

Overview

M2-W6510-48V8C is a new generation high performance and high density 25GbE switch designed for cloud-scale datacenter which provides a powerful cache capacity and advanced scheduling mechanism driven large scale line-rate non-blocking network.

M2-W6510-48V8C introduces 48-port fully backward-compatible 25GbE SFP28 interface and 8-port 100GbE QSFP28 interface to transparently migrate existing data center fabrics from 10Gbps and 40Gbps speeds to 25Gbps and 100Gbps. The platform provide hot-pluggable 1+1 redundancy power module and 3+1 redundancy cooling fan module to meet the high reliability requirement of datacenter and carrier networks.



Front View



Back View

Product Highlights

First-class Performance

- 8 × QSFP28 100GbE Ports & 48 × SFP28 25GbE Ports
- Up to 4.0 Tbps (full duplex)
- Up to 2003.4 Mpps

Data Center Oriented Design

- Typical power of under 4W per 100GbE port and 1.5W per 25GbE port
- Over 94% efficient power supplies
- Tool less maintenance and simple installation

Cloud Networking Ready

- Shared 32MB Buffer with burst absorption
- Up to 288K MAC and 168K Host entries
- Over 324K IPv4 Routes
- Over 168K IPv6 Routes

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

Resilient Configuration

- Broadcom BCM56873 (Trident 3)
- Intel Xeon D-1527 Processor (Formerly Broadwell DE)
- DDR4 8GB
- System storage ≥240GB

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.

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-W6510-48V8C
Ports	48×25GbE SFP28 + 8×100GbE QSFP28
Console Port	1
MGMT Port	1 × RJ-45 1000BASE-T
USB Port	1
Switching Capacity	4.0 Tbps
Packets/Second	2003.4 Mpps
CPU	Intel Xeon D-1527
System Memory	DDR4 8GB
System Storage	240GB
BMC Option	AST2520
Switch ASIC	Broadcom BCM56873 (Trident3)
Packet Buffer	32MB
Temperature Alarm	Supports temperature alarm and overtemperature protection
Power Supplies	2 (1+1 redundant, hot-swappable)
Fans	4 (3+1 redundant, hot-swappable)
OS	SONiC
Airflow Options	Standard and Reversed airflow
Max/Typical Power	300W/172W
Consumption Dimensions (W × D × H)	17.40 × 22.05 × 1.70 in. 442×560×43.1 mm, 1RU
Weight (with all modules)	32.41 lbs (14.7 kg)

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

Power Supply		
Model	PA550II-F/R	PD800I-F
Input Connector	IEC 320-C14	Three-pin DC connector
Output Power	550W	800W
Input Voltage	100-240 VAC	-36 to -72VDC
Frequency	50-60Hz	/
Efficiency	80 plus Platinum	91%
Typical Input Current	7.2-3.5A	23A Max
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-W6510-48V8C-FA	M2-W6510-48V8C Switch, 48 ×25GbE SFP28 ports + 4 ×100GbE QSFP28 ports, with two PA550II-F modules and four MIEFAN III-F fan modules, front-to-rear airflow.
M2-W6510-48V8C-RA	M2-W6510-48V8C switch, 48 ×25GbE SFP28 ports + 4 ×100GbE QSFP28 ports, with two PA550II-R modules and four MIEFAN III-R fan modules, rear-to-front airflow.
M2-W6510-48V8C-FD	M2-W6510-48V8C Switch, 48 ×25GbE SFP28 ports + 4 ×100GbE QSFP28 ports, with two PD800I-F modules and four MIEFAN III-F fan modules, front-to-rear airflow.
MIHFAN III-F	Fan module, front-to-rear airflow.
MIHFAN III-R	Fan module, rear-to-front airflow.
PA550II-F	550W AC power supply module, front-to-rear airflow.
PA550II-R	550W AC power supply module, Rear-to-front airflow.
PD800I-F	800W DC power supply module, front-to-rear

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.