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Solution; 4.5 Spectral Analysis: Correlation
5 Informational Analysis: EDOE Matrices5.1 Walsh-Hadamard Matrices and Latin Square Designs; 5.2 Classification Procedures: Informational Criteria; 5.3 Informational Entropy and Distances; 5.4 Adaptability in Classification; 5.5 Informational Results; 5.5.1 Proposition 1; 5.5.2 Proposition 2; 5.5.3 Proposition 3; 5.6 Relation with Thermodynamics; 5.7 Ranking, Discarding, and Replication of the Columns; 5.8 Lumping and Splitting Columns; 5.9 Juxtaposing and Cutting; 5.10 Tables of DOE Matrices; 6 EDOE Methodology; 6.1 Scientific and Engineering Methods; 6.2 Center Design and Hierarchy
6.3 Recursivity and Focusing6.4 Problem-Solving Framework for PCB Quality; 6.5 Forward and Backward Search; 6.6 Interactions: Dissociation-Integration; 6.7 EDOE Basic Steps; 6.7.1 Problem Statement; 6.7.2 Propose the Preliminary Problem-Solving Framework; 6.7.3 Select the DOE Matrices; 6.7.4 Run Center Design; 6.7.5 Analyze Results; 6.7.6 Run Multiple Forward and Backward Steps; 6.7.7 Perform Dissociation-Integration Experiments; 6.7.8 Establish the New Center Design; 6.7.9 Repeat the Testing Procedure from the New Center Design; 6.7.10 Run Simulations: Analyze the Solutions of the Problem
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Sommario/riassunto

Adopting a groundbreaking approach, the highly regarded author shows how to design methods for planning increasingly complex experiments. He begins with a brief introduction to standard quality methods and the technology in standard electric circuits. The book then gives numerous examples of how to apply the proposed methodology in a series of real-life case studies. Although these case studies are taken from the printed circuit board industry, the methods are equally applicable to other fields of engineering.