

# Check-M8!

Changing the AI Game with the latest UCS Innovations

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**CISCO** Live !

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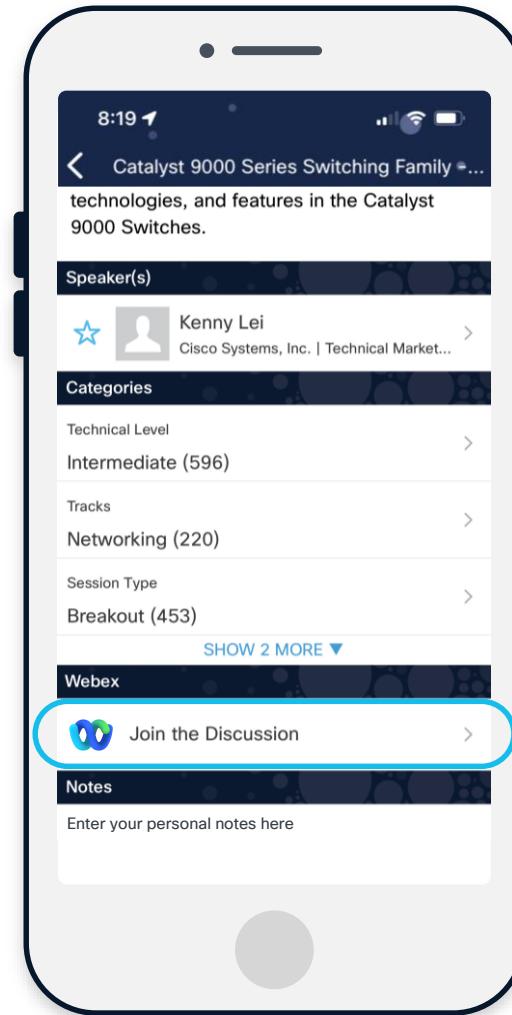
## Questions?

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**Webex spaces will be moderated by the speaker until June 13, 2025.**



# Agenda

- 01 **What's Changed and Why?**
- 02 **Rack Portfolio Updates**
- 03 **AI Server Updates**
- 04 **Modular Platform Updates**
- 05 **AI Platform Considerations**

# What's Changed and Why?

# AI Use Cases

**\$15.7T**

Potential contribution to global economy by 2030

**\$300B**

Global spending on AI by 2026

**75%**

Of large enterprises will rely on AI-infused processes by 2026



## Healthcare and Life Sciences

Diagnosis  
Drug discovery  
Personalized medicine



## Financial Services

Fraud detection  
Risk assessment  
Trading



## Retail

Personalization  
Inventory optimization  
Virtual agents



## Manufacturing

Predictive maintenance  
Quality control  
Demand forecasting



## Agriculture

Yield optimization  
Automated irrigation  
Pest prediction & prevention



## Transportation

Route optimization  
Autonomous vehicles  
Predictive maintenance



## Energy

Distribution optimization  
Fault prediction  
Demand forecasting



## Public Sector

Smart cities  
Security  
Services improvement

# AI Readiness



**85%**

say they have less than 18 months to deploy an AI strategy, or they will see negative business effects.<sup>1</sup>



**13%**

IT organizations with infrastructure prepared for AI today<sup>2</sup>



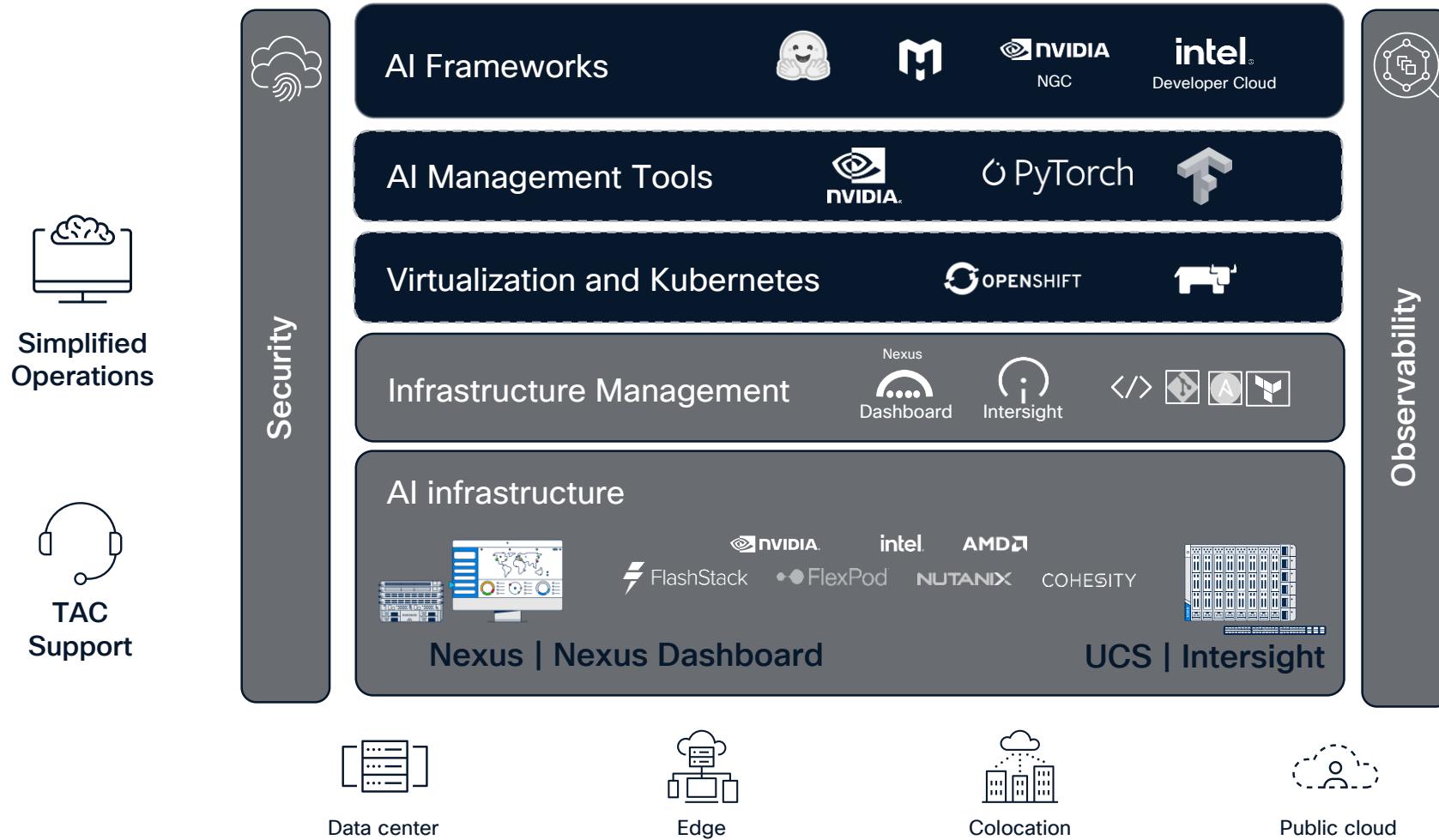
**59%**

believe AI's impact on their business will surpass expectations after 5 years. <sup>1</sup>

1. Cisco Global AI Readiness Index, 2024

2. Cisco Global AI Readiness Index, December 2023

# AI-Ready Infrastructure Stack

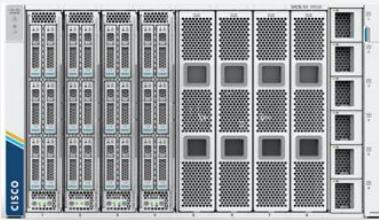


# Rack Portfolio Updates

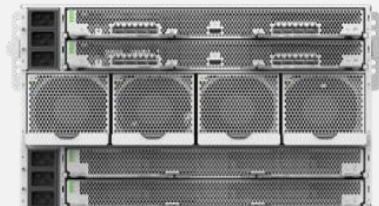
# Cisco UCS Compute Portfolio

## MAINSTREAM ENTERPRISE SERVERS

UCS X-Series  
X9508 Chassis

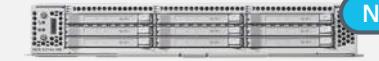


IFM Module



UCS X-Series Direct

UCS X210c M8



UCS X215c M8



UCS X410c M7



UCS X210c M7



UCS B200 M6



UCS C240 M8E3S  
36 EDSFF E3.S1T



New

UCS C240 M8SX  
28 HDD/SDD/NVMe



New

UCS C240 M8L  
16 LFF + 4 SFF



New

UCS C240 M7SN  
28 NVMe



UCS C240 M6S  
14 SSD/HDD Media drive



UCS C240 M6N  
14 NVMe Media Drive

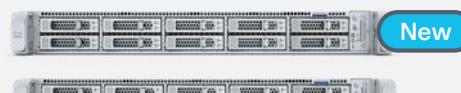


New

UCS C220 M8E3S  
16 EDSFF E3.S1T

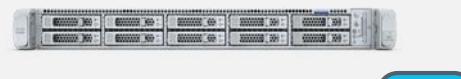


UCS C220 M8S  
10 HDD/SSD/NVMe

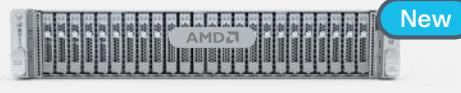


New

UCS C220 M7N  
10 NVMe



UCS C245 M8SX  
28 HDD/SDD



New

UCS C225 M8S  
10 HDD/SSD



New

UCS C225 M8N  
10 NVMe

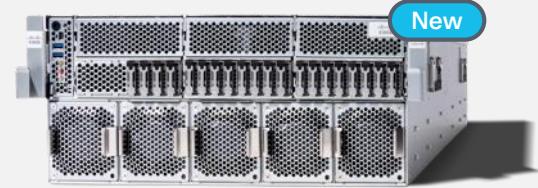


New

## AI SERVERS



UCS C885A M8  
8RU Dense GPU  
Server



UCS C845A M8  
4RU MGX Server

# Cisco UCS C220 M8 Rack Server

Dense 1RU form factor for a wide range of workloads, including virtualization, web, collaboration, cloud, and bare-metal applications

## C220 M8 SFF SKU

Up to 2x Intel Xeon 6 Processors  
Up to 86C / 350W per CPU



Hybrid drive backplane supports up to 10x 2.5in  
HDD/SSD/NVMe (up to 8x direct attach NVMe SSDs)

## C220 M8 EDSFF SKU

Up to 2x Intel Xeon 6 Processors  
Up to 86C / 350W per CPU



Up to 16x E3.S direct attach NVMe SSDs  
(Gen5 x4 each)

