Registers

- 1. General registers
- 2. Control registers
- 3. Segment registers

General registers

- 1. Data registers
- 2. Pointer registers
- 3. Index registers

Data registers

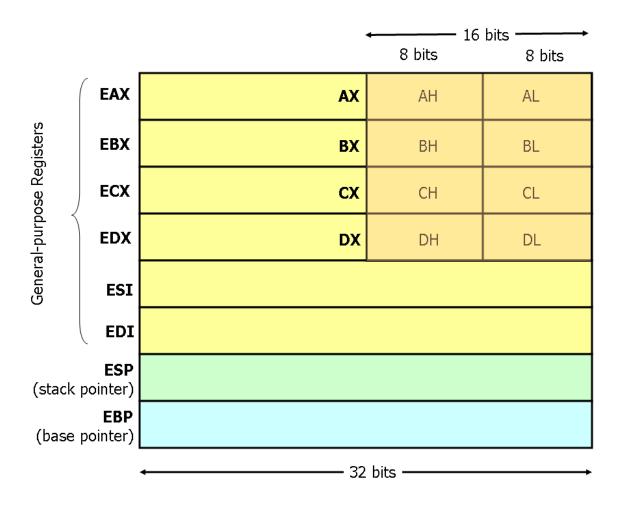
2-bit registers		16-bit registers	
31	16 15 8	7 0	
EAX	АН	AL AX Accumulat	or
EBX	ВН	BL BX Base	
ECX	СН	CL CX Counter	
EDX	DH	DL DX Data	

Ax input/output and most arithmetic instructions

Bx indexed addressing

Cx loop count in iterative operations

Dx multiply and divide operations involving large value It is also used with AX register



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8 bit (AH, AL, BH, BL, CH, CL, DH, and DL.)
16 bit (AX, BX, CX and DX. )
32bit (EAX, EBX, ECX, EDX.)
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Pointer registers

1. Instruction Pointer (IP) ; next instruction to be executed.

2. Stack Pointer (SP) ; current position of data or address

3. Base Pointer (BP) ; referencing the parameter variables

passed to a subroutine

	Pointer registers	
31	16 15	0
ESP	SP	Stack Pointer
EBP	ВР	Base Pointer

Index registers

- 1. Source Index (SI) source index for string operations
- 2. Destination Index (DI) destination index for string operations.

Index registers

31	16 15	0
ESI	SI	Source Index
EDI	DI	Destination Index

- 1. Pointer registers
- 3. Index registers