

Spec Sheet



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## **OVERVIEW**

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

The UCS S3260 server helps you achieve the highest levels of data availability and performance. With dual-node capability that is based on the 2<sup>nd</sup> Gen Intel® Xeon® Scalable and Intel® Xeon® Scalable processors, the server features up to 840 TB of local storage in a compact 4-Rack-Unit (4RU) form factor. The drives can be configured with enterprise-class Redundant Array of Independent Disks (RAID) redundancy or with a pass-through Host Bus Adapter (HBA) controller. Network connectivity is provided with dual-port 40-Gbps nodes in each server, with expanded unified I/O capabilities for data migration between Network-Attached Storage (NAS) and SAN environments. This storage-optimized server comfortably fits in a standard 32-inch-depth rack, such as the Cisco® R 42610 Rack.

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 UCS-S3260 M5 server nodes.
  - Each S3260 M5 server node has up to two Intel® Xeon® Scalable CPUs or up to two 2nd Generation Intel® Xeon® Scalable CPUs, up to 14 2666-MHz DDR4 DIMM or DC Persistent Memory Modules (DCPMM) memory slots (with one slot per CPU that can accommodate a DCPMM), a dual-chip passthrough controller or a dual-chip RAID controller with dual 4 GB cache and up to two 7 mm NVMe SSDs.
- (3) System I/O Controller (SIOC): one or two SIOCs with choice of:
  - Onboard Cisco UCS Virtual Interface Card 1300 platform and 2 x 40-Gbps Quad Small Form-factor Pluggable (QSFP) ports (160 Gbps of throughput), or
  - PCIe slot based with choice of Cisco UCS VIC 1455 Quad Port 10/25G, Cisco UCS VIC 1496 Dual Port 100G, or third-party Ethernet and FC Adapters.
- (4) Memory:
  - The M5 server node accommodates seven DIMM slots per CPU. Each slot allows 16-, 32-, 64-, or 128-GB DIMM capacities. There is one Intel Optane DC Persistent Memory Module (DCPMM) ready slot per CPU that also allows 128-GB, 256-GB or 512-GB DCPMM capacities. All seven DIMM slots per CPU can be populated with DIMMs, or one DCPMM per CPU1 can be populated in slot A2 and one DCPMM for CPU2 can be populated in slot G2, with the remaining six slots per CPU being populated with DIMMs. With DCPMMs, the App Direct mode is supported. Memory Mode will be supported at a future date.

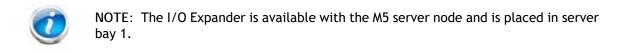
(5) Hard Drives: Up to 56 top-loading Large Form Factor (LFF) HDDs of 4 TB, 6 TB, 8 TB, 10 TB and 12 TB capacities.

(6) Solid State Drives: Optionally up to 28 SSDs of 400 GB, 800 GB, 1.6 TB, and 3.2 TB capacities.

(7) Solid-State Boot Drives: up to two SSD boot drives per server node.

(8) Optional Drive Expansion Node: Up to four Large Form Factor (LFF) 3.5-in. drives in a choice of capacities (2-, 4-, 6-, 8-, 10-, or 12-TB).

(9) I/O Expansion Module: dual x8 Peripheral Component Interconnect Express (PCIe) half-height, half-width slots for third-party add-in cards.



The enterprise-class Cisco UCS S3260 storage server extends the capabilities of Cisco's Unified Computing System portfolio. See *Figure 1 on page 5*.

### Figure 1 Cisco UCS S3260 Storage Server

### Front View



### Rear View

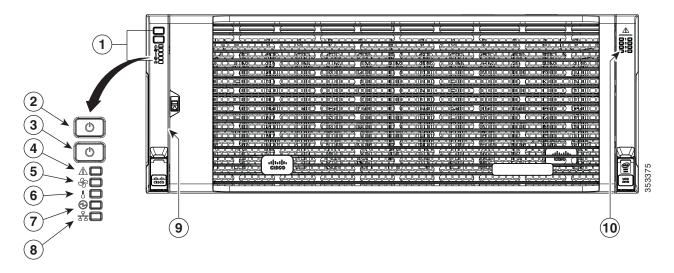


## **DETAILED VIEWS**

### **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	button/LED 7 Power supply status LED	
3	System unit identification button/LED	8	Network link activity LED
4	4 System status LED		Pull-out asset tag (not visible under front bezel)
5	Fan status LED	10	Internal-drive status LEDs

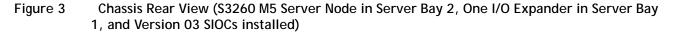
### **Chassis Rear View**

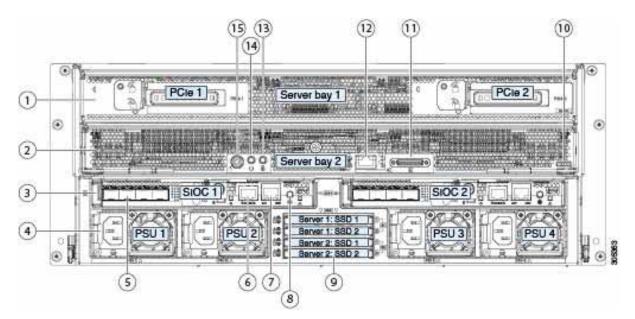


NOTE: There are several combinations of how to populate the S3260 server with Server Nodes, I/O Expanders, Disk Expansion Trays, and SIOCs, as follows:

- One S3260 M5 Server Node in server node bay 1, with one or two SIOCs (SIOC1 is mandatory, SIOC2 is optional), or
- Two S3260 M5 Server Nodes (one in each server bay), with SIOC1 and SIOC2, or
- One S3260 M5 Server node in bay 1 and a drive expansion tray containing 4x 3.5-in. SDD drives in server node bay 2, or
- One S3260 M5 Server node in server node bay 2 and I/O expander in server node bay 1, with SIOC2.

*Figure 3* shows the external features of the rear of the chassis with an S3260 M5 server node and I/O expander installed. Again, many combinations are possible.





1	Server bay 1 ■ Optional I/O Expander (as shown), or	9	Solid state boot drive bays (up to four 2.5-inch SAS SSDs)		
	<ul> <li>Optional Server Node</li> </ul>		<ul> <li>SSDs in Server 1 bays 1 and 2 (upper two bays) require a server node in server bay 1</li> </ul>		
			<ul> <li>SSDs in Server 2 bays 1 and 2 (lower two bays) require a server node in server bay 2</li> </ul>		

2	Server bay 2	10	S3260 M5 server node label (M5 SVRN)
	<ul> <li>Optional Server Node, or</li> </ul>		Note: This label identifies an M5 server node.
	<ul> <li>Optional Disk Expansion Tray</li> </ul>		The S3260 M3 server node does not have a label.
3	System I/O Controller (SIOC) (Version 03 SIOCs are shown)	11	KVM console connector (one on each server node)
	<ul> <li>SIOC 1 is required if you have a server node in server bay 1</li> </ul>		Used with a KVM cable that provides two USB, one VGA, and one serial connector.
	SIOC 2 is required if you have a server node in server bay 2		
4	Power supplies (four, redundant as 3+1)	12	1 Gb Ethernet dedicated management port (RJ-45)
5	QSFP ports (four on each SIOC)	13	Server node unit identification button/LED
	When using the SIOC Version 03 (as shown), the ports vary, depending on which adapter card is installed.		
6	Chassis Management Controller (CMC) debug firmware utility port (one each SIOC)	14	Server node power button
7	10/100/1000 dedicated management port, RJ-45 connector (one each SIOC	15	Server node reset button (resets the chipset in the server node)
8	Not used at this time	16	

## **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 11.

### Table 1 Capabilities and Features

Capability/Feature	Description
Chassis	Four rack unit (4RU) chassis
Server Node	One or two M5 server nodes plug into the back of the chassis
	Two Intel <sup>®</sup> Xeon <sup>®</sup> Scalable CPUs or two 2 <sup>nd</sup> Generation Intel <sup>®</sup> Xeon <sup>®</sup> Scalable CPUs
	Up to fourteen 2666-MHz DDR4 DIMMs (can be mixed with up to two DCPMMs)
	Up to two 7 mm NVMe drives
	Choice of Storage Controller
	<ul> <li>Dual-Chip RAID with 4GB Cache for each chip, or</li> </ul>
	Dual-Chip Pass-Through
	One 1G Host Management Port
	One KVM console connector
System I/O Controller	The system can have one or two system I/O Controllers (SIOC). The SIOCs provide data and management connectivity.
	Management
	<ul> <li>One 10/100/1000 Ethernet dedicated management port per SIOC</li> </ul>
	Data
	<ul> <li>SIOC with embedded VIC 1300 Series with dual Port 40Gb QSFP+ ports each, or</li> </ul>
	<ul> <li>SIOC with PCIe Adapter for VIC 1400 or 3rd Party Ethernet and Fiber Channel Adapters.</li> </ul>

Capability/Feature	Description				
Drives	All drives are hot-pluggable, with no preconditioning required.				
	Top Load Hot Plug Drives				
	<ul> <li>Up to 56 3.5-inch Large Form Factor (LFF) 7.2K RPM NL-SAS drives, in 2 TB, 4 TB, 6 TB, 8T B, 10 TB and 12 TB capacities.</li> </ul>				
	Up to 28 SAS SSD in 3.5 inch carriers (included with each drive), choice of 3WPD and 10WPD SSDs				
	<u> </u>				
	Note: The maximum total of HDDs and SSDs is 56.				
	Rear Load Hot Plug Large Form Factor Hard Drives				
	Rear Disk Expansion Tray				
	<ul> <li>Up to four 3.5-inch LFF 7.2K RPM NL-SAS drives, in 2 TB, 4 TB, 6 TB, 8 TB, 10 TB and 12 TB capacities.</li> </ul>				
	Rear Boot Drives				
	<ul> <li>Up to two rear boot drives (SATA 1WPD SSDs) per server node, in 240 GB, 480 GB, and 1.6 TB capacities.</li> </ul>				
	Server Node NVMe Drives				
	A server node can accommodate up to two NVMe drives.				
	SIOC Drives				
	An SIOC can accommodate up to one NVMe drive.				
I/O Expander	The optional I/O Expander goes in bay 1 of the chassis (upper slot). It provides two 8x PCIe Slots, and up to two 7 mm NVMe SSDs for the M5 server node.				
Storage Controller	For the M5 server node, the storage controller resides on the server node. A choice of RAID and pass-through controllers supports JBOD, RAID 0, 1, 5, 6, 10, 50, and 60. Storage controllers are connected to all the drives by means of the SAS backplane				
Video Interfaces	Integrated 2D graphics controller supporting up to 1600x1200 resolution				
Power Supply	Four hot-swappable power supply (redundant as 3+1), with a choice of 1050W AC or DC supplies				
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 3.2.3 is required to manage S3260 M5 Server Node using 6200 and 6300 Fabric Interconnects				
	UCSM 4.0(1) when SIOC with PCIe Adapter installed				
	UCSM 4.0(4x) supports App Direct memory mode (see Table 6 on page 15)				
	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 12
- STEP 2 SELECT SERVER NODE, page 13
- STEP 3 SELECT SYSTEM I/O CONTROLLER, page 18
- STEP 4 SELECT I/O EXPANDER (OPTIONAL), page 21
- STEP 5 SELECT HARD DISK DRIVE (HDD) MULTIPACKS, page 23
- STEP 6 SELECT HARD DISK DRIVES (HDDs) or SOLID STATE DRIVES (SSDS), page 29
- STEP 7 SELECT BOOT DRIVES (OPTIONAL), page 31
- STEP 8 SELECT DISK EXPANSION TRAY AND DRIVES (OPTIONAL), page 32
- STEP 9 SELECT NIC MODE (OPTIONAL), page 34
- STEP 10 SELECT POWER SUPPLY, page 35
- STEP 11 SELECT POWER CORD(s), page 36
- STEP 12 SELECT REVERSIBLE CABLE MANAGEMENT ARM (OPTIONAL), page 39
- STEP 13 SELECT A KVM CABLE, page 40
- STEP 14 SELECT OPERATING SYSTEM AND VALUE-ADDED SOFTWARE, page 41
- STEP 15 SELECT OPERATING SYSTEM MEDIA KIT, page 44
- STEP 16 SELECT SERVICE and SUPPORT LEVEL, page 45
- OPTIONAL STEP ORDER RACK(s), page 50
- OPTIONAL STEP ORDER PDU, page 51



