The Gateway to New Paradigm

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Agenda

- Introduction
- Ufi Space Cell Site Gateway Router
- Ufi Space Universal CPE
- Q&A

Our Company

- **Vision:** Open Networking Platform & End-To-End Solutions

- **Markets Served:** Telco & Hyperscale

- **Business Model:** IDM/ White Box

- **Products:** Switch/ Server/ uCPE/ Router/ Broadband/ Wireless/ CPE

- **Profile:**
  - Founded in 2012
  - HQ in Taipei, Taiwan
  - RD Design and Sales & Marketing focused
  - Partnered w/ top tier EMS for engineering support & manufacturing operation
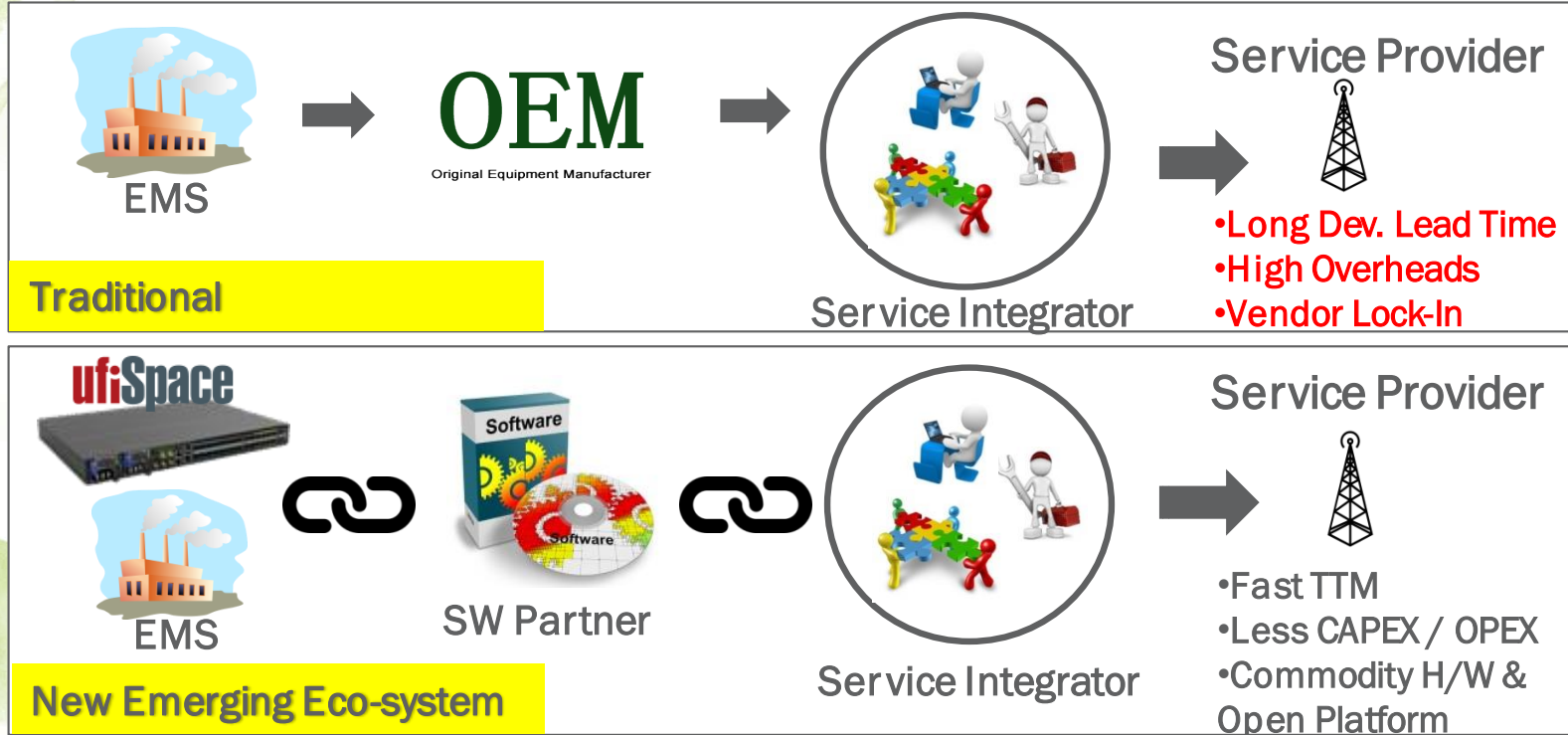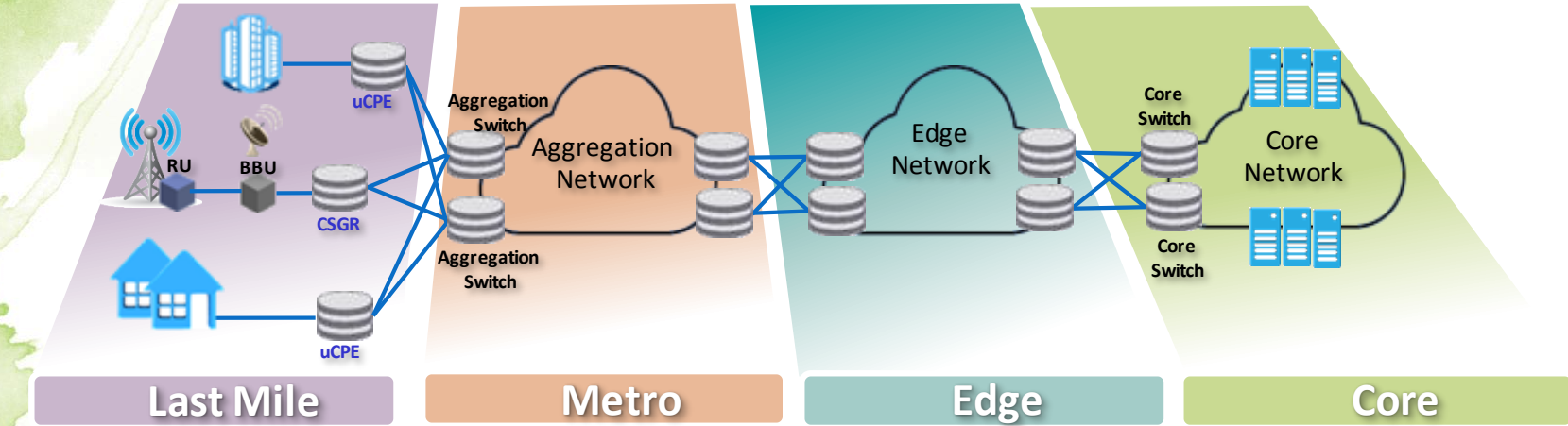 - Joined OCP community in 2018

