



Welcome to the 3rd Annual SWTest Asia in Taiwan

Jerry Broz, Ph.D.
General Chair, SWTest Asia
Advanced Probing Systems, Inc.

Clark Liu
Technical Program Chair, SWTest Asia
Taiwan MJC Co., Ltd.

Hsinchu, Taiwan, October 26-28, 2022

It's Great to Be Back in Taiwan !



Update for 2023 - Save the Date !



SWTest Asia will return to Taiwan !
November 1 to 3, 2023
Hsinchu, Sheraton

Health and Safety at SWTest Asia 2022

Masks are Required at ALL Times during the Conference
(**protect** our close-knit, international test community)



HANDS



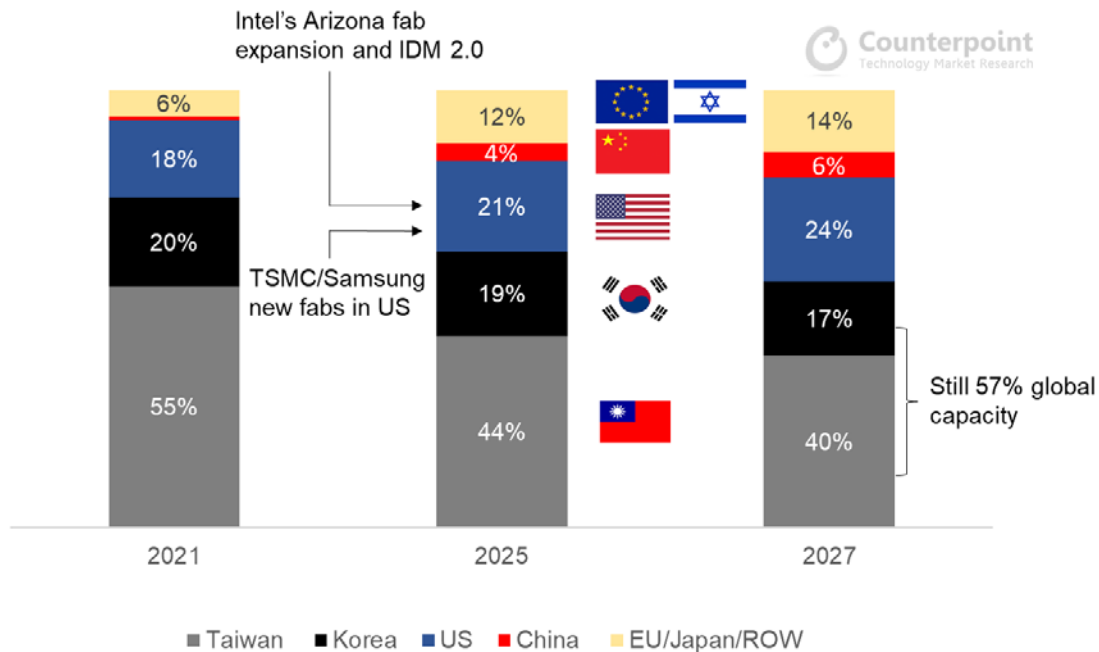
FACE



SPACE

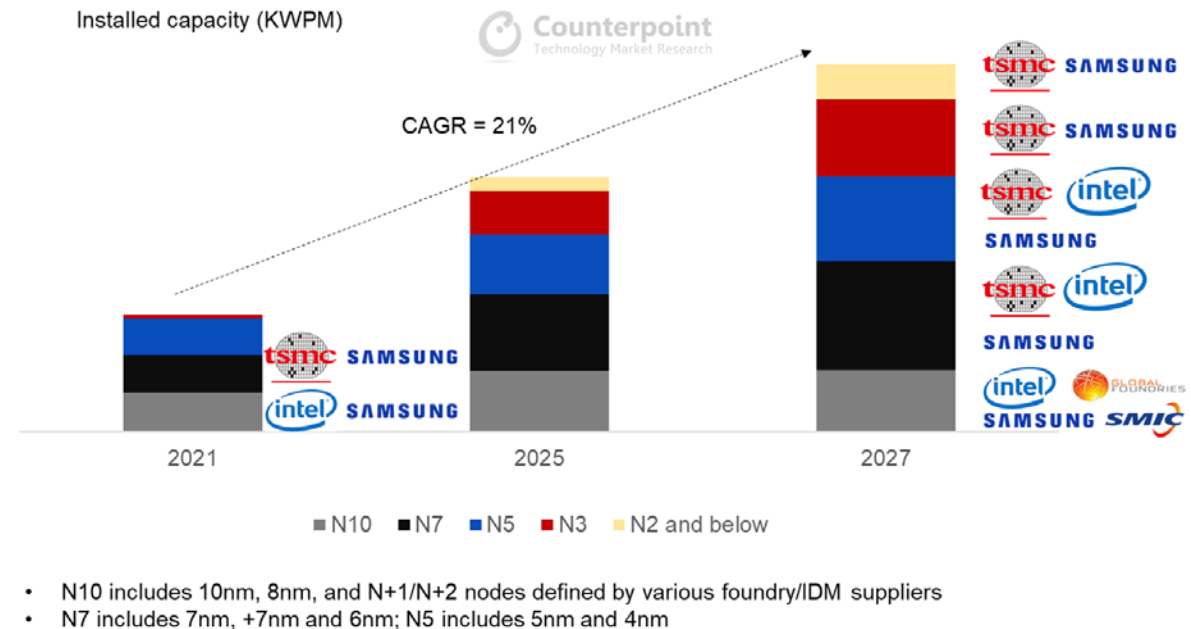
A Global Semiconductor Initiative

Leading-edge logic (non-memory) capacity breakdown by locations
(wafer manufacturing at 10nm and below; Foundry and IDM)



