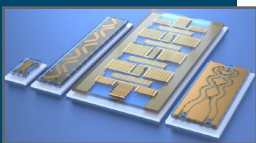
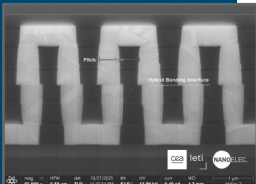


Advanced Packaging Update: Market and Technology Trends

Vol. 2-0726



This second volume of the Advanced Packaging Update includes an analysis of OSAT financials. Data center growth, energy and water use, and shortages of components, assembly, and materials are described. A discussion of orbital data centers is provided. Developments in hybrid bonding are discussed along with drivers and projections for application adoption. Remaining challenges are discussed. A special section is devoted to challenges in high-performance computing including large substrates; developments in glass core substrates and remaining challenges; and alternatives including ceramic core and silicon. Substrate design rules are presented for laminate flip chip BGA and CSP substrates worldwide, including body size, core thickness, via and pad diameter, minimum bump pitch supported, and substrate finish.

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ACCESS, ASE Materials, AT&S, BRAI Technology, Daeduck, Daisho Denshi, FICT, GS Swiss, Haesung DS, Ibiden, Kinsus, KCC, Kyocera, LGIT, Meiko, Nan Ya PCB, R&D Altanova, SEMCO, SCC, Fastprint, Shinko Electric, Simmtech, Toppan, TTM, Unimicron

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