

## Inspur NF5180M5 server

A dual-path 1U rackmount server with seamless compute density and scalability integration



The Inspur NF5180M5 server is a dual-path 1U rackmount server dedicated to Internet, Internet Data Center (IDC), cloud computing, enterprise market, and telecommunications application requirements.

### ► Product Features

#### **Excellent performance, high efficiency**

The NF5180M5 supports the latest Intel® Xeon® scalable processor. Each processor has up to 28\* cores and 56\* threads and supports a maximum TDP of 205 W.

Configurable to a maximum of 24\* DDR4-2933 DIMMs for a total of 3TB. The NF5180M5 also supports RDIMM, LDRIMM, ECC, memory imaging, and hot standby.

Supports up to 8 Optane™ PMem.

The 10 hot swappable NVMe SSD hard drives have an all-flash configuration and provide a ten-fold input/output operations per second (IOPS) increase compared to SATA SSDs for high-end enterprise applications, providing increased storage bandwidth.

#### **Multiple configurations, superior scalability**

Each front node supports up to 4\*3.5" hard drives and 2\* SATA SSDs or 10\* 2.5" hard drives, while each rear node supports 2\* SATA SSDs, thus achieving a significant increase in storage to provide large-scale storage.

Supports 2\* SATA M.2 or 2\* PCIe M.2 SSDs for faster and more secure operating system startups.

A flexible OCP/PHY card slot is available for 10G, 25G, and 40G network ports, providing highly flexible network configurations for different applications.

Supports 3 PCIe 3.0 slots for customers requiring flexibility for diverse system scalability and performance.

#### **Secure, reliable, easy to operate, and accessible**

Based on humanization designs, tool-free maintenance is available for certain components, further lowering the maintenance time and increasing operation availability.

Inspur's unique intelligent control technology optimizes internal cooling to ensure server stability even at temperatures of up to 35°C.

With the latest BMC technology, our technical support personnel are able to use a web management interface as well as the LED and front UID indicators to identify the location and status of fault issues. This simplifies maintenance, reduces troubleshooting time, and increases system availability.

All swappable components have a fool-proof design for easier maintenance.

## Product Specification

Model	Description
Specifications	1U rackmount
Processor	Supports single and dual Intel® Xeon® series scalable processors: supports up to 28 cores at a frequency of 2.2 GHz; maximum 3.6 GHz (8 cores); 2 UPI interconnected chains with maximum speed of 10.4 GT/s per chain and maximum power of 205W
Chipset	Intel C621/C622/C624
Memory	Supports up to 24* DDR4 2400/2666/2933 MT/s DIMMs; each CPU supports 12 DIMMs, two CPUs support 24 DIMMs; each CPU supports RDIMM/LRDIMM/Optane™ PMem; supports up to 3TB (64 GB per DIMM); supports up to 512GB per Optane™ PMem (The maximum number of supported OptaneTM PMem is related to the specific configuration)
Storage	Each front node supports up to 4*3.5" hard drives and 2* SATA SSD hard drives or 10* 2.5" hard drives; each rear node supports up to 2* SATA M.2 SSDs; each internal node supports 2* SATA M.2 or 2* PCIe M.2 SSDs (the maximum number of supported hard drives is configuration-specific)
Storage Controller	SATA controller on motherboard, supports RAID 0/1/5/10; NVMe controller interface on motherboard configurable with Intel NVMe RAID key
Network Port	10 Gb/s PHY; 10G b/s, 25 Gb/s OCP
I/O Expansion Slot	Expands up to 2* standard PCIe x16 slots, each PCIe slot is a x8 slot
Ports	Front: 1* USB2.0 port, 1* USB3.0 port (2* USB2.0 ports in 2.5 chassis), 1*VGA port, 1* UID indicator and button Rear: 2* USB3.0 ports, 1* VGA port, 1* 1 GB management port, and 1* UID indicator and button
Internal:	1* USB2.0 port, 1* serial port
Fan	7* hot-swappable N+1 redundancy dual-rotor fans
Power Supply	Supports 2* 550W/800W/1300W/1600W PSUs (platinum), 1+1 redundancy
System Management	The onboard BMC management module supports IPMI, SOL, KVM Over IP, and virtual media, and provides 1 external 1 Gb RJ45 network port
Operating System	Supports Windows/ Red Hat/ SUSE/ Centos/ Debian/ XenServer/ Oracle Linux/ ESXi/ Ubuntu etc.
Size	435mm (W) x 43mm (H) x 751mm (D)
Weight	Less than 28 kg at full load, please refer to the technical white paper for further details
Operating Temperature	5°C~35°C (please refer to the technical white paper for more details)

