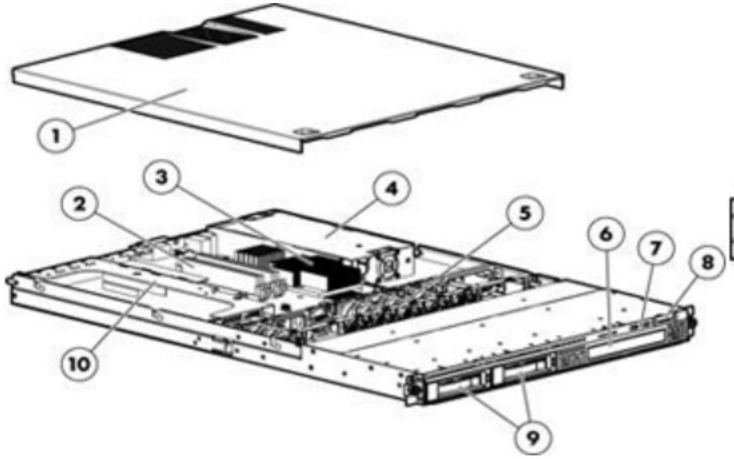
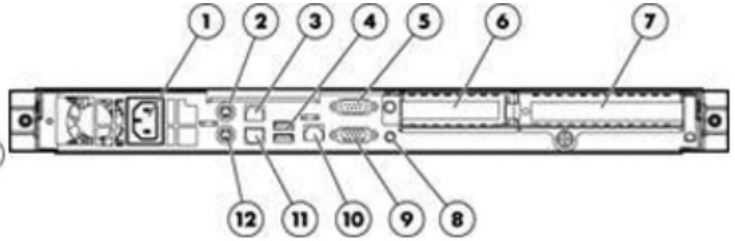
QuickSpecs

HP ProLiant DL320 Generation 5p (G5p)

Overview





Front View:

1. Cover
2. Four PC2-6400 ECC DDR2 Memory Slots
3. Processor Socket (Intel® Xeon®, Core™2, Pentium® or Celeron®)
4. Power Supply (400 Watt)
5. Non Hot Plug Dual Rotor Fans
6. Optional 12.7mm DVD-ROM, or DVD-RW Drive for 2 HDD models and optional 9.5mm DVD-ROM, or DVD combo drive for 4-HDD model
7. Two upfront USB connectors
8. Power Button, UID Button, and Front LED Indicators
9. Support for up to four Hot Plug SATA or SAS Hard Drives
10. Two PCI-Express Slots (2 PCI-Express x8 connectors standard)

Rear View:

1. Power supply
2. Mouse connector
3. NIC 2 Port
4. USB connectors (2)
5. Serial connector
6. PCI Express expansion slot 5, low-profile, half-length
7. PCI Express expansion slot 4, (optional PCI-X, full-length)
8. UID button/LED
9. Video connector
10. Dedicated Integrated Lights-Out 2 (iLO 2) management port (optional)
11. NIC 1 Port / Shared iLO 2 Management Port
12. Keyboard connector

What's New

- New Quad-Core Intel Xeon processors with up to 12 MB L2 cache for 1333MHz Front Side Bus
  - Adding to line up of Quad-Core and Dual-Core Intel processors for more performance, flexibility and choice

