1. Record Nr. UNINA9910760278603321 Autore LaMeres Brock J Titolo Quick Start Guide to Verilog / / by Brock J. LaMeres Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2024 9783031441042 **ISBN** [2nd ed. 2024.] Edizione Descrizione fisica 1 online resource (244 pages) Disciplina 621.3815 Soggetti Electronic circuits Microprocessors Computer architecture Logic design **Electronic Circuits and Systems Processor Architectures** Logic Design Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia The Modern Digital Design Flow -- Verilog Constructs -- Modeling Nota di contenuto Concurrent Functionality in Verilog -- Structural Design and Hierarchy -- Modeling Sequential Functionality -- Test Benches -- Modeling Sequential Storage and Registers -- Modeling Finite State Machines --Modeling Counters -- Modeling Memory -- Computer System Design. Sommario/riassunto This textbook provides a starter's guide to Verilog, to be used in conjunction with a one-semester course in Digital Systems Design, or on its own for readers who only need an introduction to the language. This book is designed to match the way the material is actually taught in the classroom. Topics are presented in a manner which builds foundational knowledge before moving onto advanced topics. The author has designed the presentation with learning goals and assessment at its core. Each section addresses a specific learning outcome that the student should be able to "do" after its completion.

The concept checks and exercise problems provide a rich set of assessment tools to measure student performance on each outcome. Written the way the material is taught, enabling a bottom-up approach

to learning which culminates with a high-level of learning, with a solid foundation; Emphasizes examples from which students can learn: contains a solved example for nearly every section in the book; Includes more than 200 exercise problems, as well as concept check questions for each section, tied directly to specific learning outcomes.