

ISTFA/2026

**52ND INTERNATIONAL SYMPOSIUM FOR
TESTING AND FAILURE ANALYSIS**

**OCTOBER 4-8 | HENRY B. GONZÁLEZ CONVENTION CENTER
SAN ANTONIO, TEXAS**

SHOW DIRECTORY

ORGANIZED BY:



ASM
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EDFAS
Electronic Device Failure Analysis Society
ASM INTERNATIONAL

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**ELECTRONIC DEVICE
FAILURE ANALYSIS**
A RESOURCE FOR TECHNICAL INFORMATION AND INDUSTRY DEVELOPMENTS

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See precision sample preparation in action at Booth #401.

Visit Allied High Tech Products to discuss your failure analysis and materials characterization challenges.

MultiPrep™ System

Site-Specific Grinding/Polishing

- Ideal for precise, quantitative semiautomatic preparation
- Available for use with 8", 10" or 12" (203, 254 or 305 mm) platens
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- Maintains geometric position of sample relative to abrasive plane
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GENERAL INFORMATION

STAY CONNECTED AT THE SHOW

Follow show news on X (formerly Twitter), Facebook and LinkedIn. Share your photos and videos by using #ISTFA2026

MOBILE APP

Download the official event app for Apple and Android devices by searching 'ISTFA 2026'.

SPECIAL NOTE: the only way to view the full ISTFA technical program is via the mobile app or via the ISTFA 2026 website.

- Access all of the following features on your smart phone:
- Search for exhibitors, read their company profiles, and request meetings
- Locate the booths of your favorite exhibitors on the exhibit hall floor plan
- View the technical schedule and search for presentations that interest you
- Create an itinerary and review your saved presentations and exhibitors
- Search for speakers and connect with other attendees at the eve
- Complete a survey for each tutorial presentation and the Best Paper!

INTERNET ACCESS

Complimentary WiFi access for attendees is available throughout the public spaces and meeting rooms within the Henry B. González Convention Center.

Scan the QR code below to view the ISTFA 2026 Technical Program!



OR CLICK HERE!

Integrated Semiconductor Failure Analysis

Tescan
A SHIMADZU COMPANY



One connected workflow from buried defect to root cause determination.

As advanced packaging evolves, transistor architectures change, material stacks become more complex, and defects move farther below the surface. Failure analysis can no longer rely on isolated steps.

See the complete workflow at Booth 605

www.tescan.com

SOLVE THE PROBLEM



SCHEDULE AT-A-GLANCE

*AS OF 8/31/26

SATURDAY, OCTOBER 3, 2026		
8:30 a.m. – 12:30 p.m.	2.5D, 3D, 3.5D advanced packaging techniques: design, process, manufactory, yield, reliability, and failure analysis* (Registration Required)	Hyatt Regency San Antonio, Live Oak
1:30 – 5:30 p.m.	Beam-Based Defect Localization* (Registration Required)	Hyatt Regency San Antonio, Directors Room
SUNDAY, OCTOBER 4, 2026		
7:00 – 8:00 a.m.	Author's Coffee/Briefing	Room 207A
7:00 a.m. – 5:00 p.m.	Registration Open	Hall 4 West
8:00 a.m. – 5:50 p.m.	Tutorial Programming	Rooms 205, 206A, 206B, 207
10:00 – 10:20 a.m.	Morning Refreshment Break	205-206 Foyer
12:20 – 1:30 p.m.	Lunch	Bridge Hall
3:30 – 3:50 p.m.	Afternoon Refreshment Break	205-206 Foyer
MONDAY, OCTOBER 5, 2026		
7:00 – 8:00 a.m.	Author's Coffee / Session Briefing	Room 207A
7:00 a.m. – 5:00 p.m.	Registration Open	Hall 4 West
7:30 – 8:30 a.m.	Breakfast	Bridge Hall
8:30 – 9:40 a.m.	Opening Session & EDFAS General Meeting	Bridge Hall
9:40 – 10:30 a.m.	Best Paper Awards	Bridge Hall
10:30 – 10:50 a.m.	Morning Refreshment Break	Bridge Hall
10:50 a.m. – 5:15 p.m.	Technical Programming	Bridge Hall, Rooms 205 & 206
12:10 – 1:10 p.m.	Lunch	Bridge Hall
12:10 – 1:10 p.m.	Women in Electronics Failure Analysis (WEFA) Session	Bridge Hall
1:10 – 2:10 p.m.	International Roadmap for Failure Analysis (IRFA) Keynote: Dr. Zhiyong Ma, Intel	Bridge Hall
2:10 – 3:45 p.m.	International Roadmap for Failure Analysis (IRFA) Session	Bridge Hall
3:45 – 4:00 p.m.	Afternoon Refreshment Break	Bridge Hall
4:00 – 5:00 p.m.	Integrated PFA, OFI & System in Package User Group Discussions	Bridge Hall, Rooms 205 & 206AB
5:00 – 5:15 p.m.	User Group Discussion Break	Bridge Hall, Rooms 205 & 206AB
5:30 – 7:30 p.m.	Tools of the Trade Tour (Ticketed Event*)	Exhibit Hall 4B
TUESDAY, OCTOBER 6, 2026		
7:00 – 8:00 a.m.	Author's Coffee / Session Briefing	Room 207A
7:30 a.m. – 6:30 p.m.	Registration Open	Hall 4 West

CONTINUED ON NEXT PAGE

SCHEDULE AT-A-GLANCE

*AS OF 8/31/26

TUESDAY, OCTOBER 6, 2026

8:30 – 9:30 a.m.	ISTFA Keynote: Jeff Rearick, AMD Sponsored by: 	Exhibit Hall 4B – Industry Exchange
9:30 – 10:10 a.m.	Morning Refreshment Break	Exhibit Hall 4B
9:30 a.m. – 6:30 p.m.	Exhibit Hall Open	Exhibit Hall 4B
10:10 a.m. – 5:00 p.m.	Technical Programming	Bridge Hall, Rooms 205 & 206
11:50 a.m. – 12:50 p.m.	Lunch on the Show Floor	Exhibit Hall 4B
12:50 – 1:50 p.m.	Sample Prep User Group Discussion Sponsored by: 	Bridge Hall
1:50 – 2:50 p.m.	FIB User Group Discussion	Bridge Hall
2:50 – 3:20 p.m.	Afternoon Refreshment Break	Bridge Hall
4:00 – 5:00 p.m.	AI User Group Discussion	Bridge Hall
5:00 – 6:30 p.m.	Welcome Reception with the Exhibitors	Exhibit Hall 4B

WEDNESDAY, OCTOBER 7, 2026

7:00 – 8:00 a.m.	Author's Coffee / Session Briefing	Room 207A
7:30 a.m. – 5:30 p.m.	Registration Open	Hall 4 West
8:00 a.m. – 5:00 p.m.	Technical Programming	Rooms 205 & 206
9:00 a.m. – 4:00 p.m.	Exhibit Hall Open	Exhibit Hall 4B
9:40 – 10:00 a.m.	Morning Refreshment Break	Exhibit Hall 4B
10:40 – 11:40 a.m.	Nanoprobe/SPM User Group Discussion	Bridge Hall
11:50 a.m. – 1:20 p.m.	Specifiers, Justifiers, & Buyers – A Peer Exchange on How to Fund FA Labs	Exhibit Hall 4B – Industry Exchange
11:20 a.m. – 12:20 p.m.	Lunch on the Show Floor	Exhibit Hall 4B
11:40 a.m. – 1:10 p.m.	Student Young Professionals	Room 207B
1:30 – 3:00 p.m.	Panel Discussion: Design for Analysis: Confronting the Challenges of Backside Power, Heterogeneous Integration, and Co-Packaged Optics in the AI Era	Exhibit Hall 4B – Industry Exchange
3:00 – 4:00 p.m.	Poster Session, Student Poster Contest	Exhibit Hall 4B
5:00 – 5:30 p.m.	Student Young Professionals Discussion	Bridge Hall
6:30 – 9:00 p.m.	Social Networking Event (Ticketed Event*) Sponsored by: 	Casa Rio

