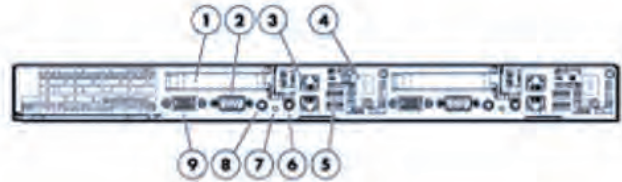
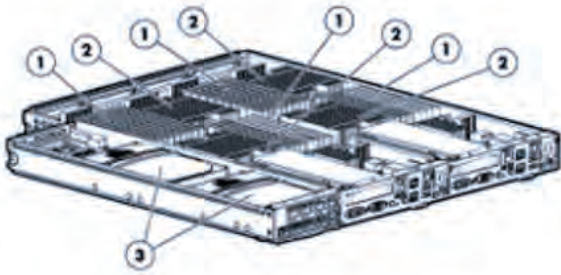


Overview

The HP ProLiant SL2x170z is part of a new family, HP ProLiant SL6000, of HP server solutions optimized for scale-out customers to greatly reduce costs, maximize power efficiency, and maintain total flexibility. The HP ProLiant SL2x170z G6 Server is designed for maximum compute density. Each SL2x170z system board is a two socket Intel server with 16 DDR3 DIMM sockets.

NOTE: The SL2x170 include two (2) SL170 system boards per tray. The following information is for each system board.



Open View:

1. 16 DDR3 DIMM slots
2. Up to two Intel® Quad-Core 5500 sequence processors
3. Two 3.5" (1 per server) or four 2.5" (2 per server) non-hot plug hard drives using a quick release drive carrier

Front View:

1. Optional low profile x16 PCI-e Gen 2
2. Serial Port
3. (2) 1Gbit NIC
4. Optional Dedicated Management port
5. (2) USB Ports
6. Power Button
7. Health LED
8. UID
9. Video Port

What's New

- Support for new HP CN1100E Dual Port Converged Network Adapter



Standard Features

NOTE: For the Standard Features shipped in the Factory Integrated Models, please see the "Configuration Information - Factory Integrated Models" section.

Processor

One of the following depending on Model

Six-Core Processor

Intel® Xeon® Processor X5680 (3.33 GHz, 12MB L3 Cache, 130W, DDR3-1333, HT, Turbo 1/1/2/2/3/3)

Intel® Xeon® Processor X5670 (2.93 GHz, 12MB L3 Cache, 95W, DDR3-1333, HT, Turbo 2/2/3/3/4/4)

Intel® Xeon® Processor X5660 (2.80 GHz, 12MB L3 Cache, 95W, DDR3-1333, HT, Turbo 2/2/3/3/4/4)

Intel® Xeon® Processor X5650 (2.66 GHz, 12MB L3 Cache, 95W, DDR3-1333, HT, Turbo 2/2/3/3/4/4)

Quad-Core Processors

Intel® Xeon® Processor E5640 (2.66 GHz, 12MB L3 Cache, 80W, DDR3-1066, HT, Turbo 1/1/2/2)

Intel® Xeon® Processor E5630 (2.53 GHz, 12MB L3 Cache, 80W, DDR3-1066, HT, Turbo 1/1/2/2)

Intel® Xeon® Processor E5620 (2.40 GHz, 12MB L3 Cache, 80W, DDR3-1066, HT, Turbo 1/1/2/2)

Intel® Xeon® Processor L5640 (2.40 GHz, 12MB L3 Cache, 60W, DDR3-1066, HT, Turbo 2/2/3/3/4/4)

Intel® Xeon® Processor L5630 (2.13 GHz, 12MB L3 Cache, 40W, DDR3-1066, HT, Turbo 1/1/2/2)

Intel® Xeon® Processor X5570 (2.93 GHz, 8MB L3 Cache, 95W, DDR3-1333, HT, Turbo 2/2/3/3)

Intel® Xeon® Processor X5560 (2.8 GHz, 8MB L3 Cache, 95W, DDR3-1333, HT, Turbo, 2/2/3/3)

Intel® Xeon® Processor X5550 (2.66 GHz, 8MB L3 Cache, 95W, DDR3-1333, HT, Turbo, 2/2/3/3)

Intel® Xeon® Processor E5540 (2.53 GHz, 8MB L3 Cache, 80W, DDR3-1066, HT, Turbo 1/1/2/2)

Intel® Xeon® Processor E5520 (2.26 GHz, 8MB L3 Cache, 80W, DDR3-1066, HT, Turbo 1/1/2/2)

Intel® Xeon® Processor E5506 (2.13 GHz, 4MB L3 Cache, 80W, DDR3-800)

Intel® Xeon® Processor E5504 (2.00 GHz, 4MB L3 Cache, 80W, DDR3-800)

Intel® Xeon® Processor L5530 (2.40 GHz, 8MB L3 Cache, 60W, DDR3-1066, HT, Turbo 1/1/2/2)

