

Data Center Switch

AS9516-32D



The Edgecore DCS810 switch is a programmable leaf or spine switch for large scale data centers. In a 1RU form factor, the switch provides line-rate L2 switching and L3 routing, deep packet inspection, and traffic load balancing etc, across the 32 x QSFP-DD ports that support up to 32 x 400 GbE connections. The DCS810 can be deployed as a leaf switch supporting 25/50/100 GbE to servers, routers etc. with 100/400 GbE uplinks, or as a spine switch supporting 100/400 GbE leaf and 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 option and commercial NOS offerings.

Key Features and Benefits

- Very high performance, open network switch infrastructure for data center fabric.
- Designed with programmable Tofino2 switch silicon from Intel Networks.
- Deploys as leaf or spine switch supporting 25/50/100 GbE to servers, with 100 or 400 GbE uplinks.
- Deploys as spine switch supporting 100 or 400 GbE leaf and spine interconnects.
- 32 x QSFP-DD switch ports, each supporting 1x 400 GbE, 1x 100GbE, 1x 40GbE or via breakout cables 400GbE to 4 x 100GbE, 100GbE to 4x 25GbE or 40GbE to 4 x 10GbE.
- Layer 2 or Layer 3 forwarding of 12.8 Tbps (25.6Tbps full duplex).
- Supports port-to-power airflow direction.
- All ports on front; PSUs and fans accessible from rear.
- Hot-swappable, load-sharing, redundant AC power.
- 5+1 redundant, hot-swappable fan modules.
- Switch pre-loaded with diagnostics and Open Network Install Environment (ONIE) for automated loading of compatible open source and commercial NOS offerings.
- Quad programmable packet processing pipelines with 20 Match Action Unit stages per pipe.



Freedom
of choice



Greater
control



Rapid
innovation

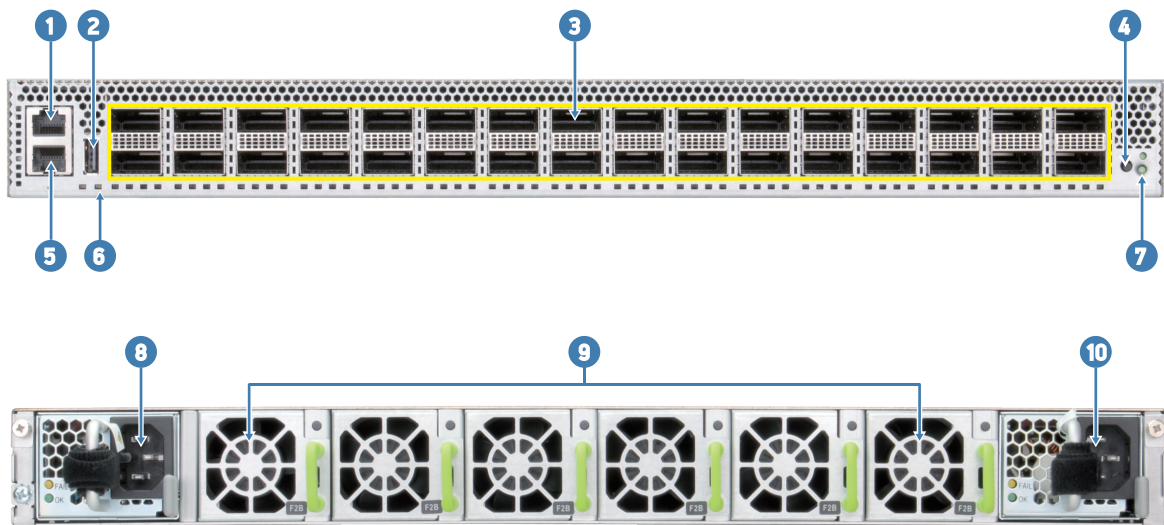


Reduced
CAPEX and OPEX

Free Software Included

onie

Interfaces



Description

1. Console port	6. System LEDs
2. USB storage port	7. Breakout mode LEDs
3. 32 x 400G QSFP-DD ports	8. PSU 2
4. Port LEDs breakout mode button	9. Hot-swappable 5 + 1 redundant fans
5. Management port	10. PSU 1

Ports

- Switch Ports:
32 x QSFP-DD switch ports, each supporting 1 x 400 GbE, 1 x 100GbE, 1 x 40GbE or via breakout cables 400GbE to 4 x 100GbE, 100GbE to 4 x 25GbE or 40GbE to 4 x 10GbE
- Management ports on port side:
1 x RJ-45 serial console
1 x RJ-45 1G BASE-T management
1 x USB Type A storage
Baseboard Management Controller (BMC) Aspeed AST1250A1-GP

