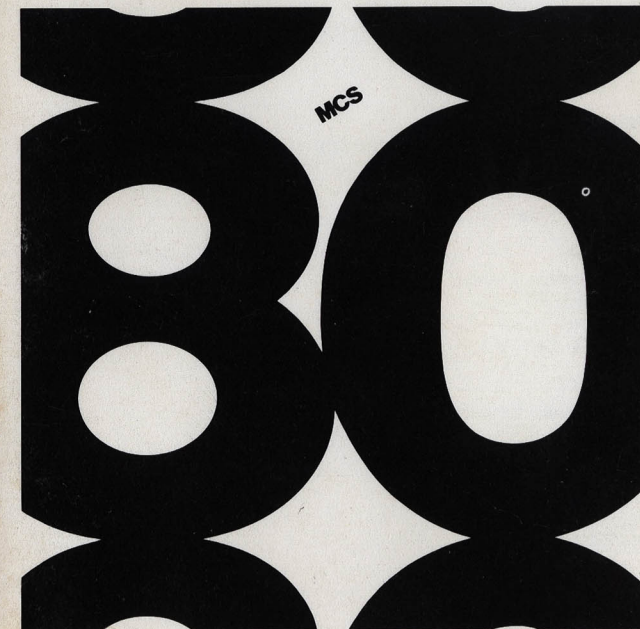


January 1975



00	NOP		2B	DCX	H	56	MOV	D,M
01	LXI	B,D16	2C	INR	L	57	MOV	D,A
02	STAX	B	2D	DCR	L	58	MOV	E,B
03	INX	B	2E	MVI	L,D8	59	MOV	E,C
04	INR	B	2F	CMA		5A	MOV	E,D
05	DCR	B	30	---		5B	MOV	E,E
06	MVI	B,D8	31	LXI	SP,D16	5C	MOV	E,H
07	RLC		32	STA	Adr	5D	MOV	E,L
08	---		33	INX	SP	5E	MOV	E,M
09	DAD	B	34	INR	M	5F	MOV	E,A
0A	LDAX	B	35	DCR	M	60	MOV	H,B
0B	DCX	B	36	MVI	M,D8	61	MOV	H,C
0C	INR	C	37	STC		62	MOV	H,D
0D	DCR	C	38	---		63	MOV	H,E
0E	MVI	C,D8	39	DAD	SP	64	MOV	H,H
0F	RRC		3A	LDA	Adr	65	MOV	H,L
10	---		3B	DCX	SP	66	MOV	H,M
11	LXI	D,D16	3C	INR	A	67	MOV	H,A
12	STAX	D	3D	DCR	A	68	MOV	L,B
13	INX	D	3E	MVI	A,D8	69	MOV	L,C
14	INR	D	3F	CMC		6A	MOV	L,D
15	DCR	D	40	MOV	B,B	6B	MOV	L,E
16	MVI	D,D8	41	MOV	B,C	6C	MOV	L,H
17	RAL		42	MOV	B,D	6D	MOV	L,L
18	---		43	MOV	B,E	6E	MOV	L,M
19	DAD	D	44	MOV	B,H	6F	MOV	L,A
1A	LDAX	D	45	MOV	B,L	70	MOV	M,B
1B	DCX	D	46	MOV	B,M	71	MOV	M,C
1C	INR	E	47	MOV	B,A	72	MOV	M,D
1D	DCR	E	48	MOV	C,B	73	MOV	M,E
1E	MVI	E,D8	49	MOV	C,C	74	MOV	M,H
1F	RAR		4A	MOV	C,D	75	MOV	M,L
20	---		4B	MOV	C,E	76	HLT	
21	LXI	H,D16	4C	MOV	C,H	77	MOV	M,A
22	SHLD	Adr	4D	MOV	C,L	78	MOV	A,B
23	INX	H	4E	MOV	C,M	79	MOV	A,C
24	INR	H	4F	MOV	C,A	7A	MOV	A,D
25	DCR	H	50	MOV	D,B	7B	MOV	A,E
26	MVI	H,D8	51	MOV	D,C	7C	MOV	A,H
27	DAA		52	MOV	D,D	7D	MOV	A,L
28	---		53	MOV	D,E	7E	MOV	A,M
29	DAD	H	54	MOV	D,H	7F	MOV	A,A
2A	LHLD	Adr	55	MOV	D,L	80	ADD	B

