

| Instrução | Opcode e/ou<br>identificador<br>único | Sinais de controle |      |               |              |              |              |              |              |              |              |        |              |       |                  |
|-----------|---------------------------------------|--------------------|------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------|--------------|-------|------------------|
|           |                                       | Reg<br>Dst         | Jump | Branc<br>hNEQ | Branc<br>hEQ | Mem<br>ToReg | AluOp<br>(3) | AluOp<br>(2) | AluOp<br>(1) | AluOp<br>(0) | Mem<br>Write | AluSrc | RegW<br>rite | PcSrc | ITCont<br>roller |
| ADD       | 000/0110011                           | 1                  | 0    | 0             | 0            | 0            | 0            | 0            | 0            | 1            | 0            | 0      | 1            | 1     | 0                |
| SUB       | 001/0110011                           | 1                  | 0    | 0             | 0            | 0            | 0            | 0            | 1            | 0            | 0            | 0      | 1            | 1     | 0                |
| ADDI      | 000/0010011                           | 1                  | 0    | 0             | 0            | 0            | 0            | 0            | 1            | 1            | 0            | 1      | 1            | 1     | 0                |
| SLL       | 010/0110011                           | 1                  | 0    | 0             | 0            | 0            | 0            | 1            | 0            | 0            | 0            | 0      | 1            | 1     | 0                |
| SRL       | 011/0000011                           | 1                  | 0    | 0             | 0            | 0            | 0            | 1            | 0            | 1            | 0            | 0      | 1            | 1     | 0                |
| LW        | 010/0100011                           | 1                  | 0    | 0             | 0            | 1            | 0            | 1            | 1            | 0            | 0            | 1      | 1            | 1     | 0                |
| SW        | 010/0000011                           | 1                  | 0    | 0             | 0            | 0            | 0            | 1            | 1            | 1            | 1            | 1      | 0            | 1     | 0                |
| LB        | 000/0100011                           | 1                  | 0    | 0             | 0            | 1            | 1            | 0            | 0            | 0            | 0            | 1      | 1            | 1     | 0                |
| SB        | 000/0100011                           | 1                  | 0    | 0             | 0            | 0            | 1            | 0            | 0            | 1            | 1            | 1      | 0            | 1     | 0                |
| BEQ       | 011/0100011                           | 1                  | 0    | 0             | 0            | 0            | 1            | 0            | 1            | 0            | 0            | 0      | 0            | 1     | 0                |
| BNE       | 001/0100011                           | 1                  | 0    | 0             | 0            | 0            | 1            | 0            | 1            | 1            | 0            | 0      | 0            | 1     | 0                |
| SLT       | 100/0110011                           | 1                  | 0    | 0             | 0            | 0            | 1            | 1            | 0            | 0            | 0            | 0      | 1            | 1     | 0                |
| SLTI      | 001/0010011                           | 1                  | 0    | 0             | 0            | 0            | 1            | 1            | 0            | 1            | 0            | 1      | 1            | 1     | 0                |
| J         | xxx/0000010                           | 1                  | 1    | 1             | 1            | 0            | x            | x            | x            | x            | 0            | 0      | 0            | 1     | 0                |
| JAL       | xxx/1101111                           | 0                  | 0    | 1             | 1            | 0            | x            | x            | x            | x            | 0            | 0      | 1            | 1     | 0                |
| JARL      | xxx/1100111                           | 0                  | 0    | 1             | 1            | 0            | x            | x            | x            | x            | 0            | 1      | 1            | 1     | 0                |
| ECALL     | xxx/1110011                           | 0                  | 0    | 0             | 0            | 0            | x            | x            | x            | x            | 0            | 0      | 0            | 0     | 1                |
| NOP       | 010/0010011                           | 1                  | 0    | 0             | 0            | 0            | x            | x            | x            | x            | 0            | 0      | 0            | 1     | 0                |