

Base Instruction Set

	0	1	2	3	4	5	6	7
00	NIN	JMP u, \$hhl	JSR u, \$hhl	RSR u	PSH Xh	POP Xh	INC Xhl	INC AC
01	CLC	JMP c, \$hhl	JSR c, \$hhl	RSR c	PSH XI	POP XI	DEC Xhl	DEC AC
02	CLN	JMP n, \$hhl	JSR n, \$hhl	RSR n	PSH Yh	POP Yh	INC Yhl	ROR AC
03	CLZ	JMP z, \$hhl	JSR z, \$hhl	RSR z	PSH Yl	POP Yl	DEC Yhl	ROL AC
04	CLI	JMP nc, \$hhl	JSR nc, \$hhl	RSR nc	PSH H	POP H	INC HL	RSH AC
05	CLF	JMP nn, \$hhl	JSR nn, \$hhl	RSR nn	PSH L	POP L	DEC HL	LSH AC
06	EXT	JMP nz, \$hhl	JSR nz, \$hhl	RSR nz	PSH AC	POP AC		NOT AC
07	HLT	JMP i, \$hhl	JSR i, \$hhl					
10	ADD \$hhl	ADD \$zz	ADD (HL)	ADD #\$nn	ADD Xh	ADD XI	ADD Yh	ADD Yl
11	ADC \$hhl	ADC \$zz	ADC (HL)	ADC #\$nn	ADC Xh	ADC XI	ADC Yh	ADC Yl
12	SUB \$hhl	SUB \$zz	SUB (HL)	SUB #\$nn	SUB Xh	SUB XI	SUB Yh	SUB Yl
13	SBB \$hhl	SBB \$zz	SBB (HL)	SBB #\$nn	SBB Xh	SBB XI	SBB Yh	SBB Yl
14	CMP \$hhl	CMP \$zz	CMP (HL)	CMP #\$nn	CMP Xh	CMP XI	CMP Yh	CMP Yl
15	AND \$hhl	AND \$zz	AND (HL)	AND #\$nn	AND Xh	AND XI	AND Yh	AND Yl
16	OR \$hhl	OR \$zz	OR (HL)	OR #\$nn	OR Xh	OR XI	OR Yh	OR Yl
17	XOR \$hhl	XOR \$zz	XOR (HL)	XOR #\$nn	XOR Xh	XOR XI	XOR Yh	XOR Yl
20	LD Xh, \$hhl	LD Xh, \$zz	LD Xh, (HL)	LD Xh, #\$nn	STR Xh, \$hhl	STR Xh, \$zz	STR Xh, (HL)	
21	LD XI, \$hhl	LD XI, \$zz	LD XI, (HL)	LD XI, #\$nn	STR XI, \$hhl	STR XI, \$zz	STR XI, (HL)	
22	LD Yh, \$hhl	LD Yh, \$zz	LD Yh, (HL)	LD Yh, #\$nn	STR Yh, \$hhl	STR Yh, \$zz	STR Yh, (HL)	
23	LD Yl, \$hhl	LD Yl, \$zz	LD Yl, (HL)	LD Yl, #\$nn	STR Yl, \$hhl	STR Yl, \$zz	STR Yl, (HL)	
24	LD H, \$hhl	LD H, \$zz		LD H, #\$nn	STR H, \$hhl	STR H, \$zz		
25	LD L, \$hhl	LD L, \$zz		LD L, #\$nn	STR L, \$hhl	STR L, \$zz		
26	LD AC, \$hhl	LD AC, \$zz	LD AC, (HL)	LD AC, #\$nn	STR AC, \$hhl	STR AC, \$zz	STR AC, (HL)	
27	LD SP, \$hhl	LD SP, \$zz	LD SP, (HL)	LD SP, #\$nn	STR SP, \$hhl	STR SP, \$zz	STR SP, (HL)	
30		MOV XI, Xh	MOV Yh, Xh	MOV Yl, Xh	MOV H, Xh	MOV L, Xh	MOV AC, Xh	MOV SP, Xh
31	MOV Xh, XI		MOV Yh, XI	MOV Yl, XI	MOV H, XI	MOV L, XI	MOV AC, XI	MOV SP, XI
32	MOV Xh, Yh	MOV XI, Yh		MOV Yl, Yh	MOV H, Yh	MOV L, Yh	MOV AC, Yh	MOV SP, Yh
33	MOV Xh, Yl	MOV XI, Yl	MOV Yh, Yl		MOV H, Yl	MOV L, Yl	MOV AC, Yl	MOV SP, Yl
34	MOV Xh, H	MOV XI, H	MOV Yh, H	MOV Yl, H		MOV L, H	MOV AC, H	MOV SP, H
35	MOV Xh, L	MOV XI, L	MOV Yh, L	MOV Yl, L	MOV H, L		MOV AC, L	MOV SP, L
36	MOV Xh, AC	MOV XI, AC	MOV Yh, AC	MOV Yl, AC	MOV H, AC	MOV L, AC		MOV SP, AC
37	MOV Xh, SP	MOV XI, SP	MOV Yh, SP	MOV Yl, SP	MOV H, SP	MOV L, SP	MOV AC, SP	

Extended Instruction Set

	0	1	2	3	4	5	6	7
00	ADD (Xhl)	ADD (Yhl)		LD Xh, (Yhl)		STR Xh, (Yhl)	MOV Yhl, Xhl	PSH Xhl
01	ADC (Xhl)	ADC (Yhl)		LD XI, (Yhl)		STR XI, (Yhl)	MOV HL, Xhl	POP Xhl
02	SUB (Xhl)	SUB (Yhl)	LD Yh, (Xhl)		STR Yh, (Xhl)		MOV Xhl, Yhl	PSH Yhl
03	SBB (Xhl)	SBB (Yhl)	LD Yl, (Xhl)		STR Yl, (Xhl)		MOV HL, Yhl	POP Yhl
04	CMP (Xhl)	CMP (Yhl)	LD H, (Xhl)	LD H, (Yhl)	STR H, (Xhl)	STR H, (Yhl)	MOV Xhl, HL	PSH HL
05	AND (Xhl)	AND (Yhl)	LD L, (Xhl)	LD L, (Yhl)	STR L, (Xhl)	STR L, (Yhl)	MOV Yhl, HL	POP HL
06	OR (Xhl)	OR (Yhl)	LD AC, (Xhl)	LD AC, (Yhl)	STR AC, (Xhl)	STR AC, (Yhl)		PSH PC
07	XOR (Xhl)	XOR (Yhl)						POP PC