

<<微电子封装组件的建模和仿真>>

图书基本信息

书名：<<微电子封装组件的建模和仿真>>

13位ISBN编号：9787122123725

10位ISBN编号：7122123723

出版时间：2012-1

出版时间：化学工业出版社

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页数：564

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内容概要

随着电子封装的发展，电子封装已从传统的四个主要功能（电源系统、信号分布及传递、散热及机械保护）扩展为六个功能，即增加了DFX及系统测试两个新的功能。

其中DFX是为“X”而设计，X包括：可制造性、可靠性、可维护性、成本，甚至六西格玛。

DFX有望在产品阶段实现工艺窗口的确定、可靠性评估和测试结构及参数的设计等功能，真正做到“第一次就能成功”，从而将计算机辅助工程（CAE）变为计算机主导工程（CE），以大大加速产品的上市速度。

本书是全面介绍DFX在封装中应用的图书。

作为封装工艺过程和快速可靠性评估及测试建模仿真的第一本专著，《微电子封装组件的建模和仿真：制造可靠性与测试》中包含两位作者刘胜、刘勇在工业界二十多年的丰富经验，以及在MEMS、IC和LED封装部分成功的实例，希望能给国内同行起到抛砖引玉的作用。

同时，读者将会从书中的先进工程设计和微电子产品的并行工程和协同设计方法中受益。

《微电子封装组件的建模和仿真：制造可靠性与测试》主要读者对象为学习DFX（制造工艺设计、测试设计、可靠性设计等）的研究人员、工程师和学生等。

书籍目录

Foreword
Foreword
Preface
Acknowledgments
About the Author
Part I Mechanics and Modeling
1 Constitutive Models and Finite Element Method
1.1 Constitutive Models for Typical Materials
1.1.1 Linear Elasticity
1.1.2 Elastic-Visco-Plasticity
1.2 Finite Element Method
1.2.1 Basic Finite Element Equations
1.2.2 Nonlinear Solution Methods
1.2.3 Advanced Modeling Techniques in Finite Element Analysis
1.2.4 Finite Element Application in Semiconductor Packaging Modeling
1.3 Chapter Summary
References
2 Material and Structural Testing for Small Samples
2.1 Material Testing for Solder Joints
2.1.1 Specimen
2.1.2 A Thermo-mechanical Fatigue Tester
2.1.3 Tensile Test
2.1.4 Creep Test
2.1.5 Fatigue Test
2.2 Scale Effect of Packaging Materials
2.2.1 Specimen
2.2.2 Experimental Results and Discussion
2.2.3 Thin Film Scale Dependence for Polymer Thin Films
2.3 Two-ball Joint Specimen Fatigue Testing
2.4 Chapter Summary
References
3 Constitutive and User-supplied Subroutines for Solder Code Modeling
Damage Evolution
3.1 Constitutive Model for Tin-lead Solder Joint
3.1.1 Model Formulation
3.1.2 Determination of Material Constants
3.1.3 Model Prediction
3.2 Visco-elastic-plastic Properties and Constitutive Modeling of Underfills
3.2.1 Constitutive Modeling of Underfills
3.2.2 Identification of Material Constants
3.2.3 Model Verification and Prediction
3.3 A Damage Coupling Framework of Unified Viscoplasticity for the Fatigue of Solder Alloys
3.3.1 Damage Coupling Thermodynamic Framework
3.3.2 Large Deformation Formulation
3.3.3 Identification of the Material Parameters
3.3.4 Creep Damage
3.4 User-supplied Subroutines for Solder Code Modeling
Damage Evolution
3.4.1 Return-Mapping Algorithm and FEA Implementation
3.4.2 Advanced Features of the Implementation
3.4.3 Application of the Methodology
3.5 Chapter Summary
References
4 Accelerated Fatigue Life Assessment Approaches for Solder in Packages
4.1 Life Prediction Methodology
4.1.1 Strain-Based Approach
4.1.2 Energy-Based Approach
4.1.3 Fracture Mechanics-Based Approach
4.2 Accelerated Testing Methodology
