

Introducing Coherent 100ZR for the optical edge

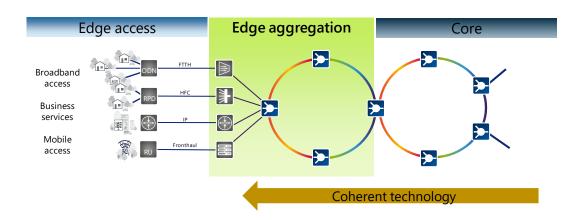
New 100G pluggable device features the industry's first DSP to meet 5W QSFP28 specification

June 2022



Coherent technology gaining traction at the edge

- 100Gbit/s is ramping up in optical edge aggregation infrastructure. Millions of 10GbE ports need to be upgraded
- Direct-detect solutions, which have been predominant up to now, have limited reach due to optical dispersion and so are not efficient for high speeds and long distances



What's the most efficient upgrade path to 100Gbit/s?

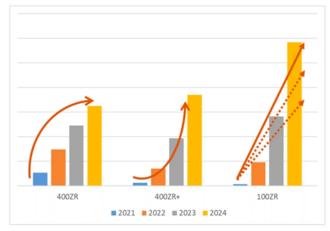


Top transport technology trends at the network edge

Adoption of **coherent pluggable optics** that can be plugged directly into the application device (e.g., OLT, CCAP, DU, switches and routers)

QSFP28 universal form factor for 100GbE ports

Hardened temperature components for outdoor deployments



Source: Cignal AI, 2021

100Gbit/s coherent technology is ramping up at the optical edge



The ADVA Coherent 100ZR

Industry's first 100ZR pluggable coherent transceiver engineered to meet the most stringent optical edge aggregation demands:

- QSFP28 form factor and power envelope
- Commercial and industrial temperature operating ranges
- Automatic wavelength tuning
- Cost-efficiency

With a new purpose-built DSP co-developed by ADVA and II-VI Incorporated, our Coherent 100ZR transceiver empowers service providers to deploy 100Gbit/s coherent technology in the access network easily and affordably



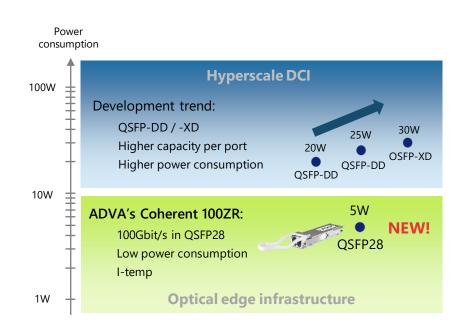
Designed to seamlessly upgrade edge aggregation network to 100Gbit/s



Breaking free from the mainstream

Purpose-built DSP for the optical edge

- Currently available coherent pluggable solutions cannot meet optical edge demands
 - Existing equipment doesn't offer the form factor or power consumption levels required
- Our new Coherent 100ZR has been engineered to comply with the 5W QSFP28 specification
 - The new purpose-built DSP Steelerton[™], codeveloped by ADVA and II-VI Incorporated, enables a cost-efficient, low-power, I-temp pluggable device in a standard QSFP28 form factor



Designed to seamlessly upgrade edge aggregation network to 100Gbit/s



Coherent 100ZR at a glance

For any QSFP28-based host equipment

- Standards-compliant transceiver and optical interface
- QSFP28 form factor and power envelope

For any open line system (OLS)

- 100GHz/50GHz/flexgrid resolution
- Fully tunable transceiver with self-tuning capability



For carriers and DCI applications

- 100Gbit/s OTN OTU4 and 100GbE Ethernet support
- Long reach without dispersion compensation units

For indoor and outdoor deployment

- C-temp and I-temp variants
- Slots directly into existing applications devices

Cost-efficient, low-power pluggable for the optical edge



Automatic wavelength tuning

Industry's first coherent plug with auto-tuning

No commissioning or manual intervention

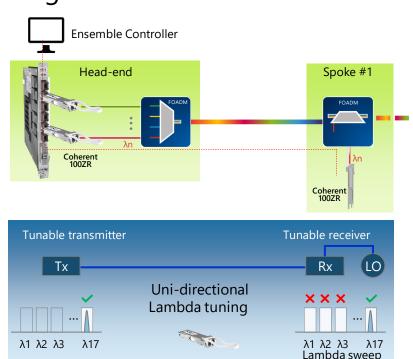
Coherent 100ZR modules automatically start the automatic tuning process, and tune to the wavelength determined by the DWDM filter (probe and detect)

Minimum inventory

Coherent 100ZR pluggables are fully C-Band tunable

Host-agnostic

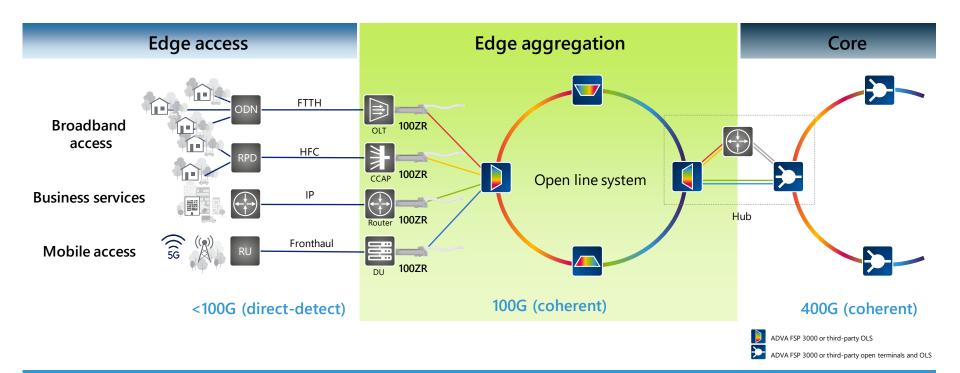
The self-tuning algorithm is host-agnostic and can operate in any standard QSFP28 slot without manual intervention



Coherent 100ZR eases operation and reduces inventory



Coherent 100ZR application areas



100ZR QSFP28 for seamless introduction of 100Gbit/s coherent waves at the edge





Thank you

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