

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

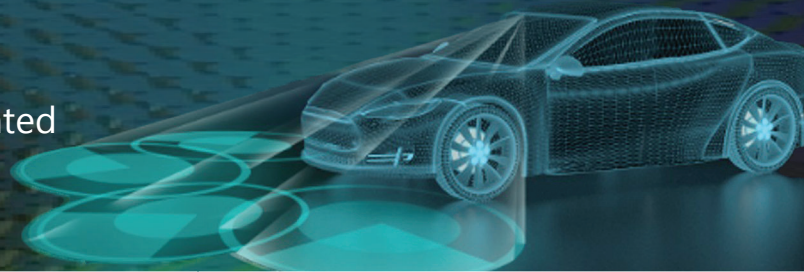
Blazed

Slanted

Diffractive

Waveguides

Refractive



Multi-Level Diffractive Optic Elements

Facial Recognition

AR/VR

Other Applications

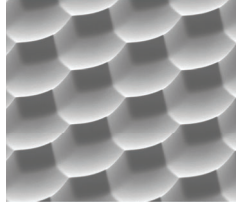
Masters, stamps, molds, and shims
for R&D, prototypes, and all levels of manufacturing.

Photoresist Masters
Nickel Shims
Silicon Etched Masters & Parts
Soft Molds

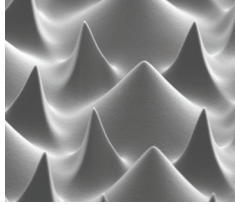
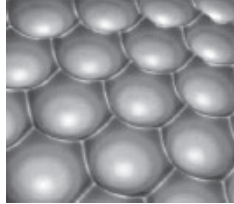
Wafer-Level Optics from design to assembly
&
Continuous Pattern Areas up to 700mm



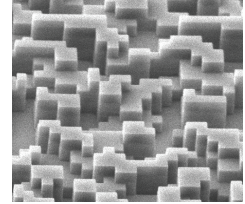
NanoSculpt™ Capabilities



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

Wafer-Level Mastering

Large-Area Mastering

	100 mm	200 mm	300 mm
Substrate Size	100 mm	200 mm	300 mm
Minimum Structure Size	5 nm	5 nm	5 nm
Structure Height	up to 3 um	up to 3 um	up to 3 um
Surface Roughness	<5 nm	<5 nm	<5 nm
Nominal Shape Tolerance	<25 nm	<25 nm	<25 nm
Patterned Area	up to 95 mm	up to 195 mm	up to 295 mm

Substrate Size	up to 1 Meter
Minimum Structure Size	0.8 um
Structure Height	up to 100 um
Surface Roughness	<50 nm
Nominal Shape Tolerance	<250 nm
Patterned Area	up to 800 mm

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.