CM300

300 mm fully-automated probe system

Material Handling Unit (MHU300)
• For fast handling of 200/300 mm wafers
• Integrated pre-aligner for flat/notch detection
• Barcode/2D Matrix code/OCR wafer code recognition from both sides (option)

Integrated Chiller
• Handling unit designed to accommodate a chiller, minimizing footprint
• Single chiller to support one prober down to -60˚C, or to support two provers down to -40˚C simultaneously

Up to Two Load Ports
• For enhanced capacity of up to 50 wafers for extended autonomous operation
• For FOUP and FOSB 300 mm wafer cassettes
• Open cassette adapter for use of standard 200 mm wafer cassettes (option)
• Autosetventory and cassette hot-swap capability for high-priority wafer test processing

Full-Featured Prober System
• Full EMI-shielding for highly-accurate low-leakage and low-noise measurement results
• Minimizes settling times for efficient measurements, without compromising accuracy over full thermal range
• Automated Thermal Management (ATM™) sets equipment parameter relative to chuck temperature
• Automated re-alignment capability compensates thermal drift of wafers and provers after every temperature change
• Reliable and repeatable contacts over a wide thermal range on small pads down to 30 µm and microbumps
• Large scope bridge to mount measurement instruments such as parameter or noise analyzer and VNA, as close as possible to the DUT

Cluster Tool Configuration
• Two independent prober systems share a single handling unit, enabling greater test cell efficiency and minimizing footprint
• Field upgradable

Probe Card Holder
• Ensures EMI-shielded and light-tight environment for the probe card for higher measurement accuracy
• Rigid and thermally optimized design, for reliable small pad probing
• Easy change-over to analytical measurement set-up with TopHat™

VeloxPro™ User Interface
• Intuitive GUI for efficient system utilization by novice and expert users
• Compliant to SEMI E95, enabling intuitive operation
• Analog joystick for precise, sub-micron positioning
• Easy integration with instrumentation, testers, and test and measurement software for fast data collection
• Automated wafer alignment, and auto XY2 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 check

Manual Wafer Loading and Unloading
• Semi-automated mode to manually handle single die, fractions and small wafers
• Capability of handling 300 mm wafer frames for thinned wafers on foil (option)

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

Probing Over Wide Thermal Range
• Thermal range -60°C to 200°C for characterization and modeling
• Thermally optimized platens, shielding solution and ultra-flat wafer chucks ensure stable and repeatable measurements