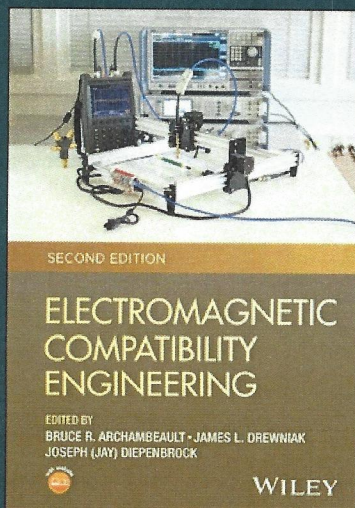




# Electromagnetic Compatibility Engineering, 2nd Edition

New research and applications in electromagnetic compatibility and noise reduction. Design equipment that performs reliably in the real world, and meets the regulations that govern it.

By: Bruce R. Archambeault,  
James L. Drewniak, and  
Joseph (Jay) Diepenbrock

ISBN: 978-1-394-19826-9

Pub Date: October 2026

Price: \$120.95

Save 20% today with  
discount code: ECE20.  
Only valid at the  
checkout on Wiley.com  
Offer valid through  
November 30<sup>th</sup> 2026



Scan for more  
information

**WILEY**

## Practical EMC solutions for today's high-speed designs

This edition reflects the most recent developments in EMC and noise reduction, with practical applications across computer, home entertainment, medical, telecom, industrial process control, and automotive equipment, as well as military and aerospace systems. You'll get a clear look at full-wave simulation techniques, including what they can and can't do, alongside an in-depth examination of high-speed differential signals and the common-mode noise they create. Core topics you already rely on, including cabling, grounding, filtering, shielding, digital circuit layout, and ESD, are fully updated for today's increased data rates and signal integrity demands.

### New to this edition

- Full-wave simulation techniques, including the finite element method and the partial element equivalent circuit technique, with a clear look at their strengths and limitations
- Common-mode noise from high-speed differential signals, including how in-pair skew, amplitude mismatch, and rise-fall time mismatch create it
- Practical methods for mitigating common-mode noise through electromagnetic band gap structures and transmission line grading
- The distinction between slew rate and signal rise time, and why it matters for real and test signals
- How to calculate the inductance associated with connecting decoupling capacitors