

The background is a vibrant green with a watercolor-like texture. It features several circular patterns of small, light green arrows pointing outwards, and a larger, more dense pattern of similar arrows on the right side.

OCP Networking

Engineering Workshop

Scott Emery (Cumulus Networks) & Omar Baldonado (Facebook)

August 30, 2018

Flex Customer Experience Center

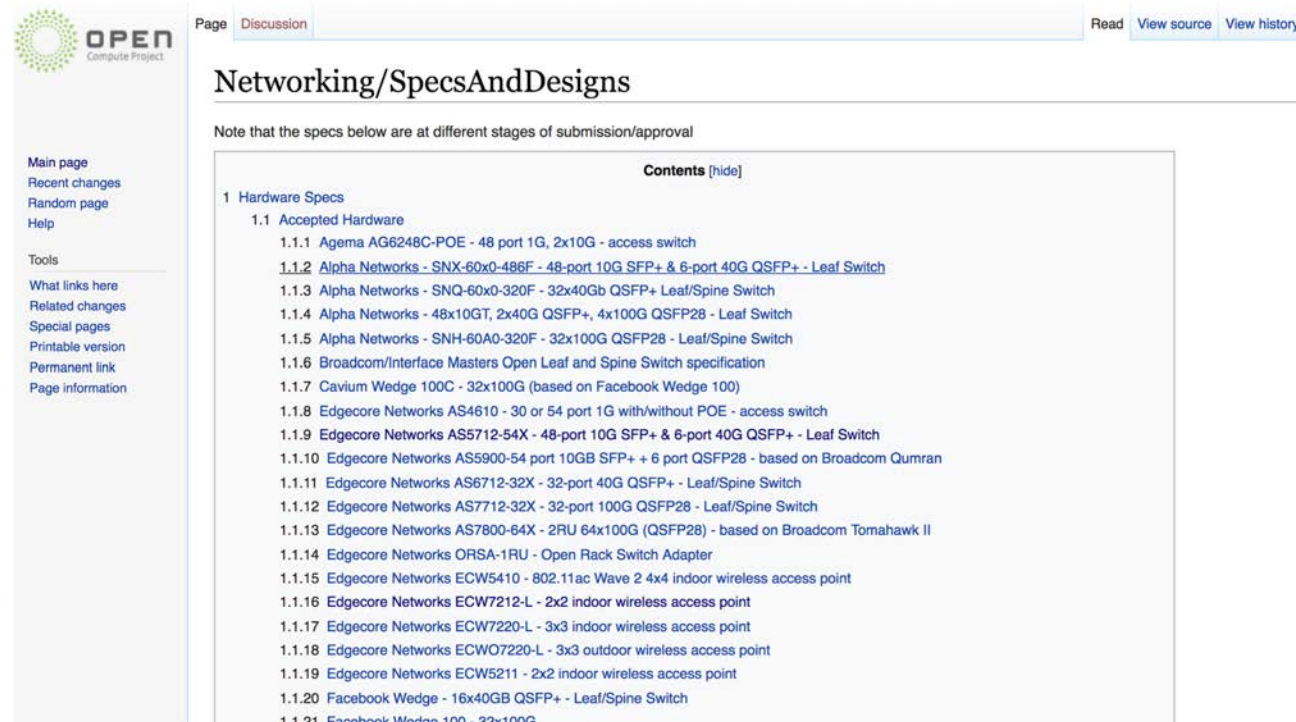
Milpitas, CA

From our (new) charter

"The overall mission of the OCP Networking Project is to create a set of networking technologies that are disaggregated and fully open, allowing for rapid innovation in the network space."

The page & wiki & mailing list

- <https://www.opencompute.org/wiki/Networking>
- Specs, designs, and links to subprojects



The screenshot shows the Open Compute Project Wiki page for "Networking/SpecsAndDesigns". The page title is "Networking/SpecsAndDesigns" and it includes a note that the specs below are at different stages of submission/approval. The page content is organized into a table of contents with the following items:

