Flip Chip Technology Market by Wafer Bumping Process, Packaging Technology, Application and Geography - Global Forecast to 2022

Description: "Miniaturization of semiconductor devices, improved performance, and reduced size driving the flip chip technology market"

The flip chip technology market is expected to grow from USD 19.01 billion in 2015 to USD 31.27 billion by 2022, at a CAGR of 7.1% between 2016 and 2022. The flip chip technology market is driven by factors such as increasing demand for miniaturization and high performance in electronic devices, and strong penetration in the consumer electronics market.

"The market for CPU of flip chip technology to gain maximum traction during the forecast period"

CPUs packaged using the flip chip technology are estimated to hold the largest market share during the forecast period. The market for LED is expected to gain traction and grow at the highest CAGR in the next six years. These are the most sustainable product segments for the flip chip technology market. CPUs have a wide range of applications in computers, smartphones (application processor), high-end networks such as servers, wearables, and now automotive. The performance of application processor in smartphones and tablets remains a key feature leading to fierce competition among brands. Therefore, increasing need for more functionality and reduced package size is expected to drive the integration of flip chip technology in baseband and application processors for mobile platforms.

The market in APAC expected to witness highest growth during the forecast period

APAC accounted for the major market share of the overall flip chip technology market in 2015. Moreover, the market in APAC is expected to grow at the highest CAGR between 2016 and 2022. Asia-Pacific is a major manufacturing hub and expected to provide ample opportunities for the growth of flip chip technology. The growing demand for high performance in smartphones and automotive MCUs is driving the market in this region.

In the process of determining and verifying the market size for several segments and sub-segments gathered through the secondary research, extensive primary interviews with key people have been conducted. The break-up of profile of primary participants is as given below:

- By Company Type: Tier 1 - 22%, Tier 2 - 45% and Tier 3 - 33%
- By Designation: C-level - 43%, Manager level - 57%
- By Region: North America - 12%, Europe - 38%, APAC - 25%, RoW - 25%

Owing to the rise in the demand for flip chip packaging solutions in smartphones, computers, and tablets, the flip chip technology market is expected to have huge opportunity for growth in the next six years.

Various key players in the flip chip technology market profiled in the report are as follows:

1. TSMC, Ltd. (Taiwan)
2. Samsung (South Korea)
3. Intel Corporation (U.S.)
4. United Microelectronics Corporation (Taiwan)
5. ASE Group (Taiwan)
6. Amkor Technology (U.S.)
7. STATS ChipPAC (Singapore)
8. Powertech Technology (Taiwan)
9. SPIP, Co., Ltd. (Taiwan)
10. JCET, Co., Ltd. (China)

The report would help key players/new entrants in this market in the following ways:

1. This report segments the flip chip technology market comprehensively and provides the closest
approximations of the size of the overall market and sub-segments across different verticals and regions.
2. The report helps stakeholders understand the pulse of the market and provides them information on key market drivers, restraints, challenges, and opportunities.
3. This report would help stakeholders to better understand a competitor and gain more insights to improve their position in the business. The competitive landscape section includes competitor ecosystem, new product developments, partnerships, mergers and acquisitions.

