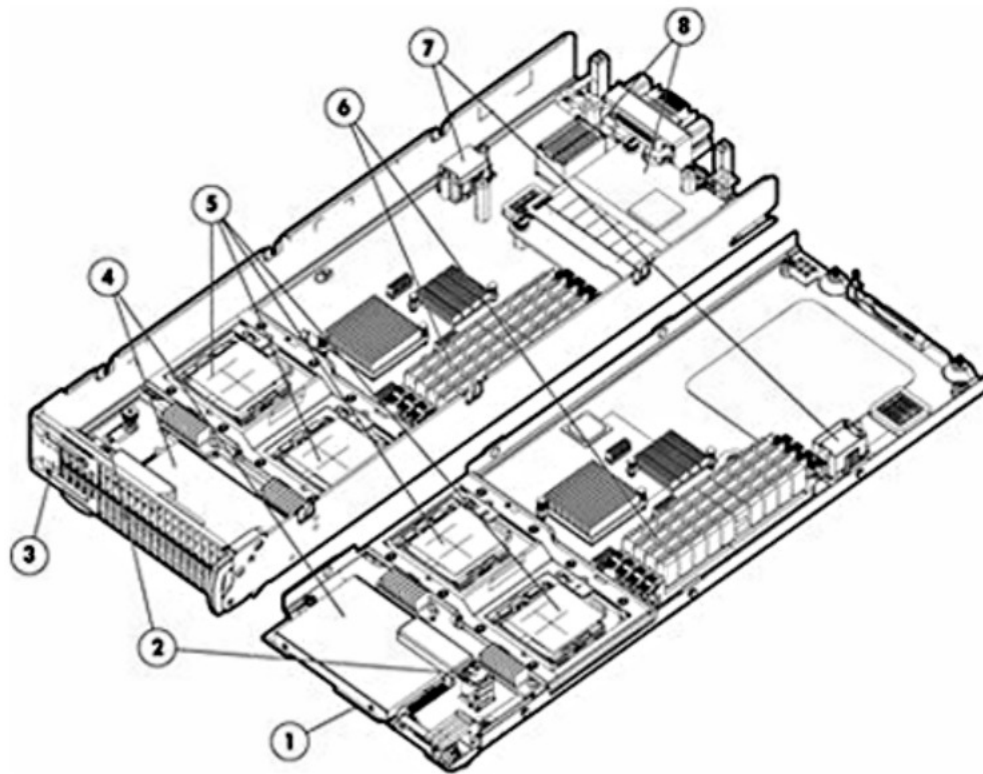


# QuickSpecs

## HP ProLiant BL2x220c Generation 5 (G5) Server Blade

### Overview



### HP ProLiant BL2x220c Generation 5 (G5) Server Blade

- |  |  |
|--|--|
| 1. Server B  | 5. Up to two Quad-Core or Dual-Core Intel® Xeon® processors    |
| 2. Internal USB Connector  | 6. Four (4) PC2-5300, Registered DIMMs (DDR2-667) Memory Slots |
| 3. Server A  | 7. Server interconnection                                      |
| 4. Small form factor (SFF) SATA drive (or battery carriage for storage controller) | 8. Type I Mezzanine slots (1 per node)                         |

### What's New



# QuickSpecs

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### Overview

HP BladeSystem c-Class c7000 Enclosure QuickSpecs:

[http://h18004.www1.hp.com/products/quickspecs/12810\\_na/12810\\_na.html](http://h18004.www1.hp.com/products/quickspecs/12810_na/12810_na.html)

HP BladeSystem c-Class Interconnect Components QuickSpecs:

[http://h18000.www1.hp.com/products/quickspecs/12524\\_na/12524\\_na.html](http://h18000.www1.hp.com/products/quickspecs/12524_na/12524_na.html)

The HP ProLiant BL2x220c provides maximum 2-socket x86 server blade density with benchmark leading power efficiency. HP ProLiant BL2x220c server blade includes 2 server nodes per blade providing up to 256 processor sockets/1024 processor cores in 40U of rack space. All specifications listed per node (2 nodes per blade chassis):

