

FIBERSTAMP 2025

NEWSPAPER

Future New Products Development Roadmap 2025 Innovation Plan on Optical Transceivers New Key Solutions for Optical Network Our Award And Specialty

Data Center & AI Solutions

- 1.6T CPO Interconnection
- 1.6T Pluggable Optics Interconnection
- 800G/400G Optics Data Center & AI Interconnection
- 800G/400G Immersion Data Center & AI Interconnection
- 400G/200G Hybrid Optics Data Center Interconnection
- Structured MPO Cabling

Telecom & Broadcast Optical Network Solutions

- 100G PAM4 QSFP28/SFP112 Singel Lambda Optics
- 400G QSFP-DD LR4/BiDi LR4/ER4-30
- SDI 3G/12G/48G SDI UHD Video Transmission

DCI DWDM & Coherent Subsystem Integrated Solutions

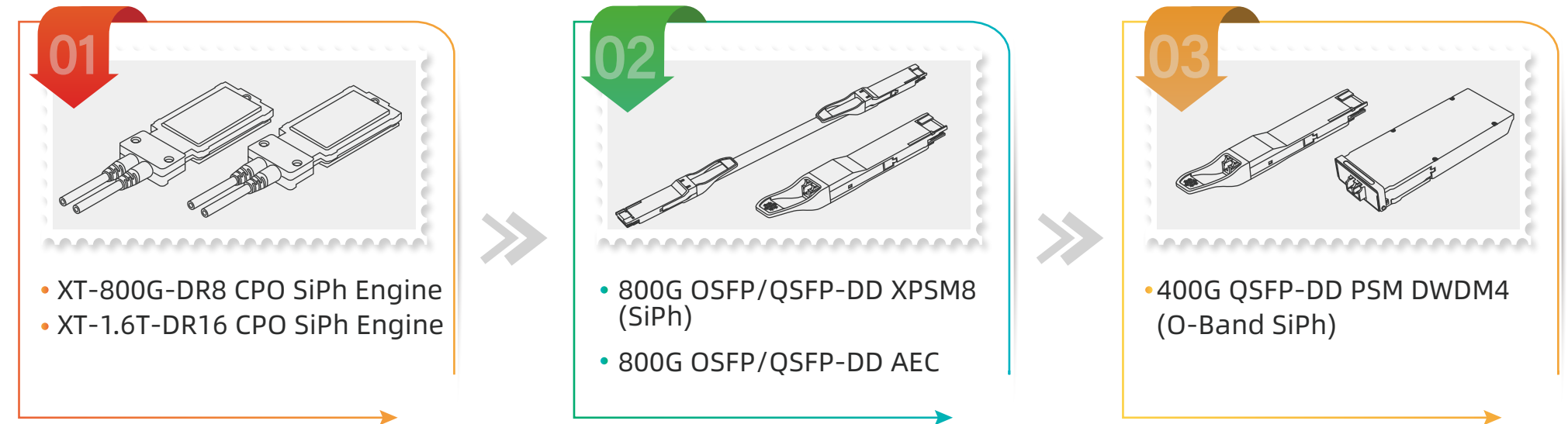
- Color ZR+ 4x25G NRZ DWDM and Subsystem
- Color X 100G PAM4 DWDM and Subsystem
- 400G QSFP-DD PSM DWDM4 O-Band
- New Generation 400G Coherent DCO And Subsystem