Contents:
1 Introduction
1.1 Objectives Of The Study
1.2 Market Definition
1.3 Study Scope
1.3.1 Markets Covered
1.3.2 Years Considered For The Study
1.4 Currency
1.5 Limitations
1.6 Market Stakeholders
2 Research Methodology
2.1 Research Data
2.1.1 Secondary Data
2.1.1.1 Key Data From Secondary Sources
2.1.2 Primary Data
2.1.2.1 Key Data From Primary Sources
2.1.2.2 Key Industry Insights
2.1.2.3 Breakdown Of Primaries
2.2 Market Size Estimation
2.2.1 Bottom-Up Approach
2.2.2 Top-Down Approach
2.2.3 Market Share Estimation
2.3 Market Breakdown And Data Triangulation
2.4 Research Assumptions
2.4.1 Assumptions
3 Executive Summary
4 Premium Insights
4.1 Attractive Opportunities In The Global Flip Chip Technology Market
4.2 Flip Chip Technology Market Size, By Packaging Type, 2016 - 2022
4.3 Flip Chip Technology Market Size, By Wafer Bumping Process, 2016 - 2022
4.4 Flip Chip Technology Market Size, By Packaging Technology, 2016 - 2022
4.5 Flip Chip Technology Market Size, By Product, 2016 - 2022
4.6 Flip Chip Technology Market Size, By Application, 2016 - 2022
4.7 Flip Chip Technology Market Size, By Geography
5 Market Overview
5.1 Introduction
5.2 Market Segmentation
5.2.1 Flip Chip Technology Market, By Wafer Bumping Process
5.2.2 Flip Chip Technology Market, By Packaging Technology
5.2.3 Flip Chip Technology Market, By Packaging Type
5.2.4 Flip Chip Technology Market, By Product
5.2.5 Flip Chip Technology Market, By Application
5.2.6 Geographic Analysis
5.3 Market Dynamics
5.3.1 Drivers
5.3.1.1 Increasing Demand For Miniaturization And High-Performing Electronic Devices
5.3.1.2 Penetration In The Consumer Electronics Sub Segment
5.3.2 Restraints
5.3.2.1 Reliability Challenges
5.3.3 Opportunities
5.3.3.1 Growth In The Ic Industry
5.3.4 Challenges
5.3.4.1 High Cost Associated With Flip Chip Packaging Solutions
6 Industry Trends
6.1 Introduction
6.2 Value Chain Analysis
6.3 Porter’s Five Forces Analysis
6.3.1 Threat Of New Entrants
6.3.2 Threat Of Substitutes
6.3.3 Bargaining Power Of Suppliers
6.3.4 Bargaining Power Of Buyers
6.3.5 Intensity Of Competitive Rivalry
7 Flip Chip Technology Market, By Wafer Bumping Process
7.1 Introduction
7.2 Copper (Cu) Pillar
7.2.1 Benefits Of Copper Pillar Bumping Process Over Other Wafer Bumping Processes
7.3 Lead (Pb)-Free
7.4 Tin-Lead (Sn-Pb) Eutectic Solder
7.5 Gold-Stud+ Plated Solder

8 Flip Chip Technology Market, By Packaging Technology
8.1 Introduction
8.2 2D Ic Packaging Technology
8.3 2.5D Ic Packaging Technology
8.3.1 Major Benefits Of 2.5D Ic Packaging Over The Traditional 2D Ic Packaging Technology
8.4 3D Ic Packaging Technology
8.5 Comparison Between 2D, 2.5D, 3D Ic Packaging Technology

9 Flip Chip Technology Market, By Packaging Type
9.1 Introduction
9.2 Fc Bga (Flip Chip Ball Grid Array)
9.3 Fc Pga (Flip Chip Pin Grid Array)
9.4 Fc Lga (Flip Chip Land Grid Array)
9.5 Fc Qfn (Flip Chip Quad Flat No-Lead)
9.6 Fc Sip (Flip Chip System-In-Package)
9.7 Fc Csp (Flip Chip-Chip-Scale Package)

10 Flip Chip Technology Market, By Product
10.1 Introduction
10.2 Memory
10.3 Light-Emitting Diode (Led)
10.4 Cmos Image Sensor
10.5 Rf, Analog, Mixed Signal, And Power Ic
10.6 Cpu
10.7 Gpu
10.8 Soc

