Cisco UCS E-Series M6 Server

Contents

With powerful data center–class servers that are virtualization-ready, you can host business applications and network services right in your branch-office edge router.

Product overview

Cisco UCS® E-Series M6 Server brings data center–class blade servers to the branch office. This powerful, small-form-factor, x86 64-bit blade servers reside in the Cisco Catalyst™ 8300 Series Edge Platforms. The blade is virtualization-ready and can host essential infrastructure services and mission-critical business applications, all while you maintain a lean branch-office environment (Figure 1).

Figure 1.
Cisco UCS E-Series Server with the Catalyst 8300 Series Edge Platform

Product details

Cisco UCS E-Series M6 Server

The Cisco Unified Computing System™ (Cisco UCS) E-Series M6 Server is available as a double-wide module. The double-wide module occupies two service-module slots side by side.

The Cisco UCS E-Series M6 Server is a high-density blade server with single-socket Intel® Xeon® D processor. It balances simplicity, performance, and application density while operating in an energy-efficient environment, providing better energy efficiency than preceding models. The server also includes integrated remote lights-out management.

The E-Series M6 server thus provides an excellent platform for introducing virtualization into the branch office and supporting mission-critical business applications. The innovative, zero-footprint form factor of the M6 server, in conjunction with the lower Total Cost of Ownership (TCO) of the Intel Xeon processor, increases business agility and enhances reliability when compared to standalone rack-mount and tower servers.

Table 1 lists the top-level part number for the E-Series M6 server.

Table 1. Cisco UCS E-Series M6 Server part number

Cisco UCS E-Series M6 part number	Picture
Cisco UCS E-Series double-wide servers: • UCS-E1100D-M6	

Applications for Cisco UCS E-Series Servers

Cisco UCS E-Series Servers provide excellent performance and value for these and other types of workloads:

- **Mission-critical business applications:** Point-of-sale systems, bank teller in-office control points, electronic medical record systems, inventory management systems, video surveillance systems, and cloud connectors
- **Security applications:** Make use of the 10-Gbps backplane connectivity with the Catalyst 8300 Series for line-rate firewall services
- **WAN optimization:** AppQoE for your SD-WAN network with the Cisco Catalyst 8000V Edge Software installed on the Cisco UCS E-Series module
- **Collaboration:** Hosting unified communications applications such as Cisco Unified Communications Manager
- **Core network services:** Dynamic Host Configuration Protocol (DHCP) server services and DNS server services
- **Core Microsoft Windows services:** Microsoft Active Directory Domain Services, Microsoft Windows print services, and Microsoft Windows file services
- **Client-management services:** Configuration and operations management, monitoring services, update and patching services, backup and recovery services, and terminal server gateways

Features and benefits

The Cisco UCS E-Series Servers easily extend the Cisco UCS data center portfolio to branch-office environments. By adding virtualization to the servers, you can deploy new services incrementally on a schedule that best meets your timing and budget. Meanwhile, you avoid service-call costs for onsite visits to deploy new hardware or software.

Cisco UCS E-Series Servers address your changing business needs in the following ways:

- **Reduced operational burden:** Through a consolidated, wire-free infrastructure, Cisco UCS E-Series Servers make the addition of new services and infrastructure quick and easy.
- **Simplified system maintenance:** Cisco UCS E-Series Servers ease physical server provisioning and system maintenance.
- **Enhanced server management:** Built-in lights-out server management through the Cisco Integrated Management Controller (IMC), which runs on the same dedicated baseboard management controller hardware found in all Cisco UCS products. This feature provides standalone management consistency with Cisco UCS C-Series Rack Servers for both local and remote server monitoring and configuration management. The hardware is Cisco Intersight® capable, and we expect Intersight to be supported in the future.
- **Stronger physical security:** The blades require no external network cables or physical Keyboard, Video, or Mouse (KVM). They can therefore be easily secured in a wiring closet or other secure location without compromising manageability, a situation that is difficult to achieve with traditional legacy tower and rack-mount servers that lack virtual KVM capabilities.

