



HP ProLiant BL2x220c G5 Server Blade

Data sheet



Get more compute per square foot and reduced power consumption with one of the highest densities in the industry. Presenting the HP ProLiant BL2x220c G5.

Overview

Aimed at high performance computing (HPC), grid, and massive scale-out applications, the BL2x220c G5 provides industry-leading compute density. It has up to 32 server nodes per enclosure, each capable of supporting 2 Quad-Core CPUs and up to 16 GB of RAM. This means it can scale to provide up to

1,024 cores and 2 TB of RAM per 42U rack. Two Gigabit Ethernet ports (provided per node as standard) with options available to upgrade to 10 Gbit Ethernet or InfiniBand provide high performance and low latency interconnects.

Key benefits

Performance

- Up to 2 Intel Xeon 5400 Series Quad Core CPUs or Intel Xeon 5200 Series Dual Core CPUs per server node
- x8 mezzanine per node for I/O expansion
- Up to 16 GB of PC5200 DDR2 memory per server node, 4 GB (2x2 GB) standard

Management

- Embedded iLO2 Blade Edition per node for remote management
- Embedded power management and power capping enabled through iLO Select
- HP Insight Control Environment for HP BladeSystem for comprehensive system health, remote control, operating system deployment, power management, vulnerability scanning, and patch management in an easy to install software suite

Density

- Two servers per slot, up to 32 server nodes per c7000 enclosure, 16 server nodes per c3000 enclosure
- 2 sockets per server, 4 per slot, 64 per enclosure
- Up to 256 Cores per enclosure
- Up to 1024 cores and 2 TB of RAM per 42U rack

Power Efficiency

- Reduced power consumption without performance loss with low power Intel 5400 Series Quad Core CPUs
- Low Power Memory to reduce power consumption and heat generation
- HP PARSEC cooling architecture for optimum cooling efficiency and lowered fan power
- Highest server density leading to reduced enclosure power overhead

Ideal environment

The BL2x220c G5 is ideal for HPC, grid, and scale-out environments where jobs are distributed across a large number of nodes.

Management and configuration tools

Industry-leading management and configuration tools for superior remote administration, complete life cycle management, and resource utilization to help lower total cost of ownership.

HP Integrated Lights-Out 2 (iLO2) Standard Blade Edition delivers the industry's most complete, high-performance, out-of-band remote management solution. With new Virtual KVM performance, iLO 2 Standard Blade Edition provides all of the capabilities required for administrative or maintenance tasks from a single remote console. iLO 2 also provides true in-front-of-the-server control of systems located in data centers or remote locations from the office, home, or travel locations, eliminating unnecessary travel and increasing IT efficiency and responsiveness. Now IT administrators have a single remote management and control solution.

<http://h18004.www1.hp.com/products/servers/management/ilo2-blades/index.html>

Get even more out of HP iLO 2 Select by upgrading to the iLO 2 Select Pack, featuring power regulator reporting, scripted multi-server virtual media and additional enterprise security. iLO 2 Select has flexible licensing including site licenses and an eight blade kit. <http://h18004.www1.hp.com/products/servers/management/ilo2-select/index.html>

HP Insight Control Environment for BladeSystem is an integrated suite of software that simplifies the provisioning and management of HP BladeSystem infrastructures. Insight Control Environment for BladeSystem delivers comprehensive management for HP BladeSystem including hardware resource deployment, health and performance monitoring, software version control, and vulnerability scanning and patch management. Transform your data center into an excellent run server infrastructure with time-smart management software that delivers total control, increased flexibility, and tangible savings to your business.

<http://h18013.www1.hp.com/products/servers/management/ice/index.html>

WHY HP?

The HP ProLiant BL2x220c G5 blade server delivers the highest compute density and maximum power efficiency available in the industry today.

Why HP for blades?

Our innovations, brought together from excellent technology from across the HP portfolio broaden the breadth and scope of our BladeSystem offering. These help solve your daily business challenges.

