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Assemble Compute, Storage and Memory Resources via PCIe/CXL Cabling

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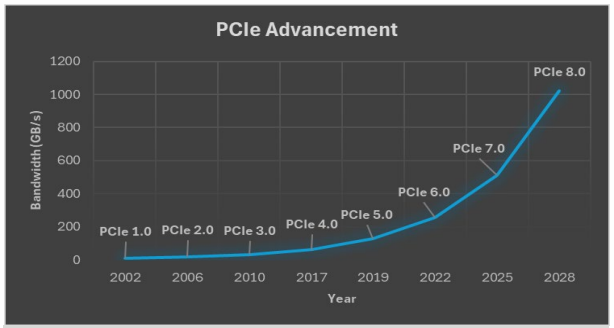
Forward-looking statements

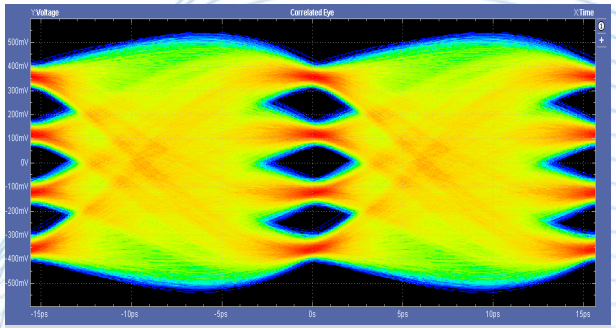
Except for statements of historical fact, this presentation contains forward-looking statements (within the meaning of the federal securities laws) including statements related to future revenue, future earnings, and the success of our product releases that involve risks and uncertainties. Words such as “anticipates,” “expects,” “intends,” “plans,” “projects,” “believes,” “seeks,” “estimates,” “can,” “may,” “will,” “would” and similar expressions identify such forward-looking statements. These statements are not guarantees of results and should not be considered as an indication of future activity or future performance. Actual events or results may differ materially from those described in this presentation due to a number of risks and uncertainties.

Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions that are difficult to predict, including those described in the “Risk Factors” section of our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and other documents filed by us from time to time with the SEC. Forward-looking statements speak only as of the date they are made. You are cautioned not to put undue reliance on forward-looking statements, and no person assumes any obligation to update or revise any such forward-looking statements, whether as a result of new information, future events or otherwise.

