op1¤	op2¤	Rd¤	Rs¤	immediate¤	
2b¤	2b¤	2b¤	2b¤	8b¤	

Preizkusni program: vsota dveh števil

Naslov	Oznaka	Ukaz v zbirniku	Strojni ukaz
0x0000	main:	MOV R0, #0x20	e020
0x0001		LDRH R1, [R0]	4400
0x0002		MOV R0, #0x21	e021
0x0003		LDRH R2, [R0]	4800
0x0004		ADD R2, R2, R1	2900
0x0005		MOV R0, #0x22	e022
0x0006		STRH R2, [R0]	5800
0x0007	inf:	B inf	f007
...			
0x0020		0x10 = 16	0010
0x0021		0x40 = 64	0040
0x0022		? = 0x50 = 80	0050
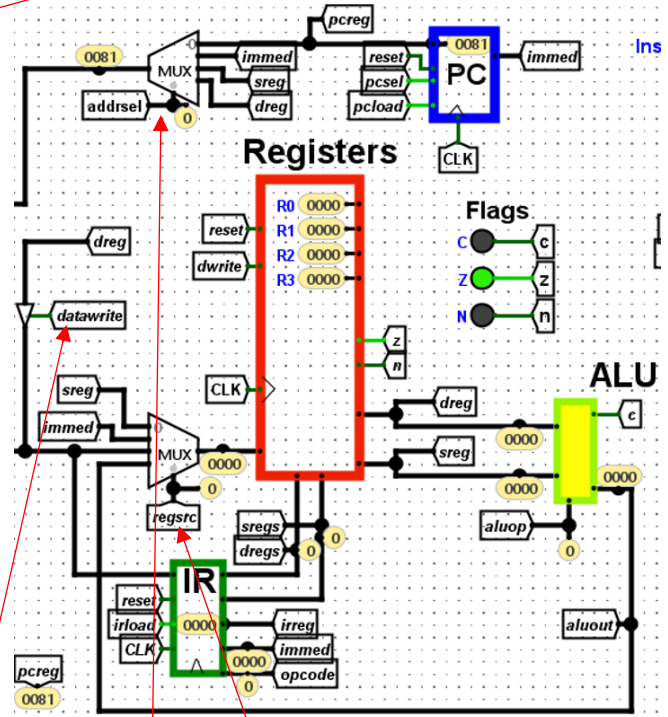
op1	op2	ARM9 zapis	pc sel	pc load	ir load	data write	d write	addr sel	reg sel	d reg	s reg	aluop
xx	xx	FETCH - vsi ukazi	1(pc+1)	1	1	0	0	0(pc)				
00	10	ADD Rd, Rd, Rs		0	0	0	1		3(ALU)	Rd	Rs	op2=0b10
01	00	LDRH Rd, [Rs]		0	0	0	1	2(Rs)	2(Dbus)	Rd	Rs	
01	01	STRH Rd, [Rs]		0	0	1	0	2(Rs)		Rd	Rs	
11	10	MOV Rd, #immed		0	0	0	1		1 (IM)	Rd		
11	11	B immed	0(IM)	1	0	0	0					

PC Logic

16-bit ALU