NOTE: To configure the server online, create an estimate at the following link: https://apps.cisco.com/ccw/cpc/guest/content/ucsContentMain/ucsHome

### 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

### S3260 M5 Server Node (with Intel® Xeon® Scalable CPUs)

This server node is configurable. Choose a base PID for the S3260 M5 server node from Table 3.

### Table 3 UCS C3260 M5 Server Node Base PIDs

Product ID (PID)	Description
UCS-S3260-M5SRB	UCS S3260 M5 Server Node for Intel Scalable CPUs
UCS-S3260-M5SRB-U	UCS S3260 M5 Server Node with no CPU or memory
UCS-S3260-M5SBI-U	UCS S3260 M5 Server Node with I/O Expander configurable

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	Processor Type				
Cisco Recomme	Cisco Recommended CPUs					
UCS-CPU-I4214	Intel 4214 2.2-GHz/85W 12C/16.75 MB DDR4 2400MHz	2 <sup>nd</sup> Gen Intel <sup>®</sup> Xeon <sup>®</sup>				
UCS-CPU-I5220	Intel 5220 2.2-GHz/125W 18C/24.75 MB 3DX DDR4 2666 MHz	2 <sup>nd</sup> Gen Intel <sup>®</sup> Xeon <sup>®</sup>				
4000 Series Pro	ocessor					
UCS-CPU-I4214	Intel 4214 2.2-GHz/85W 12C/16.75 MB DDR4 2400MHz	2 <sup>nd</sup> Gen Intel <sup>®</sup> Xeon <sup>®</sup>				
UCS-CPU-4110	Intel 4110 2.1-GHz 4110/85W 8C/11 MB Cache/DDR4 2400MHz	Intel <sup>®</sup> Xeon <sup>®</sup>				
UCS-CPU-4114	Intel 4114 2.2-GHz 4114/85W 10C/13.75 MB Cache/DDR4 2400MHz	Intel <sup>®</sup> Xeon <sup>®</sup>				
5000 Series Pro	ocessor					
UCS-CPU-I5220 Intel 5220 2.2-GHz/125W 18C/24.75 MB 3DX DDR4 2666 MHz 2 <sup>nd</sup> Gen Intel <sup>®</sup> Xeon <sup>G</sup>						
UCS-CPU-5117	2.0-GHz 5117/105W 14C/19.25 MB Cache/DDR4 2400MHz	Intel <sup>®</sup> Xeon <sup>®</sup>				
UCS-CPU-5118	2.3-GHz 5118/105W 12C/16.50 MB Cache/DDR4 2400MHz	Intel <sup>®</sup> Xeon <sup>®</sup>				
6000 Series Pro	6000 Series Processor					
UCS-CPU-I6240	Intel 6240 2.6GHz/150W 18C/24.75MB 3DX DDR4 2933 MHz	2 <sup>nd</sup> Gen Intel <sup>®</sup> Xeon <sup>®</sup>				
UCS-CPU-6132	2.6-GHz 6132/140W 14C/19.25 MB Cache/DDR4 2666MHz	Intel <sup>®</sup> Xeon <sup>®</sup>				
UCS-CPU-6138	2.0-GHz 6138/125W 20C/27.50 MB Cache/DDR4 2666MHz	Intel <sup>®</sup> Xeon <sup>®</sup>				

### Table 4 CPUs (continued)

Product ID (PID)	Description	Processor Type
UCS-CPU-6152	2.1-GHz 6152/140W 22C/30.25 MB Cache/DDR4 2666MHz	Intel <sup>®</sup> Xeon <sup>®</sup>

- Choose memory from *Table 5*.
  - If you are using DIMMs only, choose 2, 4, 6, or 7 identical DIMMs for CPU from *Table 5*.
  - If you are using DCPMMs, select identical DCPMMs (one per CPU), and 6 identical DIMMs per CPU from *Table 5*.

#### Table 5 DIMMs

Product ID (PID)	Description			
UCS-MR-X16G1RS-H	16GB DDR4-2666-MHz RDIMM/PC4-21300/single rank/x4/1.2v			
UCS-MR-X32G2RS-H	32GB DDR4-2666-MHz RDIMM/PC4-21300/dual rank/x4/1.2v			
UCS-ML-X64G4RS-H	64GB DDR4-2666-MHz LRDIMM/PC4-21300/quad rank/x4/1.2v			
UCS-MR-128G8RS-H	128GB DDR4-2666-MHz TSV-RDIMM/PC4-21300/octal rank/x4/1.2v			
Intel <sup>®</sup> Optane <sup>™</sup> DC Persistent Memory Modules (DCPMMs)				
UCS-MP-256GS-A0	Intel <sup>®</sup> Optane <sup>TM</sup> DC Persistent Memory, 256GB, 2666 MHz			
UCS-MP-512GS-A0	Intel <sup>®</sup> Optane <sup>TM</sup> DC Persistent Memory, 512GB, 2666 MHz			

See Table 6 for how to populate combinations of DIMMs and DCPMMs.



NOTE: *Table 6* shows how DIMMs and DCPMMs are populated for the App Direct DCPMM operational mode. UCSM 4.0(4x) supports App Direct mode. Memory Mode will be supported at a future date.

### Table 6 2<sup>nd</sup> Generation Intel<sup>®</sup> Xeon<sup>®</sup> CPU DIMM<sup>1</sup> and DCPMM<sup>2</sup> Physical Configuration (App Direct Mode)

DIMM to DCPMM Count	CPU 1						
	iMC1 iMC0						
	Channel 2 Channel 1 Channel 0		Channel 2	Channel 1	Channel 0		
	F1	E1	D1	C1	B1	A2	A1
6 to 1	DIMM	DIMM	DIMM	DIMM	DIMM	DCPMM	DIMM
DIMM to DCPMM Count	CPU 2						
	iMC1				iMCO		
	Channel 2	Channel 1 Channel 0 Channel 2 Channel 1 Cha		Chan	nel 0		
	M1	L1	K1	J1	H1	G2	G1
6 to 1	DIMM	DIMM	DIMM	DIMM	DIMM	DCPMM	DIMM

Notes

1. When using DCPMMs, you must populate 12 identical DIMMs (6 per CPU).

2. All systems must be fully populated with two CPUs when using DCPMMs at this time.

■ Choose a storage controller from *Table 7*.

### Table 7 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, and 60

■ Choose an optional Trusted Platform Module (TPM) from *Table 8*.

### Table 8 TPM

Product ID (PID)	Description
UCSX-TPM2-002	Trusted Platform Module 2.0 for UCS servers
UCSX-TPM2-001	Trusted Platform Module 1.2 for UCS (SPI-based)

■ Choose up to two NVMe drives from *Table 9*.

#### Table 9 Storage Drive

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



NOTE: The NVMe drives are not in a sled. The sled (PID = UCS-S3260-NVMSLD1) is auto structured when an NVMe drive is selected. Each sled can host up to two NVMe drives

### **Approved Configurations**

- The following configurations are valid in the S3260 chassis:
  - One S3260 M5 Server Node in server node bay 1, with one or two SIOCs (SIOC1 is mandatory), or
  - Two S3260 M5 Server Nodes (one in each server bay), with SIOC1 and SIOC2, or
  - One S3260 M5 Server node in bay 1 and a drive expansion tray containing 4x 3.5-in.
     SDD drives in server node bay 2, or
  - One S3260 M5 Server node in server node bay 2 and I/O expander in server node bay 1, with SIOC2.



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

### STEP 3 SELECT SYSTEM I/O CONTROLLER

There are two types of System I/O Controllers available:

- One with the Embedded VIC 1300, or
- One that can be configured with a PCIe adapter.

Select one SIOC from *Table 10*.

#### Table 10 System I/O Controller PID

Product ID (PID)	Description		
UCSC-C3260-SIOC	SIOC with VIC 1300 included		
UCS-S3260-PCISIOC	SIOC with a x8 low profile PCIe slot and up to two NVMe slots. You can select one PCIe adapter from <i>Table 11 on page 19</i> and up to two NVMe drives from <i>Table 12 on page 19</i> .		



NOTE: Either of the two above System I/O Controller has a 1-GbE dedicated management port to access CIMC and BMC.

#### **Approved Configurations**

- Select one or two SIOCs.
- Each server node requires a single SIOC
  - The top server node (node 1) connects with the left SIOC as viewed from the rear of the chassis.
  - The bottom server node (node 2) connects with the right SIOC (as viewed from the rear of the chassis.



NOTE: When an I/O Expander is selected, the server node is placed in bay 2, and therefore the active SIOC is located in the right-hand slot (SIOC2)

- In a single server node, two SIOCs are allowed. This configuration requires Cisco IMC software 3.0(3) and UCSM release 3.1(3) or later.
- With two server nodes in the configuration, the I/O path on each slot is dedicated to that server node.
- Do not mix the VIC 1300 SIOC with the PCIe SIOC.

### PCIe SIOC CONFIGURATIONS

Select one PCIe adapter per SIOC from *Table 11*.

