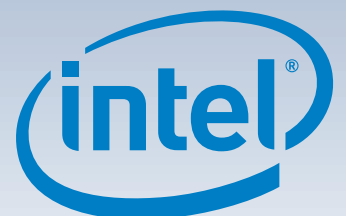


Intel® Server System P4000IP and Intel® Workstation System P4000CR Family Quick Installation User's Guide

Thank you for buying an Intel® Server System. The following information will help you assemble your Intel® Server System and install components.

If you are not familiar with ESD [Electrostatic Discharge] procedures used during system integration, see the complete ESD procedures described in your *Service Guide*.

This guide and other supporting documents are located on the web at:
<http://www.intel.com/support>.



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Warning



Read all caution and safety statements in this document before performing any of the instructions. Also see the *Intel® Server Board and Server Chassis Safety Information* document at: <http://www.intel.com/support/motherboards/server/sb/cs-010770.htm> for complete safety information.

Warning



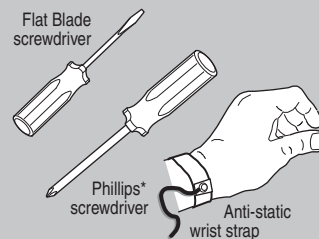
Installation and service of this product to be performed only by qualified service personnel to avoid risk of injury from electrical shock or energy hazard.

Caution



Observe normal ESD [Electrostatic Discharge] procedures during system integration to avoid possible damage to server board and/or other components.

Tools Required



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Intel® Server System P400IP Family Product Configuration

Intel® Server System	System Fan	Hard Drives				Power Supply			
	Five Hot Swap System Fans (80 x 38 mm)	8 x 3.5" Hot Swap	8 x 2.5" Hot Swap	16 x 2.5" Hot Swap	24 x 2.5" Hot Swap	N/A	Two Hot Swap CRPS 750W	Two Hot Swap CRPS 1200W	Two Hot Swap CRPS 1600W
P4308IP4LHGC	■	■					■		
P4308IP4LHJC	■	■						■	
P4308IP4LHJCL	■	■						■	
P4308IP4LHKC	■	■							■
P4208IP4LHGC	■		■				■		
P4216IP4LHJC	■			■				■	
P4216IP4LHKC	■			■					■
P4224IP4LHKC	■				■				■

Intel® Workstation System P400CR Family Product Configuration

Intel® Workstation System	System Fan	Hard Drives	Power Supply		
	Two Fixed System Fans (120x38mm)	4 x 3.5 Fixed	One Hot Swap CRPS 750W	One Hot Swap CRPS 1200W	One Hot Swap CRPS 1600W
P4304CR2LFGN	■	■	■		
P4304CR2LFJN	■	■		■	
P4304CR2LFJNL	■	■		■	
P4304CR2LFKN	■	■			■

■ = Configuration Feature

Thermal Operation and Configuration Requirements

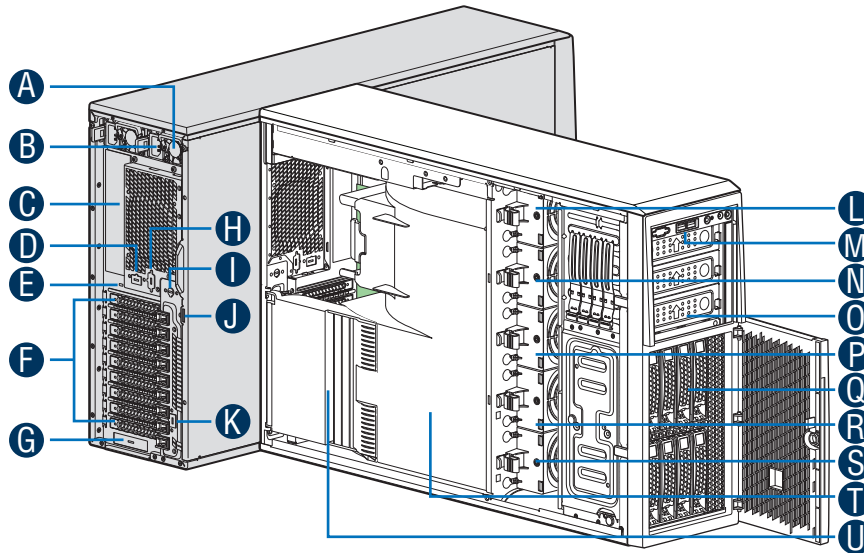
To keep the system operating within supported maximum thermal limits, the system must meet the following operating and configuration guidelines:

