Agenda

▪ Open GPON OLT
▪ CORD Reference Architecture
▪ XGS-PON OLTs
▪ Designing for Telco Technical Space (a.k.a. COs)
AT&T Open GPON OLT

http://tinyurl.com/cord-trial
Open GPON Software Stack

CORD
Central Office Re-architected as a Datacenter

Open Software Announcement Next Week at Open Network Summit

SDN controller, applications, and agents run on standard servers
HW drivers runs on SOC

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Updates to Spec from IC Review

- Align all references to CPU to be generic
- Espouse Open BMC and IPMI where it can be applied
Reference Architecture

- Open GPON OLT is a part of a OCP POD to provide Broadband access. The work is done openly and in collaboration at ON.Lab and is called "Central Office Re-architected as a Datacenter" or CORD

- CORD is a broader initiative than just GPON access. It includes XGS-PON, NG-PON, G.Fast, DOCSIS, 5G, MEF-Ethernet, ...

- These should provide some hints at what additional specs might be expected at OCP Telco

- [http://opencord.org](http://opencord.org)
CORD POD

The BoM includes: 4 – Accton 6712 switches, 4 – Quanta S210 servers, 3 – Open GPON OLTs, 1 – Management switch, and various cables, plugs, optics

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XGS-PON OLT Specs

- Applied feedback from IC to these specs as well
  - Generic modular CPU, BMC/IPMI.
- Work is focused on software architecture (creating a community) as we wait for merchant silicon to sample.
- Expect technical updates in the Fall of 2016
- ONIE, Open BMC, SAI for access silicon. (ASAI?)
- Input and feedback are encouraged
AT&T Technical Space Specs
https://ebiznet.sbc.com/sbcnebs/

- AT&T services are typically 2, 3 and 4 - but rarely 5 - 9s
- There is interest in deriving availability on demand rather than baking it into every element every where
- Some equipment is necessarily a single point of failure. This equipment largely follows traditional NEBS requirements. The Open GPON OLT is such an element, and AT&T TP 76208 applies.
- More equipment is paired or better, and part of an availability set. Servers and fabric switches fall into this category, and AT&T TP 76207 applies.
- These have been introduced on a few calls, and this slide is largely for Q&A.