



Centar Frontier

One Polishing System — All Inclusive

Automated, computer controlled, *in-situ* microscope and patented image processing

Site specific cross-sectioning — SEM/SCM/X-Ray

- 0.1µm accuracy
- No minimum size (<1mm)
- Any type of sample (die, package)
- Any type of material (ceramic, organic, Si, GaAs, Polyamid, Cu)
- Using SMPT patented image processing

Thinning to any desired thickness — TEM/STEM

- Using edge to edge algorithms
- Pre-FIB, Pre-Ion Mill, Wedge — 3mm
- Plan view or X-section
- Batch samples — up to 12

Frontside/delayering — layer by layer — SEM/electrical

- Automatic POI image saving
- Automatic stitching
- Increments as short as 0.2sec
- Delayer edges and corners
- No minimum sample size

Backside thinning to any desired thickness

- Automatic process by selecting thickness target
- PEM prep
- Backside SIMS prep — <2-µm

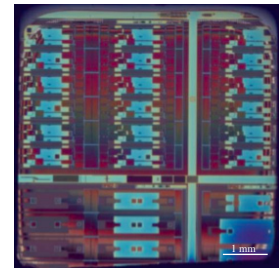
Shallow bevel —

3D angle control (SRM)

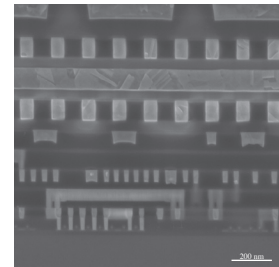
- EAC — Exact Angle Accuracy — 0.003deg

Outcome

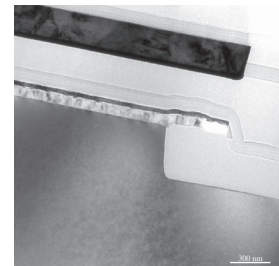
- High throughput, high repeatability & high success rate by any user despite the technical challenge



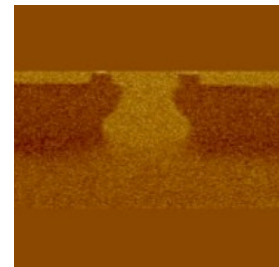
Hands-free delayering



Low K cross section



TEM wedge sample



SCM



we get it!

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