

ASXvOLT16

Bare-Metal Hardware



Product Overview

The ASXvOLT16 is a 16-10G-port XGS-PON virtual Optical Line Terminal (vOLT) with 4 x 100G/40G QSFP28 fixed ports. The 10G ports, 100G uplink ports, and console/management USB ports are all on the front panel. All 10G ports operate at wire-speed by default and support standard XGS-PON transceivers. The QSFP28 ports support 100G and 40G operation modes, as well as being configurable as 4 x 25GbE or 4 x 10 GbE modes using DAC breakout cables. This vOLT supports redundant hot-swappable PSUs and fans, and is available with a front-to-back or back-to-front airflow direction.

Key Features and Benefits

- Cost-effective, bare-metal switch infrastructure for data center fabric.
- 4 x QSFP28 switch ports, each supporting 1 x 100 GbE or 1 x 40 GbE, or via breakout cables 2 x 50 GbE, 4 x 25 GbE, or 4 x 10 GbE.
- Layer 2 or Layer 3 forwarding at 300 Gbps (full duplex).
- 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 AC or -48V DC or 12V DC PSUs.
- 5+1 redundant, hot-swappable fan modules.
- Handles the abstraction between the protocol and the native hardware RPC.
- OpenFlow Agent
- NETCONF Agent
- OLT OMCI Agent
- Interworking Logic between OpenFlow/NETCONF Agent and HW SDK
- PON/ONU management
- Bare-Metal hardware switch pre-loaded with diagnostics software and with Open Network Install Environment (ONIE) for automated loading of compatible open source and commercial NOS offerings.

Features

Ports

Switch Ports:

- 16 x XGS-PON ports
- 4 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 Components

Switch Silicon: BCM88470 300 Gbps

CPU Modules:

- Intel Broadwell-DE XeonD-1518 2.2 GHz
- 8 GB x 2 SO-DIMM DDR4 RAM
- 16 MB SPI Flash (Boot)
- 4 MB SPI Flash (LAN)
- 2 MB SPI Flash 2 PCIe dual-port dual-media Gigabit Ethernet controller*
- mSATA: 32 GB MLC (reserve)
- USB to NAND Flash: 8 GB SLC (reserve)
- m.2: 32 GB MLC
- CPLD: Altera 5M1270ZF256
- TPM: ST33ZP24AR28PVSP ST
- Reserve mSATA connector

Performance

Switching Capability: 300 Gbps

Jumbo frames support up to 9 Kbytes

Packet Buffer Size:

- 32 K programmable wire-rate queues

Subject to NOS:

- MAC Addresses: 250 K
- VLAN IDs: 4 K
- IPv4 forwarding database: 128 K
- IPv6 forwarding database: 48 K

Physical and Environmental

Dimensions (WxDxH): 43.8 x 60.9 x 4.35 cm (17.3 x 23.9 x 1.7 in)

Weight: 10 kg (23 lb)

Fans: Hot-swappable 5 + 1 redundant fans

Operating Temperature: 5°C to 40°C (41°F to 104°F)

Storage Temperature: -40°C to 40°C (-40°F to 104°F)

Operating Humidity: 5% to 85% non-condensing

LEDs

QSFP28 Port LEDs: Link Status, Activity, Rate

Ethernet Management Port LED: Link Status, Activity

Console Port LED: Link Status

System LEDs: Diagnostic, Locator, PSU and Fan Status

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
- EN55022 Class A
- EN55024
- EN61000-3-2
- EN61000-3-3

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, GR-1089-CORE
- Acoustic Level: 78 dB sound power at 26°C

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.

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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.

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