

Instrukce strojového kodu MHB 8080:

(d-data 8b, w-data 16b, a-adresa 16b, a8-adresa 8b)

00 NOP	40 MOV B,B	80 ADD B	C0 RNZ
01 LXI B,w	41 MOV B,C	81 ADD C	C1 POP B
02 STAX B	42 MOV B,D	82 ADD D	C2 JNZ a
03 INX B	43 MOV B,E	83 ADD E	C3 JMP a
04 INR B	44 MOV B,H	84 ADD H	C4 CNZ a
05 DCR B	45 MOV B,L	85 ADD L	C5 PUSH B
06 MVI B,d	46 MOV B,M	86 ADD M	C6 ADI d
07 RLC	47 MOV B,A	87 ADD A	C7 RST 0
08 ...	48 MOV C,B	88 ADC B	C8 RZ
09 DAD B	49 MOV C,C	89 ADC C	C9 RET
0A LDAX B	4A MOV C,D	8A ADC D	CA JZ a
0B DCX B	4B MOV C,E	8B ADC E	CB ...
0C INR C	4C MOV C,H	8C ADC H	CC CZ a
0D DCR C	4D MOV C,L	8D ADC L	CD CALL a
0E MVI C,d	4E MOV C,M	8E ADC M	CE ACI d
0F RRC	4F MOV C,A	8F ADC A	CF RST 1
10 ...	50 MOV D,B	90 SUB B	D0 RNC
11 LXI D,w	51 MOV D,C	91 SUB C	D1 POP D
12 STAX D	52 MOV D,D	92 SUB D	D2 JNC a
13 INX D	53 MOV D,E	93 SUB E	D3 OUT a8
14 INR D	54 MOV D,H	94 SUB H	D4 CNC a
15 DCR D	55 MOV D,L	95 SUB L	D5 PUSH D
16 MVI D,d	56 MOV D,M	96 SUB M	D6 SUI d
17 RAL	57 MOV D,A	97 SUB A	D7 RST 2
18 ...	58 MOV E,B	98 SBB B	D8 RC
19 DAD D	59 MOV E,C	99 SBB C	D9 ...
1A LDAX D	5A MOV E,D	9A SBB D	DA JC a
1B DCX D	5B MOV E,E	9B SBB E	DB IN a8
1C INR E	5C MOV E,H	9C SBB H	DC CC a
1D DCR E	5D MOV E,L	9D SBB L	DD ...
1E MVI E,d	5E MOV E,M	9E SBB M	DE SBI d
1F RAR	5F MOV E,A	9F SBB A	DF RST 3
20 ...	60 MOV H,B	A0 ANA B	E0 RPO
21 LXI H,w	61 MOV H,C	A1 ANA C	E1 POP H
22 SHLD a	62 MOV H,D	A2 ANA D	E2 JPO a
23 INX H	63 MOV H,E	A3 ANA E	E3 XTHL
24 INR H	64 MOV H,H	A4 ANA H	E4 CPO a
25 DCR H	65 MOV H,L	A5 ANA L	E5 PUSH H
26 MVI H,d	66 MOV H,M	A6 ANA M	E6 ANI d
27 DAA	67 MOV H,A	A7 ANA A	E7 RST 4
28 ...	68 MOV L,B	A8 XRA B	E8 RPE
29 DAD H	69 MOV L,C	A9 XRA C	E9 PCHL
2A LHLD a	6A MOV L,D	AA XRA D	EA JPE a
2B DCX H	6B MOV L,E	AB XRA E	EB XCHG
2C INR L	6C MOV L,H	AC XRA H	EC CPE a
2D DCR L	6D MOV L,L	AD XRA L	ED ...
2E MVI L,d	6E MOV L,M	AE XRA M	EE XRI d
2F CMA	6F MOV L,A	AF XRA A	EF RST 5
30 ...	70 MOV M,B	B0 ORA B	F0 RP
31 LXI SP,w	71 MOV M,C	B1 ORA C	F1 POP PSW
32 STA a	72 MOV M,D	B2 ORA D	F2 JP a
33 INX SP	73 MOV M,E	B3 ORA E	F3 DI
34 INR M	74 MOV M,H	B4 ORA H	F4 CP a
35 DCR M	75 MOV M,L	B5 ORA L	F5 PUSH PSW
36 MVI M,d	76 HLT	B6 ORA M	F6 ORI d
37 STC	77 MOV M,A	B7 ORA A	F7 RS 6
38 ...	78 MOV A,B	B8 CMP B	F8 RM
39 DAD SP	79 MOV A,C	B9 CMP C	F9 SPHL
3A LDA a	7A MOV A,D	BA CMP D	FA JM a
3B DCX SP	7B MOV A,E	BB CMP E	FB EI
3C INR A	7C MOV A,H	BC CMP H	FC CM a
3D DCR A	7D MOV A,L	BD CMP L	FD ...
3E MVI A,d	7E MOV A,M	BE CMP M	FE CPI d
3F CMC	7F MOV A,A	BF CMP A	FF RST 7

... instrukce není definována.

