

Global and China Advanced Packaging Industry Report, 2014-2015

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Abstracts

Global and China Advanced Packaging Industry Report, 2014-2015 focuses on the followings:

- 1 Analysis of Global Semiconductor Market and Industry
- 2 Analysis of Chinese Semiconductor Market and Industry
- 3 Technical Trends of Advanced Packaging
- 4 Analysis of Global and China Advanced Packaging Industry
- 5 Study of 24 Advanced Packaging Vendors

Global outsourced semiconductor assembly and test (OSAT) market was valued at about USD27.1 billion in 2014, expanding by 7.9% from 2013, is expected to swell by 7.0% to USD29 billion in 2015, and will further slow down to 3.8% in 2016, but start to accelerate with growth rate of 6.0% in 2017. Memory packaging and test is the largest single-product packaging and test in OSAT field, HMC and HBM are expected to spring up after 2017, accelerating the expansion of OSAT. It is predicted that SiP and ePoP will be main drivers behind OSAT growth in 2015 and 2016.

New technologies have mushroomed in OSAT field, but few of them were commercialized and used on a massive basis in recent years. The most popular new technologies now include FOWLP, 2.5D and TSV, which are afraid to be put into large-scale application after 2017. On the one hand, these new technologies are not sufficiently mature and small in scale, leading to higher cost, like FOWLP attempting to replace FC-CSP. On the other hand, the reason lies in business model. Wafer-level packaging (WLP) has become more and more common, but the business model in which whether Foundry or OSAT dominates WLP still needs to be explored. As business model has not been fully shaped, downstream vendors will adopt a wait-and-



see attitude. For future 2.5D and 3D packaging, most of silicon interposer layers may be completed by OSAT companies and part by Foundries. There may be also companies that specialize in silicon interposer layers.

Two pronounced trends of OSAT industry are: 1) Revenue growth of large companies far exceeds that of small ones, as the former has more funding for R&D than the latter, and OSAT industry hungers for new technologies. Long-term development of the companies cannot be realized without adequate technology accumulation. 2) Chinese OAST companies grow at the fastest rate, largely due to strong liquidity and hot stock market, which provide strong financial backing for OSAT companies, thus giving them adequate funds for R&D and capacity expansion. Chinese OSAT companies, by virtue of powerful weapon of capital, enter the stage of rapid development, and will boost its scale and technical competence via more acquisitions.



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