

IMAPS Florida Chapter Advanced Technical Workshop & Tabletops

Heterogenous Integration - System in Package Research, Manufacturing & Digital Workflow

SAVE THE DATE August 28th, 2024

Skywater/BRIDG/imec - 200 NeoCity Way, Kissimmee, FL 34744

Workshop Focus:

*The focus is on manufacturing low volume, highly customized chips which have little or no broad-based demand by the average consumer, but are **highly sought after by the aerospace, defense, and medical industries because those industries operate in extreme environments** that often require microchips with specific functions in very low volumes. Large scale, commercial fabs do not make these types of chips because they either do not meet aerospace, defense, and extreme environment requirements or the way they are produced does not meet the system developer's security needs.

This workshop will bring together the scientists, engineers, manufacturing, academia, business and people from around the world who work in the area of smart sensors, systems and advanced packaging technology. This workshop and tabletop exhibits enable discussion and presentations on the latest semiconductor-based design, process and materials for smart sensor and photonic technologies.

- Fan-Out Wafer-Level Packaging (FOWLP)
- Silicon and Glass Substrates/Interposers
- Hybrid Bonding
- Chiplet Technology
- Additive Manufactured Electronics (AME)
- Interconnect Materials
- Novel Die Interconnect

- Digital workflow & Cybersecurity
- Design, Simulation and Modeling
- In Situ Metrology & Machine Learning
- Digital Twin,
- CHIPS and SHIPS
- On Shoring
- TSV's & TGV's

On Shoring of the semiconductor supply chain is driving the need for new advanced packaging and digital manufacturing strategies and application/mission specific System in Packaging technologies

* Note – Defined by the Central Florida Microelectronics Regional Cluster http://www.imaps.org/

