



IMAPS DPC 2022: Community Member Preview – Keynotes, Technical Tracks and More – March 3, 2022

[3D Event Coverage](#)

Mar 03, 2022 · By Trine Pierik · [Ajinomoto](#), [Amkor](#), [ASE](#), [Brewer Science](#), [Cadence](#), [Deca](#), [ERS](#), [EV Group](#), [Evatec](#), [EVG](#), [finetech](#), [Gel-Pak](#), [KLA](#), [Micross](#), [MRSI](#), [NAMICS](#), [QPTechnologies](#), [siemens](#), [StratEdge Corporation](#), [Techsearch International](#), [X-Celeprint](#), [XPERI](#)



Interconnects for Tomorrow's Applications

IMAPS Device Packaging Conference 2022 takes place next week – March 8-10, here in our home state of Arizona, and we at 3D InCites are very excited! There are over 300 attendees registered and the show floor and hotel are sold out. It's been two years since the event took place in person, and it was also the last time we held the 3D InCites Awards Ceremony in person. On top of that, we have recently established a partnership with IMAPS, and we are now their official industry partner. It's gearing up to be a great conference. Look out for Francoise who will be at the 3D InCites booth conducting interviews for her Podcast, the official Podcast of the conference, be sure to stop by.

Here is how our Community Members are participating next week, including keynotes, technical tracks and exhibition booths.

KEYNOTE SPEAKERS

Tuesday Evening

PANEL DISCUSSION:

So Many High Performance Packages: Is There a Winner?

Moderator: Jan Vardaman, President and Founder TechSearch International, Inc.



Panelists:

Calvin Cheung, ASE Group

Mike Kelly, Amkor Technology

Suresh Ramalingam, Xilinx

Islam (Sam) Salama, Hyperion Technologies

Raja Swaminathan, AMD

New packaging solutions are being adopted to achieve the economic advantages that were previously met with silicon scaling. Heterogeneous integration, especially chiplets, is pivotal in this new era. The difficulty is making a package choice from the sea of options. This panel examines the drivers for different options with proponents of different packages, including Silicon Interposer, Fan-out on Substrate, and Embedded Bridge. Advantages of sided-by-side and 3D configurations will be debated.

Wednesday 11:30-12



Global Business Council

Keynote & Plenary Session on US DOMESTIC CAPABILITIES FOR ON-SHORING OF IC PACKAGING AND ASSEMBLY FOR DoD ACCESS

DOMESTIC ADVANCED PACKAGING FOR HI-REL MICROELECTRONICS – THE FUTURE IS NOW

Jeremy Adams, Micross Components – Vice President of Products & Services



Jeremy Adams is the Vice President of Products & Services of Micross Components. He has a Bachelor's Degree in Mechanical Engineering from University of Central Florida. Jeremy joined Micross in 2005 as a Project Engineer and has held multiple engineering roles prior to assuming his former position as Director of Technology Development. Jeremy has over 16 years of focused microelectronics engineering experience as well as a proven record of successfully building Micross' capabilities across multiple Micross divisions. Leveraging Micross' capabilities, he continues to drive innovative engineering teams and product portfolio enhancement in key Aerospace & Defense hi-rel markets and applications.

Thursday 8:10am-8:55am

Hybrid Bonding for the Next Generation of High Performance Devices

Laura Mirkarimi, VP of Engineering, 3D Portfolio and Bonding Technology, Xperi Corp.



The electronics industry continues to pursue optimal performance for the insatiable consumer demand of computation intensive products like GPUs, CPUs and AI accelerators. While the monolithic system on chip approach promises exceptional performance, it is costly. The advanced packaging industry has responded to the challenge with 2.5D and 3D integration solutions that bridge the performance gap with heterogeneous integration. Hybrid bonding combined with chiplet architectures within 2.5D will enable the distribution of function and nodes across a chips within a module, providing a path toward more flexible product introduction and innovation.

Professional Development Courses

Monday, March 7, 2022

- **10:00AM-12:00PM**

- PDC2: *The Evolution of Flip Chip Package Technology*, Mark Gerber, ASE US, Inc.
- **3:30PM-5:30PM**
 - PDC8: *System-in-Package (SiP) – System Solutions Through Miniaturization*, Mark Gerber, ASE US, Inc.

