

# INSTRUCTION ENCODING

C7	C6	C5	C4	C3	C2	C1	C0
O2	O1	O0	S0	Z	W	D1	D0
F3	F2	F1	F0	S1	B	D3	D2
C15	C14	C13	C12	C11	C10	C9	C8

Z	ZPAGE
0	OFF
1	ON

W	~WRITE
0	TRUE
1	FALSE

Z	BANK
0	OFF
1	ON

#PC	O2	O1	O0	OPERATION	
4	0	0	0	HL $\oplus$ S -> D,A	
3	0	0	1	L $\oplus$ S -> D	
3	0	1	0	H $\oplus$ S -> D,A	
3	0	1	1	S0	ROM
2	1	0	0	0	NOP
2	1	0	0	1	LD
1-2	1	0	1	0	LDP
1-2	1	0	1	1	LDN
2	1	1	0	H $\oplus$ S -> D,A	
2	1	1	1	H $\oplus$ S -> D	

D3	D2	D1	D0	DEST
0	0	0	0	N (null)
0	0	0	1	O1
0	0	1	0	O2
0	0	1	1	O3
0	1	0	0	O4
0	1	0	1	O5
0	1	1	0	O6
0	1	1	1	O7
1	0	0	0	X
1	0	0	1	E
1	0	1	0	S
1	0	1	1	V
1	1	0	0	Y
1	1	0	1	HL
1	1	1	0	PC
1	1	1	1	Pg

F3	F2	F1	F0	FUNC
0	0	0	0	MV
0	0	0	1	ADD
0	0	1	0	AF
0	0	1	1	AND
0	1	0	0	OR
0	1	0	1	XOR
0	1	1	0	WAV
0	1	1	1	DIS
1	0	0	0	MUL
1	0	0	1	DIV
1	0	1	0	COM
1	0	1	1	VID
1	1	0	0	FNC
1	1	0	1	FND
1	1	1	0	FNE
1	1	1	1	FNF

S1	S0	SOURCE
0	0	I (input)
0	1	E (external)
1	0	A (accumulator)
1	1	M (memory)