Cisco Intersight  
and  
IMM support

3x HH PCIe 5.0 or 2x FH PCIe 5.0  
MLOM / OCP 3.0 Support  
VIC 15000 Series

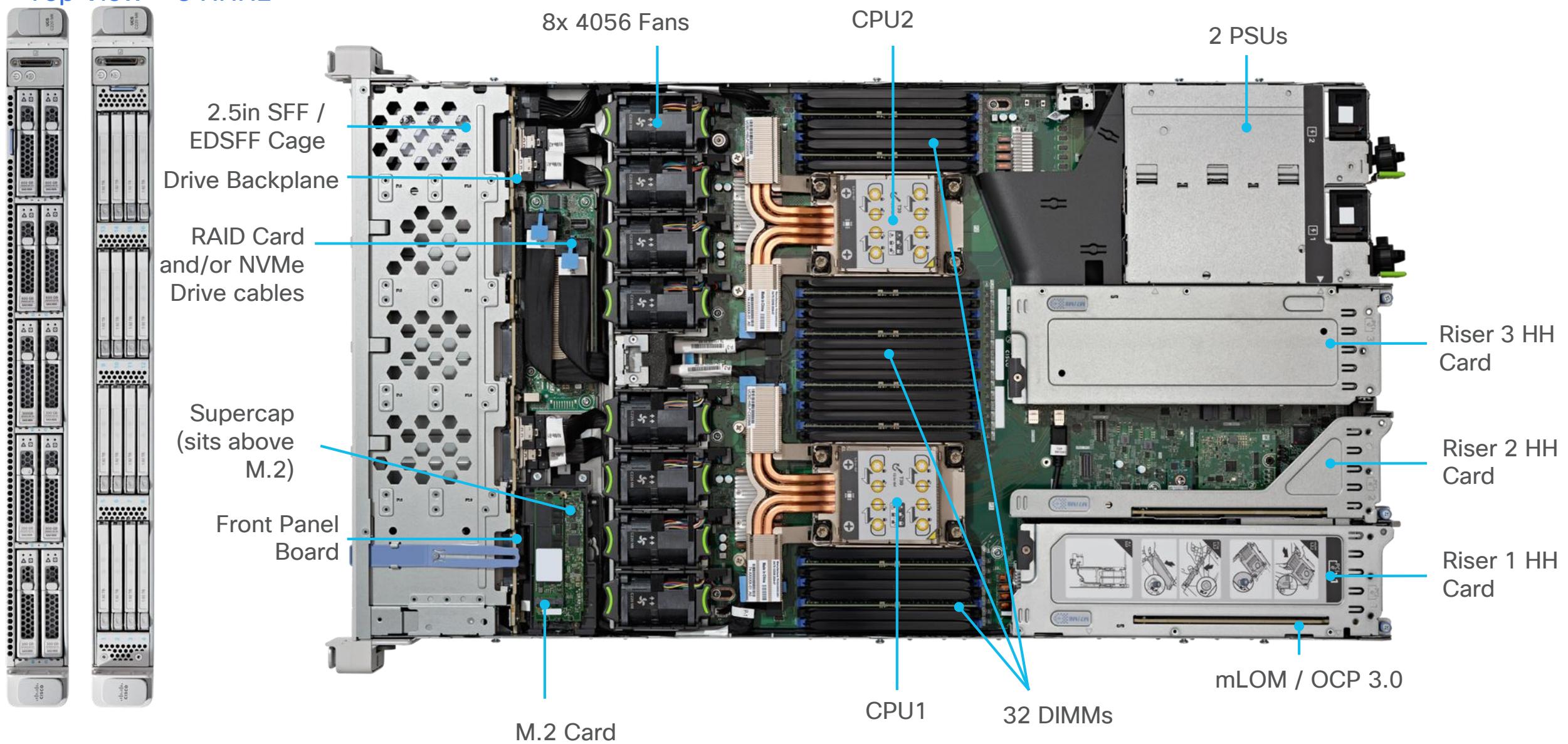
Dual M.2 SATA RAID for boot  
(hot-swappable M.2 available)

DDR5 6400 MT/s DIMMs  
(running at 6400 MT/s 1DPC,  
5200 MTS 2DPC)  
DDR5 8000 MT/s MRDIMMs

CPUs >330W limited to 30C Ambient

# UCS C220 M8 - System Placement

## Top View - 3 HHHL



# Cisco UCS C240 M8 Rack Server

Exceptional performance for enterprise workloads, including big data analytics, collaboration, databases, virtualization, and high-performance applications

## C240 M8 SFF SKU

Up to 2x Intel Xeon 6 Processors  
Up to 86C / 350W per CPU



Hybrid drive backplane supports up to 28 2.5in  
HDD/SSD/NVMe (up to 12x direct attach NVMe  
SSDs)

## C240 M8 EDSFF SKU

Up to 2x Intel Xeon 6 Processors  
Up to 86C / 350W per CPU



Up to x 36 E3.S direct attach NVMe SSDs  
(Up to 32 Gen5 x4 each)

Cisco Intersight  
and  
IMM support

8x FH PCIe 5.0  
MLOM / OCP 3.0 Support  
VIC 15000 Series

Dual M.2 SATA RAID for boot  
(hot-swappable M.2 available)

DDR5 6400 MT/s DIMMs  
(running at 6400 MT/s 1DPC,  
5200 MTS 2DPC)  
DDR5 8000 MT/s MR DIMMs

# Cisco UCS C240 M8 Rack Server

Exceptional performance for enterprise workloads, including big data analytics, collaboration, databases, virtualization, and high-performance applications

## C240 M8 LFF SKU

Up to 2x Intel Xeon 6 Processors

Up to 64C / 330W per CPU



3.5in LFF backplane supports up to 16 3.5in SAS  
HDDs (plus up to 4x rear SFF SAS/SATA/NVMe  
SSDs)

Dual M.2 SATA RAID for boot  
(hot-swappable M.2 available)

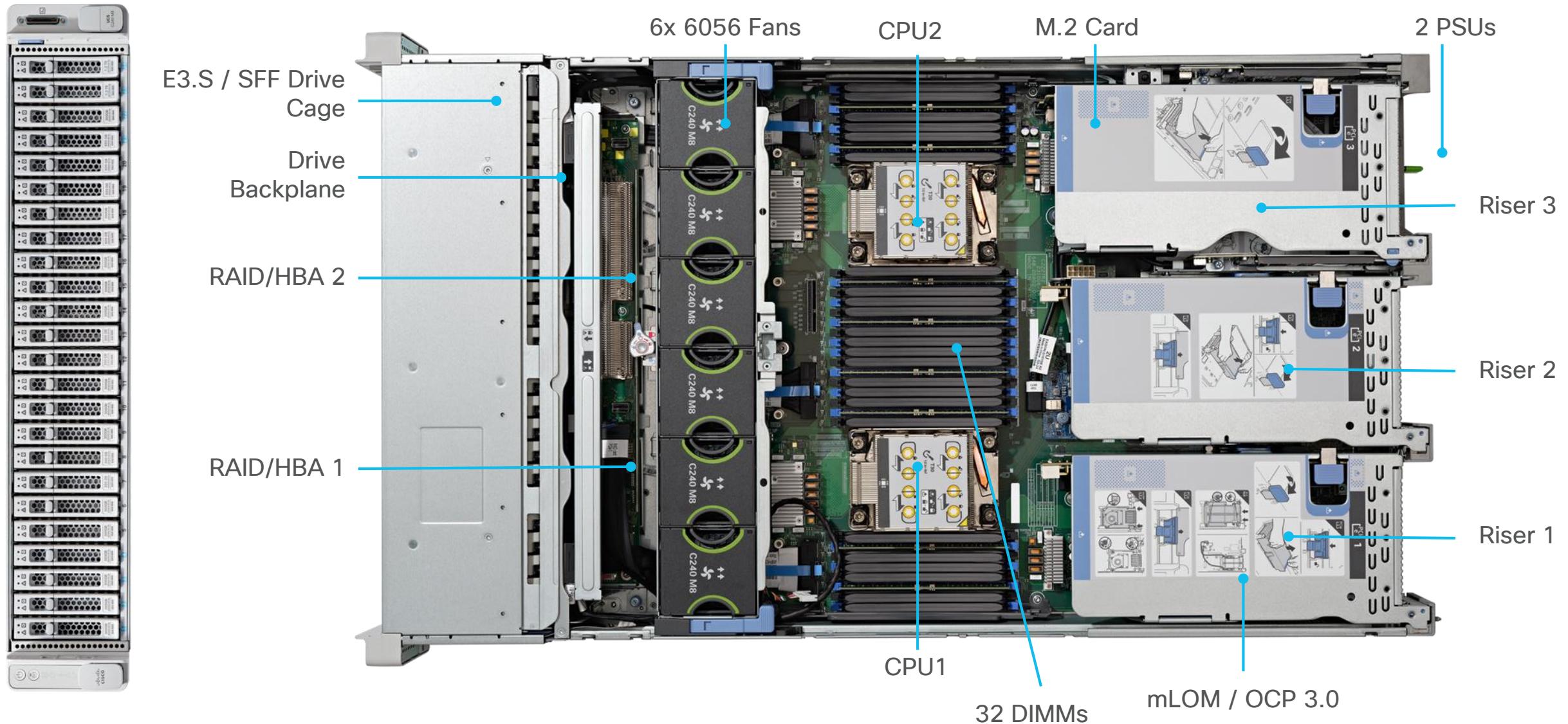
Cisco Intersight  
and  
IMM support

5x FH PCIe 5.0  
MLOM / OCP 3.0 Support  
VIC 15000 Series

DDR5 6400 MT/s DIMMs  
(running at 6400 MT/s 1DPC,  
5200 MTS 2DPC)  
DDR5 8000 MT/s MR DIMMs

