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# ADVANCED IC PACKAGING TECHNOLOGIES AND MARKETS

## *2010 EDITION*

## A Strategic Report on the Latest Technologies in IC Packaging With Forecasts of Key Markets

### Report Coverage

- Stacked Packages
- Through Silicon Vias (TSV)
- System in Package (SiP)
- Staggered Inner Row QFN
- WLPs including Fan-Out Overmold Style
- Interconnect and Bumping

### Report Highlights

- Technology Updates
- Research News
- New Products Introductions
- Industry Outlook
- End Markets/Applications
- Market Analysis and Forecasts, 2009–2014

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# Advanced IC Packaging Technologies and Markets - 2010 Edition

## Synopsis

Although IC shipments dropped significantly in 2009, it turned out to be merely a dip in the road. Volumes have already begun to move upward again in 2010, and customers will require an ever-increasing portfolio of advanced IC packaging technologies for growing applications.

*New Venture Research* (NVR) in its report, **Advanced IC Packaging Technologies and Markets, 2010 Edition**, uses information from IC packaging industry insiders to present the most realistic forecasts available regarding advanced IC packaging. Throughout the report, the latest advanced packaging products, services, and research from numerous companies and organizations are described.

Chapter 3, **Stacked Packages**, explains the basics of this critical packaging technology, along with a sampling of the latest products. Forecasts include units, prices, packaging revenue, package types, device types, first-level interconnection, and applications.

Chapter 4, **TSV Market** (3D stacking) is covered in depth, including various methods of connecting the devices, 2.5D technology, specific company applications, and numerous examples of the lastest designs. Unit projections are forecast and a look at the markets which are incorporating this technology first are included.

Chapter 5, **System in Package (SiP) Solutions and Embedded Substrates**, presents information on the evolving market for ICs combined with passive devices within a single package. Forecasts include units, prices, packaging revenue, device types, interconnection, and applications.

Chapter 6, **Staggered Inner Row QFN Packages**, examines the latest new product introductions plus market forecasts for Array QFN Packages. Forecasts include units, prices, packaging revenue and applications.

Chapter 7, **Wafer-Level Packages, Including Fan-Out Overmold Style,** explains the latest new product introductions plus market forecasts for WLP by product, pitch and re-configured wafer-level packages.

Chapter 8, **Interconnection, Wire Bonding, Flip Chip, and Bumping**, contains a review of first-level package interconnection. Flip chip and wire bonding forecasts are provided within the package and as bare die on the PCB. Trends in wafer bumping are discussed extensively. Unit forecasts are given for bump styles, UBM processes, and bump composition.

Chapter 9, **State of the Industry, Where to Place Your Bets, and Applications for IC Devices,** presents the state of the industry, ICs with the highest growth and detail product applications by vertical market such as computers, communications, consumer, industrial/medical and transportation and defense sectors.

Trends in advanced IC packaging are important to your business. **Advanced IC Packaging Technologies and Markets - 2010 Edition** will provide you with an effective and economical tool for assessing the future of this market. The report sells for $2995 as a single-user license PDF file. Additional licenses sell for $250 each and a corporate license sells for $1000. Order your copy today!

## About the Author

**Sandra Winkler** is the senior analyst for IC packaging at New Venture Research (NVR) - formerly Electronic Trend Publications (ETP). She began her analyst career as an independent consultant to the telecommunications industry over 20 years ago. Since 1995, Ms. Winkler has authored all of NVR's widely cited reports on IC packaging. She has spoken at numerous industry conferences, writes columns for Chip Scale Review magazine and contributes articles to the IEEE CPMT SCV Chapter Newsletter. Ms. Winkler is a senior member of IEEE/CPMT and serves on the executive committee for the IEEE-CPMT-SCV chapter where she is also the Program Co-Chair. She holds a MBA from Santa Clara University.

# Advanced IC Packaging Technologies and Markets, 2010 Edition

## Table of Contents


### Chapter 1: Introduction

### Chapter 2: Executive Summary

### Chapter 3: Stacked Packages
- Types of Stacked Packages
- The Ins and Outs of Stacked Packages Interconnection
- Stacked Package as a Multicomponent Package
- Wafer Thinning
- End Markets and Application Trends
- New Products
- Stacked Package Forecasts
- Stacked Packages by Application
- End Markets for Stacked Packages
- Potential Markets
- Stacked Packages by Device Type
- Stacked Packages by Interconnection

