

# Elite300

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
- Large 78 mm<sup>2</sup> X-Y microscope adjustment area
- 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

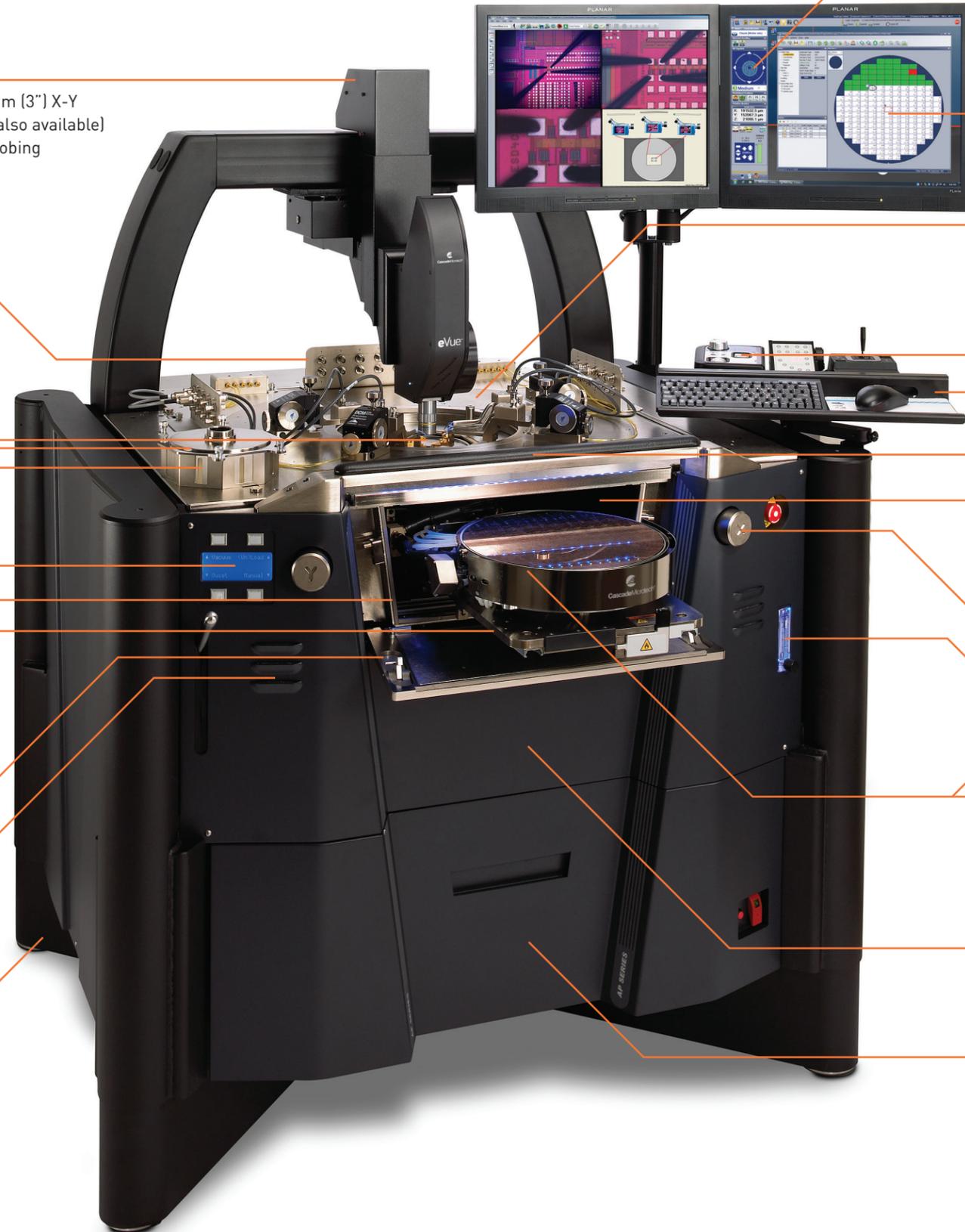
- Full wafer access via locking roll out stage
- Guarded lift pin option for wafer loading at hot temperatures

## Safety interlocks

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

## Integrated stereo speakers with iPod/MP3 input

## Adjustable platform height for increased user comfort



## Velox™ probe station control software

- Intuitive GUI for efficient system utilization by novice and expert users
- Software joystick for precise, sub-micron positioning
- Improved sub-die navigation with CellView
- Easy integration with instrument, testers, and test and measurement software for fast data collection

## Powerful automation tools for data collection

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

## Next-generation PureLine™ II

- 10x better spectral noise ( $\leq -170\text{dBVrms/rtHz}$ )
- 4x better system AC noise ( $\leq 5\text{ mVp-p}$ )
- Guaranteed shielding effectiveness
- World's best station for low-level and 1/f measurements

## "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 and 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

## Small-footprint, fully integrated system

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

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Elite300-PH-0115

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