Cadence of technology advance is increasing



PCIe progression



I/O speed

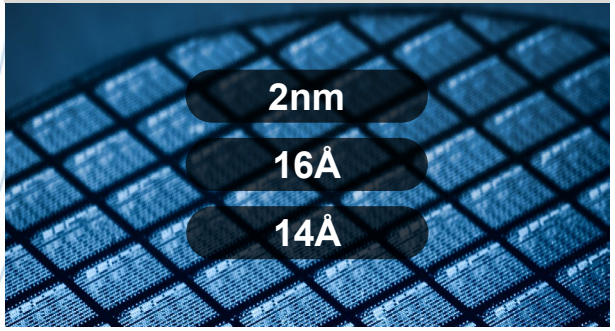
Electrical → optical

CXL 1 → 2 → 3

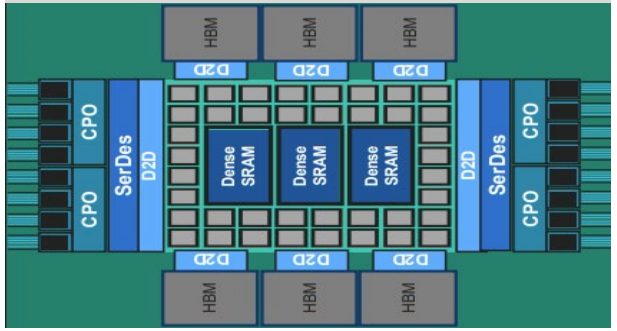
CXL Compute Express Link®

CXL 1.0/1.1	CXL 2.0	CXL 3.0	CXL 3.1	CXL 3.2
2019	2020	2022	2023	2024

Process node



Advanced packaging

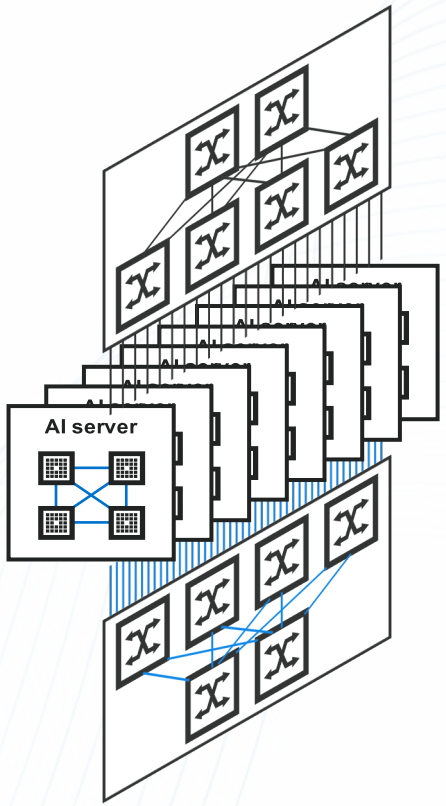


AI data center evolution

Frontend network
Connects AI servers to rest of DC

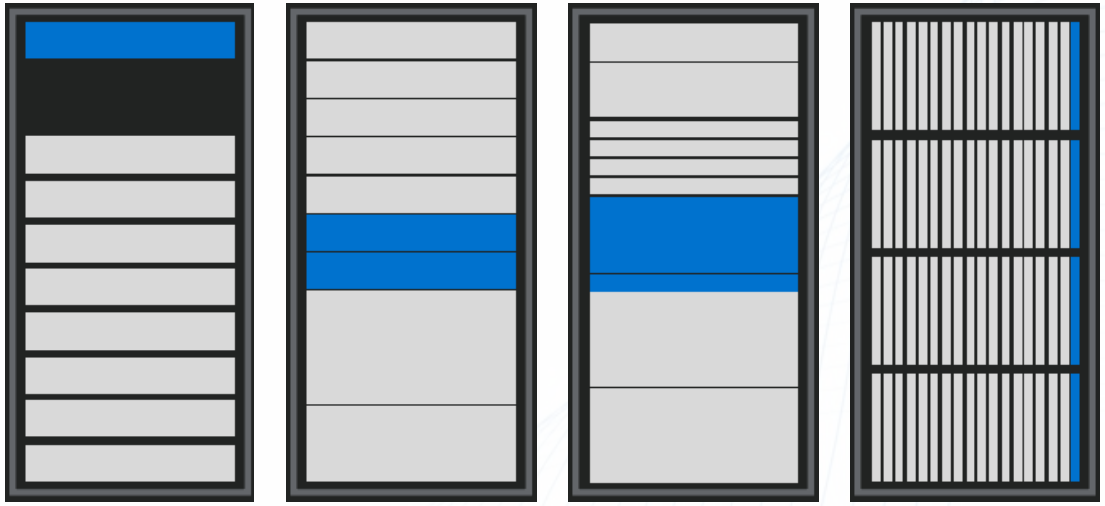
Scale-up network
Connect XPUs via compute fabric