### Table 11 SIOC PCIe Adapters

Product ID(PID)	Description
Ethernet Cards	
UCSC-PCIE-C25Q-04	Cisco UCS VIC 1455 Quad Port 10/25G SFP28 CNA PCIE
UCSC-PCIE-C100-04	Cisco UCS VIC 1495 Dual Port 100G QSFP28 CNA PCIe
UCSC-PCIE-IRJ45	Intel i350 Quad Port 1Gb Adapter
N2XX-AIPCI01	Intel X520 Dual Port 10Gb SFP+ Adapter
UCSC-PCIE-ID40GF	Intel XL710 dual-port 40G QSFP+ NIC
UCSC-PCIE-ID25GF	Intel XXV710-DA2 10-dual-port 25G NIC
UCSC-PCIE-ID10GC	Intel X550-T2 dual-port 10GBase-T NIC
FC Cards	
UCSC-PCIE-QD16GF	Qlogic QLE2692 dual-port 16G FC HBA

Select up to two 7 mm NVMe drives per SIOC from *Table 12*. These NVMe drives are the same as the drives available for the M5 sever node.

### Table 12 NVMe Drives

Product ID (PID)	Description
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. The sled (PID = UCS-S3260-NVMSLD2) is auto structured when an NVMe is selected. Each sled can host up to two NVMe drives.

### VIC 1300 SIOC CONFIGURATIONS

Select an appropriate SIOC transceiver or SFP cable for the VIC 1300 from Table 13.



NOTE: *Table 13* lists all the qualified components that are not available in the online ordering tool and can be ordered as spares.

### Table 13 SIOC Optical Transceivers and SFP Cables

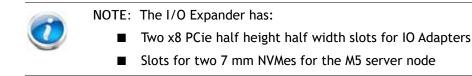
Rate	Optical Transceiver and SFP Cable PIDs	Description		
10 Gbps <sup>1</sup>	SFP-10G-SR	10GBASE-SR SFP optical transceiver		
	SFP-H10GB-CU1M	10GBASE-CU SFP+ Cable 1 Meter		
	SFP-H10GB-CU3M	10GBASE-CU SFP+ Cable 3 Meter		
	SFP-H10GB-CU5M	10GBASE-CU SFP+ Cable 5 Meter		
	SFP-H10GB-ACU7M	Active Twinax cable assembly, 7m		
	SFP-H10GB-ACU10M	Active Twinax cable assembly, 10m		
	CVR-QSFP-SFP10G	QSFP to SFP+ adapter (QSA)		
40 Gbps	QSFP-40G-SR4	40GBASE-SR4 QSFP optical transceiver module with MPO connector		
	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-4SFP10G-CU3M	QSFP to 4xSFP10G Passive Copper Splitter Cable, 3m		
	QSFP-4X10G-AC7M	QSFP to 4xSFP10G Active Copper Splitter Cable, 7m		
	QSFP-4X10G-AC10M	QSFP to 4xSFP10G Active Copper Splitter Cable, 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 4 SELECT I/O EXPANDER (OPTIONAL)

■ Select an I/O Expander from *Table 14*.



### Table 14 PID of the I/O Expander

Product ID (PID)	Description	
UCSC-C3K-M4IO	Cisco UCS S3260 I/O Expander for M5 Server Node.	

Select one or two PCIe modules for the I/O expander from Table 15.

### Table 15 Adapters for the PCIe Slots

Product ID (PID)	Description
Ethernet Cards	
UCSC-PCIE-IRJ45	Intel i350T4 Quad Port 1Gb copper with iSCSI NIC
N2XX-AIPCI01 <sup>1</sup>	Intel X520 Dual Port 10Gb SFP+ Adapter
UCSC-PCIE-ID10GC	Intel X550-T2 dual-port 10GBase-T NIC
FC Cards	
UCSC-PCIE-QD16GF	Qlogic QLE2692 Dual Port 16Gb Fibre Channel HBA
UCSC-PCIE-Q2672	Qlogic QLE2672 Dual Port 16Gb Fibre Channel HBA
UCSC-PCIE-E16002	Emulex LPe16002 Dual-Port 16Gb Fibre Channel HBA w/SR Optics
N2XX-AQPCI05	Qlogic QLE2562 Dual Port 8Gb Fibre Channel HBA
Flash Cards	
UCSC-F-S32002	UCS Rack PCIe Storage 3200GB SanDisk SX350 Medium Endurance

#### Notes

1. N2XX-AIPCI01 uses an Intel SFP. For more information see this link:

https://www.intel.com/content/www/us/en/support/articles/000005528/network-and-i-o/ethernet-products. htl

Choose one or two NVMe drives for the I/O Expander from Table 16

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

Table 16	NVMes for	I/O Expander



### NOTE:

- The NVMe SSDs are installed in sleds
- The S3260 M5 Node uses Intel 4501 NVMes and the I/O Expander uses HGST SN 200 NVMes. Because Intel 4501 NVMes cannot be mixed with SN 200 NVMes, you can either use NVMe drives on the I/O Expander or on the S3260 M5 Nodes. Mixing is not allowed due to different suppliers and firmware limitations.
- The I/O Expander should be included in the initial order; however, It can be ordered in the field, although CIMC and UCSM will need to be reconfigured if the existing server node is moved from bay 1 into bay 2 (along with the boot drives).

### STEP 5 SELECT HARD DISK DRIVE (HDD) MULTIPACKS

Select drive multipacks from *Table 17, Table 18, Table 19*, or *Table 20*. The drives in each multipack mount into drive trays at the top of the server.



NOTE: A minimum of one 14-drive multipack must be installed in the Cisco UCS S3260 chassis.

### Table 17 HDD Multipacks (512n)

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

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 TB	UCS-C3K-6TEM
UCS-C3K-28HD6E	UCS S3260 2 rows of 6TB 512e NL-SAS drives (28 total) 168 TB	28	168 TB	UCS-C3K-6TEM
UCS-C3K-42HD6E	UCS S3260 3 rows of 6TB 512e NL-SAS drives (42 total) 252 TB	42	252 TB	UCS-C3K-6TEM
UCS-C3K-56HD6E	UCS S3260 4 rows of 6TB 512e NL-SAS drives (56 total) 336 TB	56	336 TB	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 TB	UCS-C3K-10TEM
UCS-C3K-28HD10E	UCS S3260 2 rows of 10 TB 512e NL-SAS drives (28 total) 280 TB	28	280 TB	UCS-C3K-10TEM
UCS-C3K-42HD10E	UCS S3260 3 rows of 10 TB 512e NL-SAS drives (42 total) 420 TB	42	420 TB	UCS-C3K-10TEM
UCS-C3K-56HD10E	UCS S3260 4 rows of 10 TB 512e NL-SAS drives (56 total) 560 TB	56	560 TB	UCS-C3K-10TEM

Table 18 HDD Multipacks (512e Emulation) - work with Vmware 6.5 and above

### Table 19 HDD Multipacks (4Kn native) - work with VMware 6.7 and above

Product ID (PID)	Description	# of drives	Total Raw Capacity	Base Drive PID
6TB Bundles (4Kn)				
UCSC-C3X60-14HD6	UCS S3260 1 row of 6TB 4Kn NL-SAS drives (14 total) 84TB raw	14	84 TB	UCSC-C3X60-HD6TB
UCSC-C3X60-28HD6	UCS S3260 2 rows of 6TB 4Kn. NL-SAS drives (28 total) 168TB raw	28	168 TB	UCSC-C3X60-HD6TB
UCSC-C3X60-42HD6	UCS S3260 3 rows of 6TB 4Kn NL-SAS drives (42 total) 252TB raw	42	252 TB	UCSC-C3X60-HD6TB

Product ID (PID)	Description	# of drives	Total Raw Capacity	Base Drive PID
UCSC-C3X60-56HD6	UCS S3260 4 rows of 6TB 4Kn NL-SAS drives (56 total) 336TB raw	56	336 TB	UCSC-C3X60-HD6TB
8TB Bundles (4Kn)				
UCS-S3260-14HD8	S3260 1row of 8TB (4Kn HGST UE10 SAS 7200RPM(14Total: 112TB)	14	112 TB	UCS-S3260-HD8TB
UCS-S3260-28HD8	S3260 2row of 8TB (4Kn HGST UE10NL-SAS 7200RPM (28Total: 224TB)	28	224 TB	UCS-S3260-HD8TB
UCS-S3260-42HD8	S3260 3row of 8TB (4Kn HGST UE10NL-SAS 7200RPM(42Total: 336TB)	42	336 TB	UCS-S3260-HD8TB
UCS-S3260-56HD8	S3260 4row of 8TB (4Kn HGST UE10NL-SAS 7200RPM (56Total: 448TB	56	448 TB	UCS-S3260-HD8TB
8TB A Bundles (4Kn)				
UCS-S3260-14HD8A	UCS S3260 1row of drives 14x8TB NL-SAS 7200RPM (Total 112TB)	14	112 TB	UCS-S3260-HD8TA
UCS-S3260-28HD8A	UCS S3260 2row of drives 28x8TB NL-SAS 7200RPM (Total 224TB)	28	224 TB	UCS-S3260-HD8TA
UCS-S3260-42HD8A	UCS S3260 3row of drives 42x8TB NL-SAS 7200RPM (Total 336TB)	42	336 TB	UCS-S3260-HD8TA
UCS-S3260-56HD8A	UCS S3260 4row of drives 56x8TB NL-SAS 7200RPM (Total 448TB)	56	448 TB	UCS-S3260-HD8TA
10TB Bundles (4Kn)				
UCS-C3K-14HD10	UCS S3260 1 row of 10TB 4Kn NL-SAS drives (14 total) 140TB raw	14	140 TB	UCSC-C3X60-10TB
UCS-C3K-28HD10	UCS S3260 2 rows of 10TB 4Kn NL-SAS drives (28 total) 280TB raw	28	280 TB	UCSC-C3X60-10TB
UCS-C3K-42HD10	UCS S3260 3 rows of 10TB 4Kn NL-SAS drives (42 total) 420TB raw	42	420 TB	UCSC-C3X60-10TB
UCS-C3K-56HD10	UCS S3260 4 rows of 10TB 4Kn NL-SAS drives (56 total) 560TB raw	56	560 TB	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 TB	UCS-S3260-HD12T

Table 19 HDD Multipacks (4Kn native) - work with VMware 6.7 and above (continued)

Product ID (PID)	Description	# of drives	Total Raw Capacity	Base Drive PID
UCS-S3260-28HD12	UCS S3260 Dual row of drives containing 28x 12TB 4Kn (NL-SAS 7.2K) 336TB Total	28	336 TB	UCS-S3260-HD12T
UCS-S3260-42HD12	UCS S3260 Three rows of drives containing 42x 12TB 4Kn (NL-SAS 7200PM) 504TB Total	42	504 TB	UCS-S3260-HD12T
UCS-S3260-56HD12	UCSS3260 Four rows of drives containing 56x 12TB 4Kn (NL-SAS 7200PM) 672TB Total	56	672 TB	UCS-S3260-HD12T
14TB Bundles (4Kn)				
UCS-S3260-14HD14	UCS S3260 1row of drives 14x 14TB SAS3 Total: 196TB	14	196 TB	UCS-S3260-HD14T
UCS-S3260-28HD14	UCS S3260 2row of drives 28x 14TB SAS3 Total: 392TB	28	392 TB	UCS-S3260-HD14T
UCS-S3260-42HD14	UCS S3260 3rows of drives 42x 14TB SAS3 Total: 588TB	42	588 TB	UCS-S3260-HD14T
UCS-S3260-56HD14	UCS S3260 4rows of drives 56x 14TB SAS3 Total: 784TB	56	784 TB	UCS-S3260-HD14T