4.2.1 Failure Modes via Accelerated Testing Bounds
4.2.2 Isothermal Fatigue via Thermal Fatigue
4.3 Constitutive Modeling Methodology
4.3.1 Separated Modeling via Unified Modeling
4.3.2 Viscoplasticity with Damage Evolution
4.4 Solder Joint Reliability via FEA
4.4.1 Life Prediction of Ford Joint Specimen
4.4.2 Accelerated Testing: Insights from Life Prediction
4.4.3 Fatigue Life Prediction of a PQFP Package
4.5 Life Prediction of Flip-Chip Packages
4.5.1 Fatigue Life Prediction with and without Underfill
4.5.2 Life Prediction of Flip-Chips without Underfill via Unified and Separated Constitutive Modeling
4.5.3 Life Prediction of Flip-Chips under Accelerated Testing
4.6 Chapter Summary
References
5 Multi-physics and Multi-scale Modeling
5.1 Multi-physics Modeling
5.1.1 Direct-coupled Analysis
5.1.2 Sequential Coupling
5.2 Multi-scale Modeling
5.3 Chapter Summary
References
6 Modeling Validation Tools
6.1 Structural Mechanics Analysis
6.2 Requirements of Experimental Methods for Structural Mechanics Analysis
6.3 Whole Field Optical Techniques
6.4 Thermal Strain Measurements Using Moiré Interferometry
6.4.1 Thermal Strain in a Plastic Ball Grid Array (PBGA) Interconnection
6.4.2 Real-time Thermal Deformation Measurements Using Moiré Interferometry
6.5 In-situ Measurements on Micro-machined Solder
6.5.1 Micro-machined Membrane Structure in a Chemical Solder
6.5.2 In-situ Measurement Using Twyman-Green Interferometry
6.5.3 Membrane Deformation due to Power Cycles
6.6 Real-time Measurements Using Speckle Interferometry
6.7 Image Processing and Computer Aided Optical Techniques
6.7.1 Image Processing for Fringe Analysis
6.7.2 Phase Shifting Technique for Increasing Displacement Resolution
6.8 Real-Time Thermal-Mechanical Loading Tools
6.8.1 Micro Mechanical Testing
6.8.2 Environmental Chamber
6.9 Warpage Measurement Using PM-SM System
6.9.1 Shadow Moiré and Project Moiré Setup
6.9.2 Warpage Measurement of a BGA, Two Crowded PCBs
6.10 Chapter Summary
References
7 Application of Fracture Mechanics
7.1 Fundamental of Fracture Mechanics
7.1.1 Energy Release Rate
7.1.2 J Integral
7.1.3 Interfacial Crack
7.2 Bulk Material Cracks in Electronic Packages
7.2.1 Background
7.2.2 Crack Propagation in Ceramic/Adhesive/Glass System
7.2.3 Results
7.3 Interfacial Fracture Toughness
7.3.1 Background
7.3.2 Interfacial Fracture Toughness of Flip-chip Package between Passivated Silicon Chip and Underfill
7.4 Three-dimensional Energy Release Rate Calculation
7.4.1 Fracture Analysis
7.4.2 Results and Comparison
7.5 Chapter Summary
References
8 Concurrent Engineering for Microelectronics
8.1 Design Optimization
8.2 New Developments and Trends in Integrated Design Tools
8.3 Chapter Summary
References
9 Typical IC Packaging and Assembly Processes
9.1 Wafer Process and

