Data Center Switch
AS9716-32D

The Edgecore DCS510 is spine switch for high-performance data centers. The switch provides line-rate L2 and L3 switching across the 32 x QSFP-DD ports, each supporting 1 x 400 GbE or 1 x 100 GbE, or via breakout cables 4 x 100 GbE or 4 x 25 GbE. The DCS510 can be deployed as a spine switch supporting 100/400 GbE spine interconnects. This open network switch is loaded with the Open Network Install Environment (ONIE), which supports the installation of compatible Network Operating System software, including the open source options Open Network Linux, plus commercial NOS offerings.
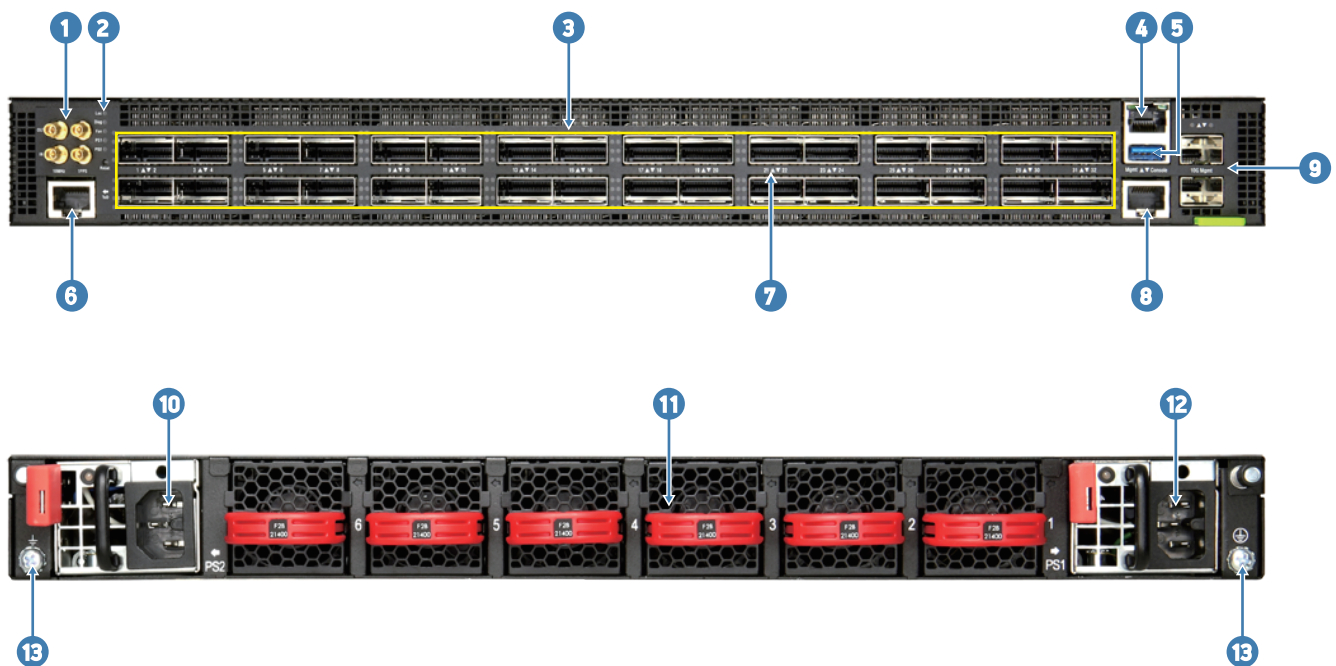
Key Features and Benefits

- Cost-effective, open network switch for data center fabric.
- 2 x QSFP-DD switch ports, each supporting 1 x 400 GbE or 1 x 100 GbE, or via breakout cables 4 x 100 GbE or 4 x 25 GbE.
- Incorporates Broadcom Tomahawk III switch series silicon for non-blocking line-rate performance.
- 1 RU form factor.
- Supports hot/cold aisles with front-to-back and back-to-front airflow SKUs.
- All ports on front; PSUs and fans accessible from rear.
- Hot-swappable, load-sharing, redundant 1300 W PSUs.
- 5+1 redundant, hot-swappable fan modules.
- Hardware switch pre-loaded with Open Network Install Environment (ONIE) for automated loading of compatible open source and commerical NOS offerings.
- Compatible with Open Network Linux (ONL), the open-source, OCP reference NOS.