Table 19 HDD Multipacks (4Kn native) - work with VMware 6.7 and above (continued)

### Table 20 SED Bundles (4Kn)

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

#### # of Total Raw Product ID (PID) Description Base Drive PID Capacity drives SED 12TB Bundles (4Kn) UCS-S-14HD12K9 UCS S3260 1row of drives 14x 12TB 14 168 TB UCS-S-HD12TK9 SED Total: 168TB UCS-S-28HD12K9 UCS S3260 2 row of drives 28 x 28 336 TB UCS-S-HD12TK9 12TB SED Total: 336TB UCS-S-42HD12K9 UCS S3260 3 row of drives 42 x 42 504 TB UCS-S-HD12TK9 12TB SED Total: 504TB UCS-S-56HD12K9 UCS S3260 4 row of drives 56 x 56 672 TB UCS-S-HD12TK9 12TB SED Total: 672TB

#### Table 20 SED Bundles (4Kn)



### NOTE:

Due to performance difference drive packs and drive capacities cannot be mixed. 512n, 512e and 4Kn drives cannot be mixed. Refer to Internal Drive Population Guidelines, page 56

#### **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 21 on page 29*.
- The UCSC-C3X60-14HD6, UCSC-C3X60-28HD6, and UCSC-C3X60-42HD6 multipacks can be selected along with HDDs and SSDs from *Table 21 on page 29*.
- 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 21 on page 29*.
- 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 21 on page 29*.
- 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 Internal Drive Population Guidelines, page 56.
- The 14, 28, and 42 drive Multipacks from Table 17 through Table 20 can be mixed with the same capacity and type of drive from STEP 6 SELECT HARD DISK DRIVES (HDDs) or SOLID STATE DRIVES (SSDS), page 29.
- There are a maximum of 56 top load drives (multipacks drives and individual drives combined).

### Caveats

- VMWare ESXi 6.0 does not support 4Kn Drives. 4Kn drive support with VMWare is available in release 6.7 and later.
- 4Kn drives require UEFI Boot

### STEP 6 SELECT HARD DISK DRIVES (HDDs) or SOLID STATE DRIVES (SSDS)

Select additional drives as desired from *Table 21*. 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 5 SELECT HARD DISK DRIVE (HDD) MULTIPACKS, page 23.

#### Table 21 HDDs and SSDs

Product ID (PID)	PID Description	Drive Type	Capacity (each)
HDDs (512n)			
UCS-C3K-HD4TB	UCS S3260 4TB NL-SAS 7.2K RPM 12Gb w Carrier	SAS-3	4TB
UCS-S3260-HD2T	UCS S3260 2TB NL-SAS 7.2K RPM 12Gb w Carrier	SAS-3	2TB
HDDs (512e)			
UCS-C3K-10TEM	Cisco UCS S3260 10TB (512e)	SAS-3	10TB
UCS-C3K-6TEM	Cisco UCS S3260 6TB (512e)	SAS-3	6TB
HDDs (4Kn)			
UCS-S3260-HD14T	UCS S3260 14TB NL-SAS 7.2K RPM 12Gb HDD w Carrier	SAS-3	14TB
UCS-S3260-HD12T	UCS S3260 12TB NL-SAS 4Kn 7.2K SAS 12Gb w Carrier	SAS-3	12TB
UCSC-C3X60-10TB	UCSC S3260 10TB 4Kn	SAS-3	10TB
UCS-S3260-HD8TB	UCS S3260 8TB NL-SAS 7.2K UE10 with HDD Carrier	SAS-3	8TB
UCS-S3260-HD8TA	8TB 12G SAS 7.2K RPM LFF HDD (4K)	SAS-3	8TB
UCSC-C3X60-HD6TB	UCS S3260 6TB 12Gbps NL-SAS 7.2K RPM with HDD carrier	SAS-3	6TB
SEDs (4Kn)			
UCS-S-HD12TK9	UCS S3260 12TB (4Kn) 7.2K RPM SED Drives FIPS140-2 Top Load	SED	12TB
UCS-C3K-HD6TK9	Cisco UCS S3260 600GB 4Kn Self Encrypt SED FIPS140-2 Top Load	SED	6TB
UCS-C3K-TSSD4K9	Cisco UCS S3260 400GB 4Kn Self Encrypt SED FIPS140-2 Top Load	SED	400GB
UCS-S3260-TSD4K9	Cisco UCS S3260 400GB 4Kn Self Encrypt SED <b>FIPS140-2</b> Top Load (3X read)	SED	400GB
SSDs			
Enterprise Performa			
UCS-C3K-3XTSSD32	Cisco UCS S3260 Top Load 3X 3.2TB SSD	SAS-3	3.2TB
UCS-C3K-3XTSSD16	Cisco UCS S3260 Top Load 3X 1.6TB SSD	SAS-3	1.6TB
UCS-C3K-3XTSSD8	Cisco UCS S3260 Top Load 3X 800GB SSD	SAS-3	800GB
UCS-C3K-3XTSSD4	Cisco UCS S3260 Top Load 3X 400GB SSD	SAS-3	400GB
UCS-S3260-3SSD32	Cisco UCS S3260 Top Load HGST 3X 3.2TB SSD	SAS-3	3.2TB
UCS-S3260-3SSD16	Cisco UCS S3260 Top Load HGST 3X 1.6TB SSD	SAS-3	1.6TB
UCS-S3260-3SSD8	Cisco UCS S3260 Top Load HGST 3X 800GB SSD	SAS-3	800GB
UCS-S3260-3SSD4	Cisco UCS S3260 Top Load HGST 3X 400GB SSD	SAS-3	400GB
Enterprise Performa	nce 10X Read		

### Table 21 HDDs and SSDs (continued)

Product ID (PID)	PID Description	Drive Type	Capacity (each)
UCS-C3X60-12G2160	UCSC S3260 1.6TB 12Gbps SSD (Gen 2)	SAS-3	1.6TB
UCS-C3X60-12G280	UCSC S3260 800GB 12Gbps SSD (Gen 2)	SAS-3	800GB
UCS-C3X60-12G240	UCSC S3260 400GB 12Gbps SSD (Gen 2)	SAS-3	400GB

Caveats

- VMWare ESXi 6.0 does not support 4Kn Drives. 4Kn drive support with VMWare is available in release 6.7 and later.
- 4K native drives require UEFI Boot



NOTE: To add individual drives, use the HDD or SSD Tab in CCW at the following link: https://apps.cisco.com/ccw/cpc/guest/content/ucsContentMain/ucsHome



NOTE: Cisco uses solid state drives (SSDs) from a number of vendors. All solid state drives (SSDs) are subject to physical write limits and have varying maximum usage limitation specifications set by the manufacturer. Cisco will not replace any solid state drives (SSDs) that have exceeded any maximum usage specifications set by Cisco or the manufacturer, as determined solely by Cisco.

### STEP 7 SELECT BOOT DRIVES (OPTIONAL)

Boot drives are 6 Gbps SATA Drives that are low-endurance and support up to one drive write per day (DWPD). The boot drives are located at the rear of the server and there are up to two boot drives per server node (see *Figure 3 on page 7*).

Select up to two boot drives per server node from Table 22.

#### Table 22 Boot Drives

Product ID (PID)	Description	Capacity	Vendor/Model
Micron 5100 Max			
UCS-S3260-G3SD24	UCS S3260 240G Boot SSD (Micron 6G SATA)	240 GB	Micron 5100 MAX
UCS-S3260-G3SD48	UCS S3260 480G Boot SSD (Micron 6G SATA)	480 GB	Micron 5100 MAX
UCS-S3260-G3SD160	UCS S3260 1.6TB Boot SSD (Micron 6G SATA)	1.6 TB	Micron 5100 MAX
SED			
UCS-S-BSD960K9	UCS S3260 960 GB SATA Self-Encrypting Drive (SED) boot SSD	960 GB	Micron 5200



NOTE: Cisco uses solid state drives (SSDs) from a number of vendors. All solid state drives (SSDs) are subject to physical write limits and have varying maximum usage limitation specifications set by the manufacturer. Cisco will not replace any solid state drives (SSDs) that have exceeded any maximum usage specifications set by Cisco or the manufacturer, as determined solely by Cisco.

#### **Approved Configurations**

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



NOTE: The boot drives can be in a RAID mode by one of the following means:

- When a Server Node has a RAID Controller (UCS-S3260-DRAID for the 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), the boot drives are controlled through software RAID or ACH.

### **STEP 8** SELECT DISK EXPANSION TRAY AND DRIVES (OPTIONAL)

Select the optional disk expansion tray with included drives from *Table 23*. The expander tray PID includes the expander tray itself loaded with four drives (2, 4, 6, 8, 10, or 12 TB). The entire assembly mounts at the rear of the chassis in the server node 2 slot.

Product ID (PID)	PID Description	# of Drives	Total Raw Capacity	Base Drive PID	
Expander Bundle wit	h 4 x 2TB Drives (8TB Total)				
UCS-S3260-EX8T	Cisco UCS S3260 Expander with 4x 2TB 7200 RPM NL-SAS Drives	4	8 TB	UCS-S3260-HD2TR	
Expander Bundle wit	h 4 x 4TB Drives (16TB Total)				
UCS-S3260-EX16T	Cisco UCS S3260 Expander with 4x 4TB 7200 RPM NL-SAS Drives	4	16 TB	UCS-C3K-HD4TBRR	
Expander Bundle wit	h 4 x 6TB 512e SED Drives (24TB Total)				
UCS-S3260-EX24TK9	UCS S3260 Expander with 4x 6TB 512e SED NL-SAS drives	4	24 TB	UCS-C3K-HD6TRK9	
Expander Bundle wit	h 4 x 6TB 512e Drives (24TB Total)				
UCS-C3K-EX24TE	UCS S3260 Expander with 4x 6TB 512e NL-SAS drives 24TB	4	24 TB	UCS-C3K-6TEM	
Expander Bundle wit	h 4 x 6TB Drives (24TB Total)				
UCSC-C3X60-EX24T	UCS UCS S3260 Expander with 4x 6TB 12 Gbps 7200RPM NL-SAS Drives	4	24 TB	UCSC-C3X60-6TBRR	
Expander Bundle wit	h 4 x 8TB Drives (32TB Total)				
UCS-S3260-EX32T	S3260 HDD Expander with 4x 8TB UE10 7200RPM NL-SAS Drives	4	32 TB	UCS-S3260-HD8TBRR	
Expander Bundle with 4 x 8TB Drives (32TB Total)					
UCS-S3260-EX32TA	UCS S3260 HDD Expander with 4x 8TB Ultrastar 7200RPM NL-SAS	4	32 TB	UCS-S3260-HD8TARR	
Expander Bundle with 4 x 10TB 512e Drives (40TB Total)					
UCS-C3K-EX40TE	UCS S3260 Expander 4x 10TB 512e NL-SAS drives 40TB	4	40 TB	UCS-C3K-10TREM	

