

# **Overview**

This chapter contains the following sections:

- Cisco UCS B260 M4 Blade Server, on page 1
- The Cisco UCS B460 M4 Blade Server, on page 2
- External Features Overview, on page 4

# **Cisco UCS B260 M4 Blade Server**

The UCS B260 M4 Blade Server is a full-width blade that is formed from the following parts:

- One UCS Scalable Blade Module
- One UCS Scalability Terminator that attaches to the front of the UCS Scalable Blade Module

The following table lists the features of the Cisco UCS B260 M4 Blade Server.

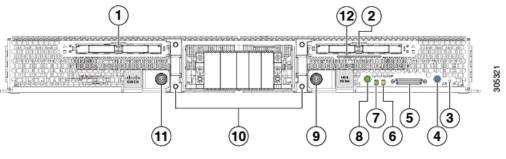
Feature	UCS B260 M4 with Intel Xeon E7 v4 CPU
Base server PID	UCSB-EX-M4-3
Form factor	Full width
Number of CPUs	2
CPU Model	Intel Xeon E7 v4
Memory type	DDR4 DIMMs
Memory slots	48
LSI3008 SAS RAID Controller	1 that supports 2 SAS or SATA hard drives
Drive Quantity	2 SSD
Mezzanine slots	2+ mLOM
Secure digital (SD) cards	2

Feature	UCS B260 M4 with Intel Xeon E7 v4 CPU	
Internal USB device	1	
Trusted platform module (TPM)	1	

You can install up to four Cisco UCS B260 M4 Blade Servers in the Cisco UCS 5108 server chassis.

The following figure shows the front of the Cisco UCS B260 M4 Blade Server.

#### Figure 1: Cisco UCS B260 M4 Blade Server Front View



1	SSD 1	7	Network link status	
2	SSD 2	8	Power button and LED	
3	Reset button	9	Right ejector handle	
4	Beaconing button and LED	10	Terminator/connector interface	
5	Local console connection	11	Left ejector handle	
6	Blade health LED	12	Asset tag	

The plastic asset tag pulls out of the front panel and does not interfere with the air flow of the module. A label that identifies the version of the UCS Scalable M4 Blade Module appears on the asset tag.

# The Cisco UCS B460 M4 Blade Server

The UCS B460 M4 blade server is a four-socket blade server that consists of two UCS Scalable M4 Blade Modules that are attached together with the UCS Scalability Connector.

An upgrade kit is available to upgrade the Cisco UCS B260 blade server to the UCS B460 M4 blade server. The upgrade kits includes the following parts:

- One UCS Scalable M4 Blade Module
- One UCS Scalability Connector that attaches to the front of the blade modules and connects them to form the four-socket blade server.

The two UCS Scalable M4 Blade Modules in the UCS B460 M4 blade server are in a master-slave relationship. The lower module is the master, and the upper module is the slave. The KVM cable, USB flash drive, and SD cards must be configured in the master blade module of a B460 M4 blade server; if they are configured in the slave module, they will not operate.

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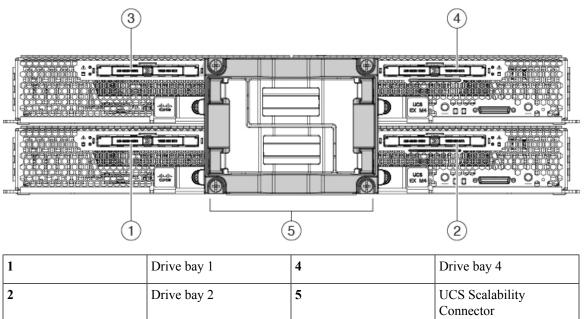
See Upgrading to a Cisco UCS B460 M4 Blade Server for the instructions to upgrade to a UCS B460 M4 blade server.

The following table lists the features of the Cisco UCS B460 M4 Blade Server.

Table 2: Features of the Cisco UCS B460 M4 Blade Server

Feature	UCS B460 M4 with Intel Xeon E7 v4 CPU
Base server PID	UCSB-EX-M4-3
Form factor	Full width, double height
Number of CPUs	4
CPU Model	Intel Xeon E7 v4
Memory type	DDR4 DIMMs
Memory slots	96
LSI3008 SASRAID Controller	2 that supports 4 SAS or SATA hard drives
Drive Quantity	4 SSD
Mezzanine slots	2 + 2x mLOM
Secure digital (SD) cards	2
Internal USB device	1
Trusted platform module (TPM)	1

Figure 2: Cisco UCS B460 M4 Blade Server



3	Drive bay 3		
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## **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 3: Blade Server LEDs

LED	Color	Description	
Power	Off	Power off.	
Ø	Green	Main power state. Power is supplied to all server components and the server is operating normally.	
	Amber Standby p   supplied or processor server can		
		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.	
궁	Green	At least one network link is up.	
Health	Off	Power off.	
A	Green	Normal operation.	
	Amber	Minor error.	
	Blinking Amber	Critical error.	

LED	Color	Description
Blue locator button and LED	Off	Blinking is not enabled.
ð	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	Off	Inactive.
(Disk Drive)	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.

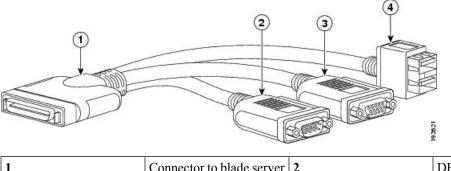
The locator function for an individual server may get turned on or off by pressing the locator button/LED.

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 3: KVM Cable for Blade Servers



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

## **Secure Digital Cards**

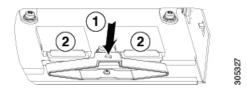
Secure Digital (SD) card slots are provided and one or two SD cards can be populated. If two SD cards are populated, they can be used in a mirrored mode.

Note Do not mix different capacity cards in the same server.

The SD cards can be used to store operating system boot images or other information. Once the server is removed from the chassis, you can access the SD cards from the back of the server. When facing the back of the server, the SD cards are in the lower right corner. The following figure shows the SD cards and the process to remove them:

- 1. Press down on the retainer top to expose the SD cards.
- 2. While holding down the retainer top, push on the edge of the SD card to remove it.

#### Figure 4: SD Card Slots



### Drives

Each UCS Scalable M4 Blade Module has two front-accessible, hot-swappable 7-mm SSDs. Unused drive bays should always be covered with a blank faceplate (N20-BBLKD-7MM) if the bay is to remain empty.

The drives supported in the blade server come with the drive sled attached. Spare drive sleds are not available. A list of currently supported drives is in the specification sheets at this URL:http://www.cisco.com/c/en/us/products/servers-unified-computing/ucs-b-series-blade-servers/datasheet-listing.html

Overview

Drives

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