Thinning9.1.1 Wafer Process Stress Models9.1.2 Thin Film Deposition9.1.3 Backside Grind for Thinning9.2 Die Pick Up9.3 Die Attach9.3.1 Material Co titutive Relatio 9.3.2 Modeling and Numerical Strategies9.3.3 FEA Simulation Result of Flip-Chip Attach9.4 Wire Bonding9.4.1 Assumption, Material Properties and Method of Analysis9.4.2 Wire Bonding Process with Different Paramete 9.4.3 Impact of Ultrasonic Amplitude9.4.4 Impact of Ultrasonic Frequency9.4.5 Impact of Friction Coef?cients between Bond Pad and FAB9.4.6 Impact of Different Bond Pad Thickness9.4.7 Impact of Different Bond Pad Structures9.4.8 Modeling Results and Discussion for Cooling SubstrateTemperature after Wire Bonding9.5 Molding9.5.1 Molding Flow Simulation9.5.2 Curing Stress Model9.5.3 Molding Ejection and Clamping Simulation9.6 Leadframe Forming/Singulation9.6.1 Euler Forward ve us Backward Solution Method9.6.2 Punch Process Setup9.6.3 Punch Simulation by ANSYS Implicit9.6.4 Punch Simulation by LS-DYNA9.6.5 Experimental Data9.7 Chapter SummaryReferences10 Opto Packaging and Assembly10.1 Silicon Substrate Based Opto Package Assembly10.1.1 State of the Technology10.1.2 Monte Carlo Simulation of Bonding/Soldering Process10.1.3 Effect of Matching Fluid10.1.4 Effect of the Encapsulation10.2 Welding of a Pump Laser Module10.2.1 Module Description10.2.2 Module Packaging Process Flow10.2.3 Radiation Heat Tra fer Modeling for HermeticSealing Process10.2.4 Two-Dime ional FEA Modeling for Hermetic Sealing10.2.5 Cavity Radiation Analyses Results and Discussio 10.3 Chapter SummaryReferences11 MEMS and MEMS Package Assembly11.1 A Pressure Se or Packaging (Deformation and Stress) 11.1.1 Piezoresistance in Silicon11.1.2 Finite Element Modeling and Geometry11.1.3 Material Properties11.1.4 Results and Discussion11.2 Mounting of Pressure Se or11.2.1 Mounting Process11.2.2 Modeling11.2.3 Results11.2.4 Experiments and Discussio 11.3 Thermo-Fluid Based Accelerometer Packaging11.3.1 Device Structure and Operation Principle11.3.2 Linearity Analysis11.3.3 Design Co ideration11.3.4 Fabrication11.3.5 Experiment11.4 Plastic Packaging for A Capacitance Based Accelerometer11.4.1 Micro-Machined Accelerometer11.4.2 Wafer-Level Packaging11.4.3 Packaging of Capped Accelerometer11.5 Tire Pressure Monitoring System (TPMS) Antenna11.5.1 Test of TPMS System with Wheel Antenna11.5.2 3D Electromagnetic Modeling of The Wheel Antenna11.5.3 Stress Modeling of I talled TPMS11.6 Thermo-Fluid Based Gyroscope Packaging11.6.1 Operating Principle and Design11.6.2 Analysis of Angular Acceleration Coupling11.6.3 Numerical Simulation and Analysis11.7 Microjets for Radar and LED Cooling11.7.1 Microjet Array Cooling System11.7.2 Preliminary Experiments11.7.3 Simulation and Model Veri?cation11.7.4 Comparison and Optimization of Three Microjet Devices11.8 Air Flow Se or11.8.1 Operation Principle11.8.2 Simulation of Flow Conditio 11.8.3 Simulation of Temperature Field on the Se orChip Surface11.9 Direct Numerical Simulation of Particle Separationby Direct Current Dielectrophoresis11.9.1 Mathematical Model and Implementation11.9.2 Results and Discussion11.10 Modeling of Micro-Machine for Use in Gastrointestinal Endoscopy11.10.1 Methods11.10.2 Results and Discussion11.11 Chapter SummaryReference12 System in Package (SIP) Assembly12.1 Assembly Process of Side by Side Placed SIP12.1.1 Multiple Die Attach Process12.1.2 Cooling Stress and Warpage Simulation after Molding12.1.3 Stress Simulation in Trim Process12.2 Impact of the Nonlinear Materials Behavio on the Flip-chipPackaging Assembly Reliability12.2.1 Finite Element Modeling and Effect of Material Models12.2.2 Experiment12.2.3 Results and Discussio 12.3 Stacked Die Flip-chip Assembly Layout and the Material Selection12.3.1 Finite Element Model for the Stack Die FSBGA12.3.2 Assembly Layout Investigation12.3.3 Material Selection12.4 Chapter SummaryReferencesPart III Modeling in Microelectronic Package Reliability and Test13 Wafer Probing Test13.1 Probe Test Model13.2 Parameter Probe Test Modeling Results and Discussio 13.2.1 Impact of Probe Tip Geometry Shapes13.2.2 Impact of Contact Friction13.2.3 Impact of Probe Tip Scrub13.3 Comparison Modeling: Probe Test ve us Wire Bonding13.4 Design of Experiment (DOE) Study and Correlation of ProbingExperiment and FEA Modeling13.5 Chapter SummaryReferences14 Power and Thermal Cycling, Solder Joint Fatigue Life14.1 Die Attach Process and Material Relatio 14.2 Power Cycling Modeling and Discussion14.3 Thermal Cycling Modeling and Discussion14.4 Methodology of Solder Joint Fatigue Life Prediction14.5 Fatigue Life Prediction of a Stack Die Flip-chip on Silicon (FSBGA) 14.6 Effect of Cleaned and Non-Cleaned Situatio on the Reliabilityof Flip-Chip Packages14.6.1 Finite Element Models for the Clean and Non-Clean Cases14.6.2 Model Evaluation14.6.3 Reliability Study for the Solder Joints14.7 Chapter

