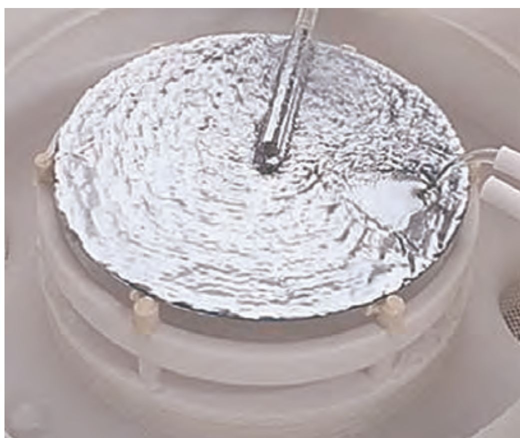
Wet Strip and Clean Processes with Megasonics Assist for Advanced 3D Devices

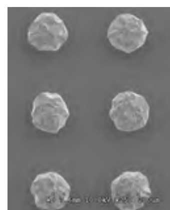
Velocity

- Single wafer cleaning technology
- Independent wafer frontside - backside process control
- Wide range of dispense and spray options provide process flexibility
- Stacked chamber layout minimizes footprint - 4 or 6 chamber layouts
- Wafer handling for 150mm to 300mm
- Flexible chemical mixing system
- Complete SEMI factory automation capability
- Safety certifications: S2/S8, CE, FM7-7



Patented Goldfinger® Megasonics

Stripping Negative Tone Resist After Micro-Bump Formation



Bumps formed with 20 µm thick JSR THB-126N negative resist

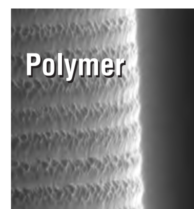
Micro-bumps formed with 50 µm thick JSR THB-151N negative resist

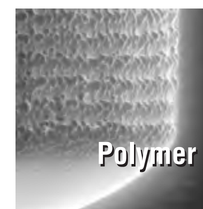
Goldfinger® Megasonic energy reduces process times and chemical usage by 30-40% with common solvent chemistries

Complete removal of thick negative tone resist layers at significantly lower cost per wafer

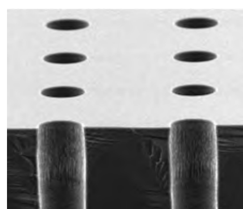
Polymer Removal After TSV Etch

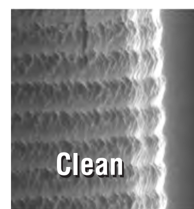
After TSV Etch

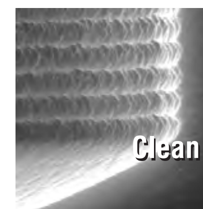




After Meg-Assisted Cleaning







Megasonic energy provides agitation to drive chemicals to via bottoms ensuring complete polymer removal

Ensures clean surfaces prior to critical deposition steps

Enables non-solvent SC1-DHF polymer cleans when photoresist removal is not required

Other Goldfinger Meg-assisted Processes in 3D Device Formation

RDL Photoresist Removal
UBM Etching
Post-Grinding or CMP Treatments
Glass Interposer and Carrier Cleaning

NAURA AKRION

6330 Hedgewood Drive, Suit 150, Allentown, PA 18106 USA