QuickSpecs

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Overview

- Processor:
  - Quad-Core Intel® Xeon® 3300 processor sequence
  - Quad-Core Intel® Xeon® 3200 processor sequence
  - Dual-Core Intel® Xeon® 3100 processor sequence
  - Dual-Core Intel® Xeon® 3000 processor sequence
  - Dual-Core Intel® Core™2 E4600 processor
  - Dual-Core Intel® Pentium® E2160 processor
  - Single-Core Intel® Celeron® 440 and 420 processors
  - Intel® 3210 Chipset with up to 1333MHz Front Side Bus (FSB)
- Memory:
  - Supports up to 8 GB of PC2-6400 (800 MHz) Unbuffered DDR2 ECC SDRAM Memory
  - 4 DIMM sockets
- Storage Controller:
  - 4 Port SATA Controller with RAID 0/1 support
    NOTE: Transfer rate: 1.5Gb/s SATA
- Internal Drive Support:
  - Up to four 3.5" (Large Form Factor) SATA or SAS hard drives
    - Two drive cage standard. Optional 4 HDD cage upgrade kit
    - SAS drives require optional SAS Host Bus Adapter (HBA) or Smart Array Controller
    - Optional hot plug hard drive configuration
  - Internal storage capacity of up to 4TB (4 x 1TB SATA hard drives) with optional 4HDD cage
  - Optional DVD, DVD Combo or DVD-RW drive (depending on 2 or 4 HDD model)
- Network Controller:
  - Embedded NC326i Dual Port Gigabit Server Adapter
- Expansion Slots:
  - Two total slots:
    - (1) Full length PCI Express x8 slot (x8 connector)
  - Can be replaced with a full-length 64-bit /133MHz PCI-X slot
    - (1) Half-length, low-profile PCI Express x1 slot (x8 connector)
      USB 2.0 Ports:
  - Up to 5 Total: (2) front; (1) internal (optional); (2) rear accessible ports
  - Internal USB port (optional) for flexible storage, security, or USB drive key deployment
- Infrastructure Management:
  - Convenient slide-out Systems Insight Display for quick and easy front view server diagnostics, along with status LEDs, Automatic Server Recovery (ASR), ROM Based Setup Utility (RBSU)
  - HP ProLiant Onboard Administrator (powered by the Integrated Light-Out 2 management processor) for simplified server setup, health monitoring and recovery, power and thermal control, and lights-out remote administration
  - HP Insight Control (ICE) suites, as product options, deliver essential infrastructure management that can help save time and money by making it easy to deploy, monitor, control and optimize your IT infrastructure through a single, simple management console. ICE suites support both Windows and Linux-based servers and management consoles.
  - HP Insight Dynamics - VSE suite for ProLiant servers, a product option, is an integrated command center that enables you to continuously analyze and optimize your adaptive infrastructure. This advanced infrastructure management

Overview

- 1U (1.70" / 4.32 cm) Rack Mount Chassis
- 26.85" (68.20 cm) Deep

- 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 parts repair is available for three years Next Business Day, with one year on-site support from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Expanded support may be covered under the warranty or available for an additional fee. Enhancements to warranty services are available through HP Care Pack services or customized service agreements. SATA hard drives have a one-year warranty.
    NOTE: Server Warranty includes three year parts, one year labor, and one year on-site support with next business day response. 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://h71028.www7.hp.com/ERC/downloads/4AA1-5500ENW.pdf.
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	Quad-Core Processors
	Quad-Core Intel® Xeon® Processor X3370 (3.0 GHz, 12MB L2 cache, 95 Watts, 1333MHz FSB) NOTE: Available via CTO only.
	Quad-Core Intel® Xeon® processor X3360 (2.83GHz, 12MB L2 cache, 95 Watts, 1333MHz Front Side Bus (FSB)) NOTE: Available via CTO only.
	Quad-Core Intel® Xeon® processor X3350 (2.66GHz, 12MB L2 cache, 95 Watts, 1333MHz FSB) NOTE: Available via CTO only.
	Quad-Core Intel® Xeon® Processor X3330 (2.66 GHz, 6MB L2 cache, 95 Watts, 1333MHz FSB) NOTE: Available via CTO only.
	Quad-Core Intel® Xeon® processor X3320 (2.50GHz, 6MB L2 cache, 95 Watts, 1333MHz FSB)
	Quad-Core Intel® Xeon® processor X3220 (2.4GHz, 8MB L2 cache, 95 Watts, 1066MHz FSB) NOTE: Available via CTO only.
	Quad-Core Intel® Xeon® processor X3210 (2.13GHz, 8MB L2 Cache, 95 Watts, 1066MHz FSB)
	Dual-Core Processors
	Dual-Core Intel® Xeon® Processor E3120 (3.16 GHz, 6MB L2 cache, 65 Watts, 1333MHz FSB) NOTE: Available via CTO only.
	Dual-Core Intel® Xeon® processor E3110 (3.0GHz, 6MB L2 cache, 65 Watts, 1333MHz FSB)
	Dual-Core Intel® Xeon® processor 3075 (2.66GHz, 4MB L2 cache, 65 Watts, 1333MHz FSB)
	Dual-Core Intel® Xeon® processor 3065 (2.33GHz, 4MB L2 Cache, 65 Watts, 1333MHz FSB) NOTE: Available via CTO only.
	Dual-Core Intel® Core™2 processor E4600 (2.4GHz, 2MB L2 cache, 800MHz FSB) NOTE: Available via CTO only.
	Dual-Core Intel® Core™2 processor E4400 (2.0GHz, 2MB L2 cache, 800MHz FSB) NOTE: Available via CTO only.
	Dual-Core Intel® Pentium® processor E2160 (1.80GHz, 1MB L2 cache, 800MHz FSB) NOTE: Available via CTO only.
	Single-Core Processors
	Single-Core Intel® Celeron® processor 440 (2.00GHz, 512KB L2 cache, 800MHz FSB) NOTE: Available via CTO only.
	Single-Core Intel® Celeron® processor 420 (1.60GHz, 512KB L2 cache, 800MHz FSB) NOTE: Available via CTO only.