Backend network
Connects AI servers within a cluster



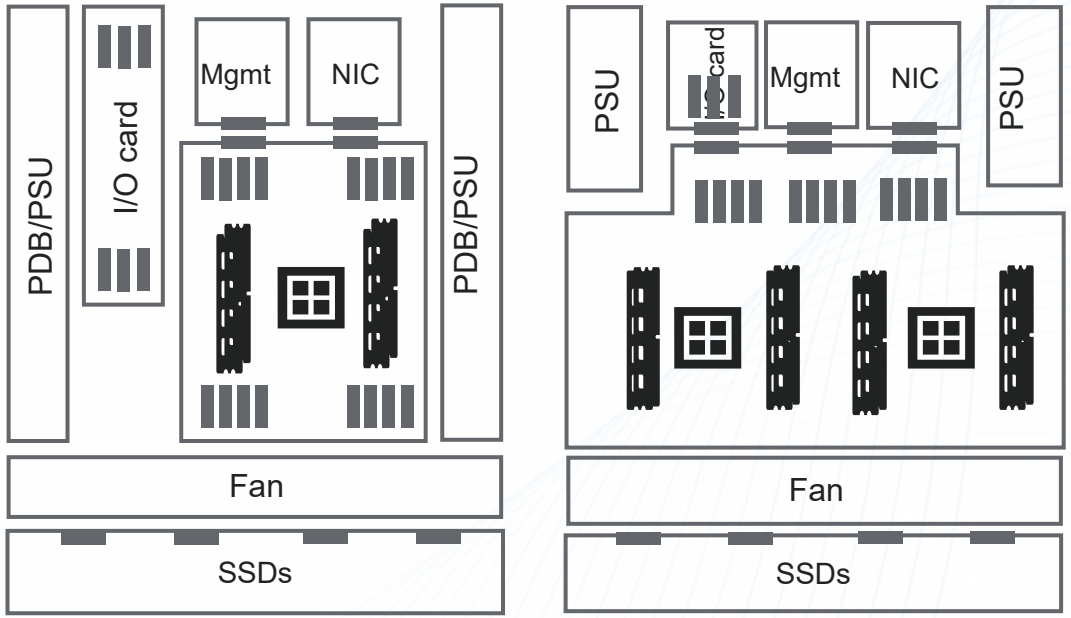
▶ AI scale up

AI data center evolution



- AI scale up
- Rack-scale solutions

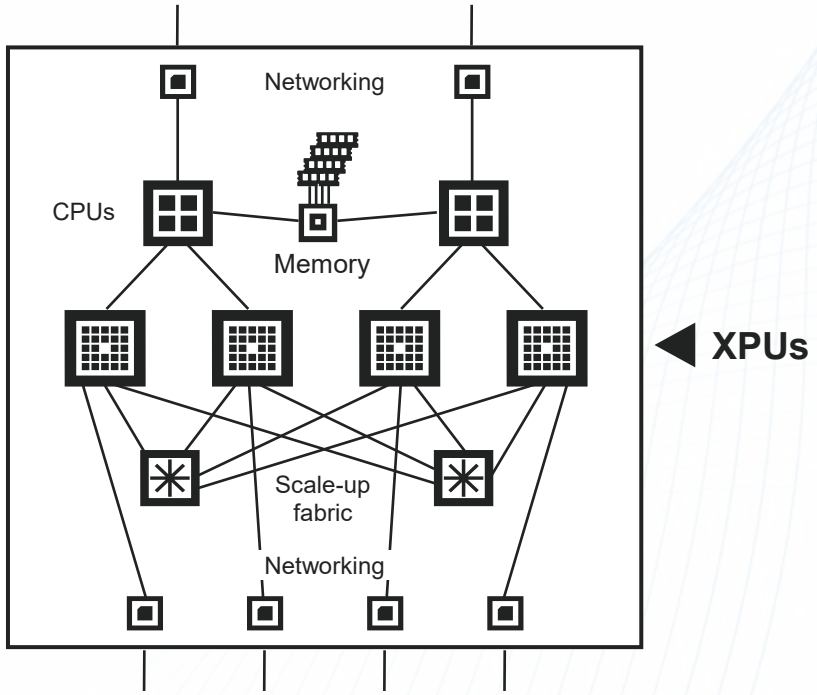
AI data center evolution



- AI scale up
- Rack-scale solutions
- Server modularization

Note: illustration refers to OCP DC-MHS project

AI data center evolution



- AI scale up
- Rack-scale solutions
- Server modularization
- Custom silicon and system

AI data center evolution

- AI scale up
- Rack-scale solutions
- Server modularization
- Custom silicon and system

