Table of Contents

Part I: Semiconductor Devices and Basic Applications

Chapter 1: Semiconductor Materials and Diodes

Chapter 2: Diode Circuits

Chapter 3: The Field-Effect Transistor

Chapter 4: Basic FET Amplifiers

Chapter 5: The Bipolar Junction Transistor

Chapter 6: Basic BJT Amplifiers

Chapter 7: Frequency Response

Chapter 8: Output Stages and Power Amplifiers

Part II: Analog Electronics

Chapter 9: Ideal Operational Amplifiers and Op-Amp Circuits

Chapter 10: Integrated Circuit Biasing and Active Loads

Chapter 11: Differential and Multistage Amplifiers

Chapter 12: Feedback and Stability

Chapter 13: Operational Amplifier Circuits

Chapter 14: Nonideal Effects in Operational Amplifier Circuits

Chapter 15: Applications and Design of Integrated Circuits

Part III: Digital Electronics

Chapter 16: MOSFET Digital Circuits

Chapter 17: Bipolar Digital Circuits