

<<数字集成电路>>

图书基本信息

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### 内容概要

本书的特点主要包括：（1）将数字集成电路设计中电路与系统的视角统一起来，在系统深入地介绍了深亚微米条件下半导体器件的知识和最基本的反相器后，作者逐渐将这些基础知识引入到更加复杂的模块，比如门、寄存器、控制器、加法器、乘法器和存储器等。

在深亚微米的设计条件下，设计者不仅仅需要考虑整个系统的设计问题，还要随时警惕在电路级——比如器件和连线所带来的问题。

（2）本书是第一本将数字集成电路设计问题集中在深亚微米条件下的参考书，并且提供了一个深亚微米条件下的简晶体管模型。

另外针对深亚微米条件下设计人员所面对的新挑战，例如互连线问题、信号完整性问题、时钟分布问题、功耗问题等，全书都做了非常详细的论述。

（3）书中的内容紧扣当今数字集成电路设计的核心问题，并通过大量的设计实例向读者介绍了最新的设计技术和工程发展现状与趋势。

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