



# EXPRESS5800/A1080a SERIES

## 5<sup>TH</sup> GENERATION ENTERPRISE SERVER

**Exceptional flexibility, capacity, record-breaking performance and configurability — exploiting the inherent functionality of the Intel® Xeon® processor 7500 series.**

### Scalable and Flexible

NEC's Express5800/A1080a series server can accommodate up to 2 TB of memory and 128 threads with modular in-box partitioning in an innovative single 7U chassis. Whether for memory hungry virtualization solutions, compute intensive databases, or high availability for mission-critical business, IT managers have the flexibility to scale and configure the new Express5800/A1080a series server for their unique datacenter requirements.

### Exceptional Performance

Building upon the record-breaking performance of the NEC enterprise scalable servers, the A1080a series server utilizes Intel's QuickPath Interconnect (QPI) technology, delivering 2X database performance improvement.

### Simple Standardized Management

Combining Intel's new architecture with NEC's advanced RAS features, the Express5800/A1080a series server supports standard operating systems for out-of-box implementation. It offers exceptional availability and serviceability with built-in service processors that work in conjunction with NEC's BIOS and Intel's Machine Check Architecture (MCA) to simplify management of all server resources.

### Addresses Blade and Server Sprawl

The Express5800/A1080a series server is especially suited for environments struggling with managing various server architectures or space constraints due to blade or server sprawl. NEC's innovative server-in-a-box approach offers IT managers the option of having a unified management environment on a common architecture regardless of workload.

### Cost Savings

Designed to be less costly than two discreet servers, this latest generation of NEC enterprise servers can save businesses rack space and power with the advanced partitioning and power cooling technology.

<b>PERFORMANCE</b>	• Leverages the functionality of Intel® Xeon® processor 7500 series
	• Higher IO throughput with newest PCI Express 2.0 technology
	• Performance optimized for virtualized and database workload
<b>RELIABILITY</b>	• Intel® Itanium® processor inspired RAS features for advanced error isolation
	• Integrated memory RAS features for higher data integrity
	• Proactive service alerts by service processor(s) based error logging
<b>EFFICIENCY</b>	• Space saving modular in-box partitioning in a single 7U chassis
	• NEC's green power cooling technology minimizes power consumption
	• Energy efficient 80 PLUS® Gold certified power supply

## Specifications

DESCRIPTION		SPECIFICATIONS		
Model		A1080a-S	A1080a-D	A1080a-E
		Single four-socket server	Dual four-socket servers	Eight-socket server
CPU	CPU Socket	1 to 4 sockets	1 to 4 sockets	8 sockets
	Core / Thread (Max)	32 core / 64 thread	32 core / 64 thread	64 core / 128 thread
	Processor(s)	Intel® Xeon® processors 7500 series		
	Type	Intel® Xeon® processor X7560 (8 cores, 2.26GHz, 24MB L3 Cache) Intel® Xeon® processor X7550 (8 cores, 2.00GHz, 18MB L3 Cache) Intel® Xeon® processor E7540 (6 cores, 2.00GHz, 18MB L3 Cache)		
Memory	DIMM Type	DDR3-1066 Registered ECC DIMM		
	Slots	16 to 64 slots	16 to 64 slots	128 slots
	Min/Max	4 GB / 1 TB*	4 GB / 1 TB*	8 GB / 2 TB*
I/O	PCI Type	PCI Express 2.0 x8 and x16		
	Slots	6 (x8) slots, 1 (x16) slot	6 (x8) slots, 1 (x16) slot	12 (x8) slots, 2 (x16) slot
Storage	Internal HDD Type	SAS SFF 2.5" HDD or SSD** (Hot-swap)		
	Controller	2-channel 6 SAS RAID Controller		
	RAID Options	RAID levels 0 / 1 / 10 / 50		
	Drive Options	146 GB 15,000 RPM / 300 GB 10,000 RPM / SSD**		
	Slots	6 hot plug slots	6 hot plug slots	12 hot plug slots
Peripheral Devices		1 DVD-ROM or DVD-R/W drive		
External Interfaces		2 1000Base-T ports 1 VGA 1 RS232C Serial port 2 front / 2 rear USB	2 1000Base-T ports 1 VGA 1 RS232C Serial port 2 front USB (shared) 2 rear USB	2 1000Base-T ports 1 VGA 1 RS232C Serial port 2 front / 2 rear USB
Service Processor(s)		1 100Base-T port for management Performs Hardware Configuration and Server Control Performs Hardware Error Management and Correction Performs MCA handling*** Communicates with NEC Server Monitoring Software (ESMPro)		
Power		2158VA / 2115W 2-4 80 PLUS® Power Supply 2N redundancy	3896VA / 3818W 2-4 80 PLUS® Power Supply 2N redundancy	3869VA / 3792W 2-4 80 PLUS® Power Supply 2N redundancy
Physical Dimensions		7U Rack mount Width: 19.2 in. (488 mm) x Depth: 28.1 in. (714 mm) x Height: 12.0 in. (307 mm)		
Weight (Maximum)		132 lb. (60 kg)	176 lb. (80 kg)	176 lb. (80 kg)
Operating Systems		Windows Server 2008 x64 SP2 Enterprise and Datacenter Editions Windows Server 2008 x64 R2 Enterprise and Datacenter Editions Red Hat Enterprise Linux 5.5 SUSE Linux Enterprise Server 10 SP3, 11 VMware vSphere ESX and ESXi 4.0 update1****, 4.1		
Warranty		3-Years Limited Warranty (upgraded service available)		



\* Maximum memory capacity supported in 2H2010  
 \*\* SSD available 2H2010  
 \*\*\* Require Machine Check Architecture supported OS for full support  
 \*\*\*\* Support up to 32 cores

# Express5800

### NEC CORPORATION OF AMERICA

2880 Scott Blvd.  
 Santa Clara, CA 95050

[www.necam.com/Servers](http://www.necam.com/Servers)  
 1 866-632-3226

© 2010 NEC Corporation of America. All rights reserved. Specifications are subject to change without notice. NEC is a registered trademark and Empowered by Innovation is a trademark of NEC Corporation. Intel, the Intel logo, Xeon and Xeon Inside are trademarks of Intel Corporation in the U.S. and other countries. All other trademarks are the property of their respective owners. (DS151-1\_0310)

Empowered by Innovation

