CISCO SYSTEMS

PUBLICATION HISTORY

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OVERVIEW

DETAILED VIEWS

Chassis Front View

Figure 2 shows the front view of the Cisco UCS C220 M4 High-Density SFF Rack Server.

Figure 2 Chassis Front View

1 Drives (up to eight 2.5-inch drives)

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BASE SERVER STANDARD CAPABILITIES and FEATURESO

STEP 1 VERIFY SERVER SKU

Verify the product ID (PID) of the server as shown in *Table 2*.

Table 2 PID of the C220 M4 High-Density SFF Rack Base Server

Product ID (PID)	Description
UCSC-C220-M4S	UCS C220 M4 SFF, no CPU, memory, HDD, SSD, power supply, SD cards, PCIe cards, or tool-less rail kit

The Cisco UCS C220 M4 SFF server:

Approved Configurations

- (1) 1-CPU configurations:
 - Select any one CPU listed in *Table 3 on page 16*.

STEP 3 SELECT MEMORY

The standard memory features are:

- DIMMs
 - Clock speed: 2400 or 2133 MHzRanks per DIMM: 1, 2, 4, or 8
 - Operational voltage: 1.2 V
 - Registered ECC DDR4 DIMMs (RDIMMs), TSV-RDMMS, or load-reduced ECC DDR4 DIMMs (LRDIMMs)
- Memory is organized with four memory channels per CPU, with up to three DIMMs per channel, as shown in *Figure 4*.

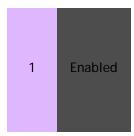
(2) 1-CPU configuration with memory mirroring:

Table 6	2400-MHz DIMM Memory Speeds with Different w/t CPUs

STEP 4

Approved Configurations

- The embedded software RAID default supports up to 8 internal SATA HDDs with RAID 0, 1, 10 support.
- The embedded software RAID 5 upgrade key option supports up to 8 internal SATA HDDs with RAID 0, 1, 10, 5 support.
- The Cisco 12G SAS Modular RAID controller upgrade option supports up to 8







(4) Systems Using Plug-in NVMe PCle SSDs

Systems using NVMe PCIe SSDs are controlled through the PCIe bus. If you choose one or two NVMe PCIe SSDs, they must be plugged into only drive slots 1 and 2 in the front of the chassis. Additionally, any system implementing NVMe PCIe SSDs must be ordered with two CPUs.

Caveats

- A maximum of two storage accelerator cards are supported if they are half height; the supported number of full-height cards is one.
- For 1-CPU systems:
 - Only the full-height PCle slot on riser 1 (slot 1) is supported

Approved Configurations

(1) Choose Up to Two SFP+ Modules for Each Network Card Ordered

CONFIGURING the SERVER

STEP 8 ORDER POWER SUPPLY

STEP 9 SELECT AC POWER CORD(s)

Using *Table 17*, select the appropriate AC power cords. You can select a minimum of no power cords and a maximum of two. If you select the option R2XX-DMYMPWRCORD, no power cord is shipped with the server.

Table 17 Available Power Cords

Product ID (PID)	PID Description	Images
R2XX-DMYMPWRCORD	No power cord (dummy PID to	

CAB-250V-10A-AR	Power Cord, 250V, 10A, Argentina	
	.	

CONFIGURING the SERVER

CONFIGURING the SERVER

STEP 17 SELECT SERVICE and SUPPORT LEVEL

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

Unified Computing Warranty, No Contract

OPTIONAL STEP - ORDER RACK(s)

The optional R42610 rack is available from Cisco for the C-Series servers, including the C220 M4 SFF server. This rack is a standard 19-inch rack and can be ordered with a variety of options, as listed in *Table 33*

Table 33 Racks and Rack Options

Product ID (PID)	PID Description
RACK-UCS ¹	Cisco R42610 expansion rack, no side panels
RACK-UCS2	

SUPPLEMENTAL MATERIAL

Block Diagram

Memory Population Rules

RAID Option ROM (OPROM) Settings

(2) Press Ctrl+M to start the RAID group creation process for the primary SATA controller (for drives 1-4, as shown in *Figure 10 on page 74*). Or, do nothing and wait for the next screen, which allows you to create a RAID group for the secondary SATA (sSATA) controller see *Figure 13*).

Serial Port Details

The pinout details of the rear RJ-45 serial port connector are shown in *Figure 14*.

Figure 14 Serial Port (Female RJ-45 Connector) Pinout



Upgrade and Servicing-Related Parts

This section lists the upgrade and servicing-related parts you may need during the life of your server. Some

RACKS

The Cisco R42610 rack (see *Figure 15*) is certified for Cisco UCS installation at customer sites and is suitable for the following equipment:

- Cisco UCS B-Series servers and fabric interconnects

Figure 15 Cisco R42610 Rack

Environmental Specifications

The power specifications for the C220 M4 server are listed in *Table 45*.

Table 45 UCS C220 M4 SFF Environmental Specifications

Parameter