

8086 INSTRUCTION SET

AAA		ASCII adjust addition	JL	slabel	Jump if less	NEG	dt	Negate
AAD		ASCII adjust division	JLE	slabel	Jump if less or equal	NOP		No operation
AAM		ASCII adjust multiply	JMP	label	Jump	NOT	dt	Logical NOT
AAS		ASCII adjust subtraction	JNA	slabel	Jump if not above	OR	dt,sc	Logical OR
ADC	dt,sc	Add with carry	JNAE	slabel	Jump if not above or equal	OUT	port,ac	output to port
ADD	dt,sc	Add	JNB	slabel	Jump if not below	POP	dt	Pop word off stack
AND	dt,sc	Logical AND	JNBE	slabel	Jump if below or equal	POPF		Pop flags off stack
CALL	proc	Call a procedure	JNC	slabel	Jump if no carry	PUSH	sc	Push word onto stack
CBW		Convert byte to word	JNE	slabel	Jump if not equal	PUSHF		Push flags onto stack
CLC		Clear carry flag	JNG	slabel	Jump if not greater	RCL	dt,cnt	Rotate left through carry
CDL		Clear direction flag	JNGE	slabel	Jump if not greater or equal	RCR	dt,cnt	Rotate right through carry
CLI		Clear interrupt flag	JNL	slabel	Jump if not less	REP		Repeat string operation
CMC		Complement carry flag	JNLE	slabel	Jump if not less or equal	REPE		Repeat while equal
CMP	dt,sc	Compare	JNZ	slabel	Jump if not zero	REPZ		Repeat while zero
CMPS	[dt,sc]	Compare string	Jib	slabel	Jump if not overflow	REPNE		Repeat while not equal
CMPSB	[dt,sc]	Compare bytes	JNP	slabel	Jump if not parity	REPNZ		Repeat while not zero
CMPSW	[dt,sc]	Compare words	JNS	slabel	Jump if not sign	RET	[pop]	Return from procedure
CWD		Convert word to dble word	JO	slabel	Jump if overflow	ROL	dt,cnt	Rotate left
DAA		Decimal adjust addition	JPO	slabel	Jump if parity odd	ROR	dt,cnt	Rotate right
DAS		Decimal adjust substrac.	JP	slabel	Jump if parity	SAME'		Store AH into flags
DEC	dt	Decrement	JPE	slabel	Jump if parity even	SAL	dt,cnt	Shift arithmetic left
DIV	sc	Unsigned divide	JS	slabel	Jump if sign	SHL	dt,cnt	Shift logical left
ESC	code, sc	Escape	JZ	slabel	Jump if zero	SAR	dt,cnt	Shift arithmetic right
HLT		Halt	LAHF		Load AM from flags	SHE	dt,sc	Subtract with borrow
IDIV	sc	Integer divide	LDS	dt,sc	Load pointer using DS	SCAS	[dt]	Scan string
IMUL	se	Integer multiply	LEA	dt,sc	Load effective address	SCASB	[dt]	Scan byte
IN	ac,port	Input from port	LES	dt,sc	Load pointer using ES	SCASW	[dt]"	Scan word
INC	dt	Increment	LOCK		Lock bus	SHR	dt,cnt	Shift logical right
INT	type	Interrupt	LODS	[so]	Load string	STC		Set carry flag
INTO		Interrupt if overflow	LODSB	[so]	Load bytes	STD		Set direction flag
IRET		Return from interrupt	LODSW	[so]	Load words	STI		Set interrupt flag
JA	slabel	Jump if above	LOOP	slabel	Loop	STOS	[dt]	Store string
JAE	slabel	Jump if above or equal	LOOPE	slabel	Loop if equal	STOSH	[dt]	Store byte
JB	slabel	Jump if below	LOOPZ	slabel	Loop if zero	STOSW	[dt]	Store word
JBE	slabel	Jump if below or equal	LOOPNE	slabel	Loop if not equal	SUB	dt,sc	Substraction
JC	slabel	ump if carry	LOOPNZ	slabel	Loop if not zero	TEST	dt,sc	Test (logical AND)
JCXZ	slabel	Jump if CX is zero	MOV	dt,sc	Move	WAIT		Wait for 8087
JE	slabel	Jump if equal	MOVS	[dt,sc]	Move string	XCHG	dt,sc	Exchange
JG	slabel	Jump if greater	MOVSB	[dt,sc]	Move bytes	XLAT	table	Translate
JGE	slabel	Jump if greater or equal	MOVSW	[dt,sc]	Move words	XLATB	table	Translate
			MUL	se	Unsigned multiply	XOR	dt,sc	Logical exclusive OR