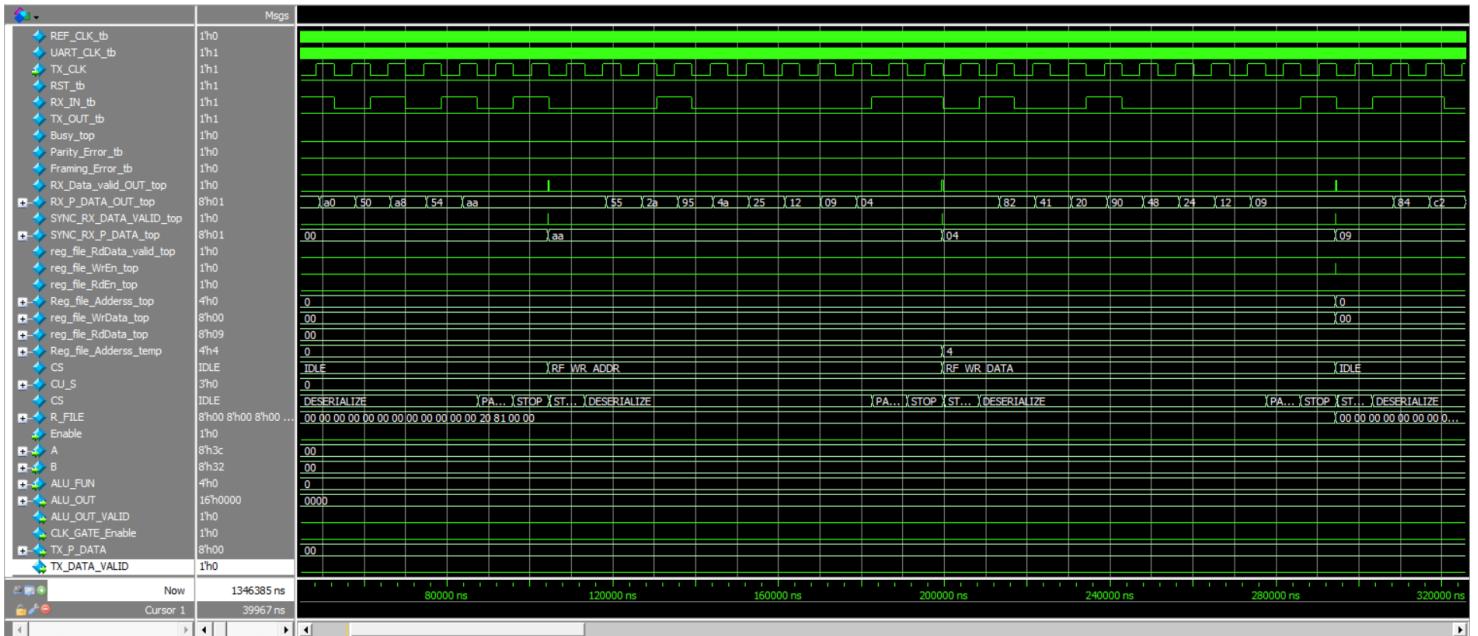
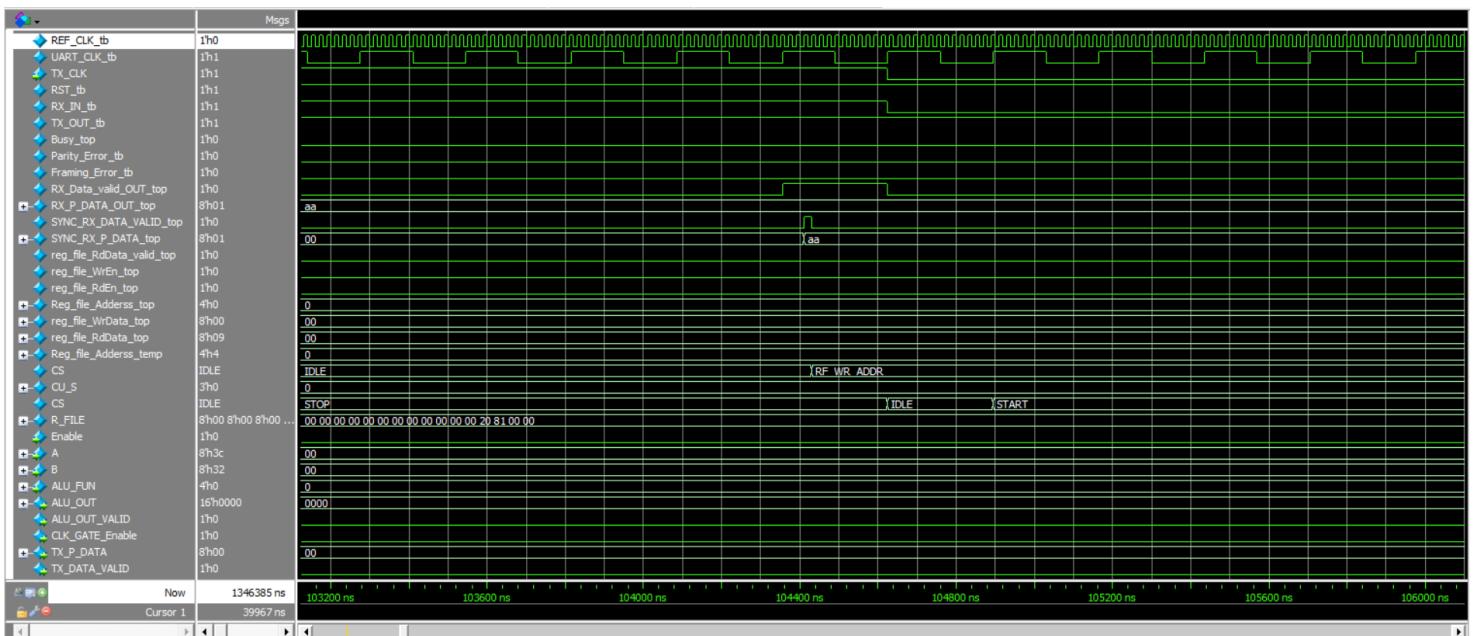


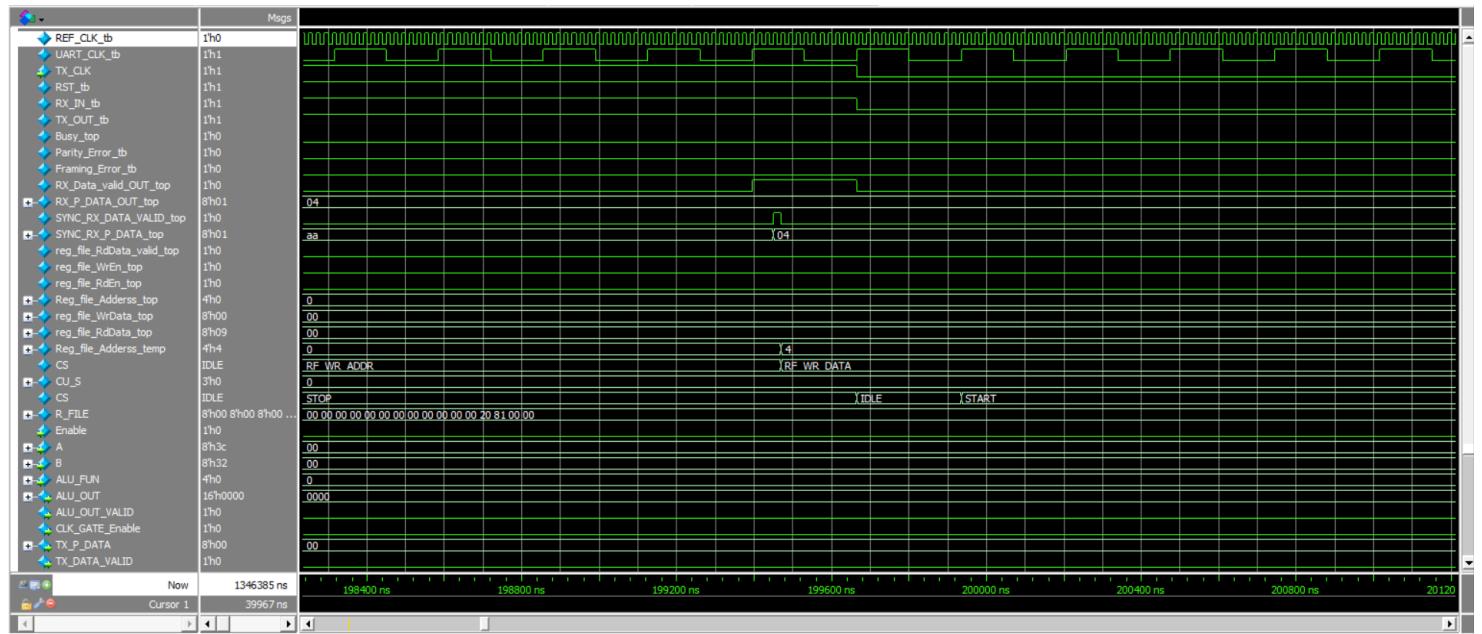
Register file write command (3f frames)



