| inst. | op | func3 | func7 | PCsrc | Result Src | Mem Write | AluControl | ALUSrc | ImmSrc | RegWrite |
|---|---|---|---|---|---|---|---|---|---|---|
| ADD | 0110011 | 000 | 0000000 | 0 | 00 | 0 | 000 | 0 | XXX | 1 |
| SUB | 0110011 | 000 | 0100000 | 0 | 00 | 0 | 001 | 0 | XXX | 1 |
| AND | 0110011 | 111 | 0000000 | 0 | 00 | 0 | 010 | 0 | XXX | 1 |
| OR | 0110011 | 110 | 0000000 | 0 | 00 | 0 | 011 | 0 | XXX | 1 |
| XOR | 0110011 | 100 | 0000000 | 0 | 00 | 0 | 100 | 0 | XXX | 1 |
| SLL | 0110011 | 001 | 0000000 | 0 | 00 | 0 | 101 | 0 | XXX | 1 |
| SRL | 0110011 | 101 | 0000000 | 0 | 00 | 0 | 110 | 0 | XXX | 1 |
| SLT | 0110011 | 010 | 0000000 | 0 | 00 | 0 | 111 | 0 | XXX | 1 |
| LW | 0000011 | 010 | - | 0 | 01 | 0 | 000 | 1 | "I":000 | 1 |
| SW | 0100011 | 010 | - | 0 | 00 | 1 | 000 | 1 | "S":001 | 0 |
| BEQ | 1100011 | 000 | - | 0/1 (zero input) | 00 | 0 | 001 | 0 | "B":010 | 0 |
| BNE | 1100011 | 001 | - | 0/1 (zero input) | 00 | 0 | 001 | 0 | "B":010 | 0 |
| JAL | 1101111 | - | - | 1 | 10 | 0 | xxx | 0 | "J":100 | 1 |
| JALR | 1100111 | 000 | - | 1 | 10 | 0 | 000 | 1 | "I":000 | 1 |
| ADDI | 0010011 | 000 | - | 0 | 00 | 0 | 000 | 1 | "I":000 | 1 |
| ANDI | 0010011 | 111 | - | 0 | 00 | 0 | 010 | 1 | "I":000 | 1 |
| SLLI | 0010011 | 001 | 0000000* | 0 | 00 | 0 | 101 | 1 | "I":000 | 1 |
| SRLI | 0010011 | 101 | 0000000* | 0 | 00 | 0 | 110 | 1 | "I":000 | 1 |
| SLTI | 0010011 | 010 | - | 0 | 00 | 0 | 111 | 1 | "I":000 | 1 |
| LUI | 0110111 | - | - | 0 | 00 | 0 | 000 | 1 | "U":011 | 1 |

*SLLI and SRLI take funct7 from the upper 7 bits of the immediate field of the I-type format.