Table 23 Disk Expansion Trays and Drives

Total # of Product ID (PID) PID Description Raw **Base Drive PID Drives** Capacity Expander Bundle with 4 x 10TB Drives (40TB Total) UCS-C3K-EX40T UCS UCS S3260 Expander with 4 x 10TB 12 40 TB UCSC-C3X60-10TBRR 4 Gbps 7200RPM NL-SAS Drives Expander Bundle with 4 x 12TB Drives (48TB Total) UCS-S3260-EX48T UCS S3260 Disk Expansion Tray with 4x 12TB 4 48 TB UCS-S3260-HD12TR NL-SAS 7200 RPM 12Gb HDD Rear Expander Bundle with 4 x 12TB SED NL-SAS Drives (48TB Total) UCS-S-EX48TK9 UCS S3260 Rear Expander with 4x 12TB SED 48 TB UCS-S-HD12TRK9 4 **NL-SAS Drives** Rear Expander Bundle with 4x14TB NL-SAS Drives (56TB Total) UCS-S3260-EX56T UCS S3260 Rear Expander with 4x14TB 4 56 TB UCS-S3260-HD14TR NL-SAS Drives Total 56TB

### Table 23 Disk Expansion Trays and Drives (continued)

### **Approved Configurations**

- The disk expansion tray always comes with four LFF Drives.
- The choice of capacity and drive types is restricted, and must be the same as what is chosen in STEP 6 SELECT HARD DISK DRIVES (HDDs) or SOLID STATE DRIVES (SSDS), page 29.
- Drive capacities cannot be mixed.
- Drives come installed in the disk expansion tray, whose PID is 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 I/O Expander, you cannot select the disk expansion tray.

### STEP 9 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 24*. In Dedicated NIC mode, the CIMC can be accessed only through the dedicated management port. See Chassis Rear View (S3260 M5 Server Node in Server Bay 2, One I/O Expander in Server Bay 1, and Version 03 SIOCs installed), page 7 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 24 Dedicated NIC Mode Ordering Information

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

### STEP 10 SELECT POWER SUPPLY

The Cisco UCS S3260 accommodates four power supplies. Four power supplies are mandatory.

The power supplies are configured as redundant 3+1 (if one power supply fails, the server continues to operate with three power supplies). Use *Table 25* to order the power supplies.

Table 25	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 S3260



NOTE: All power supplies must be identical.

## **STEP 11** SELECT POWER CORD(s)

Using *Table 26*, select four appropriate AC power cords. If you select the option R2XX-DMYMPWRCORD, no power cord is shipped with the server.

Table 26 Available Power Cords

Product ID (PID)	PID Description	Images
R2XX-DMYMPWRCORD	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	Plug: Molex 3CKT 428160312 -48 VDC, 40 A Green 2.0 m Black & red 3.5 m
CAB-N5K6A-NA	N5000 AC Power Cable, 6A, 250V, North America, 2.5m	Plug: NEMA 6-15P Cordset rating: 10 A, 250 V Langth: 8.2 It Connector: IEC6032201C13
CAB-AC-L620-C13	AC Power Cord, NEMA L6-20 - C13, 2M/6.5ft	70+2
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-C14-2M-JP	Power Cord C13-C14, 2M/6.5ft Japan PSE mark	Diagram not available

#### Table 26 Available Power Cords

Product ID (PID)	PID Description	Images
CAB-C13-C14-AC	Power cord, C13 to C14 (recessed receptacle), 10A	
CAB-250V-10A-AR	N5000 AC Power Cable, 10A, 250V, Argentina, 2.5m	Plug: EL 219 (IRAM 2073) EL 219
CAB-9K10A-AU	N5000 AC Power Cable, 10A, 250V, Australia, 2.5m	Cordset rating: 10 A, 250 V/500 V MAX Length: 2500m Plug: EL 210 (BS 1363A) 13 AMP fuse
CAB-250V-10A-CN	AC Power Cord - 250V, 10A - PRC	B B C C C C C C C C C C C C C
CAB-9K10A-EU	N5000 AC Power Cable, 10A, 250V, Europe, 2.5m	Plug: M2511 Conductor Length: 8 ff 2 in. (2.5 m) Connector: VSC15
CAB-250V-10A-ID	N5000 AC Power Cable, 10A, 250V, India, 2.5m	Plug: EL 208 Cordset rating 16A, 250V (2500mm) Connector: EL 701
CAB-250V-10A-IS	N5000 AC Power Cable, 10A, 250V, Israel, 2.5m	Cordset rating 10A, 250V/500V MAX (2500 mm) Pug: EL 212 (SI-32)

#### Table 26 Available Power Cords

Product ID (PID)	PID Description	Images
CAB-9K10A-IT	N5000 AC Power Cable, 10A, 250V, Italy, 2.5m	Plug: V3G (CEI 23-16) Cordset rating: 10 A, 250 V Length: 8 ft 2 in. (2.5 m) Connector C15M (EN60320/C15)
CAB-9K10A-SW	N5000 AC Power Cable, 10A, 250V, Switzerland, 2.5m	Plug: MP232-R Cordset rating: 10 A, 250 V Length: 8 ft. 2 in (2.5 m) EConnector: IEC 60320 C15
CAB-9K10A-UK	N5000 AC Power Cable, 10A, 250V, United Kingdom, 2.5m	Cordset rating: 10 A, 250 V/500 V MAX Length: 2500mm Plug: EL 210 (BS 1363A) 13 AMP fuse
CAB-250V-10A-BR	Power Cord - 250V, 10A - Brazil	
CAB-9K10A-KOR	Power Cord - 125VAC 13A KSC8305 Plug, Korea	Diagram not available

# **STEP 12** 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 27* to order a cable management arm.

Table 27 Cable Management Arm

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

# STEP 13 SELECT A KVM CABLE

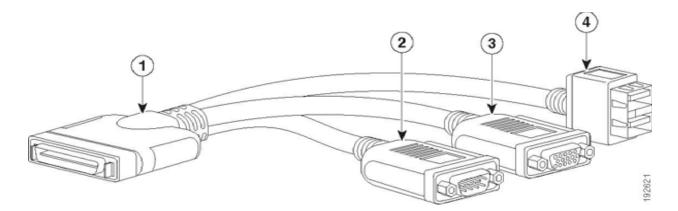
The KVM cable provides a connection into the server, providing a DB9 serial connector, a VGA connector for a monitor, and dual USB 2.0 ports for a keyboard and mouse. With this cable, you can create a direct connection to the operating system and the BIOS running on the server.

The KVM cable ordering information is listed in *Table 28*.

Tahle	28	кум	Cable
Iable	20		Cable

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

Figure 4 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 14** SELECT OPERATING SYSTEM AND VALUE-ADDED SOFTWARE

For more details on supported operating systems and software for this server, see the Hardware & Software Compatibility List (HCL).

Note: PIDs tagged with an asterisk (\*) are resell of an OEM vendor's support. They are required to be added to the associated Product License PID.

#### Select

- OEM Software (*Table 29*)
- Operating System (*Table 30*)

#### Table 29 OEM Software

Product ID (PID)	PID Description
StorMagic	
UCS-STORM-UTB-1S	StorMagic SvSAN Software License - Unlimited TB - 1 Yr SnS
UCS-STORM-UTB-3S	StorMagic SvSAN Software License - Unlimited TB - 3 Yr SnS
UCS-STORM-UTB-5S	StorMagic SvSAN Software License - Unlimited TB - 5 Yr SnS
UCS-STORM-UTA-1S	StorMagic SvSAN Adv SW Lic - Unlim TB, 1Node; 1Yr SnS Reqd
UCS-STORM-UTA-3S	StorMagic SvSAN Adv SW Lic - Unlim TB, 1Node; 3Yr SnS Reqd
UCS-STORM-UTA-5S	StorMagic SvSAN Adv SW Lic - Unlim TB, 1Node; 5Yr SnS Reqd

#### Table 30 Operating System

Product ID (PID)	PID Description		
Microsoft Windows Serv	Microsoft Windows Server		
MSWS-16-ST16C	Windows Server 2016 Standard (16 Cores/2 VMs)		
MSWS-16-ST24C	Windows Server 2016 Standard (24 Cores/2 VMs)		
MSWS-16-ST16C-NS	Windows Server 2016 Standard (16 Cores/2 VMs) - No Cisco SVC		
MSWS-16-ST24C-NS	Windows Server 2016 Standard (24 Cores/2 VMs) - No Cisco SVC		
MSWS-16-DC16C	Windows Server 2016 Data Center (16 Cores/Unlimited VMs)		
MSWS-16-DC24C	Windows Server 2016 Data Center (24 Cores/Unlimited VMs)		
MSWS-16-DC16C-NS	Windows Server 2016 DC (16 Cores/Unlim VMs) - No Cisco SVC		
MSWS-16-DC24C-NS	Windows Server 2016 DC (24 Cores/Unlim VMs) - No Cisco SVC		

Table 30	(continued)Operating System
----------	-----------------------------

Product ID (PID)	PID Description
MSWS-19-DC16C	Windows Server 2019 Data Center (16 Cores/Unlimited VMs)
MSWS-19-DC16C-NS	Windows Server 2019 DC (16 Cores/Unlim VMs) - No Cisco SVC
MSWS-19-ST16C	Windows Server 2019 Standard (16 Cores/2 VMs)
MSWS-19-ST16C-NS	Windows Server 2019 Standard (16 Cores/2 VMs) - No Cisco SVC
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
RHEL-2S2V-5A	Red Hat Enterprise Linux (1-2 CPU,1-2 VN); 5-Yr Support Req
VMware	
VMW-VSP-STD-1A	VMware vSphere 6 Standard (1 CPU), 1-yr, Support Required
VMW-VSP-STD-3A	VMware vSphere 6 Standard (1 CPU), 3-yr, Support Required
VMW-VSP-STD-5A	VMware vSphere 6 Standard (1 CPU), 5-yr, Support Required
SUSE	
SLES-2S2V-1A	SUSE Linux Enterprise Svr (1-2 CPU,1-2 VM); 1-Yr Support Req
SLES-2SUV-1A	SUSE Linux Enterprise Svr (1-2 CPU,Unl VM); 1-Yr Support Req
SLES-2S2V-3A	SUSE Linux Enterprise Svr (1-2 CPU,1-2 VM); 3-Yr Support Req
SLES-2SUV-3A	SUSE Linux Enterprise Svr (1-2 CPU, Unl VM); 3-Yr Support Req
SLES-2S2V-5A	SUSE Linux Enterprise Svr (1-2 CPU,1-2 VM); 5-Yr Support Req
SLES-2SUV-5A	SUSE Linux Enterprise Svr (1-2 CPU,Unl VM); 5-Yr Support Req
SLES-2S2V-1S	SUSE Linux Enterprise Svr (1-2 CPU,1-2 VM); Prio 1-Yr SnS
SLES-2SUV-1S	SUSE Linux Enterprise Svr (1-2 CPU, Unl VM); Prio 1-Yr SnS
SLES-2S2V-3S	SUSE Linux Enterprise Svr (1-2 CPU,1-2 VM); Prio 3-Yr SnS
SLES-2SUV-3S	SUSE Linux Enterprise Svr (1-2 CPU, Unl VM); Prio 3-Yr SnS
SLES-2S2V-5S	SUSE Linux Enterprise Svr (1-2 CPU,1-2 VM); Prio 5-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 SnS
SLES-2S-HA-3S	SUSE Linux High Availability Ext (1-2 CPU); 3yr SnS
SLES-2S-HA-5S	SUSE Linux High Availability Ext (1-2 CPU); 5yr SnS
SLES-2S-GC-1S	SUSE Linux GEO Clustering for HA (1-2 CPU); 1yr Sns

