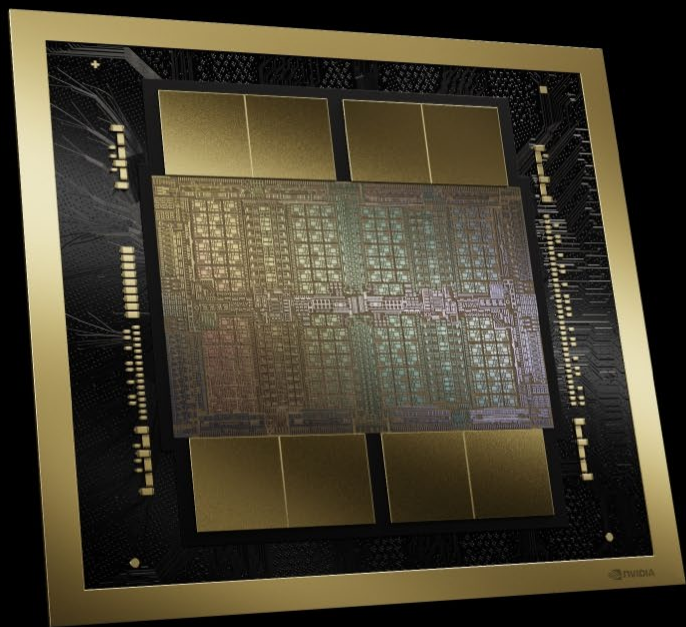
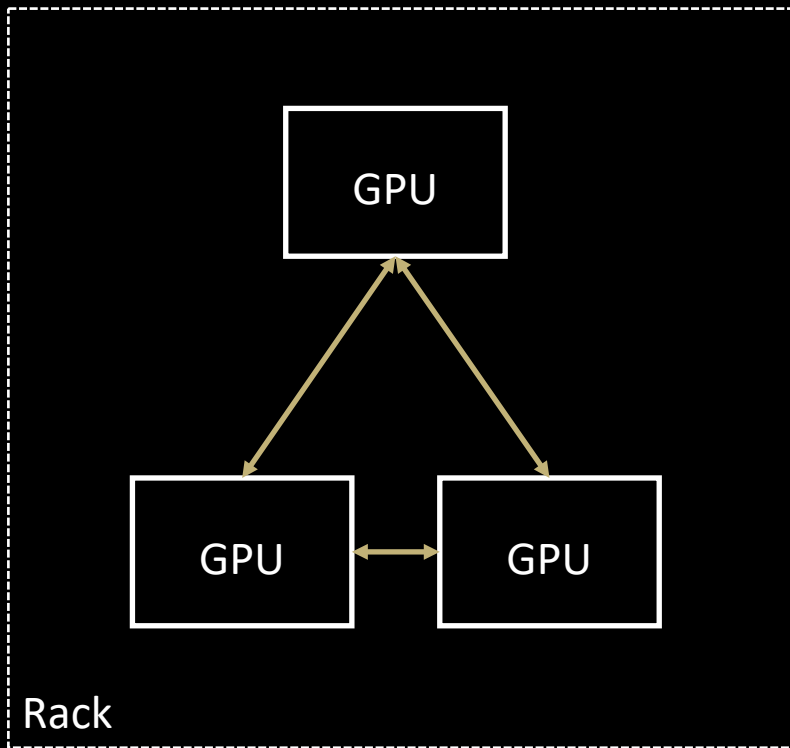


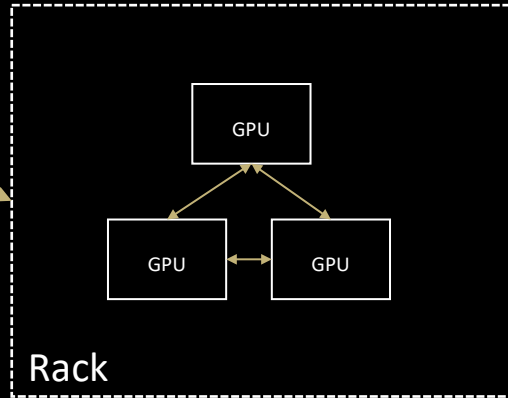
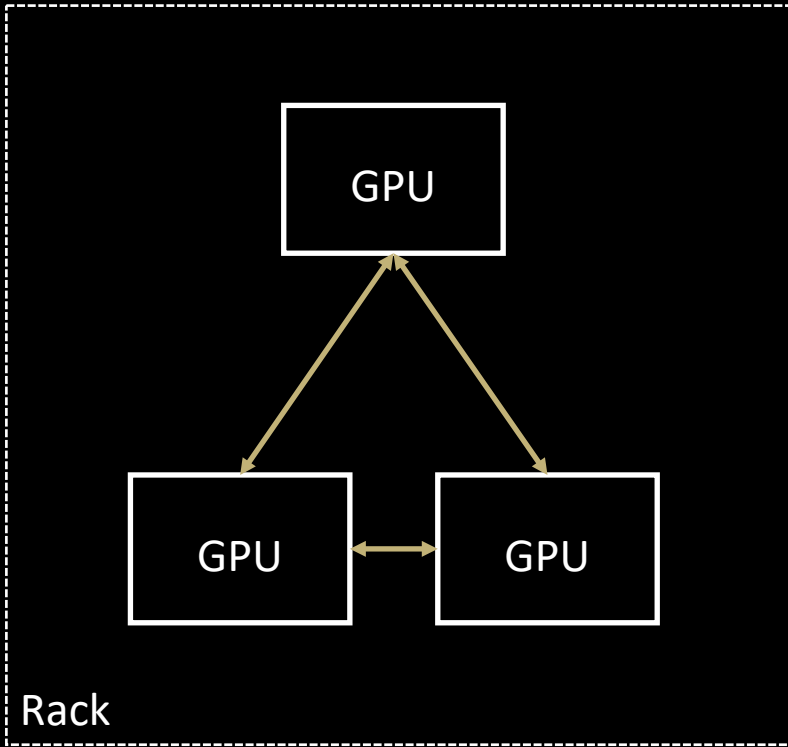


