# Elite300<sup>™</sup>

## Advanced accuracy, precision and performance in an ultra-efficient measurement environment

## Versatile microscope mounts for every application

• High-stability bridge mount ideal for fine structure probing, using programmable 75 mm (3") X-Y sub-micron transport and 150 mm (6") linear Z lift (motorized and manual transports also available)

• Large-area bridge mount with 300 mm (12") X-Y ideal for array and large-area WLR probing

## Universal accessory mounting system -

- Use with all IV/CV connection panels, vacuum and positioner mounts
- Multiple locations for coax, triax and dual-triax cables
- Fast reconfigurability for multiple test needs

## Patented AttoGuard® -

- Makes the station invisible to your IV and CV instruments
- < 1 fA noise in triaxial IV measurements
- 10 aF resolution CV measurements
- Improved settling time with new thermal isolation

## Large-area Tophat -

- Fast setup in < 1 minute
- 20 % increased working area
- Wide 40 mm RF probe-tip separation
- Optimized for all DC and RF measurement probes

## Flexible seals -

- Accommodates up to eight low-noise probe positioners
- Ensures light-tight and EMI integrity

## Quick access control panel for common tasks

## Patented MicroChamber® -

 Chuck enclosure ensures moisture-free, light-tight EMI-protected measurements, eliminates dark box, making over-temperature measurements easy

## Safely load and unload wafers -

• Full wafer access via locking roll out stage

## Safety interlocks -

- X-Y motion control safety interlock
- IV instrument high-voltage safety interlock

## Adjustable platform height for increased user comfort

## Small-footprint, fully integrated system

• Built-in components: motion control, computer controller, anti-vibration and air-management systems

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## Elite300-PH-1011

# \*Optimal test instrument integration Instrument shelf available as an option to streamline cabling to the test instruments and to minimize footprint

## Unattended testing over multiple temperatures

- Eliminate the idle time between temperature transitions with VueTrack™ technology
- Minimized thermal drift and reduced die soak with HTS (High-Thermal Stability) enhancements

## Next-generation PureLine™ II

- 10x better spectral noise (≤ -170 dbVrms/rtHz)
- 4x better system AC noise (≤5 mVp-p)
- Guaranteed shielding effectiveness
- World's best station for low-level and 1/f measurements

## Powerful automation tools for data collection

- Automatic wafer alignment
- Auto XYZ and theta correction for sub-micron stepping
- Automatic die size measurement tool

## Fast test and measurement software integration

- Real-time wafer mapping
- Point-and-shoot navigation
- IEEE, remote communication support

## "Hands-free" microscope remote control

• With programmable and motorized transports

Ergonomic accessory mount for system control

Ergonomic arm rest for easy sub-micron probing

## Quick access to auxiliary chucks

- Two patented auxiliary chucks with vacuum controls
- Temperature-stable HF-CV and RF calibration standards
- Easy probe-tip cleaning using cleaning substrates

## Manual X-Y stage controls

## Automatic MicroChamber air-purge system

 Faster thermal transitions and auto dry air-purge controls for "cold" probing

## Patented FemtoGuard® triaxial guarding technology

## Wide-temperature probing

- -60 °C to 300 °C systems for characterization & modeling
- 400 °C systems for WLR and power applications
- Stable measurements with thermally optimized platen, MicroChamber and ultra-flat wafer chucks

## Next-generation, semi-automatic stage

- Fast linear motor/air bearing technology (200 mm/sec)
- Super high-accuracy, temperature-compensating design
- Precision wafer stepping and high-force Z stage

