

Product Highlights

Port Configurations

- CX308P-48Y-N-V2:
48 x 25G SFP28 + 8 x 100G QSFP28
- CX532P-N-V2:
32 x 100G QSFP28
- CX732Q-N-V2:
32 x 400G QSFP-DD
- Wired speed L2 and L3 forwarding

Hardware

- Compact 1RU fixed units, high port density with multi-speed combination
- N+1 Redundant fans
- 1+1 Redundant power supplies
- 128K MAC entries
- 288K IPv4 Routes
- High-precision PTP timestamp

AsterNOS

- SONiC based enterprise distribution
- Single binary for all models
- Standard L2/L3 features

Product Applications

- Cloud data center
- High performance computing
- Distributed storage
- AVoIP

Overview

The popularity of high-performance servers and the increase in applications that use higher bandwidth have accelerated the need for dense 25, 100 to even 400 Gigabit Ethernet switching in the leaf and spine of modern networks. Asterfusion CX-N-V2 series enterprise data center switches are wire speed network leaf/spine roles for enterprise data center scenarios. Comparing to CX-N series, the CX-N-V2 series based on Marvell Falcon ASIC offers provides larger table size and richer feature set, which are suitable for data center application scenarios that do not have extreme requirements on latency.



CX308P-48Y-N-V2



CX532P-N-V2



CX732Q-N-V2

The CX308P-48Y-N-V2, CX532P-N-V2, CX732Q-N-V2 support a flexible combination of speeds including 10G/25G, 40G/100G and 400G in compact form factors that allow customers to design networks for different applications and east-west traffic patterns found in modern data centers whilst providing investment protection. In addition, the 100G/400G models support break-out to 4x10G, 4x25G and 4x100G, which enable seamless transition for 10/25G servers to 100G even 400G.

Combined with AsterNOS, the CX-N-V2 series deliver advanced features for cloud, virtualized and traditional data centers.

AsterNOS

AsterNOS is a common software for all Asterfusion products. It is an enterprise distribution of SONiC which is based on Linux kernel and Switch Abstract Interface (SAI) for multi-vendor merchant silicon adaptability. AsterNOS provides rich, standard Layer-2, Layer-3 and virtualization functionalities across all products, which makes it possible that customers can have consistent experience on campus switches, data center switches, and routers. For details of the latest AsterNOS version for data center switches, visit: <https://asternos.com/community/space/aidc-fabric/home>

Prometheus Exporter and Grafana Monitoring Solution

As a containerized operating system based on the Linux kernel, AsterNOS is well compatible with open-source operation, maintenance and management solutions. We provide AsterNOS Exporter, which runs as a container in the operating system. It can collect the operating status of the switch in real time and send the collected metrics to the Prometheus server, and the standard Grafana dashboard will display it on the front end.

High-precision Time Synchronization and Multicast Support

CX-N-V2 switches provide full support for IEEE 1588v2 Precision Time Protocol (PTP) with Class C-level timing accuracy, enabling precise time synchronization for time-sensitive networking applications. The switches support multiple industry-standard PTP profiles, including IEEE 1588v2, G.8275.1, G.8275.2, SMPTE 2059-2, and AES67. Flexible clock roles are supported, including GrandMaster (GM), Boundary Clock (BC), Ordinary Clock (OC). In addition, the switches support comprehensive multicast protocols, including IGMP Snooping, IGMP Querier, and PIM, ensuring efficient and reliable multicast traffic delivery in AVoIP or industrial network deployments.

Asterfusion Optics and Cables

Asterfusion switches support a wide range of 10G, 25G, 100G, 200G, 400G and 800G ports. For details about the different optical modules compatible with Asterfusion switches, visit:

<https://cloudswit.ch/product-category/optical-transceivers/>

Interface

- 10G/25G/40G/100G/200G/400G
- Interface Statistics
- Jumbo Frames (9216 Bytes)
- Digital Optical Monitoring (DOM)
- Virtual Interfaces