## INSPUR NF5280M5 SERVER

### Ultimate Data Center 2-socket Rack Server



Inspur NF5280M5 is a 2U 2-socket rack-mounted server based on the new generation Intel® Xeon® scalable processor, optimized for the demand of data center applications. NF5280M5 applies ultimate design concept to provide better performance, scalability and storage, which is particularly suitable for applications such as cloud compute, big data and deep learning.

## ► Features

### Ultimate Performance

NF5280M5 supports the new generation Intel® Xeon® Scalable processors, with up to 28 cores and 56 threads per CPU, up to 24\*DDR4-2933 memories. 24\* hot-swap NVMe SSDs full-flash configuration brings 15 billion + IOPS, huge leap on storage.

Supporting up to 4 double wide GPUs or 8 single wide GPUs. The FP16 computing power of single GPU can reach 112 teraflops which brings more feasibility for deep learning applications.

### Profound Configuration

Supporting up to 20\* 3.5" hard drives or 31\* 2.5" hard drives in addition to 2\* M.2 SSDs to implement massive storage, which is 1.5 times larger than former generation.

Supporting free combination of OCP and PHY network cards with different network interfaces to provide 1Gb/10Gb/25Gb/40Gb flexible network configurations

for different applications.

Supporting 9\*PCIe3.0 slots, 1\*OCP/PHY PCIe slot, meeting the system and performance demand of high-end customers.

### Intelligent Management and Security

Conducting real-time monitoring and intelligent isolation and recovering. It adopts open management protocol and INSPUR BMC, which simplifies deployment, management and maintenance, optimized for large scale DC.

Supporting TPM2.0 security control, it conducts trust chain between soft and hardware as BIOS, memory, hard drive, OS and applications to prevent illegal write or replacement from unknown firmware. Ensuring system safe and controllable.

## Specifications

Component	Description
Form Factor	2U Rack
Processor	Supporting 1/2*Intel® Xeon® Scalable Processor Processor Core: up to 28 cores (freq. 2.7GHz) Processor Frequency: up to 3.8GHz (4 cores) Two UPI interconnected links, the maximum transmission rate of single link is 10.4GT/s TDP: up to 205W
Chipset	Intel C621/C622/C624
Memory	Up to 24*DDR4 2400/2666/2933MT/s memory Single CPU supports 12*DIMMs, dual CPU supports 24*DIMMs Supporting RDIMM/LRDIMM/Optane™ PMem Each RDIMM/LRDIMM supports up to 128GB(Skylake)/256GB(Cascade Lake) Each Optane™ PMem supports up to 512GB(Cascade Lake)
Storage	Front: up to 12*3.5"/ 25*2.5"hard drives Internal: up to 4*3.5" and 2*M.2 SSDs Rear: up to 4*3.5", 4*2.5"hard drives Supporting SAS/SATA/SSD (The maximum quantity of supported hard drives is related to the specific configurations )
Storage Controller	Onboard SATA controller, supporting RAID 0/1/5/10 Onboard NVMe controller interface and Intel NVMe RAID Key is optional
Network	Supporting 1*OCP or 1*PHY PHY: supporting 2/4* 1/10 Gb Ethernet port OCP: supporting 1/2* 10/25Gb Ethernet port Standard PCIe Ethernet card: supporting 1/10/25/40/100 Gb
I/O Scalable Slot	Supporting up to 9*PCIe x8 slots and the different quantitative combination of x8/x16/OCP/PHY slots can be achieved by selecting different PCIe Riser Supporting up to 4 double wide GPU、8 single wide GPU
Interface	Front: 1*USB 2.0 (supporting LCD module), 1*USB 3.0, 1*VGA, 1*UID indicator light and button Internal: 2*USB 3.0 Rear: 2*USB 3.0, 1*VGA, 1*Management interface, 1*UID indicator light and button
System Fan	4*hot-swap N+1 redundant fans (dual-rotor)
PSU	Supporting 2*550W/800W/1300W/1600W/2000W PSU (Platinum/Titanium), 1+1 redundant
System Management	Onboard BMC management module, supporting IPMI, SOL, KVM Over IP, virtual media and other management features; providing one 1Gb RJ45 management interface (supporting NCSI); supporting SSD life detection and other functions
OS	Supporting Windows Server/Red Hat/SUSE/CentOS/ Debian/ XenServer/ Oracle Linux/ ESXi/Ubuntu etc.
Dimension	435mm(W) x 87mm(H) x 780mm(D)
Weight	Full configuration<31kg, please refer to the technical white paper for details
Working Temperature	5°C ~ 45°C, please refer to the technical white paper for details

