Overview

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The Cisco UCS C4200 Server Chassis is a 2RU, rack-mount chassis that provides shared storage, cooling, and power for up to four removeable compute nodes. Each of the four removable compute nodes can control 6 front-loading drives in the chassis, for a total of up to 24 small form-factor (SFF), 2.5-inch, SAS/SATA HDDs or SSDs.

With Cisco IMC 4.0(2) and later, each of the four compute nodes can control two front-loading NVMe SSDs, for a total of up to eight NVME SSDs in the chassis.

For information about compute nodes, see the service note for your compute node:

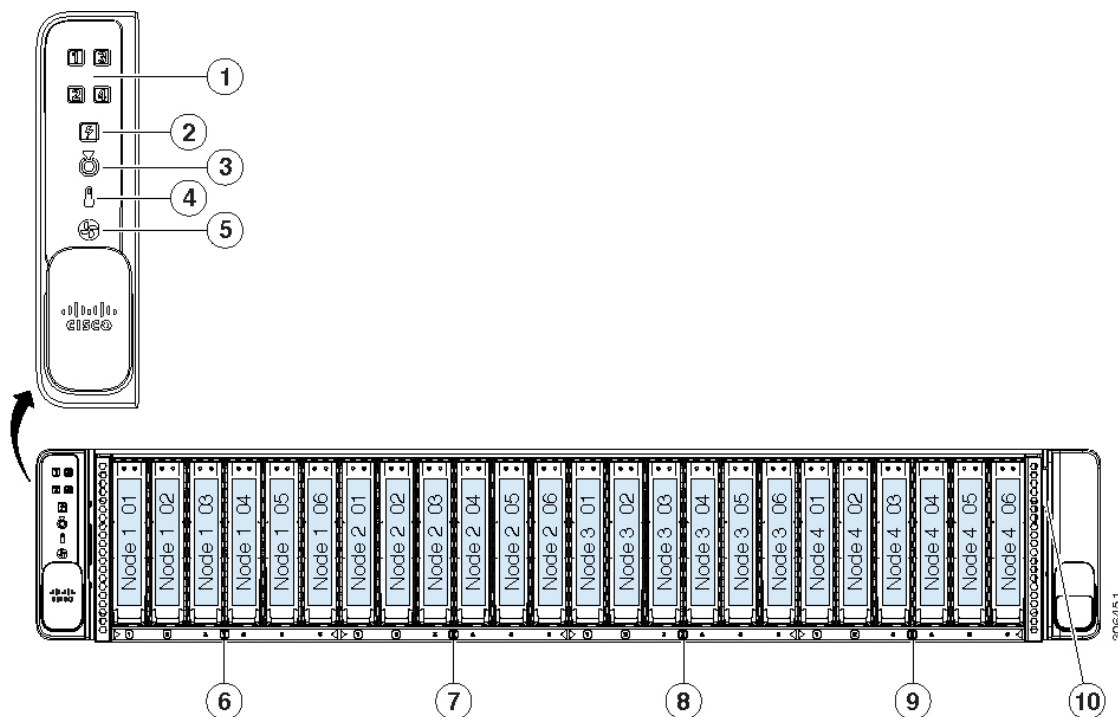- Cisco UCS C125 Compute Node Service Note

External Features

This topic shows the external features of the server chassis.

Cisco UCS C4200 Chassis Front Panel Features (SFF, 24-Drive)

The following figure shows the front panel features.

For definitions of LED states, see Front-Panel LEDs.