11 Flip Chip Technology Market, By Application
11.1 Introduction
11.2 Consumer Electronics
11.2.1 Smartphones & Tablets
11.2.2 Laptops
11.2.3 Desktop Pc
11.2.4 Set-Top Box/Hybrid Set Top Box
11.2.5 Game Stations
11.3 Telecommunications
11.3.1 Network Equipment
11.3.2 Base Stations
11.3.3 Servers
11.4 Automotive
11.4.1 Ecu
11.4.2 Sensors
11.4.3 Power Modules
11.4.4 Others
11.5 Industrial
11.5.1 Industrial Wireless Sensor Network
11.5.2 Identification And Monitoring
11.5.3 Others
11.6 Medical Devices
11.6.1 Patient Monitoring Devices
Table 7 Flip Chip Technology Market Size, By Packaging Type, 2013 - 2022 (USD Million)
Table 8 Flip Chip Technology Market Size For Fc Bga, By Product, 2013 - 2022 (USD Million)
Table 9 Flip Chip Technology Market Size For Fc Pga, By Product, 2013 - 2022 (USD Million)
Table 10 Flip Chip Technology Market Size For Fc Lga, By Product, 2013 - 2022 (USD Million)
Table 11 Flip Chip Technology Market Size For Fc Qfn, By Product, 2013 - 2022 (USD Million)
Table 12 Flip Chip Technology Market Size For Fc Sip, By Product, 2013 - 2022 (USD Million)
Table 13 Flip Chip Technology Market Size For Fc Csp, By Product, 2013 - 2022 (USD Million)
Table 14 Flip Chip Technology Market Size, By Product, 2013 - 2022 (USD Million)
Table 15 Flip Chip Technology Market Size For Memory, By Packaging Technology, 2013 - 2022 (USD Million)
Table 16 Flip Chip Technology Market Size For Memory, By Packaging Type, 2013 - 2022 (USD Million)
Table 17 Flip Chip Technology Market Size For Led, By Packaging Technology, 2013 - 2022 (USD Million)
Table 18 Flip Chip Technology Market Size For Led, By Packaging Type, 2013 - 2022 (USD Million)
Table 19 Flip Chip Technology Market Size For Cmos Image Sensor, By Packaging Technology, 2013 - 2022 (USD Million)
Table 20 Flip Chip Technology Market Size For Cmos Image Sensor, By Packaging Type, 2013 - 2022 (USD Million)
Table 21 Flip Chip Technology Market Size For Rf, Analog, Mixed Signal, And Power Ic, By Packaging Technology, 2013 - 2022 (USD Million)
Table 22 Flip Chip Technology Market Size For Rf, Analog, Mixed Signal, And Power Ic, By Packaging Type, 2013 - 2022 (USD Million)
Table 23 Flip Chip Technology Market Size For Cpu, By Packaging Technology, 2013 - 2022 (USD Million)
Table 24 Flip Chip Technology Market Size For Cpu, By Packaging Type, 2013 - 2022 (USD Million)
Table 25 Flip Chip Technology Market Size For Gpu, By Packaging Technology, 2013 - 2022 (USD Million)
Table 26 Flip Chip Technology Market Size For Gpu, By Packaging Type, 2013 - 2022 (USD Million)
Table 27 Flip Chip Technology Market Size For Soc, By Packaging Technology, 2013 - 2022 (USD Million)
Table 28 Flip Chip Technology Market Size For Soc, By Packaging Type, 2013 - 2022 (USD Million)
Table 29 Flip Chip Technology Market Size, By Application, 2013 - 2022 (USD Million)
Table 30 Flip Chip Technology Market Size, By Consumer Electronics, 2013 - 2022 (USD Million)
Table 31 Flip Chip Technology Market Size For Consumer Electronics, By Region, 2013 - 2022 (USD Million)
Table 32 Americas: Flip Chip Technology Market Size, By Region, 2013 - 2022 (USD Million)
