

*Co-hosted by the IEEE Electronics Packaging Society (EPS) and the SEMI Americas Advanced Packaging Committee*

**Date: Wednesday, July 12, 2023**

**Time: 2:00-4:30pm PST**

**Location: TechTalk Stage, Moscone South, San Francisco, CA**

Heterogeneous Integration through advanced packaging innovations is widely acknowledged as being increasingly important to drive performance, system availability, power efficiency, cost, and time to market of microelectronics systems, from HPC & Data Centers, to 5G & Beyond, mobile, automotive, IoT, medical and health markets.

As the full microelectronics design and manufacturing supply chain come together to respond to challenges and develop new solutions, two integration technologies are paving the way to make these innovations possible – System in Package (SiP) and Chiplets Integration. HPC systems have adopted the mantra of co-design at the system-level to address waning performance gains from shrinking transistors. By co-designing in a system-application approach, innovators across the whole ecosystem will deliver the next extension of Moore's law in the next decade and more years.

This Heterogeneous Integration session takes a full ecosystem approach to look at how advanced packaging in SiP and Chiplets are paving the way for the Future of HPC and Hyperscale computing.

The DOE Supercomputers: Frontier at Oak Ridge National Lab came on line 2022. Aurora at Argonne National Lab will be ready any day now. Together they illustrate the vast potential of Heterogeneous Integration & Advanced Packaging in Chiplets to unleash the power of semiconductors and packaging innovations for the benefit of humanity.

#### **Agenda**

2:00–2:10 pm (10)	<b>Session Welcome Remarks and Agenda review: Bill Chen; Ravi Mahajan; John Shelf</b>
2:10–2:40 pm (30)	<b>Speaker 1 - Dr. Kalyan Kumaran (Argonne National Lab)</b>
2:40–3:10 pm (30)	<b>Speaker 2 - Morgan Leigh Tribolet (Intel)</b>
<b>3:10-3:20 pm</b>	<b>BREAK</b>
<b>Panel</b>	<b>Moderators: John Shelf, Ravi Mahajan &amp; Bill Chen</b>
3:20-3:25 pm	Panelist 1: Bapi Vinnokota (ODSA/OCP)
3:25-3:30 pm	Panelist 2: Deraje Agonafer (UT Arlington)
3:30-3:35 pm	Panelist 3: Richard Ho (Lightmatter)
3:35-3:40 pm	Panelist 4: Mark Wade (Ayar Labs)
3:40-4:40 pm	Panel Discussion (4 Panelists + 2 invited speakers) Discussion Q&A from Audience
6:00 pm	Reception