OPEN OPTICAL NETWORK MAIL CARRIER



FUTURE NEW PRODUCTS DEVELOPMENT ROADMAP

On The Way to Continuous Innovation Of SiPh 800G, AEC, CPO and O-Band DWDM

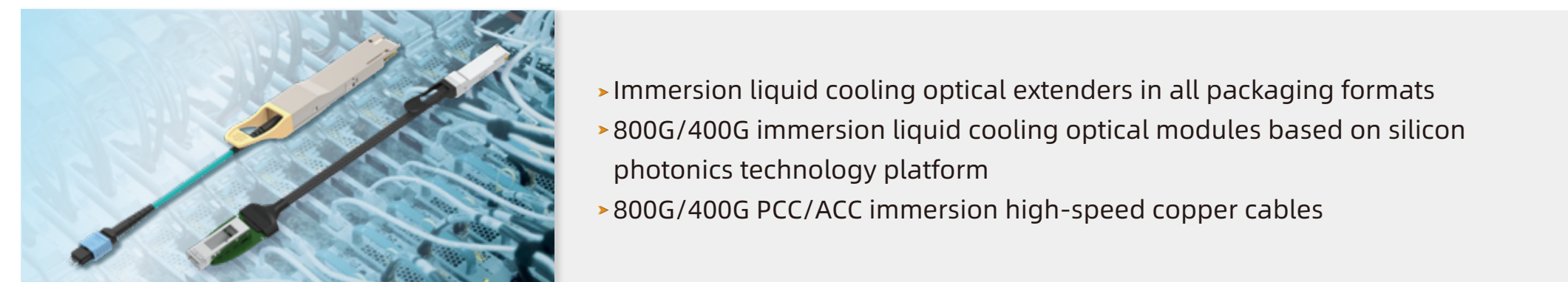


2025 INNOVATION PLAN ON OPTICAL TRANSCEIVERS

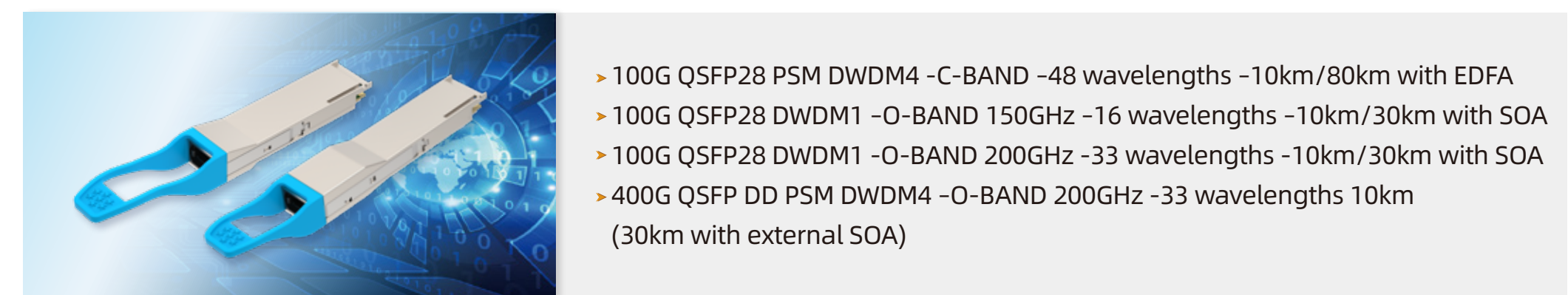
800G Product Upgrade Plan for Metro Data Center Interconnect