THURSDAY, OCTOBER 8, 2026

7:00 – 8:00 a.m.	Author's Coffee / Session Briefing	Room 207A
7:30 a.m. – 12:00 p.m.	Registration Open	Hall 4 West
8:00 a.m. – 12:20 p.m.	Technical Programming	Rooms 205 & 206
10:00 – 10:20 a.m.	Morning Refreshment Break	205-206 Foyer
12:00 p.m.	Conference Concludes	

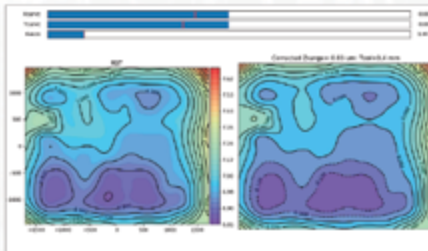
*ticketed event/separate registration required

ASAP-1[®] In Situ

5-AXIS DIGITAL MILL & POLISHER



MEET 3D & CURVED/WARPED SURFACE CHALLENGES WITH ADAPTIVE MODULES



+/- 0.4µm in overall uniformity in thinned area,
+/- 0.12µm in required zone

Combined Mapping & Polishing Control

Generated data provides an adaptive model to obtain final RST and thickness profile



Fluid Control System

Dose & remove lubricants or abrasives while maintaining a live view of the process

EXPANDING THE SAMPLE PREP TOOLKIT

'In Situ' RST Measurement

- Single footprint system solution
- Eliminates tilt/curve translation errors

Ultra-High Res Cameras

- All systems now include 3 UHD cameras at **Target**, **45° Side**, and **45° Front** positions
- **NEW** NIR Illumination Mode provides through-silicon imaging

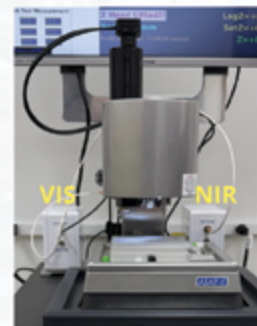
Work with Overlays

- Import Optical, X-RAY, and C-SAM images
- Image manipulation tools include **Rotate**, **Stretch**, **Resize**, and **Layer-Locking**

Unique Legacy Modules

- Thermal Relaxation (heat & cool) stage
- Automated Endpoint Module - Capacitance/Resistance based

IN SITU THROUGH-SILICON RST MEASUREMENT



Code	Spectrometer	Application
UT-F3	NIR	Standard thinning
UT-VIS	Visible Light Extension	Ultrathinning (<10 microns)

Two In Situ options are available for measuring and mapping remaining silicon thickness (RST).



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SHOW DIRECTORY

EXPOSITION DATES AND TIMES

Henry B. González Convention Center, Exhibit Hall 4B

EXHIBIT DATES & TIMES

Tuesday, October 6 | 9:30 a.m. – 6:30 p.m.

- » Morning Refreshment Break | 9:30 – 10:10 a.m.
- » Lunch on the Expo Floor | 11:50 a.m. – 12:50 p.m.
- » Afternoon Refreshment Break | 2:50 – 3:20 p.m.
- » Welcome Reception with Exhibitors | 5:00 – 6:30 p.m.

Wednesday, November 19 | 9:00 a.m. – 4:00 p.m.

- » Morning Refreshment Break | 9:40 – 10:10 a.m.
- » Lunch on the Expo Floor | 11:20 a.m. – 12:20 p.m.
- » Expo Dessert Reception and Poster Session | 3:00 – 4:00 p.m.

We appreciate and acknowledge the following sponsors

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UPDATED 9/30/26

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#ISTFA2026

Join Us For Our Booth
Presentation!



An Innovative Approach to Passive Voltage Contrast Analysis Using Low-Angle Ion Milling - SEM

"Until now, there has been a strong demand for a methodology that minimizes operator dependency throughout the entire workflow, from delayering sample preparation to PVC analysis. This presentation will describe the principles of this approach and demonstrate its effectiveness through application examples and experimental data."

