



CHAPTER 1

Overview

This chapter provides an overview of the Cisco UCS C24 server features.

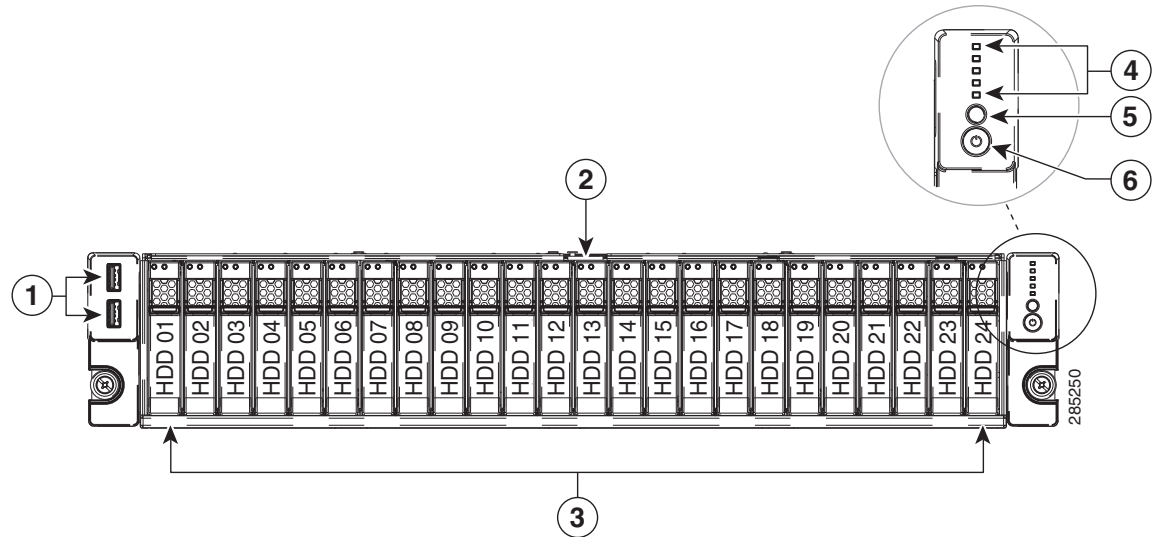
The figures in this chapter show an overview of external server features. Internal server features are illustrated in [Figure 3-4 on page 3-9](#).

The server is orderable in three different versions, each with one of three different front panel/backplane configurations:

- Cisco UCS C24 (small form-factor (SFF) drives, with 24-drive backplane and expander). Holds up to twenty-four 2.5-inch hard drives or solid state drives.
- Cisco UCS C24 (small form-factor (SFF) drives, with 16-drive backplane, no expander). Holds up to sixteen 2.5-inch hard drives or solid state drives.
- Cisco UCS C24 (large form-factor (LFF) drives, with 12-drive backplane and expander). Holds up to twelve 3.5-inch hard drives.

[Figure 1-1](#) shows the front panel features of the Small Form-Factor drives version of the server. This version of the server can be ordered with either a 16-drive direct-connect backplane or a 24-drive backplane with an expander. When the 16-drive backplane is installed, only the first 16 drive bays are used.

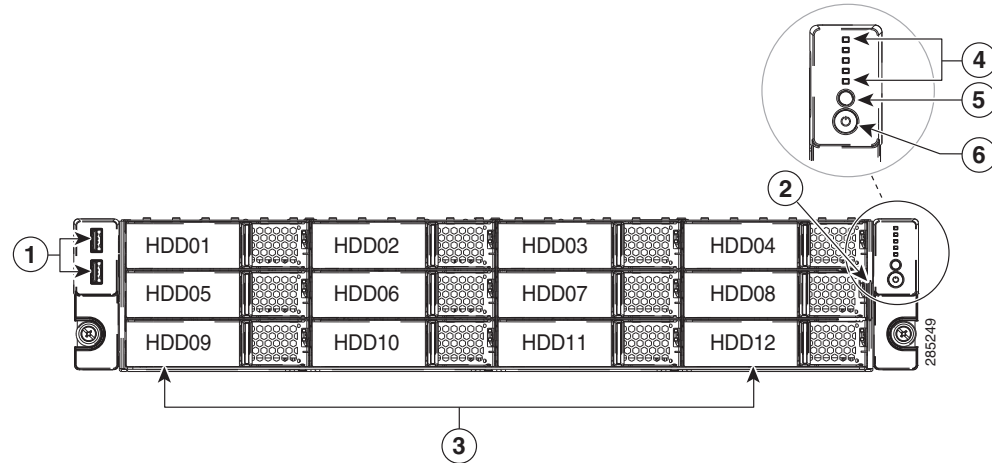
Figure 1-1 Cisco UCS C24 Server (Small Form Factor Drives) Front Panel Features



1	USB 2.0 ports (two)	4	Status LEDs (top to bottom): Network activity LED Power supply status LED Temperature status LED Fan Status LED System status LED
2	Pull-out asset tag	5	Identification button/LED
3	Drives, hot-swappable <ul style="list-style-type: none"> • 24-drive backplane version: Up to twenty-four 2.5-inch drives • 16-drive backplane version: Up to sixteen 2.5-inch drives 	6	Power button/Power status LED

Figure 1-2 shows the front panel features of the Large Form Factor drives version of the server. This version of the server has a 12-drive backplane with an expander. For definitions of all LED states, see [Status LEDs and Buttons, page 3-2](#).