## Table 30 (continued)Operating System

Product ID (PID)	PID Description
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
SLES-2S-LP-1S	SUSE Linux Live Patching Add-on (1-2 CPU); 1yr SnS Required
SLES-2S-LP-3S	SUSE Linux Live Patching Add-on (1-2 CPU); 3yr SnS Required
SLES-2S-LP-1A	SUSE Linux Live Patching Add-on (1-2 CPU); 1yr Support Req
SLES-2S-LP-3A	SUSE Linux Live Patching Add-on (1-2 CPU); 3yr Support Req

# STEP 15 SELECT OPERATING SYSTEM MEDIA KIT

Select the optional operating system media listed in Table 31.

Table 31 OS Media

Product ID (PID)	PID Description
MSWS-16-ST16C-RM	Windows Server 2016 Stan (16 Cores/2 VMs) - Recovery Media
MSWS-16-ST24C-RM	Windows Server 2016 Stan (24 Cores/2 VMs) - Recovery Media
MSWS-16-DC16C-RM	Windows Server 2016 DC (16 Cores/Unlim VMs) - Recovery Media
MSWS-16-DC24C-RM	Windows Server 2016 DC (24 Cores/Unlim VMs) - Recovery Media
MSWS-19-ST16C-RM	Windows Server 2019 Stan (16 Cores/2 VMs) Rec Media DVD Only
MSWS-19-DC16C-RM	Windows Server 2019 DC (16Cores/Unlim VM) Rec Media DVD Only

# **STEP 16** 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 32.

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

#### Table 32 Cisco SMARTnet for UCS Service

# 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 33.

Table 33	SMARTnet for	<b>UCS Hardware</b>	Only Service
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Product ID (PID)	Service Level GSP	On Site?	Description
CON-UCW7-S3260BSE	UCW7	Yes	UC PLUS 24X7X4OS 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 34.

Table 34 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 35.

Table 35 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 36, Table 37, or Table 38.



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

#### Table 36 Drive Retention Service Options

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

#### Table 37 Drive Retention Service Options for Partner Support Service

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

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

#### Table 38 Drive Retention Service Options for Partner Support Service (Hardware Only)

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 UCS-3260. This rack is a standard 19-inch rack and can be ordered with a variety of options, as listed in Table 39. Racks are shipped separately from the UCS-S3260 server.

Table 39 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 - occupied RU = 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 Racks, page 57.

# **OPTIONAL STEP - ORDER PDU**

An optional power distribution unit (PDU) is available from Cisco for the server. This PDU is available in a zero rack unit (RU) style or horizontal PDU style (see Table 40).

Table 40 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

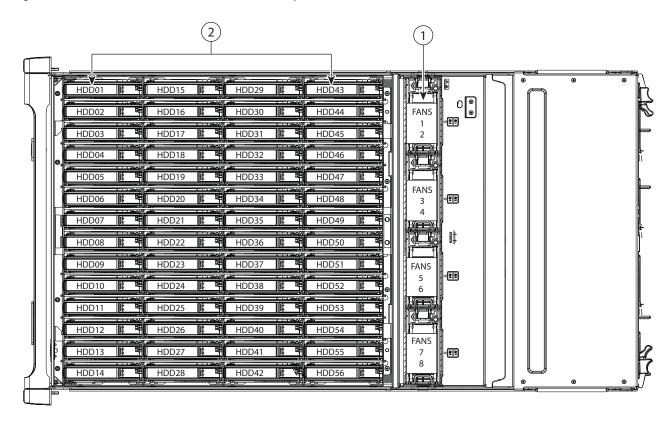
For more information about the PDU, see PDUs, page 59.

# SUPPLEMENTAL MATERIAL

# **CHASSIS**

An internal view of the Cisco UCS S3260 chassis with the top cover removed is shown in *Figure 5*.

Figure 5 Cisco UCS S3260 Server With Top Cover Off



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

## **RAID CONTROLLER**

RAID levels supported by the 12 Gbps RAID controller (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.
- The maximum number of drives per RAID Groups is 32
- The maximum number of virtual drives allowed is 64

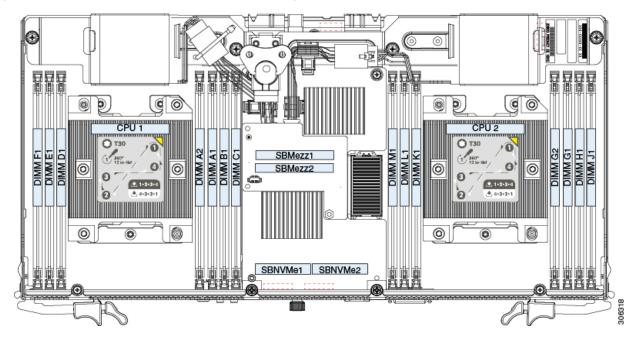
# **CPUs and DIMMs**

### S3260 M5 Server Node Physical Layout

Figure 6 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 consists of DIMM sockets A1 and A2.
- Channels A and G use two DIMMs per channel (DPC); all other channels use one DPC.

Figure 6 S3260 M5 DIMM and CPU Numbering



## **Memory Population Rules**

- 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 Table 41, depending on the number of DIMMs per CPU.



NOTE: The table below lists recommended configurations (2, 4, 6, or 7 DIMMs per CPU). Using 5 DIMMs per CPU is not recommended.

#### Table 41 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
2	(A1, B1)	-	(G1, H1)	-
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 42 shows the DIMM mixing rules.

#### Table 42 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/CPUs installed in the channel.	You can mix speeds, but DIMMs will run at the speed of the slowest DIMMs/CPUs installed in the bank.
DIMM type	You cannot mix DIMM types in a channel.	You cannot mix DIMM types in a bank.

- The DIMM/DCPMM combination guidelines are as follows:
  - All DDR4 DIMMs populated in the DIMM slots must be the same size.
  - If you select a DCPMM, you must select 12 identical DIMMs (6 per CPU).
  - If you select DCPMMs, you must identical DIMMs, one for each CPU.
  - Using non-Cisco supported hardware configurations may result in slower performance or a non-supported warning during bootup.

## **Internal Drive Population Guidelines**

The system has 56 internal drive bays in the main chassis. *Figure 7* 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 all other drives 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 SSD drives in bays 56 and 55.

■ The four colored boxes shown in *Figure 7* represent the four power groups in which the power is distributed for the drive bays. This might be useful for troubleshooting power rail problems.

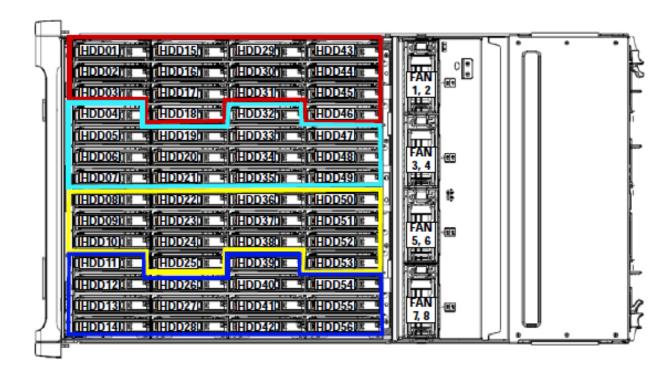


Figure 7 Internal Drive Bay Numbering

## Racks

The Cisco R42612 rack (see Figure 8 on page 58) is certified for Cisco UCS installation at customer sites and is suitable for the following equipment:

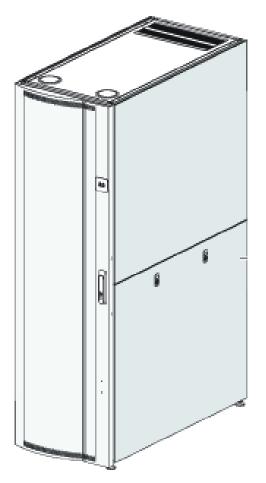
- Cisco UCS B-Series servers and fabric interconnects
- Cisco UCS C-Series and select Nexus switches
- Cisco UCS S-Serles

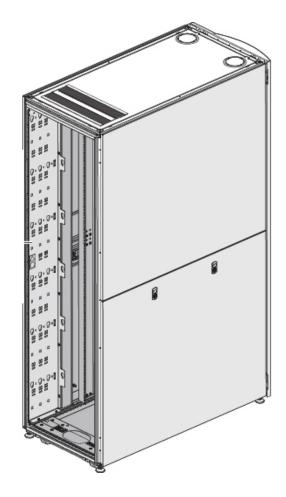
The rack is compatible with hardware designed for EIA-standard 19-inch racks. Rack specifications are listed in Table 43.

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

#### Table 43 R42612 Specifications

Figure 8 Cisco R42612 Rack





Front View

Rear View

### **PDUs**

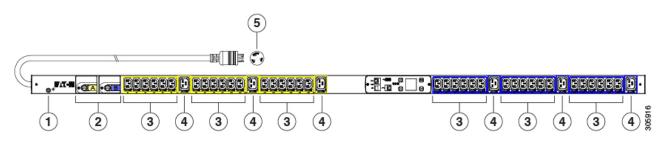
Cisco RP Series Power Distribution Units (PDUs) offer power distribution with branch circuit protection.

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 9* for one example of a zero rack unit PDU.

