

# Preliminary Program Overview, rev2.7 *(Subject to updates and changes)*

|                   |                                                                                                                                                                                                      |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   | <b>DAY 1: December 2, 2025</b>                                                                                                                                                                       |
| 8:00am - 9:00am   | Registration & Refreshment                                                                                                                                                                           |
| Venue             | Resort World West Ballroom at Basement 2                                                                                                                                                             |
| 9:00am - 9:10am   | Welcome Speech: Dr Eric Phua, EPTC 2025 General Chair                                                                                                                                                |
| 9:10am - 9:20am   | Opening Speech: Prof Jeffery Suhling (EPS President-Elect)                                                                                                                                           |
| 9:20am - 10:05am  | Keynote 1: Dr Radha Nagarajan, SVP/CTO, Marvell<br><b>Scaling AI Infrastructure with Advanced Optical Interconnects</b>                                                                              |
| 10:05am - 10:25am | 20min Coffee Break @ West Ballroom Foyer                                                                                                                                                             |
| 10:25am - 11:10am | Keynote 2: Audrey Charles, SVP, Lam Research<br><b>Interconnect Horizons: Wafer and Panel Innovation and Industry Partnerships to Unlock AI's Next Step</b>                                          |
| 11:10am - 12:10pm | Panel Session: Advances and Challenges in Metrology and Test for Heterogeneous Integration<br>Moderator: Sia Choon Beng (FormFactor)                                                                 |
| 12:10pm - 12:30pm | Technology Solution Presentation: by Lam Research (Diamond Sponsor)                                                                                                                                  |
| Venue             | West Ballroom Foyer                                                                                                                                                                                  |
| 12:30pm - 1:30pm  | Lunch @ West Ballroom Foyer                                                                                                                                                                          |
|                   | Exhibition Hall Opens (LEO 1-4 Function Room at Level 1)                                                                                                                                             |
| Venue             | Resort Worlds West Ballroom at Basement 2                                                                                                                                                            |
| 1:30pm - 2:15pm   | Keynote 3: Pax Wang, TD Director, UMC<br><b>Rewiring Edge AI System Efficiency with Advanced Packaging</b>                                                                                           |
| 2:15pm - 2:30pm   | Technology Solution Presentation: by Applied Materials (Platinum Sponsor)                                                                                                                            |
| 2:30pm - 3:15pm   | Keynote 4: Prof. Harald Kuhn, Director, Fraunhofer Institute of Electronic Nano Systems ENAS<br><b>Driving Innovation Through Hetero-Integration: Technologies, Challenges and Future Directions</b> |
| 3:15pm - 3:40pm   | 20min Coffee Break @ West Ballroom Foyer                                                                                                                                                             |
| 3:40pm - 3:55pm   | Technology Solution Presentation: by KLA-Tencor (Platinum Sponsor)                                                                                                                                   |
| 3:55pm - 4:55pm   | Panel Session: Co-Packaged Optics: The Next Inflection Point for Advanced Packaging<br>Moderator: Surya Bhattacharya (IME)                                                                           |
| 4:55pm - 5:45pm   | Day 1 Wrap-Up and Networking Reception @ Outside West Ballroom                                                                                                                                       |
| 6:30pm - 8:00pm   | VIP Dinner @ Tangerine, Equarius Hotel (by invitation only)                                                                                                                                          |

|                   | DAY 2: December 3, 2025                                                                                                                                           |                                                                                                                                                |                                                                                                    |                                                                                                                            |                                                                                                                     |                                                                                                                             |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Venue             | AQUARIUS 2-3                                                                                                                                                      | AQUARIUS 4                                                                                                                                     | GEMINI 1                                                                                           | GEMINI 2                                                                                                                   | PISCES 1                                                                                                            | PISCES 2                                                                                                                    |
| 08:30am - 10:00am | PDC1                                                                                                                                                              | PDC2                                                                                                                                           | PDC3                                                                                               | PDC4                                                                                                                       | PDC5                                                                                                                | PDC6                                                                                                                        |
|                   | Advanced Packaging for Chiplets, Heterogenous Integration and CPO<br><b>Dr John Lau (Unimicron)</b>                                                               | Photonic Components and Packaging Technologies for Data Center, Communications, Sensing and Displays<br><b>Dr Torsten Wipiejewski (Huawei)</b> | Advanced Packaging for MEMS and Sensors<br><b>Dr Horst Theuss (Infineon)</b>                       | Current and Future Challenges and Solutions in AI & HPC System and Thermal Management<br><b>Dr Gamal Refai-Ahmed (AMD)</b> | Overview of Characterization Techniques for 3D HI Circuit Packaging<br><b>Prof Ali Shakouri (Purdue University)</b> | Design-on Simulation Technology for Reliability Prediction of AP<br><b>Prof K.N. Chiang (National Tsing Hua University)</b> |
| 10:00am - 10:30am | 30min Coffee Break outside Exhibition Hall (LEO 1-4)                                                                                                              |                                                                                                                                                |                                                                                                    |                                                                                                                            |                                                                                                                     |                                                                                                                             |
| 10:30am - 12:00pm | PDC1 (con't)                                                                                                                                                      | PDC2 (con't)                                                                                                                                   | PDC3 (con't)                                                                                       | PDC4 (con't)                                                                                                               | PDC5 (con't)                                                                                                        | PDC6 (con't)                                                                                                                |
| 12:00pm - 1:15pm  | EPS Luncheon @ PISCES 2 to Virgo 3                                                                                                                                |                                                                                                                                                |                                                                                                    |                                                                                                                            |                                                                                                                     |                                                                                                                             |
| 1:15pm - 2:25pm   | Technology Innovation Showcase - Session 1 (70 min)   Quiz & Prizes Included                                                                                      |                                                                                                                                                |                                                                                                    |                                                                                                                            |                                                                                                                     |                                                                                                                             |
| Venue             | AQUARIUS 3                                                                                                                                                        | AQUARIUS 4                                                                                                                                     | GEMINI 1                                                                                           | GEMINI 2                                                                                                                   | PISCES 1                                                                                                            | PISCES 2                                                                                                                    |
| 2:25pm - 3:10pm   | <b>Materials and Processing 1</b>                                                                                                                                 | <b>TSV/Wafer Level Packaging 1</b>                                                                                                             | <b>Mechanical Simulation &amp; Characterization 1</b>                                              | <b>Interconnection Technologies 1</b>                                                                                      | <b>Advanced Packaging 1</b>                                                                                         | <b>Emerging Technologies</b>                                                                                                |
| 2:25pm - 2:40pm   | <b>P372 (111)-Oriented Nanotwinned/ Nanograined Bilayer Cu for Post-Q-time Low Temperature Cu-Cu Bonding</b>                                                      | <b>P168 Thermally Reliable Through Glass Via Filling with Ni-Fe Alloy for Advanced 3D Packaging (MAT)</b>                                      | <b>P317 Toward lifetime prediction under variable load conditions in power electronics</b>         | <b>P266 Surface Treatment for Wafer Bonding using Atmospheric Vapor Plasma Technology</b>                                  | <b>P170 Development of Embedded Bridge Die interposer Using FO Packaging for HI of NPUs and HBMs</b>                | <b>P326 3D Surface Ion Trap Process Development for Quantum Applications</b>                                                |
|                   | Peng, Gangqiang<br>City University of Hong Kong, Hong Kong                                                                                                        | Yang, Fan<br>Hanyang University, Korea                                                                                                         | Horn, Tobias Daniel<br><br>Micro Materials Center, Fraunhofer ENAS, Chemnitz, Germany              | Lee, Seokjun<br><br>Samsung Electronics, Korea                                                                             | Kim, Jay nepes, Korea                                                                                               | Li, Hongyu<br><br>Institute of Microelectronics, A*STAR, Singapore                                                          |
| 2:40pm – 2:55pm   | <b>P167 Enhancing Wafer Bonding Strength via Surface and Dielectric Modification Using Plasma Activation Process</b>                                              | <b>P319 RDL-first FOWL P Development for III-V Semiconductor Chips in RF Applications</b>                                                      | <b>P255 Board level solder reliability and package stress for TSiCV UBM/bump IC package design</b> | <b>P185 Study of Extremely Low Temperature Organic Hybrid Bonding with Grain Engineered Cu</b>                             | <b>P287 HI of High-Performance Compute, Memory and Photonic Engine Chiplets on Large Molded Interposer package</b>  | <b>P161 2.5D Cryogenic Packaging for Advanced Quantum Processors</b>                                                        |
|                   | Park, Jaehyung<br><br>Samsung Electronics, Korea                                                                                                                  | Ho, Soon Wee David<br><br>Institute of Microelectronics, A*STAR, Singapore                                                                     | Mandal, Rathin<br><br>Institute of Microelectronics, A*STAR, Singapore                             | Maruyama, Yoshiki<br><br>Resonac Corporation                                                                               | Chai, Tai Chong<br><br>Institute of Microelectronics, A*STAR, Singapore                                             | Jaafar, Horhanani<br><br>Institute of Microelectronics, A*STAR, Singapore                                                   |
| 2:55pm – 3:10pm   | <b>P356 Analysis of SiO<sub>2</sub> surface chemistry by quasi-in situ XPS during N<sub>2</sub> plasma activation for SiO<sub>2</sub>/SiO<sub>2</sub> bonding</b> | <b>P302 Mitigating Connected PAD Corrosion in Hybrid Bonding</b>                                                                               | <b>P138 Design of Wire Bonding Schemes for Reliability of CQFP Packages under Vibration Test</b>   | <b>P355 Bond line thickness stability of Cu sintering for automotive power module packaging</b>                            | <b>P199 Ultra-low-TTV Glass Carrier and Temporary Bonding Method to Enable Wafer Ultra-thinning</b>                 | <b>P208 Wafer-level Processes for the Manufacturing of Encapsulated Flexible Polymer-Based Implants</b>                     |
|                   | Jin, Renxi                                                                                                                                                        | Chew, Soon Aik<br><br>IMEC, Belgium                                                                                                            | Ma, Yiyi                                                                                           | Kim, Byeongchan                                                                                                            | Chang, Ya Huei                                                                                                      | Costina, Andrei                                                                                                             |
|                   | Institute of Microelectronics of the Chinese Academy of Sciences, China                                                                                           |                                                                                                                                                | STMicroelectronics, Singapore                                                                      | Korea Institute of Industrial Technology, Korea                                                                            | Corning incorporated                                                                                                | Fraunhofer IZM                                                                                                              |

