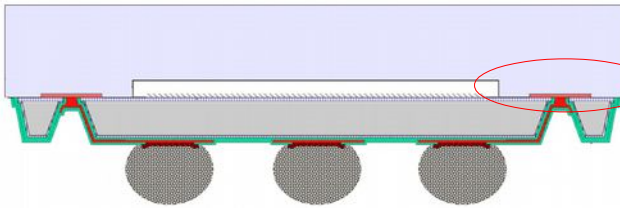


Glass Cavity Substrates for WLCSP

Lithoglas® micro-structured glass substrates are manufactured on wafer-level and can be integrated beneficially in existing packaging technologies to improve reliability and device lifetime while reducing the package dimension.

Replacement of polymer dam by glass



schematic of CSP for CIS



optical substrate with glass dam

Improved reliability

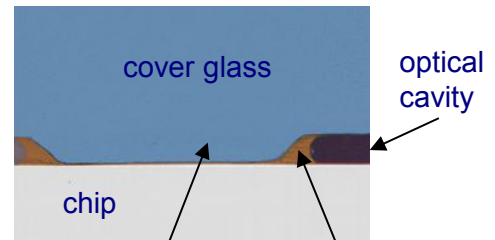
- ✓ glass dam is a moisture barrier
- ✓ reduced stress – matched CTE of glass

Reduced package height

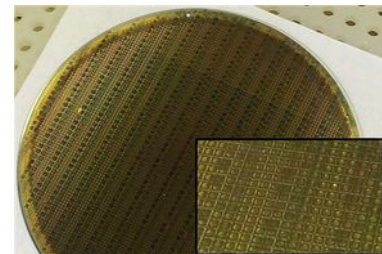
- ✓ glass dam thickness of 5 – 20 μm sufficient
- ✓ reduced glass lid thicknesses possible

Optical integration features

- ✓ optical coatings, e.g. AR, IR
- ✓ opaque aperture layers
- ✓ lense integration (under development)



Lithoglas® dam bond adhesive



integration of wafer-level-optics



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