HITACHI
Inspire the Next

DATASHEET

Do more in your data center with the Hitachi Compute Blade 500 blade server. This highly reliable enterprise platform is designed for virtualization and is the ideal platform for cloud computing applications.

Enterprise Blade Computing With Hitachi Compute Blade 500: Flexibility, Scalability and Outstanding Performance

Hitachi Compute Blade 500 (CB 500) delivers top computing power and performance, as well as unprecedented scalability and configuration flexibility with the latest Intel Xeon E5v2 and E7v2 family processors. It extends the benefits of Hitachi logical partitioning to new areas of the enterprise data center and includes a choice of integrated switched-fabric networking options.

Standard and double-width blade models are available with up to 2 CPUs in each standard-width blade, and up to 4 CPUs in each double-width blade. The standard CB520Hv2 blade features the E5-2600v2 processor series and supports 24 slots for high-speed, DDR3-registered ECC memory DIMMs. Each blade allows up to 1536GB of shared memory to be installed (using 64GB LRDIMM modules), as well as up to 2 hot-pluggable, front-side-accessible, serial-attached SCSI (SAS), or solid-state disk (SSD) drives, with hardware RAID. The double-width CB540A blade uses 4 E5-4600 processors with 48 DIMM slots per blade.

CB520Hv2 blade capability may be enhanced using either of two available expansion blades to add either additional storage, or IO expansion capability to the blade. These expansion blade types allow a CB500 system to support PCIe based flash for application acceleration as well as GPUs for virtual desktop deployments.

Scale Up to 8 Sockets

The CB520X blade, powered by up to 2 Intel E7v2 series processors, supports Hitachi multiblade SMP interconnect technology. It enables you to scale up to 4 connected CB520X blades to achieve a single 8-socket SMP system with 192 memory DIMM slots. CB520X blades can be combined in 2 or 4 blade configurations, and can grow incrementally by simply adding blades. In this way, compute, memory and I/O capacity scale together, to support large workloads and high memory capacity needs.

Rapid Deployment

A dedicated LCD control panel and simplified USB-enabled configuration setup allow fast implementation and accelerated time-to-value for your application. Simple, tool-free access speeds configuration, setup or upgrades, and allows optional customer replacement of critical modules for lower service cost for basic maintenance.

Flexible, Scalable Networking

Hitachi Compute Blade 500 provides a wide range of network connectivity options, including high-speed integrated fabric switching, futureproof shared access to high-speed IP networking, Fibre Channel and converged switched-fabric architectures. Connect to almost any network infrastructure to reduce cabling and complexity within your data center.

Secure Logical Partitions

The Hitachi Compute Blade 500 logical partitioning feature, LPAR, is embedded in CB 500 server blade firmware. The combination of Hitachi expertise with Intel virtualization technologies improves performance, reliability and security.

Support for 4 logical partitions per blade is included with the system, and may be expanded to allow for configuration of up to 30 logical partitions per blade. Use the embedded logical partitioning feature or Microsoft® Hyper-V® or VMware, or all 3 in a single chassis.

Unprecedented Adaptability

Hitachi Compute Blade 500 elegantly integrates network, I/O and server resources into a single, space-efficient, flexible solution. The rack-mountable 6U chassis houses up to 8 server blade modules. For I/O versatility, there are 4 bays for internal network switches, and dedicated storage expansion blades allow high-capacity

onboard high-density disk (HDD) or SSD storage to be supported. With sophisticated, built-in reliability, availability and serviceability features, Hitachi Compute Blade 500 is an ideal data center platform for consolidation of mission-critical applications, virtualization and cloud computing applications.

CHASSIS

Chassis	**Size**	6U (rack mountable)
	Dimensions (w x d x h)	447mm x 820mm x 266mm
	Server blade modules	Up to 8 server blade modules
	Management modules	1 standard, 2 maximum (redundant)
	Cooling fans	6 standard
	HDD RAID	Up to 4 expansion blades with 6 HDD/SSD per blade
	Switch modules	2 standard, 4 maximum
	Power supplies	Up to 4 power supply modules (N+1 or fully redundant) 80 PLUS Platinum Efficiency Rating

CB 500 SERVER BLADES

Item		Description		
		CB520v2 Server Blade	**CB540A Server Blade**	**CB520X Server Blade**
CPU	**CPU**	Intel Xeon E5-2600v2 series	Intel Xeon E5-4600 series	Intel Xeon E7-8800v2 or E7-4800v2 series
	Number of sockets	2	4	2 (per blade), 4-8 (SMP mode)
Memory	**DIMM type**	Registered ECC DDR3	Registered ECC DDR3	Registered ECC DDR3
	Number of slots	24	48	48 (single blade), 192 (8S SMP)
	Maximum memory capacity	768GB (32GB DIMM) 1.5TB (64GB LRDIMM)	1.5TB (32GB LRDIMM) 3.0TB (64GB LRDIMM)	1.5TB (32GB DIMM) (Single Blade) 6.0TB (32GB DIMM) (8S SMP) 12.0TB (64GB LRDIMM) (8S SMP)
Management Interface	**BMC/rKVM**	SH core based		
	Management LAN	1Gb Ethernet		
Onboard I/O	**NIC**	2x dual-port 10Gb or 1Gb Ethernet	4x dual-port 10Gb or 1Gb Ethernet	2x dual-port 10Gb or 1Gb Ethernet
Mezzanine	**Host bus**	PCIe (Gen. 3.0)		
	Number of slots	2x mezzanine card slots		4x mezzanine card slots
HDD	**RAID**	Hardware RAID		
	HDD bay	Hot-swappable 2x 2.5-inch SAS HDD/SSD (per blade)		
Front Port	**KVM**	USB connector (USB 2.0 for bootable optical drive)/KVM connector (USB 2.0 x2, VGA)		
	Indicator	Power, location, failure		
Form Factor		Standard width	Double width	
Operating System		Microsoft® Windows Server® 2012 R2, Red Hat Enterprise Linux 6.4, VMware ESX 5.5; Hitachi Compute Blade logical partitioning feature		

Hitachi Data Systems

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