

Transient and Cycle Structure of Elementary Rule 150 with Reflective Boundary

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Abstract

Cellular automata are simple mathematical representation of complex dynamical systems. Therefore there are several applications of cellular automata in many areas such as coding, cryptography, VLSI design etc. [1,2]. In this study, a recurrence relation for computation minimal polynomial of transition matrix of linear elementary rule 150 with reflective boundary condition [3] was obtained. Then, the maximum transient and cycle lengths of this rule were calculated by algorithm in [4].

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References

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