Synthesis Report

Group No : 28 - 18CS10013, 18CS10024

Ripple Carry Binary Adder

Hardware Requirement for ripple carry binary adder:

LUT	8
IO	26

The board used is Nexys4 DDR. The critical delay is 7.118ns for the path from LSB of B to Cout (carry output).

Hybrid Binary Adder

Hardware Requirement for hybrid binary adder:

LUT	8
IO	26

The board used is Nexys4 DDR. The critical delay is 7.118ns for the path from b[1] to cout.

Bit Serial Binary Adder

Hardware Requirement for bit serial binary adder:

LUT	69
FF	63
IO	27

The board used is Nexys4 DDR. The critical delay is 4.090ns for all the paths from out_reg[i] to out[i] (for all i = 0 to 7).

The delay in bit serial binary adder is small. It is faster among the above 3 binary adders. Number of the hardware components required for bit serial binary adder is more when compared to ripple carry binary adder and hybrid binary adder.