

AS5916-54XKS

Data Center Top-of-Rack and Carrier Access/Aggregation Switch Bare Metal Hardware



Product Overview

AS5916-54XKS is based on Broadcom StrataDNS[®] Qumran MX[™] Switch silicon capable of line rate 800Gbps Layer2 and Layer3 switching. The switch can be deployed either as a Top-of-Rack switch in data center, or as a carrier access/aggregation switch.

The AS5916-54XKS hardware comes with high-availability designs, including redundant, hot-swappable AC or -48 VDC PSUs. Fans are designed with 5+1 redundant fan modules with port-to-power or power-to-port airflow options. The Edgecore AS5916-54XKS switch meets the high-performance, availability, and scalability requirements of cloud data centers and communication service providers.

Key Features and Benefits

- Cost-effective, data center top-of-rack and carrier access/aggregation switch.
- 48 x SFP+ switch ports, supporting 10 GbE (DAC, AOC, 10GBASE-SR/LR) or 1 GbE (1000BASE-T/SX/LX).
- 6 x 100G QSFP28 ports at front.
- Rack mountable in standard 19" racks.
- Hot-swappable, load sharing, redundant AC or -48 VDC PSUs.
- Hot swappable 5+1 redundant fan modules.
- Management: Ethernet and console RJ-45 ports.
- Hardware switch pre-loaded with Open Network Install Environment (ONIE)
Compatible with Open Network Linux (ONL)

Data Center Switch



Features

Ports

Switch Ports:

- 48 x SFP+ each supporting 10 GbE or 1 GbE
- 6 x 100G QSFP28 each supporting 1 x 40/100 GbE

Management Ports on Front Panel:

- 1 x RJ-45 serial console
- 1 x RJ-45 100/1000BASE-T management port
- 1 x USB Type A storage port
- 1 x BMC

Key Components

Broadcom Qumran-MX BCM88375 Processor+ BCM52311 TCAM Knowledge-Based

CPU Modules:

- Intel® Xeon® D-1548 processor 8 cores 2.0 GHz
- DDR4 SO-DIMM 16 GB x 2
- m.2 SSD: 128GB MLC

Performance

- Switching Capacity: 800 Gbps
- Processing rate: 700 Mpps
- Jumbo Frame: 9 Kbytes
- 16MB on-chip buffering
- Deep DRAM buffering: 6 GB

Supported Optics and Cables

SFP+ Ports:

- 10GBASE-CR DAC: up to 3 m passive; up to 10 m active
- 10GBASE-SR: up to 100/300 m over OM3 MMF
- 10GBASE-LR: Up to 10 km over SMF
- 1000BASE-SX, 1000BASE-LX, 100/1000BASE-T

QSFP+ Ports:

- 40GBASE-CR4 DAC; up to 3 m passive; up to 10 m active
- 40GBASE-CR4 DAC to 4 x SFP+ 10GBASE-CR DAC; up to 3 m passive; up to 10 m active
- 40GBASE-SR4: Up to 100 m over OM3 MMF, 150 m over OM4 MMF
- 40GBASE-LR4: Up to 10 km over SMF
- 100GBASE-SR4: 100 Gbps short reach transceiver
- 100GBASE-LR4: 100 Gbps long reach transceiver
- QSFP28 AOC Cable: 100 Gbps to 100 Gbps AOC cable with upto 30 M 100G QSFP28 to 100 G QSFP28

Physical and Environmental

Dimensions (WxDxH): 43.84 x 50.19 x 4.4 cm (17.26 x 19.76 x 1.73 inch)

Weight: 9.7 kg (21.38 lb), with two installed PSU modules

Fans: hot-swappable 5+1 redundant fans

Operating Temperature: 0°C to 40°C (32°F to 104°F)

Storage Temperature: -40°C to 70°C (-40°F to 158°F)

Operating Humidity: 5% to 95% non-condensing

Software

Switch is loaded with Open Network Install Environment (ONIE)

