Cisco Compute Hyperconverged C240 M7 Node Family

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Cisco® Compute Hyperconverged with Nutanix accelerates and simplifies the delivery of infrastructure and applications, at a global scale, through best-in-class cloud-operating models, industry-leading flexibility, and enhanced support and resiliency capabilities so you can power your hybrid multicloud future with the industry's most complete hyperconverged solution.

Product overview

Cisco Compute Hyperconverged with Nutanix

Cisco and Nutanix have partnered to introduce the industry's most complete hyperconverged solution by integrating and validating Cisco servers, storage, networking, and SaaS operations with the Nutanix hybrid multicloud platform. Cisco Compute Hyperconverged with Nutanix is built, managed, and supported holistically to deliver a more seamless experience, foster innovation, and accelerate customers' hybrid-cloud journeys.

Cisco Compute Hyperconverged C240 M7 Node family

Cisco Compute Hyperconverged C240 M7 Node family delivers performance, flexibility, and resiliency in a high-capacity solution (up to 24 disks). Physically, nodes are deployed into clusters, with a cluster consisting of one or more Cisco Compute Hyperconverged C240 M7 all-flash servers.

These servers can be interconnected and managed in two different ways:

- **UCS Managed mode:** The nodes are connected to a pair of Cisco UCS® 6400 Series or a pair of Cisco UCS 6500 Series fabric interconnects and managed as a single system using UCS Manager. The minimum number of nodes in such a cluster is three. These clusters can support both general-purpose deployments and mission-critical high-performance environments.

- **Intersight Standalone mode:** The nodes are connected to a pair of Top-of-Rack (ToR) switches and servers are centrally managed using Cisco Intersight®. While a minimum of three nodes are required to deploy a standard Nutanix cluster, we also offer an option to deploy a single-node cluster and a two-node cluster for Edge and branch locations and situations that already have a high-performance network fabric installed. Refer to the Cisco spec sheets for further detail on the use of 1-node and 2-node Nutanix clusters.

Features and benefits

Cisco Compute Hyperconverged C240 M7 All Flash and All NVMe nodes with Intel® Xeon® Scalable Processors are excellent for a wide range of enterprise workloads, including cloud computing, Virtual Desktop Infrastructure (VDI), databases, and server virtualization.

Table 1. Summary of features and benefits of Cisco Compute Hyperconverged C240 M7 All Flash and All NVMe Node

Feature	Benefit	
Memory	• High memory capacity • Up to 8 TB memory (32 x 256 GB DDR5 DIMMs)	
Processors	5th Generation Intel Xeon Scalable Processors (Emerald Rapids) • Massive processing power with up to 64 cores per socket • 5 MB of L3 cache per core • Speed Select Technology that supports high and low priority cores. • Up to 80 PCI Express 5.0 lanes • High-speed DDR5 memory technology for up to 5600 MT/s • Multiple built-in accelerators for new functional capabilities across AI, analytics, security, and storage	4th Generation Intel Xeon Scalable Processors (Saphire Rapids) • 10-nanometer (nm) processor technology • Processing power with up to 60 cores per socket • Larger L2 and L3 cache • High-speed DDR5 memory technology for up to 4800 MT/s
Unified network fabric (optional)	• Low-latency, up to 8 x 10/25/50 Gigabit Ethernet connections or up to 4 x 40/100 Gigabit Ethernet connections • Wire-once deployment model, eliminating the need to install adapters and re-cable racks and switches when changing I/O configurations • Fewer interface cards, cables, and upstream network ports to purchase, power, configure, and maintain	
Cloud-based services and management	Cisco Intersight® simplifies infrastructure operations across on-premises data centers, edge sites, and public clouds. • Use a software-as-a-service platform that bridges applications with infrastructure • Correlate visibility and management across • bare-metal servers, hypervisors, and application components • Transform operations with artificial intelligence to reach needed scale and velocity	Nutanix Cloud Platform (NCP) includes Nutanix Cloud Infrastructure (NCI), Nutanix Cloud Management (NCM), and desktop services: • NCI unifies compute, storage and network, hypervisors and containers, in public or enterprise clouds. • NCM offers customers simplicity and ease of use to build and grow their cloud deployments and realize rapid ROI, by providing intelligent operations, self-service and orchestration, visibility, and governance. • Desktop services offer hybrid-cloud infrastructure capabilities for on-premises Virtual Desktop Infrastructure (VDI) and Desktop-as-a-Service (DaaS) use cases.
Storage	• All-flash and All-NVMe configurations ◦ Deliver high-capacity configurations for the Cisco Compute Hyperconverged Platform capacity layer • Nutanix Unified Storage provides software-defined, scale-out storage solutions for enterprise Network Attached Storage (NAS) and object workloads for unstructured data, block storage for structured data, and backup storage.	
Enterprise data protection	• Synchronous and near synchronous replication with optional runbook automation	

Feature	Benefit
	• Multisite asynchronous replication for disaster recovery • Deduplication and compression • Disaster recovery in cloud with Nutanix cloud clusters
Security	• Data-at-rest encryption using self-encrypting drives and enterprise key management integration • Trusted Platform Module (TPM), a chip (microcontroller) that can securely store artifacts, including passwords, certificates, and encryption keys, which are used to authenticate the platform (node). Supports TPM 2.0. • Software-based data-at-rest encryption and micro-segmentation
Software	• Management software: Cisco Intersight, Nutanix Cloud Infrastructure (NCI), Nutanix Cloud Management (NCM), desktop services • Storage software: AOS Storage, Nutanix Unified Storage (NUS) - for files, objects, and volumes use cases • Hypervisor: Nutanix Acropolis Hypervisor (AHV) and VMware vSphere

