

Intel 8008 instruction set

Illegal
Jumps/Calls
Arithmetic/Logical
Miscellaneous
Load/Store/Move

	x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	xA	xB	xC	xD	xE	xF
0x			RLC 1 10 --- C	RNC 1 10/6 ----	ADI d8 2 16 SZ P-	RST 0 1 10 ----	MVI A,d8 2 16 ----	RET 1 10 ----	INR B 1 10 SZ P-	DCR B 1 10 SZ P-	RRC 1 10 --- C	RNZ 1 10/6 ----	ACI d8 2 16 SZ P-	RST 1 1 10 ----	MVI B,d8 2 16 ----	
1x	INR C 1 10 SZ P-	DCR C 1 10 SZ P-	RAL 1 10 --- C	RP 1 10/6 ----	SUI d8 2 16 SZ P-	RST 2 1 10 ----	MVI C,d8 2 16 ----		INR D 1 10 SZ P-	DCR D 1 10 SZ P-	RAR 1 10 --- C	RPO 1 10/6 ----	SBI d8 2 16 SZ P-	RST 3 1 10 ----	MVI D,d8 2 16 ----	
2x	INR E 1 10 SZ P-	DCR E 1 10 SZ P-		RC 1 10/6 ----	ANI d8 2 16 SZ P-	RST 4 1 10 ----	MVI E,d8 2 16 ----		INR H 1 10 SZ P-	DCR H 1 10 SZ P-		RZ 1 10/6 ----	XRI d8 2 16 SZ P-	RST 5 1 10 ----	MVI H,d8 2 16 ----	
3x	INR L 1 10 SZ P-	DCR L 1 10 SZ P-		RM 1 10/6 ----	ORI d8 2 16 SZ P-	RST 6 1 10 ----	MVI L,d8 2 16 ----					RPE 1 10/6 ----	CPI d8 2 16 SZ P-	RST 7 1 10 ----	MVI M,d8 2 18 ----	
4x	JNC a16 3 22/18 ----	IN 0 1 16 ----	CNC a16 3 22/18 ----	IN 1 1 16 ----	JMP a16 3 22 ----	IN 2 1 16 ----	CALL a16 3 22 ----	IN 3 1 16 ----	JNZ a16 3 22/18 ----	IN 4 1 16 ----	CNZ a16 3 22/18 ----	IN 5 1 16 ----		IN 6 1 16 ----		IN 7 1 16 ----
5x	JP a16 3 22/18 ----	OUT 8 1 12 ----	CP a16 3 22/18 ----	OUT 9 1 12 ----		OUT 10 1 12 ----		OUT 11 1 12 ----	JPO a16 3 22/18 ----	OUT 12 1 12 ----	CPO a16 3 22/18 ----	OUT 13 1 12 ----		OUT 14 1 12 ----		OUT 15 1 12 ----
6x	JC a16 3 22/18 ----	OUT 16 1 12 ----	CC a16 3 22/18 ----	OUT 17 1 12 ----		OUT 18 1 12 ----		OUT 19 1 12 ----	JZ a16 3 22/18 ----	OUT 20 1 12 ----	CZ a16 3 22/18 ----	OUT 21 1 12 ----		OUT 22 1 12 ----		OUT 23 1 12 ----
7x	JM a16 3 22/18 ----	OUT 24 1 12 ----	CM a16 3 22/18 ----	OUT 25 1 12 ----		OUT 26 1 12 ----		OUT 27 1 12 ----	JPE a16 3 22/18 ----	OUT 28 1 12 ----	CPE a16 3 22/18 ----	OUT 29 1 12 ----		OUT 30 1 12 ----		OUT 31 1 12 ----
8x	ADD A 1 10 SZ PC	ADD B 1 10 SZ PC	ADD C 1 10 SZ PC	ADD D 1 10 SZ PC	ADD E 1 10 SZ PC	ADD H 1 10 SZ PC	ADD L 1 10 SZ PC	ADD M 1 16 SZ PC	ADC A 1 10 SZ PC	ADC B 1 10 SZ PC	ADC C 1 10 SZ PC	ADC D 1 10 SZ PC	ADC E 1 10 SZ PC	ADC H 1 10 SZ PC	ADC L 1 10 SZ PC	ADC M 1 16 SZ PC