<<微电子封装组件的建模和仿真>>

SummaryReferences15 Passivation Crack Avoidance15.1 Ratcheting-Induced Stable Cracking: A Synopsis15.2 Ratcheting in Metal Films15.3 Cracking in Passivation Films15.4 Design Modification 15.5 Chapter SummaryReferences16 Drop Test16.1 Controlled Pulse Drop Test16.1.1 Simulation Methods16.1.2 Simulation Results16.1.3 Parametric Study16.2 Free Drop16.2.1 Simulated Drop Test Procedure16.2.2 Modeling Results and Discussion16.3 Portable Electronic Devices Drop Test and Simulation16.3.1 Test Set Up16.3.2 Modeling and Simulation16.3.3 Results16.4 Chapter SummaryReferences17 Electromigration17.1 Basic Migration Formulation and Algorithm17.2 Electromigration Examples from IC Device and Package17.2.1 A Sweat Structure17.2.2 A Flip-chip CSP with Solder Bumps17.3 Chapter SummaryReferences18 Popcorning in Plastic Packages18.1 Statement of Problem18.2 Analysis18.3 Results and Comparison 18.3.1 Behavior of a Delaminated Package due to Pulsed Heating-Verification18.3.2 Convergence of the Total Strain Energy Release Rate18.3.3 Effect of Delamination Size and Various Processes for a Thick Package18.3.4 Effect of Moisture Expansion Coefficient18.4 Chapter SummaryReferencesPart IV Modern Modeling and Simulation Methodologies19 Classical Molecular Dynamics19.1 General Description of Molecular Dynamics Method19.2 Mechanism of Carbon Nanotube Welding onto the Metal19.2.1 Computational Methodology19.2.2 Results and Discussion19.3 Application of Car – Parrinello Molecular Dynamics19.3.1 Car – Parrinello Simulation of Initial Growth Stage of Gallium Nitride on Carbon Nanotube19.3.2 Effects of Mechanical Deformation on Outer Surface Reactivity of Carbon Nanotubes19.3.3 Adsorption Configuration of Magnesium on Wurtzite Gallium Nitride Surface Using First-principles Calculation 19.4 Nano-welding by RF Heating19.5 Chapter SummaryReferencesAppendixSummary of Continuous MechanicsIndex

<<微电子封装组件的建模和仿真>>

编辑推荐

虽然集成电路封装在设计阶段对建模和仿真的需求正在不断增加，但是目前的大多数组件工艺和多种可靠性测试仍然依据耗时的“测试一尝试”的方法来获得最优的方案。

建模和仿真能够自如地通过虚拟实验设计的方法获得最优方案。

这种方法极大地降低了电子产品的成本和生产时间，对于新产品的开发效果尤其显著。

使用建模和仿真技术对促进未来三维封装的发展将会越来越有必要。

在《微电子封装组件的建模和仿真：制造可靠性与测试》中，刘胜博士和刘勇博士将会介绍建模与仿真的基础知识和高级技巧以帮助相关领域的人员运用建模与仿真的方法解决他们遇到的问题。

本书适用于微电子封装和互联设计、装配制造、可靠性/质量及半导体材料相关领域的工程师、研究人员和研究生。

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