- Semiconductor theory (transistors, op-amps, etc.)—*Microelectronic Circuits,* Adel S. Sedra and Kenneth C. Smith, Saunders College Publishing.

The publications provided by manufacturers about their own parts and the technologies that they incorporate are, collectively, a treasure trove of information that is highly valued by this author. Semiconductor manufacturers have always published literature that describes the specifications of their devices in addition to application notes on recommended usage scenarios. The Internet has increased the accessibility of these publications to the point at which numerous manufacturers' web sites can be scoured in a short while to get information on a specific topic. Much can be learned by reading data sheets, even when all of the topics covered are not already understood. Application notes are highly beneficial, because they contain detailed descriptions of how a chip is actually used. The context and advice provided by application notes can fill in the questions that arise from reading a data sheet. While nearly all component manufacturers have web sites with useful information, the following companies stand out in the author's view because of the quality and comprehensive collection of technical information that is freely available to all visitors:

- Altera—FPGAs and CPLDs (www.altera.com)
- AVX Corporation—passive components (www.avxcorp.com)
- Fairchild Semiconductor—discrete semiconductors, logic, analog, and mixed-signal ICs (www.fairchildsemi.com)
- Linear Technology—analog and mixed-signal ICs (www.linear.com)
- Maxim Integrated Circuits—analog and mixed-signal ICs (www.maxim-ic.com)
- Micron Technologies—memory (www.micron.com)
- Microchip Technology—microcontrollers and nonvolatile memory (www.microchip.com)
- National Semiconductor—analog and mixed-signal ICs (www.national.com)
- Texas Instruments—discrete semiconductors, logic, analog, and mixed-signal ICs (www.ti.com)
- Xilinx—FPGAs and CPLDs (www.xilinx.com)

Many useful third-party web sites are maintained by generous and experienced members of the world's technical community. Almost every engineering topic imaginable can be found with a quick web search. While these sites can be very helpful, the information found should be correlated with other sources whenever possible. There is both good and bad information available on the web, and some sites do contain erroneous data that can cause much grief.

Numerous technical conferences exist in both broad and specialized areas of electrical engineering. Notices for these conferences can be found in trade publication advertisements.

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