Cisco UCS C4200 Series Rack Server Chassis

Contents

The Cisco UCS C4200 Series Rack Server Chassis with the Cisco C125 M5 Rack Server Node Delivers Outstanding Performance for Space-Constrained Environments.

Product overview

The Cisco UCS® C4200 Series Rack Server Chassis delivers outstanding performance for space-constrained environments. It is among the most versatile general-purpose enterprise infrastructure and application servers in the industry. Supporting up to four Cisco UCS C125 M5 2-socket rack server nodes it delivers industry-leading performance and efficiency for a wide range of workloads, including scale-out/compute intensive, general service provider, and bare-metal applications. The Cisco UCS C-Series Rack Servers can be deployed as standalone servers or as part of the Cisco Unified Computing System™ (Cisco UCS) to take advantage of Cisco's standards-based unified computing innovations that help reduce customers' Total Cost of Ownership (TCO) and increase their business agility.

The C4200 chassis extends the capabilities of the Cisco UCS portfolio in a 2-Rack-Unit (2RU) form factor supporting up to four Cisco UCS C125 M5 Rack Server Nodes. The latest update includes support for AMD EPYC 2 (Rome) 7002 processors. The AMD EPYC 2 processors have higher core density (up to 64 cores) and higher performance with an enhanced AMD Zen 2 core design. The existing AMD EPYC 7001 processors, will continue to be offered for flexibility of customer choice. Both CPUs types delivering significant performance and efficiency gains in a compact form factor that will improve your application performance while saving space. The C4200 and the C125 M5 nodes deliver outstanding levels of capability and performance in a highly compact package, with:

- AMD EPYC 7002 (Rome) series processors, with up to 64 cores per socket, AMD EPYC 7001 (Naples) series processors with up to 32 cores per socket.
- Up to 2TB of DRAM using sixteen 128GB DDR4 LRDIMMs for 2-socket CPU configuration (eight DIMMs/memory channels per CPU)
- 3200 MHz 16G/32G/64G DIMMs for AMD EPYC 7002 (Rome) CPUs and 2666 MHz 16G/32G/64G DIMMs of AMD EPYC 7001 (Naples) CPUs.
- Over 45 TB of storage, with up to six Small-Form-Factor (SFF) 2.5-inch direct-attached drives per node
  - Either six direct attach SAS/SATA drives or two NVMe plus four SAS/SATA drives
- Optional dual SD cards or M.2 modular storage for increased storage or boot drive capacity
- Support for the Cisco® 12-G 9460-8i PCIe SAS RAID controller with 2-GB Flash-Backed Write Cache (FBWC)
- Support for the Cisco 12-G 9400-8i PCIe SAS controller for use with external disk arrays
- OCP 2.0 network mezzanine slot supporting speeds up to 100 Gbps
- Support for Cisco's fourth-generation PCIe Virtual Interface Card (VIC)

Powering Next-Generation applications

The Cisco UCS C4200 Series Rack Server Chassis is well suited for a wide range of industry-driven workloads in areas such as:

- Research and education
- Aerospace
- Finance
- Manufacturing
- Oil and gas
- Gaming

Management

Cisco provides adaptive management for a new era of IT infrastructure with Cisco Intersight™. Cisco Intersight simplifies and automates IT Operations Management (ITOM) to make daily activities easier and more efficient. We have extended our vision of adaptive management to the C4200 platform. You can efficiently implement operations automation of your IT infrastructure from the data center to the edge.

The C125 M5 nodes can be deployed as standalone servers or in a Cisco UCS managed environment. When used in combination with Cisco UCS Manager, the C4200 brings the power and automation of unified computing to enterprise applications, including Cisco SingleConnect technology, drastically reducing switching and cabling requirements.

Cisco UCS Manager uses service profiles, templates, and policy-based management to enable rapid deployment and help ensure deployment consistency. If also enables end-to-end server visibility, management, and control in both virtualized and bare-metal environments.

The Cisco Integrated Management Controller (IMC) delivers comprehensive out-of-band server management with support for many industry standards, including:

- Redfish Version 1.01 (v1.01)
- Intelligent Platform Management Interface (IPMI) v2.0
- Simple Network Management Protocol (SNMP) v2 and v3
- Syslog
- Simple Mail Transfer Protocol (SMTP)
- Key Management Interoperability Protocol (KMIP)
- HTML5 GUI
- HTML5 virtual Keyboard, Video, and Mouse (vKVM)
- Command-Line Interface (CLI)
- XML API management Software Development Kits (SDKs) and DevOps integrations exist for Python, Microsoft PowerShell, Ansible, Puppet, Chef, and more. For more information about integrations, see Cisco DevNet

Product specifications

Table 1, below, lists the specifications for the Cisco UCS C4200 Series Rack Server Chassis and C125 M5 rack server nodes.

Table 1. Product Specifications for Cisco UCS C4200 Series Rack Server Chassis and Cisco UCS C125 M5 Rack Server Node

