HYBRID OBFUSCATION WITH KEY BASED ENCRYPTION

FOR INTEGRATED CIRCUITS

 $\mathcal A$ project report submitted in partial fulfillment of the requirements

For the award of the

BACHELOR OF TECHNOLOGY

IN

"ELECTRONICS & COMMUNICATION ENGINEERING"

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16811A0422 16811A0401 16811A0461 16811A0450

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AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

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CERTIFICATE

This is certify that the project report entitled "HYBIRD OBFUSCATION WITH KEY BASED ENCRYPTION FOR INTEGRATED CIRCUITS" is a bonafide work submitted by Garaga Yugasri, Addepalli Navyasri, Thamada Rassi, Polimera Gajapathi, in partial fulfillment of the requirements for the award of

BACHELOR OF TECHNOLOGY

IN

ELECTRONICS & COMMUNICATION ENGINEERING

During the academic year 2016-2020.

PRNaidy INTERNAL GUIDE

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EXTERNAL EXAMINER

ABSTRACT

A new functional encryption method applied for integrated circuit (IC) is proposed in this abstract which is called as hybrid obfuscation. The hardware obfuscation or encryption function is a countermeasures act utilized to provide safety of circuit from malware attack and unauthorized entry at the time of manufacture by the distrusted foundries across the world. The purpose of encryption is to design and embed secret keys for achieving functional modifications at the design space itself. Such keys are programmed suddenly inside the ICs when they are obtained from the factory. Since the distrusted factory doesn't approach the key, they can't dispose of the extra components of the chip which doesn't work effectively without the key. By joining existing procedures of obscurity known as fixed obfuscation and dynamic obfuscation, the half and half muddling strategy accomplish the objectives of an encryption function. The investigation of safety efforts proves that the functional encryption enhances the design security as contrasted with existing method.