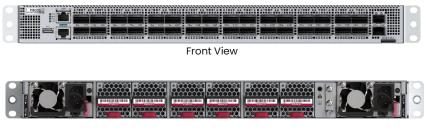## Overview

The M2-W6920-32QC2X data center switch offers 32-port 400GbE interface in 1RU chassis, which delivers the highest performance combined with complete L2 and L3 forwarding feature in modern large-scale datacenter networks. Each supporting 1 × 400G QSFP56-DD, 2 × 200G (4 lanes 50G PAM4), 4 × 100G (2 lanes 50G PAM4).

The M2-W6920-32QC2X can be deployed as a spine switch supporting spine to spine or spine to leaf interconnects. This open network switch is loaded with Open Network Install Environment (ONIE) software installer, which support the SONiC operating system, including the community versions and the enhanced versions.

Front View

Back View

Product Highlights

First-class Performance

- 32 × QSFP-DD 400GbE Ports
- Up to 25.6 Tbps full duplex
- Up to 8 Bpps
- Wire speed L2 and L3 forwarding

Resilient Configuration

- Broadcom BCM56980 (Tomahawk 3)
- Intel ATOM C3758
- DDR4 8GB
- System storage 64GB

Data Center Oriented Design

- Over 94% efficient power supplies
- 1+1 redundant & hot-swappable power supplies
- 5+1 redundant & hot-swappable fans
- Front-to-rear cooling
- Rear-to-front cooling

Outstanding OS Compatibility

- Loaded with Open Network Install Environment (ONIE) software installer and OpenBMC
- Compatible with software for SONiC
- Learn more about open NOS features at the Micas Networks dedicated page.

Cloud Networking Ready

- Shared 64 MB buffer with burst absorption
- MAC entries: 8K
- VLAN: 4K
- L3 host entries:
    - IPv4 UC: 16K
    - IPv4 MC: 8K
    - IPv6 UC: 8K
    - IPv6 MC: 4K

*The above table is the maximum capacity that the switching chip can provide.

Fully-loaded Software Functions

- BGP
- Route Policies
- ARP
- Load Balance based on LAG/ECMP
- ACL
- SNMP&GRPC Restconf
- etc.

*Download SONiC DS to see all software functions.

Parameter Specifications

System Specifications	
Switch Model	M2-W6920-32QC2X
Ports	32×400GbE QSFP-DD
MGMT Port	1 × RJ-45 1000BASE-T 2 × SFP+10G In-band management
Console Port	1
USB Port	1
Switching Capacity	25.6 Tbps
Packets/Second	8 Bpps
CPU	Intel ATOM C3758
System Memory	DDR4 8GB
System Storage	64GB
BMC Option	Yes
Switch ASIC	Broadcom BCM56980 (Tomahawk 3)
Packet Buffer	64MB
Temperature Alarm	Supports temperature alarm and overtemperature protection
Power Supplies	2 (1+1 redundant, hot-swappable)
Fans	6 (5+1 redundant, hot-swappable)
OS	SONiC
Airflow Options	Standard and reversed airflow
Max Power	1200W
Typical Power	• 800W (Front-to-rear airflow) • 900W (Rear-to-front airflow)
Consumption Dimensions (W × D × H)	17.40 × 27.56 × 1.72 in. 442 × 700 × 43.6 mm, 1RU
Weight (with all modules)	27.01 lbs (12.25 kg)

Port Split

Split Type	Support Port Speed
1 × 400G non-breakout	1 × 400G (8 lanes 50G PAM4) 1 × 200G (4 lanes 50G PAM4) 1 × 100G (4 lanes 25G NRZ) 1 × 40G (4 lanes 10G NRZ) 1 × 25G (1 lanes 25G NRZ) 1 × 10G (1 lanes 10G NRZ)
2 × 200G breakout	2 × 200G (4 lanes 50G PAM4) 2 × 40G (4 lanes 10G NRZ)
4 × 100G breakout	4 × 100G (2 lanes 50G PAM4) 4 × 25G (1 lanes 25G NRZ) 4 × 10G (1 lanes 10G NRZ)
8 × 50G breakout	8 × 50G (1 lanes 50G PAM4) 8 × 25G (1 lanes 25G NRZ) 8 × 10G (1 lanes 10G NRZ)

Power Supply

Model	PA1300I-F/R
Input Connector	IEC 320-C14
Output Power	1300W
Input Voltage	100 to 240 VAC
Frequency	50-60Hz
Efficiency	80 plus Platinum
Typical Input Current	12A (100 VAC ~ 127 VAC) 8A (200 VAC ~ 240 VAC)

Environmental Characteristics

Operating Temperature	M2-W6920-32QC2X-FA: • 32 to 104ºF (0 to 40ºC) M2-W6920-32QC2X-RA: • 32 to 95ºF (0 to 35ºC)
Storage Temperature	-40 to 158º F (-40 to 70ºC)
Operating Humidity	10% to 90% RH (Non-condensing)
Altitude (Operating)	0-16,404.20 ft. (0-5,000 m)

Standard Compliance

EMC Standards	FCC CFR Title 47, Part 15, Subpart B ICES-003 Issue 7 ANSI C63.4
Safety	UL 62368-1 CSA C22.2 NO. 62368-1
Certifications	FCC, IC, cTUVus
European Union Directives	-

Ordering Information

Product ID	Product Description
M2-W6920-32QC2X-FA	M2-W6920-32QC2X switch, 32 × 400GbE QSFP-DD ports, with two PA1300I-F modules and six M1HFAN IV-F fan modules, front-to-rear airflow.
M2-W6920-32QC2X-RA	M2-W6920-32QC2X switch, 32 × 400GbE QSFP-DD ports, with two PA1300I-R modules and six M1HFAN IV-R fan modules, rear-to-front airflow.
M1HFAN IV-F	Fan module for front-to-rear airflow.
M1HFAN IV-R	Fan module for rear-to-front airflow.
PA1300I-F	1300W AC power supply module, front-to-rear airflow.
PA1300I-R	1300W AC power supply module, rear-to-front airflow.

ABOUT MICAS

Micas Networks, a pioneer in open networking solutions, offers high-performance switch

products and reliable services tailored for data centers.

Address: 250W Tasman Drive. San Jose

For more information, please visit. https://micasnetworks.com or contact your local Micas sales representative.