

Digital Logic and Computer Architecture

Igor Dimitrov

2024-05-17

Table of contents

Preface	3
1 Reading List	4
1.1 Intro	4
1.2 Digital Logic	4
1.3 Computer Architecture & Organization	4
1.4 Computer Systems, Higher-level Perspective	4
1.5 FSMs	5
1.6 HDLs	5
1.6.1 VHDL	5
1.7 Assembly	5

Preface

This is a Quarto book.

To learn more about Quarto books visit <https://quarto.org/docs/books>.

1 Reading List

1.1 Intro

- Inside the Machine - An Illustrated Introduction to Microprocessors and Computer Architecture. Stokes
- How Computers Really Work - A Hands-on Guide to the Inner Workings of the Machine. Justice

1.2 Digital Logic

- Digital Design - Principles and Practices. Wakerly
- Digital Logic & Microprocessor Design with Interfacing (2nd ed). Enoch O Hwang
- Digital Design and Computer Architecture - Risc-V Edition. Harris, Harris
- Digital Electronics 1 - Combinational Logic Circuits. Tertulien Ndjountche
- Digital Electronics 2 - Sequential and Arithmetic Logic Circuits. Tertulien Ndjountche
- Digital Circuit Design for Computer Science Students - an Introductory Textbook. Wirth

1.3 Computer Architecture & Organization

- Principles of Computer Hardware. Clements
- Computer Organization and Architecture - Themes and Variations. Clements
- Computer Organization and Architecture. Null, Lobur
- Principles of Computer Organization and Assembly Language Using the Java Virtual Machine. Juola

1.4 Computer Systems, Higher-level Perspective

- Computer Systems - A Programmer's Perspective. Bryan, O'Hallaron
- Dive into Systems - a Gentle Introduction to Computer Systems. Matthews, Newhall, Webb

1.5 FSMs

- Finite State Machines in Hardware. Pedroni
- Digital Electronics 3 - Finite-state Machines. Ndjountche
- Switching and Finite Automate Theory. Kohavi

1.6 HDLs

1.6.1 VHDL

- Circuit Design and Simulation with VHDL (2nd ed). Pedroni

1.7 Assembly

- Assembly Language for x86 Processors. Irvine