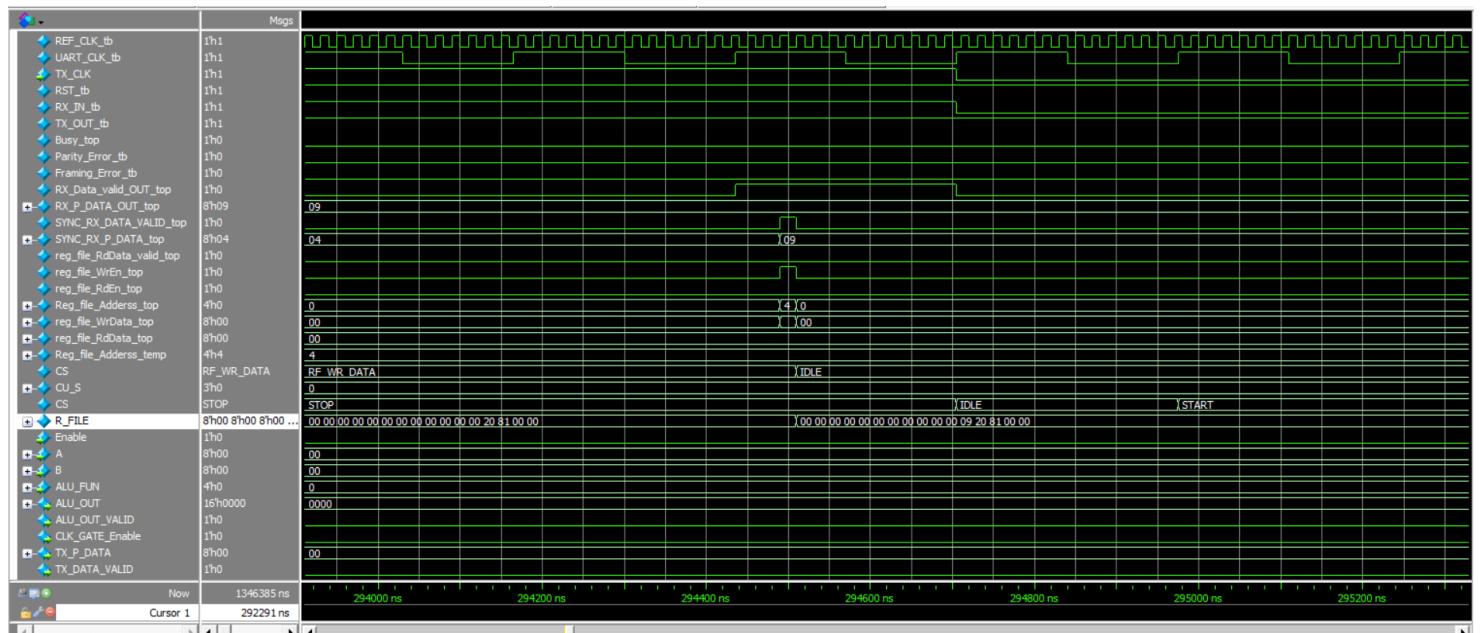
Frame1 of Register file write command



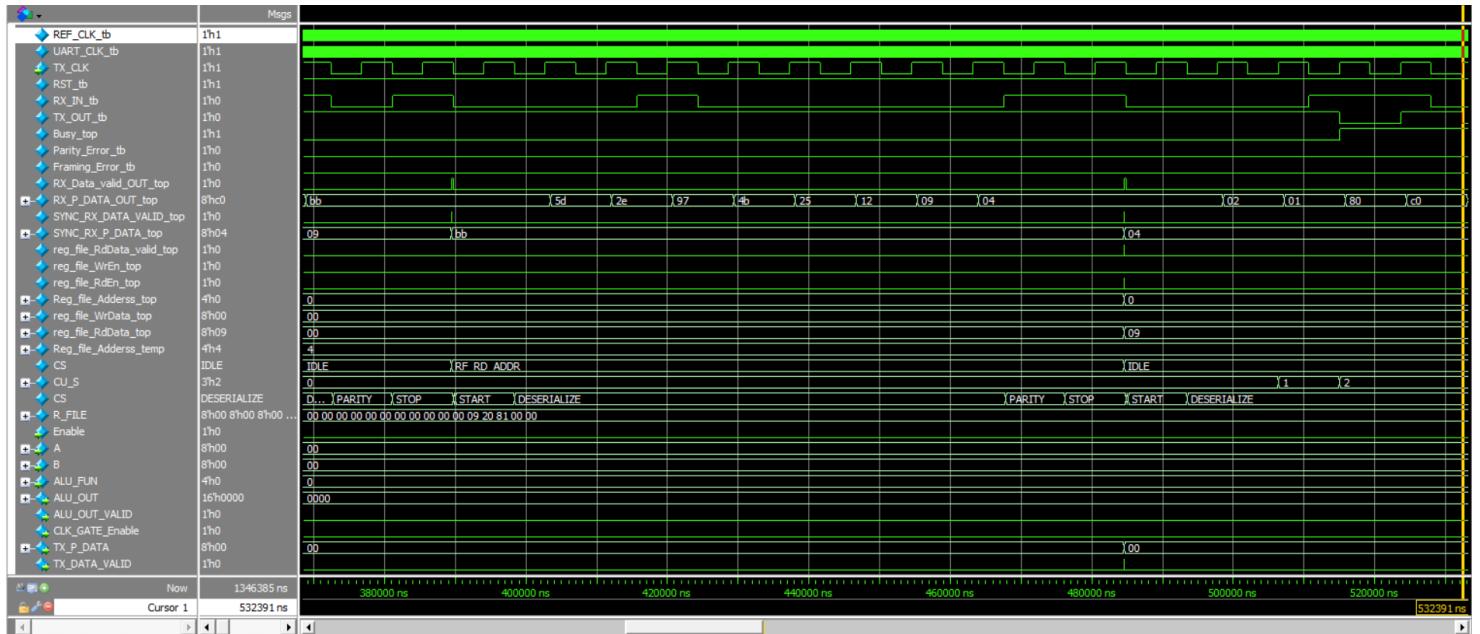
Frame2 of Register file write command (wr_addr)



