

CONSTANT DEFINITION		ACCUMULATOR	
C3 MP	CD CALL	C9 RET	07 RLC
C2 NZ	C4 CNZ	C0 RNZ	0F RRC
CA Z	CC CZ	C8 RZ	2 RAL
D2 NC	D4 CNC	D0 RNC	3 RAR
DA C	DC CC	D8 RC	4 RST
E2 PO	E4 CPO	E0 RPO	5 RST
EA PE	EC CPE	E8 RPE	6 RST
F2 P	F4 CP	F0 RP	7 RST
FA M	FC CM	F8 RM	CONTROL
E9	PCHL		
MOVE (cont)		ROTATE	
C7 RST	07 RLC	58 MOV E,B	80 ADD B
CF RST	1 OF RRC	59 MOV E,C	81 ADD C
D7 RST	2 17 RAL	5A MOV E,D	82 ADD D
DF RST	3 1F RAR	5B MOV E,E	83 ADD E
E7 RST	4 RST	5C MOV E,H	84 ADD H
EF RST	5 RST	5D MOV E,L	85 ADD L
F7 RST	6 RST	5E MOV E,M	86 ADD M
FF RST	7 RST	5F MOV E,A	87 ADD A
		60 NOP	88 ADC B
		76 HLT	61 MOV H,C
		F3 DI	62 MOV H,D
		FB EI	63 MOV H,E
			64 MOV H,H
			65 MOV H,L
			66 MOV H,M
			67 MOV H,A
MOVE IMMEDIATE		MOVE	
06 MV1 B.	C6 ADI	C5 PUSH B	68 MOV L,B
0E MV1 C.	CE ACI	D5 PUSH D	40 MOV B,B
16 MV1 D.	D6 SUI	E5 PUSH H	41 MOV B,C
1E MV1 E.	DE SBI	F5 PUSH PSW	42 MOV B,D
26 MV1 H.	E6 ANI	C1 POP B	43 MOV B,E
2E MV1 L.	EE XRI	D1 POP D	44 MOV B,H
36 MV1 M.	F6 ORI	E1 POP H	45 MOV B,L
3E MV1 A.	FE CPI	F1 POP PSW*	46 MOV B,M
		09 DAD B	47 MOV BA
		19 DAD D	48 MOV C,B
		29 DAD H	49 MOV C,C
		E3 XTHL	70 MOV M,B
		F9 SPHL	71 MOV M,C
		39 DAD SP	72 MOV M,D
INCREMENT**		DECREMENT**	
04 NR B	05 DCR B	SPECIALS	73 MOV M,E
0C NR C	0D DCR C	EB XCHG	74 MOV M,H
14 NR D	15 DCR D	27 DAA*	4D MOV C,L
1C NR E	1D DCR E	4E MOV C,M	75 MOV M,L
24 NR H	25 DCR H	4F MOV C,A	77 MOV M,A
2C NR L	2D DCR L	50 MOV D,B	78 MOV A,B
34 NR M	35 DCR M	51 MOV D,C	79 MOV A,C
3C NR A	3D DCR A	52 MOV D,D	7A MOV A,D
		53 MCY D,E	9F SBB A
		54 MOV D,H	7B MOV A,E
		55 MOV D,L	7C MOV A,H
		D3 OUT D8	7D MOV A,L
		DB IN D8	7E MOV A,M
		57 MOV DA	7F MOV A,A
LOAD IMMEDIATE		INPUT/OUTPUT	
03 NX B	0B DCX B	02 STAX B	54 MOV DB
13 NX D	1B DCX D	12 STAX D	55 MOV DL
23 NX H	2B DCX H	22 SHLD Adr	56 MOV DM
33 NX SP	3B DCX SP	32 STA Adr	57 MOV DA
RETURN		OPERATORS	
C3 MP	CD CALL	01 LXI B.	06 MV1 B.
C2 NZ	C4 CNZ	11 LXI D.	0E MV1 C.
CA Z	CC CZ	21 LXI H.	16 MV1 D.
D2 NC	D4 CNC	31 LXI SP	1E MV1 E.
DA C	DC CC		26 MV1 H.
E2 PO	E4 CPO		2E MV1 L.
EA PE	EC CPE		36 MV1 M.
F2 P	F4 CP		3E MV1 A.
FA M	FC CM		
E9	PCHL		
ROTATE		TEST	
C7 RST	07 RLC	A8 XRA B	80 ADD B
CF RST	1 OF RRC	A9 XRA C	81 ADD C
D7 RST	2 17 RAL	AA XRA D	82 ADD D
DF RST	3 1F RAR	AB XRA E	83 ADD E
E7 RST	4 RST	AC XRA H	84 ADD H
EF RST	5 RST	AD XRA L	85 ADD L
F7 RST	6 RST	AE XRA M	86 ADD M
FF RST	7 RST	AF XRA A	87 ADD A
		B0 ORA B	88 ADC B
		B1 ORA C	89 ADC C
		B2 ORA D	90 SUB B
		B3 ORA E	91 SUB C
		B4 ORA H	92 SUB D
		B5 ORA L	93 SUB E
		B6 ORA M	94 SUB H
		B7 ORA A	95 SUB L
			96 SUB M
			97 SUB A
ACCUMULATOR		TEST	
58 MOV E,B	59 MOV E,C	60 MOV H,B	61 MOV H,C
5A MOV E,D	5B MOV E,E	62 MOV H,D	63 MOV H,E
5C MOV E,H	5D MOV E,L	64 MOV H,H	65 MOV H,L
5E MOV E,M	5F MOV E,A	66 MOV H,M	67 MOV H,A
STACK OPS		TEST	
C5 PUSH B	D5 PUSH D	68 MOV L,B	69 MOV L,C
D5 PUSH H	E5 PUSH PSW	70 MOV L,D	71 MOV L,E
F5 PUSH PSW		72 MOV L,F	73 MOV L,G
		74 MOV M,H	75 MOV M,L
		76 MOV M,I	77 MOV M,J
		78 MOV M,K	79 MOV M,L
		7A MOV M,M	7B MOV M,N
		7C MOV M,O	7D MOV M,P
		7E MOV M,Q	7F MOV M,R
OPERATORS		TEST	
+ -		80 SUB B	81 SUB C
		82 SUB D	83 SUB E
		84 SUB H	85 SUB L
		86 SUB M	87 SUB A
PSEUDO INSTRUCTION		TEST	
ORG Adr	END	88 CMP B	89 CMP C
EQU Di6		90 CMP D	91 CMP E
		92 CMP F	93 CMP G
		94 CMP H	95 CMP I
		96 CMP L	97 CMP M
STANDARD SETS		TEST	
A SET 7	B SET 0	C SET 1	D SET 2
E SET 3	H SET 4	L SET 5	M SET 6
F SET 6	I SET 6	J SET 6	K SET 6
PSEUDO INSTRUCTION		TEST	
DS D16	DB D8	DB D16	DB D16
SP SET 6	SP SET 6	SP SET 6	SP SET 6
PSW SET 6	PSW SET 6	PSW SET 6	PSW SET 6

Adr = 16 bit address  
 \* = all Flags (C,Z,S,P) affected  
 \*\* = only CARRY affected  
 (exception: INX & DCX affect no Flags)

D16 = constant, or logical/arithmetic expression that evaluates to a 16 bit data quantity.  
 + = all Flags (C,Z,S,P) affected

## APPENDIX II

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