Dpath_USF.Group2.USF.EE

The design is used to describe the data flow in the 8x8 multiplier. The data path comprises of a D-Register, Q-register, A-Register and an ALU unit. The registers are used to store the multiplicand and multiplier inputs. A-register stores the MSB bits of Product output. A control signal 'op' is used to select a particular register that needs to be active at a certain point, also, the 2 LSB bits of Q- Register is used to drive ALU unit. The circuit is positive edge triggered and the output 'zi' flag is high once the counter completes the cycle, which moves the circuit to the next state.

Cursor = 950ns
Baseline = 0
Cursor-Baseline = 950ns

Baseline = 0

TimeA = 50ns

TimeB = 950ns

Signal	Value
clk_tb	1
op_tb	'h1D
dd_tb	'h00
qq_tb	'h00
zl_tb	1
aq_tb	'h0F00