



Cisco UCS S3260 Storage Server

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OVERVIEW

The Cisco UCS S3260 Storage Server is a modular, storage server with dual M4 or M5 server nodes¹, optimized for large datasets used in environments such as big data, cloud, object storage, video surveillance, and content delivery.

The Cisco UCS S3260 chassis is a modular architecture consisting of the following modules:

1. **Base Chassis:** contains eight redundant, hot-pluggable fans, and a rail kit.
2. **Server Node:** one or two S3260 M5 or S3260 M4 server nodes. Each S3260 M5 server node has two CPUs, up to 14 DIMM slots, a dual chip pass through controller or a dual chip RAID controller with dual 4GB cache and up to two 7mm NVMe SSD. Each S3260 M4 server node has two CPUs, up to 16 DIMM slots, a dual chip pass through controller or a RAID controller with 4GB cache and one 15mm NVMe SSD.
3. **System I/O Controller (SIOC):** one System I/O Controller per node, each of which includes an integrated 1300-series virtual interface capability.
4. **Hard Drives:** Up to 56 top-loading Large Form Factor (LFF) HDDs of 4TB, 6TB, 8TB, 10TB and 12TB capacities.
5. **Solid State Drives:** Optionally up to 28 SSDs of 400GB, 800 GB, 1.6TB, and 3.2 TB capacities.
6. **Solid-State Boot Drives:** up to two SSDs per server node.
7. **Optional Drive Expansion Node:** Up to 4 Large Form Factor (LFF) 3.5-in. drives in a choice of capacities.
8. **I/O Expander:** provides two PCIe expansion slots.

The enterprise-class Cisco UCS S3260 storage server extends the capabilities of Cisco's Unified Computing System portfolio in a 4U form factor that delivers the best combination of high-availability performance, flexibility, and efficiency gains. See [Figure 1 on page 4](#).

Notes

1. A S3260 M5 Server Node has Intel® Xeon® Processor Scalable Family with 2666MHz DDR-4 DIMMs. A S3260 M4 Server Node has Intel E5-2600 v4 CPUs and DDR-4 DIMMs.

Figure 1 Cisco UCS S3260 Storage Server

Front View



Rear View

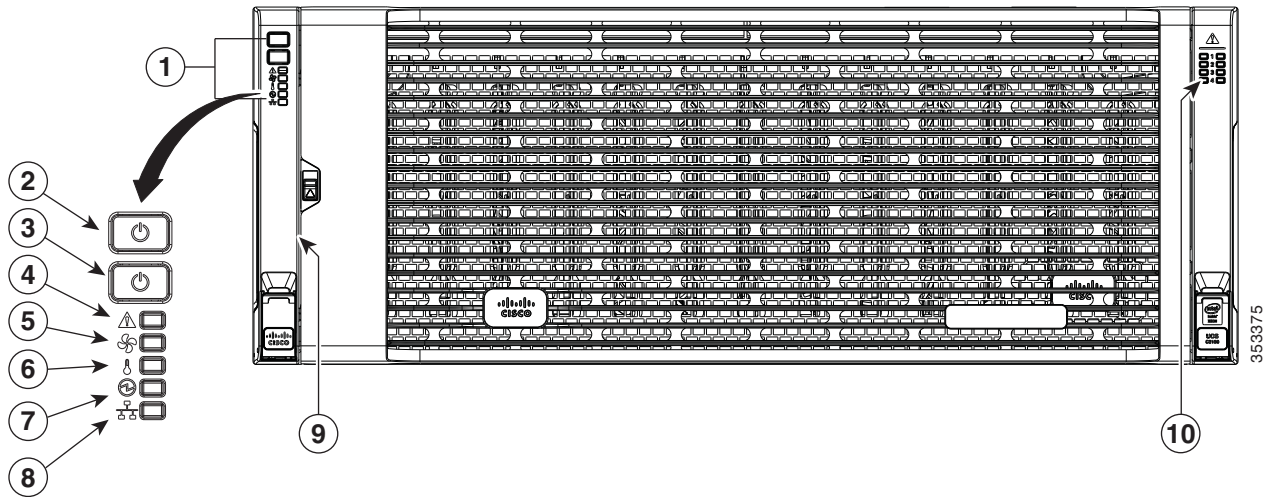


DETAILED VIEWS

Chassis Front View

Figure 2 shows the Cisco UCS S3260 Storage Server.

Figure 2 Chassis Front View

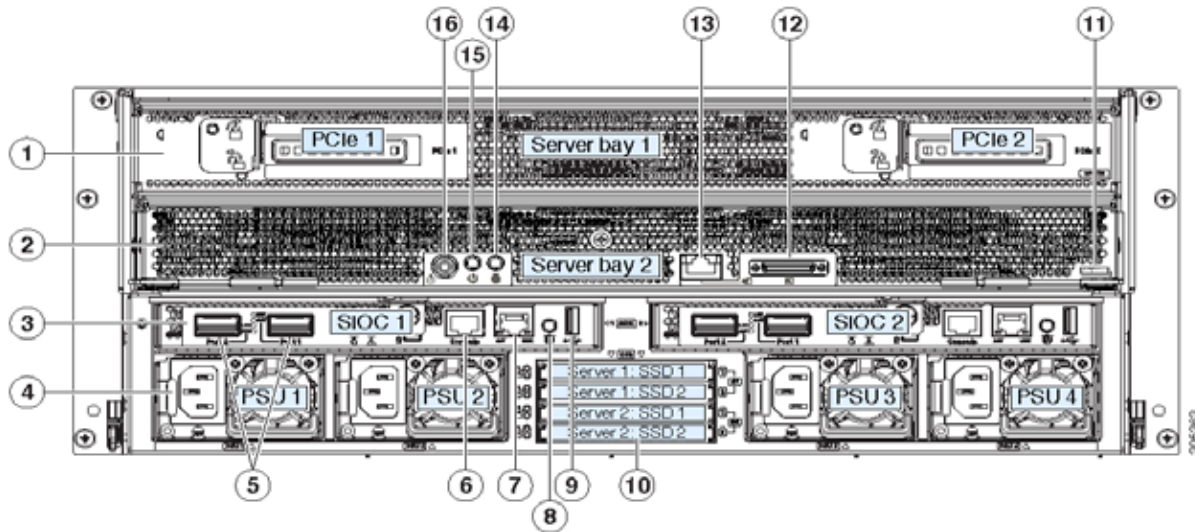


1	Operations panel	6	Temperature status LED
2	System power button/LED	7	Power supply status LED
3	System unit identification button/LED	8	Network link activity LED
4	System status LED	9	Pull-out asset tag (not visible under front bezel)
5	Fan status LED	10	Internal-drive status LEDs

Chassis Rear View

Figure 4 shows the external features of the rear of the chassis with a S3260 M4 server node (v4 CPUs) and I/O expander installed.

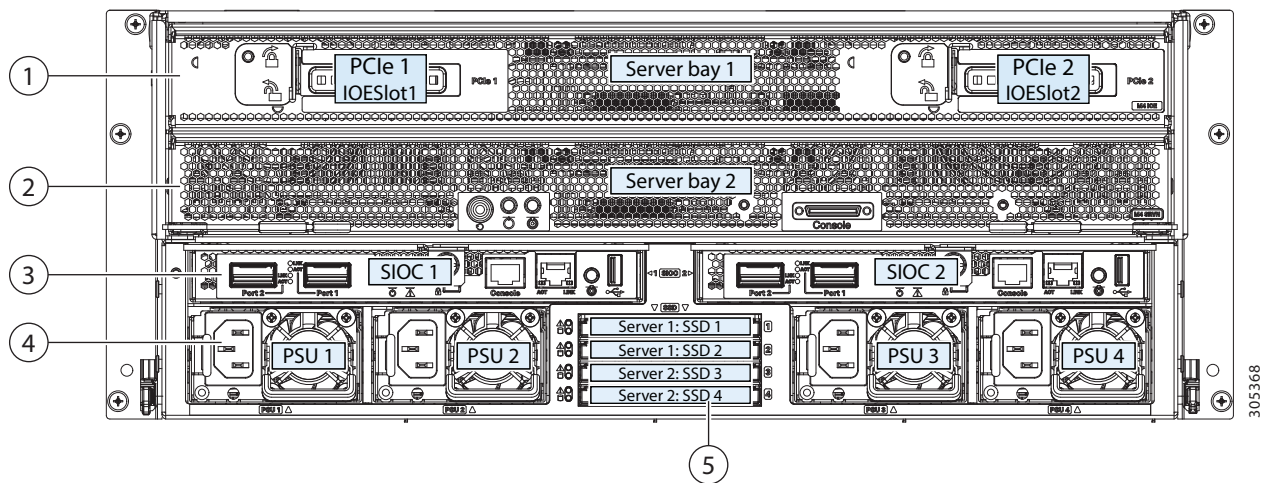
Figure 3 Chassis Rear View (S3260 M5 Server server node installed and one I/O expander installed)



1	<p>Server bay 1</p> <ul style="list-style-type: none"> ■ (Optional) I/O expander, as shown (attaches to S3260 M4 or S3260 M5 server node only) ■ (Optional) server node 	9	Not used at this time
2	<p>Server bay 2</p> <ul style="list-style-type: none"> ■ (Optional) server node (S3260 M4 shown) ■ (Optional) disk expansion tray 	10	<p>Solid state drive bays (up to four 2.5-inch SAS SSDs)</p> <ul style="list-style-type: none"> ■ SSDs in Server 1 bays 1 and 2 require a server node in server bay 1 ■ SSDs in Server 2 bays 1 and 2 require a server node in server bay 2
3	<p>System I/O controller (SIOC)</p> <ul style="list-style-type: none"> ■ SIOC 1 is required if you have a server node in server bay 1 ■ SIOC 2 is required if you have a server node in server bay 2 	11	<p>S3260 M4 server node label (M4 SVRN) or S3260 M5 server node label (M5 SVRN)</p> <p>Note: This label identifies an M4 or M5 server node. The S3260 M3 server node does not have a label.</p>
4	Power supplies (four, redundant as 3+1)	12	<p>KVM console connector (one each server node)</p> <p>Used with a KVM cable that provides two USB, one VGA, and one serial connector.</p>

5	QSFP ports (two on each SIOC)	13	1 Gb Ethernet dedicated management port (RJ-45)
6	Chassis Management Controller (CMC) Debug Firmware Utility port (one each SIOC)	14	Server node unit identification button/LED
7	10/100/1000 dedicated management port, RJ-45 connector (one each SIOC)	15	Server node power button
8	Not used at this time	16	Server node reset button (resets the chipset in the server node)

Figure 4 Chassis Rear View (one S3260 M4 server node installed and one I/O expander installed)



1	Server bay 1 ■ (Optional) I/O expander, as shown ■ (Optional) S3260 M4 server node ■ (Optional) drive expansion module	4	Power supplies (four, redundant as 2+2)
2	Server bay 2 ■ (Optional) S3260 M4 server node, as shown ■ (Optional) drive expansion module	5	2.5-inch SAS/SATA SSDs (up to four)
3	System I/O controllers (SIOCs) (one or two)	—	—

BASE SERVER STANDARD CAPABILITIES and FEATURES

Table 1 lists the capabilities and features of the base server. Details about how to configure the server for a particular feature or capability (for example, number of processors, disk drives, or amount of memory) are provided in [CONFIGURING the SERVER, page 10](#).

Table 1 Capabilities and Features

Capability/Feature	Description
Chassis	Four rack unit (4RU) chassis
Server Node	<p>One or two server nodes plug into the back of the chassis</p> <p>Server Nodes:</p> <p>S3260 M5 Server Node</p> <ul style="list-style-type: none"> ■ Up to two Intel Scalable CPUs ■ Up to fourteen 2666 MHz DDR4 DIMMs ■ Up to two 7mm NVMe ■ Choice of Storage Controller: Dual-Chip RAID with 4GB Cache for each chip or Dual-Chip Pass-Through ■ One 1G Host Management Port ■ One KVM console connector <p>S3260 M4 Server Node</p> <ul style="list-style-type: none"> ■ Up to two Intel E5-2600 v4 CPUs ■ Up to sixteen 2400 MHz DDR4 DIMMs ■ Up to one 15mm NVMe ■ Choice of Storage Controller: Single-Chip RAID with 4GB Cache or Dual-Chip Pass-Through" ■ One KVM console connector
System I/O Controller	<p>The system can have one or two system I/O controllers (SIOC). These provide data and management connectivity</p> <ul style="list-style-type: none"> ■ Dual Port 40Gb QSFP+ ports each ■ One 10/100/1000 Ethernet dedicated management port on each SIOC
Drives	<p>All Drives are hot-pluggable, no pre-conditioning required.</p> <p>Top Load Hot Plug Drives:</p> <ul style="list-style-type: none"> ■ Up to 56 3.5inch Large Form Factor 7.2K RPM Near-Line SAS drives, choice of 7.2 NL SAS Drives: 2TB, 4TB, 6TB, 8TB, 10TB and 12TB ■ Up to 28 SAS SSD in 3.5 inch carrier (included with the drive), choice of 3WPD and 10WPD SSDs ■ Rear Load Hot Plug Large Form Factor Hard Drives ■ Four 3.5 inch Large Form Factor 7.2K RPM Near-Line SAS Drives, capacity choices: 2TB, 4TB, 6TB, 8TB, 10TB and 12TB ■ Rear Boot Solid State Drives ■ Up to 2 Rear Boot SATA 1WPD SSDs per server node, capacity choice; 240G, 480G, 1.6T, 3.2T <p>NVMe Storage available on Server Node</p>

Capability/Feature	Description
Optional I/O Expander	Optional I/O Expander that can go in Slot 1 of the chassis (upper slot, above the server node). It provides two 8x PCIe Slots, and up to two 15mm NVMe SSDs. For S3260 M4 node, an additional RAID Controller can be optionally added.
Storage Controller	Storage Controller resides on the server node and for S3260 M4 node also on the IO Expander, choice of RAID and pass-through. RAID Controller supports JBOD, RAID 0, 1,5,6,10,50,60. Storage controllers are connected to all the drives via the SAS backplane
Video Interfaces	Integrated 2D graphics controller supporting up to 1600x1200 resolution
Power Supply	Four hot-swappable power supply (Redundant as 2+2), Choice of 1050W AC or DC
Fans	Four hot-swappable dual fan modules that provide front-to-rear cooling for the chassis (8 fans total) One fan in each power supply
Front Panel	Status Indications and control buttons
Integrated Management Processor	Baseboard Management Controller (BMC) running Cisco Integrated Management Controller (CIMC) firmware, that can be accessed via the 1-GbE dedicated management port on SIOC
UCS Manager	UCSM 3.1.2a required to manage S3260 M4 Server Node using 6200 and 6300 Fabric Interconnects UCSM 3.2.3 required to manage S3260 M5 Server Node using 6200 and 6300 Fabric Interconnects Note: Connectivity with FI 6324 not supported at this time

CONFIGURING the SERVER

Follow these steps to configure the Cisco UCS S3260 Storage Server:

- *STEP 1 VERIFY SERVER SKU, page 11*
- *STEP 2 SELECT SERVER NODE, page 12*
- *STEP 3 SELECT SYSTEM I/O CONTROLLER, page 17*
- *STEP 4 SELECT TRANSCEIVERS OR SFP CABLES FOR SYSTEM I/O CONTROLLER (OPTIONAL), page 18*
- *STEP 5 SELECT I/O EXPANDER (OPTIONAL), page 20*
- *STEP 6 SELECT HARD DISK DRIVE (HDD) MULTIPACKS, page 22*
- *STEP 7 SELECT HARD DISK DRIVES (HDDs) or SOLID STATE DRIVES (SSDs), page 26*
- *STEP 8 SELECT BOOT DRIVES (OPTIONAL), page 27*
- *STEP 9 SELECT DISK EXPANSION TRAY AND DRIVES (OPTIONAL), page 28*
- *STEP 10 SELECT NIC MODE (OPTIONAL), page 30*
- *STEP 11 SELECT POWER SUPPLY, page 31*
- *STEP 12 SELECT POWER CORD(s), page 32*
- *STEP 13 SELECT REVERSIBLE CABLE MANAGEMENT ARM (OPTIONAL), page 35*
- *STEP 14 SELECT A KVM CABLE, page 36*
- *STEP 15 SELECT OPERATING SYSTEM AND VALUE-ADDED SOFTWARE, page 37*
- *STEP 16 SELECT OPERATING SYSTEM MEDIA KIT, page 39*
- *STEP 17 SELECT SERVICE and SUPPORT LEVEL, page 40*
- *OPTIONAL STEP - ORDER RACK(s), page 45*
- *OPTIONAL STEP - ORDER PDU, page 46*

STEP 1 VERIFY SERVER SKU

Select the base server product ID (PID) from [Table 2](#).

