

Cisco Media Convergence Server 7835

THE CISCO MEDIA CONVERGENCE SERVER 7835 (MCS-7835) IS A HIGH-AVAILABILITY SERVER PLATFORM FOR CISCO AVVID (ARCHITECTURE FOR VOICE, VIDEO AND INTEGRATED DATA). THE CISCO MCS-7835 IS AN INTEGRAL PART OF A COMPLETE, SCALABLE ARCHITECTURE FOR A NEW GENERATION OF HIGH-QUALITY IP VOICE SOLUTIONS THAT RUN ON THE ENTERPRISE DATA NETWORK. THE MCS-7835 DELIVERS THE HIGH PERFORMANCE AND AVAILABILITY DEMANDED BY TODAY'S ENTERPRISE NETWORKS AND REPRESENTS A TURNKEY SOLUTION THAT IS EASY TO DEPLOY AND HIGHLY COST-EFFECTIVE. AT ONLY 3U HIGH, THE MCS-7835 PACKS TREMENDOUS POWER IN A LOW-PROFILE CHASSIS DESIGNED TO MINIMIZE RACK-SPACE REQUIREMENTS. THE MCS-7835 IS ENGINEERED TO RUN A VARIETY OF CISCO AVVID APPLICATIONS, SUCH AS CISCO CALLMANAGER AND CISCO UNIFIED OPEN NETWORK EXCHANGE VOICE MESSAGING.

Key Benefits and Features

Performance

The MCS-7835 features a 733-MHz Intel Pentium III processor, and is expandable up to 4 GB of 133-MHz registered SDRAM, extending the high performance you will require to roll out current and future Cisco AVVID applications. There is hardware RAID support for dual 18.2-GB Ultra2 small computer serial interface hot-plug hard drives to improve overall system performance. All of this power is delivered in a space-saving rack-mountable form factor (3U) designed to save precious rack space in your data center.

High Availability

Availability, or the percentage of time that a system is available to provide service, was assumed in old-world networks. Availability is a key requirement in the New World networks Cisco is building today. The high-availability design of the MCS-7835 will deliver a robust platform for your mission-critical Cisco AVVID applications. The MCS-7835 comes standard with a redundant hot-plug power supply and two redundant 18.2-GB SCSI hot-plug hard drives running RAID-1 disk mirroring to ensure maximum availability. If a hard drive or power supply fails, it can be replaced without powering down the server, and the failure will not affect service. In the case of the SCSI drive, as soon

as the replacement drive is inserted, the integrated RAID controller will restore the image to the new drive, without any user intervention.

Scalability

Whether you start your Cisco IP telephony network with 5 telephones or 5000, the MCS-7835 server seamlessly allows you to grow your network at your pace. An MCS-7835 server can serve as a Cisco CallManager server or a Cisco uOne voice-messaging server. Additional applications are planned for the platform in the future. As a Cisco CallManager 3.0 server, each MCS-7835 can handle up to 2500 IP telephones (total number of IP Phones dependent on N+1 redundancy configuration). This setup allows you to scale your Cisco AVVID network at your pace. Remote sites can also be interconnected through an H.323 interface, using an H.323 gatekeeper.

Flexibility

The MCS-7835 is configurable to run either Cisco CallManager software or Cisco uOne voicemail software. The MCS-7835 was also designed to run future Cisco application packages that will become part of the Cisco AVVID solution. The MCS-7835 has an optional internal 12/24-GB DAT tape drive to back up your critical data, and also offers the flexibility of saving important user data to a separate server located elsewhere on the IP network.

Cisco CallManager Software

The Cisco CallManager (CCM) is the call-processing software component of the Cisco AVVID network. CCM extends enterprise telephony features and functions to packet telephony network devices such as IP phones, voice-over-IP gateways, and multimedia applications. The salient benefit of all these voice applications is that no additional special-purpose voice-processing hardware is required.

Supplementary and enhanced services such as hold, transfer, forward, conference, multiple-line appearances, automatic route selection, speed dial, last-number redial, and other features are extended by CCM to IP phones and gateways.

Because CCM is a software application, enhancing its capabilities is a matter of upgrading software, thereby avoiding expensive hardware upgrade costs. Further, Cisco CallManager allows all phones, gateways, and applications to be distributed across an IP network, providing a single, distributed, virtual telephony network.

Cisco uOne Software

Cisco uOne communicates over LANs and WANs using voice over IP (VoIP). The voice-messaging industry is evolving from a proprietary, closed, high-cost infrastructure to an open, distributed, standards-based design with correspondingly better price/performance ratios. Cisco

Systems and the Cisco uOne application are at the forefront of this evolution. The delivery of robust voice messaging over IP reduces the overall infrastructure spending, lowers capital and operational costs, and opens the environment to explosive innovation in telephony applications.