Figure 1: Front Panel

1	Node health LEDs	6	Node 1-controlled drive bays 1—6
			All six bays support SAS/SATA drives; bays 1 and 2 also support NVME drives.
2	Power supply status LED	7	Node 2-controlled drive bays 1—6
			All six bays support SAS/SATA drives; bays 1 and 2 also support NVME drives.
3	Locator beacon LED Activating the locator beacon of any installed compute node activates this chassis locator beacon.	8	Node 3-controlled drive bays 1—6
			All six bays support SAS/SATA drives; bays 1 and 2 also support NVME drives.
4	Temperature status LED	9	Node 4-controlled drive bays 1—6
			All six bays support SAS/SATA drives; bays 1 and 2 also support NVME drives.
5	Fan status LED	10	Pull-out asset tag

Cisco UCS C4200 Chassis Rear Panel Features

The exact features depend on how many compute nodes are installed in the node bays and which cards are installed in the nodes. The sample figure below shows a chassis with four Cisco UCS C125 M5 compute nodes installed.
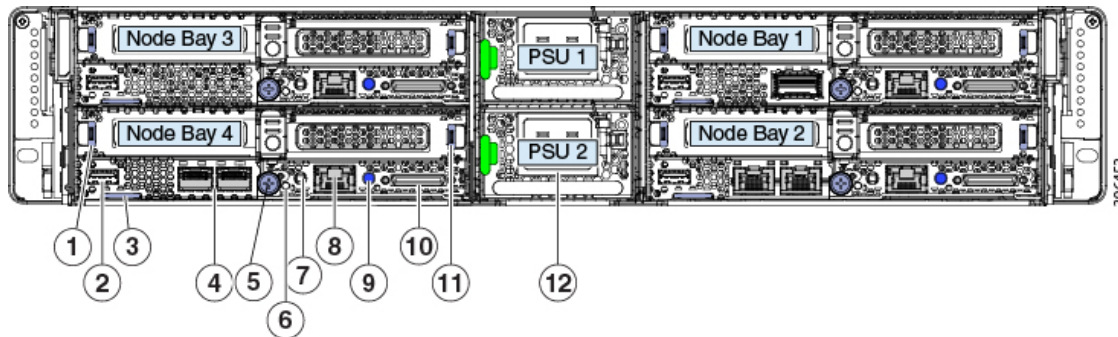
Although the power supplies are the only components native to the chassis in the view below, features of a removeable compute node are defined to explain network connections for the system. For information about node components, see the Cisco UCS C125 Compute Node Service Note.

Note All node bays must have either a compute node or a node blank installed to ensure adequate air flow.

For definitions of LED states, see Rear-Panel LEDs.

Figure 2: Cisco UCS C4200 Chassis Rear Panel (Shown With Four C125 M5 Compute Nodes Installed)

