

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 2, June 2022

A Comparative Performance Analysis of CMOS XOR XNOR Circuits

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Abstract: New XOR-XNOR circuit modes are proposed to improve speed and power as these circuits are the building blocks of multiple arithmetic circuits. This project evaluates and compares the performance of various XOR-XNOR circuits. The performance of XOR-XNOR circuits is tested by comparing the simulation results obtained with Electric VLSI. The mimicry results show which region has the lowest PDP and EDP performance, the most energy efficient and fastest compared to the best available XOR-XNOR circuits.

Keywords: Exclusive-OR (XOR), Exclusive-NOR (XNOR), High Speed, Low Power, Arithmetic Circuits. Circles

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