Control Unit Table

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Name | Op  Code | format | Type | ALU op | in | out | Result/  Load | Store | Result/  Sll | Cin | Binv | Bne | Jump |
| Add | 0000 | 0 | R | 011 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| And | 0001 | 0 | R | 000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Or | 0010 | 0 | R | 001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nor | 0011 | 0 | R | 010 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Slt | 0100 | 0 | R | 100 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| Addi | 0101 | 1 | I | 011 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sll | 0110 | 1 | I | xxx | 0 | 0 | 0 | 0 | 1 | x | x | 0 | 0 |
| Lw | 0111 | 0 | R | xxx | 0 | 0 | 1 | 0 | 0 | x | x | 0 | 0 |
| Sw | 1000 | 0 | R | xxx | 0 | 0 | 0 | 1 | 0 | x | x | 0 | 0 |
| In | 1001 | 0 | R | xxx | 1 | 0 | 0 | 0 | 0 | x | x | 0 | 0 |
| Out | 1010 | 0 | R | xxx | 0 | 1 | 0 | 0 | 0 | x | x | 0 | 0 |
| Bne | 1011 | 1 | I | 101 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| Jump | 1100 | 1 | I | xxx | 0 | 0 | 0 | 0 | 0 | x | x | 0 | 1 |
| Slti | 1101 | 1 | I | 100 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| Sub | 1110 | 0 | R | 101 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |