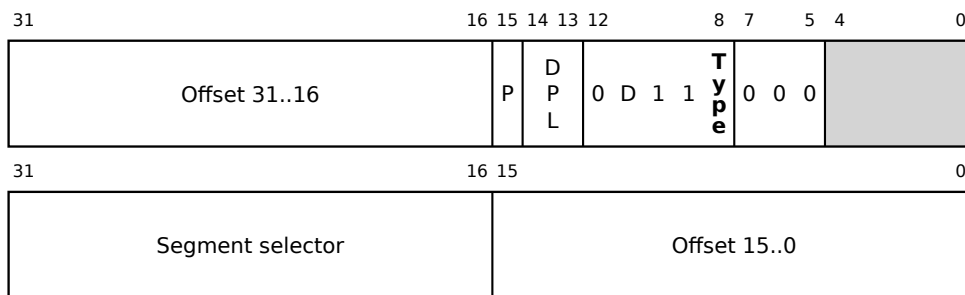


### Interrupt/trap gate



Type 0=Interrupt gate  
1=Trap gate

P Present

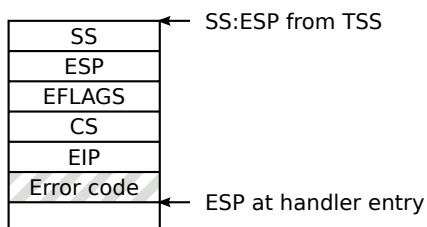
DPL Descriptor privilege level  
(CPL required to invoke gate)

Selector Destination CS

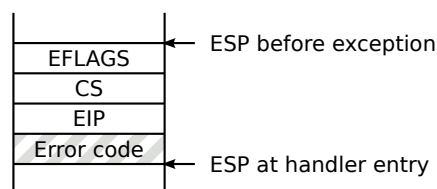
Offset Destination IP or EIP

D Size of gate (0=16-bits, 1=32-bits)

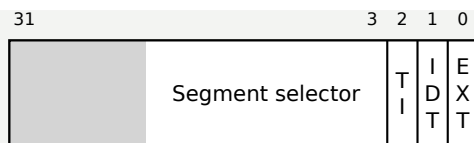
#### Exception stack (with privilege change)



#### Exception stack (without privilege change)



| Vector | Description              | Type      | Error code | Exception types  |
|--------|--------------------------|-----------|------------|--|
| 0      | Divide error             | Fault     | No         | Fault Faulting instruction not executed<br>CS:EIP is the faulting instruction                                    |
| 1      | Reserved                 |           |            |  |
| 2      | Non-maskable interrupt   | Interrupt | No         | Trap Trapping instruction executed<br>CS:EIP is the next instruction   |
| 3      | Breakpoint               | Trap      | No         |  |
| 4      | Overflow                 | Trap      | No         | Abort Location is imprecise; cannot<br>safely resume execution   |
| 5      | BOUND range exceeded     | Fault     | No         |  |
| 6      | Invalid/undefined opcode | Fault     | No         |  |
| 7      | No math coprocessor      | Fault     | No         |  |
| 8      | Double fault             | Abort     | Zero       |  |
| 9      | Reserved                 |           |            |  |
| 10     | Invalid TSS              | Fault     | Yes        |  |
| 11     | Segment not present      | Fault     | Yes        | TI 0=GDT, 1=LDT  |
| 12     | Stack-segment fault      | Fault     | Yes        | IDT 0=GDT/LDT, 1=IDT   |
| 13     | General protection       | Fault     | Yes        | EXT External event   |
| 14     | Page fault               | Fault     | Yes        |  |
| 15     | Reserved                 |           | No         |  |
| 16     | x87 FPU error            | Fault     | No         |  |
| 17     | Alignment check          | Fault     | Zero       |  |
| 18     | Machine check            | Abort     | No         |  |
| 19     | SIMD FP exception        | Fault     | No         |  |
| 20-31  | Reserved                 |           |            |  |
| 32-255 | User defined interrupts  | Interrupt | No         | P 0=Non-present page<br>1=Protection-violation<br>W/R Cause (0=Read, 1=Write)<br>U/S Mode (0=Supervisor, 1=User) |



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