Our Value

- To facilitate the open and disaggregation of software and hardware for open community through state of the art network designs

- To focus on providing end-to-end solutions for
  - Telco/ISPs
  - Hyper-scale Data Centers

Disaggregated Network Value Chain

Traditional

- EMS → OEM (Original Equipment Manufacturer) → Service Integrator → Service Provider
  - •Long Dev. Lead Time
  - •High Overheads
  - •Vendor Lock-In

New Emerging Eco-system

- EMS → SW Partner → Service Integrator → Service Provider
  - •Fast TTM
  - •Less CAPEX / OPEX
  - •Commodity H/W & Open Platform

Consume. Collaborate. Contribute.

Next Generation Open Network Platforms

Last Mile

Metro

Edge

Core

uCPE

RU   BBU

CSGR

uCPE

Aggregation Switch

Aggregation Network

Aggregation Switch

Edge Network

Core Switch

Core Network
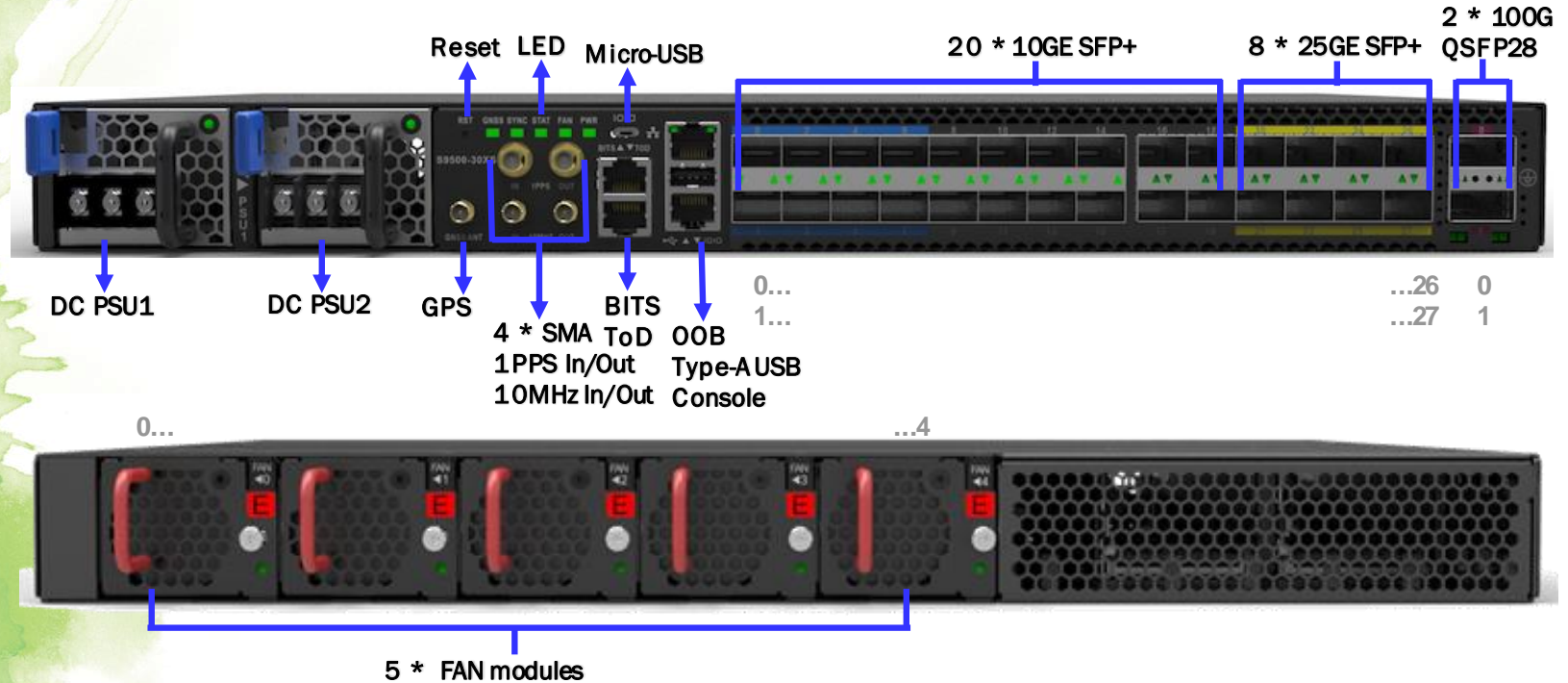
Core Switch

CSGR

uCPE

Aggregation Switch

Edge/Core Switch
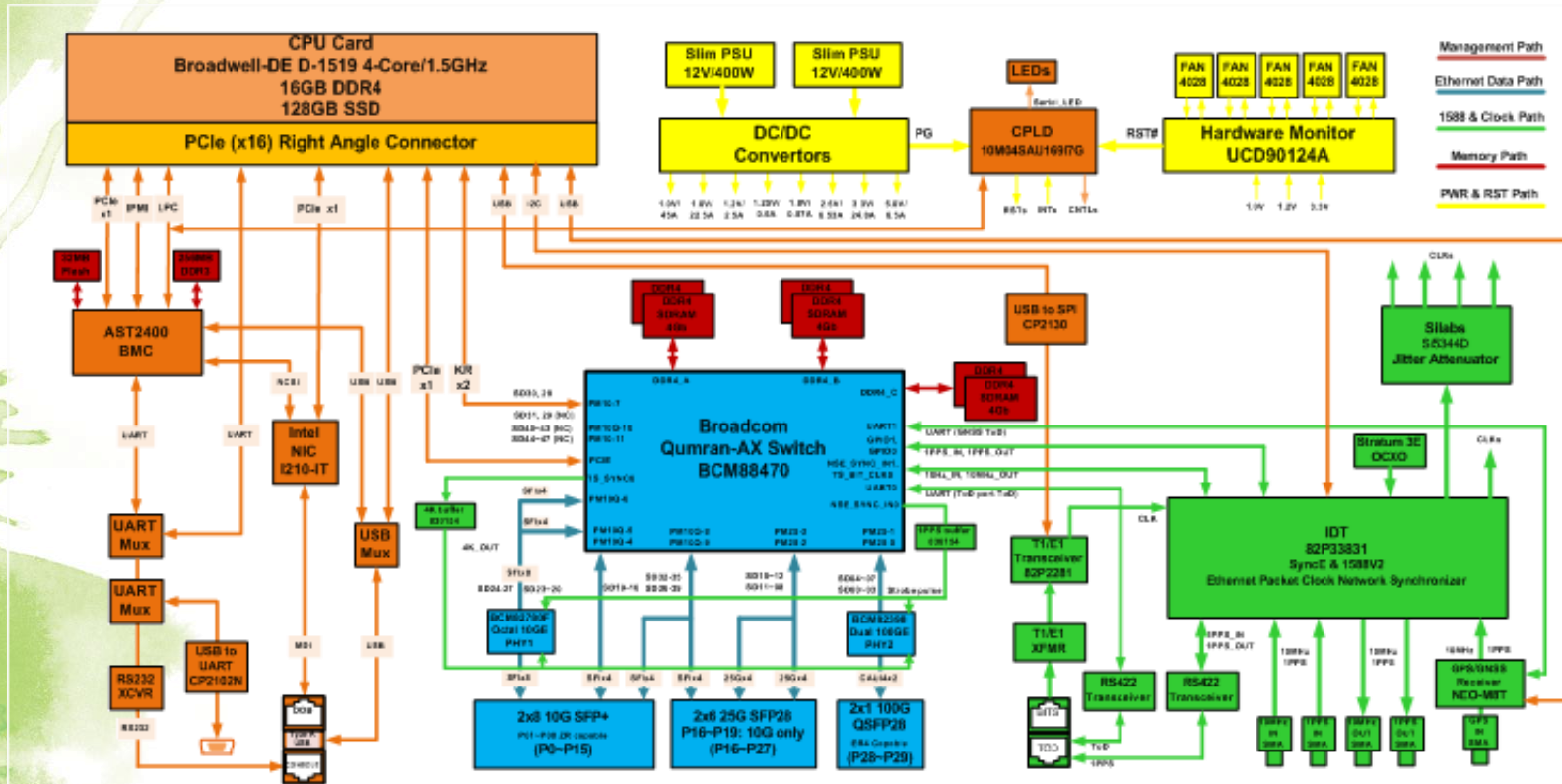
S9500-30XS Cell Site Gateway Router

