



64-Port 400G Data Center Managed Ethernet Switch

S6700-64CQ

Product Brochure

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Product Introduction:

S6700-64CQ is a new generation Full 400G Ethernet switch designed for enterprise data center and campus LAN networks, providing high-throughput, high-density 400GE interfaces, larger buffer and lower latency. The S6700-64CQ adopts advanced hardware architecture with 64*400GE ports. S6700-64CQ provide rich data center service features and management capability.

It realize large buffer of the interfaces, meeting the burst flow forwarding without packet loss; provide the M-LAG technology for virtualization scenarios; provide the modular power and fan design for high reliability. The key components adopt "overvoltage" designs to ensure that the product has the strong ability of continuous operation.

It can work with S6700-32CQ or S6700-24QV16CQ ToR switches to build a complete, scalable, virtualized fabric network that meets the data center requirements. Meanwhile, S6700-64CQ can also be deployed as aggregation or core switches for enterprise campus LAN networks.



Main Features:

High-density 400GE ports

- Provide fixed 64*400GE interfaces in compact 2U device. The port combination fully satisfies the interface density requirement of data center scenarios.
- Have a maximum of 64*400GE QSFP112 ports, the ports can be connected to S6700-32CQ access switches to build a non-blocking network architecture.

M-LAG for cross-device link aggregation

- Support multi-chassis link aggregation group (M-LAG), which enables links of multiple switches to aggregate into one to implement cross-device link backup. The rest of switches in the M-LAG group are working actively regardless any switch failure. During the upgrade, other switches in the system take over traffic forwarding to ensure uninterrupted services.

Complete data center features

- The S6700-64CQ supports VXLAN and EVPN, which can meet the requirements for building data center overlay networks and deploying large layer 2 networks within the data center.

High reliability assurance at the telecommunications level

- S6700-64CQ adopts redundant backup design scheme for key hardware components; Multiple reliability protection at both device and link levels; Adopting overcurrent protection, overvoltage protection, and overheating protection technologies; Support rapid switching of 50-200ms link failures to ensure uninterrupted transmission of critical services; Support cross device Link aggregation to facilitate the access server/switch to realize dual active link uplink.

Based on the SONIC open source development

- Support SONIC open source software, support white box switches, greatly reducing customer investment costs.

Specifications:

Hardware Specification:	
Network Interface	• 64 * 400G Q S F P 1 1 2 optical interfaces • 2 * 10 G SFP+ optical interfaces • 1 * Console port • 1 * Management port • 1 * USB port
Redundant Design	• Support 2 pluggable power, 1 + 1 backup mode • Support 4 pluggable fans
Switching Capacity (Full-duplex)	• 51.2Tbps
Packets Forwarding	• 38Bpps
packet buffer	• 128MB
RAM	• 16 GB
SSD	• 128 GB
Power Supplier	• AC: 90V~264V, rated voltage 100-127V or 200-240V • High voltage DC: 180-300V, rated voltage 240V 2700W
Dimension	• WxDxH: 440×674×87mm
Environment	• Operating temperature: 0°C~40°C • Storage temperature: -40°C~70°C • Operating humidity: 10% ~ 90% RH non condensing • Storage humidity: 10% ~ 90% RH non condensing
Safety Regulations	• CE/ ROHS/ FCC

Software Specifications(SONIC):

Port	Support FEC Support Speed-400G Support MTU - 9212 Support Auto-neg
L2 Switching	Support Layer 2 VLAN Support FDB MAC Learn/Age Support Static LAG Support LACP: IEEE 802.3ad Support LAG Hash Support Storm Control Support LLDP Support RSTP Support RPVST Support MSTP Support BPDU Guard Support Root Guard Support Loop Guard Support BPDU Filter
L3 and Routing	Support Routed Port Support Routed PortChannel Support SVI Support ARP Support Sub-interface Support ECMP,WCMP Support NAT Support IPV6 Neighbor Discovery Support IPv6 Route Advertisement Support BGP unnumbered Support Border Gateway Protocol Support (BGP) for IPv4 Border Gateway Protocol (BGP) for IPv6 Support BFD Support DHCP Relay Support Static Routes Support OSPF v2 Support OSPF v3 Support VRF

Software Specifications(SONiC):

Management	Support ZTP Support SNMPv2 Support SNMPv3 Support ISCLI (ONES FMCLI) Support Feature / Functionality Support SSH Support NTP Support Management VRF Support SYSLOG Support DHCP Client (MGMT) Support ACLS Support Sflow Support Telemetry (ONES Agent) Support ERSPAN Support AAA and TACACS+ Support Radius Support ACLs for IPV4 Support ACLs for IPV6 Support Management ACL Support CoPP Support Monitor link Support IP SLA
Traffic	Support CoPP Support ECN Support QOS Support WRED Support DCBX Support ETS Support 802.1p mapping Support DSCP mapping Support Drop Counters Support Port Counters Support PFC Support PFC WatchDog Support On-click RoCE Support Policy Routing
DCI	Support L2 VXLAN Support BGP EVPN (Type 2,3,5) Support L3 VXLAN