## Inspur NF5266M5 server

2U24 servers optimized for storage



The Inspur NF5266M5 is a 2U rackmount server with high storage density based on the latest Intel® Xeon® Scalable Processors. It is suitable for warm and cold data storage, distributed storage, large data storage, and the establishment of cloud storage pools. It is the optimum solution for massive data storage given the ever-changing architecture requirements of Internet, radio and television, financial, telecommunications, transportation, public security, medical, and educational applications.

### ► Product features

#### **Large storage capacity**

The NF5266M5 supports up to 24\* 3.5" hard drives and 4\* 2.5" hard drives, offering 50% higher storage density than conventional 2U12 servers.

It supports 4\* hot-swappable U.2 NVMe SSD and meets the requirements for quick data access in virtualization and distributed architecture applications.

#### **Flexible scalability**

Supports multiple RAID card/SAS card configurations according to user choice.

Supports SAS/SATA/NVMe hard drives to meet the requirements of data layering operations.

Supports 1 Gb/10 Gb/25 Gb/100 Gb network expansions to meet the requirements of various business and server room environments.

Supports a single PCIe 3.0 expansion slot, further enhancing I/O and network performance.

#### **High computing power**

The NF5266M5 is based on the next-generation Intel® Xeon® Cascade Lake series scalable processors; supports up to 2\* 24-core CPUs to meet the performance requirements of various business applications.

Supports 12\* 2933 MT/s DDR4 ECC memory (RDIMM/LDRIMM) and provides enhanced speed, excellent usability, and high capacity.

#### **Applicability**

Based on humanization designs, online maintenance can be achieved. The hardware design is optimized to achieve quick disassembly, further lowering the maintenance time and increasing operation availability.

All hard drives on the system are hot-swappable. The hard drives support RAID 0/1/1E/10/5/50/50/60, provide RAID Cache, and support SuperCap power loss protection.

Optimal operating environment is achieved by integrating Inspur's unique intelligent control technology with an advanced cooling system, which also guarantees system operation stability and energy efficiency.

#### **Intelligent management**

The next-generation Inspur Server Baseboard Management Controller (ISBMC) system automatically performs management tasks to ensure the stable operation of the server.

The ISBMC platform is an Inspur-designed monitoring system that realizes real-time data collection and alerts.

## Product Specifications

Model	Description
Specifications	2U rackmount server
Processor	Supports 1*/2* Intel® Xeon® 4100/4200/5100/5200/6100/6200/8200 series scalable processors; 2 UPI interconnected chains with maximum speed of 10.4 GT/s per chain, maximum L3 cache of 30.25 MB; maximum power of 165 W
Chipset	Intel C622 series
Memory	Supports up to 12 DIMMs; each processor supports 6 memory channels, maximum DIMM speed of 2933 MT/s Two processors support up to 12×64GB DIMMs, maximum capacity of 768GB Supports RDIMM, LRDIMM; DIMMs support ECC, memory mirroring, and memory rank sparing
Storage	Front nodes: Supports up to 24* 3.5" hard drives Rear nodes: Supports up to 4* 2.5" hard drives Internal nodes: 2* M.2 SSDs; supports SAS/SATA/SSD
Storage Controller	SATA controller on motherboard, supports RAID 0/1/5/10; NVMe controller interface on motherboard configurable with Intel NVMe RAID key; supports multiple external RAID card/SAS card configurations according to user choice
Network Port	The server supports 1* OCP card or 1* PHY card PHY: Supports 2*/4* cards at a 1 Gb/10 Gb network port configuration OCP: Supports 1*/2* cards at a 10 Gb/25 Gb network port configuration Standard PCIe Ethernet card: Supports 1/10/25/40/100 Gb
I/O Expansion Slot	Supports up to 4* standard PCIe slots and 1* OCP/PHY card slot Riser module 1 expands to 2* PCIe3.0 x16 ports Riser module 2 expands to 2* PCIe3.0 x8 ports
Ports	Front (chassis ports): 1* VGA port + 2* USB3.0 ports Rear: 1* VGA port + 2* USB3.0 ports + 1* RJ45 dedicated BMC management network port
Fan	5* hot-swappable N+1 redundancy fans
Power Supply	Supports 2* 800W/1300W PSUs, 1+1 redundancy
System Management	1* dedicated 1000 Gb network port for IPMI2.0 remote management.
Operating System	Supports Windows Server/ Red Hat/ SUSE/ Centos/ Oracle Linux etc.
Size	446mm (W) x 88mm (H) x 850mm (D)
Weight	Less than 60kg at full load, please refer to the technical white paper for further details
Operating Temperature	5°C ~ 35°C