Table 33 Flip Chip Technology Market Size, By Telecommunication Application, 2013 - 2022 (USD Million)
Table 34 Flip Chip Technology Market Size For Telecommunication, By Region, 2013 - 2022 (USD Million)
Table 35 Americas: Flip Chip Technology Market Size, By Region, 2013 - 2022 (USD Million)
Table 36 Flip Chip Technology Market Size, By Automotive Application, 2013 - 2022 (USD Million)
Table 37 Flip Chip Technology Market Size For Automotive, By Region, 2013 - 2022 (USD Million)
Table 38 Americas: Flip Chip Technology Market Size, By Region, 2013 - 2022 (USD Million)
Table 39 Flip Chip Technology Market Size, By Industrial, 2013-2022 (USD Million)
Table 40 Flip Chip Technology Market Size For Industrial, By Region, 2013 - 2022 (USD Million)
Table 41 Americas: Flip Chip Technology Market Size, By Region, 2013 - 2022 (USD Million)
Table 42 Flip Chip Technology Market Size, By Medical Devices, 2013 - 2022 (USD Million)
Table 43 Flip Chip Technology Market Size For Medical Devices, By Region, 2013 - 2022 (USD Million)
Table 44 Americas: Flip Chip Technology Market Size, By Region, 2013-2022 (USD Million)
Table 45 Flip Chip Technology Market Size, By Smart Technologies, 2013 - 2022 (USD Million)
Table 46 Flip Chip Technology Market Size For Smart Technologies, By Region, 2013 - 2022 (USD Million)
Table 47 Americas: Flip Chip Technology Market Size, By Region, 2013 - 2022 (USD Million)
Table 48 Global Flip Chip Technology Market Size, By Military And Aerospace Application, 2013 - 2022 (USD Million)
Table 49 Flip Chip Technology Market Size For Military & Aerospace Application, By Region, 2013 - 2022 (USD Million)
Table 50 Americas: Flip Chip Technology Market Size For Military & Aerospace Application, By Region, 2013 - 2022 (USD Million)
Table 51 Flip Chip Technology Market Size, By Region, 2013 - 2022 (USD Million)
Table 52 Americas: Flip Chip Technology Market Size, By Region, 2013 - 2022 (USD Million)
Table 54 South America: Flip Chip Technology Market Size, By Country, 2013 - 2022 (USD Million)
Table 55 Americas: Flip Chip Technology Market Size, By Region, 2013 - 2022 (USD Million)
Table 56 Flip Chip Technology Market Size In Americas, By Application, 2013 - 2022 (USD Million)
Table 57 Flip Chip Technology Market Size In South America, By Application, 2013 - 2022 (USD Million)
Table 58 Europe: Flip Chip Technology Market Size, By Country, 2013 - 2022 (USD Million)
Table 59 Flip Chip Technology Market Size In Europe, By Application, 2013 - 2022 (USD Million)
Table 60 Flip Chip Technology Market Size In Apac, By Country, 2013 - 2022 (USD Million)
Table 61 Flip Chip Technology Market Size In Apac, By Application, 2013 - 2022 (USD Million)
Table 62 RoW: Flip Chip Technology Market Size, By Region, 2013 - 2022 (USD Million)
Table 63 Flip Chip Technology Market Size In Row, By Application, 2013 - 2022 (USD Million)
Table 64 Most Significant Collaborations In The Flip Chip Technology Market, 2010 - 2015
Table 65 Most Significant Acquisitions, Joint Ventures, And Agreements In The Flip Chip Technology Market, 2014 - 2015
Table 66 Most Significant Other Strategies In The Flip Chip Technology Market, 2014 - 2015