Tuesday, October 6th • 12:10PM to 12:50PM CT

Presenter: Dr. Shunsuke Asahina

Booth #416

HAXIS

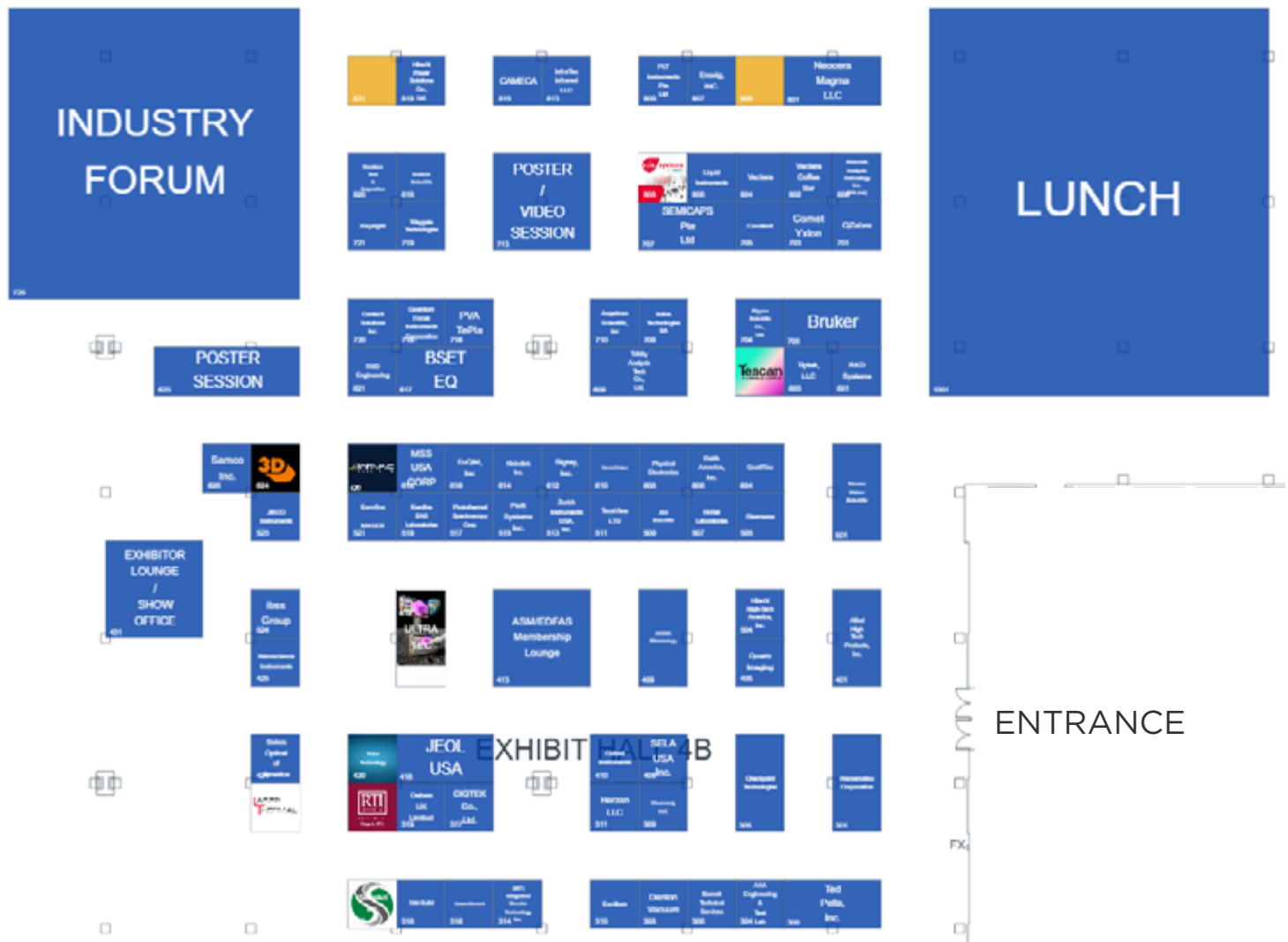
ISTFA EXHIBITOR LIST

ISTFA EXHIBITING COMPANIES	BOOTH #
3D-Micromac AG	624
AAA Engineering & Test Lab	304
Allied High Tech Products, Inc.	401
Angstrom Scientific, Inc	710
Barnett Technical Services	306
Bruker	700
BSET EQ	617
CAMECA	815
ZEISS Microscopy	409
Checkpoint Technologies	305
CIQTEK Co., Ltd.	317
Comet Technologies USA Inc.	703
Contech Solutions Inc.	720
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Deben UK Limited	319
Denton Vacuum	308
Eurofins EAG Laboratories	519
EuQlid, Inc	616
Eurofins MASER	521
Evident Scientific	818
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Hamamatsu Corporation	301
Herzan LLC	311
Hi-Rel Laboratories	507
Hitachi High-Tech America, Inc.	504
Hitachi Power Solutions Co., Ltd.	819
ibss Group	524
Imina Technologies SA	708
InfraTec infrared LLC	813
(iST) Integrated Service Technology Inc.	314
Intlvac Thin Film	620
JEOL USA	416
JIACO Instruments	525
Keysight	721
Kleindiek Inc.	614
Laser Thermal Analysis, Inc.	325
Liquid Instruments	806
Materials Analysis Technology Inc. (MA-tek)	800
Mel-Build	318
Trlnity Analysis Tech Co., Ltd.	609
Microsanj, LLC	309
MSS USA CORP	618

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*as of 9/22/26

ISTFA 2026 FLOOR PLAN



**VIEW THE INTERACTIVE ISTFA 2026
FLOOR PLAN ON THE WEB HERE:**



2026 ISTFA EXHIBITOR SHOWCASE

Visit these key exhibitors and more at the Henry B. González Convention Center in San Antonio, Texas.

Exhibition Hours

Tuesday, October 6 | 9:30 a.m. – 6:00 p.m.

Wednesday, October 7 | 9:00 a.m. – 4:00 p.m.

San Antonio skyline at dusk.



3D-MICROMAC AG

Speed up your time-to-sample with laser-based sample preparation and free your sample-polishing tools for what they



do best! **3D-Micromac's** microPREP systems have been field-proven for over ten years, accelerating sample preparation for various failure analysis methods, including TEM, SEM, APT, XRM, and micromechanical testing. The new microPREP L scales sample preparation to 12" wafers and system-level boards, enabling the preparation of multiple sites of the same sample in a single run.

microprep.pro

BOOTH
624

ALLIED HIGH TECH PRODUCTS INC.

For over 43 years, **Allied High Tech Products** has provided sample preparation products for microscopic



evaluation to the microelectronics industry. Allied manufactures cutting-edge equipment at its USA facilities where all design, manufacturing, and assembly takes place in-house to ensure the highest quality equipment is produced. Items on display include Allied's state-of-the-art X-Prep Precision Polishing/Grinding/Milling Machine, MultiPrep Polishing System, and TechCut High and Low Speed Sectioning Saws. A range of consumable products will also be shown.



alliedhightech.com

BOOTH
401



The Alamo.

HAMAMATSU

Advance your failure analysis (FA) and identify defects quickly with **Hamamatsu's**

HAMAMATSU
PHOTON IS OUR BUSINESS

Dual PHEMOS-X emission microscope (C16506-01). Designed for both top- and bottom-side FA in one unit, the Dual PHEMOS-X eliminates the need to move wafers or dies to another system for two-sided optical analysis of advanced, 3D, nontransparent devices.



hamamatsu.com/us/en/product/semiconductor-manufacturing-support-systems/failure-analysis-system/C16506-01.html

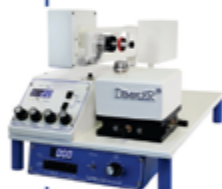
BOOTH
301

TED PELLA INC.

Ted Pella Inc. announces the PELCO Dimpler pro-

TED PELLA, INC.
Microscopy Products for Science and Industry

vides automated precision thinning of specimens for TEM analysis, for deprocessing and failure analysis, and similar applications where targeted fine polishing is required. It is a precision electro-mechanical metal-



lographic lapping instrument that will continuously monitor and control dimpling parameters and accurately terminate at a preset specimen thickness. Active monitoring of the Z-position, feedback-controlled damping, and automated controls for determining termination of processing work together to provide repeatable, reliable results in sample preparation.

tedpella.com/Material-Sciences_html/PELCO-Dimpler.aspx

BOOTH
300

THERMO FISHER

With over 40 years of semiconductor experience, **Thermo Fisher Scientific** is a trusted

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partner for failure analysis. The company's end-to-end electron microscopy and fault isolation solutions help locate defects, investigate root causes, and characterize complex semiconductor devices with confidence. Visit the booth to discover workflows that enable atomic-resolution imaging, buried defect analysis, and process characterization to reveal what matters and support next-generation innovation.



thermofisher.com/us/en/home/semiconductors.html

BOOTH
501

ULTRA TEC

ULTRA TEC's ULTRAPOL

Advance is the leading all-in-one lapping and polishing workstation for the production of flat surfaces. A combination of advanced control and process features allow for the accurate processing of modern ICs through topside

ULTRA TEC
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electronic deprocessing—enabled by the advanced optical enhancements such as our ULTRACOLLIMATOR. Applications include backside preparation of packages and wafers, particularly for flip-chips—and rapid global thinning of larger surfaces. The ULTRAPOL Advance offers cross-sectioning of die and package-level devices.



ultratecusa.com

BOOTH
419



Riverwalk's boat tour.

TOOLS OF THE TRADE TOUR

What: The **Tools of the Trade Tour** at ISTFA 2026 offers attendees an inside look at the latest products, technologies, and services shaping the future of failure analysis. This guided, show-floor experience is designed to bring technical concepts to life through live, hands-on demonstrations and real-world applications.

Registrants should meet at the entrance of the Exhibit Hall at 5:15 p.m.

Pre-registration is required.

Where: Expo Show Floor – Exhibit Hall 4B

When: Monday, October 5, 2026 | 5:30 – 7:30 p.m.

Scheduled Tours:

- | | |
|-----------------------------------|-----------------|
| » 3D MICROMAC | » SIEMENS |
| » Allied High Tech Product | » Sigray |
| » JIACO | » Thermo Fisher |
| » Quartz | » Ultra Tec |
| » Robston Technologies Inc. (RTI) | » ZEISS |



Booth #: 624

Product/Tool Name: microPREP® systems

Product/Tool Description: microPREP® laser systems have been field-proven for over ten years. They accelerate sample preparation for FA methods like TEM, SEM, APT, XRM, and micromechanical testing. They have evolved from pico- to femtosecond lasers to bigger sample sizes: microPREP® L can prepare specimens on samples like 12" wafers or system-level boards.

