

# Hitachi Advanced Server DS120 G2

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.

## DATASHEET



### Flexible Power for Solutions

#### Storage Options

DS120 G2 supports up to 12 hot-pluggable, front-side-accessible 2.5-inch non-volatile memory express (NVMe), serial-attached SCSI (SAS) or serial-ATA (SATA) Hard disk drive (HDD) or solid-state drive. (SSD) The system also offers 2 onboard M.2 slots. 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 PCIe 4.0 expansion slots, mezzanine slot as well as an OCP NIC 3.0 slot are available, allowing the configuration of I/O expansion and controller modules. This approach adds versatility, and enables DS120 G2 to be optimized for many different solutions, applications and workloads.

#### Enterprise-Class Features

DS120 G2 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.

### High Density, High Performance for Solution Workloads

With support for two Intel Xeon Scalable processors in just 1U of rack space, the Hitachi Advanced Server DS120 G2 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 32 slots for high-speed DDR4 memory, allowing up to 4TB memory capacity with RDIMM population (128GB x 32) or 8TB (512GB x 16) Intel Optane Persistent Memory.

[Read More on Converged and HyperConverged Infrastructure](#)

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Specifications	
<b>Processor</b>	<ul style="list-style-type: none"> <li>Intel 3<sup>rd</sup> Generation Xeon Scalable processor family</li> <li>Max. thermal Design Power (TDP) Support: 270W</li> <li>Number of Processors: 2</li> <li>Internal Interconnect: 11.2 gigatransfers per second (GT/s)</li> </ul>
<b>Form Factor</b>	<ul style="list-style-type: none"> <li>1U</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>W x H x D (inch): 17.3 x 1.7 x 30.7</li> <li>W x H x D (mm): 440 x 43.2 x 780</li> </ul>
<b>Chipset</b>	<ul style="list-style-type: none"> <li>Intel C620 (LBG-R) Series Chipset</li> </ul>
<b>Storage</b>	<ul style="list-style-type: none"> <li>(12) 2.5" hot-plug Serial ATA (SATA) drives or NVMe SSDs</li> <li>(4) 2.5" hot-plug SATA or SAS drives + (8) 2.5" hot-plug NVMe or SATA or SAS drives</li> </ul>
<b>Memory</b>	<ul style="list-style-type: none"> <li>Total Slots: (32) DDR4 RDIMM slots (up to (16) optional Intel Optane PMem)</li> <li>Capacity: Up to 4TB (128GBx32) RDIMM or Up to 8 TB with (512GB x 16) Intel Optane PMem</li> <li>Memory Type: 3200 MHz @2DPC (2 DIMM'S per channel)</li> <li>Memory Size: 16GB, 32GB, 64GB, 128GB RDIMM or 128GB, 256GB and 512GB PMem</li> </ul>
<b>Expansion Slot</b>	<ul style="list-style-type: none"> <li>(3) HHHH PCIe Gen4 x16 Slots</li> <li>(1) OCP NIC 3.0 PCIe Gen4 x8 Small Form Factor Mezzanine Slot</li> <li>(1) SAS PCIe Gen4 x8 Mezzanine Slot</li> </ul>
<b>Network Controller</b>	<ul style="list-style-type: none"> <li>Dedicated 1 GbE management port</li> <li>Optional Network Interface Controller Add in Cards</li> </ul>
<b>Front I/O</b>	<ul style="list-style-type: none"> <li>(2) USB 3.0, (1) Power Button and LED, (1) ID Button and LED, (1) Reset Button, (1) Status LED, (1) PEF LED</li> </ul>
<b>Storage Controller</b>	<ul style="list-style-type: none"> <li>Broadcom SAS3916 4G RAID Mezzanine, Broadcom SAS3816 HBA Mezzanine</li> <li>Intel Virtual RAID on CPU (VROC)</li> <li>Optional Storage Controller Add In Cards</li> </ul>
<b>Power Supply</b>	<ul style="list-style-type: none"> <li>(1+1) High efficiency redundant hot-plug 80Plus Titanium 1600W AC PSU</li> </ul>
<b>Fan</b>	<ul style="list-style-type: none"> <li>(8) 4056 dual rotor fans (15+1 redundant)</li> </ul>
<b>Video</b>	<ul style="list-style-type: none"> <li>Integrated ASPEED AST2500 8MB DDR4 video memory</li> </ul>
<b>System Management</b>	<ul style="list-style-type: none"> <li>Redfish v1.8, IPMI v2.0 Compliant, onboard "KVM over IP" support, Baseboard management controller</li> </ul>
<b>Rear I/O</b>	<ul style="list-style-type: none"> <li>(2) USB 3.0, (1) VGA, (1) micro USB (COM port), (1) Micro SD, (1) RJ-45 Management Port, (1) ID LED</li> </ul>
<b>Operating Environment</b>	<ul style="list-style-type: none"> <li>Operating temperature: 5°C to 40°C</li> <li>Non-operating temperature: -40°C to 70°C</li> <li>Operating relative humidity: 20% to 85%RH</li> <li>Non-operating relative humidity: 10% to 95%RH</li> </ul>
<b>Security</b>	<ul style="list-style-type: none"> <li>Trusted Platform Module 2.0, UEFI Secure Boot, Cryptographic signed BIOS and BMC firmware, Intel Platform Firmware Resilience*</li> </ul>
<b>Weight (Max. Configuration)</b>	<ul style="list-style-type: none"> <li>34 KG</li> </ul>

## Hitachi Vantara



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\*Post Launch Enhancement

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