

IEICE Transactions on Fundamentals of Electronics,
Communications of Computer Sciences, E83-A(12): 2762-2765

A Practical (t,n) Multi-secret Sharing Scheme

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Abstract

Based on the systematic block codes, we propose a (t,n) multi-secret sharing scheme. Compared with the previous works, our scheme has the advantages of smaller communication overhead, easy generator matrix construction and nondisclosure of users secret shares after multiple secret reconstruction operations. These advantages make the practical implementation of our scheme very attractive.

Key words : Cryptography; Secret sharing