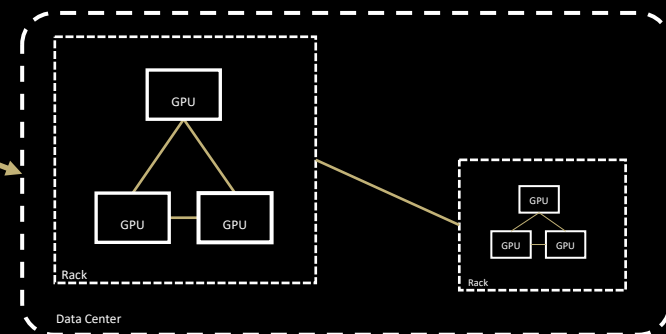
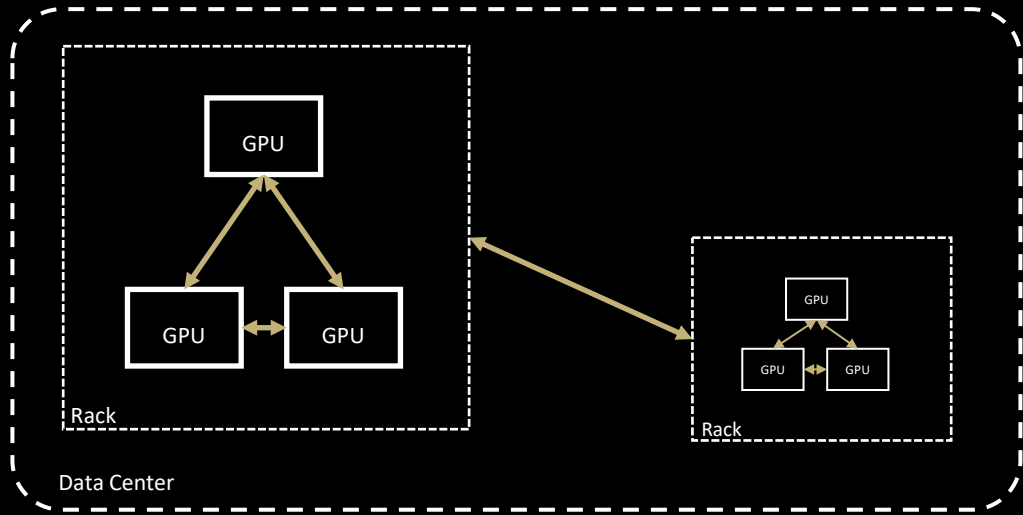
 enlightra