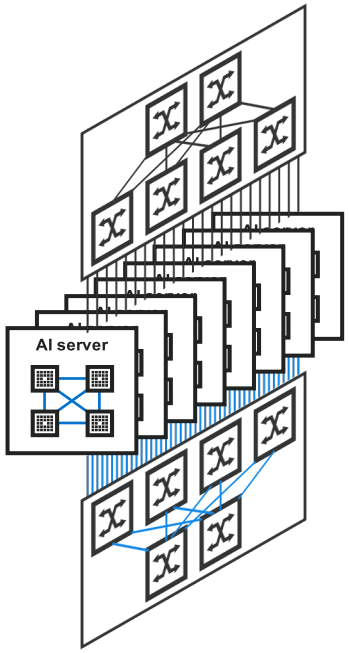
High-speed connectivity

PCIe/CXL, Ethernet, InfiniBand, UEC, UALink, proprietary…

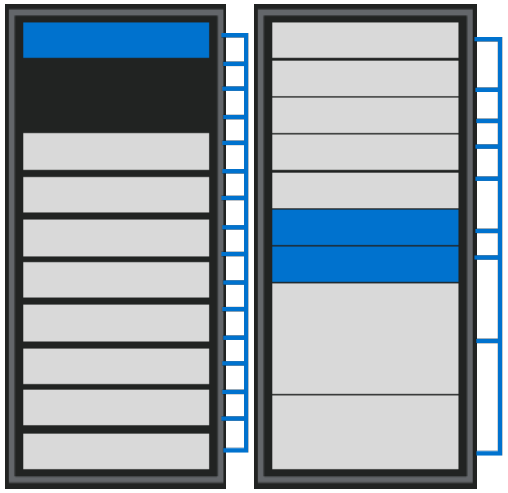
High-speed connectivity is the key enabler of AI evolution

