

# Kapitel 20

## 8051 Befehlsliste

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'X'	Memonic	'X'	Memonic	'X'	Memonic	'X'	Memonic	'X'	Memonic	'X'	Memonic	'X'	Memonic	'X'	Memonic
00	NOP	20	JB badr,rel	40	JC rel	60	JZ rel	80	SJMP rel	A0	ORL C,/badr	C0	PUSH dadr	E0	MOVX A,@DPTR
01	AJMP page 0	21	AJMP page 1	41	AJMP page 2	61	AJMP page 3	81	AJMP page 4	A1	AJMP page 5	C1	AJMP page 6	E1	AJMP page 7
02	LJMP adr16	22	RET	42	ORL dadr,A	62	XRL dadr,A	82	ANL C,badr	A2	MOV C,badr	C2	CLR badr	E2	MOVX A,@R0
03	RR A	23	RL A	43	ORL dadr,#c8	63	XRL dadr,#c8	83	MOVC A,@A+PC	A3	INC DPTR	C3	CLR C	E3	MOVX A,@R1
04	INC A	24	ADD A,#c8	44	ORL A,#c8	64	XRL A,#c8	84	DIV AB	A4	MUL AB	C4	SWAP A	E4	CLR A
05	INC dadr	25	ADD A,dadr	45	ORL A,dadr	65	XRL A,dadr	85	MOV dadr,dadr	A5	----	C5	XCH A,dadr	E5	MOV A,dadr
06	INC @R0	26	ADD A,@R0	46	ORL A,@R0	66	XRL A,@R0	86	MOV dadr,@R0	A6	MOV @R0,dadr	C6	XCH A,@R0	E6	MOV A,@R0
07	INC @R1	27	ADD A,@R1	47	ORL A,@R1	67	XRL A,@R1	87	MOV dadr,@R1	A7	MOV @R1,dadr	C7	XCH A,@R1	E7	MOV A,@R1
08	INC R0	28	ADD A,R0	48	ORL A,R0	68	XRL A,R0	88	MOV dadr,R0	A8	MOV R0,dadr	C8	XCH A,R0	E8	MOV A,R0
09	INC R1	29	ADD A,R1	49	ORL A,R1	69	XRL A,R1	89	MOV dadr,R1	A9	MOV R1,dadr	C9	XCH A,R1	E9	MOV A,R1
0A	INC R2	2A	ADD A,R2	4A	ORL A,R2	6A	XRL A,R2	8A	MOV dadr,R2	AA	MOV R2,dadr	CA	XCH A,R2	EA	MOV A,R2
0B	INC R3	2B	ADD A,R3	4B	ORL A,R3	6B	XRL A,R3	8B	MOV dadr,R3	AB	MOV R3,dadr	CB	XCH A,R3	EB	MOV A,R3
0C	INC R4	2C	ADD A,R4	4C	ORL A,R4	6C	XRL A,R4	8C	MOV dadr,R4	AC	MOV R4,dadr	CC	XCH A,R4	EC	MOV A,R4
0D	INC R5	2D	ADD A,R5	4D	ORL A,R5	6D	XRL A,R5	8D	MOV dadr,R5	AD	MOV R5,dadr	CD	XCH A,R5	ED	MOV A,R5
0E	INC R6	2E	ADD A,R6	4E	ORL A,R6	6E	XRL A,R6	8E	MOV dadr,R6	AE	MOV R6,dadr	CE	XCH A,R6	EE	MOV A,R6
0F	INC R7	2F	ADD A,R7	4F	ORL A,R7	6F	XRL A,R7	8F	MOV dadr,R7	AF	MOV R7,dadr	CF	XCH A,R7	EF	MOV A,R7
10	JBC badr,rel	30	JNB badr,rel	50	JNC rel	70	JNZ rel	90	MOV DPTR,#c16	B0	ANL C,/badr	D0	POP dadr	F0	MOVX @DPTR,A
11	ACALL page 0	31	ACALL page 1	51	ACALL page 2	71	ACALL page 3	91	ACALL page 4	B1	ACALL page 5	D1	ACALL page 6	F1	ACALL page 7
12	LCALL adr16	32	RETI	52	ANL dadr,A	72	ORL C,badr	92	MOV badr,C	B2	CPL badr	D2	SETB badr	F2	MOVX @R0,A
13	RRC A	33	RLC A	53	ANL dadr,#c8	73	JMP @A+DPTR	93	MOVC A,@A+DPTR	B3	CPL C	D3	SETB C	F3	MOVX @R1,A
14	DEC A	34	ADDC A,#c8	54	ANL A,#c8	74	MOV A,#c8	94	SUBB A,#c8	B4	CJNE A,#c8,rel	D4	DA A	F4	CPL A
15	DEC dadr	35	ADDC A,dadr	55	ANL A,dadr	75	MOV dadr,#c8	95	SUBB A,dadr	B5	CJNE A,dadr,rel	D5	DJNZ dadr,rel	F5	MOV dadr,A
16	DEC @R0	36	ADDC A,@R0	56	ANL A,@R0	76	MOV @R0,#c8	96	SUBB A,@R0	B6	CJNE @R0,#c8,rel	D6	XCHD A,@R0	F6	MOV @R0,A
17	DEC @R1	37	ADDC A,@R1	57	ANL A,@R1	77	MOV @R1,#c8	97	SUBB A,@R1	B7	CJNE @R1,#c8,rel	D7	XCHD A,@R1	F7	MOV @R1,A
18	DEC R0	38	ADDC A,R0	58	ANL A,R0	78	MOV R0,#c8	98	SUBB A,R0	B8	CJNE R0,#c8,rel	D8	DJNZ R0,rel	F8	MOV R0,A
19	DEC R1	39	ADDC A,R1	59	ANL A,R1	79	MOV R1,#c8	99	SUBB A,R1	B9	CJNE R1,#c8,rel	D9	DJNZ R1,rel	F9	MOV R1,A
1A	DEC R2	3A	ADDC A,R2	5A	ANL A,R2	7A	MOV R2,#c8	9A	SUBB A,R2	BA	CJNE R2,#c8,rel	DA	DJNZ R2,rel	FA	MOV R2,A
1B	DEC R3	3B	ADDC A,R3	5B	ANL A,R3	7B	MOV R3,#c8	9B	SUBB A,R3	BB	CJNE R3,#c8,rel	DB	DJNZ R3,rel	FB	MOV R3,A
1C	DEC R4	3C	ADDC A,R4	5C	ANL A,R4	7C	MOV R4,#c8	9C	SUBB A,R4	BC	CJNE R4,#c8,rel	DC	DJNZ R4,rel	FC	MOV R4,A
1D	DEC R5	3D	ADDC A,R5	5D	ANL A,R5	7D	MOV R5,#c8	9D	SUBB A,R5	BD	CJNE R5,#c8,rel	DD	DJNZ R5,rel	FD	MOV R5,A
1E	DEC R6	3E	ADDC A,R6	5E	ANL A,R6	7E	MOV R6,#c8	9E	SUBB A,R6	BE	CJNE R6,#c8,rel	DE	DJNZ R6,rel	FE	MOV R6,A
1F	DEC R7	3F	ADDC A,R7	5F	ANL A,R7	7F	MOV R7,#c8	9F	SUBB A,R7	BF	CJNE R7,#c8,rel	DF	DJNZ R7,rel	FF	MOV R7,A

