

# 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.



## **Contents**

#### 1 GLOBAL SEMICONDUCTOR INDUSTRY

- 1.1 Market Overview
- 1.2 Supply Chain
- 1.3 Industry Overview

#### 2 DOWNSTREAM MARKETS OF IC PACKAGING INDUSTRY

- 2.1 Global Memory Market
- 2.2 Supply and Demand of DRAM
- 2.3 Supply and Demand of NAND
- 2.4 Global Mobile Phone Market
- 2.5 Global Mobile Phone Industry
- 2.6 Chinese Mobile Phone Marekt
- 2.7 Laptop Computer Market
- 2.8 Tablet PC Market
- 2.9 Server Market

### **3 TRENDS OF PACKAGING & TEST TECHNOLOGY**

- 3.1 HBM/HMC Memory
- 3.2 Embedded Component Substrate
- 3.3 Embedded Trace Substrate
- 3.4 POP Packaging
- 3.5 FOWLP
- 3.6 Introduction of SiP Packaging
- 3.7 SiP Packaging Industy and Market
  - 3.7.1 Murata
  - 3.7.2 USI
- 3.8 2.5D Packaging (SI/GLASS/ORGANIC INTERPOSER)
  - 3.8.1 Introduction of 2.5D Packaging
  - 3.8.2 Applications of 2.5D Packaging
  - 3.8.3 Business Model of 2.5D Packaging
  - 3.8.4 2.5D Interposer Market Size
  - 3.8.5 Suppliers of 2.5D Packaging
- 3.9 TSV (3D) Packaging
- 3.9.1 TSV Packaging Equipment



- 3.10 SENSOR/MEMS/CIS Packaging
  - 3.10.1 MEMS Market Size
  - 3.10.2 Trends of Sensor/MEMS/CIS Packaging

#### **4 PACKAGING & TEST INDUSTRY**

- 4.1 Packaging & Test Industry Size
- 4.2 Middle-end Packaging & Test Industy
- 4.3 China Semiconductor Packaging & Test Industy
- 4.4 Ranking of Chinese Semiconductor Packaging & Test Vendors
- 4.5 Semiconductor Test
- 4.6 Ranking of Global Packaging & Test Vendors
- 4.7 Foundry Industry Size
- 4.8 Chinese IC Market
- 4.9 China Semiconductor Industry
- 4.10 Chinese Government's Supportive Policies for Semiconductor Industry
- 4.11 Recent M&As in China's Semiconductor Field
- 4.12 Forecast of China IC Industry Development
- 4.13 Development Goals of China Foundry Industry

# **5 PACKAGING & TEST VENDORS**

- 5.1 ASE
- 5.2 Amkor
- **5.3 SPIL**
- 5.4 STATS ChipPAC
- 5.5 PTI
- 5.6 Greatek
- 5.7 ChipMOS
- **5.8 KYEC**
- 5.9 Unisem
- 5.10 FATC
- 5.11 JECT
- 5.12 UTAC
- 5.13 Lingsen Precision
- 5.14 Nantong Fujitsu Microelectronics
- 5.15 Walton Advanced Engineering
- 5.16 Chipbond
- 5.17 J-DEVICES



- 5.18 MPI
- 5.19 STS Semiconductor
- 5.20 Signetics
- 5.21 Hana Micron
- **5.22 NEPES**
- 5.23 Tianshui Huatian Technology
- 5.24 China Wafer Level CSP



