

New hardware features

- New hardware features in Infrastructure Firmware Release 6.0(2.260067) — None, on page 1
- New hardware features in Infrastructure Firmware Release 6.0(1.260006) — None, on page 1
- New hardware features in Infrastructure Firmware Release 6.0(2.260045), on page 1
- New hardware features in Infrastructure Firmware Release 6.0(1.260003) — None, on page 2
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New hardware features in Infrastructure Firmware Release 6.0(2.260067) — None

New hardware features in Infrastructure Firmware Release 6.0(1.260006) — None

New hardware features in Infrastructure Firmware Release 6.0(2.260045)

Cisco UCS 6652 Fabric Interconnect

The Cisco UCS 6652 fabric interconnect is a 1-rack-unit (1-RU), fixed-port system designed for top-of-rack deployment in data centers with a total of 52 ports.

The Cisco UCS 6652 fabric interconnect supports an array of Gigabit Ethernet (GbE), Fibre Channel (FC), and Fibre Channel over Ethernet (FCoE) ports to provide connectivity to peer data center devices. The system offers the following ports and capabilities:

- 48 ZSFP ports (ports 1–48) that support 10G, 25G, and 50G Ethernet speeds.
- 4 QSFP-DD uplink ports (ports 49–52) that support 40G, 100G, and 400G Ethernet speeds.
- Breakout capability is supported only on QSFP-DD ports.

- 16 unified ports (ports 17–32) that support either:
  - 10/25/50 Gbps Ethernet or FCoE, or
  - 16/32/64 Gbps Fibre Channel.
- Unified ports provide full retimer and MACsec support.
- All Ethernet ports support Fibre Channel over Ethernet (FCoE).
- The fabric interconnect includes management, console, USB, and high-availability L1/L2 ports.
- The architecture supports low-latency, deterministic, line-rate switching.

For more information, see the Cisco UCS 6600 Series Fabric Interconnects Data Sheet.



Note The Cisco UCS 6652 FI supports these components:

- Cisco UCSX-9508 chassis that support Cisco UCSX-I-9108-25G Intelligent Fabric Modules (IFM) and Cisco UCS X-series blade servers with Cisco UCS VIC 14,000 or 15,000 series adapters
- Cisco UCS 5108 chassis with IOM 2408
- Cisco UCS C-series servers with Cisco UCS VIC 1400 or 15,000 series adapters, and
- Cisco UCS C-series servers using Nexus 93180YC-FX3 in Fabric Extender (FEX) mode.

New hardware features in Infrastructure Firmware Release 6.0(1.260003) — None

New Hardware Features in Infrastructure Firmware Release 6.0(1.250229)

This section provides a brief description of the new hardware features.

Cisco UCS X580p PCIe Node

The Cisco UCS X580p PCIe Node is the latest PCIe resource node for the UCS X-Series Modular System. It delivers high-performance GPU support for workloads such as generative and agentic AI fine-tuning, inference, and other applications that require GPU acceleration.

The Cisco UCS X580p PCIe Node supports up to four PCIe GPUs. It can be paired with the Cisco UCS X210c M8 server (with Intel® Xeon® processors) or the UCS X215c M8 server (with EPYC processors). The X580p uses Cisco UCS X-Fabric technology for GPU connectivity.

The X580p occupies two node slots in the X-Series chassis and allows assignment of up to four GPUs per node. Each 7RU Cisco UCS X9508 chassis supports up to two PCIe Nodes, with each node pairing with one or two servers.

For more information, see Cisco UCS X580p PCIe Node Installation and Service Guide and Cisco UCS X580p PCIe Node Spec Sheet.

Cisco UCS X9516 X-Fabric

The Cisco UCS X9516 X-Fabric is the second-generation X-Fabric module for the UCS X9508 chassis. It provides ultra-low-latency PCIe Gen5 switching and SmartNIC support, enabling flexible and composable IT resources. Managed via Cisco Intersight®, the UCS X9516 X-Fabric allows GPUs and NICs to be dynamically provisioned across servers using policy-based management.

Paired with the UCS X580p PCIe Node, the X9516 X-Fabric supports up to four dual-slot GPUs per node with NVLink Bridge support, serving as the control point for modular GPU composability in AI-driven environments.

For more information, see Cisco UCS X9516 X-Fabric Data Sheet.

Minimum Firmware Requirements to Support Cisco UCS X580p PCIe Node and Cisco UCS X9516 X-Fabric

- X580p PCIe Node Firmware: 6.0(1.252044)
- X9508 Chassis Firmware: 6.0(1.252044)
- Cisco UCS X-Series M8 Server Firmware: 6.0(1.252039)
- Fabric Interconnect Infrastructure Firmware: 6.0(1.250229)

Note The X580p PCIe Node firmware 6.0(1.252044) and X9508 Chassis firmware 6.0(1.252044) are available as separate bundles.

New hardware features in Infrastructure Firmware Release 6.0(1.250198)

This section provides a brief description of the new hardware features.

Cisco UCS 6664 Fabric Interconnect

The Cisco UCS 6664 Fabric Interconnect is a 2-rack unit (RU), fixed-port system designed for Top-of-Rack deployment in data centers. It reduces cabling complexity for the Cisco UCS® X-Series Modular System and Cisco UCS C-Series Rack Servers.

The Fabric Interconnect supports an array of Gigabit Ethernet (GbE), Fibre Channel (FC), and Fibre Channel over Ethernet (FCoE) ports to offer connectivity to peer data center devices. For more information, see Cisco UCS 6600 Series Fabric Interconnects Data Sheet.

Note

- Cisco UCS 6664 Fabric Interconnect (FI) is supported with the UCSX-9508 chassis using the UCSX-I-9108-25G and UCSX-I-9108-100G Intelligent Fabric Modules (IFMs).
- Cisco UCS 6664 FI supports the UCS IOM 2408 when used with the Cisco UCS 5108 chassis.

New hardware features in Infrastructure Firmware Release 6.0(1.250198)