
Partie 11

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Annexe 1

Codes de contrôle et caractères ASCII

Décimal	Hexadécimal	Caractère ASCII
0	00	NUL (CTRL @)
1	01	SOH (CTRL A)
2	02	STX (CTRL B)
3	03	ETX (CTRL C)
4	04	EOT (CTRL D)
5	05	ENQ (CTRL E)
6	06	ACQ (CTRL F)
7	07	BEL (CTRL G)
8	08	BS (CTRL H)
9	09	HT (CTRL I)
10	0A	LF (CTRL J)
11	0B	VT (CTRL K)
12	0C	FF (CTRL L)
13	0D	CR (CTRL M)
14	0E	SO (CTRL N)
15	0F	SI (CTRL O)
16	10	DLE (CTRL P)
17	11	DC1 (CTRL Q)
18	12	DC2 (CTRL R)
19	13	DC3 (CTRL S)
20	14	DC4 (CTRL T)
21	15	NAK (CTRL U)
22	16	SYN (CTRL V)
23	17	ETB (CTRL W)
24	18	CAN (CTRL X)
25	19	EM (CTRL Y)
26	1A	SUB (CTRL Z)
27	1B	ESC
28	1C	FS
29	1D	GS
30	1E	RS
31	1F	US
32	20	SP
33	21	!
34	22	"
35	23	#
36	24	\$
37	25	%
38	26	&
39	27	'
40	28	(
41	29)
42	2A	*
43	2B	+
44	2C	,
45	2D	-
46	2E	.
47	2F	/
48	30	0
49	31	1
50	32	2
51	33	3
52	34	4

Décimal	Hexadécimal	Caractère ASCII
53	35	5
54	36	6
55	37	7
56	38	8
57	39	9
58	3A	:
59	3B	;
60	3C	<
61	3D	=
62	3E	>
63	3F	?
64	40	@
65	41	A
66	42	B
67	43	C
68	44	D
69	45	E
70	46	F
71	47	G
72	48	H
73	49	I
74	4A	J
75	4B	K
76	4C	L
77	4D	M
78	4E	N
79	4F	O
80	50	P
81	51	Q
82	52	R
83	53	S
84	54	T
85	55	U
86	56	V
87	57	W
88	58	X
89	59	Y
90	5A	Z
91	5B	[
92	5C	\
93	5D]
94	5E	^
95	5F	_
96	60	`
97	61	a
98	62	b
99	63	c
100	64	d
101	65	e
102	66	f
103	67	g
104	68	h
105	69	i
106	6A	j

Décimal	Hexadécimal	Caractère ASCII
107	6B	k
108	6C	l
109	6D	m
110	6E	n
111	6F	o
112	70	p
113	71	q
114	72	r
115	73	s
116	74	t
117	75	u
118	76	v
119	77	w
120	78	x
121	79	y
122	7A	z
123	7B	(
124	7C)
125	7D)
126	7E	-

Annexe 2

Codes opératoires de l'assembleur Z80 et leur codage en hexadécimal

Mnémonique	Op-code	c z p s n h	Opération symbolique	Cycles machine
ADC A, (HL)	8E	^ ^ V ^ 0 ^	A←-A+(HL)+c	2
ADC A, (IX+d)	DD8Edd	^ ^ V ^ 0 ^	A←-A+(IX+d)+c	5
ADC A, (IY+d)	FD8Edd	^ ^ V ^ 0 ^	A←-A+(IY+d)+c	5
ADC A,A	8F	^ ^ V ^ 0 ^	A←-A+A+c	1
ADC A,B	88	^ ^ V ^ 0 ^	A←-A+B+c	1
ADC A,C	89	^ ^ V ^ 0 ^	A←-A+C+c	1
ADC A,D	8A	^ ^ V ^ 0 ^	A←-A+D+c	1
ADC A,E	8B	^ ^ V ^ 0 ^	A←-A+E+c	1
ADC A,H	8C	^ ^ V ^ 0 ^	A←-A+H+c	1
ADC A,L	8D	^ ^ V ^ 0 ^	A←-A+L+c	1
ADC A,N	CEnn	^ ^ V ^ 0 ^	A←-A+nn+c	2
ADC HL,BC	ED4A	^ ^ V ^ 0 X	HL←-HL+BC+c	4
ADC HL,DE	ED5A	^ ^ V ^ 0 X	HL←-HL+DE+c	4
ADC HL,HL	ED6A	^ ^ V ^ 0 X	HL←-HL+HL+c	4
ADC HL,SP	ED7A	^ ^ V ^ 0 X	HL←-HL+SP+c	4
ADD A, (HL)	86	^ ^ V ^ 0 ^	A←-A+(HL)	2
ADD A, (IX+dd)	DD86dd	^ ^ V ^ 0 ^	A←-A+(IX+dd)	5
ADD A, (IY+dd)	FD86dd	^ ^ V ^ 0 ^	A←-A+(IY+dd)	5
ADD A,A	87	^ ^ V ^ 0 ^	A←-A+A	1
ADD A,B	80	^ ^ V ^ 0 ^	A←-A+B	1
ADD A,C	81	^ ^ V ^ 0 ^	A←-A+C	1
ADD A,D	82	^ ^ V ^ 0 ^	A←-A+D	1
ADD A,E	83	^ ^ V ^ 0 ^	A←-A+E	1
ADD A,H	84	^ ^ V ^ 0 ^	A←-A+H	1
ADD A,L	85	^ ^ V ^ 0 ^	A←-A+L	1
ADD A,N	C6nn	^ ^ V ^ 0 ^	A←-A+nn	2
ADD HL,BC	09	^ . . . 0 X	HL←-HL+BC	3
ADD HL,DE	19	^ . . . 0 X	HL←-HL+DE	3
ADD HL,HL	29	^ . . . 0 X	HL←-HL+HL	3

Mnémonique	Op-code	c z p s n h	Opération symbolique	Cycles machine
ADD HL,SP	39	^ . . . 0 X	HL←-HL+SP	3
ADD IX,BC	DD09	^ . . . 0 X	IX←-IX+BC	4
ADD IX,DE	DD19	^ . . . 0 X	IX←-IX+DE	4
ADD IX,IX	DD29	^ . . . 0 X	IX←-IX+IX	4
ADD IX,SP	DD39	^ . . . 0 X	IX←-IX+SP	4
ADD IY,BC	FD09	^ . . . 0 X	IY←-IY+BC	4
ADD IY,DE	FD19	^ . . . 0 X	IY←-IY+DE	4
ADD IY,IY	FD29	^ . . . 0 X	IY←-IY+IY	4
ADD IY,SP	FD39	^ . . . 0 X	IY←-IY+SP	4
AND (HL)	A6	0 ^ P ^ 0 1	A←-A AND (HL)	2
AND (IX+dd)	DDA6dd	0 ^ P ^ 0 1	A←-A AND (IX+dd)	5
AND (IY+dd)	FDA6dd	0 ^ P ^ 0 1	A←-A AND (IY+dd)	5
AND A	A7	0 ^ P ^ 0 1	A←-A AND A	1
AND B	A0	0 ^ P ^ 0 1	A←-A AND B	1
AND C	A1	0 ^ P ^ 0 1	A←-A AND C	1
AND D	A2	0 ^ P ^ 0 1	A←-A AND D	1
AND E	A3	0 ^ P ^ 0 1	A←-A AND E	1
AND H	A4	0 ^ P ^ 0 1	A←-A AND H	1
AND L	A5	0 ^ P ^ 0 1	A←-A AND L	1
AND N	E6nn	0 ^ P ^ 0 1	A←-A AND nn	2
BIT 0, (HL)	CB46	. ^ X X 0 1	z←-(HL)	3
BIT 0, (IX+dd)	DDCBdd46	. ^ X X 0 1	z←-(IX+dd)	5
BIT 0, (IY+dd)	FDCBdd46	. ^ X X 0 1	z←-(IY+dd)	5
BIT 0,A	CB47	. ^ X X 0 1	z←-A	2
BIT 0,B	CB40	. ^ X X 0 1	z←-B	2
BIT 0,C	CB41	. ^ X X 0 1	z←-C	2
BIT 0,D	CB42	. ^ X X 0 1	z←-D	2
BIT 0,E	CB43	. ^ X X 0 1	z←-E	2
BIT 0,H	CB44	. ^ X X 0 1	z←-H	2
BIT 0,L	CB45	. ^ X X 0 1	z←-L	2
BIT 1, (HL)	CB4E	. ^ X X 0 1	z←-(HL)	3
BIT 1, (IX+dd)	DDCBdd4E	. ^ X X 0 1	z←-(IX+dd)	5
BIT 1, (IY+dd)	FDCBdd4E	. ^ X X 0 1	z←-(IY+dd)	5

Mnémonique	Op-code	c z p s n h	Opération symbolique	Cycles machine
		v		
BIT 1,A	CB4F	. ^ X X 0 1	$z \leftarrow \overline{A}$	2
BIT 1,B	CB48	. ^ X X 0 1	$z \leftarrow \overline{B}$	2
BIT 1,C	CB49	. ^ X X 0 1	$z \leftarrow \overline{C}$	2
BIT 1,D	CB4A	. ^ X X 0 1	$z \leftarrow \overline{D}$	2
BIT 1,E	CB4B	. ^ X X 0 1	$z \leftarrow \overline{E}$	2
BIT 1,H	CB4C	. ^ X X 0 1	$z \leftarrow \overline{H}$	2
BIT 1,L	CB4D	. ^ X X 0 1	$z \leftarrow \overline{L}$	2
BIT 2,(HL)	CB56	. ^ X X 0 1	$z \leftarrow \overline{(HL)}$	3
BIT 2,(IX+dd)	DDCBdd56	. ^ X X 0 1	$z \leftarrow \overline{(IX+dd)}$	5
BIT 2,(IY+dd)	FDCBdd56	. ^ X X 0 1	$z \leftarrow \overline{(IY+dd)}$	5
BIT 2,A	CB57	. ^ X X 0 1	$z \leftarrow \overline{A}$	2
BIT 2,B	CB50	. ^ X X 0 1	$z \leftarrow \overline{B}$	2
BIT 2,C	CB51	. ^ X X 0 1	$z \leftarrow \overline{C}$	2
BIT 2,D	CB52	. ^ X X 0 1	$z \leftarrow \overline{D}$	2
BIT 2,E	CB53	. ^ X X 0 1	$z \leftarrow \overline{E}$	2
BIT 2,H	CB54	. ^ X X 0 1	$z \leftarrow \overline{H}$	2
BIT 2,L	CB55	. ^ X X 0 1	$z \leftarrow \overline{L}$	2
BIT 3,(HL)	CB5E	. ^ X X 0 1	$z \leftarrow \overline{(HL)}$	3
BIT 3,(IX+dd)	DDCBdd5E	. ^ X X 0 1	$z \leftarrow \overline{(IX+dd)}$	5
BIT 3,(IY+dd)	FDCBdd5E	. ^ X X 0 1	$z \leftarrow \overline{(IY+dd)}$	5
BIT 3,A	CB5F	. ^ X X 0 1	$z \leftarrow \overline{A}$	2
BIT 3,B	CB58	. ^ X X 0 1	$z \leftarrow \overline{B}$	2
BIT 3,C	CB59	. ^ X X 0 1	$z \leftarrow \overline{C}$	2
BIT 3,D	CB5A	. ^ X X 0 1	$z \leftarrow \overline{D}$	2
BIT 3,E	CB5B	. ^ X X 0 1	$z \leftarrow \overline{E}$	2
BIT 3,H	CB5C	. ^ X X 0 1	$z \leftarrow \overline{H}$	2
BIT 3,L	CB5D	. ^ X X 0 1	$z \leftarrow \overline{L}$	2
BIT 4,(HL)	CB66	. ^ X X 0 1	$z \leftarrow \overline{(HL)}$	3
BIT 4,(IX+dd)	DDCBdd66	. ^ X X 0 1	$z \leftarrow \overline{(IX+dd)}$	5
BIT 4,(IY+dd)	FDCBdd66	. ^ X X 0 1	$z \leftarrow \overline{(IY+dd)}$	5
BIT 4,A	CB67	. ^ X X 0 1	$z \leftarrow \overline{A}$	2
BIT 4,B	CB60	. ^ X X 0 1	$z \leftarrow \overline{B}$	2
BIT 4,C	CB61	. ^ X X 0 1	$z \leftarrow \overline{C}$	2

