VLSI Physical Design Automation: Theory And Practice
VLSI is an important area of electronic and computer engineering. However, there are few textbooks available for undergraduate/postgraduate study of VLSI design automation and chip layout. VLSI Physical Design Automation: Theory and Practice fills the void and is an essential introduction for senior undergraduates, postgraduates and anyone starting work in the field of CAD for VLSI. It covers all aspects of physical design, together with such related areas as automatic cell generation, silicon compilation, layout editors and compaction. A problem-solving approach is adopted and each solution is illustrated with examples. Each topic is treated in a standard format: Problem Definition, Cost Functions and Constraints, Possible Approaches and Latest Developments.

Book Information

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Customer Reviews

I have read most of the book and implemented most of the proposed algorithms. It was easy to understand. The authors simplified much of the notations that is used by the original writers of the algorithms. It opens the area for any one interested in those topics to continue research with an open mind about what to choose and how.

Since this book was published in 1997, a lot has happened in the area of physical design automation—but this is still a remarkably good text, especially for students and beginners. This
because not only is it exceedingly clearly written, it concentrates on classic techniques which form the foundation for techniques still used today. What is urgently needed is a bang-up-to-date text on this subject which contains materials for the more advanced user—not just for students, but also for old salts like myself who have been working in the trenches for 10 years! If such a text were to be written by these authors, I’m sure it would be a classic. Sadly, EDA industry is a very small and shrinking industry, and a book like this is HARD to write, because you have to be an expert in so many fields. So this book is probably as good as we can reasonably expect to see anytime soon.

I found that the pseudocode in this book was well explained with the algorithms. I did find the book to be quite dry overall; just an acceptable textbook. Note: This book is super difficult to keep open, especially since it's too small.

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