

# NEC Express5800/100 Series T120a-M



## Highlights

### ■ Highly expandable 2-socket tower server

The T120a-M is a powerful and reliable server with high capacity internal storage.

- Up to two Intel® Xeon® processors 5500 series
- Up to 192GB of memory
- Up to eight 3.5-inch SAS/SATA or 16 2.5-inch SAS/SATA disk drives, with optional RAID 5 and 6 capability
- PCI Express 2.0, with twice the bandwidth of the previous generation
- 80PLUS® energy efficient power supply for reduced AC/DC loss

### ■ Dynamic scalability

Powered by Intel® Xeon® 5500 series with QuickPath Interconnect (QPI) technology, the T120a-M achieves significant throughput performance improvement. The latest processor features include:

- Enhanced performance of individual processor cores to process more instructions per clock cycle
- Integrated Memory Controller to allow each processor to access its own dedicated memory
- High-speed QuickPath interconnects to link processors to memory and I/O without the conflict between processors

### ■ Simplified deployment and management

The T120a-M offers integrated setup and management tools.

- The EXPRESSBUILDER setup support tool provides step-by-step guides via intuitive graphic interface and automates the setup process with the Express Setup function, dramatically reducing hands-on management of the server.
- The ESMPRO management software and the EXPRESSSCOPE Engine 2 remote management controller interact to monitor, control and troubleshoot from a remote console, with no need to travel for on-site operational tasks.



## ■ Ideal Environments and Applications

The T120a-M is ideal for medium to large businesses needing robust scalability and proven reliability for compute-intensive environments.

- Application server to consolidate business-critical and general office applications, and process high volumes of data in tandem with a backend database
- Database server to handle large volumes of data, while providing greater compute power for working with application and web servers
- Web server to handle increasing user access requirements, while enhancing business efficiency by interacting with groupware and an application server

## Specification Overview

### Processors

Quad-core processors

Intel® Xeon® Processor X5570 (2.93GHz/8MB L3 Cache)

Intel® Xeon® Processor X5550 (2.66GHz/8MB L3 Cache)

Intel® Xeon® Processor E5520 (2.26GHz/8MB L3 Cache)

Dual-core processor

Intel® Xeon® Processor E5502 (1.86GHz/4MB L3 Cache)

### Memory

DDR3 DIMM with ECC

Up to 192GB (12 x 16GB)

### Maximum storage<sup>1</sup>

3.5-inch SATA : 8TB (8 x 1TB)

3.5-inch SAS : 3.6TB (8 x 450GB)

2.5-inch SATA : 8TB (16 x 500GB)

2.5-inch SAS : 4.8TB (16 x 300GB)

### Removable media

1 x DVD-ROM drive (CD: max. X40 DVD: max. X16)

1 x floppy disk drive (optional)

### Expansion slots

Total: 6 slots

3 x PCI Express 2.0 X8

1 x PCI Express X4

1 x 32bit/33MHz PCI (5V)

1 x dedicated slot for a RAID controller

### Video

Integrated in the Server Management Controller (32MB)

### Network

2 x 1000BASE-T (100BASE-TX is supported)

### Power consumption

122VA/120W up to 666VA/659W

### Redundant power supply

Supported (hot plug)

### Redundant cooling fan

Supported (hot plug)

### External interfaces

1 x VGA, 1 x keyboard, 1 x mouse, 4 x USB 2.0, 2 x serial

2 x LAN, 1 x management LAN

### Dimensions (mm) and weight

220W x 711D x 453H\* \*317W x 736D x 453H (including front bezel and protruding objects)

Std: 22kg Max: 36kg

An optional Rack Conversion Kit allows the T120a-M to convert to a 5U rack server.

### Operating systems

Microsoft® Windows Server® 2003, Standard/Enterprise Editions (SP1 or later)

Microsoft® Windows Server® 2003 R2, Standard/Enterprise Editions (x64)

Microsoft® Windows Server® 2008 Standard/Enterprise (x64)

Red Hat® Linux™

VMware® ESXi™ 4

<sup>1</sup>The optional 3.5" HDD Cage [N8154-21F] allows installation of four additional 3.5-inch SAS/SATA hard disk drives. 2.5-inch SAS disk drives are supported by replacing the factory-installed HDD cage with the optional 2.5" HDD Cage [N8154-20F].

The T120a-M can hold up to two 2.5" HDD Cages, providing a total of 16 disk bays.

Note:

For Linux support, contact your local NEC sales office, or go to the NEC website at: <http://www.nec.com/global/prod/express/linux/index.html>

## NEC EXPRESS5800

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