| OP CODE | | | | | |
|---------|-------|-----------|-----------|---------|-----------|
| (0-3) | (4-7) | (8-11) | (12-15) | (16-17) | OPERATION |
| 0000 | DEST | SRC1 | SRC2 | XX | ADD |
| 0001 | DEST | SRC1 | IMMEDIATE | | ADDI |
| 0010 | DEST | SRC1 | SRC2 | XX | AND |
| 0011 | DEST | SRC1 | IMMEDIATE | | ANDI |
| 0100 | DEST | SRC1 | SRC2 | XX | OR |
| 0101 | DEST | SRC1 | IMMEDIATE | | ORI |
| 0110 | DEST | SRC1 | SRC2 | XX | XOR |
| 0111 | DEST | SRC1 | IMMEDIATE | | XORI |
| 1000 | DEST | ADDRESS10 | | | LD |
| 1001 | SRC1 | ADDRESS10 | | | ST |
| 1010 | | ADDRESS14 | | | JUMP |
| 1011 | OP1 | OP2 | ADDRESS6 | | BEQ |
| 1100 | OP1 | OP2 | ADDRESS6 | | BLT |
| 1101 | OP1 | OP2 | ADDRESS6 | | BGT |
| 1110 | OP1 | OP2 | ADDRESS6 | | BGE |
| 1111 | OP1 | OP2 | ADDRESS6 | | BLE |