

基于 Hsim 的标准单元时序信息提取方法

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摘要: 在全定制标准单元版图设计完成后, 需要在不同的负载, 输入转换时间以及最快, 最慢和典型情况下, 对标准单元进行后仿真. 为了快速得到其准确的时序信息, 提出了一种基于 Hsim 的标准单元时序信息提取方法, 并以 D 触发器标准单元为例, 介绍了利用测量脚本快速提取标准单元时序信息的过程. 结果表明该方法可以灵活的根据需要设置仿真环境参数, 实现了对标准单元时序信息的快速准确提取, 测量结果为后续标准单元的使用与版图优化提供了指导意义.

关键词: 标准单元; 时序信息; Hsim; 后仿真

Timing Information Extraction of Standard Cell Based on Hsim

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Abstract: In order to quickly and accurately extract the timing information of full-custom standard cells, a method of extracting timing information of standard cells based on Hsim is proposed. After the design of the full-custom standard cell layout, it is necessary to simulate the standard cell in different load, input transition time and the fastest, slowest and typical cases, to obtain the accurate timing information. Taking the standard cell of D flip-flop as an example, this paper introduces the process of quickly extracting the timing information of standard cells by using the measurement script based on Hsim. The results show that the method achieves fast and accurate extraction of the timing information of standard cells, and the measurement results provide guidance for the use of standard cells.

Key words: standard cell; timing information; Hsim; post-layout simulation

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