Formal Verification of Trustability of Circuits

Jörg Bormann (Siemens EDA, D)

Abstract

The talk will present the new tool Questa Verify Trust, with which Siemens EDA exploits its research in VE-VIDES. Questa Verify Trust searches for trust related RTL bugs that are classified in databases like the Common Weaknesses Enumeration database cwe.mitre.org. Formal verification appears to be an ideal technology for the identification of such weaknesses. Therefore, Siemens EDA researched an extensible framework for such checks and populated it with with already existing verification technology as well as technology newly developed in VE-VIDES.

Curriculum Vitae

Jörg Bormann is Product Manager for Advanced Verification at Siemens EDA. He is responsible for Siemens EDA's formal Trust verification technology and the GapFree solution, that formally verifies all circuit functionality. Previous employments include Infineon, Intel and OneSpin Solutions.

Jörg Bormann received in 2009 his Dr.-Ing. from the University of Kaiserslautern after an extra-occupational graduation on the GapFree verification approach. On top of his responsibilities, his professional interest include new approaches for the verification of the interaction of firmware and hardware of embedded systems.