Code design of l_{t_i/n_i}-ispotty-byte error correcting θ-codes

S. Jain

Abstract. l_{t_i/n_i}-ispotty-byte error correcting codes over $\mathbf{Z}_q$ [7] are non-binary codes generalizing the binary irregular-spotty-byte codes [3] suitable for semiconductor memories in which a word is divided into irregular bytes not necessarily of the same length. The distance between distinct words is measured in terms of newly defined l_{t_i/n_i}-metric function [7]. In this paper, we present the code construction methods of l_{t_i/n_i}-ispotty-byte error correcting codes in terms of their parity check matrix.

AMS Subject Classification (2020): 94B05

Keywords:ispotty-byte codes, ispotty distance