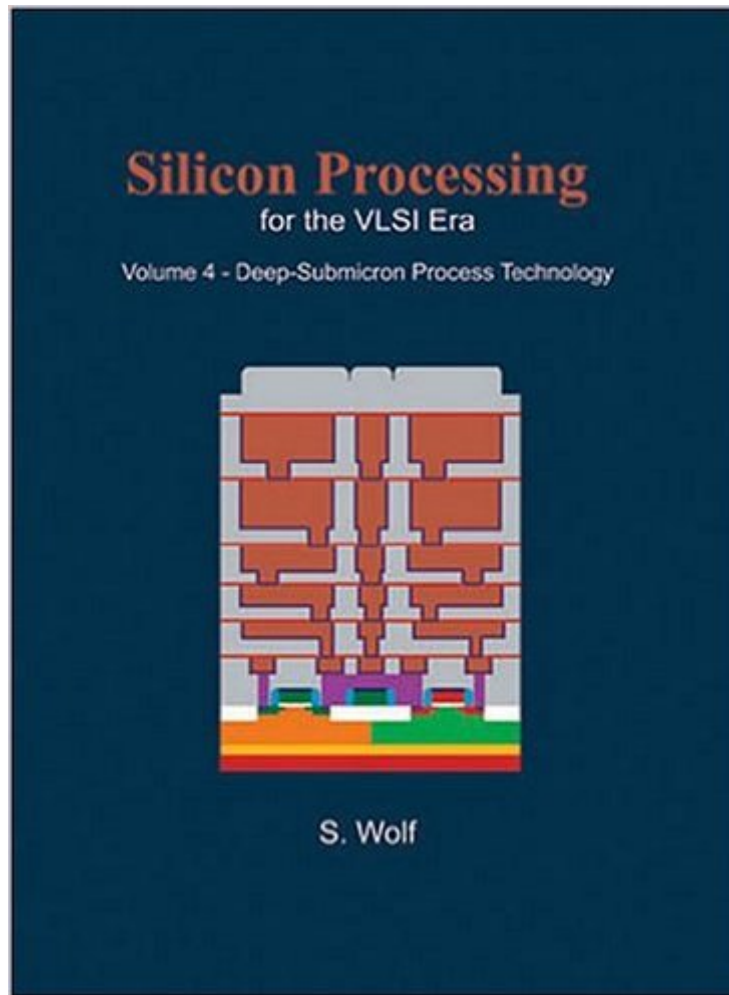


The book was found

# Silicon Processing For The VLSI Era, Vol. 4: Deep-Submicron Process Technology



## Synopsis

Book by Wolf, Stanley

## Book Information

Hardcover: 822 pages

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## Customer Reviews

This well written reference book is highly recommended to anyone interested in the technology used to manufacture deep-submicron MOSFETs, i.e., MOSFETs requiring lithography in the 1/4 to 1/8-micron range. The first chapter nicely identifies several practical problems that appeared during the evolution of the MOSFET to ULSI, and the remainder of the book discusses processing solutions to those problems. Major processing topics include thin gate oxides, self-aligned silicides, high- and low-k dielectrics, double and triple level metal interconnects, dual damascene copper interconnects, copper seed and electroplating technology, deep uv photoresists and tools, chemical-mechanical planarization, and processing issues unique to 300-mm wafers. State of the art CMOS topics including super-steep retrograde channel doping, punchthrough-control implants, source/drain engineering, shallow trench isolation, and more are used to illustrate the integration of deep-submicron processes into manufacturing. Increasing use of Si-Ge heterojunction bipolar transistors and silicon-on-insulator is anticipated and discussed. This up-to-date book is one of a kind. It is simply required reading for those in the business.

This book provides a great amount of information on a field where there isn't much information to be found. It is easy to read and very descriptive - highly recommended. It is a 2002 book though, talking

about a field which evolves too quickly. Some of the "future" things the book talks about have already happened or the industry decided to move in a different direction, but in general this is not much a problem.

This book collects the hot issues on the very recent deep submicron (less than 0.18um) semiconductor process technology, such as EUV lithography, high and low k materials, CMP, and 300mm wafer. It seems to provide a good guideline to anyone who wonders what it is going on in the semiconductor process industry.

Ordered on Thursdays night and get it within 3 business days. Product is what has promised. I would purchase other products in the future.

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Silicon Processing for the VLSI Era, Vol. 4: Deep-Submicron Process Technology Silicon Processing for the VLSI Era, Vol. 2: Process Integration Chip Design for Submicron VLSI: CMOS Layout and Simulation Silicon VLSI Technology: Fundamentals, Practice and Modeling (Taschenbuch) Silicon VLSI Technology: Fundamentals, Practice, and Modeling Silicon VLSI Technology Silicon-on-Insulator Technology: Materials to VLSI Digital VLSI Design with Verilog: A Textbook from Silicon Valley Polytechnic Institute VLSI Test Principles and Architectures: Design for Testability (The Morgan Kaufmann Series in Systems on Silicon) Digital VLSI Design with Verilog: A Textbook from Silicon Valley Technical Institute VLSI Fabrication Principles: Silicon and Gallium Arsenide, 2nd Edition Circuits, Interconnections, and Packaging for Vlsi (Addison-Wesley VLSI systems series) VLSI Digital Signal Processing Systems: Design and Implementation Digital Signal Processing in Vlsi (Analog Devices Technical Reference Books) VLSI Analog Signal Processing Circuits: Algorithm, Architecture, Modeling, and Circuit Implementation MASON JAR RECIPES BOOK SET 5 book in 1: Meals in Jars (vol.1); Salads in Jars (Vol. 2); Desserts in Jars (Vol. 3); Breakfasts in Jars (Vol. 4); Gifts in Jars (Vol. 5): Easy Mason Jar Recipe Cookbooks Deep Thoughts & Vulgar Quotes: The Book for Adults filled with Dirty Quotes, Deep and Vulgar Thoughts, Profane Proverbs! (Shut the F\*ck Up and Color 7) Deep Calling Unto Deep: The Dynamics of Prayer in the Perspective of Chassidism (Mystical Dimension) Ecuador History: Pre-Hispanic Era, Discovery and Conquest, Spanish Colonial Era, Society, Economy, Government, Politics Finland History: Origins of the Finns, The Era of Swedish Rule, 1150-1809, Independence and the Interwar Era, 1917-39, Society, Economy, Government and Politics

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