Function:

Asynchronous

eq is HIGH when op1 == op2, otherwise LOW.

lt is HIGH when op1 < op2, otherwise LOW.

funct:

0: do result = op1 + op2

1: do result = op1 - op2

2: do result = op1 & op2

3: do result = op1 | op2

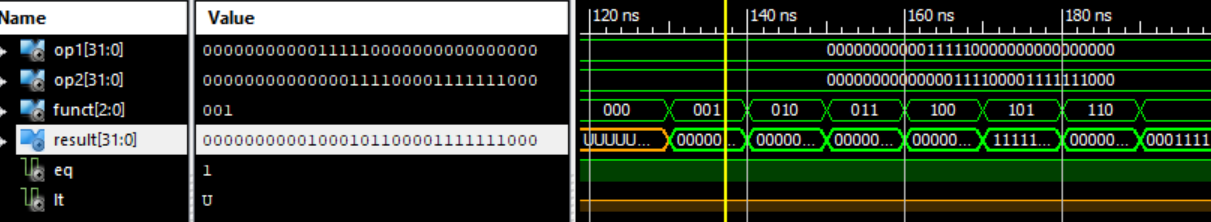
4: do result = !(op1 | op2)

5: do result = op1 << op2

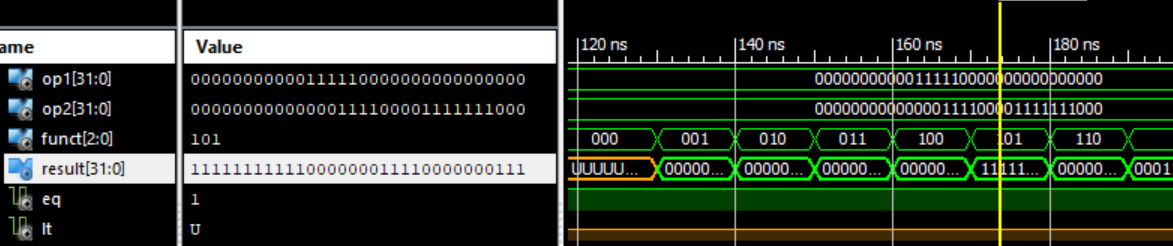
6: do result = op1 >> op2

Function simulation:

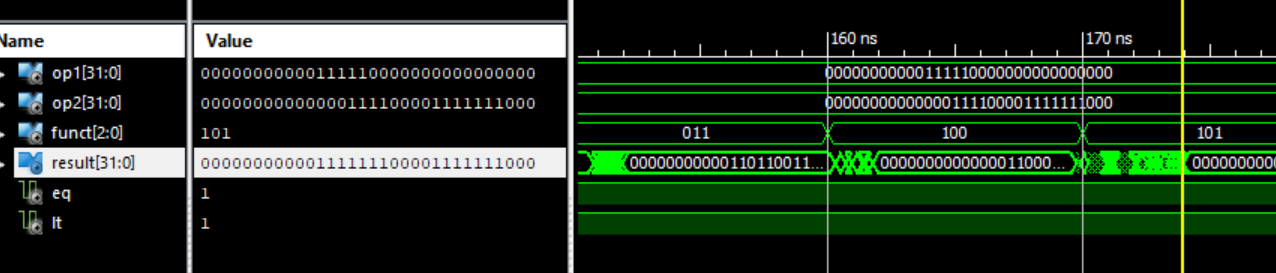
op1+op2:

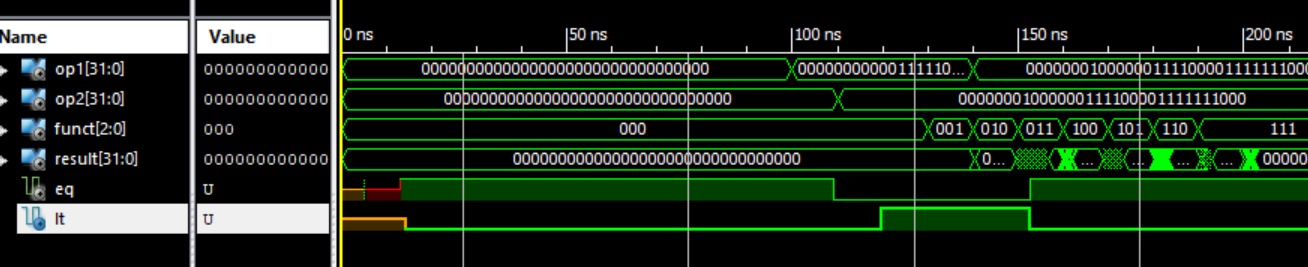


~op1|op2:



Post-route simulation:





The delay is about 13.903ns.