PCIe enables every evolutionary step

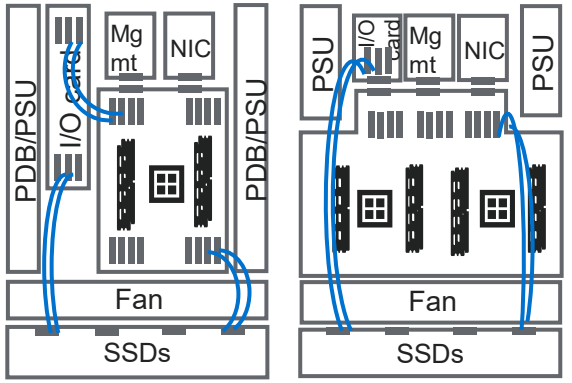
AI scale up



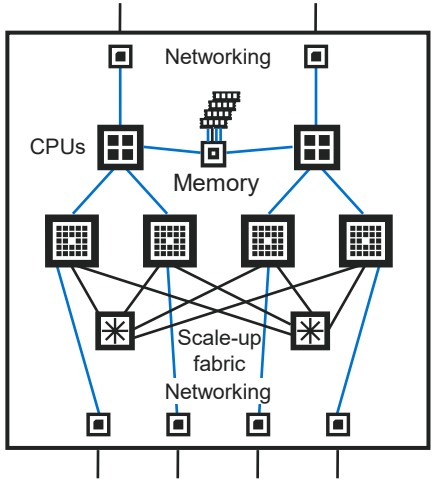
Rack-scale solutions



Server modularization



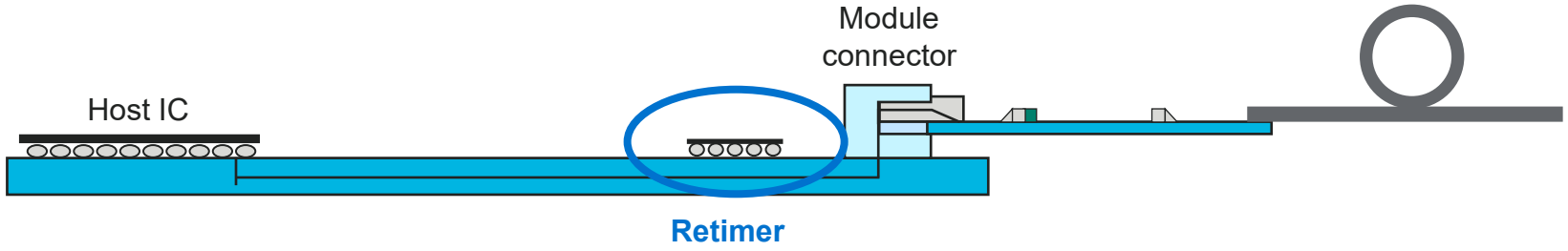
Custom silicon and system



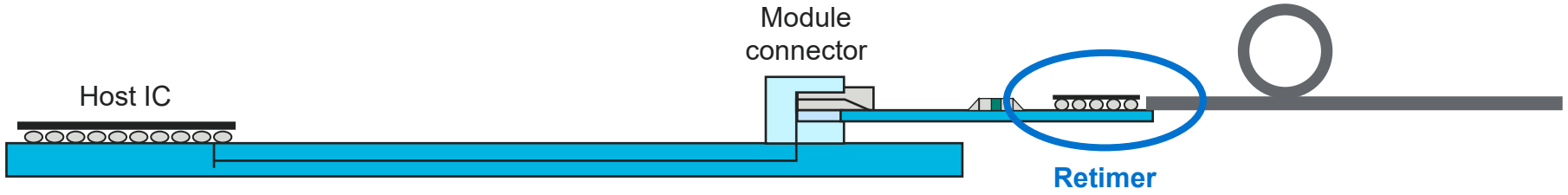
PCIe is the most widely adopted protocol for resource interconnect

Various cable types powered by PCIe retimer

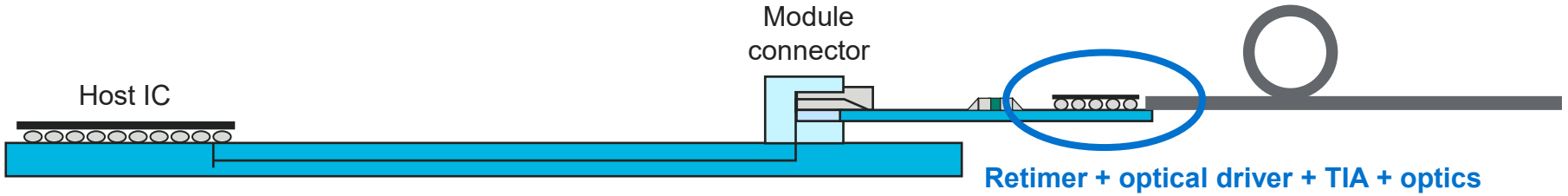
Direct Attach Copper Cable (DAC)



Active Electrical Cable (AEC)



Active Optical Cable (AOC)



Different cable types cover on-board, off-board and between-rack interconnect

Various cable types powered by PCIe retimer

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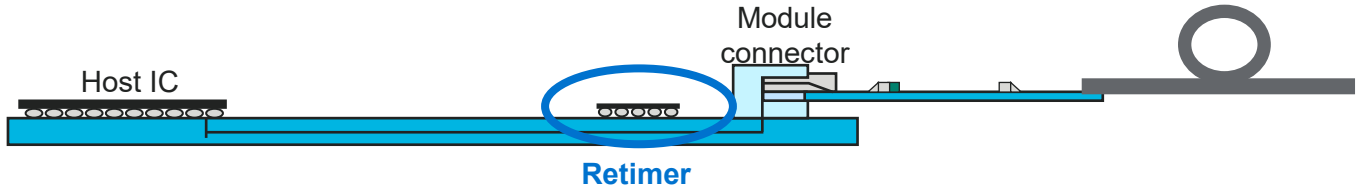

