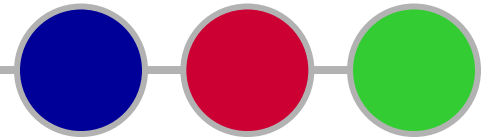

Global and China Advanced Packaging Industry Report, 2012-2013

May 2013

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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.

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Abstract

Global and China Advanced Packaging Industry Report, 2012-2013 covers the followings:

1. Global Semiconductor Industry Overview;
2. IC Manufacturing Industry Overview;
3. IC Downstream Industry Market Overview;
4. Advanced Packaging Industry and Market;
5. 23 Advanced Packaging Vendors

In 2012, global semiconductor sales fell 2.7%; semiconductor equipment spending dropped by 15% to US$36.9 billion from US$43.5 billion in 2011. The semiconductor market in 2013 is also not optimistic, accompanied by recession of the world's emerging economies and Europe's sluggish recovery. U.S. and Japanese markets are relatively better, while China, as the world's largest semiconductor market, has witnessed lower-than-expected economic growth, the global economy is yet to show signs of recovery.

In spite of the overall decline in semiconductor industry, the foundry field still grows. In 2012, the global semiconductor foundry market reached total value of US$34.6 billion, an increase of 6.5% over 2011.

With the growth slowdown of smart phones and tablet PCs, it is expected that the foundry market in 2013 will increase by just 1.6% to exceed about US$35.2 billion.

With foundries as main customers, advanced packaging vendors were therefore essentially flat or slightly enhanced in 2012, the same expected in 2013. The fall in price of gold, the indispensable raw material for advanced packaging vendors, especially LCD Driver IC packaging companies, will improve the profit margin of advanced packaging vendors in 2013.

Vendors located in Malaysia and Singapore all showed decline, on account of the decreasing revenue of foundries in this region. Taiwanese peers saw moderate growth except memory package, chiefly benefiting from the strong drive of TSMC and UMC. South Korean companies were boosted by Samsung.

Among Japanese companies, J-devices experienced the highest growth, mainly owing to the back-end packaging business purchased from Fujitsu. In January, 2013, Japan's largest semiconductor vendor – Renesas also sold three back-end packaging factories to J-devices, which would usher in amazing growth in the coming year, with expected annual revenue in FY2013 and FY2017 outnumbering JPY100 billion and JPY250 billion, respectively.

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Taiwan-based Chipbond, the world's largest LCD Driver IC packaging vendor, will be another eye-catching performer in 2013. The significantly enhanced screen resolution of mobile phone and tablet PC will greatly raise Chipbond's earnings, and the decline in gold prices makes it the biggest beneficiary. In order to further improve the industrial chain layout, Chipbond acquired the COF substrate vendor - SIMPAL Electronics on May 2, 2013.

In addition, Chipbond is the advanced packaging vendor with the highest operating margin, i.e. 16.7% in 2011 and 21.9% in 2012, but also the unique one with operating margin growth. ASE closely followed in terms of operating margin, who benefitted from its large customer TSMC that produced the world's state-of-the-art IC.

Chinese Mainland counterparts performed poorly, although JECT's revenue saw substantial growth, yet its operating margin fell sharply from 1.8% in 2011 to 0.2% in 2012, slipping to the edge of loss.

Revenue and Operating Margin of the World's Top 23 Packaging & Testing Vendors, 2011-2012

	Headquarter Location	Revenue, 2011	Revenue, 2012	Operating Margin in 2012
ASE	Taiwan	4,339	4,387	21.6%
AMKOR	USA	2,776	2,760	5.5%
StatsChippac	Singapore	1,707	1,702	5.6%
SPIL	Taiwan	2,078	2,229	10.0%
PTI	Taiwan	1,339	1,435	11.9%
UTAC	Malaysia	958	908	
J-devices	Japan	608	956	
ChipMOS	Taiwan	602	662	7.2%
JCET	Mainland China	582	703	0.2%
Chipbond	Taiwan	449	521	21.9%
KYEC	Taiwan	391	437	
FATC	Taiwan	402	367	5.3%
STS Semiconductor	South Korea	407	489	4.7%
Unisem	Malaysia	380	375	10%
Carsem	Malaysia	332	282	
Signetics	South Korea	243	306	7.8%
Hana Micron	South Korea	258	235	1.1%
Nepes	South Korea	242	312	11.7%
Walton Advanced Engineering	Taiwan	278	286	3.5%
Nantong Fujitsu Microelectronics	Mainland China	248	252	14.2%
Lingsen	Taiwan	198	200	11.6%
TIANSHUI HUATIAN	Mainland China	203	208	4.9%

Unit:US$M

Source: researchinchina *Global and China Advanced Packaging Industry Report, 2012-2013*

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