



Data Sheet

Cisco MCS 7835-H1

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PRODUCT OVERVIEW

The Cisco® MCS 7835-H1 Media Convergence Server is a high-availability server platform for Cisco Unified Communications solutions. An integral part of a complete, scalable architecture for a new generation of high-quality IP voice solutions that run on enterprise data networks, the Cisco MCS 7835-H1 delivers the high performance and availability demanded by today's enterprise networks—and it is easy to deploy and highly cost-effective. At only 2 rack units (2RU) high, the Cisco MCS 7835-H1 offers tremendous power in a low-profile chassis that minimizes rack space. It runs a variety of Cisco IP Communications applications, such as Cisco CallManager; its features include:

- Intel Xeon 3.4-GHz (or higher) processors, an 800-MHz front side bus (FSB), and 2 MB of Layer 2 cache
- 2-GB PC2-3200R 400-MHz Double Data Rate 2 (DDR2) memory with online spare capabilities
- Integrated Ultra320 Smart Array 6i Redundant Array of Independent Disks (RAID) Controller with 64-MB read cache plus 128-MB battery-backed write cache
- Dual-port Gigabit Ethernet controller (embedded)
- Quick-deployment third-party rail kit
- Support for Integrated Lights Out (iLO) server management
- Support for up to six 1-inch Ultra320 Small Computer System Interface (SCSI) hot-plug hard drives
- Hot-plug redundant power supplies
- Hot-plug redundant fans

SUPPORTED APPLICATIONS

The Cisco MCS 7835-H1 can run any of the following Cisco Systems® applications:

- Cisco Unified CallManager—Up to 2500 IP phones per server
- Cisco Emergency Responder—Up to 20,000 IP phones
- Cisco Unified Presence Server
- Cisco Unified Intelligent Contact Management Enterprise
- Cisco Unified Intelligent Contact Management Hosted
- Cisco Unified Contact Center Enterprise
- Cisco Unified Contact Center Hosted
- Cisco Unified Contact Center Express
- Cisco Unified IP Interactive Voice Response (IP IVR)

- Cisco Unified MeetingPlace® conferencing solution—Supports Cisco MeetingPlace systems with up to 480 concurrent voice conferencing licenses running the following software: Cisco MeetingPlace for Outlook, Cisco MeetingPlace for Notes, Cisco MeetingPlace Instant Messaging (dedicated server), Cisco MeetingPlace Web Conferencing (up to 50 concurrent Web conferencing licenses per server; Cisco MCS 7845-H1 and MCS 7845-I1 for > 50 concurrent Web conferencing licenses), Cisco MeetingPlace Directory Integration Application (dedicated server for > 200 concurrent voice conferencing licenses), Cisco MeetingPlace Video Integration, Cisco MeetingPlace H.323/Session Initiation Protocol (SIP) Gateway Software, and Cisco MeetingPlace Simple Mail Transfer Protocol (SMTP) E-mail Gateway Software
- Cisco Unified MeetingPlace Express
- Cisco Personal Assistant—Up to 2500 users per server
- Cisco Unified IP Queue Manager
- Cisco Unity® Unified Messaging—Up to 48 ports and up to 2000 mailboxes

KEY FEATURES AND BENEFITS

Performance

The Cisco MCS 7835-H1 is a robust, highly available server platform designed to support today's unified communications applications. It uses an Integrated Smart Array 6i Controller with a 64-MB cache to provide onboard RAID support without using one of the peripheral component-interface (PCI)-X slots on the server. The Cisco MCS 7835-H1 occupies only 2RU of space while providing the features most requested in a high-availability server platform. At product introduction the Cisco MCS 7835-H1 will ship with an Intel Xeon 3.4-GHz processor and over time the processor speed will be increased as Intel retires the 3.4-GHz processor and introduces new processors.

High Availability

- High availability on the Cisco MCS 7835-H1 is achieved through the following mechanisms:
- Redundant hot-swap 575W power supplies
- Hot-swap SCSI hard drives configured using RAID 1

Serviceability

System Health LEDs

The Cisco MCS 7835-H1 provides system health LEDs and unit identification lights on the front and back of the server to make pinpointing system problems easier than ever. When an internal component fails, this indication is made on an internal component LED (amber) and on the front panel of the Cisco MCS 7835-H1. If the item is serviceable without removing the server hood, as in the case of a redundant power supply, the external health LED illuminates. If the item is serviceable by removing the hood, as in the case of a fan failure, the internal health LED illuminates. If no failures have occurred, the system health LEDs are green. If a failure has occurred but a redundant feature has enabled the system to continue running, the LED is amber. If the failure is critical and has caused the system to shut down, the LED is red.

Integrated Lights Out

The Integrated Lights Out (iLO) Standard is included on the motherboard. Combining essential management functions and diagnostics with basic lights-out functions as standard components of the server, iLO is available at no charge. iLO Standard offers maximum security, availability, and control over business-critical servers without the need to visit the systems physically.

- iLO Standard provides fundamental server control and monitoring by integrating essential lights-out technology directly into the Cisco MCS 7835-H1 server architecture.
- Essential lights-out features include remote power control, text-based console, logs, status, and alert forwarding.