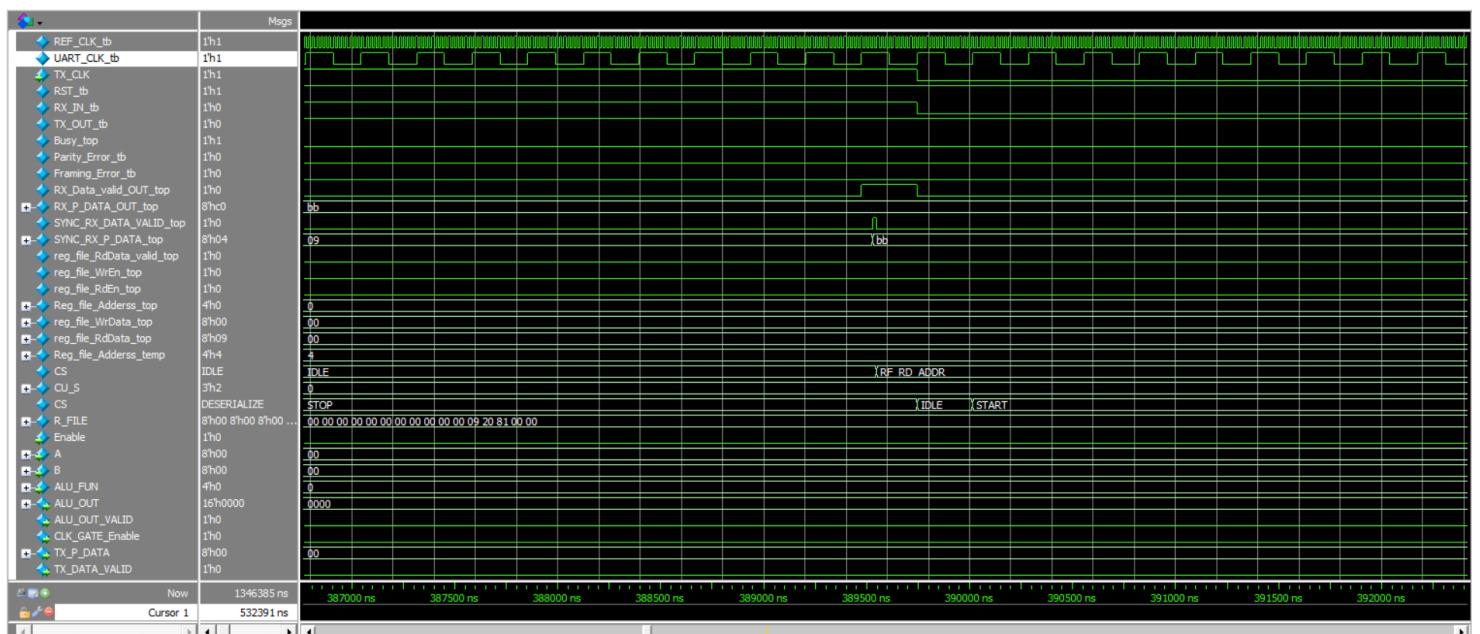
Frame3 of Register file write command (wr_data)



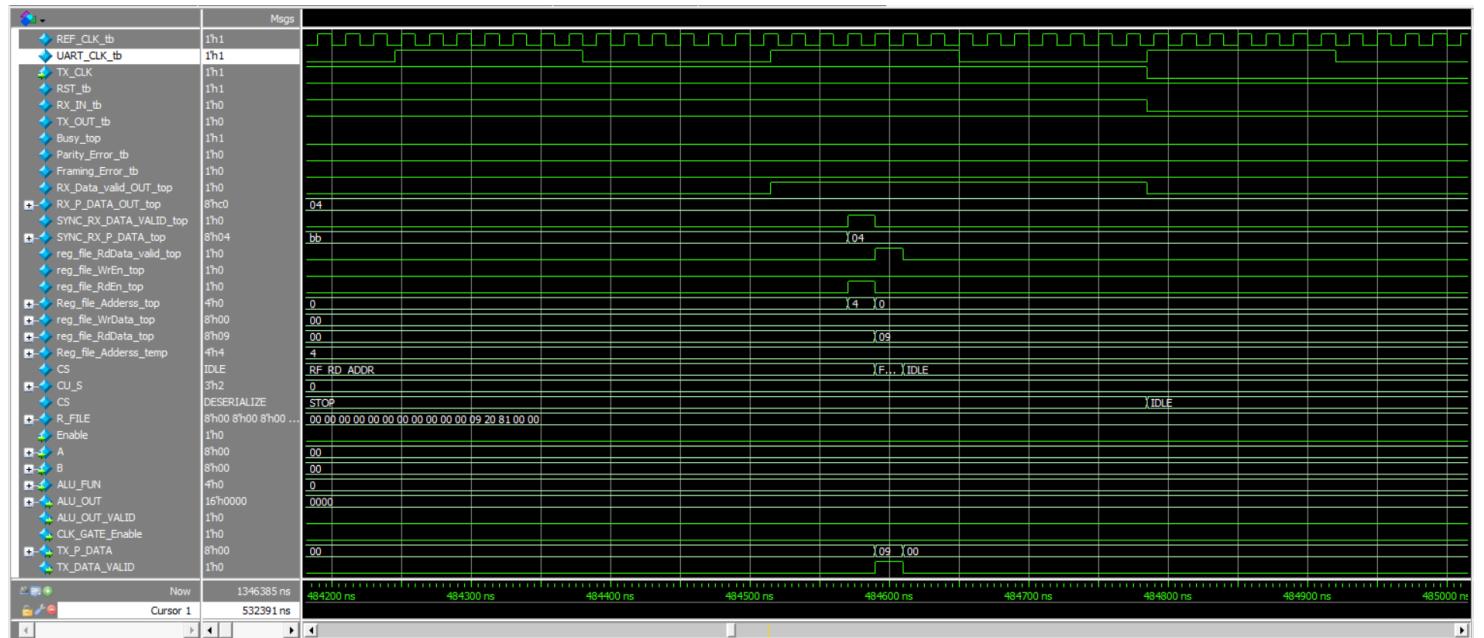
Register file read command (2 frames)



