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## **Circuit Design Considerations for Implantable Devices**

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### **Description:**

Implantable devices are a unique area for circuit designers. A comprehensive understanding of design trade-offs at the system level is important to ensure device success. *Circuit Design Considerations for Implantable Devices* provides knowledge to CMOS circuit designers with limited biomedical background to understand design challenges and trade-offs for implantable devices, especially neural interfacing.

Technical topics discussed in the book include:

- Neural interface
- Neural sensing amplifiers
- Electrical stimulation
- Embedded Signal Analysis
- Wireless Power Transmission to mm-Sized Free-Floating Distributed Implants
- Next Generation Neural Interface Electronics

**Keywords:** Implantable medical device, neural interface, interface circuit design, electrical stimulation, neuromodulation, brain machine interface