Overview of Demonstration: To the ISTFA show site, we bring our microPREP® PRO demo tool. We use it to show the core competence of all microPREP® systems: speeding up your time-to-sample through laser-based sample preparation and allowing your downstream equipment to do what it does best. You will learn about the wide range of materials microPREP® systems can handle, the different pico- and femtosecond lasers available, the various sample geometries, and how repeatable recipes, together with endpoint detection, reduce both rework and the need for user intervention.



Booth #: 401

Product/Tool Name: NEW X-Prep 6x®

Product/Tool Description: The NEW

X-Prep 6x® is a specialized 6-axis CNC-based milling, grinding, and polishing system engineered for mechanical sample preparation of advanced semiconductor devices. Designed for heterogeneous integration and advanced packaging, its expanded preparation region accommodates larger, more complex samples while delivering exceptional flexibility, precision, and process repeatability.

Overview of Demonstration: Experience the NEW X-Prep 6x® 6-Axis Precision Sample Preparation System and learn how Allied is advancing mechanical sample preparation for the next generation of semiconductor devices. Designed to address the challenges of heterogeneous integration and advanced packaging, the X-Prep 6x® combines advanced 6-axis motion with an expanded preparation region to accommodate larger and more complex samples. Meet with Allied's X-Prep specialists to discuss sample preparation strategies supporting heterogeneous packaging investigations, reverse engineering, hardware assurance, and electrical and physical failure analysis workflows.



Booth #: 525

Product/Tool Name: MIP / MIP+

Product/Tool Description:

MIP & MIP+ are JIACO's patented Microwave Induced Plasma systems: atmospheric plasma for package decapsulation and die-level etching (MIP+). MIP delivers artifact-free, automated IC decapsulation while preserving samples and failure sites. MIP+ extends to die level etching, ion-free, for selective etching of advanced packaging materials in FA and reliability testing.

Overview of Demonstration: JIACO Instruments will demonstrate how MIP & MIP+ plasma-based sample preparation improves Failure Analysis success rates across semiconductor packages. On wire bond packages we will demonstrate throughput increases without sacrificing decapsulation selectivity & quality. On advanced packages, MIP+ enables new preparation approaches. After a short introduction to JIACO, MIP, and MIP+, we'll walk through recent developments: Accelerated Workflow with Booster Etch, High Power Recipes, and High-Definition Vision for better process visibility with a case study on advanced packages. We'll close with where the industry, and JIACO, are headed next: larger sample sizes and AI integration.



Booth #: 405

Product/Tool Name: Quartz FA-LIMS

Product/Tool Description: Quartz FA-LIMS is a highly configurable Laboratory Information Management System built for failure analysis and materials characterization labs. It is the

only LIMS that treats image data as first-class passengers, integrating directly with imaging and non-imaging instruments to offer visibility and traceability of the full workflow from start to finish.

Overview of Demonstration: In this demonstration, we will walk through a selection of FA-LIMS features that directly impact how efficiently a lab operates day to day. Rather than a broad product overview, we have focused on specific areas where labs typically lose time or rely on manual effort, and we will show how FA-LIMS addresses those pain points in a practical, straightforward way. What you will see reflects real workflow scenarios that analytical labs in your industry deal with regularly. Our goal is to leave you with a clear picture of where meaningful productivity gains are achievable without disrupting how your lab already works.

TOOLS OF THE TRADE TOUR



Booth #: 321

Product/Tool Name: MultiTrace Curve Tracer

Product/Tool Description:

MultiTrace is an automated benchtop curve tracer that performs non-destructive I-V testing on semiconductor devices. It quickly identifies electrical faults, compares devices to known good references, and supports failure analysis, counterfeit detection, and reliability testing with configurable hardware and automated software.

Overview of Demonstration: MultiTrace provides fast, automated electrical characterization of semiconductor devices through non-destructive I-V curve tracing. Designed for engineering, failure analysis, and quality assurance, it helps detect damaged, counterfeit, or out-of-spec components by comparing electrical signatures against known good devices. The system supports a wide range of package types and configurable pin counts, integrates with RTI test fixtures and sockets, and is controlled through intuitive DataTrace software. MultiTrace delivers repeatable, accurate results that reduce troubleshooting time, improve product quality, and accelerate semiconductor analysis.



Booth #: 505

Product Name: Tessent Diagnosis Coverage

Product Description: Software-based scan diagnosis has been used to localize defects prior to physical failure analysis. Pre-silicon simulation analysis can be used to predict the localization possible for a given design.

Overview of Demonstration: In this presentation, we will show how new analysis can be used to predict diagnosis resolution (localization) and some mitigation strategies that could be utilized to address these limitations in the design.



Booth #: 612

Product Name: Apex Hybrid

Product Description: Sigray's Apex-Hybrid is the first X-ray

microscope to combine laminography and tomography in one system. A patent-pending changeable beamline and patented Precision Angle Laminography deliver 350 nm resolution on intact boards and packages so you can locate the defect, then image it artifact-free in tomography mode. One tool, fast answers, high confidence.

Overview of Demonstration: In this demo, we will showcase our state-of-the-art Apex Hybrid 3D X-ray microscope, designed for high-flexibility imaging in failure analysis labs. We will demonstrate how high-resolution 3D datasets are collected non-destructively on intact devices, using both laminographic (CL) and tomographic (CT) imaging modes. CL is well suited to large, flat samples such as populated boards and packages, while CT delivers isotropic resolution on smaller extracted regions. We will then visualize these datasets to reveal example feature measurements, including solder bond size and shape, voiding, and buried defects, illustrating how each mode fits into a typical 3D FA workflow.



Booth #: 501

Product/Tool Name: Meridian EV System and Helios Hydra PFIB

Product/Tool Description: Ga-

Free Sample Preparation and Electron Beam-Based Fault Isolation for Advanced Device Analysis

Overview of Demonstration: Demo will show two innovative workflows that overcome where conventional preparation and optical fault isolation are reaching practical limits

Attendees will review a gallium-free TEM preparation approach using multi-ion species PFIB workflows to produce ultra-thin, structure-targeted lamellae. This will highlight how xenon and argon-based preparation can achieve sub-20 nm thickness while preserving crystalline structure and avoiding gallium implantation artifacts that can compromise compositional analysis.

Next, we introduce Meridian EV for backside power device workflows, focusing on how dockable e-beam probing enables improved access and connectivity for advanced backside power architectures. Attendees will see how backside power architectures limit traditional optical fault isolation and why e-beam probing, advanced sample preparation, and tester interface hardware are becoming critical.



Booth #: 419

Product/Tool Name: ASAP-1

Product/Tool Description:

Our ASAP-1 line of selected area preparation systems has become the de-facto standard for mechanical decapsulation and backside preparation for microelectronic devices.

Overview of Demonstration: ASAP-1 IN SITU now offers surface profiling as part of its mechanical touch-off functionality. This aspect will be demonstrated live on a modern BGA package.

Modern device and package geometries require ever more accurate and interactive product solutions to ensure analytical success. Surface profiling is key to ULTRA TEC's product plan for new product generations.

FA Engineers and technologists who need advanced interactivity and feedback during device decap and material removal.



