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

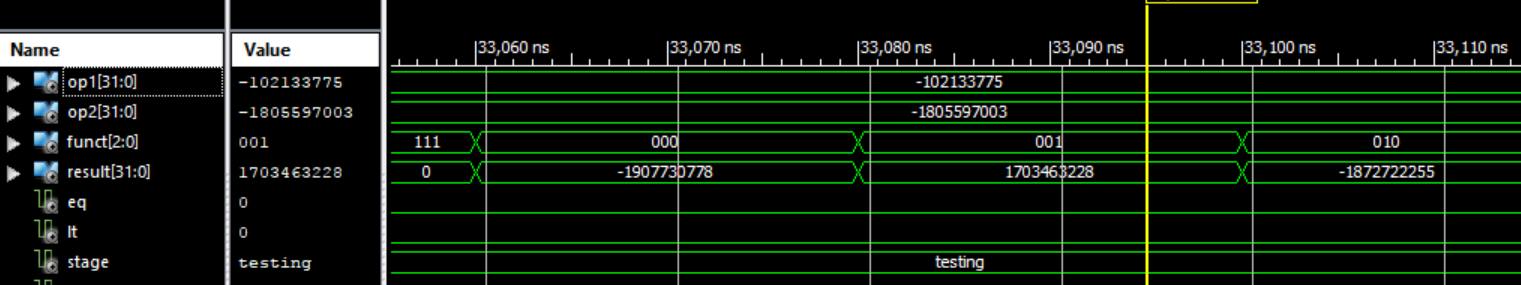
3: do result = op1 | op2

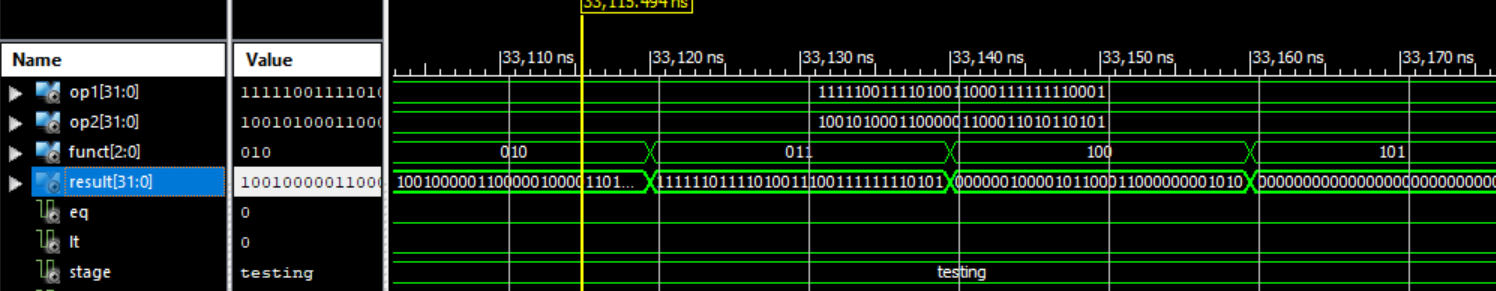
4: do result = !(op1 | op2)

