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How to Use Jade

Help

In this module we will discuss the Instruction Set Architecture, or ISA. The ISA is the language that a processor actually understands. It determines the operations, registers, and memory organization of the processor. After learning about these components of an ISA, we will delve into the details of the LC-3's ISA, learning how to design hardware that executes LC-3 operate and memory instructions.

By the end of this module, you will be able to:

- Explain the major components of an ISA: the instructions, registers, and memory organization.

- Implement the hardware to support LC-3 operate and memory instructions.

- Describe and compare the three addressing modes for LC-3 memory instructions.

INTRODUCING THE INSTRUCTIONAL SET ARCHITECTURE

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