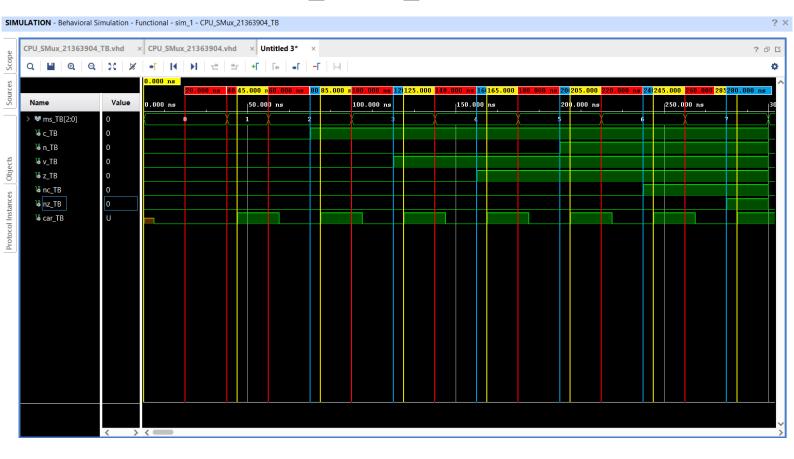# CPU_SMux_21363904

The timing diagram for the Status Vector Multiplexer is shown above.

The red lines mark when the value of the select changes, the blue lines mark when the flag values change, and the yellow lines mark when the corresponding output is displayed. When the select is 0, the output is 0. When the select is 1, the output is 1. When the select is 2, the output displays the state of the carry flag, which is 0 at first and then changes to 1 once the flag is set. Selecting 3,4,5,6 and 7 using MS displays the state of the overflow, zero, negative, not C and not Z flags respectively, following the same pattern. Each output is displayed 5ns after the input changes.