KLOÉ

Keys to your expectation in Optics

MICROTEST
Equipment & Consumables for the semiconductors and hybrids

Dilase 650

All-in-one maskless direct laser lithography system

- An advanced system for mask fabrication and fast prototyping
- High speed lithography
- 266nm, 375nm and 405nm
- Compatible with all photoresists
- Very high aspect ratio : 1x50
- High resolution lithography

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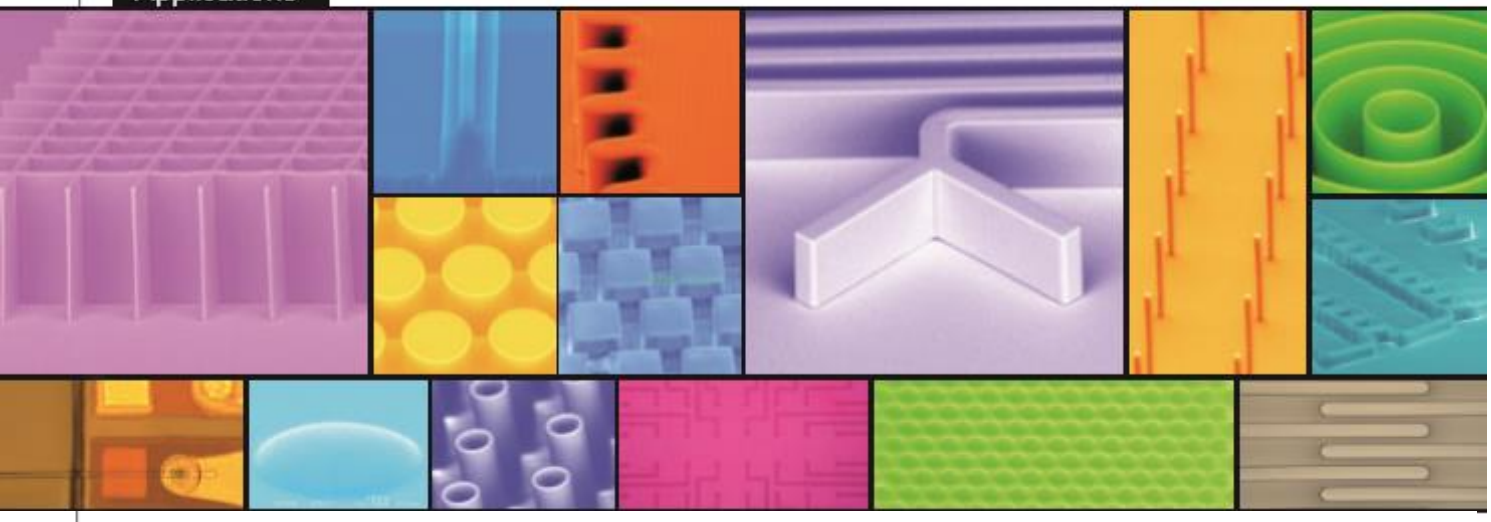
Dilase 650

Dilase 650 is the all-in-one direct laser writing equipment. This system, dedicated to photolithography, is a high-performance laser processing tool, offering access to the flexibility of a maskless technology, mainly suitable to speed up development and optimisation times required when dealing with new products range or prototyping.
Powered by very fast and accurate stages, Dilase 650 allows writing patterns in photosensitive resists deposited on planar substrates up to 6 inches diameter and mask blank up to 7 inches, by means of one or two continous laser sources (375 or 405 nm).
Up to 2 different optical lines can be implemented on Dilase 650, giving the opportunity to use up to 2 different spot sizes and hence, to combine a high resolution head to create micron-scaled patterns and a wider sized spot to optimise writing times required to fill large surfaces.
Dilase 650 is fully compatible with most of the commercially available photoresists, such as SU8, Shipley and AZ resists. It is merely optimized for processing K-CL resins, developed by Kloé, to quickly achieve fine resolution and high aspect ratio microstructurations (1x50 and more) or microfluidic devices fabrication.

Features

- Size : 1270 x 970 x 1650 mm
- Integrated computer control interfaces (Windows OS)
- 1 to 2 laser sources : 266, 375 and / or 405 nm
- 1 to 2 optical sub-assemblies
- High resolution video positioning system
- Data formats supported : LWI (Kloé Design format), DXF, GDS2
- Automated focus setting
- Integrated design software : Kloé Design V.2
- 2 modes of write : vectorial and raster scan

Applications



Performances

Linear writing speed	> 500 mm.s^{-1}
Stage travel resolution	100 nm
Repeatability	100 nm
Wafer writing area	1 to 6 inches
Substrate thickness	250 µm to 10 mm
Laser spot size (1 or 2)	1 µm to 50 µm
Form factor	Minimum 10
Realignment precision	500 nm