Mnémonique	Op-code	c z p s n h	Opération symbolique	Cycles machine
		v		
BIT 4,D	CB62	. ^ X X 0 1	$z \leftarrow \overline{D}$	2
BIT 4,E	CB63	. ^ X X 0 1	$z \leftarrow \overline{E}$	2
BIT 4,H	CB64	. ^ X X 0 1	$z \leftarrow \overline{H}$	2
BIT 4,L	CB65	. ^ X X 0 1	$z \leftarrow \overline{L}$	2
BIT 5,(HL)	CB6E	. ^ X X 0 1	$z \leftarrow \overline{(HL)}$	3
BIT 5,(IX+dd)	DDCBdd6E	. ^ X X 0 1	$z \leftarrow \overline{(IX+dd)}$	5
BIT 5,(IY+dd)	FDCBdd6E	. ^ X X 0 1	$z \leftarrow \overline{(IY+dd)}$	5
BIT 5,A	CB6F	. ^ X X 0 1	$z \leftarrow \overline{A}$	2
BIT 5,B	CB68	. ^ X X 0 1	$z \leftarrow \overline{B}$	2
BIT 5,C	CB69	. ^ X X 0 1	$z \leftarrow \overline{C}$	2
BIT 5,D	CB6A	. ^ X X 0 1	$z \leftarrow \overline{D}$	2
BIT 5,E	CB6B	. ^ X X 0 1	$z \leftarrow \overline{E}$	2
BIT 5,H	CB6C	. ^ X X 0 1	$z \leftarrow \overline{H}$	2
BIT 5,L	CB6D	. ^ X X 0 1	$z \leftarrow \overline{L}$	2
BIT 6,(HL)	CB76	. ^ X X 0 1	$z \leftarrow \overline{(HL)}$	3
BIT 6,(IX+dd)	DDCBdd76	. ^ X X 0 1	$z \leftarrow \overline{(IX+dd)}$	5
BIT 6,(IY+dd)	FDCBdd76	. ^ X X 0 1	$z \leftarrow \overline{(IY+dd)}$	5
BIT 6,A	CB77	. ^ X X 0 1	$z \leftarrow \overline{A}$	2
BIT 6,B	CB70	. ^ X X 0 1	$z \leftarrow \overline{B}$	2
BIT 6,C	CB71	. ^ X X 0 1	$z \leftarrow \overline{C}$	2
BIT 6,D	CB72	. ^ X X 0 1	$z \leftarrow \overline{D}$	2
BIT 6,E	CB73	. ^ X X 0 1	$z \leftarrow \overline{E}$	2
BIT 6,H	CB74	. ^ X X 0 1	$z \leftarrow \overline{H}$	2
BIT 6,L	CB75	. ^ X X 0 1	$z \leftarrow \overline{L}$	2
BIT 7,(HL)	CB7E	. ^ X X 0 1	$z \leftarrow \overline{(HL)}$	3
BIT 7,(IX+dd)	DDCBdd7E	. ^ X X 0 1	$z \leftarrow \overline{(IX+dd)}$	5
BIT 7,(IY+dd)	FDCBdd7E	. ^ X X 0 1	$z \leftarrow \overline{(IY+dd)}$	5
BIT 7,A	CB7F	. ^ X X 0 1	$z \leftarrow \overline{A}$	2
BIT 7,B	CB78	. ^ X X 0 1	$z \leftarrow \overline{B}$	2
BIT 7,C	CB79	. ^ X X 0 1	$z \leftarrow \overline{C}$	2
BIT 7,D	CB7A	. ^ X X 0 1	$z \leftarrow \overline{D}$	2
BIT 7,E	CB7B	. ^ X X 0 1	$z \leftarrow \overline{E}$	2
BIT 7,H	CB7C	. ^ X X 0 1	$z \leftarrow \overline{H}$	2

Mnémonique	Op-code	c z p s n h	Opération symbolique	Cycles machine
		v		
BIT 7,L	CB7D	. ^ X X 0 1	$z \leftarrow \overline{L}$	2
CALL C,ADR	DCaaaa	. . . . .	si C, pile \leftarrow -PC,PC \leftarrow -ADR	3
CALL M,ADR	FCaaaa	. . . . .	si M, pile \leftarrow -PC,PC \leftarrow -ADR	3
CALL NC,ADR	D4aaaa	. . . . .	si NC, pile \leftarrow -PC,PC \leftarrow -ADR	3
CALL ADR	CDaaaa	. . . . .	pile \leftarrow -PC,PC \leftarrow -ADR	5
CALL NZ,ADR	C4aaaa	. . . . .	si NZ, pile \leftarrow -PC,PC \leftarrow -ADR	3
CALL P,ADR	F4aaaa	. . . . .	si P, pile \leftarrow -PC,PC \leftarrow -ADR	3
CALL PE,ADR	ECaaaa	. . . . .	si PE, pile \leftarrow -PC,PC \leftarrow -ADR	3
CALL PO,ADR	E4aaaa	. . . . .	si PO, pile \leftarrow -PC,PC \leftarrow -ADR	3
CALL Z,ADR	CCaaaa	. . . . .	si Z, pile \leftarrow -PC,PC \leftarrow -ADR	3
CCF	3F	^ . . . 0 X	$c \leftarrow \overline{c}$	1
CP (HL)	BE	^ ^ V ^ 1 ^	A-(HL)	2
CP (IX+dd)	DDBEdd	^ ^ V ^ 1 ^	A-(IX+dd)	5
CP (IY+dd)	FDBEdd	^ ^ V ^ 1 ^	A-(IY+dd)	5
CP A	BF	^ ^ V ^ 1 ^	A-A	1
CP B	BB	^ ^ V ^ 1 ^	A-B	1
CP C	B9	^ ^ V ^ 1 ^	A-C	1
CP D	BA	^ ^ V ^ 1 ^	A-D	1
CP E	BB	^ ^ V ^ 1 ^	A-E	1
CP H	BC	^ ^ V ^ 1 ^	A-H	1
CP L	BD	^ ^ V ^ 1 ^	A-L	1
CP N	FEnn	^ ^ V ^ 1 ^	A-nn	2
CPD	EDA9	. ^ ^ ^ 1 ^	A \leftarrow -(HL),HL \leftarrow -HL-1,BC \leftarrow -BC-1	4
CPDR	EDB9	. ^ ^ ^ 1 ^	A \leftarrow -(HL),HL \leftarrow -HL-1,BC \leftarrow -BC-1	5/4
			Repet. jusqu'à A=(HL) ou BC=0.	
CPI	EDA1	. ^ ^ ^ 1 ^	A \leftarrow -(HL),HL \leftarrow -HL+1,BC \leftarrow -BC-1	4
CPIR	EDB1	. ^ ^ ^ 1 ^	A \leftarrow -(HL),HL \leftarrow -HL+1,BC \leftarrow -BC-1	5/4
			Répét. jusqu'à A=(HL) ou BC=0.	
CPL	2F	. . . . 1 1	A \leftarrow \overline{A}	1
DAA	27	^ ^ P ^ . ^	Ajustement decimal	1
DEC (HL)	35	. ^ V ^ 1 ^	(HL)=(HL)-1	3
DEC (IX+dd)	DD35dd	. ^ V ^ 1 ^	(IX+dd)=(IX+dd)-1	6
DEC (IY+dd)	FD35dd	. ^ V ^ 1 ^	(IY+dd)=(IY+dd)-1	6
DEC A	3D	. ^ V ^ 1 ^	A \leftarrow -A-1	1

Mnémonique	Op-code	c z p s n h	Opération symbolique	Cycles machine
		v		
DEC B	05	. ^ V ^ 1 ^	B←B-1	1
DEC BC	0B	. . . . .	BC←BC-1	1
DEC C	0D	. ^ V ^ 1 ^	C←C-1	1
DEC D	15	. ^ V ^ 1 ^	D←D-1	1
DEC DE	1B	. . . . .	DE←DE-1	1
DEC E	1D	. ^ V ^ 1 ^	E←E-1	1
DEC H	25	. ^ V ^ 1 ^	H←H-1	1
DEC HL	2B	. . . . .	HL←HL-1	1
DEC IX	DD2B	. . . . .	IX←IX-1	2
DEC IY	FD2B	. . . . .	IY←IY-1	2
DEC L	2D	. ^ V ^ 1 ^	L←L-1	1
DEC SP	3B	. . . . .	SP←SP-1	1
DI	F3	. . . . .	IFF←0	1
DJNZ DEPL	10dd	. . . . .	B←B-1, si B<>0, PC←PC+dd	2/3
EI	FB	. . . . .	IFF←1	1
EX (SP),HL	E3	. . . . .	H←→(SP+1) et L←→(SP)	5
EX (SP),IX	DDE3	. . . . .	IXH←→(SP+1), IXL←→(SP)	6
EX (SP),IY	FDE3	. . . . .	IYH←→(SP+1), IYL←→(SP)	6
EX AF,AF'	0B	. . . . .	AF←→AF'	1
EX DE,HL	EB	. . . . .	DE←→HL	1
EXX	D9	. . . . .	BC←→BC', DE←→DE', HL←→HL'	1
HALT	76	. . . . .	Stoppe l'UC	1
IM 0	ED46	. . . . .	Interrupt Mode 0	2
IM 1	ED56	. . . . .	Interrupt Mode 1	2
IM 2	ED5E	. . . . .	Interrupt Mode 2	2
IN A,(C)	ED7B	. ^ P ^ 0 ^	A←(C)	3
IN A,(N)	DBnn	. . . . .	A←(nn)	3
IN B,(C)	ED40	. ^ P ^ 0 ^	B←(C)	3
IN C,(C)	ED48	. ^ P ^ 0 ^	C←(C)	3
IN D,(C)	ED50	. ^ P ^ 0 ^	D←(C)	3
IN E,(C)	ED58	. ^ P ^ 0 ^	E←(C)	3
IN H,(C)	ED60	. ^ P ^ 0 ^	H←(C)	3
IN L,(C)	ED68	. ^ P ^ 0 ^	L←(C)	3

Mnémonique	Op-code	c z p s n h	Opération symbolique	Cycles machine
		v		
INC (HL)	34	. ^ V ^ 0 ^	HL←-HL+1	3
INC (IX+dd)	DD34dd	. ^ V ^ 0 ^	(IX+dd)←-(IX+dd)+1	6
INC (IY+dd)	FD34dd	. ^ V ^ 0 ^	(IY+dd)←-(IY+dd)+1	6
INC A	3C	. ^ V ^ 0 ^	A←-A+1	1
INC B	04	. ^ V ^ 0 ^	B←-B+1	1
INC BC	03	. . . . .	BC←-BC+1	1
INC C	0C	. ^ V ^ 0 ^	C←-C+1	1
INC D	14	. ^ V ^ 0 ^	D←-D+1	1
INC DE	13	. . . . .	DE←-DE+1	1
INC E	1C	. ^ V ^ 0 ^	E←-E+1	1
INC H	24	. ^ V ^ 0 ^	H←-H+1	1
INC HL	23	. . . . .	HL←-HL+1	1
INC IX	DD23	. . . . .	IX←-IX+1	2
INC IY	FD23	. . . . .	IY←-IY+1	2
INC L	2C	. ^ V ^ 0 ^	L←-L+1	1
INC SP	33	. . . . .	SP←-SP+1	1
IND	EDAA	. ^ X X 1 X	(HL)←-(C),B←-B-1,HL←-HL-1	4
INDR	EDBA	. 1 X X 1 X	(HL)←-(C),B←-B-1,HL←-HL-1	5/4
			Action répétée jusqu'à B=0	
INI	EDA2	. ^ X X 1 X	(HL)←-(C),B←-B-1,HL←-HL+1	4
INIR	EDB2	. 1 X X 1 X	(HL)←-(C),B←-B-1,HL←-HL+1	5/4
			Action répétée jusqu'a B=0	
JP (HL)	E9	. . . . .	PC←-HL	1
JP (IX)	DDE9	. . . . .	PC←-IX	2
JP (IY)	FDE9	. . . . .	PC←-IY	2
JP C,ADR	DAaaaa	. . . . .	Saut si c=1 à ADR	3
JP M,ADR	FAaaaa	. . . . .	Saut si minus à ADR	3
JP NC,ADR	D2aaaa	. . . . .	Saut si c=0	3
JP ADR	C3aaaa	. . . . .	PC←-ADR	3
JP NZ,ADR	C2aaaa	. . . . .	Saut si z=0 à ADR	3
JP P,ADR	F2aaaa	. . . . .	Saut si positif à ADR	3
JP PE,ADR	EAaaaa	. . . . .	Saut si P=1 à ADR	3
JP PO,ADR	E2aaaa	. . . . .	Saut si P=1 à ADR	3

