

3D Chips (3D IC): Market Research Report

https://marketpublishers.com/r/33C627083E6EN.html

Date: October 2010

Pages: 300

Price: US\$ 3,450.00 (Single User License)

ID: 33C627083E6EN

Abstracts

This report analyzes the Global market for 3D Chips (3D IC) in US\$ Million.

Annual estimates and forecasts are provided for the period 2006 through 2015.

The report profiles 38 companies including many key and niche players such as Amkor Technology, GlobalFoundries, Inc., Hynix Semiconductor, Inc., International Business Machines Corporation, Intel Corporation, Micron Technology, Inc., Renesas Electronics Corporation, Samsung Electronics Co., Ltd., Sony Corporation, Tezzaron Semiconductor Corporation, Toshiba Semiconductors, and Ziptronix, Inc.

Market data and analytics are derived from primary and secondary research.

Company profiles are mostly extracted from URL research and reported select online sources.



Contents

I.INTRODUCTION, METHODOLOGY & PRODUCT DEFINITIONS

Study Reliability and Reporting Limitations
Disclaimers
Data Interpretation & Reporting Level
Quantitative Techniques & Analytics
Product Definitions and Scope of Study

II. EXECUTIVE SUMMARY

1.MARKET OUTLOOK

Semiconductor Industry: An Overview

Chip-Making Industry Reels Under the Economic Pressure

3D CHIPS: MARKET & TECHNOLOGY OVERVIEW

A Quick Primer

Transition from 2D Configuration to 3D IC

Appeal of 3D Chip Soars Among End-Use Sectors

Rationale Behind the Growing Popularity of 3D IC

TSV Technology – Ensuring Success of 3D-IC Integration

3D TSV: TECHNOLOGICAL TRENDS AND ISSUES

Market Adoption of 3D IC Technology: Challenges

2.PRODUCT OVERVIEW

Semiconductor

Discrete Devices

Integrated Circuits (ICs)

Analog ICs

Digital ICs

3D IC (THREE-DIMENSIONAL INTEGRATED CIRCUIT) - AN INTRODUCTION

3D PACKAGING VS 3D ICS

Benefits of 3D IC

Manufacturing Technologies for 3D IC

Technological Challenges

Manufacturing Costs



Yield

Heat

Complexity of Design Lack of Clearly Defined Standards Lack of Relevance Post Insertion Supply Delay

3.PRODUCT INTRODUCTIONS/LAUNCHES

TierLogic Announces the Launch of 3D FPGA Movidius Rolls Out 3D Chip for Smartphones STMicroelectronics Unveils 3D IC Chip for Digital TV Applications Applied Materials Launches Avila™ Technology STMicroelectronics Launches 3D IC for Enhanced Audio in Portable Media Players BeSang Unleashes 3D IC Technology to Enable Low Cost Solutions Sound Design Technologies Rolls Out New 3D Chip Stacking Technology Toshiba to Develop 3D NAND Flash Chip NEC Develops New 3D Chip Stacked Flexible Memory for SoC IMEC Introduces 3D SIC Technology Aviza Technology Launches Versalis fxP

4.RECENT INDUSTRY ACTIVITY

CEA-Leti, SPTS Ally Over Next-Gen TSV Development

EVG, IME Collaborate for 3D-IC Integration Technologies

CMC, CMP, MOSIS Ally for 3D-IC Process

Elpida Collaborate with PTI, UMC for 3D-IC Integration Development

Leti, R3Logic Partner for 3D-IC Methodologies and Designs

NEC Electronics Merges with Renesas Technology

Advanced Technology Investment Company Acquires Chartered Semiconductor Manufacturing

ON Semiconductor Acquires Sound Design Technologies

SPP Acquires Key Assets of Aviza Technology

IBM Partners with ETH and EPFL to Co-Develop Eco-Friendly 3D Microchips

S.E.T and IMEC Collaborate to Develop Processes for 3D Integration

Industrial Technology Research Institute Collaborates with Applied Materials

EV Group and Applied Materials Collaborate to Develop Wafer Bonding Process for 3D IC

Soitec Collaborates with CEA-Leti for 3D Integration



Apple Acquires Stake in Imagination Technologies

Applied Materials Acquires Semitool

KLA- Tencor Acquires Stake in ICOS Vision Systems

Zoran Corporation Takes Over Let It Wave

SanDisk Enters into Collaboration with Toshiba for Rewriteable 3D Chip Development BeSang Collaborates with National NanoFab Centre and Stanford NanoFab to Develop 3D IC

Singapore forms Novel Consortium to Boost 3D Adoption DDD and Samsung Collaborate for Development of 3D Chips

5.FOCUS ON SELECT PLAYERS

Amkor Technology (US)

GlobalFoundries, Inc. (US)

Hynix Semiconductor, Inc. (South Korea)

International Business Machines Corporation (US)

Intel Corporation (US)

Micron Technology, Inc. (US)

Renesas Electronics Corporation (Japan)

Samsung Electronics Co., Ltd. (South Korea)

Sony Corporation (Japan)

Tezzaron Semiconductor Corporation (US)

Toshiba Semiconductors (Japan)

Ziptronix, Inc. (US)

6.GLOBAL MARKET PERSPECTIVE

Table 1. World Recent Past, Current & Future Analysis for 3D Chips (3D IC) Analyzed with Annual Sales Figures in US\$ Million for Years 2006 through 2015 (includes corresponding Graph/Chart)

III. COMPETITIVE LANDSCAPE

Total Companies Profiled: 38 (including Divisions/Subsidiaries - 40)

Region/CountryPlayers

The United States16

Canada

Japan



Europe
France
The United Kingdom
Rest of Europe
Asia-Pacific (Excluding Japan)



I would like to order

Product name: 3D Chips (3D IC): Market Research Report

Product link: https://marketpublishers.com/r/33C627083E6EN.html

Price: US\$ 3,450.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/33C627083E6EN.html