



Global and China Advanced Packaging Industry Report, 2014-2015

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STUDY GOAL AND OBJECTIVES

This report provides the industry executives with strategically significant competitor information, analysis, insight and projection on the competitive pattern and key companies in the industry, crucial to the development and implementation of effective business, marketing and R&D programs.

REPORT OBJECTIVES

- ◆ To establish a comprehensive, factual, annually updated and cost-effective information base on market size, competition patterns, market segments, goals and strategies of the leading players in the market, reviews and forecasts.
- ◆ To assist potential market entrants in evaluating prospective acquisition and joint venture candidates.
- ◆ To complement the organizations' internal competitor information gathering efforts with strategic analysis, data interpretation and insight.
- ◆ To suggest for concerned investors in line with the current development of this industry as well as the development tendency.
- ◆ To help company to succeed in a competitive market, and

METHODOLOGY

Both primary and secondary research methodologies were used in preparing this study. Initially, a comprehensive and exhaustive search of the literature on this industry was conducted. These sources included related books and journals, trade literature, marketing literature, other product/promotional literature, annual reports, security analyst reports, and other publications. Subsequently, telephone interviews or email correspondence was conducted with marketing executives etc. Other sources included related magazines, academics, and consulting companies.

INFORMATION SOURCES

The primary information sources include Company Reports, and National Bureau of Statistics of China etc.

Abstract

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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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

Revenue of Global Top24 Packaging & Test Vendors, 2013-2015E

Unit: USD mln

	2013	2014	2015E
ASE	4,740	5,288	6,082
AMKOR	2,956	3,129	3,380
SPIL	2,345	2,735	2,980
STATS ChipPAC (Acquired by JCET)	1,599	1,586	1,508
PTI	1,270	1,318	1,320
J-devices	908	920	930
UTAC	748	734	785
JCET	775	1,046	1,302
ChipMOS	649	696	670
Chipbond	534	537	540
KYEC	496	536	600
STS Semiconductor	499	530	590
Huatian Technology	395	538	610
MPI (Carsem)	389	400	376
Nepes	296	261	302
FATC	303	303	330
Walton	300	330	265
Unisem	315	317	352
Nantong Fujitsu Microelectronics	285	340	385
Hana Micron	253	279	310
Signetics	254	223	190
Lingsen	204	195	185

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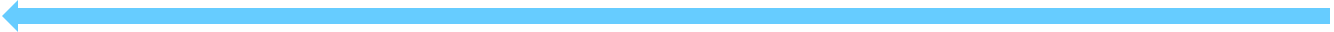
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Embedded Trace Package Sweet Spot (for Wire Bonding)

Embedded Trace Package Sweet Spot (for FLIP CHIP)

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Samsung Widcon

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