Intel® Xeon® Processor L5520 (2.26 GHz, 8MB L3 Cache, 60W, DDR3-1066, HT, Turbo 1/1/2/2)

Intel® Xeon® Processor L5506 (2.13 GHz, 4MB L3 Cache, 60W, DDR3-800)

Dual Core Processors

Intel® Xeon® Processor E5503 (2.00 GHz, 4MB L3 Cache, 80W, DDR3-800)

Intel® Xeon® Processor E5502 (1.86 GHz, 4MB L3 Cache, 80W, DDR3-800)

NOTE: HT indicates that the processor model supports Intel® Hyper-Threading Technology

NOTE: Turbo indicates the maximum potential frequency increment when using Intel® Turbo Boost Technology, with 4, 3, 2, and 1 cores active.

NOTE: DDR3 speed is the maximum memory speed of the processor. Actual memory speed may depend on the quantity and type of DIMMs installed.

NOTE: For the Intel 5500 and 5600 Series, the letter preceding the model number indicates the performance/wattage of the processor. "X" denotes High Performance/Wattage; "E" denotes Enterprise Performance/Wattage (Mainstream), and "L" denotes Lower Wattage.

NOTE: Up to 2 processors supported. Mixing different processor models is not supported.



Standard Features

Cache Memory One of the following depending on Model	<p>12MB (1 x 12MB) Level 3 cache NOTE: All 5600 sequence processor models.</p> <p>8MB (1 x 8MB) Level 3 cache NOTE: All processor models except for those identified below.</p> <p>4MB (1 x 4MB) Level 3 cache NOTE: For processors L5506, E5504, E5506, E5503 and E5502.</p>					
Chipset	<p>Intel® 5520 Chipset NOTE: For more information regarding Intel chipsets, please see the following URL: http://www.intel.com/products/server/chipsets/</p>					
Upgradeability	Upgradeable to two processors					
Memory Protection	Advanced memory protection					
Memory	Type	DDR3 Registered (RDIMM) or Unbuffered (UDIMM)				
	Standard (per server tray)	6GB (3 x 2 GB) UDIMMs				
	Maximum (RDIMM) (per server tray)	192GB (12 x 16GB) for Registered Memory configurations using PC3-8500R DDR3 Registered (RDIMM) memory, operating at 800MHz when fully populated in 12 slots				
	Maximum (UDIMM) (per server tray)	48GB (12 x 4GB) for Unbuffered Memory configurations using PC3-10600E DDR3 Unbuffered (UDIMM) memory, operating at 1066MHz when fully populated at 2 DIMMs per Channel in 12 slots				
	NOTE: Depending on the memory configuration and processor model, the memory speed may run at 1333MHz, 1066MHz, or 800MHz. Please see the Online Memory Configuration Tool at: www.hp.com/go/ddr3memory-configurator .					
	NOTE: Kits described as LP include Low Power DIMMs. For more information on ProLiant Energy Efficient Features, see: www.hp.com/go/proliant-energy-efficient .					
Network Controller	HP NC362i Integrated Dual Port Gigabit Server Adapter					
Expansion Slots	NOTE: One available PCI Express Gen 2.0 slots. Optional Slot 1: Low profile x16 PCI-Express 2.0.					
	Expansion Slots #	Technology	Bus Width**	Connector Width	Form Factor	Notes
	1	PCI-Express 2.0	x16	x16	Low Profile	3.3 volts
	** Indicates the number of physical electrical lanes running to the connector.					



Standard Features

Storage Controller	HP Embedded Smart Array B110i SATA RAID Controller (RAID 0, 1, 10) per server node NOTE: To enable RAID on Embedded SATA, use the HP Smart Array B110i SATA Raid controller, To enable use of the B110i, enter the ROM based setup utility(RBSU). The option for enabling RAID can be found in the advanced section of the RBSU. For additional details www.hp.com/go/SATARAID . NOTE: Transfer rate: 3.0 Gb/s SATA. NOTE: A HP Smart Array controller is required for SAS Hard Drives NOTE: An external diskette drive, USB floppy drive key or virtual FDD using LO100 Advanced Pack is needed to install storage controller drivers during a Windows operating system installation from a CD.
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Storage	Diskette Drives	Via USB only
	Optical Drives	DVD / CD drives via USB only
	Hard Drives	None ship standard
	Drive Bays	Up to two 3.5" non-hot plug Serial ATA (SATA) or Serial Attached SCSI (SAS) hard drives using a quick release drive carrier (1 per server) Up to four 2.5" non-hot plug Serial ATA (SATA), Serial Attached SCSI (SAS), or Solid State Drive (SSD) hard drives using a quick release drive carrier and the SFF drive cage (2 per server)