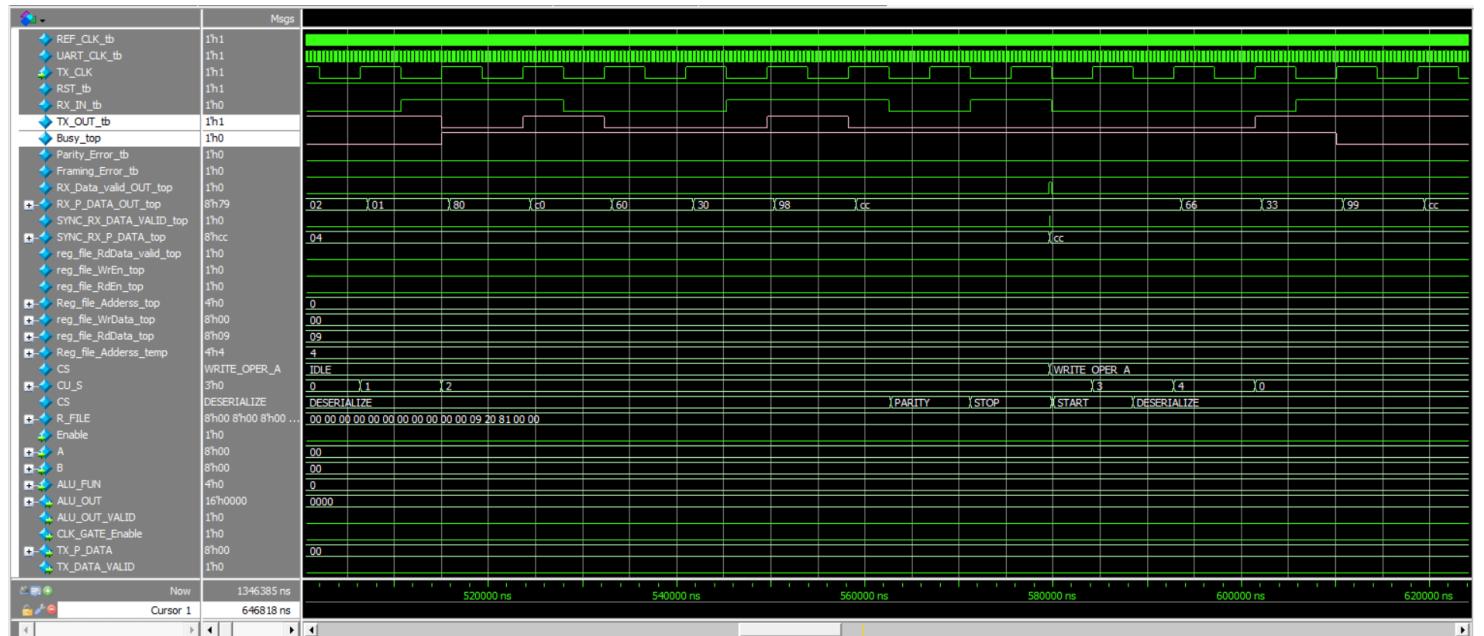
Frame1 of Register file read command



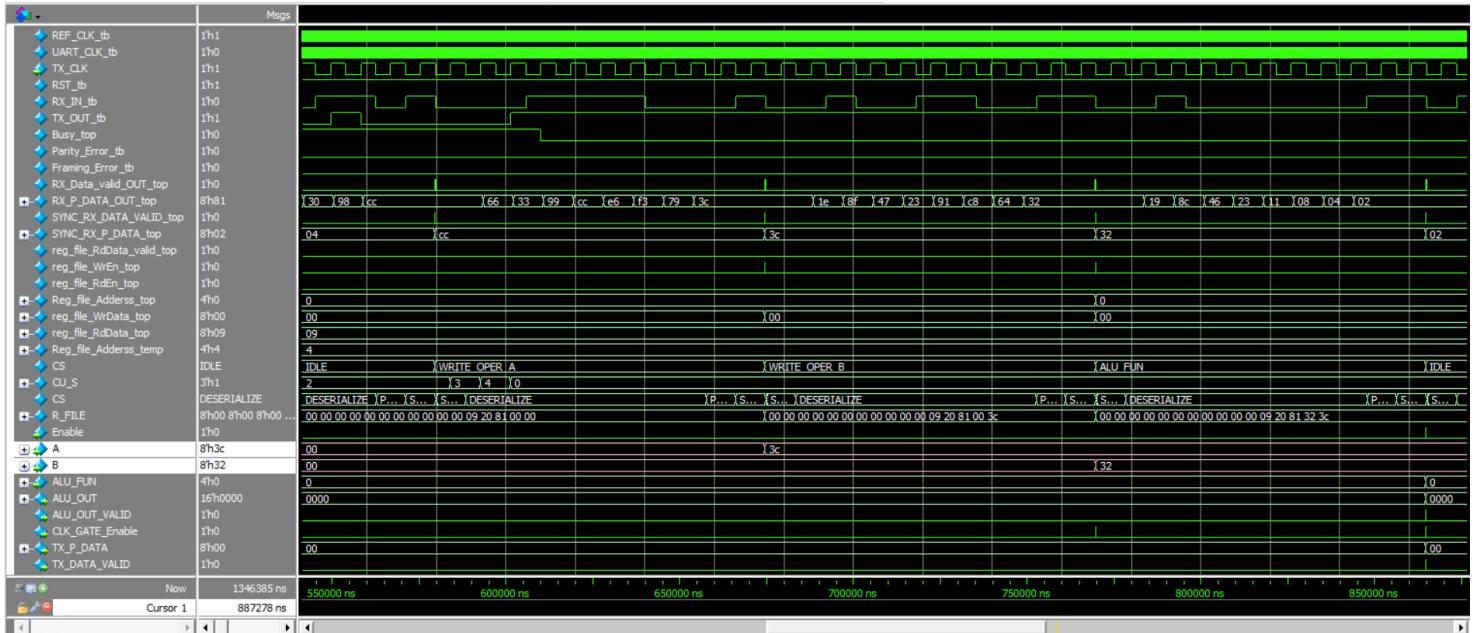
Frame2 of Register file read command (rd_addr)



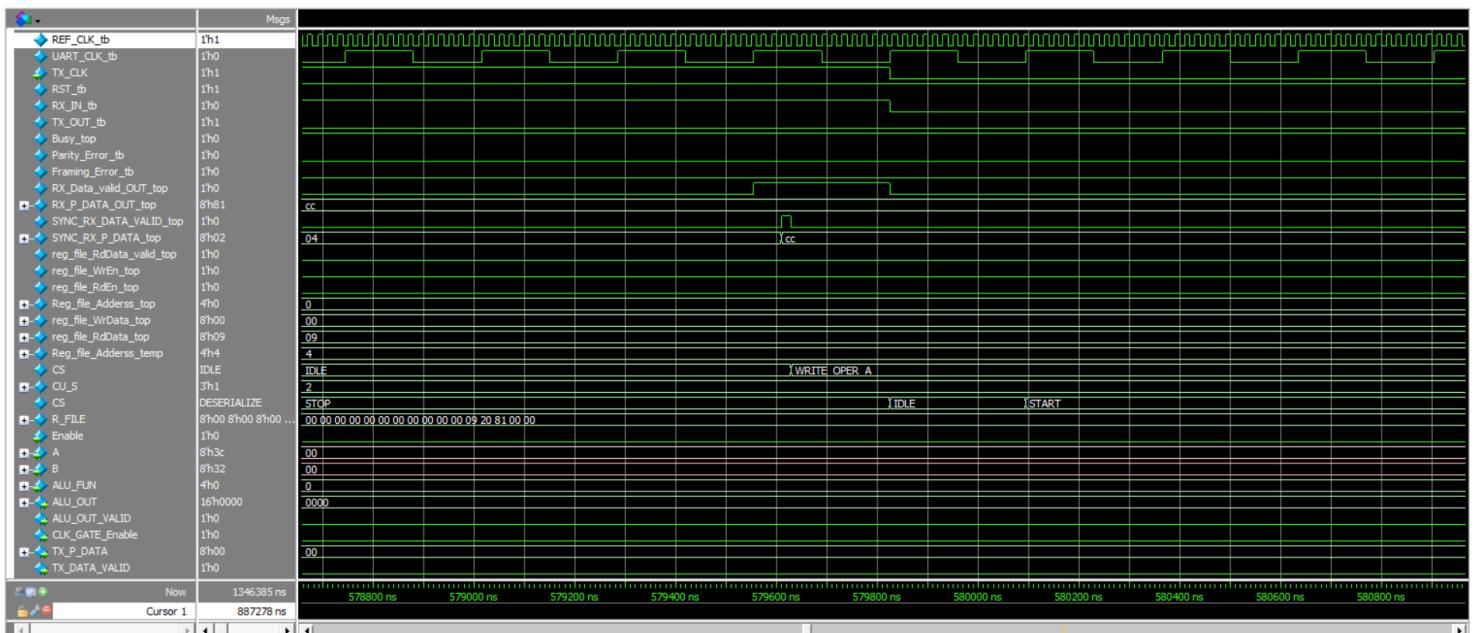
TX_OUT from the Register file read command



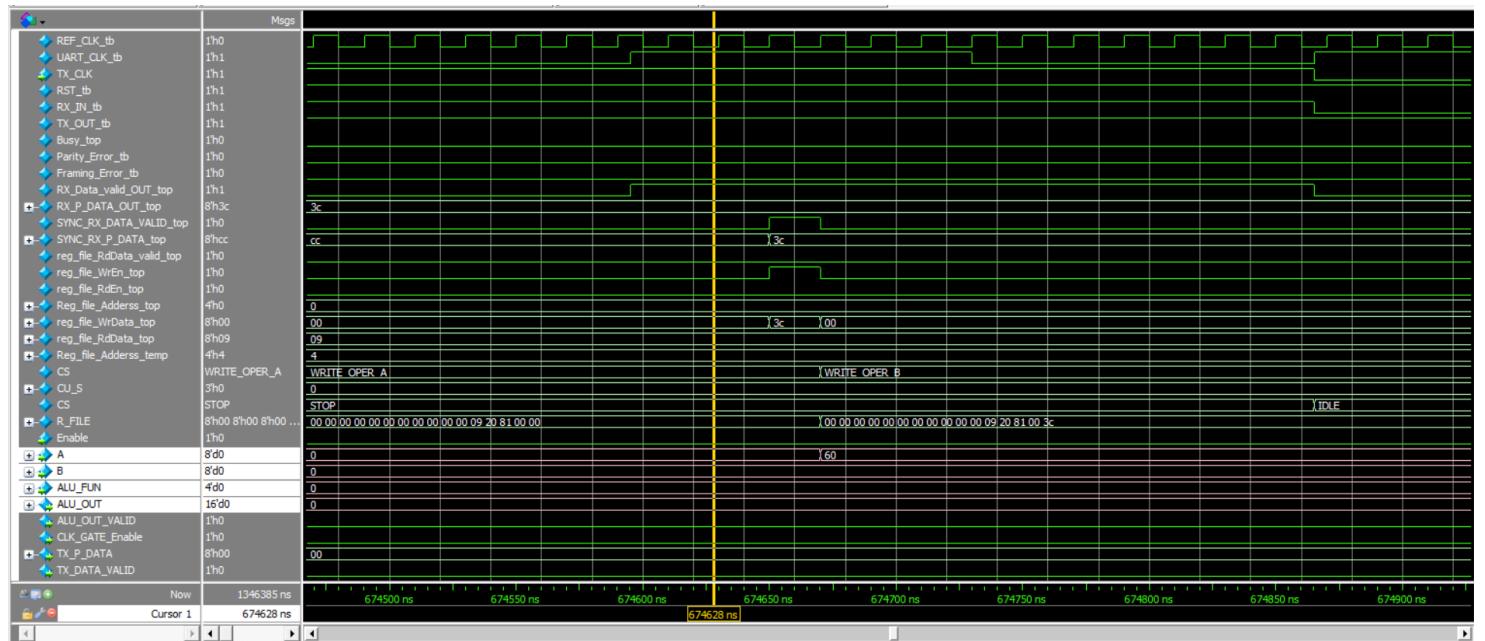
ALU with operands command (4 frames)