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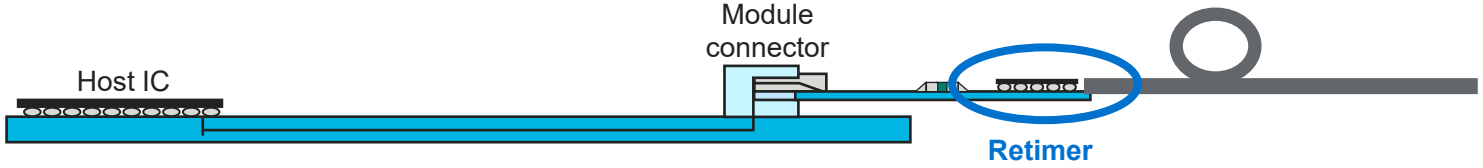

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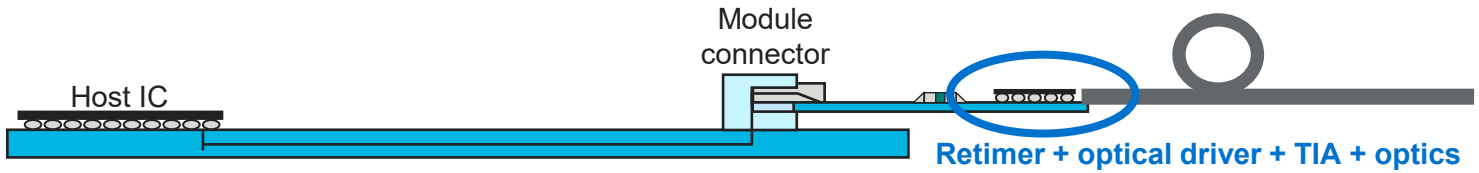
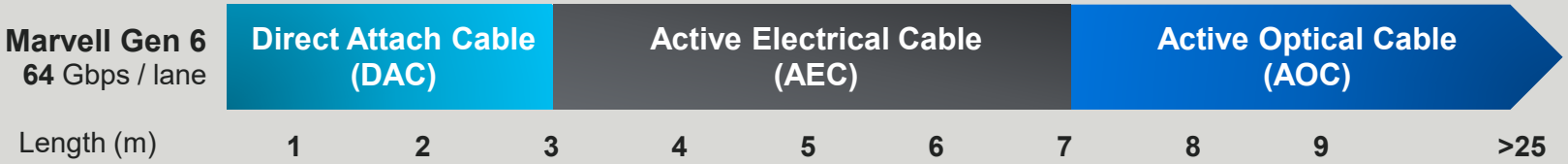
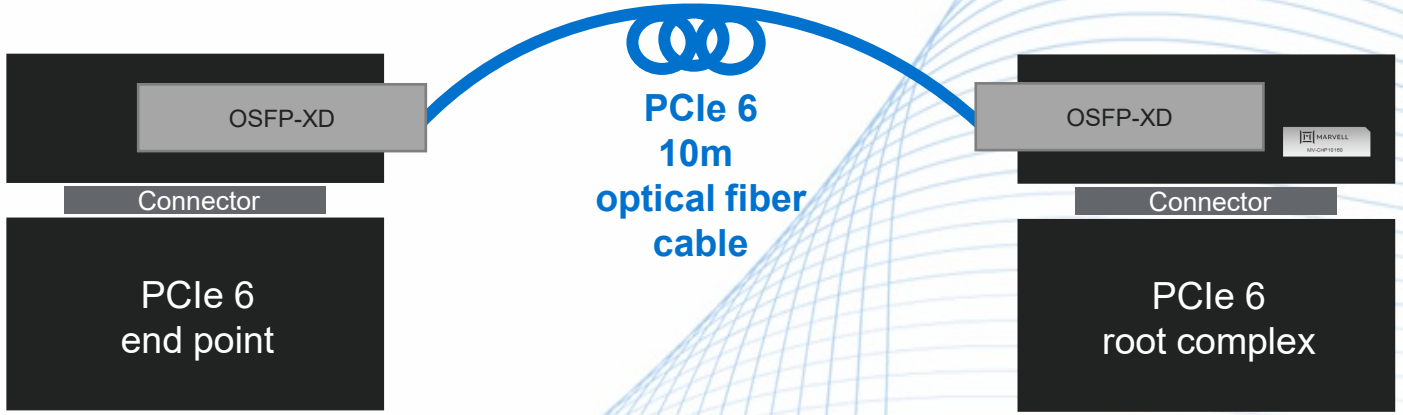




