Abstract Details

Title: Evaluation of Hardware Security for Embedded Systems

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Abstract: The design of secure hardware is often overlooked in the product development lifecycle, leaving many devices vulnerable to hacker attacks resulting in theft of service, loss of revenue, or a damaged reputation. Many times, products must be redesigned after a harmful incident, which raises overall development costs and increases time-to-market. This paper focuses on general concepts for hardware security. Required Topics in this paper include recommendations on incorporating security into the product development cycle, attack and threat models, and design solutions for enclosure, circuit board, and firmware layers.

Keywords: Firmware, PCB, Security, Attacks, Tamper Mechanisms.