

CUSTOM E-BEAM PATTERNING SERVICES

Eulitha offers electron beam patterning services to academic and industrial customers. In most cases finished Nanoimprint templates are produced according to customer design. Alternatively patterns can be realized on a variety of substrates and films for direct use in experiments or production of devices. The customers have the choice to provide their own substrates or use standard ones from Eulitha.

Typical production cycle involves the following steps:

1. Specification of customer requirements, e.g. substrate, pattern layout, resolution, feature height and profile
2. Proposal from Eulitha including alternative approaches in consideration of quality, cost and manufacturability
3. Transfer of substrates and layout files (if applicable) from customer to Eulitha. Creation of ebeam layout and exposure files.
4. Pattern realization through ebeam exposure including any pattern transfer steps, e.g. etching
5. Characterization: SEM, AFM, optical. Customer feedback
6. Shipment of finished products

- Optimized Silicon and Quartz etching processes for Nanoimprint template production
- Feature sizes (resolution) down to 50nm
- State-of-the art 100kV ebeam exposures
- Leading expertise on ebeam writing strategies to maximize throughput and optimize pattern fidelity
- Choice of ebeam resists to fit the application requirements
- Up to 6" round, and 5" square substrates
- Quick turnaround times in the range of 2-6 weeks

Please contact us to discuss how we can work together to find the optimum solution for your ebeam patterning needs.



Vistec EBPG 5000ES system used in ebeam exposures