Global logic fab capacity breakdown in leading-edge nodes

(wafer manufacturing at 10nm and below; Foundry and IDM)



SWTest Conferences and Expos

- **SWTest Conferences are Probe Technology Forums ...**

- Premier Conferences for Wafer Test Professionals and Probing Technologists.
- Balanced mixture of manufacturers and suppliers as well as collaborative presentations
- Practical solutions to real problems that are faced by test engineers



Held During
Every October
In Asia Region

- **Thirty-Two Combined Years of Probe Technology ...**

- SWTest Asia brings a “workshop style” conference to Asia Semiconductor community.
- SWTest in San Diego has hosted more than 10,000 worldwide professionals to discuss probe technology.

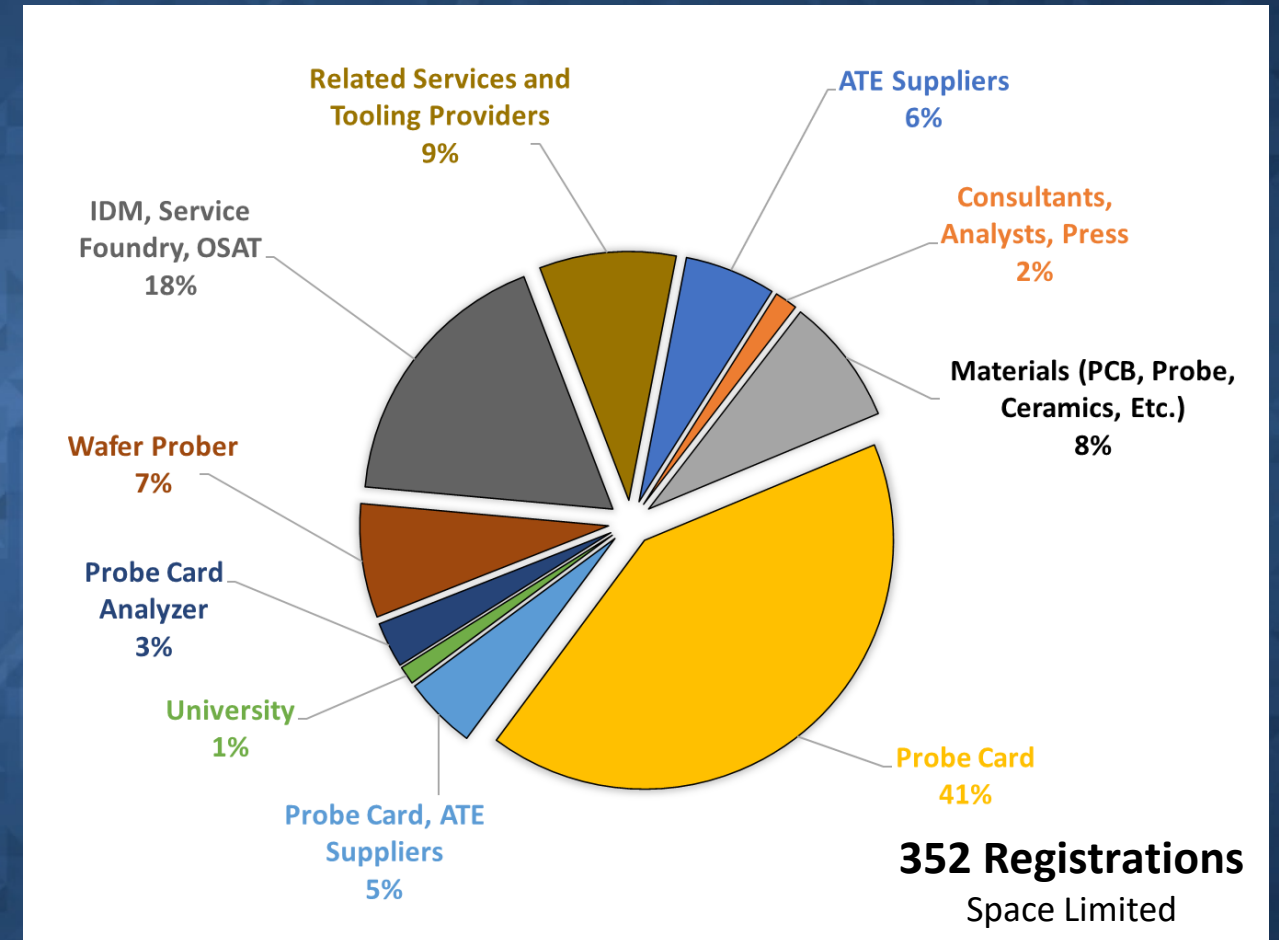
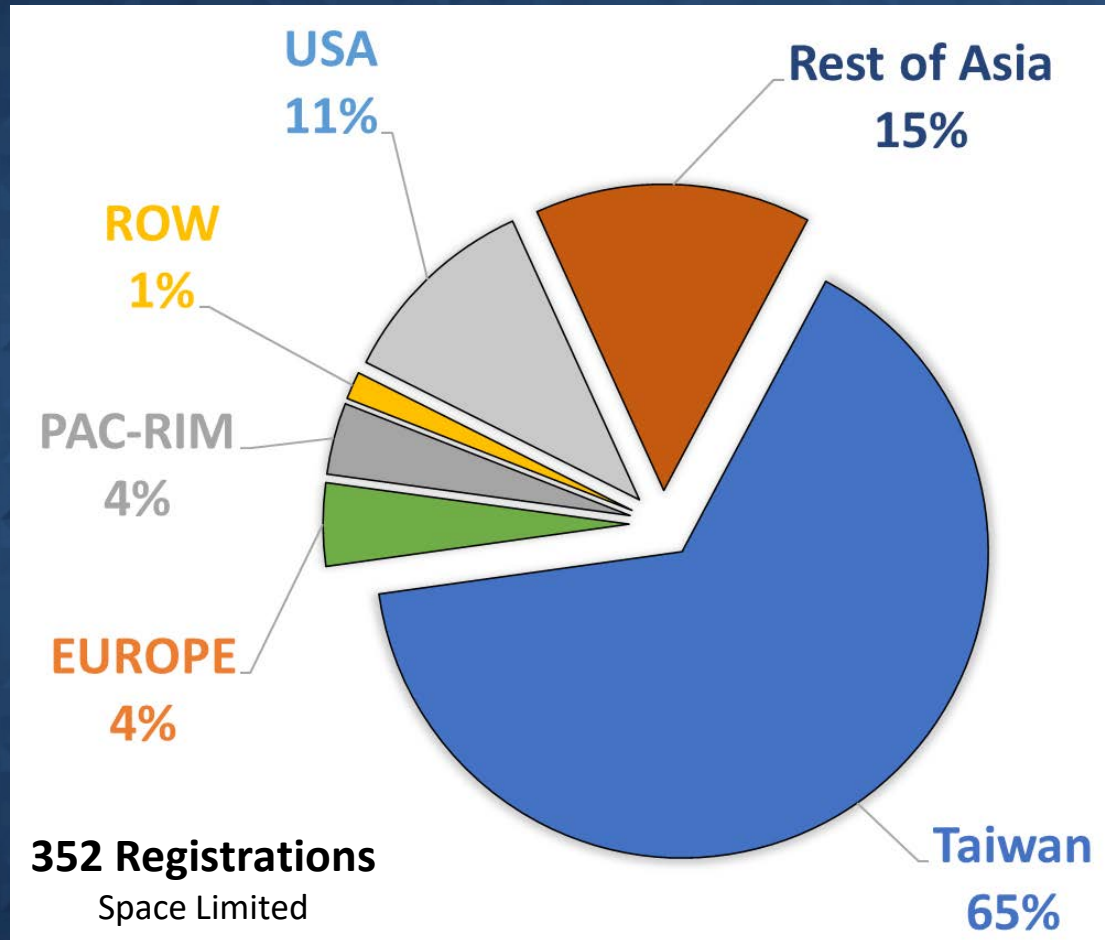


