

# Cisco UCS M6 Servers with 3<sup>rd</sup> Gen Intel Xeon CPUs

## General

- Q** **What did Cisco announce on April 6, 2021?**
- A** Three new UCS servers: the Cisco UCS® B200 M6 Blade Server, the Cisco UCS C220 M6 Rack Server, and the Cisco UCS C240 M6 Rack Server.
- Q** **What is different about the B200 M6, C220 M6, and C240 M6 servers?**
- A** These servers feature 3rd Gen Intel® Xeon® Scalable Processors (aka “Ice Lake” CPUs), 3200 MHz memory, and PCIe 4.0.
- Q** **When will these servers be available?**
- A** They are orderable now and will ship in May.
- Q** **Have the UCS B480 M5, UCS C240 SD M5, UCS C480 M5, UCS C480 ML M5, or the UCS S3260 M5 servers been updated to these new CPUs?**
- A** No, these servers have not been updated. The four-socket B480 M5 and C480 M5 don’t support the “Ice Lake” CPUs. The other servers continue to be evaluated.
- Q** **Where can I find more detailed information about the new Cisco UCS M6 servers?**
- A** Visit <https://cisco.com/go/UCS>.

## Common hardware questions

- Q** **How many cores do the 3rd Gen Intel Xeon Scalable CPUs have?**
- A** Processor core counts vary from eight to forty depending on the model.
- Q** **How much memory is supported?**
- A** Up to 8 TB when using DDR4 memory. Up to 12 TB total memory when used with Intel Optane™ persistent memory.
- Q** **What version of PCIe is supported for I/O and storage?**
- A** Like the C225 M6 and C245 M6 announced in March, the C220 M6 and C240 M6 support PCIe 4.0.
- Q** **What operating systems and hypervisors are supported?**
- A** Check the [UCS Hardware and Software Compatibility \(HCL\)](#) website.
- Q** **Can I mix M6 servers with previous-generation servers?**
- A** You can mix M6 and older servers if you are running the minimum required UCS management software supporting M6 servers. See the HCL for information about which server generations are supported.
- Q** **Are the new M6 servers NEBS certified?**
- A** Plans for NEBS certification are in process. Check with your Cisco account team for timelines.

## Cisco UCS B200 M6 Blade Server

- Q** **How many mezzanine cards are supported?**
- A** There is a dedicated slot for mLOM VIC options, one rear mezzanine slot for VIC or port expansion options, and one front slot for the Cisco FlexStorage RAID controller, FlexStorage passthrough, or M.2 RAID controller.
- Q** **How many drives are supported?**
- A** Up to two front-loading SAS/SATA/NVMe drives or up to four internal M.2 drives.
- Q** **How many GPUs are supported?**
- A** Motherboard layout changes to support 3rd Gen Intel Xeon Scalable Processors prohibit the support of GPUs.
- Q** **How are these servers managed?**
- A** There are multiple ways to manage all Cisco UCS servers. The preferred way is through Cisco Intersight™ Managed Mode. Intersight is a cloud-based SaaS management platform that supports infrastructure management as well as many other services. You may also manage your servers with Cisco UCS Manager running a 6300 or 6400 series Fabric Interconnect. There are also many third-party management solutions, such as Ansible and Puppet, that can utilize Cisco's management APIs.

## Cisco UCS C220 M6 Rack Server

- Q** **How many PCIe slots are supported?**
- A** Up to three PCIe 4.0 expansion slots.
- Q** **Is a PCIe slot the only way to support networking adapters (VIC or NIC)?**
- A** No, there is also a mLOM slot for VIC options as well as two 10Gbase-T Intel LOM ports.
- Q** **Are the 10-Gbps LOM modules 1-Gbps-capable?**
- A** Yes.
- Q** **How many disk drives are supported?**
- A** There are two different configurations. There is an all NVMe and a SAS/SATA version. Both support 10 disks.
- Q** **How many GPUs are supported?**
- A** Up to two GPUs are supported.
- Q** **Does the optional RAID controller consume a PCIe slot?**
- A** No. The RAID controller plugs into a dedicated slot, leaving all PCIe slots available for other cards.
- Q** **How are these servers managed?**
- A** There are multiple ways to manage all Cisco UCS servers. The preferred way is through Cisco Intersight Managed Mode. Intersight is a cloud-based SaaS management platform that supports infrastructure management as well as many other services. C-Series rack servers can also be managed with Intersight via the Cisco Integrated Management Controller (IMC). The Cisco IMC can also be used to manage rack servers in standalone mode. There are also many third-party management solutions, such as Ansible and Puppet, that can utilize Cisco's management APIs.

## Cisco UCS C240 M6 Rack Server

### Q How many PCIe slots are supported?

A Up to eight PCIe 4.0 expansion slots.

### Q Is a PCIe slot the only way to support networking adapters (VIC or NIC)?

A No, there is also a mLOM slot for VIC options as well as two 10Gbase-T Intel LOM ports.

### Q Are the 10-Gbps LOM modules 1-Gbps-capable?

A Yes.

### Q How many drives are supported?

A There are five different configurations. There are two Small-Form-Factor (SFF) all-NVMe options: up to 16 or up to 28 drives; two similar options for SAS/SATA; and a fifth option with 16 Large-Form-Factor (LFF) drives + two SFF drives – up to four NVMe drives.

### Q What do you mean by “up to” for PCIe slots and drives?

A The PCIe riser cages come in multiple versions. Four PCIe slots can be converted to NVMe storage. Those would be added to the front-load drives for the total supported drives.

### Q How many GPUs are supported?

A Up to five GPUs are supported.

### Q Does the optional RAID controller consume a PCIe slot?

A No. The RAID controller plugs into a dedicated slot, leaving all PCIe slots available for other cards.

### Q How are these servers managed?

A There are multiple ways to manage all Cisco UCS servers. The preferred way is through Cisco Intersight Managed Mode. Intersight is a cloud-based SaaS management platform that supports infrastructure management as well as many other services. C-Series rack servers can also be managed with Intersight via the Cisco Integrated Management Controller (IMC). The Cisco IMC can also be used to manage rack servers in standalone mode. There are also many third-party management solutions, such as Ansible and Puppet, that can utilize Cisco’s management APIs.