Item	Specification
Chassis	2RU Cisco UCS C4200 Rack Server Chassis
Server nodes	Up to four Cisco UCS C125 M5 Rack Server Nodes
Processors	AMD EPYC 7001 (Naples) or AMD EPYC 2 7002 (Rome) series processors (1 or 2 same CPUs per C125 node)
Processor cores	Up to 128 per node
Memory	16 DDR4 DIMM slots: 16, 32, and 64 GB and 2666/3200 MHz per AMD EPYC 7001/AMD EPYC 7002 CPUs respectively
PCIe expansion	1 PCIe 3.0 x 16 slots and 1 PCIe 3.0 x 8 slots, plus one dedicated OCP 2.0 network mezzanine slot per node
Storage controller	Internal controllers: • Optional Cisco 12-Gbps PCIe RAID Controller (PCIe 3.0) with 2-GB Flash-Backed Write Cache (FBWC), providing enterprise-class data protection for up to six SAS and SATA Hard-Disk Drives (HDDs), or Solid Disk Drives (SSDs) • AHCI 6Gbps SATA controller available from CPU 0 supporting up to 6 drives • Optional Cisco 12-Gbps PCIe SAS Controller (PCIe 3.0)
Internal storage	24 SFF 2.5-inch direct-attach drives • Each C125 M5 node has up to six direct- attach 2.5-inch SAS/ SATA HDDs/SSDs or up to two 2.5-inch NVMe drives and four SAS/SATA drives per node
Networking	Dedicated OCP 2.0 mezzanine slot that can flexibly accommodate up to 100-Gbps adapters per node Support for PCIe based 4th Gen VIC Adapters
Power supplies	Hot-pluggable, redundant 2400W AC
Other storage	• Dual internal Cisco FlexFlash Secure Digital (SD) cards (32, 64, and 128 GB) for installing an operating system or hypervisor • Support for RAID 0 mirroring between SD cards • Dedicated Baseboard Management Controller (BMC) MicroSD card (32 GB) for server utilities • Dual M.2 SATA SSD
Management	• Cisco Intersight • Cisco IMC • Cisco UCS Manager
Rack options	Cisco ball-bearing rail kit with optional reversible cable management arm

Item	Specification
Physical unit	• 2RU high x 32-in. depth • High reliability, availability, and serviceability features with easy-to-use latching lid, and hot-swappable and hot-pluggable Nodes, Fans and Storage
Hardware and software interoperability	See the Cisco Hardware and Software Interoperability Matrix for a complete listing of supported operating systems and peripheral options
GPU	NVIDIA T4 GPU (Graphics Processing Unit)

System requirements

Table 2 lists system requirements for the server.

Table 2. System requirements

Item	Requirements
Cisco UCS Manager (optional)	Release 4.0(1) or Later
Cisco IMC	Release 4.0(1) or Later

Ordering information for Cisco UCS C4200 Series Rack Server Chassis

For information about installing or upgrading your server, see the Cisco UCS C4200 Series Rack Server Chassis hardware installation guide.

For ordering information, see:

- Cisco UCS C4200 Series Rack Server Chassis with C125 M5 Rack Server Node specification sheet

Warranty information

Cisco UCS C4200 chassis and Cisco C125 M5 nodes have a three-year Next-Business-Day (NBD) hardware warranty and a 90-day software warranty.

Augmenting the Cisco UCS warranty, Cisco Smart Net Total Care® and Cisco Solution Support services are part of Cisco's technical services portfolio. Cisco Smart Net Total Care combines Cisco's industry-leading and award-winning foundational technical services with an extra level of actionable business intelligence that is delivered to you through the smart capabilities in the Cisco Smart Net Total Care portal. For more information, please refer to https://www.cisco.com/c/en/us/support/services/smart-net-total-care/index.html.

Cisco Solution Support includes both Cisco product support and solution-level support, resolving complex issues in multivendor environments on average 43 percent more quickly than with product support alone. Solution Support is a critical element in data center administration, helping rapidly resolve any issue encountered while maintaining performance, reliability, and return on investment.

This service centralizes support across your multivendor Cisco environment for both our products and our solution partners' products that you have deployed in your IT ecosystem. Whether there is an issue with a Cisco or a solution-partner product, just call us. Our experts are the primary point of contact and own the case from first call to resolution. For more information, please refer to https://www.cisco.com/c/en/us/services/technical/solution-support.html.

Cisco environmental sustainability

Information about Cisco's environmental sustainability policies and initiatives for our products, solutions, operations, and extended operations or supply chain is provided in the "Environment Sustainability" section of Cisco's Corporate Social Responsibility (CSR) Report.

Reference links to information about key environmental sustainability topics (mentioned in the "Environment Sustainability" section of the CSR Report) are provided in the following table:

Sustainability topic	Reference
Information on product material content laws and regulations	Materials
Information on electronic waste laws and regulations, including products, batteries, and packaging	WEEE compliance

Cisco makes the packaging data available for informational purposes only. It may not reflect the most current legal developments, and Cisco does not represent, warrant, or guarantee that it is complete, accurate, or up to date. This information is subject to change without notice.

Cisco Customer Recycling Solutions

https://www.cisco.com/c/en/us/about/product-innovation-stewardship/product-recycling/takeback-recycleprogram.html.

Product environmental information

Product environmental information for users per Commission Regulation (EU) 2019/424
https://www.cisco.com/web/dofc/18799432.pdf

Cisco and Partner Services

Cisco and our industry-leading partners deliver services that accelerate your transition to a Cisco UCS C-Series Rack Servers solution. Cisco Unified Computing Services can help you create an agile infrastructure, accelerate time to value, reduce costs and risks, and maintain availability during deployment and migration. After deployment, our services can help you improve performance, availability, and resiliency as your business needs evolve and help you further mitigate risk. For more information, visit https://www.cisco.com/go/unifiedcomputingservices.

Cisco Capital

Flexible Payment Solutions to Help You Achieve Your Objectives

Cisco Capital makes it easier to get the right technology to achieve your objectives, enable business transformation and help you stay competitive. We can help you reduce the total cost of ownership, conserve capital, and accelerate growth. In more than 100 countries, our flexible payment solutions can help you acquire hardware, software, services and complementary third-party equipment in easy, predictable payments. Learn more.

For more information

For more information about Cisco UCS servers, refer to https://www.cisco.com/go/ucs.

Document history

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