|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TIP | Instructiune | Opcode | ALUOp | ALUCtrl | RegDst | ExtOp | ALUSrc | Branch | BranchNe | Jump | MemWrite | MemtoReg | RegWrite |
| R Type | ADD | 000000 | 000 | 000(+) | 1 | x | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| SUB | 000000 | 000 | 001(-) | 1 | x | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| SLL | 000000 | 000 | 010(<<) | 1 | x | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| SRL | 000000 | 000 | 011(>>) | 1 | x | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| AND | 000000 | 000 | 100(&) | 1 | x | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| OR | 000000 | 000 | 101(or) | 1 | x | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| XOR | 000000 | 000 | 110(xor) | 1 | x | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| SRA | 000000 | 000 | 111(>>>) | 1 | x | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| I Type | ADDI | 001000 | 001 | 000(+) | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| LW | 100011 | 001 | 000(+) | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 |
| SW | 101011 | 001 | 000(+) | x | 1 | 1 | 0 | 0 | 0 | 1 | x | 0 |
| BEQ | 000100 | 010 | 001(-) | x | 1 | 0 | 1 | 0 | 0 | 0 | x | 0 |
| ANDI | 001100 | 101 | 100(&) | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| BNE | 000101 | 010 | 001(-) | x | 1 | 0 | 0 | 1 | 0 | 0 | x | 0 |
| J Type | JUMP | 000010 | 000 | xxx | x | x | x | x | x | 1 | 0 | x | 0 |