



Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science)

James E. Stine

Download now

Read Online ➔

[Click here](#) if your download doesn't start automatically

Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science)

James E. Stine

Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science) James E. Stine

This text presents basic implementation strategies for arithmetic datapath designs and methodologies utilized in the digital system. The author implements various datapath designs for addition, subtraction, multiplication, and division. Theory is presented to illustrate and explain why certain designs are chosen. Each implementation is discussed in terms of design choices and how particular theory is invoked in the hardware. Along with the theory that emphasizes the design in question, Verilog modules are presented for understanding the basic ideas that accompany each design. Structural models are implemented to guarantee correct synthesis and for incorporation into VLSI schematic-capture programs. From the modules, the reader can easily add or modify existing code to study current areas of research in the area of computer arithmetic. The emphasis is on the arithmetic algorithm and not the circuit. For any design, both algorithmic and circuit trade-offs should be adhered to when a design is under consideration. Therefore, the idea is to implement each design at the RTL level so that it may be possibly implemented in many different ways (i.e. standard-cell or custom-cell). Thus, professionals, researchers, students, and those generally interested in computer arithmetic can understand how arithmetic datapath elements are designed and implemented. Also included is a CD-ROM which contains the files discussed in the book. The CD-ROM includes additional files utilized in preparing the designs in Verilog including scripts to automatically generate Verilog code for parallel carry-save and tree multipliers. Each Verilog design also contains each module including testbenches to facilitate testing and verification.

Note: The Kindle edition of this book does not include any CDs or DVDs.



[Download Digital Computer Arithmetic Datapath Design Using Veril ...pdf](#)



[Read Online Digital Computer Arithmetic Datapath Design Using Ver ...pdf](#)

Download and Read Free Online Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science) James E. Stine

Download and Read Free Online Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science) James E. Stine

From reader reviews:

Michael Joslyn:

Have you spare time to get a day? What do you do when you have more or little spare time? Yeah, you can choose the suitable activity with regard to spend your time. Any person spent their very own spare time to take a wander, shopping, or went to the particular Mall. How about open or maybe read a book allowed Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science)? Maybe it is to be best activity for you. You know beside you can spend your time with your favorite's book, you can cleverer than before. Do you agree with it has the opinion or you have various other opinion?

Christopher Forney:

The book Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science) can give more knowledge and also the precise product information about everything you want. So why must we leave a good thing like a book Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science)? Several of you have a different opinion about publication. But one aim that will book can give many info for us. It is absolutely right. Right now, try to closer along with your book. Knowledge or facts that you take for that, you could give for each other; it is possible to share all of these. Book Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science) has simple shape but you know: it has great and massive function for you. You can appear the enormous world by open up and read a e-book. So it is very wonderful.

James Ensor:

Reading can called head hangout, why? Because if you find yourself reading a book specially book entitled Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science) your mind will drift away trough every dimension, wandering in each and every aspect that maybe mysterious for but surely can be your mind friends. Imaging each word written in a e-book then become one contact form conclusion and explanation this maybe you never get ahead of. The Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science) giving you yet another experience more than blown away the mind but also giving you useful info for your better life within this era. So now let us show you the relaxing pattern here is your body and mind will be pleased when you are finished studying it, like winning a sport. Do you want to try this extraordinary shelling out spare time activity?

William Luke:

This Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science) is fresh way for you who has curiosity to look for some information

because it relief your hunger of information. Getting deeper you into it getting knowledge more you know otherwise you who still having bit of digest in reading this Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science) can be the light food for yourself because the information inside this kind of book is easy to get through anyone. These books develop itself in the form that is reachable by anyone, that's why I mean in the e-book application form. People who think that in book form make them feel sleepy even dizzy this book is the answer. So there isn't any in reading a publication especially this one. You can find actually looking for. It should be here for you actually. So , don't miss the item! Just read this e-book kind for your better life along with knowledge.

Download and Read Online Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science) James E. Stine #DMBUFKTO6QG

Read Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science) by James E. Stine for online ebook

Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science) by James E. Stine Free PDF download, 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 Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science) by James E. Stine books to read online.

Online Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science) by James E. Stine ebook PDF download

Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science) by James E. Stine Doc

Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science) by James E. Stine Mobipocket

Digital Computer Arithmetic Datapath Design Using Verilog HDL (International Series in Operations Research and Management Science) by James E. Stine EPub