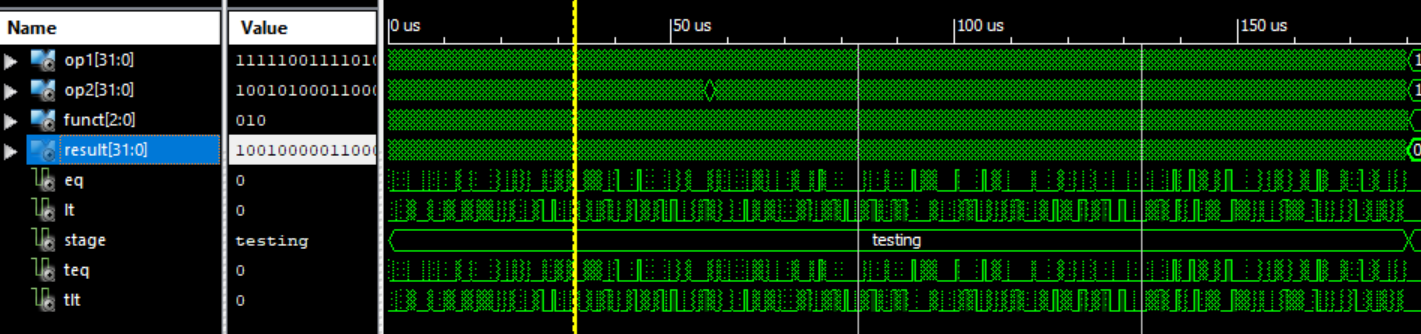
5: do result = op1 << op2

6: do result = op1 >> op2

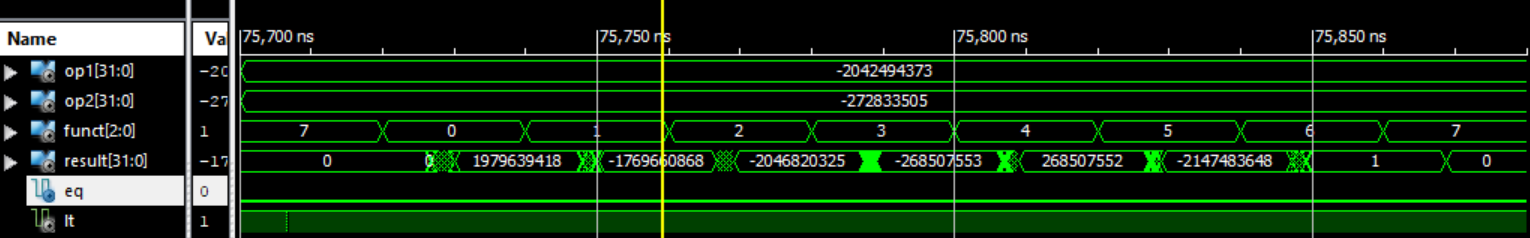
Function simulation:

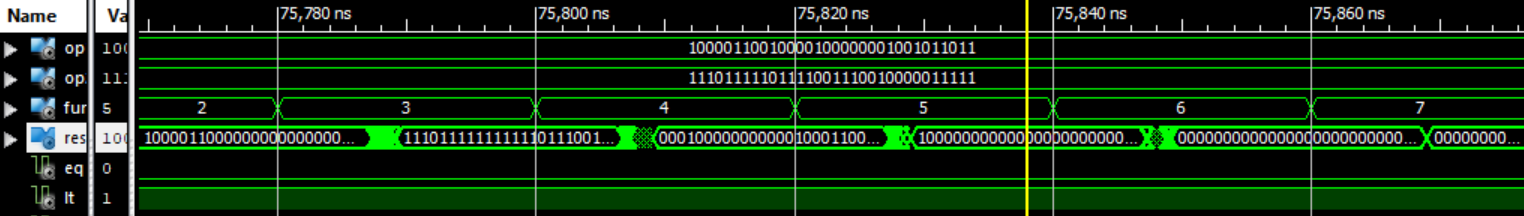




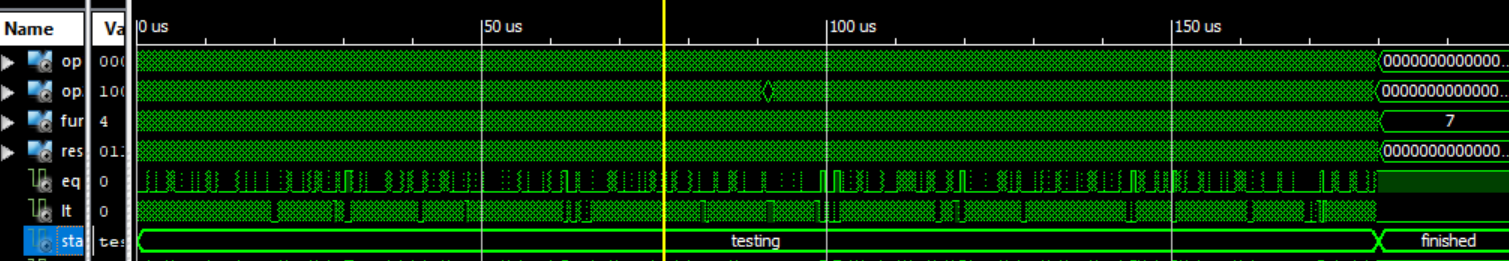


Timing simulation:





For 1000 cases:



The delay is about 10.442ns.