

Assembler programming for a minimalist computer

What are you going to learn ?

- What are the minimal components of a computer ?
- What is the memory exactly?
- What is the memory address space?
- What does little endian mean ?
- What is a device and how to communicate with ?
- What is the main feature of the MIPS core ?
- How to write a program for the MIPS core?
- How to program the MIPS32 with assembler language?

Plan

- Von Newmann's architecture
- Role of processor
- Role of memory
- Role of in-out controller
- Actual computer's architecture
- Address space definition
- External processor architecture
- Assembly language
- Type of instruction
- Endianness

Von Newmann's architecture