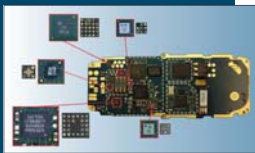
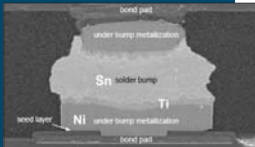
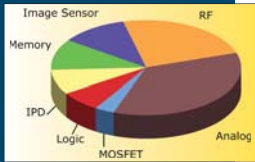
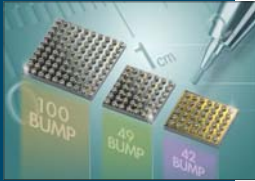


2010 Flip Chip and WLP: Market Projections and New Developments



Flip chip devices continue to see strong growth as an increasing number of new designs are converting from wire bond. Wireless products continue to be one of the volume growth applications for flip chip. Copper pillar is expected to see greater demand as companies move to fine pitch solutions. Growth in wafer level packages (WLPs) continues to be driven by the strong preference for small form factor, low profile packages for use in mobile phones. WLPs are also found in watches, MP3 players, digital cameras, laptops and tablet computers such as the iPad. Shipments of WLPs are also growing as many companies convert leaded packages into WLPs. Fan-out WLPs are seeing increased demand for large die with high I/Os. WLPs are often underfilled in order to pass the drop test. New processes to make WLPs more reliable are key to greater adoption. Process improvements include increased dielectric thickness, new materials with improved properties, and improved designs. This study updates all the major developments. Updated forecasts for the flip chip and WLP markets in number of die and wafers are provided. Trends in Pb-free, copper pillar, micro bump, UBM developments, 300mm capacity, and ultra low-k dielectrics are included. Major players in the infrastructure are listed and contact information is provided.

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- Indium bump

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