Naplneni registru konstantou d=8bitu;

06 MVI B,d 16 MVI D,d 26 MVI H,d 36 MVI M,d
0E MVI C,d 1E MVI E,d 2E MVI L,d 3E MVI A,d

Naplneni reg.paru konstantou w=16bitu;

01 LXI B,w 11 LXI D,w 21 LXI H,w 31 LXI SP,w
Presuny mezi registry: 40 MOV B,B - 7F MOV A,A

Presuny mezi reg.pary:

E3 XTHL E9 PCHL EB XCHG F9 SPHL

Plneni/ulozeni stradace A a reg.paru HL;

0A LDAX B 1A LDAX D 2A LHLD a 3A LDA a
02 STAX B 12 STAX D 22 SHLD a 32 STA a

Ulozeni reg.paru do zasobniku/naplneni ze zasobniku;

C5 PUSH B D5 PUSH D E5 PUSH H F5 PUSH PSW
C1 POP B D1 POP D E1 POP H F1 POP PSW

Skoky podmínene a nepodmínene na adresu a;

C2 JNZ a D2 JNC a E2 JPO a F2 JP a
CA JZ a DA JC a EA JPE a FA JM a
C3 JMP a (nepodmíneny)

Volani podprogramu podmínene i nepodmínene;

C4 CNZ a D4 CNC a E4 CPO a F4 CP a
CC CZ a DC CC a EC CPE a FC CM a
CD CALL a

Navraty z podprogramu podmínene i nepodmínene;

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

Restarty (obdoba volani podprogramu) na adr.X*8;

C7 RST 0 D7 RST 2 E7 RST 4 F7 RST 6
CF RST 1 DF RST 3 EF RST 5 FF RST 7

Zvetzeni (INX)/zmenseni (DCX) obsahu reg.paru o 1;

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

Zvetzeni/zmenseni obsahu reg.o 1 (meni F mimo CY);

04 INR B 14 INR D 24 INR H 34 INR M
0C INR C 1C INR E 2C INR L 3C INR A
05 DCR B 15 DCR D 25 DCR H 35 DCR M
0D DCR C 1D DCR E 2D DCR L 3D DCR A

Soucet reg.paru a [HL] (vysledek v HL, meni jen CY);

09 DAD B 19 DAD D 29 DAD H 39 DAD SP

Soucet A s konstantou d nebo registrem (meni F);

C6 ADI d 80 ADD B 81 ADD C... (viz tab.)
CE ACI d 88 ADC B 89 ADC C... (pricte prenos CY)

Odecteni konstanty/registru od A (meni F);

D6 SUI d 90 SUB B 91 SUB C... (viz tab.)
DE SBI d 98 SBB B 99 SBB C... (pujci si 1 z CY)

Logicke funkce konstanty/registru s A (meni F);

E6 ANI d A0 ANA B A1 ANA C...
EE XRI d A8 XRA B A9 XRA C...
F6 ORI d B0 ORA B B1 ORA C...
FE CPI d B8 CMP B B9 CMP C...

Rotace obsahu A/A+CY vlevo L/vpravo R;

07 RLC 0F RRC 17 RAL 1F RAR

Nastaveni prenosu CY: 37 STC

Doplnek prenosu -CY: 3F CMC

Doplnek stradace -A: 2F CMA

Dekadické nastaveni A: 27 DAA

Preruseni zakazano: F3 DI

Preruseni povoleno: FB EI (po dalsi instrukci)

Vystup dat stradace: D3 OUT a8 (adresa 8bitu)

Vstup dat do stradace: DB IN a8 (adresa 8bitu)

Prazdna operace: 00 NOP (pricte +1 k PC)

Zastaveni procesoru: 76 HLT (start po RESET, INT)

Prevodni tabulka cisel desitkove/sestnactkove:

