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ADVANCED IC PACKAGING TECHNOLOGIES AND MARKETS

2009 EDITION

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

Report Coverage

- **Wafer-Level Packages (WLPs)**
- **Stacked Packages**
- **System in Package (SiP)**
- **Flip Chip**
- **Bumping**
- **Array QFNs**
- **Optical Interconnect**

Report Highlights

- **Technology Updates**
- **Research News**
- **New Products**
- **Applications Industry**
- **Outlook**
- **Market Forecasts, 2009–2013**

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Advanced IC Packaging Technologies and Markets, 2009 Ed.

Synopsis

Although IC shipments have dropped significantly in 2009, this is merely a dip in the road. Volumes have already begun to move upward again, and customers will require an ever-increasing portfolio of advanced IC packaging technologies.

New Venture Research (NVR) in its report, **Advanced IC Packaging Technologies and Markets, 2009 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, **The State of the Industry**, begins with ETP's views on the state of the semiconductor industry. This includes a look at global economic factors that impact the industry. ETP's base semiconductor forecast (see Figure 1) and a mid-year update to that forecast are also provided.

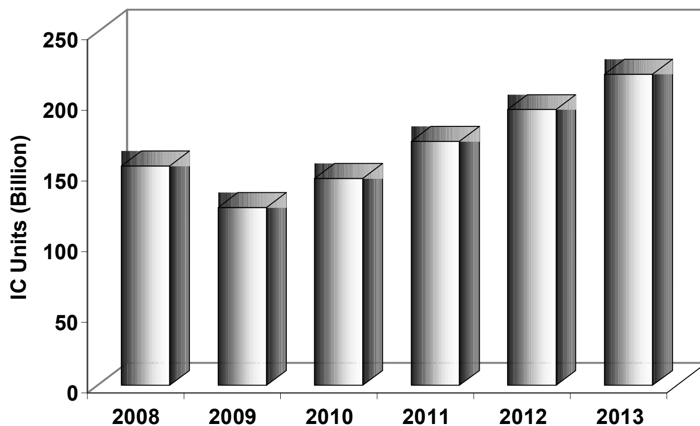

Figure 1 IC Unit Forecast

Chapter 4, **Wafer-Level Packages (WLPs)**, presents important WLP designs that have been introduced over the past year. WLP forecasts by pitch, I/O range, and IC product are given.

Chapter 5, **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. Through-silicon via (TSV) technology is discussed in depth.

In a similar manner, Chapter 6, **System in Package (SiP)**, 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 7, **Interconnection, Flip Chip, and Bumping**, contains a review of first-level package interconnection. Flip chip forecasts are provided, both 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 8, **Array QFNs,** reviews the latest designs in these new packages. Market forecasts include units, average I/O count, price per I/O, average assembly price, and revenue.

Chapter 9, **Optical Interconnect,** presents the current state of this exciting packaging technology of the future. The market potentials of both interchip and intrachip photonics are explored.

Trends in advanced IC packaging are important to your business. **Advanced IC Packaging Technologies and Markets** will provide you with an effective and economical tool for assessing the future of this market. The report sells for $2495, with extra copies $350. Each copy includes both a hardbound version and a single-user PDF file on CD-ROM. Corporate licensing is available—contact us for pricing. Order your copies today!

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 nearly 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 and is a contributing editor for Chip Scale Review magazine. Ms. Winkler has an 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:

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