset with GeminiEngine™	
Memory type	DDR3-1333 ECC Registered DIMM with ECC, x4 SDDC	
Memory Clock	1333 MHz	800 MHz
Logical Memory slots	12	
Maximum logical memory	96 GB	
Storage type	Hot plug 2.5-inch SAS	
Logical hard drive bays	8	
Maximum logical internal storage	4.8 TB	
Optical drive	DVD-RAM drive	
Logical expansion slots	2 Low-profile PCIe x4 Gen 1 2 Full-height PCIe x4 Gen 2	2 Low-profile PCIe x4 Gen 1
Video (VRAM)	Integrated in the server management controller (32 MB)	
Logical network interface	2 100BASE-T 1 100BASE-TX for management	
Maximum power consumption	1400 VA / 1390 Watt	
Power supply	850 Watt (1 per module)	
Systems management	EXPRESSSCOPE Engine 2	
External Interface	1 VGA, 4 USB 2.0, 4 LAN (2 per module), 2 management LAN (1 per module)	
Dimensions (W x D x H) and maximum weight	483 x 736 x 178 mm / 19.0 x 29.0 x 7.0 in / 52 Kg / 114.64 lbs.	
Temperature and humidity conditions (non-condensing)	Operating: 10 to 35 °C / 50 to 95 °F, 20 to 80% Non-operating: -10 to 55°C / 14 to 131°F, 20 to 80%	
Operating systems	Red Hat® Enterprise Linux® 5 *1 Red Hat® Enterprise Linux® 6 *1 VMware® ESX™; i 5	

*1 Xen/KVM (Kernel-based Virtual Machine) is not supported.

©Copyright 2013 NEC Corporation. The information and specifications contained in this publication are subject to modification without prior notice. Microsoft and Windows Server are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Intel, Intel Logo, Xeon, and Xeon Inside are trademarks of Intel Corporation in the U.S. and/or other countries. Linux is a trademark of Linus Torvalds. Red Hat is a registered trademark of Red Hat, Inc. in the U.S. All other names of products and brands cited are the property of their respective owners. NEC is not responsible for photographic or typing errors.



Asia (APAC)
NEC Corporation

7-1, Shiba 5-chome Minato-ku
Tokyo 108-8001 Japan

www.nec.com/express

Europe (EMEA)
NEC France
IT Platform Solutions Division

29, rue des Hautes Pâtures
92737 Nanterre Cedex France
+33 1 46 49 46 49

www.nec-itplatform.com

North America
NEC Corporation of America
Information Technology Group

2880 Scott Blvd.
Santa Clara, CA 95050 U.S.
+1 866 632 3226

www.necam.com/servers