Table 2 PID of the Cisco UCS S3260 Base Server

Product ID (PID)	Description
UCSS-S3260	Cisco UCS S3260 Storage Server, one rail kit, and bezel.

The Cisco UCS S3260 Storage Server:

- Does not include internal storage drives, system I/O controller, power supplies, or server node (no CPU, memory, or Storage controller).



NOTE: Use the steps on the following pages to configure the server with the components that you want to include.

STEP 2 SELECT SERVER NODE

There are two types of server nodes:

- S3260 M5 Server Nodes with two Intel Xeon Scalable CPUs



NOTE: Do not mix M5 and M4 server node in the same chassis.



NOTE: The Server Node has a label for M5 SVRN or M4 SVRN on the corner

S3260 M5 Server Node (with Intel Xeon Scalable CPUs)

This server node is configurable. The base PID of the S3260 M5 server node is shown in [Table 3](#).

Table 3 UCS C3260 M5 Server Node Base PID

Product ID (PID)	Description
UCS-S3260-M5SRB	UCS S3260 M5 Server Node based on Intel Scalable CPUs
UCS-S3260-M5SRB-U	UCS S3260 M5 Server Node Standalone Configurable Spare
UCS-S3260-M5SBI-U	UCS S3260 M5 Server Node Standalone w/ IOE Configurable Spare

Use the following tables to choose options for the S3260 M5 server node

- Choose two CPUs from [Table 4](#).

Table 4 CPUs

Product ID (PID)	Description
UCS-CPU-4110	2.1 GHz 4110/85W 8C/11MB Cache/DDR4 2400MHz
UCS-CPU-4114	2.2 GHz 4114/85W 10C/13.75MB Cache/DDR4 2400MHz
UCS-CPU-5118	2.3 GHz 5118/105W 12C/16.50MB Cache/DDR4 2400MHz
UCS-CPU-6132	2.6 GHz 6132/140W 14C/19.25MB Cache/DDR4 2666MHz
UCS-CPU-6138	2.0 GHz 6138/125W 20C/27.50MB Cache/DDR4 2666MHz
UCS-CPU-6152	2.1 GHz 6152/140W 22C/30.25MB Cache/DDR4 2666MHz

- Choose 2, 4, 6,7 DIMMs from [Table 5](#).

Table 5 DIMMs

Product ID (PID)	Description
UCS-MR-X16G1RS-H	16GB DDR4-2666-MHz RDIMM/PC4-23100/single rank/x4/1.2v
UCS-MR-X32G2RS-H	32GB DDR4-2666-MHz RDIMM/PC4-23100/dual rank/x4/1.2v
UCS-ML-X64G4RS-H	64GB DDR4-2666-MHz LRDIMM/PC4-23100/quad rank/x4/1.2v
UCS-MR-128G8RS-H	28GB DDR4-2666-MHz TSV-RDIMM/PC4-21300/octal rank/x4/1.2v

- Choose a storage controller from [Table 6](#).

Table 6 Storage Controller

Product ID (PID)	Description
UCS-S3260-DHBA	UCS S3260 Dual Pass Through Controller based on Broadcom IT Firmware
UCS-S3260-DRAID	UCS S3260 Dual Raid Controller based on Broadcom 3316 ROC



NOTE: The UCS-S3260-DRAID RAID controller is a dual-chip controller with 4G flash-backed write cache for each controller. This controller supports JBOD and RAID levels 0,1,5,6,10,50,60

- Choose an optional Trusted Platform Module (TPM) from [Table 7](#).

Table 7 TPM

Product ID (PID)	Description
UCSX-TPM2-002	Trusted Platform Module 2.0 for UCS servers

- Choose Optional NVMe Drives from [Table 8](#).

Table 8 Storage Drive

Product ID (PID)	Description
UCS-S3260-NVG25	UCS S3260 500G NVMe for M5 Server Node based on Intel 4501
UCS-S3260-NVG210	UCS S3260 1T NVMe for M5 Server Node based on Intel 4501
UCS-S3260-NVG220	UCS S3260 2T NVMe for M5 Server Node based on Intel 4501



NOTE: The NVMe Drives are not in a sled. Sled PID(UCS-S3260-NVMSLD1) is auto structured when an NVMe is selected. Each Sled PID UCS-S3260-NVMSLD1 can host up to 2 NVMe Drive

Approved Configurations

- The following configurations are valid in the S3260 Chassis
 - Single S3260 M5 Server Node in server node bay 1
 - Dual S3260 M5 Server Node in Server node bay 1 and bay 2
 - Single S3260 M5 Server node in bay 1(upper bay) and a drive expansion module containing 4x 3.5 in SDD drives in server node bay 2(lower bay) or
 - Single S3260 M5 Server node in server node bay 2 (lower bay) and I/O expander in server node bay 1 (upper bay). In this case, the main SIOC is in SIOC slot 2.
-



NOTE: Requires Cisco IMC SW 3.1(3) and UCSM 3.2(3)

S3260 M4 Server Node (with Intel E5-2600 v4 CPU)

This server node is configurable. The base PID of the S3260 M4 server node is shown in [Table 9](#).

Table 9 UCS S3260 M4 Server Node Base PID

Product ID (PID)	Description
UCSC-C3K-M4SRB	UCS S3260 M4 Server Node for Intel E5-2600 v4

Use the following tables to choose options for the S3260 M4 server node.

- Choose two CPUs from [Table 10](#).

Table 10 CPUs

Product ID (PID)	Description
UCS-CPU-E52695E	2.10 GHz E5-2695 v4/120W 18C/45MB Cache/DDR4 2400MHz
UCS-CPU-E52680E	2.40 GHz E5-2680 v4/120W 14C/35MB Cache/DDR4 2400MHz
UCS-CPU-E52650E	2.20 GHz E5-2650 v4/105W 12C/30MB Cache/DDR4 2400MHz
UCS-CPU-E52640E	2.40 GHz E5-2640 v4/90W 10C/25MB Cache/DDR4 2133 MHz
UCS-CPU-E52620E	2.10 GHz E5-2620 v4/85W 8C/20MB Cache/DDR4 2133MHz

- Choose 4, 6, or 8 DIMMs per CPU from [Table 11](#).

Table 11 DIMMs

Product ID (PID)	Description
UCS-ML-1X644RV-A	64GB DDR4-2400-MHz LRDIMM/PC4-19200/quad rank/x4/1.2v
UCS-MR-1X322RV-A	32GB DDR4-2400-MHz RDIMM/PC4-19200/dual rank/x4/1.2v
UCS-MR-1X161RV-A	16GB DDR4-2400-MHz RDIMM/PC4-19200/single rank/x4/1.2v

- Choose a storage controller from [Table 12](#).

Table 12 Storage Controller

Product ID (PID)	Description
UCS-C3K-M4RAID	Cisco UCS S3260 RAID Controller M4 Server w 4G RAID Cache
UCS-S3260-DHBA	UCS S3260 Dual Pass Through



NOTE: The Cisco UCS S3260 RAID Controller M4 Server supports JBOD and RAID levels (0,1,5,6,10,50, 60), with 4 GB flash-backed write cache

- Choose an optional Trusted Platform Module (TPM) from [Table 13](#).

Table 13 TPM

Product ID (PID)	Description
UCSX-TPM2-002	Trusted Platform Module 2.0 for UCS servers

- Choose one optional storage drive from [Table 14](#).

Table 14 Storage Drive

Product ID (PID)	Description
UCS-S3260-NVM48	Cisco UCS S3260 800G NVMe SSD for M4 Node (SN 200)
UCS-S3260-NVM416	Cisco UCS S3260 1.6TB NVMe SSD for M4 Node (SN 200)
UCS-S3260-NVM432	Cisco UCS S3260 3.2TB NVMe SSD for M4 Node (SN 200)
UCS-S3260-NVM464	Cisco UCS S3260 6.4TB NVMe SSD for M4 Node (SN 200)

Approved Configurations

- Select one of the following:
 - Single S3260 M4 server node in server node bay 1 with CIMC 2.0(13), or
 - Two S3260 M4 server nodes in server node bay 1 and bay 2, or
 - Single S3260 M4 server node in server node bay 1 (upper bay) and drive expansion module containing 4 x 3.5” drives in server node bay 2 (lower bay), or
 - Single S3260 M4 server node in server node bay 2 (lower bay) and I/O expander in server node bay 1 (upper bay) - in this case, the active SIOC is SIOC-2, not SIOC-1.

STEP 3 SELECT SYSTEM I/O CONTROLLER

Select system I/O controllers from [Table 15](#). Each system I/O controller contains a built-in 1300-series VIC with two 40 Gb QSFP ports.

Table 15 PID of the System I/O Module

Product ID (PID)	Description
UCSC-C3260-SIOC	Cisco UCS S3260 System IO Controller with 1300-series VIC included

Approved Configurations

- Select one or two system I/O controllers.

Caveats

- If you select two server nodes and two SIOCs, you have the following functionality:
 - The top server node works with the left SIOC (as viewed from the rear).
 - The bottom server node works with the right SIOC (as viewed from the rear).



NOTE: With Cisco IMC software 3.0(3) and UCSM release 3.1(3), a single server with dual SIOC configuration is supported.

STEP 4 SELECT TRANSCEIVERS OR SFP CABLES FOR SYSTEM I/O CONTROLLER (OPTIONAL)



NOTE: [Table 16](#) lists all the qualified components that are not available in the online ordering tool and can be ordered as spares.

Select an appropriate system I/O controller optical transceiver or SFP cable from [Table 16](#).

Table 16 PIDs for SIOC Optical Transceivers and SFP Cables

Rate	Optical Transceiver and SFP Cable PIDs	Description
10 Gbps ¹	SFP-10G-SR	10GBASE-SR SFP optical transceiver
	SFP-H10GB-CU1M	10GBASE-CU SFP+ Cable 1 Meter
	SFP-H10GB-CU3M	10GBASE-CU SFP+ Cable 3 Meter
	SFP-H10GB-CU5M	10GBASE-CU SFP+ Cable 5 Meter
	SFP-H10GB-ACU7M	Active Twinax cable assembly, 7m
	SFP-H10GB-ACU10M	Active Twinax cable assembly, 10m
	CVR-QSFP-SFP10G	QSFP to SFP+ adapter (QSA)
	SFP-10G-LR	10GBASE-LR SFP Module (Requires CVR-QSFP-SFP10G)

Table 16 PIDs for SIOC Optical Transceivers and SFP Cables (*continued*)

Rate	Optical Transceiver and SFP Cable PIDs	Description
40 Gbps	QSFP-40G-SR-BD	QSFP40G bidirectional short-reach optical transceiver
	QSFP-40G-SR4	40GBASE-SR4 QSFP optical transceiver module with MPO connector
	QSFP-H40G-CU1M	40GBASE-CR4 Passive Copper Cable, 1m
	QSFP-H40G-CU3M	40GBASE-CR4 Passive Copper Cable, 3m
	QSFP-H40G-CU5M	40GBASE-CR4 Passive Copper Cable, 5m
	QSFP-H40G-ACU7M	40GBASE-CR4 Active Copper Cable, 7m
	QSFP-H40G-ACU10M	40GBASE-CR4 Active Copper Cable, 10m
	QSFP-4SFP10G-CU1M	QSFP to 4xSFP10G Passive Copper Splitter Cable, 1m
	QSFP-4X10G-AC7M	QSFP to 4xSFP10G Active Copper Splitter Cable, 7m
	QSFP-4X10G-AC10M	QSFP to 4xSFP10G Active Copper Splitter Cable, 10m
	QSFP-40G-LR4	QSFP 40GBASE-LR4 transceiver module, LC, 10km
	QSFP-4X10G-LR-S	4x10GBASE-LR transceiver module, SM MPO, 10KM
	QSFP-H40G-AOC1M	40-Gbps QSFP active optical cable, 1m
	QSFP-H40G-AOC2M	40-Gbps QSFP active optical cable, 2m
	QSFP-H40G-AOC3M	40-Gbps QSFP active optical cable, 3m
	QSFP-H40G-AOC5M	40-Gbps QSFP active optical cable, 5m
	QSFP-H40G-AOC7M	QSFP to QSFP active optical cables,7m
	QSFP-H40G-AOC10M	40-Gbps QSFP active optical cable, 10m
	QSFP-4X10G-AOC1M	QSFP to four SFP+ active optical breakout cables,1m
	QSFP-4X10G-AOC2M	QSFP to four SFP+ active optical breakout cables,2m
	QSFP-4X10G-AOC3M	QSFP to four SFP+ active optical breakout cables,3m
	QSFP-4X10G-AOC5M	QSFP to four SFP+ active optical breakout cables,5m
	QSFP-4X10G-AOC7M	QSFP to four SFP+ active optical breakout cables,7m
	QSFP-4X10G-AOC10M	QSFP to four SFP+ active optical breakout cables,10m

Notes

1. In order to use a 10 Gbps SFP transceiver or cable, you must first install a QSFP to SFP 10G adapter (PID CVR-QSFP-SFP10G) in the SIOC QSFP port.

STEP 5 SELECT I/O EXPANDER (OPTIONAL)

Select the optional I/O expander product ID (PID) from [Table 17](#).



NOTE: The I/O Expander has

- Two x8 PCIe half height half width slots for IO Adapters
- Optional Two 15mm NVMe
- Optional RAID Controller (UCS-C3K-M4RAID) when configured with S3260 M4 Server Node.

