

## Semnale de control MIPS32

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

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

(+), (-), (&), (|), (^), (<<I), (<<V), (>>I), (>>A), (<)

Semnificații: & - AND, | - OR, ^ - XOR, I - logic, A - aritmetic, V - cu variabilă

Instruc țiune	Opcode <i>Instr[31-26]</i>	Reg Dst	ExtOp	ALUSrc	Branch	Br_ne	Jump	Mem Write	Memto Reg	Reg Write	ALUOp[1:0]	function <i>Instr[5-0]</i>	ALUCtrl[2:0]
ADD	000000	1	X	0	0	0	0	0	0	1	10	100000	000(+)
SUB	000000	1	X	0	0	0	0	0	0	1	10	100010	100(-)
SLL	000000	1	X	0	0	0	0	0	0	1	10	000000	011(<<)
SRL	000000	1	X	0	0	0	0	0	0	1	10	000010	101(>>)
AND	000000	1	X	0	0	0	0	0	0	1	10	100100	001(&)
OR	000000	1	X	0	0	0	0	0	0	1	10	100101	010( )
SRA	000000	1	X	0	0	0	0	0	0	1	10	000011	110(>>A)
XOR	000000	1	X	0	0	0	0	0	0	1	10	100110	111(^)
ADDI	001000	0	1	1	0	0	0	0	0	1	00(+)	XXXXXX	000(+)
LW	100011	0	1	1	0	0	0	0	1	1	00(+)	XXXXXX	000(+)
SW	101011	X	1	1	0	0	0	1	X	0	00(+)	XXXXXX	000(+)
BEQ	000100	X	1	0	1	0	0	0	X	0	01(-)	XXXXXX	100(-)
ORI	001101	0	0	1	0	0	0	0	0	1	11( )	XXXXXX	010( )
BNE	000101	X	1	0	0	1	0	0	X	0	01(-)	XXXXXX	100(-)
J	000010	X	X	X	0	0	1	0	X	0	XX	XXXXXX	XX

URL: [https://drive.google.com/file/d/1SI7x2Gp\\_2m3SEkwnXuGt4ns4voYzpGBH/view?usp=sharing](https://drive.google.com/file/d/1SI7x2Gp_2m3SEkwnXuGt4ns4voYzpGBH/view?usp=sharing)