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Sommario/riassunto

3D IC and RF SiPs: Advanced Stacking and Planar Solutions for 5G
 Mobility Lih-Tyng Hwang, National Sun Yat-Sen University, Taiwan,
 Jason Tzyy-Sheng Horng, National Sun Yat-Sen University, Taiwan A
 concise summary of the state of the art, this book is an interdisciplinary
 guide to enabling technologies for 3D ICs and 5G mobility, covering
 packaging, design to product life and reliability assessments. Readers
 are introduced to the markets, technology drivers, integrated circuits,
 packaging and substrate trends that go hand-in-hand with the
 development of 3D IC and RF SiP, as well as related digital and RF
 designs, and product life and reliability assessments. Smart phone
 tear-down is used to illustrate the key components for mobility (4G and
 future 5G), such as AP/mobile memory and RFIC/RF FE. Other essential
 topics include packaging technology, high density logic design, RF
 system integration and future trends in MTM technology. . Features an
 interdisciplinary approach to the enabling technologies and hardware
 for 3D ICs and 5G mobility. Presents statistical treatments and
 examples with tools that are easily accessible, such as Microsoft's Excel
 and Minitab. Fundamental design topics such as electromagnetic
 design for logic and RF/passives centric circuits are explained in detail.
 Provides chapter-wise review questions and powerpoint slides as
 teaching tools 3D IC and RF SiPs offers graduate students and
 researchers an essential guide to advanced stacking and planar
 solutions for 5G mobility. It can also be used as a reference text for
 engineers and advanced students of semiconductors, communications
 hardware, and IC packaging technologies.