

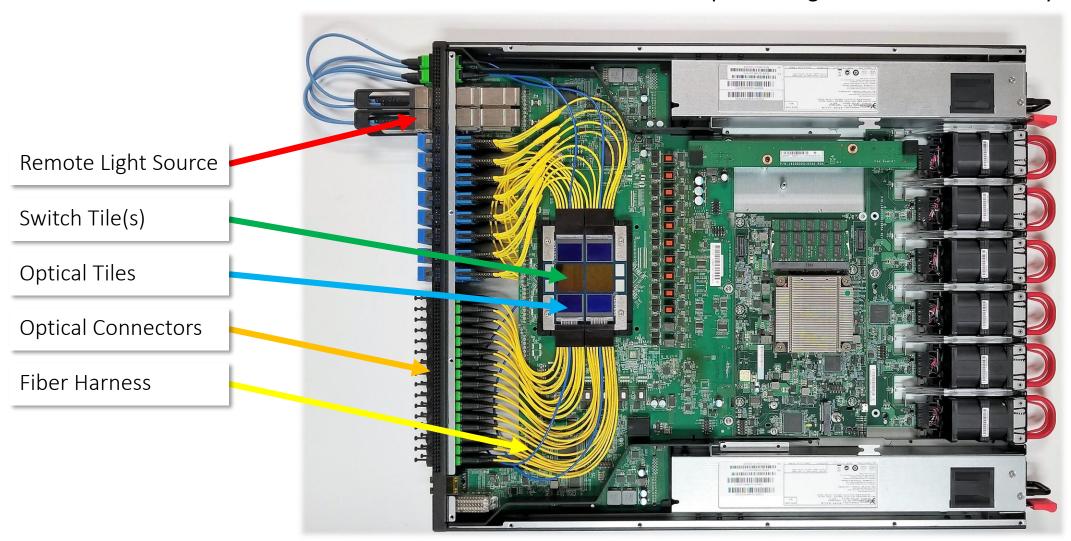
Co-Packaged Optics Integration

EPIC Online Technology Meeting on Co-Packaged Optics

Brian Welch June 8, 2020

Co-Packaged Optics - Example

Cisco Optical Integration Mechanical Study



Done in collaboration with Accton

Co-Packaged Optics: Key Components

Silicon Photonics

- Tight/Dense integration with host IC (ie, switch)
- Able to tolerate high temperatures (~105 C)

Light Source

- High efficiency: Multiple lanes per laser
- High reliability: Much better than pluggable optics
- Temperature: Remote laser or thermally insensitive

Interfaces:

- Electrical I/O: 112G-XSR
- Optical I/O: Standard compliant (ie, 400G-DR4/FR4) Allows interop with conventional optics

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