Held During
Every June
In San Diego, CA

- **Informal and Networking Conferences ...**

- Focused technical exchange
- Great social activities and informal discussions
- Meet new people and have a little fun !

SWTest Asia 2022 Demographics



SWTest Asia Chairs and Committee

- **SWTest Asia Chairs**

- Dr. Jerry Broz, General Chair (Advanced Probing Systems, Inc. – USA)
- Clark Liu, SWTest Asia Technical Program Chair (Taiwan MJC Co., Ltd. – Taiwan)
- Rey Rincon, Technical Program Co-Chair (PTSL, Inc. – USA)
- Maddie Harwood, Finance and Conference Management Chair (SWTest Conferences)

- **SWTest Asia Steering Committee**

- Nobuhiro Kawamata (Formfactor, K.K. – Japan)
- Eric Chia-Cheng Chang (Intel Corporation – USA)
- Alex Yang (MPI Corporation – Taiwan)
- Alan Ferguson, Ph.D. (Oxford Lasers, Inc., United Kingdom)
- Joey Wu (SWTest Member at Large – Taiwan)

SWTest Asia Benefit Tournament



Wednesday, October 26, 2022
Support Travel Grants for Students



Welcome !

3rd Annual SWTest Asia | Taiwan, October 27-28, 2022

SWTest Asia 2022 on October 27 to 28

Thursday, October 27

- **Technical Program with 2-podium sessions**
 - 1300 – 1315: Welcome to SWTest Asia 2022
 - 1315 – 1445: Getting Manufacturing Smarter
 - 1600 – 1730: Meeting Process Challenges
- **SWTest Asia EXPO 2022 with key suppliers**
- **Technology Showcase Presentations by Platinum Sponsors**
- **Welcome Reception in Expo Hall**

Friday, October 28

- **Keynote from Colley Hwang, Founder and Chairman, Digitimes-Asia**
- **Technical Program with 3-podium sessions**
 - 1100 – 1230: Test Challenges and Solutions
 - 1400 – 1530: Power, Magnets, and Memory
 - 1600 – 1730: Testing for the Next Generation
 - Awards for “Best Presentations” selected by committee.
- **SWTest Asia EXPO 2022 with key suppliers**
- **Technology Showcase Presentations by Platinum Sponsors**
- **Closing Reception in Expo Hall**

Platinum Sponsors



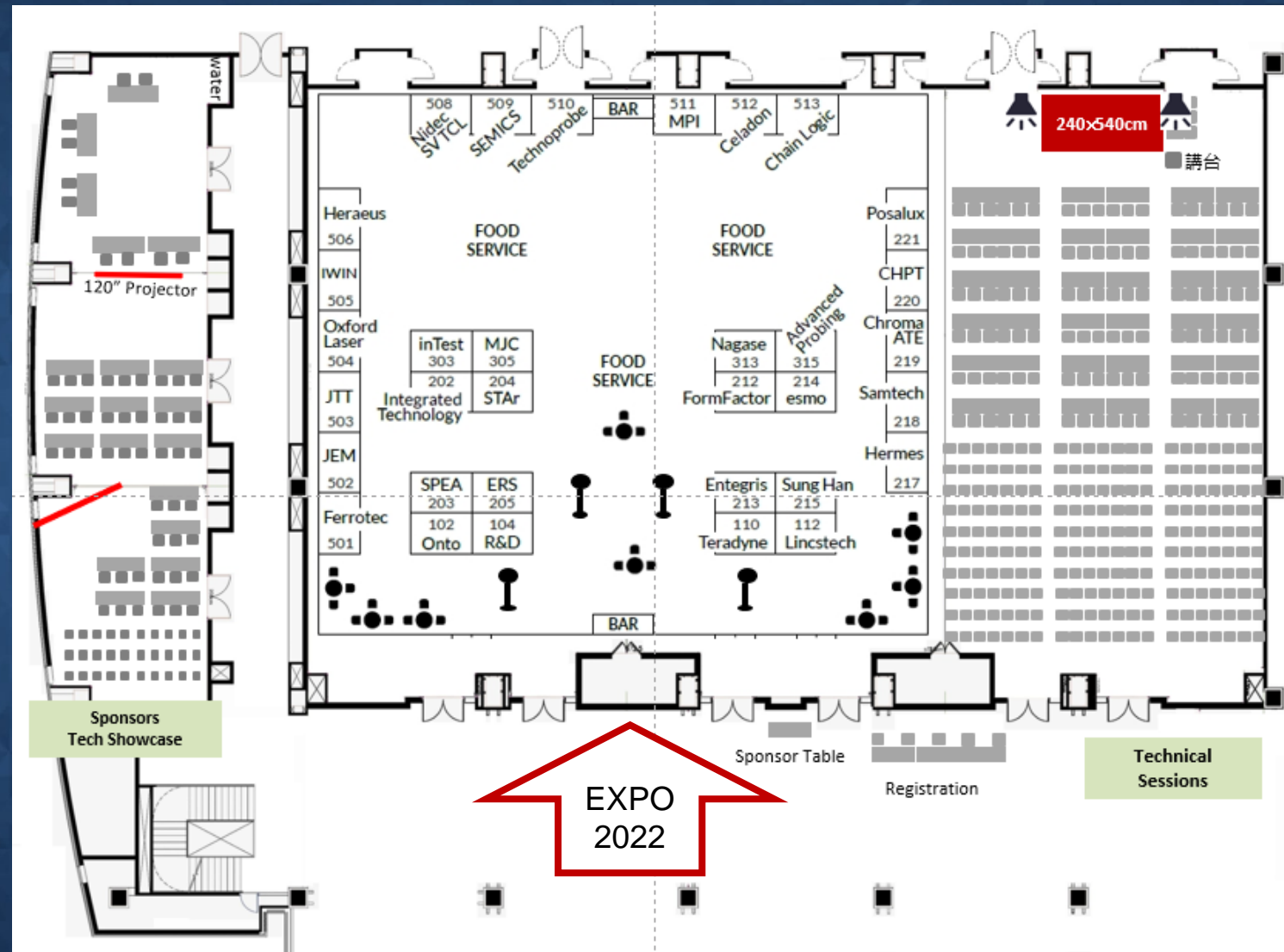
Gold Sponsors

The logo for ERS, featuring the letters "ERS" in a bold, black, sans-serif font. To the right of the text is a stylized circular graphic composed of two concentric arcs, one blue and one red.The logo for posalux, with the word "posalux" in a lowercase, yellow, sans-serif font. Below it, in a smaller, black, sans-serif font, are the words "SWISS MADE" followed by a small red Swiss flag icon.The logo for inTEST EMS, with "inTEST" in a bold, red, sans-serif font and "EMS" in a grey, sans-serif font. Below "EMS" is the text "an inTEST Company" in a very small, red, sans-serif font.The logo for CHPT, featuring the letters "CHPT" in a bold, blue, italicized, sans-serif font. To the right is a stylized blue swoosh that curves around a small orange dot.The logo for MPI, with the letters "MPI" in a bold, yellow, sans-serif font.The logo for CELADON, with the word "CELADON" in a light blue, sans-serif font. The letters are connected by thin horizontal lines, giving it a modern, digital feel.The logo for Heraeus, with the word "Heraeus" in a grey, sans-serif font.The logo for SEMICS, with the word "SEMICS" in a bold, orange, italicized, sans-serif font. The letters are partially enclosed by a grey circular shape.The logo for Nidec SVTCL, with "Nidec" in a green, italicized, sans-serif font, "SV" in a purple, sans-serif font, and "TCL" in a black, sans-serif font.

