Edge-core ®
NETWORKS

10GbE Data Center Switch
Bare-Metal Hardware

AS5835-54T

The Edgecore AS5835-54T switch meets the high-performance, availability, and network-scaling requirements of enterprise and cloud data centers. The AS5835-54T 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 AS5835-54T 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 AS5835-54T is an ideal Top-of-Rack switch for virtualized data centers with support for VXLAN and NVGRE tunneling functions in hardware.
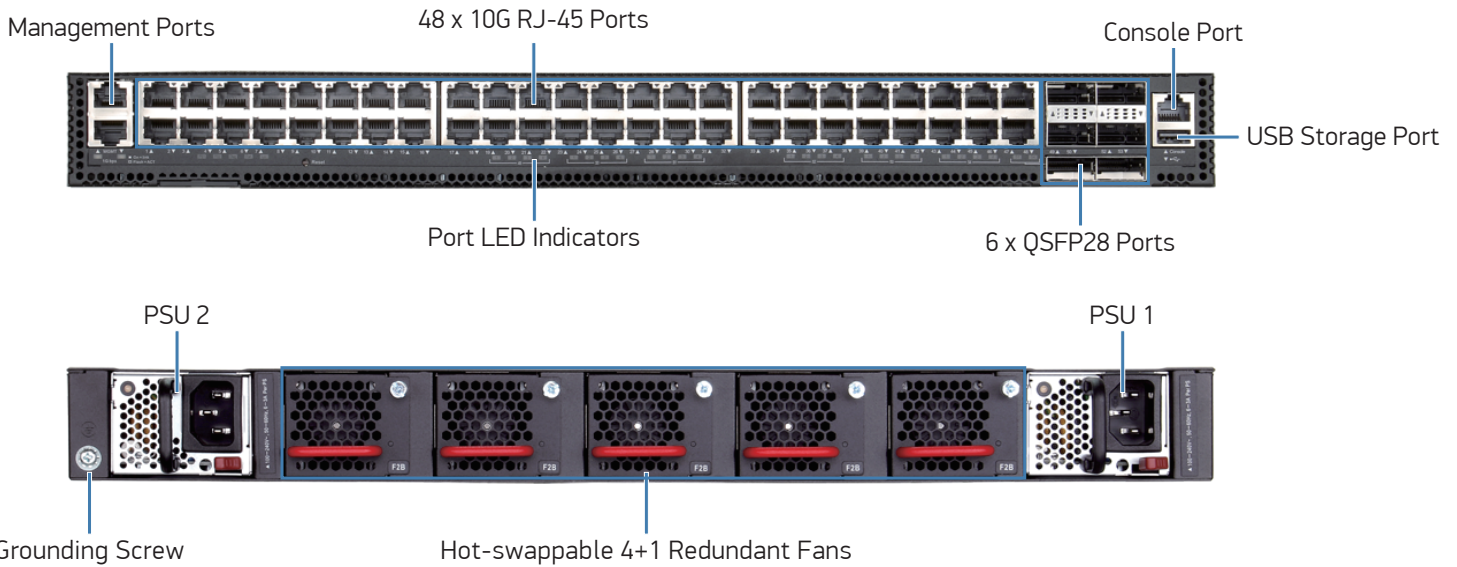
Key Features and Benefits

- Cost-effective, bare-metal switch infrastructure for data center fabric.
- 48 x RJ-45 switch ports
- 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 commerical NOS offerings.
- Compatible with Open Network Linux (ONL), the open-source, OCP reference NOS.
- Compatible with PicOS™ from Pica8 Inc

OPEN PLATINUM

OPEN Compute Project
SOLUTION PROVIDER

Freedom of choice

Greater control

Rapid innovation

Reduced CAPEX and OPEX

Software Supported

Intefaces

Management Ports

48 x 10G RJ-45 Ports

Console Port

USB Storage Port

Port LED Indicators

6 x QSFP28 Ports

PSU 2

PSU 1

Grounding Screw

Hot-swappable 4+1 Redundant Fans

Ordering Information

AS5835-54T 48-Port 10G RJ-45 with 6x100G QSFP28 uplinks; ONIE software installer

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

Ports

- Switch Ports:
  48 x RJ-45 each supporting 10GbE
  6 x QSFP28 each supporting 100GbE or 4 x 25GbE
- 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

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: 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 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.
- 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 Title 47, Part 15, Subpart B 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)

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.