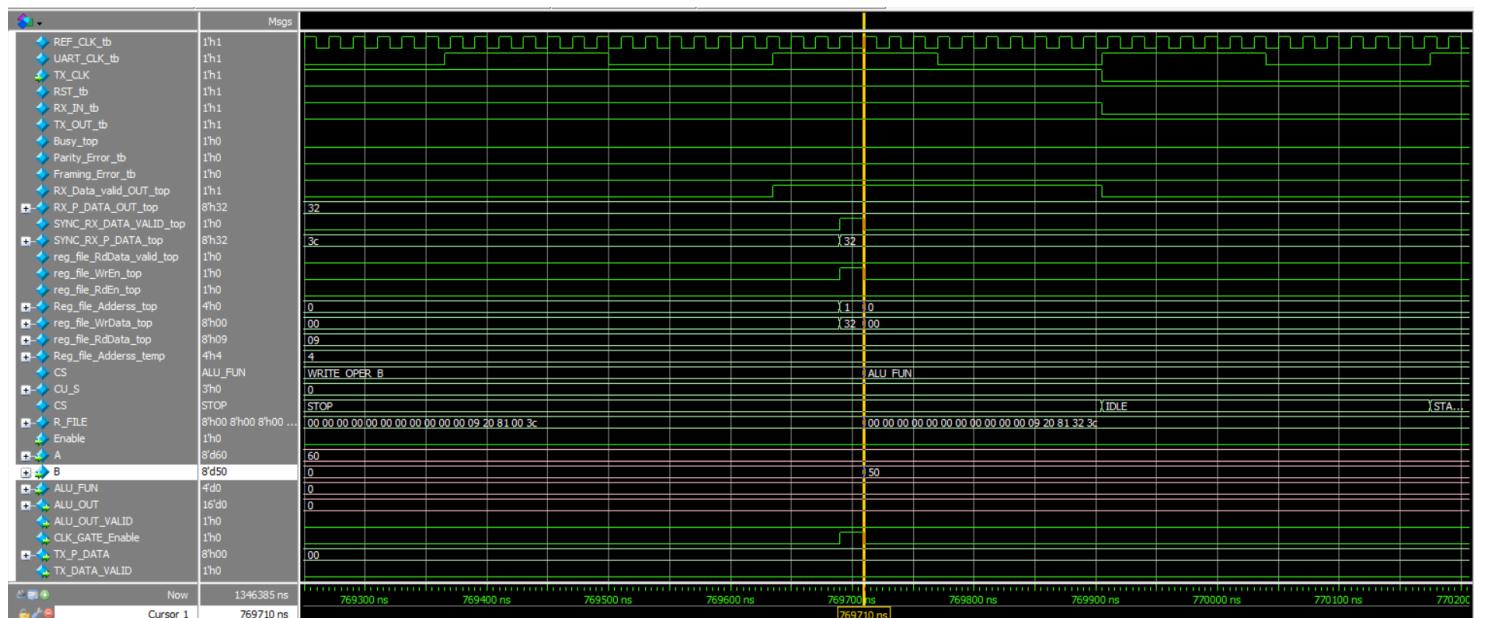
Frame1 of ALU with operands command



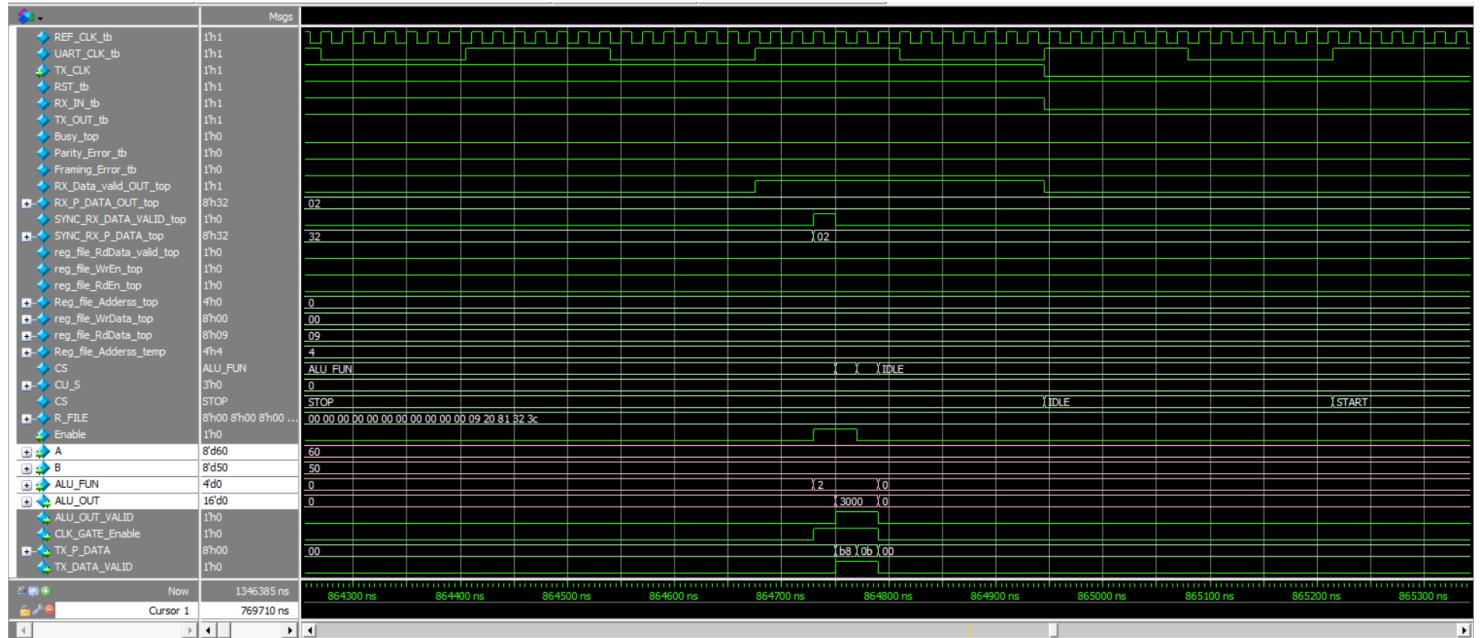
Frame2 of ALU with operands command (operand A data)