Mnémonique	Op-code	c z p s n h	Opération symbolique	Cycles machine
		v		
JP Z,ADR	CAaaaa	. . . . .	Saut si z=1 à ADR	3
JR C,DEPL	38dd	. . . . .	Saut si c=1 à ADR	2
JR DEPL	18dd	. . . . .	PC←-PC+dd	3
JR NC,DEPL	30dd	. . . . .	Saut si c=0	2
JR NZ,DEPL	20dd	. . . . .	Saut si z=0	2
JR Z,DEPL	28dd	. . . . .	Saut si z=1	2
LD (BC),A	02	. . . . .	(BC)←-A	2
LD (DE),A	12	. . . . .	(DE)←-A	2
LD (HL),A	77	. . . . .	(HL)←-A	2
LD (HL),B	70	. . . . .	(HL)←-B	2
LD (HL),C	71	. . . . .	(HL)←-C	2
LD (HL),D	72	. . . . .	(HL)←-D	2
LD (HL),E	73	. . . . .	(HL)←-E	2
LD (HL),H	74	. . . . .	(HL)←-H	2
LD (HL),L	75	. . . . .	(HL)←-L	2
LD (HL),N	36nn	. . . . .	(HL)←-nn	3
LD (IX+dd),A	DD77dd	. . . . .	(IX+dd)←-A	5
LD (IX+dd),B	DD70dd	. . . . .	(IX+dd)←-B	5
LD (IX+dd),C	DD71dd	. . . . .	(IX+dd)←-C	5
LD (IX+dd),D	DD72dd	. . . . .	(IX+dd)←-D	5
LD (IX+dd),E	DD73dd	. . . . .	(IX+dd)←-E	5
LD (IX+dd),H	DD74dd	. . . . .	(IX+dd)←-H	5
LD (IX+dd),L	DD75dd	. . . . .	(IX+dd)←-L	5
LD (IX+dd),N	DD36ddnn	. . . . .	(IX+dd)←-nn	5
LD (IY+dd),A	FD77dd	. . . . .	(IY+dd)←-A	5
LD (IY+dd),B	FD70dd	. . . . .	(IY+dd)←-B	5
LD (IY+dd),C	FD71dd	. . . . .	(IY+dd)←-C	5
LD (IY+dd),D	FD72dd	. . . . .	(IY+dd)←-D	5
LD (IY+dd),E	FD73dd	. . . . .	(IY+dd)←-E	5
LD (IY+dd),H	FD74dd	. . . . .	(IY+dd)←-H	5
LD (IY+dd),L	FD75dd	. . . . .	(IY+dd)←-L	5
LD (IY+dd),N	FD36ddnn	. . . . .	(IY+dd)←-nn	5
LD (NN),A	32nnnn	. . . . .	(nnnn)←-A	4

Mnémonique	Op-code	c z p s n h	Opération symbolique	Cycles machine
		v		
LD (NN),BC	ED43nnnn	. . . . .	(nnnn)←-BC	6
LD (NN),DE	ED53nnnn	. . . . .	(nnnn)←-DE	6
LD (NN),HL	22nnnn	. . . . .	(nnnn)←-HL	5
LD (NN),IX	DD22nnnn	. . . . .	(nnnn)←-IX	6
LD (NN),IY	FD22nnnn	. . . . .	(nnnn)←-IY	6
LD (NN),SP	ED73nnnn	. . . . .	(nnnn)←-SP	6
LD A,(BC)	0A	. . . . .	A←-(BC)	2
LD A,(DE)	1A	. . . . .	A←-(DE)	2
LD A,(HL)	7E	. . . . .	A←-(HL)	2
LD A,(IX+dd)	DD7Edd	. . . . .	A←-(IX+dd)	5
LD A,(IY+DD)	FD7Edd	. . . . .	A←-(IY+dd)	5
LD A,(NN)	3Annnn	. . . . .	A←-(nnnn)	4
LD A,A	7F	. . . . .	A←-A	1
LD A,B	7B	. . . . .	A←-B	1
LD A,C	79	. . . . .	A←-C	1
LD A,D	7A	. . . . .	A←-D	1
LD A,E	7B	. . . . .	A←-E	1
LD A,H	7C	. . . . .	A←-H	1
LD A,I	ED57	. ^ i . 0 0	A←-I	2
LD A,L	7D	. . . . .	A←-L	1
LD A,N	3Enn	. . . . .	A←-nn	2
LD A,R	ED5F	. ^ i . 0 0	A←-R	2
LD B,(HL)	46	. . . . .	B←-(HL)	2
LD B,(IX+dd)	DD46dd	. . . . .	B←-(IX+dd)	5
LD B,(IY+DD)	FD46dd	. . . . .	B←-(IY+dd)	5
LD B,A	47	. . . . .	B←-A	1
LD B,B	40	. . . . .	B←-B	1
LD B,C	41	. . . . .	B←-C	1
LD B,D	42	. . . . .	B←-D	1
LD B,E	43	. . . . .	B←-E	1
LD B,H	44	. . . . .	B←-H	1
LD B,L	45	. . . . .	B←-L	1
LD B,N	06nn	. . . . .	B←-nn	2

Mnémonique	Op-code	c z p s n h v	Opération symbolique	Cycles machine
LD BC, (NN)	ED4Bnnnn	. . . . .	BC←-(nnnn)	6
LD BC, NN	01nnnn	. . . . .	BC←-nnnn	3
LD C, (HL)	4E	. . . . .	C←-(HL)	2
LD C, (IX+dd)	DD4Edd	. . . . .	C←-(IX+dd)	5
LD C, (IY+DD)	FD4Edd	. . . . .	C←-(IY+dd)	5
LD C, A	4F	. . . . .	C←-A	1
LD C, B	48	. . . . .	C←-B	1
LD C, C	49	. . . . .	C←-C	1
LD C, D	4A	. . . . .	C←-D	1
LD C, E	4B	. . . . .	C←-E	1
LD C, H	4C	. . . . .	C←-H	1
LD C, L	4D	. . . . .	C←-L	1
LD C, N	0E nn	. . . . .	C←-nn	2
LD D, (HL)	56	. . . . .	D←-(HL)	2
LD D, (IX+dd)	DD56dd	. . . . .	D←-(IX+dd)	5
LD D, (IY+DD)	FD56dd	. . . . .	D←-(IX+dd)	5
LD D, A	57	. . . . .	D←-A	1
LD D, B	50	. . . . .	D←-B	1
LD D, C	51	. . . . .	D←-C	1
LD D, D	52	. . . . .	D←-D	1
LD D, E	53	. . . . .	D←-E	1
LD D, H	54	. . . . .	D←-H	1
LD D, L	55	. . . . .	D←-L	1
LD D, N	16 nn	. . . . .	D←-nn	2
LD DE, (NN)	ED5Bnnnn	. . . . .	DE←-(nnnn)	6
LD DE, NN	11nnnn	. . . . .	DE←-nnnn	3
LD E, (HL)	5E	. . . . .	E←-(HL)	2
LD E, (IX+dd)	DD5Edd	. . . . .	E←-(IX+dd)	5
LD E, (IY+DD)	FD5Edd	. . . . .	E←-(IY+dd)	5
LD E, A	5F	. . . . .	E←-A	1
LD E, B	58	. . . . .	E←-B	1
LD E, C	59	. . . . .	E←-C	1
LD E, D	5A	. . . . .	E←-D	1

Mnémonique	Op-code	c z p s n h	Opération symbolique	Cycles machine
		v		
LD E,E	5B	. . . . .	E←E	1
LD E,H	5C	. . . . .	E←H	1
LD E,L	5D	. . . . .	E←L	1
LD E,N	1E nn	. . . . .	E←nn	2
LD H,(HL)	66	. . . . .	H←(HL)	2
LD H,(IX+dd)	DD66dd	. . . . .	H←(IX+dd)	5
LD H,(IY+DD)	FD66dd	. . . . .	H←(IY+dd)	5
LD H,A	67	. . . . .	H←A	1
LD H,B	60	. . . . .	H←B	1
LD H,C	61	. . . . .	H←C	1
LD H,D	62	. . . . .	H←D	1
LD H,E	63	. . . . .	H←E	1
LD H,H	64	. . . . .	H←H	1
LD H,L	65	. . . . .	H←L	1
LD H,N	26 nn	. . . . .	H←nn	2
LD HL,(NN)	2A nnnn	. . . . .	HL←(nnnn)	5
LD HL,NN	21 nnnn	. . . . .	HL←nnnn	3
LD I,A	ED47	. . . . .	I←A	2
LD IX,(NN)	DD2A nnnn	. . . . .	IX←(nnnn)	6
LD IX,NN	DD21 nnnn	. . . . .	IX←nnnn	4
LD IY,(NN)	FD2A nnnn	. . . . .	IY←(nnnn)	6
LD IY,NN	FD21 nnnn	. . . . .	IY←nnnn	4
LD L,(HL)	6E	. . . . .	L←(HL)	2
LD L,(IX+dd)	DD6Edd	. . . . .	L←(IX+dd)	5
LD L,(IY+DD)	FD6Edd	. . . . .	L←(IY+dd)	5
LD L,A	6F	. . . . .	L←A	1
LD L,B	68	. . . . .	L←B	1
LD L,C	69	. . . . .	L←C	1
LD L,D	6A	. . . . .	L←D	1
LD L,E	6B	. . . . .	L←E	1
LD L,H	6C	. . . . .	L←H	1
LD L,L	6D	. . . . .	L←L	1
LD L,N	2E nn	. . . . .	L←nn	2

Mnémonique	Op-code	c z p s n h v	Opération symbolique	Cycles machine
LD R,A	ED4F	. . . . .	R←A	2
LD SP,(NN)	ED7Bnnnn	. . . . .	SP←(nnnn)	6
LD SP,HL	F9	. . . . .	SP←HL	1
LD SP,IX	DDF9	. . . . .	SP←IX	2
LD SP,IY	FDF9	. . . . .	SP←IY	2
LD SP,NN	31nnnn	. . . . .	SP←nnnn	3
LDD	EDAB	. . ^ . 0 0	(DE)←(HL),DE←DE-1 HL←HL-1,BC←BC-1	4
LDDR	EDBB	. . 0 . 0 0	(DE)←(HL),DE←DE-1 HL←HL-1,BC←BC-1 Répét. jusqu'à BC=0	5
LDI	EDA0	. . ^ . 0 0	(DE)←(HL),DE←DE+1 HL←HL+1,BC←BC-1	4
LDIR	EDB0	. . 0 . 0 0	(DE)←(HL),DE←DE+1 HL←HL+1,BC←BC-1 Répét. jusqu'à BC=0	5
NEG	ED44	^ ^ v ^ 1 ^	A←0-A	2
NOP	00	. . . . .	aucune action	1
OR (HL)	B6	0 ^ P ^ 0 0	A←A OU (HL)	2
OR (IX+dd)	DDB6dd	0 ^ P ^ 0 0	A←A OU (IX+dd)	5
OR (IY+dd)	FDB6dd	0 ^ P ^ 0 0	A←A OU (IY+dd)	5
OR A	B7	0 ^ P ^ 0 0	A←A OU A	1
OR B	B0	0 ^ P ^ 0 0	A←A OU B	1
OR C	B1	0 ^ P ^ 0 0	A←A OU C	1
OR D	B2	0 ^ P ^ 0 0	A←A OU D	1
OR E	B3	0 ^ P ^ 0 0	A←A OU E	1
OR H	B4	0 ^ P ^ 0 0	A←A OU H	1
OR L	B5	0 ^ P ^ 0 0	A←A OU L	1
OR N	F6nn	0 ^ P ^ 0 0	A←A OU nn	2
OTDR	EDBB	. 1 X X 1 X	(C)←(HL),B←B-1,HL←HL-1 Répét. jusqu'à B=0.	5/4
OTIR	EDB3	. 1 X X 1 X	(C)←(HL),B←B-1,HL←HL+1 Répét. jusqu'à B=0.	5/4