Figure 9 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

# **SPARE 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 44

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
UCS-S3260-PCISIOC=	UCS S3260 PCIe SIOC
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
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 Heat Sink
UCS-S3260-NVMSLD1=	UCS S3260 NVMe Sled for Server Node for Dual NVMEs
UCS-S3260-NVG210=	UCS S3260 1T NVMe for M5 Server Node/SIOC

Table 44 Upgrade and Servicing-related Parts for Cisco UCS S3260 Server

Spare Product ID (PID)	Descriptions
UCS-S3260-NVG220=	UCS S3260 2T NVMe for M5 Server Node/SIOC
UCS-CPU-TIM=	CPU thermal interface material syringe for M5 server HS seal <sup>1</sup>
IO Expander (For Add-on	to Server Node) <sup>2</sup>
UCSC-C3K-M4IO=	Cisco UCS C3000 I/O Expander for 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 800 GB NVMe SSD for Node(SN 200)
UCS-S3260-NVM416=	Cisco UCS S3260 1.6 TB NVMe SSD for Node(SN 200)
UCS-S3260-NVM432=	Cisco UCS S3260 3.2 TB NVMe SSD for Node(SN 200)
UCS-S3260-NVM464=	Cisco UCS S3260 6.4 TB NVMe SSD for Node(SN 200)
PCIe SIOC (Ordered as spa	are)
UCS-S3260-PCISIOC=	UCS S3260 PCIe SIOC
UCS-S3260-NVMSLD2=	UCS S3260 PCIe SIOC NVMe Sled
UCS-S3260-NVG210=	UCS S3260 M5/SIOC 1TB NVMe (no Sled)
UCS-S3260-NVG220=	UCS S3260 M5/SIOC 2TB NVMe (no Sled)
UCSC-PCIE-C25Q-04 =	Cisco UCS VIC 1455 Quad Port 10/25G SFP28 CNA PCIE
UCSC-PCIE-IRJ45=	Intel i350 Quad Port 1Gb Adapter
N2XX-AIPCI01=	Intel X520 Dual Port 10Gb SFP+ Adapter
UCSC-PCIE-ID25GF=	Intel XXV710-DA2 10 Dual Port 25G NIC
UCSC-PCIE-ID40GF=	Intel XL710 Dual Port 40G QSFP+ NIC
UCSC-PCIE-QD16GF=	Qlogic QLE2692 Dual Port 16G FC HBA
UCSC-PCIE-C100-04=	Cisco UCS VIC 1495 Dual Port 100G QSFP28 CNA PCIe
Drive Bundles: 14-Drive 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 6 TB 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)

Spare Product ID (PID)	Descriptions
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 )
UCS-S3260-14HD8=	S3260 1row of 8 TB (4Kn HGST UE10 SAS 7200RPM(14Total: 112TB) (Pack of 14 UCS-S3260-HD8TB)
UCS-S3260-14HD8A=	UCS S3260 1row of drives 14x8TB NL-SAS 7200RPM (Total 112TB) (Pack of 14 UCS-S3260-HD8TA)
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)
UCS-S-14HD12K9=	UCS S3260 1row of drives 14x 12TB Total: 168TB (Pack of 14 UCS-S-HD12TK9)
UCS-S3260-14HD6K9=	UCS S3260 1row of 14 x 6TB SED NL-SAS 7200 (14Total) 84TB (Pack of 6UCS-C3K-HD6TK9)
UCS-S3260-14HD14=	UCS S3260 1row of drives 14x 14TB SAS3 Total: 196TB ((Pack of UCS-S3260-HD14T)
Individual Top Load Drives	
UCSC-S3260-HD2T=	CS S3260 2 TB 512n NL-SAS 7200 RPM 12 Gbs HDD w Carrier- Top Load
UCSC-C3K-HD4TB=	UCS S3260 4 TB 512n NL-SAS 7200 RPM 12 Gbs HDD w Carrier- Top Load
UCS-C3K-6TEM=	Cisco UCS S3260 6 TB (512e) Top Load
UCS-C3K-10TEM=	Cisco UCS S3260 10 TB (512e) Top Load
UCSC-C3X60-HD6TB=	UCS C3X60 6 TB 12Gbps NL-SAS 7200RPM HDD w carrier- Rear-load
UCS-C3K-HD6TK9=	Cisco UCS C3000 6TB 4Kn Self Encrypt Top Load
UCS-S3260-HD8TB=	UCSC 3X60 8 TB NL-SAS 7.2K RPM Helium HDD with HDD Carrier
UCS-S3260-HD8TA=	8 TB 12G SAS 7.2K RPM LFF HDD (4K)
UCSC-C3X60-10TB=	UCSC C3X60 10 TB 4Kn for Top-Load
UCS-S3260-HD12T=	UCS C3000 12TB NL-SAS 7200 RPM 12 Gbs HDD w Carrier- Top Load
UCS-S-HD12TK9=	UCS S3260 12TB (4Kn) 7.2K RPM SED Drives Top Load
UCS-S3260-HD14T=	UCS S3260 14TB NL-SAS 7200 RPM 12Gb HDD w Carrier- Top Load
Rear Drives (Order the Dis	k Expansion Tray Separately)
UCS-S3260-HD2TR=	UCS S3260 2 TB NL-SAS 512n 7200 RPM 12Gb HDD w Carrier- Rear Load
UCS-C3K-HD4TBRR=	UCS S3260 4 TB 512n NL-SAS 7200 RPM 12Gb HDD w Carrier- Rear Load
UCS-C3K-HD6TRK9=	Cisco UCS C3000 6TB 4Kn Self Encrypt Rear Load

Spare Product ID (PID)	Descriptions
UCS-C3K-6TREM=	Cisco UCS S3260 6 TB (512e) Rear Load
UCS-C3K-10TREM=	Cisco UCS S3260 10 TB (512e) Rear Load
UCSC-C3X60-6TBRR=	UCS C3X60 6 TB 12Gbps NL-SAS 7200RPM HDD w carrier- Rear-load
UCS-S3260-8TBRR=	UCS S3260 8TB NL-SAS 7.2K UE10 HDD rear with HDD Carrier
UCS-S3260-HD8TARR=	8 TB 12G SAS 7.2K RPM LFF HDD (4K)
UCSC-C3X60-10TBRR=	UCSC C3X60 10 TB 4Kn Drives for Rear-Load
UCS-S3260-HD14TR=	UCS S3260 14TB NL-SAS 7200 RPM 12Gb HDD w Carrier-Rear Load
UCS-S3260-HD12TR=	UCS C3000 12 TB NL-SAS 7200 RPM 12Gb HDD w Carrier- Rear Load
UCS-S-HD12TRK9=	UCS S3260 12TB (4Kn) 7.2K RPM SED Drives Rear Load

Spare Product ID (PID)	Descriptions
SSD Drives	
UCS-C3K-3XTSSD32=	Cisco UCS S3260 Top Load 3X 3.2TB SSD
UCS-C3K-3XTSSD16=	Cisco UCS S3260 Top Load 3X 1.6TB SSD
UCS-C3K-3XTSSD8=	Cisco UCS S3260 Top Load 3X 800GB SSD
UCS-C3K-3XTSSD4=	Cisco UCS S3260 Top Load 3X 400GB SSD
UCS-S3260-3SSD32=	Cisco UCS S3260 Top Load HGST 3X 3.2TB SSD
UCS-S3260-3SSD16=	Cisco UCS S3260 Top Load HGST 3X 1.6TB SSD
UCS-S3260-3SSD8=	Cisco UCS S3260 Top Load HGST 3X 800GB SSD
UCS-S3260-3SSD4=	Cisco UCS S3260 Top Load HGST 3X 400GB SSD
UCS-C3X60-12G2160=	UCSC S3260 1.6TB 12Gbps SSD (Gen 2)
UCS-C3X60-12G280=	UCSC S3260 800GB 12Gbps SSD (Gen 2)
UCS-C3X60-12G240=	UCSC S3260 400GB 12Gbps SSD (Gen 2)
HDD Drives	
UCS-C3K-HD4TB=	UCS S3260 4TB NL-SAS 7.2K RPM 12Gb w Carrier
UCS-S3260-HD2T=	UCS S3260 2TB NL-SAS 7.2K RPM 12Gb w Carrier
UCS-C3K-10TEM=	Cisco UCS S3260 10TB (512e)
UCS-C3K-6TEM=	Cisco UCS S3260 6TB (512e)
UCS-S3260-HD14T=	UCS S3260 14TB NL-SAS 7.2K RPM 12Gb HDD w Carrier
UCS-S3260-HD12T=	UCS S3260 12TB NL-SAS 4Kn 7.2K SAS 12Gb w Carrier
UCSC-C3X60-10TB=	UCSC S3260 10TB 4Kn
UCS-S3260-HD8TB=	UCS S3260 8TB NL-SAS 7.2K UE10 with HDD Carrier
UCS-S3260-HD8TA=	8TB 12G SAS 7.2K RPM LFF HDD (4K)
UCSC-C3X60-HD6TB=	UCS S3260 6TB 12Gbps NL-SAS 7.2K RPM with HDD carrier
Boot Drives	
UCS-S3260-G3SD24=	UCS S3260 240 GB Boot SSD (Micron 6G SATA)
UCS-S3260-G3SD48=	UCS S3260 480 GB Boot SSD (Micron 6G SATA)
UCS-S3260-G3SD160=	UCS S3260 1.6 TB Boot SSD (Micron 6G SATA)
UCS-S-BSD960K9=	UCS S3260 960G SATA SED Boot SSD
SED Drives	
UCS-C3K-TSSD4K9=	Cisco UCS S3260 400 GB SED Top Load K9
	·

Spare Product ID (PID)	Descriptions
UCS-C3K-HD6TK9=	Cisco UCS S3260 6 TB 4Kn SED Top Load K9
UCS-C3K-HD6TRK9=	Cisco UCS S3260 6 TB 4Kn SED Rear Load K9
UCS-C3K-BSD48K9 =	UCS S3260 480 GB SATA SSD Self Encrypted Boot K9
UCS-S-HD12TK9=	UCS S3260 12TB (4Kn) 7.2K RPM SED Drives FIPS140-2 Top Load
UCS-S3260-TSD4K9=	Cisco UCS S3260 400GB 4Kn Self Encrypt SED FIPS140-2 Top Load (3X read)

Notes

1. This part is included with the purchase of options or spare CPU or CPU Processors kit. Note that each CPU requires an entire syringe.

2. 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.

# **UPGRADING OR REPLACING CPUS**



NOTE: Before servicing any CPU, shut down the server node by using the software interface or by pressing the node power button, then remove the server node from the system.

To replace an existing CPU, follow these steps:

- (1) Have the following tools and materials available for the procedure:
  - T-30 Torx driver—Supplied with replacement CPU.
  - #1 flat-head screwdriver—Supplied with replacement CPU.
  - CPU assembly tool—Supplied with replacement CPU. Can be ordered separately as Cisco PID UCS-CPUAT=.
  - Heatsink cleaning kit—Supplied with replacement CPU. Can be ordered separately as Cisco PID UCSX-HSCK=.
  - Thermal interface material (TIM)—Syringe supplied with replacement CPU.Can be ordered separately as Cisco PID UCS-CPU-TIM=.
- (2) Order the appropriate replacement CPU from SELECT SERVER NODE, page 13.