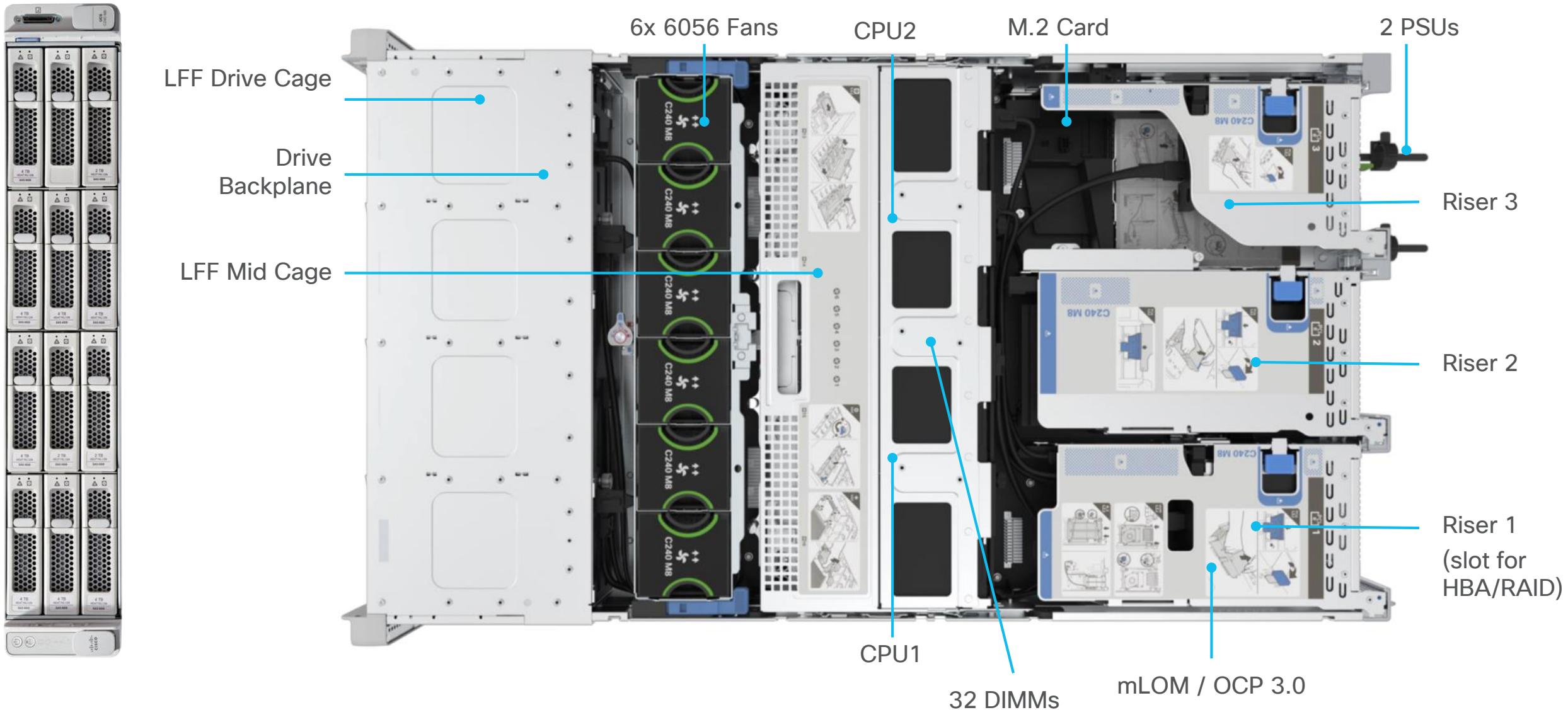
# UCSC-C240-M8SX/M8E3S - System Placement

## Top View



# UCSC-C240-M8L - System Placement

## Top View



# Cisco UCS C225 M8 Rack Server

Dense 1RU form factor for a wide range of workloads, including EDA, SDS, Big Data, Edge Centric application and other common 1U server use cases

## Single socket optimized

All the IO is derived from CPU1 for maximum flexibility in a single socket footprint



Hybrid drive backplane supports up to 10 2.5in HDD/SSD/NVMe (up to 4x direct attach NVMe SSDs)

## Direct Attach All NVMe SKU

Up to 10 NVMe SSD drives directly connected to CPU1



All NVMe Backplane supports 10 direct attach SFF NVMe SSDs

Cisco Intersight and  
IMM support

PCIe 5.0  
MLOM / OCP 3.0 Support  
VIC 15000 Series

Support for all 4<sup>th</sup> and 5<sup>th</sup> Gen  
EPYC CPU SKUs (up to 360W  
TDP)  
Up to 160 Cores

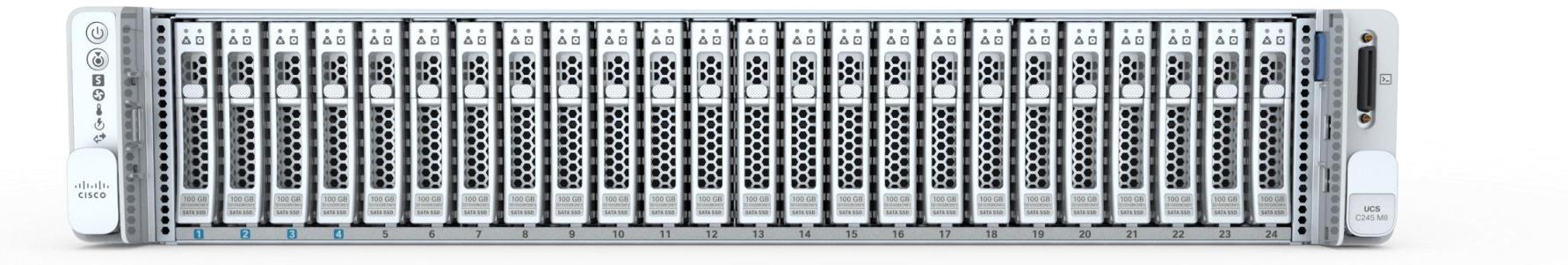
DDR5 6400 MT/s DIMMs  
12 DIMM slots  
Up to 3TB of Memory

# Cisco UCS C245 M8 Rack Server

Exceptional performance for enterprise workloads, including big data analytics, collaboration, databases, virtualization, and high-performance applications

C245 M8 SFF SKU

Supports 2x 4th and 5th Gen EPYC CPU SKUs  
(up to 160C / proc)



Hybrid drive backplane supports up to 28 2.5in  
HDD/SSD/NVMe (up to 4x front / 4x rear direct  
attach NVMe SSDs)

Dual M.2 SATA RAID for boot  
(hot-swappable M.2 available)

Cisco Intersight  
and  
IMM support

PCIe 5.0  
MLOM / OCP 3.0 Support  
VIC 15000 Series

DDR5 6400 MT/s DIMMs  
24 DIMM slots  
Up to 6TB of Memory

# New Storage Options for M8 Rack Servers

Flexible Storage options to align with a variety of workloads and applications

- **Cisco 24G Modular Tri-Mode RAID Controller + 4GB Cache** provides support for up to 14 drives
  - Provides RAID 0/1/5/6/10/50/60
  - UCSC-RAID-M1L16
  - Supported on C220M8S, C225M8S, C240M8SX (10 drives on 1U and 14 on 2U)
  - Up to 2x controllers on 2U
- **Cisco 24G Modular Tri-Mode RAID Controller + 4GB Cache** provides support for up to 28 drives
  - Provides RAID 0/1/5/6/10/50/60
  - UCSC-RAID-MP1L32
  - For C240M8SX and C245M8SX
- **Cisco 24G Modular Tri-Mode RAID Controller + 8GB Cache** provides support for up to 20 drives
  - Provides RAID 0/1/5/6/10/50/60
  - UCSC-RAID-MP1LL32
  - For C240M8L only

# New Storage Options for M8 Rack Servers

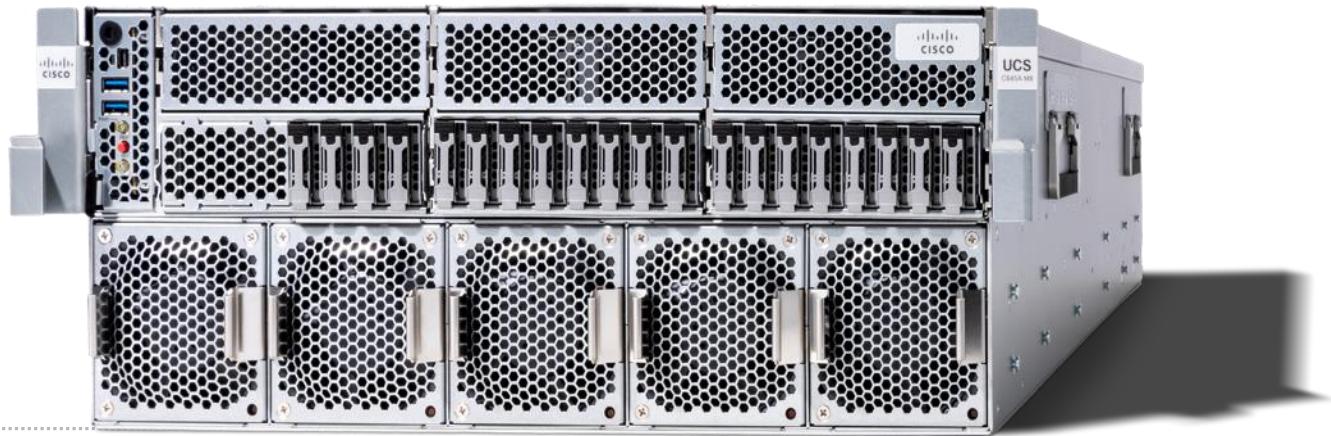
Flexible Storage options to align with a variety of workloads and applications

- **Cisco 24G Modular Tri-Mode HBA** for pass-through support for up to 14 drives
  - No RAID
  - UCSC-HBA-M1L16
  - For C220M8S, C225M8S, C240M8SX and C245M8SX (10 drives on 1U and 14 on 2U)
  - Up to 2x controllers on 2U
- **Cisco 24G Modular Tri-Mode HBA** for pass-through support for up to 20 drives
  - No RAID
  - UCSC-HBAMP1LL32
  - For C240M8L only

# AI Rack Server Updates

# Introducing the newest member to Cisco's AI server family

Flexible, modular design for organizations looking to "start small and scale up" with AI



Announced February 2025,  
Orderable NOW

## UCS Accelerated Cisco UCS C845A M8

### NVIDIA MGX reference design

Configurations with NVIDIA or AMD GPUs  
Included as an option in Cisco Hyperfabric

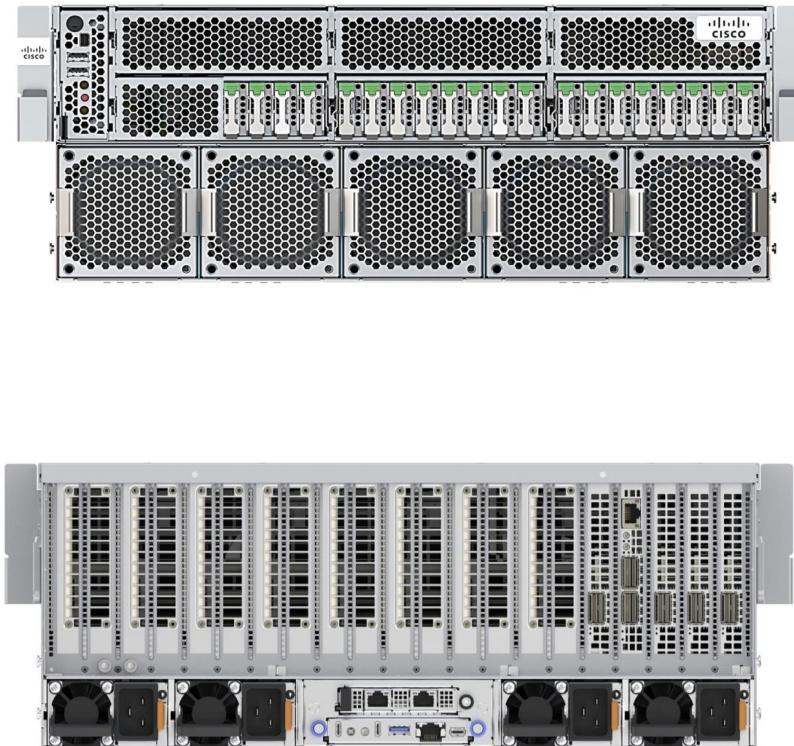
### High performance in a compact form factor