Silver Sponsors

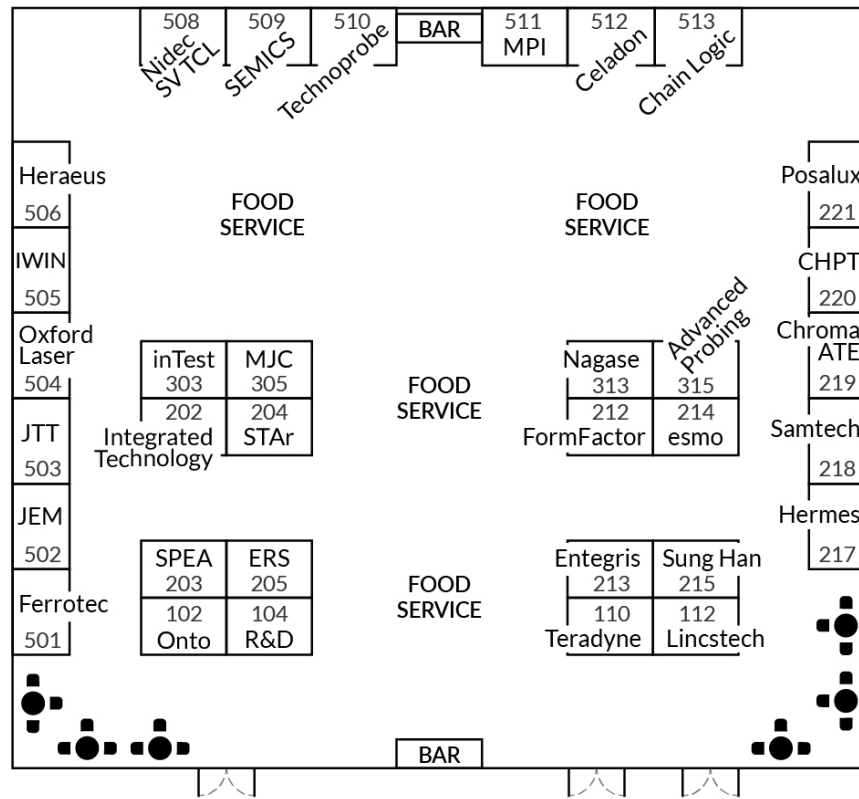


Map of the Area



SWTest Asia 2022 in Taiwan Expo

EXPO HALL



SWTest Asia Expo – Exhibitors

- Advanced Probing Systems, Inc.
- Celadon Systems, Inc.
- Chain-Logic International Corp.
- Chroma ATE, Inc.
- CHPT, Co., Ltd.
- ERS electronic GmbH
- esmo Taiwan Co., Ltd
- Ferrotec Material Technologies Corp.
- FormFactor Inc.
- Heraeus Deutschland GmbH & Co. KG
- Hermes Testing Solutions Inc.
- Integrated Technology Corporation
- International Test Solutions / Entegris
- inTEST EMS
- IWIN Co., Ltd.
- JEM Taiwan Probe Corp.
- JTT Test Solutions Partner Co., Ltd
- Linstech Co., Ltd.
- MPI Corporation
- NAGASE (Taiwan) Co., Ltd.
- Nidec SV TCL
- Onto Innovation
- Oxford Lasers Ltd.
- Posalux SA
- R&D Altanova, Advantest Group
- Samtec
- SEMICS Inc.
- SPEA S.p.A.
- STAr Technologies, Inc.
- Sung Han Co., Ltd
- Taiwan MJC
- Technoprobe
- Teradyne



Technical Program

SWTest Asia 2022

Thursday, October 27, 2022

Hsinchu, Taiwan, October 26-28, 2022

Thursday, October 27, 2022

10:45 to 12:15 – Getting Manufacturing Smarter

**Probecard Challenges for Expanding Arrays of Fine Pad Pitch Devices to
Test Under Wide Temperature Range**

Pouya Dastmalchi, PhD, and Cameron Harker (Formfactor – USA)

TestGeni - Test Development Intelligent Automation

Senthil Kumar Dhamodharan, Nachiappan Gnanasambandam,
Vaishnavi Saravanan (Caliber Interconnect Solutions Pvt Ltd - India)

Advanced Testing Technology for Future Requirement

Scott Huang (Kore Semiconductor Co., Ltd. - China)

3rd Annual SWTest Asia | Taiwan, October 27-28, 2022

Thursday, October 27, 2022

15:30 to 16:00 – Meeting Process Challenges

Thermal Stability and Properties Of PALYSIUM Revolutionary Probe Material

Dr. Jonas Fecher (Heraeus Deutschland GmbH & Co. KG - Germany)