## Inspur NF5466M5 Server

New generation 4U dual socket rackmount server



The Inspur NF5466M5 is a 4U dual socket optimized rackmount server that uses the latest Intel® Xeon® Scalable Processors to provide excellent performance. With its cutting-edge design, the server boasts flexible and high-capacity local storage capabilities that can be applied to hot and cold data storage, video surveillance storage, big data storage, and cloud storage pool setups.

### Product features

#### **Mass storage**

Supports up to 44 3.5" hard drives or 36 3.5" hard drives + 4 2.5" hard drives.

Supports up to 4 NVMe, providing cloud computing and Internet businesses with fast access to massive data.

#### **Flexible storage**

Hard disks can be managed using a single RAID card to facilitate cost optimization.

The server's multiple storage media make the server ideal for distributed storage architectures.

#### **Excellent performance**

Powered by the latest Intel® Xeon® Scalable Processors (supports up to 28-core high frequency CPUs).

Supports GPU to meet IVA scenarios.

#### **High scalability**

Multiple application scenarios can be combined in different

ways through the use of storage modules, I/O modules, network modules, and GPU modules, allowing users to flexibly select configurations that meet their business requirements.

Supports free switching of OCP network cards and PHY cards and a variety of OCP standard network interfaces (1Gb, 10Gb, 25Gb) to provide a more flexible network structure for applications.

#### **Intelligent management**

New generation ISBMC-Inspur server baseboard management system automatically executes management tasks to ensure stable server operations.

The independently developed ISPIM-Inspur infrastructure management platform is a monitoring system that collects real-time data and issues real-time alerts.

Bluetooth smart management app enables easy and efficient operations management.

## Product Specifications

Model	Description
Specifications	4U rackmount server
Processor	Supports single and dual Intel® Xeon® 3100/4100/4200/5100/5200/6100/6200/8100/8200series scalable processors; supports up to 28 cores, maximum 3.8 GHz (4 cores) 2 UPI interconnected chains with maximum speed of 10.4 GT/s per chain, maximum power pf 165 W
Chipset	Intel C622 series
Memory	Supports up to 24 DIMMs; up to 2933 MT/s; maximum memory of 3 TB Supports RDIMM, LRDIMM; supports [modes include] ECC, memory mirroring, and memory rank sparing; Supports TB grade (12*) Intel® Optane™ Persistent Memory (Optane™ PMem)
Storage	Front nodes: Supports up to 24* 3.5" hard drives or 12* 3.5" hard drives + 12* 2.5" hard drives; Built-in: Supports up to 4* 3.5" hard drives, 2* M.2 SSD hard drives; Rear nodes: Supports up to 16* 3.5" hard drives or 12* 3.5" hard drives + 4* 2.5" hard drives Supports SAS/SATA/SSD (The maximum number of supported hard drives is configuration-specific)
Network Port	Server supports 1* OCP card or 1* PHY card PHY: Supports 2*/4* cards at a 1 Gb/10 Gb network port configuration OCP: Supports 1*/2* cards at a 10 Gb/25 Gb network port
I/O Expansion Slot	Supports up to 8* standard PCIe slots and 1* OCP/PHY card slot Riser module 1 expands to 3* PCIe3.0x8 ports Riser module 2 expands to 3* PCIe3.0x8 ports Riser module 3 expands to 2* PCIe3.0x8 ports
Ports	Front (chassis ports): 1* VGA port + 1* USB3.0 port + 1* USB2.0 port (can be connected to LCD) Rear: 1* RJ45 port + 1* VGA port + 1* USB3.0 port + 1* COM port (supports up to 2* double-width GPUs or 6* single-width GPUs)
Fan	4* hot-swappable N+1 redundancy fans (dual-rotor)
Power Supply	Supports 1+1 redundancy, supports output power supplies of 800W/1300W and above
System Management	1* dedicated 1 Gb network port for remote management
Operating System	Supports Microsoft Windows Server 2012/2016/SUSE Linux Enterprise Server 12/ Red Hat Enterprise 7/CentOS 7/Kylin 7.4 etc.
Mainframe Size	483mm (W) x 175mm (H) x 819mm (D)
Weight	Less than 67kg at full load, please refer to the technical white paper for further details
Operating Temperature	5°C~35°C



