

## 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 si ALUCtrl:

(+), (-), (&), (|), (^), (<<l), (<<l/v), (>>l), (>>a), (<

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

Instruc țiune	Opcode <i>Instr[31-26]</i>	Reg Dst	ExtOp	ALUSrc	Branch	Br_ne	Jump	JmpR (opțional)	Mem Write	Memto Reg	Reg Write	ALUOp[2:0]	function <i>Instr[5-0]</i>	ALUCtrl[2:0]
ADD	000000	1	X	0	0	0	0		0	0	1	000	000000	000(+)
SUB	000000	1	X	0	0	0	0		0	0	1	000	000001	001(-)
SLL	000000	1	X	0	0	0	0		0	0	1	000	000010	101(<<l)
SRL	000000	1	X	0	0	0	0		0	0	1	000	000011	110(>>l)
AND	000000	1	X	0	0	0	0		0	0	1	000	100000	010(&)
OR	000000	1	X	0	0	0	0		0	0	1	000	100001	011( )
XOR	000000	1	X	0	0	0	0		0	0	1	000	100010	100(^)
SLT	000000	1	X	0	0	0	0		0	0	1	000	010000	111(<)
ADDI	000001	0	1	1	0	0	0		0	0	1	001(+)	XXXXXX	000(+)
LW	000111	0	1	1	0	0	0		0	1	1	001 (+)	XXXXXX	000(+)
SW	000011	X	1	1	0	0	0		1	X	0	001 (+)	XXXXXX	000(+)
BEQ	000100	X	1	0	1	0	0		0	X	0	010(-)	XXXXXX	001(-)
ORI	000101	0	1	1	0	0	0		0	0	1	011( )	XXXXXX	011( )
BNE	000110	X	1	0	0	1	0		0	X	0	010(-)	XXXXXX	001(-)
J	100000	X	X	X	X	0	1		0	X	0	XXX	XXXXXX	XXX

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