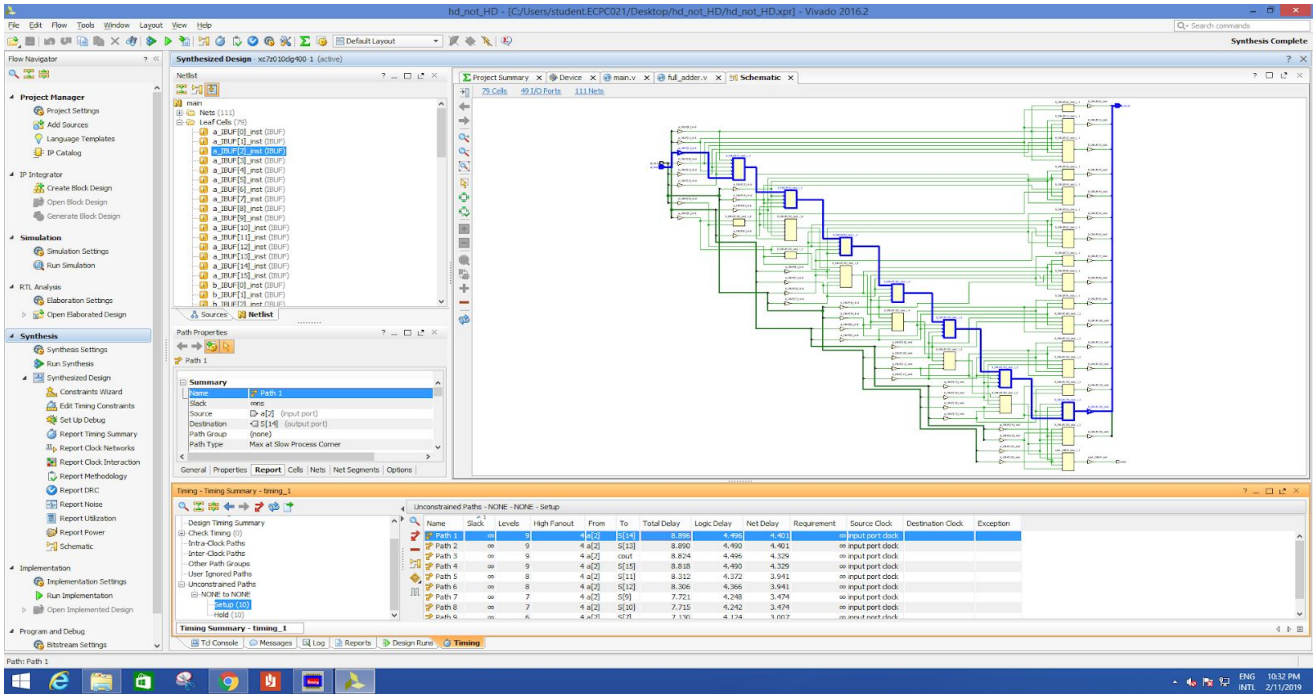
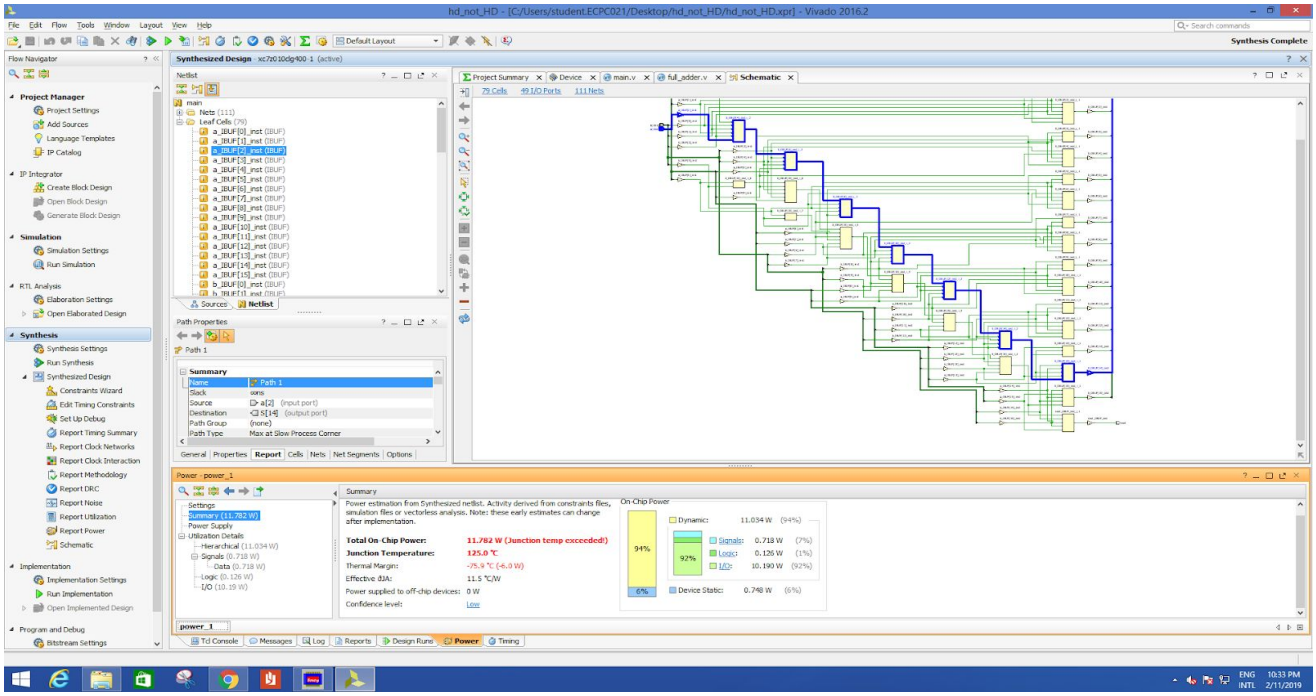
Results of 16 bit adders compared with an efficient one