(3) Carefully remove and replace the CPU and heatsink in accordance with the instructions found in "Cisco UCS S3260 M5 Server Node For Cisco UCS S3260 Storage Server Service Note," found at:

https://www.cisco.com/c/en/us/td/docs/unified\_computing/ucs/s/hw/S3260M5/install/S3260M5/ S3260M5\_chapter\_010.html#task\_j5g\_bzp\_hz. To add a new CPU, follow these steps:

- (1) Have the following tools and materials available for the procedure:
  - T-30 Torx driver—Supplied with new CPU.
  - #1 flat-head screwdriver—Supplied with new CPU
  - CPU assembly tool—Supplied with new CPU.Can be ordered separately as Cisco PID UCS-CPUAT=
  - Thermal interface material (TIM)—Syringe supplied with replacement CPU.Can be ordered separately as Cisco PID UCS-CPU-TIM=
- (2) Order the appropriate new CPU from SELECT SERVER NODE, page 13.
- (3) Order one heat sink for each new CPU. Order PID UCS-S3260-M5HS= for the M5.

(4) Carefully remove and replace the CPU and heatsink in accordance with the instructions found in "Cisco UCS S3260 M5 Server Node For Cisco UCS S3260 Storage Server Service Note," found at:

https://www.cisco.com/c/en/us/td/docs/unified\_computing/ucs/s/hw/S3260M5/install/S3260M5/ S3260M5\_chapter\_010.html.

# UPGRADING OR REPLACING MEMORY

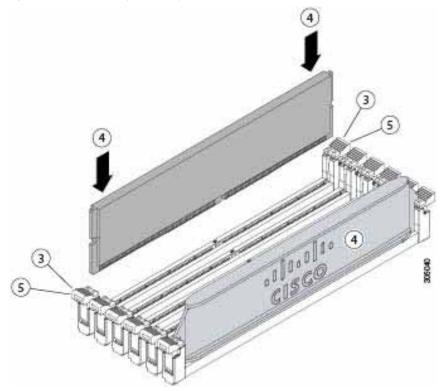


NOTE: Before servicing any DIMM, shut down the server node by using the software interface or by pressing the node power button, then remove the server node from the system.

To add or replace DIMMs or DCPMMs, follow these steps:

- (1) Order new DIMMs or DCPMMs as needed from SELECT SERVER NODE, page 13.
- (2) Order DIMM/DCPMM blanks as needed (PID UCS-DIMM-BLK=)
- (3) Open both connector latches and remove or replace the DIMM/DCPMM or blank as needed.

Figure 10 Replacing Memory



(4) Press evenly on both ends of the DIMM/DCPMM until it clicks into place in its slot.



NOTE: Ensure that the notch in the DIMM/DCPMM aligns with the slot. If the notch is misaligned, it is possible to damage the DIMM/DCPMM, the slot, or both.

(5) Press the connector latches inward slightly to seat them fully.

(6) Populate all slots with a DIMM, DCPMM, or DIMM blank. A slot cannot be empty.

For additional details on replacing or upgrading DIMMs, see ""Cisco UCS S3260 M5 Server Node For Cisco UCS S3260 Storage Server Service Note," found at: https://www.cisco.com/c/en/us/td/docs/unified\_computing/ucs/s/hw/S3260M5/install/S3260 M5/S3260M5\_chapter\_010.html.

# **DISCONTINUED EOS/EOL PRODUCTS**

Table 45 lists the parts that were previously available for this product and are no longer sold. Please refer to the following EOL bulletin links to determine if the part is still supported and if there is a replacement part.

https://www.cisco.com/c/en/us/products/collateral/servers-unified-computing/ucs-c-series-rack-servers/eos-eol-notice-c51-740779.html

https://www.cisco.com/c/en/us/products/collateral/servers-unified-computing/ucs-c-series-rack-servers/eos-eol-notice-c51-741895.html

https://www.cisco.com/c/en/us/products/collateral/servers-unified-computing/ucs-c-series-rack-servers/eos-eol-notice-c51-740780.html

https://www.cisco.com/c/en/us/products/collateral/servers-unified-computing/ucs-c-series-rack-servers/eos-eol-notice-c51-741234.html

https://www.cisco.com/c/en/us/products/collateral/servers-unified-computing/ucs-c-series-rack-servers/eos-eol-notice-c51-742012.html

EOS option PID	Description
Server Node for M4	
UCSC-C3K-M4SRB	UCS S3260 M4 Server Node for Intel E5-2600 v4
Memory DIMMs	
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
CPUs	
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
Optical Transceivers and SFP Cables	
SFP-10G-LR	10GBASE-LR SFP Module (Requires CVR-QSFP-SFP10G)
QSFP-40G-SR-BD	QSFP40G bidirectional short-reach optical transceiver
QSFP-H40G-CU1M	40GBASE-CR4 Passive Copper Cable, 1m
QSFP-H40G-CU3M	40GBASE-CR4 Passive Copper Cable, 3m
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

#### Table 45 EOS/EOL Products

EOS option PID	Description
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
PCIe Adapters	
UCSC-F-FIO-1000PS	UCS 1000GB Fusion ioMemory3 PX Performance line for Rack M4
Boot Drives	
UCS-C3X60-G2SD160	UCSC C3X60 1.6TB Boot SSD (Gen 2)
UCS-C3K-BSD48K9	UCS C3260 480G SATA SSD Self Encrypted Boot K9
	Replaced with UCS-S-BSD960K9 (UCS S3260 960G SATA SED Boot SSD)
RAID Controllers	
UCS-C3K-M4RAID	Cisco UCS C3000 RAID Controller M4 SrvNode w/4G RAID Cache
UCSC-C3X60-HBA	UCS CX260 12G SAS Pass through Controller
PREVIOUS GENERATION SE	RVERS (C3260) OBSOLETE PARTS
RAID Controllers	
UCSC-C3X60-R1GB	UCS C3X60 12G SAS RAID Controller with 1GB cache
UCSC-C3X60-R4GB	UCS C3X60 12G SAS RAID Controller with 4GB cache
Server Nodes	
UCSC-C3X60-SVRN1	Server Node Config 1
UCSC-C3X60-SVRN2	Server Node Config 2
UCSC-C3X60-SVRN3	Server Node Config 3
UCSC-C3X60-SVRN4	Server Node Config 4
UCSC-C3X60-SVRN5	Server Node Config 5
UCSC-C3X60-SVRN6	Server Node Config 6
UCSC-C3X60-SVRN7	Server Node Config 7
Drive Multipacks	
UCSC-C3X60-14HD4	Cisco UCS C3X60 One row of 14x 4TB (Total:56TB) Drives
UCSC-C3X60-28HD4	Cisco UCS C3X60 One row of 28 x 4TB (Total:112TB) Drives
UCSC-C3X60-42HD4	Cisco UCS C3X60 One row of 42x 4TB (Total:168TB) Drives
UCSC-C3X60-56HD4	Cisco UCS C3X60 One row of 56x 4TB (Total:224TB) Drives
UCSC-C3X60-SSD4	Cisco UCS C3X60 one row of 14 drives: 400GB SSD and 4TB Drives
UCSC-C3X60-14HD6	Cisco UCS C3X60 One row of 14x6TB (Total:84 TB) Drives
UCSC-C3X60-28HD6	Cisco UCS C3X60 One row of 28x6TB (Total:168 TB) Drives

### Table 45 EOS/EOL Products (continued)

Table 45 EOS/EOL Products	(continued)
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EOS option PID	Description
UCSC-C3X60-42HD6	Cisco UCS C3X60 One row of 42x6TB (Total:252TB) Drives
UCSC-C3X60-56HD6	Cisco UCS C3X60 One row of 56x6TB (Total:336TB) Drives
UCSC-C3X60-SSD6	Cisco UCS C3X60 one row of 14 drives: 400GB SSD and 6TB Drives
HDDs	
UCSC-C3X60-HD4TB	UCS C3X60 4TB NL-SAS 7.2K HDD including C3X60 HDD carrier
UCSC-C3X60-HD6TB	UCS C3X60 6TB 12Gbps NL-SAS 7200RPM HDD w carrier- Top-load
SSDs	
UCSC-C3160-400SSD	UCS C3160 400GB Enterprise Performance 6G SAS SSD
UCS-C3X60-12G0400	UCS C3X60 400GB Enterprise Performance 12G SAS SSD
UCS-C3X60-12G016	UCSC Cisco C3X60 1.6TB SSD
Storage Drives	
UCS-S3260-NVG25	UCS S3260 500G NVMe for M5 Server Node based on Intel 4501
Boot Drives	
UCS-C3X60-G1SD480	Cisco UCS C3X60 480GB SATA Boot SSD
UCS-C3X60-G2SD48=	UCSC C3X60 480 GB Boot SSD (Gen 2)
UCS-S3260-G2SD24	UCS S3260 240GB Boot SATA Drives
UCSC-C3X60-12SSD	UCS C3X60 SATA SSD 120GB Enterprise Value
Disk Expansion Tray	
UCSC-C3X60-EX16T	UCS UCS C3X60 Expander with 4 x 4TB 7200RPM NL-SAS Drives
UCSC-C3X60-EX24T	UCS UCS C3X60 Expander with 4x 6TB 12 Gbps 7200RPM NL-SAS Drives
USB Drive	
UCS-USBFLSHB-16GB	UCS Servers 16 GB Flash USB Drive
ТРМ	
UCSX-TPM1-001	TPM Module For UCS
CPUs	
UCS-CPU-E52620B	2.10 GHz E5-2620 v2/80W 6C/15MB Cache/DDR3 1600MHz
UCS-CPU-E52660B	2.20 GHz E5-2660 v2/95W 10C/25MB Cache/DDR3 1866MHz
UCS-CPU-E52695B	2.40 GHz E5-2695 v2/115W 12C/30MB Cache/DDR3 1866MHz
Memory DIMMs	·
UCS-MR-1X082RZ-A	8GB DDR3-1866-MHz RDIMM/PC3-14900/dual rank/x4/1.5v
UCS-MR-1X162RZ-A	16GB DDR3-1866-MHz RDIMM/PC3-14900/dual rank/x4/1.5v

# **TECHNICAL SPECIFICATIONS**

## Power

The server is available with 1050 W (AC) or 1050 W (DC) power supplies. The power supply specifications are listed in Table 46 and Table 47.

#### Table 46 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 47 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

The power specifications for the Cisco UCS S3260 server are listed in Table 48.

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

# **Dimensions and Weight**

Table 49 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)

# Compliance

The regulatory compliance requirements for The Cisco UCS S3260 Storage Server are listed in Table 50.

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

 Table 50 Regulatory Compliance Requirements



Americas Headquarters Cisco Systems, Inc. San Jose, CA Asia Pacific Headquarters Cisco Systems (USA) Pte. Ltd. Singapore Europe Headquarters Cisco Systems International BV Amsterdam, The Netherlands

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