|                 |                                                                                                                                                                                                                                |                                                                                                                                                                            |                                                                                                                                                                                                         |                                                                                                                                                                                     |                                                                                                                                                                                             |                                                                                                                                                                                |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 | DAY 2: December 3, 2025 (con't)                                                                                                                                                                                                |                                                                                                                                                                            |                                                                                                                                                                                                         |                                                                                                                                                                                     |                                                                                                                                                                                             |                                                                                                                                                                                |
| 3:10pm - 4:40pm | Interactive Presentation 1 (Poster), Exhibition and Coffee Break outside Exhibition Hall (LEO 1-4)                                                                                                                             |                                                                                                                                                                            |                                                                                                                                                                                                         |                                                                                                                                                                                     |                                                                                                                                                                                             |                                                                                                                                                                                |
| Venue           | AQUARIUS 3                                                                                                                                                                                                                     | AQUARIUS 4                                                                                                                                                                 | GEMINI 1                                                                                                                                                                                                | GEMINI 2                                                                                                                                                                            | PISCES 1                                                                                                                                                                                    | PISCES 2                                                                                                                                                                       |
| 4:40pm -5:40pm  | Materials and Processing 2                                                                                                                                                                                                     | Thermal Management and Characterization 1                                                                                                                                  | Mechanical Simulation & Characterization 2                                                                                                                                                              | Interconnection Technologies 2                                                                                                                                                      | Advanced Packaging 2                                                                                                                                                                        | Assembly and Manufacturing Technology 1                                                                                                                                        |
| 4:40pm – 4:55pm | <b>P343 Chip Stacking: Impact of Chip Spacing in C2W hybrid bonding on Temporary Bonding and Debonding</b><br><br>Sharma, Jaibir<br><br>Institute of Microelectronics, A*STAR, Singapore                                       | <b>P251 DIMM Thermal Performance Enhancement with Heat Spreader and Advanced Cooling Solutions</b><br><br>Nallavelli, Ramesh<br><br>Micron Technology Operations India LLP | <b>P241 Electric-Thermal Coupled Transient Simulation for a Schottky Diode with Temperature Dependent Resistivity of Epitaxial Layer</b><br><br>Yahaya, Khairul Ikhsan<br>Nexperia Hong Kong            | <b>P188 A Novel Interface Characterization Technique for Hybrid Bonding Process Optimization</b><br><br>Sameshima, Junichiro<br>Toray Research Center, Inc., Japan                  | <b>P354 Innovation and Efficiency in 3D Packaging Enabled by Optimized Integration Processes</b><br><br>Varga, Ksenija<br><br>EV Group, Austria                                             | <b>P201 High-Density Interconnect RDL-FPC Hybrid Substrate for Compact SiP Packaging</b><br><br>Li, Jeng-Ting<br><br>Unimicon Technology Corp., Taiwan                         |
| 4:55pm – 5:10pm | <b>P382 Water Vapor Permeation in Low-Temperature Processable Polyimide Materials for Reliable Polymer HB</b><br><br>Nomura, Kota<br><br>Toray Industries Inc., Japan                                                          | <b>P223 CFD and Surrogate Model-Driven Optimization of Two-Phase Immersion Cooling Configurations</b><br><br>Jalali, Ramin<br><br>National Yang Ming Chiao Tung University | <b>P332 Prediction of Void-induced Crack Propagation within Underfill using the Meshless Material Point Method</b><br><br>de Jong, Sjoerd Douwe Medard<br><br>Delft University of Technology            | <b>P174 Gas-Free &amp; Nano TiO2-Coated Ag Bonding Wire for Replacing Au Wire</b><br><br>Park, Soojae<br><br>OxWires Co., Ltd., Korea                                               | <b>P275 Seamless Heterointegration of Components: Advancements in Fanout Technology and Thermal Solutions in SiP</b><br><br>Gernhardt, Robert<br><br>Fraunhofer IZM, Germany                | <b>P365 Novel UV-USP Laser Grooving and Plasma Dicing Separation Schemes for Next Generation Advanced Packaging</b><br><br>Evertsen, Rogier<br><br>ASMPT ALSI, The Netherlands |
| 5:10pm – 5:25pm | <b>P165 Novel TIM1 paste for Enhanced Thermal Management</b><br><br>Liao, Yile<br>Heraeus Materials Pte Ltd, Singapore                                                                                                         | <b>P153 Thermal Design and Power Dissipation of Advanced Package with Heterogenous Integration</b><br><br>Han, Yong<br>Institute of Microelectronics, A*STAR, Singapore    | <b>P271 Enhancing Predictive Accuracy of Warpage and Reliability for Advanced Packages by Modelling Accurate Poisson's Ratio in FEM</b><br>Che, Faxing<br>Micron Semiconductor Asia Operations Pte. Ltd | <b>P280 High-AR, Fine-Pitch Through-Mold Interconnect Fabrication for Heterogeneous Integration of HPC</b><br><br>Chia, Lai Yee<br>Institute of Microelectronics, A*STAR, Singapore | <b>P102 A Packaging Structure for an Antenna-in-Package Module</b><br><br>Tain, Ra-Min<br>Unimicon Technology Corporation, Taiwan                                                           | <b>P173 Is Flash Lamp Annealing a Relevant Wafer Debonding Technique?</b><br><br>Jedidi, Nader<br>IMEC, Belgium                                                                |
| 5:25pm – 5:40pm | <b>P362 Applicability of Both-Sided Flash Lamp Annealing (FLA) Method on Heat Treatment Cu Plating Thin Film and Low Dielectric Resin Films</b><br><br>Yi, Dong Jae<br>Graduate School of Engineering, Kanto Gakuin University | <b>P142 PIV-Based Study of Heat Dissipation and Clogging phenomenon of TiO<sub>2</sub> Nanofluid in Microchannels</b><br><br>Li, Tieliang<br><br>Xidian University, China  | <b>P294 Optimization of Warpage and Mechanical Properties for Stacked SiP Package</b><br><br>Liu, Zhen<br><br>Changsha AnMuQuan Intelligent Technology Co., Ltd, China                                  | <b>P144 Interfacial Reactions of BiIn and SnBi Solders React with Cu Substrate</b><br><br>Wang, Yi-Wun<br><br>Tamkang University, Taiwan                                            | <b>P303 Using WGAN-Based Data Augmentation Machine Learning Algorithm for Estimating the Equivalent Material Properties</b><br><br>Su, Qinghua<br><br>National Tsing Hua University, Taiwan | <b>P301 Cost efficient Infrared Laser debonding technology enabled by Si carrier reuse</b><br><br>Chancerel, Francois<br><br>IMEC, Belgium                                     |
| 5:40pm - 6:45pm | Sponsors/Exhibitors Appreciation and Networking Cocktail Session @ Virgo 4                                                                                                                                                     |                                                                                                                                                                            |                                                                                                                                                                                                         |                                                                                                                                                                                     |                                                                                                                                                                                             |                                                                                                                                                                                |