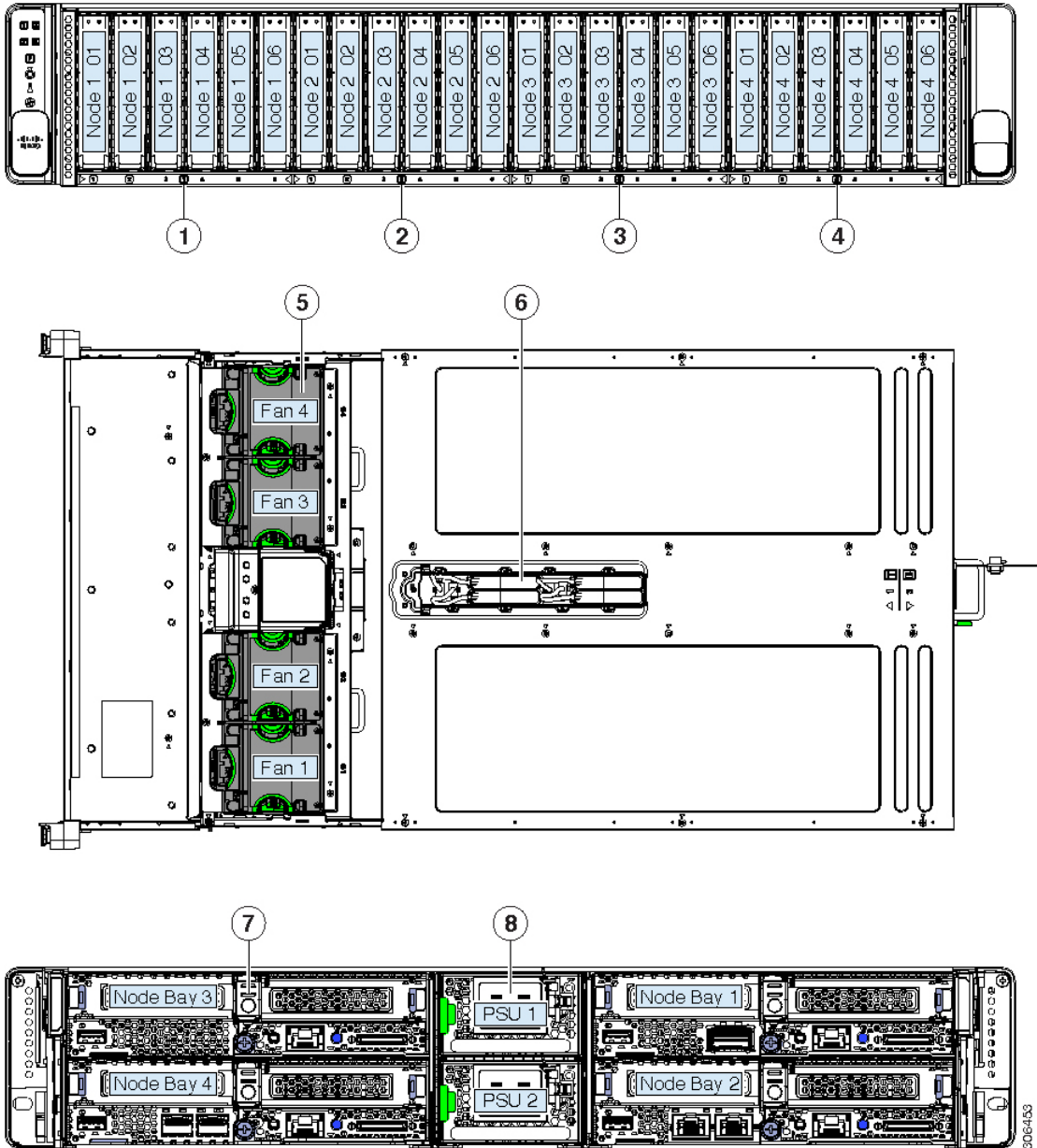| 1	PCIe riser 1 handle (one each node) • Node PCIe riser 1/slot 1 (half-height, half length, x8 slot)	7	Node Power button/Power status LED (one each node)
2	Node USB 3.0 port (one each node)	8	Node 1 Gb Ethernet dedicated management port (one each node)
3	Node pull-out asset tag (one each node)	9	Node locator button/LED (one each node)
4	Node OCP adapter card Ethernet LAN ports (one each node, if this optional adapter card is installed) Depending on which adapter card is installed, these ports can be either: • Dual 10 Gb Base-T (RJ-45 connectors) • Dual 10/25 Gb (SFP 28 connectors) • Single 100 Gb (QSFP 28 connector)	10	Node KVM local debug console port (one each node) Used with KVM cable that provides one DB-15 VGA, one DB-9 serial, and two USB 2.0 connectors.
5	Node securing thumbscrew and release lever (one each node)	11	PCIe riser 2 handle (one each node) • Node PCIe riser 2/slot 2 (half-height, half length, x16 slot)
6	Node Health Status LED	12	Chassis power supplies (two, redundant 1+1)

Serviceable Components in the Chassis

The figure in this topic shows the locations of the serviceable components in the chassis.