## **Selected Charts**

#### **SELECTED CHARTS**

Global Semiconductor Market Size, 2013-2019E

Global Semiconductor Market Breakdown by Product, 2012-2016E

Market Size Growth of Various Semiconductor Products, 2012-2016E

Semiconductor Outsourced Supply Chain

Semiconductor Company Systems

Semiconductor Outsourced Supply Chain Example

Food Chain IC CAD Design Industry

Top25 Semiconductor Sales Leaders, 2014Q1

Top25 Semiconductor Sales Leaders, 2015Q1

Worldwide IC Sales by Company Headquarters Location, 1990-2013

Fabless IC Sales Market Share by Company Headquarters Location, 2013

Top10 IC Vendors in China, 2008-2013

Global Memory Market Size, 2009-2016E

Global Memory Market by Type, 2014

Automotive Memory Market Size, 2008-2015

Automotive Memory Market by Technology, 2010-2015

Capex of DRAM Industry, 2008-2015

Oversupply Ratio of DRAM, 2013-2016E

DRAM Demand by Device, 2013-2015

DRAM GB/System, 2013-2015

Oversupply Ratio of DRAM, 2014Q1-2016Q4E

Capex of NAND Industry, 2008-2015

Mainstream Tech-node on Typical Smartphone IC, 2011-2018E

Average IC Costs Per Mobile Phone, 2008-2016E

Frequency Bands Per Mobile Handset Device, 2000-2018E

Cellular Terminal Shipment Forecast by Cellular Standard, 2000-2018E

LTE-enabled Cellular Terminal Forecast, 2011-2018E

Global Mobile Phone Shipments, 2007-2015

Global 3G/4G Mobile Phone Shipments Breakdown by Region, 2011-2014

Worldwide Smartphone Sales to End Users by Vendor, 2014 (Thousands of Units)

Worldwide Smartphone Sales to End Users by Operating System, 2014 (Thousands of Units)

Shipments of Global Top10 Mobile Phone Vendors, 2014

Shipments of Major Mobile Phone Vendors, 2015Q1

Market Share of Major Mobile Phone Vendors, 2015Q1



Market Share of Major Mobile Phone Operating Systems, 2015Q1

Worldwide Smartphone Sales to End Users by Vendor, 2014 (Thousands of Units)

Worldwide Smartphone Sales to End Users by Operating System, 2014 (Thousands of Units)

Market Share of Major Chinese Smartphone Vendors, 2014

Market Share of Major Vendors in Chinese 4G Mobile Phone Market, 2014

Laptop Computer Shipments, 2008-2015

Shipments of Major Global Notebook PC ODM Vendors, 2010-2014

Global Tablet PC Shipments, 2011-2016E

Shipments of Top5 Tablet PC Vendors, 2014Q4

Shipments, Market Share and Growth of Top5 Tablet PC Vendors, 2014

Global Server Market Size, 2013-2018E

Worldwide Server Systems Factory Revenue of Top5 Corporate Family, 2013

Worldwide Server Systems Factory Revenue of Top5 Corporate Family, 2014Q4

Market Share of Global Server Vendors, 2015

**HBM Architecture** 

Mobile DRAM Trend

Advantages of WIDE IO

SK Hynix WIDE IO2 Roadmap

**HMC** Architecture

Benefits of HMC

Advantages of Embedded Passive/Active Substrate

**Embedded Component Substrate Process** 

Comparison of Embedded Active & Passive Components

Roadmap of Embedded Passive Substrate

Structure Roadmap of Embedded Active Substrate

FOWLP and PLP Process Comparison

Why Embedded Trace?

**Embedded Trace Package Features** 

Embedded Trace Package Sweet Spot (for Wire Bonding)

Embedded Trace Package Sweet Spot (for FLIP CHIP)

Development Trend of PoP Packaging

Samsung Widcon

ePoP Architecture

Application of FOWLP

Fan-Out eWLP (Embedded Wafer-Level Packaging) Architecture

Embedded Fan-Out Wafer Level Package (eWLP) vs. PBGA (Plastic Ball Grid Array)

Thermal Management between PBGA and InFO-WLP of Baseband Chip Set (TSMC

Results)