Tuesday March 8

10:30-11am **3D Packaging versus 3D Integration. Is there really a difference?**

John Park, Cadence Design Systems

Empowering Front-End Cellular Innovations with Advanced SiP Solutions

Curtis Zwenger, Amkor Technology

11-11:30am **Heterogeneous IC Packaging, Optimizing Performance and Cost**

Michael Kelly, Amkor Technology, Inc. (Dave Hiner, George Scott, Doug Scott, Kevin Engel)

12-12:30pm **FOWLP Thermal Debonding: Easing Manufacturing Constraints**

Debbie-Claire Sanchez, ERS electronic GmbH

12-12:30pm **Cost-effective High-density Fan-Out Chip on Substrate using M-Series™ and Adaptive Patterning® Technology** Robin Davis, Deca Technologies (Benedict San Jose, Deca Technologies;

John Hunt, ASE US Inc.; Chia-Pin Chen, ASE Global)

3-3:30pm **Maskless Laser Direct Imaging & Adaptive Patterning Solution for Fan-Out**

Heterogeneous Integration Clifford Sandstrom, Deca Technologies (Timothy Olson)

4-4:30pm **Thermal Performance Simulation of Heterogeneous Integration and Coupled Thermal-Mechanical Simulation of Large Body HDFO** Nathan Whitchurch, Amkor Technology (Wei Lin, Mike Kelly)

4:30-5pm **New Development in Selective Surface Modification Materials with Promising Adhesion Performance** Ziwei Liu, Brewer Science, Inc. (Jinhua Dai)

5-5:30pm **Indium Alloy Thermal Interface Materials for High-Power Lidded FCBGA Products** YoungDo Kweon, Amkor Technology (Mike Kelly)

Wednesday, March 9

2:30-3pm **Advanced Fanout Embedded Bridge Packaging Technology for Chiplets Integration**

Lihong Cao, ASE Group (Teck Chong Lee, Yung-shun Chang, Sheng-Wen Yang, Yen-Liang Huang, I-Ting Lin, Yih sien Wu)

3-3:30pm **Low-Loss Photosensitive Polymeric Dielectric Materials for Millimeter Wave and Terahertz Applications** Mei Dong, Brewer Science (Baron Huang, Duo Tsai, Rama Puligadda)

3-3:30pm **Scaling Down while Scaling Up with M-Series? Fan-out & Adaptive Patterning**

Clifford Sandstrom, Deca Technologies (Timothy Olson)

4:30-5pm **Heterogeneous Integration of Chiplets, Lego-like IP for More Than Moore**

Keith Felton, Siemens DISW

5-5:30pm **Design and Analysis Challenges of 3D Multi-Chiplet Heterogenous Architectures**

John Park, Cadence Design Systems, Inc.

Thursday, March 10

10:30-11am **Micro Transfer Printing: Massively Parallel Pick-and-Place of Ultra-Thin Die** Bob Conner, X-Celeprint (Bill Batchelor, David Gomez)

11:30-12pm **Build-up Materials with Low Insertion Loss/fine Pitch Wiring and Low Warpage Molding Material for Advanced Packages** Habib Hichri, Ajinomoto Fine-Techno USA Corporation (Yuko Shibata, Ryo Miyamoto)

Member Company Booth Listing and Previews

MRSI 6

MRSI Systems has been a member and proud supporter of IMAPS for more than 35 years and is pleased to sponsor the IMAPS Device Packaging Conference. MRSI Systems is a leading manufacturer of fully automated, high-precision, high-speed die bonding and epoxy dispensing systems. [Contact sales](#) to schedule a meeting at IMAPS Device Packaging.

StratEdge 51

StratEdge will showcase its post-fired ceramic, low-cost molded ceramic, and [ceramic QFN packages](#). Also highlighted will be StratEdge Assembly Services and its new ISO 9001:2015 facility with a Class 1000 cleanroom, including Class 100 work areas with ESD control for performing sensitive operations. StratEdge's packages meet the extreme demands of gallium nitride (GaN) and gallium arsenide (GaAs) devices and the critical requirements of the telecom, mixed signal, VSAT, broadband wireless, satellite, military, test and measurement, automotive, down-hole, and MEMS markets. Technical experts will be available to discuss the best types of packaging and assembly services for devices.

Finetech 53

New Generation *FINEPLACER® pico 2 bonder*

With the FINEPLACER® pico 2 die bonder, Finetech presents a new generation of the proven micro assembly platform for product development. This multi-purpose bonder will continue to be an indispensable tool in all types of R&D environments, universities and small batch production – where assembly and manufacturing options can be tested on the same machine.

The system offers a 3 µm placement accuracy, making it suitable for demanding assembly processes of miniaturized components. It can support all typical bonding technologies: soldering, adhesive bonding, ultrasonic and thermocompression bonding, as well as processes using process and forming gas, dispensing or UV curing.

Micross 58

Micross is showcasing its advanced 3D and heterogeneous integration solutions, as well as its portfolio of microelectronic services and components. Product experts and executives will be onsite, booth #58 to support your needs.

QP Technologies 61

Visit booth 61 to learn about QP Technologies' broad range of microelectronics packaging, assembly, wafer preparation and custom substrate development capabilities. Its over-molded QFN/DFN packages and pre-molded air-cavity QFN packages offer a fast-turn, convenient solution for customer prototype and small-volume production requirements in mil-aero, power/RF, automotive, industrial, and commercial applications. QP Technologies provides same-day IC assembly services to help reduce your time to market, as well as advanced assembly services for chiplets, stacked die, MCM, SiP, flip-chip, and chip-on-board approaches.

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