An increasing number of companies are expanding their use of flip chip with solder bumps and copper pillars in package (FCIP). The use of flip chip for a variety of wireless products will contribute to continued growth in 2009. Demand for thinner, lighter-weight portable products continues to drive the use of wafer level packages (WLPs), especially in mobile phones. WLPs have been used for low pin count devices, but are now an option for larger die sizes with higher pin counts (≥100 I/O). This study details these developments, including the trends in fan-out WLPs, with descriptions and photos. Updated forecasts for the flip chip wafer bumping and WLP markets by product application, device type, FCIP/FCOB split, number of wafers, and number of die are provided. Projected demand and capacity (merchant and captive) by the number of wafers and bump type are also included. Geographic changes in the location of bumping supply are presented. Information on stud bump, micro bumping, and copper pillar is also provided. Trends in Pb-free, 300mm, and low-k dielectrics are included. Suppliers and contact information for bumping, wafer level packaging, mounting equipment, contract assembly services, laminate substrates, laser dicing equipment, and inspection systems are provided.

Executive Summary

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- Fujitsu power management LSI
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- CSR’s Bluetooth™ device
- Marvell wireless LAN
- Infineon’s CMOS RF switch
- S.E.T. Indium bump