New Generation of Kelvin Spring Pins

Lambert Brost (Technoprobe - USA) and Ming-Ting Wu (Microfabrica)

Probe Card Market Dynamics in a Turbulent World

John West and Lin Fu (Yole Intelligence - United Kingdom)

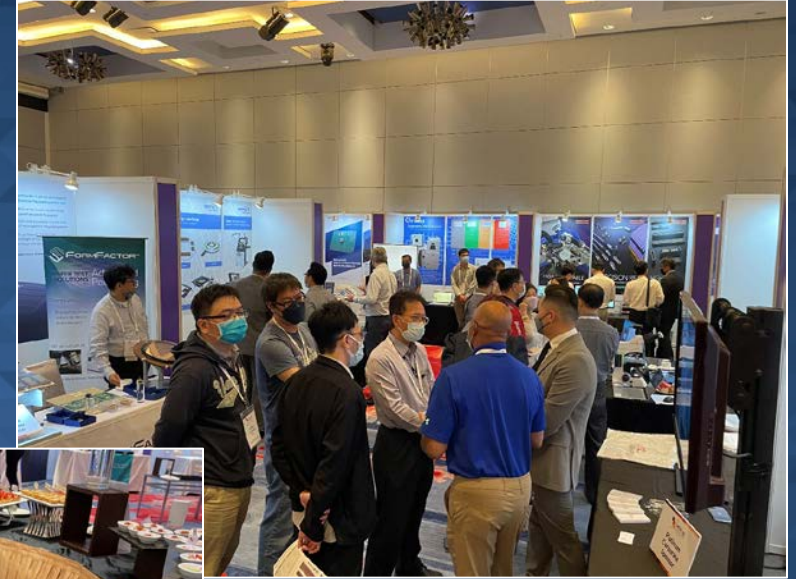
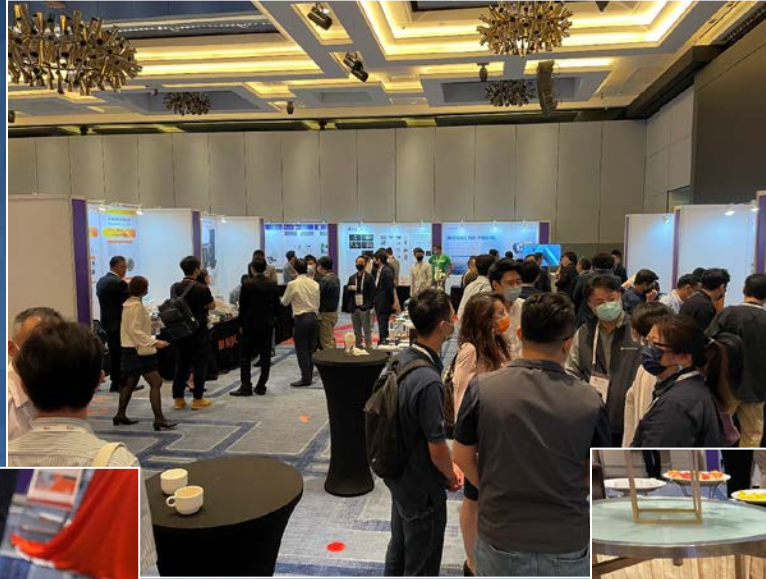
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SWTest Asia 2022 – Technical Program Day 1



3rd Annual SWTest Asia | Taiwan, October 27-28, 2022

SWTest Asia 2022 – Expo Day 1



3rd Annual SWTest Asia | Taiwan, October 27-28, 2022



Technical Program

SWTest Asia 2022

Fridaday, October 28, 2022

Hsinchu, Taiwan, October 26-28, 2022

Friday, October 28, 2022

9:00 to 9:15 – Welcome to SWTest Asia

Dr. Jerry Broz (SWTest Asia General Chair) and Clark Liu (SWTest Program Chair)

9:15 to 10:15 – Visionary Keynote Speaker

**Semiconductor, the Information and Communication
Technology (ICT) Supply Chain and Geopolitics**

Colley Hwang

Digitimes Founder and Chairman

DIGITIMES
asia



3rd Annual SWTest Asia | Taiwan, October 27-28, 2022

Friday, October 28, 2022

11:00 to 12:30 –Test Challenges and Solutions

Validation of 55GHz Octal-site Wafer Test Probecard for 5G mmWave device

Peter Cockburn (Cohu, Inc. - United Kingdom)

Aging parametric testers versus determining measurement system vitality

Mike Palumbo and Jeff Arasmith (Technoprobe - USA)

**High Parallelism Probe Card on V93K Direct-Probe™ System to
Increase Testing Throughput on Automotive IC**

John Kao (Formfactor - Taiwan)

Friday, October 28, 2022

14:00 to 15:30 – Power, Magnets, and Memory

Testing challenges for latest SiC and GaN devices

Elia Petrogalli (SPEA S.p.A. - Italy)

**Wafer Level Magnetic Testing of STT-MRAM for Process Control
and Chip Sorting in Volume Manufacturing**

Siamak Salimy (Hprobe - France) and Henry Chung (HTSI - Taiwan)