81	ADD	C	AC	XRA	H	D7	RST	2
82	ADD	D	AD	XRA	L	D8	RC	
83	ADD	E	AE	XRA	M	D9	---	
84	ADD	H	AF	XRA	A	DA	JC	Adr
85	ADD	L	B0	ORA	B	DB	IN	D8
86	ADD	M	B1	ORA	C	DC	CC	Adr
87	ADD	A	B2	ORA	D	DD	---	
88	ADC	B	B3	ORA	E	DE	SBI	D8
89	ADC	C	B4	ORA	H	DF	RST	3
8A	ADC	D	B5	ORA	L	E0	RPO	
8B	ADC	E	B6	ORA	M	E1	POP	H
8C	ADC	H	B7	ORA	A	E2	JPO	Adr
8D	ADC	L	B8	CMP	B	E3	XTHL	
8E	ADC	M	B9	CMP	C	E4	CPO	Adr
8F	ADC	A	BA	CMP	D	E5	PUSH	H
90	SUB	B	BB	CMP	E	E6	ANI	D8
91	SUB	C	BC	CMP	H	E7	RST	4
92	SUB	D	BD	CMP	L	E8	RPE	
93	SUB	E	BE	CMP	M	E9	PCHL	
94	SUB	H	BF	CMP	A	EA	JPE	Adr
95	SUB	L	C0	RNZ		EB	XCHG	
96	SUB	M	C1	POP	B	EC	CPE	Adr
97	SUB	A	C2	JNZ	Adr	ED	---	
98	SBB	B	C3	JMP	Adr	EE	XRI	D8
99	SBB	C	C4	CNZ	Adr	EF	RST	5
9A	SBB	D	C5	PUSH	B	F0	RP	
9B	SBB	E	C6	ADI	D8	F1	POP	PSW
9C	SBB	H	C7	RST	0	F2	JP	Adr
9D	SBB	L	C8	RZ		F3	DI	
9E	SBB	M	C9	RET	Adr	F4	CP	Adr
9F	SBB	A	CA	JZ		F5	PUSH	PSW
A0	ANA	B	CB	---		F6	ORI	D8
A1	ANA	C	CC	CZ	Adr	F7	RST	6
A2	ANA	D	CD	CALL	Adr	F8	RM	
A3	ANA	E	CE	ACI	D8	F9	SPHL	
A4	ANA	H	CF	RST	1	FA	JM	Adr
A5	ANA	L	D0	RNC		FB	EI	
A6	ANA	M	D1	POP	D	FC	CM	Adr
A7	ANA	A	D2	JNC	Adr	FD	---	
A8	XRA	B	D3	OUT	D8	FE	CPI	D8
A9	XRA	C	D4	CNC	Adr	FF	RST	7
AA	XRA	D	D5	PUSH	D			
AB	XRA	E	D6	SUI	D8			

D16 = constant, or logical/arithmetic expression that evaluates to a 16 bit data quantity.

