|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **OPCODE** | | | |  |  |  |  | |  | |  |  |  | | |  | | | |  |  | |  |  |  |
|  | **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | | **8** | | **9** | **10** | **11** | | | **12** | | | | **13** | **14** | | **15** | **16** | **17** |
| **ADD** | 0 | 0 | 0 | 0 | DESTINATION R | | | | | SOURCE R1 | | | | | | | SOURCE R2 | | | | | | | | ----- | |
| **ADDI** | 0 | 0 | 0 | 1 | DESTINATION R | | | | | SOURCE R1 | | | | | |  | | IMMEDIATE VALUE | | | | | | | | |
| **AND** | 0 | 0 | 1 | 0 | DESTINATION R | | | | | SOURCE R1 | | | | | | | SOURCE R2 | | | | | | | | ---- | |
| **ANDI** | 0 | 0 | 1 | 1 | DESTINATION R | | | | | SOURCE R1 | | | | | | |  | | IMMEDIATE VALUE | | | | | | | |
| **OR** | 0 | 1 | 0 | 0 | DESTINATION R | | | | | SOURCE R1 | | | | | | | SOURCE R2 | | | | | | | | ---- | |
| **ORI** | 0 | 1 | 0 | 1 | DESTINATION R | | | | | SOURCE R1 | | | | | | |  | | | IMMEDIATE VALUE | | | | | | |
| **XOR** | 0 | 1 | 1 | 0 | DESTINATION R | | | | | SOURCE R1 | | | | | | | SOURCE R2 | | | | | | | | ---- | |
| **XORI** | 0 | 1 | 1 | 1 | DESTINATION R | | | | | SOURCE R1 | | | | | | |  | | IMMEDIATE VALUE | | | | | | | |
| **JUMP** | 1 | 0 | 0 | 0 | ADDRESS | | | | | | | | | | | | | | | | | | | | | | |  | |
| **LD** | 1 | 0 | 0 | 1 | DESTINATION R | | | | | | ADRESS | | | | | | | | | | | | | | | | | |  | |
| **ST** | 1 | 0 | 1 | 0 | SOURCE R | | | | | | ADRESS | | | | | | | | | | | | | | | | | |  | |
| **BEQ** | 1 | 1 | 1 | 1 | OP 1 | | | | OP 2 | | | | | | n=0 z=1 p=0 | | | | | | | | ADDRESS | | | | | | | | |
| **BLT** | 1 | 1 | 1 | 1 | OP 1 | | | | OP 2 | | | | | | n=1 z=0 p=0 | | | | | | | | ADDRESS | | | | | | | | |
| **BLE** | 1 | 1 | 1 | 1 | OP 1 | | | | OP 2 | | | | | | n=1 z=1 p=0 | | | | | | | | ADDRESS | | | | | | | | |
| **BGT** | 1 | 1 | 1 | 1 | OP 1 | | | | OP 2 | | | | | | n=0 z=0 p=1 | | | | | | | | ADDRESS | | | | | | | | |
| **BGE** | 1 | 1 | 1 | 1 | OP 1 | | | | OP 2 | | | | | | n=0 z=1 p=1 | | | | | | | | ADDRESS | | | | | | | | |