

1. Improving IC Security Against Trojan Attacks Through Integration of Security Monitors

Accession number: 13250677

Authors: Narasimhan, S. (1); Wen Yueh (2); Xinmu Wang (1); Mukhopadhyay, S. (2); Bhunia, S. (1)

Author affiliation: (1) EECS Dept., Case Western Reserve Univ., Cleveland, OH, United States; (2) Dept. of ECE, Georgia Tech, Atlanta, GA, United States

Source title: IEEE Design & Test of Computers

Abbreviated source title: IEEE Des. Test Comput. (USA)

Volume: 29

Issue: 5

Publication date: Oct. 2012

Pages: 37-46

Language: English

ISSN: 0740-7475

CODEN: IDTCEC

Document type: Journal article (JA)

Publisher: IEEE Computer Society

Country of publication: USA

Material Identity Number: CL78-2013-001

Abstract: This paper describes using on-chip monitors to significantly improve the sensitivity of side-channel signal analysis techniques to malicious inclusions in integrated circuits known as hardware Trojans.

Number of references: 12

Inspection controlled terms: electronic engineering computing - integrated circuit design - invasive software - system-on-chip

Uncontrolled terms: IC security improvement - on-chip monitors - side-channel signal analysis technique sensitivity - integrated circuits - hardware Trojans

Inspection classification codes: B1265M System-on-chip - B1265A Digital circuit design, modelling and testing - C7410D Electronic engineering computing - C6130S Data security - C5137 System-on-chip

Treatment: Practical (PRA)

Discipline: Electrical/Electronic engineering (B); Computers/Control engineering (C)

DOI: 10.1109/MDT.2012.2210183

IPC Code: G06F15/76 - G06F21/00

Database: Inspec

Copyright 2013, The Institution of Engineering and Technology

Data Provider: Engineering Village