KunLun 9032 Mission critical Server Specifications

Category	Item	KunLun 9032		
Basic configuration		Four system computer enclosures (SCEs), one central management enclosure (CME)		
	Quantity	Up to 32 CPUs (24 CPUs for non-full configuration)		
Processor	Туре	Intel® Xeon® E7-4800/E7-8800 v3 series processors		
	Capacity	Up to 24 TB (32 GB DIMMs), 32 TB (64 GB DIMMs)		
Memory	Quantity	Up to 768 DIMMs (12-DIMM memory risers) Up to 512 DIMMs (8-DIMM memory risers)		
	Туре	16 GB/32 GB DDR3/DDR4 DIMMs		
	Front I/O (FIO) modules	Up to four FIO modules (one for each SCE)		
	Hard disk	Up to ninety-six 2.5-inch hot-swappable SAS 3.0 HDDs/SSDs		
Storage	RAID	RAID controller cards (configurable): RAID 0, 1, 10, and 1E RAID 0, 1, 10, 5, 50, 6, and 60, a maximum cache capacity of 2 GB, and a supercapacitor for power-off protection Up to eight RAID controller cards of the same type (configurable)		
LOM network ports Rear LAN on motherboard (LOM) LOMs are plug-in cards and support flexible configuration: Up to eight LOMs Specifications: 2 x GE ports (RJ45)/ 4 x GE ports (RJ45)/ 2 x 10GE ports (SFP+)/ 2 x 10GE ports (RJ45)/ 2		LOMs are plug-in cards and support flexible configuration: Up to eight LOMs Specifications: 2 x GE ports (RJ45)/ 4 x GE ports (RJ45)/ 2 x 10GE ports (SFP+)/ 2 x 10GE ports (RJ45)		
PCle	Rear standard PCIe slot	Up to 24 rear standard PCIe 3.0 (non-hot-swappable) slots Or up to 16 rear standard PCIe 3.0 (hot-swappable) slots Each SCE supports a maximum of two rear IO modules, and each of the rear IO modules supports three non-hot- swappable slots (1 x PCIe 3.0 x16 + 2 x PCIe 3.0 x8) or two hot-swappable slots (2 x PCIe 3.0 x16) Support standard cards (NICs, HCAs, HBAs, etc.) that require connections to external cables.		
Expansion	Front PCIe slot	Up to 24 front standard PCIe 3.0 slots (non-hot-swappable, no connection to external cables) Each SCE supports a maximum of one FIO module (12-disk FIO module). Each FIO module supports a maximum of six non-hot-swappable standard NICs that require no connection to external cables. Support GPU cards and Huawei-developed PCIe SSDs (ES3000). Up to two GPUs in a single system or physical partition		
DVD drive		The CME supports one SATA DVD-RW drive.		
Cabinet door		Common door or noise-reduction door for selection. If a front noise-reduction door is configured, the 8-inch touch management LCD is configured.		
Power input	External interface	Four AC five-core industry plugs (2+2 redundancy)		
	Voltage input	90 V AC to 264 V AC, 50 Hz/60 Hz		
Power output	rer output voltage 12 V DC			
Mechanical	Height	19-inch standard cabinet		
specifications	Weight	Full-configuration weight: 950 kg (excluding noise-reduction doors); packaging materials weight: 15 kg		
Operating environment	Ig nent Temperature Operating temperature: 5°C to 40°C (41°C to 104°C) Storage temperature: -40°C to +65°C (-40°C to +149°C)			
System management		Remote management, web pages, virtual KVM, standard protocols such as IPMI 2.0 and SNMP, local touch management LCD (noise-reduction door required)		
Security feature		TPM 2.0; Power-on password, administrator password		
OS		RHEL, SLES, Microsoft Windows Server		
Partitioning		Physical partitioning, logical partitioning		

Huawei KunLun 9016/9032 Mission Critical Server



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Huawei KunLun 9016/9032 Mission Critical Server



Highlights

Superior, industry-leading performance and scalability

- 576-core, 768 DDR4 DIMM slots, maximized resources in a single system
- Support for physical and logical partitions, superb scalability
- Up to 1.97x(1) scalability factor

Reliable, innovative RAS 2.0 technology supporting hot-swappable CPU & memory module

- 100% modular design, maintenance without opening the chassis cover
- Hot-swappable CPUs and DIMMs, unique in the industry
- Proactive Failure Analysis Engine reducing 85%(2) downtime

Open, TCO 30% less than that of UNIX servers

- Compatible with mainstream x86 OSs, DBs, virtualization, etc.
- TCO 30%(3) less than that of Superdome 2
- TCO 50%(3) lower than that of Power 780

Mission critical platform openness is an unstoppable trend. Maybe you want to migrate services from closed UNIX servers to open x86 servers but hesitate over the reliability of x86 servers or the capability in providing over 8-socket scalability and performance of standard x86 servers. Integrating the open x86 ecosystem and Huawei servers with innovative industry-leading technologies, Huawei KunLun 9016/9032 is a reliable choice for your mission critical environment.