**Next Generation DRAM Temperature Requirements
and Impacts to Full Wafer Contactor Probe Card Performance**

Myung Jin Lee (FormFactor - USA) and Hyun Ae Lee (Samsung Electronics - Korea)

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Friday, October 28, 2022

16:00 to 17:30 – Testing for the Next Generation

Challenges and Improvement Actions for HPC Wafer Testing

Oscar Lee, Harvey Lin, and Hung I Tsai (TSMC - Taiwan)

Known Good Die Memory Wafer Test Challenge Beyond DDR5 4GHz/8Gbps Speed

Alan Liao (FormFactor - USA)

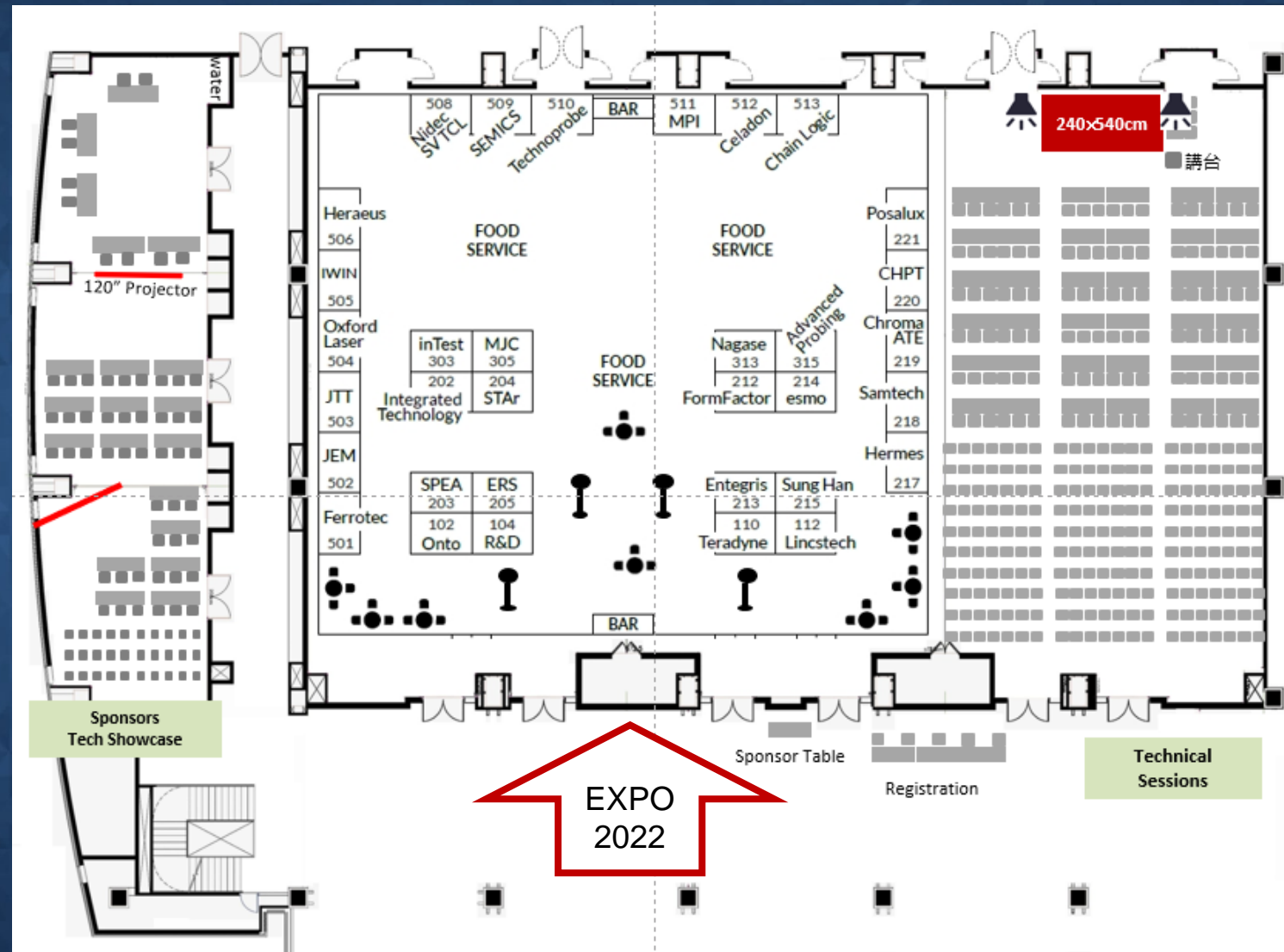
High wattage dissipation under temperature

A new method for test evaluation

Klemens Reitingner (ERS electronic GmbH - Germany)

