

2025 Flip Chip and WLP: Trends and Market Forecasts

Fan-in wafer level package (WLP) and fan-out WLP continue to show strong growth. Flip chip has expanded from bumped devices attached to a package substrate to interposers mounted onto laminate substrates and in/on redistribution layers (RDLs). Higher density I/O count is driving the move to μ bumps and even bumpless bonding. Panel fan-out (FO) is in production at several companies. Driven by regional demand, WLP, FO-WLP, and bump capacity continues to expand. A supply and demand analysis is included for each segment with capacity provided by geographic region, technology, wafer size, and panel.

This report covers end products and device types in a range of applications from high-performance to mobile and consumer to automotive and defense. The latest technology developments and trends, including fine pitch bumping, substrate trends to meet density requirements, and new material developments are discussed. Flip chip market projections include number of packages. The market for fan-in WLP versus FO-WLP is presented. A set of PowerPoint slides is included with the detailed analysis.

- 1 Technology Developments
 - 1.1 Fan-in and FO-WLP Developments (including panel fan-out and high-density FO on substrate)
 - 1.2 New Material and Process Developments
 - 1.3 Bump Pitch Trends, Micro Bumps, Bumpless/Hybrid Bonding
 - 1.4 Flip Chip Substrate Technology Trends
 - 1.5 Underfill Material Trends
- 2 Flip Chip Market Projections
 - 2.1 Flip Chip Market Projections (number of packages)
 - 2.3 Flip Chip Capacity Analysis by Wafer Size and Geographic Region
- 3 Wafer Level Package Projections
 - 3.1 Fan-in Wafer Level Package Market Growth
 - 3.2 Fan-out Wafer Level Packages Market Growth
 - 3.3 Fan-in and Fan-out Wafer Level Packaging Applications
 - 3.4 Fan-in and FO-WLP Capacity Analysis by Wafer Size and Panel and Geographic Region
- 4 Wafer Bumping and WLP Service Providers
- 5 Flip Chip Assembly Equipment Developments
- 6 OSAT Services

Price: \$5,400 (single user), Corporate License \$9,000)

Contents and specifications subject to change without notice 2,25.25