THE MULTI-COMPONENT IC PACKAGING MARKET

2014 EDITION

A Strategic Report on the Growing Markets for Multi-Component IC Packaging Technologies

Report Coverage

- Stacked Packages
- Through Silicon Vias (TSV)
- 2.5-D and 3-D Integration
- 2.5-D Interposers
- System in Package (SiP)

Report Highlights

- Market Analysis and Forecasts, 2011-2017
- Key Application Forecasts
- New Product/Technology
 Introductions
- 32 Tables, 65 Figures

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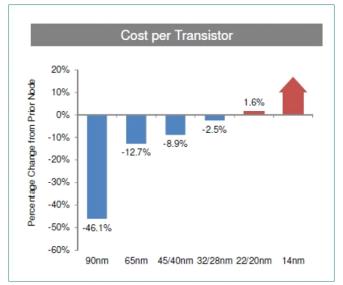
The Multi-Component IC Packaging Market, 2014 Edition

Synopsis

Complex multi-component packages have added a new dimension to high speed and small form factor, and have been game changers for the industry. It is the package of the integrated circuit (IC) which holds the footprint to the printed circuit board (PCB), and thus it is the IC package which has enabled the multitude of small, handheld electronics to be invented and proliferate in today's world.

It is not just small size, but the added performance with high speed, more functionality, and the ability for handheld electronics to communicate via the Internet so that anyone with a smart phone or tablet has a wealth of information at their fingertips.

The costs per transistor is now going up with advancing technology nodes of 22nm and 14nm (see figure below), when traditionally the cost goes down. Increasingly the backend, or IC packaging, is being looked at a meeting the needs of tomorrow's technology demands rather than the front end manufacturing.



Courtesy of Amkor Technology and IEEE/CPMT

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

Chapter 4: Through Silicon Vias, 3-D and 2.5-D Integration is covered in depth, including 2.5-D interposer technology, with coverage of the latest new products and processes. Unit projections of both 2.5-D and 3-D are forecast, as are the identified potential markets for these technologies and their sizes, and 2.5-D interposer technology.

Chapter 5: System in Package (SiP) Solutions presents this package solution which combines an IC and passive devices in a single functional block, with a JEDEC footprint. New product introductions are presented. Forecasts include units, prices, packaging revenue, device types, interconnection, and applications.

The Multi-Component IC Packaging Market - 2014 Edition sells for \$1495 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 \$750.

About the Author

Sandra L Winkler has been an industry analyst starting in 1988, and from 1995 has been a staff member of Electronic Trend Publications, now New Venture Research Corporation. She has produced numerous off-the-shelf and custom reports throughout her career. She began her analyst career in the telecommunications industry, with Frost and Sullivan and since 1995 has focused on the semiconductor packaging industry, authoring more than 30 widely cited reports on the topic, most notably, The Worldwide IC Packaging Market, Advanced IC Packaging Markets and Trends, and IC Packaging Materials. She is a contributing editor and writer for Chip Scale Review magazine, Global SMT & Packaging News, and contributes to the IEEE/CPMT newsletter and other media. Ms. Winkler has earned an MBA from Santa Clara University and is on the executive planning committee of the IEEE/CPMT Santa Clara Valley chapter, serving as Luncheon Program Chair.

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The newest packaging products and latest research for the following companies are interspersed throughout the report:

3D Glass Solutions
APSTL, Ilc
Auburn University
CEA-Leti
Cisco, Inc. and Amkor Technology
Corning, Inc.
Dow Chemical
EV Group
Fraunhofer Institute for Reliability and Microintegration
Fujikura Ltd. and FlipChip International, LLC
Innovative Micro Technology
Kyocera America

Percent of Total Revenue, 2011—2017

Nanyang Technology University

Sandia National Laboratories
SET North America and RTI International CMET
Shinko Electric Industries
STATS ChipPAC Ltd.
SUNY College, College of Nanoscale Science and
Engineering
SUSS MicroTec
Texas Instruments
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