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g-byte error correcting codes for semiconductor memories

S. Jain

Abstract. This paper considers a new model of error control codes for semiconductor memories consisting of RAM chips not necessarily of the same size. The information stored on a chip corresponds to a variable length byte and thus byte length is not same in this case and varies from chip to chip. The variable length byte is termed a “general byte” or simply a “g-byte”. The code presented in this paper are capable of correcting single g-byte errors.

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