Booth #: 409

Product Name: Crossbeam 750 FIB-SEM

Product Description: A FIB-SEM highly optimized for the most demanding sample preparation tasks

Overview of Demonstration: Attendees will learn how the evolving demands on

TEM sample preparation in semiconductor manufacturing are redefining the requirements for FIB-SEM tools. Driven mainly by leading edge logic and memory technology nodes, TEM samples need to be thinner, larger, of better quality, and be produced at higher throughput. Routine preparation of samples with a thickness of 10 to 20 nanometers over areas in the range of square micrometers at an endpoint accuracy of 2 nanometers or less has become essential. The presentation will explain why, what the resulting requirements for instrumentation are, and how ZEISS overcame these challenges by introducing the Crossbeam 750.



SMARTPROBE

Coordinate-driven nanoprobining for minimal beam exposure and maximum ease of use.

PRECISION & STABILITY

- Up to 8 probes with active position holding
- Approved for 2-nm technology nodes

AUTOMATION & WORKFLOW

- Automatic probe landing and alignment
- CAD-assisted navigation of sample and probes

Designed for SEM-based failure analysis, defect localization and advanced-node electrical characterization.

COMPANY DESCRIPTIONS

3D-Micromac AG

Booth # 624

With more than ten years of experience in microdiagnostics and failure analysis, 3D-Micromac is the industry leader in laser-based sample preparation. We develop processes, machines, and turnkey solutions at the highest technical and technological level. Our field-proven microPREP® systems accelerate sample preparation for a wide range of failure analysis methods, including TEM, SEM, APT, XRM, and micromechanical testing.

www.microprep.pro

AAA Engineering & Test Lab

Booth # 304

AAA Engineering & Test Lab specializes in High-Reliability component qualification, testing, and screening and has achieved DLA Suitability for numerous MIL-STD test methods. Focused on DPA, FA, PEM Qualification, AS6171, and AS6081, AAA has delivered critical testing and analysis for Aerospace, Defense, Manufacturing, Medical, and Automotive industries. Located on the Space Coast of Florida. Veteran Owned and Operated.

www.aaactl.com

Allied High Tech Products, Inc.

SPONSOR

Booth # 401

For over 42 years, Allied High Tech Products has provided sample preparation products for microscopic evaluation to the microelectronics industry. Allied manufactures state-of-the-art equipment at its California and Oklahoma locations with all design, manufacturing and assembly taking place in-house. Items on display include Allied's state-of-the-art X-Prep® Precision Polishing/Grinding/Milling Machine, the MultiPrep™ Polishing System, TechCut™ Sectioning Saws and Zeiss microscopes.

www.alliedhightech.com

Angstrom Scientific, Inc

Booth # 710

Angstrom Scientific Inc. represents leading manufacturers supporting materials characterization. Featuring sample prep tools from Leica, including ultra-microtomes and e-beam coaters. Hitachi Tabletop TM 4000P Ser 3 SEM with EDX. We support a wide range of in-situ systems for your SEM from ConnectomX (Katana microtome), NenoVision (AFM), C-sense Self-Sensing Cantilevers, and Alemnis (micro and nano mech test). In addition, for semiconductor failure analysis we have Imina probe systems coupled with Point Electronic EBIC/EBAC. Point Electronic also provides complete SEM modernization. On the TEM side we have EMSIS (Cameras) and Point Electronic STEBIC. Our latest addition to our portfolio is a novel technology from Radalytica (portable robotic X-ray & CT systems) and VacuumFAB (micro positioning stages and switches).

www.angstrom.us

Barnett Technical Services

Booth # 306

Barnett Technical Services distributes products for the advanced characterization of failures. Our product offerings include Micro Support benchtop micromanipulators for electrical testing/advanced micro-sample prep and Lasertec Optics HYBRID+ Confocal Laser Scanning Microscopes. Brands: Micro Support Axis Pro Micromanipulator, Lasertec Optics HYBRID+ Confocal Laser Scanning Microscope

www.barnett-technical.com

Bruker

Booth # 700

Bruker enables scientists to explore life and materials at molecular, cellular, and microscopic levels. Visit our booth to discover Bruker's solutions for small-scale mechanical, chemical, and structural analyses. Our instruments include in-situ characterization tools for electron microscopes (EDS, WDS, EBSD, micro-XRF, nanomechanical test instruments) as well as atomic force microscopes for nanomechanical, nanoelectrical, and nanochemical research.

www.bruker.com/nano

BSET EQ

SPONSOR

Booth # 617

BSET EQ provides solutions for your FA needs through GAS PLASMA and LASER technologies. On display is our PLASER™ plasma DECAP system. BSET EQ is the leader of this DECAP technology with continued development and prior art since 1999. Recently we have proven to be by far the best with exposure of SILVER architectures. Also highlighted is our popular FA2000 tabletop / FA3000 RIE/ICP etchers. These systems provide functional delayering for your packaged devices or wafers.

www.bseteq.com

CAMECA

Booth # 526

World-leading supplier of high-performance analytical instrumentation for semiconductor research and process control: CAMECA® IMS series Secondary Ion Mass Spectrometers are used for depth-profiling of implants with sub-nm resolution. LEAP® Atom Probes perform atomic scale quantitative 3d mapping of dopant distributions, analysis of high-k films, measurement of clustering at interfaces...

www.cameca.com

Checkpoint Technologies

Booth # 305

Checkpoint Technologies develops and manufactures innovative optical failure analysis tools used by semiconductor manufacturers to improve the speed and reliability of integrated circuits. Our products, which range from OEM components to fully-integrated, enduser solutions, reflect our fundamental commitment to maximizing value by adapting technology to meet specific market needs.

www.checkpointtechnologies.com

COMPANY DESCRIPTIONS

Comet Industrial X-ray Modules

Booth # 317

Comet Industrial X-ray (IXM) supplies top-quality metal ceramic X-ray tubes and generator sets for NDT, Security, Semiconductor, Electronics, Sorting, and Gauging markets. Known for reliability and performance, our products help customers detect defects accurately. Based in Shelton, CT, we leverage our location near tech hubs and institutions to collaborate closely with clients, delivering innovative, sustainable, and high-quality solutions tailored to their needs.

www.xray.comet.tech

Comet Technologies USA Inc.

Booth # 703

Building on decades of experience and an unflinching passion for technology, Comet Yxlon is a globally leading company for industrial X-ray and CT system solutions. Manufacturers in the aerospace, automotive, electronics, and semiconductor industries rely on Comet Yxlon to maximize their product quality and the efficiency of their production. From cutting-edge inspection systems to the award-winning user interface Gemini – at Comet Yxlon, we support our customers with innovative products and services that help them shape future markets.

www.yxlon.comet.tech

Contech Solutions Inc.

Booth # 720

Contech Solutions Inc is a leader in design and manufacturing of Semi-conductor test interface products.