Table 17 PID of the I/O Expander

Product ID (PID)	Description
UCSC-C3K-M4IO	Cisco UCS S3260 I/O Expander for M4 S3260 Server Blade

Select one or two PCIe modules for the I/O expander from [Table 18](#).

Table 18 Adapters for the PCIe Slots

Product ID (PID)	Description	S3260 M4	S3260 M5
Ethernet Cards			
UCSC-PCIE-IRJ45	Intel i350T4 quad-port 1G copper with iSCSI NIC	Yes	Yes
N2XX-AIPCI01	Intel X520 Dual Port 10Gb SFP+ Adapter	Yes	Yes
FC Cards			
UCSC-PCIE-QD16GF	Qlogic QLE2692 dual-port 16G Fibre Channel HBA	X	Yes
UCSC-PCIE-Q2672	Qlogic QLE2672 dual-port 16Gb Fibre Channel HBA	Yes	X
Flash Cards			
UCSC-F-FIO-1000PS	UCS 1000GB Fusion ioMemory3 PX Performance line for Rack M4	Yes	X
UCSC-F-S32002	UCS Rack PCIe Storage 3200GB SanDisk SX350 Medium Endurance	Yes	X

Table 19 NVMe for IO Expander (Choice of one of two NVMe)

Product ID (PID)	Description
UCS-S3260-NVM48	Cisco UCS S3260 800G NVMe SSD for M4 Node(SN 200)
UCS-S3260-NVM416	Cisco UCS S3260 1.6TB NVMe SSD for M4 Node(SN 200)
UCS-S3260-NVM432	Cisco UCS S3260 3.2TB NVMe SSD for M4 Node(SN 200)
UCS-S3260-NVM464	Cisco UCS S3260 6.4TB NVMe SSD for M4 Node(SN 200)

**NOTE:**

- Above NVMe SSDs are installed in the sleds
- S3260 M5 Node use Intel 4501 NVMe and cannot be mixed with HGST SN200 NVMe that are currently qualified on the IO Expander. Therefore, can either use NVMe on IO Expander or S3260 M5 Nodes. IOExpander should be included in the initial order. It can be ordered in the field, though CIMC and UCSM will need to be reconfigured due to moving the Main Server Node into a different slot and with that moving the boot drives.

STEP 6 SELECT HARD DISK DRIVE (HDD) MULTIPACKS

Select drive multipacks from [Table 20](#). The drives in each multipack mount into drive trays at the top of the server.



NOTE: A minimum of 14 drives must be installed in the Cisco UCS S3260 chassis.

Table 20 Available Disk Multipacks (512n (Native) Drive Packs)

Product ID (PID)	Description	# of drives	Total Raw Capacity	Base Drive PID
2TB Bundles (512n)				
UCS-S3260-14HD2	UCS S3260 1 row of 2 TB NL-SAS drives (14 total) 28 TB raw	14	28TB	UCSC-S3260-HD2T
UCS-S3260-28HD2	UCS S3260 2 rows of 2 TB NL-SAS drives (28 total) 56 TB raw	28	56TB	UCSC-S3260-HD2T
UCS-S3260-42HD2	UCS S3260 3 rows of 2 TB NL-SAS drives (42 total) 84 TB raw	42	84TB	UCSC-S3260-HD2T
UCS-S3260-56HD2	UCS S3260 4 rows of 2 TB NL-SAS drives (56 total) 112 TB raw	56	112TB	UCSC-S3260-HD2T
4TB Bundles (512n)				
UCS-S3260-14HD4	UCS S3260 1 row of 4 TB 512n NL-SAS drives (14 total) 56 TB raw	14	56	UCSC-C3K-HD4TB
UCS-S3260-28HD4	UCS S3260 2 rows of 4 TB 512n NL-SAS drives (28 total) 112 TB raw	28	112	UCSC-C3K-HD4TB
UCS-S3260-42HD4	UCS S3260 3 rows of 4 TB 512n NL-SAS drives (42 total) 184 TB raw	42	168	UCSC-C3K-HD4TB
UCS-S3260-56HD4	UCS S3260 4 rows of 4 TB 512n NL-SAS drives (56 total) 240 TB raw	56	224	UCSC-C3K-HD4TB

Table 21 Available Disk Multipacks (512e (Emulation) Drive Packs (works with Vmware 6.5 and above))

Product ID (PID)	Description	# of drives	Total Raw Capacity	Base Drive PID
6TB Bundles (512e)				
UCS-C3K-14HD6E	UCS S3260 1 row of 6TB 512e NL-SAS drives (14 total) 84 TB	14	84	UCS-C3K-6TEM
UCS-C3K-28HD6E	UCS S3260 2 rows of 6TB 512e NL-SAS drives (28 total) 168 TB	28	168	UCS-C3K-6TEM

Table 21 Available Disk Multipacks (512e (Emulation) Drive Packs (works with Vmware 6.5 and above))

UCS-C3K-42HD6E	UCS S3260 3 rows of 6TB 512e NL-SAS drives (42 total) 252 TB	42	252	UCS-C3K-6TEM
UCS-C3K-56HD6E	UCS S3260 4 rows of 6TB 512e NL-SAS drives (56 total) 336 TB	56	336	UCS-C3K-6TEM
10TB Bundles (512e)				
UCS-C3K-14HD10E	UCS S3260 1 row of 10 TB 512e NL-SAS drives (14 total) 140 TB	14	140	UCS-C3K-10TEM
UCS-C3K-28HD10E	UCS S3260 2 rows of 10 TB 512e NL-SAS drives (28 total) 280 TB	28	280	UCS-C3K-10TEM
UCS-C3K-42HD10E	UCS S3260 3 rows of 10 TB 512e NL-SAS drives (42 total) 420 TB	42	420	UCS-C3K-10TEM
UCS-C3K-56HD10E	UCS S3260 4 rows of 10 TB 512e NL-SAS drives (56 total) 560 TB	56	560	UCS-C3K-10TEM

Table 22 Available Disk Multipacks (4Kn (native) Drive Packs (DOES NOT WORK WITH VMWARE))

Product ID (PID)	Description	# of drives	Total Raw Capacity	Base Drive PID
6TB Bundles (4Kn)				
UCSC-C3X60-14HD6	UCS S3260 1 row of 6 TB 4Kn NL-SAS drives (14 total) 84 TB raw	14	84	UCSC-C3X60-HD6TB
UCSC-C3X60-28HD6	UCS S3260 2 rows of 6 TB 4Kn. NL-SAS drives (28 total) 168 TB raw	28	168	UCSC-C3X60-HD6TB
UCSC-C3X60-42HD6	UCS S3260 3 rows of 6 TB 4Kn NL-SAS drives (42 total) 252 TB raw	42	252	UCSC-C3X60-HD6TB
UCSC-C3X60-56HD6	UCS S3260 4 rows of 6 TB 4Kn NL-SAS drives (56 total) 336 TB raw	56	336	UCSC-C3X60-HD6TB
8TB Bundles (4Kn)				
UCS-S3260-14HD8	S3260 1row of 8TB (4Kn HGST UE10 SAS 7200RPM(14Total: 112TB)	14	112	UCS-S3260-HD8TB
UCS-S3260-28HD8	S3260 2row of 8TB (4Kn HGST UE10NL-SAS 7200RPM (28Total: 224TB)	28	224	UCS-S3260-HD8TB
UCS-S3260-42HD8	S3260 3row of 8TB (4Kn HGST UE10NL-SAS 7200RPM(42Total: 336TB)	42	336	UCS-S3260-HD8TB
UCS-S3260-56HD8	S3260 4row of 8TB (4Kn HGST UE10NL-SAS 7200RPM (56Total: 448TB)	56	448	UCS-S3260-HD8TB
10TB Bundles (4Kn)				

Table 22 Available Disk Multipacks (4Kn (native) Drive Packs (DOES NOT WORK WITH VMWARE))

UCS-C3K-14HD10	UCS S3260 1 row of 10 TB 4Kn NL-SAS drives (14 total) 140 TB raw	14	140	UCSC-C3X60-10TB
UCS-C3K-28HD10	UCS S3260 2 rows of 10 TB 4Kn NL-SAS drives (28 total) 280 TB raw	28	280	UCSC-C3X60-10TB
UCS-C3K-42HD10	UCS S3260 3 rows of 10 TB 4Kn NL-SAS drives (42 total) 420 TB raw	42	420	UCSC-C3X60-10TB
UCS-C3K-56HD10	UCS S3260 4 rows of 10 TB 4Kn NL-SAS drives (56 total) 560 TB raw	56	560	UCSC-C3X60-10TB
12TB Bundles (4Kn)				
UCS-S3260-14HD12	UCS S3260 Single row of drives containing 14x 12TB 4Kn (NL-SAS 7.2K) Drives 168TB Total	14	168	UCS-S3260-HD12T
UCS-S3260-28HD12	UCS S3260 Dual row of drives containing 28x 12TB 4Kn (NL-SAS 7.2K) 336TB Total	28	336	UCS-S3260-HD12T
UCS-S3260-42HD12	UCS S3260 Three rows of drives containing 42x 12TB 4Kn (NL-SAS 7200PM) 504TB Total	42	504	UCS-S3260-HD12T
UCS-S3260-56HD12	UCSS3260 Four rows of drives containing 56x 12TB 4Kn (NL-SAS 7200PM) 672TB Total	56	672	UCS-S3260-HD12T

Table 23 SED Bundles (4Kn)

Product ID (PID)	Description	# of drives	Total Raw Capacity	Base Drive PID
SED Bundles (4Kn)				
UCS-S3260-14HD6K91	UCS S3260 1 row of 6 TB 4Kn SED NL-SAS drives (14 total) 84 TB raw	14	84	UCS-C3K-HD6TK9
UCS-S3260-28HD6K9	UCS S3260 2 rows of 6 TB 4Kn SED NL-SAS drives (28 total) 168 TB raw	28	168	UCS-C3K-HD6TK9
UCS-S3260-42HD6K9	UCS S3260 3 rows of 6 TB 4Kn SED NL-SAS drives (42 total) 252 TB raw	42	252	UCS-C3K-HD6TK9
UCS-S3260-56HD6K9	UCS S3260 4 rows of 6 TB 4Kn SED NL-SAS drives (56 total) 336 TB raw	56	336	UCS-C3K-HD6TK9

**NOTE:**

Due to performance difference drive packs and drive capacities cannot be mixed.
Cannot Mix 512n, 512e and 4Kn drives
Refer to Drive Populations Guideline

Approved Configurations

- The UCS-S3260-14HD4, UCS-S3260-28HD4, UCS-S3260-42HD4, and UCS-S3260-42HD4 multipacks can be selected along with HDDs and SSDs from [Table 24 on page 26](#).
- The UCSC-C3X60-14HD6, UCSC-C3X60-28HD6, and UCSC-C3X60-42HD6 multipacks can be selected along with HDDs and SSDs from [Table 24 on page 26](#).
- The UCSC-C3X60-56HD6 multipack cannot be selected with any other multipack.
- The UCSC-C3X60-14HD8, UCSC-C3X60-28HD8, and UCSC-C3X60-42HD8 multipacks can be selected along with HDDs and SSDs from [Table 24 on page 26](#).
- The UCSC-C3X60-56HD8 multipack cannot be selected with any other multipack.
- The UCS-C3K-14HD10, UCS-C3K-28HD10, and UCS-C3K-42HD10 multipacks can be selected along with HDDs and SSDs from [Table 24 on page 26](#).
- The UCS-C3K-56HD10 multipack cannot be selected with any other multipack.
- You cannot mix multipacks that have different drive capacities (4, 6, 8, or 10 TB).
- Populate drive bays according to [DIMM Population Rules, page 53](#).
- The 14, 28 and 42 drive Multipacks from the [Table 22- 23 \(or 24\)](#) can be mixed with the same capacity/type HDD PID from [STEP 7 SELECT HARD DISK DRIVES \(HDDs\) or SOLID STATE DRIVES \(SSDS\)](#)
- The 14, 28 and 42 drive Multipacks from the [Table 22- 23 \(or 24\)](#) can be mixed with any SSDs in [STEP 7 SELECT HARD DISK DRIVES \(HDDs\) or SOLID STATE DRIVES \(SSDS\)](#)
- There are a maximum of 56 Top Load drives and therefore with 56 drives there are no more empty drive slots available in the top.

Caveats

- 4Kn drives are not supported by VMware. VMware 6.5 supports 512e drives.

STEP 7 SELECT HARD DISK DRIVES (HDDs) or SOLID STATE DRIVES (SSDs)

Select additional drives as desired from [Table 24](#). The drives mount into drive trays at the top of the server. The drives can be added to the chassis in addition to the multipacks already selected in [STEP 7 SELECT HARD DISK DRIVES \(HDDs\) or SOLID STATE DRIVES \(SSDs\)](#), [page 26](#).

Table 24 Available Additional HDDs and SSDs

Product ID (PID)	PID Description	Drive Type	Capacity (each)
HDDs			
UCS-S3260-HD12T	UCS S3260 12TB NL-SAS 4Kn 7.2K SAS 12Gb HDD w Carrier- Top Load	SAS-3	12TB 4Kn
UCSC-C3X60-10TB	UCSC S3260 10 TB 4Kn for Top-Load	SAS-3	10 TB 4Kn
UCS-C3K-10TEM	Cisco UCS S3260 10TB (512e) Top Load	SAS-3	10 TB 512e
UCSC-C3X60-HD8TB	UCSC S3260 8 TB NL-SAS 7.2KHelium HDD with HDD Carrier	SAS-3	8 TB
UCS-C3K-6TEM	Cisco UCS S3260 6TB (512e) Top Load	SAS-3	6 TB 512e
UCSC-C3X60-HD6TB	UCS S3260 6 TB 12Gbps NL-SAS 7200RPM HDD with HDD carrier	SAS-3	6 TB
UCS-C3K-HD4TB	UCS S3260 4 TB NL-SAS 7200 RPM 12Gb HDD w Carrier- Top Load	SAS-3	4 TB
UCSC-S3260-HD2T	UCS S3260 2 TB NL-SAS 7200 RPM 12Gb HDD w Carrier- Top Load	SAS-3	2 TB
SEDs			
UCSC3K-HD6TK9	Cisco UCS S3260 6 TB 4Kn Self Encrypt Top Load	SED	6 TB 4Kn
UCS-C3K-TSSD4K9	Cisco UCS S3260 400 GB Self Encrypt SED Top Load	SED	400 GB
SSDs			
Enterprise Performance 3X Read			
UCS-C3K-3XTSSD32	Cisco UCS S3260 Top Load 3X 3.2 TB SSD	SAS-3	3.2 TB
UCS-C3K-3XTSSD16	Cisco UCS S3260 Top Load 3X 1.6 TB SSD	SAS-3	1.6 TB
UCS-C3K-3XTSSD4	Cisco UCS S3260 Top Load 3X 400 GB SSD	SAS-3	400 GB
UCS-C3K-3XTSSD8	Cisco UCS S3260 Top Load 3X 800 GB SSD	SAS-3	800 GB
Enterprise Performance 10X Read			
UCS-C3X60-12G2160	UCSC S3260 1.6 TB 12Gbps SSD (Gen 2)	SAS-3	1.6 TB
UCS-C3X60-12G280	UCSC S3260 800 GB 12Gbps SSD (Gen 2)	SAS-3	800 GB
UCS-C3X60-12G240	UCSC S3260 400 GB 12Gbps SSD (Gen 2)	SAS-3	400 GB



NOTE: To Add Individual Drives, use the HDD or SSD Tab in CCW

STEP 8 SELECT BOOT DRIVES (OPTIONAL)

Select up to two boot drives per server node from [Table 25](#).