Layer 2 & Layer 3 Features

- 4096 VLANs
- MSTP
- LLDP
- LACP
- IPv4/v6 Dual Stack
- ARP, NDP
- SVI
- Routing Protocols: Static, OSPF v2/v3, BGP, MP-BGP, IS-IS
- Policy Based Routing (PBR)
- Route Map
- ECMP
- DHCPv4/v6

Virtualization Features

- VRF
- Static/Dynamic VXLAN
- VXLAN Centralized/Distributed Gateway
- EVPN Type 1/2/3/4/5
- VXLAN Cross-connect
- VXLAN Multicast Underlay
- Inter-VRF Route Leaking
- Anycast Gateway
- Symmetric IRB
- DCI

Multicast Features

- Multicast Route
- IGMP v1/v2/v3
- IGMP Querier
- IGMP Snooping
- PIMv4, PIM-SM

Quality of Service (QoS)

- 8 Queues per Port

- 802.1p Based Classification
- DSCP Based Classification
- Strict Priority Queueing
- DWRR Scheduling
- WRED
- Policing/Shaping
- Rate limiting
- ECN
- PFC
- PFC Watchdog
- DCBX
- RoCEv2
- Easy RoCE (One-step RoCE Configuration)
- Fast CNP

Security

- ACL for IPv4/v6
- Ingress/Egress ACL
- Storm Suppression
- TACACS+
- RADIUS
- CoPP

Reliability

- MC-LAG
- VRRPv2/v3
- EVPN MultiHoming
- Monitor Link
- BFD

Management and Monitoring

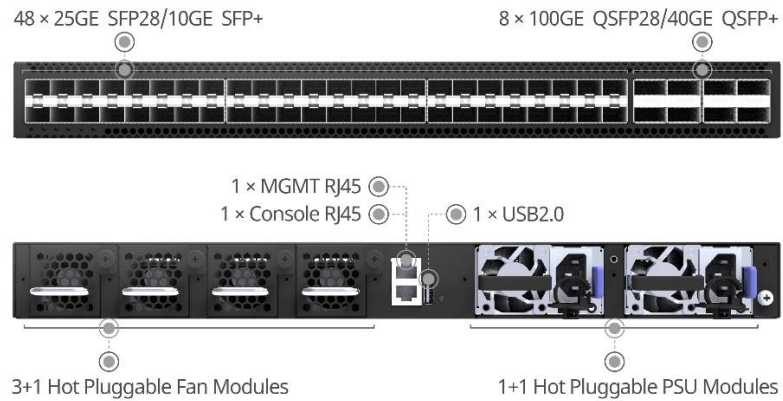
- Console, SSH, Telnet, REST API, NETCONF
- Industry Standard CLI(Klish)
- ZTP
- Syslog
- sFlow
- SNMPv1/v2/v3
- SPAN/ERSPAN
- PTP Profile: IEEE 1588v2, ITU-T G.8275.1, ITU-T G.8275.2, SMPTE-2059-2, AES67
- PTP Clock Type: GrandMaster, BC, OC, TGM, T-BC, T-BC-P, T-TSC, T-TSC-P
- SyncE
- AsterNOS Exporter (Prometheus)
- Grafana Dashboard



