**Semnale de control MIPS32**

Semnale de Branch opționale: ? ϵ {gez, ne, gtz}, se va înlocui ? cu o valoare din paranteză, dacă e cazul

Tipuri de operații care se pun în paranteză la ALUOp si ALUCtrl:

(+), (-), (&), (|), (^), (<<*l*), (<<*lv*), (>>*l*), (>>*a*), (<)

Semnificații: & - AND, | - OR, ^ *- XOR, l* *- logic, a - aritmetic, v - cu variabilă*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Instrucțiune** | **Opcode**  *Instr[31-26]* | **RegDst** | **ExtOp** | **ALUSrc** | **Branch** | **Br\_?**  (opțional) | **Jump** | **JmpR** (opțional) | **MemWrite** | **MemtoReg** | **Reg Write** | **ALUOp[1:0]** | **function**  *Instr[5-0]* | **ALUCtrl[2:0]** |
| lw | 100011 | 0 | 1 | 0 | 0 | - | 0 | - | 0 | 1 | 1 | 00 | x | 010 |
| addi | 001000 | 0 | 1 | 0 | 0 | - | 0 | - | 0 | 1 | 0 | 00 | x | 010 |
| slt | 000000 | 1 | 0 | 0 | 0 | - | 0 | - | 0 | 0 | 1 | 10 | 101010 | 111 |
| beq | 000000 | x | 0 | 1 | 0 | - | 0 | - | 0 | x | 0 | 01 | x | 001 |
| bne | 000101 | x | 0 | 1 | 0 | - | 0 | - | 0 | x | 0 | 01 | 100010 | 001 |
| sw | 101011 | x | 1 | 0 | 0 | - | 0 | - | 1 | x | 0 | 00 | x | 010 |

URL: <https://drive.google.com/file/d/1SI7x2Gp_2m3SEkwnXuGt4ns4voYzpGBH/view?usp=sharing>