Table 25 Boot Drives are 6Gbps SATA Drives (Low endurance, supports up to 1X DWPD - (drive writes per day))

Product ID (PID)	Description	Capacity	Vendor/Model
Samsung PM863A			
UCS-S3260-G2SD24	UCS S3260 240GB Boot SATA Drives	240GB	Samsung PM863A
UCS-C3X60-G2SD48	UCSC S3260 480GB Boot SSD (Gen 2)	480GB	Samsung PM863A
UCS-C3X60-G2SD160	UCSC S3260 1.6TB Boot SSD (Gen 2)	1.6TB	Samsung PM863A
Micron 5100 Max			
UCS-S3260-G3SD24	UCS S3260 240G Boot SSD (Micron 6G SATA)	240GB	Micron 5100 MAX
UCS-S3260-G3SD48	UCS S3260 480G Boot SSD (Micron 6G SATA)	480GB	Micron 5100 MAX
UCS-S3260-G3SD160	UCS S3260 1.6TB Boot SSD (Micron 6G SATA)	1.6TB	Micron 5100 MAX
SED			
UCS-C3K-BSD48K9	UCS C3260 480G SATA SSD Self Encrypted Boot K9	480G	Micron

Approved Configurations

- Select one or two boot drives for per server node.
- Do not mix boot drive capacities



NOTE: The boot drives can be in a RAID mode via

- When Server Node has a RAID Controller (UCS-C3K-M4RAID for M4 Server Node or UCS-S3260-DRAID for M5 Server Node), the boot drives are connected to the RAID Controller and are hardware RAID
- With the Pass Through Controller (PID = UCS-S3260-DHBA) Installed, the boot drives are controlled through software RAID or ACH.

STEP 9 SELECT DISK EXPANSION TRAY AND DRIVES (OPTIONAL)

Select the optional disk expansion tray from [Table 26](#). This selection adds an extra four 2,4,6,7,10 or 12TB drives that mount at the rear of the chassis, fits in server node slot 2.

Table 26 Disk Expansion Tray and Drives

Product ID (PID)	PID Description	Drive Type	Capacity (each)
UCS-S3260-EX8T	Cisco UCS S3260 Expander with 4x 2 TB 7200 RPM NL-SAS Drives Includes the following: UCS-S3260-HD2TR UCS S3260 2TB NL-SAS 7200 RPM 12Gb HDD wCarrier- Rear Load	SAS	2 TB
UCS-S3260-EX16T	Cisco UCS S3260 Expander with 4x 4 TB 7200 RPM NL-SAS Drives Includes the following: UCS-C3K-HD4TBRR UCS S3260 4TB NL-SAS 7200 RPM 12Gb HDD w Carrier (rear load)	SAS	4 TB
UCS-S3260-EX24TK9	UCS S3260 Expander 4x 6 TB 512e SED NL-SAS drives 24 TB Includes the following: UCS-C3K-HD6TRK9 Cisco UCS S3260 6TB 4Kn Self Encrypt Rear Load	SAS	6 TB 512e
UCS-C3K-EX24TE	UCS S3260 Expander 4x 6 TB 512e NL-SAS drives 24 TB Includes the following: UCS-C3K-6TEM Cisco UCS S3260 6TB (512e) (rear load)	SAS	6 TB 512e
UCSC-C3X60-EX24T	UCS UCS S3260 Expander with 4x 6 TB 12 Gbps 7200RPM NL-SAS Drives Includes the following: UCSC-C3X60-6TBRR 6 TB 12 Gbps NL-SAS 7200 RPM 3.5 inch HDD including S3260 HDD carrier (rear load)	SAS	6 TB
UCSC-C3X60-EX32T	UCS UCS S3260 Expander with 4 x 8TB 12 Gbps 7200RPM NL-SAS Drives Includes the following: UCSC-C3X60-8TBRR 8 TB 12 Gbps NL-SAS 7200 RPM 3.5 inch Helium HDD including S3260 HDD carrier (rear load)	SAS-3	8 TB 4Kn
UCS-C3K-EX40TE	UCS S3260 Expander 4x 10 TB 512e NL-SAS drives 40TB Includes the following: UCS-C3K-10TREM Cisco UCS S3260 10TB (512e) (rear load)	SAS-3	10 TB 512e

Table 26 Disk Expansion Tray and Drives (*continued*)

Product ID (PID)	PID Description	Drive Type	Capacity (each)
UCSC-C3K-EX40T	UCS UCS S3260 Expander with 4 x 10TB 12 Gbps 7200RPM NL-SAS Drives Includes the following: UCSC-C3X60-10TBRR	10 TB 12 Gbps NL-SAS 7200 RPM 3.5 inch Helium HDD including S3260 HDD carrier (rear load)	SAS-3 10 TB 4Kn

Approved Configurations

- Disk Expansion Node always comes with 4 LFF Drives.
- Choice of capacity and drive types is restricted to be same as what is chosen for Top Load Drives in Step 6.
- Drive Capacities cannot be mixed.
- Drives come installed in the expander (PID: UCSC-C3X60-EXPT)

Caveats

- If you configure two server nodes, you cannot configure a disk expansion tray with drives.
- If you configure one server node with the IO Expander from Step 5, you cannot select the drive expander

STEP 10 SELECT NIC MODE (OPTIONAL)

By default, the Cisco UCS S3260 server NIC mode is configured to be Shared LOM Extended, which means that the CIMC can be accessed through the 40Gb SFP ports.

To change the default NIC mode to Dedicated, select the UCSC-DLOM-01 PID shown in [Table 27](#). In Dedicated NIC mode, the CIMC can be accessed only through the dedicated management port. See [Chassis Rear View \(S3260 M5 Server server node installed and one I/O expander installed\)](#), [page 6](#) for the location of the management port.

For more details on all the NIC mode settings, see

http://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/c/sw/gui/config/guide/2-0/b_Cisco_UCS_C-series_GUI_Configuration_Guide_201.pdf

Table 27 Dedicated NIC Mode Ordering Information

Product ID (PID)	PID Description
UCSC-DLOM-01	Dedicated Mode BIOS setting for C-Series Servers

STEP 11 SELECT POWER SUPPLY

The Cisco UCS S3260 accommodates four power supplies. Four power supplies are mandatory. Use [Table 28](#) to order the power supplies.

Table 28 Power Supply PID

Product ID (PID)	PID Description
UCSC-PSU1-1050W	UCS S3260 1050W Power Supply Unit
UCSC-PSUV2-1050DC	1050W V2 -48 VDC Power Supply for C220M4/S3260



NOTE: All power supplies must be identical.

STEP 12 SELECT POWER CORD(s)

Using [Table 29](#), select the appropriate AC power cords. You can select a minimum of no power cords and a maximum of two. If you select the option R2XX-DMYPWRCORD, no power cord is shipped with the server.

Table 29 Available Power Cords

Product ID (PID)	PID Description	Images
R2XX-DMYPWRCORD	No power cord (dummy PID to allow for a no power cord option)	Not applicable
CAB-48VDC-40A-8AWG	C-Series -48VDC PSU Power Cord, 3.5M, 3 Wire, 8AWG, 40A	
CAB-N5K6A-NA	N5000 AC Power Cable, 6A, 250V, North America, 2.5m	
CAB-AC-L620-C13	AC Power Cord, NEMA L6-20 - C13, 2M/6.5ft	
CAB-C13-CBN	Cabinet Jumper Power Cord, 250 VAC 10A, C14-C13 Connectors	
CAB-C13-C14-2M	CABASY,WIRE,JUMPER CORD, PWR, 2 Meter, C13/C14,10A/250V	
CAB-C13-C14-AC	Power cord, C13 to C14 (recessed receptacle), 10A	

Table 29 Available Power Cords

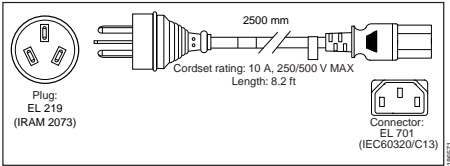
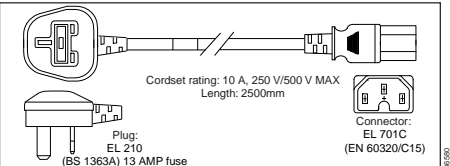
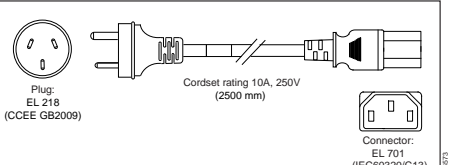
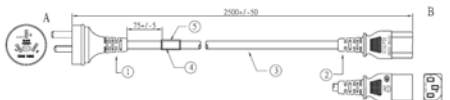
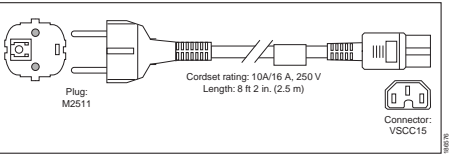
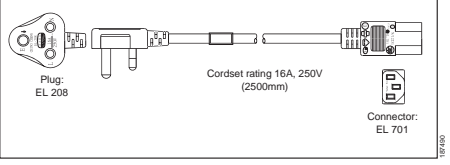
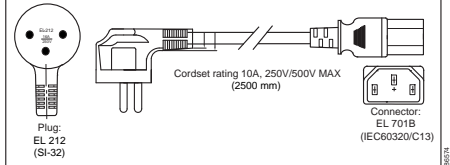
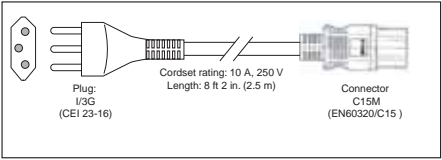
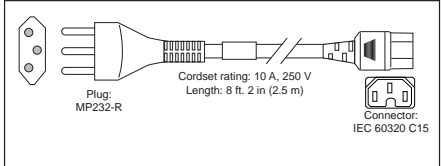
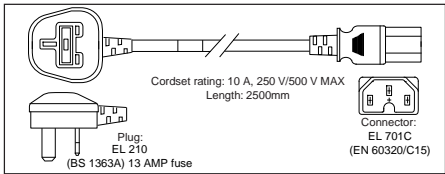
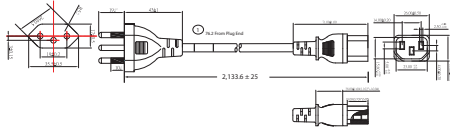
Product ID (PID)	PID Description	Images
CAB-250V-10A-AR	N5000 AC Power Cable, 10A, 250V, Argentina, 2.5m	
CAB-9K10A-AU	N5000 AC Power Cable, 10A, 250V, Australia, 2.5m	
CAB-250V-10A-CN	N5000 AC Power Cable, 10A, 250V, China, 2.5m	
CAB-250V-10A-CN	AC Power Cord - 250V, 10A - PRC	
CAB-9K10A-EU	N5000 AC Power Cable, 10A, 250V, Europe, 2.5m	
CAB-250V-10A-ID	N5000 AC Power Cable, 10A, 250V, India, 2.5m	
CAB-250V-10A-IS	N5000 AC Power Cable, 10A, 250V, Israel, 2.5m	

Table 29 Available Power Cords

Product ID (PID)	PID Description	Images
CAB-9K10A-IT	N5000 AC Power Cable, 10A, 250V, Italy, 2.5m	 <p>Plug: I/3G (CEI 23-16)</p> <p>Cordset rating: 10 A, 250 V Length: 8 ft 2 in. (2.5 m)</p> <p>Connector: C15M (EN60320/C15)</p>
CAB-9K10A-SW	N5000 AC Power Cable, 10A, 250V, Switzerland, 2.5m	 <p>Plug: MP232-R</p> <p>Cordset rating: 10 A, 250 V Length: 8 ft 2 in (2.5 m)</p> <p>Connector: IEC 60320 C15</p>
CAB-9K10A-UK	N5000 AC Power Cable, 10A, 250V, United Kingdom, 2.5m	 <p>Cordset rating: 10 A, 250 V/500 V MAX Length: 2500mm</p> <p>Plug: EL 210 (BS 1363A) 13 AMP fuse</p> <p>Connector: EL 701C (EN 60320/C15)</p>
CAB-250V-10A-BR	Power Cord - 250V, 10A - Brazil	

STEP 13 SELECT REVERSIBLE CABLE MANAGEMENT ARM (OPTIONAL)

The reversible cable management arm mounts on either the right or left slide rails at the rear of the server and is used for cable management. Use [Table 30](#) to order a cable management arm.

Table 30 Cable Management Arm

Product ID (PID)	PID Description
UCSC-CMA-M4	Reversible CMA for C240 M4 ball bearing rail kit

STEP 14 SELECT A KVM CABLE

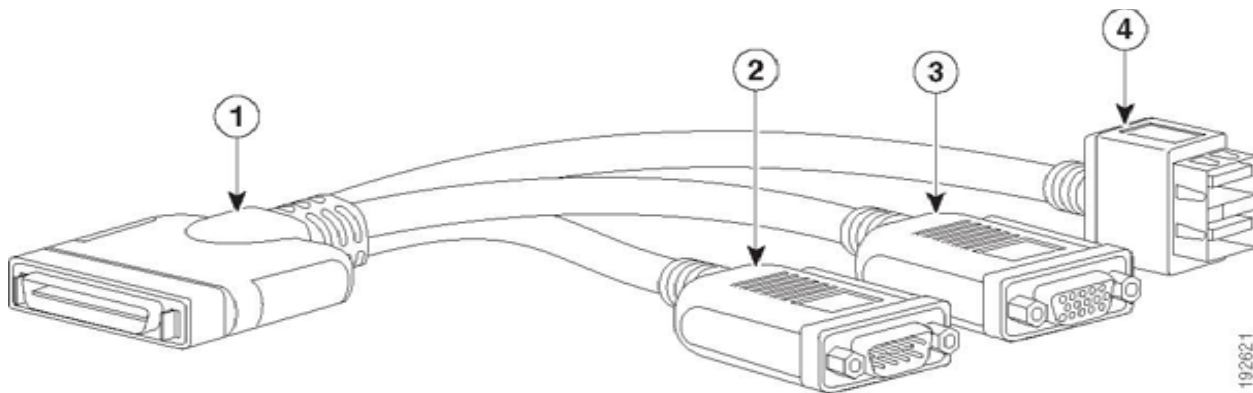
The KVM cable provides a connection into the server, providing a DB9 serial connector, a VGA connector for a monitor, and dual USB 2.0 ports for a keyboard and mouse. With this cable, you can create a direct connection to the operating system and the BIOS running on the server.