SiP Module Technologies

Business Model of ASE and USI

SoC, SiP and SoB

SiP Roadmap

Market Share of Major SiP Packaging Vendors, 2014

Sales and Operation Margin of Murata, FY2009-FY2016

Sales Breakdown of Murata by Product, FY2013-FY2015

Major Products of Murata

Sales Breakdown of Murata by Application, FY2013-FY2016

Operation Income Bridge of Murata, FY2014-FY2015

Quarterly Sales, Order and Backlog of Murata, 2012Q2-2015Q1

Revenue and Operating Margin of USI, 2008-2015

Revenue of USI by Application, 2011-2014

Output of USI's Products, 2011-2014

Cost Structure of USI, 2014

ASE (USI) SiP Module Roadmap for System Integration

ASE (USI) SiP Module Roadmap for Miniaturization

ASE (USI) SiP Module Roadmap Advanced Process

Challenges of 2.5D Packaging Technology

Current 2.5D Packaging Business Model

Future 2.5D Packaging Business Model

2.5D Interposer Manufacturing Revenue

Breakdown by Interposer Bulk Material, 2010-2017

Applications of TSV

Suppliers of TSV Equipment

TSV Packaging Equipment Distribution, 2012-2017E

MEMS -NEMS Trend

MEMS Shipments, 20132018E

MEMS Market Size, 2012-2018E

Main MEMS Players, 2014-2015

Avago's FBAR MEMS Filter with TSV

**CIS Packaging Trend** 

Cross-section SEM Image of a BI-CIS

OSAT Market Size, 2008-2018E

Share of IC Package Value Add, 1990-2020E

Global Shipments of IC Packaging Type, 2011/2013/2018E

BUMPED WAFER PRODUCTION BY PITCH (300mm Equivalent), 2013/2018E

Middle-End Packaging Industry Process

China Semiconductor Packaging & Test Industry Size, 2009-2015



Number of Capacity of Chinese Semiconductor Packaging & Test Vendors, 2010-2014

Top30 Chinese IC Packaging & Test Vendors by Revenue, 2014

Ranking of FIQFN Vendors, 2013

Ranking of FOWLP Vendors, 2013

Ranking of Stacked Package Vendors, 2013

Ranking of Global Top24 OSAT Companies by Revenue, 2013-2015

Operating Margin and Gross Margin Comparison of Major Global OSAT Companies,

2013-2015

Global Foundry Market Size, 2008-2017E

Chinese IC Market Size, 2011-2017E

China's IC Imports, 2006-2013

China's IC Exports, 2006-2013

China's IC Industry Sales, 2008-2014

Capex of China's IC Industry, 2008-2014

Top10 Chinese IC Design Houses by Sales, 2004/2014

China Foundry Sales Share of the Pure-play IC Foundry Market, 2002-2018E

China National IC Fund Structure

Organizational Structure of ASE

Revenue and Gross Margin of ASE, 2003-2015

Revenue and Operating Margin of ASE, 2009-2015

Monthly Revenue of ASE, May 2013-May 2015

Revenue of ASE by Business, 2010-2015

Revenue and Gross Margin of ASE Packaging, 2013Q1-2015Q1

Revenue of ASE Packaging by Type, 2013Q1-2015Q1

Revenue and Gross Margin of ASE Testing, 2013Q1-2015Q1

Revenue and Gross Margin of ASE Material, 2013Q1-2015Q1

EMS Revenue and Gross Margin of ASE, 2013Q1-2015Q1

IC ATM Revenue Structure of ASE by Application, 2013Q1-2015Q1

EMS Revenue Structure of ASE by Application, 2013Q1-2015Q1

Machinery & Equipment Capital Expenditure vs. EBITDA of ASE, 2013Q1-2015 Q1

Major Customers of ASE

Revenue, Gross Margin and Operating Margin of Amkor, 2005-2015

Revenue of Amkor by Packaging Type, 2007-2015

Shipments of Amkor by Packaging Type, 2012-2015

Revenue of Amkor by Application, 2012-2015

Amkor's Capital Intensity, 2012-2015

Debt and Cash of Amkor, 2012-2015

Property, Plant and Equipment of Amkor by Region 20122013

Revenue and Shipments of Amkor by Region, 2012



Net Sales of Amkor by Country Based on Customer Location, 2012-2014

Organizational Structure of SPIL

Revenue, Gross Margin and Operating Margin of SPIL, 2005-2015

Monthly Revenue of SPIL, May 2013-May 2015

Quarterly Revenue, Gross Margin and Operating Margin of SPIL, 2013Q1-2015Q1

Revenue of SPIL by Region, 2005-2015

Revenue of SPIL by Application, 2005-2015

Revenue of SPIL by Business, 2005-2015

Capacity of SPIL, 2006-2015

Equity Structure of New STATS ChipPAC

Revenue and Gross Margin of STATS ChipPAC, 2004-2015

Revenue of STATS ChipPAC by Packaging Type, 2006-2015

Revenue of STATS ChipPAC by Application, 2006-2015