Enhanced power delivery, fewer PCBs, and better cable routing for optimal airflow and thermal management

# Introducing Cisco UCS C845A M8

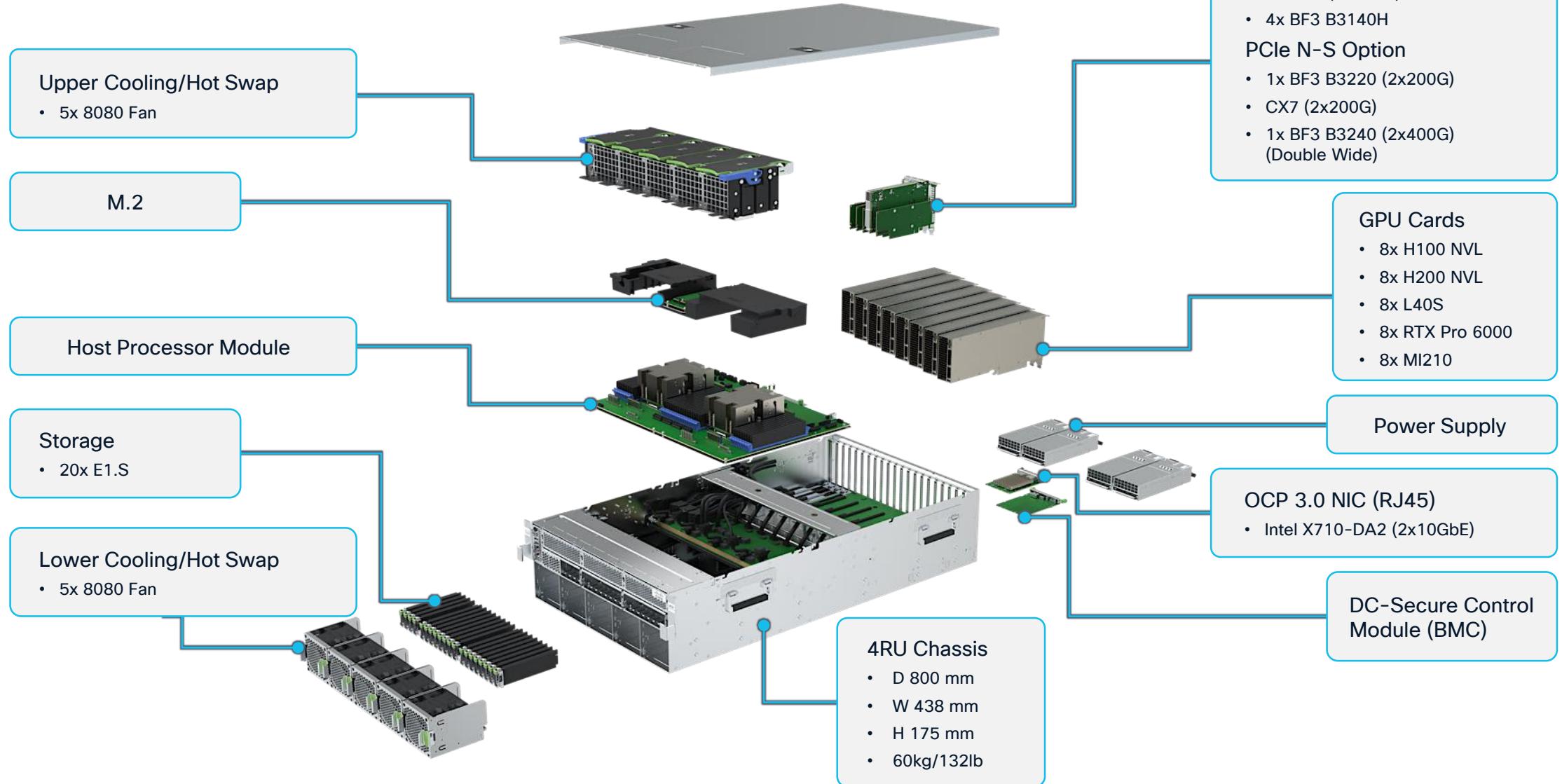


# UCS C845A Dense GPU Server Specifications



Product Specifications	
Form Factor	<ul style="list-style-type: none"><li>• MGX 4RU 19" Rack Server</li></ul>
Compute + Memory	<ul style="list-style-type: none"><li>• 2x 5<sup>th</sup> Gen AMD EPYC CPUs (400W, up to 96 cores, up to 5GHz per core)</li><li>• Up to 32x DDR5 RDIMM slots (5200 MT/s, 1 DPC - 4400 MT/s, 2 DPC)</li><li>• 8 Memory Channels per CPU</li></ul>
Storage	<ul style="list-style-type: none"><li>• Up to 2 M.2 SATA SSDs for boot (hardware RAID Option Available)</li><li>• Up to 20 E1.S NVMe SSDs for cache and data</li></ul>
GPUs	<ul style="list-style-type: none"><li>• Up to 8x NVIDIA or AMD PCIe GPUs</li></ul>
Network Cards	<ul style="list-style-type: none"><li>• 4 PCIe Gen5x16 FHHL for East-West (EW) NIC ConnectX-7 (1x400G) or BF3 B3140H SuperNIC</li><li>• 1 PCIe Gen5x16 FHHL for North-South (NS) NIC ConnectX-7 (2x200G) , BF3 B3220</li><li>• OCP 3.0 X710-DA2 (dual port 10GBaseT) for x86 management</li></ul>
Cooling	<ul style="list-style-type: none"><li>• 10 hot-swappable fans for front-to-rear cooling</li></ul>
Front IO	<ul style="list-style-type: none"><li>• 2 USB 3.0, 1 ID Button, 1 Power Button, 1 Reset Button, 1 miniDP port</li></ul>
Rear IO	<ul style="list-style-type: none"><li>• 1 USB 3.0 A, 1 USB 3.0 C, 1 mDP, 1 ID Button, 1 Power Button, 1 USB 2.0 C (for debugging), 1 RJ45 (mgmt.)</li></ul>
Power Supply	<ul style="list-style-type: none"><li>• Mandatory 4x 3200W (AC), Titanium hot-swappable power supplies (N+1)</li></ul>

# UCS C845A M8 exploded drawing



# Cisco UCS C845A M8 Versatile AI Server

## Optimized for GenAI

- Address a variety of AI use cases
- Modular NVIDIA MGX™ architecture enables configuration flexibility
- Built on air-cooled enterprise rack design that easily fits in your data center



## Scalable AI performance

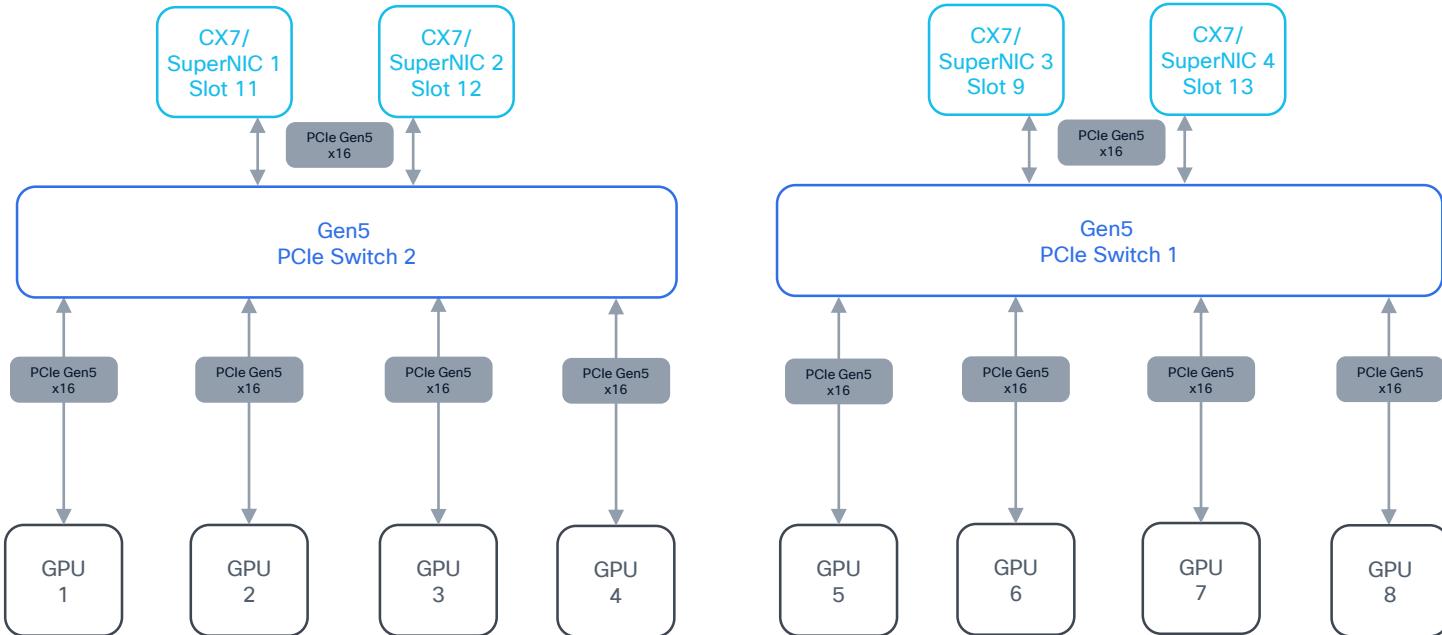
- Choose the number of GPUs that match your use case
- Increase the number of GPUs when your workloads demand it
- Easily create clusters of AI servers to scale out and meet increasing needs



## Consistent management

- Cisco Intersight delivers a unified management paradigm across all your UCS servers
- Manage your AI server with the same tool as your traditional servers

# UCS C845A – GPU Connectivity



- All GPU cards must be procured from Cisco (unique SBIOS ID required by CIMC)
- Max 8 GPUs, even number, minimum 2, GPUs cannot be mixed
  - 2-Way Bridge
    - Minimum 2 adjacent GPUs per bridge
    - If selected, each 2-way bridge must be fully populated with GPUs
  - 4-Way Bridge
    - Minimum 4 adjacent GPUs per bridge
    - If selected, each 4-way bridge must fully be populated with GPUs
- Start with slot 8 for initial GPU is recommended
- Place any additional GPU pairs in adjacent slots
- Communication between GPUs on different PCI Switches will go through CPUs

