

# 10GbE Data Center Switch

## Bare-Metal Hardware

### AS5835-54X



The Edgecore AS5835-54X switch meets the high-performance, availability, and network-scaling requirements of enterprise and cloud data centers. The AS5835-54X 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 AS5835-54X 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 port-to-power or power-to-port airflow options. The AS5835-54X is an ideal Top-of-Rack switch for virtualized data centers with support for VXLAN and NVGRE tunneling functions in hardware.

## Key Features and Benefits

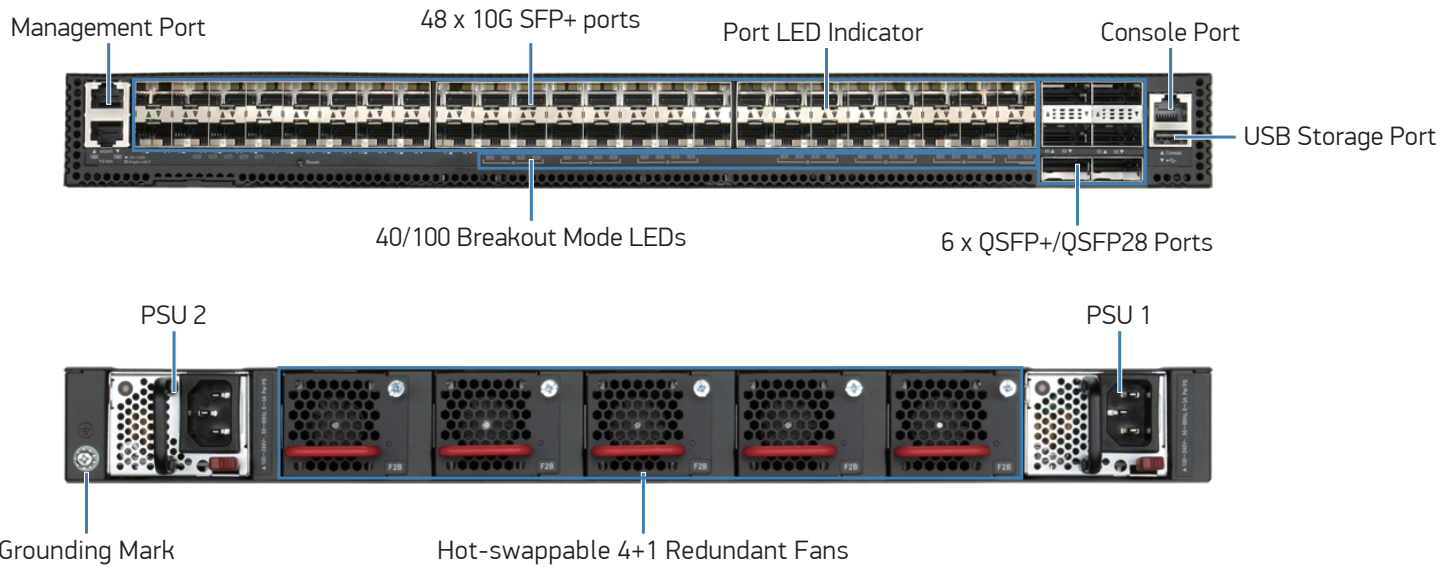
- Cost-effective, bare-metal switch infrastructure for data center fabric.
- 48 x SFP+ switch ports, supporting 10GbE (DAC, 10GBASE-SR/LR) or 1GbE (1000BASE-T/SX/LX).
- 6 x 100 QSFP28 switch ports, each supporting 100GbE (DAC, 100GBASE SR4/LR4) or 4 x 25GbE (DAC or fiber breakout cable).
- VXLAN and NVGRE tunneling support in hardware for network virtualization.
- Rack mountable in standard 19" racks.
- Supports hot/cold aisles with port-to-power and power-to-port 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 commercial NOS offerings.
- Compatible with Open Network Linux (ONL), the open-source, OCP reference NOS.
- Compatible with PicOS™ from Pica8 Inc



## Software Supported



## Interface



## Ordering Information

**Base Model: AS5835-54X 48-Port 10G SFP+ with 6x100G QSFP28 uplinks; ONIE software installer**

Model Number	CPU Module	PSU	Airflow	Region (power cord)
5835-54X-O-AC-F-US	Intel Atom C3558 processor	dual AC PSUs	port-to-power airflow	N. America
5835-54X-O-AC-B-US	Intel Atom C3558 processor	dual AC PSUs	power-to-port airflow	N. America
5835-54X-O-AC-F-EU	Intel Atom C3558 processor	dual AC PSUs	port-to-power airflow	Europe
5835-54X-O-AC-B-EU	Intel Atom C3558 processor	dual AC PSUs	power-to-port airflow	Europe
5835-54X-O-AC-F-UK	Intel Atom C3558 processor	dual AC PSUs	port-to-power airflow	UK
5835-54X-O-AC-B-UK	Intel Atom C3558 processor	dual AC PSUs	power-to-port airflow	UK
5835-54X-O-AC-F-JP	Intel Atom C3558 processor	dual AC PSUs	port-to-power airflow	Japan
5835-54X-O-AC-B-JP	Intel Atom C3558 processor	dual AC PSUs	power-to-port airflow	Japan
5835-54X-O-48V-F	Intel Atom C3558 processor	dual -48V DC PSUs	port-to-power airflow	
5835-54X-O-48V-B	Intel Atom C3558 processor	dual -48V DC PSUs	power-to-port airflow	

## Ports

- Switch Ports:
  - 48 x SFP+ each supporting 10GbE or 1GbE
  - 6 x QSFP28 each supporting 100GbE or 4 x 25GbE
- Management Ports on Front Panel:
  - 1 x RJ-45 serial console
  - 1 x RJ-45 100/1000BASE-T management
  - 1 x USB Type A storage port

## Key Components

- Switch Silicon: Broadcom BCM56771 Trident III 1.08 Tbps
- CPU Modules:
  - Intel Atom/Denverton C3558 2.2GHz 4 core x86 processor
  - DDR4: 8GB x 2 SO-DIMM
  - SPI Flash: 16 MB x 2
  - Storage: m.2 32GB MLC

## Performance

- Switching Capacity: 2.16 Tbps full duplex
- Forwarding Rate: 1 Bpps
- 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: 8.815 kg (19.43 lb), with two PSUs installed
- 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
- Console Port LED: Link Status
- System LEDs: PSU1, PSU2, Diagnostic, Fans, Locator

## Software

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

Compatible with PicOS™ from Pica8 Inc

## Power

- PSUs: 2 redundant, load-sharing, hot-swappable AC or -48 VDC
- Input Voltage: 100-240 VAC at 50-60 Hz. -48 to -72 VDC.
- Max Power: 356 W

## Regulatory

- Electromagnetic Compatibility
  - 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
  - BSMI Class A, CNS 13438
  - CCC
- Safety
  - EN60950, UL60950
  - EN62368, UL62368
  - CCC
  - BSMI, CNS 14336-1
- Environmental
  - NEBS GR63-CORE (Pre-test)
  - WEEE Standards: The switches complied 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)

## Warranty

Please check [www.edge-core.com](http://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](http://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](http://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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