The KVM cable ordering information is listed in [Table 31](#).

Table 31 KVM Cable

Product ID (PID)	PID Description
N20-BKVM=	KVM cable for server console port

Figure 5 KVM Cable



1	Connector (to server front panel)	3	VGA connector (for a monitor)
2	DB-9 serial connector	4	Two-port USB 2.0 connector (for a mouse and keyboard)

STEP 15 SELECT OPERATING SYSTEM AND VALUE-ADDED SOFTWARE

Several operating systems and value-added software programs are available. Select as desired from [Table 32](#).

Table 32 OSs and Value-Added Software (for 2-CPU servers)

PID Description	Product ID (PID)
Microsoft Windows Server	
MSWS-12-ST2S	Windows Server 2012 Standard (2 CPU/2 VMs)
MSWS-12-DC2S	Windows Server 2012 Datacenter (2 CPU/Unlimited VMs)
MSWS-12-ST2S-NS	Windows Server 2012 Standard (2 CPU/2 VMs) No Cisco SVC
MSWS-12-DC2S-NS	Windows Server 2012 Datacenter (2 CPU/Unlim VM) No Cisco SVC
MSWS-12R2-ST2S	Windows Server 2012 R2 Standard (2 CPU/2 VMs)
MSWS-12R2-DC2S	Windows Server 2012 R2 Datacenter (2 CPU/Unlimited VMs)
MSWS-12R2-ST2S-NS	Windows Server 2012 R2 Standard (2 CPU/2 VMs) No Cisco SVC
MSWS-12R2-DC2S-NS	Windows Server 2012 R2 Datacen (2 CPU/Unlim VM) No Cisco Svc
SUSE	
SLES-2S2V-1A	SUSE Linux Enterprise Svr (1-2 CPU,1 Phys);1yr Support Reqd
SLES-2S2V-3A	SUSE Linux Enterprise Svr (1-2 CPU,1 Phys);3yr Support Reqd
SLES-2S2V-5A	SUSE Linux Enterprise Svr (1-2 CPU,1 Phys);5yr Support Reqd
SLES-2S2V-1S	SUSE Linux Enterprise Svr (1-2 CPU,1-2 VM); Prio 1-Yr SnS
SLES-2S2V-3S	SUSE Linux Enterprise Svr (1-2 CPU,1-2 VM); Prio 3-Yr SnS
SLES-2S2V-5S	SUSE Linux Enterprise Svr (1-2 CPU,1-2 VM); Prio 5-Yr SnS
SLES-2SUV-1A	SUSE Linux Enterprise Svr (1-2 CPU,Unl Vrt);1yr Support Reqd
SLES-2SUV-3A	SUSE Linux Enterprise Svr (1-2 CPU,Unl Vrt);3yr Support Reqd
SLES-2SUV-5A	SUSE Linux Enterprise Svr (1-2 CPU,Unl Vrt);5yr Support Reqd
SLES-2SUV-1S	SUSE Linux Enterprise Svr (1-2 CPU,Unl VM); Prio 1-Yr SnS
SLES-2SUV-3S	SUSE Linux Enterprise Svr (1-2 CPU,Unl VM); Prio 3-Yr SnS
SLES-2SUV-5S	SUSE Linux Enterprise Svr (1-2 CPU,Unl VM); Prio 5-Yr SnS
SLES-2S-HA-1S	SUSE Linux High Availability Ext (1-2 CPU); 1yr Support Reqd
SLES-2S-HA-3S	SUSE Linux High Availability Ext (1-2 CPU); 3yr Support Reqd
SLES-2S-HA-5S	SUSE Linux High Availability Ext (1-2 CPU); 5yr Support Reqd
SLES-2S-GC-1S	SUSE Linux GEO Clustering for HA (1-2 CPU); 1yr Sns
SLES-2S-GC-3S	SUSE Linux GEO Clustering for HA (1-2 CPU); 3yr Sns
SLES-2S-GC-5S	SUSE Linux GEO Clustering for HA (1-2 CPU); 5yr Sns
VMware 5	
VMW-VS5-STD-1A	VMware vSphere 5 Standard for 1 Processor, 1 Year, Support Rqd
VMW-VS5-STD-2A	VMware vSphere 5 Standard for 1 Processor, 2 Year, Support Rqd
VMW-VS5-STD-3A	VMware vSphere 5 Standard for 1 Processor, 3 Year, Support Rqd
VMW-VS5-STD-4A	VMware vSphere 5 Standard for 1 Processor, 4 Year, Support Rqd
VMW-VS5-STD-5A	VMware vSphere 5 Standard for 1 Processor, 5 Year, Support Rqd

Table 32 OSs and Value-Added Software (for 2-CPU servers) *(continued)*

PID Description	Product ID (PID)
VMW-VS5-ENT-1A	VMware vSphere 5 Enterprise for 1 Processor, 1 Year Support Rqd
VMW-VS5-ENT-2A	VMware vSphere 5 Enterprise for 1 CPU, 2 Yr Support Rqd
VMW-VS5-ENT-3A	VMware vSphere 5 Enterprise for 1 CPU, 3 Yr Support Rqd
VMW-VS5-ENT-4A	VMware vSphere 5 Enterprise for 1 Processor, 4 Year Support Rqd
VMW-VS5-ENT-5A	VMware vSphere 5 Enterprise for 1 CPU, 5 Yr Support Rqd
VMW-VS5-ENTP-1A	VMware vSphere 5 Enterprise Plus for 1 Processor, 1 Year Support Rqd
VMW-VS5-ENTP-2A	VMware vSphere 5 Enterprise Plus for 1 CPU, 2 Yr Support Rqd
VMW-VS5-ENTP-3A	VMware vSphere 5 Enterprise Plus for 1 Processor, 3 Year Support Rqd
VMW-VS5-ENTP-4A	VMware vSphere 5 Enterprise Plus for 1 Processor, 4 Year Support Rqd
VMW-VS5-ENTP-5A	VMware vSphere 5 Enterprise Plus for 1 Processor, 5 Year Support Rqd
VMW-VC5-STD-1A	VMware vCenter 5 Server Standard, 1 yr support required
VMW-VC5-STD-2A	VMware vCenter 5 Server Standard, 2 yr support required
VMW-VC5-STD-3A	VMware vCenter 5 Server Standard, 3 yr support required
VMW-VC5-STD-4A	VMware vCenter 5 Server Standard, 4 yr support required
VMW-VC5-STD-5A	VMware vCenter 5 Server Standard, 5 yr support required
UCS-VMW-TERMS	Acceptance of Terms, Standalone VMW License for UCS Servers
Red Hat	
RHEL-2S2V-1A	Red Hat Enterprise Linux (1-2 CPU,1-2 VN); 1-Yr Support Req
RHEL-2S2V-3A	Red Hat Enterprise Linux (1-2 CPU,1-2 VN); 3-Yr Support Req

STEP 16 SELECT OPERATING SYSTEM MEDIA KIT

Select the optional operating system media listed in [Table 33](#).

Table 33 OS Media

Product ID (PID)	PID Description
RHEL-6	RHEL 6 Recovery Media Only (Multilingual)
MSWS-12-ST2S-MD	Windows Server 2012 Standard (2 CPU/2 VMs) Recovery Media
MSWS-12-DC2S-MD	Windows Server 2012 Datacenter(2 CPU/Unlimited VM) Rec Media
MSWS-12R2-ST2S-RM	Windows Server 2012 R2 Standard (2 CPU/2 VMs) Recovery Media
MSWS-12R2-DC2S-RM	Windows Server 2012 R2 Datacen(2 CPU/Unlimited VM) Rec Media

STEP 17 SELECT SERVICE and SUPPORT LEVEL

A variety of service options are available, as described in this section.

Unified Computing Warranty, No Contract

If you have noncritical implementations and choose to have no service contract, the following coverage is supplied:

- Three-year parts coverage.
- Next business day (NBD) onsite parts replacement eight hours a day, five days a week.
- 90-day software warranty on media.
- Ongoing downloads of BIOS, drivers, and firmware updates.

SMARTnet for UCS

For support of the entire Unified Computing System, Cisco offers the Cisco SMARTnet for UCS Service. This service provides expert software and hardware support to help sustain performance and high availability of the unified computing environment. Access to Cisco Technical Assistance Center (TAC) is provided around the clock, from anywhere in the world.

Smart Call Home provides proactive, embedded diagnostics and real-time alerts. The Cisco SMARTnet for UCS Service includes flexible hardware replacement options, including replacement in as little as two hours. There is also access to Cisco's extensive online technical resources to help maintain optimal efficiency and uptime of the unified computing environment. You can choose a desired service listed in [Table 34](#).

Table 34 Cisco SMARTnet for UCS Service

Product ID (PID)	On Site?	Description
CON-PREM-S3260BSE	Yes	ONSITE 24X7X2 UCS S3260 Server
CON-OSP-S3260BSE	Yes	ONSITE 24X7X4 UCS S3260 Server
CON-OSE-S3260BSE	Yes	ONSITE 8X5X4 UCS S3260 Server
CON-OS-S3260BSE	Yes	ONSITE 8X5XNBD UCS S3260 Server
CON-S2P-S3260BSE	No	SMARTNET 24X7X2 UCS S3260 Server
CON-SNTP-S3260BSE	No	SMARTNET 24X7X4 UCS S3260 Server
CON-SNTE-S3260BSE	No	SMARTNET 8X5X4 UCS S3260 Server
CON-SNT-S3260BSE	No	SMARTNET 8X5XNBD UCS S3260 Server

SMARTnet for UCS Hardware Only Service

For faster parts replacement than is provided with the standard Cisco Unified Computing System warranty, Cisco offers the Cisco SMARTnet for UCS Hardware Only Service. You can choose from two levels of advanced onsite parts replacement coverage in as little as four hours. SMARTnet for UCS Hardware Only Service provides remote access any time to Cisco support professionals who can determine if a return materials authorization (RMA) is required. You can choose a service listed in [Table 35](#).

Table 35 SMARTnet for UCS Hardware Only Service

Product ID (PID)	Service Level GSP	On Site?	Description
CON-UCW7-S3260BSE	UCW7	Yes	UC PLUS 24X7X40S UCS S3260 Server
CON-UCW5-S3260BSE	UCW5	Yes	UC PLUS 8X5XNBDOS UCS S3260 Server

Unified Computing Partner Support Service

Cisco Partner Support Service (PSS) is a Cisco Collaborative Services service offering that is designed for partners to deliver their own branded support and managed services to enterprise customers. Cisco PSS provides partners with access to Cisco's support infrastructure and assets to help them:

- Expand their service portfolios to support the most complex network environments
- Lower delivery costs
- Deliver services that increase customer loyalty

Partner Unified Computing Support Options enable eligible Cisco partners to develop and consistently deliver high-value technical support that capitalizes on Cisco intellectual assets. This helps partners to realize higher margins and expand their practice.

PSS is available to all Cisco PSS partners, but requires additional specializations and requirements. For additional information, see the following URL:

www.cisco.com/go/partnerucssupport

The two Partner Unified Computing Support Options include:

- Partner Support Service for UCS
- Partner Support Service for UCS Hardware Only

Partner Support Service for UCS provides hardware and software support, including triage support for third party software, backed by Cisco technical resources and level three support. See [Table 36](#).

Table 36 Partner Support Service for UCS

Product ID (PID)	Service Level GSP	On Site?	Description
CON-PSJ1-S3260BSE	PSJ1	No	UCS SUPP PSS 8X5XNBD UCS S3260 Server
CON-PSJ2-S3260BSE	PSJ2	No	UCS SUPP PSS 8X5X4 UCS S3260 Server
CON-PSJ3-S3260BSE	PSJ3	No	UCS SUPP PSS 24X7X4 UCS S3260 Server
CON-PSJ4-S3260BSE	PSJ4	No	UCS SUPP PSS 24X7X2 UCS S3260 Server
CON-PSJ6-S3260BSE	PSJ6	Yes	UCS SUPP PSS 8X5X4 Onsite UCS S3260 Server
CON-PSJ7-S3260BSE	PSJ7	Yes	UCS SUPP PSS 24X7X4 Onsite UCS S3260 Server
CON-PSJ8-S3260BSE	PSJ8	Yes	UCS SUPP PSS 24X7X2 Onsite UCS S3260 Server

Partner Support Service for UCS Hardware Only provides customers with replacement parts in as little as two hours. See [Table 37](#).

Table 37 Partner Support Service for UCS (Hardware Only)

Product ID (PID)	Service Level GSP	On Site?	Description
CON-PSW2-S3260BSE	PSW2	No	UCS W PL PSS 8X5X4 UCS S3260 Server
CON-PSW3-S3260BSE	PSW3	No	UCS W PL PSS 24X7X4 UCS S3260 Server
CON-PSW4-S3260BSE	PSW4	No	UCS W PL PSS 24X7X2 UCS S3260 Server
CON-PSW6-S3260BSE	PSW6	Yes	UCS W PL PSS 8X5XX4 Onsite UCS S3260 Server
CON-PSW7-S3260BSE	PSW7	Yes	UCS W PL PSS 24X7X4 Onsite UCS S3260 Server

Cisco Combined Services

Combined Services makes it easier to purchase and manage required services under one contract. SMARTnet services for UCS help increase the availability of your vital data center infrastructure and realize the most value from your unified computing investment. The more benefits you realize from the Cisco Unified Computing System (Cisco UCS), the more important the technology becomes to your business. These services allow you to:

- Optimize the uptime, performance, and efficiency of your UCS
- Protect your vital business applications by rapidly identifying and addressing issues

- Strengthen in-house expertise through knowledge transfer and mentoring
- Improve operational efficiency by allowing UCS experts to augment your internal staff resources
- Enhance business agility by diagnosing potential issues before they affect your operations

Unified Computing Drive Retention Service

With the Cisco Unified Computing Drive Retention (UCDR) Service, you can obtain a new disk drive in exchange for a faulty drive without returning the faulty drive. In exchange for a Cisco replacement drive, you provide a signed Certificate of Destruction (CoD) confirming that the drive has been removed from the system listed, is no longer in service, and has been destroyed.

Sophisticated data recovery techniques have made classified, proprietary, and confidential information vulnerable, even on malfunctioning disk drives. The UCDR service enables you to retain your drives and ensures that the sensitive data on those drives is not compromised, which reduces the risk of any potential liabilities. This service also enables you to comply with regulatory, local, and federal requirements.

If your company has a need to control confidential, classified, sensitive, or proprietary data, you might want to consider one of the Drive Retention Services listed in [Table 38](#), [Table 39](#), or [Table 40](#).



NOTE: Cisco does not offer a certified drive destruction service as part of this service.

