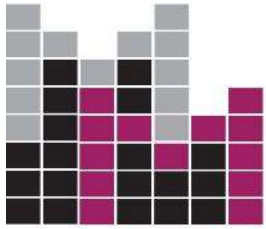




Thin glass substrates
for microelectronic
and photonic applications





Flat, smooth, and extremely **thin glass** is available in the market

www.mtixtl.com

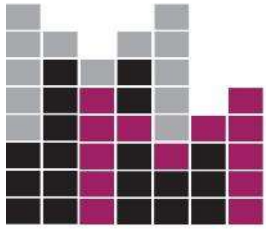


Corning Inc.

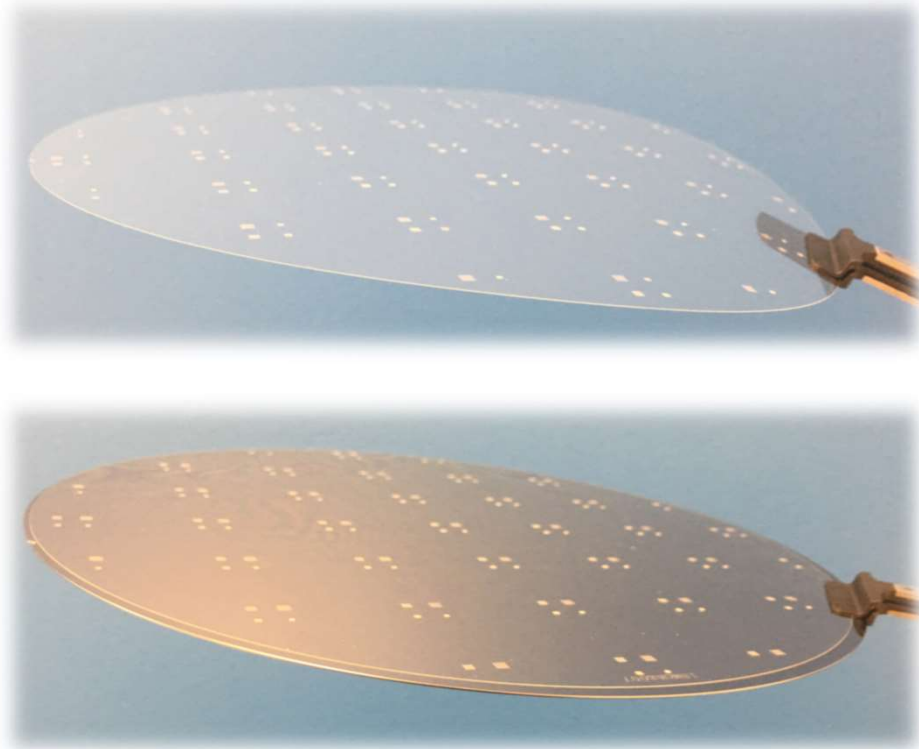


Handling in automated lab equipment is a challenge

Mosaic Microsystems



Mosaic creates a **robust wafer handling solution**

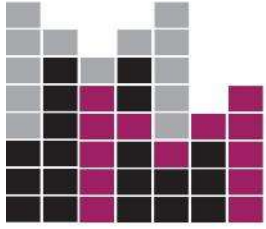


- Thin bare glass, or with through-holes
- Flatness is a challenge

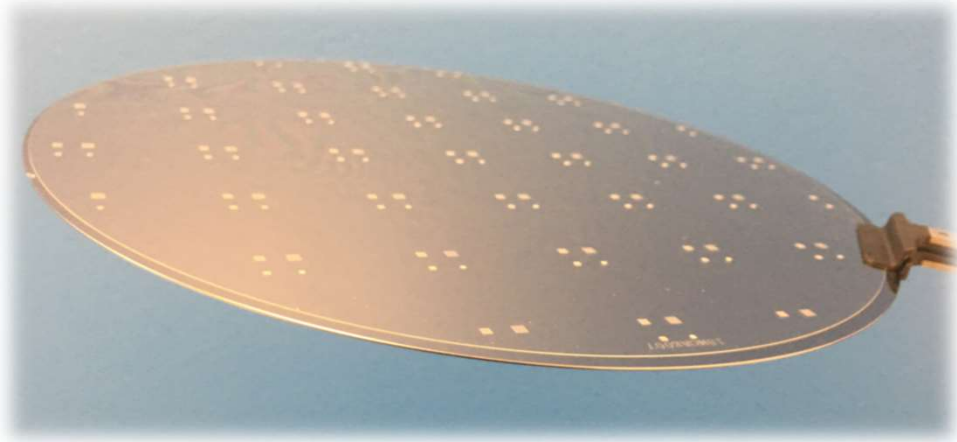
Mosaic product:

- Thin bare glass or with through-holes temporarily bonded to a glass or silicon carrier wafer
- Addresses flatness
 - Equipment interface is Si wafer

Can be processed like a standard silicon wafer



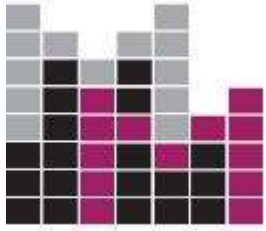
Mosaic proprietary bond material is key



- Bond is temporary to $\geq 450^{\circ}\text{C}$
- $\ll 1\ \mu\text{m}$ thick layer
- No outgassing during vacuum processes
- Compatible with silicon processing (installed equipment base)



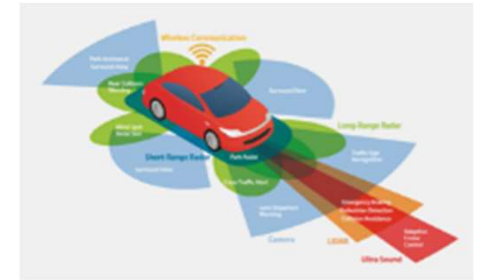
Mechanical debond
("peel") with low force



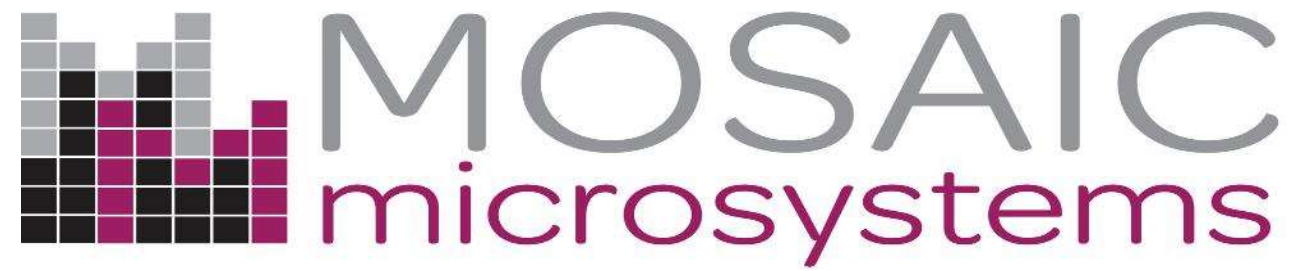
Mosaic Microsystems Summary

- Industry trends require new packaging solutions
- Glass is an attractive solution for several industry needs but gaps in the supply chain has made adoption difficult

Mosaic Microsystems provides solutions to enable cost-effective manufacture for glass/TGV and other thin substrates in high a volume environment



Mosaic Microsystems



Thank you