NF5488M5-D is an extreme training/inference platform with mature ecology. It is equipped with Intel Xeon® Cascade(R) CPU, NVIDIA's newly upgraded Ampere architecture A100 GPU, which can provide computing performance of 20 PetaOPs. At the same time, it can provide the extremely AI performance of 5PetaFlops, which can provide super computing power for modern multi-task and multi-scenario AI training.

#### Extreme Design

4U space is highly integrated with 8GPU, and can support 4 HDR InfiniBand cards at the same time. Modular design can meet the rapid deployment of modern data center.

#### Powerful performance

HGX A100 8-GPU system, which using the third-generation NVLink fully interconnected technology. NF5488M5-D can release 5 petaflops of extreme AI computing power, shorten the development cycle, and greatly improve the efficiency of AI innovation.

#### Large-scale deployment

A single system integrates various functions such as deep learning training and inferencing, while providing ultra-high computing density, helping AI data center users to streamline data center technical architecture design.

#### Accelerate AI application innovation

It is suitable for various AI applications such as smart customer service, financial analysis, smart city, and smart language processing, providing powerful computing power support and accelerating application innovation.

## Specification

Model	NF5488M5-D
Accelerator	1* HGX A100 8-GPU
Processor	2*Intel® Xeon® Scalable Processor
Chipset	Intel® C620 series chipset (Lewisburg-2)
Memory	24 *DDR4 2933MT/s RDIMMs//LRDIMMs, up to 3 TB
Built-in PCIe	4*low profile PCIe x16
Front I/O	2*USB 3.0 port 1*VGA port, 1*RJ45 management port
Ethernet card	10G Ethernet Interface
Management	Built-in Aspeed2500 BMC module, support IPMI, SOL, KVM Over IP, VM, etc.
Storage	8*2.5" SAS/SATA (or 4*NVMe+4*SATA/SAS), 4* NVMe M.2
M.2	2* SATA M.2
RAID	Support 3108 Raid Card (NVMe Raid with Intel Raid Key)
Operating system	Red Hat Enterprise 7.6 64bit Centos7.6 Ubuntu16.04(kernel4.15)
Cooling	N+1 Redundant hot swap fan
PSU	3+1 Redundant PSU
Chassis	4U W*H*D 448mm*175.5mm*850mm

## Inspur NF8260M5 server

A highly scalable computing platform designed for critical application workloads



The NF8260M5 is a 2U 4socket rackmount server designed by Inspur based on the latest Intel® Xeon® scalable processor series. It has reached the industry-leading computing density by supporting up to 4 Intel® Xeon® scalable processors as well as 48 \* DDR4 DIMMs and 24\*2.5" hard drives in a 2U space.

### ► Product features

#### **Ultimate Computing Density**

The NF8260M5 integrates up to 4 Intel® Xeon® scalable processors with maximum 3.6 GHz frequency, it has 38.5 MB level-3 high capacity cache and up to 112 physical cores as well as 224 threads. Four processors are directly interconnected with each other at a UPI speed of up to 10.4 GT/s. This results in a high parallel computing power and a 65% increase in computing performance compared to previous server generations.

