Trasarea execuției programului de test pentru MIPS32

Valorile se completează în hexazecimal așa cum trebuie să apară pe SSD. Succesiunea pașilor reprezintă ordinea de execuție în timp la apăsarea butonului ENable. **Pasul 0 corespunde stării inițiale a circuitului (PC = 0), iar pasul *N* caracterizează starea după apăsarea de *N* ori a butonului ENable.** Inițial registrele vor avea valoarea 0 (care se atribuie automat în lipsa unei inițializări explicite a RF), iar memoria de date RAM poate fi inițializată cu valori dorite. Tabelul se completează pentru tot programul sau, dacă are buclă, până la finalul primei iterații. *Buclă = revenirea execuției la o instrucțiune care a mai fost executată anterior.*

Pas	SW(7:5)	"000"	"001"	"010"	"011"	"100"	"101"	"110"	"111"	De completat numai pentru instrucțiuni de salt	
	Instr (*în asamblare*)	Instr (*hexa*)	PC+4	RD1	RD2	Ext_Imm	ALURes	MemData	WD	BranchAddr	JumpAddr
1	ADDI $8, $0, 0	X"20080000"	X"00000004"	X"00000000"	X"00000000"	X"00000000"	X"00000000"	X"XXXXXXXX"	X"00000010"		
2	ADDI $9, $0, 0	X"20090020"	X"00000008"	X"00000000"	X"00000000"	X"00000000"	X"00000000"	X"XXXXXXXX"	X"0000000A"		
3	ADDI $2, $0, 0	X"20020000"	X"0000000C"	X"00000000"	X"00000000"	X"00000000"	X"00000000"	X"XXXXXXXX"	X"0000000B"		
4	BEQ $9, $0, 14	X"1120000E"	X"00000010"	X"00000000"	X"00000002"	X"0000000E"	X"XXXXXXXX"	X"XXXXXXXX"	X"XXXXXXXX"	X"00000044"	
5	LW $10, 0($0)	X"8COA0000"	X"00000014"	X"0000000C"	X"0000000D"	X"00000000"	X"XXXXXXXX"	X"XXXXXXXX"	X"00000001"		
6	ADD $11, $3, $0	X"60582000"	X"00000018"	X"00000000"	X"00000000"	X"00000000"	X"0000000"	X"0000000A"	X"00000000"		
7	ADDI $12, $0, 0	X"21800000"	X"0000001C"	X"00000000"	X"00000000"	X"00000000"	X"00000000"	X"XXXXXXXX"	X"00000000"		
8	BEQ $11, $0, 5	X"11600000"	X"00000020"	X"00000001"	X"00000003"	X"00000005"	X"XXXXXXXX"	X"XXXXXXXX"	X"XXXXXXXX"	X"00000030"	
9	ANDI $13, $11, 1	X"316D0001"	X"00000024"	X"00000000"	X"00000000"	X"00000001"	X"00000000"	X"XXXXXXXX"	X"00000000"		
10	XOR $12, $12, $6	X"16B00060"	X"00000028"	X"0000000C"	X"0000000C"	X"XXXXXXXX"	X"0000000D"	X"XXXXXXXX"	X"00000000"		
11	SRL $11, $11, 1	X"B5842000"	X"0000002C"	X"0000000B"	X"0000000B"	X"XXXXXXXX"	X"0000000A"	X"0000000D"	X"XXXXXXXX"		
12	J 8	X"80000008"	X"00000030"	X"XXXXXXXX"	X"XXXXXXXX"	X"XXXXXXXX"	X"XXXXXXXX"	X"00001000"	X"00000000"		X"0000001C"
13	BNE $12, $0, 2	X"15800002"	X"00000034"	X"00000002"	X"00000005"	X"00000002"	X"XXXXXXXX"	X"XXXXXXXX"	X"XXXXXXXX"	X"00000038"	
14	ADD $2, $2, $10	X"4A102000"	X"00000038"	X"00000000"	X"00000000"	X"XXXXXXXX"	X"0000000D"	X"XXXXXXXX"	X"00000000"		
15	ADDI $8, $8, 4	X"21080004"	X"0000003C"	X"00000000"	X"00000000"	X"00000100"	X"00000002"	X"XXXXXXXX"	X"0000000"		
16	ADDI $9, $9, -1	X"2129FFFF"	X"00000040"	X"00000000"	X"00000000"	X"FFFFFFFF"	X"FFFFFFFF"	X"XXXXXXXX"	X"0000000"		
17	J 4	X"80000004"	X"00000044"	X"XXXXXXXX"	X"XXXXXXXX"	X"XXXXXXXX"	X"XXXXXXXX"	X"XXXXXXXX"	X"XXXXXXXX"		X"0000000C"
18	ADDI $2, $0, 10	X"2002000A"	X"00000048"	X"00000000"	X"00000000"	X"0000000A"	X"00000010"	X"00000000"	X"00000000"		
19	NOOP	X"00000000"	X"0000004C"								
20	NOOP	X"00000000"	X"00000050"								
21	NOOP	X"00000000"	X"00000054"								
22	NOOP	X"00000000"	X"00000058"								
23	NOOP	X"00000000"	X"0000005C"								
24	NOOP	X"00000000"	X"00000060"								

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