

ClearIQ Mask Cleaning System

System Overview

ClearIQ is a batch immersion reticle cleaning tool that removes organic contaminants, particles, and free ionic residues and haze. It uses a patented sulfuric megasonics technique that minimizes the degree of etching and roughening of the mask. The cleaning technique includes the use of megasonics to SOM (sulfuric acid/ozone mixture) to enhance the stripping efficiency and applies megasonics to SC1 enabling an optimal balance between particle removal efficiency and optical property changes.

Substrate Size:	Typical 152mm x 152mm x 6.35mm (6" x 6" x ¼")
Applicable material:	Photomask
Technology Markets:	Offline Tool for Mask Cleaning



ClearIQ Mask Cleaning Tool for Binary and Advanced Photomasks



Photomasks in ClearIQ Carrier

Processes

- Cleaning Binary and Advanced Photomasks

Production Advantages

- Exceptional particle removal efficiency
- Consistently low ionic contamination levels
- Minimal optical property changes
- Suitable for binary and PSM Technologies
- Flexibility through modular design
- Proven high reliability
- SMIF Compatible
- High throughput capability
- Optional chemistries: Solvents & HF etch
- Able to perform photoresist stripping and surface cleaning
- Small tanks to minimize water and chemical consumption
- DIO3 intentionally configured to reduce sulfate residue after SPM (or SOM)