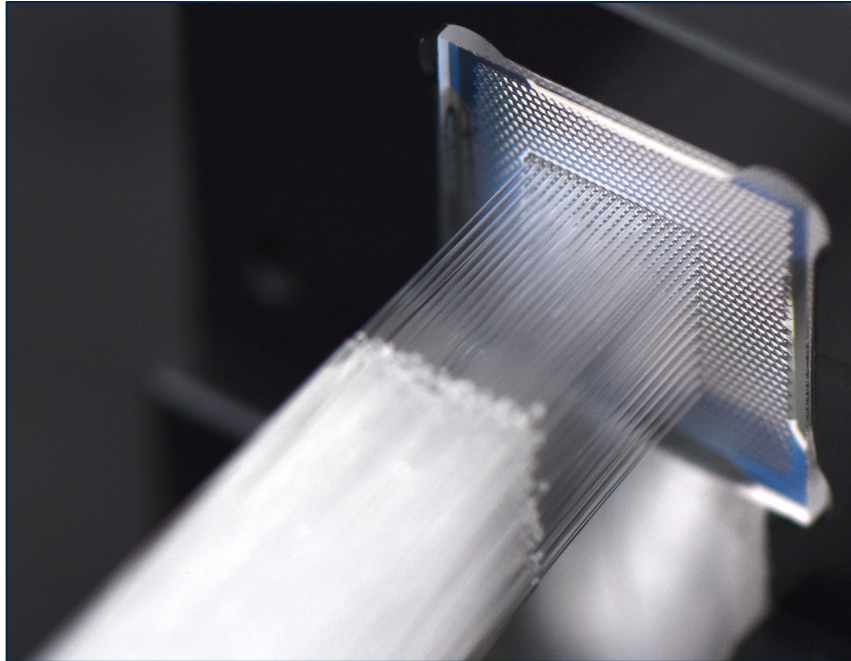




## Medusa™

### 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
- $\geq 50 \mu\text{m}$  center-to-center spacing
- Configurable fiber location

#### *Applications:*

- Hyperscaling datacenter interconnects
- 2D silicon photonics interconnects
- Laser beam combining



# Medusa™

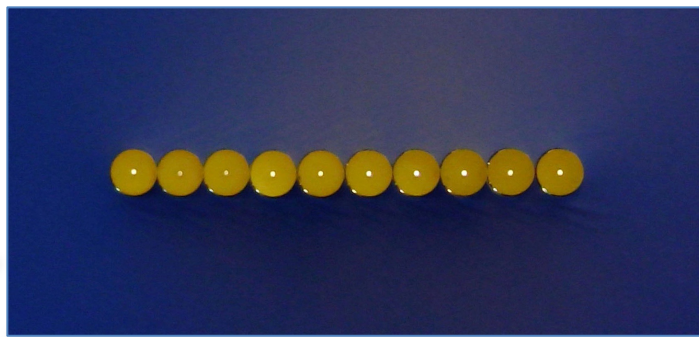
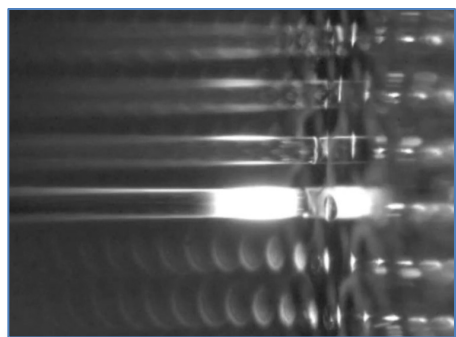
## High-Density Fiberized Microlens Arrays

### Specifications:

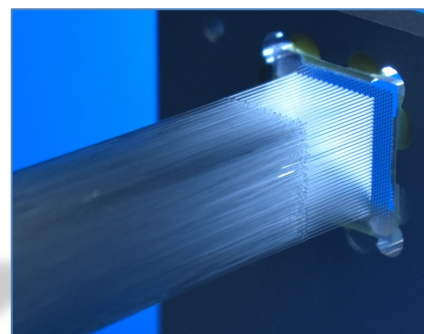
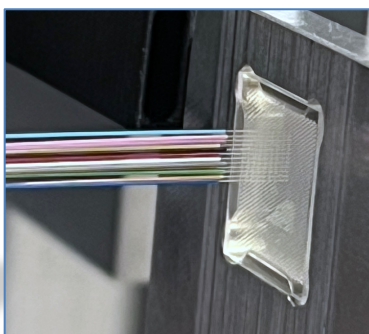
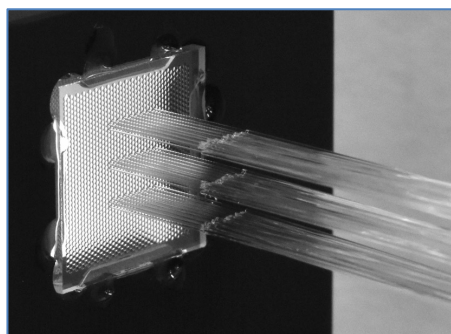
	Typical configuration	Options	Unit
Fiber type	SMF-28	50 <sup>(1)</sup> -400μm clad, PM, mixed	-
Number of fibers	128	≥1024, user-defined	-
Fiber configuration	Hex-pack	Square pack, user-defined	-
Center-to-center spacing	300	≥ 50, user defined	μm
Fiber placement error	≤ 0.7	-	μm
Pointing error <sup>(2)</sup>	≤ 1.0	-	mrad
PM fiber co-alignment	≤ 0.3	Cross-aligned, user defined	°

(1): customer-supplied fiber

(2): based on lenses for 300μm center-to-center spacing



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



Customizable fiber configuration: 3x32 array, ribbon cable array, 1024-count array