



Micro optics in Automotive

MLA (Micro Lens Array) Opportunity

1. New optical 3D designs
2. Designs with hidden Lighting functions
3. Uniformity HL (Head Lights) with IIP (Integrated Indicator Projector)
4. Space for LIDAR transmitter & sensor lenses
5. Highly efficient optical systems



<Daytime Running Light>



<Rear Light>

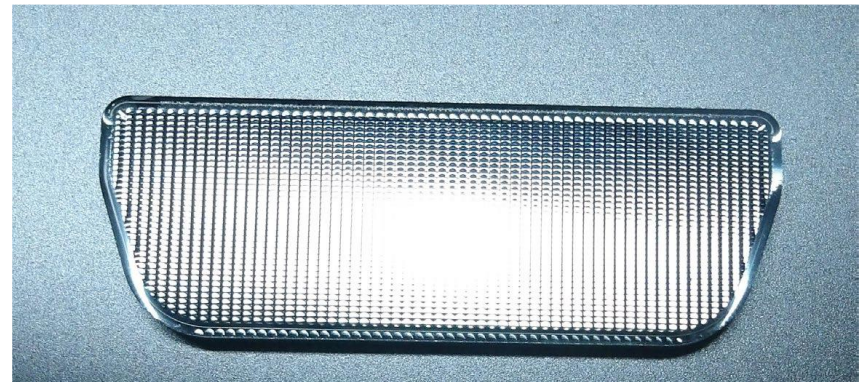
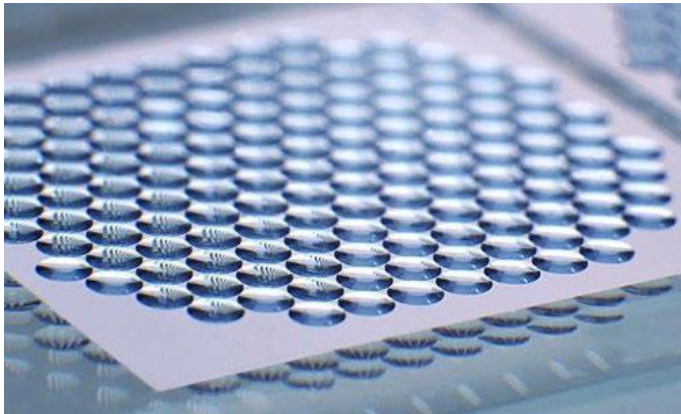


<Light Carpet>



<Head Lights>

MLA in Automotive Industry



MLA Advantage for Head Light

<MLA advantage summary for HL>

Slim

System miniaturization

Different functions smaller space

Suppression of mechanical parts on system level

Functionality

Different cutting / function

Broad road illumination

High contrast

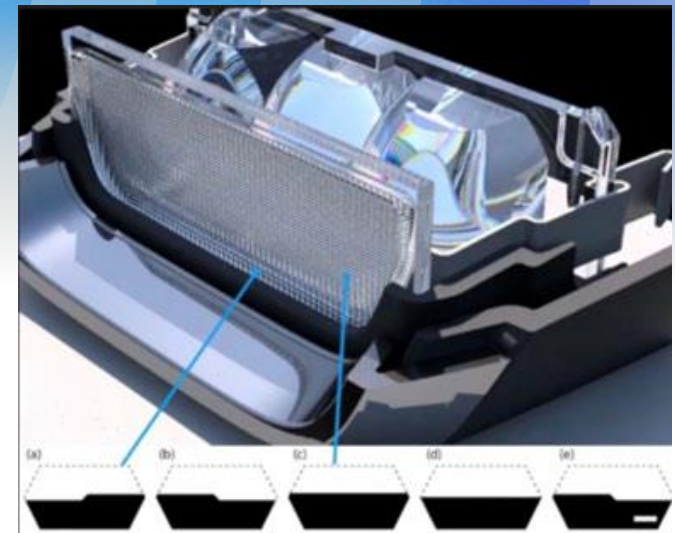
Freedom of design

Free form of MLA cells

Modular construction

3D MLA combination of function cells

Integrated Indication projector (IIP) with HL appearance



**High Contrast with >2,000
Individual Projectors**