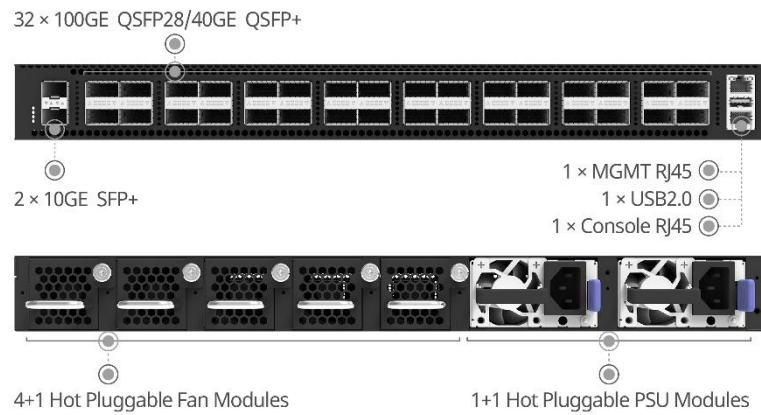
Specifications

Product Model		CX308P-48Y-N-V2	CX532P-N-V2	CX732Q-N-V2
Network interface	400GE(QSFP-DD)	-	-	32
	100GE(QSFP28)	8	32	-
	25GE(SFP28)	48	-	-
	10GE(SFP+)	-	2	2
Switching chip	Chip model	Marvell Falcon		
	Switching capacity	2.0Tbps	3.2Tbps	12.8Tbps
Control and manage CPU (COMe)	CPU	Intel Xeon-D		
	Memory	16GB DDR4, extensible to 96GB		16GB DDR4, extensible to 64GB
	SSD	256GB M.2 SATA		
Management interface	USB	1xUSB2.0		
	Console	1xConsole RJ45		
	MGMT	1xMGMT GE RJ45		
Electrical characteristics	Fan redundancy (Hot-pluggable)	3+1	4+1	5+1
	Power redundancy (Hot-pluggable)	1+1	1+1	1+1
	Input voltage	100~240V AC/ 36~72V DC/ 180~300V DC	100~240V AC/ 36~72V DC/ 180~300V DC	100~240V AC/ 180~300V DC
	Maximum power consumption	480W	495W	1000W
Dimensions	Height	1U		
	Dimensions (WxHxD, mm)	440x44x515		
Operating conditions	Operating temperature	Front-to-Rear: 0 - 45°C/ Rear-to-Front: 0 - 35°C		Front-to-Rear: 0 - 40°C
	Relative humidity	5% - 90% (non-condensing)		

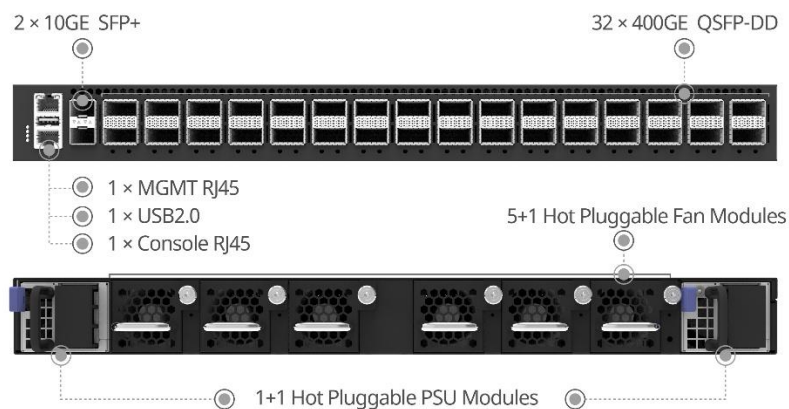
Panel Illustration



CX308P-48Y-N-V2



CX532P-N-V2



CX732Q-N-V2



Ordering Information

Part Number	Description
CX308P-48Y-N-V2	Enterprise data center switch system, 48x25G SFP28, 8x100G QSFP28, hot-pluggable 1+1 PSU, hot-pluggable 3+1 FANs, front-to-power airflow
CX532P-N-V2	Enterprise data center switch system, 32x100G QSFP28, hot-pluggable 1+1 PSU, hot-pluggable 4+1 FANs, front-to-power airflow
CX732Q-N-V2	Enterprise data center switch system, 32x400G QSFP-DD, hot-pluggable 1+1 PSU, hot-pluggable 5+1 FANs, front-to-power airflow
Optional Components	
HW-WNT-1Y-CX308P-N	Hardware platform warranty for CX308P-N series, 1 Year
AsterNOS-UG-1Y-CX308P-N	Major version upgrade of AsterNOS for CX308P-N series, 1 Year
HW-WNT-1Y- CX532P-N	Hardware platform warranty for CX532P-N series, 1 Year
AsterNOS-UG-1Y-CX532P-N	Major version upgrade of AsterNOS for CX532P-N series, 1 Year
HW-WNT-1Y- CX732Q-N	Hardware platform warranty for CX732Q-N series, 1 Year
AsterNOS-UG-1Y-CX732Q-N	Major version upgrade of AsterNOS for CX732Q-N series, 1 Year