1. Record Nr. UNINA9910146108203321

Autore	Iordache Octavian
Titolo	Evolvable designs of experiments [[electronic resource]] : applications for circuits / / Octavian Iordache
Pubbl/distr/stampa	Weinheim, : Wiley-VCH, c2009
ISBN	1-282-02196-6 9786612021961 3-527-62402-3 3-527-62403-1
Descrizione fisica	1 online resource (232 p.)
Disciplina	621.3192
Soggetti	Chemical engineering - Mathematical models Experimental design Printed circuits - Design and construction Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 205-210) and index.
Nota di contenuto	Evolvable Designs of Experiments: Applications for Circuits; Contents; Preface; Abbreviations; Part One Introduction; 1 Printed Circuits; 1.1 Technology Presentation; 1.2 Inner-Layer Processing; 1.3 Materials Preparation; 1.4 Lamination; 1.5 Drilling; 1.6 Making the Hole Conductive; 1.7 Imaging; 1.8 Electroplating; 1.9 Copper Etching; 1.10 Solder Masking; 1.11 Surface Finishing; 1.12 Routing; 1.13 Testing and Inspection; 1.14 Assembling; 2 Problem Solving for Reliability and Quality; 2.1 Conventional Paradigms; 2.2 Complexity and Time Frames; 2.3 Quasilinearity, Circularity, and Closure 2.4 Advance of Reliability ParadigmsPart Two Evolvable Designs of Experiments (EDOE); 3 Polystochastic Models; 3.1 What Is PSM?; 3.2 Basic Notions for Categorical Frame; 3.3 Illustrative Examples of PSM and Categorical Frames; 3.3.1 Lumped Stochastic Chains; 3.3.2 Conditional Stochastic Chains; 4 First-Order Wave Equation; 4.1 Algebraic Frames for Time"T"and Space"Z"; 4.2 The First-Order Wave Equation; 4.3 "Kinetic"Model: Walsh-Hadamard Matrices; 4.4 "Convection"Model: Latin Squares; 4.4.1 GF(3) Solution; 4.4.2 GF(4)

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
6.8 EDOE Frame and SKUP Schema6.9 Comparison of EDOE with other Methods; Part Three Case Studies; 7 Solder Wicking; 7.1 Illustrative Failure Analysis; 7.2 Illustrative EDOE Frame; 7.3 SKUP Schema for Solder Wicking; 8 Reliability Analysis; 8.1 EDOE for Reliability; 8.2 SKUP Schema for Reliability; 8.3 Reliability Management System: Main Elements; 8.4 Reliability Prediction Software; 8.5 Minicoupons; 8.6 Reliability Analysis; 8.7 IST Electrical Resistance Analysis; 9 Drilling; 9.1 Drilling Quality Framework; 9.2 Test Coupons; 9.3 Testing Small Plated Through Holes: SKUP Schema for Drilling
9.4 Reliability Tests

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.

2. Record Nr. UNINA9910787939203321

Autore	Rautman Alison E.
Titolo	Constructing community : the archaeology of early villages in central New Mexico / / Alison E. Rautman
Pubbl/distr/stampa	Tuczon, Arizona : , : University of Arizona Press, , 2014 ©2014
ISBN	0-8165-9865-7
Descrizione fisica	1 online resource (304 p.)
Classificazione	SOC003000
Disciplina	978.9/01
Soggetti	Community life - New Mexico - Salinas Pueblo Missions National Monument Region - History Social archaeology - New Mexico - Salinas Pueblo Missions National Monument Region Pueblo Indians - New Mexico - Salinas Pueblo Missions National Monument Region - Antiquities Pueblo Indians - Dwellings - New Mexico - Salinas Pueblo Missions National Monument Region - History Pueblo Indians - New Mexico - Salinas Pueblo Missions National Monument Region - Social life and customs Farmers - New Mexico - Salinas Pueblo Missions National Monument Region - History Excavations (Archaeology) - New Mexico - Salinas Pueblo Missions National Monument Region Villages - New Mexico - Salinas Pueblo Missions National Monument Region - History Architecture, Domestic - New Mexico - Salinas Pueblo Missions National Monument Regio - History Salinas Pueblo Missions National Monument Region (N.M.) Antiquities
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Interpreting Archaeological Village Sites -- Village and Community -- Pithouse Period -- Jacal Period -- Early Pueblo Period -- The Glaze A Pueblos -- Pueblo Communities and Regional Interaction -- Constructing Community in Early Salinas Villages.
Sommario/riassunto	"In central New Mexico, tourists admire the majestic ruins of old

Spanish churches and historic pueblos at Abo, Quarai, and Gran Quivira in Salinas Pueblo Missions National Monument. The less-imposing remains of the earliest Indian farming settlements, however, have not attracted nearly as much notice from visitors or from professional archaeologists. In Constructing Community, Alison E. Rautman synthesizes over twenty years of research about this little-known period of early sedentary villages in the Salinas region. Rautman tackles a very broad topic: how archaeologists use material evidence to infer and imagine how people lived in the past, how they coped with everyday decisions and tensions, and how they created a sense of themselves and their place in the world. Using several different lines of evidence, she reconstructs what life was like for the ancestral Pueblo Indian people of Salinas, and identifies some of the specific strategies that they used to develop and sustain their villages over time. Examining evidence of each site's construction and developing spatial layout, Rautman traces changes in community organization across the architectural transitions from pithouses to jacal structures to unit pueblos, and finally to plaza-oriented pueblos. She finds that, in contrast to some other areas of the American Southwest, early villagers in Salinas repeatedly managed their built environment to emphasize the coherence and unity of the village as a whole. In this way, she argues, people in early farming villages across the Salinas region actively constructed and sustained a sense of social community"--