#### **Flexible and User-Centric Scalability**

The modular design of hard drive, I/O, and integrated network ensure flexible configurations based on different needs. The NF8260M5 also supports 9 PCIe 3.0 slots for customers requiring flexibility to tailor diverse performance and scalability.

#### **High Manageability and Resilience**

Key components redundancy and NVDIMM supported, providing full protection for memory data in the event of power outage.

The NF8260M5 supports memory protection.

The embedded server intelligent management chipset supports IPMI2.0 and Redfish management for realizing comprehensive remote system monitoring, remote KVM, and virtual media function.

The NF8260M5 supports embedded oscilloscope diagnosis technology for real-time monitoring, recording and analysis of fault signals, and the rapid identification of fault sources.

Added support for code-level diagnostics and analysis.

Basic system information and error code can be displayed through the external LCD diagnosis screen.

## Product Specifications

Component	Description
Form Factor	2U Rack mount
Processor	Supporting 2/4 Intel® Xeon® Scalable Processors Processor Core: up to 28 cores( freq. 2.2 GHz) Processor Frequency: up to 3.6 GHz (8 cores) Two UPI interconnected links, the maximum transmission rate of single link is 10.4 GT/s TDP: up to 205W.
Chipset	Intel C622
Memory	Up to 48*DDR4 2666/2933 MT/s memory Single CPU supports 8*DIMMs, dual CPU support 24*DIMMs. Supporting RDIMM/LRDIMM/NVDIMM/ OptaneTM PMem Each RDIMM/LRDIMM supports up to 128 GB (6TB in all) Each OptaneTM PMem supports up to 128 GB
Storage	Supporting up to 24*2.5" hard drives Supporting up to 6*U.2 NVMe SSDs Supporting up to 2*M.2 SSDs (The maximum quantity of supported hard drives is related to the specific configurations)
Storage Controller	Onboard SATA controller supporting RAID 0/1 Standard PCIe RAID controller supporting RAID 0/1/5/6/10/50/60
Network	Supporting standard OCP card and flexible network configurations The OCP card supports NCSI function and accesses the BMC management system via Sharelink technology 1. 4 * 1Gb RJ45 2. 2 * 10Gb SFP+ 3. 2 * 10Gb RJ45 4. 2*25Gb SFP+
I/O Scalable slot	Supporting up to 9*standard PCIe3.0 slots
Interface	Front : 1*USB2.0 port, 1*USB3.0, 1*VGA port, liquid crystal diagnosis screen Rear : 2*USB3.0 ports, 1*VGA, 1* Gb management interface, 1*dedicated management interface, 1*COM Embedded: 1*USB3.0
System Fan	6*6056 system fans supporting N+1 redundant and hot-swap
PSU	Supporting up to 2*800W/1300W/1600W/2000W CRPS PSUs, 1+1 redundant
System management	Supporting remote management and control, e.g. IPMI2.0,KVM over IP, SOL, and SNMP Supporting external BMC-dedicated management interface and BMC diagnosis serial port Supporting offline troubleshooting
OS	Supporting Microsoft Windows Sever/Red Hat Enterprise Linux/SuSE Linux Enterprise Server etc.
Dimension	With handles: 479 mm (W); 87 mm (H); 806 mm (D) Without handles: 446 mm (W); 87 mm (H); 780 mm (D) With packaging: 651 mm (W); 295 mm (H); 1031 mm (D)
Weight	Full configuration: 37.2kg (including server + package + slide rails + components box)
Operating temperature	0°C ~ 40°C

## Inspur i24 M5 Server

High-density 2U Four-node Server of New Generation for Data Center



The i24 M5, a 2U four-node (2U4N) high-density server perfectly demonstrates the characteristics of high density, efficiency, reliability and intelligence in limited space, and meets the deployment requirements of customers with higher density. Achieving triple savings in data center space resources, energy efficiency, and deployment costs is an excellent solution for customers to reduce cloud computing data center TCO. Mainly for large and medium-sized enterprises, Internet and other users, for high-performance computing, cloud applications, distributed infrastructure, hyperconvergence infrastructure platform and other applications to provide flexible solutions.

