

1. Designing and implementing hardware Trojans in ARM9 IP

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Authors: Zhen, Li (1); Lei, Li (1); Feng, Wenfeng (1); Lei, Fang (1); Zhao, Zhiqiang (1)

Author affiliation: (1) Research Institute of Electronic Science and Technology, UESTC, Chengdu, Sichuan, China

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Abstract: Hardware security to ensure trust in ICs has emerged as important research topic in recent years; several Trojan detection approaches are developed to prevent Trojans damage, which making Trojan inserting more and more difficult. In this paper we design Trojans in a simple ARM9 IP, which formed by 3-stage pipeline. This is the first time insert Hardware Trojans into popular processor. Our simulation result show that, with a negligible area overhead, our proposed method can significantly influence performance even disable the processor. © 2013 IEEE.

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