- Ambient in-let temperature cannot exceed 35° C and should not remain at this maximum level for long periods of time. Doing so may affect long term reliability of the system.
- The CPU-1 processor and CPU heatsink must be installed.
- DIMM Population on CPU-1: Install DIMMs in order; Channels A, B, C, and D. Start with 1st DIMM slot (blue) on each channel.
- DIMM Population on CPU-2: Install DIMMs in order; Channels E, F, G, and H. Start with 1st DIMM slot (blue) on each channel.
- All hard drive bays must be populated. Hard drive carriers either can be populated with a hard drive or supplied drive blank.
- The air duct must be installed at all times.
- In single power supply configurations, the second power supply bay must have the supplied filler blank installed at all times.
- The system top-cover must be installed at all times.

System Overview

Intel® Server System P4308IP4LHGC

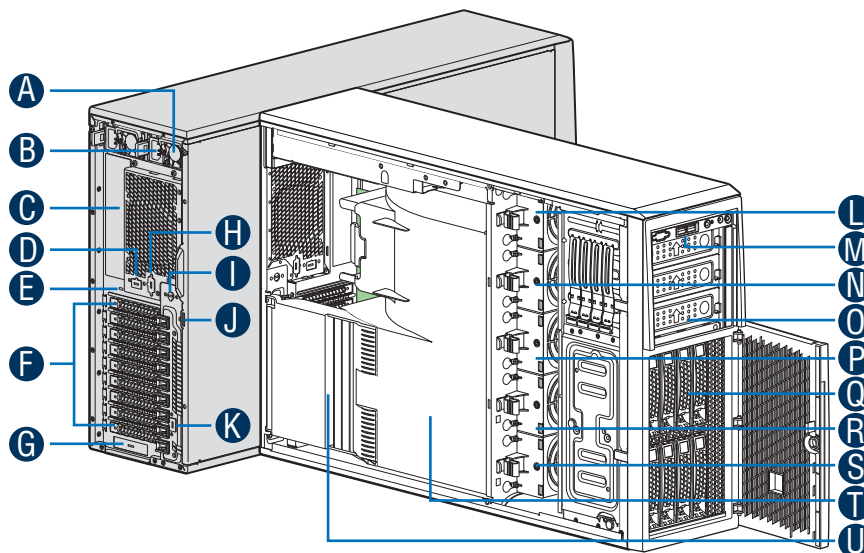
System Features and Components



- A 750W Common Redundant Power Supply
- B AC Input Power Connector
- C I/O Ports
- D Serial Port Knockout
- E A Kensington* Cable Lock Mounting Hole
- F PCI Add-in Board Slot Covers
- G Knock-out Opening for I/O Modules
- H Alternate RMM4 Knockout
- I Opening for SPDIF Cable
- J Padlock Loop
- K RMM4 Knockout
- L Hot-swap System Fan 5
- M Front Control Panel
- N Hot Swap System Fan 4
- O 5.25" Peripheral Bays
- P Hot-swap System Fan 3
- Q One 8x3.5" Hot-swap HDD Cage
- R Hot-swap System Fan 2
- S Hot Swap System Fan 1
- T Air Duct
- U PCI Card Retainer

Intel® Server System P4308IP4LHJC(L)