Compatible with the following NOS options:

- Open Network Linux (ONL)

Power

PSUs: 2 redundant, load-sharing, hot-swappable AC or -48 VDC

AC input range: 100–240 VAC

DC input range: -36~-72 VDC

Regulatory

EMI

CE Mark

EN55032 Class A

EN55024

EN61000-3-2

EN61000-3-3

FCC Part 15 Subpart B Class A

VCCI Class A

Safety

CB

UL/CUL

Environmental:

NEBS GR-63-CORE (Pre-test)

RoHS 2.0 Compliant

WEEE Standards: The switches complied with the following WEEE

standards: Waste Electrical and Electronic Equipment (WEEE

Directive 2002/96/EC)

Warranty

Please check www.edge-core.com for the warranty terms in your country.

Ordering Information

Base Model: AS5916-54XKS; 48-Port 10G QSFP+ with 6 x 100G QSFP28 uplinks; ONIE software installer

Model Number	CPU Module	PSU	Airflow	Region (power cord)
5916-54XKS-O-AC-F-US	Intel® Xeon® D-1548 Processor	dual AC PSUs	port-to-power airflow	N. America
5916-54XKS-O-AC-F-EU	Intel® Xeon® D-1548 Processor	dual AC PSUs	port-to-power airflow	Europe
5916-54XKS-O-AC-F-UK	Intel® Xeon® D-1548 Processor	dual AC PSUs	port-to-power airflow	UK
5916-54XKS-O-AC-F-UN	Intel® Xeon® D-1548 Processor	dual AC PSUs	port-to-power airflow	C13 - C14 Power Cord
5916-54XKS-O-AC-F-JP	Intel® Xeon® D-1548 Processor	dual AC PSUs	port-to-power airflow	Japan
5916-54XKS-O-AC-F	Intel® Xeon® D-1548 Processor	dual AC PSUs	port-to-power airflow	N/A
5916-54XKS-O-48V-F	Intel® Xeon® D-1548 Processor	Dual 48VDC PSUs	port-to-power airflow	N/A
5916-54XKS-OT-AC-F-US	Intel® Xeon® D-1548 Processor	dual AC PSUs	port-to-power airflow	N. America
5916-54XKS-OT-AC-F-EU	Intel® Xeon® D-1548 Processor	dual AC PSUs	port-to-power airflow	Europe
5916-54XKS-OT-AC-F-UK	Intel® Xeon® D-1548 Processor	dual AC PSUs	port-to-power airflow	UK
5916-54XKS-OT-AC-F-UN	Intel® Xeon® D-1548 Processor	dual AC PSUs	port-to-power airflow	C13 - C14 Power Cord
5916-54XKS-OT-AC-F-JP	Intel® Xeon® D-1548 Processor	dual AC PSUs	port-to-power airflow	Japan
5916-54XKS-OT-AC-F	Intel® Xeon® D-1548 Processor	dual AC PSUs	port-to-power airflow	N/A
5916-54XKS-OT-48V-F	Intel® Xeon® D-1548 Processor	Dual 48VDC PSUs	port-to-power airflow	N/A

For More Information

To find out more about Edgecore Networks Corporation products and solutions, visit www.edge-core.com.

About Edgecore Networks Corporation

Edgecore Networks Corporation is in the business of providing innovative network solutions. In the service provider network, in the data center or in the cloud, Edgecore Networks Corporation delivers the software and systems that transform the way the world connects. Edgecore Networks Corporation serves customers and partners worldwide. Additional information can be found at www.edge-core.com.

Edgecore Networks Corporation is a subsidiary of Accton Technology Corporation, the leading network ODM company. The Edgecore data center switches are developed and manufactured by Accton.

To purchase Edgecore Networks solutions, please contact your Edgecore Networks Corporation representatives at +886-3-563-8888 (HQ) or +1 (949)-336-6801 or authorized resellers.

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