Table 38 Drive Retention Service Options

Service Description	Service Program Name	Service Level GSP	Service Level	Product ID (PID)
SMARTnet for UCS Service with Drive Retention	UCS DR	UCSD7	24x7x4 Onsite	CON-UCSD7-S3260BSE
		UCSD5	8x5xNBD Onsite	CON-UCSD5-S3260BSE
SMARTnet for UCS HW ONLY+Drive Retention	UCS HW+DR	UCWD7	24x7x4 Onsite	CON-UCWD7-S3260BSE
		UCWD5	8x5xNBD Onsite	CON-UCWD5-S3260BSE

Table 39 Drive Retention Service Options for Partner Support Service

Service Description	Service Level GSP	Service Level	Product ID (PID)
Partner Support Service for UCS Drive Retention	PSJD6	8x5x4 Onsite	CON-PSJD6-S3260BSE
	PSJD7	24x7x4 Onsite	CON-PSJD7-S3260BSE

Table 40 Drive Retention Service Options for Partner Support Service (Hardware Only)

Service Description	Service Level GSP	Service Level	Product ID (PID)
Partner Support Service for UCS Drive Retention Hardware only	PSWD6	8x5x4 Onsite	CON-PSWD6-S3260BSE
	PSWD7	24x7x4 Onsite	CON-PSWD7-S3260BSE

For more service and support information, see the following URL:

http://www.cisco.com/en/US/services/ps2961/ps10312/Unified_Computing_Services_Overview.pdf

For a complete listing of available services for Cisco Unified Computing System, see this URL:

http://www.cisco.com/en/US/products/ps10312/serv_group_home.html

OPTIONAL STEP - ORDER RACK(S)

The optional R42612 rack is available from Cisco for the C-Series servers, including the C240 M4 SFF server. This rack is a standard 19-inch rack and can be ordered with a variety of options, as listed in [Table 41](#). Racks are shipped separately from the C240 M4 SFF server.

Table 41 Racks and Rack Options

Product ID (PID)	PID Description
RACK2-UCS	Cisco R42612 expansion rack, no side panels. This type of rack is used for multiple-rack deployments.
RACK2-UCS2	Cisco R42612 static (standard) rack, with side panels. This type of rack is used for single-rack and end of row deployments. Side panels are needed for racks at the ends of multiple-rack deployments. For example, when configuring a row of 5 racks, order 1 standard rack plus 4 expansion racks. Apply the side panels from the standard rack to the racks at each end of the row.
RACK-BLANK-001	Blanking panels (qty 12), 1U, plastic, toolless. Recommended to ensure proper airflow. Fill all empty RU spaces in the front of the rack. Because each blanking panel PID includes 12 panels, use the following calculation: $42RU - \text{occupied RU} = \text{available RU}$. Divide available RU by 12 to determine PID order quantity.
RACK-CBLMGT-001	Cable mgt D rings (qty 10), metal. Use the D rings to bundle system cables to ensure proper airflow.
RACK-CBLMGT-003	Brush strip (qty 1), 1 U. The brush strip promotes proper airflow while allowing cables to be passed from the front to the rear of the rack.
RACK-CBLMGT-011	Cable mgt straps (qty 10), Velcro. Use the Velcro straps to bundle system cables to ensure proper airflow.
RACK-FASTEN-001	Mounting screws (qty 100), M6. The rack ships with nuts and screws, but extras may be ordered.
RACK-FASTEN-002	Cage nuts (qty 50), M6. The rack ships with nuts and screws, but extras may be ordered.
RACK2-JOIN-001	Rack joining kit. Use the kit to connect adjacent racks within a row. Order 1 unit less than the number of racks in the row.
RACK2-GRND-001	Cisco R42612 grounding kit

For more information about the R42612 rack, see [DIMM Population Rules, page 53](#).

OPTIONAL STEP - ORDER PDU

An optional power distribution unit (PDU) is available from Cisco for the C-Series rack servers, including the C240 M4 server. This PDU is available in a zero rack unit (RU) style or horizontal PDU style (see [Table 42](#)). For more information about the PDU, see [PDUs, page 60](#).

Table 42 Available PDUs

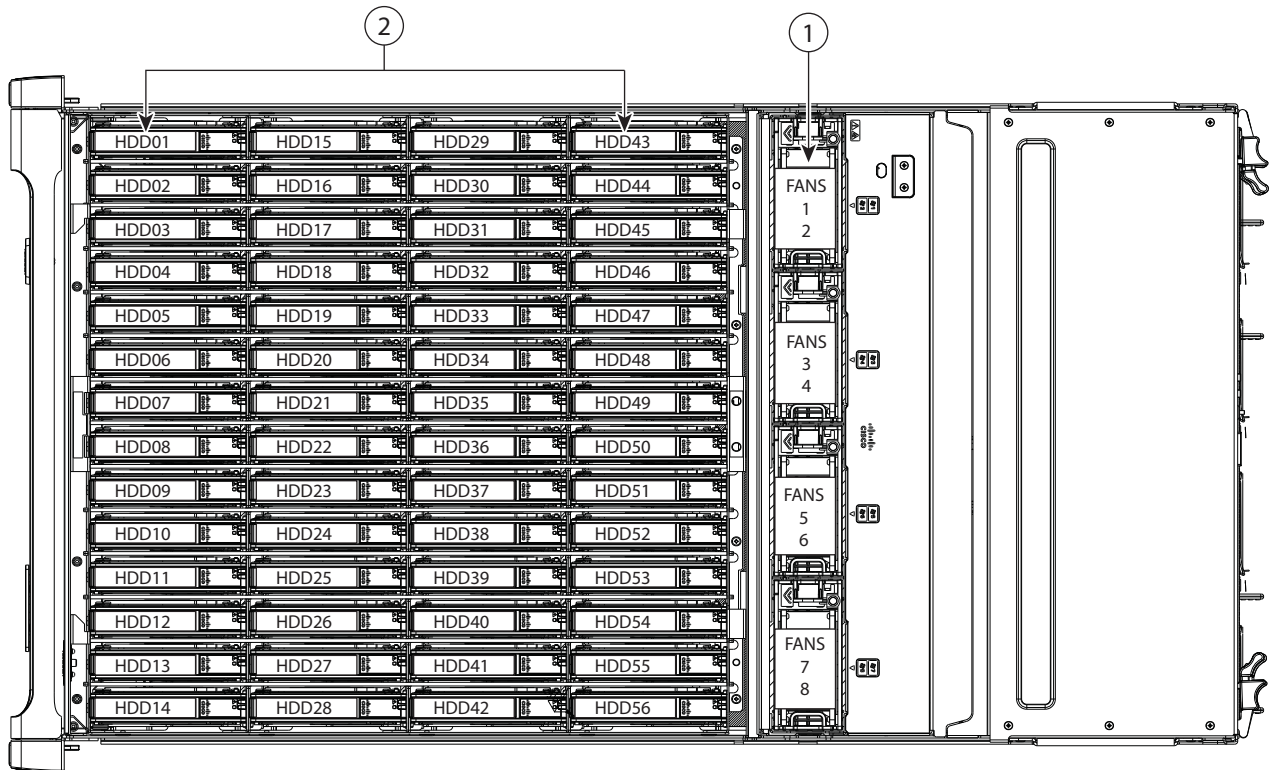
Product ID (PID)	Description	Plug	Country
Zero-RU PDUs			
RP208-30M1P-6-36	30 A, single-phase, vertical-mount PDU with 6 C19 and 36 C13 connectors	L6-30P	North America
RP208-30M3P-6-30	30 A, three-phase, vertical-mount PDU with 6 C19 and 30 C13 connectors	L15-30P	North America
RP208-60M3P-12-9	60 A, three-phase, vertical-mount PDU with 12 C19 and 9 C13 connectors	IEC60309 460P9	North America
RP230-32M1P-6-36	32 A, single-phase, button-mount (rear and sides) PDU with 6 C19 and 36 C13 connectors	IEC60309 332P6	International
RP230-32M3P-12-12	32 A, single-phase, button-mount (rear and sides) PDU with 12 C19 and 12 C13 connectors	IEC60309 532P6	International
Horizontal PDUs (occupy RU space)			
RP208-30M1P-4-8 (1 RU space)	30 A, single-phase, horizontal-mount PDU with 4 C19 and 8 C13 connectors	L6-30P	North America
RP208-60M3P-12 (2 RU spaces)	48 A, three-phase, horizontal-mount PDU with 12 C19 connectors	L15-30P	North America

SUPPLEMENTAL MATERIAL

CHASSIS

An internal view of the Cisco UCS S3260 chassis with the top cover removed is shown in *Figure 6*.

Figure 6 Cisco UCS S3260 Server With Top Cover Off



<p>1</p>	<p>Fan modules (four, hot-swappable) Each fan module contains two fans. Even numbers are upper fans, odd numbers are lower fans.</p>	<p>2</p>	<p>Internal drive bays (up to 56 2.5-inch drives, hot-swappable)</p>
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RAID CONTROLLER

RAID levels supported by the 12 Gbps RAID controller (UCS-C3K-M4RAID AND UCS-S3260-DRAID) are as follows:

- JBOD
- RAID 0 uses striping to provide high data throughput, especially for large files in an environment that does not require fault tolerance.
- RAID 1 uses mirroring so that data written to one drive is simultaneously written to another drive which is good for small databases or other applications that require small capacity, but complete data redundancy.
- RAID 5 uses disk striping and parity data across all drives (distributed parity) to provide high data throughput, especially for small random access.
- RAID 6 uses distributed parity, with two independent parity blocks per stripe, and disk striping. A RAID 6 virtual drive can survive the loss of two drives without losing data. A RAID 6 drive group, which requires a minimum of three drives, is similar to a RAID 5 drive group. Blocks of data and parity information are written across all drives. The parity information is used to recover the data if one or two drives fail in the drive group.
- A RAID 00 drive group is a spanned drive group that creates a striped set from a series of RAID 0 drive groups.
- RAID 10, a combination of RAID 0 and RAID 1, consists of striped data across mirrored spans. A RAID 10 drive group is a spanned drive group that creates a striped set from a series of mirrored drives. RAID 10 allows a maximum of eight spans. You must use an even number of drives in each RAID virtual drive in the span. The RAID 1 virtual drives must have the same stripe size. RAID 10 provides high data throughput and complete data redundancy but uses a larger number of spans.
- RAID 50, a combination of RAID 0 and RAID 5, uses distributed parity and disk striping. A RAID 50 drive group is a spanned drive group in which data is striped across multiple RAID 5 drive groups. RAID 50 works best with data that requires high reliability, high request rates, high data transfers, and medium-to-large capacity.
- RAID 60, a combination of RAID 0 and RAID 6, uses distributed parity, with two independent parity blocks per stripe in each RAID set, and disk striping. A RAID 60 virtual drive can survive the loss of two drives in each of the RAID 6 sets without losing data. It works best with data that requires high reliability, high request rates, high data transfers, and medium-to-large capacity.

RAID Grouping Allowed:

- Maximum number of drives per RAID Groups is 32
- Maximum number of VD allowed is 64

CPU and DIMMs

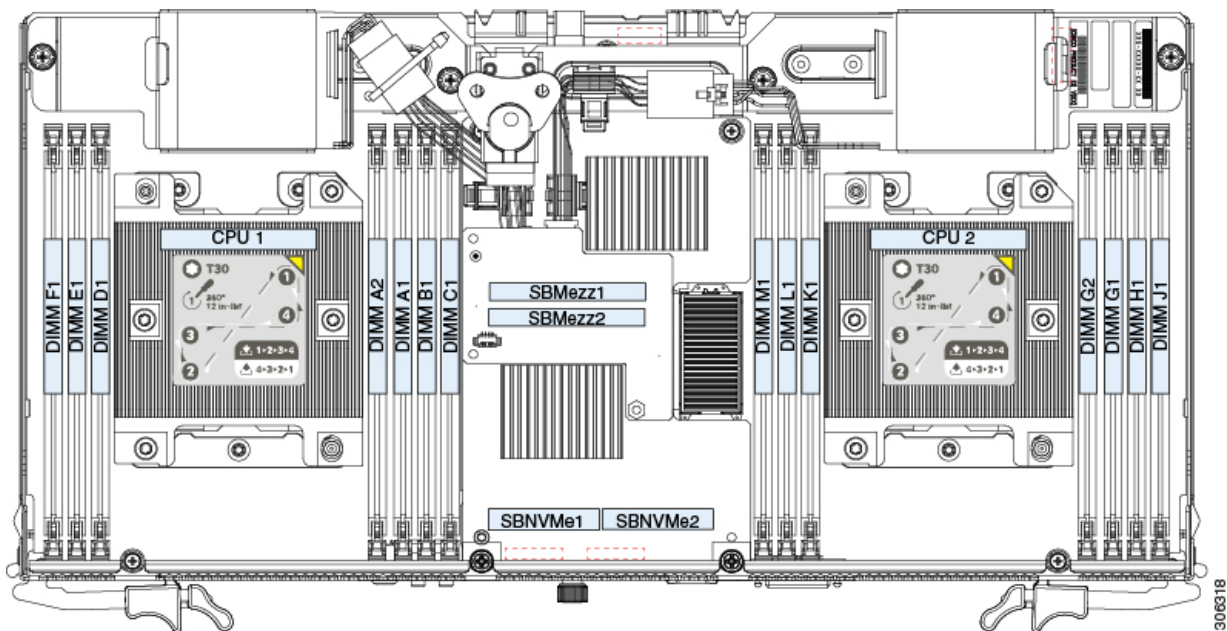
S3260 M5 Server Node Physical Layout

DIMM Sockets

The following figure shows the DIMM sockets and how they are numbered on an S3260 M5 server node board.

- A server node has 14 DIMM sockets (7 for each CPU).
- Channels are labeled with letters as shown in the following figure. For example, channel A = DIMM sockets A1, A2.
- Channels A and G use two DIMMs per channel (DPC); all other channels use one DPC

Figure 7 S3260 M5 DIMM and CPU Numbering



S3260 M4 Server Node Physical Layout

Each CPU has four DIMM channels:

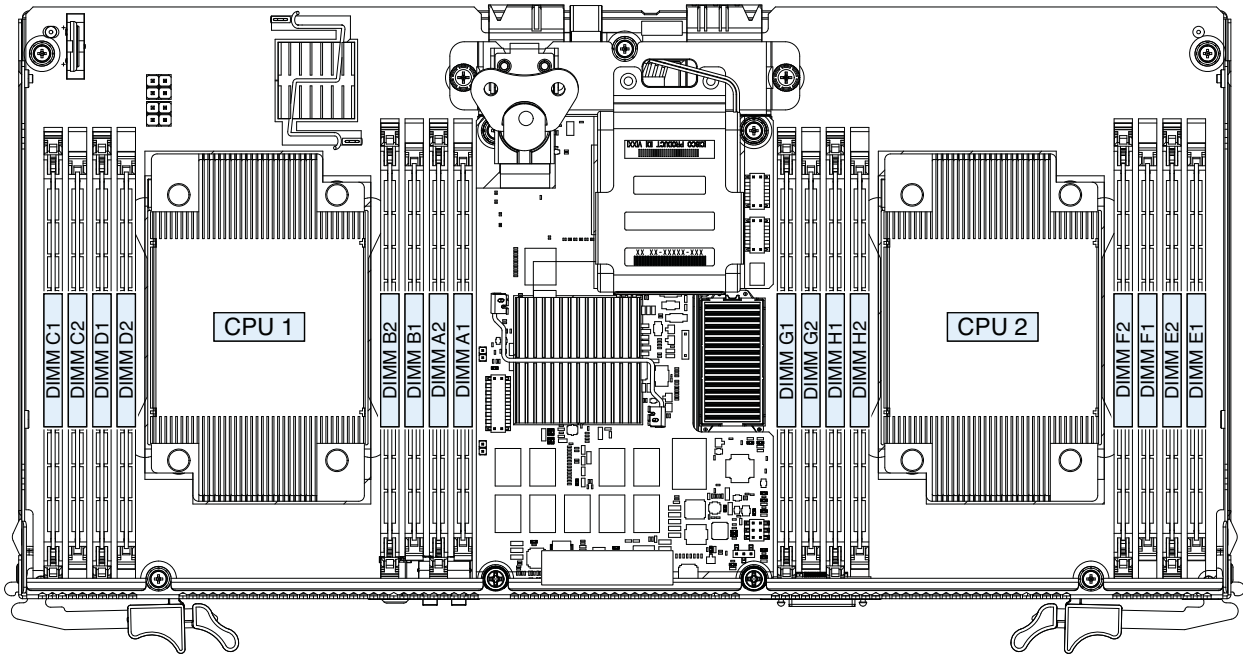
- CPU1 has channels A, B, C, and D
- CPU2 has channels E, F, G, and H

Each DIMM channel has two slots: slot 1 and slot 2. The blue-colored DIMM slots are for slot 1 and the black-colored slots for slot 2.

