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3.3.2 Physical description of contact resistances and overlap capacitances
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4.2.1.3 Parameter estimation; 4.2.1.4 Parameter correlations; 4.2.2 Results using transistor measurements; 4.2.2.1 Uncertainty contributions; 4.2.2.2 Intrinsic model parameter sensitivities; 4.2.2.3 Intrinsic model parameter uncertainties; 4.2.2.4 Multibias extraction results; 4.3 Optimizer-based estimation techniques; 4.3.1 Maximum likelihood estimation; 4.3.1.1 Simple example; 4.3.1.2 MLE uncertainty; 4.3.2 MLE of small-signal transistor model parameters; 4.3.2.1 Parasitic parameter estimation; 4.3.2.2 Application to parasitic FET model extraction
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5 The large-signal model: theoretical foundations, practical considerations, and recent trends

Sommario/riassunto

Achieve accurate and reliable parameter extraction using this complete survey of state-of-the-art techniques and methods. A team of experts from industry and academia provides you with insights into a range of key topics, including parasitics, intrinsic extraction, statistics, extraction uncertainty, nonlinear and DC parameters, self-heating and traps, noise, and package effects. Learn how similar approaches to parameter extraction can be applied to different technologies. A variety of real-world industrial examples and measurement results show you how the theories and methods presented can be used in practice. Whether you use transistor models for evaluation of device processing and you need to understand the methods behind the models you use, or you want to develop models for existing and new device types, this is your complete guide to parameter extraction.
