

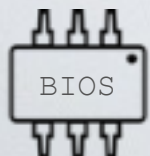
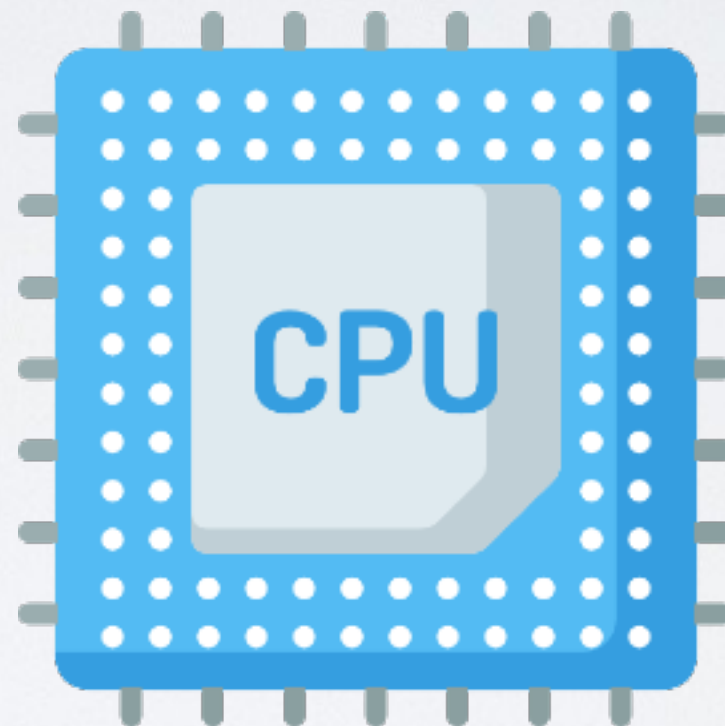
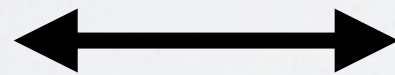
0x FF FF FF FF



I/O



RAM



Boot

0x 00 00 00 00

# Simple Computer Architecture

## Memory + CPU

for a more accurate and detailed map of the x86 memory  
look at [https://wiki.osdev.org/Memory\\_Map\\_\(x86\)](https://wiki.osdev.org/Memory_Map_(x86))

# Each processor has its Instruction Set Architecture (ISA)

Processor executes instructions stored in memory

- ➡ Each instruction is a bit string that the processor understands as an operation
  - arithmetic
  - read/write bit strings
  - bit logic
  - jumps
- ✓ ~2000 instructions on modern x86-64 processors