Complete Solution for Immersion Liquid Cooling Interconnect Data Centers

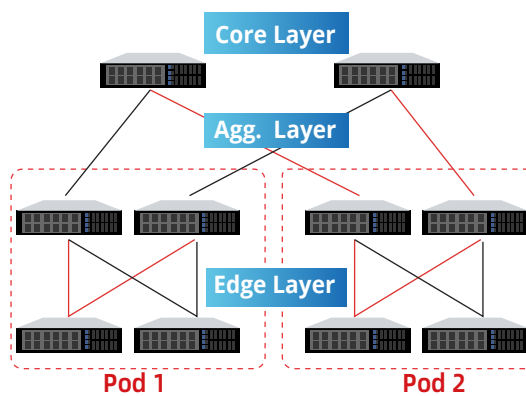


Short-Distance Transmission Optical Transceivers for Metro DWDM Interconnect



400G Optical Transceivers for Edge Computing and HFT Data Center Solutions





Data Rate	400G Solutions		800G Solutions	1.6T Solutions		200G Solutions For HFT Low Latency		400G Solutions For HFT Low Latency	
DCI	400G CFP2 / QSPF-DD OpenZR+ DCO		800G ZR/ ZR+ DCO			200G CFP2 DCO		400G CFP2 DCO/QSPF-DD ZR+	
Spine - Spine (≤10km)	400G QSPF-DD LR4	400G QSPF-DD CWDMA/LR4/ DR4++	800G QSPF-DD 2xFR4/2xLR4/ LR8/DR8++	1.6T CPO DR16	1.6T OSFP224/ QSPF-DD DR8	200G QSPF-DD LR8/PSM8	200G QSPF-DD 2xCWDM4	400G QSPF-DD LR8/PSM8	400G QSPF-DD 2xFR4
Leaf - Spine (≤2km)	400G QSPF-DD 2xFR4 to 2x200G FR4	400G QSPF-DD DR4/DR4+ 400G FR4	800G QSPF-DD DR8/DR8+ 800G FR8	800G DR8	800G DR4	200G QSPF-DD PSM8	100G QSPF28 CWDMA	400G QSPF-DD PSM8	200G QSPF56 FR4
TOR - Leaf (≤100m)	200G QSPF56 SR4	400G SR4/VR4	800G SR8/VR8	800G OSFP SR8	1.6T OSFP-XD AEC/ 800G AEC	200G QSPF-DD SR8/ 100G QSPF28 SR4	100G QSPF28 SR4	400G QSPF-DD SR8/ 200G QSPF56 SR4	200G QSPF56 SR
Server - TOR (DAC/AOC) (≤20m)	25G/50G/100G	100G	800G to 4x200G	800G	1.6T/800G	25G	25G	50G	50G
Serdes	25G NRZ/ 50G PAM4	100G PAM4	100G PAM4	100G PAM4	200G PAM4	25G NRZ	25G NRZ	50G PAM4	50G PAM4

Data Rate	800G Solutions			1.6T Solutions	
Core Layer	800G OSFP 2xFR4/LR4	800G OSFP DR8/ DR4+/DR8++	800G OSFP SR8	1.6T CPO DR16	1.6T OSFP224/QSFP-DD DR8
Agg. Layer	400G QSFP112/ OSFP-RHS FR4/LR4	400G QSFP112/OSFP-RHS DR4/DR4+/DR4+++	400G QSFP112/ OSFP-RHS SR4	800G OSFP DR8	800G DR4
Edge Layer	400G SR4	400G SR4	400G SR4	800G OSFP SR8	1.6T OSFP-XD AEC/800G AEC
Edge to Server	400G SR4/AOC 800G to 2x 400G or 4x 200G DAC	400G SR4/AOC 800G to 2x 400G or 4x 200G DAC	400G SR4/AOC 800G to 2x 400G or 4x 200G DAC	800G OSFP AOC/DAC	1.6T OSFP-XD DAC/800G DAC
Highlight	Speed Up	Great Scalability	Identical Bandwidth	High Bandwidth	Forward Compatibility

The diagram illustrates the Singlemode (SMF) Trunk Cables solution, showing two main configurations: 400Gb/s and 800Gb/s.

400Gb/s Configuration:

- Top Section:** Two Patch Panels with SMF MPO/APCm are connected by Singlemode (SMF) Trunk Cables. The text states: "Singlemode (SMF) Trunk Cables No connectors in the link!". Below the panels, it specifies: "Total link length: 500m 4x MPO-MPO interfaces: End-to-End RL~60dB (per interface)".
- Bottom Section:** Two NDR Transceivers (MPO/APCm) are connected to the patch panels via SMF Drop Cables. Below the transceivers, it specifies: "NDR Transceiver (MPO/APCm)".
- Left Side:** A 1:2 Splitter Fiber Cable is shown, connecting a Twin port OSPF to two Straight Fiber Cables. The text indicates: "1:2 Splitter Fiber Cables" and "Straight Fiber Cables".
- Right Side:** A 1:2 Splitter Fiber Cable is shown, connecting a Twin port OSPF to two Straight Fiber Cables. The text indicates: "1:2 Splitter Fiber Cables" and "Straight Fiber Cables".

