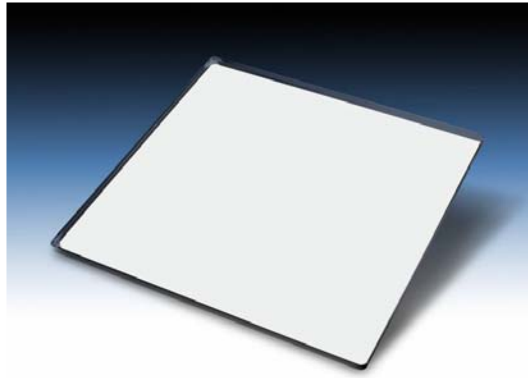
CONTAMINATION

VLSI Standards

Reticle Contamination Standards

SMALL OR LARGE, FIND PARTICLES THAT COUNT. The Reticle Contamination Standard (RCS) is used to calibrate instruments which size and detect particles on the surface of a reticle or its protective pellicle. Use ACS to characterize particles, before particles characterize products.

The Reticle Contamination Standard appears to the naked eye as a photomask blank. The reticle (or optionally its pellicle) is deposited with microscopic polystyrene latex spheres.



PRODUCT DESCRIPTION

The Reticle Contamination Standard is built by depositing highly spherical polystyrene latex (PSL) spheres which have well-characterized optical properties and a very tight monodisperse size distribution. These parameters make PSL spheres a useful material for the calibration and monitoring of instruments that measure and count particles. A range of traceable to SI units through NIST and other non-traceable PSL sizes or standards with smaller or larger sphere sizes may be special ordered.

Deposition may be performed on the reticle surface or on the surface of the pellicle, after mounting on the reticle. By request, front-side and/or backside particle deposition as well as pellicle mounting on front or back can be done. VLSI Standards performs full-substrate particle depositions or spot particle depositions with a wide variety of NIST-traceable sphere sizes down to 40 nm.

PRODUCT SPECIFICATIONS

- **Substrates Available:**
  Customer-supplied (any size), 125 mm x 125 mm or 152 mm x 152 mm: clear, chrome, half clear / half chrome
- **Pellicles available**
  Contact VLSI Standards
- **Particle Sizes Available**
  40 nm through 50 µm
- **Traceability**
  PSL diameter traceable to SI units through NIST

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Specifications subject to change.

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