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Analog circuit design isn’t black magic or a mystical art . . .

. . . instead, it’s an essential part of most electronic devices and systems. No matter how “digital” most devices are, at some point they have to interface with the real world. That job requires analog circuitry.

But analog circuit techniques are radically different from digital ones. Analog circuits process voltages, currents, and frequencies which can (and do) assume a continuous range of values. Factors such as capacitance and inductance are vital to the proper functioning of analog circuits. The analog design process is also more intuitive and experimental than that for digital.

Coping with such differences is a lot easier if you have an experienced “analog wizard” to guide you through the design process. Jim Williams is such a wizard, and in this book he’s gathered together 23 other masters of the analog art to share their experience, knowledge, insights, and often wit. The result is a comprehensive and useful guide to analog theory and applications.

Analog Circuit Design: Art, Science, and Personalities is far more than just another tutorial or reference guide—it’s a tour through the world of analog design, combining theory and applications with the philosophies behind the design process. You’ll read how leading analog circuit designers approach problems and their thought processes as they develop solutions to those problems. You’ll also learn about the “analog way”—a broad, flexible method of thinking about analog design tasks.

Here’s a few of the topics you’ll find in this book:

- visualizing the operation of analog circuits
- how to rapidly determine workable approximations of analog circuit parameters
- understanding the benefits and limitations of computer-aided analog circuit design using SPICE and other software
- mastering the use of feedback

Each of the 24 contributors has brought his own unique perspectives and style to this book. You’ll find a wealth of practical working circuits and anecdotes from each author’s experience—if you work with analog circuits or want to gain new insights into them, this is one book you must have.

Cover photo: Jim Williams’s bench at Linear Technology Corp. Photo by Bob Martin.