|                   |                                                                                                                                          |                                                                                                                                                        |                                                                                                                                                                                            |                                                                                                                                         |                                                                                                                                                           |                                                                                                                                          |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
|                   | DAY 3: December 4, 2025                                                                                                                  |                                                                                                                                                        |                                                                                                                                                                                            |                                                                                                                                         |                                                                                                                                                           |                                                                                                                                          |
| Venue             | AQUARIUS 3                                                                                                                               | AQUARIUS 4                                                                                                                                             | GEMINI 1                                                                                                                                                                                   | GEMINI 2                                                                                                                                | PISCES 1                                                                                                                                                  | PISCES 2                                                                                                                                 |
| 8:45am -9:45am    | <b>TSV/<br/>Wafer Level Packaging 2</b>                                                                                                  | <b>Smart Manufacturing and<br/>Equipment Technology 1</b>                                                                                              | <b>Mechanical Simulation &amp;<br/>Characterization 3</b>                                                                                                                                  | <b>Quality, Reliability &amp;<br/>Failure Analysis 1</b>                                                                                | <b>Advanced Packaging 3</b>                                                                                                                               | <b>Assembly and<br/>Manufacturing Technology 2</b>                                                                                       |
| 8:45am – 9:00am   | <b>P106 Adaptive Patterning®:<br/>Unlocking Scalable Density in<br/>Embedded Bridge Die Interposer</b>                                   | <b>P242 Connectivity-Guided<br/>Feasibility Masking for Efficient<br/>Chiplet Placement in 2.5D<br/>Packaging via Reinforcement<br/>Learning</b>       | <b>P177 Study on the Warpage<br/>Simulation and its Validation of<br/>Lidded FCBGA with Indium alloy TIM</b>                                                                               | <b>P140 Studies and Elimination of F-<br/>induced Corrosion on AI Bondpads<br/>and Wafer Fabrication Process<br/>Improvement</b>        | <b>P312 Characterization of PVD Seed<br/>Layer Contact Resistance in 2.0 to<br/>20.0 µm Vias</b>                                                          | <b>P273 Selective Post-Soldering<br/>Volume Adjustment for Improved<br/>Co-Planarity of C4 Bump Interfaces</b>                           |
|                   | Sandstrom, Clifford Paul<br><br>Deca Technologies,<br>United States of America                                                           | Kundu, Partha Pratim<br>Institute for Infocomm Research (I2R),<br>A*STAR, Singapore                                                                    | Park, Yoonsoo<br><br>Amkor technology, Inc., Korea                                                                                                                                         | Hua, Younan<br>WinTech Nano-Technology Services<br>Pte. Ltd., Singapore                                                                 | Carazzetti, Patrik<br><br>Evatec AG,<br>Switzerland                                                                                                       | Fettke, Matthias<br><br>PacTech GmbH,<br>Germany                                                                                         |
| 9:00am – 9:15am   | <b>P336 Novel Selective Copper<br/>Deposition Method for TGV Filling</b>                                                                 | <b>P263 Real-Time 3D Reconstruction<br/>for Wire Bonding Using Multi-View<br/>Projection and EM Polynomial<br/>Modelling</b>                           | <b>P233 A Shock Vibration Calculation<br/>Method Considering Viscoplastic<br/>Behavior of Packaging Systems</b>                                                                            | <b>P228 Annealing effect for Backside<br/>Metallization of SiC device</b>                                                               | <b>P150 112 Gbps SERDES Channel<br/>Design with 2.5D Sub-Micron BEOL<br/>Interconnect</b>                                                                 | <b>P178 Aerosol Jet Printing of a<br/>Copper Nanoparticle Ink by<br/>Controlling the Wetness of<br/>Aerosols</b>                         |
|                   | Seo, Jong Hyun<br><br>Cuprum Materials Inc., Korea                                                                                       | Chien, Yu Hsuan<br>ASMPT, Taiwan                                                                                                                       | Chen, Honghao<br><br>Nanjing University of Posts and<br>Telecommunications                                                                                                                 | Sameshima, Junichiro<br><br>Toray Research Center, Inc.,<br>Japan                                                                       | Ayers, Seann<br><br>Applied Materials,<br>United States of America                                                                                        | Zheng, Cheng<br>Nanyang Technological University,<br>Singapore                                                                           |
| 9:15am – 9:30am   | <b>P172 Thin Fan-Out Package<br/>Characterization and Evaluation</b>                                                                     | <b>P186 Defect Localization in Material<br/>Surfaces Using retinal CSRF kernel<br/>and Statistical Peak Profiling</b>                                  | <b>P113 Delamination Effect<br/>Investigations Near RDL and UBM in<br/>WLCSP Packages</b>                                                                                                  | <b>P306 Direct Bonding of Aluminum<br/>and Polypropylene in High-<br/>Reliability Structural Interfaces</b>                             | <b>P151 Advanced Bevel Deposition for<br/>Enhanced Yield and Cost Efficiency<br/>in Wafer-Level Bonding</b>                                               | <b>P162 Heat Release Tape<br/>Characterization for Panel Level<br/>Packaging</b>                                                         |
|                   | Lin, Vito<br><br>Siliconware Precision Industries Co.,<br>Ltd., Taiwan                                                                   | Hanmante, Udaykumar<br><br>Applied Materials                                                                                                           | Huang, Leo<br><br>Renesas, Taiwan                                                                                                                                                          | Park, Jin Woong<br><br>Hanbat National University,<br>Korea                                                                             | Xiao, Yun<br><br>Lam Research,<br>China                                                                                                                   | Shanmuga Sundaram, Shanthini<br><br>ST Microelectronics,<br>Singapore                                                                    |
| 9:30am – 9:45am   | <b>P111 Process-induced parasitic<br/>surface conduction (PSC) in SOI<br/>substrates for 3D-integrated RF<br/>front-end applications</b> | <b>P187 Enhancing Wire Bonding<br/>Quality Prediction with a Physics-<br/>Informed Ensemble Learning<br/>Framework</b>                                 | <b>P368 Feasibility Study of Stacked<br/>Sub-THz Band AiP Modules Based<br/>on Warpage and Stress Analysis</b>                                                                             | <b>P219 Nanoindentation tests and<br/>constitutive study of sintered nano-<br/>silver</b>                                               | <b>P307 Physics-Informed Graph<br/>Convolutional Neural Network for<br/>Scalable, and Accurate Thermal<br/>Analysis of 2.5D Chiplet-based<br/>Systems</b> | <b>P175 Reliability Evaluations of Pb-<br/>free Solder Joint Formed Using Sn-<br/>Ag-Cu solder ball and Sn-Bi-Ag<br/>solder paste</b>    |
|                   | Rotaru, Mihai Dragos<br><br>Institute of Microelectronics ASTAR,<br>Singapore                                                            | Lu, Hsin-Fang<br><br>ASMPT Limited,<br>Taiwan                                                                                                          | Tsukahara, Makoto<br><br>SHINKO ELECTRIC INDUSTRIES<br>CO., LTD., Japan                                                                                                                    | Yu, Huachen<br><br>Nanjing University of Posts and<br>Telecommunications,<br>China                                                      | Sahay, Rahul<br>Singapore University of Technology<br>and Design, Singapore                                                                               | Kim, Jahyeon<br>Korea Institute of Industrial<br>Technology (KITECH), Hanyang<br>University, Korea                                       |
| 9:45am -10:15am   | 30min Coffee Break outside Exhibition Hall (LEO 1-4)                                                                                     |                                                                                                                                                        |                                                                                                                                                                                            |                                                                                                                                         |                                                                                                                                                           |                                                                                                                                          |
| 10:15am -10:45am  | <b>Invited Talk 1:<br/>Dr Dielacher Bernd (EVG)</b><br>The Critical Role of Wafer Bonding<br>in Next-Generation Interconnect<br>Scaling  | <b>Invited Talk 2:<br/>Dr Taku Hanna (ULVAC Inc)</b><br>Polymer Fine Pattern Formation based<br>upon Plasma Etching for High Density<br>RDL Interposer | <b>Invited Talk 3:<br/>Dr Zhao Yi (ZSCT)</b><br>Advanced Packaging EDA's New<br>Paradigm: Collaborative Innovation<br>Revolution for Design-Simulation-<br>Verification in the 2.5D/3D Era | <b>Invited Talk 4:<br/>Inohara Masahiro (KIOXIA)</b><br>Accelerating the Evolution of NAND<br>Flash Memory with Bonding<br>Technologies | <b>Invited Talk 5:<br/>Dr Mushuan Chan (SPIL)</b><br>High Layer RDL Process Technology<br>for Heterogenous Integration Package                            | <b>Invited Talk 6:<br/>Dr Sajay BG (IME)</b><br>Heterogeneously Integrated WL<br>Processed CPO Engine for Next Gen<br>AI/ML Data Centers |
| Venue             | VIRGO 1-4                                                                                                                                |                                                                                                                                                        |                                                                                                                                                                                            |                                                                                                                                         |                                                                                                                                                           |                                                                                                                                          |
| 10:45am - 11:55am | Technology Innovation Showcase Session 2 (70 min)   Quiz & Prizes Included                                                               |                                                                                                                                                        |                                                                                                                                                                                            |                                                                                                                                         |                                                                                                                                                           |                                                                                                                                          |
| Venue             | VIRGO 1-4                                                                                                                                |                                                                                                                                                        |                                                                                                                                                                                            |                                                                                                                                         |                                                                                                                                                           |                                                                                                                                          |
| 11:55am -1:00pm   | EPTC Luncheon @ PISCES 2 to VIRGO 3                                                                                                      |                                                                                                                                                        |                                                                                                                                                                                            |                                                                                                                                         |                                                                                                                                                           |                                                                                                                                          |

