HITACHI
Inspire the Next

Hitachi Compute Blade 320

Delivering a combination of compute density and enterprise-class reliability that far exceeds the capabilities of rackmount servers and other blade servers, Hitachi Compute Blade 320 operates with a level of simplicity that is absolutely unprecedented. It is the ideal platform for consolidating applications at the edge and application tier of the enterprise data center.

Unique Blend of Blazing Speed and Stunning Efficiency

Redefines "Power Packed"

Hitachi Compute Blade 320 packs more power into a smaller space than any comparable solution. It offers up to 10 blade modules per 6U chassis, with each blade module powered by up to 2 quad-core or 6-core Intel Xeon 5600 series processors. The result is up to a 60% space savings compared to rackmount server solutions. For large configurations the system can pack 70 dual-socket, quad-core servers in a single standard 42U rack: that is, up to 840 cores in a single rack.

Because they are powered by Intel Xeon 5600 series processors, Compute Blade 320 models also give you access to the latest Intel innovations. These include: Intel Turbo Boost Technology, which delivers performance on demand; Intel Hyper-Threading Technology, which delivers greater throughput and responsiveness for multithreaded applications; and Intel QuickPath Technology, which speeds traffic between processors and I/O controllers.

The results: Performance is optimized to fit application and business requirements. Automated features scale energy usage to the workload for optimal performance per watt. And Compute Blade 320 delivers up to 9 times the performance of a single-core server with 50% lower idle power compared to previous-generation products.

Mix and match blade models within a single chassis and run your most demanding applications with confidence. Compute Blade 320 has built-in reliability, availability and serviceability (RAS) features that keep you up and running at high performance 24/7. These range from hot-swap components and multiconfigurable power supplies to the unique Hitachi N+M cold standby feature for automated system failover.

The 6U Compute Blade 320 features a 110 volt power option, so it plugs right in to standard power outlets with no special equipment or adapters. It is also the lightest 6U system on the market. That means you can make changes to your configurations quickly and easily.

Hitachi Compute Blade 320 includes Hitachi Compute Systems Manager (HCSM) agentless server management and system monitoring software. HCSM enables power management, asset and configuration monitoring, and operating-system-level management of virtual servers. It integrates seamlessly with Hitachi Command Suite for a unified view of IT environments with Hitachi storage.

Many optional capabilities and components are available, such as a LAN passthrough option, Fibre Channel ports and switch modules for connecting to a SAN, and remote keyboard-video-mouse (KVM). These built-in components are less complex and require less cabling and less administration.

Provides Simplicity and Power

Are you are looking for a simple, manageable, cost-efficient way to deploy compute power when and where you need it? Or, do you need extra data center space? In either case, Hitachi Compute Blade 320 is your answer.

HITACHI COMPUTE BLADE 320 SPECIFICATIONS — CHASSIS

	Standard Chassis		
Size	6U (rack mountable)	Weight (max.)	Approx. 216 lbs or 98kg
Server Blade Modules	Up to 10 server blade modules	I/O Modules	1Gb/sec Ethernet switch module 1 to 10Gb/sec Ethernet switch module 1Gb/sec LAN pass-through module 4Gb/sec 16 Port Fibre Channel switch module
Dimensions (w x d x h)	17.3 in. (440mm) x 30.7 in. (780mm) x 10.3 in. (262mm)		
Power Supplies	110V or 220V hot swappable, N+1 or fully redundant configurable power supplies		

HITACHI COMPUTE BLADE 320 SPECIFICATIONS — SERVER BLADES

Blade Models	SAN Blade - GGAX1S5 / PCI Blade - GGAX51P5 / HDD Blade - GGAX51H5 / RAID Blade - GGAX5R5					
Processor	6-core Intel Xeon Processor X5690 (S5 Blade Only	6-core Intel Xeon Processor X5680 (S5 Blade only)	6-core Intel Xeon Processor X5675 6-core Intel Xeon Processor	6-core Intel Xeon Processor X5670		
Processor Frequency	3.46GHz	3.33GHz	3.03GHz	2.93GHz		
Processor	6-core Intel Xeon Processor E5649, Dual-core Intel® Xeon® Processor E5503	Quad-core Intel Xeon Processor E5640, Quad-core Intel Xeon Processor E5620	Quad-core Intel Xeon Processor E5620, Quad-core Intel Xeon Processor E5640	Quad-core Intel Xeon Processor E5603, Quad-core Intel Xeon Processor E5603	Dual-core Intel Xeon Processor E5503	Quad-core Intel Xeon Processor L5630, Dual-core Intel Xeon Processor L5630
Processor Frequency	2.53GHz	2.66GHz	2.40GHz	1.60GHz	2.00GHz	2.13GHz
Number of Processors	Min. 1, Max. 2					
Cache	4MB	12MB	12MB	12MB	12MB	12MB
System Bus (QPI) - Frequency Gigatransfers per Second (GT/sec)	4.80GT/sec	5.86GT/sec	5.86GT/sec	6.40GT/sec	6.40GT/sec	5.86GT/sec
Memory	4GB, 8GB and 16GB DDR3 Registered DIMM plus low voltage 4GB and 8GB					
Memory Capacity	R5, P5, S5: Max. 96GB — H5: Max. 48GB (*1)					
Internal Hard Disk	**R5 Server Blade:** up to 2 x 147GB 10krpm, 300GB 10krpm, 600GB 10krpm, 147GB 15krpm; 6Gb/sec, 2.5 in. SAS disks, hot-pluggable. **H5 Server Blade:** up to 6 x 147GB 10krpm, 300GB 10krpm, 600GB 10krpm, 147GB 15krpm; 6Gb/sec, 2.5 in. SAS disks, hot-pluggable and 64GB SATA SSD; **S5 and P5B Server Blade:** None; **P5C Server Blade:** 32GB/64GB SATA SSD					
Network Interface	Up to 4 x integrated Gigabit Ethernet (SERDES) ports					
Mezzanine Card Expansion Slot (internal)	R5, P5, H5, S5: one slot					
PCI Expansion Slot	P5: one PCI Express 2.0 (x4 Lanes) (*2)					
Supported Mezzanine Card Options	Dual Port 4Gb/sec Fibre Channel Mezzanine Card (Hitachi HFC0402-M) Dual Port 4Gb/sec Fibre Channel Mezzanine Card (Emulex LPe12002)					
Supported PCI Card Options	Dual Port 8Gb/sec Fibre Channel adapter (Emulex LPe12002); Dual Port 1000Base-T Ethernet adapter (Intel 82576); Quad Port 1000Base-T Ethernet adapter (Intel 82576); Dual Port 10GBASE-SR Ethernet adapter (Intel 82599)					

(*1) S5 Blade configured with X5680 processors have a maximum memory limit of 64GB.

(*2) PCI expansion slots for the P5 blade support a compact proprietary PCI card form factor.

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