Product specifications

Table 2. Specifications for Cisco Compute Hyperconverged C240 M7 All Flash and All NVMe Node

Feature	Common specifications across the C240 M7 Node family
Chassis	• 2RU of rack space per node
Processors	One or two 5th Gen Intel Xeon Scalable Processors (Emerald Rapids) Or One or two 4th Gen Intel Xeon Scalable Processors (Sapphire Rapids)
Memory	32 DDR5-5600 DIMM slots (16 DIMMS per CPU): 16, 32, 48, 64, 96, 128, 256GB at up to 5600 MT/s for up to 8TB of memory with 5th Gen Intel Xeon Scalable processors Or 32 DDR5-4800 DIMM slots (16 DIMMS per CPU): 16, 32, 64, 128, 256GB at up to 4800 MT/s for up to 8TB of memory with 4th Gen Intel Xeon Scalable processors
Storage	• Specific drive options are available for Compute Hyperconverged C240 nodes: • C240 All Flash Node: 1.9 TB, 3.8 TB,7.6 TB or 15.3 TB SSD disks (up to 24 drives per node) • C240 All NVMe Node: 1.9 TB, 3.8 TB, 7.6 TB and 15.3 TB NVMe disks (up to 24 drives per node) • Dual M.2 SATA SSDs with HW RAID support for hypervisor boot
PCIe	• Up to 8 PCIe 4.0 slots or up to 4 PCIe 5.0 slots plus 1 dedicated 12-Gbps RAID controller slot and 1 dedicated mLOM slot
Graphics Processing Units (GPUs)	• NVIDIA A16, A30, A40, H100-80 Tesla GPU card (optional) • NVIDIA L4, L40S GPU cards (optional)
Network	• Cisco UCS Virtual Interface Card 15428 or 15238 or 15427 or 15237 (modular LAN on Motherboard) • Quad 10/25/50 G or Dual 40/100 G Ethernet VIC (Cisco UCS Virtual Interface Card 15425 or 15235) (optional) • Intel E810 dual-or quad-port Network Interface Card (Intersight Standalone Mode) • Intel 710 dual- or quad-port Network Interface Card (Intersight Standalone Mode)
Management	• Cisco Intersight

Feature	Common specifications across the C240 M7 Node family
	• Cisco Integrated Management Controller (CIMC) • Cisco UCS Manager
Advanced Reliability, Availability, and Serviceability (RAS) features	• Robust reporting and analytics • Hot-swappable, front-accessible drives • Dual-redundant fans and hot-swappable, redundant power supplies for enterprise-class reliability and a convenient latching lid for easy access to internal server • Tool-free CPU insertion, enabling processor upgrades and replacements with less risk of damage • Tool-free access to all serviceable items, and color-coded indicators to guide users to hot-pluggable and serviceable items • Non-disruptive rolling upgrades using Nutanix Life-Cycle Manager (LCM)
Front-panel connector	• 1 KVM console connector per node • (supplies 2 USB connectors, 1 VGA connector, and 1 serial connector)
Front-panel locator LED	• Helps direct administrators to specific servers in large data-center environments
Additional rear connectors	• 1 Gigabit Ethernet management port • 1 RS-232 serial port (RJ45 connector) • 1 Video Graphics Array (VGA) video port (DB15 connector) • 2 USB 3.0 ports
Power and cooling	• One or two hot-pluggable power supplies • Second power supply provides 1+1 redundancy • 1050W DC, 1200W AC, 1600W AC, or 2300W AC power supply options • 6 hot-swappable fans for front-to-rear cooling
Rail-kit options	• Cisco ball-bearing rail kit with optional reversible cable-management arm
Software	• Management software: Nutanix Cloud Infrastructure, Nutanix Cloud Management, desktop services • Storage software: AOS Storage, Nutanix Unified Storage (files, objects, and volumes) • Hypervisor: Nutanix Acropolis Hypervisor (AHV) and VMware vSphere

Ordering information

For a complete list of part numbers, refer to the [Cisco Compute Hyperconverged C240 M7 All Flash and All NVMe Node specification sheet](#).

Cisco Unified Computing Services

Cisco, Nutanix, and our industry-leading partners deliver services that accelerate your transition to Cisco Compute Hyperconverged systems. Professional services can help you create an agile infrastructure, accelerate time to value, reduce costs and risks, and maintain availability during deployment and migration. After you have deployed your system, our services can help you improve performance, availability, and resiliency as your business needs evolve.

Product sustainability

Information about Cisco's Environmental, Social, and Governance (ESG) initiatives and performance is provided in Cisco's Corporate Social Responsibility (CSR) and sustainability [reporting](#).

Table 3.   Cisco environmental sustainability information

Sustainability topic		Reference
General	Information on product-material-content laws and regulations	[Materials](#)
	Information on electronic waste laws and regulations, including our products, batteries, and packaging	[WEEE Compliance](#)
	Information on product takeback and reuse program	[Cisco Takeback and Reuse Program](#)
	Sustainability inquiries	Contact: csr_inquiries@cisco.com

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 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.

Document history

New or Revised Topic	Described In	Date
Update to include Intel 5th Gen Processor support	[Table 1](#)	August 2024
Update for Intersight Standalone Mode	Data Sheet	February 2024
Initial release	Data Sheet	December 2023

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