HP ProLiant BL480c Server Blade

Data sheet

The powerful and versatile HP ProLiant BL480c delivers no-compromise performance and expansion to support your most challenging applications.
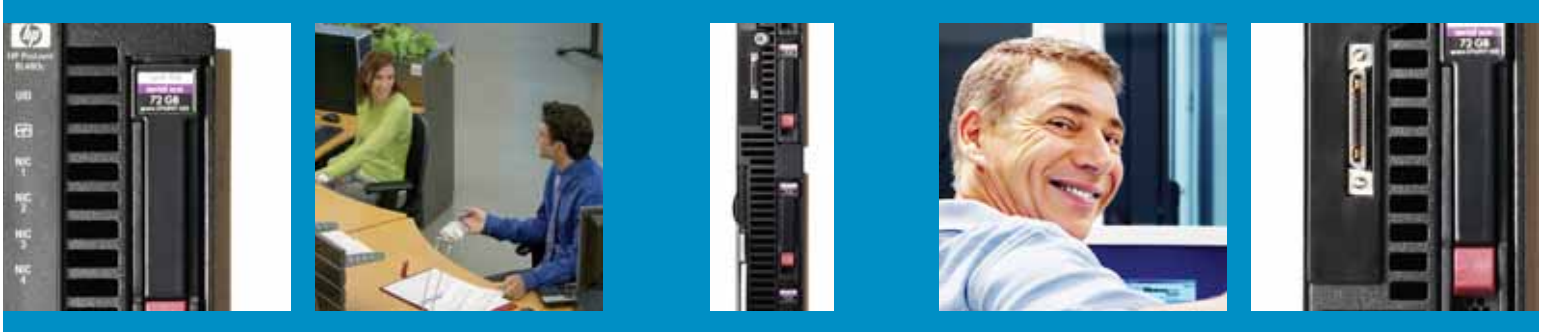
Unmatched combination of performance and expansion

With more memory, drives, and I/O expansion, the BL480c is a workhorse server for demanding applications and databases. The ProLiant BL480c server blade features two Quad-Core or Dual-Core Intel® Xeon® processors, up to 48 GB of ECC 667 MHz DDR2 memory, four Gigabit Ethernet adapters, integrated RAID controller, four hot plug SAS or SATA drive bays, and three I/O mezzanine expansion slots. Experience the difference with the HP ProLiant BL480c.

Key features and benefits

- **Unparalleled combination of performance and expansion for demanding scale-out applications:** The ProLiant BL480c will make you look at server blade computing in a whole new way. There is no need to worry about giving up features while moving to a blade architecture because this blade has it all—more memory, more drives, and more I/O. It has the performance and expansion to handle demanding applications for which you may not have considered blades in the past. ProLiant BL480c takes multi-core server blade computing to a new level that is unmatched in the industry.

- **Rich in redundant features to deliver increased uptime:** You can mirror drives with the HP Smart Array P400i controller that ships standard on every ProLiant BL480c server blade. The P400i provides RAID 1, 0, 1+0, and 5 and also features a battery-backed write cache option (BBWC) to further protect your data. The BBWC also adds RAID 6 (advanced data guarding). All the drives are hot plug so you can easily swap drives without shutting down the system.

You can also add availability to your networking by configuring the four embedded Gigabit Ethernet network adapters for redundancy. High-availability features are also delivered with the memory subsystem. The ProLiant BL480c supports advanced ECC, online spare, memory interleaving, and mirrored memory. No other server blade vendor offers this level of memory protection in a high-performance, greater density form factor.

The HP BladeSystem c3000 and c7000 enclosures support up to four and eight BL480c server blades respectively, provide redundant power and cooling, and a real-time view of heat, power, and cooling data. For the first time, you have access to information about your actual power utilization and temperature levels, which can help you plan a high availability architecture.

- **Quality ProLiant engineering for reliability and ease of ownership:**
  The ProLiant BL480c was designed with all the features you have come to expect from ProLiant servers. Utilize the same great management tools such as HP System Insight Manager, Integrated Lights-Out 2 (iLO 2), and Rapid Deployment Pack software—all of which are designed for ProLiant servers and server blades. There is no need to learn a new tool to take advantage of server blade architecture. The server blades also support the same drives and memory as standard ProLiant servers, taking the headache out of stocking different spares. Experience similar features like common management, processors, memory, drives, Ethernet network adapters, Smart Array controllers, and internal USB.

- **Impressive management solutions for easy maintenance:**
  ProLiant server blades are now even easier to manage. Every c-Class blade features iLO 2 Standard Blade Edition remote management, which delivers performance up to 15 times faster than iLO to save valuable time. Access iLO 2 easily through the Integrated Remote Console that delivers a Terminal Services-like user interface for improved screen visibility and a simple command bar with full power and virtual media control. All standard ProLiant server blades come with advanced features such as Graphical Remote Console and browser-accessible virtual floppy/CD-ROM.