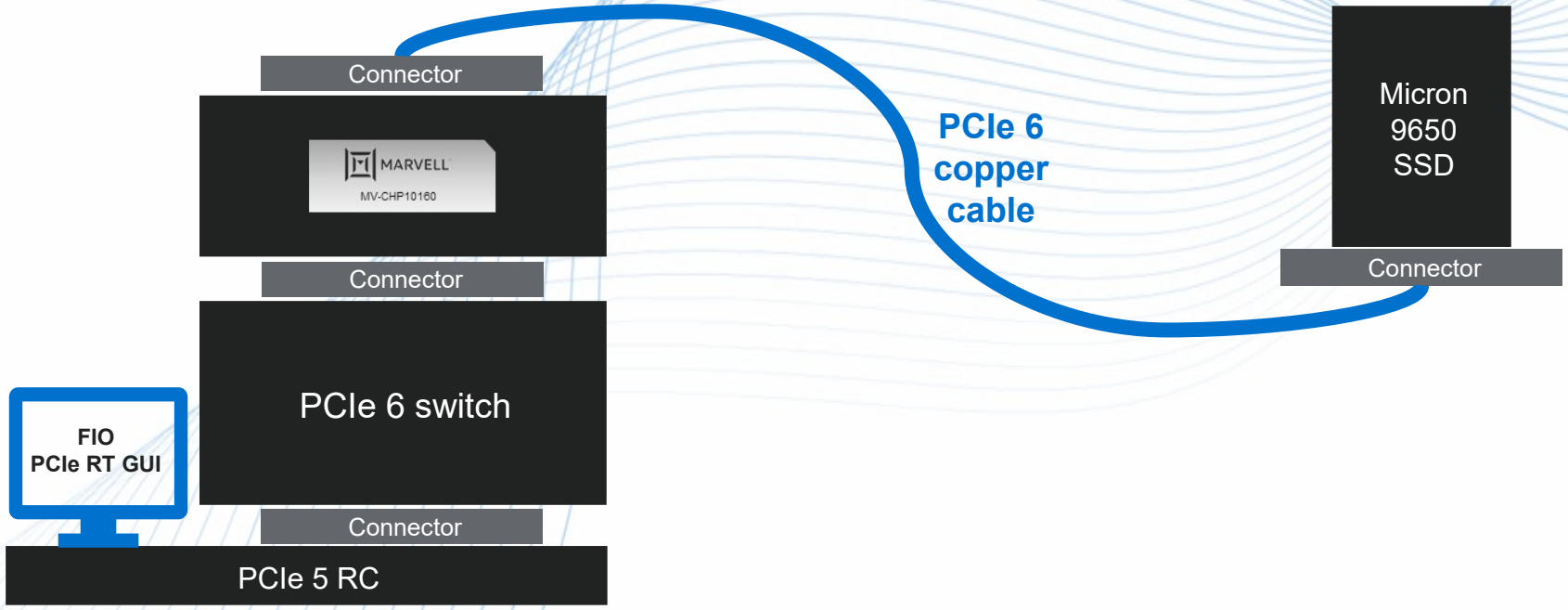
Different cable types cover on-board, off-board and between-rack interconnect

End-to-end PCIe 6 over AOC at OFC25



Industry's first end-to-end PCIe 6 over 10m optical cable

Live PCIe 6 over copper demo at FMS25



FMS Organization Pavilion PCI-SIG Kiosk 725B

Key takeaways

1. PCIe is open and pervasive
2. PCIe cabling enables various resource configurations
3. Retimers enable PCIe cable to address a wide range of media and distances
4. Stop by the FMS Organization Pavilion **PCI-SIG kiosk 725B** for live demo

Thank You