AS7816-64X
Bare-Metal Hardware

OCP Accepted

Product Overview

The Edgecore AS7816-64X is a Top-of-Rack (TOR) or spine switch for high-performance data centers. The switch provides line-rate L2 and L3 switching across the 64 x QSFP28 ports, each supporting 1 x 100 GbE or 1x 40 GbE, or via breakout cables 4 x 25 GbE or 4 x 10 GbE. The AS7816-64X can be deployed as a TOR switch supporting 10/25 GbE to servers with 40/100 GbE uplinks, or as a spine switch supporting 40/100 GbE 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 options Open Network Linux and OpenSwitch, plus commercial NOS offerings.

Key Features and Benefits

■ Cost-effective, bare-metal switch infrastructure for data center fabric.

■ 64 x QSFP28 switch ports, each supporting 1 x 100 GbE or 1 x 40 GbE, or via breakout cables 4 x 25 GbE or 4 x 10 GbE.

■ Supports hot/cold aisles with front-to-back and back-to-front airflow SKUs.

■ All ports on front; PSUs and fans accessible from rear.

■ Hot-swappable, load-sharing, redundant 850 W PSUs.

■ 3+1 redundant, hot-swappable fan modules.

■ Bare-metal hardware switch pre-loaded with diagnostics software and with Open Network Install Environment (ONIE) for automated loading of compatible open source and commerical NOS offerings.

Bare-Metal Hardware

Features

Ports

Switch Ports: 64 x QSFP28 100 GbE
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: BCM56970
CPU Modules:
  Intel Xeon D-1518 quad-core 2.4 GHz
  8 GB x 2 1600 MHz with ECC (SO-DIMM) DDR3L
  8 MB x 2 SPI Flash (Boot)
  m.2 SSD: 128 GB
  Reserve mSATA connector

Performance

Switching Capability: 12.8 Tbps full duplex
Jumbo frames support up to 9 Kbytes
Packet Buffer Size: 42 MB integrated packet buffer
Subject to NOS:
  MAC Addresses: 8 K min./264 K max.
  VLAN IDs: 4 K
  IPv4: 76 K min./128 K max. host entries; IPv4/32: 32 K LPM entries
    with TCAM-only mode
  IPv6: 46K /64 K max. host entries; IPv6/64: 16 K TCAM-only mode

Physical and Environmental

Dimensions (WxDxH): 43.8 x 58.0 x 8.8 cm (17.2 x 22.8 x 3.5 in)
Weight: 14.11 kg (31.1 lb)
Fans: Hot-swappable 3 + 1 redundant fans
Operating Temperature: 0°C ~ 45°C (32°F ~ 113°F)
Operating Humidity: 5% ~ 95% non-condensing

QSFP28 Port LEDs

LED1: Blue (100 G), Orange (40 G), White (25 G), Green (10 G)
LED2~LED4: White (25 G), Green (10 G)
Management Port LED: Green: (10 M/100 M/1 G), Flashing: Activity
System LEDs: PSU1, PSU2, Fan, Diag, and Loc
Reset button

Power

PSUs: 2 redundant, load-sharing, hot-swappable AC or -48 VDC
Input Voltage: 90 to 240 VAC at 50-60 Hz or -36 to -72 VDC

Regulatory

EMI
  CE Mark
    EN 55032:2015 + AC:2016, Class A
    EN 55024:2010 + A1:2015
    EN 61000 3-2:2014, Class A
    EN 61000 3-3:2013
    CISPR 32:2015 + COR1:2016, Class A
  FCC Part 15 Subpart B Class A
  VCCI Class A
  CCC
Safety
  CB
  UL/CU/NRTL
  CCC
Environmental:
  Vibration: GR-63-CORE
  Shock: GR-63-CORE
RoHS-6 Compliant
Electrical and Electronic Equipment (WEEE Directive 2002/96/EC)

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 (877) 828-CORE (877-828-2673) or authorized resellers.

TEL: +886-3-5638888 FAX: +886-3-6686111
No.1, Creation Rd. III, Hsinchu Science Park, Taiwan 30077
sales@edge-core.com   www.edge-core.com

TEL: +1 (949)-336-6801
20 Mason Irvine, CA 92618

EC-DS-0118-01