Abstract

Nowadays reversible circuit designing is the emerging area of research. This design strategy
Design of a 4-bit 2’s Complement Reversible Circuit for Arithmetic Logic Unit Applications

aims towards the formation of digital circuits with ideally zero power dissipation. In this paper we have proposed a new reversible logic module to design a 4-bit binary 2’s complement circuit. This complement circuit using reversible logic can be used to design other low loss Arithmetic circuit. Proposed circuits have been simulated using ModelSim and implemented using Xilinx Spartan2 FPGA platform.

References

Design of a 4-bit 2’s Complement Reversible Circuit for Arithmetic Logic Unit Applications


Index Terms

Computer Science

Information Technology

Keywords

Reversible Logic Circuit

Reversible Gates