# Design of 32-bit MIPS ALU by Efficient Adders

# Abstract:

With the advancement of technology, Integrated Chip (IC) it has lead to an increase of power dissipation and undesired noise. As the design gets more complex, this results in slower speed. Hence, the demand for low power, fast speed is desired. In this paper an adder and logic circuits are designed in three different CMOS technology structures like complementary logic, ratio logic and dynamic logic. They all have a similar function, but the way of producing the intermediate nodes and the transistor count is different

**Tools used:**

**Xilinx 13.2**