Key Components

- Switch Silicon: Intel Tofino2 BFN-T20-128Q (U series)
- CPU Modules:
Intel Pentium D-1517 (4 core@1.6GHz)
8GB SO-DIMM
128GB M.2 SSD

Performance

- Switching Capacity: 12.8 Tbps (25.6 Tbps full duplex)
- Jumbo frames support up to 9216 Bytes
- Packet Buffer Size: 64 MB integrated packet buffer

Physical and Environmental

- Dimensions (WxDxH): 440 x 507 x 44 mm (17.32 x 19.97 x 1.73 inch)
- Weight: 10.005 kg (20.05 lb)
- Fans: 5+1 hot-swappable 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: 0% to 95% non-condensing
- Operating Altitude: 0 to 10,000 feet

Software

- Switch is loaded with Open Network Install Environment (ONIE) software installer

LEDs

- QSFP-DD Port LEDs: Link Status, Activity, Rate
- Ethernet Management Port LED: Link Status, Activity
- System LEDs: Diagnostic, Locator, PSU and Fan Status

Power

- PSUs: 2 redundant, load-sharing, hot-swappable AC
- Input Voltage: 90 to 240 VAC at 50-60 Hz

Regulatory Compliance

- EMI
FCC
FCC 47 CFR Part 15 Subpart B Class A
CE
EN55022 Class A
EN55035
EN300 286,
EN 61000-3-2,
EN 61000-3-3
VCCI
VCCI-32
BSMI
- Safety
UL/ CUL
UL, CSA
CB
IEC: EN-60950-1 ☒ IEC 62368
- RoHS
Restriction of Hazardous Substances (RoHS) 6/6
China Restriction of Hazardous Substances (RoHS)
- Environmental:
Temperature: IEC 68-2-14
Vibration: IEC 68-2-36,
IEC 68-2-6 Shock:
IEC 68-2-29 Drop: ISTA 2A
Acoustic Level: TBD

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: AS9516-32D; Intel® Pentium® D-1517; 32-Port 400G QSFP-DD; ONIE software installer.

Model Number	Part Number	PSU	Airflow	Region (power cord)
AS9516-32D-O-AC-F-US	FP5ZZ8632404A	Dual AC PSUs	Port-to-Power airflow	N. America
AS9516-32D-O-AC-F-EU	FP5ZZ8632204A	Dual AC PSUs	Port-to-Power airflow	EU
AS9516-32D-O-AC-F-UK	FP5ZZ8632304A	Dual AC PSUs	Port-to-Power airflow	UK
AS9516-32D-O-AC-F-JP	FP5ZZ8632504A	Dual AC PSUs	Port-to-Power airflow	Japan

Accessories

Model Number	Part Number	Description
ET7502-SR8	M00EC7502018Z	400G SR8 Multi-Mode QSFP-DD, 100 m, Transceiver
ET7502-FR4	M00EC7502020Z	400G FR4 Single-Mode QSFP-DD, 2 km, Transceiver
ET7502-DR4	M00EC7502019Z	400G DR4 Single-Mode QSFP-DD, 4x100G, 500 m, Transceiver
ET7502-AOC-15M	M00EC7502011Z	400 Gbps QSFP-DD to 4 x100G QSFP28 AOC cable with 15 m
ET7502-B4D-2M	M00EC7502037Z	400 Gbps QSFP-DD to 4 x100G QSFP28 DAC cable with 2 m
ET7402-SR4	M00EC7402054Z	100G SR4 QSFP28 850 nm MM 100 m Transceiver
ET7402-DAC-3M	M00EC7402057Z	100 Gbps to 100 Gbps DAC cable with 3 m
ET7402-AOC-3M	M00EC7402051Z	100 Gbps to 100 Gbps AOC cable with 3 m
ET7402-25AOC-30M	M00EC7402071Z	100 Gbps to 4 x 25 Gbps AOC cable with 30 m
ET7402-25DAC-3M	M00EC7402059Z	100 Gbps QSFP28 to 4 x 25G SFP28 DAC cable with 3 m
ET6401-SR4	M00EC6401007Z	40G QSFP+ short reach transceiver 100/150-m Link Length via OM3/OM4 (MMF) with MPO Optical Connector
ET6402-10DAC-3M	M00EC6402036Z	40G QSFP+ to 4 x 10G SFP+ DAC Breakout Cable with 3 m