

Addendum to the instruction set

INSTRUCTION	OP CODE	C	V	Z	S	DESCRIPTION	SYNTAX
Subroutines:							
Load SP (Imm)	89	X	X	X	X	$SP \leftarrow \text{mem}[PC+1], \text{mem}[PC]$	LDSI <data>
Call	C8	X	X	X	X	$SP \leftarrow (SP) - 1; \text{mem}[SP] \leftarrow (PC_L);$ $SP \leftarrow (SP) - 1; \text{mem}[SP] \leftarrow (PC_H)$	CALL <address>
Return	C0	X	X	X	X	$PC_H \leftarrow \text{mem}[SP]; SP \leftarrow (SP) + 1;$ $PC_L \leftarrow \text{mem}[SP]; SP \leftarrow (SP) + 1$	RET
Index addressing:							
Load X (Imm)	8A	X	X	X	X	$X \leftarrow \text{mem}[PC+1], \text{mem}[PC]$	LDXI <data>
Load Acc (Indx)	BC	X	X	X	X	$A \leftarrow \text{mem}[(X) + b]$	LDAA b,X
Store Acc (Indx)	EC	X	X	X	X	$\text{mem}[(X) + b] \leftarrow (A)$	STAA b,X
Increment X	FC	X	X	X	X	$X \leftarrow (X) + 1$	INCX
Decrement X	FD	X	X	X	X	$X \leftarrow (X) - 1$	DECX