The photonic platform powering the future of computing and communication









Scale UP



Scale Out



Scale Across



NVIDIA's NVL72



NVIDIA's NVL72

Connecting 72 GPUs

- > 5,000 Cables with ~2m reac
- 1 Pb/s



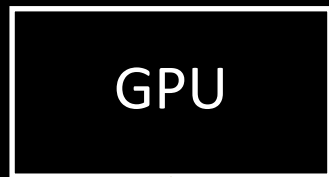
NVIDIA's NVL72

Connecting 72 GPUs with **Light**

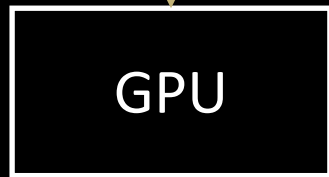
>100m reach

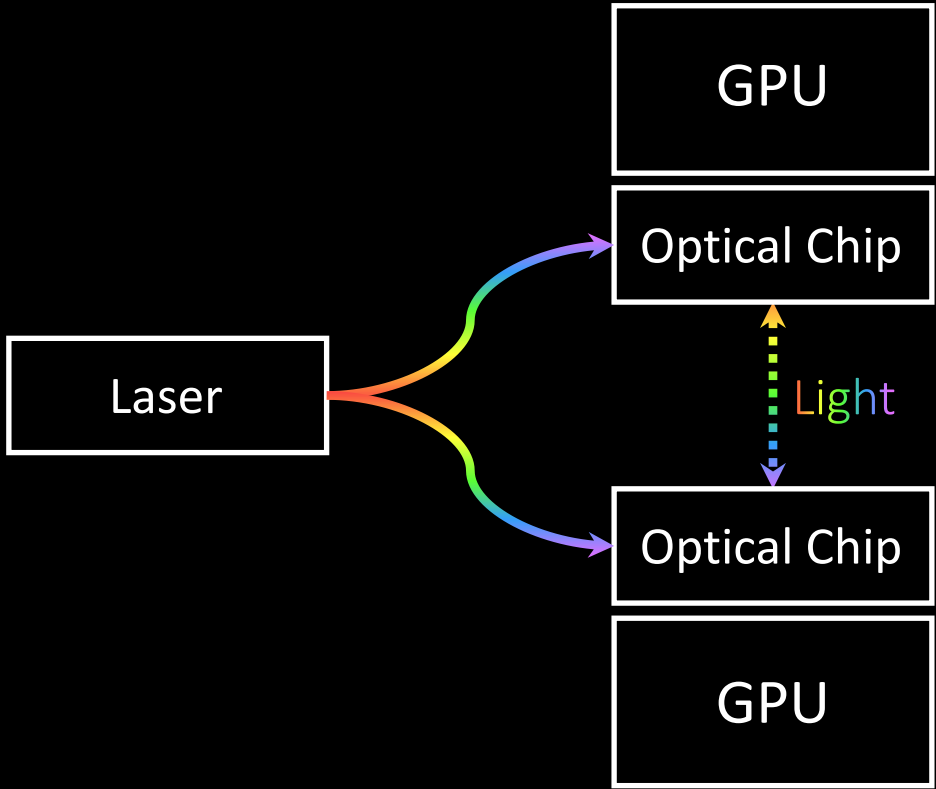
10 Pb/s of bandwidth



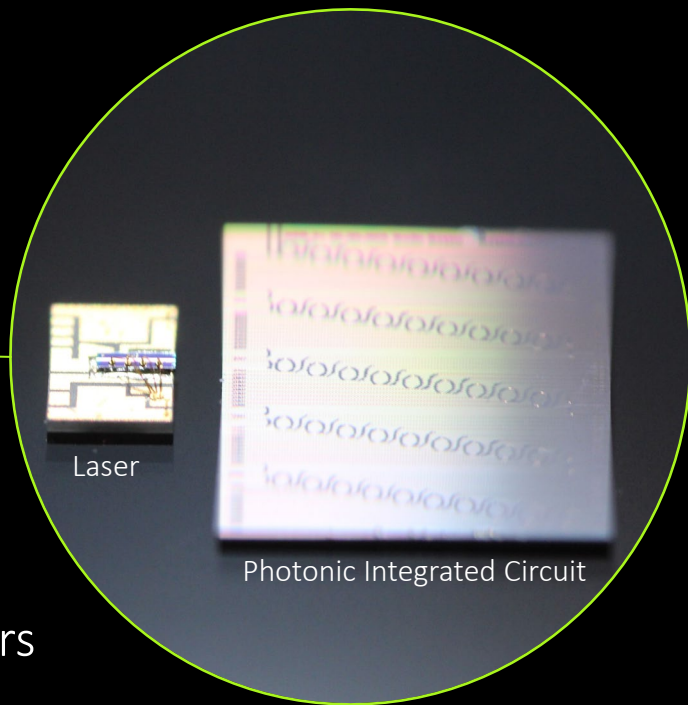


Copper





Enlightra's multi-color laser module for AI



Enlightra combines lasers with photonic integrated circuits to make multi-color lasers



- **Rapid growth** – scaled from 3 to 30 employees since 2023
- **Deep expertise** – 11 PhD holders, 50+ years of cumulative expertise in core technology and broad industrial experience



- **Vertically integrated** – we own full prototyping cycle for the iteration speed, from design and fabrication to packaging and system integration.
- **Backed by top accelerators**



Why is this so hard?

Why is this so hard?

Thermal Management

CTE mismatch

Curing recipes

Solder vs UV epoxy

•

•

•

It is all an art!

Challenges we have faced.

You need to iterate a lot - packaging is expensive and slow

Optical packaging houses often do not want to share the recipe

Process development is still needed with the tier 1 CMs

There needs to be a business model that works for everyone



 enlightra

John Jost - john.jost@enlightra.com