- Compliant with the AT&T Cell Site Gateway Router Specification

- TP-76200 & TP-76450 compliance for Level 3 OSP/CELL-SITE Class 2

- 2 x 100G QSFP28, 8 x 25G SFP28, 20 x10G SFP+

- Mobility Backhaul Deployment
  - Operating temp range (-40C to +65C)
  - 1588v2 and Synchronous Ethernet
  - MACsec security
  - 1RU, 300mm depth, 350W max power

- -48VDC and AC Power Supply Options

- Broadcom Qumran-AX Silicon with Deep Buffer

S9500-30XS Cell Site Gateway Router

Reset   LED   Micro-USB

20 * 10GE SFP+   8 * 25GE SFP+   2 * 100G QSFP28

DC PSU1   DC PSU2   GPS   4 * SMA   BITS   OOB
                          1 PPS In/Out   ToD   Type-A USB
                          10 MHz In/Out   Console

0…   1…   …26   0
               …27   1

0…   …4

5 * FAN modules

S9500-30XS CSGR Schedules

- **Product Schedule**
  - Sample availability: Now
  - 4G/5G Cell Site Field Test & NEBS Level 3 Test to be completed by Mar'19
  - GA : Mar'19

- **Contribution Schedule**
  - Specification : Mar'19
  - Design Package : Mar'19

CSGR Outside Plant Environment

TP-76200 & TP-76450 compliance for Level 3 OSP/CELL-SITE Class 2

Source: AT&T

UCAD-0263 Universal CPE

- ## SD-WAN Solutions
  - Desktop Version
  - SR-IOV (Single-root input/output virtualization)
  - Intel ATOM C3000 Series (Denverton-NS, 4C/8C)
  - Intel QAT QuickAssist Technology Crypto Acceleration
  - DDR4 2400 MHz RDIMM (2 Slots, Max. 32GB)
  - 2x 10GE SFP+ Ports (SR-IOV Support)
  - 6x GE RJ45 Ports (2 Pairs Bypass, 2 POE+ 802.3at)
  - 1x mPCIe Socket Support (Wi-Fi)
  - 1x M.2 Socket Support (LTE, SIM)

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UCAR-3080 Universal CPE

- ## SD-WAN Solutions
  - Rackmount Version
  - SR-IOV (Single-root input/output virtualization)
  - Xeon D-2100 Series (Skylake-D, Max. 16C)
  - Intel QAT QuickAssist Technology Crypto Acceleration
  - DDR4 2666 MHz RDIMM (4 Slots, Max. 128GB)
  - 2x 10GE SFP+ Ports (SR-IOV Support)
  - 6x GE RJ45 Ports (SR-IOV Support)

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Design Roadmap

- Core Network 400G Solutions
  - 40 x 100G QSFP28 and 13 x 400G QSFP-DD
  - Disaggregation Architecture Design
  - Scalable Deployment to Fit Any Network Size

- Aggregation Network Solutions
  - 48 x 10G SFP+ and 6 x 100G QSFP28
  - 2 x 10G SFP+ optional design to CPU or Front I/O
  - Deep Buffer Switch

Core Switch

Aggregation Switch

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