- 1 Hardware Specs
 - 1.1 Accepted Hardware
 - 1.1.1 Agema AG6248C-POE - 48 port 1G, 2x10G - access switch
 - 1.1.2 Alpha Networks - SNX-60x0-486F - 48-port 10G SFP+ & 6-port 40G QSFP+ - Leaf Switch
 - 1.1.3 Alpha Networks - SNQ-60x0-320F - 32x40Gb QSFP+ Leaf/Spine Switch
 - 1.1.4 Alpha Networks - 48x10GT, 2x40G QSFP+, 4x100G QSFP28 - Leaf Switch
 - 1.1.5 Alpha Networks - SNH-60A0-320F - 32x100G QSFP28 - Leaf/Spine Switch
 - 1.1.6 Broadcom/Interface Masters Open Leaf and Spine Switch specification
 - 1.1.7 Cavium Wedge 100C - 32x100G (based on Facebook Wedge 100)
 - 1.1.8 Edgecore Networks AS4610 - 30 or 54 port 1G with/without POE - access switch
 - 1.1.9 Edgecore Networks AS5712-54X - 48-port 10G SFP+ & 6-port 40G QSFP+ - Leaf Switch
 - 1.1.10 Edgecore Networks AS5900-54 port 10GB SFP+ + 6 port QSFP28 - based on Broadcom Qumran
 - 1.1.11 Edgecore Networks AS6712-32X - 32-port 40G QSFP+ - Leaf/Spine Switch
 - 1.1.12 Edgecore Networks AS7712-32X - 32-port 100G QSFP28 - Leaf/Spine Switch
 - 1.1.13 Edgecore Networks AS7800-64X - 2RU 64x100G (QSFP28) - based on Broadcom Tomahawk II
 - 1.1.14 Edgecore Networks ORSA-1RU - Open Rack Switch Adapter
 - 1.1.15 Edgecore Networks ECW5410 - 802.11ac Wave 2 4x4 indoor wireless access point
 - 1.1.16 Edgecore Networks ECW7212-L - 2x2 indoor wireless access point
 - 1.1.17 Edgecore Networks ECW7220-L - 3x3 indoor wireless access point
 - 1.1.18 Edgecore Networks ECW07220-L - 3x3 outdoor wireless access point
 - 1.1.19 Edgecore Networks ECW5211 - 2x2 indoor wireless access point
 - 1.1.20 Facebook Wedge - 16x40GB QSFP+ - Leaf/Spine Switch
 - 1.1.21 Facebook Wedge 100 - 32x100G

2018 Hardware to date

- Accepted
 - Agema AG6248C-POE - 48 port 1G, 2x10G
 - Edgecore Networks ECW7212-L - 2x2 indoor wireless AP
 - Edgecore Networks ECW7220-L - 3x3 indoor wireless AP
 - Edgecore Networks ECW07220-L - 3x3 outdoor wireless AP
 - Edgecore Networks ECW5211 - 2x2 indoor wireless AP
 - Edgecore Networks ECW5410 – 4x4 indoor wireless AP
 - SKT T-CAP - CNA-SSX2RC
- Contributed
 - Alpha SNC-60x0-488F 48x25G switch with 8x100G uplinks using Trident3
 - Edgecore Networks - 32x400G - based on Broadcom Tomahawk III
 - Facebook Fabric Aggregator - based on Wedge 100S
- 30+ accepted hardware specifications and design packages, 15+ in pipeline across enterprise, hyperscale, campus/branch, wireless, ...

Software

- Several major open-source projects in large-scale, production use and continue to grow their communities
- Very active subgroups starting close to the hardware and going up
- Many opportunities for cross-group, cross-org interaction
 - OCP's Open System Firmware
 - Linux Foundation
- The focus of today's workshop
 - Fostering interest amongst developers and potential adopters

Going forward

- Looking to expand adoption of OCP hardware and usage of OCP software
- Growing the communities with more adopters – the purpose of today
- Tracking validated solutions and testing

Our Logistics

- Thanks to Flex for hosting and support!
- Wifi
- Conference rooms/breakouts
 - SAI/SONiC – here
 - ONIE/ONL – Riesling 1 & 2 – in secure area, need Flex escort
- Facilities

High-level Agenda

Morning

- 9:30-10:30am - ONIE Overview - Curt Brune (Cumulus)
- 10:30-11:00am - ONL Overview - Jeff Townsend (Big Switch Networks)
- 11-11:30am - SAI/SONiC Overviews - Xin Liu (Microsoft)
- 11:30-12 - CBW Overview - Omar Baldonado (Facebook)

Lunch

- 12-1:30pm - Lunch/Tour & A Word from our Sponsor, Flex

Afternoon

- 1:30-5pm - Breakout Tracks (SAI/SONiC, ONIE, & ONL)
 - * SAI/SONiC – CEC
 - * ONIE/ONL – breakout rooms
- 5-6pm - Cocktail Hour & Networking

Thank you!