

| Instrução | Opcode | EN_RAM | WR_RAM | RD_RAM | EN_PC | WR_ACC | SEL_OP1 | | SEL_OP2 | SEL_ULA | EN_TEC | EN_MON | SEL_JUMP |
|-----------|--------|--------|--------|--------|-------|--------|---------|-------|---------|---------|--------|--------|----------|
| | | | | | | | bit 1 | bit 0 | | | | | |
| NOP | 000000 | 0 | 0 | 0 | 1/0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SW | 000001 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LW | 000010 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| LI | 000011 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| ADD | 000100 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| ADDI | 000101 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SUB | 000110 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| SUBI | 000111 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| J | 001000 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| IN | 001001 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| OUT | 001010 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |