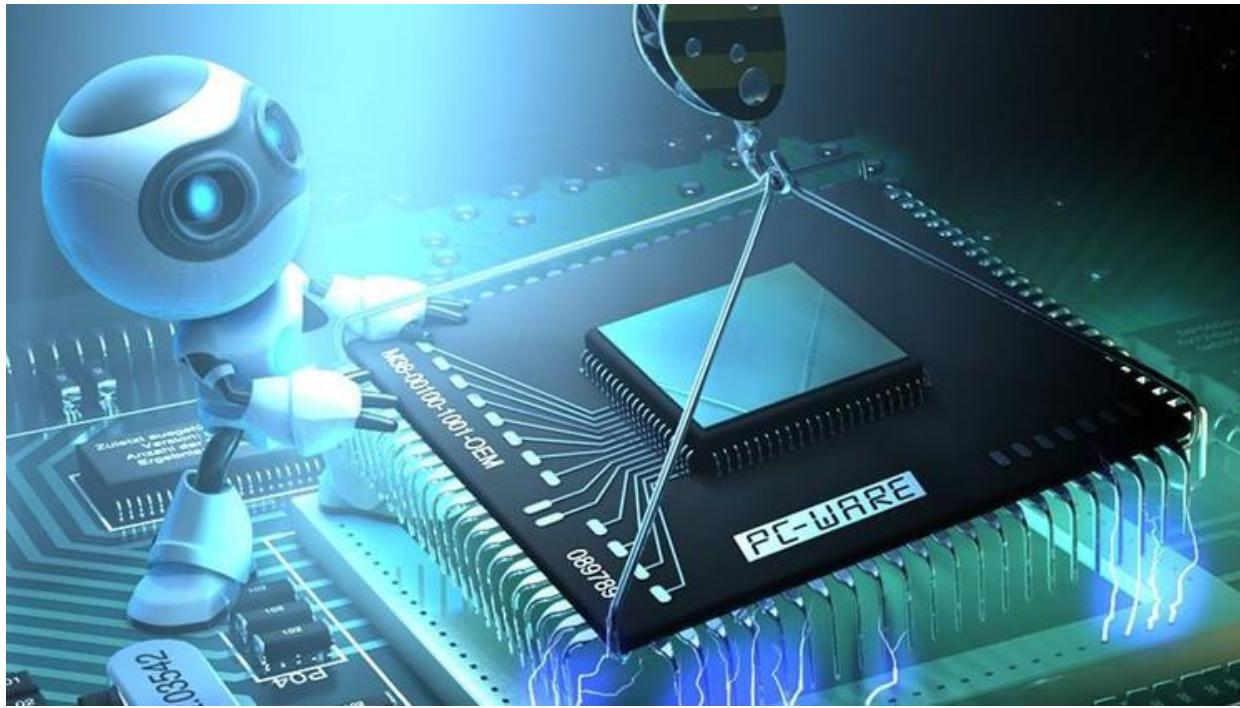


# Data Range





# Basic Data Types

## Natural Range

- **byte**:  $0 \leq x \leq 255$
- **word**:  $0 \leq x \leq 65.535$
- **longword**:  $0 \leq x \leq 4.294.967.215$

## Integer Range

- **byte**:  $-128 \leq x \leq 127$
- **word**:  $-32.768 \leq x \leq 32.767$
- **longword**:  $-2.147.483.648 \leq x \leq 2.147.483.647$

## Real Range (IEEE 754)

- **Simple precision** (32 bits, 24 precisión<sup>\*</sup>):  $1,18 \cdot 10^{-38} \leq x \leq 3,40 \cdot 10^{38}$
- **Double precision** (64 bits, 53 precisión<sup>\*</sup>):  $2,23 \cdot 10^{-308} \leq x \leq 1,79 \cdot 10^{308}$
- **Extended double precision** (80 bits, 64 precisión<sup>\*</sup>):  $3,37 \cdot 10^{-4932} \leq x \leq 1,18 \cdot 10^{4932}$