Integrated Photonics: Enabling Pluggable Modules

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Finisar
10G Discrete Optics

- 10Gb/s MMF 850nm VCSEL SR SFP+
- Also 10 Gb/s SMF 1310nm DFB laser LR SFP+
- 48x 10Gb/s ports in 1 RU card
Why pluggable modules?

- Multiple applications
- Pay as you go
- Confined replaceable failures
- Common market
- Specialized R&D production
- Port density parity with Switch ASICs
40G Photonic Integration

- 40 Gb/s MMF 850nm VCSEL PIC SR4 QSFP+
- Also 40 Gb/s SMF 1310nm DFB laser PIC LR4 QSFP+
- 144x 10 Gb/s or 36x 40 Gb/s ports in 1 RU card
100G Photonic Integration

- 100 Gb/s MMF w/ 850nm VCSEL PIC SR10 CFP4
- Also 100 Gb/s SMF 1310nm (InP/SIP) PIC LR4 CFP4
- 320x 10 Gb/s, 64x 40 Gb/s, or 32x 100 Gb/s ports (requires MLG I/O) in 1 RU card
400G Photonic Integration

- 400 Gb/s MMF 850nm VCSEL PIC SR16 CFP2
- Also 400 Gb/s SMF 1310nm (InP/SIP) PIC LR4/8 CFP2
- 100x 40 Gb/s, 40x 100 Gb/s, or 10x 400 Gb/s ports (requires MLG I/O) in 1 RU card