|                 |                                                                                                                                                     |                                                                                                                                      |                                                                                                                                     |                                                                                                       |                                                                                                                 |                                                                                                                                             |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
|                 | DAY 3: December 4, 2025 (con't)                                                                                                                     |                                                                                                                                      |                                                                                                                                     |                                                                                                       |                                                                                                                 |                                                                                                                                             |
| 11:55am -1:00pm | EPTC Luncheon                                                                                                                                       |                                                                                                                                      |                                                                                                                                     |                                                                                                       |                                                                                                                 |                                                                                                                                             |
| Venue           | AQUARIUS 3                                                                                                                                          | AQUARIUS 4                                                                                                                           | GEMINI 1                                                                                                                            | GEMINI 2                                                                                              | PISCES 1                                                                                                        | PISCES 2                                                                                                                                    |
| 1:00pm -1:45pm  | Materials and Processing 3                                                                                                                          | Thermal Management and Characterization 3                                                                                            | Mechanical Simulation & Characterization 4                                                                                          | Interconnection Technologies 3                                                                        | Advanced Packaging 4                                                                                            | Quality, Reliability & Failure Analysis 3                                                                                                   |
| 1:00pm – 1:15pm | <b>P164</b> Metallurgical properties of Sn-3.0Ag-0.5Cu solder joints with Alumina layer deposition                                                  | <b>P191</b> Magnetohydrodynamic Liquid Cooling Embedded in PCBs for High-power Electronics                                           | <b>P252</b> Evaluating Dummy Die Sizes and Compound Adjustments to reduce Wafer Warpage in FOEB-T Packaging.                        | <b>P202</b> Comparative wear-out study and characterization methods for Pure and Alloyed Copper wires | <b>P320</b> Ka-Band Ultra-Short Die-to-Antenna Interconnect Enabled by Embedded Glass Fan-Out Packaging         | <b>P141</b> Short-Circuit Behavior and Failure Mechanism Analysis of Double-Trench SiC MOSFETs                                              |
|                 | Noh, Eun-Chae<br>Chungbuk National University, Korea                                                                                                | Feng, Huicheng<br>A*STAR, Singapore                                                                                                  | Zeng, TzuChi<br>Siliconware Precision Industries Co., Ltd., Taiwan                                                                  | Losacco, Gabriele<br>STMicroelectronics, Italy                                                        | Jin, Shengxiang<br>Peking University Shenzhen Graduate School, China                                            | Chen, Zhiwen<br>The Institute of Technological Sciences, Wuhan University, Wuhan, China                                                     |
| 1:15pm – 1:30pm | <b>P211</b> Wettability, Mechanical Properties and IMC of SiC nanoparticle-reinforced Sn-58Bi solders on Cu substrates under multiple reflow cycles | <b>P247</b> Thermal Performance of MEMS Cross-flow Heat Exchangers Subjected to External Heat Transfer                               | <b>P369</b> Characterization and Modelling of Inelastic Behavior of Epoxy Molding Compounds                                         | <b>P378</b> MDQFN™: Panel-Level QFN for Scalable, Cost-Effective Semiconductor Packaging              | <b>P227</b> Development of a Wideband Energy Harvesting Circuit Utilizing Terrestrial Digital Broadcast Signals | <b>P276</b> A Modified Test Vehicle Incorporating DNP-Induced Strain Gradients for Single-Specimen Fatigue Life Assessment of Solder Joints |
|                 | Yao, Wang<br>Harbin Institute of Technology                                                                                                         | Alnaimat, Fadi<br>United Arab Emirates University, United Arab Emirates                                                              | Tippabhotla, Sasi Kumar<br>Institute of Microelectronics, A*STAR, Singapore                                                         | Castillo, Chelo Veronica<br>Deca Technologies, Inc., United States of America                         | Tanaka, Hayato<br>Kyushu University, Japan                                                                      | Park, Hyeong-Bin<br>Hanyang University, Korea                                                                                               |
| 1:30pm – 1:45pm | <b>P304</b> Impact of Solder Powder Size on Cleaning Efficiency in Chip Resistor Assemblies for Future Advanced Packaging                           | <b>P270</b> Numerical Investigation of Embedded Micro-Pin Fin Two-Phase Liquid Cooling for Dual-Chip Stacks in HPC & AI Applications | <b>P220</b> Nanoindentation Test and Crystal Plasticity Finite Element Model of SAC305 Solder Joint Considering Crystal Orientation | <b>P157</b> Investigation of Cu bonding wire lifetime under accelerated temperature environments      | <b>P146</b> Optimization of Shielded Capacitive Power Transfer (S-CPT) Systems Using Slotted Electrodes         | <b>P147</b> Correlation Between Thermal Cycling Ramp Rates and its Respective Solder Joint Reliability                                      |
|                 | Parthasarathy, Ravi<br>ZESTRON Americas, United States of America                                                                                   | Patra, Chinmaya Kumar<br>Indian Institute of Technology Kharagpur, India                                                             | Liu, Lu<br>Nanjing University of Posts and Telecommunications, Nanjing, China                                                       | Azuma, Shinya<br>Nippon Micrometal Corporation, Japan                                                 | Chen, Hao<br>Kyushu University, Japan                                                                           | CHAN, Yong Tat<br>STMicroelectronics Pte Ltd, Singapore                                                                                     |
| 1:45pm - 3:15pm | Interactive Presentation 2 (Poster), Exhibition and Coffee Break outside Exhibition Hall (LEO 1-4)                                                  |                                                                                                                                      |                                                                                                                                     |                                                                                                       |                                                                                                                 |                                                                                                                                             |

|                 |                                                                                                           |                                                                                                          |                                                                                                                            |                                                                                                                          |                                                                                                                                          |                                                                                                                                         |
|-----------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
|                 | DAY 3: December 4, 2025 (con't)                                                                           |                                                                                                          |                                                                                                                            |                                                                                                                          |                                                                                                                                          |                                                                                                                                         |
| Venue           | AQUARIUS 3                                                                                                | AQUARIUS 4                                                                                               | GEMINI 1                                                                                                                   | GEMINI 2                                                                                                                 | PISCES 1                                                                                                                                 | PISCES 2                                                                                                                                |
| 3:15pm -4:00pm  | Materials and Processing 4                                                                                | Thermal Management and Characterization 4                                                                | Mechanical Simulation & Characterization 5                                                                                 | Interconnection Technologies 4                                                                                           | Advanced Packaging 5                                                                                                                     | Assembly and Manufacturing Technology 3                                                                                                 |
| 3:15pm – 3:30pm | <b>P379 Enhancing Yield Performance in Chip-to-Wafer Hybrid Bonding in Advanced Packaging</b>             | <b>P371 Direct-Bonded Manifold-Jet-Impingement Cooling for High-Performance AI Chips</b>                 | <b>P352 Statistical Evaluation of Bond Strength Variation in Hybrid Bonding Interfaces</b>                                 | <b>P299 Fluxless Die to Die Bonding of 10µm Ultra-fine Pitch Microbump</b>                                               | <b>P367 Low Temperature Post Bond Anneal for Hybrid Bonding enabled by Interfacial (IF) Metal Capping – An Assessment of Reliability</b> | <b>P196 Growth Behaviour of Intermetallic Compounds in Cu-Sn3.5Ag Solder Joints with Different furnace cooling rate</b>                 |
|                 | Xie, Ling<br><br>Institute of Microelectronics, A*STAR, Singapore                                         | Zhang, Yuantong<br><br>Xi'an Jiaotong University, China                                                  | Kobayashi, Daiki<br><br>YOKOHAMA National University, Japan                                                                | Xu, Zheqi<br><br>Tsinghua University, China                                                                              | Rath, Santosh Kumar<br><br>Applied Materials Singapore, Singapore                                                                        | Gan, Jingjian<br><br>NXP Semiconductors, China                                                                                          |
| 3:30pn – 3:45pm | <b>P234 Study on Backside Metallization for the S-SWIFT(TM) Package</b>                                   | <b>P334 High-Temperature Pressure Mapping of TIM Interfaces for Improved Thermal Simulation Accuracy</b> | <b>P349 Real-time Effective Mechanical Property Characterization of Redistribution Layer (RDL) for Chiplet Integration</b> | <b>P314 Novel Ultrasonic Flip Chip Bonding Approach utilizing electroplated Aluminium pillars for Advanced Packaging</b> | <b>P323 Backside Metal Interconnect for High Performance RF Interposer</b>                                                               | <b>P158 Hybrid Evaluation of Pure Argon Plasma Treatment for Enhanced Wire Bonding and Manufacturing Efficiency in Microelectronics</b> |
|                 | Jo, Dambi<br><br>Product Development Team, Amkor Technology, Korea                                        | U, Srinath<br><br>Cisco Systems (India) Private Limited, Bengaluru, India                                | Liu, Jun<br><br>Institute of High-Performance Computing, A*STAR, Singapore                                                 | Cirulis, Imants<br><br>Technical University Chemnitz, Fraunhofer ENAS, Germany                                           | Lim, Teck Guan<br><br>Institute of Microelectronics, A*STAR, Singapore                                                                   | Pelingo, Jorell<br><br>onsemi Carmona, Philippines                                                                                      |
| 3:45pm – 4:00pm | <b>P189 Study of Coverage Decay Mechanism of Liquid Metal Filler TIM for Advanced Package Application</b> | <b>P222 Operando Thermal Analysis of CPU and PCB using a Pixel-level Emissivity Correction Method</b>    | <b>P274 Simulation and Validation of Warpage in Ultrathin Embedded-Die Substrates for Advanced Packaging</b>               | <b>P353 Interfacial Electromigration Behavior and Reliability Evaluation in Cu/Ag Sintered Joints</b>                    | <b>P256 Surface Activation and Bonding Mechanisms of SiCN and TEOS Dielectrics for Low-Temperature Hybrid Bonding</b>                    | <b>P363 Comparative Evaluation of FCVA and High-Current Arc Deposited ta-C Films for Hermetic Encapsulation (Mat Paper)</b>             |
|                 | Jhan, Jyun-De<br><br>Siliconware Precision Industries Co., Ltd., Taiwan                                   | Kim, Seongjin<br><br>Pohang University of Science and Technology (POSTECH), Korea                        | Ma, Rui<br><br>Institute of Microelectronics of the Chinese Academy of Sciences, China                                     | Kim, Yun-Chan<br><br>Korea Institute of Industrial Technology, Korea University, Korea                                   | Chang, Liu<br><br>School of Integrated Circuits, Southeast University, China                                                             | Li, Ying<br><br>Nanyang Technological University, Singapore                                                                             |



