Execute is set to 0 to trigger the operation since it's an active-low signal

Execute is still 0 but the operation halts. Since the computation stops after 1 computational cycle (8 clock cycles) no matter what logic value Execute has.

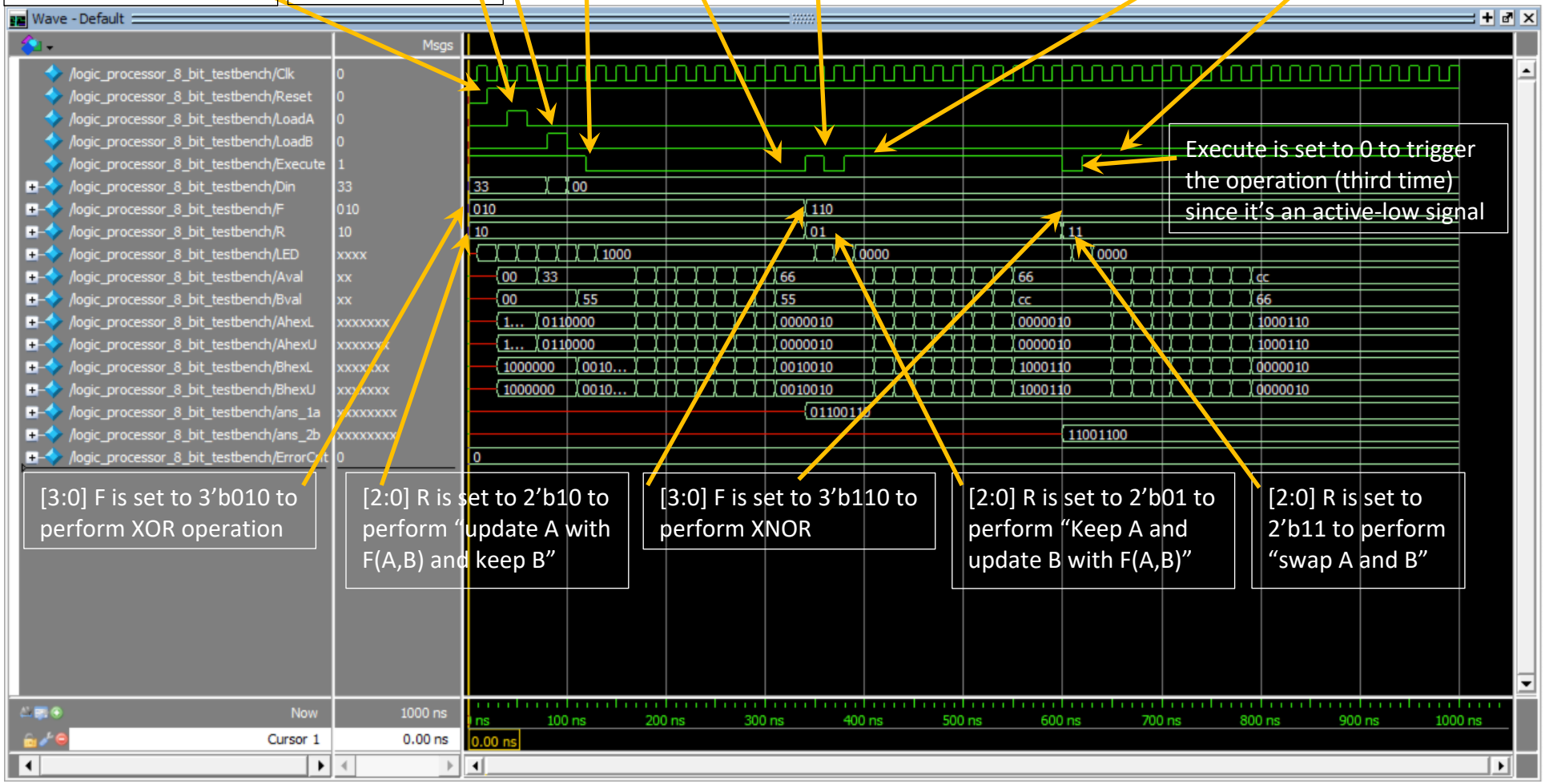
Execute is quickly set back to 1 but it doesn't affect the functionality since 1 computational cycle (8 clock cycles) has to finish after Execute is triggered.

Register B is load with 2'h55

Reset is set to 1 to stop resetting since it's an active-low signal

Register A is load with 2'h33

Execute is reset to 1 and then set to 0 to trigger the operation (second time) since it's an active-low signal



Execute is set to 0 to trigger the operation (third time) since it's an active-low signal

[3:0] F is set to 3'b010 to perform XOR operation

[2:0] R is set to 2'b10 to perform "update A with F(A,B) and keep B"

[3:0] F is set to 3'b110 to perform XNOR

[2:0] R is set to 2'b01 to perform "Keep A and update B with F(A,B)"

[2:0] R is set to 2'b11 to perform "swap A and B"