DCS202 Data Center Switch

Edge-corE NETWORKS

Data Center Switch

AS5835-54T

The Edgecore DCS202 switch meets the high-performance, availability, and network-scaling requirements of enterprise and cloud data centers. The DCS202 provides full line-rate switching at Layer 2 or Layer 3 across 48 x 10GbE ports and 6 x 100GbE uplinks. The switch can be deployed either as a top-of-rack switch, or as part of a 40GbE or 100GbE distributed spine, forming a non-blocking folded-Clos data center fabric. The switch is rack mountable in a standard 19-inch rack.

The DCS202 hardware provides the high availability features required for data center operation, including redundant, hot-swappable AC or -48 VDC PSUs, 4+1 redundant fan modules, and front-to-back or back-to-front airflow options. The DCS202 is an ideal top-of-rack switch for virtualized data centers with support for VXLAN and NVGRE tunneling functions in hardware. 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

- 48 x 10G RJ-45 IEEE 802.3an switch ports.
- 6 x 100G QSFP28 switch ports, each supporting 100GbE (DAC, 100GBASE SR4/LR4) or 4 x 25GbE (DAC or fiber breakout cable).
- VXLAN and NVGRE tunneling support in hardware for network virtualization.
- Rack mountable in standard 19" racks.
- Supports hot/cold aisles with front-to-back or back-to-front airflow SKUs.
- All ports on front; PSUs, fan modules on rear.
- Hot-swappable, load sharing, redundant AC or -48 VDC PSUs.
- Hot-swappable 4+1 redundant fan modules.
- Management: Ethernet and console RJ-45 ports; USB storage port.
- Hardware switch pre-loaded with Open Network Install Environment (ONIE) for automated loading of compatible open source and commerical NOS offerings.

Freedom of choice

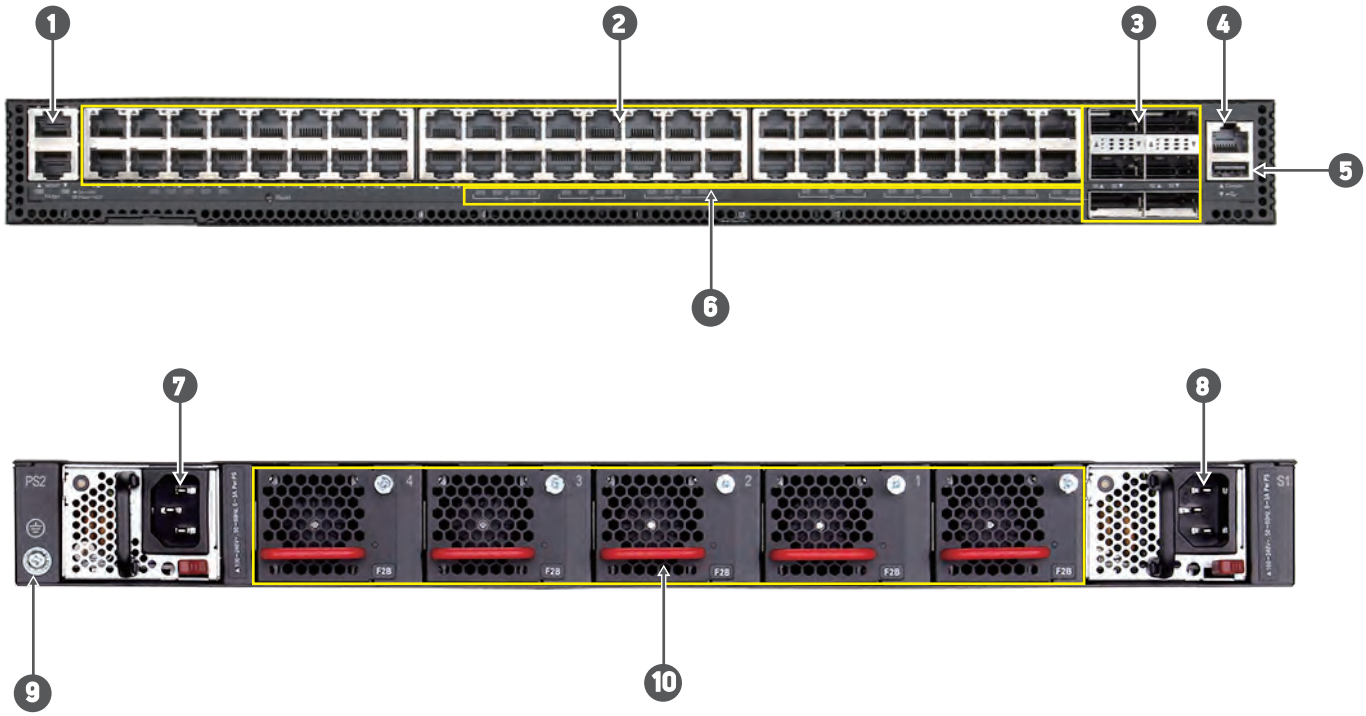
Greater control

Rapid innovation

Free Software Included

onie

Interfaces



Description			
1.	Management ports	6.	Port LED indicators
2.	48 x 10G RJ-45 ports	7.	PSU 2
3.	6 x 100G QSFP28 ports	8.	PSU 1
4.	Console port	9.	Grounding point
5.	USB storage port	10.	Hot-swappable 4+1 fedundant fans

Ports

- Switch Ports:
  48 x RJ-45 each supporting 10GbE (IEEE 802.3an)
  6 x QSFP28 each supporting 100GbE or 4 x 25GbE
  - Note: When a DAC cable is used in a topology, a link issue may be encountered if the CR4 Auto-Negotiation/Link Training does not turn on. This can be solved by manually enabling CR4 Auto Negotiation/Link Training.
  - Note: Due to a chip limitation, only two QSFP28 ports can support breakout modes at the same time. Ports 49 to 51 and 52 to 54 can only have one port in breakout mode. Currently, the default ports are 51 and 54, which can be changed according to user preference.
- Management Ports on Front Panel:
  1 x RJ-45 serial console
  2 x RJ-45 100/1000BASE-T management
  1 x USB Type A storage port
- Supported Transceivers and Cables:
  40GBASE-SR4/LR4
  40G-DAC/AOC Cable
  100GBASE-SR4/CWDM4/LR4
  100G-DAC/AOC Cable
  - Note: More optics and detailed cabling information can be found at www.edge-core.com.