Standard Features

Cache Memory One of the following depending on Model	12 MB L2 Cache NOTE: For Models with Intel® Xeon® processor X3370, X3360 and X3350. 8 MB L2 Cache NOTE: For Models with Intel® Xeon® processor X3220 and X3210. 6 MB L2 Cache NOTE: For Models with Intel® Xeon® processor X3330, X3320, E3120, and E3110. 4 MB L2 Cache NOTE: For Models with the Intel® Xeon® processor 3075 and 3065. 2 MB L2 Cache NOTE: For Models with the Intel® Core2 processor E4600 and E4400. 1 MB L2 Cache NOTE: For Models with the Intel® Pentium processor E2160. 512 KB L2 Cache NOTE: For Models with the Intel® Celeron processor 440 and 420.	
Chipset	Intel® 3210 Chipset	
Memory Protection	ECC	
Memory One of the following depending on Model	Type	PC2-6400 (800MHz) Unbuffered ECC DDR2 SDRAM Interleaving optional (Enabled when DIMMs populated in pairs)
	DIMM Sockets	4
	Standard - Xeon E3110 and Xeon 3075 Models	1 GB (1 x 1 GB)
	Standard - Xeon X3320 and Xeon X3210 Models	2 GB (2 x 1 GB)
	Maximum Memory	8 GB
Network Controller	Embedded NC326i Dual Port Gigabit Server Adapter	

Standard Features

Expansion Slots

Expansion Slots #	Technology	Bus Width ***	Connector Width	Bus Number*	Device No.**	Form Factor	Notes
5 (Standard)	PCIe	x1	x8	10	0	Low profile (half length, half height) slot	
4 (Standard)	PCIe	x8	x8	21	0	Full length, full height slot	This PCIe slot can be replaced with optional PCI-X slot below
4 (Optional)	PCI-X (133MHz, 3.3Volt)	64-bit	Not applicable	24	4	Full length, full height slot	

* Default bus assignment (in decimal). Inserting cards with PCI bridges may alter the actual bus assignment number.
** Slots are enumerated differently based on OS. MS OS's enumerate from lowest to highest Device ID by bus (starting with the lowest bus).
*** Indicates the number of physical electrical lanes running to a PCI-e connector.

Storage Controllers	Integrated Intel® 82801IR Serial ATA Host Controller with RAID 0/1 support. Hot Plug SAS and SATA controllers available via PCI card option.		
Storage	Optical Drive	Optional 2 HDD Models: 12.7mm DVD-ROM, or DVD-RW Drive 4 HDD Models: 9.5mm DVD-ROM, or DVD combo drive	
	Hard Drives One of the following depending on Model	Hard Drives - Hot Plug SATA/SAS	Up to 2 or 4 hot plug SATA or SAS 3.5" drives NOTE: Hot-plug and/or SAS support requires optional HBA or Controller card.
Maximum Internal Storage Type	SATA (2HDD models - standard)	2.0TB	2 x 1TB SATA
	SATA (4HDD models - requires optional 4HDD cage)	4.0TB	4 x 1TB SATA
	SAS (2HDD models standard - requires	2.0TB	2 x 1TB SAS