### Chapter 4: Through Silicon Via (TSV) Market
- Overview
- Issues
- 3D Die-Stacking Technology Requirements
- Wafer-to-Wafer Bonding
- Die-to-Wafer Bonding
- Die-to-Die Bonding
- Via First, Middle, or Last Technology
- Via Etching and Filling
- Silicon Interposers/2.5D
- Specific Company Applications
- Companies with TSV Designs
- New Product Highlights
- Moving Forward
- Forecasts

### Chapter 5: System in Package (SiP) Solutions and Embedded Substrates
- Overview
- New Product Introductions/Highlights
- SiP Forecasts
  - Summary
  - SiPs by Application
  - SiPs by Device Type
  - SiPs by Interconnection

### Chapter 6: Staggered Inner Row QFN Packages
- Overview
- New Product Introductions
- Market Forecasts

### Chapter 7: Wafer-Level Packages including Fan-Out Overmold Style
- Wafer-Level Package Overview
- New Product Introductions
- Market Forecasts for WLP
- Forecasts by Product
- Forecasts by Pitch
- Forecasts of Reconfigured WLP

### Chapter 8: Interconnection, Wire Bond, Flip Chip and Bumping
- Interconnection Overview
- Wafer-Bumping and Process Overview
- New Product Introductions
- Flip Chip Applications: In Package and as Bare Die
- Alternatives to Solder
- Interconnection Forecast
- Units by Interconnection
- Total Flip Chip Forecast
- Flip Chip Bump Styles
- UBM Process Techniques
- Bump Composition

### Chapter 9: State of the Industry, Highest Growth ICs and Their Applications
- State of the Industry
- Strongest Growth Markets (for ICs)
- Applications
- Computer Market Forecast
- Communications Market Forecast
- Consumer Market Forecast
- Industrial and Medical Market Forecast
- Transportation and Defense Market Forecasts

### Partial List of Figures and Tables
- Dual-Die TSOP Stack
- STATS ChipPAC's PiP
- High Performance Stakpak
- DAG Process Steps
- Dice Before Grinding Method
- Die Thickness Relative Strength
- 8-Gigabit TSV DRAM Package Outline and Cross Section
- A Schematic Illustration Showing the CoW Bonding Process
- Micro-Bump and UMB Pad Structure
- Die Stack FBGA Packages, 2009-2014
- PoP Packages, 2009–2014
- PiP Packages, 2009–2014
- TSOP Stacked Packages, 2009–2014
- QFN Stacked Packages, 2009–2014
- MCM Stacked Packages, 2009–2014


(continued on next page)

# Advanced IC Packaging Technologies and Markets, 2010 Edition

## Table of Contents (continued)

### Partial List of Figures and Tables (cont'd)


**Stacked WLPs, 2009–2014**
**Stacked Package Assembly Revenue, 2009–2014**
**Total ICs in Stacked Packages, 2009–2014**
**Stacked ICs as a Percentage of Total ICs, 2009-2014**
**Stacked Packaging Revenue as a Percentage of Total Packaging Revenue, 2009-2014**
**Application Breakdown for Stacked Packages, 2010**
**Cellular Handsets vs. Stacked Packages, 2009-2014**
**Market for Various End Products Using Stacked Packages**
**Total Memory Devices in FBGAs**
**Total Memory Devices in WLPs**
**Stacked Packages by Device Type**
**Interconnection of Stacked Packages, 2009–2014**
**SiPs, 2009–2014**
**SiPs by Device Type, 2009–2014**
**Interconnection of SiPs, 2009–2014**
**Applications for SiPs, 2009**
**QFN Interconnection Forecast, 2009-2014**
**PGA Interconnection Forecast, 2009–2014**
**BGA Interconnection Forecast, 2009–2014**
**FBGA Interconnection Forecast, 2009–2014**
**Total Flip Chip Forecast, 2009–2014**
**Flip Chip Bump Styles, 2009–2014**
**UBM Process, 2009–2014**
**Bump Composition Units, 2009–2014**
**Devices in QFN Packages**
**Array QFN Forecast, 2009–2014**


**The latest advanced packaging products, services, and research of the following companies and organizations are interspersed throughout the report:**

**Alchimer**
**ALLVIA, Inc.**
**Amkor Technology**
**ASE**
**Applied Materials**
**ChipSIP Technology**
**CMC Microsystems**
**CMP**
**Institute of Microelectronics**
**Elpida Memory**
**Georgia Institute of Technology, 3D Systems Packaging Center**
**MOSIS**
**NEXX Systems**
**Peking University**
**Samsung Electronics**
**Shanghai Sinyang Semiconductor Materials Co.**
**SphereTek, LCC, Division of MVM Technologies**
**STATS ChipPac**
**Tango Systems**
**Texas Instruments**
**United Test and Assembly Center**
**Zoran Corporation**

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