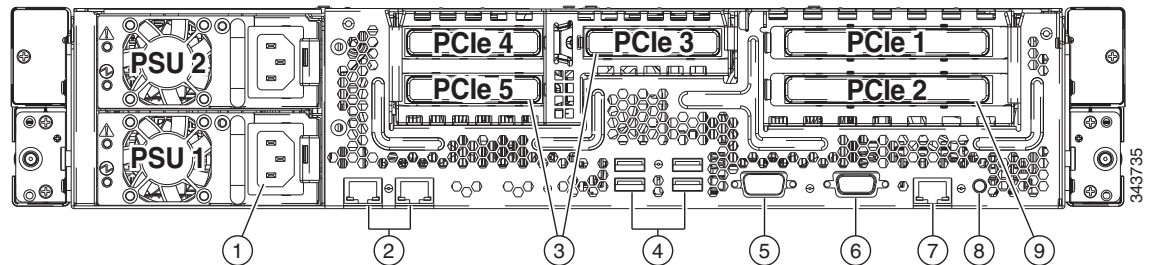
Figure 1-2 Cisco UCS C24 Server (Large Form Factor Drives) Front Panel Features



1	USB 2.0 ports (two)	4	Status LEDs (top to bottom): Network activity LED Power supply status LED Temperature status LED Fan Status LED System status LED
2	Asset tag (serial number)	5	Identification button/LED
3	Drives, hot-swappable (up to twelve 3.5-inch drives)	6	Power button/Power status LED

Figure 1-3 shows the rear panel features of the server (identical for all versions of the server). For definitions of all LED states, see [Status LEDs and Buttons](#), page 3-2.

Figure 1-3 Cisco UCS C24 Server Rear Panel Features



1	Power supplies (two)	6	VGA video port (DB-15 connector)
2	Dual 1 Gb Ethernet ports (LAN1, LAN2)	7	10/100/1000 Ethernet dedicated management port
3	PCIe slots 3, 4, and 5 on riser 2 See PCIe Slots , page 3-36 for slot specifications.	8	Rear Identification button/LED
4	USB 2.0 ports (four)	9	PCIe slots 1 and 2 on riser 1 See PCIe Slots , page 3-36 for slot specifications.
5	Serial port (DB-9 connector)		—

Table 1-1 lists a summary of server features.

Table 1-1 Cisco UCS C24 Server Features

Chassis	Two rack-unit (2RU) chassis.
Processors	Two Intel Xeon E5-2400 Series processors.
Memory	The server provides 12 DIMM ¹ sockets on the motherboard.
Multi-bit error protection	This server supports multi-bit error protection.
Baseboard management	Pilot III BMC, running Cisco Integrated Management Controller (CIMC) firmware. Depending on your CIMC settings, the CIMC can be accessed through the 10/100/1000 Ethernet dedicated management port, the 1-Gb Ethernet LOM ports, or a Cisco P81E virtual interface card.
Network and management I/O	The server provides these connectors: <ul style="list-style-type: none"> One 1-Gb Ethernet dedicated management port Two 1-Gb Base-T Ethernet LAN ports One RS-232 serial port (DB-9 connector) One 15-pin VGA² connector Six USB³ 2.0 connectors
WoL	The 1-Gb Base-T Ethernet LAN ports support the wake-on-LAN (WoL) standard.

Table 1-1 Cisco UCS C24 Server Features (continued)

Power	Two power supplies: Both either 450 W each or 650 W each. Do not mix power supply types. Redundant as 1+1. See Power Specifications, page A-2 .
ACPI	This server supports the advanced configuration and power interface (ACPI) 4.0 standard.
Cooling	Four hot-swappable fan modules for front-to-rear cooling.
PCIe I/O	Five horizontal PCIe ⁴ expansion slots on two risers. See PCIe Slots, page 3-36 for specifications of the slots.
InfiniBand	The bus slots in this server support the InfiniBand architecture.
Storage	Drives are installed into front-panel drive bays that provide hot-pluggable access. There are two versions of the server front panel and backplane: <ul style="list-style-type: none"> • Cisco UCS C24 (small form-factor (SFF) drives, with 24-drive backplane and expander). Holds up to twenty-four 2.5-inch hard drives or solid state drives. • Cisco UCS C24 (small form-factor (SFF) drives, with 16-drive backplane, no expander). Holds up to sixteen 2.5-inch hard drives or solid state drives. • Cisco UCS C24 (large form-factor (LFF) drives, with 12-drive backplane and expander). Holds up to twelve 3.5-inch hard drives.
Internal USB support	The server has one internal USB 2.0 socket on the motherboard that you can use with a USB thumb drive for additional storage. The server can be ordered with an optional blank 8-GB Cisco USB Flash Drive pre-installed in the internal USB port.
Cisco USB Flash Drive with pre-loaded utilities	The server can be ordered with an optional 16-GB Cisco USB flash drive. This drive is pre-loaded with Cisco C-series Server utilities. This drive contains four virtual drives. The four virtual drives contain, respectively: <ul style="list-style-type: none"> • Cisco Server Configuration Utility • Cisco Host Upgrade Utility • Cisco C-Series server drivers set • A blank virtual drive on which you can install an OS or a hypervisor See Overview of the Pre-Loaded 16-GB Cisco USB Flash Drive, page 3-44 for more information about enabling and booting the virtual drives.
Disk Management (RAID)	For a list of RAID ⁵ controller options and cables, see RAID Controller Considerations, page C-1 .
RAID Backup	There are two mounting points inside the chassis that can be used for the SuperCap power module that is used with LSI MegaRAID-CV card.
Video	Matrox G200e video controller. Resolution up to 1920 x1200, 16bpp at 60 Hz. Up to 256 MB of video memory.

1. DIMM = dual inline memory module
2. VGA = video graphics array
3. USB = universal serial bus
4. PCIe = peripheral component interconnect express
5. RAID = redundant array of independent disks