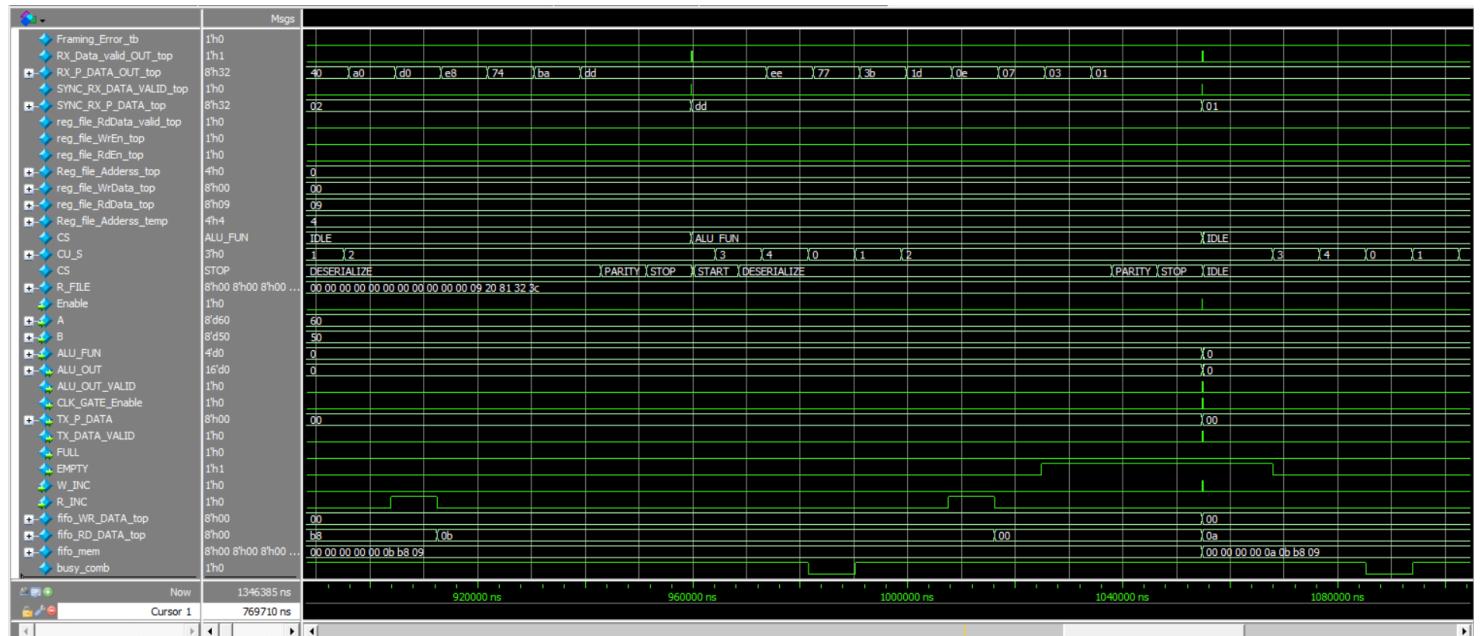
Frame3 of ALU with operands command (operand B data)



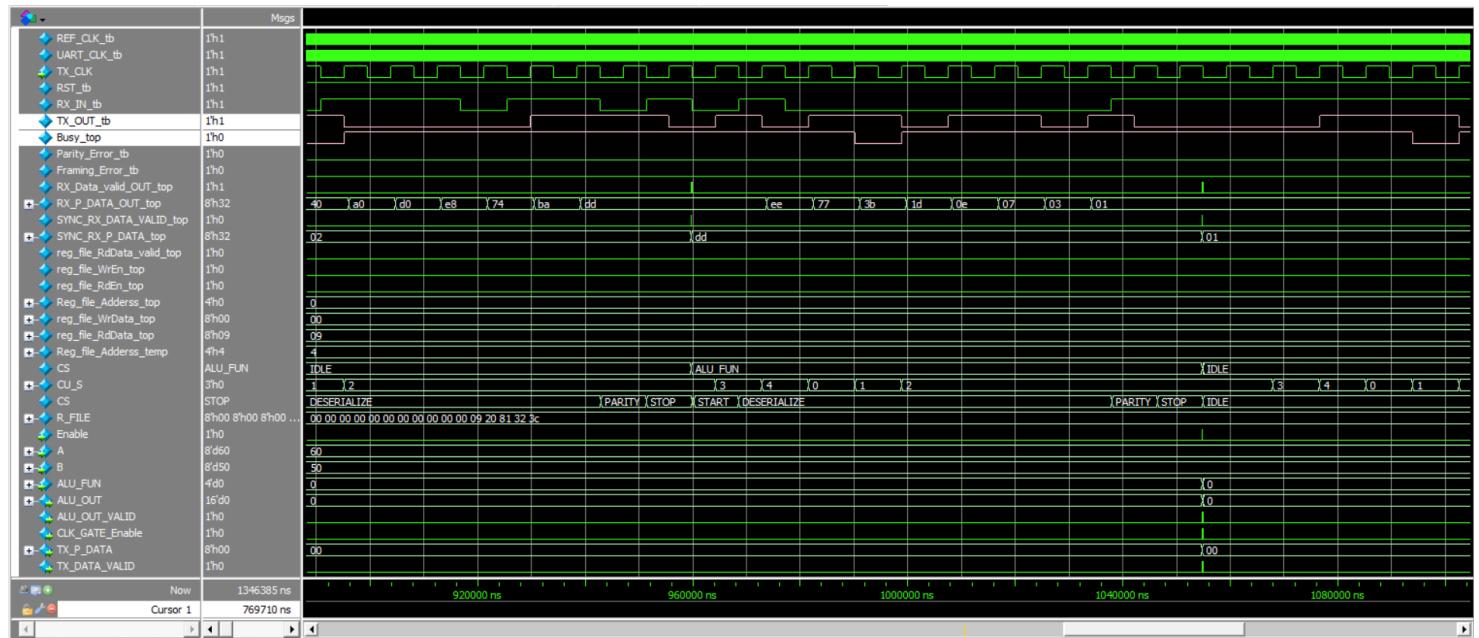
Frame4 of ALU with operands command (Func frame)



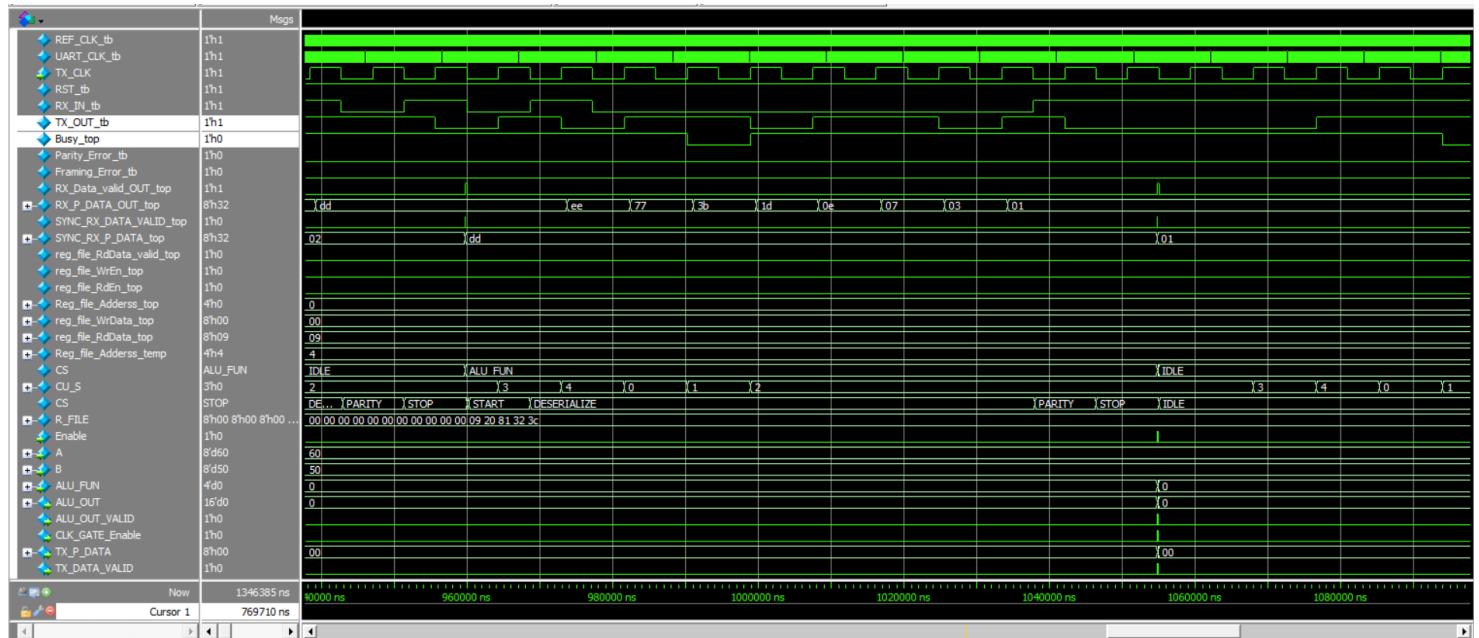
Write ALU_OUT in FIFO and Wr_inc goes high twice to write low and high bytes of ALU_OUT