### ► Product Features

#### **2U4N, High density and efficiency**

The i24 deploys four 2-socket NS5162 nodes in a 2U space increasing the compute density by four fold, providing better server room space utilization.

The modular node design achieves rapid deployment, increases operation efficiency during node replacement and upgrading, and a 50% reduction in deployment time.

A unified power supply and cooling system is shared between each node in the chassis allowing for greater efficient utilization of power supply and fans. Each server node provides average energy savings of up to 15%.

#### **High reliability, Easy management**

A configuration of 1+1 redundancy power supply and fans ensure stable system operations and lowered risk of lessened availability due to server room or component malfunction.

The i24 supports TPM encryption chips to ensure data security as well as security control of the information system.

The i24 also supports a BMC+CMC dual-management model

for an effortless unified management of the server's power supply and fans. In addition, users can check the regulatory information of each node through the remote management module.

#### **Ultimate performance, Flexible architecture**

With an all-flash mode, the 24 NVMe hard drives are fully configurable, resulting in a ten-fold speed. As a result, users can obtain higher input/output operations per second (IOPS), as well as faster access to cache and lower latency.

The i24 supports multiple Optane™ PMem storage configurations, enhanced storage capacities, and non-volatility memory and storage. Consequently, the enhanced data processing speed meets diverse application requirements.

Each node also supports more standard PCIe expansion slots, multiple network connector options and greater network structure configuration flexibility.

## ► Product Specification

Component	Description	
Specifications	Four 2-socket compute nodes in a 2U space	
Processor	Supports two Intel® Xeon® Scalable processors Each processor supports up to 28 cores with a frequency of 2.2GHz Each processor supports up to a frequency of 3.8GHz (4 cores) 2 x 2 UPI interconnected chains, maximum speed of 10.4GT/s The highest TDP of 205W	
Chipset	Intel C622/C624/C627	
Memory	Each node supports up to 16 DDR4 2400/2666/2933MHz memory Each CPU supports 8 DIMMs, two CPUs support 16 DIMMs. Supports RDIMM/LRDIMM/Optane™ PMem (Up to 128GB per DIMM) Each node supports up to 2TB of memory (128GB per DIMM)	
Storage controller	SATA controller on motherboard, supports RAID 0/1/5/10 Standard PCIe RAID controller RAID 0/1/10/1E/5/6/10/50	
Network port	Each node supports one OCP/PHY card and two PCIe network cards OCP:Supports 1/2 ports on 25Gb/s network card PHY:Supports 2/4 ports on 1/10Gb/s network card Standard PCIe: Supports 1/2/4 ports on 1/10/25/40Gb/s Ethernet card Supports 1/2 ports on 56/100Gb/s InfiniBand card Supports 1/2 ports on 16Gb/s FC card	
I/O expansion slot	Each node supports two PCIe 3.0 x16 slots	
Ports	1 SUV port per node (expands up to 2 USB 2.0 ports, 1 VGA port, and 2 serial ports) 1 IPMI port	
Fan	80mm cooling fans with N+1 redundancy	
Power supply	Supports 2 x 2000W PSUs (platinum), 1+1 redundancy	
System management	Supports BMC+CMC dual management module, IPMI, KVM Over IP and virtual media.	
Operating system	Supports Windows Server/ Red Hat/ SUSE/ Citrix/ Oracle/ Neokylin/ ESXi/ Ubuntu etc.	
Storage	Each node supports up to 3x 3.5" front HDDs Each internal node supports up to 2x M.2 SSDs Chassis supports up to 12x 3.5"front HDDs	Each node supports up to 6x 2.5" front HDDs Each internal node supports up to 2x M.2 SSDs Chassis supports up to 24x2.5"front SSDs
Size	Chassis with 3.5" HDDs: 446mm(W)×87.5mm(H)×845mm(D) Package size 721mm(W)×279mm(H)×1168mm(D)	Chassis with 2.5" SSDs: 446mm(W)×87.5mm(H)×805mm(D) Package size 721mm(W)×279mm(H)×1168mm(D)
Chassis weight	Fully loaded 3.5" chassis gross weight: 42.9kg/58kg (includes server + package + rail kit + components box)	Fully loaded 2.5" chassis gross weight : 40.5kg/53kg (includes server + package + rail kit + components box)
Operating temperature	5°C -35°C	