Overview

This chapter contains the following sections:

Cisco UCS B200 M5 Blade Server

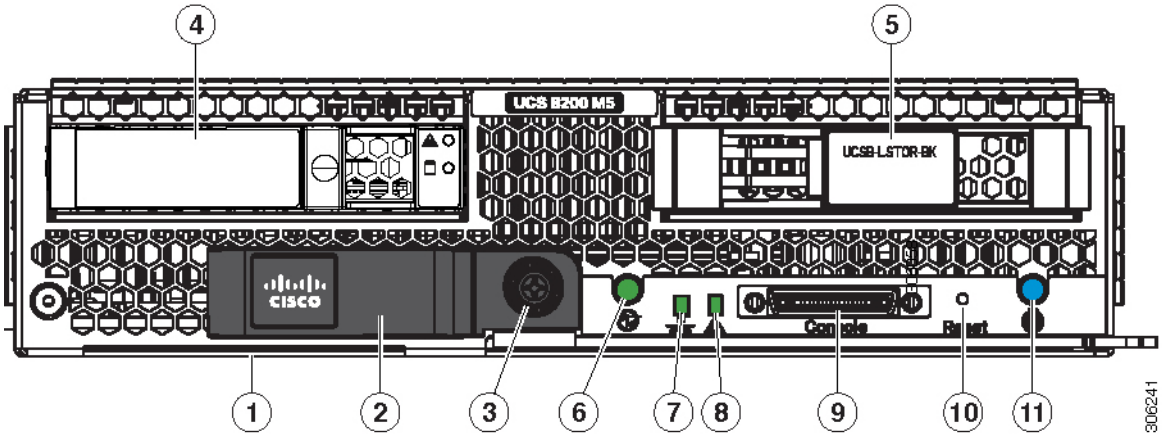
The Cisco UCS B200 M5 is a density-optimized, half-width blade server that supports two CPU sockets for the Intel Xeon Processor Scalable Family of CPUs. The server supports the following features:

- 24 DDR4 DIMMs
- 1 front mezzanine module (storage or graphics processing unit (GPU))
- 1 modular LAN on motherboard (mLOM) module
- 1 rear mezzanine module (I/O or GPU)
- A mini-storage module socket with these options:
  - SD card module with two SD card slots
  - M.2 module with slots for two SATA M.2 drives
  - Cisco Boot-Optimized M.2 RAID Controller (module with two slots for SATA M.2 drives, plus an integrated SATA RAID controller that can control the two M.2 drives in a RAID 1 array)

You can install up to eight UCS B200 M5 blade servers in a UCS 5108 chassis, mixing with other models of Cisco UCS blade servers in the chassis if desired.

Note Subject to chassis power configuration.

Figure 1: Cisco UCS B200 M5 Blade Server Front Panel



1	Asset pull tag	**2**	Blade ejector handle
3	Ejector thumb screw	**4**	Drive bay 1
5	Drive bay 2	**6**	Power button and LED
7	Network link status LED	**8**	Blade health LED
9	Local console connection	**10**	Reset button
11	Locate button and LED	-	

Note The asset pull tag is a blank plastic tag that pulls out from the front panel. You can add your own asset tracking label to the asset pull tag and not interfere with the intended air flow of the server.

External Features Overview

The features of the blade server that are externally accessible are described in this section.

LEDs

Server LEDs indicate whether the blade server is in active or standby mode, the status of the network link, the overall health of the blade server, and whether the server is set to give a blinking blue locator light from the locator button.

The removable drives also have LEDs indicating hard disk access activity and disk health.

Table 1: Blade Server LEDs

LED	Color	Description
Power	Off	Power off.
	Green	Main power state. Power is supplied to all server components and the server is operating normally.
	Amber	Standby power state. Power is supplied only to the service processor of the server so that the server can still be managed. **Note** The front-panel power button is disabled by default. It can be re-enabled through Cisco UCS Manager. After it's enabled, if you press and release the front-panel power button, the server performs an orderly shutdown of the 12 V main power and goes to standby power state. You cannot shut down standby power from the front-panel power button. See the Cisco UCS Manager Configuration Guides for information about completely powering off the server from the software interface.
Link	Off	None of the network links are up.
	Green	At least one network link is up.
Health	Off	Power off.
	Green	Normal operation.
	Amber	Minor error.
	Blinking Amber	Critical error.

