# µ-PRINTER

The POLOS µPrinter is a maskless lithography equipment for rapid-prororyping, based on a µLCD projection technology, compatible with a wide range of resists and substrates. Our system can produce any 2D shapes at micron resolution without the need for a hard-mask.

Key features

- Writing resolution down to 2 µm
- Adjustable writing field and resolution with exchangeable objectives
- Compatible with CAD files or bitmap images
- Compatible with g-line photoresists
- Compatible with a wide range of substrates (silicon, glass, metal, plastic,..)
- Compatible with any sample size up to 4" wafer
- Camera feedback for alignment steps

200 µm

100 µm

30 µm
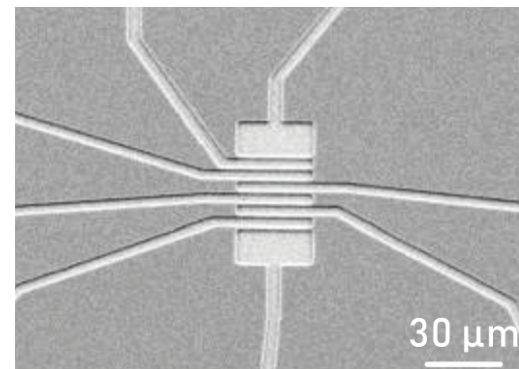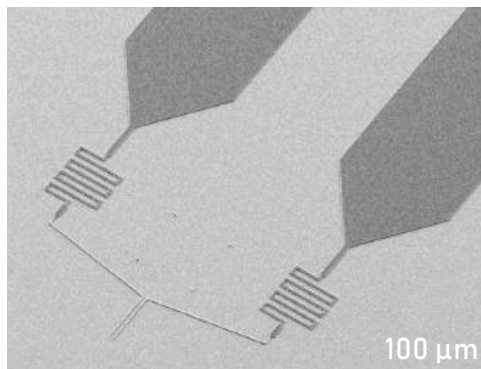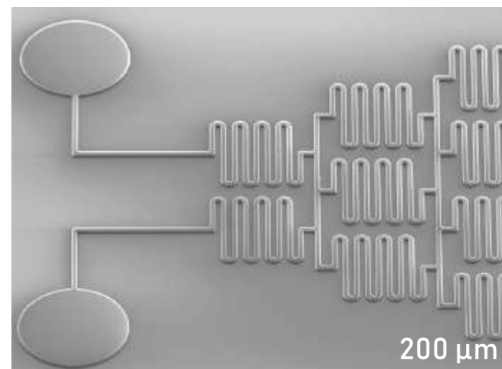
Key benefits

- Time and money saving due to the absence of a hard-mask
- Intuitive alignment method with direct overlay of the design on the sample
- Table-top with very small foot print
- Technology well suited for microelectronics, 2D-materials, microfluidics, optoelectronics, optics or any other 2D microfabrication application

SPECIFICATIONS

MICROFABRICATION SYSTEM	
Light source	Exposure: 435 nm; alignment: 525 nm
Minimum feature size	Adjustable from 2 to 23 µm
Alignment resolution	Down to 1 µm/cm^2
Maximum exposure area	75 x75 mm^2
Substrate size	Up to 4" wafers
System dimensions	W: (36 cm); D: (36 cm); H: (60 cm)

SOFTWARE SYSTEM	
All-in-one PC	With Win 10, 24" full HD
SFTprint software	Machine control, step-and-repeat, automatic dose test, stitching, alignment
SFTconverter	Convertion of standard formats (gdsii, dxf, cif, oas) to bitmap images. CAD software included

Options and accessories

- Multiple-sample holder (glass-slide, 4" water, ...)
- Objectives (see below)
- Manual or motorized Z stage with tilt correction
- Manual rotation stage (360°)