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ADVANCED IC PACKAGING TECHNOLOGIES, MATERIALS AND MARKETS

2011 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)
- Fan-in QFN
- WLPs including Fan-out Style
- Interconnect and Bumping
- Substrates

Report Highlights

- Technology Updates
- Research News
- New Products Introductions
- Industry Outlook
- End Markets/Applications
- Market Analysis and Forecasts, 2010–2015

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Advanced IC Packaging Technologies, Materials and Markets - 2011 Edition

Synopsis

Despite a global recession, the demand for handheld portable products remains strong. To continue to meet the ever-increasing needs for higher bandwidth, IC packaging technologies are continually being pushed to the limit. This report details the advances in those limits.

New Venture Research **(NVR)** in its report, **Advanced IC Packaging Technologies, Materials and Markets, 2011 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 and 2.5D stacking) is covered in depth, including various methods of connecting the devices, specific company applications, and numerous examples of the latest new products and processes. 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, 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, **Fan-in QFN Packages**, examines the latest new product introductions plus market forecasts for Fan-in QFN Packages. Forecasts include units, prices, packaging revenue and applications.

Chapter 7, **Wafer-Level Packages Including Fan-out 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, **Substrates,** presents the market, including an overview of substrate types and materials, and highlights of recent developments in substrates. Forecasts are provided for substrate units, area, and revenue by package type and substrate material.

Chapter 10, **Mobile Applications for IC Devices,** presents product applications such as cellular handsets and infrastructure, tablets, set-top boxes, DVD players/recorders, digital cameras/ camcorders, personal navigation, audio products, notebook/ netbooks and PCs, servers and workstations.

Trends in advanced IC packaging are important to your business. **Advanced IC Packaging Technologies, Materials and Markets - 2011 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. With the purchase of the report, an Excel spreadsheet of all tables may be obtained for an additional $500.

About the Author

Sandra Winkler is the senior analyst for IC packaging at **New Venture Research (NVR)**. 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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Amkor Technology
Avago
Brewer Science
Cadence
Dow Chemical
Elpida Memory
Endicott Interconnect Technologies
EPWorks
Fraunhofer Institute for Reliability and Microintegration
Georgia Institute of Technology, 3D Systems Packaging Center
IBM
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