# The UCS C845A M8—a better overall AI server improving upon the MGX reference design



## UCS C845A M8 MGX Server (2-8-5) Mechanicals

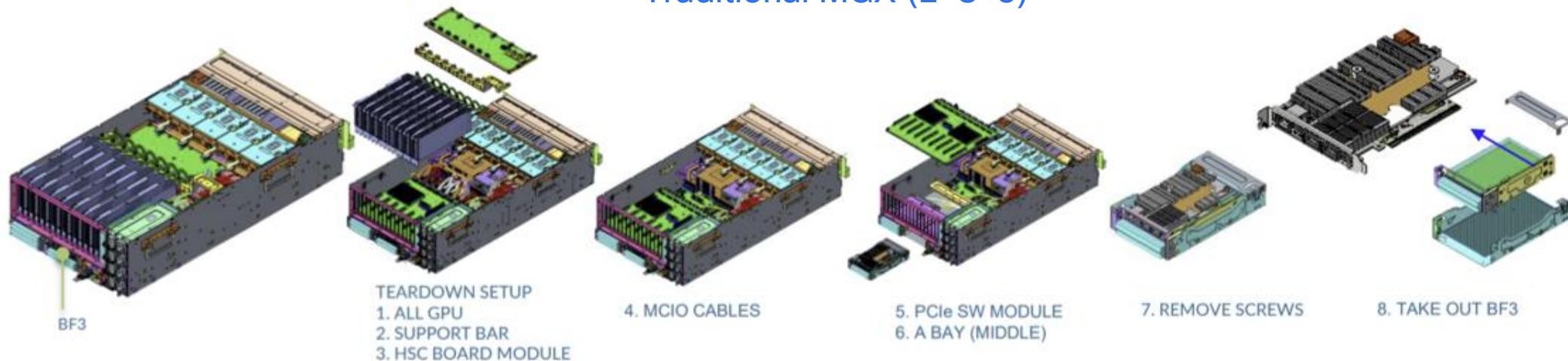
- Improved power delivery
- Better design (fewer PCB's (17 PCB -> 11 PCB))
- Improved cable routing in manufacturing and serviceability
  - Total decrease of 19 cables
- Leverages MGX building block infrastructure

*From an electrical, system and thermal design perspective, C845A M8 is **100% compliant to the MGX Architecture***

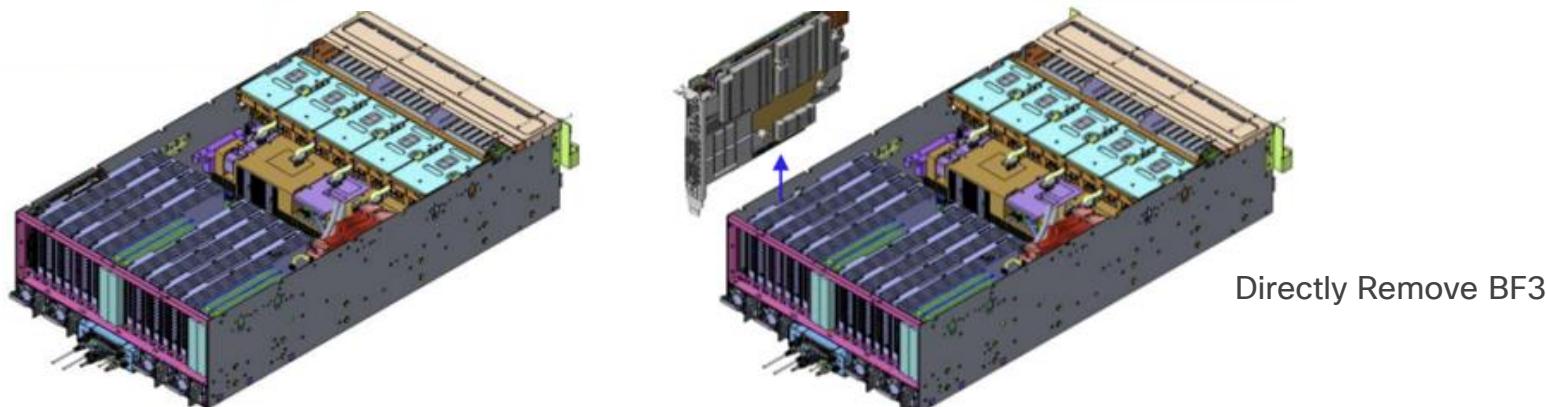
# The UCS C845A M8 – A Better Overall Design

## PCIe Card Serviceability Example

### Traditional MGX (2-8-5)



### Cisco UCS C845A M8 (2-8-5)

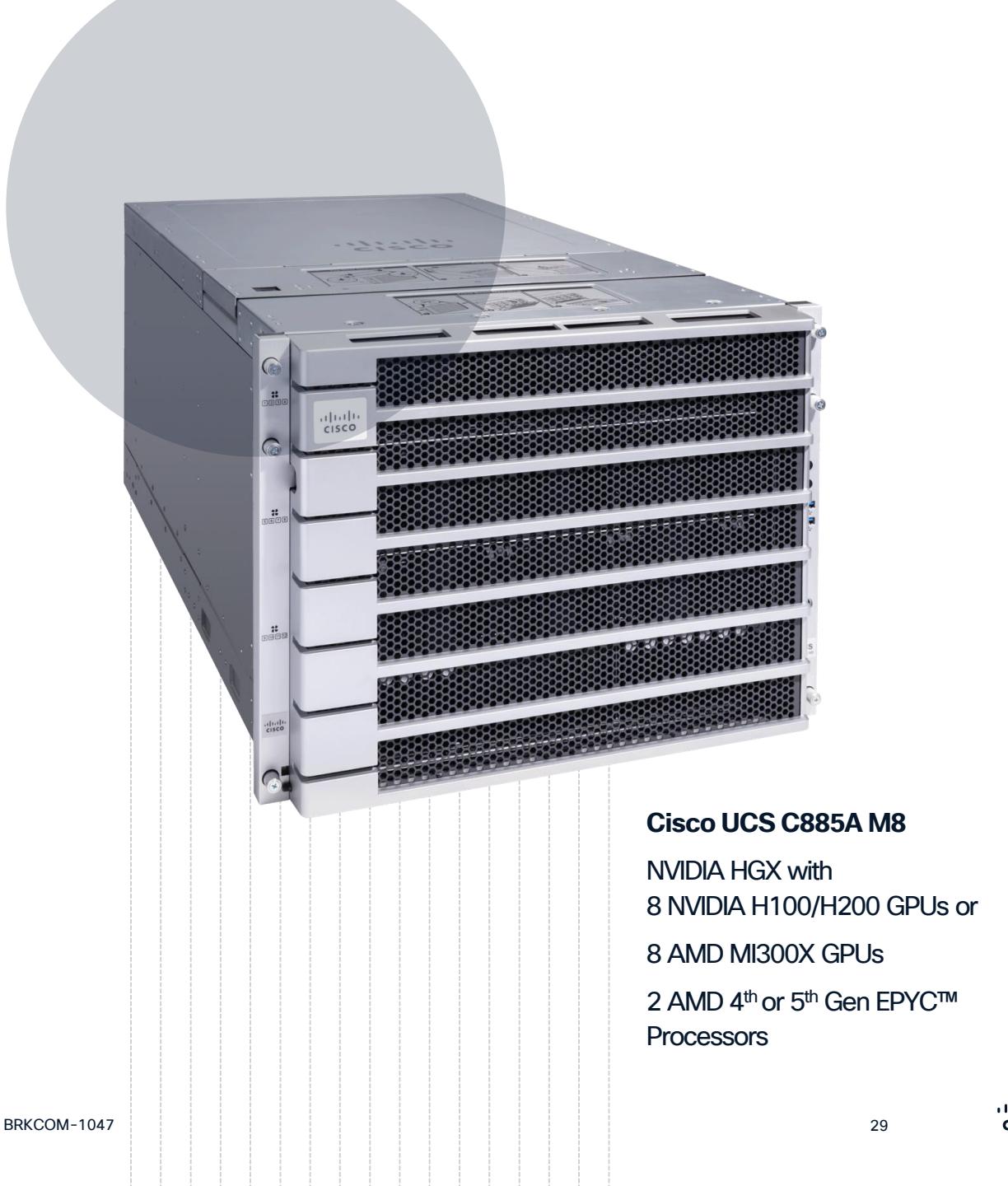


# Cisco UCS C885A M8 High Density Rack Server

Bringing high-density GPU servers to the Cisco UCS® family and to Cisco's AI solution portfolio

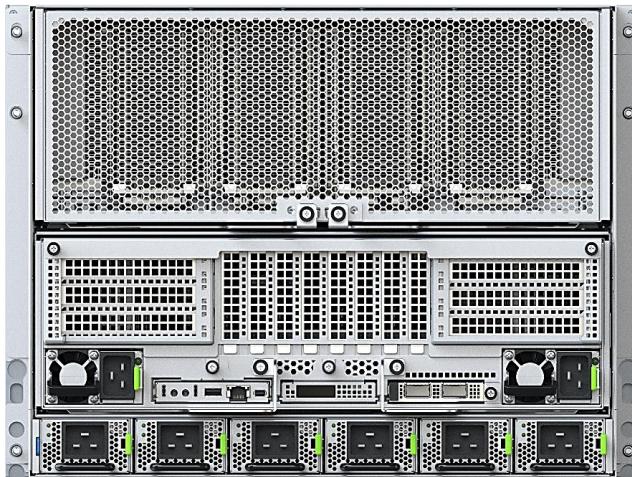
Purpose-built for data-intensive use cases like model training and deep learning

- Training—large/small models
- Fine-tuning
- Large model inferencing
- Retrieval-Augmented Generation (RAG)



**Cisco UCS C885A M8**  
NVIDIA HGX with  
8 NVIDIA H100/H200 GPUs or  
8 AMD MI300X GPUs  
2 AMD 4<sup>th</sup> or 5<sup>th</sup> Gen EPYC™  
Processors