9x	SUB A 1 10 SZ PC	SUB B 1 10 SZ PC	SUB C 1 10 SZ PC	SUB D 1 10 SZ PC	SUB E 1 10 SZ PC	SUB H 1 10 SZ PC	SUB L 1 10 SZ PC	SUB M 1 16 SZ PC	SBB A 1 10 SZ PC	SBB B 1 10 SZ PC	SBB C 1 10 SZ PC	SBB D 1 10 SZ PC	SBB E 1 10 SZ PC	SBB H 1 10 SZ PC	SBB L 1 10 SZ PC	SBB M 1 16 SZ PC
Ax	ANA A 1 10 SZ PC	ANA B 1 10 SZ PC	ANA C 1 10 SZ PC	ANA D 1 10 SZ PC	ANA E 1 10 SZ PC	ANA H 1 10 SZ PC	ANA L 1 10 SZ PC	ANA M 1 16 SZ PC	XRA A 1 10 SZ PC	XRA B 1 10 SZ PC	XRA C 1 10 SZ PC	XRA D 1 10 SZ PC	XRA E 1 10 SZ PC	XRA H 1 10 SZ PC	XRA L 1 10 SZ PC	XRA M 1 16 SZ PC
Bx	ORA A 1 10 SZ PC	ORA B 1 10 SZ PC	ORA C 1 10 SZ PC	ORA D 1 10 SZ PC	ORA E 1 10 SZ PC	ORA H 1 10 SZ PC	ORA L 1 10 SZ PC	ORA M 1 16 SZ PC	CMP A 1 10 SZ PC	CMP B 1 10 SZ PC	CMP C 1 10 SZ PC	CMP D 1 10 SZ PC	CMP E 1 10 SZ PC	CMP H 1 10 SZ PC	CMP L 1 10 SZ PC	CMP M 1 16 SZ PC
Cx	NOP 1 10 ----	MOV A,B 1 10 ----	MOV A,C 1 10 ----	MOV A,D 1 10 ----	MOV A,E 1 10 ----	MOV A,H 1 10 ----	MOV A,L 1 10 ----	MOV A,M 1 16 ----	MOV B,A 1 10 ----	MOV B,B 1 10 ----	MOV B,C 1 10 ----	MOV B,D 1 10 ----	MOV B,E 1 10 ----	MOV B,H 1 10 ----	MOV B,L 1 10 ----	MOV B,M 1 16 ----
Dx	MOV C,A 1 10 ----	MOV C,B 1 10 ----	MOV C,C 1 10 ----	MOV C,D 1 10 ----	MOV C,E 1 10 ----	MOV C,H 1 10 ----	MOV C,L 1 10 ----	MOV C,M 1 16 ----	MOV D,A 1 10 ----	MOV D,B 1 10 ----	MOV D,C 1 10 ----	MOV D,D 1 10 ----	MOV D,E 1 10 ----	MOV D,H 1 10 ----	MOV D,L 1 10 ----	MOV D,M 1 16 ----
Ex	MOV E,A 1 10 ----	MOV E,B 1 10 ----	MOV E,C 1 10 ----	MOV E,D 1 10 ----	MOV E,E 1 10 ----	MOV E,H 1 10 ----	MOV E,L 1 10 ----	MOV E,M 1 16 ----	MOV H,A 1 10 ----	MOV H,B 1 10 ----	MOV H,C 1 10 ----	MOV H,D 1 10 ----	MOV H,E 1 10 ----	MOV H,H 1 10 ----	MOV H,L 1 10 ----	MOV H,M 1 16 ----
Fx	MOV L,A 1 10 ----	MOV L,B 1 10 ----	MOV L,C 1 10 ----	MOV L,D 1 10 ----	MOV L,E 1 10 ----	MOV L,H 1 10 ----	MOV L,L 1 10 ----	MOV L,M 1 16 ----	MOV M,A 1 14 ----	MOV M,B 1 14 ----	MOV M,C 1 14 ----	MOV M,D 1 14 ----	MOV M,E 1 14 ----	MOV M,H 1 14 ----	MOV M,L 1 14 ----	HLT 1 8 ----