Mnémonique	Op-code	c z p s n h	Opération symbolique	Cycles machine
		v		
OUT (C),A	ED79	. . . . .	(C)←A	3
OUT (C),B	ED41	. . . . .	(C)←B	3
OUT (C),C	ED49	. . . . .	(C)←C	3
OUT (C),D	ED51	. . . . .	(C)←D	3
OUT (C),E	ED59	. . . . .	(C)←E	3
OUT (C),H	ED61	. . . . .	(C)←H	3
OUT (C),L	ED69	. . . . > .	(C)←L	3
OUT (N),A	D3nn	. . . . .	(C)←nn	3
OUTD	EDAB	. ^ X X 1 X	(C)←(HL),B←B-1,HL←HL-1	4
OUTI	EDA3	. ^ X X 1 X	(C)←(HL),B←B-1,HL←HL+1	4
POP AF	F1	^ ^ ^ ^ ^ ^	A←(SP+1),F←(SP)	3
POP BC	C1	. . . . .	B←(SP+1),C←(SP)	3
POP DE	D1	. . . . .	D←(SP+1),E←(SP)	3
POP HL	E1	. . . . .	H←(SP+1),L←(SP)	3
POP IX	DDE1	. . . . .	IXH←(SP+1),IXL←(SP)	4
POP IY	FDE1	. . . . .	IYH←(SP+1),IYL←(SP)	4
PUSH AF	F5	. . . . .	(SP-2)←F,(SP-1)←A	3
PUSH BC	C5	. . . . .	(SP-2)←C,(SP-1)←B	3
PUSH DE	D5	. . . . .	(SP-2)←E,(SP-1)←D	3
PUSH HL	E5	. . . . .	(SP-2)←L,(SP-1)←H	3
PUSH IX	DDE5	. . . . .	(SP-2)←IXL,(SP-1)←IXH	4
PUSH IY	FDE5	. . . . .	(SP-2)←IYL,(SP-1)←IYH	4
RES 0,(HL)	CB86	. . . . .	(HL) ₀ ←0	4
RES 0,(IX+dd)	DDCBdd86	. . . . .	(IX+dd) ₀ ←0	6
RES 0,(IY+dd)	FDCBdd86	. . . . .	(IY+dd) ₀ ←0	6
RES 0,A	CB87	. . . . .	A ₀ ←0	2
RES 0,B	CB80	. . . . .	B ₀ ←0	2
RES 0,C	CB81	. . . . .	C ₀ ←0	2
RES 0,D	CB82	. . . . .	D ₀ ←0	2
RES 0,E	CB83	. . . . .	E ₀ ←0	2
RES 0,H	CB84	. . . . .	H ₀ ←0	2
RES 0,L	CB85	. . . . .	L ₀ ←0	2
RES 1,(HL)	CB8E	. . . . .	(HL) ₁ ←0	4

Mnémonique	Op-code	c z p s n h v	Opération symbolique	Cycles machine
RES 1, (IX+dd)	DDCBdd8E	. . . . .	$(IX+dd)_1 \leftarrow 0$	6
RES 1, (IY+dd)	FDCBdd8E	. . . . .	$(IY+dd)_1 \leftarrow 0$	6
RES 1, A	CB8F	. . . . .	$A_1 \leftarrow 0$	2
RES 1, B	CB88	. . . . .	$B_1 \leftarrow 0$	2
RES 1, C	CB89	. . . . .	$C_1 \leftarrow 0$	2
RES 1, D	CBBA	. . . . .	$D_1 \leftarrow 0$	2
RES 1, E	CB8B	. . . . .	$E_1 \leftarrow 0$	2
RES 1, H	CB8C	. . . . .	$H_1 \leftarrow 0$	2
RES 1, L	CB8D	. . . . .	$L_1 \leftarrow 0$	2
RES 2, (HL)	CB96	. . . . .	$(HL)_2 \leftarrow 0$	4
RES 2, (IX+dd)	DDCBdd96	. . . . .	$(IX+dd)_2 \leftarrow 0$	6
RES 2, (IY+dd)	FDCBdd96	. . . . .	$(IY+dd)_2 \leftarrow 0$	6
RES 2, A	CB97	. . . . .	$A_2 \leftarrow 0$	2
RES 2, B	CB90	. . . . .	$B_2 \leftarrow 0$	2
RES 2, C	CB91	. . . . .	$C_2 \leftarrow 0$	2
RES 2, D	CB92	. . . . .	$D_2 \leftarrow 0$	2
RES 2, E	CB93	. . . . .	$E_2 \leftarrow 0$	2
RES 2, H	CB94	. . . . .	$H_2 \leftarrow 0$	2
RES 2, L	CB95	. . . . .	$L_2 \leftarrow 0$	2
RES 3, (HL)	CB9E	. . . . .	$(HL)_3 \leftarrow 0$	4
RES 3, (IX+dd)	DDCBdd9E	. . . . .	$(IX+dd)_3 \leftarrow 0$	6
RES 3, (IY+dd)	FDCBdd9E	. . . . .	$(IY+dd)_3 \leftarrow 0$	6
RES 3, A	CB9F	. . . . .	$A_3 \leftarrow 0$	2
RES 3, B	CB98	. . . . .	$B_3 \leftarrow 0$	2
RES 3, C	CB99	. . . . .	$C_3 \leftarrow 0$	2
RES 3, D	CB9A	. . . . .	$D_3 \leftarrow 0$	2
RES 3, E	CB9B	. . . . .	$E_3 \leftarrow 0$	2
RES 3, H	CB9C	. . . . .	$H_3 \leftarrow 0$	2
RES 3, L	CB9D	. . . . .	$L_3 \leftarrow 0$	2
RES 4, (HL)	CBA6	. . . . .	$(HL)_4 \leftarrow 0$	4
RES 4, (IX+dd)	DDCBddA6	. . . . .	$(IX+dd)_4 \leftarrow 0$	6
RES 4, (IY+dd)	FDCBddA6	. . . . .	$(IY+dd)_4 \leftarrow 0$	6
RES 4, A	CBA7	. . . . .	$A_4 \leftarrow 0$	2

Mnémonique	Op-code	c z p s n h	Opération symbolique	Cycles machine
		v		
RES 4, B	CBA0	. . . . .	B ₄ ← 0	2
RES 4, C	CBA1	. . . . .	C ₄ ← 0	2
RES 4, D	CBA2	. . . . .	D ₄ ← 0	2
RES 4, E	CBA3	. . . . .	E ₄ ← 0	2
RES 4, H	CBA4	. . . . .	H ₄ ← 0	2
RES 4, L	CBA5	. . . . .	L ₄ ← 0	2
RES 5, (HL)	CBAE	. . . . .	(HL) ₅ ← 0	4
RES 5, (IX+dd)	DDCBddAE	. . . . .	(IX+dd) ₅ ← 0	6
RES 5, (IY+dd)	FDCBddAE	. . . . .	(IY+dd) ₅ ← 0	6
RES 5, A	CBAF	. . . . .	A ₅ ← 0	2
RES 5, B	CBAB	. . . . .	B ₅ ← 0	2
RES 5, C	CBA9	. . . . .	C ₅ ← 0	2
RES 5, D	CBAA	. . . . .	D ₅ ← 0	2
RES 5, E	CBAE	. . . . .	E ₅ ← 0	2
RES 5, H	CBAC	. . . . .	H ₅ ← 0	2
RES 5, L	CBAD	. . . . .	L ₅ ← 0	2
RES 6, (HL)	CBB6	. . . . .	(HL) ₆ ← 0	4
RES 6, (IX+dd)	DDCBddB6	. . . . .	(IX+dd) ₆ ← 0	6
RES 6, (IY+dd)	FDCBddB6	. . . . .	(IY+dd) ₆ ← 0	6
RES 6, A	CBB7	. . . . .	A ₆ ← 0	2
RES 6, B	CBBO	. . . . .	B ₆ ← 0	2
RES 6, C	CBB1	. . . . .	C ₆ ← 0	2
RES 6, D	CBB2	. . . . .	D ₆ ← 0	2
RES 6, E	CBB3	. . . . .	E ₆ ← 0	2
RES 6, H	CBB4	. . . . .	H ₆ ← 0	2
RES 6, L	CBB5	. . . . .	L ₆ ← 0	2
RES 7, (HL)	CBBE	. . . . .	(HL) ₇ ← 0	4
RES 7, (IX+dd)	DDCBddBE	. . . . .	(IX+dd) ₇ ← 0	6
RES 7, (IY+dd)	FDCBddBE	. . . . .	(IY+dd) ₇ ← 0	6
RES 7, A	CBBF	. . . . .	A ₇ ← 0	2
RES 7, B	CBB8	. . . . .	B ₇ ← 0	2
RES 7, C	CBB9	. . . . .	C ₇ ← 0	2
RES 7, D	CBBA	. . . . .	D ₇ ← 0	2

Mnémonique	Op-code	c z p s n h	Opération symbolique	Cycles machine
		v		
RES 7,E	CBBB	. . . . .	$E_7 \leftarrow 0$	2
RES 7,H	CBBC	. . . . .	$H_7 \leftarrow 0$	2
RES 7,L	CBBD	. . . . .	$L_7 \leftarrow 0$	2
RET	C9	. . . . .	$PCL \leftarrow (SP), PCH \leftarrow (HL+1)$	3
RET C	DB	. . . . .	Retour si c=1	1/3
RET M	F8	. . . . .	Retour si minus	1/3
RET NC	DD	. . . . .	Retour si c=0	1/3
RET NZ	CD	. . . . .	Retour si z=0	1/3
RET P	FD	. . . . .	Retour si positif	1/3
RET PE	E8	. . . . .	Retour si p=1	1/3
RET PO	ED	. . . . .	Retour si p=0	1/3
RET Z	CB	. . . . .	Retour si z=1	1/3
RETI	ED4D	. . . . .	Retour d'interruption	4
RETN	ED45	. . . . .	Retour d'IT non masquable	4
RL (HL)	CB16	^ ^ P ^ 0 0	Rotation \leftarrow de (HL)	4
RL (IX+dd)	DDCBdd16	^ ^ P ^ 0 0	Rotation \leftarrow de (IX+dd)	6
RL (IY+dd)	FDCBdd16	^ ^ P ^ 0 0	Rotation \leftarrow de (IY+dd)	6
RL A	CB17	^ ^ P ^ 0 0	Rotation \leftarrow de A	2
RL B	CB10	^ ^ P ^ 0 0	Rotation \leftarrow de B	2
RL C	CB11	^ ^ P ^ 0 0	Rotation \leftarrow de C	2
RL D	CB12	^ ^ P ^ 0 0	Rotation \leftarrow de D	2
RL E	CB13	^ ^ P ^ 0 0	Rotation \leftarrow de E	2
RL H	CB14	^ ^ P ^ 0 0	Rotation \leftarrow de H	2
RL L	CB15	^ ^ P ^ 0 0	Rotation \leftarrow de L	2
RLA	17	^ . . . 0 0	Rotation \leftarrow de A	1
RLC (HL)	CB06	^ ^ P ^ 0 0	Rot. circ. \leftarrow de (HL)	4
RLC (IX+dd)	DDCBdd06	^ ^ P ^ 0 0	Rot. circ. \leftarrow de (IX+dd)	6
RLC (IY+dd)	FDCBdd06	^ ^ P ^ 0 0	Rot. circ. \leftarrow de (IY+dd)	6
RLC A	CB07	^ ^ P ^ 0 0	Rot. circ. \leftarrow de A	2
RLC B	CB00	^ ^ P ^ 0 0	Rot. circ. \leftarrow de B	2
RLC C	CB01	^ ^ P ^ 0 0	Rot. circ. \leftarrow de C	2
RLC D	CB02	^ ^ P ^ 0 0	Rot. circ. \leftarrow de D	2
RLC E	CB03	^ ^ P ^ 0 0	Rot. circ. \leftarrow de E	2