|                   |                                                                                                                                                                                                       |                                                                                                                                                                                               |                                                                                                                                                                                                                                |                                                                                                                                                                                                                    |                                                                                                                                                                                      |                                                                                                                                                                                                |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   | DAY 3: December 4, 2025 (con't)                                                                                                                                                                       |                                                                                                                                                                                               |                                                                                                                                                                                                                                |                                                                                                                                                                                                                    |                                                                                                                                                                                      |                                                                                                                                                                                                |
| Venue             | VIRGO 1-4                                                                                                                                                                                             |                                                                                                                                                                                               |                                                                                                                                                                                                                                |                                                                                                                                                                                                                    |                                                                                                                                                                                      |                                                                                                                                                                                                |
| 4:00pm - 5:10pm   | Technology Innovation Showcase Session 3 (70 min)   Quiz & Prizes Included                                                                                                                            |                                                                                                                                                                                               |                                                                                                                                                                                                                                |                                                                                                                                                                                                                    |                                                                                                                                                                                      |                                                                                                                                                                                                |
| Venue             | AQUARIUS 3                                                                                                                                                                                            | AQUARIUS 4                                                                                                                                                                                    | GEMINI 1                                                                                                                                                                                                                       | GEMINI 2                                                                                                                                                                                                           | PISCES 1                                                                                                                                                                             | PISCES 2                                                                                                                                                                                       |
| 5:10pm - 5:55pm   | Materials and Processing 5                                                                                                                                                                            | Thermal Management and Characterization 5                                                                                                                                                     | Quality, Reliability & Failure Analysis 4                                                                                                                                                                                      | Interconnection Technologies 5                                                                                                                                                                                     | TSV/ Wafer Level Packaging 3                                                                                                                                                         | Assembly and Manufacturing Technology 4                                                                                                                                                        |
| 5:10pm – 5:25pm   | <b>P116 Study on Microstructural Evolution Mechanisms of Amorphous SiO2 in Through Glass Via Wafer during Thinning</b><br><br>Xu, Kezhong<br><br>Huazhong University of Science and Technology, China | <b>P163 Thermal Performance Enhancement of Stacked Packages using Silicon-Based Heat Spreading Die</b><br><br>Lee, Seokjun Daniel<br><br>Semiconductor R&D Center, Samsung Electronics, Korea | <b>P115 Defect Z-depth Determination in 2.5D IC Using Magnetic Field Imaging</b><br><br>Cai, Fengkai<br><br>National University of Singapore, Singapore                                                                        | <b>P261 Microstructure Evaluation of Engineered Cu for Low-Temperature Cu-Cu Hybrid Bonding</b><br><br>Tanaka, Fabiana Lie<br><br>Yokohama National University, Japan                                              | <b>P105 Analysis of Cu and dielectric layer interfacial delamination in chip redistribution layer</b><br><br>Chen, Zhiwen<br><br>Wuhan University, China                             | <b>P315 Automated In-Line Metrology of Advanced Package Interconnections using a High-Speed 3D X-ray System</b><br><br>Gregorich, Thomas<br><br>Zeiss SMT, United States of America            |
|                   | <b>P272 Optimizing SSD Performance with One-Part Thermal Gap Fillers: A Sustainable Approach</b><br><br>Kumaresan, Vigneshwarram<br><br>SanDisk Storage Malaysia, Malaysia                            | <b>P381 Solid-State On-Chip Thermal Management Using Micro-Thermoelectric Devices</b><br><br>Kim, Jeong-Hwan<br><br>Korea Advanced Institute of Science and Technology, Korea                 | <b>P200 In-Situ Package Level Relative Humidity Measurement using Wet-Bulb and Dry-Bulb Temperatures</b><br><br>Iyer, Vidya Subramanian<br><br>Infineon Technologies Asia Pacific; Nanyang Technological University, Singapore | <b>P179 A Molecular Dynamics Study of Grain Size Effects on Cu-Cu Interfacial Void Reduction in Direct Bonding Interconnect</b><br><br>Park, Junhyeok<br>Ulsan National Institute of Science and Technology, Korea | <b>P126 Mitigation of Cu Nodule Formation in High Open Area Products for Electroplated Cu RDL Applications</b><br><br>Lin, SW<br><br>Lam Research Corporation, Taiwan                | <b>P224 Mass Transfer solution for Micro-LEDs based displays</b><br><br>Raphoz, Natacha<br><br>CEA - LETI, France                                                                              |
| 5:40pm 5:55pm     | <b>P316 Cost-Effective Wafer Level Micro Bumping Solution for Advanced Packaging</b><br><br>Lip Huei, Yam<br><br>Heraeus Materials Singapore Pte Ltd, Singapore                                       | <b>P322 Thermal Sensitivity Analysis of SoIC Face-to-Back Stacking Using Foundation Models for Physics</b><br><br>Kabaria, Hardik<br><br>Vinci4D.ai Inc, USA                                  | <b>P358 AI-empowered 3D X-ray analysis of solder joint cracking after board level vibration testing</b><br><br>Ghorbani, Amir<br><br>Tu Delft, Netherlands                                                                     | <b>P243 In-situ AFM Analysis of Thermal Expansion of Cu Pads with Varied Grain Characteristics</b><br><br>Yang, Gangli<br><br>School of Integrated Circuits, Southeast University, China                           | <b>P265 Characterization on Fan-Out Heterogeneous Integration Packaging for Premium Smartphone</b><br><br>Chen, Cheng Chia<br><br>Siliconware Precision Industries Co., Ltd., Taiwan | <b>P118 Enhancing Electrochemical Migration Resistance of Sintered Silver by Ceria Additives for Die Attachment Applications</b><br><br>Siow, Kim Shyong<br><br>Universiti Kebangsaan Malaysia |
| 06:15pm - 08:30pm | Party @ Ola Beach (ticketed event)                                                                                                                                                                    |                                                                                                                                                                                               |                                                                                                                                                                                                                                |                                                                                                                                                                                                                    |                                                                                                                                                                                      |                                                                                                                                                                                                |