System Features and Components

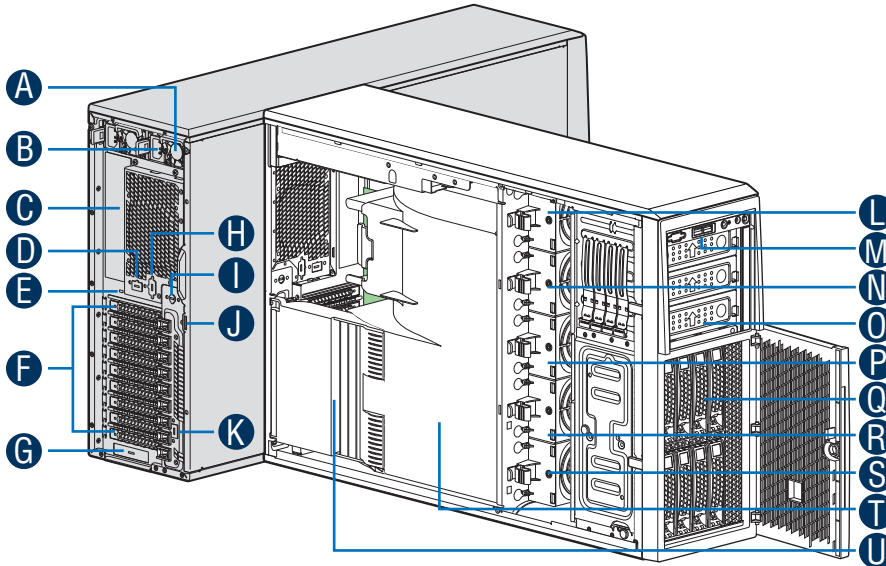


- A 1200W Common Redundant Power Supply
- B AC Input Power Connector
- C I/O Ports
- D Serial Port Knockout
- E A Kensington* Cable Lock Mounting Hole
- F PCI Add-in Board Slot Covers
- G Knock-out Opening for I/O Modules
- H Alternate RMM4 Knockout
- I Opening for SPDIF Cable
- J Padlock Loop
- K RMM4 Knockout
- L Hot-swap System Fan 5
- M Front Control Panel
- N Hot-swap System Fan 4
- O 5.25" Peripheral Bays
- P Hot-swap System Fan 3
- Q One 8x3.5" Hot-swap HDD Cage
- R Hot-swap System Fan 2
- S Hot-swap System Fan 1
- T Air Duct
- U PCI Card Retainer

System Overview

Intel® Server System P4308IP4LHKC

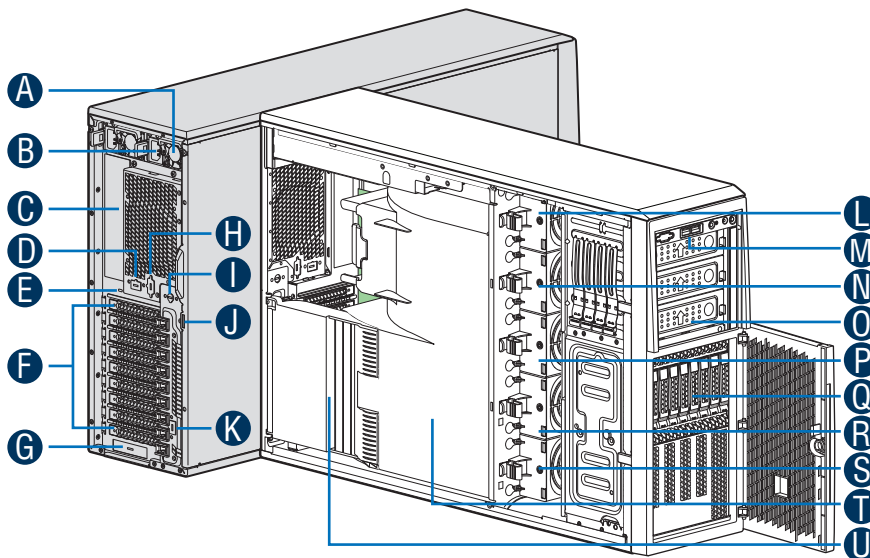
System Features and Components



- A** 1600W Common Redundant Power Supply
- B** AC Input Power Connector
- C** I/O ports
- D** Serial Port Knockout
- E** A Kensington Cable Lock Mounting Hole
- F** PCI Add-in Card Slot Covers
- G** Knock-out Opening for I/O Modules
- H** Alternate RMM4 Knockout
- I** Opening for SPDIF Cable
- J** Padlock Loop
- K** RMM4 Knockout
- L** Hot Swap System Fan 5
- M** Front Control Panel
- N** Hot Swap System Fan 4
- O** 5.25" Peripheral Bays
- P** Hot Swap System Fan 3
- Q** One 8x3.5" Hot-swap HDD Cage
- R** Hot-swap System Fan 2
- S** Hot-swap System Fan 1
- T** Air Duct
- U** PCI Card Retainer