0	00	64	40	128	80	192	C0
1	01	65	41	129	81	193	C1
2	02	66	42	130	82	194	C2
3	03	67	43	131	83	195	C3
4	04	68	44	132	84	196	C4
5	05	69	45	133	85	197	C5
6	06	70	46	134	86	198	C6
7	07	71	47	135	87	199	C7
8	08	72	48	136	88	200	C8
9	09	73	49	137	89	201	C9
10	0A	74	4A	138	8A	202	CA
11	0B	75	4B	139	8B	203	CB
12	0C	76	4C	140	8C	204	CC
13	0D	77	4D	141	8D	205	CD
14	0E	78	4E	142	8E	206	CE
15	0F	79	4F	143	8F	207	CF
16	10	80	50	144	90	208	D0
17	11	81	51	145	91	209	D1
18	12	82	52	146	92	210	D2
19	13	83	53	147	93	211	D3
20	14	84	54	148	94	212	D4
21	15	85	55	149	95	213	D5
22	16	86	56	150	96	214	D6
23	17	87	57	151	97	215	D7
24	18	88	58	152	98	216	D8
25	19	89	59	153	99	217	D9
26	1A	90	5A	154	9A	218	DA
27	1B	91	5B	155	9B	219	DB
28	1C	92	5C	156	9C	220	DC
29	1D	93	5D	157	9D	221	DD
30	1E	94	5E	158	9E	222	DE
31	1F	95	5F	159	9F	223	DF
32	20	96	60	160	A0	224	E0
33	21	97	61	161	A1	225	E1
34	22	98	62	162	A2	226	E2
35	23	99	63	163	A3	227	E3
36	24	100	64	164	A4	228	E4
37	25	101	65	165	A5	229	E5
38	26	102	66	166	A6	230	E6
39	27	103	67	167	A7	231	E7
40	28	104	68	168	A8	232	E8
41	29	105	69	169	A9	233	E9
42	2A	106	6A	170	AA	234	EA
43	2B	107	6B	171	AB	235	EB
44	2C	108	6C	172	AC	236	EC
45	2D	109	6D	173	AD	237	ED
46	2E	110	6E	174	AE	238	EE
47	2F	111	6F	175	AF	239	EF
48	30	112	70	176	B0	240	F0
49	31	113	71	177	B1	241	F1
50	32	114	72	178	B2	242	F2
51	33	115	73	179	B3	243	F3
52	34	116	74	180	B4	244	F4
53	35	117	75	181	B5	245	F5
54	36	118	76	182	B6	246	F6
55	37	119	77	183	B7	247	F7
56	38	120	78	184	B8	248	F8
57	39	121	79	185	B9	249	F9
58	3A	122	7A	186	BA	250	FA
59	3B	123	7B	187	BB	251	FB
60	3C	124	7C	188	BC	252	FC
61	3D	125	7D	189	BD	253	FD
62	3E	126	7E	190	BE	254	FE
63	3F	127	7F	191	BF	255	FF

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00000000000000000000111111111111111122222222222  
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A full-page view of a blank sheet of white graph paper. The grid consists of thin black horizontal and vertical lines forming small squares. There are approximately 20 columns and 25 rows visible. A thicker vertical line runs down the left side, about one-fifth of the way from the edge, creating a margin. Another thicker vertical line runs down the right side, about one-fifth of the way from the right edge. These two lines divide the page into three main sections: a narrow left margin, a large central area, and a narrow right margin. The grid covers the entire surface of the paper except for these margins.

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ADRESOVANI BYTU VE VIDEO PAMETI:

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C240									
C480									
C6C0									
C900									
CB40									
CD80									
CFC0									
D200									
D440									
D680									
D8C0									
DB00									
DD40									
DF80									
E1C0									
E400									
E640									
E880									
EAC0									
ED00									
EF40									
F180									
F3C0									
F600									
F840									
FA80									
FCC0									
FF00									
FFC0									

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Prevod sestiactkovych adres na desitkove:

0000	0000	0100	0256	0200	0512	0300	0768
0400	1024	0500	1280	0600	1536	0700	1792
0800	2048	0900	2304	0A00	2560	0800	2816
0C00	3072	0D00	3328	0E00	3584	0F00	3840
1000	4096	1100	4352	1200	4608	1300	4864
1400	5120	1500	5376	1600	5632	1700	5888
1800	6144	1900	6400	1A00	6656	1B00	6912
1C00	7168	1D00	7424	1E00	7680	1F00	7936
2000	8192	2100	8448	2200	8704	2300	8960
2400	9216	2500	9472	2600	9728	2700	9984
2800	10240	2900	10496	2A00	10752	2B00	11008
2C00	11264	2D00	11520	2E00	11776	2F00	12032
3000	12288	3100	12544	3200	12800	3300	13056
3400	13312	3500	13568	3600	13824	3700	14080
3800	14336	3900	14592	3A00	14848	3B00	15104
3C00	15360	3D00	15616	3E00	15872	3F00	16128
4000	16384	4100	16640	4200	16896	4300	17152
4400	17408	4500	17664	4600	17920	4700	18176
4800	18432	4900	18688	4A00	18944	4B00	19200
4C00	19456	4D00	19712	4E00	19968	4F00	20224
5000	20480	5100	20736	5200	20992	5300	21248
5400	21504	5500	21760	5600	22016	5700	22272
5800	22528	5900	22784	5A00	23040	5B00	23296
5C00	23552	5D00	23808	5E00	24064	5F00	24320
6000	24576	6100	24832	6200	25088	6300	25344
6400	25600	6500	25856	6600	26112	6700	26368
6800	26624	6900	26880	6A00	27136	6B00	27392
6C00	27648	6D00	27904	6E00	28160	6F00	28416
7000	28672	7100	28928	7200	29184	7300	29440
7400	29696	7500	29952	7600	30208	7700	30464
7800	30720	7900	30976	7A00	31232	7B00	31488
7C00	31744	7D00	32000	7E00	32256	7F00	32512