|                   |                                                                                                                                                                                                                                       |                                                                                                                                                                                         |                                                                                                                                                                                                          |                                                                                                                                                                                                                |                                                                                                                                                                                                               |                                                                                                                                                                                                                    |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   | DAY 4: December 5, 2025                                                                                                                                                                                                               |                                                                                                                                                                                         |                                                                                                                                                                                                          |                                                                                                                                                                                                                |                                                                                                                                                                                                               |                                                                                                                                                                                                                    |
| Venue             | VIRGO 1-4                                                                                                                                                                                                                             |                                                                                                                                                                                         |                                                                                                                                                                                                          |                                                                                                                                                                                                                |                                                                                                                                                                                                               | GEMINI 2                                                                                                                                                                                                           |
| 8:45am – 10:00am  | Technology Innovation Showcase Session 4 (75 min)   Quiz & Prizes Included                                                                                                                                                            |                                                                                                                                                                                         |                                                                                                                                                                                                          |                                                                                                                                                                                                                |                                                                                                                                                                                                               | R10 EPS Chapter Officers's Meeting                                                                                                                                                                                 |
| 10:00am - 11:00am | 60min Coffee Break outside Exhibition Hall (LEO 1-4)                                                                                                                                                                                  |                                                                                                                                                                                         |                                                                                                                                                                                                          |                                                                                                                                                                                                                |                                                                                                                                                                                                               |                                                                                                                                                                                                                    |
| Venue             | PISCES 1                                                                                                                                                                                                                              | PISCES 2                                                                                                                                                                                | PISCES 3                                                                                                                                                                                                 | PISCES 4                                                                                                                                                                                                       | GEMINI 1                                                                                                                                                                                                      | GEMINI 2                                                                                                                                                                                                           |
| 11:00am -11:30am  | <b>Invited Talk 7:</b><br><b>Dr Kathy Yan</b> (TSMC)<br>From Cloud AI to Edge AI:<br>Driving Innovation with<br>Advanced Packaging                                                                                                    | <b>Invited Talk 8:</b><br><b>Dr Takenori Fujiwara</b> (Toray)<br>Polymer Bonding Technology<br>for Semiconductor Advanced<br>Packaging                                                  | <b>Invited Talk 9:</b><br><b>Dr Tan Yik Yee</b> (Yole Group)<br>AI Is Accelerating the Shift to Advanced<br>Packaging with FOPLP                                                                         | <b>Invited Talk 10:</b><br><b>Jonathan Abdilla</b> (BESI)<br>Hybrid Bonding and Fluxless TCB:<br>Defining the Sub 10um Interconnect<br>Roadmap for 3D HI                                                       | <b>Invited Talk 11:</b><br><b>Dr Fu Chao</b> (WinTechNano)<br>Labless Enable Effective FA of<br>Electronics Packages through<br>Scientific Approach                                                           | <b>Invited Talk 12:</b>                                                                                                                                                                                            |
| 11:30am – 12:15pm | <b>Advanced Packaging 6</b>                                                                                                                                                                                                           | <b>Materials and Processing 6</b>                                                                                                                                                       | <b>Smart Manufacturing and Equipment<br/>Technology 2</b>                                                                                                                                                | <b>Interconnection Technologies 6</b>                                                                                                                                                                          | <b>Quality, Reliability &amp; Failure Analysis<br/>5</b>                                                                                                                                                      | <b>Mechanical Simulation &amp;<br/>Characterization 6</b>                                                                                                                                                          |
| 11:30am -11::45pm | <b>P350 Fabrication of N77/N79<br/>Antenna-plexer: Integration of<br/>BAW Filters with Broadband<br/>Glass-IPD Diplexer for 5G<br/>Applications</b><br><br>Park, Minsoo<br>Korea Electronics Technology<br>Institute, Korea           | <b>P240 Copper Pillar Bump FCBGA<br/>Underfill Process<br/>Characterization for Automotive<br/>Application</b><br><br>Koey Poh Meng, Dominic<br>NXP Semiconductors,<br>Malaysia         | <b>P193 AI-driven Pixel-Level Defect<br/>Localization using Magnetic Current<br/>Images</b><br><br>Aung, Aye Phyu Phyu<br>Institute for Infocomm Research (I2R),<br>A*STAR, Singapore                    | <b>P143 UV-Assisted Fluxless Thermal-<br/>Compression Bonding Under Ambient<br/>Conditions</b><br><br>Kim, You-Gwon<br>Hanyang University, Korea                                                               | <b>P132 Anomalyspy: A Generative<br/>Defect Localization in Semiconductor<br/>Packages, with X-ray Microscopy</b><br><br>I Made, Riko<br>Institute of Materials Research and<br>Engineering (IMRE), Singapore | <b>P321 Degradation Mechanism of<br/>Frequency Stability in MEMS<br/>Resonant Accelerometers</b><br><br>Bie, Xiaorui<br>Institute of CAS, China                                                                    |
| 11:45am -12::00pm | <b>P308 Power and Performance<br/>Comparison between FPGA-<br/>Optics Integrated 3D SiP and<br/>equivalent board level test<br/>hardware</b><br><br>Pamidighantam, V Ramana<br><br>LightSpeed Photonics Private<br>Limited, Singapore | <b>P212 Enhanced Reliability of<br/>Large BGA Assemblies for AI<br/>Server and HPC Application</b><br><br>Wang, Huaguang<br><br>Indium Corporation, United States<br>of America         | <b>P236 Research on Intelligent Prediction<br/>of 3D-IC Packaging Injection Molding<br/>Based on Machine Learning</b><br><br>Wu, Jie<br><br>Nanjing University of Posts and<br>Telecommunications, China | <b>P244 Characterization of Fine Line<br/>Width/Spacing RF Interconnects for<br/>Co-Packaged Optics with High I/O<br/>Density</b><br><br>Wu, Jia Qi<br><br>Institute of Microelectronics, A*STAR,<br>Singapore | <b>P180 Cu/SiCN wafer-to-wafer hybrid<br/>bonding interface reliability down to<br/>400 nm pitch</b><br><br>Zhang Boyao<br><br>imec, Belgium                                                                  | <b>P370 Dev of a Reproducible, Stable,<br/>and Scalable Eval Routine for<br/>Lifetime Assessment of Power and<br/>Microelectronic Devices</b><br><br>Albrecht, Jan<br><br>Fraunhofer ENAS; Germany                 |
| 12:00pm- 12:15pm  | <b>P361 Process Developments of<br/>Chip-to-Wafer assembly with<br/>HPC and Photonics Chiplets on<br/>large RDL-first interposer</b><br><br>Lim, Sharon Pei Siang<br><br>Institute of Microelectronics,<br>A*STAR, Singapore          | <b>P384 Development and<br/>Monitoring of Gold Electroplating<br/>Process on 300mm Wafer Level</b><br><br>Tran, Van Nhat Anh<br><br>Institute of Microelectronics,<br>A*STAR, Singapore | <b>P359 Cross-Domain Adaptation of<br/>Automated 3D X-ray Defect Detection<br/>from HBM to Optical Transceivers</b><br><br>Wang, Jie<br><br>Institute for Infocomm Research (I2R),<br>A*STAR, Singapore  | <b>P117 Study on Solder Core Ball Using<br/>Sn-Bi Plating for Low-Temperature<br/>Bonding</b><br><br>Kim, Hui Joong<br><br>MKE, Korea                                                                          | <b>P375 Investigations on the Mutual<br/>Effects of Electromigration and<br/>Thermal Fatigue failures of TSV<br/>Interconnects</b><br><br>Cheng Tian<br><br>Zhangjiang Lab, China                             | <b>P329 Advancing Electronic Package<br/>Reliability Analysis by Predicting<br/>Solder Joint Strain Patterns Using<br/>Neural Networks</b><br><br>Meier, Karsten<br><br>Technische Universität Dresden,<br>Germany |
| Venue             | VIRGO 1-4                                                                                                                                                                                                                             |                                                                                                                                                                                         |                                                                                                                                                                                                          |                                                                                                                                                                                                                |                                                                                                                                                                                                               |                                                                                                                                                                                                                    |
| 12:15pm -1:30pm   | Conference Lunch                                                                                                                                                                                                                      |                                                                                                                                                                                         |                                                                                                                                                                                                          |                                                                                                                                                                                                                |                                                                                                                                                                                                               |                                                                                                                                                                                                                    |



