



# Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler™ Physical Compiler™ and PrimeTime®

By Himanshu Bhatnagar



## Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler™ Physical Compiler™ and PrimeTime® By Himanshu Bhatnagar

*Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler® Physical Compiler® and PrimeTime®, Second Edition* describes the advanced concepts and techniques used towards ASIC chip synthesis, physical synthesis, formal verification and static timing analysis, using the Synopsys suite of tools. In addition, the entire ASIC design flow methodology targeted for VDSM (Very-Deep-Sub-Micron) technologies is covered in detail.

The emphasis of this book is on real-time application of Synopsys tools, used to combat various problems seen at VDSM geometries. Readers will be exposed to an effective design methodology for handling complex, sub-micron ASIC designs. Significance is placed on HDL coding styles, synthesis and optimization, dynamic simulation, formal verification, DFT scan insertion, links to layout, physical synthesis, and static timing analysis. At each step, problems related to each phase of the design flow are identified, with solutions and work-around described in detail. In addition, crucial issues related to layout, which includes clock tree synthesis and back-end integration (links to layout) are also discussed at length. Furthermore, the book contains in-depth discussions on the basis of Synopsys technology libraries and HDL coding styles, targeted towards optimal synthesis solution.

Target audiences for this book are practicing ASIC design engineers and masters level students undertaking advanced VLSI courses on ASIC chip design and DFT techniques.

[!\[\]\(faf942dc3e59ce8eb64b4ac481eca7e0\_img.jpg\) \*\*Download\*\* Advanced ASIC Chip Synthesis: Using Synopsys® Des...pdf](#)

[!\[\]\(cf531ed27e91483460120fcc057b3901\_img.jpg\) \*\*Read Online\*\* Advanced ASIC Chip Synthesis: Using Synopsys® D...pdf](#)

# Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler™ Physical Compiler™ and PrimeTime®

By Himanshu Bhatnagar

**Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler™ Physical Compiler™ and PrimeTime®** By Himanshu Bhatnagar

*Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler® Physical Compiler® and PrimeTime®, Second Edition* describes the advanced concepts and techniques used towards ASIC chip synthesis, physical synthesis, formal verification and static timing analysis, using the Synopsys suite of tools. In addition, the entire ASIC design flow methodology targeted for VDSM (Very-Deep-Sub-Micron) technologies is covered in detail.

The emphasis of this book is on real-time application of Synopsys tools, used to combat various problems seen at VDSM geometries. Readers will be exposed to an effective design methodology for handling complex, sub-micron ASIC designs. Significance is placed on HDL coding styles, synthesis and optimization, dynamic simulation, formal verification, DFT scan insertion, links to layout, physical synthesis, and static timing analysis. At each step, problems related to each phase of the design flow are identified, with solutions and work-around described in detail. In addition, crucial issues related to layout, which includes clock tree synthesis and back-end integration (links to layout) are also discussed at length. Furthermore, the book contains in-depth discussions on the basis of Synopsys technology libraries and HDL coding styles, targeted towards optimal synthesis solution.

Target audiences for this book are practicing ASIC design engineers and masters level students undertaking advanced VLSI courses on ASIC chip design and DFT techniques.

**Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler™ Physical Compiler™ and PrimeTime®** By Himanshu Bhatnagar **Bibliography**

- Published on: 2013-05-23
- Original language: English
- Number of items: 1
- Dimensions: 9.21" h x .75" w x 6.14" l, 1.11 pounds
- Binding: Paperback
- 328 pages

 [Download Advanced ASIC Chip Synthesis: Using Synopsys® Des ...pdf](#)

 [Read Online Advanced ASIC Chip Synthesis: Using Synopsys® D ...pdf](#)

## Download and Read Free Online Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler™ Physical Compiler™ and PrimeTime® By Himanshu Bhatnagar

---

### Editorial Review

### Users Review

#### From reader reviews:

#### James Fomby:

Do you have favorite book? When you have, what is your favorite's book? Book is very important thing for us to find out everything in the world. Each e-book has different aim or maybe goal; it means that publication has different type. Some people experience enjoy to spend their a chance to read a book. They can be reading whatever they consider because their hobby is usually reading a book. Consider the person who don't like reading through a book? Sometime, particular person feel need book if they found difficult problem or maybe exercise. Well, probably you will require this Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler™ Physical Compiler™ and PrimeTime®.

#### Thomas Paine:

The reserve with title Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler™ Physical Compiler™ and PrimeTime® has a lot of information that you can study it. You can get a lot of gain after read this book. This particular book exist new understanding the information that exist in this reserve represented the condition of the world at this point. That is important to yo7u to be aware of how the improvement of the world. This particular book will bring you within new era of the glowbal growth. You can read the e-book on your own smart phone, so you can read the item anywhere you want.

#### Opal Moffett:

Often the book Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler™ Physical Compiler™ and PrimeTime® has a lot details on it. So when you make sure to read this book you can get a lot of benefit. The book was published by the very famous author. The author makes some research before write this book. This book very easy to read you may get the point easily after scanning this book.

#### Elaine West:

As we know that book is vital thing to add our expertise for everything. By a e-book we can know everything we want. A book is a set of written, printed, illustrated as well as blank sheet. Every year had been exactly added. This publication Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler™ Physical Compiler™ and PrimeTime® was filled with regards to science. Spend your time to add your knowledge about your technology competence. Some people has diverse feel when they reading the book. If you know how big selling point of a book, you can experience enjoy to read a reserve. In the modern era like now, many ways to get book that you simply wanted.

**Download and Read Online Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler™ Physical Compiler™ and PrimeTime® By Himanshu Bhatnagar #VTGZ021UDOP**

## **Read Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler™ Physical Compiler™ and PrimeTime® By Himanshu Bhatnagar for online ebook**

Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler™ Physical Compiler™ and PrimeTime® By Himanshu Bhatnagar Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler™ Physical Compiler™ and PrimeTime® By Himanshu Bhatnagar books to read online.

### **Online Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler™ Physical Compiler™ and PrimeTime® By Himanshu Bhatnagar ebook PDF download**

**Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler™ Physical Compiler™ and PrimeTime® By Himanshu Bhatnagar Doc**

**Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler™ Physical Compiler™ and PrimeTime® By Himanshu Bhatnagar Mobipocket**

**Advanced ASIC Chip Synthesis: Using Synopsys® Design Compiler™ Physical Compiler™ and PrimeTime® By Himanshu Bhatnagar EPub**