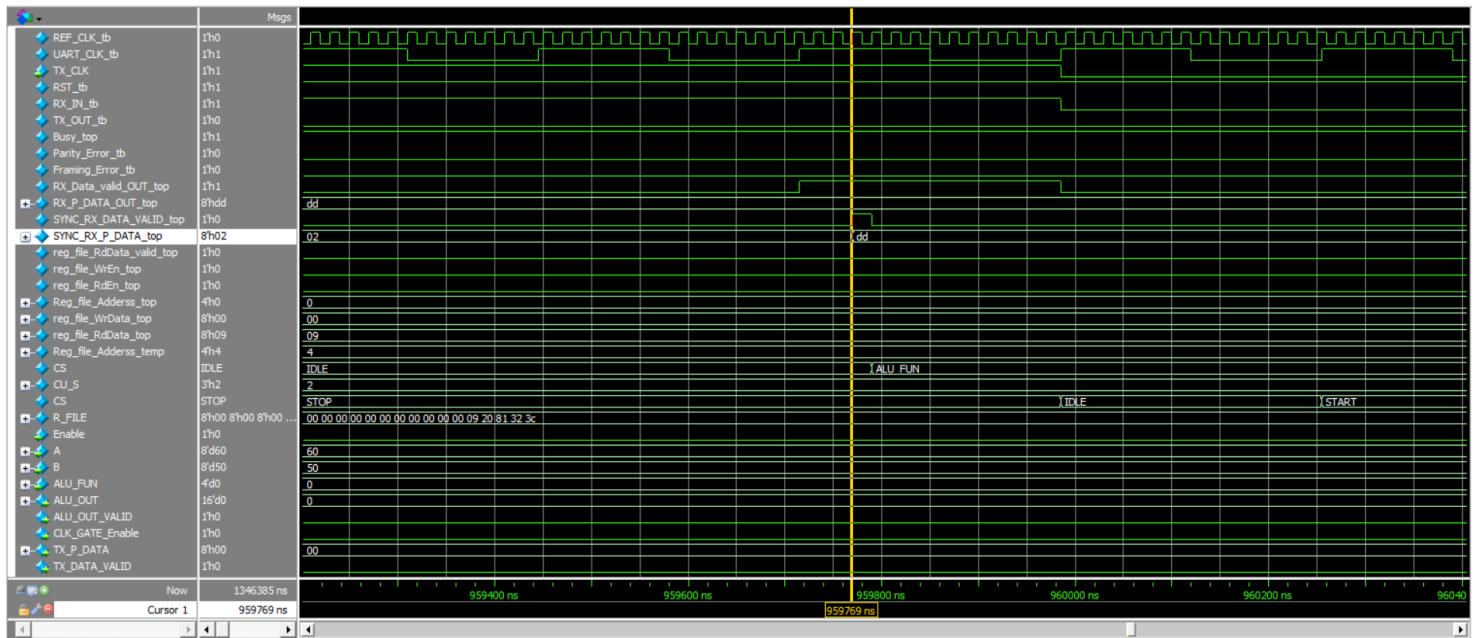
TX_OUT from the ALU_OUT from ALU operation with operands command



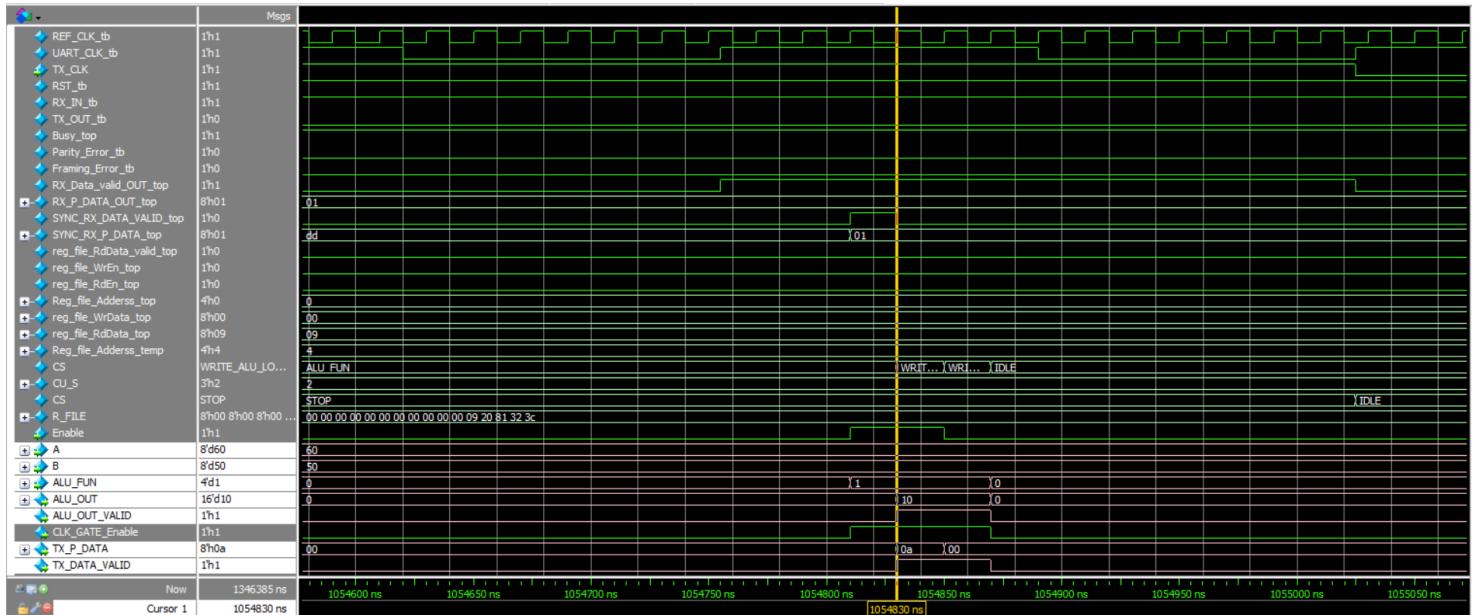
ALU without operands command (2 frames)



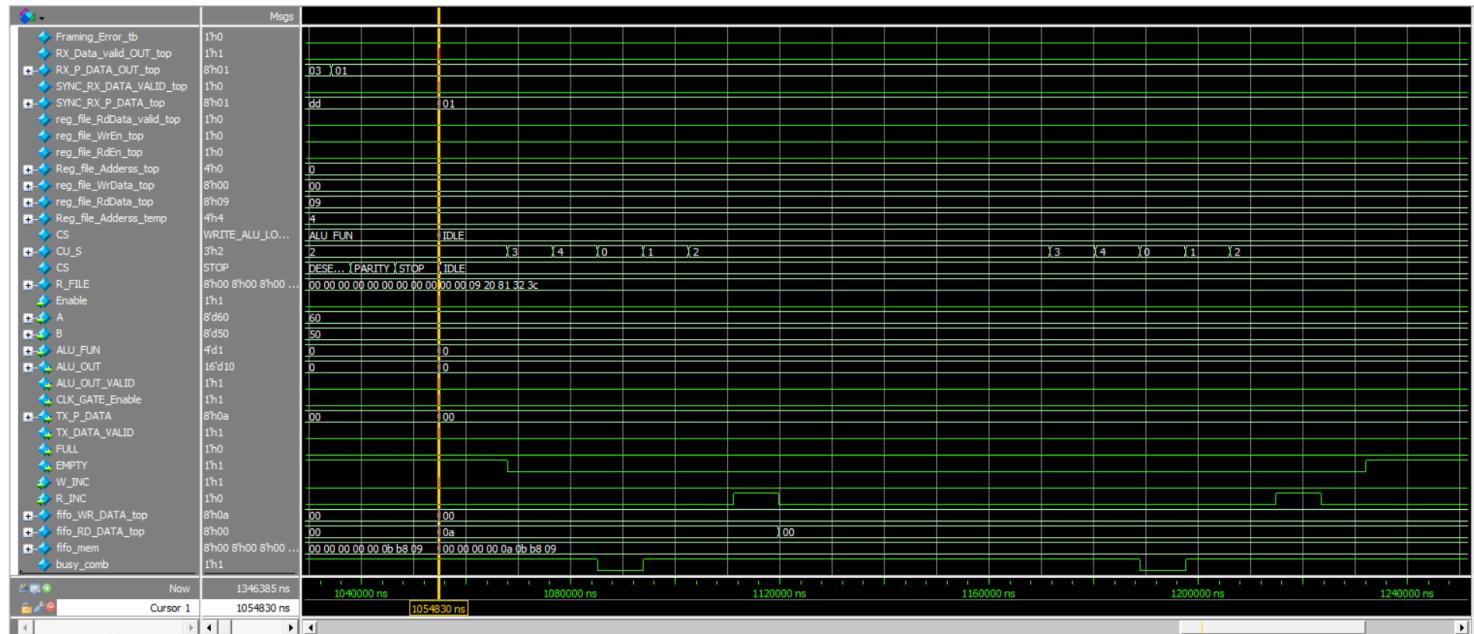
Frame1 from the ALU without operands command



