

Instructions	execution	icode	ALU A	ALU B	ALU_Fun	Set_CC	CND
			valA/valC/+8/X	valB/0/X	0,1,2,3	1/0	0/1/X
halt	cpu.stat = HALT	0	X	X	X	X	X
nop	N/A	1	X	X	X	X	X
rrmovq rA, rB	valE $\leftarrow$ 0 + valA	2	valA	0	0	0	X
irmovq V, rB	valE $\leftarrow$ 0 + valC	3	valC	0	0	0	X
rmmovq rA, D(rB)	valE $\leftarrow$ valC + valB	4	valC	valB	0	0	X
rrmovq D(rB), rA	valE $\leftarrow$ valC + valB	5	valC	valB	0	0	X
OPq rA, rB	valE $\leftarrow$ valB OP valA set CC	6	valA	valB	ifun	1	X
jXX Dest	cnd $\leftarrow$ cond(CC, ifun)	7	X	X	0	0	Cond(CC,ifun)
cmovXX rA, rB	valE $\leftarrow$ 0 + valA	2	valA	0	0	0	X
pushq rA	valE $\leftarrow$ valB + - 8	A	-8	valB	0	0	
pop rA	valE $\leftarrow$ valB + 8	B	8	valB	0	0	X

Instructions	PC Update	PC	icode
		valP/valC/valM	
halt	$PC \leftarrow 0$	0	0
nop	$PC \leftarrow \text{valP}$	valP	1
rrmovq rA, rB	$PC \leftarrow \text{valP}$	valP	2
irmovq V, rB	$PC \leftarrow \text{valP}$	valP	3
rmmovq rA, D(rB)	$PC \leftarrow \text{valP}$	valP	4
mrmmovq D(rB), rA	$PC \leftarrow \text{valP}$	valP	5
OPq rA, rB	$PC \leftarrow \text{valP}$	valP	6
jXX Dest	$PC \leftarrow \text{cnd} ? \text{valC} : \text{valP}$	valC/valP	7
cmovXX rA, rB	$PC \leftarrow \text{valP}$	valP	2
pushq rA	$PC \leftarrow \text{valP}$	valP	A
pop rA	$PC \leftarrow \text{valP}$	valP	B