

Special Section of Review Articles From Intel Corporation

The industry of microelectronic packaging is experiencing rapid developments to meet increasing performance and function needs of modern microprocessors, mobile devices and new electronic devices for different product segments including mobile devices, PC, data centers, and other new markets. In facing of the new data era, the semiconductor industry has launched new technologies, including heterogeneous packaging integration, chiplet design and so on. It's a good time to invite the experts from the industry to share their learning and insights in the areas of electronic packaging and component integration. For this special section, a few review papers from Intel Corporation will cover broad topics of electronic packaging and thermal-mechanical challenges of server CPU for the data centers.

Out of internal selection and review, authors of a few selected papers were invited to submit papers for this special section of ASME *Journal of Electronic Packaging* (JEP). These papers were then subject to an independent peer-review process in accordance with the editorial procedures of JEP. Subsequently, it was decided to publish four papers in this Special Section issue. Other review papers shall be published in a future issue pending internal and external review processes.

Broadly, these review papers cover topics across electronic packaging technology and thermal-mechanical challenges of server CPU in the data centers including papers on advanced thin bare-die packages for next-generation mobile PC platform, TIM characterization and its challenge, thermal-mechanical challenges of server CPU for the data centers, and current status and future trend of liquid cooling for the data centers with increasing TDP trend. This collection of papers will be an excellent resource for the readers and subscribers of the ASME *Journal of Electronic Packaging*. I gratefully acknowledge all the authors whose work appears in this Special Section and the reviewers for their help in improving the quality of these papers. I would also like to acknowledge JEP Editor-in-Chief Professor Y. C. Lee for his support in this process.

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