Key features and benefits

Designed to keep pace with high computing demands, the BL480c server offers outstanding quad-core and dual-core processing power, as well as impressive expansion and management tools that make it easy to deploy and maintain.

Performance
- Latest Dual-Core and Quad-Core Intel® Xeon® 5000 Sequence processors
- Low voltage Intel® Xeon® 5000 Sequence processors
- Intel® 5000P chipset supporting up to a 1333 MHz front side bus
- Up to 48-GB ECC 667 MHz DDR2 via 12 fully buffered DIMM slots
- High-performance Smart Array P400i controller with 256 MB cache, RAID 0/1/1+0/5, and optional battery-backed write cache with RAID 6

Expansion
- Four hot plug small form factor (SFF) SAS or SATA drive bays
- Four integrated Gigabit Ethernet network adapters—two are Multifunction with TCP/IP offload engine for Microsoft Windows and iSCSI boot for Linux
- Three mezzanine expansion slots to simultaneously support a wide variety of I/O mezzanine cards including Multifunction Gigabit and 10 Gb Ethernet, standard Gigabit Ethernet, 4 Gb Fibre Channel, and 4X DDR (20 Gb) InfiniBand

Management
- Integrated Lights-Out 2 Standard Blade Edition provides high-performance, out-of-band remote management solution
- New BladeSystem Thermal Logic Cooling displays instant thermal dashboard for system diagnostics and control of power and cooling
- Insight Control Data Center Edition provides a software suite that simplifies provisioning and management
- Smart power and thermal management available with HP Power Regulator including new industry-exclusive power meter reporting capability to log actual power usage

Options
- Add battery-backed write cache option to the Smart Array P400i for fault tolerance
- Get more out of HP ProLiant Essentials for Integrated Lights-Out. Upgrade to Integrated Lights-Out Select Pack adding power regulator reporting, command line and scripted multi-server virtual media, and enterprise security
- Take advantage of the 3 mezzanine slots that allow for a variety configuration options—Multifunction Gigabit and 10 Gb Ethernet, standard Gigabit Ethernet, 4 Gb Fibre Channel, and 4X DDR (20 Gb) InfiniBand

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, you require 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 BL480c—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 BL480c—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 BL480c—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 BL480c Installation and Startup for BladeSystem c-Class infrastructure service

For more information visit: **www.hp.com/services/bladesystemservices**

Ideal applications
- Large enterprise datacenters with multi-tiered applications such as SAP, PeopleSoft, Siebel, Oracle®, and JDE
- Corporate infrastructure: file/print, mail/messaging including Exchange and Lotus Notes, domain name system, directory services, firewall, and small to medium-size databases
- Virtualization environments such as those using VMware® and Microsoft® Virtual ServerVMware® and Microsoft® Virtual Server VMware® and Microsoft® Virtual Server
- Performance-sensitive network infrastructure services, client/server: Citrix, Terminal Services

HP ProLiant BL480c

Processors	Quad-Core and Dual-Core Intel Xeon 5000 sequence Intel 5000P chipset supporting up to a 1333 MHz front side bus
Maximum processors	2
Memory type	PC2-5300 DDR2 fully buffered DIMMs with online spare, memory interleaving, and mirrored memory
Standard/maximum memory	2 or 4 GB / 48 GB, 12 DIMM sockets
Internal disk drives	Up to four small form factor SAS or SATA hot-plug hard drives
Storage controller	Integrated HP Smart Array P400i with 256 MB memory module, RAID 0/1/1+0/5, and optional battery-backed write cache with RAID 6 upgrades
Internal I/O expansion	Three mezzanine I/O slots for QLogic and Emulex 4 Gb Fibre Channel, Gigabit and 10 Gb Ethernet, and 4X DDR (20 Gb) InfiniBand
Networking	One embedded NC326i Dual Port Gigabit Server Adapter Two embedded NC373i Multifunction Gigabit Server Adapters with TCP/IP Offload Engine for Microsoft Windows 2003 and iSCSI boot for Linux One embedded 10/100 network adapter dedicated to iLO 2 management Optional 10 Gb Ethernet, 4X DDR (20 Gb) InfiniBand, and additional Gigabit Ethernet via mezzanine I/O slots
USB drive support	One internal USB 2.0 connector for security key devices and USB drive keys
Remote management	Integrated Lights-Out 2 Standard Blade Edition Optional ProLiant Essentials management packs
Operating System support	Microsoft Windows 2000 and 2003, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, Debian Linux, and Sun Solaris x86
Form Factor	Full height server blade; four servers per c3000 enclosure, eight servers per c7000 enclosure
Warranty	3-year parts, 3-year labor, 3-year onsite
Additional Information	For detailed specifications, please see the BL480c quickspecs located at **http://www.hp.com/servers/bl480c**

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 HP ProLiant BL480c, contact your local HP representative, or visit: **www.hp.com/servers/bl480c.**