

### This is the Title of the Work

## And this Work also has a very nice Subtitle

## Chair of Electronic Design Automation



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Advisor: Ph.D. Student

# **Declaration of Authorship**

ereby I declare that I wrote this thesis myself with the help of no more than the mention	ned
terature and auxiliary means.	
Kaiserslautern, January 17, 2024	

Signature

### **Abstract**

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#### 1 Section

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#### 1.1 Subsection

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#### 1.1.1 Subsubsection

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```
// Listing for code snippets

val signalA = Wire(UInt(2.W))

val signalB = Wire(UInt(2.W))

signalA := 3.U
signalB := signalA
```

### 2 Another Section

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#### 2.1 Another Subsection

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### A Appendix

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### References

- [1] A. Biere and W. Kunz, "SAT and ATPG: Boolean Engines for Formal Hardware Verification," in *Proceedings of the 2002 IEEE/ACM International Conference on Computer-Aided Design*, ser. ICCAD '02. Association for Computing Machinery, 2002, p. 782–785.
- [2] E. Clarke, A. Biere, R. Raimi, and Y. Zhu, "Bounded Model Checking Using Satisfiability Solving," *Formal Methods in System Design*, pp. 7–34, 2001.
- [3] M. R. Fadiheh, J. Müller, R. Brinkmann, S. Mitra, D. Stoffel, and W. Kunz, "A Formal Approach for Detecting Vulnerabilities to Transient Execution Attacks in Out-of-Order Processors," in 2020 57th ACM/IEEE Design Automation Conference (DAC), 2020, pp. 1–6.