Assignment #2 - Report

Verilog Design of Binary Adders

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Ripple Carry Binary Adder:

1. Hardware Requirements: 8 Full Adders, 26 I/O, 7 Wires

2. Critical Path Delay:
   - Total Delay: 7.012 ns
   - Logic Delay: 4.012 ns
   - Net Delay: 3.000 ns

Hybrid Binary Adder:

1. Hardware Requirements: 2 Carry Lookahead Adders, 26 I/O, 25 Wires

2. Critical Path Delay:
   - Total Delay: 7.012 ns
   - Logic Delay: 4.012 ns
   - Net Delay: 3.000 ns

Bit-Serial Binary Adder:

1. Hardware Requirements: 1 D-Flip-Flop, 1 Full Adder, 27 I/O, 17 Wires

2. Critical Path Delay:
   - Total Delay: 4.037 ns
   - Logic Delay: 3.237 ns
   - Net Delay: 0.800 ns
   - Clock Time Period : 5 ns