Huawei KunLun 9016/9032 perfectly integrates the open ecosystems with RAS features and performance required by Mission critical environments. KunLun uses Huawei's unique RAS 2.0 technology to build high server reliability from chips to OSs. The innovative scaleup architecture of KunLun supports high-speed interconnection among 32 x86 processors and 768 DDR4 DIMM slots. With the scalable performance and RAS features, KunLun easily handles surging online transactions, meets rapid service development requirements, and greatly increases computing cost-efficiency.

1: 1.97x scalability factor Third-party benchmark test result

- 2: 85% less downtime Huawei lab test data
- 3: 30%, 50% less TCO Summarized based on public data

KunLun redefines the mission critical servers. It can help accelerate platform transformation and service innovation in scenarios such as migrating Mission critical services from UNIX servers to cost-effective x86 servers, integrating databases or virtualization servers for lower OPEX, or deploying industry-leading memory computing for real-time insight of data.

KunLun 9016 Mission critical Server Specifications

	Category	Item	
	Basic configurat	ion	Two system computer enclosures (SCEs), o
		Quantity	Up to 16 CPUs (8 CPUs for non-full configu
	Processor	Туре	Intel [®] Xeon [®] E7-4800/E7-8800 v3 series pr
		Capacity	Up to 12 TB (32 GB DIMMs), 24 TB (64 GB
	Memory	Quantity	Up to 384 DIMMs (12-DIMM memory rise Up to 256 DIMMs (8-DIMM memory risers
		Туре	16 GB/32 GB DDR3/DDR4 DIMMs
		Front I/O (FIO) modules	Up to two FIO modules (one for each SCE)
		Hard disk	Up to forty-eight 2.5-inch hot-swappable S
	Storage	RAID	RAID controller cards (configurable): RAID 0, 1, 10, and 1E RAID 0, 1, 10, 5, 50, 6, and 60, a maximu Up to eight RAID controller cards of the sa
	LOM network ports	Rear LAN on motherboard (LOM)	LOMs are plug-in cards and support flexible Up to four LOMs Specifications: 2 x GE ports (RJ45)/ 4 x GE p
	PCIe	Rear standard PCIe slot	Up to 12 rear standard PCIe 3.0 (non-hot- Or up to 8 rear standard PCIe 3.0 (hot-swa Each SCE supports a maximum of two rear swappable slots (1 x PCIe 3.0 x16 + 2 x PC Support standard cards (NICs, HCAs, HBAs
	Expansion	Front PCIe slot	Up to 12 front standard PCIe 3.0 slots (nor Each SCE supports a maximum of one FIO non-hot-swappable standard NICs that rec Support GPU cards and Huawei-developed Up to two GPUs in a single system or phys
	DVD drive		The CME supports one SATA DVD-RW driv
	Cabinet door		Common door or noise-reduction door for management LCD is configured.
	Power input	External interface	Four AC five-core industry plugs (2+2 redu
		Voltage input	90 V AC to 264 V AC, 50 Hz/60 Hz
	Power output	Rated output voltage	12 V DC
	Mechanical	Height	19-inch standard cabinet
	specifications	Weight	Full-configuration weight: 420 kg (excludir
	Operating environment	Temperature	Operating temperature: 5° C to 40° C (41° C Storage temperature: -40° C to $+65^{\circ}$ C (-40°
	System management		Remote management, web pages, virtual l management LCD (noise-reduction door re
	Security feature		TPM 2.0; Power-on password, administrator passwo
	OS		RHEL, SLES, Microsoft Windows Server
	Partitioning		Physical partitioning, logical partitioning

KunLun 9016

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SAS 3.0 HDDs/SSDs

Im cache capacity of 2 GB, and a supercapacitor for power-off protection ame type (configurable)

le configuration:

ports (RJ45)/ 2 x 10GE ports (SFP+)/ 2 x 10GE ports (RJ45)

swappable) slots

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