Mnémonique	Op-code	c z p s n h v	Opération symbolique	Cycles machine
RLC H	CB04	^ ^ P ^ 0 0	Rot. circ. <- de H	2
RLC L	CB05	^ ^ P ^ 0 0	Rot. circ. <- de L	2
RLCA	07	^ . . . 0 0	Rot. circ. <- de A	1
RLD	ED6F	. ^ P ^ 0 0	Rot. décimale à gauche	5
RR (HL)	CB1E	^ ^ P ^ 0 0	Rotation -> de (HL)	4
RR (IX+dd)	DDCBdd1E	^ ^ P ^ 0 0	Rotation -> de (IX+dd)	6
RR (IY+dd)	FDCBdd1E	^ ^ P ^ 0 0	Rotation -> de (IY+dd)	6
RR A	CB1F	^ ^ P ^ 0 0	Rotation -> de A	2
RR B	CB18	^ ^ P ^ 0 0	Rotation -> de B	2
RR C	CB19	^ ^ P ^ 0 0	Rotation -> de C	2
RR D	CB1A	^ ^ P ^ 0 0	Rotation -> de D	2
RR E	CB1B	^ ^ P ^ 0 0	Rotation -> de E	2
RR H	CB1C	^ ^ P ^ 0 0	Rotation -> de H	2
RR L	CB1D	^ ^ P ^ 0 0	Rotation -> de L	2
RRA	1F	^ . . . 0 0	Rotation -> de A	1
RRC (HL)	CBOE	^ ^ P ^ 0 0	Rot. circ. -> de (HL)	4
RRC (IX+dd)	DDCBddOE	^ ^ P ^ 0 0	Rot. circ. -> de (IX+dd)	6
RRC (IY+dd)	FDCBddOE	^ ^ P ^ 0 0	Rot. circ. -> de (IY+dd)	6
RRC A	CBOF	^ ^ P ^ 0 0	Rot. circ. -> de A	2
RRC B	CBO8	^ ^ P ^ 0 0	Rot. circ. -> de B	2
RRC C	CBO9	^ ^ P ^ 0 0	Rot. circ. -> de C	2
RRC D	CBOA	^ ^ P ^ 0 0	Rot. circ. -> de D	2
RRC E	CBOB	^ ^ P ^ 0 0	Rot. circ. -> de E	2
RRC H	CBOC	^ ^ P ^ 0 0	Rot. circ. -> de H	2
RRC L	CBOD	^ ^ P ^ 0 0	Rot. circ. -> de L	2
RRCA	0F	^ . . . 0 0	Rot. circ. -> de A	1
RRD	ED67	. ^ P ^ 0 0	Rot. décimale droite	5
RST 00	C7	. . . . .	(SP-1)<-PCH, (SP-2)<-PCL PCH<-00, PCL<-00	3
RST 08	CF	. . . . .	(SP-1)<-PCH, (SP-2)<-PCL PCH<-00, PCL<-08	3
RST 10H	D7	. . . . .	(SP-1)<-PCH, (SP-2)<-PCL PCH<-00, PCL<-10	3

Mnémonique	Op-code	c z p s n h v	Opération symbolique	Cycles machine
RST 18H	DF	. . . . .	(SP-1)←PCH, (SP-2)←PCL PCH←00, PCL←18	3
RST 20H	E7	. . . . .	(SP-1)←PCH, (SP-2)←PCL PCH←00, PCL←20	3
RST 28H	EF	. . . . .	(SP-1)←PCH, (SP-2)←PCL PCH←00, PCL←28	3
RST 30H	F7	. . . . .	(SP-1)←PCH, (SP-2)←PCL PCH←00, PCL←30	3
RST 38H	FF	. . . . .	(SP-1)←PCH, (SP-2)←PCL PCH←00, PCL←38	3
SBC A, (HL)	9E	^ ^ V ^ 1 ^	A←A-(HL)-c	2
SBC A, (IX+dd)	DD9Edd	^ ^ V ^ 1 ^	A←A-(IX+dd)-c	5
SBC A, (IY+dd)	FD9Edd	^ ^ V ^ 1 ^	A←A-(IY+dd)-c	5
SBC A, A	9F	^ ^ V ^ 1 ^	A←A-A-c	1
SBC A, B	98	^ ^ V ^ 1 ^	A←A-B-c	1
SBC A, C	99	^ ^ V ^ 1 ^	A←A-C-c	1
SBC A, D	9A	^ ^ V ^ 1 ^	A←A-D-c	1
SBC A, E	9B	^ ^ V ^ 1 ^	A←A-E-c	1
SBC A, H	9C	^ ^ V ^ 1 ^	A←A-H-c	1
SBC A, L	9D	^ ^ V ^ 1 ^	A←A-L-c	1
SBC A, N	DEnn	^ ^ V ^ 1 ^	A←A-nn-c	2
SBC HL, BC	ED42	^ ^ V ^ 1 X	HL←HL-BC-c	4
SBC HL, DE	ED52	^ ^ V ^ 1 X	HL←HL-DE-c	4
SBC HL, HL	ED62	^ ^ V ^ 1 X	HL←HL-HL-c	4
SBC HL, SP	ED72	^ ^ V ^ 1 X	HL←HL-SP-c	4
SCF	37	1 . . . 0 0	c←-1	1
SET 0, (HL)	CBC6	. . . . .	(HL) ₀ ←-1	4
SET 0, (IX+dd)	DDCBddC6	. . . . .	(IX+dd) ₀ ←-1	6
SET 0, (IY+dd)	FDCBddC6	. . . . .	(IY+dd) ₀ ←-1	6
SET 0, A	CBC7	. . . . .	A ₀ ←-1	2
SET 0, B	CBCD	. . . . .	B ₀ ←-1	2
SET 0, C	CBC1	. . . . .	C ₀ ←-1	2
SET 0, D	CBC2	. . . . .	D ₀ ←-1	2
SET 0, E	CBC3	. . . . .	E ₀ ←-1	2

Mnémonique	Op-code	c z p s n h	Opération symbolique	Cycles machine
		v		
SET 0,H	CBC4	. . . . .	$H_0 \leftarrow -1$	2
SET 0,L	CBC5	. . . . .	$L_0 \leftarrow -1$	2
SET 1,(HL)	CBCE	. . . . .	$(HL)_4 \leftarrow -1$	4
SET 1,(IX+dd)	DDCBddCE	. . . . .	$(IX+dd)_4 \leftarrow -1$	6
SET 1,(IY+dd)	FDCBddCE	. . . . .	$(IY+dd)_4 \leftarrow -1$	6
SET 1,A	CBCF	. . . . .	$A_4 \leftarrow -1$	2
SET 1,B	CBC8	. . . . .	$B_4 \leftarrow -1$	2
SET 1,C	CBC9	. . . . .	$C_4 \leftarrow -1$	2
SET 1,D	CBCA	. . . . .	$D_4 \leftarrow -1$	2
SET 1,E	CBCB	. . . . .	$E_4 \leftarrow -1$	2
SET 1,H	CBCC	. . . . .	$H_4 \leftarrow -1$	2
SET 1,L	CBCD	. . . . .	$L_4 \leftarrow -1$	2
SET 2,(HL)	CBD6	. . . . .	$(HL)_2 \leftarrow -1$	4
SET 2,(IX+dd)	DDCBddD6	. . . . .	$(IX+dd)_2 \leftarrow -1$	6
SET 2,(IY+dd)	FDCBddD6	. . . . .	$(IY+dd)_2 \leftarrow -1$	6
SET 2,A	CBD7	. . . . .	$A_2 \leftarrow -1$	2
SET 2,B	CBDO	. . . . .	$B_2 \leftarrow -1$	2
SET 2,C	CBD1	. . . . .	$C_2 \leftarrow -1$	2
SET 2,D	CBD2	. . . . .	$D_2 \leftarrow -1$	2
SET 2,E	CBD3	. . . . .	$E_2 \leftarrow -1$	2
SET 2,H	CBD4	. . . . .	$H_2 \leftarrow -1$	2
SET 2,L	CBD5	. . . . .	$L_2 \leftarrow -1$	2
SET 3,(HL)	CBDE	. . . . .	$(HL)_3 \leftarrow -1$	4
SET 3,(IX+dd)	DDCBddDE	. . . . .	$(IX+dd)_3 \leftarrow -1$	6
SET 3,(IY+dd)	FDCBddDE	. . . . .	$(IY+dd)_3 \leftarrow -1$	6
SET 3,A	CBDF	. . . . .	$A_3 \leftarrow -1$	2
SET 3,B	CBDB	. . . . .	$B_3 \leftarrow -1$	2
SET 3,C	CBD9	. . . . .	$C_3 \leftarrow -1$	2
SET 3,D	CBDA	. . . . .	$D_3 \leftarrow -1$	2
SET 3,E	CBDB	. . . . .	$E_3 \leftarrow -1$	2
SET 3,H	CBDC	. . . . .	$H_3 \leftarrow -1$	2
SET 3,L	CBDD	. . . . .	$L_3 \leftarrow -1$	2
SET 4,(HL)	CBE6	. . . . .	$(HL)_4 \leftarrow -1$	4

Mnémonique	Op-code	c z p s n h v	Opération symbolique	Cycles machine
SET 4, (IX+dd)	DDCBddE6	. . . . .	(IX+dd) ₄ ← -1	6
SET 4, (IY+dd)	FDCBddE6	. . . . .	(IY+dd) ₄ ← -1	6
SET 4, A	CBE7	. . . . .	A ₄ ← -1	2
SET 4, B	CBE0	. . . . .	B ₄ ← -1	2
SET 4, C	CBE1	. . . . .	C ₄ ← -1	2
SET 4, D	CBE2	. . . . .	D ₄ ← -1	2
SET 4, E	CBE3	. . . . .	E ₄ ← -1	2
SET 4, H	CBE4	. . . . .	H ₄ ← -1	2
SET 4, L	CBE5	. . . . .	L ₄ ← -1	2
SET 5, (HL)	CBEE	. . . . .	(HL) ₅ ← -1	4
SET 5, (IX+dd)	DDCBddEE	. . . . .	(IX+dd) ₅ ← -1	6
SET 5, (IY+dd)	FDCBddEE	. . . . .	(IY+dd) ₅ ← -1	6
SET 5, A	CBEF	. . . . .	A ₅ ← -1	2
SET 5, B	CBEB	. . . . .	B ₅ ← -1	2
SET 5, C	CBE9	. . . . .	C ₅ ← -1	2
SET 5, D	CBEA	. . . . .	D ₅ ← -1	2
SET 5, E	CBEB	. . . . .	E ₅ ← -1	2
SET 5, H	CBEC	. . . . .	H ₅ ← -1	2
SET 5, L	CBED	. . . . .	L ₅ ← -1	2
SET 6, (HL)	CBF6	. . . . .	(HL) ₆ ← -1	4
SET 6, (IX+dd)	DDCBddF6	. . . . .	(IX+dd) ₆ ← -1	6
SET 6, (IY+dd)	FDCBddF6	. . . . .	(IY+dd) ₆ ← -1	6
SET 6, A	CBF7	. . . . .	A ₆ ← -1	2
SET 6, B	CBF0	. . . . .	B ₆ ← -1	2
SET 6, C	CBF1	. . . . .	C ₆ ← -1	2
SET 6, D	CBF2	. . . . .	D ₆ ← -1	2
SET 6, E	CBF3	. . . . .	E ₆ ← -1	2
SET 6, H	CBF4	. . . . .	H ₆ ← -1	2
SET 6, L	CBF5	. . . . .	L ₆ ← -1	2
SET 7, (HL)	CBFE	. . . . .	(HL) ₇ ← -1	4
SET 7, (IX+dd)	DDCBddFE	. . . . .	(IX+dd) ₇ ← -1	6
SET 7, (IY+dd)	FDCBddFE	. . . . .	(IY+dd) ₇ ← -1	6
SET 7, A	CBFF	. . . . .	A ₇ ← -1	2

