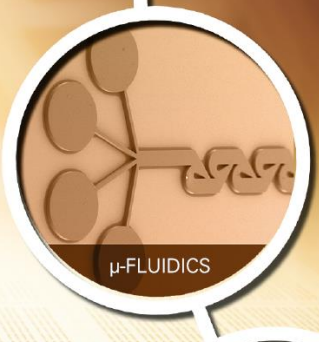
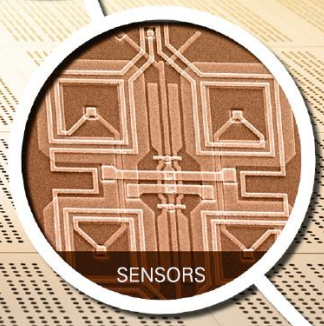
MLA150

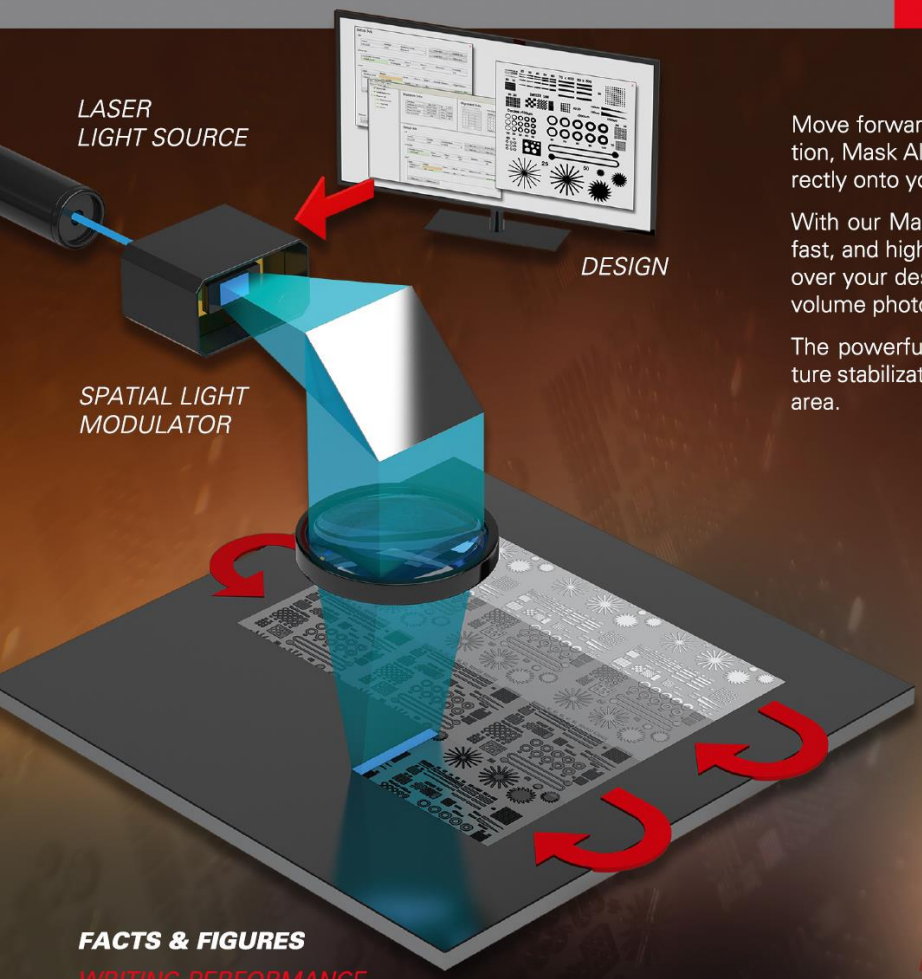
HEIDELBERG INSTRUMENTS





MLA
MASKLESS ALIGNER

GO MASKLESS
ACHIEVE MORE



Move forward – from the traditional (CAD layout, photomask fabrication, Mask Aligner) into the future: create the design and expose it directly onto your wafer – no photomask necessary!

With our Maskless Aligners (MLA), this becomes a straightforward, fast, and highly precise procedure, giving you every control you need over your design and patterning process, in particular in low to mid-volume photolithography applications like prototyping and R&D.

The powerful ***MLA150*** features environmental control, temperature stabilization, Backside Alignment, and a 150 x 150 mm² exposure area.

FLEXIBILITY

Put your designs and patterns into practice any time you need them; implement small changes without delay; experiment without restrictions – and generally eliminate the cost, time, and inconvenience associated with photomasks!

MLA
MASKLESS ALIGNER

FACTS & FIGURES

WRITING PERFORMANCE

Minimum feature size	1 µm
Linewidth variation [3σ]	120 nm
2nd layer alignment [3σ]	Front side: 500 nm Backside: 1000 nm
Maximum exposure area	Standard: 150 x 150 mm²; optional: 200 x 200 mm²
Exposure time (at maximum write speed)	9 min for 100 x 100 mm² 16 min for 150 x 150 mm²

SYSTEM SPECIFICATIONS

Light source	Diode lasers: 8 W at 405 nm and 2.8 W at 375 nm
Substrate sizes	Variable: 5 x 5 mm² to 6" x 6"; optional: 8" x 8"
Size detection	Automatic
Alignment mode	Front side and backside alignment
Software	Intuitive, with on-screen guidance; supports all standard input formats (dxf, gdsii, cif, gerber); includes CAD software for design creation
Environmental Control	Temperature controlled laminar flow box
System dimensions	W: 1300 mm (51.2"); D: 1300 mm (51.2"); H: 1950 mm (76.8")
Good to know	Non-contact exposure; compatible with g-, h-, and i-line resists; automatic labeling and serialization; overview camera for rapid positioning and easy alignment on substrate; real-time autofocus system; Draw Mode for CAD-less exposures; Gray Scale Mode: 128 gray levels

SPEED

From design to finished structure in minutes: For example, using the 405 nm laser, it will take you 4 minutes only to expose a 50 x 50 mm² area, irrespective of the number of structures or the fill factor. In addition, system setup, loading, and alignment require just minutes to accomplish.

GO MASKLESS
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Specifications depend on individual process conditions and can vary according to equipment configurations. Design and specifications are subject to change without prior notice.

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