

Computer Organization and Architecture

Post-Lab

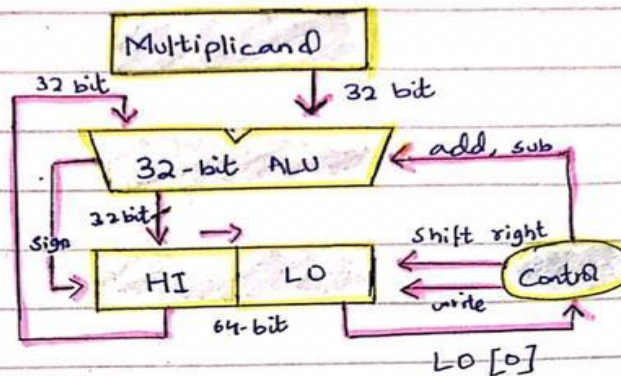
Lab 09



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Class	Computer Organization and Architecture CPE343(BCE-5B)
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Postlab:

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Hardware Design

Code :

```

module Signed_fourbit (
    input clk, reset,
    input [3:0] multiplicand, multiplier,
    output [3:0] HI_FF, LO_FF
);
    wire phit, SR;

    multiplier_controller MC (clk, reset, init, SR);
    multiplier_datapath MDP (clk, reset, init, SR, multiplicand,
                             multiplier,
                             HI_FF, LO_FF);
endmodule
    
```

Output Waveform:

