1 Instruction Format

Op-Code is 4 bits long:

| 1 | (CYCLE) |
|----|---------|
| 1. | |
| 1. | |

| | \ / |
|---|---------|
| | 000 |
| Ī | Op-Code |
| | 0-2 |

2. LOAD: LD

| 101 | X | XXXX |
|---------|----------|---------|
| Op-Code | Register | Address |
| 0-2 | 3 | 4-7 |

3. STORE: STR

| 111 | x | xxxx |
|---------|----------|---------|
| Op-Code | Register | Address |
| 0-2 | 3 | 4-7 |

4. ADD: ADD

| 0010 | X |
|---------|------------------------|
| Op-Code | Register to store into |
| 0-3 | 4 |

5. SUBTRACT: SUB

| 0011 | X |
|---------|------------------------|
| Op-Code | Register to store into |
| 0-3 | 4 |

6. Branch equal: BEQ

| 0100 | x |
|---------|---------|
| Op-Code | Address |
| 0-3 | 4-7 |

7. Branc not equal: BNQ

| | 0101 | X |
|---|---------|---------|
| | Op-Code | Address |
| ĺ | 0-3 | 4-7 |

8. PRINT: PRT

| 0110 | X |
|---------|---------------------|
| Op-Code | Register to display |
| 0-3 | 4 |

9. INPUT: INP

| 0111 | X |
|---------|------------------------|
| Op-Code | Register to store into |
| 0-3 | 4 |

10. STOP: STOP

| 1000 | |
|---------|--|
| Op-Code | |
| 0-3 | |

11. MULTIPLICATION: MULT

| 1001 | х | XXX |
|---------|------------------------|----------|
| Op-Code | Register to store into | Constant |
| 0-3 | 4 | 5-7 |