

## 基于 UVM 的验证平台设计研究

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**摘要:** 提出了一种采用 UVM (Universal Verification Methodology) 验证方法学设计出的适合超高频 RFID 芯片解码系统的验证平台. 该验证平台相比于传统验证平台具有重用性强、层次化合理、效率高、验证自动化等优点, 且该验证平台以覆盖率驱动, 显著提高了验证的效率和质量. 现该验证平台已成功应用于一款超高频 RFID 标签芯片解码系统的设计验证, 得到了期望的覆盖率, 满足设计要求.

**关键词:** UVM; RFID; 验证平台; 覆盖率; DUT

## The Design and Research of the Verification

### Platform Based on UVM

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**Abstract:** This paper presents a new verification platform. Suite for decoder system of ultrahigh frequency RFID, the new platform is based on the method of UVM (Universal Verification Methodology). Compared to traditional verification platform, the new verification platform has many advantages, such as stronger reuse and extensibility, more reasonable hierarchical structure, higher efficiency and verification automation. And the platform is coverage-driven. Significantly, it enhances the efficiency and quality of verification. Now the verification platform has been successfully applied to the design and verification of decoder system in an ultrahigh frequency RFID tag chip. The verification report shows that coverage is expected and meet the requirement.

**Key words:** UVM; RFID; verification platform; coverage; DUT

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