- **Processor:**
  - Up to two Quad-Core Intel® Xeon® 5400 sequence processors
  - Up to two Dual-Core Intel® Xeon® 5200 sequence processors
  - Intel 5100 chipset supporting up to a 1333 MHz Front Side Bus
  - 667 MHz, 1066 MHz or 1333MHz Front Side Bus
- **Memory:**
  - Up to 32 GB (4 x 8 GB) of memory, supported by (4) slots of PC2-5300 Registered DIMMs, 667 MHz
  - Low-power memory support
  - Advanced ECC memory support
  - Memory interleaving (2x1)
- **Internal Drive Support:**
  - 1 non-hot plug small form factor SATA drive (120GB or 250GB)
  - 1 non-hot plug small form factor Solid State Drive (SSD) (32GB or 64GB)
- **Network Controller:**
  - Embedded Dual-port NC326i Gigabit Server Adapter
- **Mezzanine Support:**
  - One (1) I/O expansion slots via mezzanine card (Type I only)
    - Dual-Port Fibre Channel Mezzanine (4-Gb) options for SAN connectivity (Choice of Emulex or QLogic)
    - Ethernet adapter Mezzanine options for additional network ports
    - 4X DDR InfiniBand (IB) Mezzanine (20 Gb/s) options for low latency server interconnectivity
- **Internal USB Support:**
  - One (1) internal USB 2.0 connector for security key devices and USB drive keys
- **Form Factor:**
  - Half height c-Class Server Blade
- **Infrastructure Management:**
  - HP ProLiant Onboard Administrator (powered by the HP Integrated Lights-Out 2 management processor) for simplified server setup, health monitoring and recovery, power and thermal control, and lights-out remote administration.
  - HP Insight Control, a product option, delivers essential infrastructure management that can help save time and money by making it easy to deploy, migrate, monitor, control and optimize your IT infrastructure through a single, simple management console. Insight Control supports both Windows and Linux-based central management servers.
  - HP Insight Dynamics for ProLiant, a product option, is an integrated command center that enables IT Staff personnel to



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## HP ProLiant BL2x220c Generation 5 (G5) Server Blade

### Overview

- The HP BladeSystem c3000 rack enclosure is 6U high and holds up to 8 HP ProLiant BL2x220c Blades (16 server nodes) plugged horizontally.
- The HP BladeSystem c3000 tower enclosure is designed with casters for sites without racks and holds up to 8 HP ProLiant BL2x220c Blades (16 server nodes) plugged vertically.  
NOTE: Six (6) fans are required in the c3000 enclosure.
- Server blades, storage blades, interconnect modules, power supplies, fans, and redundant Onboard Administrator modules are all designed to fit into the c3000 and c7000 enclosures.
- For additional enclosure information, please see:  
<http://h18004.www1.hp.com/products/blades/components/enclosures/c-class/index.html>
- **Warranty:**
  - This product is covered by a global limited warranty and supported by HP Services and a worldwide network of HP Authorized Channel Partners. Hardware diagnostic support and repair is available for one year from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Enhancements to warranty services are available through HP Care Pack services or customized service agreements. Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.  
NOTE: Server warranty includes 1 year Parts, 1 year Labor, 1-year on-site support. Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. A travel and labor charge will result when customers decline to replace a Mandatory CSR part; 2) Optional CSR parts are also designed for easy replacement but may involve added complexity. Customers may choose to have HP replace Optional CSR parts at no charge. Additional information regarding worldwide limited warranty and technical support is available at:  
<http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html>



### Standard Features

NOTE: For a brief, printer friendly data sheet that describes this product and informs you of the essential capabilities and specifications, please visit: [http://h18004.www1.hp.com/products/quickspecs/DS\\_00123/DS\\_00123.pdf](http://h18004.www1.hp.com/products/quickspecs/DS_00123/DS_00123.pdf)

#### Processor

##### Quad-Core Processor Option Kits

NOTE: BL2x220c G5 does not support 1600 FSB or 120W and 150W processors.

Quad-Core Intel® Xeon® processor L5430 (2.66 GHz, 133 FSB, 50W)

Quad-Core Intel® Xeon® processor L5420 (2.50 GHz, 1333 FSB, 50W)

Quad-Core Intel® Xeon® processor L5410 (2.33 GHz, 1333 FSB, 50W)

NOTE: Offered through Configure-To-Order only. See Factory Integrated Models section for more details.

