

## Overview

The M2-W6520-24DC8QC data center switch offers 24-port 200GbE and 8-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 400G port support 1 × 400G, 2 × 200G (4 lanes 50G), and each 200G port support 1 × 200G, 2 × 100G (2 lanes 50G).

The M2-W6520-24DC8QC can be deployed as a leaf switch supporting spine to leaf interconnects. This open network switch is loaded with Open Network Install Environment (ONIE) software installer and OpenBMC, which support the SONiC operating system, including the community versions and the enhanced versions.



Front View



Back View

## Product Highlights

### First-class Performance

- 24 × QSFP56 200GbE Ports and 8 × QSFP-DD 400GbE Ports
- Highest density 200GbE in compact 1RU
- Up to 16 Tbps full duplex
- Up to 2.74 Bpps
- Wire speed L2 and L3 forwarding

### Resilient Configuration

- Broadcom BCM56780 (Trident 4)
- Intel Xeon D-1627 Processor (Formerly Broadwell DE)
- DDR4 16GB
- System storage ≥ 240GB

### Data Center Oriented Design

- Typical power of under 7.5W per 200GbE port
- Typical power of under 14W per 400GbE port
- Over 94% efficient power supplies
- 1+1 redundant & hot-swappable power supplies
- 5+1 redundant & hot-swappable fans
- Front-to-rear cooling

### 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.

### Cloud Networking Ready

- Dynamic Load Balancing for advanced multi-pathing
- Integrated high-performance 82MB SmartBuffer

### 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.

# Parameter Specifications

System Specifications	
Switch Model	M2-W6520-24DC8QC
Ports	24 × 200GbE QSFP56 + 8 × 400GbE QSFP-DD
Console Port	1
MGMT Port	1 × RJ-45 1000BASE-T
USB Port	1
Switching Capacity	16 Tbps
Packets/Second	2.74 Bpps
CPU	Intel Xeon D-1627
System Memory	DDR4 16GB
System Storage	240GB
BMC Option	AST2520
Switch ASIC	Broadcom BCM56780 (Trident4)
Packet Buffer	82 MB
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 airflow
Max/Typical Power	800W/665W
Consumption Dimensions (W × D × H)	17.40 × 26.41 × 1.72 in. 442 × 670.8 × 43.6 mm, 1RU
Weight (with all modules)	25.57 lbs (11.6 kg )

## Port Split

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

## Power Supply

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

Environmental Characteristics	
Operating Temperature	32 to 104° F (0 to 40°C)
Storage Temperature	-40 to 158° F (-40 to 70°C)
Operating Humidity	10% to 90% RH (Non-condensing)
Altitude (Operating)	0-16,404.20 ft. (0-5,000 m)
Standard Compliance	
EMC Standards	FCC 47 CFR Part 15 Subpart B ANSI C63.4 ICES-003 Issue 7  EN 55032 EN 55035 EN IEC 61000-3-2 EN 61000-3-3 EN 300386  BS EN 55032 BS EN 55035 BS EN IEC61000-3-2 BS EN 61000-3-3 BS EN 300386
Safety	UL 62368-1 CSA C22.2 NO. 62368-1 IEC 62368-1 EN 62368-1 BS EN 62368-1
Certifications	FCC; IC; cTUVus; CE; CB; ANATEL; UKCA; VOC
European Union Directives	Low Voltage Directive 2014/35/EU EMC Directive 2014/30/EU Directive 2012/19/EU DIRECTIVE 2011/65/EU

## Ordering Information

Product ID	Product Description
M2-W6520-24DC8QC-FA	M2-W6520-24DC8QC switch, 24 × 200GE QSFP56 ports + 8 × 400GE QSFP-DD ports, with two PA1300I-F modules and six MIHFAN II-F fan modules, front-to-rear airflow.
MIHFAN II-F	Fan module for front-to-rear airflow.
PA1300I-F	1300W AC power supply module, front-to-rear airflow

### ABOUT MICAS

Micas Networks, a pioneer in open networking solutions, offers high-performance switch products and reliable services tailored for data centers.

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