

The MIPS Blue Card

| Mnemonic | Format | Opcode / Funct | Syntax | Name | 0 |
|----------|--------|----------------|-----------------------|-----------------------------------|-----------------------|
| sll | R | 0 / 0 | \$rd, \$rt, shamt | Shift Left Logical | \$rs = 0 |
| srl | R | 0 / 2 | \$rd, \$rt, shamt | Shift Right Logical | \$rs = 0 |
| jr | R | 0 / 8 | \$rs | Jump Register | \$rd, \$rt, shamt = 0 |
| jalr | R | 0 / 9 | \$rd, \$rs | Jump and Link Register | \$rt, shamt = 0 |
| mfhi | R | 0 / 10 (hex) | \$rd | Move from HI | \$rs, \$rt, shamt = 0 |
| mflo | R | 0 / 12 (hex) | \$rd | Move from LO | \$rs, \$rt, shamt = 0 |
| mult | R | 0 / 18 (hex) | \$rs, \$rt | Multiply | \$rd, shamt = 0 |
| and | R | 0 / 24 (hex) | \$rd, \$rs, \$rt | And | shamt = 0 |
| or | R | 0 / 25 (hex) | \$rd, \$rs, \$rt | Or | shamt = 0 |
| xor | R | 0 / 26 (hex) | \$rd, \$rs, \$rt | Xor | shamt = 0 |
| nor | R | 0 / 27 (hex) | \$rd, \$rs, \$rt | Nor | shamt = 0 |
| add | R | 0 / 20 (hex) | \$rd, \$rs, \$rt | Add | shamt = 0 |
| addu | R | 0 / 21 (hex) | \$rd, \$rs, \$rt | Add Unsigned | shamt = 0 |
| sub | R | 0 / 22 (hex) | \$rd, \$rs, \$rt | Subtract | shamt = 0 |
| subu | R | 0 / 23 (hex) | \$rd, \$rs, \$rt | Subtract Unsigned | shamt = 0 |
| slt | R | 0 / 2A (hex) | \$rd, \$rs, \$rt | Set on Less Than | shamt = 0 |
| sltu | R | 0 / 2B (hex) | \$rd, \$rs, \$rt | Set on Less Than Unsigned | shamt = 0 |
| clz | R | 1C / 20 (hex) | \$rd, \$rs | Count Leading Zeros | \$rt, shamt = 0 |
| j | J | 2 | target | Jump | |
| jal | J | 3 | target | Jump and Link | |
| beq | I | 4 | \$rs, \$rt, offset | Branch on Equal | |
| bne | I | 5 | \$rs, \$rt, offset | Branch on Not Equal | |
| blez | I | 6 | \$rs, offset | Branch on Less Than or Equal Zero | \$rt = 0 |
| bgtz | I | 7 | \$rs, offset | Branch on Greater Than Zero | \$rt = 0 |
| addi | I | 8 | \$rt, \$rs, immediate | Add Immediate | |
| addiu | I | 9 | \$rt, \$rs, immediate | Add Immediate Unsigned | |
| slti | I | A (hex) | \$rt, \$rs, immediate | Set on Less Than Immediate | |
| sltiu | I | B (hex) | \$rt, \$rs, immediate | Set on Less Than Imm. Unsigned | |
| andi | I | C (hex) | \$rt, \$rs, immediate | And Immediate | |
| ori | I | D (hex) | \$rt, \$rs, immediate | Or Immediate | |
| lui | I | F (hex) | \$rt, immediate | Load Upper Immediate | \$rs = 0 |
| lb | I | 20 (hex) | \$rt, offset(\$rs) | Load Byte | |
| lh | I | 21 (hex) | \$rt, offset(\$rs) | Load Half Word | |
| lw | I | 23 (hex) | \$rt, offset(\$rs) | Load Word | |
| lbu | I | 24 (hex) | \$rt, offset(\$rs) | Load Byte Unsigned | |
| lhu | I | 25 (hex) | \$rt, offset(\$rs) | Load Half Word Unsigned | |
| sb | I | 28 (hex) | \$rt, offset(\$rs) | Store Byte | |
| sh | I | 29 (hex) | \$rt, offset(\$rs) | Store Half Word | |
| sw | I | 2B (hex) | \$rt, offset(\$rs) | Store Word | |
| sc | I | 2C (hex) | \$rt, offset(\$rs) | Store Conditional | |
| ldlc | I | 32 (hex) | \$rt, offset(\$rs) | Load Doubleword Left Coprocessor | |