

IEEE TRANSACTIONS ON  
**COMPUTER-AIDED DESIGN**  
OF INTEGRATED CIRCUITS AND SYSTEMS

A PUBLICATION OF THE IEEE COUNCIL ON ELECTRONIC DESIGN AUTOMATION



**CALL FOR PAPERS**

**IEEE Transactions on CAD Special Section on Hardware Security and Trust**

IEEE Transaction on Computer Aided Design (TCAD) seeks original manuscripts for a special section on **Hardware Security and Trust**.

There is an increasing concern involving the security and trustworthiness of the hardware underlying the information systems on which modern society is reliant for mission-critical and safety-critical functions. Secure and trustworthy hardware components, platforms and supply chains are vital to all domains including financial, healthcare, transportation, and energy. Traditionally, authenticity, integrity and confidentiality of information were being protected with security protocols in software with the underlying hardware assumed to be secure and trustworthy. However this assumption is no longer true; an increasing number of attacks are being reported on the hardware root of trust. Whereas security and trust risks are better understood in software, understanding and addressing threats to the hardware root of trust is an emerging challenge and the focus of this special issue. Topics of interest include, but are not limited to:

- Hardware security primitives including PUFs, public PUFs, and TRNGs
- Hardware-based security protocols for IC metering, watermarking and obfuscation
- Hardware-based attacks, detection, recovery, and compensation
- Reverse engineering ICs: transistor level, gate level, RT level, and system level
- Hardware Trojans: attacks and defenses
- Side channel attacks and countermeasures
- Security implications of split manufacturing and logic obfuscation
- IC counterfeiting and securing the semiconductor supply chain
- VLSI test, verification, and validation for trust
- FPGA Security
- Computer aided design (CAD) techniques for secure ICs and systems
- Interplay between security, trust, and reliability of emerging nanotechnologies
- Trustworthy hardware based system security
- Trustworthy micro-architectures
- Benchmarks and red team blue team trust assessment

Submitted articles must not have been previously published or currently submitted for journal publication elsewhere. The authors are responsible for understanding and adhering to the submission guidelines of IEEE Transactions on CAD.

Please submit your paper to Manuscript Central at <http://mc.manuscriptcentral.com/tcad>

Please note the following important dates.

- Submission Deadline: July 1, 2014**
- Reviews Completed: September 1, 2014**
- Major Revisions Due (if needed): October 1, 2014**
- Notification of Final Acceptance: November 1, 2014**

**For more information, please contact the Guest Editors:**

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