HEX-ASCII TABLE			
00	NUL	2B	+
01	SOH	2C	,
02	STX	2D	-
03	ETX	2E	.
04	EOT	2F	/
05	ENQ	30	0
06	ACK	31	1
07	BEL	32	2
08	BS	33	3
09	HT	34	4
0A	LF	35	5
0B	VT	36	6
0C	FF	37	7
0D	CR	38	8
0E	SO	39	9
0F	SI	3A	:
10	DLE	3B	;
11	DC1 (X-ON)	3C	<
12	DC2 (TAPE)	3D	=
13	DC3 (X-OFF)	3E	>
14	DC4 (TAPE)	3F	?
15	NAK	40	@
16	SYN	41	A
17	ETB	42	B
18	CAN	43	C
19	EM	44	D
1A	SUB	45	E
1B	ESC	46	F
1C	FS	47	G
1D	GS	48	H
1E	RS	49	I
1F	US	4A	J
20	SP	4B	K
21	!	4C	L
22	"	4D	M
23	#	4E	N
24	\$	4F	O
25	%	50	P
26	&	51	Q
27	'	52	R
28	(	53	S
29	)	54	T
2A	*	55	U
56	V		
57	W		
58	X		
59	Y		
5A	Z		
5B	[		
5C	\		
5D	]		
5E	^	(↑)	
5F	_	(←)	
60	`		
61	a		
62	b		
63	c		
64	d		
65	e		
66	f		
67	g		
68	h		
69	i		
6A	j		
6B	k		
6C	l		
6D	m		
6E	n		
6F	o		
70	p		
71	q		
72	r		
73	s		
74	t		
75	u		
76	v		
77	w		
78	x		
79	y		
7A	z		
7B	{		
7C			
7D	}	(ALT MODE)	
7E	~		
7F	DEL	(RUB OUT)	

Adr = 16 bit address

D8 = constant, or logical/arithmetic expression that evaluates to an 8 bit data quantity.

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Telex: 34-6372

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Tel: (714) 835-9642
TWX: 910-595-1114

Mid-America:
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Suite 178
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Tel: (214) 661-8829
TWX: 910-860-5487

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Dayton, Ohio 45415
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TELEX: 288-004

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216 Avenue Louise
Brussels B1050
Tel: 649-20-03
TELEX: 24814

Orient:
Intel Japan Corporation
Kasahara Bldg.
1-6-10, Uchikanda
Chiyoda-ku
Tokyo 101
Tel: (03) 295-5441
TELEX: 781-28426

JUMP		CALL	
C3 JMP	} Adr	CD CALL	} Adr
C2 JNZ		C4 CNZ	
CA JZ		CC CZ	
D2 JNC		D4 CNC	
DA JC		DC CC	
E2 JPO		E4 CPO	
EA JPE	} Adr	EC CPE	} Adr
F2 JP		F4 CP	
FA JM		FC CM	
E9 PCHL			

MOVE IMMEDIATE		Acc IMMEDIATE*	
06 MVI B,	} D8	C6 ADI	} D8
0E MVI C,		CE ACI	
16 MVI D,		D6 SUI	
1E MVI E,		DE SBI	
26 MVI H,		E6 ANI	
2E MVI L,		EE XRI	
36 MVI M,	} D8	F6 ORI	} D8
3E MVI A,		FE CPI	

INCREMENT**		DECREMENT**	
04 INR B	} D8	05 DCR B	} D8
0C INR C		0D DCR C	
14 INR D		1D DCR D	
1C INR E		1D DCR E	
24 INR H		25 DCR H	
2C INR L		2D DCR L	
34 INR M	} D8	35 DCR M	} D8
3C INR A		3D DCR A	

03 INX B	0B DCX B
13 INX D	1B DCX D
23 INX H	2B DCX H
33 INX SP	3B DCX SP

D8 = constant, or logical/arithmetic expression that evaluates to an 8 bit data quantity.

* = all Flags (C, Z, S, P, AC) affected

RETURN	
C9 RET	} D16
C0 RNZ	
C8 RZ	
D0 RNC	
D8 RC	
E0 RPO	
E8 RPE	} D16
F0 RP	
F8 RM	

LOAD IMMEDIATE	
01 LXI B,	} D16
11 LXI D,	
21 LXI H,	
31 LXI SP,	

DOUBLE ADD†	
09 DAD B	} D16
19 DAD D	
29 DAD H	
39 DAD SP	

LOAD/STORE	
0A LDAX B	} D16
1A LDAX D	
2A LHLD Adr	
3A LDA Adr	

02 STAX B	} D16
12 STAX D	
22 SHLD Adr	
32 STA Adr	

RESTART		ROTATE†	
C7 RST 0	} D16	07 RLC	} D16
CF RST 1		0F RRC	
D7 RST 2		17 RAL	
DF RST 3		1F RAR	
E7 RST 4			
EF RST 5			
F7 RST 6	} D16		} D16
FF RST 7			

