

**NEC**



## Express5800/120Rf-1

- **Ultra Dense 1U Compact Rack Chassis**
- **Intel E7520 Chipset Supporting EM64T Technology**
- **Latest Intel Xeon CPUs of up to 3.6GHz & 2MB L2 Cache**
- **Up to 16GB of Advanced DDR2-400 SDRAM**
- **Flexible Storage Through SATA & U320 SCSI Models**
- **Onboard SATA & U320 SCSI RAID for Data Protection**
- **Maximum Transfer of up to 4GB/s with PCI-Express X8**
- **Optional HotSwap Power Supply Units on SCSI Models**

### **The ULTRA SLIM Rack Server**

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#### FORM FACTOR

1U Rack

#### PROCESSOR

Up to 2 Xeon™ from 2.80 to 3.60GHz  
mPGA 604 Packaging  
1MB or 2MB of Integrated L2 Cache

#### ARCHITECTURE & BOARD

Intel E7520 + ICH5R Chipset  
800MHz Front Side Bus (FSB)

#### MEMORY

512MB (2x 256MB) Min / Up to 16GB  
8 DIMM Slots Supporting  
DDR2-400 2-way Interleaved ECC SDRAM  
With Chipkill, Mirroring & Sparing

#### STORAGE

Up to 900 GB (3x 300GB) HotSwap SCSI, or  
Up to 500GB (2x 250GB) Fixed SATA  
73.2/146/300GB 10Krpm U320 SCSI HDD  
36.3GB/73.2GB 15Krpm U320 SCSI HDD  
80/160/250GB SATA HDD  
Onboard 2-Chan. U320 SCSI w/ RAID 0,1  
Or 2-Port SATA 150 Controller w/ RAID 0,1  
1x ATA 100 Controller  
Optional PCI Ultra320 RAID (0, 1, 2 Ch)  
IDE Low Profile CD-ROM/ DVD/CDRW Drive  
1.44MB Floppy Disk Drive

#### BAYS

Slim Bay for Optical Device Drive  
3.5" HDD HotSwap (SCSI) 3x 1"  
3.5" HDD Fixed (SATA) 2x 1"

#### SLOTS

2 PCI (1 Full Height + 1 Low Profile) Slots  
1x PCI-X 64bit/66MHz (Low Profile)  
1x PCI-X 64bit/133MHz (Full Height)  
PCI Express X8 (FH) via Riser Option

#### VIDEO

Embedded PCI SVGA Video Controller  
16MB VRAM Standard

#### NETWORK

2-ch. Gigabit Ethernet, WOL, AFT/ALB

#### SECURITY

2 Level Passwords  
Front Door / Intrusion Protection

#### I/O PORTS

4x USB Port (2 Front, 2 Rear)  
1x PS/2 Port (Mouse/ Keyboard)  
1x SVGA Video Port

1x SCSI Connector Option (SCSI Model)  
2x Serial Ports (1 Front, 1 Rear, Exclusive)  
2x RJ45 Ethernet Ports  
1x Internal SO-DIMM for Management Cards

#### POWER SUPPLY

SATA Model: 500W Fixed PSU w/ PFC  
SCSI Model: 525W HotSwap  
Redundant HotSwap PSU Option

#### VENTILATION

Fixed (5 System Fans)  
Redundant Option on SCSI Model

#### PHYSICAL SPECIFICATIONS

483 x 835 x 44 mm (WxDxH) +48 w/ Bezel  
15-20 kg  
10°C to 35° C, 20% to 80% RH

#### OS AND SOFTWARE

ESMPRO Management Suite  
ExpressBuilder Configuration Software

Certified OS :  
Microsoft Windows Server 2003 (Std / Ent)  
Microsoft Windows 2000 Server / Adv. Server  
Red Hat Linux

#### WARRANTY

3 years On-Site Standard Warranty  
Optional Warranty Extensions

#### REGULATORY & SAFETY

UL, FCC, CE Compliance

## Express5800/120Rf-1

### The ULTRA SLIM Rack Server

#### Ultra Compact Design for Fast Space-Conscious Deployment

NEC Express5800/120Rf-1 is an innovative slim rack-dense server designed to deliver maximum performance in a very limited space. It is an easy-to-deploy general purpose solution ideal for ISPs, ASPs and enterprises looking for a front-end Web application hosting server or a network infrastructure server.

#### High Performance Network Computing Engine

NEC Express5800/120Rf-1 features up to two 64-bit Intel® Xeon™ Processors from 2.80GHz to 3.60GHz with a 800MHz system bus supporting both 1MB & 2MB L2 cache sizes. It supports Intel® Extended Memory 64 Technology (Intel® EM64T), the industry's latest enhancement that allows Intel's IA-32 processors to run 64-bit code and to access large memory amounts.

With ECC and Chipkill enabled DDR2-400 SDRAM DIMMs, the memory capacity is scalable up to 16GB (8x 2GB).

NEC Express5800/120Rf-1 has two types of models with two different hard disk drive interfaces: Serial ATA 150 and Ultra320 SCSI. The SCSI model delivers a large-scale capacity of up to 900GB (300GB x 3). For data protection, on-board RAID 0/1 is enabled both on Serial ATA 150 and Ultra320 SCSI models as standard, without a separate disk array controller. This prevents loss of important data and allows higher system availability in the event of a disk failure, while reducing the cost for the extra device. SCSI RAID 5 is optionally supported.

Along with 2 PCI-X expansion slots (1x 64bit/133MHz PCI-X and 1x 64bit/66MHz PCI-X), NEC Express5800/120Rf-1 new models support 1x PCI EXPRESS™ X8 as an option. PCI EXPRESS™ is the industry-standard, next-generation PCI bus interface; it adopts serial bus and eliminates the bottleneck that hampers its performance and delivers the maximum transfer speed of 4GB/s.

#### Advanced Reliability & Management

On the Ultra 320 SCSI model, optionally redundant hotSwap power supply and redundant fans are supported to ensure continuous system operation. To assist a user in server management, NEC ESMPRO is included for easy system control. In addition, the Total Cost of Ownership (TCO) is optimized with a choice of Management board options, Standard or Advanced. For simple system installation, NEC EXPRESSBUILDER is attached as an installation support tool. Just by inserting the single CD-ROM and following a series of user-friendly customization menus, a system administrator can set up and configure the system with ease.



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