For components inside a compute node, see the service note for your compute node:

- Cisco UCS C125 Compute Node Service Note

Figure 3: Cisco UCS C4200 Chassis Serviceable Component Locations

1	Front-loading drives Node 1-controlled drive bays 1—6 All six bays support SAS/SATA drives; bays 1 and 2 also support NVME drives.	5	Cooling fan modules (four) Each fan module contains two fans for redundancy.
2	Front-loading drives Node 2-controlled drive bays 1—6 All six bays support SAS/SATA drives; bays 1 and 2 also support NVME drives.	6	Supercap units (RAID backup) Each supercap unit backs up one RAID controller in the corresponding node (numbered 1—4).
3	Front-loading drives Node 3-controlled drive bays 1—6 All six bays support SAS/SATA drives; bays 1 and 2 also support NVME drives.	7	Compute node (up to four)
4	Front-loading drives Node 4-controlled drive bays 1—6 All six bays support SAS/SATA drives; bays 1 and 2 also support NVME drives.	8	Power supplies (two, redundant 1+1)

Summary of Server Features

The following table lists a summary of server features.

Feature	Description
Chassis	Two rack-unit (2RU) chassis
Central Processor	The chassis supports one to four removable compute nodes, each with two CPUs. With four nodes, the system can total up to eight CPUs from the AMD EPYC 7000 Series.
Memory	The chassis supports one to four removable compute nodes, each with two CPUs. Each CPU supports up to eight DIMMs. With four nodes, the system can total up to 64 DIMMs.
Multi-bit error protection	Multi-bit error protection is supported
Baseboard management	Each compute node has a BMC, running Cisco Integrated Management Controller (Cisco IMC) firmware. Depending on your settings, Cisco IMC can be accessed on each node through its 1-Gb dedicated management port or an adapter card.

Feature	Description

Network and management I/O	The network and management I/O ports for this chassis are on the removeable compute nodes. Each compute node has these connectors accessible from the rear of the chassis:
	
	• One 10/100/1000 Ethernet dedicated management port (RJ-45 connector)
	
	• One keyboard/video/mouse (KVM) console connector that is used with a KVM cable, which provides two USB 2.0, one DB-15 VGA, and one DB-9 serial connector.
	
	• One USB 3.0 port
	
	• Optional OCP adapter-card Ethernet LAN ports. Depending on which adapter is installed, these ports can be:
	
	    • Dual 10 Gb BASE-T (RJ-45 connectors)
	
	    • Dual 10/25 Gb (SFP 28 connectors)
	
	    • Single 100 Gb (QSFP 28 connector)

Power	Two power supplies, redundant as 1+1: • AC power supplies 2400 W AC each Do not mix power supply types or wattages in the server.
ACPI	The advanced configuration and power interface (ACPI) 4.0 standard is supported.
Cooling	Four hot-swappable fan modules for front-to-rear cooling. Each fan module contains two fans for redundancy.
PCIe I/O	Each removeable compute node has two PCIe risers for horizontal installation of PCIe cards such as a RAID controller or Cisco Virtual Interface Card (VIC).
Storage, front-panel	The chassis can hold up to 24 front-loading, 2.5-inch drives. Each of the four removeable compute nodes can control six of the front drives. All six bays controlled by a compute node support SAS/SATA drives. Bays 1 and 2 of the six controlled by a compute node also support NVMe drives, for a total of up to eight NVMe drives supported in the chassis.

Feature	Description
Storage, internal	Each of the four compute nodes have these internal storage options: • Mini-storage module socket, optionally with either: 　• SD card carrier. Supports up to two SD cards. 　• M.2 SSD carrier. Supports two SATA M.2 SSDs. • One micro-SD card socket.
Storage management	The system has these options via the installed compute nodes (each node can control six of the front-panel drives): • SAS RAID control via one RAID controller card in each compute node. • SATA pass-through JBOD control via the on-board controller in each compute node.
RAID supercap backup	Up to four supercap units are supported, one for the RAID controller card in each node. The supercap units have numbered bays and numbered cable connectors in the top of the chassis, corresponding to each numbered compute node.
Integrated video	Integrated VGA video in each compute node. The DB-15 VGA connector is on the KVM cable that can be used with the KVM connector on each node.