

Inspur NF8480M6 Server

A highly scalable computing platform for critical applications.



Inspur NF8480M6 is a high-end 4-socket rackmount server built on the third generation of the Intel® Xeon® Scalable processor. With extraordinary computing performance, flexible modular design, excellent scalability, optimized reliability and stability, Inspur NF8480M6 is the ideal solution for data-intensive and critical applications. It is designed for large transaction databases, memory databases, virtualization integration, HPC, deep learning, ERP, etc.

Product Features

World-Class Computing Power

NF8480M6 integrates 4 latest Intel® Xeon® Scalable processors with a maximum speed of 3.9GHz, up to 112 physical cores, and 224 threads, providing users with powerful parallel computing and processing capabilities. NF8480M6 supports 6 UPI channels and the data communication bandwidth between CPUs is doubled, which empowers non-NUMA applications with enhanced performance.

Memory speed is accelerated to 3,200MT/s, shortening the waiting time caused by frequent IO.

NF8480M6 supports 4 FHFL GPUs or 8 FHHL GPUs and delivers extraordinary computing performance to meet the needs of AI and deep learning inference and training.

Modular Expansion

NF8480M6 adopts a modular IO design with full-height and half-height options, enabling IO balance and satis-

fying different IO expansion needs of customers.

The hard drive module supports up to 50 2.5-inch hard drives and an option of 24 NVMe SSDs, providing a high IOPS solution for distributed storage and excellent expansion capacity.

The hot-swap OCP 3.0 network card offers multiple network interface options (1/10/25/100 Gb) to meet different needs.

Multidimensional Reliability

A recovery mechanism is designed to protect the firmware and core data. Support BMC, BIOS, 1+1 flash memory redundancies. Prevent physical damage to the chip or malicious modification of data stored in ROM.

Support SMART PPR memory protection. Detect and repair memory faults during the boot process.

Support fault prediction and alert for core components,

which can report exceptions in advance and reduce unplanned operation and maintenance. Both NVMe and M.2 SSDs supports hardware RAID for data reliability.

Accountable and Simple Management

NF8480M6 supports TPM2.0 and TCM, provides security metrics and a complete chain of trust for software and hardware. Therefore, NF8480M6 can timely detect malicious intrusions and equipment replacement to enhance the security and control of the IT infrastructure. Support Intel PFR to effectively prevent attacks against firmware and protect customers' data and asset security.

NF8480M6 is capable of protecting customer information with a series of security features, such as information security certifications, the security panel, and Out-Of-The-Box Alerts (OOTBA).

NF8480M6 is configured with the ISBMC4 (Inspur self-developed server baseboard management system) and supports mainstream management standards (such as IPMI2.0 and Redfish1.8), which greatly simplifies device deployment, management and maintenance. It enables better operation reliability, easier maintenance, and even accurate and comprehensive fault diagnosis.

Product Specification

Model	Description
Form Factor	4U rackmount server
Processor	2-4 3rd Generation Intel® Xeon® Scalable processor(s); Up to 28 cores (2.9GHz); Max. speed of 3.9GHz (8 cores); 6 UPI interconnected chains and up to 10.4GT/s per chain; Max. power of 250W.
Chipset	Intel C621A
Memory	Up to 48 DDR4 DIMMs, max. speed of 3,200MT/s; RDIMM and LRDIMM, and max.128G for each; Up to 12 DIMMs per CPU (48 DIMMs/4CPUs); 24 Intel® Optane™ Persistent Memory 200 Series (Barlow Pass) and max. 512GB for each.
Storage	Up to 50/49 x 2.5-inch drives and 24 x U.2 NVME SSDs. Built-in: support up to 2 x SATA/PCIE M.2 SSDs and 2 x Micro SD cards.
Storage Controller	SATA controller that supports RAID 0/1/5/10; NVMe controller with optional Intel NVMe RAID Key; Optional standard PCIe RAID controller.
Network Port	OCP 3.0 x 16 network cards (options: 1/10/25/100 Gb) and standard PCIe cards (options: 1/10/25/40/100 Gb).
I/O Expansion Slot	Up to 18 x standard PCIe slots and 1 x OCP 3.0 slot.
Ports	Front: 1 x USB2.0 port, 1 x USB3.0 port, 1 x VGA port ; Rear: 2 x USB3.0 ports, 1 x VGA port, 1 x dedicated management port, 1 x BMC port, and 1 x COM port; Built-in: 1 x USB3.0 port.
Fan	12 hot-swap N+1 redundant fans.
Power Supply	Up to 4 x 550W/800W/1300W/1600W/2000W CRPS power supplies (Platinum), N+N redundancy. Option: titanium-level.
System Management	On-board BMC module provides a 1Gb RJ45 management port that is dedicated to remote management of IPMI. BMC Flash on-chip redundancy.
Operating System	Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, CentOS, Vmware ESXi, etc.
Dimension (W x H x D)	435mm x 174.5mm x 841mm 17.12 inch x 6.87 inch x 33.11 inch
Weight	Less than 52 kg at full load. Refer to the technical white paper for details.
Operating Temperature	5°C to 45°C 41°F to 113°F Refer to the technical white paper for details.