Intel® Server System P4208IP4LHGC

System Features and Components

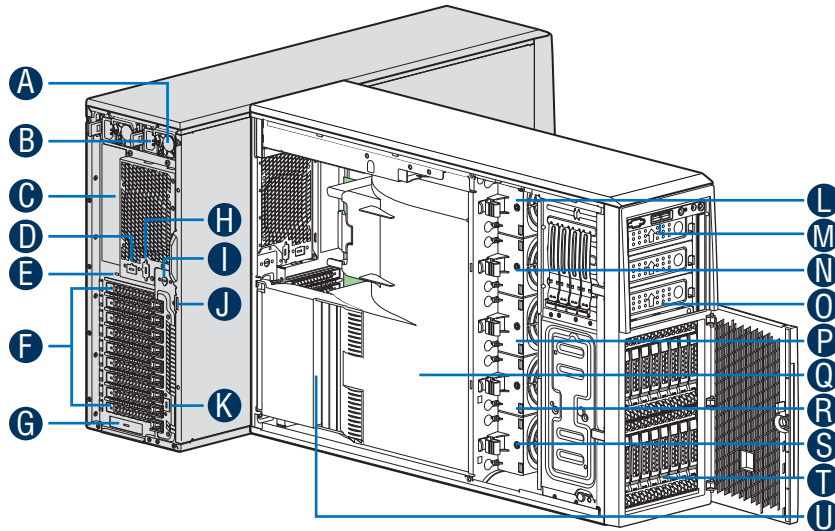


- A** 750-W Common Redundant Power Supply
- B** AC Input Power Connector
- C** I/O Ports
- D** Serial Port Knockout
- E** A Kensington* Cable Lock Mounting Hole
- F** PCI Add-in Board Slot Covers
- G** Knockout Opening for I/O Module
- H** Alternate RMM4 Knockout
- I** Opening for SPDIF Cable
- J** Padlock Loop
- K** RMM4 Knockout
- L** Hotswap System Fan 5
- M** Front Control Panel
- N** Hotswap System Fan 4
- O** 5.25" Peripheral Bays
- P** Hotswap System Fan 3
- Q** One 8x2.5 Hot-swap HDD Cage
- R** Hot-swap System Fan 2
- S** Hot Swap System Fan 1
- T** Air Duct
- U** PCI Card Retainer

System Overview

Intel® Server System P4216IP4LHJC

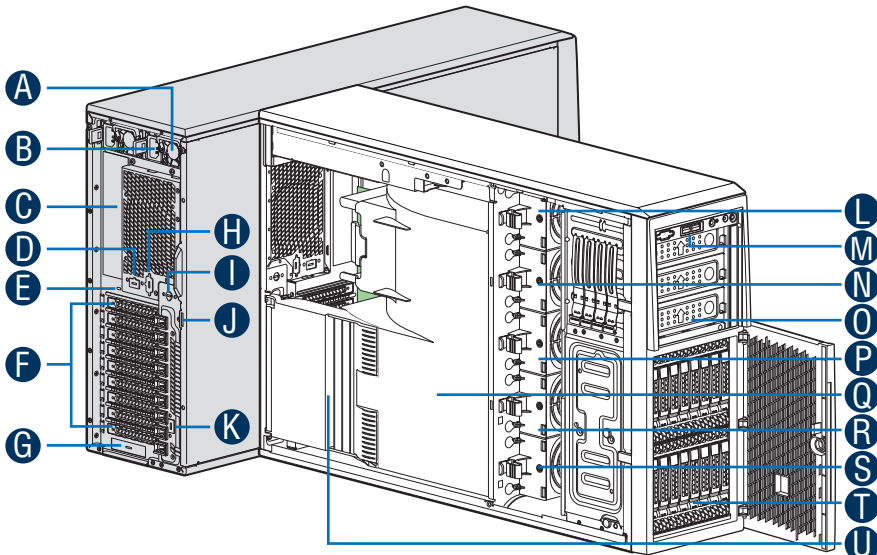
System Features and Components



- A 1200-W Common Redundant Power Supply
- B AC Input Power Connector
- C I/O Ports
- D Serial Port Knockout
- E A Kensington* Cable Lock Mounting Hole
- F PCI Add-in Board Slot Covers
- G Knock-out opening for I/O modules
- H Alternate RMM4 Knockout
- I Opening for SPDIF Cable
- J Padlock Loop
- K RMM4 Knockout
- L Hot-swap System Fan 5
- M Front Control Panel
- N Hot-swap System Fan 4
- O 5.25" Peripheral Bays
- P Hot-swap System Fan 3
- Q Air Duct
- R Hot-swap System Fan 2
- S Hot-swap System Fan 1
- T Two 8 x 2.5" Hot-swap HDD Cage
- U PCI Card Retainer

