

The Edgecore DCS510 is a 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, plus commercial NOS offerings.

Key Features and Benefits

- 32 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 3 switch series silicon.
- 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.



onie

Interfaces



Description

- 1. 10 MHz and 1PPS timing ports
- 2. System LEDs
- 3. 32 x 400G QSFP-DD Ports
- 4. RJ-45 management port
- 5. USB storage port
- 6. ToD port
- 7. Port indicators

- 8. Console port
- 9. 2 x 10G SFP+ management ports
- 10. PSU 2
- 11. Hot-swappable 5 + 1 redundant fans
- 12. PSU 1
- 13. Grounding point

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
- Supported Transceivers and Cables: 40GBASE-SR4/LR4
 40G-DAC cable
 100GBASE-SR4/CWDM4/LR4
 100G-DAC/AOC cable
 400GBASE-SR8/DR4/FR4
 400G-DAC/AOC cable
 - Note: More optics and detailed cabling information can be found at www.edge-core.com.

Key Componets

- Switch silicon: BCM56980 Tomahawk 3
- CPU modules: Intel[®] Xeon[®] Processor D-1518 4-Core DDR4: 8 GB x 2 SO-DIMM SPI Flash: 16 MB x 2 m.2 SSD: 50G MLC x 1

Performance

- Switching Capability: 12.8 Tbps full duplex
- Forwarding Rate: 5.21 Bpps
- Jumbo frames support up to 9 Kbytes
- Packet Buffer Zize: 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 source options, plus commercial NOS offerings.

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

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.

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Ordering Information

Base Model: AS9716-32D; Intel[®] Xeon[®] Processor D-1518 4-Core; 32-Port 400G QSFP-DD; ONIE Software Installer.

Model Number	Part Number	PSU	Airflow	Region (Power Cord)
9716-32D-0-AC-F-US	FP5ZZ8632400A	Dual AC PSUs	Front-to-Back airflow	N. America
9716-32D-O-AC-B-US	FP5ZZ8632401A	Dual AC PSUs	Back-to-Front airflow	N. America
9716-32D-O-AC-F-EU	FP5ZZ8632200A	Dual AC PSUs	Front-to-Back airflow	EU
9716-32D-O-AC-B-EU	FP5ZZ8632201A	Dual AC PSUs	Back-to-Front airflow	EU
9716-32D-O-AC-F-UK	FP5ZZ8632300A	Dual AC PSUs	Front-to-Back airflow	UK
9716-32D-O-AC-B-UK	FP5ZZ8632301A	Dual AC PSUs	Back-to-Front airflow	UK
9716-32D-O-AC-F-JP	FP5ZZ8632500A	Dual AC PSUs	Front-to-Back airflow	JP
9716-32D-0-AC-B-JP	FP5ZZ8632501A	Dual AC PSUs	Back-to-Front airflow	JP