

MEMORIC	SYMBOLIC OPERATION	FLAGS					OP-CODE	NO. OF T CYCLES	COMMENTS	
		C	Z	P/V	S	N				H
RST p	(SP-1) → PC _{HL} PC _{HL} ← 0 PC _{HL} ← p A ← (n)	•	•	•	•	•	•	76 543 210	11	
IN A, (n)		•	•	•	•	•	•	11 011 011	10	n to A ₀ ~ A ₇ Acc to A ₈ ~ A ₁₅
IN, (C)	r ← (C) If r = 110 only the flags will be affected	•	†	P	†	0	†	11 101 101 01 r 000	11	C to A ₀ ~ A ₇ B to A ₈ ~ A ₁₅
INI	(HL) ← (C) B ← B-1 HL ← HL + 1 (HL) ← (C) B ← B-1 HL ← HL + 1 Repeat until B ← 0	•	†	X	X	1	X	11 101 101 10 100 010	15	C to A ₀ ~ A ₇ B to A ₈ ~ A ₁₅
INR	B ← B-1 HL ← HL + 1 Repeat until B ← 0	•	†	X	X	1	X	11 101 101 10 110 010	20	C to A ₀ ~ A ₇ B to A ₈ ~ A ₁₅
IND	(HL) ← (C) B ← B-1 HL ← HL-1 (HL) ← (C) B ← B-1 HL ← HL-1 Repeat until B ← 0	•	†	X	X	1	X	11 101 101 10 101 010	15	C to A ₀ ~ A ₇ B to A ₈ ~ A ₁₅
INDR	(HL) ← (C) B ← B-1 HL ← HL-1 Repeat until B ← 0	•	†	X	X	1	X	11 101 101 10 111 010	20	C to A ₀ ~ A ₇ B to A ₈ ~ A ₁₅
OUT (n), A	(n) ← A	•	•	•	•	•	•	11 010 011	11	n to A ₀ ~ A ₇ Acc to A ₈ ~ A ₁₅
OUT (C), r	(C) ← r	•	•	•	•	•	•	11 101 101 01 r 001	12	C to A ₀ ~ A ₇ B to A ₈ ~ A ₁₅
OUTI	(C) ← (HL) B ← B-1 HL ← HL + 1 (C) ← (HL) B ← B-1 HL ← HL + 1 Repeat until B ← 0	•	†	X	X	1	X	11 101 101 10 100 011	15	C to A ₀ ~ A ₇ B to A ₈ ~ A ₁₅
OTDR	(C) ← (HL) B ← B-1 HL ← HL-1 (C) ← (HL) B ← B-1 HL ← HL-1 Repeat until B ← 0	•	†	X	X	1	X	11 101 101 10 111 011	20	C to A ₀ ~ A ₇ C to A ₈ ~ A ₁₅
OUTO	(C) ← (HL) B ← B-1 HL ← HL-1 (C) ← (HL) B ← B-1 HL ← HL-1 Repeat until B ← 0	•	†	X	X	1	X	11 101 101 10 101 011	15	C to A ₀ ~ A ₇ B to A ₈ ~ A ₁₅

Notes: r, r' means any of the registers A, B, C, D, E, H, L
ss is any of the register pairs BC, DE, HL, SP
rr is any of the register pairs BC, DE, HL, SP
1. P/V/Flag is 0 if the result of BC-1 = 0 otherwise P/V = 0
2. Z flag is 1 if A = (HL), otherwise Z = 0
e represents the extension in the relative addressing mode
e is a signed two's complement number in the range <-126, 129>
e+2 in the op-code provides an effective address of PC+e as PC is incremented by 2 prior to the addition of e
The notation _{hp} indicates bit B (0 to 7), of location _h
Flag Notation: • = flag not affected, 0 = flag reset, 1 = flag set, X = flag is unknown
† = flag is affected according to the result of the operation.

[illegible]

POWERS OF 2		POWERS OF 16	
2 ⁿ	n	16 ⁿ	n
256	8	1	1
512	9	16	2
1 024	10	256	3
2 048	11	4 096	4
4 096	12	65 536	5
8 192	13	1 048 576	6
16 384	14	16 777 216	7
32 768	15	268 435 456	8
65 536	16	4 294 967 296	9
131 072	17	68 719 476 736	10
262 144	18	1 099 511 627 776	11
524 288	19	17 592 186 044 416	12
1 048 576	20	281 474 976 710 656	13
2 097 152	21	4 503 589 627 370 496	14
4 194 304	22	72 057 570 937 927 936	15
8 388 608	23	1 152 921 504 606 846 976	16
16 777 216	24		17