

Control Registers

Overflow Flag (OF)
Direction Flag (DF)
Interrupt Flag (IF)
Trap Flag (TF)
Sign Flag (SF)
Zero Flag (ZF)
Auxiliary Carry Flag (AF)
Parity Flag (PF)
Carry Flag (CF)

Segment Registers

Code Segment all the instructions to be executed. CS register stores the starting address of the code segment

Data Segment: contains data, constants and work areas. DS register stores the starting address of the data segment.

Stack Segment: data and return addresses of procedures. It is implemented as a 'stack' data structure. The Stack Segment register or SS register stores the starting address of the stack.

Extra Segment is an extra segment register, that was not by default tied to any specific register

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[https://www.youtube.com/watch?v=6hkKb4hOZmQ&list=P
LiceGnDCE4XZdGymw66QH3o1tp2JbXLGA](https://www.youtube.com/watch?v=6hkKb4hOZmQ&list=P
LiceGnDCE4XZdGymw66QH3o1tp2JbXLGA)

Segment Registers

| | | |
|---------------|----|--|
| Code Segment | CS | |
| Data Segment | DS | |
| Stack Segment | SS | |
| Extra Segment | ES | |

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General Purpose Registers

| | | | | | |
|-------------|----|----|---|--|---------------------------------|
| Accumulator | AX | 15 | 0 | | Multiply, divide, I/O |
| Base | BX | | | | Pointer to base addresss (data) |
| Count | CX | | | | Count for loops, shifts |
| Data | DX | | | | Multiply, divide, I/O |

Pointer and Index Registers

| | | | | | |
|-------------------|----|----|---|--|----------------------------------|
| Stack Pointer | SP | 15 | 0 | | Pointer to top of stack |
| Base Pointer | BP | | | | Pointer to base address (stack) |
| Source Index | SI | | | | Source string/index pointer |
| Destination Index | DI | | | | Destination string/index pointer |
| | | 15 | 0 | | |

Segment Registers

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