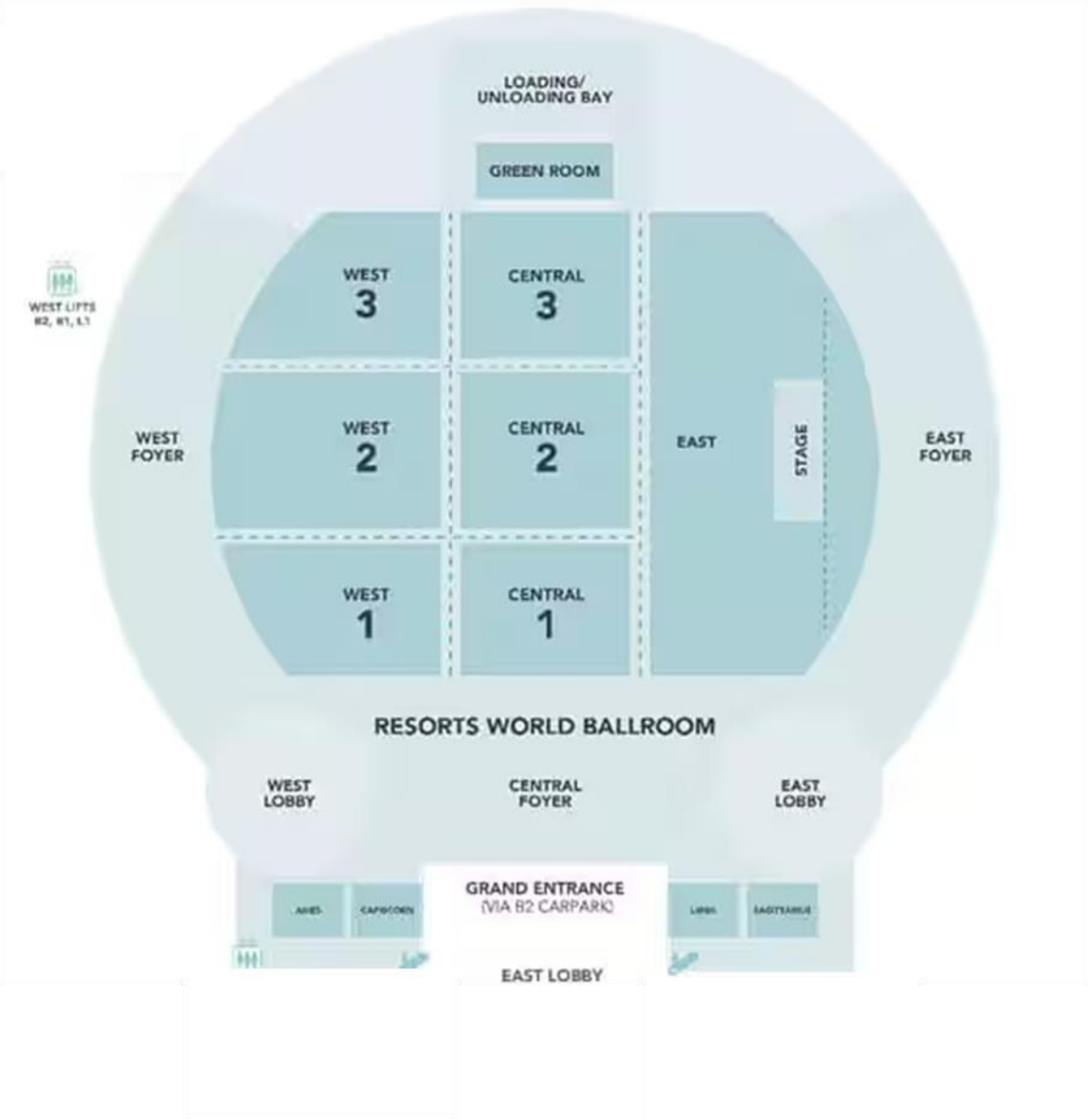
|                 |                                                                                                                                                                             |                                                                                                                                                                                                                    |                                                                                                                                                                                                             |                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                |                                                                                                                                                                                            |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 | DAY 4: December 5, 2025 (con't)                                                                                                                                             |                                                                                                                                                                                                                    |                                                                                                                                                                                                             |                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                |                                                                                                                                                                                            |
| 12:15pm -1:30pm | Conference Lunch @ VIRGO 1 to 4                                                                                                                                             |                                                                                                                                                                                                                    |                                                                                                                                                                                                             |                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                |                                                                                                                                                                                            |
| Venue           | PISCES 1                                                                                                                                                                    | PISCES 2                                                                                                                                                                                                           | PISCES 3                                                                                                                                                                                                    | PISCES 4                                                                                                                                                                                                                              | GEMINI 1                                                                                                                                                                                                                       | GEMINI 2                                                                                                                                                                                   |
|                 | Advanced Packaging 7                                                                                                                                                        | Materials and Processing 7                                                                                                                                                                                         | Electrical Simulations & Characterization                                                                                                                                                                   | Smart Manufacturing and Equipment Technology 3                                                                                                                                                                                        | Advanced Optoelectronics and Displays                                                                                                                                                                                          | Mechanical Simulation & Characterization 7                                                                                                                                                 |
| 1:30pm - 1:45pm | <p><b>P260 Demonstration of Integrated Passive Devices in Glass substrate using TGV process</b></p> <p>Yi, Sang-Ho</p> <p>Korea Electronics Technology Institute, Korea</p> | <p><b>P129 Pressure Sintering Mechanism of Ag Nanoparticles Based on The Master Sintering Curve and Visualization of Sinterability</b></p> <p>Hiratsuka, Daisuke</p> <p>TOSHIBA Corporation.</p>                   | <p><b>P169 Characteristics in the quasi-millimeter wave band of planar transmission lines formed on flexible substrates</b></p> <p>Kimigawa, Ryoma</p> <p>Kyushu University</p>                             | <p><b>P348 Inferring Wire Length and Depth from Magnetic Field Images via Deep-Spatial Physics Informed Model</b></p> <p>Jayavelu, Senthilnath</p> <p>Institute for Infocomm Research (I2R), A*STAR, Singapore</p>                    | <p><b>P267 Assembly of optical micro-ring resonator-based ultrasound sensor for photoacoustic imaging</b></p> <p>Lepukhov, Evgenii</p> <p>Tampere university, Finland</p>                                                      | <p><b>P139 Key Insights into Design for Reliability of 3D NAND Packages in Solid-State Drive</b></p> <p>Pan, Ling</p> <p>Micron Semiconductor Asia Pte Ltd, Singapore</p>                  |
| 1:45pm - 2:00pm | <p><b>P154 Residue Free TaN Etch Method for MIM Capacitor in Advanced Packaging</b></p> <p>Zhou, Hexin</p> <p>Lam Research, China</p>                                       | <p><b>P221 High-Performance Graphene Coatings for Superior Thermal and Mechanical Properties in Electronic Packaging Enclosures</b></p> <p>Sundararajan, Muralidharan</p> <p>SanDisk Storage Sdh Bhd, Malaysia</p> | <p><b>P289 Development of PDK Library for Accurate Modelling of 2.5D Interconnect Structures in Heterogeneous Integration</b></p> <p>Mani, Raju</p> <p>Institute of Microelectronics, A*STAR, Singapore</p> | <p><b>P213 Device-to-Package Electrothermal Performance Prediction of Power MOSFETs via Coupled Iterative Dual-Artificial Neural Networks</b></p> <p>Dai, Yuxuan</p> <p>Nanjing University of Posts and Telecommunications, China</p> | <p><b>P104 High Coupling Efficiency Adhesive for Photonic Packaging</b></p> <p>Lim, See Chian Garian</p> <p>DELO Industrial Adhesives</p>                                                                                      | <p><b>P373 A novel wafer warpage numerical model considering further shrinkage of epoxy molding compound</b></p> <p>Ji, Lin</p> <p>Institute of Microelectronics, A*STAR, Singapore</p>    |
| 2:00pm - 2:15pm | <b>Invited Talk 13</b><br><b>David Gani (STMicro)</b><br>Challenges and Advantages in Panel Level Packaging                                                                 | <b>Invited Talk 14</b><br><b>Hidenori Abe (Resonac)</b><br>Advanced Packaging Materials Innovation through Co-Creative Activities and Trends in Advanced Packaging Processes                                       | <b>Invited Talk 15:</b><br><b>Dr Min Woo Rhee (Samsung)</b><br>Understanding of Hybrid Bonding Mechanism by Utilizing Molecular Dynamics Approach                                                           | <p><b>P209 Thermal- and Wirelength-Aware Chiplet Placement in 2.5D Systems Through Multi-Agent Reinforcement Learning</b></p> <p>Hou, Yubo</p> <p>Institute for Infocomm Research (I²R), A*STAR, Singapore</p>                        | <p><b>P253 2.5D PIC Photonic Interposer Engine for Next Generation Photonic Link CPO of High-Performance Computing and Data Communications</b></p> <p>Chi, Ting Ta</p> <p>Institute of Microelectronics, A*STAR, Singapore</p> | <p><b>P127 Development of Warpage Predictive Models using Physics-Driven Simulation</b></p> <p>Yu, Wei</p> <p>Micron Semiconductor Asia Operations, Singapore</p>                          |
| 2:15pm - 2:30pm |                                                                                                                                                                             |                                                                                                                                                                                                                    |                                                                                                                                                                                                             | <p><b>P264 Generative AI-Powered Defect Detection for 3D X-ray Microscopy Scans of High Bandwith Memory Bumps</b></p> <p>Chang, Richard</p> <p>Institute for Infocomm Research (I2R), A*STAR, Singapore</p>                           | <p><b>P206 An Integrated Computational Materials Engineering approach for Anisotropic Conductive Films</b></p> <p>Gao, Jiaying</p> <p>Huawei Device, China</p>                                                                 | <p><b>P239 Thermal and mechanical properties optimization of TGV interposer for 2.5D integrated transceiver</b></p> <p>Li, Chunlei</p> <p>Xiamen University; Sanming University, China</p> |
| 2:30pm – 3:00pm |                                                                                                                                                                             |                                                                                                                                                                                                                    |                                                                                                                                                                                                             | 30min Coffee Break outside Exhibition Hall (LEO 1-4)                                                                                                                                                                                  |                                                                                                                                                                                                                                |                                                                                                                                                                                            |

