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Autore	Baker Bonnie
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References

Chapter 4: Do I Filter Now, Later or Never?Key Low-Pass Analog Filter Design Parameters; Anti-Aliasing Filter Theory; Analog Filter Realization; How to Pick Your Operational Amplifier; Anti-Aliasing Filters for Near DC Analog Signals; Multiplexed Systems; Continuous Analog Signals; Matching the Anti-Aliasing Filter to the System; Chapter 4 References; Chapter 5: Finding the Perfect Op Amp for Your Perfect Circuit; Choose the Technology Wisely; Fundamental Operational Amplifier Circuits; Using these Fundamentals; Amplifier Design Pitfalls; Chapter 5 References

Chapter 6: Putting the Amp Into a Linear SystemThe Basics of Amplifier DC Operation; Every Amplifier is Waiting to Oscillate, and Every Oscillator is Waiting to Amplify; Determining System Stability; Time Domain Performance; Go Forth; Chapter 6 References; Chapter 7: SPICE of Life; The Old Pencil and Paper Design Process; Is Your Simulation Fundamentally Valid?; Macromodels: What Can They Do?; Concluding Remarks; Chapter 7 References; Chapter 8: Working the Analog Problem From the Digital Domain; Pulse Width Modulators (PWM) Used as a Digital-to-Analog Converter

Using the Comparator for Analog ConversionsWindow Comparator; Combining the Comparator with a Timer; Using the Timer and Comparator to Build a Sigma-Delta A/D Converter; Conclusion; Chapter 8 References; Chapter 9: Systems Where Analog and Digital Work Together; Selecting the Right Battery Chemistry for Your Application; Taking the Battery Voltage to a Useful System Voltage; Defining Power Supply Efficiency; Comparing The Three Power Devices; What is the Best Solution for Battery-Operated Systems?; Designing Low-Power Microcontroller Systems is a State of Mind; Conclusion

Chapter 9 References

Sommario/riassunto

This book has been written to help digital engineers who need a few basic analog tools in their toolbox. For practicing digital engineers, students, educators and hands-on managers who are looking for the analog foundation they need to handle their daily engineering problems, this will serve as a valuable reference to the nuts-and-bolts of system analog design in a digital world. This book is a hands-on designer's guide to the most important topics in analog electronics-such as Analog-to-Digital and Digital-to-Analog conversion, operational amplifiers, filters, and integrating analog