Revenue of STATS ChipPAC by Region, 2006-2015

Organizational Structure of PTI

Revenue and Gross Margin of PTI, 2008-2015

Monthly Revenue of PTI, May 2013-May 2015

Revenue Mix of PTI by Application, 2014Q1-2015Q1

Revenue, Gross Margin and Operating Margin of Greatek, 2005-2015

Monthly Revenue and Growth of Greatek, May 2013-May 2015

Revenue and Gross Margin of ChipMOS, 2003-2015

Revenue and Operating Margin of ChipMOS, 2009-2015

Revenue of ChipMOS by Business, 2010-2015

Revenue of ChipMOS by Product, 2010-2015

Utilization Rate and EBITDA Margin of ChipMOS, 2011-2015

Cash Flow and CAPEX of ChipMOS, 2011-2015

Technology Roadmap of ChipMOS, 2014-2016

ChipMOS Technology Development & Business Alignment

Revenue and Gross Margin of KYEC, 2003-2015

Revenue and Operating Margin of KYEC, 2009-2015

Monthly Revenue of KYEC, May 2013-May 2015

Distribution of KYEC's Plants

Testing Platforms of KYEC

Revenue and EBITDA of Unisem, 2006-2015

Revenue and EBITDA of Unisem, 2012Q1-2015Q1

Quarterly Gross Margin of Unisem, 2012Q1-2015Q1

Quarterly Revenue Structure of Unisem by Technology, 2012Q2-2015Q1

Quarterly Revenue Structure of Unisem by Application, 2012Q2-2015Q1

Organizational Structure of Formosa Plastics



Organizational Structure of FATC

Revenue and Operating Margin of FATC, 2006-2015

Revenue and Gross Margin of FATC, 2009-2015

Monthly Revenue of FATC, May 2013-May 2015

Revenue and Operating Margin of JECT, 2006-2015

Output of JECT, 2011-2014

Chip Packaging Cost Structure of JECT, 2012-2014

Revenue of JECT by Product, 2013-2014

Global CU Pilluar Capacity, 2012

Assets and Liabilities of JECT, 2009-2014

Quarterly Revenue of JECT, 2007Q1-2015Q1

Quarterly Net Income of JECT, 2007Q1-2015Q1

Revenue and Profit of JECT's Major Subsidiaries, 2013-2014

JCET Roadmap

Revenue and Gross Margin of UTAC, 2010-2015

Revenue of UTAC by Business, 2010-2014

Revenue of UTAC by Business, 2010-2015

Revenue of UTAC by Product, 2010-2015

Revenue of UTAC by Customer, 2011-2013

Technological Distribution of UTAC

Global Distribution of UTAC

Revenue and Operating Margin of Lingsen Precision, 2007-2015

Revenue and Gross Margin of Lingsen Precision, 2009-2015

Monthly Revenue of Lingsen Precision, May 2013-May 2015

Revenue and Operating Income of Nantong Fujitsu Microelectronics, 2007-2015

Balance Sheet of Nantong Fujitsu Microelectronics, 2012-2014

Cash Flows of Nantong Fujitsu Microelectronics, 2012-2014

Key Ratio of Nantong Fujitsu Microelectronics, 2012-2014

Revenue and Operating Margin of Walton Advanced Engineering, 2007-2015

Revenue and Gross Margin of Walton Advanced Engineering, 2009-2015

Monthly Revenue and Growth of Walton Advanced Engineering, May 2013-May 2015

Revenue and Operating Margin of Chipbond, 2006-2015

Revenue and Gross Margin of Chipbond, 2009-2015

Monthly Revenue and Growth of Chipbond, May 2013-May 2015

Revenue of Chipbond by Business, 2012

Global Gold Bumping Vendor Capacity Share, 2013

Organizational Structure of J-DEVICES

Revenue and PBT of MPI, FY2007-FY2015

Equity and Assets of MPI, FY2010-FY2014



Revenue of MPI by Region, FY2011-FY2014

Organizational Structure of STS Semiconductor

Revenue and Operating Margin of STS Semiconductor, 2006-2015

Revenue of STS Semiconductor by Business, 2011-2013

Capacity of STS Semiconductor, 2011-2013

Output of STS Semiconductor, 2011-2013

Customer Distribution of STS Semiconductor, 2013-2015

Shareholder Structure of Signetics

Revenue and Operating Margin of Signetics, 2007-2015

Revenue and Operating Margin of Hana Micron, 2006-2015

Revenue of Hana Micron by Customer, 2014

Revenue of Hana Micron by Market, 2013Q1-2014Q4

Revenue and Operating Margin of Nepes, 2007-2015

Quarterly Revenue of Nepes by Division, 2013-2014

Revenue and Operating Margin of Tianshui Huatian Technology, 2006-2015

Revenue and Operating Income of China Wafer Level CSP, 2010-2015

Revenue of China Wafer Level CSP by Customer, 2014



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