Design 32-bit Lightweight Block Cipher Algorithm (DLBCA)

Abstract

Lightweight block cipher algorithms are vital for constrained environment. There are many applications need secured lightweight block cipher algorithm like credit card, E-passport and etc. This paper will propose 32-bit lightweight block cipher algorithm. It will apply two attacks differential and boomerang attack. The results will show that the proposed algorithm is resistance to these attacks.

References

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Index Terms

Computer Science

Security

Keywords
Lightweight block cipher, Substitution, Permutation Network, Differential cryptanalysis and Boomerang cryptanalysis.