Intel® Server System P4216IP4LHKC

System Features and Components

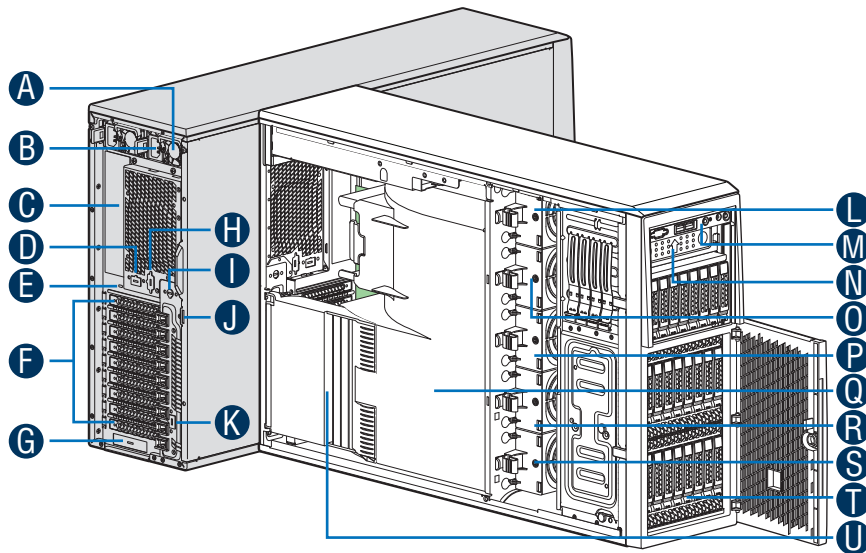


- A 1600-W Common Redundant Power Supply
- B AC Input Power Connector
- C I/O Ports
- D Serial Port Knockout
- E A Kensington* Cable Lock Mounting Hole
- F PCI Add-in Board Slot Covers
- G Knock-out opening for I/O modules
- H Alternate RMM4 Knockout
- I Opening for SPDIF Cable
- J Padlock Loop
- K RMM4 Knockout
- L Hot-swap System Fan 5
- M Front Control Panel
- N Hot-swap System Fan 4
- O 5.25" Peripheral Bays
- P Hot-swap System Fan 3
- Q Air Duct
- R Hot-swap System Fan 2
- S Hot-swap System Fan 1
- T Two 8 x 2.5" Hot-swap HDD Cage
- U PCI Card Retainer

System Overview

Intel® Server System P4224IP4LHKC

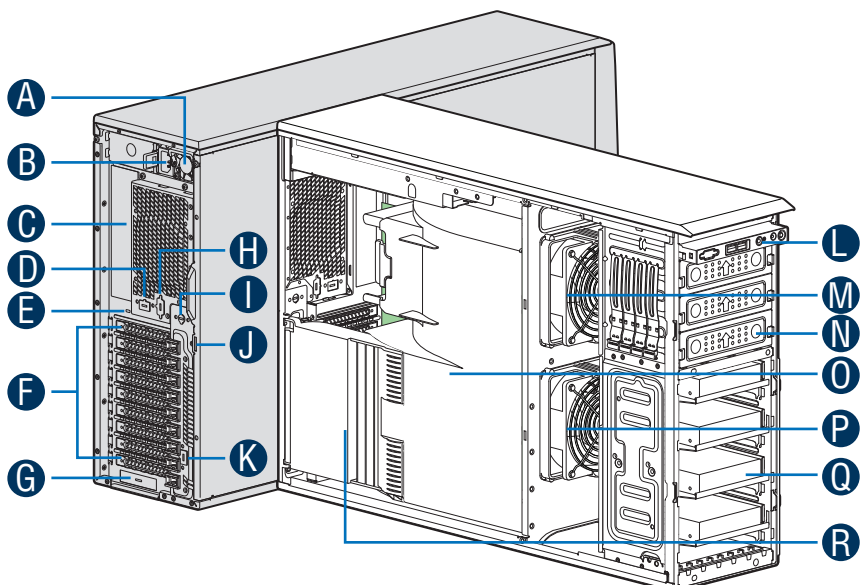
System Features and Components



- A 1600-W Common Redundant Power Supply
- B AC Input Power Connector
- C I/O Ports
- D Serial Port Knockout
- E A Kensington® Cable Lock Mounting Hole
- F PCI Add-in Board Slot Covers
- G Knock-out opening for I/O modules
- H Alternate RMM4 Knockout
- I Opening for SPDIF Cable
- J Padlock Loop
- K RMM4 Knockout
- L Hot-swap System Fan 5
- M Front Control Panel
- N 5.25" Peripheral Bays
- O Hot-swap System Fan 4
- P Hot-swap System Fan 3
- Q Air Duct
- R Hot-swap System Fan 2
- S Hot-swap System Fan 1
- T Three 8x2.5" Hot-swap HDD Cage
- U PCI Card Retainer

