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Titolo	Chiplet Design and Heterogeneous Integration Packaging // by John H. Lau
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ISBN	9789811999178 9789811999161
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (542 pages)
Disciplina	354.81150006
Soggetti	Electronics Electronic circuits Microtechnology Microelectromechanical systems Electronics and Microelectronics, Instrumentation Electronic Circuits and Systems Microsystems and MEMS
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	State-of-the-Art of Advanced Packaging -- Chip Partition and Chip Split -- Multiple System and Heterogeneous Integration with TSV Interposers -- Multiple System and Heterogeneous Integration with TSV-Less Interposers -- Chiplets Lateral (Horizontal) Communications -- Cu-Cu Hybrid Bonding.
Sommario/riassunto	The book focuses on the design, materials, process, fabrication, and reliability of chiplet design and heterogeneous integraton packaging. Both principles and engineering practice have been addressed, with more weight placed on engineering practice. This is achieved by providing in-depth study on a number of major topics such as chip partitioning, chip splitting, multiple system and heterogeneous integration with TSV-interposers, multiple system and heterogeneous integration with TSV-less interposers, chiplets lateral communication, system-in-package, fan-out wafer/panel-level packaging, and various Cu-Cu hybrid bonding. The book can benefit researchers, engineers, and graduate students in fields of electrical engineering, mechanical

engineering, materials sciences, and industry engineering, etc.
