Abstract

Reversible logic is highly useful in nanotechnology, low power design and quantum computing. The paper proposes a power efficient design of an ALU, using Reversible Logic Gates. With power management becoming a critical component for hardware design developers, Reversible Logic can provide a viable alternative towards creating low power digital circuits.

References

1. Laszlo B. Kish, Texas A&M University, Department of Electrical Engineering, College Station, TX 77843-3128, USA Received 16 July 2002; received in revised form 19 September 2002; accepted 19 September 2002, Communicated by C.R. Doering, “End of Moore’s law: thermal (noise) death of integration in micro and nano electronics.”

Microprocessor System
17. NOVEL DESIGN OF OPTIMIZED MULTIPLEXER CIRCUIT USING REVERSIBLE LOGIC Vandana Shukla1, O. P. Singh1, G. R. Mishra1, R. K. Tiwari2 vandanashuklaec05@gmail.com, opsingh@amity.edu, gr_mishra@rediffmail.com, rktiwari2323@yahoo.co.in, Amity School Of Engineering & Technology, Amity University, Lucknow 2Dr. R. M. L. University, Faizabad.
Index Terms

Computer Science               Circuits and Systems

Keywords

Reversible logic, Arithmetic Logic Unit, Low Power Design