Prevod šestnactkových adres na desítkové:

7000	28672	7010	28688	7020	28704	7030	28720
7040	28736	7050	28752	7060	28768	7070	28784
7080	28800	7090	28816	70A0	28832	70B0	28848
70C0	28864	70D0	28880	70E0	28896	70F0	28912
7100	28928	7110	28944	7120	28960	7130	28976
7140	28992	7150	29008	7160	29024	7170	29040
7180	29056	7190	29072	71A0	29088	71B0	29104
71C0	29120	71D0	29136	71E0	29152	71F0	29168
7200	29184	7210	29200	7220	29216	7230	29232
7240	29248	7250	29264	7260	29280	7270	29296
7280	29312	7290	29328	72A0	29344	72B0	29360
72C0	29376	72D0	29392	72E0	29408	72F0	29424
7300	29440	7310	29456	7320	29472	7330	29488
7340	29504	7350	29520	7360	29536	7370	29552
7380	29568	7390	29584	73A0	29600	73B0	29616
73C0	29632	73D0	29648	73E0	29664	73F0	29680
7400	29696	7410	29712	7420	29728	7430	29744
7440	29760	7450	29776	7460	29792	7470	29808
7480	29824	7490	29840	74A0	29856	74B0	29872
74C0	29888	74D0	29904	74E0	29920	74F0	29936
7500	29952	7510	29968	7520	29984	7530	30000
7540	30016	7550	30032	7560	30048	7570	30064
7580	30080	7590	30096	75A0	30112	75B0	30128
75C0	30144	75D0	30160	75E0	30176	75F0	30192
7600	30208	7610	30224	7620	30240	7630	30256
7640	30272	7650	30288	7660	30304	7670	30320
7680	30336	7690	30352	76A0	30368	76B0	30384
76C0	30400	76D0	30416	76E0	30432	76F0	30448
7700	30464	7710	30480	7720	30496	7730	30512
7740	30528	7750	30544	7760	30560	7770	30576
7780	30592	7790	30608	77A0	30624	77B0	30640
77C0	30656	77D0	30672	77E0	30688	77F0	30704
7800	30720	7810	30736	7820	30752	7830	30768
7840	30784	7850	30800	7860	30816	7870	30832
7880	30848	7890	30864	78A0	30880	78B0	30896
78C0	30912	78D0	30928	78E0	30944	78F0	30960
7900	30976	7910	30992	7920	31008	7930	31024
7940	31040	7950	31056	7960	31072	7970	31088
7980	31104	7990	31120	79A0	31136	79B0	31152
79C0	31168	79D0	31184	79E0	31200	79F0	31216
7A00	31232	7A10	31248	7A20	31264	7A30	31280
7A40	31296	7A50	31312	7A60	31328	7A70	31344
7A80	31360	7A90	31376	7AA0	31392	7AB0	31408
7AC0	31424	7AD0	31440	7AE0	31456	7AF0	31472
7B00	31488	7B10	31504	7B20	31520	7B30	31536
7B40	31552	7B50	31568	7B60	31584	7B70	31600
7B80	31616	7B90	31632	7BA0	31648	7BB0	31664
7BC0	31680	7BD0	31696	7BE0	31712	7BF0	31728
7C00	31744	7C10	31760	7C20	31776	7C30	31792
7C40	31808	7C50	31824	7C60	31840	7C70	31856
7C80	31872	7C90	31888	7CA0	31904	7CB0	31920
7CC0	31936	7CD0	31952	7CE0	31968	7CF0	31984
7D00	32000	7D10	32016	7D20	32032	7D30	32048
7D40	32064	7D50	32080	7D60	32096	7D70	32112
7D80	32128	7D90	32144	7DA0	32160	7DB0	32176
7DC0	32192	7DD0	32208	7DE0	32224	7DF0	32240
7E00	32256	7E10	32272	7E20	32288	7E30	32304
7E40	32320	7E50	32336	7E60	32352	7E70	32368
7E80	32384	7E90	32400	7EA0	32416	7EB0	32432
7EC0	32448	7ED0	32464	7EE0	32480	7EF0	32496
7F00	32512	7F10	32528	7F20	32544	7F30	32560