

NO.	Instruction	Addr.	Label	ASM	Comment
0	00000013	0	__start:	addi x0, x0, 0	
1	00402103	4 6		lw x2, 4(x0)	x2= 0x0000_0008
2	00802203	8 b		lw x4, 8(x0)	Structural Hazard x4= 0x00000010
3	004100b3	C e	RAW	add x1, x2, x4	x1= 0x18
4	fff08093	10 12	S.H.	addi x1, x1, -1	WAW x1= 0x17
5	00c02283	14 14		lw x5, 12(x0)	x5= 0x14
6	01002303	18 19		lw x6, 16(x0)	x6= 0xFFFF0000
7	01402383	1C 1f	乱序?	lw x7, 20(x0)	x7= 0x0FFF0000 268 369 920d
8	402200b3	20 1e	WAW	sub x1,x4,x2	x1= 0x8 此处有一个同时WB
9	ffd50093	24 22		addi x1,x10,-3	x1 = 0xFFFF_FFFD
10	00520c63	28 23		beq x4,x5,label0	不跳
11	00420a63	2C 27		beq x4,x4,label0	跳
12	00000013	30		addi x0,x0,0	
13	00000013	34		addi x0,x0,0	
14	00000013	38		addi x0,x0,0	
15	00000013	3C		addi x0,x0,0	
16	000040b7	40 2b	label0:	lui x1,4	x1= 0x0000 40000
17	00c000ef	44 2f	S.H. WAW 控制	jal x1,12	x1= 0x48 跳到0x50
18	00000013	48		addi x0,x0,0	
19	00000013	4C		addi x0,x0,0	
20	ffff0097	50 33		auipc x1, 0xffff0	0xffff0050
21	0223c433	54 58		div x8, x7, x2	x8 = 0x1FF E000 33546240d
22	025204b3	58 3b		mul x9, x4, x5	x9 = 0x140 320d
23	022404b3	5C 61		mul x9, x8, x2	St. Ha./RAW/WAW x9 = 0x0FFF 0000
24	00400113	60 5a		addi x2, x0, 4	WAR x2 = 4
25	000000e7	64 41		jalr x1,0(x0)	
26	00000013	68		addi x0,x0,0	
27	00000013	6C		addi x0,x0,0	