At Contech Solutions we are committed to quality, customer satisfaction and delivery of superior products

www.contechsolutions.com

Covalent

Booth # 705

Covalent Metrology is a disruptive analytical services laboratory and digital platform based in Sunnyvale, California. Its mission is to empower technological innovation with superior data and insights. Covalent now has over 500 customers in 30+ industries.

www.covalentmetrology.com

Deben UK Limited

Booth # 319

Deben, a global leader in scientific instrumentation since 1986, empowers researchers worldwide with high-quality, in-situ solutions for microscopy and X-ray applications. Based in the UK, our innovative suite of products - including renowned tensile/compression stages, heating and cooling stages, SEM detectors, and electrostatic beam blankers significantly enhances the capabilities of existing SEM, optical, XRD, and X-ray CT instruments.

www.deben.co.uk

Denton Vacuum

Booth # 308

Denton Vacuum provides innovative deposition and etch equipment solutions built on standard platforms for any production level, from pilot production to high volume manufacturing. With a long history of innovation in thin film

deposition and etch technologies, we provide production proven systems in diverse applications including delayering, laser and IR detectors, AR/VR and flexible displays, precision optics, and superconductors to match customer needs.

www.dentonvacuum.com

Eurofins EAG Laboratories

Booth # 519

From product development to failure analysis, EAG Engineering Sciences provides the advanced testing capabilities and technical expertise needed to solve complex engineering challenges. Our state-of-the-art analytical laboratories and experienced scientists help customers identify root causes, optimize performance, and accelerate successful product commercialization.

www.eag.com

EuQlid, Inc

Booth # 616

www.euqlid.io

Eurofins | MASER

Booth # 521

Eurofins MASER is an independent service provider. Since 1993 we have offered Reliability Test and Failure Analysis Services to the semiconductor industry. We offer a wide range of qualification procedures (AEC Q100/JEDEC/etc) to qualify your products according to the latest international standards. Our state-of-the-art Failure Analysis laboratory will fulfill all F/A needs for you. We can support you with your daily Reliability Test or Failure Analysis challenges.

www.maser.nl

Evident Scientific

Booth # 818

www.evidentscientific.com

Excillum

Booth # 310

Excillum is the global source for X-ray innovation. We develop, manufacture, and service the world's brightest and most advanced industrial and laboratory X-ray sources. In close collaboration with best-in-class scientific, industrial and system integration partners we enable new science, improve medicine and enhance manufacturing. Headquartered in Stockholm, Sweden, Excillum is pushing the limits of X-ray source technologies since 2007.

www.excillum.com

Hamamatsu Corporation

Booth # 301

Hamamatsu Corporation is the North American subsidiary of Hamamatsu Photonics K.K. (Japan), a leading manufacturer of devices for the generation and measurement of infrared, visible, UV light, and x-rays. We offer specialized systems for semiconductor failure analysis and other applications. We also offer photomultiplier tubes, photodiodes, image sensors, cameras, and light sources.

www.hamamatsu.com

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Precise preparation of challenging materials and sensitive devices
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- **Thermo Scientific™ nProber System for SEM-based nanoprobeing**
Accurate defect isolation to improve TEM success rate
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thermo scientific

COMPANY DESCRIPTIONS

Herzan LLC **Booth # 311**

Herzan's mission is to help researchers maximize the quality of data collected by their instrumentation. To achieve this goal, Herzan designs research-grade environmental solutions to remove acoustic, vibration, and EMI noise under any ambient lab conditions.

www.herzan.com

Hi-Rel Laboratories **Booth # 507**

Located in Spokane, Washington, Hi-Rel Laboratories is an independently owned and operated corporation, whose main concentration of activity is in the materials evaluation of the micro-electronic oriented phases of commercial, aerospace and defense industries.

www.hrlabs.com

Hitachi High-Tech America, Inc. **Booth # 504**

Hitachi High-Tech America, Inc. ("HTA") is a privately-owned global affiliate company that operates within the Hitachi Group Companies. HTA sells and services semiconductor manufacturing equipment, analytical instrumentation, scientific instruments, and bio-related products as well as industrial equipment and materials, systems products, and IoT solutions.

www.hitachi-hightech.com/us/en/

Hitachi Power Solutions Co., Ltd. **Booth # 527**

Hitachi Power Solutions develops ultrasonic inspection systems and transducers. With nearly 50 years of experience in non-destructive testing and over 40 years as an ultrasonic inspection system manufacturer, we provide reliable solutions for quality assurance. Our FineSAT and WaferLine series support a wide range of electronic device, material, and wafer inspection applications with high-speed, high-accuracy performance.

www.hitachi-power-solutions.com/en/index.html

ibss Group **Booth # 524**

The GV10x Downstream Asher and Mobile Cubic Asher reduce carbon & hydrocarbon contamination 10 to 20 times more effectively than traditional methods at vacuum pressures. Artifacts in SEM images are gone; the microscope maintains high resolution and beam stability. Black scan squares are eliminated in SEM images. Carbon contamination in FIB and TEM systems can be controlled as well.

www.ibssgroup.com

Imina Technologies SA **Booth # 708**

Imina Technologies SA is a Swiss manufacturer of robotic solutions for the characterization of samples under optical and scanning electron microscopes. Its cutting-edge products and high-quality services position the company as one of the leaders in the semiconductor test equipment market for nanoprobeing and electrical failure analysis.

imina.ch

InfraTec infrared LLC **Booth # 427**

Dresden based InfraTec GmbH Infrarotsensorik und Messtechnik was founded in 1991 and employs more than 230 employees and has its own design, manufacturing and distribution capabilities.

InfraTec's Infrared Measurement division is one of the leading suppliers of commercial thermal imaging technology. Beside high-end camera series Imager® the VarioCAM® High Definition and TaxisIR® product family, the company offers turnkey thermographic solutions, for instance to observe solar thermal absorbers.

www.infraTec-infrared.com

(iST) Integrated Service Technology Inc. **Booth # 314**

Founded in 1994, iST began its business from IC circuit debugging and modification and gradually expanded its scope of operations, including Failure Analysis, Reliability Assurance, Material Analysis and so on. iST has offered full-scope verification and analysis services to the IC engineering industry, its customers cover the whole spectrum of the electronics industry from IC design to end products.

www.istgroup.com

Intlvac Thin Film **Booth # 620**

Intlvac Thin Film designs advanced thin film deposition and ion beam etching systems for semiconductor research, failure analysis, and prototyping. Our Nanoquest platform supports precise broad beam delayering of integrated circuits, helping expose BEOL-to-FEOL layers for analysis, reverse engineering, and device development.

www.intlvac.com

JEOL USA **SPONSOR** **Booth # 416**

Since 1949, the JEOL legacy has been one of outstanding innovation in developing instruments used to advance scientific research and technology. JEOL has 70 years of expertise in the field of electron microscopy, more than 60 years in mass spectrometry and NMR spectroscopy, and more than 50 years of e-beam lithography leadership.

www.jeolusa.com

JIACO Instruments **Booth # 525**

Since 2016, JIACO Instruments' MIP decapsulation system has set the standard for complex semiconductor package decapsulation. Now vital for precision failure analysis and reliability testing, MIP was recognized in the 2022 JEDEC JESD22-B120 revision and is supported by 30+ papers solving key decap challenges. In 2024, we launched the MIP+ etching system to address emerging challenges in advanced package and die etching.

www.jiaco-instruments.com

COMPANY DESCRIPTIONS

Keysight Booth # 721

Keysight Technologies is a Fortune 500 company and a leading supplier of test and measurement solutions throughout the world. At ISTFA we will be showing (along with our partner Newark Electronics) our economical essential bench products, which includes oscilloscopes, power supplies, function generators, and digital multimeters.

www.keysight.com

Kleindiek Inc. Booth # 614

Technological advances in various fields require highly precise positioning techniques with exceedingly high stability, extraordinarily low drift, and a high degree of maneuverability. Especially the recent advances in the semiconductor industry but also in the materials and life sciences, require high-precision tools for standard tasks such as nano-probing for device & in situ materials characterisation, as well as TEM sample lift-out for rootcause analyses or structure elucidation.

www.kleindiek.us

Laser Thermal Analysis, Inc. Booth # 325

Laser Thermal is a precision instrumentation company developing advanced tools for measuring thermal properties across a wide range of materials and length scales. Founded on academic research, we use optical technologies to deliver fast and accurate thermal analysis. Our mission is to revolutionize thermal metrology analysis by delivering an intuitive, high-throughput solution that ensures precise, repeatable results, without the need for specialized expertise.

