

	层级	IF	IF/ID	ID	ID/EX
指令译码	PC	generate		1	1 1
	PC_4	generate		1	1
	instruction	generate		1	1 1
	op	generate		1	1
	rs	generate		1	1 1
	rt	generate		1	1 1
	rd	generate		1	1 1
	sa	generate		1	1 1
	function	generate		1	1
控制信号	ALU2_src			generate	1
	ALU_op			generate	1
	ALU_opsrc			generate	1
	MEM_write(4)			generate	1
	MEM_read			generate	1
	MEM_mod(?)			generate	1
	REG_write			generate	1
	REG_write_src(16)			generate	1
	REG_write_tgt(6)			generate	1
过程信号	beq			generate	used
	bgez			generate	used
	blez			generate	used
	bltz			generate	used
	bne			generate	used
	imm16			generate	1
	imm32_signed			generate	1
	imm32_unsigned			generate	1
	branch_op			generate	used
	j_op			generate	1
	offset00			generate	1
	longjump			generate	1
	PC_j_result			generate	used
	PC_b_result			generate	used
	sa				
中间结果	A_reg			generate	A_reg
	B_reg			generate	B_reg
	EX_reg				
	MEM_reg				
	HI				
旁路控制	LO				
	EX_MEM_bypass_hit				
	MEM_WB_bypass_hit				
	EX_MEM_bypass_valid				
	MEM_WB_bypass_valid				
	EX_bubble				
	ID_bubble				

EX	EX/MEM	MEM	MEM/WB	WB	
	1	1	1	1	引出
	1	1	1	1	1
	1	1	1	1	1
	1	1	1	1	1
	1	1	1	1	1

		1	1		
		1	1		
		1	1		
		1		1	引出
		1		1	
		1		1	引出

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generate		1	1	1	1
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generate	EX_reg				
		generate	MEM_reg	引出	
	EX_MEM_bypass_hit				
			MEM_WB_bypass_hit		

