CM300

300 mm semi-automated probe system

Velox™ User Interface

- Intuitive GUI for efficient system utilization by novice and expert users
- Analog joystick for precise, sub-micron positioning
- Easy integration with instrument, testers, and test and measurement software for fast data collection
- Automated wafer alignment and auto XYZ and theta correction for sub-micron stepping

Quick Access to Auxiliary Chucks

- Two patented auxiliary chucks for high calibration accuracy for RF/mmW measurements at frequencies up to 110 GHz
- Three sites for advanced cleaning procedures and contact verification

Probing Over Wide Thermal Range

- -60˚C to 300˚C systems available for characterization and modeling
- Thermally optimized platen, shielding solution and ultra-flat wafer chucks ensure stable and repeatable measurements

Safe Wafer Loading and Unloading

- Full wafer access via locking roll-out stage
- Easily handles 200/300 mm wafers and smaller, as well as single die and wafer fractions

Built-in Vibration-Isolation System

- Eliminates vibration from external sources, such as acoustic and architectural, enabling reliable small pad probing
- Enhances system stability and reduces damage to pads, wafers and probe tips
- Easy access from front- and back-side for fast configuration and service

Large Microscope Bridge

- Easy to mount measurement instruments such as parameter or noise analyzer and VNA, as close as possible to the DUT
- Minimizes signal path to eliminate parasitic effects, achieving high measurement accuracy and dynamics

Automated Test Management

- Automated Thermal Management (ATM™) minimizes thermal drift and reduces wafer and die soak times, ensuring shortest time to reach thermal equilibrium after every thermal step
- Automated re-alignment capability compensates for thermal drift after every temperature change
- Reliable and repeatable contact on small pads down to 40 µm and microbumps

Advanced EMI/RFI Shielding

- Ensures highly-accurate low-leakage and low-noise measurement results
- Minimizes settling times for efficient measurements, without compromising accuracy over full thermal range

Integrated Shielding Solution

- Chuck enclosure ensures moisture-free, light-tight and EMI-shielded measurements
- Eliminates the need for dark box, making over-temperature measurements easy
- Top-side shielding provided by TopHat ™ or optional top chambers

Mechanical Accuracy

- Stage accuracy and stability ensure precise and repeatable small-pad and fine-pitch probing
- Ideal for testing modeling and reliability structures in the kerfs and microbumps
- High-resolution probe-to-pad alignment (PTPA) for use with vertical/advanced probe cards (option)

Upgrade to Fully-Automated System (Option)

- Field upgradeable with handling unit to allow test automation out-of-cassette for higher test cell efficiency for over-night/over-weekend operation

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