

HP ProLiant BL460c Server Blade

Data sheet



The way businesses select servers is changing. It's no longer about enclosures and server devices—it's about how everything fits together and how it integrates into your existing infrastructure. The functionality of today's datacenter is constrained by the form of the building blocks used and the processes required to manage them.

Is your datacenter inflexible, static and hardwired? Is it tied to manual tasks, maxing out people and processes? Is it over-provisioned, wasting power, cooling, space, staff and already limited budget resources? Does it require management and monitoring 24x7?

HP has the solutions you need to make your datacenter flexible, automated, effectively provisioned and consistent while using fewer resources and lowering your TCO. HP server blades are designed to simplify the "racked, stacked and wired world."

With features equal to standard 1U rack-mount servers, the two-processor, dual-core or quad-core BL460c combines power-efficient compute power, and high density with expanded memory and I/O for maximum performance. The BladeSystem c7000 enclosure supports up to 16 BL460c server blades, two more servers than the IBM BladeCenter and each BL460c supports double the memory capacity of the HS21 server without an expansion blade. Now with quad-core and dual-core Intel® Xeon® processors, DDR2 fully buffered DIMMs, Serial Attached SCSI (SAS) or Serial ATA (SATA) hard drives, support of multifunction NICs and multiple I/O cards, the BL460c provides a performance system ideal for the full range of scale-out applications. In this small form factor, the BL460c includes more features to enable high-availability, such as hot plug hard drives, mirrored-memory, online spare memory, memory interleaving, embedded RAID capability and enhanced remote Lights-Out management.



Key features and benefits

- Excellent performance for demanding scale-out applications
- Versatility and availability for a wide range of deployments
- Quality engineering for reliability and ease of ownership
- Impressive expansion and management solutions for easy maintenance

Features and benefits

The BL460c, a 2P server blade, provides enterprise-class features for high performance and reliability without compromising energy efficiency or density. The BL460c server blade combines powerful dual-core and quad-core Intel Xeon series processor performance with greater memory capacity, hot plug SAS or SATA drives, simultaneous support of multiple I/O cards and enhanced remote management capabilities for the most complete dense server blade.

Proven performance and versatility

- Up to two Intel Xeon 5300, 5100 or 5000 series processors with Intel VT technology to improve performance in a virtual environment
- Supports up to 32 GB of ECC 667MHz DDR2 fully buffered DIMMs with mirrored-memory, memory interleaving and online spare capability
- 2 mezzanine expansion slots
- HP Smart Array E200i with 64 MB read cache with optional battery-backed write cache

Density

- Fine-tuned for maximum density deployments of 64-bit systems without sacrificing functionality with an internal USB connector for enhanced security
- Supports up to 8 DIMM memory expansion slots
- Two hot plug small form factor (SFF) SAS drives with battery-backed write cache support
- Simultaneously supports multiple I/O cards with two expansion slots

Options, reliability and efficiency

- Storage support of up to two high-performance SFF hot plug SAS or SATA disk drives
- Low-voltage processor option kits targeted at most optimal performance per U and power per watt resulting in cooler, power-enhanced systems
- Optional battery-backed write cache (BBWC) option to protect against data loss

Enterprise features with no compromises

- Fine-tuned for greater density deployments of 64-bit systems without sacrificing functionality with an internal USB connector for enhanced security
- Supports up to eight fully buffered DIMM memory expansion slots
- Two hot plug SFF SAS or SATA drives with BBWC support
- Simultaneously supports multiple PCI Express I/O cards with two expansion slots

Management software and configuration tools

- Integrated Lights Out 2 (iLO 2) Management for unprecedented, high-speed management that includes virtual KVM and graphical remote console at no additional cost
- HP Systems Insight Manager Thermal Logic Cooling —instant thermal dashboard for system diagnostics and control of power and cooling
- Multifunction gigabit NICs with TOE and RDMA/iSCSI options to reduce network latency
- Smart power and thermal management now available with HP Power Regulator for policy-based power management; also new industry-exclusive Power Meter reporting capability to log actual power usage