OPEN PLATINUM

OPEN Compute Project SOLUTION PROVIDER

Freedom of choice

Greater control

Rapid innovation

Reduced CAPEX and OPEX

Software Supported

onie

ONL
CERTIFIED
GOLD

Interfaces

Description

1.	10 MHz and 1PPS timing ports	8.	Console port
2.	System LEDs	9.	2 x 10G SFP+ management ports
3.	32 x 400G QSFP-DD Ports	10.	PSU 2
4.	RJ-45 management port	11.	Hot-swappable 5 + 1 redundant fans
5.	USB storage port	12.	PSU 1
6.	ToD port	13.	Grounding point
7.	Port indicators		

Ports

- Switch ports: 32 x QSFP-DD 400 GbE
- Management ports on port side:
  1 x RJ-45 serial console
  1 x RJ-45 1000BASE-T management
  2 x SFP+ 10G management

Key Componets

- Switch silicon: BCM56980 Tomahawk III 12.8 Tb/s
- CPU modules:
  Intel Xeon D-1518 quad-core 2.2 GHz
  DDR4: 8 GB x 2 SO-DIMM
  SPI Flash: 16 MB x 2
  m.2 SSD: 50G MLC x 1

Performance

- Switching capability: 25.6 Tbps full duplex
- Forwarding rate: 7.88 Bpps
- Jumbo frames support up to 9 Kbytes
- Packet buffer size: 64 MB integrated packet buffer
- Subject to NOS:
  MAC Addresses: 8 K
  VLAN IDs: 4 K
  L3 Host
  IPv4 UC: 16 K
  IPv4 MC: 8 K
  IPv6 UC: 8 K
  IPv6 MC: 4 K

Physical and Environmental

- Dimensions (WxDxH): 43.84 x 53.6 x 4.31 cm (17.25 x 21.1 x 1.69 in)
- Weight: 11.06 kg (24.38 lb)
- Fans: Hot-swappable 5 + 1 redundant fans
- Storage temperature: -40°C to 70°C (-40°F to 158°F)
- Operating temperature: 0°C ~ 45°C (32°F ~ 113°F)
- Operating humidity: 5% ~ 95% non-condensing

System and Port LEDs

- QSFP-DD Port LEDs: Blue (400G), White (200G), Green (100G), Green (50G)
- Management port LED: Green: (10 G), Flashing: Activity
- System LEDs: PSU1, PSU2, Fan, Diag, and Loc
- Reset button

Software

- Switch is loaded with Open Network Install Environment (ONIE) software installer
- Compatible with the following NOS options:
  Open Network Linux, the open-source, OCP reference NOS

Power

- PSUs: 2 redundant, load-sharing, hot-swappable AC
- AC input range: 100~240 VAC at 50-60 Hz VAC

Regulatory

- EMI
  CE Mark
  EN55032
  CISPR 32
  AS/NZS CISPR 32
  EN55024
  CISPR 24
  CISPR 35
  EN 61000-3-3
  EN 61000-3-2
  FCC Title 47, Part 15, Subpart B Class A
  VCCI Class A
  CCC
- Safety
  CB
  EN60950, UL60950
  EN62368, UL62368
- Environmental:
  GR63-CORE (Pre-test)
- RoHS-2.0 Compliant
- Electrical and Electronic Equipment (WEEE Directive 2002/96/EC)

Warranty

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

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.

Ordering Information

Base model: AS9716-32D; 32-Port 400G QSFP-DD; ONIE software installer.

Model Number	CPU Module	PSU	Airflow	Region (power cord)
9716-32D-O-AC-F-US	Intel® Xeon® D-1518 Processor	Dual AC PSUs	Port-to-Power airflow	N. America
9716-32D-O-AC-B-US	Intel® Xeon® D-1518 Processor	Dual AC PSUs	Power-to-Port airflow	N. America
9716-32D-O-AC-F-EU	Intel® Xeon® D-1518 Processor	Dual AC PSUs	Port-to-Power airflow	EU
9716-32D-O-AC-B-EU	Intel® Xeon® D-1518 Processor	Dual AC PSUs	Power-to-Port airflow	EU
9716-32D-O-AC-F-UK	Intel® Xeon® D-1518 Processor	Dual AC PSUs	Port-to-Power airflow	UK
9716-32D-O-AC-B-UK	Intel® Xeon® D-1518 Processor	Dual AC PSUs	Power-to-Port airflow	UK
9716-32D-O-AC-F-JP	Intel® Xeon® D-1518 Processor	Dual AC PSUs	Port-to-Power airflow	JP
9716-32D-O-AC-B-JP	Intel® Xeon® D-1518 Processor	Dual AC PSUs	Power-to-Port airflow	JP