

The **Cisco Catalyst C9600-SUP-2** is the second-generation supervisor engine for the Cisco Catalyst 9600 Series modular core switches. Powered by Cisco Silicon One Q200 ASICs, it unlocks up to 25.6 Tbps switching capacity and native 400G Ethernet capability for ultra-high-density enterprise core deployments.

TECHNICAL SPECIFICATIONS

Specification	Details / Performance
Supervisor Module	Cisco Catalyst C9600-SUP-2
Supported Chassis	Cisco Catalyst 9606R Chassis
Switching Capacity	Up to 25.6 Tbps per system (6.4 Tbps per slot)
Forwarding Rate	Up to 6.4 Bpps
ASIC Architecture	Cisco Silicon One Q200 ASIC
Processor & Memory	Intel x86 8-Core CPU 32 GB DDR4 RAM 16 GB eMMC Storage
SSD Storage	Supports optional 240GB / 480GB / 960GB M.2 NVMe SSD
Console & Management Ports	1x RJ-45 Console, 1x Micro-USB Console, 1x Mgmt Ethernet (RJ-45), 2x USB 3.0 Ports
High Availability Redundancy	1+1 Stateful Switchover (SSO) and Nonstop Forwarding (NSF)

KEY ARCHITECTURE HIGHLIGHTS

Cisco Silicon One Architecture

Delivers unprecedented bandwidth and energy efficiency with routing and switching unified on a single ASIC architecture for high-density 100G/400G core links.

Massive Scale & Throughput

Provides up to 6.4 Tbps bandwidth per slot—more than double the throughput of Supervisor 1—making it ideal for modern enterprise core bandwidth demands.

Enhanced Security & Encryption

Full support for native MACsec 256-bit hardware encryption, WAN MACsec, Encrypted Traffic Analytics (ETA), and Cisco TrustSec architecture.

Advanced Automation

Seamless integration with Cisco Catalyst Center (DNA Center), telemetry, programmability (NETCONF/RESTCONF), and Docker container hosting.