Special Issue

Microelectronics Assembly and Packaging: Materials and Technologies, 2nd Edition

Message from the Guest Editors

With the rapid development trend of microelectronics technology, the optimization of microsystems and their different electronic components in recent years has moved towards small form factors, high bandwidths, high frequencies, high performance, high reliability, low power consumption, and low cost. Packaging materials and bonding technologies are especially vital parts of this trend since they have essential roles in back-end processes. The further these processes develop, the more advanced packaging materials and bonding technologies are needed. To meet the rising need for advanced systems development and to address the emerging challenges and issues facing the assembly and packaging of microelectronics, various packaging materials and technologies (2D, 2.5D, 3D, wafer-level packaging, and other advanced packaging technologies) are being developed across industry and academia. The good news is that the demand around these is rapidly increasing. Additionally, we welcome articles and reviews on electronic packaging materials such as metals, alloys, ceramics, and semiconductor materials, as well as their characterization and qualification.

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