1.) Using Ripple Carry adder

Timing Results

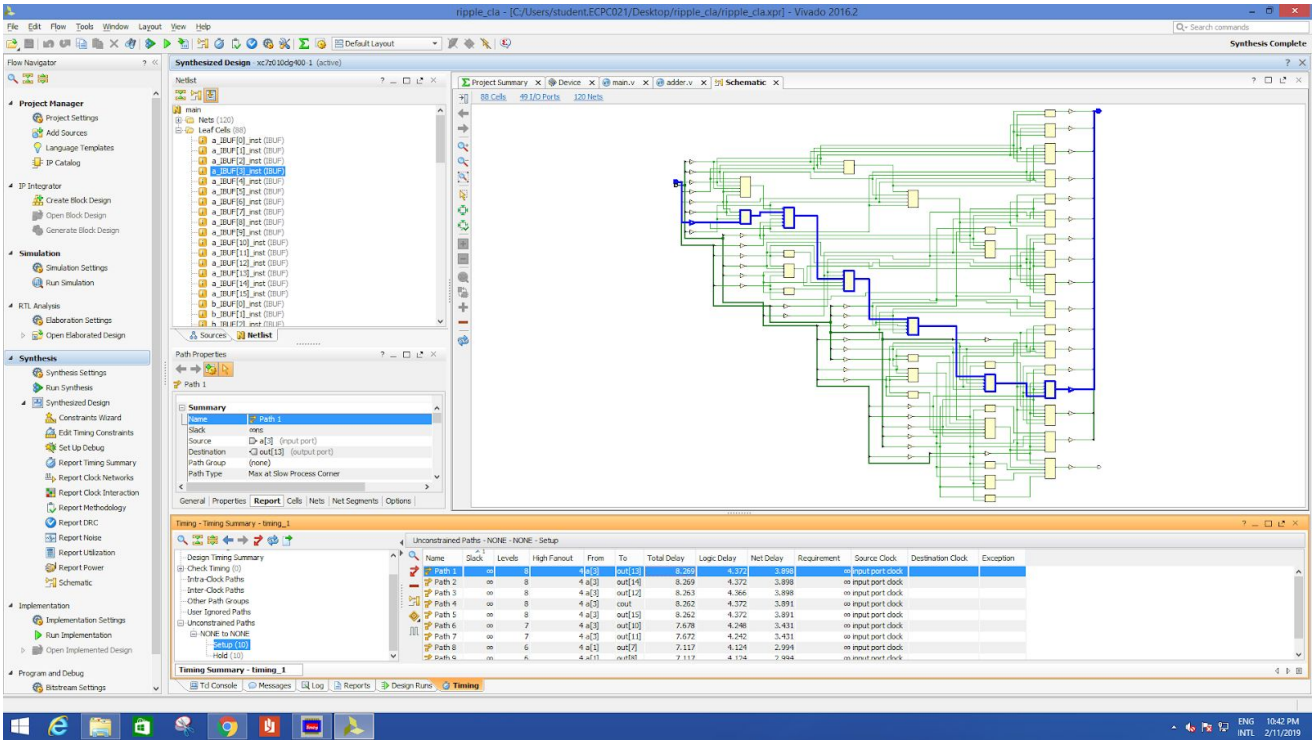


Power Results

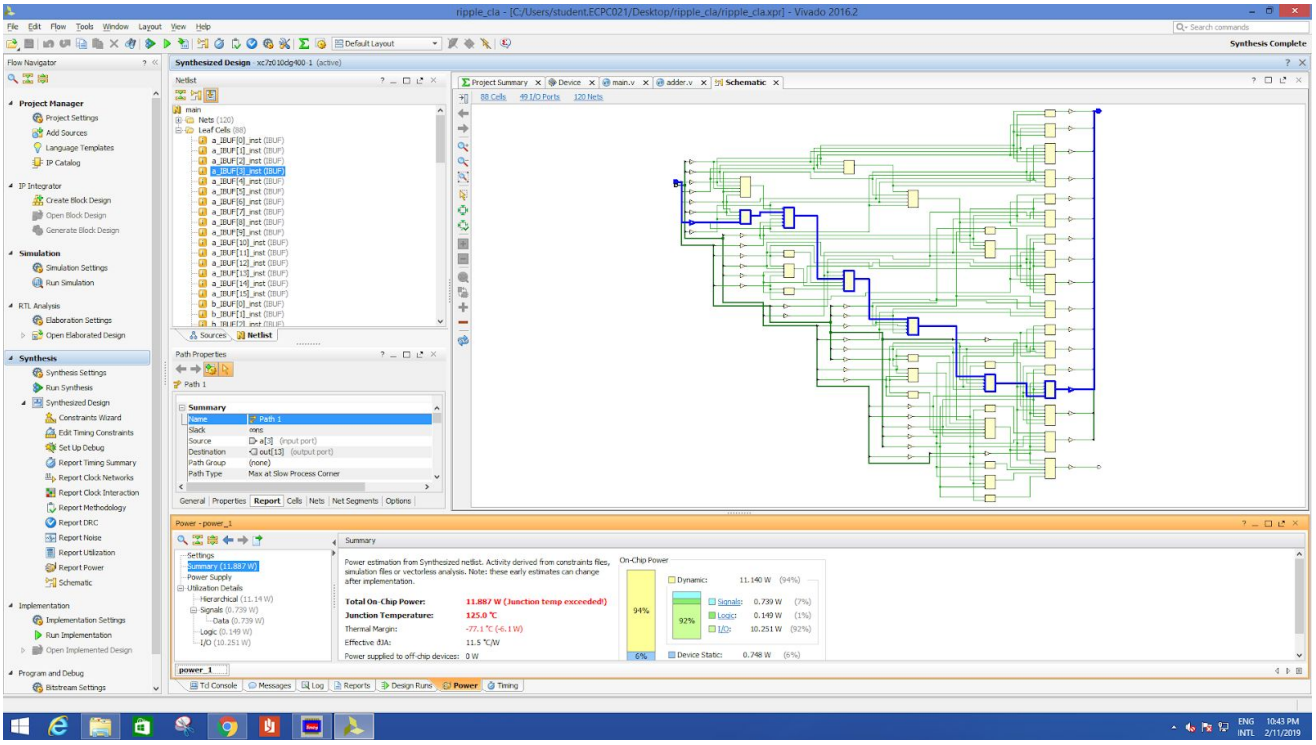


2.) Using 4 carry look ahead adder with ripple carry adder

Timing Results

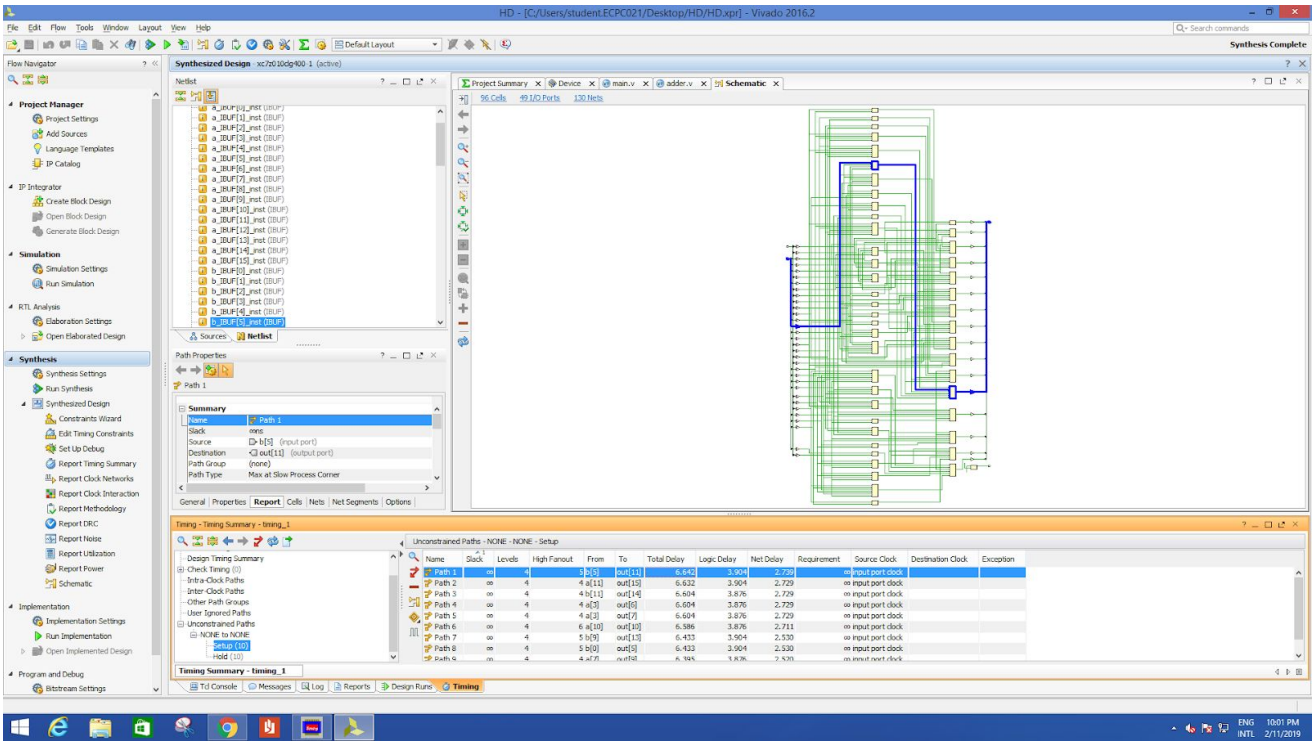


Power Results

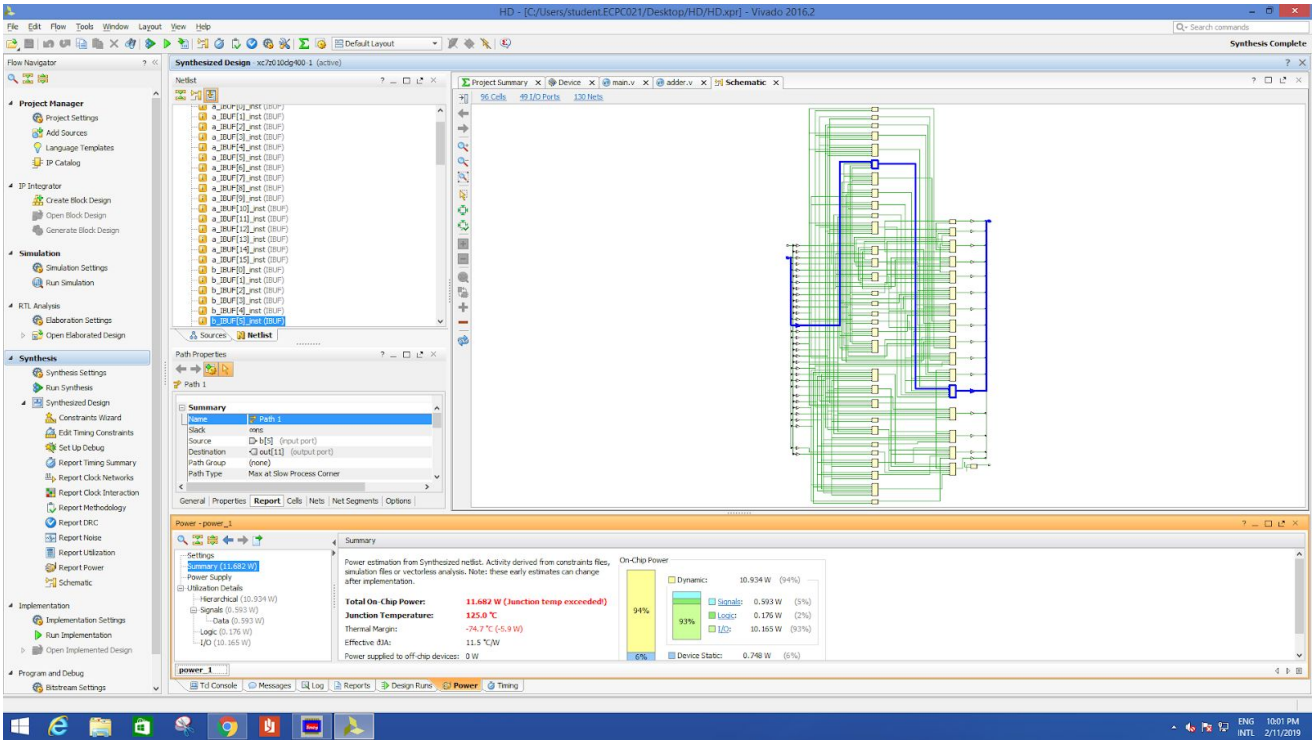


3.) Using our proposed method

Timing Results



Power Results



OBSERVATIONS

1.) Timing delay
   a.) Method 1(using ripple carry): 8.896
   b.) Method 2(using ripple carry and cla): 8.269
   c.) Method 3(proposed one): 6.642

2.) Power Consumption
   a.) Method 1(using ripple carry): 11.782W
   b.) Method 2(using ripple carry and cla): 11.887W
   c.) Method 3(proposed one): 11.682W

RESULTS:

The time delay in the proposed one is very less as compared to the other two methods.

The power consumption is almost same in all three methods, still the least is in the proposed one.