Integrated Circuit Packaging

2014 Edition

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IC KNOWLEDGE LLC

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- Discrete and Power Products Cost and Price Model - a Microsoft Excel based cost model that uses dropdown menu selections to generate manufacturing cost and selling price for most high power silicon integrated circuit and discrete products.
- Strategic Cost Model - a forward looking cost model that provide detailed wafer cost, equipment and materials projections for logic to 5nm and memory to 12nm. This model is now company and node specific.
- Strategic Forecast Report - an examination of trends in the semiconductor industry including the market, foundries, technology, costs, materials and equipment.
- 300mm and 450mm Watch - a database of all existing and announced 300mm and 450mm fabs and companion analysis.

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1.6. Report Outline

This report is broken up into 12 chapters:

- Chapter 1 - Welcome
- Chapter 2 - The Packaging Market and History
- Chapter 3 - Package Types
- Chapter 4 - Packaging Process Overview
- Chapter 5 - Wafer Level and Multi Chip Packaging
- Chapter 6 - Green Packages
- Chapter 7 - Packaging Materials
- Chapter 8 - Packaging Costs
- Chapter 9 - Test
- Chapter 10 - Qualification
- Chapter 11 - Selecting and Managing Packaging Foundries
- Chapter 12 - Profiles of the Top Ten OSATs

1.7. What This Report is Not

This report is meant to give the reader an understanding of integrated circuit packaging trends.

- We discuss general market trends, but this is not a market research firm and we are not in the business of forecasting the market. For market research and forecasts we recommend IC Insights at www.icinsights.com.
- This report presents some discussion of packaging costs, for detailed packaging costs we recommend or IC Cost and Price Model.

1.8. About The Author

Frank Muscolino is a packaging industry insider with over 20 years of experience. Frank has served in a variety of engineering, management and sales positions within the industry including sales manager for one of the ten largest packaging foundries. Frank has a Masters Degree in Chemistry from Clarkson University.

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