www.laserthermal.com

Liquid Instruments Booth # 806

www.liquidinstruments.com

Materials Analysis Technology Inc. (MA-tek) Booth # 800

MA-tek provides professional materials analysis, failure analysis, reliability testing, surface analysis, and physical & chemical characterization services. As an independent third-party laboratory, MA-tek supports industries including semiconductors, advanced packaging, electronic components, automotive electronics, energy batteries, and biomedical materials, helping customers identify root causes, verify product quality, and improve reliability from R&D to mass production.

www.ma-tek.com/home

Mel-Build Booth # 318

www.melbuild.com/

Microsanj Booth # 309

Microsanj is a thermal metrology company specializing in high-resolution thermoreflectance imaging for RF, microwave, millimeter-wave, and power semiconductor devices. Founded in 2007, Microsanj has built a worldwide installed base of 100+ customers, from leading chipmakers and defense contractors to top research universities, all relying on SanjSCOPE™ systems to solve thermal problems that conventional tools can't address. Our systems deliver sub-micron, full-field temperature mapping with transient resolution as fast as 500 picoseconds — making them uniquely suited for GaN HEMTs, MMICs, InP lasers, and other high-frequency devices where localized heating directly impacts performance and reliability. The NOSH-TDTR™ module extends this capability to passive materials characterization, enabling thermal conductivity measurement of substrates, thin films, and multilayer structures critical to advanced RF packaging.

www.microsanj.com

MSS USA CORP Booth # 618

en.msscrops.com

Nanoscience Instruments Booth # 425

Visit us at booth #425 to discover how our class-leading microscopy solutions will elevate your material analysis!

www.nanoscience.com

NenoVision Booth # 610

NenoVision is dynamic manufacturer of in-situ correlative microscopy, developing LiteScope', unique Atomic Force Microscope designed for 'plug & play' integration into the Scanning Electron Microscopes (SEMs). The connection of AFM and SEM merges the strengths of both techniques and excels in a variety of modes, such as topography, mechanical, electrical, magnetic or piezoelectric properties, resulting in effective workflow and complex sample analysis.

www.nenovision.com

Neocera Magma LLC Booth # 801

Neocera Magma LLC is a technology company that serves the semiconductor failure analysis community. The Magma-Magnetic Microscope detects shorts, opens, resistive opens and leakages in ICs with sub threshold power, and eliminates the need for de-processing. It can non-destructively streamline fault isolation, significantly reducing time-to-market for your devices.

www.neoceramagma.com

Nippon Scientific Co., Ltd. Booth # 704

www.nscnet.co.jp/index.html

COMPANY DESCRIPTIONS

Nordson Test & Inspection

Booth # 820

Nordson SONOSCAN is a leader and innovator in Acoustic Microscopy (AM) technology. Nordson SONOSCAN manufactures acoustic microscopy instruments to nondestructively inspect and analyze materials, devices, components and products. Nordson SONOSCAN's C-SAM systems provide unmatched accuracy for the inspection of products for hidden internal defects such as delaminations, etc.

www.nordson.com/en/divisions/test-and-inspection

Oxford Instruments

Booth # 410

Oxford Instruments is a leading provider of high-technology tools and systems for research and industry, enabling the acceleration of breakthroughs that create a brighter future for our world. With a global presence, we are committed to innovation and excellence, offering cutting-edge solutions that permit researchers and industry professionals to achieve innovations in their fields.

www.oxinst.com

Park Systems Inc.

Booth # 515

Park Systems is a world-leading manufacturer of atomic force microscopy (AFM) systems with a complete range of products for researchers and industry engineers in the biology, materials research, semiconductor and data storage industries. Park's AFM provides the highest data accuracy at nanoscale resolution, superior productivity, and the lowest operating cost, thanks to its unique technology and innovative engineering.

www.parksystems.com

Photothermal Spectroscopy Corp

Booth # 517

Photothermal Spectroscopy Corp (PSC) pioneered the breakthrough technique of Optical Photothermal Infrared (O-PTIR) technology eliminating key limitations of traditional IR Spectroscopy providing submicron spatial resolution for IR and transmission-like FTIR quality spectra in non-contact reflection mode. PSC has developed the world's first simultaneous Infrared and Raman microscope and imaging system, providing IR and Raman data from the same spot, same time, same submicron spatial resolution.

www.photothermal.com

Physical Electronics

Booth # 608

www.phi.com

PLT Instruments Pte Ltd

Booth # 426

www.pltinstruments.com

PVA TePla

Booth # 716

PVA TePla is a high tech company specializing in metrology and material solutions. We develop and manufacture innovative solutions for the production, refinement, and inspection of advanced materials, serving industries from semiconductors to aerospace.

www.pvatepla.com

QualiTau

Booth # 604

www.qualitau.com

Quantum Focus Instruments Corporation

Booth # 718

www.quantumfocus.com

QuantumDiamonds

Booth # 316

QuantumDiamonds GmbH is a Munich-based semiconductor metrology company developing and manufacturing advanced semiconductor testing systems based on quantum sensing. Its systems enable non-destructive, high-resolution 3D imaging of electrical current flow in complex chip architectures, helping chipmakers worldwide improve yield, accelerate failure analysis, and enable next-generation device development.

www.qd-st.com

Quartz Imaging

Booth # 405

Microscopy Laboratory Imaging and Management Software

www.quartzimaging.com

QZabre

Booth # 701

We use a single atomic defect in diamond to image current densities with sub 30 nm spatial resolution via the magnetic field they produce. This is quantum sensing with single nitrogen vacancies. We offer both the specialized diamond scanning probes and the full microscopes.

Our company is an ETH Spin-off based in Zurich founded in 2018. We have more than 15 microscopes in operation all over the world and are increasing our focus on providing solutions for the semiconductor industry.

www.qzabre.com

Raith America, Inc.

Booth # 606

RAITH leads in maskless nanofabrication and characterization systems, serving global industrial and scientific customers. Our technologies drive innovation in connectivity, mobility, green energy, and healthcare. With extensive experience, we offer high-precision writing and imaging tools for efficient research and industrial solutions. RAITH's advanced systems enable customers to develop and produce cutting-edge devices, contributing to key applications in the digital future.

www.raith.com

BSET EQ has proudly served the semiconductor failure analysis industry since 1998.

Our decapsulation tools were the **first** to expose second bonds in BGA, **first** to perform damage free exposure of first and second bonds with copper technologies, and **first** to perform damage free exposure silver wires and other Ag technologies.

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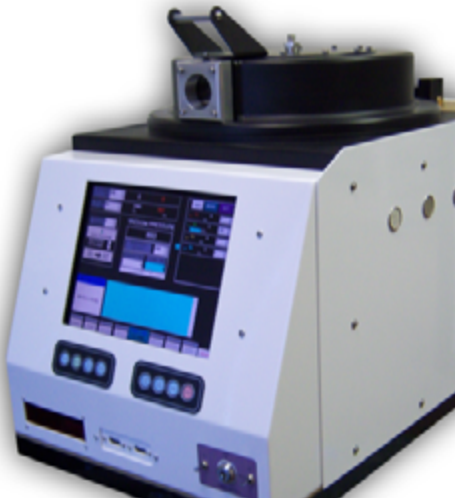
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- Automatic ultrasonic sample cleaning routines
- Precision temperature control at sample stage
- O₂ only process, where applicable
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Our FA series represents our top of the line reactors for single package or wafer processing in the semiconductor industry.

We deliver top notch performance and value at an affordable price to our potential and existing customers.

We have developed a standard format and footprint for the tool that houses all of the most commonly requested high end options for RIE, ICP and MW based processes.

We are happy to work to meet demanding customer specifications with regards to hardware, tooling and process performance, at all times.