Maximum Internal Storage	Non-Hot Plug SATA 3.5"	4.0TB	2 x 4TB (1 drive for each system board)
	Non-Hot Plug SAS 3.5"	4.0TB	2 x 2TB (1 drive for each system board)
	Non-Hot Plug SATA 2.5"	2TB	4 x 500GB (2 drives for each system board)
	Non-Hot Plug SAS 2.5"	1.2TB	4 x 300GB (2 drives for each system board)
	Non-Hot Plug SSD 2.5"	480GB	4 x 120GB (2 drives for each system board)

Interfaces	Serial	1
	Parallel	None
	Network RJ-45	2 10/100/1000 NIC ports (1 NIC shared for the HP ProLiant Lights Out 100i Remote Management)
	Graphics	1
	Management	1 Optional Dedicated LO100i Management Port
	Health LED	1 front per server node
	Power	1 front per server node
	UID	1 front per server node
	USB	3 (two front, one internal)



Standard Features

Industry Standard Compliance	ACPI V2.0 Compliant PCI 2.2 Compliant PXE Support WOL Support Microsoft® Logo certifications IPMI 2.0 DCMI 1.0 SMASH CLP compliant
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Server Power Cords	<p>One 6' Highline (IEC-IEC) power cord ships standard</p> <p>NOTE: HP ProLiant SL servers are primarily connected to PDU's in data center racks so they ship standard with only a PDU power cord (416151-B21). If a user wishes to power a ProLiant SL server using a 110V receptacle (NEMA-15), the NEMA power cord must be ordered separately.</p> <p>NOTE: If customers require a local power cord, they can check the power cord matrix for the appropriate cord. Please see the following power cord matrix: http://www.hp.com/go/powercordmatrix.</p>
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Common Slot Power Supplies	<p>HP has a new design for ProLiant power-supplies. The new Common Slot (CS) Power Supply provides the customer with commonality in power supplies across multiple platforms to save on the cost of spares and allows HP to offer multiple power solutions to fit the customers' needs. Many HP ProLiant Servers come with or are compatible with high-efficiency power without degrading performance of the ProLiant server. Power Supplies have efficiency ratings up to 94%. There are five right size power options to choose from depending on the configuration of your server. To make sure you select the correct power supply to meet your configuration, please use the HP Power Advisor at: www.hp.com/go/hppoweradvisor. All HP Common Slot power sources are UL, CE Mark Compliant, Hot Plug and Redundant.</p> <p>It is highly recommended that you use the HP Power Calculator in defining the "Right-Size" power supply for your needs.</p> <p>The HP ProLiant Common Slot Power supplies meet multiple Energy Efficiency Initiatives: Climate Savers Computing Initiative GOLD and ECOS Consulting 80PLUS GOLD for the 460w and 750w Power Supplies and Climate Savers Computing Initiative PLATINUM, ECOS Consulting 80PLUS PLATINUM for 1200w Power Supply. HP worked with the EPA on developing an ENERGY STAR Computer Server specification and we now offer models that meet the requirements. Please visit the ENERGY STAR website at: www.energystar.gov for a list of qualified platforms.</p> <p>Optional power supplies can be purchased through power supply option kits (see Power Supply Options for part numbers).</p>
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System Fans	4 system fans ship standard in z6000 chassis - N+1 redundant
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Required Cabling	For required cabling information, refer to the HP Web site at: www.hp.com/servers/s2x170z .
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Standard Features

Operating Systems and Virtualization Software Support for ProLiant Servers

Microsoft Windows Server
Microsoft Windows Server Hyper-V
Microsoft HPC Server 2008
Red Hat Enterprise Linux (RHEL)
SUSE Linux Enterprise Server (SLES)
Solaris
VMware ESX
Citrix Essentials for XenServer

NOTE: For more information on HP's Certified and Supported ProLiant Servers for OS and Virtualization Software and latest listing of software drivers available for your server including how to purchase from HP, please visit our OS Support Site at: <http://www.hp.com/go/ossupport>

Graphics

32MB shared supporting 1600x1200x16M resolution

Form Factor

HP ProLiant z6000 G6 Chassis - 2U Chassis can support up to two SL2x170z server trays in the 2U chassis. This equals a total of four (4) SL170 system boards
HP ProLiant SL2x170z G6 Server - 1U server tray with two (2) SL170 system boards

Embedded Manageability HP LO100 Advanced

HP Lights-Out 100 with Optional LO100 Advanced Licenses for Virtual KVM and Virtual Media.

Standard Features:

- Embedded IPMI standard reporting
- System event log access
- Remote Serial console (serial redirection)
- Browser, Telnet access
- SMASH-CLP compliant
- IPMI 2.0 compliant
- DCMI 1.0 compliant
- Secure Socket Layer Encryption
- Secure Shell Encryption

Licensed Features

- Virtual media (Floppy, CD, USB 2.0) with Advanced License
- Virtual KVM with Advanced License

Security

Power-on password
Setup password
Diskette boot control
Secure Sockets Layer (SSL)
Secure Shell (SSH)

