

How does a computer work?

Introduction to computer hardware

When programming a computer, it helps to have a basic understanding of the underlying hardware. Where do variables get stored? Where are functions or loops executed?





Joy
of
coding

Disk Drives

Power Supply

RAM

CPU

Motherboard

Video Card

Sound Card

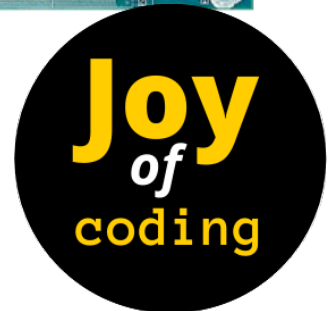
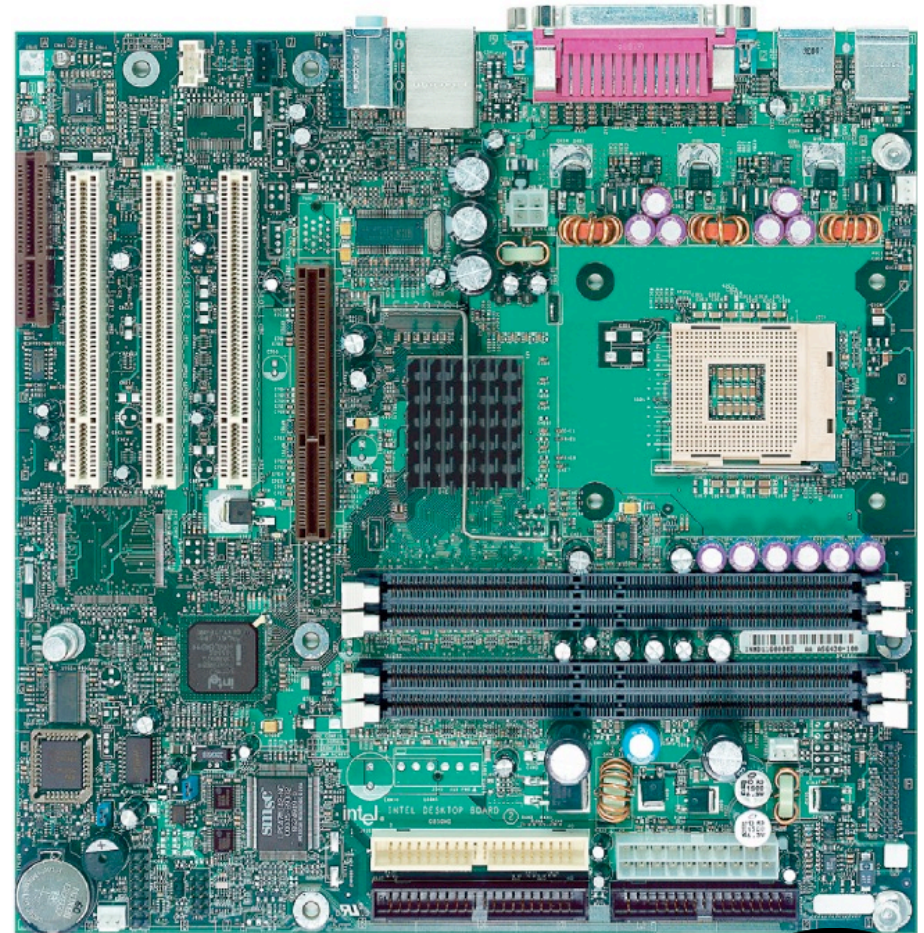
Hard Drive

Joy
of
coding



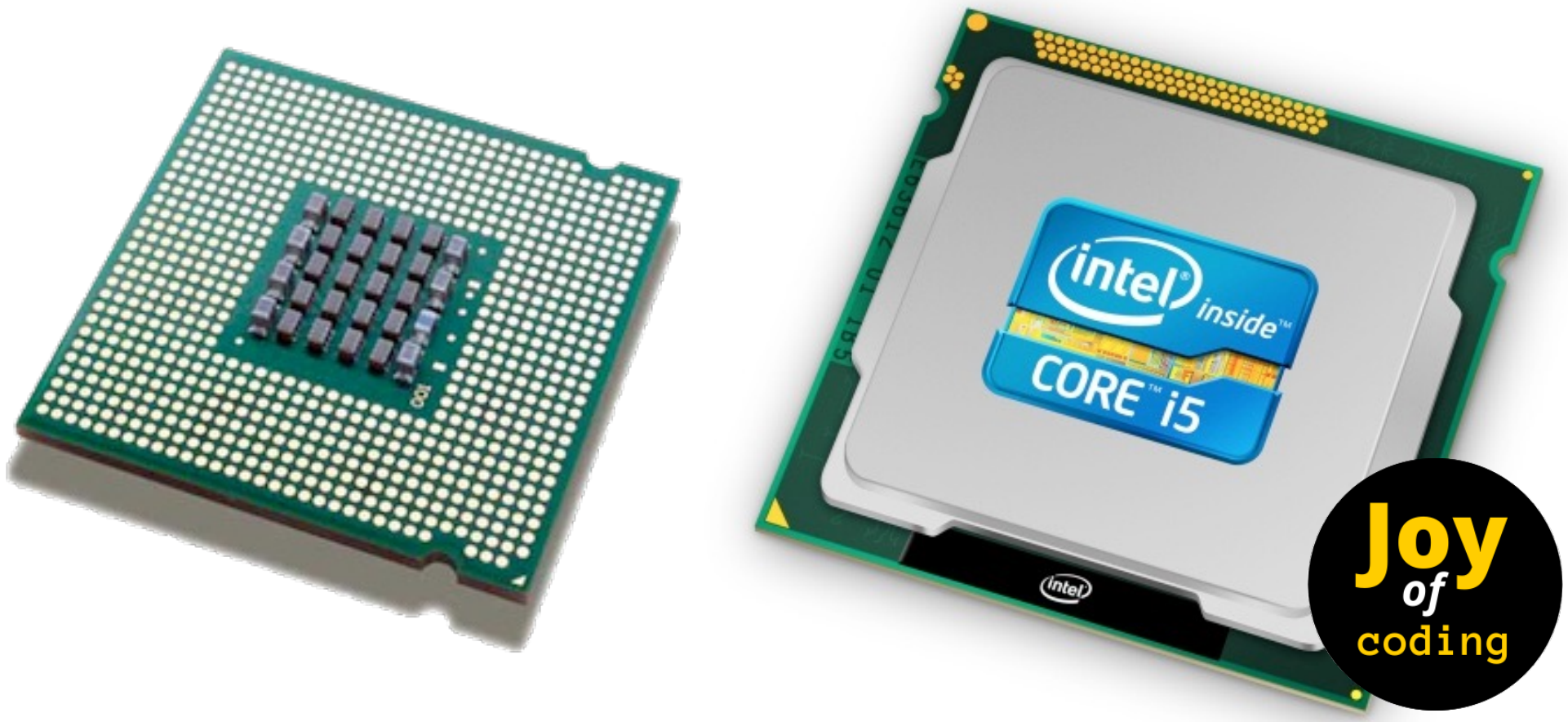
Motherboard

- Houses the computer components
- Connects them via a bus:



Processor (aka CPU)

- Executes program instructions
- e.g., performs arithmetic, runs loops



Memory

- Stores data & program instructions while programs execute
- E.g., stores variables and lists
- Volatile: contents lost when computer turned off



Hard drive

- Non-volatile: contents persist (saved) even when computer turned off
- Stores data and programs when not running



Programming & Hardware

