



The road ahead for Cable Broadband...



GROWTH THROUGH TRANSFORMATIVE TECHNOLOGIES



CLOUD SERVICES

cableOS[®] Central

Network & Service Intelligence Platform



Always Connected

Machine Learning / AI



Operator (Datacenter / hub)

Outdoor

ACCESS APPLICATIONS

cableOS[®] Apps

vCMTS

vBNG

vOLT



CORE PLATFORM

cableOS[®] Platform

Cloud-Native

Flexible Compute

Multi Tenancy
Multi Access



EDGE DEVICES

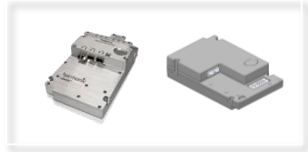
Indoor **Shelves**



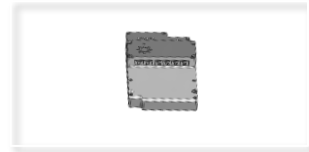
Outdoor **Nodes**



Remote **MAC/PHY Devices**



Remote **Switch**



Remote **OLT (PON)**



EMBRACED BY MARKET LEADING CUSTOMERS WORLDWIDE



59

Operators
Deployed Worldwide

>30K

Managed Remote
Devices

100% | 67%
vCMTS | DAA

Global Market
Share*



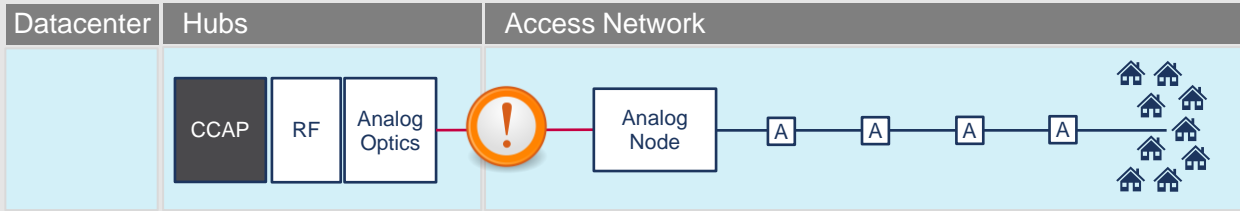
6 | +2

Major Tier-1 incl.



CABLE BROADBAND INVESTMENT STRATEGY

A PORTFOLIO OF OPTIONS



Upstream

Downstream

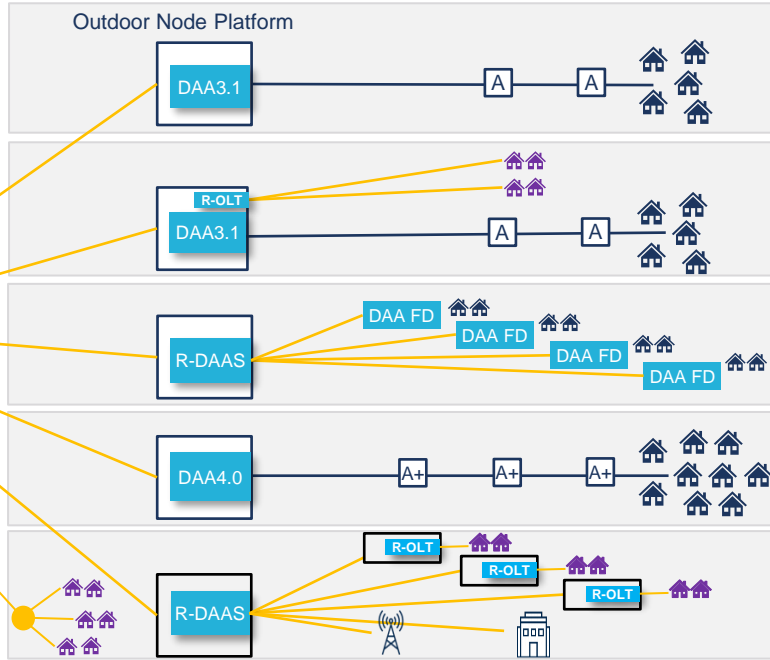
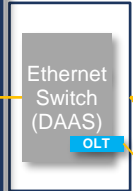

