

# PiBond

Advanced siloxane and metal oxide monomers and polymers

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## Applications

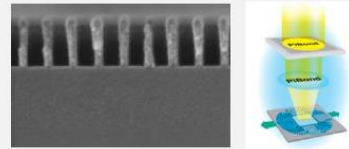


### PATTERNING MATERIALS

### PERMANENT DIELECTRIC MATERIALS

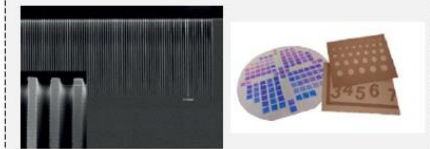
#### Traditional hard masks

- ➔ Si-HM and SiBARC
- ➔ SOC and novel MOx-HM



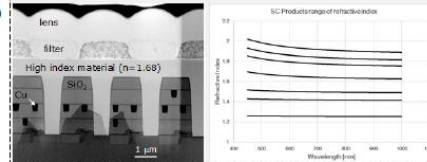
#### Metal oxide hard masks

- ➔ DRIE and TSV etch hard mask
- ➔ Novel MOx EUV PR



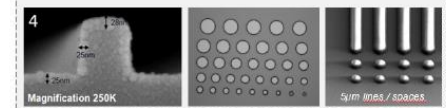
#### Optical siloxane dielectrics

- ➔ Several thickness formulations
- ➔ Leading range refractive of index

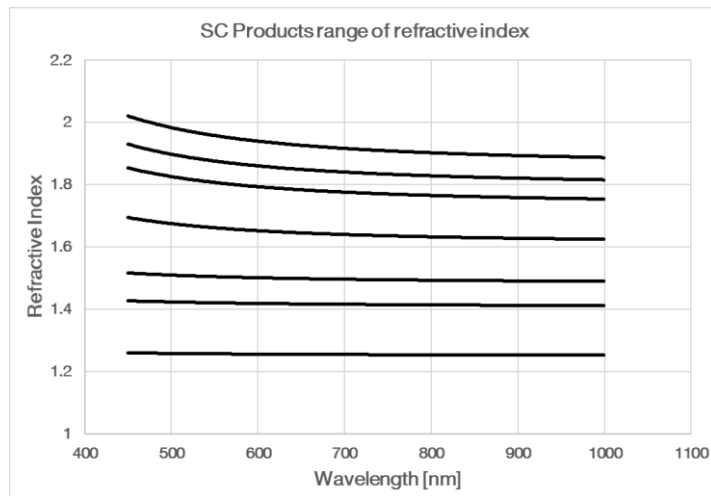
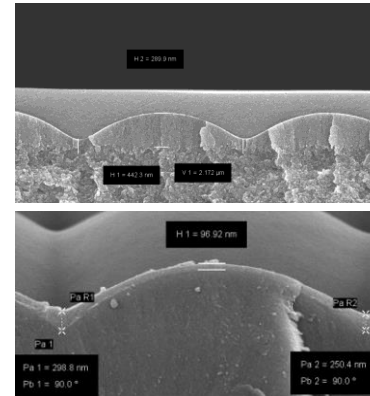
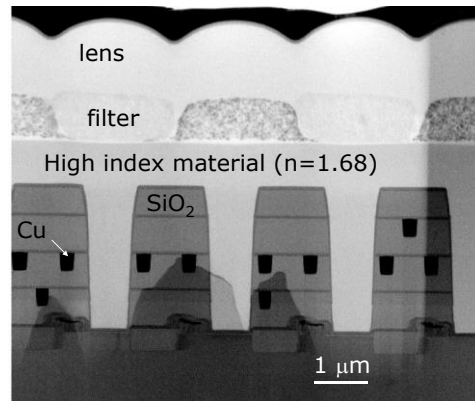
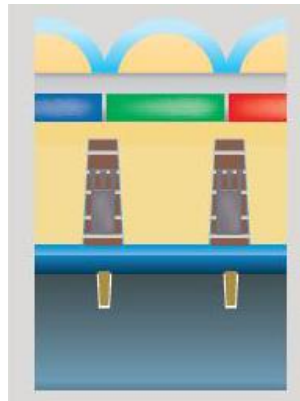


#### Silsesquioxane dielectrics

- ➔ CVD SiO<sub>2</sub> replacement
- ➔ Gap fill and planarization control
- ➔ Conformal and patternable



# Optical dielectrics

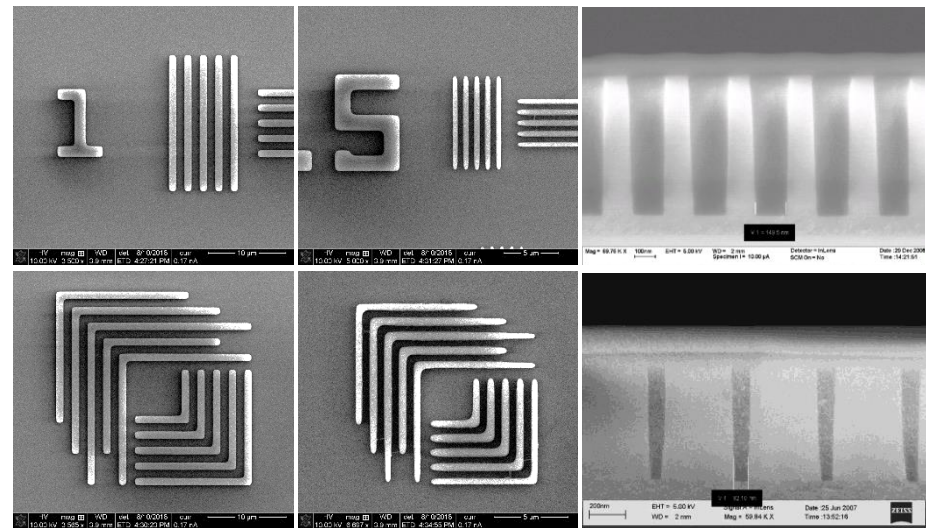
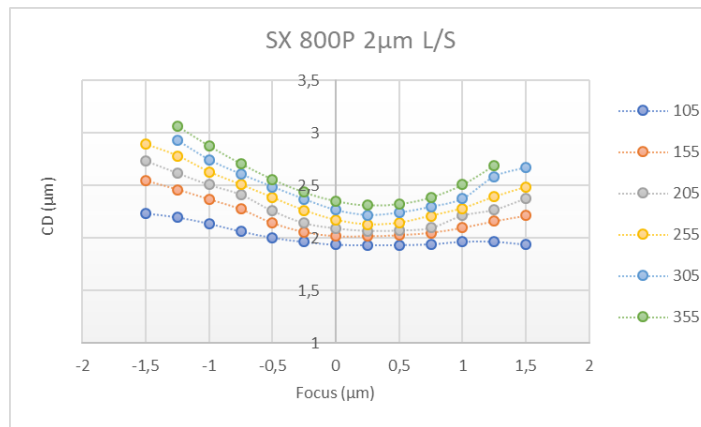


Siloxane based optical dielectrics available in multiple thickness formulations

- Industry leading RI range from 1.23 up to 1.93
- Excellent thermal and optical stability
- Qualified and in devices since 2008

# Permanent dielectrics

- SG, SX series for Partial Etch Back and Total Etch Back **planarization** processes found in **PMD** and **IMD** applications
- ST series for **high thermal budget** applications e.g. Shallow Trench Isolation and PMD
- **Directly patternable** dielectrics eliminating CVD SiO<sub>2</sub> deposition, resist patterning, etch and strip processes



# What are we looking for:

- Customers
- Analysis and test services  
(chemical / thin film)