

Cisco UCS X410c M8 Compute Node



Benefits

- Improve application performance with Intel® Xeon® 6 Processors and memory bandwidth of up to 16 TB.
- Get four CPUs per node, thus a system designed for the most intensive workloads.
- Decrease Operating Expenses (OpEx) for power, cooling, management, and maintenance by consolidating older servers onto the newest generation of modular servers.
- Simplify administration of your hybrid-cloud infrastructure with Cisco Intersight®, freeing your IT staff to focus on mission-critical and value-added projects.

Solution overview

The Cisco UCS X410c M8 Compute Node is a four-socket mission-critical server built to power the most demanding mission-critical enterprise applications, memory-intensive applications, bare-metal and virtualized workloads. Like its predecessor, the X410c M8 is designed to install directly into the Cisco UCS X9508 Chassis, leveraging shared power, cooling, and management resources for efficient and scalable data center operations.

Target workloads for the Cisco UCS X410c M8 Compute Node include:

- SAP and SAP HANA
- Microsoft SQL Server
- Oracle Database
- Epic
- Data warehouses
- In-memory databases
- Large-scale virtualization, including VDI
- Real-time financial applications
- Java-based workloads
- Server consolidation
- Big data analytics

The M8 generation of the Cisco UCS X410c Compute Node introduces several significant advancements. New to this generation is the support of Intel Xeon 6 Processors, offering up to 86 cores per CPU and RDIMMs with speeds of up to 6400 MT/s, allowing for increased memory bandwidth and improved overall system performance. The system also supports the Cisco UCS X10c passthrough controller for E3.S drives, enabling support for up to nine PCIe Gen5 NVMe drives for enhanced storage performance and flexibility.

Cisco Customer Experience (CX) Custom Quick Start Solutions help you implement your Cisco UCS X-Series technology successfully, faster, and with less risk. CX experts assist with design development, validation of your deployment prerequisites, and configuration of your workloads. We also work with you to establish a system health baseline. Then our experts train your team to use the new solution. With expertise, best practices, and insights developed from more than 35 years of leading large-scale technology implementations, you can trust us to help you get your Cisco UCS solution up and running the right way, the first time.

The Cisco UCS X410C M8 Compute Node offers powerful performance for large-scale and in-memory databases and enterprise applications. It solves the increasing pain points of GenAI and memory-intensive analytics by offering lower latency and less complex interconnects. Server administration is simplified through an industry-leading Software-as-a-Service (SaaS) management platform—Cisco Intersight—that uses analytics to deliver proactive automation and support. By combining intelligence with automated actions, you can reduce costs dramatically and accelerate time to resolution, freeing IT staff to focus on business-critical projects.



Figure 1. Cisco UCS X410c M8 Compute Node

Learn more

For more information about modernizing your infrastructure with the Cisco UCS X410c M8 Compute Node, refer to the [data sheet](#). For more information about Cisco UCS X-Series Modular System, go to <https://cisco.com/go/ucsx> and for all Cisco UCS Servers, please visit www.cisco.com/go/ucs.

What it offers

The Cisco UCS X410c M8 Compute Node provides these main features:

- **CPUs:** four Xeon 6 Processors with up to 86 cores per processor.
- **Memory:** Up to 16 TB of main memory with 64x 256 GB DDR5-6400 Memory DIMMs.
- **Storage:**
 - Up to nine hot-pluggable EDSFF E3.S NVMe drives with a new passthrough front-mezzanine controller option new to the Cisco UCS X410c M8.
 - Up to six hot-pluggable, Solid-State Drives (SSDs), or non-volatile memory express (NVMe) 2.5-inch drives with a choice of enterprise-class Redundant Array of Independent Disks (RAIDs).
 - Up to two M.2 SATA drives or two M.2 NVMe drives for flexible boot and local storage capabilities.
- **mLOM Virtual Interface Cards (VICs):**
 - Cisco UCS VIC (Virtual Interface Card) 15420 occupies the server's modular LAN on Motherboard (mLOM) slot, enabling up to 50 Gbps (2x 25Gbps) of unified fabric connectivity to each of the chassis'

Intelligent Fabric Modules (IFMs) for 100 Gbps connectivity per server with secure boot technology.

- Cisco UCS VIC 15230 occupies the server's modular LAN on Motherboard (mLOM) slot, enabling up to 100 Gbps of unified fabric connectivity to each of the chassis' Intelligent Fabric Modules (IFMs) for 100 Gbps connectivity per server with secure boot technology.
- **Optional mezzanine card:**
 - Fifth generation Cisco UCS 5th Gen VIC 15422 can occupy the server's mezzanine slot at the bottom rear of the chassis. A bridge card that is included extends the VIC's 2x 50 Gbps of network connections through IFM connectors, bringing the total bandwidth to 100 Gbps per fabric (for a total of 200 Gbps per server) with secure boot capability.