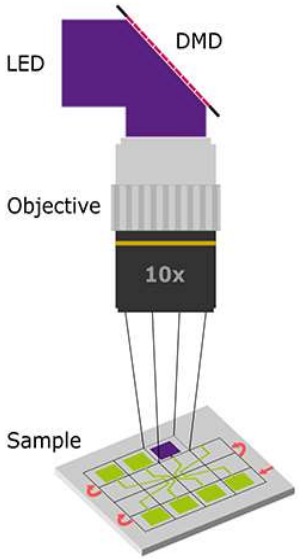
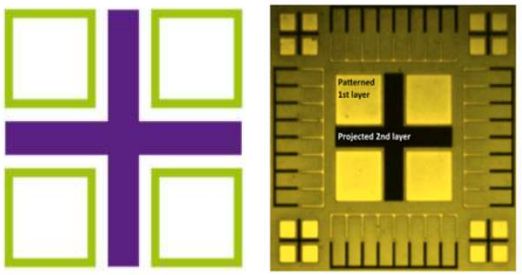
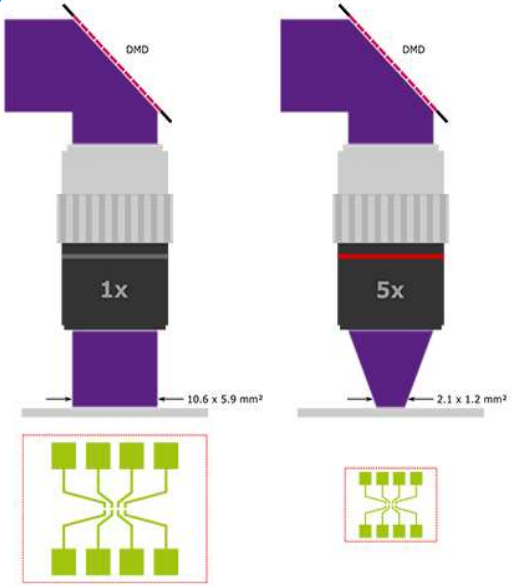
Maskless Laser Lithography (Smart Print UV)







Quick quick-release objective technology gives user access to four different writing resolution to combine writing precision and speed.
The objective range has been carefully selected with a large working distance (up to 3 cm) to make SP-UV compatible with non-standard substrates (non-flat, flexible, thick).

Smart Print UV (SP-UV) maskless lithography system uses a Digital Micromirror Device (DMD) technology It gives user a straightforward way to move from the design directly to the patterned sample without the use of the standard photomask fabrication.
No needs of photomask means more flexibility, and faster overall fabrication time.

SP-UV is equipped with a 385 nm LED source to be compatible with standard g-, h- and i-line photoresists (such as SU-8). SP-UV also integrates a secondary yellow LED source coupled with a feedback camera for focusing, inspection and alignment procedure.

System	Standard	Advanced
Light source	Exposure : 385nm; alignment : 590nm	
Minimum feature size	1.5µm	
Stitching precision	2µm	<1µm
Alignment accuracy (for 1cm² printed area)	2µm	1µm
Maximum exposure area	70 x 70 mm²	118 x 118 mm²
Substrate size	Up to 4"	Up to 5"
Writing speed (6µm resolution)	77 mm²/min	220 mm²/min
System dimensions	W:52cm, D:52cm, H:69cm	

Objectives	1x	2.5x	5x	10x
Writing fields (mm)	10.56 x 5.94	4.2 x 2.4	2.1 x 1.2	1.06 x 0.59
Smallest features (µm)	15	6	3	1.5