# UCS C885A M8 Dense GPU Server Specifications



## Product Specifications

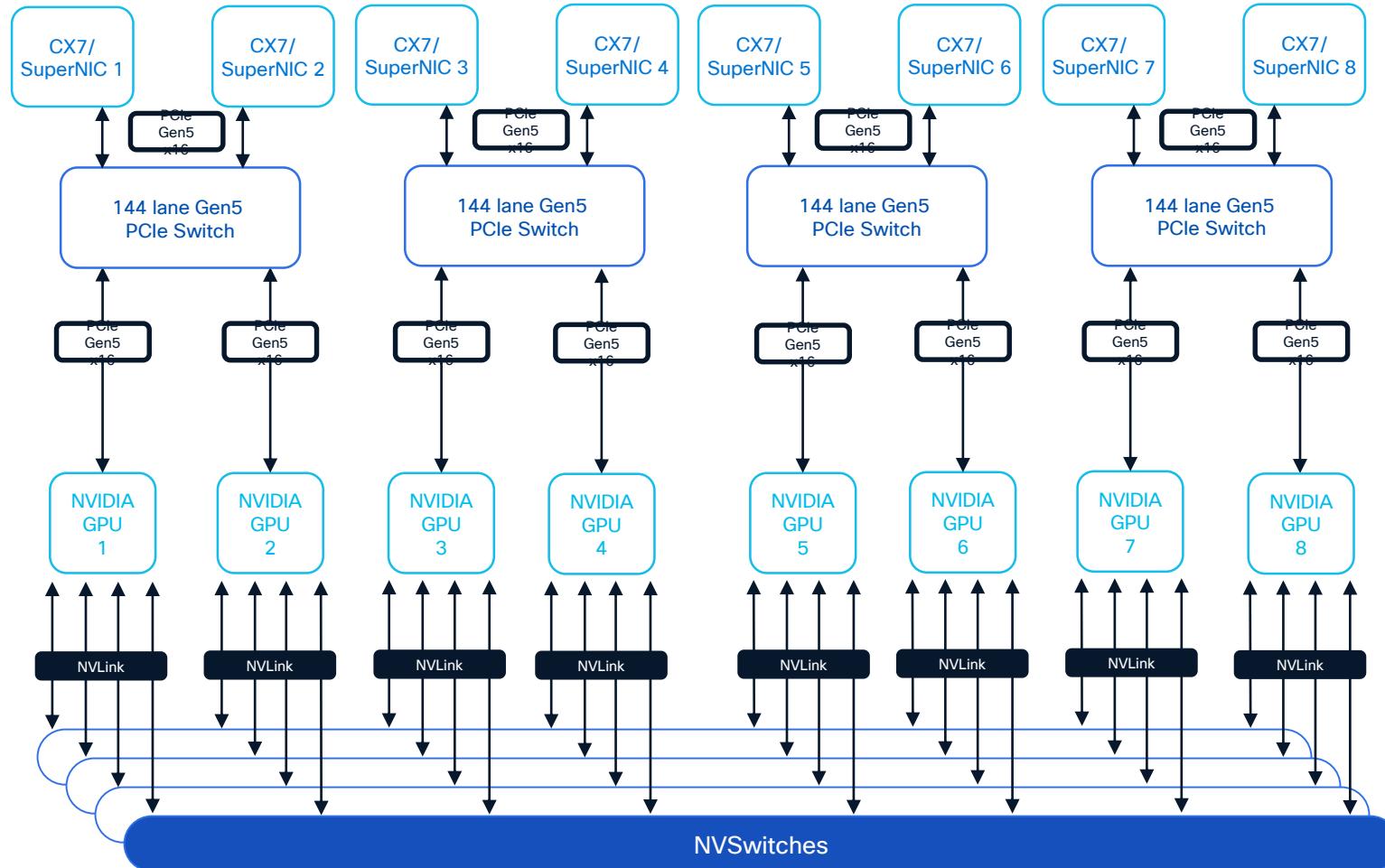
Form Factor	<ul style="list-style-type: none"><li>• HGX 8RU 19" Rack Server</li></ul>
Compute + Memory	<ul style="list-style-type: none"><li>• 2x 4<sup>th</sup> Gen AMD EPYC 9554 (360W, 64 core, up to 3.75GHz) or</li><li>• 2x 5<sup>th</sup> Gen AMD EPYC 9575F (400W, 64 core, up to 5GHz)</li><li>• 2x 5<sup>th</sup> Gen AMD EPYC 9535 (300W, 64 core, up to 3.5GHz)</li><li>• 24 DDR5 RDIMMs</li><li>• Up to 6,000 MT/S</li></ul>
Storage	<ul style="list-style-type: none"><li>• 1 PCIe3 x4 M.2 NVMe (Boot Device), optional 2x M.2 with HW Raid</li><li>• Up to 16 PCIe5 x4 2.5" U.2 NVMe SSD (Data Cache)</li></ul>
GPUs	<ul style="list-style-type: none"><li>• NVIDIA: 8 x H100 (700W) or 8 x H200 (700W)</li><li>• AMD: 8 x MI300X (750W)</li></ul>
Network Cards	<ul style="list-style-type: none"><li>• 8 PCIe x16 HHHL for East-West NIC ConnectX-7 or BF3 B3140H</li><li>• Up to 2 PCIe x16 FHHHL for North-South NIC ConnectX-7 or BF3 B3220</li><li>• 1 OCP 3.0 X710-T2L for North-South or host management</li></ul>
Cooling	<ul style="list-style-type: none"><li>• 12 Hot swappable (N+1) fans for system cooling</li><li>• 4 fans for SSD cooling</li></ul>
Front IO	<ul style="list-style-type: none"><li>• 2 USB 2.0, 1 ID Button, 1 Power Button</li></ul>
Rear IO	<ul style="list-style-type: none"><li>• 1 USB 3.0 A, 1 USB 3.0 C, mDP, 1 ID Button, 1 Power Button, 1 USB 2.0 C (for debugging), 1 RJ45 (mgmt.)</li></ul>
Power Supply	<ul style="list-style-type: none"><li>• Up to 6 54V 3kW and 2 12V 2.7kW MCRPS/CRPS, N+1 redundancy</li></ul>

# UCS C885A M8 Modular Sled Design

NVIDIA HGX Architecture

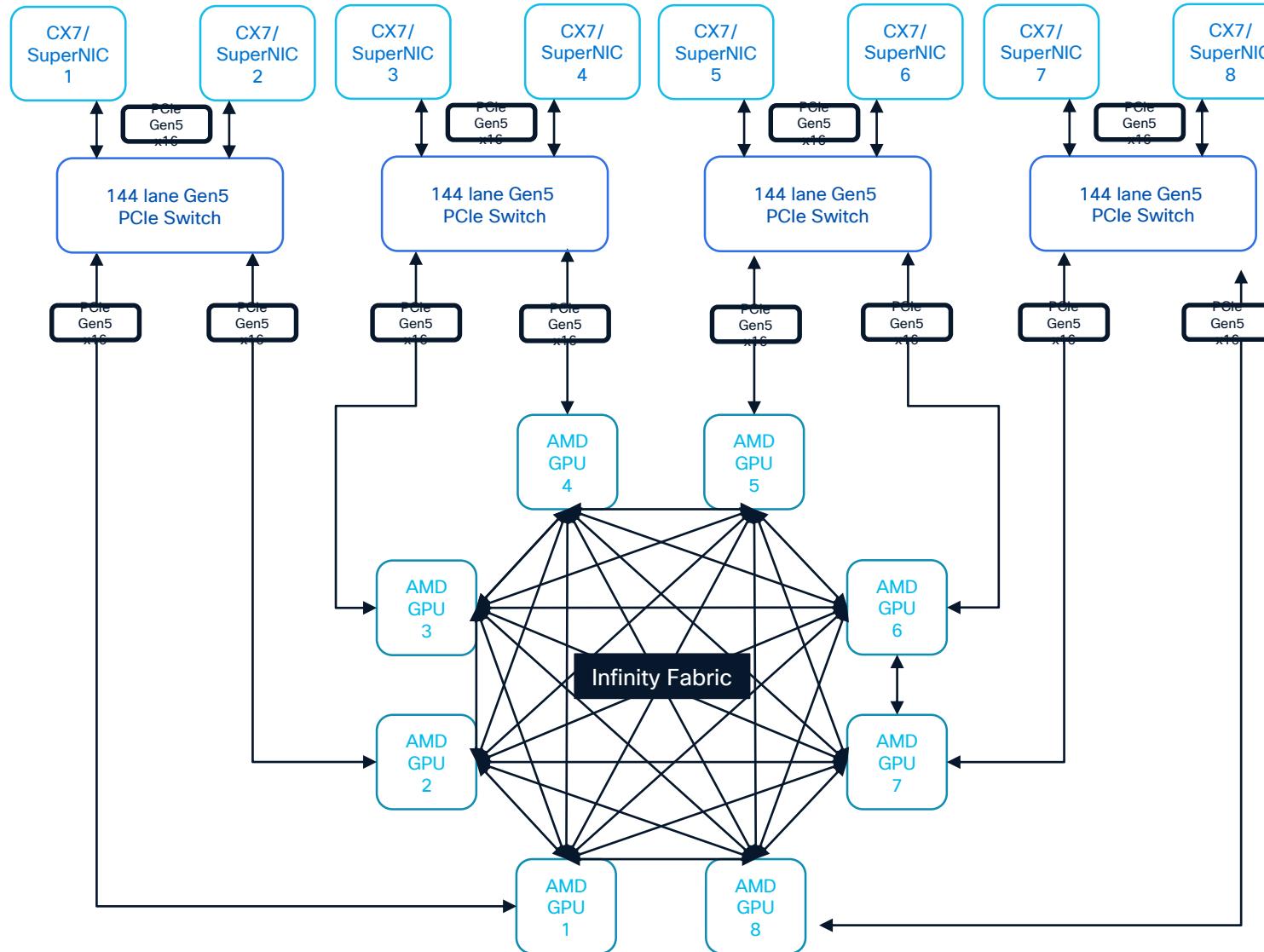


# UCS C885A M8 – NVIDIA GPU Connectivity



- 8x NVIDIA H100/H200 SXM5 Tensor Core GPUs
- Each H100/H200 GPU has multiple NVLink ports and connects to all four NVSwitches
- 4 x fully non-blocking NVSwitches that connect all 8 GPUs
- Each H100/H200 GPU also has a dedicated NIC/SuperNIC connected via PCIe Gen5 x16 for GPU-to-GPU connectivity across nodes

# UCS C885A M8 – AMD GPU Connectivity

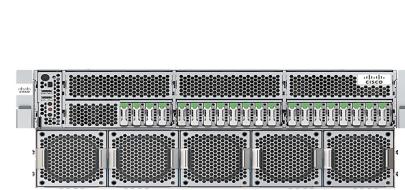


- 8x AMD MI300X OAM GPUs
- Each MI300X GPU has direct access to all other GPUs in full mesh topology over AMD Infinity Fabric mesh
- Each MI300X GPU also has a dedicated NIC/SuperNIC connected via PCIe Gen5 x16 for GPU-to-GPU connectivity across nodes

# NVIDIA's C845A M8 (MGX) vs. C885A M8 (HGX)

Feature/Aspect	NVIDIA MGX	NVIDIA HGX
Purpose	Modular GPU Expansion for diverse workloads	High-Performance Computing and AI workloads
Architecture	Modular, flexible design	Integrated, high-density design
Scalability	Highly scalable with modular components	Scalable, but within a more integrated framework
Target Use Cases	Data centers, edge computing, enterprise	Supercomputing, large-scale AI, data analytics
Networking	Support for advanced networking	Integrated high-speed networking capabilities
Deployment Flexibility	Supports diverse configurations	Optimized for specific configurations
Performance Optimization	Customizable for specific workloads	Optimized for maximum performance in HPC and AI
Security Features	Standard enterprise security features	Enhanced security for HPC environments

