



Product Introduction of Inspur Server NF5280M4

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Server Product Department of Inspur Electronic Information Industry Co., Ltd.

This document briefly introduces the specifications of the Inspur server NF5280M4 for the pre-sales engineers and the salesmen/customers interested in the technology.

It's suitable for the salesmen and pre-sales engineers to refer to and for the server users to learn about the product technology.

Inspur Server NF5280M4

Specially designed for the optimization of new data centers and new applications



■ Product Positioning

Yingxin NF5280M4 is a high-end product with flagship dual 2U rack developed by Inspur for the optimization of new data centers and new applications, which is much better based on the high quality of the previous generation of products. This product maintains the high quality and high reliability of Inspur servers. Meanwhile, it also has the highest performance in similar products, ideal expandability and good management features, so it's especially suitable for telecommunication enterprises, financial enterprises, large enterprises and other users having strict requirements for servers. With a system design of ingenuity, it perfectly shows such features as high efficiency, reliability, smartness and high expandability within a limited space and is suitable for all the key applications having high standard requirements for computing, storage and communication.

■ Key Points

- **High efficiency, smartness, elastic expansion and optimization for new applications**

With new smart computing speedup technology, it can adjust or optimize the performance according to the application of the user.

With the latest memory technology, a higher density and a larger capacity, it provides a better performance for the virtualization and business process of the enterprise.

With the latest hard disk interface technology, it eliminates the storage bottlenecks and largely improves the storage performance.

It can provide a flexible and elastic I/O function, including the integrated expansion slot supporting PCIe3.0, to realize the maximum speed network I/O. The user can expand it freely according to the requirements of the used network bandwidth to realize a network performance leap.

It provides rich I/O slots. Six standard high speed PCI-E 3.0 expansion slots and a special PCI-E expansion slot can be provided in the limited space of the 2U case, and up to 4 cards with full length and full heights can be supported. Therefore, it meets requirements of the high-end customers for system functions and performances.

- **Environment-friendliness, energy saving, safety, reliability and optimization for new data centers**

The dynamic system environment perception and control technology optimized by Inspur recently can transfer the internal temperature information of the server in real time via the multiple temperature sensors precisely provided within the system, dynamically adjust the hot-pluggable redundant fans within the equipment and work together with the advanced air cooling system to achieve the best operating environment, so as to ensure the stable operation of the system.

With the power supply bay of low power consumption and the highest transformation efficiency within the industry, as well as the high efficiency power supply design, it can save up to 20% of energy compared with other schemes. The Inspur SmartPower technology can help the user monitor and control the power consumption of the system precisely in real time, so as to improve the energy efficiency performance of the whole IT architecture further.

It can support the latest trustable encryption technology to protect the data security of the customer.

- **Easy maintenance, easy management and improvement of working efficiency**

The embedded smart server management chip can realize various management functions, such as complete remote system monitoring of IPMI 2.0, remote KVM and virtual media.

It can support the embedded large capacity flash memories, internally loaded Inspur Ruijie server management suite (v5.2) and UEFI smart firmware, and largely simplify the equipment deployment, management and maintenance work for the user.

In order to simplify the equipment management in the data center environment, the external visualized management module of Inspur will be launched to be used together with the optical path diagnosis function of Inspur, so that the management personnel can determine the equipment to be maintained quickly to largely reduce their working pressure and improve their working efficiency.

■ Application Examples

- Large government and enterprise databases and core business software having high requirements for the performance
- Various network servers having very high requirements for memory and disk expansion and network I/O capacity
- High performance clusters pursuing ultra-high performances, such as rendering operation, CAD in manufacturing industry and CAE.

