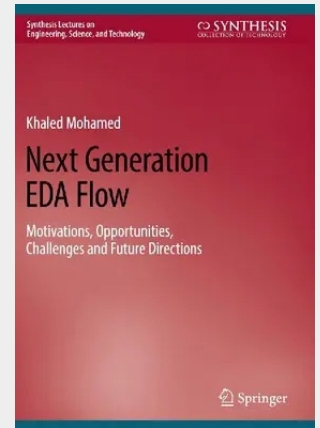


Next Generation EDA Flow

Motivations, Opportunities, Challenges and Future Directions

This book serves as a comprehensive guide to the world of EDA tools, offering readers a deeper understanding of their inner workings and a glimpse into the future of electronic design. With a meticulous focus on numerical methods, the author delves deeply into the mathematical foundations that underpin EDA tools. From finite element analysis to Monte Carlo simulations, readers will gain a thorough understanding of the numerical techniques employed to model and simulate complex electronic systems. Furthermore, this book elucidates the diverse modeling methods utilized in EDA tools, providing readers with a holistic view of the methods employed to represent and analyze electronic circuits and systems. Whether exploring circuit-level simulations or system-level modeling, readers will be equipped with the knowledge needed to navigate the intricacies of EDA toolsets. The author also delves into the fascinating intersection of quantum mechanics and electronic design, examining the evolving landscape of quantum EDA tools and offering insights into the transformative potential of quantum computing in electronic design. Lastly, this book explores the transformative impact of machine learning on EDA tools, offering insights into how artificial intelligence techniques can enhance performance and productivity.

This book serves as a comprehensive guide to the world of EDA tools, offering readers a deeper understanding of their inner workings and a glimpse into the future of electronic design. With a meticulous focus on numerical methods, the author delves deeply into the mathematical foundations that underpin EDA tools. From finite element analysis to Monte Carlo simulations, readers will gain a thorough understanding of the numerical techniques employed to model and simulate complex electronic systems. Furthermore, this book elucidates the diverse modeling methods utilized in EDA tools, providing readers with a holistic view of the methods employed to represent and analyze electronic circuits and systems. Whether exploring circuit-level simulations or system-level modeling, readers will be equipped with the knowledge needed to navigate the intricacies of EDA toolsets. The author also delves into the fascinating intersection of quantum mechanics and electronic design, examining the evolving landscape of quantum EDA tools and offering insights into the transformative potential of quantum computing in electronic design. Lastly, this book explores the transformative impact of machine learning on EDA tools, offering insights into how artificial intelligence techniques can enhance performance and productivity.



53,49 €
49,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783031884375
Medium: Buch
ISBN: 978-3-031-88437-5
Verlag: Palgrave Macmillan
Erscheinungstermin: 13.04.2026
Sprache(n): Englisch
Auflage: Erscheinungsjahr 2026
Serie: Synthesis Lectures on Engineering, Science, and Technology
Produktform: Kartoniert
Gewicht: 287 g
Seiten: 149
Format (B x H): 168 x 240 mm