# Cisco Rack Server for AI Workloads



	C245 M8	C240 M8	C845A M8 MGX	C885A M8 HGX
Form Factor	2RU	2RU	4RU	8RU
Processor Family	(2) AMD 4 <sup>th</sup> and 5 <sup>th</sup> gen EPYC processor	(2) Intel Xeon 6 <sup>th</sup> Gen processor	(2) AMD 5 <sup>th</sup> Gen EPYC processor	(2) AMD 4 <sup>th</sup> or 5 <sup>th</sup> Gen EPYC processor
Expansion Slots	(8) PCIe 5 with (3) Riser slots Max power 400W	3 Riser slots Max power 450W (500W engineering max)	(5) PCIe Gen5 slots (1) OCP slot	(5) PCIe 5 slots (1) OCP
Number and connection type of GPUs	<b>(2)</b> NVIDIA H100 NVL 400W, H100, L40S 350W <b>(3)</b> NVIDIA L40 300W, A16 250W AMD Instinct M10-210* Dec24	<b>(3)</b> GPUs NVIDIA H100 NVL 400W, L40S 350W Future GPU Models	<b>(2-8)</b> GPUs NVIDIA H200 NVL 600W H100 NVL 400W L40S 350W AMD MI210 300W	<b>(8)</b> GPUs NVIDIA HGX H100, H200 SXM5 700W AMD MI300X OAM 750W
GPU Fabric	PCIe	PCIe	PCIe NVLINK / AMD Infinity Fabric via Bridges	NVLINK AMD Infinity Fabric
GPU Placement	Rear of server PCIe riser	Rear of server PCIe riser	Rear of server PCIe riser	Top of Chassis front facing
PSU count and max power	(2) 2300W PSUs	(2) 2300W PSUs	(4) 3200W PSUs	(6) 3000W and (2) 2700W PSUs
Cooling	Air-cooled	Air-cooled	Air-cooled	Air-cooled

# Modular Platform Updates

# X-Series Portfolio

## Fabric



### 4<sup>th</sup> and 5<sup>th</sup> Gen FI

- 25/100G ports
- unified ports – up to 16x 32G FC ports (6536)
- Supports VIC 1400, 14000 and 15000 series



### 25/100G IFM 8 x 25/100G connectivity

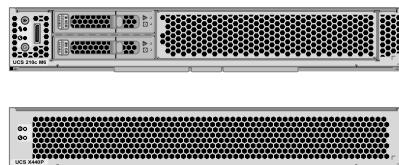
### 4<sup>th</sup> and 5<sup>th</sup> Gen VIC 25/100G connectivity for both blades and racks.

## X-Fabric and PCIe Node



### X-Fabric

- Based on native PCIe Gen. 4
- Provides GPU acceleration to enterprise application
- No backplane or cables = Easy upgrades



### GPU Node and Front Mezz GPUs

- Various NVIDIA GPU options with X210c and X215c.
- AMD GPU option with X215c M8 compute.

## Compute



### X210c Compute Node

- 2- Socket, single slot servers
- Three Generations: M6, M7, M8
- Intel Xeon CPUs



### X410c Compute Node

- 4- Socket, dual slot servers
- Intel 4<sup>th</sup> Gen Xeon CPU
- Up to 64 DDR5 DIMMs



### X215c Compute Node

- 2- Socket, single slot servers
- M8 with AMD 4<sup>th</sup> and 5<sup>th</sup> Gen EPYC CPU

# UCS X9508 System Chassis

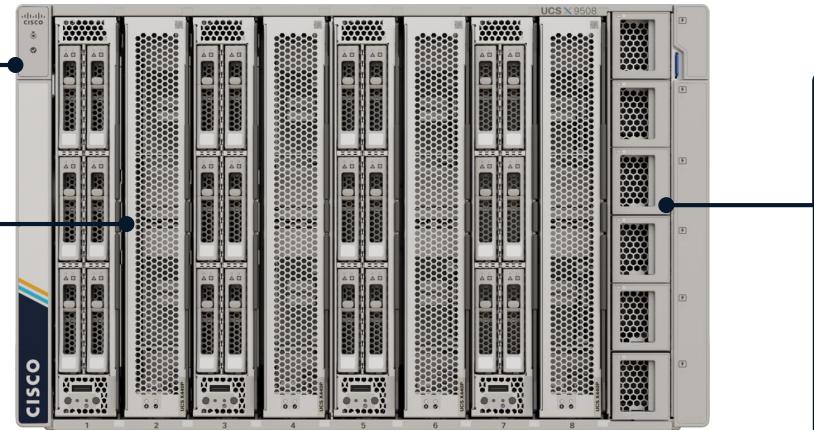
Chassis

7RU IO direct connect

8 flexible slots

Optical ready

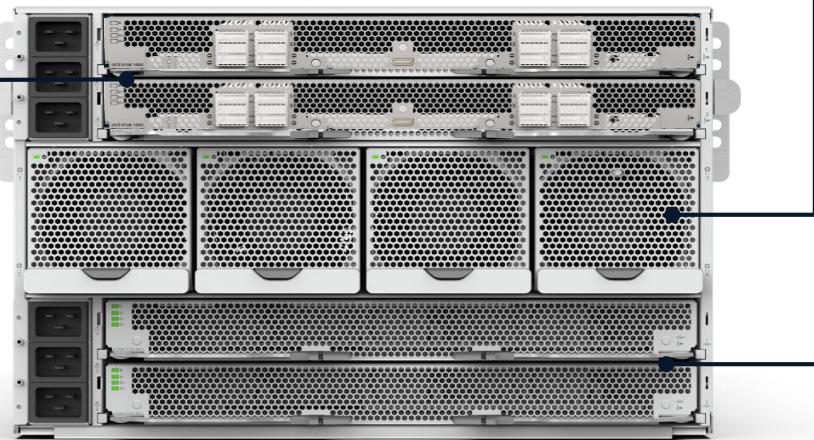
Liquid cooling ready



Ethernet fabric

Two Ethernet Modular fabrics

2 TB/s throughput



Power and cooling

6x 2800W PSU

54V power distribution

4x 100mm Dual rotor fan

X-Fabric modules

Two flexible IO modules

For storage and GPU nodes connectivity

# UCS X210c M8 X-Series Server Specs Overview



Use Cases	Enterprise-class mainstream blade server with high performance for compute-intensive workloads.	
	<ul style="list-style-type: none"><li>Virtualization</li><li>Hyperconverged</li><li>Mixed Workload Standardization</li></ul>	<ul style="list-style-type: none"><li>Database and Analytics</li><li>Virtual Desktop Infrastructure</li><li>AI/ML</li></ul>
Core Platform	<p>Dual Socket Platform – Up to 172 cores per node, 1376 cores per chassis</p> <p>Support for Intel Xeon6 6500P and 6700P processors</p> <p>Support for 32xDDR5 6400 DIMMs (1DPC/2DPC, 8 channel) up to 8TB (32 * 256GB*)</p> <p>PCIe Gen 5 support and CXL 1.1+ support</p>	
X Fabric/PCIe Node	Connect to PCIe nodes, NVIDIA GPUs	
VICS	200G aggregate/100G per fabric, 100G 5th gen VIC mLOM or 25G 5th gen VIC Mezz	
Drives/GPU	<p>Front mezz options   6 SAS/SATA U.2 with HW RAID, 6 NVMe PCIe Gen5 x4, 9 E3.S NVMe, up to 2x GPUs</p> <p>Internal   2x M.2 SATA HW RAID1, 2x M.2 NVMe</p>	
Management	Intersight Management and UCSM	

# UCS X215c M8 X-Series Server Specs Overview



Use Cases	Enterprise-class mainstream blade server with high performance for compute-intensive workloads.	
	<ul style="list-style-type: none"><li>Virtualization</li><li>Hyperconverged</li><li>Mixed Workload Standardization</li></ul>	<ul style="list-style-type: none"><li>Database and Analytics</li><li>Virtual Desktop Infrastructure</li><li>AI/ML</li></ul>
Core Platform	<p>Dual Socket Platform – Up to 256 cores per node, 2048 cores per chassis</p> <p>Support for Genoa (-X)/Bergamo/Turin</p> <p>Support for 24xDDR5 DIMMs (1DPC, 12 channel) up to 6TB (24 * 256GB)</p> <p>PCIe Gen 5 support and CXL 1.1+ support</p>	
X Fabric/PCIe Node	Connect to PCIe nodes, NVIDIA/AMD GPUs	
VICS	200G aggregate/100G per fabric, 100G 5th gen VIC mLOM or 25G 5th gen VIC Mezz	
Drives/GPU	<p>Front mezz options   6 SAS/SATA with HW RAID, 6 NVMe PCIe Gen5 x4, up to 2x GPUs</p> <p>Internal   2x M.2 SATA HW RAID1, 2x M.2 NVMe</p>	
Management	Intersight Management and UCSM	