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Processor and memory

Processors supported	<p>Quad-Core Intel Xeon Processors:</p> <p>X5355: 2.66 GHz, 1333 MHz FSB</p> <p>E5345: 2.33 GHz, 1333 MHz FSB</p> <p>E5335: 2.00 GHz, 1333 MHz FSB¹</p> <p>E5320: 1.86 GHz, 1066 MHz FSB</p> <p>E5310: 1.60 GHz, 1066 MHz FSB</p> <p>L5320: 1.86 GHz, 1066 MHz FSB</p> <p>Dual-Core Intel Xeon Processors:</p> <p>5160: 3.0 GHz mid-voltage (MV), 1333 MHz FSB</p> <p>5150: 2.66 GHz, 1333 MHz FSB</p> <p>5140: 2.33 GHz, 1333 MHz FSB</p> <p>5130: 2.03 GHz, 1333 MHz FSB¹</p> <p>5120: 1.86 GHz, 1066 MHz FSB¹</p> <p>5110: 1.6 GHz, 1066 MHz FSB</p> <p>5063: 3.20 MV GHz, 1066 MHz FSB</p> <p>5050: 3.00 GHz, 667 MHz FSB¹</p> <p>¹Available through Configure-to-order or specials models only</p>
Number of processors	1-2
Processor cores	Quad and dual
Maximum processor	Quad-Core Intel Xeon Processor X5355: 2.66 GHz, 1333 MHz FSB
Memory type	PC2-5300 DDR2 fully buffered DIMMs
Maximum front side bus	1333 MHz
Processors per 42U enclosure	128
Standard/maximum memory	1 or 2 GB (depending on model)/32 GB maximum, 8 DIMM slots

Storage

Maximum internal storage	Up to 2 hot plug SFF SAS 292 GB (2 x 146 GB) or Up to 2 hot plug SFF SATA 120 GB (2 x 60 GB)
Number of disk drives	Up to 2
Fibre Channel SAN support	Yes
Storage controller	Smart Array E200i

Deployment

Maximum blades per enclosure	10U enclosure (16 blade servers per enclosure)
Networking	2 integrated multifunction NICs (additional via mezzanine card)
Remote management	Embedded iLO 2 Standard Blade Edition
Warranty	3-year parts, 3-year labor, 3-year onsite

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The ProLiant BL460c combines powerful processing power, flexibility and remote management capabilities in the most complete dense 2P server blade.

Financial services

HP Financial Services provides innovative financing and financial asset management programs to help you cost-effectively acquire, manage and ultimately retire your HP solutions. For more information on these services, contact your local HP representative, or visit: www.hp.com/go/hpfinancialservices

For more information

For more information about the ProLiant BL460c, contact your local HP representative, or visit: www.hp.com/servers/bl460c

HP Services

HP services provides nearly continuous care and support expertise with committed response designed to meet your IT and business needs. To fully capitalize on your HP BladeSystem capabilities requires a service partner who thoroughly understands your server technology and systems environment. HP Services, an industry leader in provision of multi-vendor support solutions provides a range of services designed to meet the varying needs of business. Whether an SMB or large global corporation, HP has an HP BladeSystem support offer to help you speedily deploy and increase system uptime.

- **Extended Care**—Minimum recommended service support offer designed to enable access to expert assistance, whenever needed.
HP ProLiant BL460c—3 year 24x7 same-business-day hardware support
- **Committed Care**—Cost-effective combined hardware and software support service designed to extend HP Services committed response and to speed more complex interoperability problem resolution.
HP ProLiant BL460c—3-year 24x7 Support Plus 24
- **Committed Repair**—Highest HP Support service level recommended to help increase IT performance and availability, improve IT management with comprehensive, consistent and integrated proactive and reactive hardware and software support services.
HP ProLiant BL460c—3-year 24x7 Mission Critical Proactive 24 service
- **Deployment Services**—HP Installation and Start Up services designed to take time, risk and worry out of the deployment of ProLiant servers—and free your IT Team to focus on what they do best, meeting your business needs.
HP ProLiant BL460c Installation and Startup for BladeSystem c-Class infrastructure service

For more information visit: www.hp.com/services/bladessystemservices

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