800Gb/s Configuration:

- Top Section:** Two Patch Panels with SMF MPO/APCm are connected by Singlemode (SMF) Trunk Cables. The text states: "Singlemode (SMF) Trunk Cables No connectors in the link!". Below the panels, it specifies: "Total link length: 500m 4x MPO-MPO interfaces: End-to-End RL~60dB (per interface)".
- Bottom Section:** Two NDR Transceivers (MPO/APCm) are connected to the patch panels via SMF Drop Cables. Below the transceivers, it specifies: "NDR Transceiver (MPO/APCm)".
- Left Side:** A 1:2 Splitter Fiber Cable is shown, connecting a Twin port OSPF to two Straight Fiber Cables. The text indicates: "1:2 Splitter Fiber Cables" and "Straight Fiber Cables".
- Right Side:** A 1:2 Splitter Fiber Cable is shown, connecting a Twin port OSPF to two Straight Fiber Cables. The text indicates: "1:2 Splitter Fiber Cables" and "Straight Fiber Cables".

RRU / AAU

BBU / DU

Liquid Cooling Device

10G to 800G Full Series Immersible Solutions

The diagram illustrates a Coherent Single Lambda 400G DWDM network architecture. It shows two Data Centers connected via a long fiber link. Each Data Center contains an O-Band Transceiver and a 100G Switch. The network is composed of several key components: 100G Switches, 100G Any (Arbitrary) components, 400G Any components, 400G Wavelengths (λ_1 to λ_n), MUX/DEMUX (Multiplexer/Demultiplexer) components, and a Transmission Fiber. The architecture supports a 1+1 protection scheme, where the signal is duplicated for redundancy. The total fiber length is approximately 30km. The network is managed by an NMS (Network Management System).

The diagram illustrates a 20km 48G-SDI QSFPP+ optical link connecting two video production centers. On the left, Video Production Center A features an 8K Production Switcher connected via BNC cables to a 48G-SDI Optical Extender. This extender is linked to a 48G-SDI QSFPP+ Optical Transceiver. The transceiver outputs four 1310nm QSFP+ ports, which are connected to a 20km Duplex SMF fiber cable. On the right, Video Production Center B has an identical setup, with the 20km Duplex SMF fiber cable connecting to its 48G-SDI QSFPP+ Optical Transceiver. This transceiver is then connected to a 48G-SDI Optical Extender, which finally outputs to an 8K Production Switcher via BNC cables.



The diagram illustrates a 5G network architecture and its optical components. On the left, a network diagram shows multiple Remote Units (RU) connected to a Central Unit (CU) via Fronthaul, Midhaul, and Backhaul links. The CU is connected to the Core network. On the right, a series of optical components are shown, including a 100G SFP-DD, 100G PAM4, 100G SFP112, 100G PAM4, 100G QSFP28, and 100G PAM4. These components are connected to a central hub, which is then connected to a series of buildings representing a data center or cloud environment.

Two Technology

The diagram illustrates the Cloud Edge Computing architecture. At the top, there are two cloud icons: 'Public cloud' on the left and 'Centralized data center' on the right. Both are connected by orange lines to a central 'Edge data center' located below them. The 'Edge data center' is represented by a globe icon and a server rack icon. From the 'Edge data center', orange lines connect to a row of five edge devices at the bottom: a hand holding a smartphone, a surveillance camera, a wireless router, a laptop, and a tablet.

★ Ultra-Low latency
 ★ High-Performance

200G QSFP-DD 2xCWDM4
 400G QSFP-DD 2xFR4

100G QSFP28 CWDM4
 200G QSFP56 FR4

100G QSFP28 CWDM4
 200G QSFP56 FR4

400G QSFP112 SR4

200G QSFP56 SR2

200G QSFP56 SR2

Look forward to connecting with you in Optical Network World!

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