

## Scalable HA Server Series

# EXPRESS5800/A1080A

A XEON BASED SERVER AT MAINFRAME SECURITY AND PERFORMANCE LEVEL FOR ENTERPRISE APPLICATIONS



### RECORD-BREAKING PERFORMANCE

### SCALABILITY

### RELIABILITY

### FLEXIBILITY

### CAPACITY

### For enterprise-level computing solutions

A1080a series servers deliver exceptional reliability and scalability to meet enterprise requirements of the most demanding mission-critical applications and cloud services platforms:

- Large-scale server consolidation and virtualization platforms which require massive resource pools
- Compute-intensive enterprise application servers of large-scale database environments and ERP systems

### Exceptional performance

A1080a series gluelessly scales up to 8 CPUs and 80 cores, brings parallel processing of total 160 threads and benefits of massive memory. Its SQL performances score higher than the ones of 32 sockets risks systems and therefore are the best in this system category.

### Simple management and highly-reliable design

NEC's advanced RAS features bring Built-in Diagnostic tools and Business Continuity. The online maintainability enables defective processor or memory replacement while the system is up and running. Most of the components are hot swappable.

### Cost savings

The easy-to-use and complete management and diagnostic tools are saving the IT administration time. The low consumption and the dual 4way architecture reponds perfectly to the needs of large cluster and virtualization pools in saving space, cooling and energy.

### Performance

- Intel Xeon Processor E7-8800 and E7-4800 produit family.
- Multi-core CPU adapting Quick Path Interconnect (QPI) architecture.
- Up to 8 CPU and 80 cores
- 16 memory slots per CPU up to 2 TB

### Simple management

Built-in service processors that work in conjunction with NEC's BIOS and Intel's Machine Check Architecture (MCA) recovery function simplify management of all server resources and bring exceptional availability and serviceability.

### Cost savings

Components such as heat sinks, air ducts, and fans use light material to reduce total weight <sup>(\*1)</sup> by 14% compared to the previous model. In addition, 80 PLUS Gold® certified <sup>(\*2)</sup> power supplies are adopted for high energy efficiency.

<sup>\*1</sup> Comparison between A1160 x2 boxes and A1080a-D

<sup>\*2</sup> The 80 PLUS® program (<http://www.80plus.org/>) is an electric utility-funded incentive program to integrate more energy-efficient power supplies into electronic devices

## SPECIFICATIONS

MODEL	• A1080a-E : Eight-socket server	• A1080a-D : Dual four-socket server	• A1080a-S : Four-socket server
PROCESSOR	<b>Intel® Xeon® Processor E7-8800/4800 Product Family :</b> E7-8870 (2.40GHz/10C/30MB) E7-8850 (2.00GHz/10C/24MB) E7-8830 (2.13GHz/8C/24MB) E7-4820 (2.00GHz/8C/18MB)* E7-4807 (1.86GHz/6C/18MB)* * Not supported by A1080a-E		
MEMORY	DDR3L Registered DIMM ECC, SDDC, DDDC, on-line sparing, mirroring 8GB to 2TB for A1080a-E De 4GB to 1TB for A1080a-D (per server) and A1080a-S		
STORAGE	SAS SFF 2.5-inch HDD (hot-swap) RAID levels 0/1/5/6/10/50 Up to 7.2TB for A1080a-E Up to 3.6 TB for A1080a-D (per server) and A1080a-S		
PERIPHERAL DEVICES	1 DVD-ROM or DVD Multi drive* * Linux does not support DVD Multi drive		
EXTERNAL INTERFACES	2 1000BASE-T <sup>(*1)</sup> , 1 VGA <sup>(*1)</sup> , 1 RS232C serial port <sup>(*1)</sup> , 2 front <sup>(*2)</sup> / 2 rear <sup>(*1)</sup> USB <sup>*1</sup> Per server in A1080a-D <sup>*2</sup> Shared with two servers in 1080a-D		
SERVICE PROCESSORS	1 1000BASE-T port for management LAN (per server)		
POWER	2-4 80 PLUS® Gold certified power supply 2N redundancy <b>Maximum power consumption (200V) :</b> 3574VA/3503W (A1080a-E), 3601VA/3529W (A1080a-D), 2017VA/1977W (A1080a-S)		
DIMENSIONS (W x D x H)	• 448 x 714 x 307 mm (7U rack height)	• 482.6 x 848 x 307 mm (including protruding objects and guide rails)	
WEIGHT (MAXIMUM)	• 79.2 kg for A1080a-E	• 79.6 kg for A1080a-D	• 63.5 kg for A1080a-S
OPERATING SYSTEMS	Microsoft® Windows® Server 2008 R2 Enterprise <sup>(*3)</sup> Microsoft® Windows® Server 2008 R2 Datacenter <sup>(*3)</sup> Microsoft® Windows® Server 2008 Enterprise (x64, SP2 ou ultérieur) <sup>(*4)</sup> Microsoft® Windows® Server 2008 Datacenter (x64, SP2 ou ultérieur) <sup>(*4)</sup> Red Hat® Enterprise Linux® Advances Platform 5.6 <sup>(*4)</sup> , <sup>(*5)</sup> , <sup>(*6)</sup> Red Hat® Enterprise Linux® Advances Platform 6.1 <sup>(*4)</sup> , <sup>(*5)</sup> , <sup>(*6)</sup> VMware® ESX™ et ESXi™ 4.1		
	<sup>*3</sup> A1080a-E will support Microsoft Windows Server 2008 R2 from SP1 or later <sup>*4</sup> A180a-E does not support <sup>*5</sup> Linux does not support DVD Multi drive <sup>*6</sup> To be supported		

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