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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 latest 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.

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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.
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