# New Storage Option for X210c M8

## E3.S

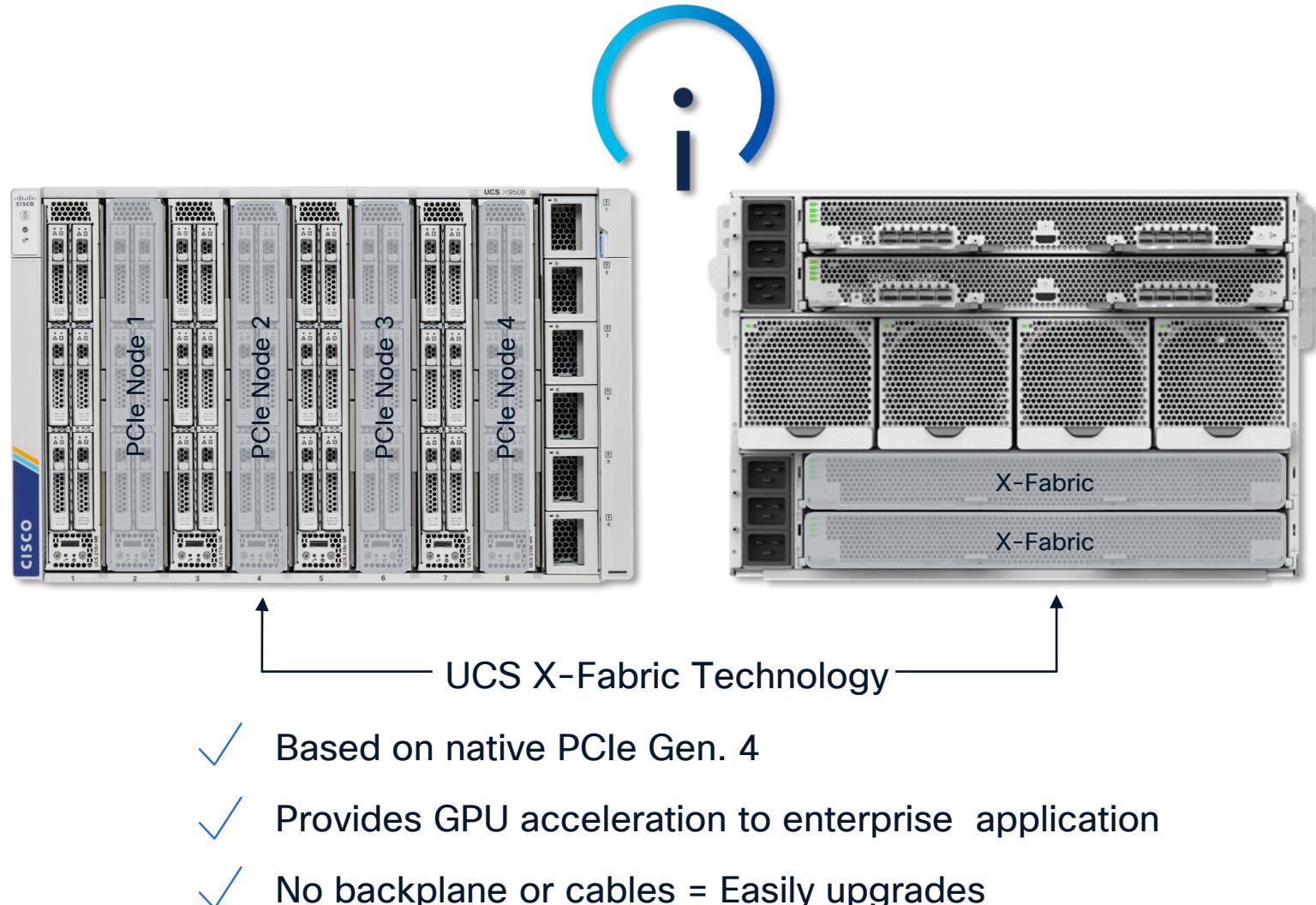
- 9x E3.S
- Support of NVMe only
- Pass-Through PCIe Gen 5 only – Up to ~16 GB/s per drive
- Up to 15.3TB drive capacity
- Use cases: vSAN, NTNX, OpenShift, SDS, Cohesity, etc.



# UCS X-Fabric Technology, PCIe Nodes with GPU

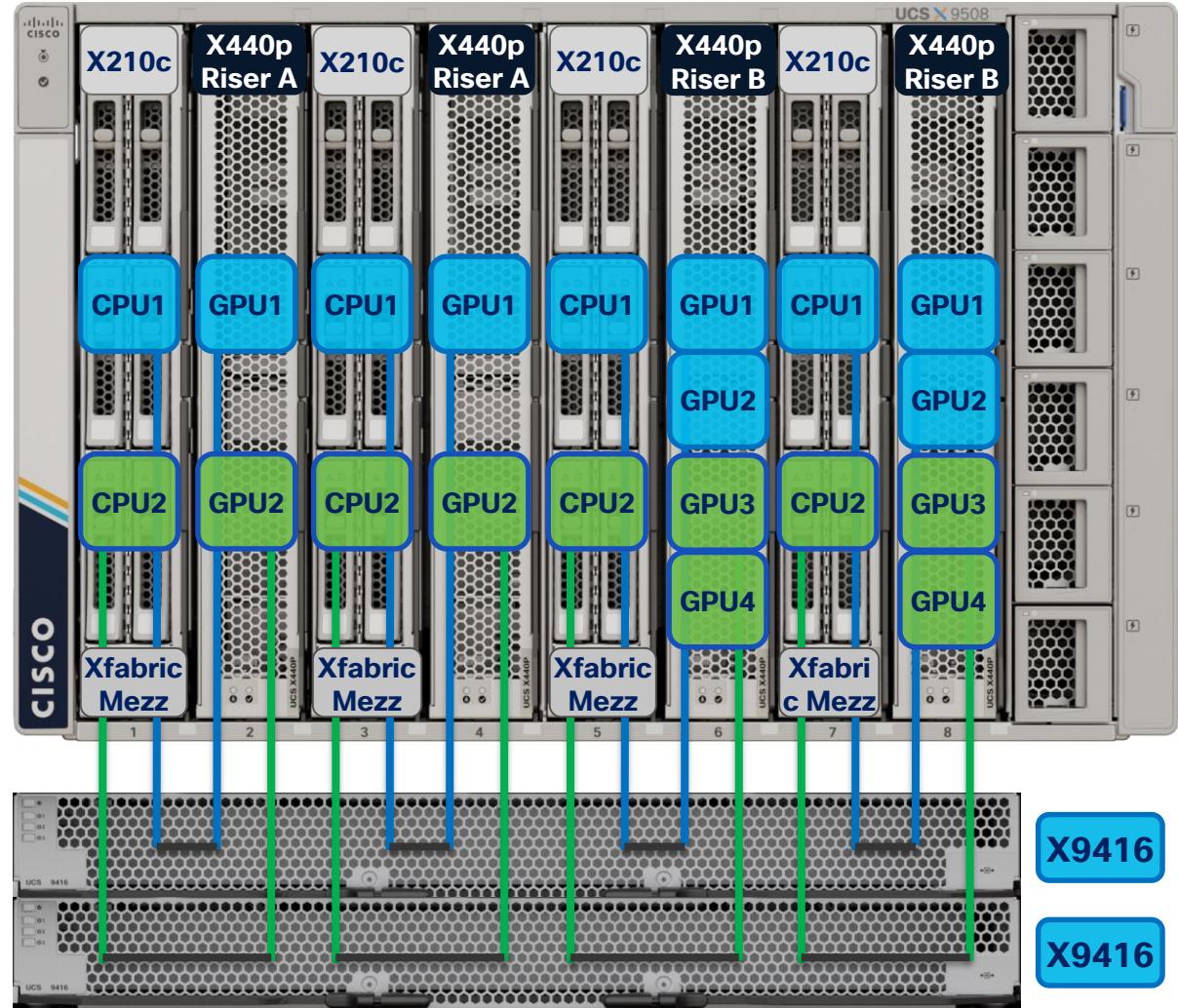
When paired with M8, PCIe node supports up to:

- 2x NVIDIA A16
- 4x NVIDIA L4
- 2x NVIDIA L40S
- 2x NVIDIA H100-NVL
- 2x AMD MI210



# UCS X-Fabric - X210c and X440p PCIe Node

- An X-Fabric Mezz card (VIC or Pass-through) on the compute node connects it to the XFM pair
- One Gen4 x16 link per CPU is routed to the XFM pair (CPU1 to XFM1 and CPU2 to XFM2)
- The X440p connects the XFM1 link to Riser 1 and XFM2 to Riser 2
- GPU firmware is updated with the attached server firmware upgrade



# AI Platform Considerations

# Enterprise GPU server strategy

Address AI workloads with visibility, consistency, and control

← →

Validated solutions for AI with compute, network, storage, and software

Build the model | Training

Optimize the model | Fine-tuning and RAG

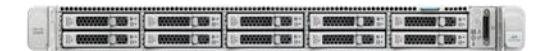
Use the model | Inferencing



Cisco UCS® GPU-dense servers



Cisco UCS blade (with GPU extensions) and rack servers

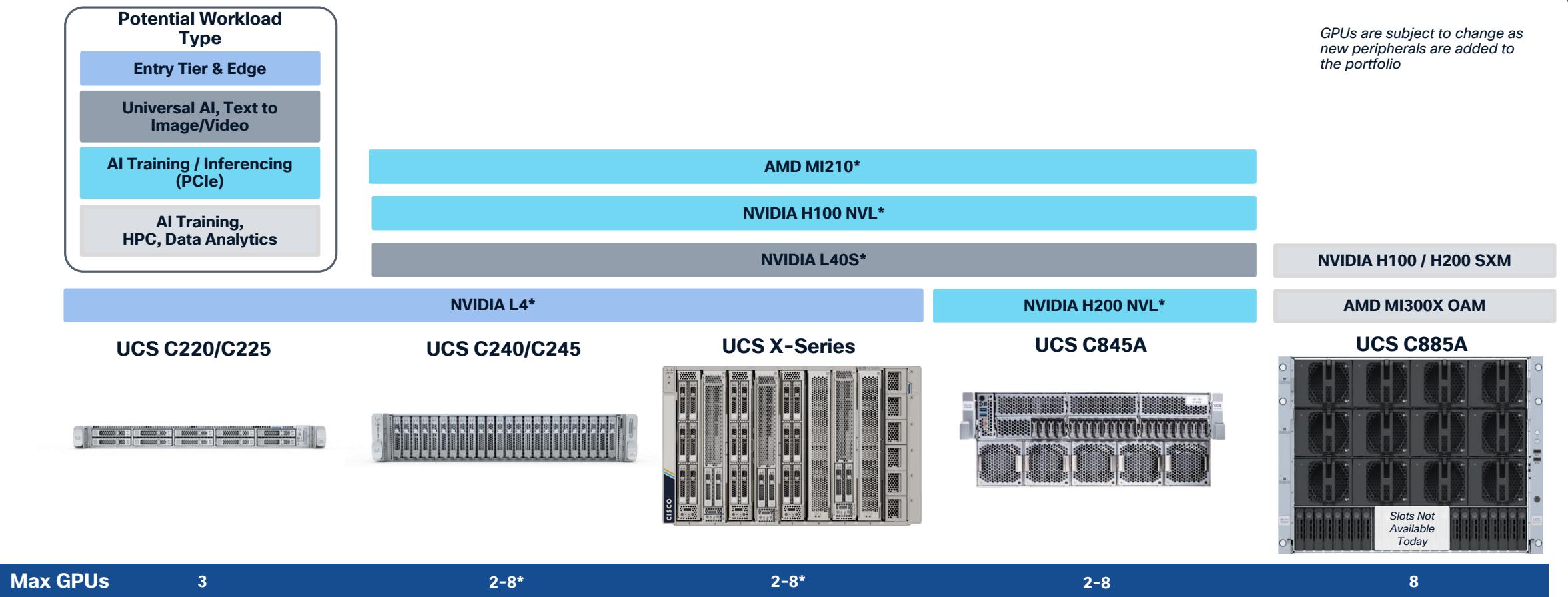


Enterprise AI edge

Dense compute for demanding AI

Full-stack AI with compute and networking

# AI Platform Considerations: UCS M8 GPU Options



\* NOTE: GPU Form Factor and GPU model support may vary between AMD and Intel Platforms (i.e. c220/c225, c240/c245, and x210c/x215c). Check the spec sheet for each platform to determine maximum GPU support based on GPU selection

# Game

# Complete your session evaluations



**Complete** a minimum of 4 session surveys and the Overall Event Survey to be entered in a drawing to win 1 of 5 full conference passes to Cisco Live 2026.



**Earn** 100 points per survey completed and compete on the Cisco Live Challenge leaderboard.

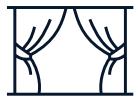


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Thank you

**CISCO** Live !