■ Specification

Model	NF5280M4
Processor	Support the latest two Intel® Xeon® E5-2600V3 processors
Memory	<p>There are 24 memory slots that support up to DDR4-2133 memory. The memory can be expanded to 1536GB maximally (in case the memory bank with single capacity of 64 GB is applied). The memories of 8, 16, 32G 1600/1866/2133 are supported currently.</p> <p>Support such advanced functions as the advanced memory error correction, memory mirroring and memory sparing.</p>
Hard disk controllers	The 8-channel SAS 6GB and disk controller of 12 GB are available.
RAID	<p>The standard SAS disk controller supporting the RAID 0/1/10 can be upgraded with the optional component to support the RAID 5, 50.</p> <p>The SAS RAID controller providing extended support for RAID 0/1/5/6/10/50/60 possesses high performance of cache that can be extended to protect the battery.</p>
Storage	<p>Front-end:</p> <p>Support up to 25 front-end 2.5-inch hot-pluggable hard disks or solid-state disks with SATA/SAS interfaces.</p> <p>The standard configuration supports 2.5-inch* 8/ 2.5-inch* 16/ 2.5-inch* 24;</p> <p>A maximum of 12 front-end 3.5-inch hot-pluggable hard disks or solid-state disks with SATA/SAS interfaces can be supported.</p> <p>The standard configuration supports 3.5-inch* 4/ 3.5-inch* 8/ 3.5-inch* 12;</p>

	<p>Rear-end:</p> <p>Support up to 4 rear-end 2.5-inch hot-pluggable hard disks or solid-state disks with SATA/SAS interfaces.</p>
I/O expansion slots	<p>Standard configuration: One PCI-E 3.0 x16, four PCI-E 3.0 x8 (various adapter cards can be selected and six PCI-Es can be supported at most).</p> <p>For one processor to be configured, only one PCI-E 3.0 x16 and two PCI-E 3.0 x8 are available.</p>
Integrated I/O port	<p>Rear-end: two USB 3.0 interfaces and one VGA interface</p> <p>Front-end: one USB 3.0 interface and one VGA interface</p> <p>Internal: two USB 3.0 interfaces and one internal serial port</p>
Network controller	<p>Two GB Ethernet controllers with high performance are integrated to support the virtualization acceleration, network acceleration, load balancing, redundancy and other advanced functions. In addition, two special extension technology-based 10GB Ethernet controllers can be added.</p>
Power supply	<p>High efficiency hot-pluggable redundant power supply: standard configuration is at platinum level, titanium level is optional, supports PMbus function and carries out functions of Node Manager 3.0; hot-pluggable single power supply is optional</p>
Graphics card	<p>Display controller with video memory of 16MB is integrated.</p>
CD driver	<p>In the factory, the internal Slim DVD-RW CD driver or external DVD-RW CD driver equipped with USB interface is optional.</p>
Internal flash memory	<p>The internal flash memory of large capacity is available.</p>
Management function	<p>System management chip is integrated to support the management functions such as IPMI2.0, KVM over IP and virtual media.</p> <p>Support the latest management suite of Inspur Ruijie server.</p> <p>Support the external visualized management module of Ruijie and provide the local visual system monitoring and fault diagnosis functions.</p>
Operating system supported	<p>Windows 2012R2, Windows 2012R2, Windows 2008R2 64Bit, VMware 5.5, Citrix 6.2 64Bit, Soloris 11, SuSE Linux Enterprise Server 11 SP2 64Bit and so on</p> <p>The operating system supports different functions according to the configurations. Please contact the Inspur for details.</p>
Official OS certification	<p>Windows 2012R2 & 2012</p> <p>Windows 2008R2</p> <p>VMware 5.5</p> <p>Citrix 6.2</p> <p>Soloris 11</p>
Temperature in Operating	<p>10 °C-35 °C</p>

environment

Power voltage 110-240V

International certification CCC, FC, CE, UL

Case W (width) 447 mm; H (height) 87 mm; D (depth) 720 mm

Reference weight 25KG

Inspur will try the best to provide comprehensive and accurate information for you. But Inspur shall not be liable for errors or omissions produced during preparation, proofreading and printing.

All pictures of the product are for reference only. The real products shall prevail.

Please contact the local dealers of Inspur for detailed specification and products availability. The product is subject to change without prior notice.

Please dial 800-860-6708 for further information of specification and price of the product.