

OPTICAL SOLUTIONS FOR SEMICONDUCTOR PROCESSING

Typical Applications

- Lithography
- Wavefront Inspection
- Mask Aligner Lithography
- Multibeam Laser Dicing

Quality Control



Typical Products

- Round / cylindrical / hexagonal lens arrays
- Diffractive optical elements

Features

- Unique stepper lithography manufacturing process
- Fused silica (various grades)
- In-house simulative design of DOE pixel pattern

Application Example: Mask-less Lithography

• Spatial filter arrays

MLAs with aperture

- Precise combination of MLA with metal pinhole array
 - 22 Illumination optics Laser 1/ 30 micron lenses 1 (I I) **Projection lens 1** Microlens array --7 Spatial filter array 5 micron holes Projection lens 2 Substrate Stage

Application Example: DUV Wafer Scanner

- Beam shaping of an excimer laser in the deep UV wavelength region
- Nanometer structures made over large areas on glass substrates



COMPANY INTRODUCTION

Founded in 2007 and headquartered in Xi'an, China, Focuslight Technologies Inc. is a fast-growing public company (Shanghai: 688167) that specializes in developing and manufacturing high-power diode laser components and materials, laser optics, as well as photonics module and system solutions focusing on optical communication, automotive, pan-semiconductor, and medical and health applications. Focuslight has expanded its global footprint through strategic acquisitions including LIMO GmbH in 2017 and SUSS MicroOptics SA in 2024 (now as Focuslight Switzerland SA). With the acquisition of assets from ams OSRAM in 2024, Focuslight extends its business to be a global photonics foundry by providing global photonics industry process development and manufacturing service under the brand of Heptagon.



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• Variable element shapes, e.g. Nipkow disks