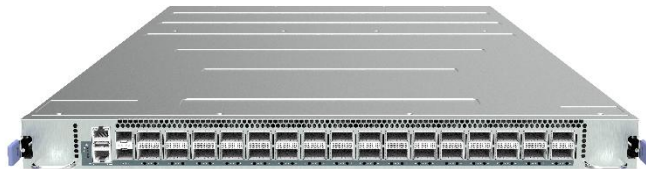


Overview

As data traffic surges driven by AI, 5G, and cloud computing, the demand for high-speed, low-latency networking solutions has skyrocketed. Asterfusion CX732Q-N-ORv3 ultra-low latency switch is at the forefront of this evolution, addressing the needs of high-performance applications such as AI training and inference. CX732Q-N-ORv3 switch deliver bandwidth scalable from 100G to 400G, while achieving ~500ns latency based on Marvell Teralynx ASIC. Built with energy-efficient ASICs, they ensure high throughput and reliability with minimal power consumption, making it essential for next-generation data centers.



CX732Q-N-ORv3

Compliant with UEC standards and OCP Open Rack V3 standard, it features comprehensive open APIs, facilitating seamless integration for data centers and HPC clusters. As a vendor-neutral network device, it is compatible with heterogeneous computing infrastructures and NICs from various vendors in an OCP standard data center. With industry-leading low latency and high reliability, the Asterfusion CX732Q-N-ORv3 low latency data center switch stands as the premier choice for 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.

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/>

Layer 2 Features

- 4096 VLANs
- Multiple Spanning Tree Protocol (MSTP)
- Link Aggregation Control Protocol (LACP)
- 128 LAG groups / 64 LAG members
- Multi-Chassis Link Aggregation (MC-LAG)
- Link Layer Discovery Protocol (LLDP)
- Jumbo Frames (9K Bytes)
- Storm Suppression
- Port Isolation
- Monitoring Link

Layer 3 Features

- Routing Protocols: OSPF, OSPFv3, BGP, MP-BGP, IS-IS
- Equal Cost Multipath Routing (ECMP)
- VRF
- Bi-Directional Forwarding Detection (BFD)
- Route Maps
- VRRP
- Policy Based Routing (PBR)
- AIDC Intelligent Routing

Virtualization Features

- VXLAN Routing and Bridging
- Anycast Gateway
- Distributed/Centralized Gateway
- Ethernet Auto Discovery
- Symmetry IRB
- EVPN Multi-homing

Security Features

- IPv4/IPv6 Ingress & Egress ACLs using User-defined fields
- Control Plane Policing (CoPP)
- Service ACLs
- TACACS+
- RADIUS

Quality of Service (QoS)

- 802.1p based classification

- DSCP based classification and Remarking
- Strict priority queueing
- DWRR Scheduling
- Port/Queue Based Traffic Shaping
- Rate limiting
- Explicit Congestion Notification (ECN)
- Per-Priority Flow Control (PFC)
- PFC Watchdog
- Data Center Bridging Extensions (DCBX)
- RoCEv2
- One-step RoCE Configuration

Management and Monitoring

- Console, SSH, Telnet, REST API, NETCONF
- Management over IPv6
- Industry Standard CLI
- Syslog
- Zero Touch Provisioning (ZTP)
- PTP IEEE 1588v2 (TC and BC)
- Containerized Custom Tools
- SNMPv2, SNMPv3, SNMP Trap
- SPAN, ERSPAN
- sFlow
- In-band Network Telemetry (INT)
- Buffer Drop Capture
- High Delay Capture
- AsterNOS Exporter (Prometheus)
- Grafana Dashboard
- RoCE Status
- Prometheus Alarm & Alert

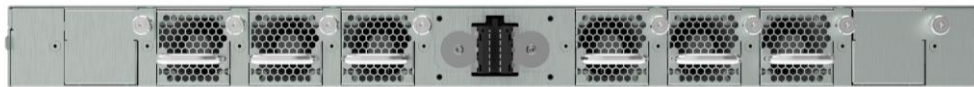
Specifications

Product Model		CX732Q-N-ORv3
Network interface	400GE(QSFP-DD)	32
	10GE(SFP+)	2
Switching chip	Chip model	Marvell Teralynx
	Switching capacity	12.8Tbps
Control and manage CPU (COMe)	CPU	Broadwell DE D-1508
	Memory	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)	5+1
	Input voltage	41~60V DC
	Maximum power consumption	1000W
Dimensions	Height	1U
	Dimensions (WxHxD, mm)	537 x 45 x 800
Operating conditions	Operating temperature	0 - 40°C
	Relative humidity	10% - 90% (non-condensing)

Panel Illustration



Front Panel



Rear Panel

Ordering Information

Part Number	Description
CX732Q-N-ORv3	Ultra-low latency AIDC switch system adapted to ORv3 standard, 32x400G QSFP-DD, hot-pluggable 5+1 FANs, front-to-rear airflow
Optional Components	
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