Quad-Core Intel® Xeon® processor E5450 (3.00 GHz, 1333FSB, 80W)

Quad-Core Intel® Xeon® processor E5440 (2.83 GHz, 1333 FSB, 80W)

NOTE: Offered through Configure-To-Order only. See Factory Integrated Models section for more details.

Quad-Core Intel® Xeon® processor E5430 (2.66 GHz, 1333 FSB, 80W)

NOTE: Offered through Configure-To-Order only. See Factory Integrated Models section for more details.

Quad-Core Intel® Xeon® processor E5420 (2.50 GHz, 1333 FSB, 80W)

NOTE: Offered through Configure-To-Order only. See Factory Integrated Models section for more details.

Quad-Core Intel® Xeon® Processor E5410 (2.33 GHz, 1333 FSB, 80W)

NOTE: Offered through Configure-To-Order only. See Factory Integrated Models section for more details.

##### Dual-Core Processor Option Kits

Dual-Core Intel® Xeon® processor X5260 (3.33 GHz, 1333 FSB, 80W)

NOTE: Offered through Configure-To-Order only. See Factory Integrated Models section for more details.

Dual-Core Intel® Xeon® processor L5240 (3.00 GHz, 1333 FSB, 40W)

NOTE: Offered through Configure-To-Order only. See Factory Integrated Models section for more details.

Dual-Core Intel® Xeon® processor E5205 (1.86 GHz, 1066 FSB, 65W)

NOTE: Offered through Configure-To-Order only. See Factory Integrated Models section for more details.

NOTE: Intel® 5400 series processors are Quad-Core and support 64-bit Intel VT. Intel®.

NOTE: For the Intel® 5400 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.



# QuickSpecs

## HP ProLiant BL2x220c Generation 5 (G5) Server Blade

### Standard Features

Chipset	Intel®-5100 chipset		
Memory	Type	PC2-5300 DDR2 Registered DIMMS at 667 MHz	
	Standard	4 GB (2 x 2 GB) per server node	
	Maximum	32 GB (4 x 8 GB) per server node NOTE: Memory must be installed in pairs.	
Network Controller	<p>Dual-port Broadcom 5715S based Gigabit Ethernet network adapter per server node</p> <p>One (1) additional 10/100 network adapter dedicated to iLO 2 Management per server node</p> <p>NOTE: The Gigabit Ethernet adapters transmit from the server only at 2000 Mbps, full duplex per port. However, within a Linux environment, the speed can be reduced or "throttled" using a feature available within the Linux operating system; see the white paper at <a href="http://h71028.www7.hp.com/ERC/downloads/4AA1-5513ENW.pdf">http://h71028.www7.hp.com/ERC/downloads/4AA1-5513ENW.pdf</a> for more information.</p> <p>The 10 Gigabit KX-4 NC512m adapter transmits from the server only at 20 Gbps (20,000 Mbps), full duplex.</p> <p>Once the adapter signal reaches the interconnect within the blade enclosure and communicates outside the blade enclosure to the LAN, the blade interconnect uplink types and settings determine the cable media, speed, duplex mode, and auto negotiation mode. Interconnects are available with Ethernet uplinks supporting 10/100/1000T, 10/100/1000 SFP, 1000 SX fiber, and 10Gb KX-4.</p>		
I/O Expansion Slots	One I/O expansion x8mezzanine Type I slot per server node		
Integrated Manageability	ProLiant Onboard Administrator (powered by the Integrated Lights-Out 2 management processor)		
Maximum Internal Storage	Non-Hot Plug Serial ATA (SATA)	250GB SATA	1 x 250GB Serial ATA (Per server node)
	Non-Hot Plug SSD (SATA)	64GB SATA	1 x 64GB SATA (Per server node)
Graphics	Integrated ATI RN-50 1600x1280x64K 16M color (64 MB DDR1 memory)		
Graphics Resolution Supported	Resolution	Color	Depths
	1600x1280	64K	256, 16