- **Thermal Logic technologies:** Smart technology saves energy and lightens the load on your air conditioners, giving you up to 30% power savings¹.
- **Virtual Connect architecture:** Wire once, then add, replace, or recover blades on the fly, without impacting networks and storage or creating extra steps.
- **Insight Control management:** Simple, single package with all the tools to streamline operations and increase administrator productivity up to ten-fold.
- **NonStop midplane:** The same million-dollar reliability that helps run Wall Street is built-in to keep your business up and running.
- **Onboard Administrator:** Wizards and tools to get you get up and running in minutes compared to hours or days to simplify daily tasks, get warned of potential issues, and reduce unwanted downtime.

¹ Source: http://h20338.www2.hp.com/enterprise/downloads/HPvslMB_bladesystem.pdf

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Processor and Memory

Processor Type	Intel® Xeon® 5400 Series Intel Xeon 5200 Series
Processors	Up to two Dual-core or Quad-core Intel Xeon 5400 and 5200 sequence processors. Max TDP 80W
Processor Core	Dual and Quad
Processor Capacity	2 per Server node
Max Processor Speed	3.0 GHz
Max Front Side Bus Speed	1333 MHz
Processors per 42U enclosure	32 Server Blades in 10U
Memory Type	PC2-5300 DDR2
Standard Memory	4 GB (2 x 2 GB) per server node
Max Memory	16 GB (4 x 4 GB) per server node

Storage

Storage Type	Non-hot Plug SFF SATA
Hard Drives Supported	1 x 120 GB per server node
Expansion Slot	X8 PCI-e mezzanine
Fibre Channel SAN Support	Emulex LPe1105 FC dual channel 4 Gb HBA QLogic QMH2462 4 Gb FC HBA

Deployment

Form Factor Chassis	c7000 enclosure
Form Factor Size	10U and 6U
Networking	Dual 1 GbE NC326i plus (1) additional 10/100 NIC dedicated to iLO 2 Management per server node
Redundant Power Supply	Enclosure level redundancy
Warranty—year(s) (parts/labor/onsite)	1/1/1
Remote Management	iLO per server node

For additional technical specifications, please visit the ProLiant BL2x220c G5 QuickSpecs at http://h18000.www1.hp.com/products/quickspecs/13049_div/13049_div.PDF

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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, contact your local HP representative or visit

www.hp.com/go/hpfinancialservices

For more information

For more information about the HP ProLiant BL2x220c G5 Server Blade, please contact your local HP representative, or visit

<http://h18004.www1.hp.com/products/blades/components/c-class-bladeservers.html>

To connect with other blade customers, partners, and experts, visit the HP Blade Connect online community:

www.hp.com/go/bladeconnect

HP Services

HP Services offers a comprehensive range of services to help design, deploy, manage, and support your IT environment and business processes. Our 73,000 skilled professionals and network of service partners deliver global services capabilities across the IT lifecycle, including consulting, integration, outsourcing, and support.

HP Support Care Pack Services deliver total care. Cost-effectively upgrade or extend your standard warranty with easy-to-buy, easy-to-use support packages. They reduce downtime risks with support levels that range from basic to mission-critical. HP Care Pack Services are available for purchase along with your ProLiant BL2x220c G5 Server Blade.

Recommended service offerings:

Recommend support delivers a support level with committed, same-day response, and work through commitment until problem resolved. *ProLiant BL2x220c G5—3-year, 24x7, same-business-day, 4-hour onsite response hardware support*

Enhanced support provides round-the-clock response and complex problem resolution through integrated hardware and software support. *ProLiant BL2x220c G5—3-year, 24x7, Support Plus 24*

Deployment services include Installation and Start up For HP BladeSystem Infrastructure and HP Enhanced Network Installation and Start up for HP BladeSystem Switches services. These are designed to take the time, risk, and worry out of the deployment of c-Class enclosure, ProLiant server blades, storage options, Virtual Connect and Insight Control Environment software for BladeSystem. Plus hardware installation for BL2x220c G5 server blade upgrades into an existing c-Class enclosure is also available.

For more information, please visit www.hp.com/services/bladeSystem

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To learn more, visit www.hp.com/go/BL2x220c

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