

时序模型提取中复杂单元拓扑结构识别的实现研究

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摘要: 基于 NanoTime 对不同复杂 D 触发器和多米诺机构采取不同的处理方式, 解决了单元拓扑结果识别错误的问题. 结合一个单元的实际案例进行仿真验证, 结果显示基于所述的处理方式可以提取出有效的单元时序模型. 目前相应的设计已投入流片, 成功应用于实际工程应用中, 这也说明其具有可靠的实际应用价值, 对工程应用设计具有重要意义.

关键词: 时序模型; NanoTime; 标记与擦出

The Methodology and Implementation for Recognition of Complex Topology During Timing Model Extraction

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Abstract: In the process of chip design, timing model extraction is one of the key of static timing analysis. Different complex D flip-flop and domino structure need different approaches based on the NanoTime to solve complex topology recognition error, which improves the effectiveness of timing model. The simulation results are shown using an actual case. The simulation data shows that effective timing model can be achieved according to the method provided by this paper. At the present, the corresponding design flow has been invested and successfully applied in practical engineering implementation. This also means it has practical applications value of reliability and it is necessary for engineering implementation.

Key words: timing model; NanoTime; mark and erase

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