

REDUCED 8088 INSTRUCTION SET

Edited by Phil Townshend 2003

INSTRUCTION	HEX CODE	FUNCTION	CYCS	Z-Flag
ADD AL,n	04 n	AL << AL + n	2	*
AND AL,n	24 n	AL << AL AND n	2	*
CALL BX	FF D3	(SP) << IP, IP << BX	2	
DEC CX	49	CX << CX - 1	1	*
DEC DX	4A	DX << DX - 1	1	*
DEC AL	FE C8	AL << AL - 1	2	*
HALT	76	Halts processor	1	
IN AL,DX	EC	AL << IN (DX)	1	*
INC DX	42	DX << DX + 1	1	*
INC BX	43	BX << BX + 1	1	*
INC AL	FE C0	AL << AL + 1	2	*
JMP fg	EB e	IP << IP + e = fg	2	
JNZ fg	75 e	IP << IP + e = fg IF F=0	2	
JZ fg	74 e	IP << IP + e = fg IF F=1	2	
MOV [BX],AL	88 07	(BX) << AL	2	*
MOV CX,AX	89 C1	CX << AX	2	
MOV BX,AX	89 C3	BX << AX	2	
MOV AL,[BX]	8A 07	AL << (BX)	2	*
MOV AL,n	B0 n	AL << n	2	*
MOV AX,mn	B8 n m	AX << mn	3	*
MOV CX,mn	B9 n m	CX << mn	3	*
MOV DX,mn	BA n m	DX << mn	3	*
MOV BX,mn	BB n m	BX << mn	3	*
MOV SP,mn	BC n m	SP << mn	3	*
OR AL,n	0C n	AL << AL OR n	2	*
OUT DX,AL	EE	OUT (DX) << AL	1	*
POP AX	58	AX << (SP)	1	
POP CX	59	CX << (SP)	1	
POP DX	5A	DX << (SP)	1	
POP BX	5B	BX << (SP)	1	
PUSH AX	50	(SP) << AX	1	
PUSH CX	51	(SP) << CX	1	
PUSH DX	52	(SP) << DX	1	
PUSH BX	53	(SP) << BX	1	
RET	C3	IP << (SP)	1	
SHL AL,1	D0 E0	AL << AL x 2	2	*
SHR AL,1	D0 E8	AL << AL / 2	2	*
SUB AL,n	2C n	AL << AL - n	2	*
XOR AL,n	34 n	AL << AL EOR n	2	*

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