- The easy-to-use, dedicated lights-out LAN port is accessible through a browser interface.
- iLO Standard saves a valuable PCI slot for additional functions and reduces installation and setup time.
- iLO Standard eliminates the need for an external power adapter or any other internal or external cables.
- iLO Standard provides a rich suite of security features, including Secure Sockets Layer (SSL).
- iLO Standard provides a scalable solution by allowing group administration of iLO processors.

Redundant ROM

In the Cisco MCS 7835-H1, the ROM is divided into two logical sections. When the system boots, the primary ROM section is executed and used in server operation. During a ROM flash, the backup section is flashed. When the flash is fully completed, the backup section becomes the primary. If under rare conditions the flash does not complete safely, potentially because of power interruption, the backup is available to boot the system. In the situation where both ROM images are valid, the user can select which image to use at boot time.

DAT Tape Support

The Cisco MCS 7835-H1 can support an optional 36-/72-GB universal-serial-bus (USB) external Digital Audio Tape (DAT) drive (part number DAT-USB-EXT-72=) or an optional USB rack-mount DAT drive (part number DAT-USB-RM-72=). This tape drive connects through one of the 4 USB 2.0 ports provided by the Cisco MCS 7835-H1 server.

PRODUCT SPECIFICATIONS

Table 1. Product Specifications

Feature	Description
Processor at Product Introduction	
Processor (CPU)	Xeon DP
Processor Internal Clock Speed	3400 MHz (or higher)
Level 2 Cache	2048 KB
Maximum Processors	2
Processors installed	1
Basic input/output system (BIOS) type	Flash
Memory	
Memory Maximum	12 GB
Memory Bus Clock	400 MHz
Memory Technology	PC2-3200R 400-MHz DDR2 synchronous dynamic RAM (SDRAM)
Multibit Error Mitigation	Advanced error correction code (AECC)
Total RAM Slots	6 (Total RAM slots is not in the other doc)
Memory Installed	2 GB (2x1-GB dual in-line memory modules [DIMMs])
RAID Controller	
Controller Model	HP Integrated Smart Array 6i Controller
Interface	PCI-X 133 MHz, 64-bit
Cache	64 MB
Battery-Backed Write Cache	Yes—128 MB

Feature	Description
RAID Levels Supported	0, 1, 1 + 0, 5,
SCSI Protocols Supported	Ultra2, Ultra3, and Ultra 320
SCSI Peak Data Transfer Rate	320 MB per channel
Maximum Drives	6
SCSI Ports (external/internal)	0/2
Hard Disk	
Hard Disk Installed	Two 72 GB (RAID 1)
Hard Disk (RPM)	15,000
Hard Disk Average Seek Time	3.8 ms
Hot-Swappable Bays	6
Hard Disk Interface Type	Ultra320 SCSI
Maximum hard drive capacity	880.8 GB with six 146.8 GB internal disks
Network Connectivity	
Network Interface Card (NIC)	Dual onboard 10/100/1000
Connector	Two RJ-45 connectors on rear of server
10BASE-T Cable Support	Categories 3, 4, or 5 unshielded twisted-pair (UTP) (2 or 4 pair) up to 328 ft (100m)
100BASE-TX Cable Support	Category 5 UTP (2 pair) up to 328 ft (100m)
1000BASE-T Cable Support	Category 5 UTP, 5E UTP, or 6 UTP (2 pair) up to 328 ft (100m)
Interfaces	
Serial Ports	1
Parallel Ports	0
USB 1.1 Ports	2
Keyboard Ports	1 PS2
Mouse Ports	1 PS2
Audio Ports	None
System Management Ports	RJ-45 for HP iLO
External SCSI Ports	1
Security	
<ul style="list-style-type: none"> • Power-on password • Keyboard password • Selectable boot device • Diskette drive control • QuickLock, network server mode • Serial interface control • Administrator's password • Disk configuration lock 	
Industry Standard Compliance	

Feature	Description
<ul style="list-style-type: none"> Advanced configuration and power interface (ACPI) 2.0 compliant PCI 2.2 compliant Wake On LAN (WOL) support Microsoft logo certifications USB 2.0 support 	
Expansion Options	
PCI-X non-hot plug 133-MHz, 64-bit slots	1
PCI-X non-hot plug 100-MHz, 64-bit slots	2
Power	
Maximum Input Power	735W
Steady State Output Power	575W
Auto-Ranging AC Mains Input	Yes
Power Factor Correction (PFC)	Yes
Maximum Hot-Swap Power Supplies	2
Hot-Swap Power Supplies Installed	2
Mains Input Frequency Range	50–60 Hz
Input Voltage Low Range	<ul style="list-style-type: none"> 100 VAC minimum 132 VAC maximum
Input Voltage High Range	<ul style="list-style-type: none"> 200 VAC minimum 265 VAC maximum
Input Current	<ul style="list-style-type: none"> 7.5A (100 VAC) 265 VAC maximum
Environmental	
Air Temperature—Server On	50.0 to 95.0°F (10 to 35°C)
Air Temperature—Server Off	–40.0 to 158°F (–40 to 70 °C)
Humidity—Server On	10 to 90%
Humidity—Server Off	5 to 95%
BTU Rating	1475 BTU per hour
Sound Emissions Idle	7.4 bel
Sound Emissions Maximum	7.4 bel
Bystander Sound Pressure Idle	58 dBa
Bystander Sound Pressure Operating	58 dBa
Cooling System	<ul style="list-style-type: none"> 5 fans installed—base systems 8 fans installed—redundant fan systems
Dimensions	
Form Factor	Rack-mount 2RU
Rack-Mounting	Included for standard third-party rack

