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| Opcode | | | Description |
| Binary | Mnemonic |  | |
| 0000 | Halt | Terminate the program. | |
| 0001 | Load X | Load the contents of address X into AC. | |
| 0010 | Store X | Store the contents of AC to address X. | |
| 0011 | Subt X | Subtract the contents of address X from AC and store the result in AC. | |
| 0100 | Add X | Add the contents of address X to AC and store the result in AC. | |
| 0101 | Input | Input a value from the keyboard into AC. | |
| 0110 | Output | Output the value in AC to the display. | |
| 0111 | Skipcond | Skip the next instruction on condition. | |
| 1000 | Jump X | Load the value of X into PC. | |
| 1001 | Load C | Load the constant value of the operand in the accumulator | |
| 1010 | AND | Perform bitwise AND operation on value in AC and value from memory address X | |
| 1011 | OR | Perform bitwise OR operation on value in AC and value from memory address X | |
| 1100 | NOT | Perform bitwise NOT operation on value in AC | |
| 1101 | XOR | Perform bitwise XOR operation on value in AC and value from memory address X | |
| 1110 | ShiftL | Shifts bits on value in AC left | |
| 1111 | ShiftR | Shifts bits on value in AC right | |

Skipcond will jump to the next instruction if the value in the AC is equal to 0 by incrementing the PC (program counter) once more in addition to incrementing it at the end of the FDE cycle. If the AC is not equal to 0, the program counter only increments at the end of the FDE cycle.