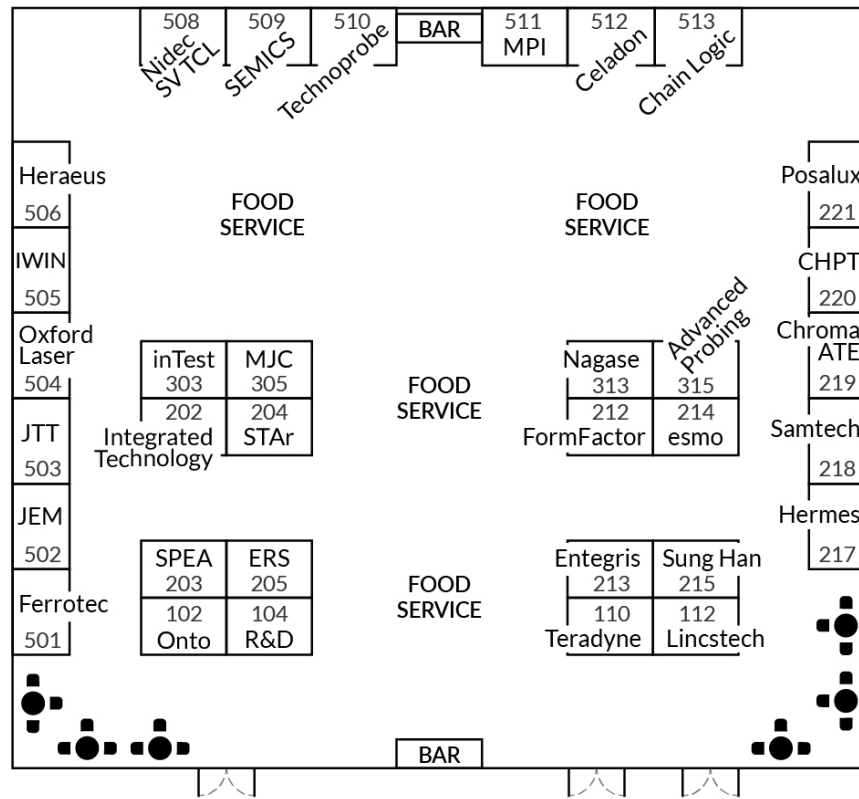
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Map of the Area



SWTest Asia 2022 in Taiwan Expo

EXPO HALL



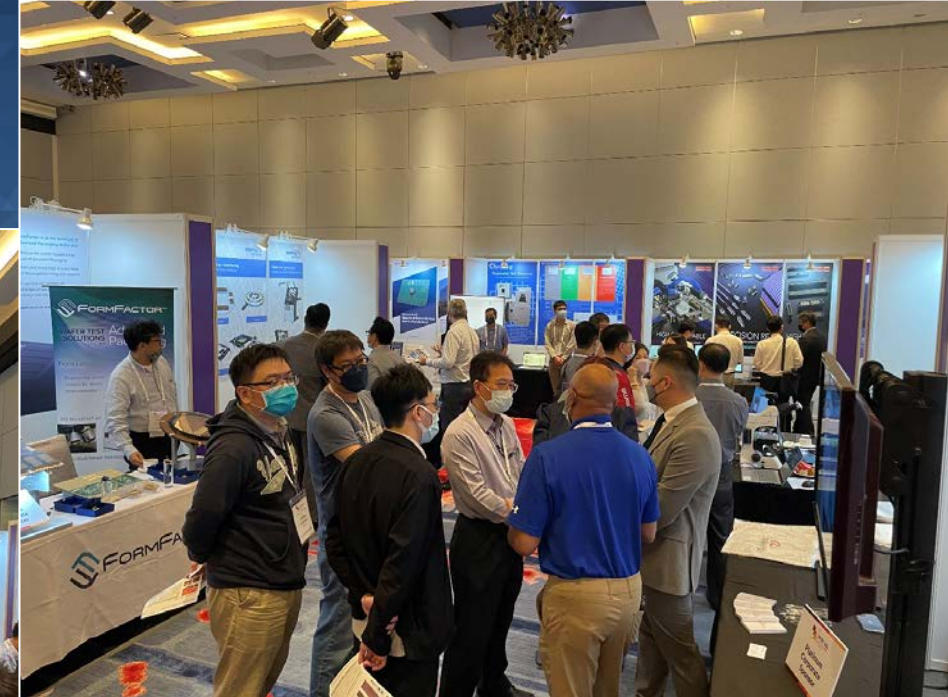
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- Ferrotec Material Technologies Corp.
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- Hermes Testing Solutions Inc.
- Integrated Technology Corporation
- International Test Solutions / Entegris
- inTEST EMS
- IWIN Co., Ltd.
- JEM Taiwan Probe Corp.
- JTT Test Solutions Partner Co., Ltd
- Linstech Co., Ltd.
- MPI Corporation
- NAGASE (Taiwan) Co., Ltd.
- Nidec SV TCL
- Onto Innovation
- Oxford Lasers Ltd.
- Posalux SA
- R&D Altanova, Advantest Group
- Samtec
- SEMICS Inc.
- SPEA S.p.A.
- STAr Technologies, Inc.
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- Technoprobe
- Teradyne

SWTest Asia 2022 in Taiwan – Technical Program



SWTest Asia 2022 in Taiwan - Expo



3rd Annual SWTest Asia | Taiwan, October 27-28, 2022

Update for 2023 - Save the Dates !



**SWTest Asia will
return to Taiwan !**

**Nov 1 to 3, 2023
Hsinchu, Sheraton**



**SWTest will be
Back in San Diego !**

**June 4 to 7, 2023
Omni La Costa, California**

Thanks for your Support !

- **Contact the SWTest Asia Team with any questions**

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