Abstract

Quantum-dot Cellular Automata is a new technology for development of logic circuits based on nanotechnology, and it is an one of the alternative for designing high performance computing over existing CMOS technology. The Research on reversible circuits is going on both VLSI and QCA based design due to low power consumption. In this paper we are presenting basic logic gate design using Reversible universal gate and also presenting the effectiveness of Reversible Universal Gate (RUG) by comparing it with other reversible gates.

References

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Basic Logic Gate Realization using Quantum Dot Cellular Automata based Reversible Universal Gate

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Index Terms
Computer Science  Circuit And Systems
Keywords
Reversible Universal Gate  Quantum Cell  Majority Voter  Inverter  Quantum Dot Cellular Automata