

Inspur TS860M5 server

Designed for mission critical



The TS860M5 is an 8-socket server that designed by Inspur for mission critical scenario based on the latest Intel® Xeon® scalable processor, it offers excellent computing performance and extreme stability to customers with high cost performance. TS860M5 is highly suitable for critical industries that require high performance and stability such as financial, energy, governments and major enterprises etc. Moreover, it is suitable for implement in critical mission scenarios such as virtualized integration, large-scale transaction databases, memory databases and ERP etc.

Product Features

Extreme computing performance

The TS860M5 supports up to 8*Intel® Xeon® scalable processors with maximum 3.8 GHz frequency, it has 39 MB level-3 high capacity cache and up to 224 physical cores as well as 448 threads to offers excellent parallel computing power.

Compared to other servers that utilize the first-generation Intel® Xeon® scalable processor series, the upgraded TS860M5 offers an at least 20% enhancement in computing performance and up to a 20% increase in memory bandwidth. It fully meets the requirements of critical missions such as large-scale transaction databases, memory databases, virtualized integration, large-scale ERP and high-performance computing.

Comprehensive fault-tolerant design

The TS860M5 has over 80 RAS features supporting a fully modular fault-tolerant design. Therefore, the TS860M5 is extremely suitable for critical missions that reliability sensitive.

The external PCIe card supports hot-swap for single-card and supports up to 12* single card hot-swapping operations. The PSU supports N+N / N+M redundancy, with cold and warm redundancy available and realizes switching within microseconds. The system fans support N+1 redundancy.

The BIOS ROM supports module redundancy and BMC dual mirroring redundancy, can be configured to support global clock redundancy and seamless clock source switching, that fault-tolerant mechanism is design to cover most kind of fault including extremely rare errors.

Flexible modular design

The modular I/O design supports full-height and half-height I/O modules, which can be flexibly configured according to user demand in I/O scalability.

The modular hard drive design supports up to 24* 3.5" hard drives and can be configured to support 12* NVMe hard drives. It also supports configurations of up to 50* 2.5" hard drives for SAP HANA application scenarios.

The fully modular design allows each module to operate independently and be configured flexibly.

Multidimensional fault diagnosis

The OLED monitor is available for server's asset information inquires, IP address managing & setting, power-consumption and temperature monitoring as well as fault code display.

The processor and memory support offline light path diagnostics to facilitate locate the malfunctioning components.

The embedded oscilloscope and in-depth hardware diagnosis & analysis functions are able to record and analyze fault signals and rapidly determine the source of errors. The code-level diagnostic determines the source of code-level faults from the software layer. Black box log and instant screen capture with video recording of crashes are supported.

Product Specifications

| Component | Description |
|---------------------|--|
| Form Factor | 4U rackmount |
| Processor | Supports up to 8* Intel® Xeon® series scalable processors: Supports up to 28 cores with a frequency of 3.8 GHz 3* UPI interconnected chains with maximum speed of 10.4 GT/s per chain, maximum power of 205W |
| Chipset | Intel C622/C624/C627 |
| Memory | 4Supports up to 96* DDR4 2400/2666/2933 MT/s RDIMM/LRDIMMs, can be configured to support 48* Optane™ PMems Each CPU supports 12* DIMMs, eight CPUs support 96* DIMM/RDIMM/LRDIMMs; each DIMM supports up to 64 GB; each Optane™ PMems supports up to 128 GB |
| Storage | Front: Supports up to 24* 3.5" or 50* 2.5" hard drives. Can be configured to support 12* NVMe SSDs Internal: Each compute node supports 2* M.2 SSDs. System supports up to 4* M.2SSDs |
| Storage Controller | Dedicated internal RAID card slot supports a standard RAID controller NVMe controller interface on motherboard configurable with Intel NVMe RAID Key |
| Network | The server supports 2* OCP/PHY cards 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 | Half-height I/O configuration: Expands up to 14* standard PCIe slots with full-length and half-height, including 2* built-in RAID card slots; Full-height I/O configuration: Expands up to 10* standard PCIe slots with full-length and half-height, including 2* built-in RAID card slots; |
| I/O | Front: 2* USB3.0 port, 1* VGA port, 1* RJ45 port Rear: 2*USB3.0 port, 1* VGA port, 1* 1 GB management port, 1* BMC serial port Internal: 2* USB3.0 ports (per compute node) |
| System Fan | 16* hot-swappable N+1 redundancy system fans |
| PSU | Supports 4* 1300W/1600W PSUs (platinum), N+N/N+M redundancy |
| System Management | Each compute node supports 1* BMC management module, supports IPMI, SOL, KVM Over IP, and virtual media, supports BMC mirroring redundancy |
| OS | Supports Windows/ Red Hat/ SUSE/ Centos/ Debian/ XenServer/ Oracle Linux/ ESXi/ Ubuntu etc |
| Dimension | 448mm (W) x 175.5mm (H) x 800mm (D) |
| Weight | Less than 110kg at full load, please refer to the technical white paper for further details |
| Working Temperature | 0℃~-40℃ depending on configuration (please refer to the technical white paper for more details) |