Mnémonique	Op-code	c z p s n h	Opération symbolique	Cycles machine
		v		
SET 7,B	CBFB	. . . . .	$B_7 \leftarrow -1$	2
SET 7,C	CBF9	. . . . .	$C_7 \leftarrow -1$	2
SET 7,D	CBFA	. . . . .	$D_7 \leftarrow -1$	2
SET 7,E	CBFB	. . . . .	$E_7 \leftarrow -1$	2
SET 7,H	CBFC	. . . . .	$H_7 \leftarrow -1$	2
SET 7,L	CBFD	. . . . .	$L_7 \leftarrow -1$	2
SLA (HL)	CB26	^ ^ P ^ 0 0	Décal. \leftarrow arith. (IX)	4
SLA (IX+dd)	DDCBdd26	^ ^ P ^ 0 0	Décal. \leftarrow arith. (IX+dd)	6
SLA (IY+dd)	FDCBdd26	^ ^ P ^ 0 0	Décal. \leftarrow arith. (IY+dd)	6
SLA A	CB27	^ ^ P ^ 0 0	Décal. \leftarrow arith. A	2
SLA B	CB20	^ ^ P ^ 0 0	Décal. \leftarrow arith. B	2
SLA C	CB21	^ ^ P ^ 0 0	Décal. \leftarrow arith. C	2
SLA D	CB22	^ ^ P ^ 0 0	Décal. \leftarrow arith. D	2
SLA E	CB23	^ ^ P ^ 0 0	Décal. \leftarrow arith. E	2
SLA H	CB24	^ ^ P ^ 0 0	Décal. \leftarrow arith. H	2
SLA L	CB25	^ ^ P ^ 0 0	Décal. \leftarrow arith. L	2
SRA (HL)	CB2E	^ ^ P ^ 0 0	Décal. \rightarrow arith. (IX)	4
SRA (IX+dd)	DDCBdd2E	^ ^ P ^ 0 0	Décal. \rightarrow arith. (IX+dd)	6
SRA (IY+dd)	FDCBdd2E	^ ^ P ^ 0 0	Décal. \rightarrow arith. (IY+dd)	6
SRA A	CB2F	^ ^ P ^ 0 0	Décal. \rightarrow arith. A	2
SRA B	CB28	^ ^ P ^ 0 0	Décal. \rightarrow arith. B	2
SRA C	CB29	^ ^ P ^ 0 0	Décal. \rightarrow arith. C	2
SRA D	CB2A	^ ^ P ^ 0 0	Décal. \rightarrow arith. D	2
SRA E	CB2B	^ ^ P ^ 0 0	Décal. \rightarrow arith. E	2
SRA H	CB2C	^ ^ P ^ 0 0	Décal. \rightarrow arith. H	2
SRA L	CB2D	^ ^ P ^ 0 0	Décal. \rightarrow arith. L	2
SRL (HL)	CB3E	^ ^ P ^ 0 0	Décal. \rightarrow logique (HL)	4
SRL (IX+dd)	DDCBdd3E	^ ^ P ^ 0 0	Décal. \rightarrow logique (IX+dd)	6
SRL (IY+dd)	FDCBdd3E	^ ^ P ^ 0 0	Décal. \rightarrow logique (IY+dd)	6
SRL A	CB3F	^ ^ P ^ 0 0	Décal. \rightarrow logique A	2
SRL B	CB38	^ ^ P ^ 0 0	Décal. \rightarrow logique B	2
SRL C	CB39	^ ^ P ^ 0 0	Décal. \rightarrow logique C	2
SRL D	CB3A	^ ^ P ^ 0 0	Décal. \rightarrow logique D	2

Mnémonique	Op-code	c z p s n h v	Opération symbolique	Cycles machine
SRL E	CB3B	^ ^ P ^ 0 0	Décal. -> logique E	2
SRL H	CB3C	^ ^ P ^ 0 0	Décal. -> logique H	2
SRL L	CB3D	^ ^ P ^ 0 0	Décal. -> logique L	2
SUB (HL)	96	^ ^ V ^ 1 ^	A<-A-(HL)	2
SUB (IX+dd)	DD96dd	^ ^ V ^ 1 ^	A<-A-(IX+dd)	5
SUB (IY+dd)	FD96dd	^ ^ V ^ 1 ^	A<-A-(IY+dd)	5
SUB A	97	^ ^ V ^ 1 ^	A<-A-A	1
SUB B	90	^ ^ V ^ 1 ^	A<-A-B	1
SUB C	91	^ ^ V ^ 1 ^	A<-A-C	1
SUB D	92	^ ^ V ^ 1 ^	A<-A-D	1
SUB E	93	^ ^ V ^ 1 ^	A<-A-E	1
SUB H	94	^ ^ V ^ 1 ^	A<-A-H	1
SUB L	95	^ ^ V ^ 1 ^	A<-A-L	1
SUB N	D6nn	^ ^ V ^ 1 ^	A<-A-nn	2
XOR (HL)	AE	0 ^ P ^ 0 0	A<-A XOR (HL)	2
XOR (IX+dd)	DDAEdd	0 ^ P ^ 0 0	A<-A XOR (IX+dd)	5
XOR (IY+dd)	FDAEdd	0 ^ P ^ 0 0	A<-A XOR (IY+dd)	5
XOR A	AF	0 ^ P ^ 0 0	A<-A XOR A	1
XOR B	AB	0 ^ P ^ 0 0	A<-A XOR B	1
XOR C	A9	0 ^ P ^ 0 0	A<-A XOR C	1
XOR D	AA	0 ^ P ^ 0 0	A<-A XOR D	1
XOR E	AB	0 ^ P ^ 0 0	A<-A XOR E	1
XOR H	AC	0 ^ P ^ 0 0	A<-A XOR H	1
XOR L	AD	0 ^ P ^ 0 0	A<-A XOR L	1
XOR N	EEnn	0 ^ P ^ 0 0	A<-A XOR nn	2

Indicateurs :

C = Carry = Retenue

Z = Zéro

P = Parity = Parité

V = Overflow = Débordement

S = Sign = Signe

N = Négative = Négatif

H = Half-carry = Demi-retenue

^ signifie que l'indicateur est affecté par l'instruction,

0 signifie que l'indicateur est à 0 en fin d'instruction,

1 signifie que l'indicateur est à 1 en fin d'instruction,

P signifie que p est affecté par l'instruction,

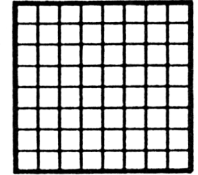
V signifie que v est affecté par l'instruction,

. signifie que l'indicateur est inchangé après l'instruction,

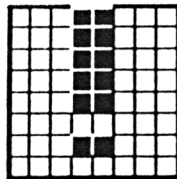
X signifie que la valeur de l'indicateur ne doit pas être considérée,

i est l'indicateur d'interruptions IFF.

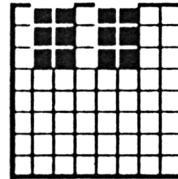
Annexe 3
Caractères standard et graphique
de l'AMSTRAD CPC 464



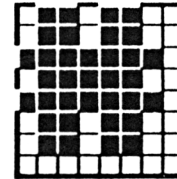
32 &H20
&X00100000



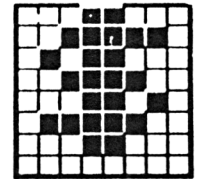
33
&H21
&X00100001



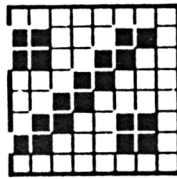
34
&H22
&X00100010



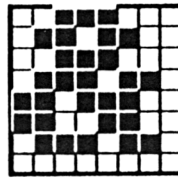
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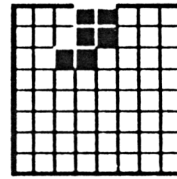
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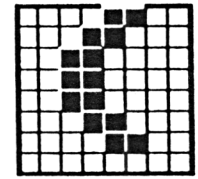
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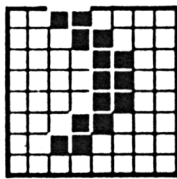
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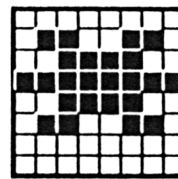
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&X00100111



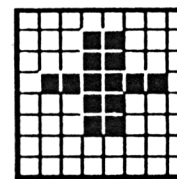
40
&H28
&X00101000



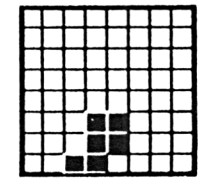
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&X00101001



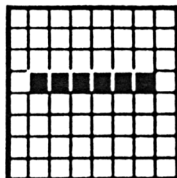
42
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&X00101010



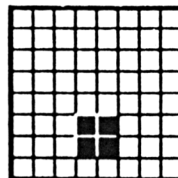
43
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&X00101011



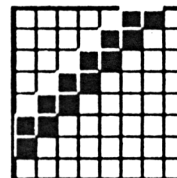
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&X00101100



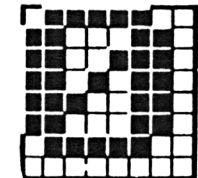
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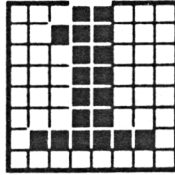
46
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&X00101110



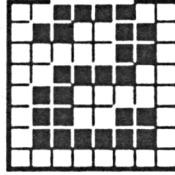
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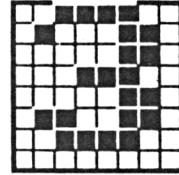
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&X00110000



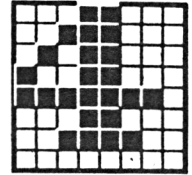
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&X00110001



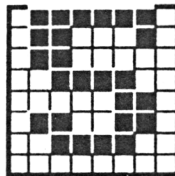
50
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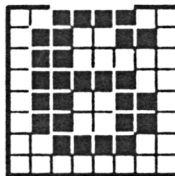
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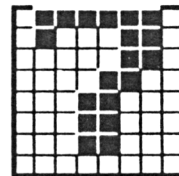
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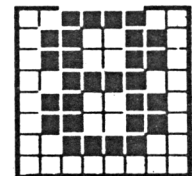
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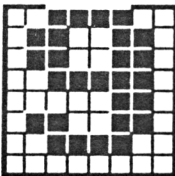
54
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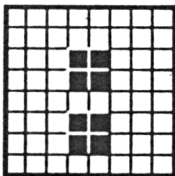
55
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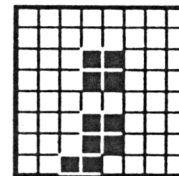
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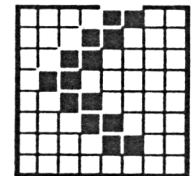
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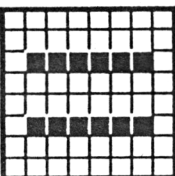
58
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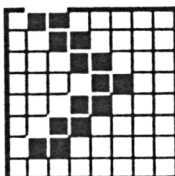
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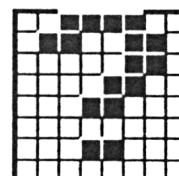
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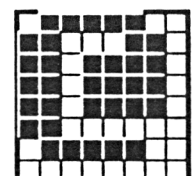
61
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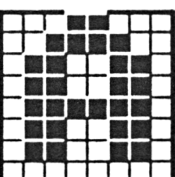
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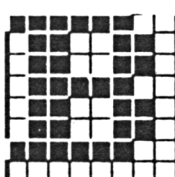
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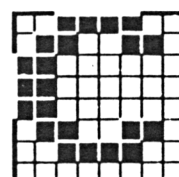
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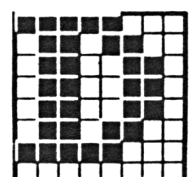
65
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&X01000001



