

## **Nanoimprinting Stepper With Hot Embossing And UV-NIL Capability**

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Micro/Nano-Replication technology, mostly known as imprinting and UV-NIL, offers a cost effective alternative to printing sub-100nm geometries when compared to the costly use of High Resolution Electron Beam lithography imaging.

The NaPa consortium complements deep UV technology by providing low-cost scalable processes and tools to cover the needs of nanopatterning from CMOS back-end processes through photonics to biotechnology. Three technologies are addressed: nanoimprint lithography, soft lithography & self-assembly and MEMS-based nanopatterning.

The Step and Repeat Imprinting Machine (NIL Stepper) using either Hot Embossing or UV-Nanoimprinting, developed in the frame of the NaPa project (WP15), is described and illustrated with some applications.