Special Section on InterPACK 2017

InterPACK is a premier international forum for exchange of state-of-the-art knowledge in research, development, manufacturing, and applications of Micro-electronics packaging. It is the flagship conference of the ASME Electronic and Photonic Packaging Division (EPPD) founded in 1992 as an ASME-JSME joint biannual conference.

Rapid changes in the semiconductor landscape together with findings from InterPACK Pathfinding workshop (IPW) in 2016 led to a significant reset of InterPACK conference priorities and focus to comprehensively address needs of the InterPACK community. As a result, starting in 2017, InterPACK has become an annual conference and the scope of the conference has increased significantly together with a systems-focus to include some of the most cutting-edge topics in electronics packaging, device integration, and reliability. These topics are organized across 5 different tracks; (1) Heterogeneous Integration: Micro-Systems with Diverse Functionality, (2) Servers of the Future, (3) Structural and Physical Health Monitoring, (4) Energy Conversion & Storage, and (5) Transportation: Autonomous & Electric Vehicles.

InterPACK2017 had nearly 100 technical papers, 100 technical presentations and about 50 keynotes and invited talks by thought leaders from industry, national labs and academia. Based on peer-reviews of these conference papers, authors of a few select exemplary papers across all 5 tracks of the conference were invited to submit papers for the special sections of JEP. These papers were then subject to an independent peer review process in accordance with the editorial procedures of ASME Journal of Electronic Packaging (JEP). Subsequently, it was decided to publish these papers in two volumes, in the March and June 2017 JEP quarterly publications. Broadly, these papers cover topics across all the 5 tracks of the conference and include papers on advanced interconnect technologies, 3D printing, microscale heat transfer, data center cooling technologies, sensors for health monitoring and reliability challenges in automotive electronics.

This collection of papers will be an excellent resource for readers and subscribers of the ASME Journal of Electronic Packaging. We gratefully acknowledge all the authors whose work appears in these Special Sections and the reviewers for help in improving the quality of these papers. We would also like to acknowledge InterPACK 2017 General Conference Chair Dr. Mehdi Asheghi and JEP Editor Professor Y. C. Lee for their support and cooperation.

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