Abstract

In this paper, a barrel shifter is a specialized digital electronic circuit with the purpose of shifting an entire data word by a specified number of bits by using combinational logic and sequential logic used. Multiplexer based 8-bit barrel shifter circuit is implemented using the hardware description language – Verilog. The proposed barrel shifter architecture implementation shows reduction in power consumption

References

1. G. V. Nikhil ; B. P. Vaibhav ; Vishnu G. Naik ; B. S. Premananda, Design of low power barrel shifter and vedic multiplier with kogge-stone adder using reversible logic gates, 2017 International Conference on Communication and Signal Processing (ICCSP) Year: 2017
2. M B Rakesh, Performance comparison of 8 bit & 32 bit logarithmic barrel shifter using Fredkin & SCRL gates, 2017 International Conference on Circuits, Controls, and Communications (CCUBE), Year: 2017
Design of Low Power Barrel Shifter using Pulsed Latches


6. Prof. Sherief Reda, Design and Implementation of VLSI Systems, Lecture 24: Sequential Circuit Design


15. Prasad D Khandekar, Dr. Mrs. Shaila Subbaraman, Venkat Raman Vinjamoori "Low Power 2:1 MUX for Barrel Shifter" First International Conference on Emerging Trends in Engineering and Technology.


Index Terms

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Keywords

Multiplexer, verilog HDL, power, pulsed latches, microwind.