

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

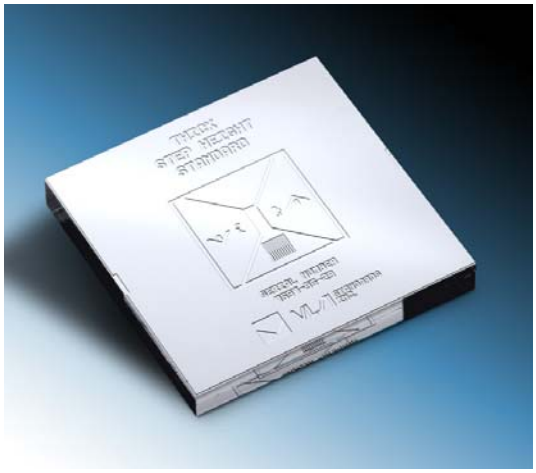
DIMENSIONAL

VLSI Standards

Step Height Standards (Quartz)

TAKING CALIBRATION A STEP FORWARD. Step Height Standards (SHS) are designed to calibrate mechanical or optical surface profilers. These standards consist of a 25 mm x 25 mm x 6.35 mm quartz block with a precisely etched uniform bar along with various test and diagnostic features. The choice of the material for manufacturing the standard–an ultra smooth quartz photomask blank–assures a very flat and smooth working surface as well as parallelism of the top and bottom surface within a few seconds of arc.

Pictured is a Thick Step Height Standard with chrome coating and showing the step height bar in the center. There are also V-Track and Pitch Array diagnostic tools featured.



PRODUCT DESCRIPTION

Specifications for Step Height Standards with Steps Smaller than 1 µm:
The calibration area of the SHS consists of a positive step 100 µm wide and 750 µm in length and is clearly marked with pointers. The design of this standard incorporates diagnostic features such as incremental pitch for stylus dynamics, size and resolution, a "V" shaped feature for checking stylus integrity, alignment marks, a ruler to facilitate scan length set-up, as well as cross-hair overlay and stylus alignment features. The zoom box and the incremental x, y grid permit determination of the magnification linearity of both optical and mechanical profilers. The standard is coated with a conformal layer of Chromium 90 nm thick to ensure high reflectivity.

Product Description for Step Height Standards larger than 1 µm
The actual calibration area consists of a negative feature (trench) 1 mm wide and 2.5 mm in length and is clearly marked with pointers. Two additional pitch structures form a test track for stylus dynamics and scan speed set-up, while two "V" shaped features can be used to determine the integrity and cleanliness of the stylus. The standard is coated with a conformal layer of Chromium 90 nm thick to ensure high reflectivity.

PRODUCT SPECIFICATIONS

- **Nominal Step Heights:**
  8 nm, 18 nm, 44 nm, 88 nm, 180 nm, 450 nm, 940 nm, 1.8 µm, 4.5 µm, 8.0 µm, 14.5 µm, 19.5 µm, 24 µm, 50 µm
- **Substrate Size**
  25 mm x 25 mm x 6.35 mm
- **Traceability**
  Traceable to SI units through NIST Calibrated Specimens

Revision SHS041512
Specifications subject to change.

© 2012 VLSI Standards.
All rights reserved.

Five Technology Drive, Milpitas, CA 95035-7916 phone 800.228.8574 fax 408.428.9555 www.vlsistandards.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP