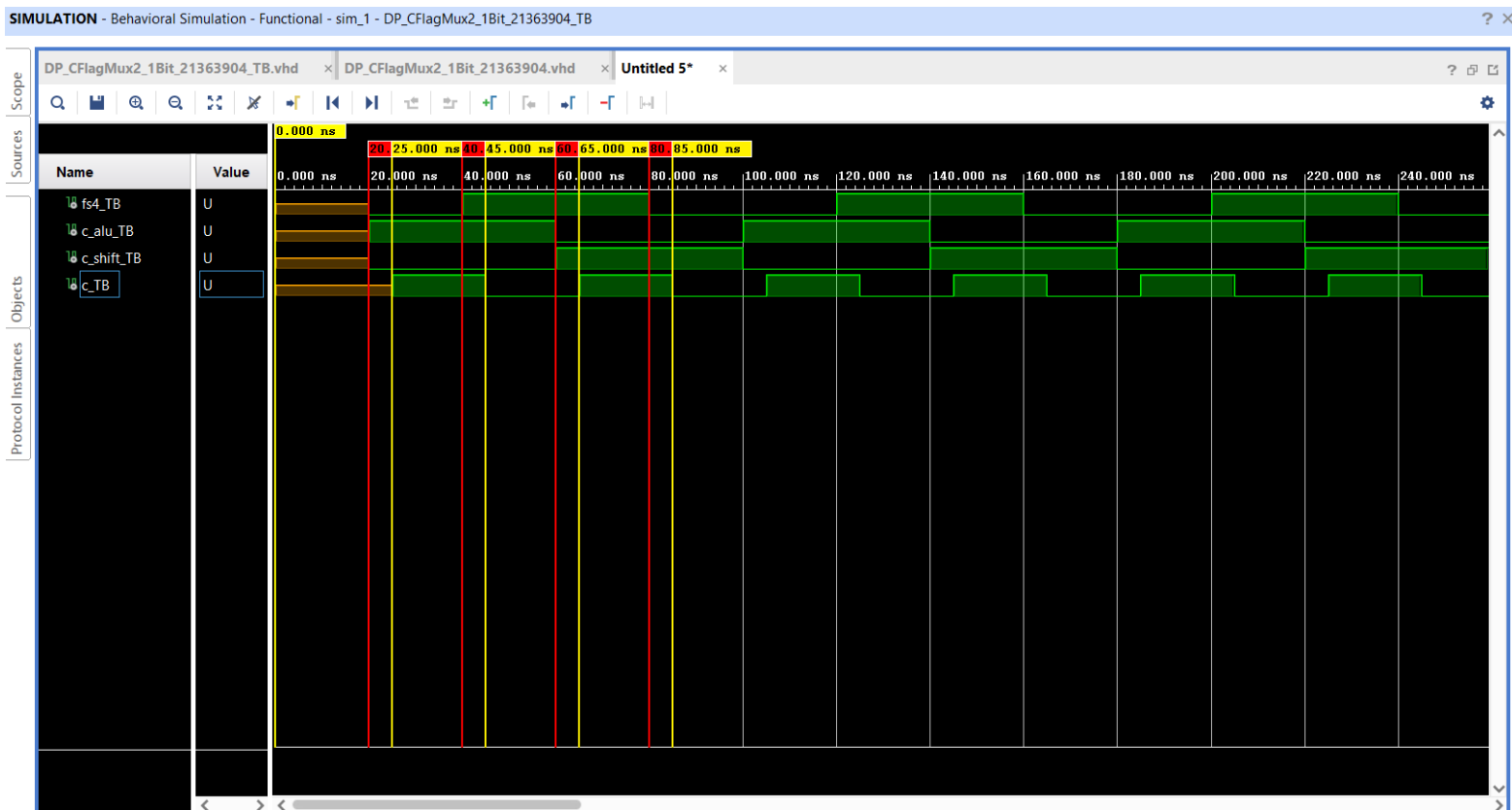


DP_CFlagMux2_1Bit_21363904



The timing diagram for the C Flag Multiplexer is shown above. The **red lines** mark when the *FS4* select input changes and the **yellow lines** mark when the correct value appears at the output, after a propagation delay of 5ns. When *FS4* is set to 0 the value of the carry at *C_ALU* is displayed at the output, and when *FS4* is set to 1 the value of the carry at *C_Shift* is displayed. This is demonstrated above: when *FS4* is set to show *C_ALU* which is 1, a 1 appears at the output, when *FS4* switches to show *C_Shift* which is 0, a 0 is displayed. When the value of *C_Shift* changes to 1, this change is reflected at the output, until *FS4* switches back to *C_ALU*, which is now 0, and as such at the output a 0 is displayed.