

Custom Optics for Next-Gen Products

Himax IGI's NanoSculpt™ technology enables innovative multi-dimensional optics.
Break through current design rules to offer your customers leading-edge products.

Micro-Lens & Micro-Mirror Arrays

Collimation and Focusing
100% Fill
Hexagonal & Square Packing
Parabolic Designs

Mixed Structures & Sizes
Aspherical & Anamorphic Lens
Vary Rotation by Position in Pattern
Freeform & Random Diffusers

Gratings

Linear

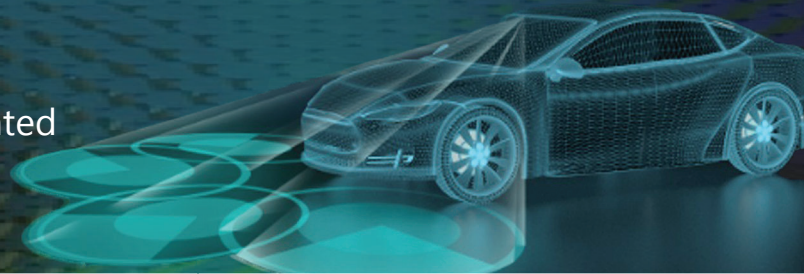
Blazed

Slanted

Diffractive

Waveguides

Refractive



Multi-Level Diffraction Optic Elements

Facial Recognition

AR/VR

Other Applications

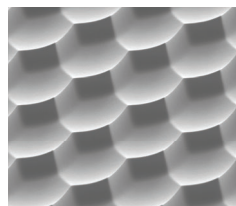
Masters, stamps, molds, and shims
for R&D, prototypes, and all levels of manufacturing.

Photoresist Masters
Nickel Shims
Silicon Etched Masters & Parts
Soft Molds

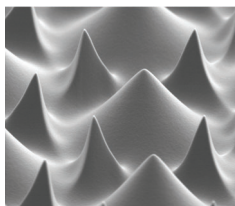
Wafer-Level Optics from design to assembly
&
Continuous Pattern Areas up to 700mm



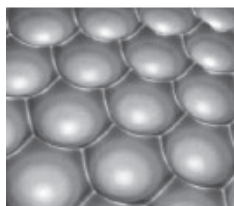
NanoSculpt™ Capabilities



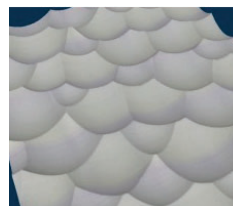
Rotated Lens



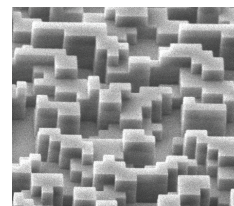
Mixed
Features



100% Fill



Random
Diffuser



Multi-Layer
DOE

Industries We Serve

Display Semiconductor Defense Solar Lidar Optical Assembly Life Sciences Bio-Technology

Masters, stamps, molds, and shims
for R&D, prototypes, and all levels of manufacturing.

Photoresist Masters
Nickel Shims
Silicon Etched Masters & Parts
Soft Molds

Nano-Structure Mastering

Substrate Size 200 mm

Minimum Structure Size 5 nm

Structure Height up to 5 μ m

Surface Roughness <5 nm

Nominal Shape Tolerance Structure Dependent

Patterned Area Structure Dependent

Micro-Structure Mastering

up to 800mm x 960mm

0.8 μ m

up to 100 μ m

<20 nm

<250 nm

up to 600mm x 800mm

Disclaimer of Warranties; As Is

The information provided in this document is provided "As Is" and Himax IGI Precision Ltd. disclaims all representations or warranties of any kind, express or implied, relating to this document and the concepts or products described herein, including without limitation, the implied warranties of merchantability, fitness for a particular purpose, non-infringement, title, or any warranties arising out of course of dealing, course of performance, or usage of trade. Users of this document shall confirm suitability of the concepts in any products or applications in which this information is adopted for use and are solely responsible for all legal, regulatory, and safety-related requirements concerning their products and applications and any use of the concepts or products described herein in any such product or applications.