Intel® Workstation System P4304CR2LFGN

System Features and Components

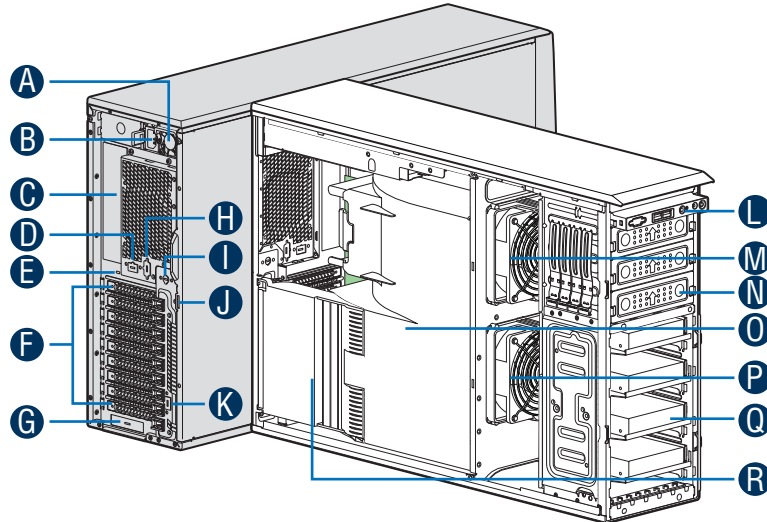


- A 750W Common Redundant Power Supply
- B AC Input Power Connector
- C I/O Ports
- D Serial Port Knockout
- E A Kensington® Cable Lock Mounting Hole
- F PCI Add-in Board Slot Covers
- G Knock-out Opening for I/O Modules
- H Alternate RMM4 Knockout
- I Opening for SPDIF Cable
- J Padlock Loop
- K RMM4 Knockout
- L Front Control Panel
- M CPU Zone System Fan (Fan 2)
- N 5.25" Peripheral Bays
- O Air Duct
- P PCI Zone System Fan (Fan 1)
- Q Fixed Hard Drive Carrier Tray
- R PCI Card Retainer

System Overview

Intel® Workstation System P4304CR2LFJN(L)