As an example, DIMM slots A1, B1, C1, and D1 belong to slot 1, while A2, B2, C2, and D2 belong to slot 2.

Figure 8 shows how slots and channels are physically laid out on the motherboard. The DIMM slots on the right half of the motherboard (channels E, F, G, and H) are associated with CPU 2, while the DIMM slots on the left half of the motherboard (channels A, B, C, and D) are associated with CPU 1. The slot 1 DIMM slots are always located farther away from a CPU than the corresponding slot 2 slots. Slot 1 slots are populated before slot 2 slots.

Figure 8 Physical Layout of CPU DIMM Channels and Slots



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Memory Population Rules

S3260 M5 Server Node

- For optimal performance, spread DIMMs evenly across both CPUs and all channels. Populate the DIMM slots of each CPU identically.
- For optimal performance, populate DIMMs in the order shown in the following table, depending on the number of DIMMs per CPU.



NOTE: The table below lists recommended configurations. Using 5 DIMMs per CPU is not recommended.

Table 43 DIMM Population Order

Number of DIMMs per CPU (Recommended Configurations)	Populate CPU 1 Slots		Populate CPU 2 Slots	
	Blue #1 Slots	Black #2 Slot	Blue #1 Slots	Black #2 Slot
1	(A1)	-	(G1)	-
2	(A1, B1)	-	(G1, H1)	-
3	(A1, B1, C1)	-	(G1, H1, J1)	-
4	(A1, B1); (D1, E1)	-	(G1, H1); (K1, L1)	-
6	(A1, B1); (C1, D1); (E1, F1)	-	(G1, H1); (J1, K1); (L1, M1)	-
7	(A1, B1); (C1, D1); (E1, F1)	(A2)	(G1, H1); (J1, K1); (L1, M1)	(G2)

Table 44 DIMM Mixing Rules

DIMM Parameter	DIMMs in the same Channel	DIMMs in the Same Bank
DIMM capacity	You can mix different capacity DIMMs in the same channel (for example, A1, A2).	You can mix different capacity DIMMs in the same bank (for example, A1, B1, C1). However, for optimal performance DIMMs in the same bank should have the same capacity.
DIMM speed	You can mix speeds, but DIMMs will run at the speed of the slowest DIMMs/CPU installed in the channel.	You can mix speeds, but DIMMs will run at the speed of the slowest DIMMs/CPU installed in the bank.

Table 44 DIMM Mixing Rules

DIMM Parameter	DIMMs in the same Channel	DIMMs in the Same Bank
DIMM type	You cannot mix DIMM types in a channel.	You cannot mix DIMM types in a bank.

S3260 M4 Server Node

When considering the memory configuration of your server, consider the following items:

- Each channel has two DIMM slots (for example, channel A = slots A1 and A2).
 - A channel can operate with one or two DIMMs installed.
 - If a channel has only one DIMM, populate slot 1 first.
- When both CPUs are installed, populate the DIMM slots of each CPU identically.
 - Fill blue slots in the channels first: A1, E1, B1, F1, C1, G1, D1, H1
 - Fill black slots in the channels second: A2, E2, B2, F2, C2, G2, D2, H2
- Any DIMM installed in a DIMM socket for which the CPU is absent is not recognized.
- Observe the DIMM mixing rules shown in [Table 45](#)

Table 45 DIMM Rules for Cisco UCS S3260 M4 Servers

DIMM Parameter	DIMMs in the Same Channel	DIMM in the Same Slot
<u>DIMM Capacity</u>		
16, 32, or 64 GB	DIMMs in the same channel (for example, A1 and A2) can have different capacities.	For best performance, DIMMs in the same slot (for example, A1, B1, C1, D1) should have the same capacity.
	Do not mix LRDIMMs with RDIMMs	Do not mix LRDIMMs with RDIMMs
<u>DIMM Speed</u>		
1866 MHz for S3260 M3 2400 MHz for S3260 M4	DIMMs will run at the lowest speed of the DIMMs/CPU installed	DIMMs will run at the lowest speed of the DIMMs/CPU installed
<u>DIMM Type</u>		
RDIMMs or LRDIMMs	Do not mix DIMM types in a channel	Do not mix DIMM types in a slot

DIMM Population Rules

Internal Drive Population Guidelines

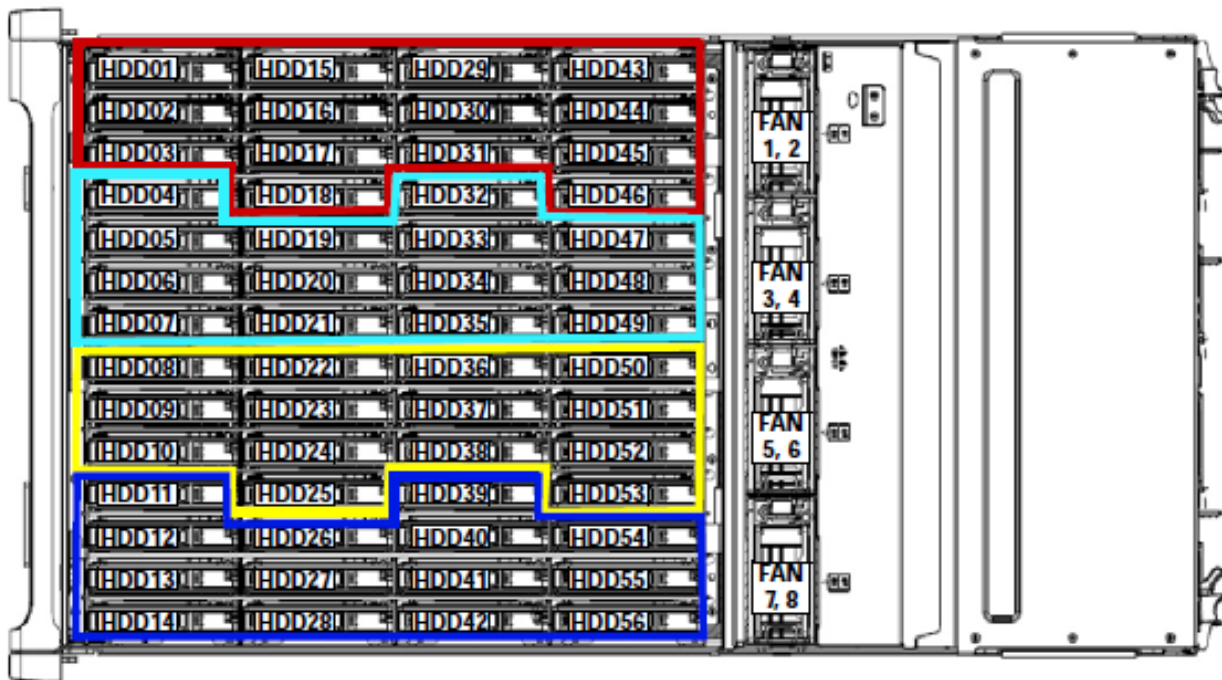
The system has 56 internal drive bays in the main chassis. *Figure 9* shows the internal drive bay numbering. When populating internal drives, follow these guidelines:

- Populate drive bays as follows:
 - Populate HDDs starting from the lowest-numbered bays to the highest. Populate row 1 - 14, then row 15 - 28, and so on.
 - Populate SSDs starting from the highest-numbered bays to the lowest. Populate bay 56, then bay 55, and so on.

For example, a system with 36 HDDs and 2 SSDs should have the HDDs in bays 1 - 36 and the SSDs in bays 56 and 55..

- The four colored boxes shown in *Figure 9* represent the four power groups in which the power is distributed for the drive bays. This might be useful for troubleshooting power rail problems.

Figure 9 Internal Drive Bay Numbering



S3260 Upgrade and Servicing-Related Parts

This section lists the upgrade and servicing-related parts you may need during the life of your server. Some of these parts are configured with every server, and some may be ordered when needed or may be ordered and kept on hand as spares for future use. See [Table 46](#)

Table 46 Upgrade and Servicing-related Parts for Cisco UCS S3260 Server

Spare Product ID (PID)	Descriptions
Base Chassis	
UCSC-C3X60-BASE=	UCS Cisco S3260 Base Chassis FRU Spare
UCSC-C3260-SIOC=	Cisco UCS S3260 System IO Controller with VIC 1380 included
UCSC-PSU1-1050W=	Cisco UCS S3260 1050W (AC) Power Supply Unit
UCSC-PSUV2-1050DC=	Cisco UCS S3260 1050W (DC) Power Supply Unit
UCSC-C3X60-FANM=	Cisco UCS S3260 Fan module containing 2x80mm fans FRU
N20-BKVM=	KVM local IO cable for UCS servers console port
UCSC-C3X60-RAIL=	UCS S3260 Rack Rails Kit
UCSC-C3X60-SBLKP=	Cisco UCS S3260 SIOC blanking plate
UCSC-C3X60-BLKP=	Cisco UCS S3260 Server Node blanking plate (needed if server node slot 2 is empty)
UCSC-MRAID-SC=	Supercap for Cisco 12G SAS Modular Raid controller for M3, M4 and M5 Server Nodes
N20-BKVM=	KVM local IO cable for UCS servers console port
M4 Server Node	
UCSC-C3K-M4SRB-U	UCS S3260 M4 Server Node for Intel E5-2600 v4 (configurable spare)
UCSC-C3K-M4SRI-U	UCS S3260 M4 Svr Node w/IOE Configurable
UCSC-C3K-M4SRB=	UCS S3260 M4 Server Node for Intel E5-2600 v4 (Field Replaceable Unit (FRU) only spare)
UCS-C3K-M4RAID=	Cisco UCS S3260 RAID Controller M4 SrvNode w/4G RAID Cache
UCS-S3260-DHBA=	UCS S3260 Dual Pass Through
UCSX-HSCK=	UCS Processor Heat Sink Cleaning Kit (when replacing a CPU)
UCSC-HS-C3X60=	Cisco UCS S3260 Server Node CPU Heatsink FRU
UCS-CPU-GREASE3=	M4 Server CPU thermal grease syringe - needed for heatsink seal1
UCS-S3260-NVM48=	Cisco UCS S3260 800G NVMe SSD for M4 Node(SN 200)
UCS-S3260-NVM416=	Cisco UCS S3260 1.6TB NVMe SSD for M4 Node(SN 200)

Table 46 Upgrade and Servicing-related Parts for Cisco UCS S3260 Server

UCS-S3260-NVM432=	Cisco UCS S3260 3.2TB NVMe SSD for M4 Node(SN 200)
UCS-S3260-NVM464=	Cisco UCS S3260 6.4TB NVMe SSD for M4 Node(SN 200)
M5 Server Node	
UCS-S3260-M5SRB-U	UCS S3260 M5 Server Node based Configurable Spare
UCS-S3260-M5SBI-U	UCS S3260 M5 Server Node and I/O Configurable Spare
UCS-S3260-M5SRB=	UCS S3260 M5 Server Node for Intel Scalable CPUs
UCS-S3260-DHBA=	UCS S3260 Dual Pass Through
UCS-S3260-DRAID=	UCS S3260 Dual Raid Controller based on Broadcom 3316 ROC
UCS-S3260-M5HS=	UCS S3260 M5 Server Node HeatSink
UCS-S3260-NVMSLD1=	UCS S3260 NVMe Sled for Server Node for Dual NVMeS
UCS-S3260-NVG25=	UCS S3260 500G NVMe for M5
UCS-S3260-NVG210=	UCS S3260 1T NVMe for M5 Server Node/SIOC
UCS-S3260-NVG220=	UCS S3260 2T NVMe for M5 Server Node/SIOC
IO Expander (For Addon to Server Node)¹	
UCSC-C3K-M4IO=	Cisco UCS C3000 I/O Expander for M4 C3000 Server Blade
UCSC-C3K-M4IOTOOL=	Cisco UCS C3000 I/O Expander Alignment Tool
UCS-S3260-IOLID=	Cisco UCS S3260 IO Lid (Need to order if ordering UCSC-C3K-M4IO=
UCS-S3260-NVM48=	Cisco UCS S3260 800G NVMe SSD for M4 Node(SN 200)
UCS-S3260-NVM416=	Cisco UCS S3260 1.6TB NVMe SSD for M4 Node(SN 200)
UCS-S3260-NVM432=	Cisco UCS S3260 3.2TB NVMe SSD for M4 Node(SN 200)
UCS-S3260-NVM464=	Cisco UCS S3260 6.4TB NVMe SSD for M4 Node(SN 200)
Drive Bundles: 14 Drives Bundles	
UCS-S3260-14HD2=	UCS S3260 1 row of 2 TB NL-SAS drives (14 total) 28 TB raw (Pack of 14 UCSC-S3260-HD2T)
UCS-S3260-14HD4=	UCS S3260 1 row of 4 TB 512n NL-SAS drives (14 total) 56 TB raw (Pack of 14 UCSC-C3K-HD4TB)
UCS-C3K-14HD6E=	UCS S3260 1 row of 6TB 512e NL-SAS drives (14 total) 84 TB (Pack of 14 UCS-C3K-6TEM)
UCS-C3K-14HD10E=	UCS S3260 1 row of 10 TB 512e NL-SAS drives (14 total) 140 TB (Pack of 14 UCS-C3K-10TEM)
UCSC-C3X60-14HD6=	UCS S3260 1 row of 6 TB 4Kn NL-SAS drives (14 total) 84 TB raw (Pack of 14 UCSC-C3X60-HD6TB)

