Wafer-Level Measurement Solutions

Keysight Technologies and Cascade Microtech

Guaranteed configuration, installation and support for improved measurement confidence.

Accurate and repeatable wafer-level measurements are essential for device modeling, technology development, process development and specification, process monitoring, component specification and pilot manufacturing. Semiconductor technology continues to evolve, time-to-market cycles are shrinking and the need for even greater accuracy is increasing. These challenges demand an integrated solution that can quickly and accurately perform advanced DC and RF measurements on components and devices.

In order to configure a system to meet these challenges you have to specify and source instrumentation, wafer probe stations, RF & DC probes and software from multiple suppliers and then integrate and prove these on-site before your first device can be tested. It can take weeks or even months before you can execute your first measurements with the confidence that there is data correlation and measurement accuracy between different locations.

Keysight Technologies and Cascade Microtech address these challenges directly by providing a range of fully integrated component measurement and device characterization solutions. Cascade Microtech wafer-level probe stations, microwave and DC bias probes, and calibration tools combined with Keysight's test instrumentation and measurement and analysis software allow you to perform comprehensive measurements on all your components.

The solutions come in a range of configurations; from a fully integrated new system with either a semi-automated or manual prober, to application-specific hardware upgrades to existing probe stations. Keysight's new WaferPro-XP measurement software platform for device characterization can also be added to an existing wafer-level measurement solution.

- Accurate, repeatable wafer-level measurements
- System configuration pre-validated
- Installation to defined acceptance criteria
- Single point of contact for support
- Solution expert for optimization
- Guaranteed system configuration, installation and support





Wafer-Level Measurement Solutions

The integrated wafer-level measurement and characterization solutions from Keysight and Cascade Microtech represent a new model for the delivery of wafer-level measurement solutions that provides semiconductor customers with guaranteed configuration, guaranteed installation and guaranteed support.

Keysight and Cascade Microtech jointly assure that a wafer-level measurement solution is configured specifically to meet your application needs. The solution is pre-validated prior to delivery. Once delivered and installed on-site by a Cascade Microtech solutions expert, the configuration is validated again based on previously agreed upon acceptance criteria. Cascade Microtech solutions experts also train the users, further speeding time to first measurement.

Each wafer-level measurement solution is backed by the offer of a full support package with access to regional solution experts who are highly skilled in wafer-level test and measurement and available to address any customer questions or issues. The solution expert will work with you to optimize the solution to meet your continuing measurement, characterization and modeling requirements. Cascade Microtech acts as the single point of contact to ensure quicker problem resolution.

With guaranteed configuration, guaranteed installation and guaranteed support, your wafer-level measurement solution from Cascade Microtech and Keysight gives you fast, accurate, verified performance at the probe tip, minimizing the time to first measurement and ensuring correlation between multiple locations.

System Components

Keysight Technologies

N5222x/4x	PNA/PNA-X Microwave Network Analyzer
B1500A	Semiconductor Device Parameter Analyzer
N6705B	DC Power Analyzer
WaferPro-XP	Measurement Software Platform
IC-CAP	Modeling Platform

Cascade Microtech

Summit 12000	200mm Semi-Automated Wafer Probe Station
Elite 300	300mm Semi-Automated Wafer Probe Station
WinCal XE	Calibration Software
Infinity Probes	Wafer Probes to 500 GHz
ISS	Impedance Standard Substrate Calibration Standards

To learn how this solution
can address your specific needs
please contact
Keysight's solutions partner,
Cascade Microtech
www.keysight.com/find/cascade



Keysight & Solutions Partners
Extending our solutions to meet your needs

Keysight and its Solutions Partners work together to help customers meet their unique challenges, in design, manufacturing, installation or support. To learn more about the program, our partners and solutions go to

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Cascade Microtech is a worldwide leader in precision contact, electrical measurement and test of integrated circuits (ICs), optical devices and other small structures www.cascademicrotech.com

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