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03	RR A	23	RL A	43	ORL dadr,#c8	63	XRL dadr,#c8	83	MOVC A,@A+PC	A3	INC DPTR	C3	CLR C	E3	MOVX A,@R1
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06	INC @R0	26	ADD A,@R0	46	ORL A,@R0	66	XRL A,@R0	86	MOV dadr,@R0	A6	MOV @R0,dadr	C6	XCH A,@R0	E6	MOV A,@R0
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0B	INC R3	2B	ADD A,R3	4B	ORL A,R3	6B	XRL A,R3	8B	MOV dadr,R3	AB	MOV R3,dadr	CB	XCH A,R3	EB	MOV A,R3
0C	INC R4	2C	ADD A,R4	4C	ORL A,R4	6C	XRL A,R4	8C	MOV dadr,R4	AC	MOV R4,dadr	CC	XCH A,R4	EC	MOV A,R4
0D	INC R5	2D	ADD A,R5	4D	ORL A,R5	6D	XRL A,R5	8D	MOV dadr,R5	AD	MOV R5,dadr	CD	XCH A,R5	ED	MOV A,R5
0E	INC R6	2E	ADD A,R6	4E	ORL A,R6	6E	XRL A,R6	8E	MOV dadr,R6	AE	MOV R6,dadr	CE	XCH A,R6	EE	MOV A,R6
0F	INC R7	2F	ADD A,R7	4F	ORL A,R7	6F	XRL A,R7	8F	MOV dadr,R7	AF	MOV R7,dadr	CF	XCH A,R7	EF	MOV A,R7
10	JBC badr,rel	30	JNB badr,rel	50	JNC rel	70	JNZ rel	90	MOV DPTR,#c16	B0	ANL C,/badr	D0	POP dadr	F0	MOVX @DPTR,A
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15	DEC dadr	35	ADDC A,dadr	55	ANL A,dadr	75	MOV dadr,#c8	95	SUBB A,dadr	B5	CJNE A,dadr,rel	D5	DJNZ dadr,rel	F5	MOV dadr,A
16	DEC @R0	36	ADDC A,@R0	56	ANL A,@R0	76	MOV @R0,#c8	96	SUBB A,@R0	B6	CJNE @R0,#c8,rel	D6	XCHD A,@R0	F6	MOV @R0,A
17	DEC @R1	37	ADDC A,@R1	57	ANL A,@R1	77	MOV @R1,#c8	97	SUBB A,@R1	B7	CJNE @R1,#c8,rel	D7	XCHD A,@R1	F7	MOV @R1,A
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1A	DEC R2	3A	ADDC A,R2	5A	ANL A,R2	7A	MOV R2,#c8	9A	SUBB A,R2	BA	CJNE R2,#c8,rel	DA	DJNZ R2,rel	FA	MOV R2,A
1B	DEC R3	3B	ADDC A,R3	5B	ANL A,R3	7B	MOV R3,#c8	9B	SUBB A,R3	BB	CJNE R3,#c8,rel	DB	DJNZ R3,rel	FB	MOV R3,A
1C	DEC R4	3C	ADDC A,R4	5C	ANL A,R4	7C	MOV R4,#c8	9C	SUBB A,R4	BC	CJNE R4,#c8,rel	DC	DJNZ R4,rel	FC	MOV R4,A
1D	DEC R5	3D	ADDC A,R5	5D	ANL A,R5	7D	MOV R5,#c8	9D	SUBB A,R5	BD	CJNE R5,#c8,rel	DD	DJNZ R5,rel	FD	MOV R5,A
1E	DEC R6	3E	ADDC A,R6	5E	ANL A,R6	7E	MOV R6,#c8	9E	SUBB A,R6	BE	CJNE R6,#c8,rel	DE	DJNZ R6,rel	FE	MOV R6,A
1F	DEC R7	3F	ADDC A,R7	5F	ANL A,R7	7F	MOV R7,#c8	9F	SUBB A,R7	BF	CJNE R7,#c8,rel	DF	DJNZ R7,rel	FF	MOV R7,A