SPECTRUM / UPSTREAM BANDWIDTH

100Mbps

2Gbps

BROADBAND CONVERGED PLATFORM

- vOLT/vBNG
- Video core
- Edge router
- vCMTS
- vCMTS



DIGITAL NODE = EXPANDED UPSTREAM

1.7Gbps

7Gbps

1

SIMILAR TO (1) + FTTH/PON ON R-OLT

For heavy users and MDUs

1.7Gbps

7Gbps

10G Symmetric

2

FIBER DEEP | STEP TO FTTH

Reuse of DOCSIS for last mile

3

NEW DOCSIS 4.0

For expanded bandwidth. 2024-2025 target

3.5Gbps

7Gbps

4

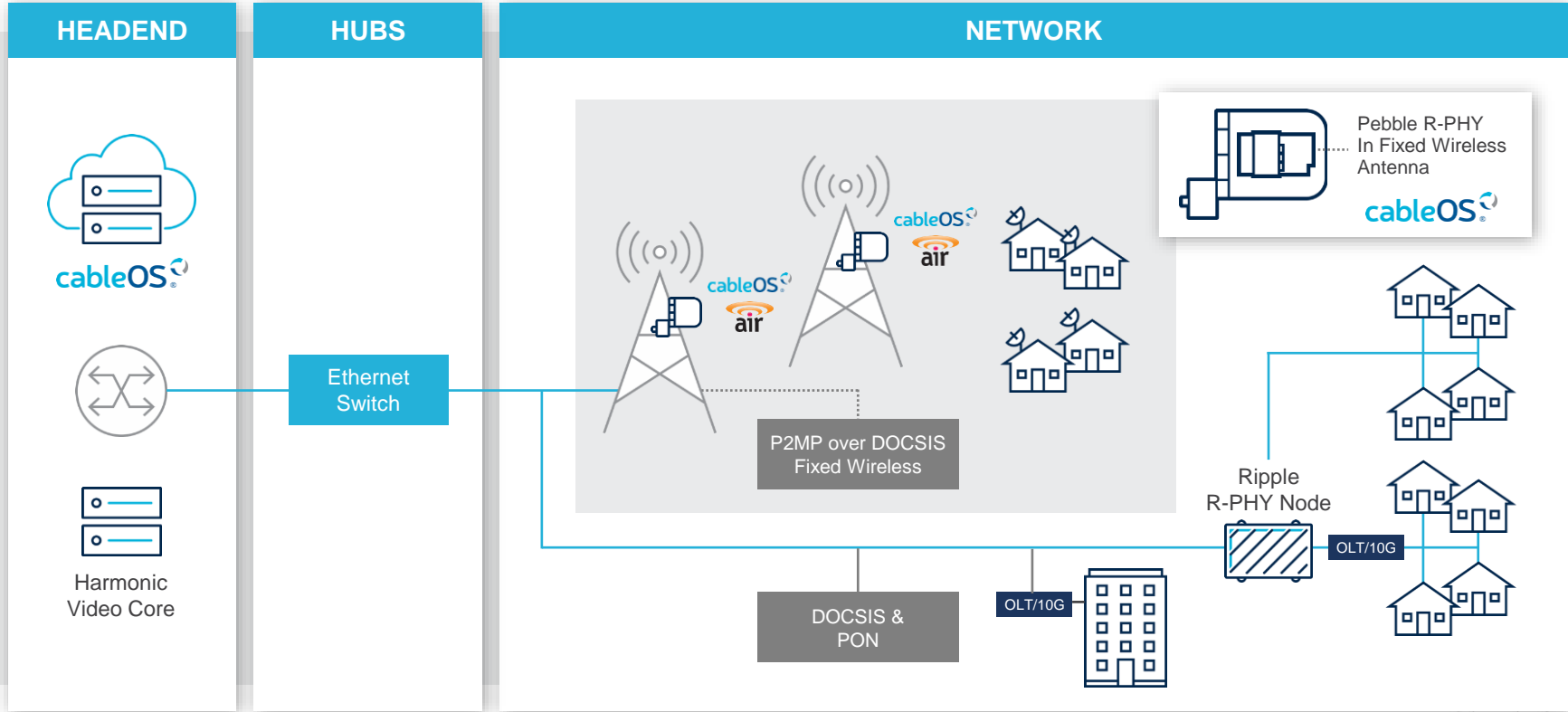
FTTH/PON

Network construction and new CPEs

10G Symmetric

5

OFF NET EXPANSION (with wireless DOCSIS)





Value proposition

- Universal licensing, Infrastructure collapse, Operational and support benefits
- Sustainable investment, no more HW / Big Iron forklifts, no “Lock In”
- Supports all popular topology, architecture and access flavors



Technology & solution

- SW & Cloud based, field proven & deployed, unlimited expansion possibilities
- The widest choice of Edge delivery platforms (Hub, R-Phy, FWA, PON..)
- Centralized easy to manage and control with CableOS Central Cloud services



Future value

- Intel server architecture enables native performance improvements and benefits
- Cloud native ensures fast app development and adaption to technology changes
- Easy to scale & introduce next gen technologies (xPON; D4.0, FDX, ESD..)

harmonic®



THANK YOU.

