

Instruction	Instruction code	Operation
NOP	00000000	No operation
LOAD X	00100000 X	$A \leftarrow M[X]$
STORE X	00110000 X	$M[X] \leftarrow A$
MOVE	10000000	$R \leftarrow A$
ADD	10100000	$A \leftarrow A + R$
XOR	11000000	$A \leftarrow A \text{ xor } R$
TESTNZ	11100000	$Z \leftarrow \text{not } V$
TESTZ	11100001	$Z \leftarrow V$
JUMP X	10000000 X	$PC \leftarrow X$
JUMPZ X	10010000 X	If $(Z = 1)$ then $PC \leftarrow X$
LOADSP X	10110000 X	$SP \leftarrow X$
PEEK	11000000	$A \leftarrow M[SP]$
PUSH	11010000	$M[--SP] \leftarrow A$
POP	11100000	$A \leftarrow M[SP++]$
HALT	11110000	$PC \leftarrow 0$, stop microsequencer