



## **"Heidelberg Instruments Maskless Lithography Systems for Micro-, Nano and 3D fabrication"**

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No matter at what kind of application we look at, whether is a one off device fabricated in a small lab or it is a cmos chip fabricated in a large fab, at the beginning we have to design and create a pattern. For the broad range of applications and used for lithography the tools required differ often a great deal.

With its range of lithography tools, Heidelberg Instruments tries to cover a large range of needs for different applications for which we would like to provide an overview: Starting with the Nanofrazor tools that can achieve feature sizes smaller than 10nm, we will also discuss our MLA series maskless- aligners, optical lithography systems that are tuned for high throughput and easy layer to layer alignment as well our newest addition, the MPO100 which uses 2photon polymerization for creating true 3 dimensional structures.

### **About Heidelberg Instruments:**

With over 1000 installed worldwide, Heidelberg Instruments is the leading provider of Direct Write Lithography systems. Customers include leading universities, multi-user facilities, government research laboratories and industrial organizations. The systems are utilized in various applications that include MEMS, Microfluidics, Micro optics, MOEMS, CMOS, Semiconductor Packaging, display technology and any other application that require micro patterning.

In 2018 Heidelberg Instruments joined forces with SwissLitho AG, now known as "Heidelberg Instruments nano" adding the NanoFrazor's nanofabrication capabilities to their portfolio as.

In 2021 Heidelberg Instruments was joined by „Multiphoton Optics GmbH in Wuerzburg" adding know-how and experience in 2photon polymerization lithpgraphy.