LED	Color	Description
Blue locator button and LED	Off	Blinking is not enabled.
	Blinking blue 1 Hz	Blinking to locate a selected blade—If the LED is not blinking, the blade is not selected. You can control the blinking in UCS Manager or by using the blue locator button/LED.
Activity (Disk Drive)	Off	Inactive.
	Green	Outstanding I/O to disk drive.
Health (Disk Drive)	Off	Can mean either no fault detected or the drive is not installed.
	Flashing Amber 4 hz	Rebuild drive active. If the Activity LED is also flashing amber, a drive rebuild is in progress.
	Amber	Fault detected.

Buttons

The Reset button is recessed in the front panel of the server. You can press the button with the tip of a paper clip or a similar item. Hold the button down for five seconds, and then release it to restart the server if other methods of restarting do not work.

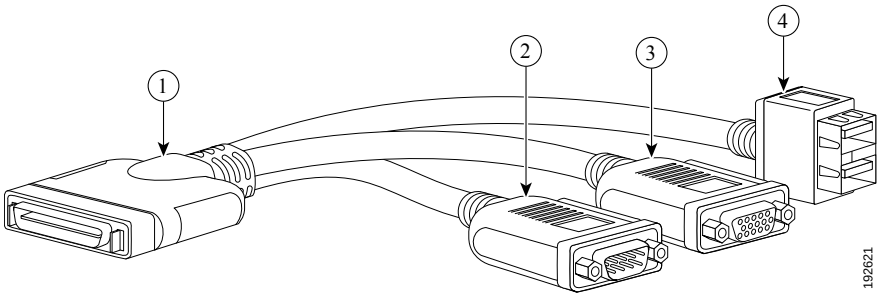
The locator function for an individual server may get turned on or off by pressing the locator button/LED.

The front-panel power button is disabled by default. It can re-enabled through Cisco UCS Manager. After it's enabled, The power button allows you to manually take a server temporarily out of service but leave it in a state where it can be restarted quickly. If the desired power state for a service profile associated with a blade server is set to "off," using the power button or Cisco UCS Manager to reset the server will cause the desired power state of the server to become out of sync with the actual power state and the server may unexpectedly shut down at a later time. To safely reboot a server from a power-down state, use the Boot Server action in Cisco UCS Manager.

Local Console Connection

The local console connector allows a direct connection to a blade server to allow operating system installation and other management tasks to be done directly rather than remotely. The port uses the KVM dongle cable that provides a connection into a Cisco UCS blade server; it has a DB9 serial connector, a VGA connector for a monitor, and dual USB ports for a keyboard and mouse. With this cable, you can create a direct connection to the operating system and the BIOS running on a blade server. A KVM cable ships standard with each blade chassis accessory kit.

Figure 2: KVM Cable for Blade Servers



1	Connector to blade server local console connection	**2**	DB9 serial connector
3	VGA connector for a monitor	**4**	2-port USB connector for a mouse and keyboard

Drive Bays

The Cisco UCS B200 M5 blade server has a front mezzanine slot that can support either a storage module or a graphics processing unit (GPU). The storage module has two drive bays that can be configured with any combination of 2.5-inch SAS, SATA, or NVMe drives. A blanking panel (UCSB-LSTOR-BK) must cover all empty drive bays.

Graphics Processing Unit

An NVIDIA GPU can be installed in the front mezzanine slot of the server. When the GPU is installed, the drive bay is not present. Two blanking panels (UCSB-LSTOR-BK) are required when the GPU is installed in the front mezzanine slot. For additional information about the GPU, see NVIDIA P6 GPU Card.