

ASXvOLT16



NETWORKS

Specification and Design Contribution

Jeff Catlin

Accton and Edgecore

- Leading Network ODM
 - > 3,300 employees worldwide, > 700 network engineers
 - High volume manufacturing facilities in China and Taiwan
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- Go-to-market subsidiary of Accton
 - Full portfolio of traditional and open network products
 - Leading contributor of network designs to OCP

The Accton logo consists of the word "Accton" in a bold, blue, sans-serif font.The Edge-core NETWORKS logo features the words "Edge-core" in a stylized font where each letter is contained within a black square. The first 'E' and the final 'E' are red, while the other letters are white. Below this, the word "NETWORKS" is written in a smaller, black, all-caps sans-serif font.This is a smaller version of the Edge-core NETWORKS logo, identical in design to the one on the right side of the slide.

Most Network Design Contributions to OCP



OCP-ACCEPTED™ DC and Telecom Products

- 1G Rack Mngmt Switch Helix4
- 10G TOR Switch Trident II
- 40G Spine Switch Trident II
- 100G TOR & Spine Switch Tomahawk
- 100G TOR & Spine Switch XPliant
- 10G/100G Edge Switch Qumran
- Open Rack Switch Adapter

Design Contributions Pending IC approval

- 100G OMP800 Chassis Tomahawk
- 100G OMP1600 Chassis Tomahawk
- 25G TOR Switch Tomahawk
- 64 x 100G Spine Switch Tomahawk II

Partner Designs, Edgecore Product

- Wedge40-16X Facebook
- Wedge100-32X Facebook
- Wedge100BF-32X Barefoot
- Wedge100BF-65X Barefoot

OCP-ACCEPTED™ Access Products

- 1G PoE Switch Helix4
- 802.11ac Wave1 Wi-Fi APs BCM
- 802.11ac Wave2 Wi-Fi APs QCA

AT&T Spec, Edgecore Product Specification and design

- ASXvOLT16 10G OLT BCM Qumran & Maple

Open Networking Software Partners

Enterprise



Packet Broker



Data Center Fabric



Service Provider



Commercial

Open Source



Open Network Linux

FlexSwitch

SONiC



ASXvOLT16

- The ASXvOLT16 meets the AT&T Open XGS-PON NFV 1RU OLT specification version 1.3
- Edgecore Networks is contributing the design specification and entire design package
- Seeking “OCP Accepted” status for the product and specification

ASXvOLT16 Design Contribution

- The following material is included in the design package:
 - BOM indicating component description, vendor part number, and quantity used
 - Code used for CPLD/FPGA devices
 - Schematic files in pdf format
 - Gerber files
 - Mechanical STEP files
 - Mechanical assembly drawings
 - Product specification

ASXvOLT16 Overview

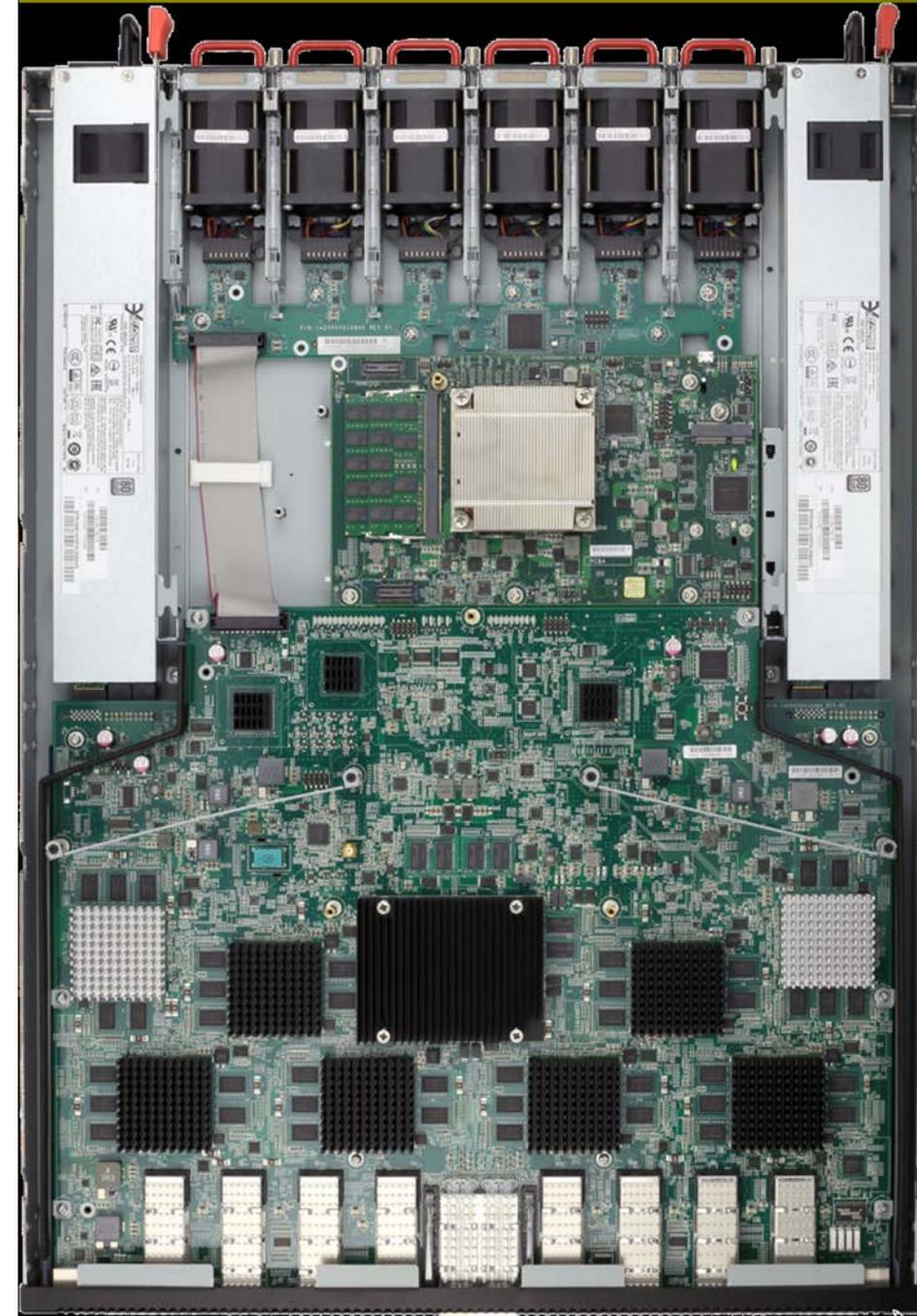
- 20 Layer main PCB with major components including
 - Broadcom “Qumran AX” silicon BCM88470
 - Broadcom “Maple” XGS-PON Silicon BCM68628
- Modular CPU card with major components including
 - Intel x86 Broadwell-DE CPU
 - Optional BMC plug-in module
- Redundant design supporting
 - Redundant hot swappable power supplies
 - Redundant hot swappable fan modules
 - Back to front / Front to back airflow options

ASXvOLT16 Overview

Front



Rear



ASXvOLT16 Software

- Numerous Open Source software components available
 - ONIE
 - Open Network Linux
 - Open Optical Monitoring (OOM) API
 - Support for RedFish REST API
 - Support for Broadcom open GPON API
 - BRCM QAX and Maple SDK (closed)
 - Support for VOLTHA Agent

Thank You