Reliable and Energy Efficient Rack Server for Data Centers

NEC Express5800/R110i-1

Overview

The NEC Express5800/R110i-1, an affordable yet powerful single-socket 1U rack server, delivers essential server features, flexibility, and enterprise-class reliability in a small footprint. Supporting high-performance Intel Xeon E3-1200 v6 product family and NEC’s innovative green technology, the R110i-1 is ideal for small businesses, corporate data center and hosting service providers to provide web service, file, security and system management.

Features

- Powerful Performance
  Featuring the latest Intel Xeon E3-1200 v6 family of processors with up to 4-core and 8 MB last level cache, up to 64 GB of memory at 2400 MHz, and up to 40 TB of storage capacity, the Express5800/R110i-1 delivers optimum computing performance for small businesses, corporate data center and hosting service providers to provide web service, file, security and system management.

- Flexible and Dense
  The Express5800/R110i-1 delivers essential server features, flexibility, and enterprise-class reliability in a small footprint. The platform features a wide range of server and upgrade options with 4 memory slots, 8 2.5-inch or 4 3.5-inch drive bays, and 3 PCIe slots for various computing needs and future business growth.

- Operational Cost Savings and Efficiency
  NEC’s innovative green design concepts and industry leading fan control technology allows the R110i-1 to operate at temperatures up to 45°C (113°F), therefore reducing cooling requirements. In addition, hot plug redundant power supplies with cold-standby mode enable further energy savings. Manage easy setup and deployment with NEC EXPRESSBUILDER and leverage easy management with NEC’s EXPRESSSCOPE Engine 3 together with NEC ESMPRO. The extensive remote management capabilities untangle the complexities in operating and maintaining the server to alleviate the burden of administrative tasks.

Key Feature

- Support for the latest Intel® Xeon® E3-1200 v6 product family
- Up to 64 GB of high speed DDR4 memory
- 3 PCIe slots in a 1U form factor
- Agent-less management with EXPRESSSCOPE Engine 3
- Wide range of operating ambient temperature from 5 to 45°C (41 to 113°F)
## Hardware Specifications

<table>
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<tr>
<th>MODEL</th>
<th>NEC Express5800/R110i-1</th>
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<tbody>
<tr>
<td>Form factor / height</td>
<td>1U Rack</td>
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<tr>
<td>Number of processors</td>
<td>1</td>
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</table>
| Processors | Intel® Pentium® Processor G4560 (3.5 GHz, 2C/4T, 3 MB)  
Intel® Xeon® Processor E3-1220 v6 (3.0 GHz, 4C/4T, 8 MB)  
Intel® Xeon® Processor E3-1225 v6 (3.3 GHz, 4C/4T, 8 MB)  
Intel® Xeon® Processor E3-1230 v6 (3.5 GHz, 4C/8T, 8 MB)  
Intel® Xeon® Processor E3-1240L v5 (2.1 GHz, 4C/8T, 8 MB)  
Intel® Xeon® Processor E3-1260L v5 (2.9 GHz, 4C/8T, 8 MB)  
Intel® Xeon® Processor E3-1270 v6 (3.8 GHz, 4C/8T, 8 MB) |
| Memory type | DDR4-2400 ECC UDIMM |
| Memory slots | 4 |
| Maximum memory | 64 GB |
| Storage type | Hot plug 2.5-inch SAS HDD  
Hot plug 2.5-inch SATA SSD  
Hot plug 2.5-inch SAS SSD  
Hot plug 2.5-inch SATA SSD  
Hot plug 3.5-inch SATA HDD |
| Maximum internal drive bays | 8 |
| Maximum internal storage | 40 TB |
| Removable media | 1 bay for optical drive |
| Expansion slots | 1 PCIe x16 Gen 3  
1 PCIe x4 Gen 3  
1 PCIe x4 Gen 3 for a RAID controller |
| Video (VRAM) | Integrated in the server management controller (32 MB) |
| Network | 2 1000BASE-T plus 1 1000BASE-T for management |
| Redundant power supply | Standard, hot plug (except non-redundant power supply model) |
| Redundant cooling fan | Optional, non-hot plug |
| Power supplies | Non-hot plug: 400 Watt  
Hot plug: 500 Watt  
100-240 VAC ± 10% / 60 Hz ± 3 Hz |
| Systems management | EXPRESSSCOPE Engine 3 |
| Interface | 1 VGA, 1 to 2 serial, 6 USB 3.0 (plus 1 internal USB 3.0), 2 LAN, 1 management LAN |
| Dimensions (W x D x H) and maximum weight | 444.0 x 615.2 x 43.6 mm / 17.5 x 24.2 x 1.7 in  
17.5 kg / 38.58 lbs |
| Temperature and humidity conditions | Operating: 5 to 40 °C / 41 to 104 °F or 5 to 45°C / 41 to 113 °F (Optional), 10 to 85%  
Non-operating: -10 to 55 °C / 14 to 131 °F, 10 to 85% |
| Operating systems and virtualization software | Microsoft® Windows Server® 2008 R2 Standard / Enterprise  
Microsoft® Windows Server® 2012 Standard / Datacenter  
Microsoft® Windows Server® 2012 R2 Standard / Datacenter  
Microsoft® Windows Server® 2016 Standard / Datacenter  
Red Hat® Enterprise Linux® 7  
VMware® ESXi™ 6.0  
VMware® ESXi™ 6.5 |

Note: For Linux support, visit the NEC website at http://www.nec.com/en/global/prod/express/linux/, or contact our sales representative

For further information please contact your local NEC representative or:

<table>
<thead>
<tr>
<th>Corporate Headquater (Japan)</th>
<th>North America (USA, Canada)</th>
<th>APAC (South Asia, South East Asia, Oceania)</th>
<th>EMEA (Europe, Middle East, Africa)</th>
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<td>NEC Asia Pacific Pte Ltd</td>
<td>NEC Enterprise Solutions</td>
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