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 | DAY 4: December 5, 2025 (con't)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 2:30pm – 3:00pm | 30min Coffee Break outside Exhibition Hall (LEO 1-4)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Venue           | VIRGO 1 to 3 (combined rooms)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 3:00pm - 3:30pm | <p><b>Heterogeneous Integration Roadmap (HIR) Workshop</b><br/>Theme: Interconnects - Design and Manufacturing of Complex HI Structures</p> <p>Opening: Kitty Pearsall<br/>Design for Manufacturability of &gt; 1 kW: Gamal Refai Ahmed (AMD)<br/>Photonics Design: Amr S Helmy (University of Toronto)<br/>HBI Manufacturability HBI: Loke Yuan Wong (Applied Materials)<br/>TCB Manufacturability: Li Ming (ASMPT)<br/>CPO Manufacturability: Surya Bhattacharya (IME, A*STAR)</p> <p>Panel Discussion<br/>“Why HBI/CPO HVM Adaption is in Slower Pace Despite all the Buzz?”<br/>Moderator: Wong Shaw Fong (Intel)</p> |
| 3:30pm - 3:45pm |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 3:45pm - 4:00pm |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 4:00pm - 4:15pm |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 4:15pm - 4:30pm |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 4:30pm – 5:00pm |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 5:10pm - 5:30pm | Closing Ceremony and Lucky Draw @ VIRGO 1, 2 and 3 (combined rooms)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

| Paper ID | Track                                     | Authors                    | Affiliation                                                                                |
|----------|-------------------------------------------|----------------------------|--------------------------------------------------------------------------------------------|
| 100      | Advanced Packaging                        | Seyedmohammadi, Shahram    | Henkel, United States of America                                                           |
| 112      | Advanced Packaging                        | Tateishi, Eiichi           | Kyushu University Graduate School of Information Science and Electrical Engineering, Japan |
| 114      | Advanced Packaging                        | Wan Ahmad, Wan Mohd Alimie | NXP Semiconductors, Malaysia                                                               |
| 128      | Advanced Packaging                        | Volkovich, Roie            | KLA, Israel                                                                                |
| 148      | Advanced Packaging                        | Cheng, Ray                 | Lam Research, Taiwan                                                                       |
| 194      | Advanced Packaging                        | Mohd Zali, Mohd Rozaini    | Nexperia Malaysia Sdn Bhd, Malaysia                                                        |
| 204      | Advanced Packaging                        | Mühlstätter, Christian     | EV Group, Austria                                                                          |
| 226      | Advanced Packaging                        | Tseng, Chia-Wei            | Graduate School of Advanced Technology, National Taiwan University, Taiwan                 |
| 231      | Advanced Packaging                        | Tschoban, Christian        | Fraunhofer IZM, Germany                                                                    |
| 324      | Advanced Packaging                        | Monroe, Matthew            | Micron technology Inc., United States of America                                           |
| 333      | Advanced Packaging                        | Zheng, Yuxiang             | Institute of Microelectronics, Chinese Academy of Sciences                                 |
| 335      | Advanced Packaging                        | Lian, Ziqi                 | Institute of Microelectronics of Chinese Academy of Sciences, Beijing                      |
| 337      | Advanced Packaging                        | Heinig, Andy               | Fraunhofer IIS/EAS, Germany                                                                |
| 257      | Assembly and Manufacturing Technology     | Zainal, Mohd Khairul       | Nexperia Malaysia Sdn Bhd, Malaysia                                                        |
| 295      | Assembly and Manufacturing Technology     | Rodriguez, Jenelyn         | Infineon Technologies Asia Pacific Pte Ltd, Singapore                                      |
| 296      | Assembly and Manufacturing Technology     | Bartolo, Marlon            | Infineon Technologies Asia Pacific Pte Ltd, Singapore                                      |
| 318      | Assembly and Manufacturing Technology     | Narayanasamy, Jayaganasan  | PT. Infineon Technologies, Batam, Indonesia                                                |
| 338      | Assembly and Manufacturing Technology     | Soh, Serine                | Institute of Microelectronics, Singapore                                                   |
| 383      | Assembly and Manufacturing Technology     | Hu, Chao                   | Huazhong University of Science and Technology                                              |
| 107      | Electrical Simulations & Characterization | Foo, Loke Yip              | Altera, Malaysia                                                                           |
| 377      | Electrical Simulations & Characterization | You, Wenchao               | Beihang University, China                                                                  |
| 120      | Emerging Technologies                     | Nakashima, Kenta           | Kyushu University, Japan                                                                   |
| 262      | Emerging Technologies                     | Otake, Yugi                | Yokohama National University, Japan                                                        |
| 130      | Materials and Processing                  | Andriani, Yosephine        | Infineon Technologies Asia Pacific Pte Ltd, Singapore                                      |
| 133      | Materials and Processing                  | Buret, Mathilde            | Inventec Performance Chemicals, France                                                     |
| 134      | Materials and Processing                  | Shrivastava, Saurabh       | Macdermid Alpha Electronics Solutions India Private Limited, India                         |
| 152      | Materials and Processing                  | Cao, Danni                 | Central South University, Changsha, China                                                  |
| 207      | Materials and Processing                  | Zheng, Jiarui              | Harbin Institute of Technology, China                                                      |
| 216      | Materials and Processing                  | LIU, YU                    | Heraeus Materials Singapore Pte. Ltd., Singapore                                           |
| 366      | Materials and Processing                  | Pan, Manyi                 | Institute of Microelectronics, Singapore                                                   |

| Paper ID | Track                                   | Authors             | Affiliation                                                                   |
|----------|-----------------------------------------|---------------------|-------------------------------------------------------------------------------|
| 145      | Quality, Reliability & Failure Analysis | Chen, Yong          | STMicroelectronics, Singapore                                                 |
| 171      | Quality, Reliability & Failure Analysis | Ichikawa, Norimitsu | Kogakuin University, Japan                                                    |
| 198      | Quality, Reliability & Failure Analysis | Mori, Tomoki        | YOKOHAMA National University, Japan                                           |
| 203      | Quality, Reliability & Failure Analysis | NAMBA, Haruhito     | Yokohama National University, Japan                                           |
| 205      | Quality, Reliability & Failure Analysis | Shinomiya, Keisuke  | Lintec corporation, Japan                                                     |
| 214      | Quality, Reliability & Failure Analysis | Tan, Tze Qing       | Innovation, Heraeus Materials Singapore Pte. Ltd.                             |
| 184      | Smart Manufacturing Equipment Tech      | Yu, Yang            | Institute for Infocomm Research (I2R), Singapore                              |
| 290      | Smart Manufacturing Equipment Tech      | Li, Mengyang        | Institute of Microelectronics, Singapore                                      |
| 292      | Smart Manufacturing Equipment Tech      | Lestari, Yuli       | INFINEON, Indonesia                                                           |
| 124      | Thermal Management & Characterization   | RAVI, KAVITHA       | Rajalakshmi Engineering College, India                                        |
| 225      | Thermal Management & Characterization   | Tseng, Chia-Wei     | Graduate School of Advanced Technology, National Taiwan University, Taiwan    |
| 248      | Thermal Management & Characterization   | Huang, Jiapeng      | Xiamen University, Xiamen, China                                              |
| 342      | Thermal Management & Characterization   | Liu, Cong           | University of Electronic Science and Technology of China                      |
| 357      | Thermal Management & Characterization   | Heinig, Andy        | Fraunhofer IIS/EAS, Germany                                                   |
| 121      | TSV/Wafer Level Packaging               | Chen, Zack          | Lam Research, Taiwan                                                          |
| 181      | TSV/Wafer Level Packaging               | Wang, Zhishen       | Wuhan University, China                                                       |
| 183      | TSV/Wafer Level Packaging               | Yang, Huihui        | Lam Research, China                                                           |
| 230      | TSV/Wafer Level Packaging               | Rathore, Shubham    | Indian Institute of Technology Hyderabad, India                               |
| 341      | TSV/Wafer Level Packaging               | Jl, Hongmiao        | Institute of Microelectronics (IME), A*STAR, Singapore                        |
| 123      | Interconnection Technologies            | PELINGO, JORELL     | onsemi Carmona, Philippines                                                   |
| 160      | Interconnection Technologies            | Manalo, Ginbert     | onsemi Philippines, Philippines                                               |
| 245      | Interconnection Technologies            | Lin, Xiaoting       | Shenzhen Advanced Joining Technology Co., LTD., China                         |
| 278      | Interconnection Technologies            | Ong, Edward Yong Xi | Institute of Microelectronics, Singapore                                      |
| 288      | Interconnection Technologies            | DE JESUS, EDSEL     | STMICROELECTRONICS, Singapore                                                 |
| 330      | Interconnection Technologies            | Liu, Sichen         | Beijing Institute of Technology, Beijing, China                               |
| 331      | Interconnection Technologies            | Jedidi, Nader       | imec, Belgium;                                                                |
| 339      | Interconnection Technologies            | Sharma, Nishant     | Indian Institute of Science, Bangalore, India                                 |
| 346      | Interconnection Technologies            | Dao, Thi Minh Anh   | National Yang Ming Chiao Tung University, Taiwan                              |
| 360      | Interconnection Technologies            | Xie, Yihan          | Xiamen University, China                                                      |
| 364      | Interconnection Technologies            | Singh, Avneesh      | Indian Institute of Information Technology & Management Gwalior, India, India |

Basement 2 Resort World Ballroom Floor Plan



Level 1 Exhibition and Breakout Room Floor Plan

