Record Nr. UNINA9910299461103321 Autore Balasinski Artur Titolo Design for manufacturability: from 1D to 4D for 90-22 nm technology nodes / / Artur Balasinski New York:,: Springer,, 2014 Pubbl/distr/stampa **ISBN** 1-4614-1761-9 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (viii, 278 pages): illustrations (some color) Collana Gale eBooks Disciplina 620 621.381 621.3815 658.56 Soggetti Electronic circuit design Integrated circuits - Design and construction Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Nota di contenuto Preface -- Classic DfM: from 2D to 3D -- DfM at 28 nm and Beyond --New DfM Domain: Stress Effects -- Conclusions and Future Work. Sommario/riassunto This book explains integrated circuit design for manufacturability (DfM) at the product level (packaging, applications) and applies engineering DfM principles to the latest standards of product development at 22 nm technology nodes. It is a valuable guide for layout designers. packaging engineers and quality engineers, covering DfM development from 1D to 4D, involving IC design flow setup, best practices, links to manufacturing and product definition, for process technologies down to 22 nm node, and product families including memories, logic, system-on-chip and system-in-package. • Provides design for manufacturability guidelines on layout techniques for the most advanced, 22 nm technology nodes; · Includes information valuable to layout designers, packaging engineers and quality engineers, working on memories, logic, system-on-chip and systemin-package: • Offers a highly-accessible, single-source reference to information otherwise available only from disparate sources; Helps readers to translate reliability methodology into real

design flows.