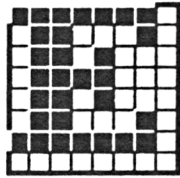
66
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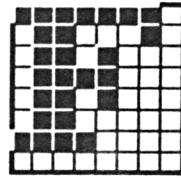
67
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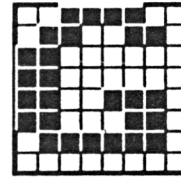
68
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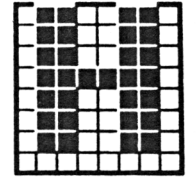
69
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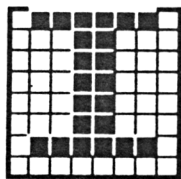
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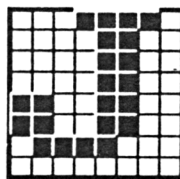
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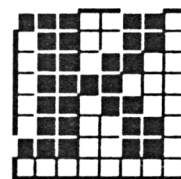
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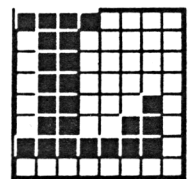
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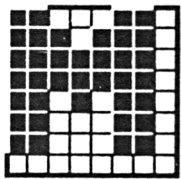
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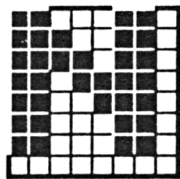
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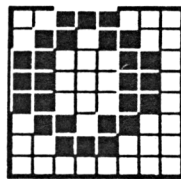
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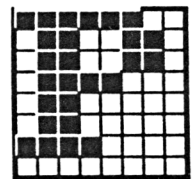
77
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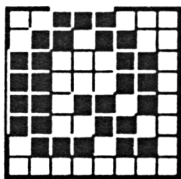
78
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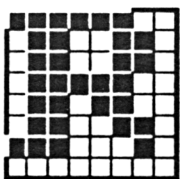
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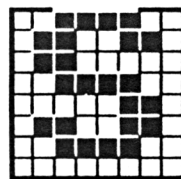
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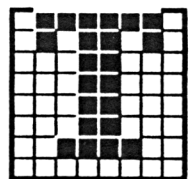
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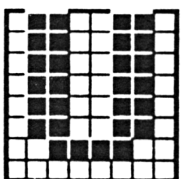
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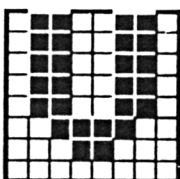
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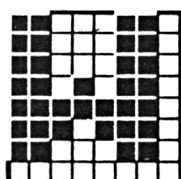
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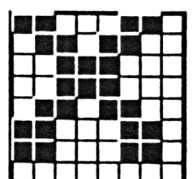
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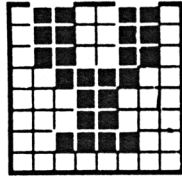
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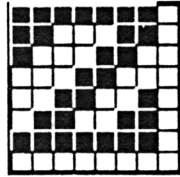
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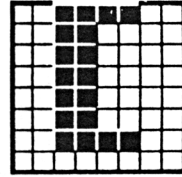
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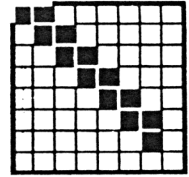
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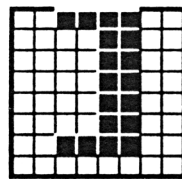
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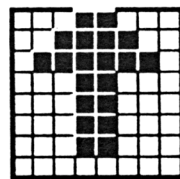
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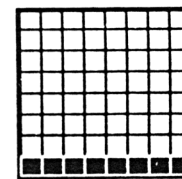
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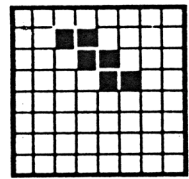
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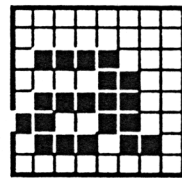
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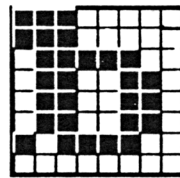
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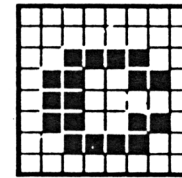
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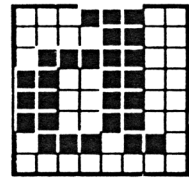
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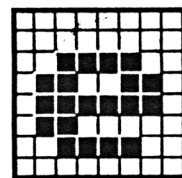
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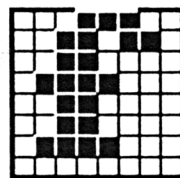
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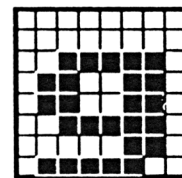
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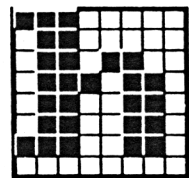
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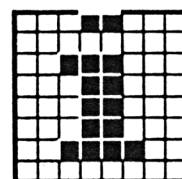
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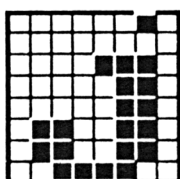
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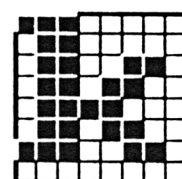
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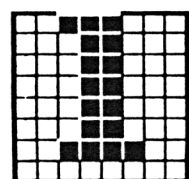
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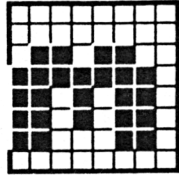
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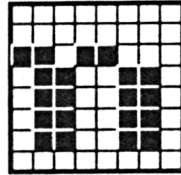
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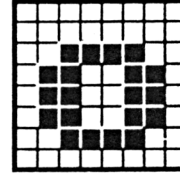
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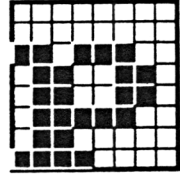
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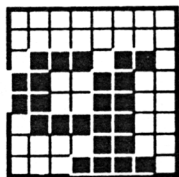
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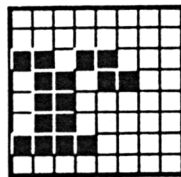
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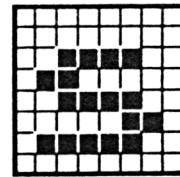
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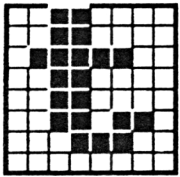
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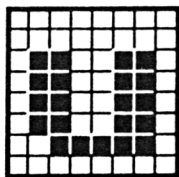
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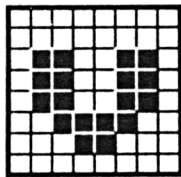
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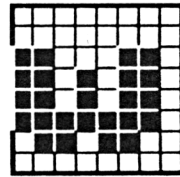
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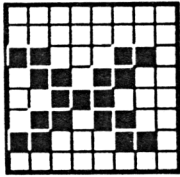
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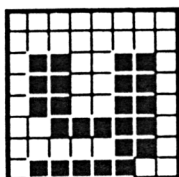
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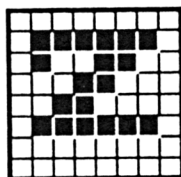
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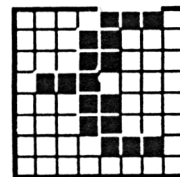
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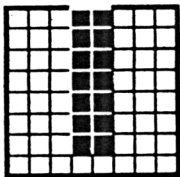
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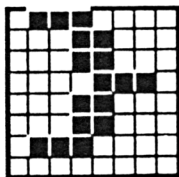
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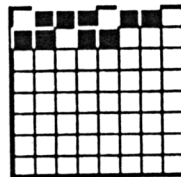
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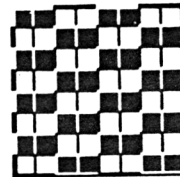
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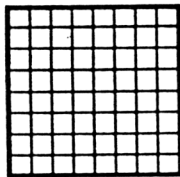
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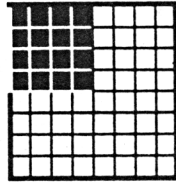
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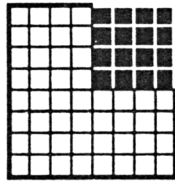
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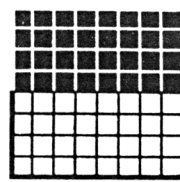
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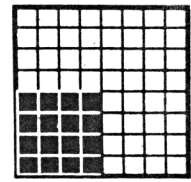
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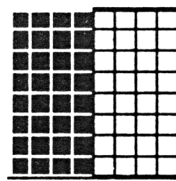
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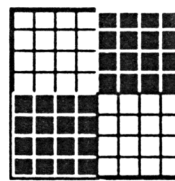
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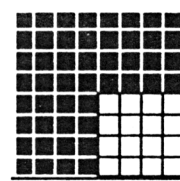
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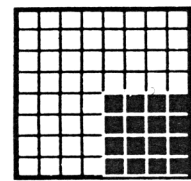
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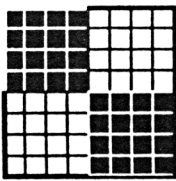
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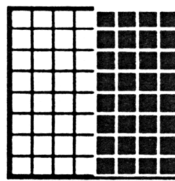
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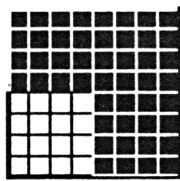
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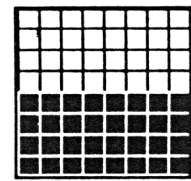
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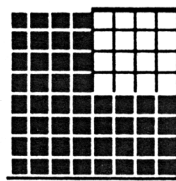
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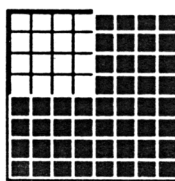
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140
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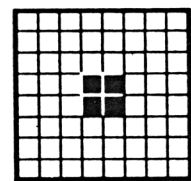
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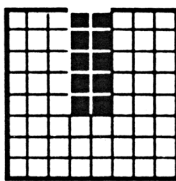
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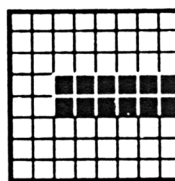
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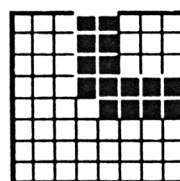
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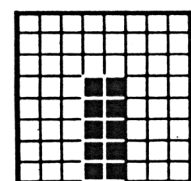
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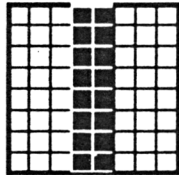
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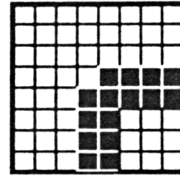
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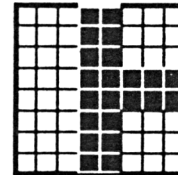
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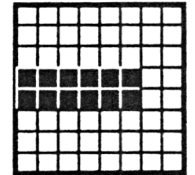
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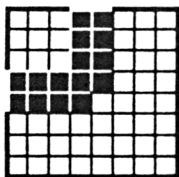
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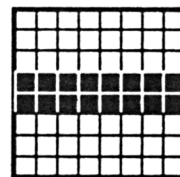
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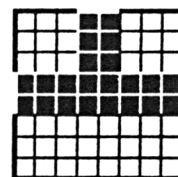
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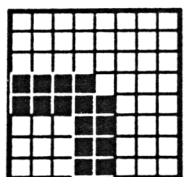
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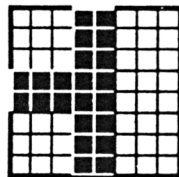
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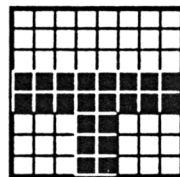
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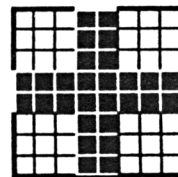
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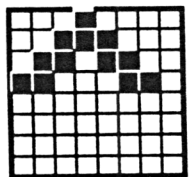
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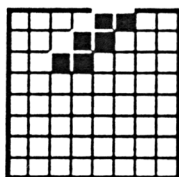
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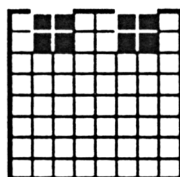
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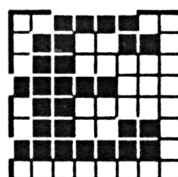
