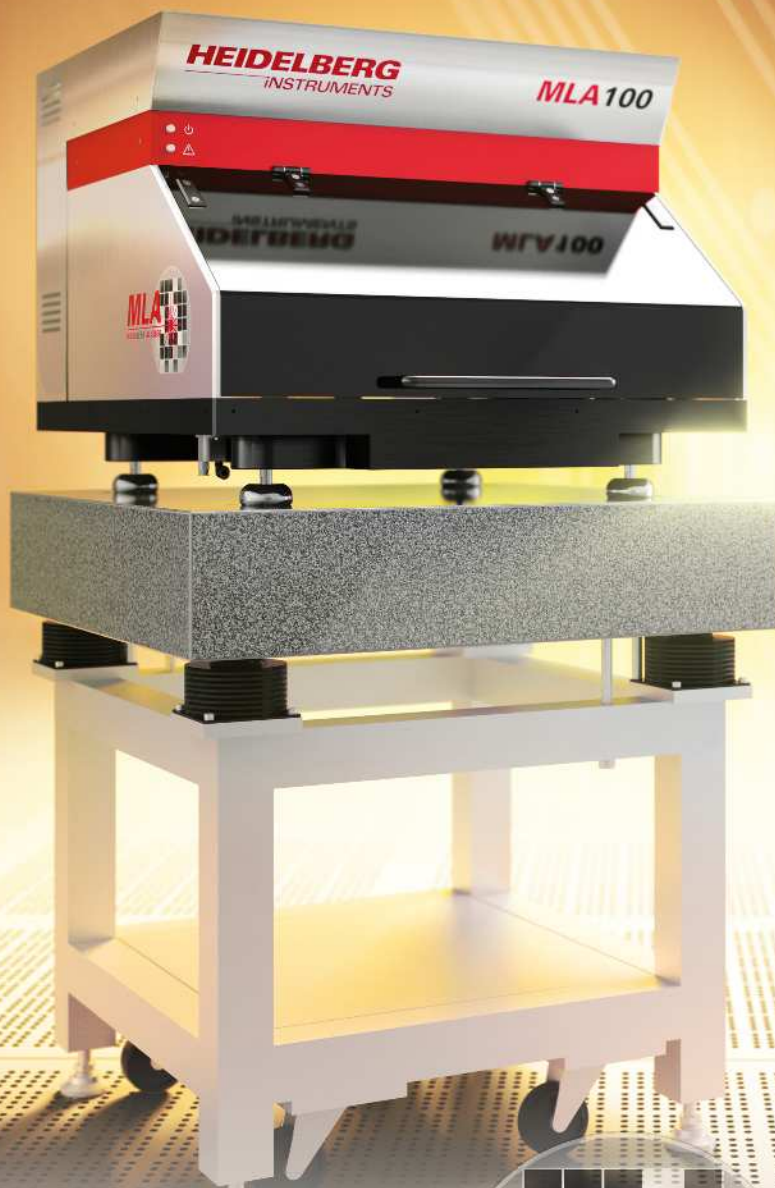


# MLA100

## HEIDELBERG INSTRUMENTS



MEMS



SENSORS



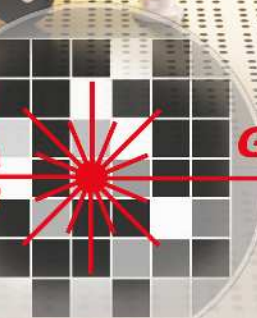
GRAY SCALE



ELECTRONICS

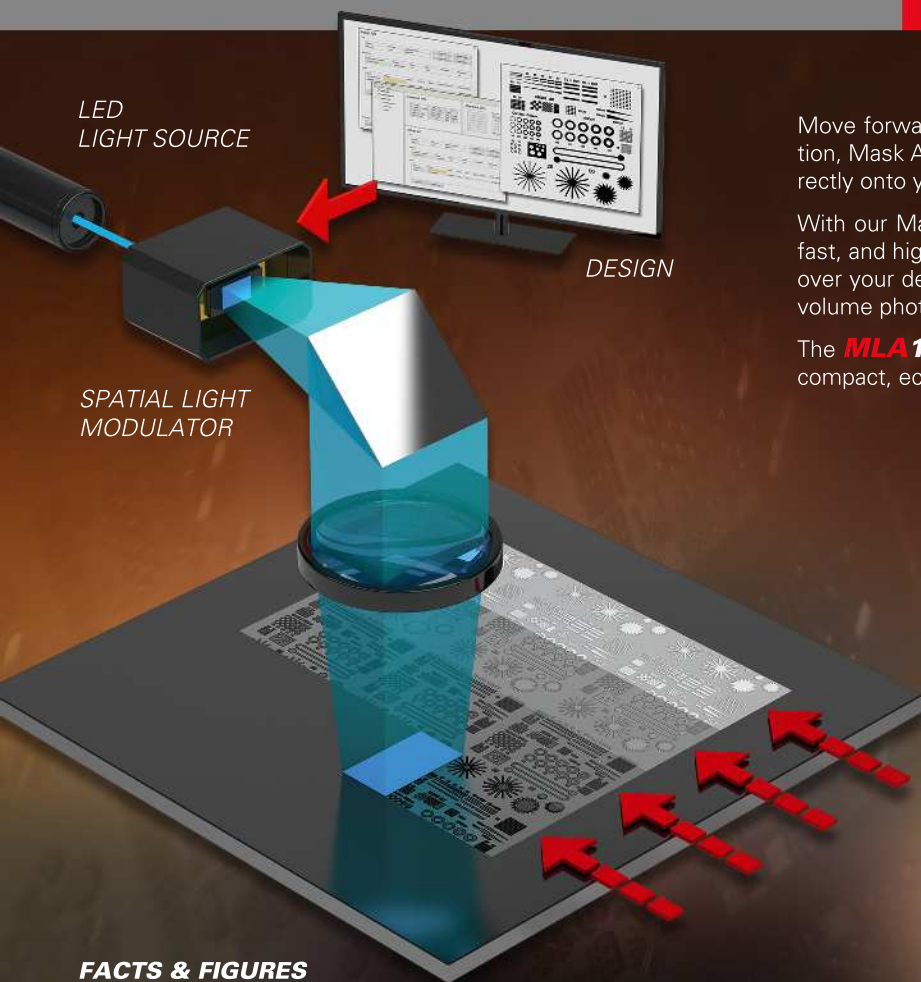
# MLA

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 **MLA100** is the tabletop maskless aligner in our MLA series – compact, economical, and versatile, with a focus on the ease of use.

### 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 $\mu\text{m}$
Linewidth variation [ $3\sigma$ ]	200 nm
2nd layer alignment [ $3\sigma$ ]	1 $\mu\text{m}$
Maximum exposure area	125 x 125 mm <sup>2</sup>
Exposure time	50 min for 50 x 50 mm <sup>2</sup>
(at maximum write speed)	200 min for 100 x 100 mm <sup>2</sup>

#### SYSTEM SPECIFICATIONS

Light source	LED: 10 W at 390 nm or LED: 10 W at 365 nm
Substrate sizes	Variable: 5 x 5 mm <sup>2</sup> up to 6" x 6"
Size detection	Automatic
Alignment mode	Front side alignment
Software	Intuitive, with on-screen guidance; supports all standard input formats (dxf, gdsii, cif, gerber); includes CAD software for design creation
System dimensions	W: 630 mm (25"); D: 800 mm (31.5"); H: 530 mm (21")
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, it will take you 8 minutes only to expose a 20 x 20 mm<sup>2</sup> 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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# ACHIEVE MORE

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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