Feature	Description
Weight—Maximum	60 lb (27.22 kg)
Weight—No Drives	47.18 lb (20.41 kg)
Height	3.38 in. (8.59 cm)
Width	17.54 in. (44.54 cm)
Depth	26.01 in. (66.07 cm)

ORDERING INFORMATION

To place an order, visit the [Cisco Ordering Home Page](#). Refer to Table 2 for part numbers.

Table 2. Ordering Information

Product Name	Part Number
Cisco CallManager 3.3	CALLMANAGER-3.3
Cisco Unified CallManager 4.0	CALLMANAGER-4.0
Cisco Unified CallManager 4.1	CALLMANAGER-4.1
Cisco Unified CallManager 4.2	CALLMANAGER-4.2
Cisco Emergency Responder	Refer to Cisco Emergency Responder Data Sheet
Cisco Unified Presence Server	Refer to Cisco Unified Presence Server Data Sheet
Cisco Unified Intelligent Contact Management Enterprise	ICM-BUNDLE
Cisco Unified Intelligent Contact Management Hosted	HOSTED-BUNDLE
Cisco Unified Contact Center Enterprise	IPC-BUNDLE
Cisco Unified Contact Center Hosted	HOSTED-BUNDLE
Cisco Unified Contact Center Express	<ul style="list-style-type: none"> • IPCX-40-STANDARD • IPCX-40-ENHANCED • IPCX-40-PREMIUM • UCCX-45-STANDARD • UCCX-45-ENHANCED • UCCX-45-PREMIUM
Cisco Unified IP IVR	IPIVR-3.5=
Cisco Unified MeetingPlace conferencing solution	Refer to Cisco Unified MeetingPlace Data Sheet
Cisco Personal Assistant	PASR-BUNDLE
Cisco Unified IP Queue Manager	IPQM-3.5=
Cisco Unity® Unified Messaging	UNITY-BUNDLE

SERVER SPARES

To order spare servers refer to Table 3.

Table 3. Ordering Information for Spare Servers by Application

Application	Spare Part Number
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Application	Spare Part Number
Cisco CallManager	MCS-7835-H1-IPC1
Cisco Emergency Responder	MCS-7835-H1-IPC1
Cisco Unified Presence Server	MCS-7835-H1-IPC1
Cisco Unified Intelligent Contact Management Enterprise	MCS-7835-H1-CC1
Cisco Unified Contact Management Hosted	MCS-7835-H1-CC1
Cisco Unified Contact Center Enterprise	MCS-7835-H1-CC1
Cisco Unified Contact Center Hosted	MCS-7835-H1-CC1
Cisco Unified Contact Center Express	MCS-7835-H1-CC1
Cisco Unified IP IVR	MCS-7835-H1-CC1
Cisco Unified MeetingPlace conferencing solution	MCS-7835-H1-RC1
Cisco Personal Assistant	MCS-7835-H1-IPC1
Cisco Unified IP Queue Manager	MCS-7835-H1-CC1
Cisco Unity Unified Messaging	MCS-7835-H1-ECS1

FIELD REPLACEABLE SPARES

To order spare parts for the servers refer to Table 4.

Table 4. Ordering Information for Server Spare Parts

Description	Spare Part Number
Spare 1024-MB SDRAM DIMM for Cisco MCS 7835-H1	MEM-7835-H1-1GB=
Spare 72-GB U320 hot-plug SCSI drive for Cisco MCS 7835-H1	HDD-7835-H1-72=
Spare 575W power supply for Cisco MCS 7835-H1	PWR-7835-H1=
Spare fan for Cisco MCS 7835-H1	FAN-7835-H1=

IDENTIFYING CPU SPEED OF SERVER

As the Cisco MCS 7835-H1 matures and Intel replaces slower processors, the processor speeds will change. Table 5 provides the Cisco manufacturing part number that will be shown on the chassis to help identify any processor speed of any individual server.

Table 5. Manufacturing Part Numbers by Processor Speed

Processor	Manufacturing Part Number Located on Server	Introduction
Intel Xeon 3.4-GHz 1MB Layer 2 cache	74-3529-01	Initial production of server
Intel Xeon 3.4-GHz 2MB Layer 2 cache	74-3529-02	Revised with new processor containing 2-MB of Layer 2 cache

SERVICE AND SUPPORT

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WARRANTY INFORMATION

Cisco offers a one-year limited hardware warranty on Cisco Media Convergence Servers. For terms and conditions of this warranty, refer to http://www.cisco.com/univercd/cc/td/doc/es_inpk/1ylcen_.htm.



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