CONTROL

00 NOP	} D16
76 HLT	
F3 DI	
FB EI	

STACK OPS		MOVE	
C5 PUSH B	} D16	40 MOV B,B	} D16
D5 PUSH D		41 MOV B,C	
E5 PUSH H		42 MOV B,D	
F5 PUSH PSW		43 MOV B,E	
C1 POP B		44 MOV B,H	
D1 POP D		45 MOV B,L	
E1 POP H	} D16	46 MOV B,M	} D16
F1 POP PSW*		47 MOV B,A	

E3 XTHL	} D16	48 MOV C,B	} D16
F9 SPHL		49 MOV C,C	
		4A MOV C,D	
		4B MOV C,E	
		4C MOV C,H	
		4D MOV C,L	
	} D16	4E MOV C,M	} D16
		4F MOV C,A	

SPECIALS	
EB XCHG	} D16
27 DAA*	
2F CMA	
37 STC†	
3F CMC†	

INPUT/OUTPUT	
D3 OUT	} D8
DB IN	

D16 = constant, or logical/arithmetic expression that evaluates to a 16 bit data quantity.

† = only CARRY affected

MOVE (cont)	
58 MOV E,B	} D16
59 MOV E,C	
5A MOV E,D	
5B MOV E,E	
5C MOV E,H	
5D MOV E,L	
5E MOV E,M	} D16
5F MOV E,A	

60 MOV H,B	} D16
61 MOV H,C	
62 MOV H,D	
63 MOV H,E	
64 MOV H,H	
65 MOV H,L	
66 MOV H,M	} D16
67 MOV H,A	

68 MOV L,B	} D16
69 MOV L,C	
6A MOV L,D	
6B MOV L,E	
6C MOV L,H	
6D MOV L,L	
6E MOV L,M	} D16
6F MOV L,A	

70 MOV M,B	} D16
71 MOV M,C	
72 MOV M,D	
73 MOV M,E	
74 MOV M,H	
75 MOV M,L	
77 MOV M,A	

78 MOV A,B	} D16
79 MOV A,C	
7A MOV A,D	
7B MOV A,E	
7C MOV A,H	
7D MOV A,L	
7E MOV A,M	} D16
7F MOV A,A	

ACCUMULATOR*	
80 ADD B	} D16
81 ADD C	
82 ADD D	
83 ADD E	
84 ADD H	
85 ADD L	
86 ADD M	} D16
87 ADD A	

88 ADC B	} D16
89 ADC C	
8A ADC D	
8B ADC E	
8C ADC H	
8D ADC L	
8E ADC M	} D16
8F ADC A	

90 SUB B	} D16
91 SUB C	
92 SUB D	
93 SUB E	
94 SUB H	
95 SUB L	
96 SUB M	} D16
97 SUB A	

98 SBB B	} D16
99 SBB C	
9A SBB D	
9B SBB E	
9C SBB H	
9D SBB L	
9E SBB M	} D16
9F SBB A	

A0 ANA B	} D16
A1 ANA C	
A2 ANA D	
A3 ANA E	
A4 ANA H	
A5 ANA L	
A6 ANA M	} D16
A7 ANA A	

Adr = 16 bit address

** = all Flags except CARRY affected;
(exception: INX & DCX affect no Flags)

CONSTANT DEFINITION	
0BDH	} Hex
1AH	
105D	} Decimal
105	
72O	} Octal
72Q	
11011B	} Binary
00110B	
'TEST'	} ASCII
'A' 'B'	

OPERATORS	
(,)	} ASCII
*,/,MOD,SHL,SHR	
+, -	
NOT	
AND	} ASCII
OR,XOR	

STANDARD SETS	
A SET 7	} D16
B SET 0	
C SET 1	
D SET 2	
E SET 3	
H SET 4	
L SET 5	} D16
M SET 6	
SP SET 6	} D16
PSW SET 6	

FLAG BYTE STACK FORMAT	
7 6 5 4 3 2 1 0	} D16
S Z 0 A 0 P 1 C	