

## **242. RANDOM BASED LSB STEGANOGRAPHY IN HARD MACROS**

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Steganography is derived from the Greek word steganographia which means covered writing. The goal is to hide the existence of the message from unauthorized party. In this paper I proposed an image based steganography that Least Significant Bits(LSB) techniques and pseudo random encoding technique on images to enhance the security of the communication. In the LSB approach, the basic idea is to replace the Least Significant Bits (LSB) of the cover image with the Bits of the messages to be hidden without destroying the property of the cover image significantly. In Pseudo-Random technique, a random-key is used in the embedding process. The design is implemented in FPGA using hard macros. Hard Macros is a precompiled(synthesized/placed/routed/previously)module and stored in a library for later use by a designer. This helps in reducing the compilation time by 3x thereby increasing the design speed. In this paper hard macros is an external hardware circuit that comprises of shift register and an Ex-or gate that generates a PRBS sequence.

Keywords: Steganography, LSB, Random key, Cover Image, secret message, hard macros.

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