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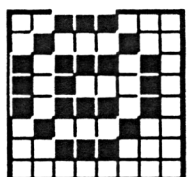
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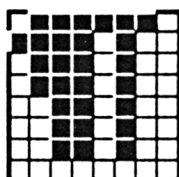
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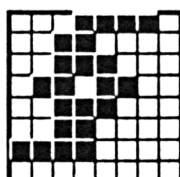
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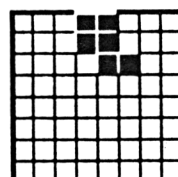
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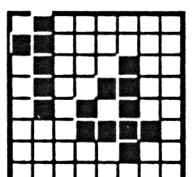
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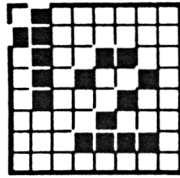
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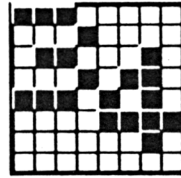
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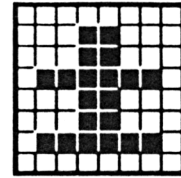
168
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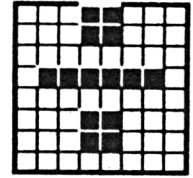
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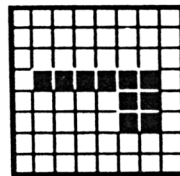
170
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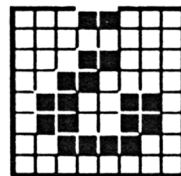
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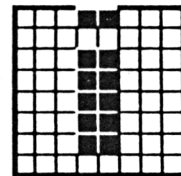
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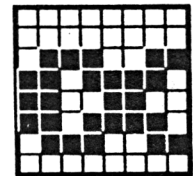
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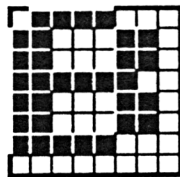
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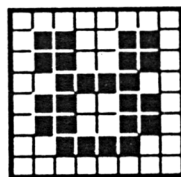
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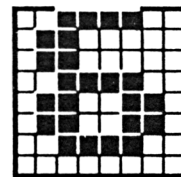
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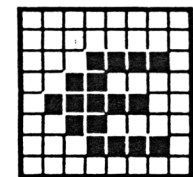
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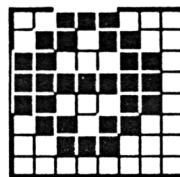
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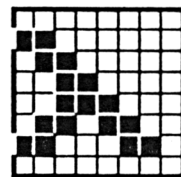
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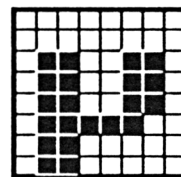
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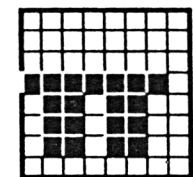
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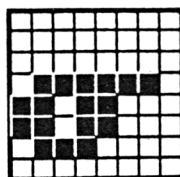
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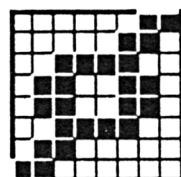
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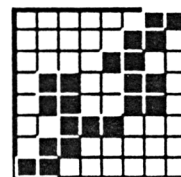
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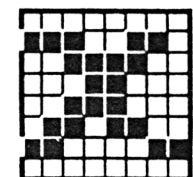
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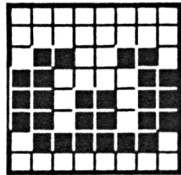
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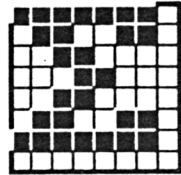
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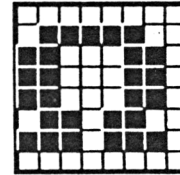
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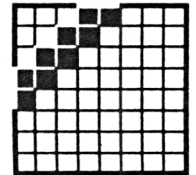
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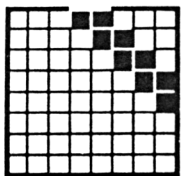
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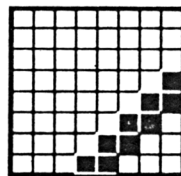
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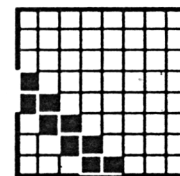
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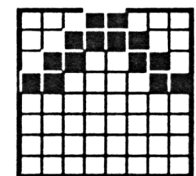
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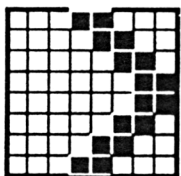
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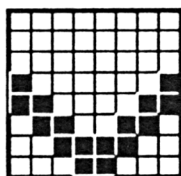
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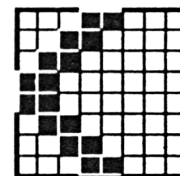
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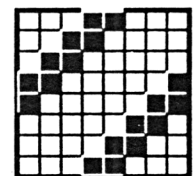
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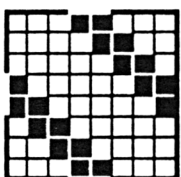
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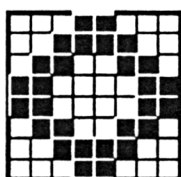
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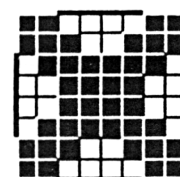
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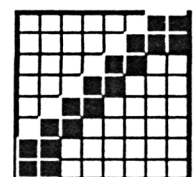
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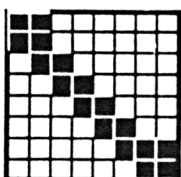
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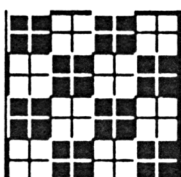
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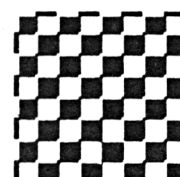
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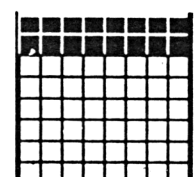
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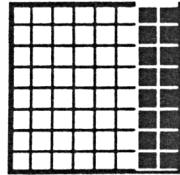
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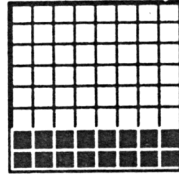
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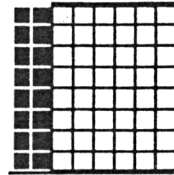
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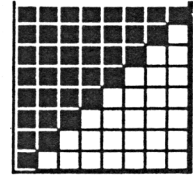
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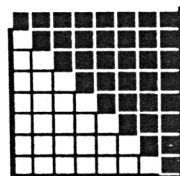
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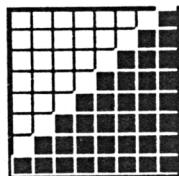
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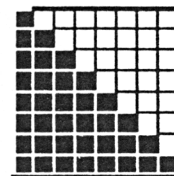
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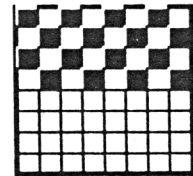
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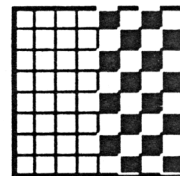
214
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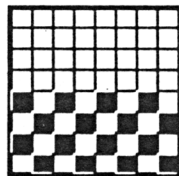
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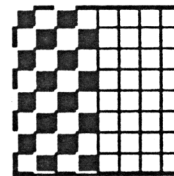
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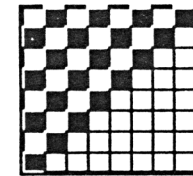
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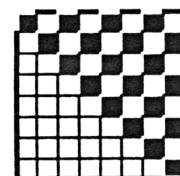
218
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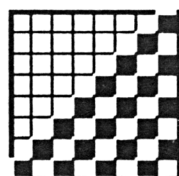
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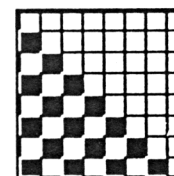
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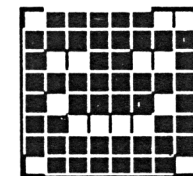
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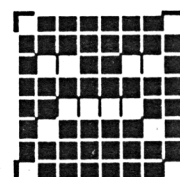
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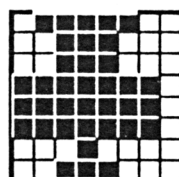
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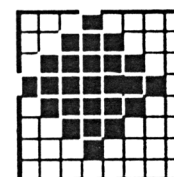
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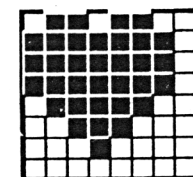
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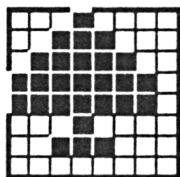
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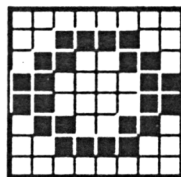
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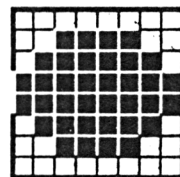
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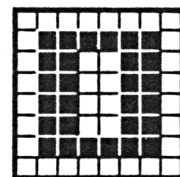
229
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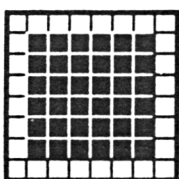
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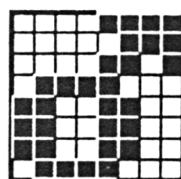
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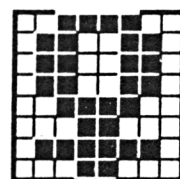
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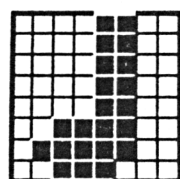
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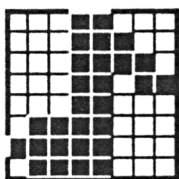
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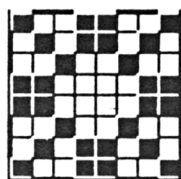
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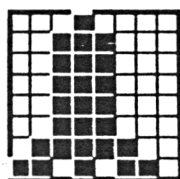
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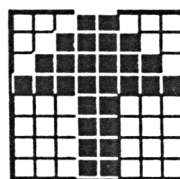
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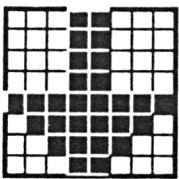
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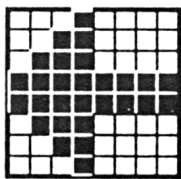
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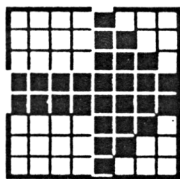
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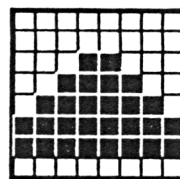
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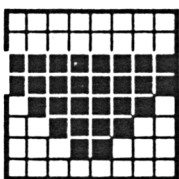
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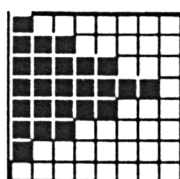
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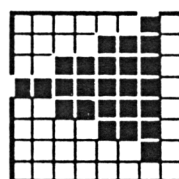
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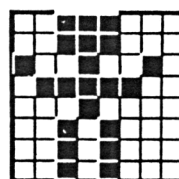
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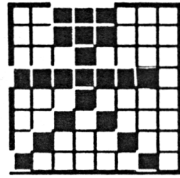
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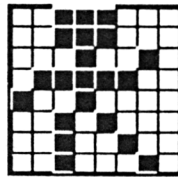
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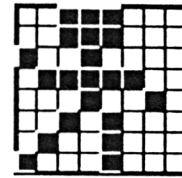
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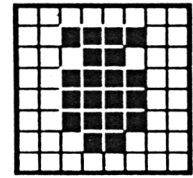
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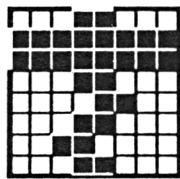
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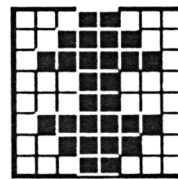
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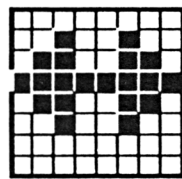
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254
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255
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