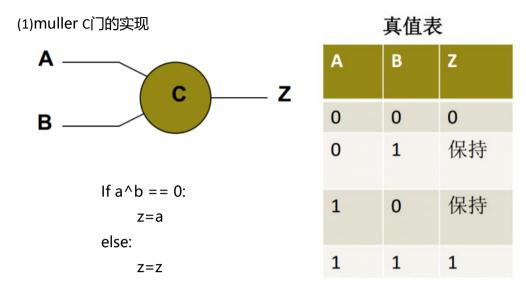
微流水线-实验报告(张里蒙)

2019年5月17日 21:08





(2)用C单元实现两段握手

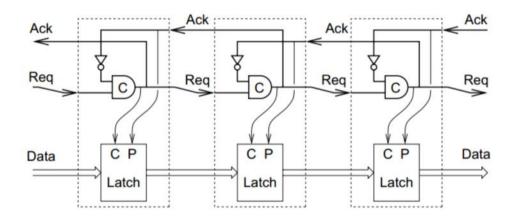
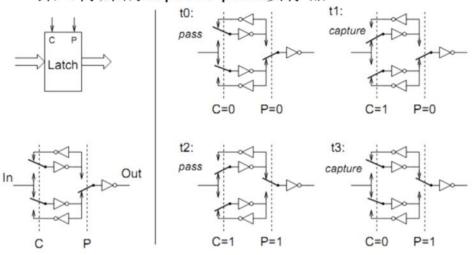


Figure 2.10. A simple 2-phase bundled-data pipeline.

(3)实现CP-latch

• 引入特殊的capture-pass锁存器



•	Msgs					
<pre>/cp_latch_tb/c</pre>	1h1					
🥠 /ф_latch_tb/p	1h1	-				
<pre>/cp_latch_tb/rst_n</pre>	1h1					
-/-/ /cp_latch_tb/data_in	3h1		3'h1	3'h0	3h1	[3'h0
-/-/ /cp_latch_tb/data_out	3h1	3'h0	3h1			(3'h0

(4)实现一个模块block

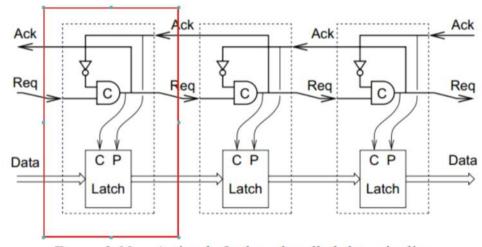
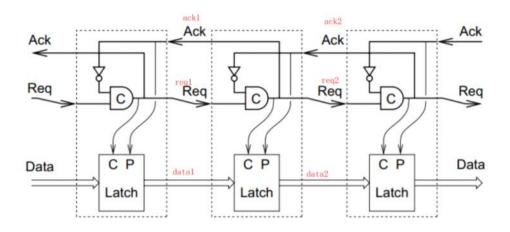


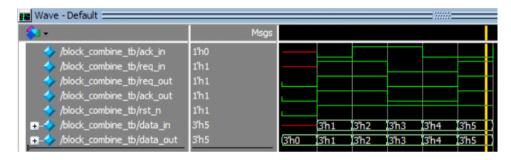
Figure 2.10. A simple 2-phase bundled-data pipeline.

. -	Msgs					
<pre>/block_tb/ack_in</pre>	1'h1					
/block_tb/req_in	1'h0					
/block_tb/rst_n	1h1					
/block_tb/req_out	1'h0					
/block_tb/ack_out	1'h0					
-/-/block_tb/data_in	3'h4		3'h1	3 h 2	3'h3	
+	3'h4	(3°h0	3h1		3h3	

Ack_in	Req_in	С	Р	CP-latch	Data_In	Data_out
0	1	1	0	capture	1	1
0	1	1	0	capture	2	1
1	1	1	1	pass	3	3

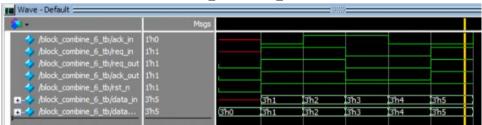
(5)实现3个block的流水线(block_combine)





如上图所示,输入为12345时,输出端为12345,实现了FIFO功能

(6)实现6个block的流水线(block_combine_6)



(7)流水线的右端没有不给应答信号,流水线充满后的状态



如图,流水线一直不给应答信号,流水线中只有数据1.