

Mnemonic	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
*ADD	0	0	0	1	DR			SR1			0	0	0	SR2		
*ADD	0	0	0	1	DR			SR1			1	imm5				
*AND	0	1	0	1	DR			SR1			0	0	0	SR2		
*AND	0	1	0	1	DR			SR1			1	imm5				
BR	0	0	0	0	n	z	p	PCOffset9								
JMP	1	1	0	0	0	0	0	BaseR			0	0	0	0	0	0
JSR	0	1	0	0	1	PCOffset11										
JSRR	0	1	0	0	0	0	0	BaseR			0	0	0	0	0	0
*LD	0	0	1	0	DR			PCOffset9								
*LDI	1	0	1	0	DR			PCOffset9								
*LDR	0	1	1	0	DR			BaseR			offset6					
LEA	1	1	1	0	DR			PCOffset9								
*NOT	1	0	0	1	DR			SR			1	1	1	1	1	1
reserved	1	1	0	1	-	-	-	-	-	-	-	-	-	-	-	-
RTI	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ST	0	0	1	1	SR			PCOffset9								
STI	1	0	1	1	SR			PCOffset9								
STR	0	1	1	1	SR			BaseR			offset6					
TRAP	1	1	1	1	0	0	0	0	trapvect8							

* modifies condition codes NZP

Trap Vector	Assembler Name
x20	GETC
x21	OUT or PUTC
x22	PUTS
x23	IN
x25	HALT

Character	ASCII Code
NUL	x00
A	x41
B	x42
C	x43
D	x44

Device Register	Addr
Keyboard Status Register	xFE00
Keyboard Data Register	xFE02
Display Status Register	xFE04
Display Data Register	xFE06