Key Components

- Switch Silicon: Broadcom BCM56771 Trident 3
- CPU Modules:
  Intel® Atom® C3558 2.2GHz 4-Core x86 processor
  DDR4: 8GB x 2 SO-DIMM
  SPI Flash: 16 MB x 2
  Storage: m.2 64GB MLC

Performance

- Switching Capacity: 1.08 Tbps full duplex
- Forwarding Rate: 964.28 Mpps
- Jumbo frames support up to 9K Bytes
- Packet Buffer Size: 32 MB integrated packet buffer
- Subject to NOS:
  MAC Address: 32 K min./288 K max.
  VLAN IDs: 4 K
  Support 4 K ECMP group
  IPv4: 16 K min./168 K max. host entries; 32 K LPM entries with TCAM-only mode
  IPv6: 8 K min./100 K max. host entries; IPv6/64=16 K TCAM-only mode

Physical and Environmental

- Dimensions (WxDxH): 44.25 x 47.33 x 4.395 cm (17.42 x 18.63 x 1.73 in)
- Weight: 9.59 kg (21.14 lb), with two installed PSUs
- Fans: hot-swappable 4+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

LEDs

- 10G SFP+ Port LEDs: Link Speed, Link Status, Activity
- 100G QSFP28 Port LEDs: Link Status, Activity
- Ethernet Management Port LED: Link Status, Activity
- System LEDs: PSU1, PSU2, Diagnostic, Fans, Locator

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 or -48 VDC Input Voltage: 100-240 VAC at 50-60 Hz.
- Max Power: 323 W

Regulatory

- Electromagnetic Compatibility:
  CE Mark
  EN55032
  CISPR32
  AS/NZS CISPR 32
  EN55024
  CISPR 24
  CISPR 35
  EN 61000-3-3
  EN 61000-3-2
  FCC 47 CFR Part 15b Class A
  VCCI Class A
  CNS 13438 (BSMI)
  CCC
- Safety:
  CB
  EN60950, UL60950
  EN62368, UL62368
  CCC
  BSMI, 14336-1
- Environmental:
  NEBS GR63-CORE (Pre-test)
  WEEE Standards: The switches comply with the following WEEE standards: Waste Electrical and Electronic Equipment (WEEE Directive 2002/96/EC)
  RoHS 2.0 Compliant
  Taiwan RoHS
  CNS 15663
  Country of Origin: Taiwan (TAA Compliant)

Ordering Information

Base Model: AS5835-54T; Intel® Atom® C3558 processor 4-Core; 48-Port 10G RJ-45 with 6x100G QSFP28 uplinks; ONIE Software Installer.

Model Number	Part Number	PSU	Airflow	Region (Power Cord)
5835-54T-O-AC-F-US	FP1ZZ5654432A	Dual AC PSUs	Front-to-Back Airflow	N. America
5835-54T-O-AC-B-US	FP1ZZ5654434A	Dual AC PSUs	Back-to-Front Airflow	N. America
5835-54T-O-AC-F-EU	FP1ZZ5654233A	Dual AC PSUs	Front-to-Back Airflow	EU
5835-54T-O-AC-B-EU	FP1ZZ5654234A	Dual AC PSUs	Back-to-Front Airflow	EU
5835-54T-O-AC-F-UK	FP1ZZ5654333A	Dual AC PSUs	Front-to-Back Airflow	UK
5835-54T-O-AC-B-UK	FP1ZZ5654334A	Dual AC PSUs	Back-to-Front Airflow	UK
5835-54T-O-AC-F-JP	FP1ZZ5654537A	Dual AC PSUs	Front-to-Back Airflow	JP
5835-54T-O-AC-B-JP	FP1ZZ5654538A	Dual AC PSUs	Back-to-Front Airflow	JP
5835-54T-O-48V-F	FP1ZZ56540B2A	Dual -48V DC PSUs	Front-to-Back Airflow	
5835-54T-O-48V-B	FP1ZZ56540B3A	Dual -48V DC PSUs	Back-to-Front Airflow	
YM-1401ABR	F0TZZ5654024A	400 W AC Power Supply FRU	Front-to-Back Airflow	
YM-1401ACR	F0TZZ5626002A	400 W AC Power Supply FRU	Back-to-Front Airflow	
FAN-1U-1x1E-F	F0TZZ5654009A	Fan Module	Front-to-Back Airflow	
FAN-1U-1x1E-B	F0TZZ5654008A	Fan Module	Back-to-Front Airflow	

Model Number	Part Number	Description
5835-54T-SVC-RTF	REWECECWA012Z	AS5835-54T, Annual Hardware Service, Return-to-Factory after warranty. 3-year warranty already included with the product, maximum 2 additional years per product. Fans and PSUs are excluded.

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 productsand 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.