Optimized for performance, high density and power efficiency, this general-purpose dual-processor server delivers a balance of compute and storage capacity with the flexibility to power a wide range of solutions and applications.

Hitachi Advanced Server DS120

Flexible Power for Solutions

**High Density, High Performance**

With support for two Intel Xeon Scalable processors in just 1U of rack space, the Hitachi Advanced Server DS120 delivers exceptional compute density. It provides flexible memory and storage options to meet the needs of converged and hyperconverged infrastructure solutions, as well as for dedicated application platforms such as internet of things (IoT) and data appliances.

The Intel Xeon Scalable processor family is optimized to address the growing demands on today's IT infrastructure. The server provides 24 slots for high-speed DDR4 memory, allowing up to 3TB of memory per node (when 128GB DIMMs are used).

### Flexible Storage Options

DS120 supports up to 12 hot-pluggable, front-side-accessible 2.5-inch serial-attached SCSI (SAS) or serial-ATA (SATA) drives. Hard disk drive (HDD), solid-state drive (SSD) and NVMe options can be supported by the system. With these options, the server can be flexibly configured to address both I/O performance and capacity requirements for a wide range of applications and solutions.

### I/O Expansion

A selection of low profile and mezzanine PCIe 3.0 expansion slots are available, allowing the configuration of I/O expansion and controller modules. This approach adds versatility, and enables DS120 to be optimized for many different solutions, applications and workloads.

### Enterprise-Class Features

DS120 server provides the reliability, availability and serviceability (RAS) features demanded by business-critical enterprise applications. The server's modular design simplifies cable routing and reduces service time. Redundant, hot-swap drives and power supplies provide a resilient architecture for important applications, and dual-rotor hot-swap fans help ensure continuous operation.

### Embedded Server Management

An integrated baseboard management controller allows DS120 to be managed remotely and independently. A dedicated interface facilitates secure remote access through a LAN connection and provides a powerful, easy-to-use web console interface for remote initialization, management and configuration.
**HITACHI ADVANCED SERVER DS120**

| Processor | **Processor Type:** Intel Xeon Scalable processor family  
**Max. Thermal Design Power (TDP) Support:** 165W  
**Number of Processors:** 2 processors  
**Internal Interconnect:** 9.6 or 10.4 gigatransfers per second (GT/s) |
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<td>Form Factor</td>
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| Dimensions | **W x H x D (inch):** 17.3 x 1.7 x 30.7  
**W x H x D (mm):** 440 x 43.2 x 780 |
| Chipset | Intel C624 |
| Storage | **Internal Storage:** Serial ATA (SATA) or Serial-Attached SCSI (SAS): (8) 2.5" (63.5mm) hot-plug SATA or SAS drives + (4) 2.5" (63.5mm) hot-plug NVMe, SATA or SAS drives |
| Memory | **Total Slots:** 24  
**Capacity:** Up to 3TB (128Gx24) of memory for RDIMM/LRDIMM  
**Memory Type:** 2666 MHz DDR4 RDIMM  
**Memory Size:** 64GB, 32GB RDIMM |
| Expansion Slot | (1) PCIe Gen3 x 16 SAS mezzanine slot  
(1) PCIe Gen3 x 16 OCP 2.0 mezzanine slot or PHY card  
(1) PCIe Gen3 x 16 LP MD-2  
(2) PCIe Gen3 x 8 LP MD-2 |
| Network Controller | **LAN on Motherboard (LOM):** Dedicated (1) gigabit Ethernet (GbE) management port  
**Optional Network Interface Card (NIC):** Intel X527-DA2 10G SFP+ dual-port OCP PHY mezzanine, Intel X557-T4 10GBASE-T quad-port OCP PHY mezzanine |
| Front I/O | (2) USB 3.0 ports  
Power, ID, reset buttons  
Power, ID, status LEDs |
| Storage Controller | Intel 624  
14 x SATA 6Gb/s ports  
SATA RAID-0, RAID-1, RAID-1+0 |
| Power Supply | (1+1) High-efficiency, redundant, hot-plug power supply unit (PSU), titanium, 800W or 1200W |
| Fan | (8) dual rotor fans (15+1 redundant) |
| Video | Integrated ASPEED AST2500 8MB DDR4 video memory |
| System Management | Baseboard management controller  
IPMI v2.0 compliant, onboard “KVM over IP” support |
| Rear I/O | (2) USB 3.0 ports  
(1) VGA port  
(1) RS232 serial port  
(1) GbE RJ45 management port  
(1) ID LED  
(1) MicroSD slot |
| Operating Environment | **Operating temperature:** 5°C to 40°C (can support 45°C under certain circumstances)  
**Nonoperating temperature:** -40°C to 70°C  
**Operating relative humidity:** 20% to 85%RH  
**Nonoperating relative humidity:** 10% to 95%RH |
| Trusted Platform Module (TPM) | TPM 2.0 module |
| Weight (Max. Configuration) | 45 lbs.10 oz. (20.7kg) |