- **Small footprint:** Cisco UCS E-Series Servers include multicore x86 64-bit Intel Xeon processors. You can reduce your branch-office server footprint by incorporating high-performance, power-optimized blade servers directly into Catalyst 8300 cloud edge routers. These servers are integrated and housed in a single router chassis, delivering an excellent all-in-one platform for the lean branch office.

Platform support and compatibility

Cisco UCS E-Series Servers are designed to support multiple bare-metal operating systems and hypervisors, including:

- Hypervisors
  - VMware vSphere ESXi 7.0U3
  - Red Hat Enterprise Linux

Product specifications

Table 2 lists the specifications and Table 3 lists Cisco Catalyst 8300 support for the Cisco UCS E-Series M6 Server. Table 4 lists safety and EMC regulatory standards compliance information.

Table 2. Product specifications for M6 servers

Feature	UCS-E1100D-M6 (double-wide)
CPU	• Intel Xeon-1749-NT (15-MB cache, 3.0 GHz, 10 cores)
DRAM	• 32 to 128 GB • 4 DIMM slots, each with 16 GB or 32 GB VLP DDR4 RAM
Hard-Disk Drive (HDD/SSD)	• 4 SFF slots; up to 4 TB each (SATA SSD or NVME SSD); refer to the ordering and compatibility guide for more information
RAID options	• Intel Virtual RAID on CPU (VROC) • RAID 0, 1, 5 • Vmware Esxi is compatible with RAID 1 only • Only NVME SSD is compatible with RAID. SATA SSD is not compatible with RAID.
Power loss protection for cache backup	• Enhanced power-loss data protection with data • Protection capacitor monitoring inside the SSD drives
Network Interface Cards (NICs)	• 2 internal Gigabit Ethernet ports (Broadcom 5719) • 2 external 10 Gigabit Ethernet ports (1000/10000) (integrated within Intel CPU) • 1 dedicated management Ethernet port (10/100/1000) for Cisco IMC
Cisco IMC	• Integrated Emulex Pilot-4 BMC • Intelligent Platform Management Interface (IPMI) 2.0 compliant for management and control • Command-Line Interface (CLI) and WebGUI management tool for automated, lights-out management • Virtual KVM

Feature	UCS-E1100D-M6 (double-wide)
SFPs supported	• GLC-SX-MMD • GLC-LH-SMD • SFP-H10GB-ACU7M • SFP-10G-SR-S • SFP-10G-LR-S
Integrated eMMC storage	• 16-GB partition for Cisco IMC • 16-GB partition for Intel x86 host
Front-panel connectors	• 1 KVM console connector (supplies 1 VGA, 1 serial, and 1 USB 2.0 connector) • 2 onboard USB 3.0 ports
Physical dimensions (H x W x D)	• 1.58 x 16.25 x 8.3 inches (4.01 x 41.27 x 21.08 cm)
Maximum weight	• 6.5 lb (2.95 kg)
Temperature: Operating	• According to operating requirements of deployable platform: 32° to 104°F (0° to 40°C) normal
Temperature: Non-operating	• –40° to 70°C
Humidity: Operating	• According to operating requirements of deployable platform: 5% to 85% operating
Humidity: Non-operating	• 5% to 95%
Altitude: Operating	• 104°F (40°C) at sea level to 10,000 ft (0 to 3000 m)
Altitude: Non-operating	• 15,000 ft (4600 m)

