# AS7700-32X Series Switch

## 100GbE Data Center Switch
## Bare-Metal Hardware

### Product Overview

The AS7700-32X switch is a Top-of-Rack (TOR) or spine switch for high-performance data centers. In a compact 1RU form factor, the switch provides line-rate L2 and L3 switching across to 32 x QSFP28 ports, supporting up to 32 x 40/100 GbE, 64 x 50 GbE, or 128 x 10/25 GbE connections. The AS7700-32X can be deployed as a TOR switch supporting 10/25/50 GbE to servers with 40/50/100 GbE uplinks, or as a spine switch supporting 40/50/100 GbE spine interconnects. The AS7700-32X is a bare-metal switch loaded with the Open Network Install Environment (ONIE) which supports the installation of compatible NOS, including Open Network Linux and commercial offerings.

Data Center Switch

### Key Features and Benefits

- Cost-effective, bare-metal switch infrastructure for data center fabric.
- Deploy as Top-of-Rack switch supporting 10 or 25 GbE to servers, with 40 or 50 or 100 GbE uplinks.
- Deploy as spine switch supporting 40, 50, or 100 GbE ToR and spine interconnects.
- 32 x QSFP28 switch ports, each supporting 1 x 100 GbE or 1 x 40 GBE, or via breakout cables, 2 x 50 GbE or 4 x 25 GbE or 4 x 10 GbE.
- Layer 2 or Layer 3 forwarding of 6.4 Tbps (full duplex).
- Supports hot/cold aisle with port-to-power and power-to-port airflow SKUs.
- All ports on front; PSUs and fans accessible from rear.
- Hot-swappable, load-sharing, redundant AC or -48V DC or 12V DC PSUs.
- 5+1 redundant, hot-swappable fan modules.
- Energy Efficiency: 310 W typical power consumption without pluggable optics.
- Bare-Metal hardware switch pre-loaded with diagnostic and with Open Network Install Environment (ONIE) for automated loading of compatible independent switchOS software.
- Compatible with Open Network Linux, an open-source, OCP-approved reference NOS.
- Compatible with Cumulus®Linux® future release.
- Design submitted to Open Compute Project as open standard.

# AS7700-32X Product Specifications

www.edge-core.com

## Features

### Ports

Switch Ports:
32 x QSFP28 ports. Each Port supports 1x40/100 GbE or
2 x 50 GbE or 4 x 10/25 GbE per port using splitter cables.
Management ports on port side:
1 x RJ-45 serial console
1 x RJ-45 100/1000BASE-T management
1 x USB Type A storage

### Key Componets

Switch Silicon: Broadcom BCM56960 Tomahawk 3.2 Tbps.
No PHYs, No Retimers
CPU Modules:
7710-32X: Freescale T2080 quad-core 1.8GHz
16GB DDR3 SDRAM SO-DIMM
8GB NAND Flash
Optional 8GB SD Card
Optional 32GB mSATA
Optional 32GB m.2
7712-32X: Intel Broadwell-DE quad-core 2.3GHz
16GB DDR4 SDRAM SO-DIMM
8GB NAND Flash
Optional 32GB mSATA
Optional 32GB m.2

### Performance

Switching Capacity: 3.2Tbps full duplex, with packets>250B
Forwarding Rate: 7.68 Bpps
12k Jumbo packets
IPv4 : 72k host entries; 128k LPM entries
IPv6 : 36k host entries; IPv6/64=85k, IPv6/128=21k
Packet Buffer Size: 24 MB shared buffer pool

### LEDs

QSFP 28 Port LEDs: Link Status, Activity, Rate
Ethernet Management Port LED: Link Status, Activity
Console Port LED: Link Status
System LEDs: Diagnostic, Locator, PSU & Fan Status

### Software

Diagnostics
U-Boot on Freescale CPU Module; BIOS on Intel CPU Module
Switch is loaded with Open Network Install Environment (ONIE) software installer

### Power

PSUs: 2 redundant, load-sharing, hot-swappable
AC PSUs
Input Voltage: 90 to 264 VAC at 50-60 Hz
Output Voltage: 12V @ 52.9A, 5V @ 4A
PSU Efficiency: Up to 93% for AC PSUs
-48V DC PSUs
Input Voltage: -36 to -72 VDC
Output Voltage: 12V @ 52.9A, 5V @ 4A
12V DC PSUs
Input Voltage: 12 VDC +5%
Output Voltage: 12V @ 52.9A, 5V @ 4A
Max Power: 350 W, without pluggable optics
Typical Power: 310 W, without pluggable optics

### Physical and Environmental

Dimensions (WxDxH): 438 x 515 x 43.5 mm
(17.3 x 20.3 x 1.7 inches)
Weight: 10 kg (23 pounds)
Operating Temperature: 0°C to 45°C (32°F to 113°F)
Storage Temperature: -40°C to 70°C (-40°F to 158°F)
Operating Humidity: 5% to 95% non-condensing
Operating Altitude: 0 to 10,000 feet

### Regulatory

EMI
CE Mark
EN55022 Class A
EN55024 (Immunity) for IT Equipment
EN 61000-3-2
EN61000-3-3
FCC Part 15 Subpart B Class A
VCCI Class A
Safety
CB, EN 60950
UL/CUL
Environmental:
Temperature: IEC 68-214
Vibration: IEC 68-2-36, IEC 68-2-6
Shock: IEC 68-2-29
Drop: ISTA 2A
Acoustic Level: 62dB @ 27°C
RoHS-6 Compliant
Country of Origin: Taiwan (TAA Compliant)

### Warranty

Please check www.edge-core.com for the warranty terms in your country. The warranty provides return-to-factory hardware replacement for a three year period in North America.

### For More Information

To find out more about Edge-Core Networks products and solutions, visit www.edge-core.com

### About Edge-Core Networks

Edge-Core Networks is in the business of providing innovative network solutions. In the service provider network, in the data center or in the cloud, Edge-Core Networks delivers the software and systems that transform the way the world connects. Edge-Core Networks serves customers and partners worldwide. Additional information can be found at www.edge-core.com.

Edge-Core Networks is a subsidiary of Accton Technology Corporation, the leading network ODM company. The Edge-Core data center switches are developed and manufactured by Accton.

To purchase Edgecore solutions, please contact your Edge-Core Network representatives at +886 3 563 8888 (HQ) or +1 (877) 828-CORE (877-828-2673) or authorized resellers.



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