Overview

NEC Express5800/A1040c is an enterprise-class quad-socket 4U rack server based on the Intel® Xeon® Processor E7 v3 Family. The server offers the highest level of performance, easy management and efficiency needed for compute-intensive and memory-hungry applications in physical and virtualized environments.

Key Features

- Enterprise-class 4-socket/4U rack server
- Support for the Intel® Xeon® Processor E7 v3 Family
- Easy manageability with integrated EXPRESSSCOPE® Engine SP3
- Operation-able in 40°C (104°F)

Features

Exceptional Performance

NEC Express5800/A1040c is a scale-up server designed with massive resource pool to support compute-intensive and memory-hungry applications in physical and virtualized environment. Powered by the Intel® Xeon® Processor E7 v3 Family, inheriting the supercomputer high performance technology, the NEC's sixth generation enterprise server supports up to 4 processors / 72 cores / 144 threads, 4.0 terabyte of memory, and 16 PCIe 3.0 slots.

Easy Management

Influenced by mainframe architectures, NEC Express5800/A1040c is armed with the EXPRESSSCOPE® Engine SP3, a specially designed baseboard management controller. This provides extensive remote management capabilities, including ultra granular component health monitoring, remote controlling of the system, and BID (built-in-diagnostics), allowing for quick diagnostics of faulted components.

High Efficiency

NEC Express5800/A1040c offers high power efficiency in 4U design. Industry-leading intelligent power management with 80 PLUS® Platinum certified power supply enable the high power efficiency operation. The server operates in temperatures as high as 40 degrees Celsius, which reduces the total power consumption by lowering cooling requirements.
# Hardware Specifications

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<th>MODEL</th>
<th>Express5800/A1040c</th>
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<tbody>
<tr>
<td>Form factor / height</td>
<td>4U rack</td>
</tr>
<tr>
<td>Number of processors</td>
<td>1 to 4</td>
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</table>
| Processors | Intel® Xeon® Processor E7-8890 v3 (2.5 GHz/18-core/45 MB)  
Intel® Xeon® Processor E7-8880 v3 (2.3 GHz/18-core/45 MB)  
Intel® Xeon® Processor E7-8870 v3 (2.1 GHz/18-core/45 MB)  
Intel® Xeon® Processor E7-4850 v3 (2.2 GHz/14-core/35 MB)  
Intel® Xeon® Processor E7-4820 v3 (1.9 GHz/10-core/25MB)  
Intel® Xeon® Processor E7-4809 v3 (2.0 GHz/8-core/20 MB)  
Intel® Xeon® Processor E7-8891 v3 (2.8 GHz/10-core/45 MB)  
Intel® Xeon® Processor E7-8893 v3 (3.2 GHz/4-core/45 MB) |
| Memory type | DDR4-2133 Registered DIMM (8/16/32 GB), DDR4-2133 Load Reduced DIMM (32/64 GB) |
| Memory slots | 64 |
| Maximum memory | 4 TB |
| Storage type | Hot plug 2.5-inch SAS HDD, Hot-plug 2.5-inch SAS SSD |
| Maximum internal drive bays | 8 |
| Maximum internal storage | HDD: 9.6 TB, SSD: 3.2 TB |
| Removable media | Internal or external drive (option) |
| Expansion slots | 14x PCI Express 3.0 (x8 lane, x8 socket) (Low Profile, 167.6 mm in length)  
2x PCI Express 3.0 (x4 lane, x8 socket) (Low Profile, 167.6 mm in length) |
| Network | 1x Management LAN connector (1000 BASE-T / 100 BASE-TX / 10 BASE-T, RJ45, rear) |
| Power | Up to 4 80 PLUS® Platinum certified power supply / Redundancy and hot plug supported |
| Maximum power consumption (200V) | 2351 VA / 2304 Watt |
| Interface | 5 x USB 2.0 (3x front, 1x rear, 1x internal), 1 x VGA (front), 1 x SUV (2x USB, 1x VGA, 1x Serial, rear) |
| Dimensions (W x D x H) | 443.0 x 719.3 x 174.5 mm (4U rack height)  
482.6 x 891.0 x 175.5 mm (including protruding objects and guide rails) |
| Maximum weight | 53 kg |
| Temperature and humidity conditions (non-condensing) | Operating: 10 to 40 °C / 50 to 104 °F, 20 to 80%  
Non-operating: -10 to 55°C / 14 to 131 °F, 20 to 80% |
| Operating systems and virtualization software | Microsoft® Windows Server® 2012 Standard / Datacenter  
Microsoft® Windows Server® 2012 R2 Standard / Datacenter  
Red Hat® Enterprise Linux® 6.6 or later (x86_64)  
VMware® ESXi™ 5.5 Update 2  
VMware® ESXi™ 6.0 |

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