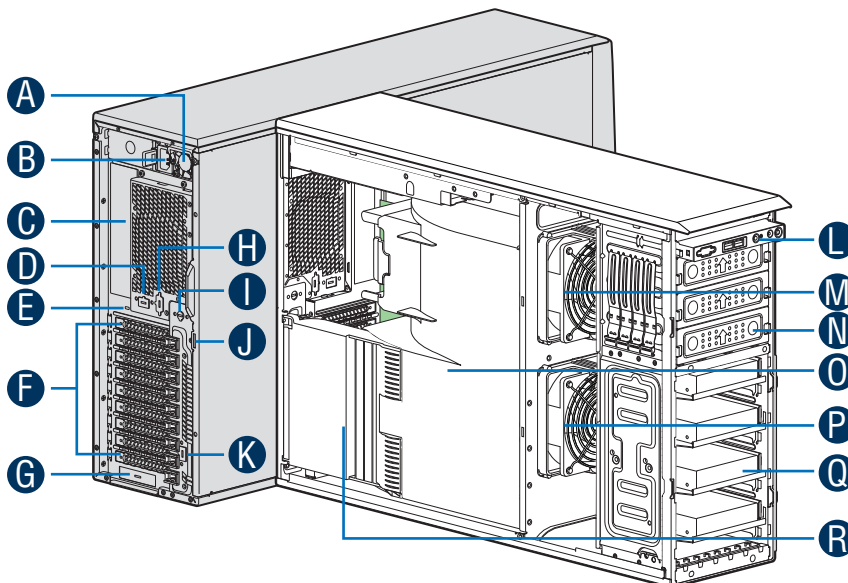
System Features and Components



- A 1200-W Common Redundant Power Supply
- B AC Input Power Connector
- C I/O Ports
- D Serial Port Knockout
- E A Kensington* Cable Lock Mounting Hole
- F PCI Add-in Board Slot Covers
- G Knock-out Opening for I/O Modules
- H Alternate RMM4 Knockout
- I Opening for SPDIF Cable
- J Padlock Loop
- K RMM4 Knockout
- L Front Control Panel
- M CPU Zone System Fan (Fan 2)
- N 5.25" Peripheral Bays
- O Air Duct
- P PCI Zone System Fan (Fan 1)
- Q Fixed Hard Drive Carrier Tray
- R PCI Card Retainer

Intel® Workstation System P4304CR2LFKN

System Features and Components

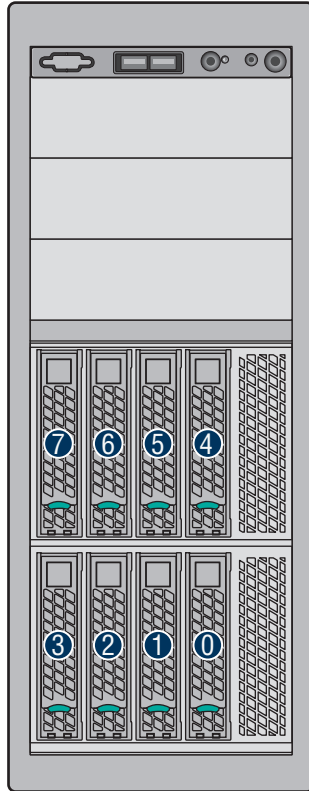


- A 1600W Common Redundant Power Supply
- B AC Input Power Connector
- C I/O Ports
- D Serial Port Knockout
- E A Kensington* Cable Lock Mounting Hole
- F PCI Add-in Board Slot Covers
- G Knock-out Opening for I/O Modules
- H Alternate RMM4 Knockout
- I Opening for SPDIF Cable
- J Padlock Loop
- K RMM4 Knockout
- L Front Control Panel
- M CPU Zone System Fan (Fan 2)
- N 5.25" Peripheral Bays
- O Air Duct
- P PCI Zone System Fan (Fan 1)
- Q Fixed Hard Drive Carrier Tray
- R PCI Card Retainer

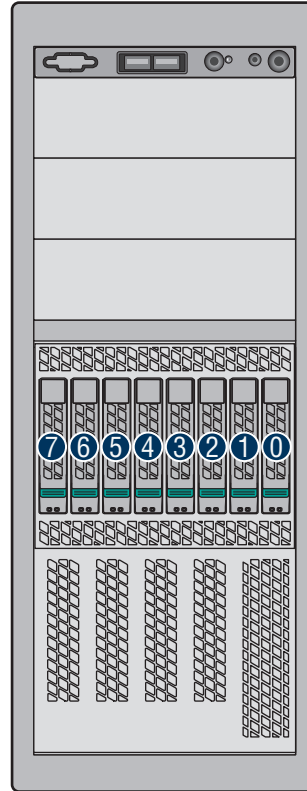
System Overview

Hot Swap Hard Drive Bay Options and HDD Numbering

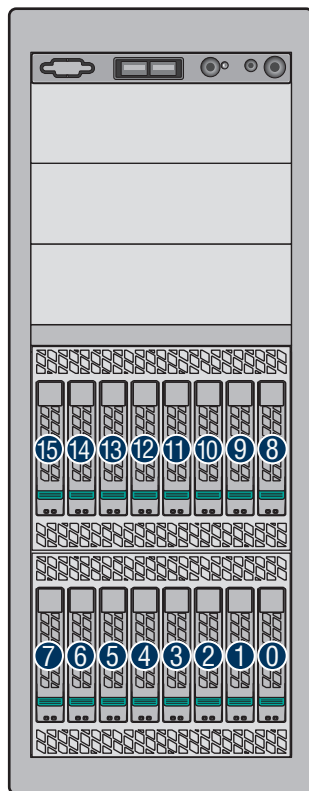
8 x 3.5"
Hot-Swap
Drive Cage



8 x 2.5"
Hot-Swap
Drive Cage



16 x 2.5"
Hot-Swap
Drive Cage



24 x 2.5"
Hot-Swap
Drive Cage

