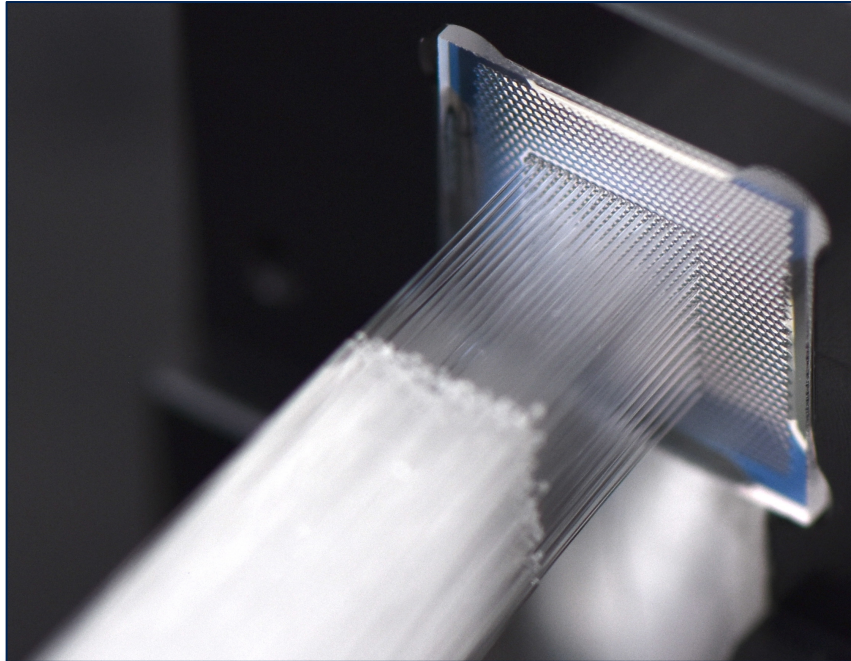




## Medusa™

### High-Density Fiberized Microlens Arrays



**Medusa™** fiberized microlens arrays offer nearly limitless scaling for fiber interconnects that cannot be matched by competing technologies.

Laser-welded fibers ensure robust adhesion and 100% fused silica beam path, while automated alignment guarantees performance specifications regardless of fiber type.

#### ***Key features:***

- SM or co-aligned PM fibers
- $\geq 250 \mu\text{m}$  center-to-center spacing
- Configurable fiber location

#### ***Applications:***

- Hyperscaling datacenter interconnects
- 2D silicon photonics interconnects



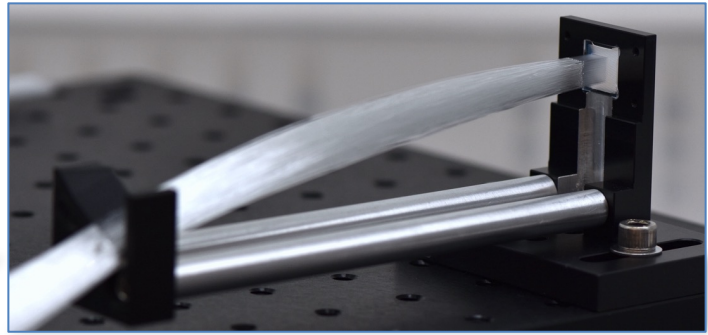
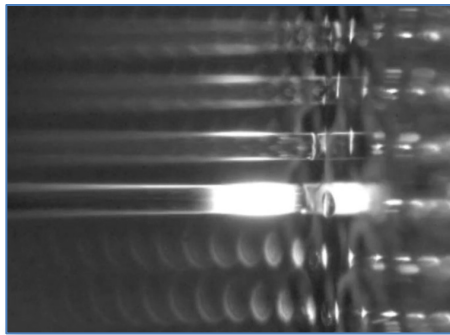
## Medusa™

### High-Density Fiberized Microlens Arrays

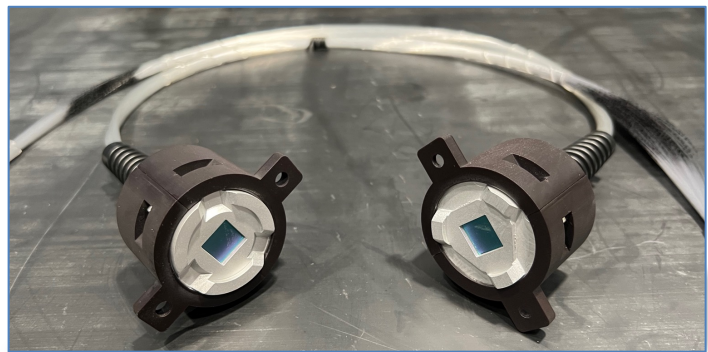
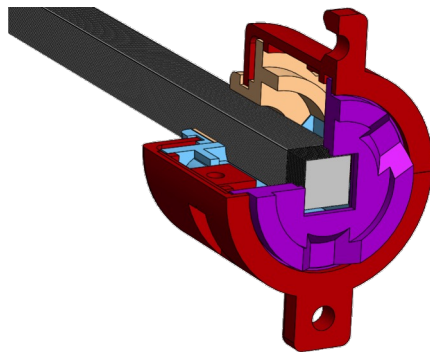
#### Specifications:

	Typical configuration	Options	Unit
Fiber type	SMF-28	PM, LMA, mixed	-
Number of fibers	128	≥1024, user-defined	-
Fiber configuration	Hex-pack	Square pack, user-defined	-
Center-to-center spacing	300	≥ 250, user defined	μm
Pointing error	≤ 2.5	-	mrad
PM fiber co-alignment	≤ 0.3	Cross-aligned, user defined	°
Connector <sup>(1)</sup> loss per channel	0.50 / 1.60	Average / maximum	dB

(1): Projected based on retro-coupling measurements and connector designs



Fibers are laser welded for strength, robustness, and all-optical path; epoxy is only used for strain relief.



Gen2 connector prototype with 1024 fiber capacity, including bar-coded fiber channels