

The scalable enterprise server

NEC Express5800/A2040e



Key Features

- Enterprise-class 4-socket/4U rack server
- Support for the Intel® Xeon® Scalable Processor Family
- High reliability, availability and serviceability (RAS) features.
- Operation-able in 40°C (104°F)

Overview

The NEC Express5800/A2040e is an enterprise-class quad-socket 4U rack server based on the Intel® Xeon® Scalable Processor Family. The server offers the highest level of performance, availability, and flexibility for compute-intensive and memory-hungry applications in mission critical and virtualized environments.

The NEC Express5800/A2040e is highly flexible to support ever demanding and dynamically changing on-premise or cloud workloads for large databases, analytics, and large-scale virtualization.

Features

Exceptional Performance

The NEC Express5800/A2040e is a scale-up server designed with a massive resource pool to support compute-intensive and memory-hungry applications in mission critical and virtualized environments.

Powered by the Intel® Xeon® Scalable Processor Family and inheriting NEC's supercomputer high performance technology, the NEC's enterprise server supports up to 4 processors / 112 cores / 224 threads, 6.0 terabyte of memory, and 16 PCIe 3.0 slots.

High Availability

The NEC Express5800/A2040e offers industry-leading reliability, availability, and serviceability (RAS) features required to support business-critical workloads for enterprise computing.

Combining Intel's Run Sure technology with NEC's mainframe inspired advanced RAS features, the Express5800/A2040e with built-in service processors and redundant components offers exceptional availability and serviceability on standard operating systems.

Advanced Flexibility

The NEC Express5800/A2040e is highly flexible to support ever demanding and dynamically changing on-premise or cloud workloads for large databases, analytics, and large-scale virtualization.

Custom configurations offer ability to populate 2, 3 or 4 sockets, and Capacity Optimization (COPT) provides ability to flexibly optimize the resources by allowing cores to be enabled dynamically. On-line addition of resources such as CPU cores, and IO cards offers flexibility to fit your business needs, providing pay as you grow configurations.

Hardware Specifications

MODEL	Express5800/A2040e
Form factor / height	4U rack
Number of processors	2 to 4 (configurable)
Processors	Intel® Xeon® Processor Platinum 8180M/8180 (2.50 GHz, 28C/56T, 38.50MB) 8176M/8176 (2.10 GHz, 28C/56T, 38.50MB) 8160 (2.10 GHz, 24C/48T, 33MB) 8156 (3.60 GHz, 4C/8T, 16.50MB) Intel® Xeon® Processor Gold 6150 (2.70 GHz, 18C/36T, 24.75MB) 6136 (3.00 GHz, 12C/24T, 24.75MB) 6144 (3.50 GHz, 8C/16T, 24.75MB) 5115 (2.40 GHz, 10C/20T, 13.75MB) 5122 (3.60 GHz, 4C/8T, 16.50MB)
Memory type	DDR4-2666 RDIMM (8/16/32 GB), DDR4-2666 RDIMM-3DS (64/128 GB)
Memory slots	48
Maximum memory	6 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	External drive (option)
Expansion slots	8x PCI Express 3.0 (x16 lane, x16 socket) (Low Profile, 167.65 mm in length) 8x PCI Express 3.0 (x8 lane, x8 socket) (Low Profile, 167.65 mm in length)
Video (VRAM)	Embedded in management controller chip (8 MB)
Network	2x 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)	2885 VA / 2827 Watt
Interface	2 x USB 3.0 (1x front, 1x rear), 1 x USB 2.0 (internal), 1 x SUV (2x USB 2.0, 1x Serial, rear), 1 x Analog RGB
Dimensions (W x D x H)	444.2 x 742.3 x 174.3 mm (4U rack height) 482.6 x 928.8 x 175.8 mm (including protruding objects and guide rails)
Maximum weight	57.4 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® 2016 Standard / Datacenter Red Hat® Enterprise Linux® 7.4 or later (x86_64) VMware® ESXi™ 6.5 Update1 SUSE Linux Enterprise Server 12 SP3 (for SAP HANA Solutions)

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