Table 3. Catalyst 8300 support for M6 servers

Catalyst 8300 platform	UCS-E1100D-M6
C8300-2N2S-4T2X	1
C8300-2N2S-6T	1

Table 4. Regulatory standards compliance: Safety and EMC

Specification	Description
Safety	• CSA C22.2 No. 62368-1:1 (Edition. 3.0) • UL 62368-1-2021 (Edition. 3.0) • IEC 62368-1:2018 (Edition. 3.0) • EN 62368-1:2020/A11:2020 (Edition. 3.0) • AS/NZS 62368.1:2022
EMC: Emissions	• ISPR32:2015+A1:2019 • EN 55032:2015+A11:2020 • EN 61000-3-3:2013+A1:2019 • EN IEC 61000-3-2:2019+A1:2021 • EN 300 386 V2.1.23:2021 • 47 CFR FCC Part 15B • ICES-003 Issue 7:2020 • KS C 9832:2019 • KS C 9610-3-2:2020 • KS C 9610-3-3:2020 • VCCI-CISPR 32:2016 • CNS 15936:2016 • QCVN 118:2018/BTTTT
EMC: Immunity	• CISPR35:2016 • EN 55035:2017+A11:2020 • EN IEC 61000-6-1:2019 • EN IEC 61000-6-2:2019 • EN 300 386 V2.1.23:2021 • KS C 9835:2019 • TCVN 7317:2003

System requirements

For Cisco UCS E-Series M6 Servers, Cisco IOS® XE Software Release 17.11 or later is required for the Catalyst 8300 Series platform.

Warranty information

Cisco UCS-E Series Servers are covered by a 90-day warranty. Find warranty information on Cisco.com on the Product Warranties page.

Cisco environmental sustainability

Information about Cisco's environmental sustainability policies and initiatives for our products, solutions, operations, and extended operations or supply chain is provided in the "Environment Sustainability" section of Cisco's Corporate Social Responsibility (CSR) Report.

Reference links to information about key environmental sustainability topics (mentioned in the "Environment Sustainability" section of the CSR Report) are provided in the following table:

Table 5. Environmental sustainability topics

Sustainability topic	Reference
Information on product material content laws and regulations	Materials
Information on electronic waste laws and regulations, including products, batteries, and packaging	WEEE compliance

Cisco makes the packaging data available for informational purposes only. It may not reflect the most current legal developments, and Cisco does not represent, warrant, or guarantee that it is complete, accurate, or up to date. This information is subject to change without notice.

Ordering information

Table 1 contains the top-level part number for the Cisco UCS E-Series M6 module. Review the ordering guide for the complete list of part numbers and ordering examples.

To place an order, visit the Cisco Ordering homepage. To download software, visit the Cisco Platform Suite.

Cisco services

Hardware support for Cisco UCS E-Series Server modules is covered by the Cisco Smart Net Total Care® contract for the router in which the module resides. Cisco Smart Net Total Care support is available on a one-time or annual contract basis. Support options range from help-desk assistance to proactive, onsite consultation.

All support contracts include:

- Major Cisco IOS Software updates for protocol, security, bandwidth, and feature improvements
- Full access rights to Cisco.com technical libraries for technical assistance, electronic commerce, and product information
- Access to the industry's largest dedicated technical support staff 24 hours a day

For more information about Cisco services, refer to Cisco Technical Support Services or Cisco Advanced Services.

Cisco and partner services for the branch office

Services from Cisco and our certified partners can help you transform the branch-office experience and accelerate business innovation and growth. Cisco has the depth and breadth of expertise to create a clear, replicable, optimized branch-office footprint across technologies. Planning and design services align technology with business goals and can increase the accuracy, speed, and efficiency of deployment. Technical services help improve operation efficiency, save money, and mitigate risk. Optimization services are designed to continuously improve performance and help your team succeed with new technologies. For more information, please visit https://www.cisco.com/go/services.

Cisco Capital

Flexible payment solutions to help you achieve your objectives

Cisco Capital® makes it easier to get the right technology to achieve your objectives, enable business transformation, and stay competitive. We can help you reduce the total cost of ownership, conserve capital, and accelerate growth. In more than 100 countries, our flexible payment solutions can help you acquire hardware, software, services, and complementary third-party equipment in easy, predictable payments. Learn more.

For more information

For more information about Cisco UCS E-Series Servers, visit https://www.cisco.com/go/ucse/ or contact your local Cisco account representative.

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

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at **https://www.cisco.com/go/offices**.

Printed in USA C78-3724616-00 06/23