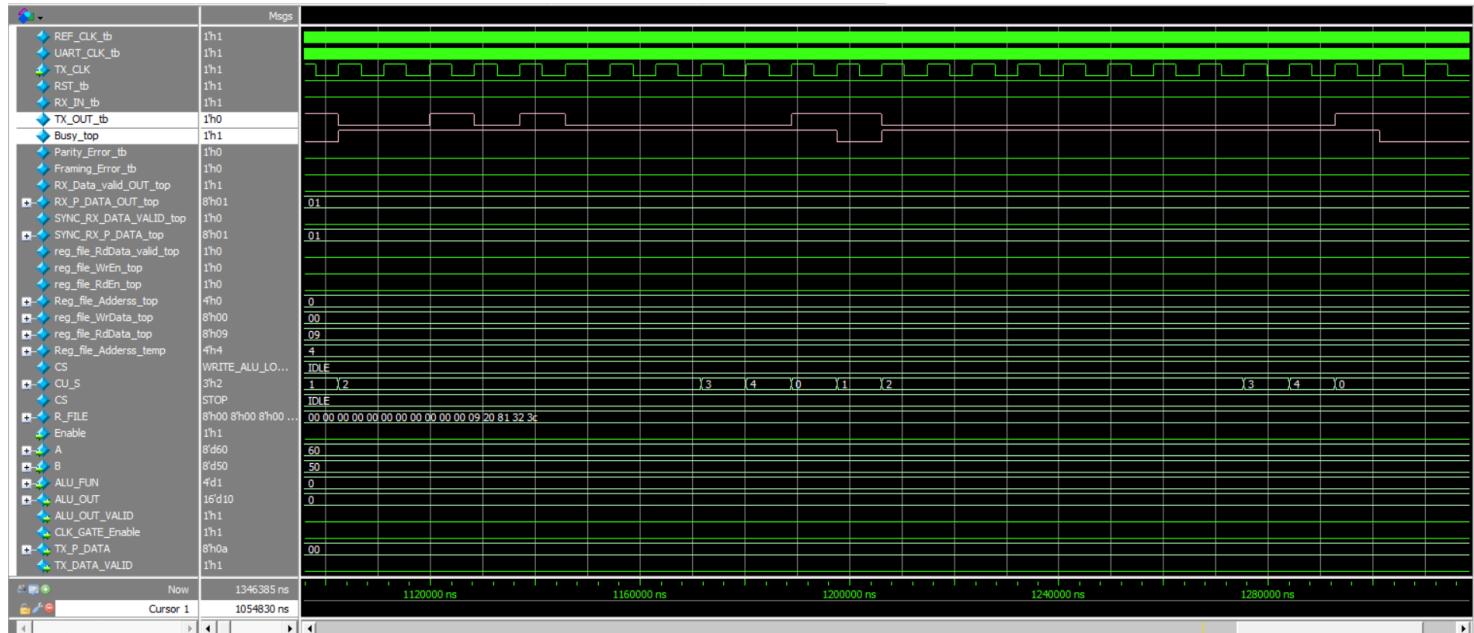
Frame2 from the ALU without operands command (Func frame)



Read ALU out from the FIFO to send it through TX_OUT



TX_OUT from the ALU_OUT from ALU operation without operands command



Transcript from ENG.Ali testbench

(All succeeded)

```
# ** Warning: (vsim-WLF-5000) WLF file currently in use: vsim.wlf
#           File in use by: Administrator Hostname: DESKTOP-FIK5SPH ProcessID: 6936
#           Attempting to use alternate WLF file "./wlft5tqkfb".
# ** Warning: (vsim-WLF-5001) Could not open WLF file: vsim.wlf
#           Using alternate file: ./wlft5tqkfb
VSIM 3> run -all
# Write Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=0 PRESCALE=32
# Read Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=0 PRESCALE=32
# ALU Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=0 PRESCALE=32
# ALU Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=0 PRESCALE=32
# Write Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=1 PRESCALE=32
# Read Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=1 PRESCALE=32
# ALU Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=1 PRESCALE=32
# ALU Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=1 PRESCALE=32
# Write Operation is succeeded with configurations PARITY_ENABLE=0 PARITY_TYPE=0 PRESCALE=32
# Read Operation is succeeded with configurations PARITY_ENABLE=0 PARITY_TYPE=0 PRESCALE=32
# ALU Operation is succeeded with configurations PARITY_ENABLE=0 PARITY_TYPE=0 PRESCALE=32
# ALU Operation is succeeded with configurations PARITY_ENABLE=0 PARITY_TYPE=0 PRESCALE=32
# Write Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=0 PRESCALE=16
# Read Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=0 PRESCALE=16
# ALU Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=0 PRESCALE=16
# ALU Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=0 PRESCALE=16
# Write Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=1 PRESCALE=16
# Read Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=1 PRESCALE=16
# ALU Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=1 PRESCALE=16
# ALU Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=1 PRESCALE=16
# Write Operation is succeeded with configurations PARITY_ENABLE=0 PARITY_TYPE=0 PRESCALE=16
# Read Operation is succeeded with configurations PARITY_ENABLE=0 PARITY_TYPE=0 PRESCALE=16
# ALU Operation is succeeded with configurations PARITY_ENABLE=0 PARITY_TYPE=0 PRESCALE=16
# ALU Operation is succeeded with configurations PARITY_ENABLE=0 PARITY_TYPE=0 PRESCALE=16
# Write Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=0 PRESCALE= 8
# Read Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=0 PRESCALE= 8
# ALU Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=0 PRESCALE= 8
# ALU Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=0 PRESCALE= 8
# Write Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=1 PRESCALE= 8
# Read Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=1 PRESCALE= 8
# ALU Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=1 PRESCALE= 8
# ALU Operation is succeeded with configurations PARITY_ENABLE=1 PARITY_TYPE=1 PRESCALE= 8
# Write Operation is succeeded with configurations PARITY_ENABLE=0 PARITY_TYPE=0 PRESCALE= 8
# Read Operation is succeeded with configurations PARITY_ENABLE=0 PARITY_TYPE=0 PRESCALE= 8
# ALU Operation is succeeded with configurations PARITY_ENABLE=0 PARITY_TYPE=0 PRESCALE= 8
# ALU Operation is succeeded with configurations PARITY_ENABLE=0 PARITY_TYPE=0 PRESCALE= 8
# ** Note: $stop : H:/modelsim_folder/examples/Projects/ASIC_Course/system/Final_system/SYS_TOP_TB.v(439)
#   Time: 16514862454 ps Iteration: 0 Instance: /SYS_TOP_TB
# Break in Module SYS_TOP_TB at H:/modelsim_folder/examples/Projects/ASIC_Course/system/Final_system/SYS_TOP_TB.v line 439
VSIM 4>
```