Table 46 Upgrade and Servicing-related Parts for Cisco UCS S3260 Server

UCS-S3260-14HD8=	S3260 1row of 8TB (4Kn HGST UE10 SAS 7200RPM)(14Total: 112TB) (Pack of 14 UCS-S3260-HD8TB)
UCS-C3K-14HD10=	UCS S3260 1 row of 10 TB 4Kn NL-SAS drives (14 total) 140 TB raw (Pack of 14 UCSC-C3X60-10TB)
UCS-S3260-14HD12	UCS S3260 Single row of drives containing 14x 12TB 4Kn (NL-SAS 7.2K) Drives 168TB Total (Pack of 14 UCS-S3260-HD12T)
Individual Top Load Drives	
UCSC-S3260-HD2T=	CS S3260 2TB 512n NL-SAS 7200 RPM 12Gb HDD w Carrier- Top Load
UCSC-C3K-HD4TB=	UCS S3260 4TB 512n NL-SAS 7200 RPM 12Gb HDD w Carrier- Top Load
UCS-C3K-6TEM=	Cisco UCS S3260 6TB (512e) Top Load
UCS-C3K-10TEM=	Cisco UCS S3260 10TB (512e) Top Load
UCSC-C3X60-HD6TB=	UCS C3X60 6TB 12Gbps NL-SAS 7200RPM HDD w carrier- Rear-load
UCS-S3260-HD8TB=	UCSC 3X60 8TB NL-SAS 7.2KHelium HDD with HDD Carrier
UCSC-C3X60-10TB=	UCSC C3X60 10TB 4Kn for Top-Load
UCS-S3260-HD12T=	UCS C3000 12TB NL-SAS 7200 RPM 12Gb HDD w Carrier- Top Load
Rear Drives (Order the Expander separately)	
UCSC-C3X60-EXPT=	Cisco UCS S3260 Expansion Tray No Drives FRU Only
UCS-S3260-HD2TR=	UCS S3260 2TB NL-SAS 512n 7200 RPM 12Gb HDD w Carrier- Rear Load
UCS-C3K-HD4TBRR=	UCS S3260 4TB 512n NL-SAS 7200 RPM 12Gb HDD w Carrier- Rear Load
UCS-C3K-6TREM=	Cisco UCS S3260 6TB (512e) Rear Load
UCS-C3K-10TREM=	Cisco UCS S3260 10TB (512e) Rear Load
UCSC-C3X60-6TBRR=	UCS C3X60 6TB 12Gbps NL-SAS 7200RPM HDD w carrier- Rear-load
UCSC-C3X60-8TBRR=	UCSC 3X60 8TB NL-SAS 7.2K Helium HDD rear with HDD Carrier
UCSC-C3X60-10TBRR=	UCSC C3X60 10TB 4Kn Drives for Rear-Load
UCS-S3260-HD12TR=	UCS C3000 12TB NL-SAS 7200 RPM 12Gb HDD w Carrier- Rear Load
SSD Drives	
UCS-C3K-3XTSSD4=	Cisco UCS C3000 Top Load 3X 400G SSD
UCS-C3K-3XTSSD8=	Cisco UCS C3000 Top Load 3X 800G SSD
UCS-C3K-3XTSSD16=	Cisco UCS C3000 Top Load 3X 1.6TB SSD
UCS-C3K-3XTSSD32=	Cisco UCS C3000 Top Load 3X 3.2TB SSD
UCS-C3X60-12G240=	UCSC C3X60 400GB 12Gbps SSD (Gen 2) 10X
UCS-C3X60-12G280 =	UCSC C3X60 800GB 12Gbps SSD (Gen 2) 10X

Table 46 Upgrade and Servicing-related Parts for Cisco UCS S3260 Server

UCS-C3X60-12G2160=	UCSC C3X60 1.6TB 12Gbps SSD (Gen 2) 10X
Boot Drives	
UCS-S3260-G2SD24=	UCS S3260 240GB Boot SATA Drives
UCS-C3X60-G2SD48=	UCSC C3X60 480GB Boot SSD (Gen 2)
UCS-C3X60-G2SD160=	UCSC C3X60 1.6TB Boot SSD (Gen 2)
UCS-S3260-G3SD24=	UCS S3260 240G Boot SSD (Micron 6G SATA)
UCS-S3260-G3SD48=	UCS S3260 480G Boot SSD (Micron 6G SATA)
UCS-S3260-G3SD160=	UCS S3260 1.6TB Boot SSD (Micron 6G SATA)
SED Drives	
UCS-C3K-TSSD4K9=	Cisco UCS S3260 400G SED Top Load K9
UCS-C3K-HD6TK9=	Cisco UCS S3260 6TB 4Kn SED Top Load K9
UCS-C3K-HD6TRK9=	Cisco UCS S3260 6TB 4Kn SED Rear Load K9
UCS-C3K-BSD48K9 =	UCS S3260 480G SATA SSD Self Encrypted Boot K9

Notes

1. IO Expander can be ordered in the field, though CIMC and UCSM will need to be reconfigured due to moving the Main Server Node and boot drives into a different slot.

System I/O Controller Blanking Panel

A system I/O controller blanking panel (UCSC-C3X60-SBLKP) must be installed if you remove a System I/O controller from the Cisco UCS S3260 server. This panel is required to maintain system temperatures at safe operating levels, and to keep dust away from system components.

RACKS

The Cisco R42612 rack (see [Figure 10 on page 59](#)) is certified for Cisco UCS installation at customer sites and is suitable for the following equipment:

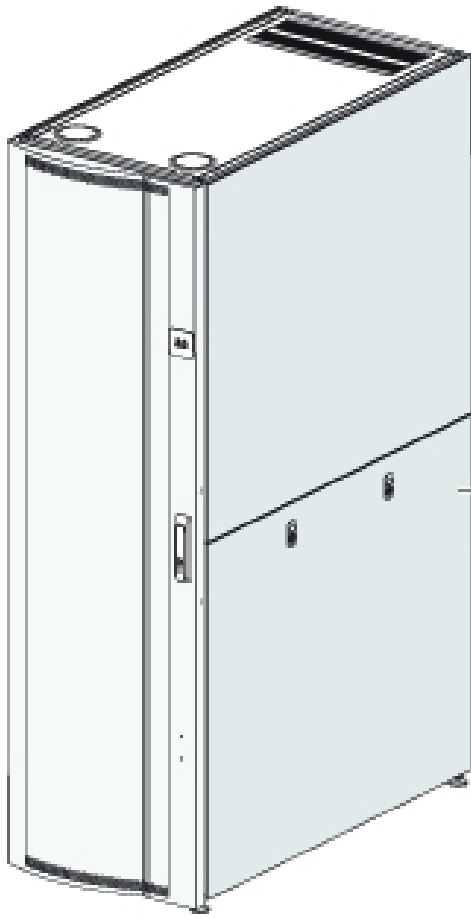
- Cisco UCS B-Series servers and fabric interconnects
- Cisco UCS C-Series and select Nexus switches
- Cisco UCS S-Series

The rack is compatible with hardware designed for EIA-standard 19-inch racks. Rack specifications are listed in [Table 47](#).

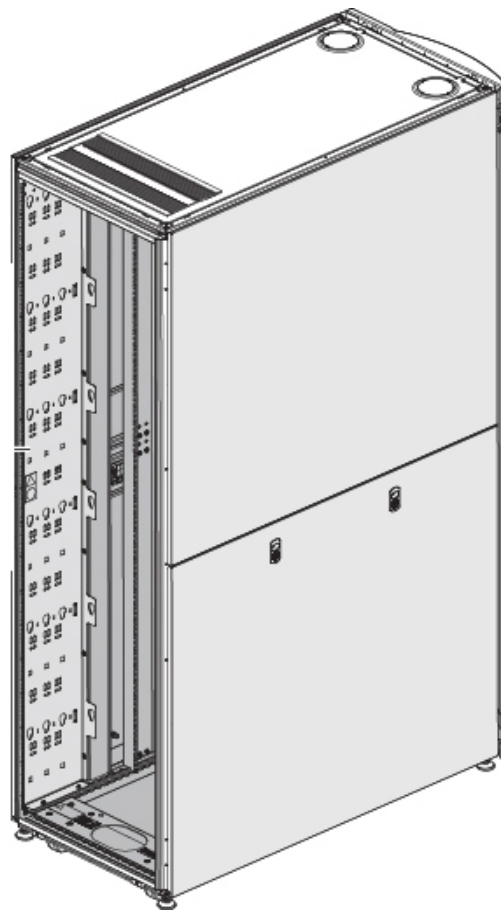
Table 47 R42612 Specifications

Cisco R42612 Rack	Standard (Static with side panels)	Expansion (Static without Side Panels)
Dimensions (H x W x D)	79.25 x 23.50 x 49.84 in. (2013 x 597 x 1266 mm)	79.25 x 23.50 x 49.84 in. (2013 x 597 x 1266 mm)
Dimensions (H x W x D) with packaging	84.25 x 32 x 54.84 in. (2140 x 813 x 1393 mm)	84.25 x 32 x 54.84 in. (2140 x 813 x 1393 mm)
Distance from front mounting rail to rear mounting rail	29.19 in. (741.5 mm)	29.19 in. (741.5 mm)
Weight	339.51 lb (154 kg)	264.55 lb (120 kg)
Weight with packaging	410.06 lb (186 kg)	335.10 lb (152 kg)
Side panels included	Yes	No
Equipment mounting capacity	42 RU	42 RU
Static load capacity	2700 lb (1224.7 kg)	2700 lb (1224.7 kg)
Dynamic load capacity	N/A	N/A

Figure 10 Cisco R42612 Rack



Front View



Rear View

PDU

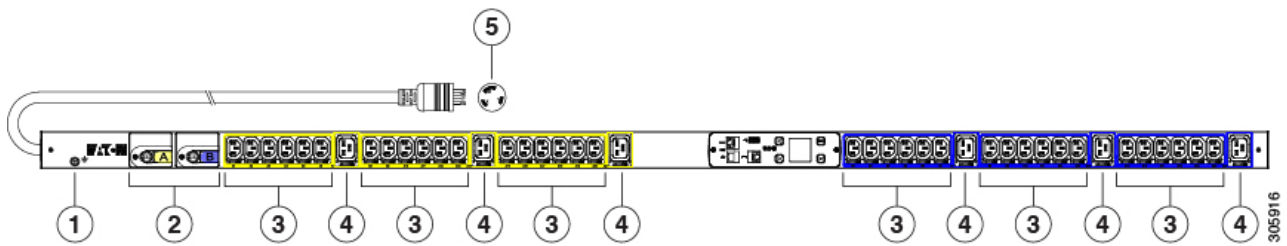
Cisco RP Series Power Distribution Units (PDUs) offer power distribution with branch circuit protection.

Cisco RP Series PDU models distribute power to up to 42 outlets. The architecture organizes power distribution, simplifies cable management, and enables you to move, add, and change rack equipment without an electrician.

With a Cisco RP Series PDU in the rack, you can replace up to two dozen input power cords with just one. The fixed input cord connects to the power source from overhead or under-floor distribution. Your IT equipment is then powered by PDU outlets in the rack using short, easy-to-manage power cords.

The C-series severs accept the zero-rack-unit (ORU) or horizontal PDU. See [Figure 11](#) for one example of a zero rack unit PDU.

Figure 11 RP208-30M1P-6-36 PDU



- 1 = Ground
- 2 = 20 A circuit breakers
- 3 = IEC 60320 C13 outlets
- 4 = EC 60320 C19 outlets
- 5 = NEMA L6-30P plug

TECHNICAL SPECIFICATIONS

Dimensions and Weight

Table 48 Cisco UCS S3260 Dimensions and Weight

Parameter	Value
Height	6.88 in (174 mm)
Width	17.46 in (444 mm)
Depth	32.00 in (813 mm)
Front Clearance	3 in. (76 mm)
Side Clearance	1 in. (25 mm)
Rear Clearance	6 in. (152 mm)
Weight (maximum configuration without rail kit)	195 lbs (88.45 kg)

Power Specifications

The server is available with 1050 W (AC) or 1050 W (DC) power supplies. The power supply specifications are listed in [Table 49](#) and [Table 50](#).

Table 49 Cisco UCS S3260 1050 W (AC) Power Supply Specifications

Description	Specification
Class	RSP2
AC input voltage	200 to 240 VAC nominal (Range: 180 to 264 VAC)
AC input frequency	50 to 60 Hz nominal (Range: 47 to 63 Hz)
Maximum AC input current	8.5 A at 200 VAC
Maximum output power for each power supply	1050 W on main power 30 W on standby power
Power supply output voltage	Main power: 12 VDC Standby power: 12 VDC
Rated output load	Main power: 116.6 DC Amps Standby power: 2.5 DC Amps

Table 50 Cisco UCS S3260 1050 W (DC) Power Supply Specifications

Description	Specification
DC Input voltage range	Nominal range: -48 to -60 VDC nominal (maximum range: -40 to -72 VDC)
Maximum DC input current	32 A at -40 VDC
Maximum input W	1234 W
Maximum output power per PSU	1050 W on 12 VDC main power 36 W on 12 VDC standby power
Maximum inrush current	15 A at -72 VDC
Maximum hold-up time	5 ms at 100% load (1050 W main and 36 W standby)
Power supply output voltage	12 VDC
Power supply standby voltage	12 VDC
Efficiency rating	Greater than or equal to 92% at 50% load
Form factor	RSP2
Input connector	3 wire Connector (Molex MINIFIT SR. R/A)

For configuration-specific power specifications, use the Cisco UCS Power Calculator at this URL:

<http://ucspowercalc.cisco.com>.

Environmental Specifications

The power specifications for the Cisco UCS S3260 server are listed in [Table 51](#).

Table 51 Cisco UCS S3260 Environmental Specifications

Parameter	Minimum
Temperature operating	5°C to 35°C (41°F to 95°F)
Temperature nonoperating	-40° C to 65° C (-40° F to 149° F)
Humidity (RH) operating, non-condensing	10% to 90%
Altitude, operating Derated 1° C for each 305 m	0 m to 3048 m (0 ft to 10,000 ft)
Altitude nonoperating	0 m to 12,192 m (0 ft to 40,000 ft)
Acoustic noise, operating	LWAd 5.4 Bel LpAm 38 dBA

Compliance Requirements

The regulatory compliance requirements for The Cisco UCS S3260 Storage Server are listed in [Table 52](#).

Table 52 Regulatory Compliance Requirements

Parameter	Description
Regulatory Compliance	Products should comply with CE Markings per directives 2004/108/EC and 2006/95/EC
Safety	UL 60950-1 Second Edition CAN/CSA-C22.2 No. 60950-1 Second Edition EN 60950-1 Second Edition IEC 60950-1 Second Edition AS/NZS 60950-1 GB4943 2001
EMC - Emissions	47CFR Part 15 (CFR 47) Class A AS/NZS CISPR22 Class A CISPR22 Class A EN55022 Class A ICES003 Class A VCCI Class A EN61000-3-2 EN61000-3-3 KN22 Class A CNS13438 Class A
EMC - Immunity	EN55024 CISPR24 EN300386 KN24



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