Abstract

New practical researches on ultra-low power systems with no-loss of information for preventing heat generation as reversible gates is making many progresses in a combination with nano-scale quantum-dot cellular automata technology. In this paper, two important design factors of QCA is investigated, Then a novel robust design of Toffoli reversible gate is proposed and compared its useful template for further uses in VLSI circuits to the others.

References


Index Terms

Computer Science

Circuits and Systems
Keywords

Toffoli, reversible gate, QCA, Boundary input, Boundary output