

In Praise of *Digital Design and Computer Architecture*

RISC-V Edition

Harris and Harris have shown how to design a RISC-V processor from the gates all the way up through the microarchitecture. Their clear explanations combined with their comprehensive approach give a full picture of both digital design and the RISC-V architecture. With the exciting opportunity that students have to run large digital designs on modern FPGAs, this approach is both informative and enlightening.

David A. Patterson University of California, Berkeley

What broad fields Harris and Harris have distilled into one book! As semiconductor manufacturing matures, the importance of digital design and computer architecture will only increase. Readers will find an approachable and comprehensive treatment of both topics and will walk away with a clear understanding of the RISC-V instruction set architecture.

Andrew Waterman SiFive

There are excellent texts for teaching digital design and there are excellent texts for teaching computer hardware organization - and this textbook does both! It is also unique in its ability to connect the dots. The writing makes the RISC-V architecture understandable by building on the basics, and I have found the exercises to be a great resource across multiple courses.

Roy Kravitz Portland State University

When I first read Harris and Harris's MIPS textbook back in 2008, I thought that it was one of the best books I had ever read for teaching computer architecture. I started using it in my courses immediately. Thirteen years later, I have had the honor of reviewing this new RISC-V edition, and my opinion of their books has not changed: *Digital Design and Computer Architecture: RISC-V Edition* is an excellent book, very clear, thorough, with a high educational value, and in line with the courses that we teach in the areas of digital design and computer architecture. I look forward to using this RISC-V textbook in my courses.

Daniel Chaver Martinez University Complutense of Madrid

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Morgan Kaufmann is an imprint of Elsevier

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