Specifications—Cisco Media Convergence Server 7835

Hardware

Server:

- Intel Pentium III 733-MHz processor
- 256-kB secondary cache
- 512-MB 133-MHz registered ECC SDRAM memory
- 10/100 TX Fast Ethernet network interface card
- Integrated-dual-channel wide Ultra SCSI-3 controller
- Dual 18.2-GB Ultra2 SCSI hot-plug drives
- 1.44-MB floppy disk
- Preinstalled high-speed IDE CD-ROM drive
- Hot-plug redundant 275-watt power supply
- 3U rack height, ships with sliding rails

Environmental Specifications/Power Requirements:

Operating Temperature Range	50 to 95 F / 10 to 35 C
Relative Operating Humidity	8% to 90%
Range Line Voltage	90 to 132 VAC/180 to 265 VAC
Nominal Line Voltage	100 to 120 VAC/220 to 240 VAC
Input Power	432W
Line Frequency	50 to 60 Hz
Heat	1475 Btu/hr
Dimensions	5.1 x 19 x 24.6 in./13.1 x 48.3 x 62.5 cm
Weight	55 lb / 25 kg (without hard drives)
Maximum Wet Bulb Temperature	101.7 F / 38.7 C

1.44-MB Diskette Drive

Diskette Size	3.5 in.
LED Indicators (front panel)	Green
Read/Write Capacity per Diskette	1.44 MB/720 kB (high/low density)
Drive Supported	One
Drive Height	One-third
Drive Rotation	300 rpm
Transfer Rate (high/low)	500/250 kbps
Bytes/Sector	512
Sectors/Track (high/low)	18/9
Tracks/Side (high/low)	80/80

Access Times

Track-to-Track (high/low)	3/6 ms
Average (high/low)	94/169 ms
Settling Time	15 ms
Latency Average	100 ms
Cylinders (high/low)	80/80
Read/Write Heads	Two

HotPlug Wide Ultra2 SCSI Hard Drives

Capacity	18209.3 MB
Height	1 in./25.4 mm
Width	3.5 in./88.9 mm
Interface	Wide Ultra2 SCSI
Transfer Rate—synchronous (Maximum)	80 MBps

Seek Time (typical reads, including settling)

Single Track	0.8 ms
Average	7.0 ms
Full Stroke	15 ms
Rotational Speed	7200 rpm

Physical Configuration

Bytes/Sector	512
Logical Blocks	35,565,080
Operating Temperature	50 to 95 F/10 to 35 C

24X Max IDE CD-ROM Drive

Disk

Applicable Disk	CD-ROM (Modes 1 and 2) CD-DA, CD-XA (Mode 2, Form 1 and 2)
Capacity	550 MB (Mode 1, 12 cm) 640 MB (Mode 2, 12 cm)

Access Times (typical)

Random	<140 ms
Full Stroke	<300 ms
Diameter	4.7 in. 3.15 in./12cm, 8 cm
Thickness	0.05 in./1.2 mm
Track Pitch	1.6 m

Data Transfer Rate

Sustained	150 KBps (sustained 1X)
Burst	2100 to 4800 KBps
Cache Buffer	128 kB (minimum)
Startup Time (typical)	< 10 seconds
Stop Time	< 5 seconds

Integrated Dual-Channel Wide Ultra SCSI-3 Adapter

Drives Supported	Up to six SCSI hard drives
Data Transfer Method	32-bit PCI bus master
SCSI Channel Transfer Rate	80 MBps per channel
Max Transfer Rate per PCI (Peak)	133 MBps
SCSI Termination	Active termination
SCSI Connectors	1 external, 2 internal (68-pin)

10/100 PCI UTP Controller (embedded)

Network Interface	10BaseT/100BaseTX
Compatibility	EEE 802.3/802.3u compliant
Data Transfer Method	32-bit busmaster PCI
Network Transfer Rate	
10BaseT (half duplex)	10 Mbps
10BaseT (full duplex)	20 Mbps
100BaseTX (half duplex)	100 Mbps
100BaseTX (full duplex)	200 Mbps
Connector	
	RJ-45
Cable Support	
10BaseT	Categories 3, 4, or 5 UTP (2 or 4 pair); up to 328 feet (100 meters)
100BaseTX	Category 5 UTP (2 pair); up to 328 feet (100 meters)

Video Controller (embedded)

Controller Chip	ATI RAGE IIC PCI
Video DRAM	4-MB video SGRAM
Data Transfer Method	32-bit PCI
Support Resolution:	
640 x 480	16.7M, 64K, 256, 16
800 x 600	16.7M, 64K, 256, 16
1024 x 768	16.7M, 64K, 256, 16
1152 x 864	16.7M, 64K, 256, 16
1280 x 1024	16.7M, 64K, 256, 16
1600 x 1200	64K, 256, 16
Connector	
	VGA
Supported Color Depths:	

Ordering Information

Part Numbers	Description
MCS-7835	Media Convergence Server 7835

Service and Support

Cisco AVVID support solutions are designed for one purpose—to ensure customer success by delivering a suite of proactive services. The award-winning Cisco internetworking service and support offerings provide presales network audit planning, design consulting, network implementation, operational support, and network optimization. Cisco interactive knowledge-transfer solutions enhance customer success by leveraging Cisco expertise and experience. By including service and support when purchasing Cisco AVVID products, customers can confidently deploy Cisco AVVID networks utilizing Cisco expertise, experience, and resources.

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