COMPANY DESCRIPTIONS

RKD Engineering

Booth # 621

RKD Engineering Corp, Inc. offers the full range of mixed acid and solutions decapsulators for gold, copper, aluminum and silver wire bonded packages.

www.rkdengineering.com

RKD Systems

Booth # 601

High Precision, high speed milling systems to remove IC packages from either a PC board or a chip onFlex while keeping the ball bonds intact. High precision die thinning and polishing down to less than a micron. The ability to measure remaining silicon thickness to 0.5 microns

Robson Technologies Inc. (RTI)

Booth # 321

Manufacturer of custom designed FA test interface solutions, including test sockets/pin blocks, test fixtures/presses, Automated Curve Tracer test systems, and PCB DUT/Adapter boards. All RTI solutions are designed, machined and built by RTI in California, USA, shipped worldwide.

www.testfixtures.com

Samco Inc.

Booth # 626

www.samcointl.com

scia Systems

Booth # 808

scia Systems is a technology leader in thin-film process equipment based on advanced ion beam and plasma technologies. The systems are used for coating, etching, and cleaning processes with nanometer resolution and have been successfully implemented in various high-tech industries worldwide, including microelectronics, MEMS, and precision optics industries. Due to their flexible and modular design, the process equipment can be configured for research applications as well as high volume productions.

www.scia-systems.com

Seiwa Optical of America

Booth # 424

For over 50 years, Seiwa Optical has been a provider of optical solutions. Our vision systems, such as cameras and microscopes, can be customized for the user's unique application requirements such as wafer inspection and biological inspection

www.seiwaamerica.com

SELA USA Inc.

Booth # 408

Full range of cleaving solutions. For over 30 years SELA develops and delivers advanced cleaving solutions for failure analysis and yield management in the semiconductor industry and analytical purposes in research laboratories and universities around the world. SELA's patented Nano Cleaving, Micro Cleaving and Perfect Cleaving technologies address emerging and challenging requirements of the cross-section for a wide variety of structures, materials and substrates.

www.sela.com

SEMICAPS Pte Ltd

Booth # 707

SEMICAPS designs and manufactures the world's leading fault localization microscopes. Trusted by over half of the top 10 global semiconductor companies, our laser scanning, optical and emission systems are essential for design-debug, yield enhancement, and failure analysis. With flexible configurations for wafer, package, and die-level inspection, we analyze the most advanced nodes- 3nm and beyond.

www.semicaps.com

Siemens

Booth # 505

Market-leading IC test solutions from Siemens EDA target the most critical defect mechanisms to improve quality and reliability across the silicon lifecycle and help accelerate yield ramp. Tessent yield learning efforts reduce the time and cost of failure analysis. When unlocked at product ramp and volume production, time to root cause can be reduced by 70%. www.eda.sw.siemens.com/en-US/ic/tessent

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Sigray, Inc.

Booth # 612

Sigray is a San Francisco Bay Area based company founded with the aim to accelerate scientific progress by providing powerful, synchrotron-grade research capabilities in its laboratory x-ray systems. Our state-of-the-art Apex XCT system provides the highest image clarity and fastest throughput of any 3D X-ray system on the market, with pixel sizes down to 0.2 microns (200 nm) and large PCB & full 300 mm wafer handling capabilities.

www.sigray.com

SmarAct Inc

Booth # 320

SmarAct Metrology develops sophisticated equipment to serve high-accuracy positioning and metrology applications in research and industry in optics, semiconductors and life sciences. Our broad portfolio includes miniaturized interferometers, optical encoders for displacement measurements and powerful electrical nanoprobe for the characterization of the smallest semiconductor technology nodes.

www.smaract.com

Ted Pella, Inc.

Booth # 300

For over 50 years, Ted Pella, Inc. has served the microscopy community globally across a broad range of applied sciences and applications. Our product line for use in R&D and F.A. labs in semiconductor / optoelectronics was expanded in 2017 with the addition of the former South Bay Technology products. Then expanded again more recently with the acquisition of the former LatticeGear® line of scribing and cleaving solutions.

www.tedpella.com

COMPANY DESCRIPTIONS

TeraView LTD

Booth # 511

Provider of Electro Optical Terahertz Pulse Reflectometry (EOTPR) technology.

www.teraview.com

Tescan

Booth # 605

Tescan develops advanced imaging and analysis tools, including SEM, FIB-SEM, STEM, Laser, and micro-CT systems, that empower scientists and lab leaders in an era of accelerated discovery. We are a global team of engineers, scientists, and designers building not only high-performance instruments, but the solutions around them. Through intuitive, user-focused workflows, we make complex research clearer, faster, and more accessible, advancing a more human approach to scientific progress.

www.tescan.com

Thermo Fisher Scientific

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Booth # 501

Thermo Fisher Scientific delivers industry-leading solutions and workflows for semiconductor failure analysis, characterization, and metrology. For more than 40 years, we have supported leading semiconductor manufacturers and developers across logic, memory, packaging, and power device technologies. Our broad portfolio spans electron microscopy and electrical fault isolation techniques, enabling customers to solve complex device challenges from research through high-volume manufacturing.

www.thermofisher.com/EM

Tiptek, LLC

Booth # 603

Tiptek: North America's Largest Nanoprobe Provider

www.tiptek.com

TrInity Analysis Tech Co., Ltd.

Booth # 609

www.mesoscope.com.tw

Trion Technology

Booth # 420

Trion Technology, Inc. manufactures plasma etch, photoresist strip, and plasma deposition systems that process packaged devices, wafer segments, wafers, and small electronic parts. Our products are modular systems that are designed for optimum reliability, flexibility, and affordability to address a wide variety of processes for materials such as Silicon, GaAs, InP, and InN. Applications include failure analysis, MEMS, photonics, and semiconductor processes.

www.triontech.com/

ULTRA TEC

SPONSOR

Booth # 419

ULTRA TEC is a designer, manufacturer and supplier of surface and sample preparation equipment for the world's failure analysis and related high tech fields. Our ASAP-1 product line has become the de-facto standard for selected area preparation, backside thinning and mechanical decap applications. Our ULTRAPOL line of polishers provides key advantages for cross-section, parallel polishing and backside thinning. We provide microscopy tools and a wide range of consumables to support our products.

www.ultratecusa.com

Vectara

Booth # 804

www.vectara.com

Waygate Technologies

Booth # 719

www.bakerhughes.com/waygate-technologies

XEI Scientific

Booth # 509

Evactron® De-Contaminators by XEI Scientific are world leaders in remote RF plasma cleaning of carbon contamination. A unique, energy-efficient hollow cathode plasma source generates oxygen or hydrogen radicals plus UV for dual-action removal of adventitious carbon at turbo pump pressures. The new Evactron E16, E50, and U50 De-Contaminators outperform other remote plasma cleaners and are easy to use, powerful, compact, and low cost.

www.evactron.com

ZEISS Microscopy

SPONSOR

Booth # 409

ZEISS has the most comprehensive portfolio of light, X-ray and electron/ion beam imaging technologies in the industry. Solutions span from wafer fab through packaging and assembly. ZEISS materials characterization and non-destructive FA solutions deliver actionable information to meet industry challenges for next-generation devices.

www.zeiss.com/microscopy

Zurich Instruments USA, Inc.

Booth # 513

Zurich Instruments is a test and measurement company based in Zurich, Switzerland, developing and selling measurement instruments and delivering customer support in key markets around the world, either directly or with carefully selected partners. We make cutting-edge instrumentation for scientists and technologists in advanced labs who are passionate about phenomena that are often notoriously difficult to measure.

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