List of Figures

Figure 1 Flip Chip Technology Market Segmentation
Figure 2 Flip Chip Technology Market: Research Design
Figure 3 Process Flow Of Market Size Estimation
Figure 4 Market Size Estimation Methodology: Bottom-Up Approach
Figure 5 Market Size Estimation Methodology: Top-Down Approach
Figure 6 Market Breakdown & Data Triangulation
Figure 7 Assumptions Of The Research Study
Figure 8 Flip Chip Technology Market Size, By Packaging Type, 2016 - 2022
Figure 9 2D Ic Packaging Technology To Hold The Largest Market Size In 2016, While The 3D Ic Packaging Technology To Grow At The Highest Rate During 2016 - 2022
Figure 10 Copper (Cu) Pillar Bumping Process To Hold Largest Market Size 2016
Figure 11 Led Expected To Grow At The Highest Rate During Forecast Period
Figure 12 Consumer Electronics Application To Hold Largest Market Size In 2016 And Also Grow At The Highest Rate During The Forecast Period
Figure 13 APACHeld The Largest Market In 2015 And Expected To Grow At The Highest Rate During The Forecast Period
Figure 14 Increasing Demand For Miniaturization Along With High Performance In Electronics Devices To Spur The Market Growth
Figure 15 The Market For Fc Csp To Grow At A High Rate During The Forecast Period
Figure 16 Copper (Cu) Pillar Process To Grow At The Highest Rate During The Forecast Period
Figure 17 The Market For 3D Ic Packaging Technology To Grow At The Highest Rate During The Forecast Period
Figure 18 The Market For Led Of Flip Chip To Grow At The Highest Rate During The Forecast Period
Figure 19 The Market For Consumer Electronics Segment To Grow At The Highest Rate During The Forecast Period
Figure 20 The Flip Chip Technology Market In The APACExpected To Grow At The Highest Rate During Forecast Period
Figure 21 Flip Chip Technology Market, By Geography
Figure 22 Flip Chip Technology Market: Drivers, Restraints, Opportunities, And Challenges
Figure 23 Ecosystem Of Flip Chip Technology
Figure 24 Porter’S Five Forces Analysis, 2015
Figure 25 Porter’S Five Forces Analysis, 2015
Figure 26 Flip Chip Technology Market: Threat Of New Entrants
Figure 27 Flip Chip Technology Market: Threat Of Substitutes
Figure 28 Flip Chip Technology Market: Bargaining Power Of Suppliers
Figure 29 Flip Chip Technology Market: Bargaining Power Of Buyers
Figure 30 Flip Chip Technology Market: Intensity Of Competitive Rivalry
Figure 31 Market, By Wafer Bumping Process
Figure 32 Market For Copper (Cu) Pillar Bumping Process Expected To Grow At The Highest Rate
Figure 33 Market, By Packaging Technology
Figure 34 Market For 3D Ic Packaging Technology Expected To Grow At The Highest Rate
Figure 35 Illustration Of 2D Ic Packaging Technology
Figure 36 Illustration Of 2.5D Ic Packaging Technology
Figure 37 Illustration Of 3D Ic Packaging Technology
Figure 38 Market, By Packaging Type
Figure 39 Market For Fc Csp Packaging Type Is Expected To Grow At The Highest Rate
Figure 40 Market, By Product
Figure 41 Market For Led Expected To Grow At The Highest Rate
Figure 42 Market, By Application
Figure 43 Market For Consumer Electronics Application Expected To Grow At The Highest Rate
Figure 44 Geographic Snapshot, 2015
Figure 45 The Flip Chip Technology Market In The APAC Region Expected To Grow At The Highest Rate
Figure 46 Americas Snapshot
Figure 47 Flip Chip Technology Market Size In Brazil, 2013 - 2022 (USD Million)
Figure 48 Flip Chip Technology Market Size In Argentina, 2013 - 2022 (USD Million)
Figure 49 Flip Chip Technology Market Size In Other Countries, 2013 - 2022 (USD Million)
Figure 50 Europe Snapshot
Figure 51 APAC Snapshot
Figure 52 Companies Adopted Collaborations As The Key Growth Strategy Between 2010 And 2015
Figure 53 Market Ranking Analysis For The Flip Chip Technology Market, 2015
Figure 54 Market Evaluation Framework
Figure 55 Battle For Market Share: Collaboration Was The Key Strategy
Figure 56 Geography Revenue Mix For Top Five Players
Figure 57 Tsmc Ltd.: Company Snapshot
Figure 58 Tsmc Ltd.: Swot Analysis
Figure 59 Samsung Electronics Co., Ltd.: Company Snapshot
Figure 60 Samsung Electronics Co., Ltd.: Swot Analysis
Figure 61 Intel Corp.: Company Snapshot
Figure 62 Intel Corp.: Swot Analysis
Figure 63 United Microelectronics Corp.: Company Snapshot
Figure 64 Ase Group.: Company Snapshot
Figure 65 Ase Group: Swot Analysis
Figure 66 Amkor Technology: Company Snapshot
Figure 67 Amkor Technology: Swot Analysis
Figure 68 Spil Co., Ltd.: Company Snapshot
Figure 69 Powertech Technology, Inc.: Company Snapshot
Figure 70 Stats Chippac Ltd.: Company Snapshot
Figure 71 Jiangsu Changjiang Electronics Technology Co., Ltd.: Company Snapshot

Ordering:
Order Online - http://www.researchandmarkets.com/reports/3673049/
Order by Fax - using the form below
Order by Post - print the order form below and send to

Research and Markets,
Guinness Centre,
Taylors Lane,
Dublin 8,
Ireland.
Fax Order Form
To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353-1-481-1716 (from Rest of World). If you have any questions please visit http://www.researchandmarkets.com/contact/

Order Information
Please verify that the product information is correct and select the format(s) you require.

Product Name: Flip Chip Technology Market by Wafer Bumping Process, Packaging Technology, Application and Geography - Global Forecast to 2022
Web Address: http://www.researchandmarkets.com/reports/3673049/
Office Code: SCH371KK

Product Formats
Please select the product formats and quantity you require:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic (PDF)</td>
<td></td>
</tr>
<tr>
<td>Single User:</td>
<td>USD 5650</td>
</tr>
<tr>
<td>1 - 5 Users:</td>
<td>USD 6650</td>
</tr>
<tr>
<td>Site License:</td>
<td>USD 8150</td>
</tr>
<tr>
<td>Enterprisewide:</td>
<td>USD 10000</td>
</tr>
</tbody>
</table>

Contact Information
Please enter all the information below in BLOCK CAPITALS

Title: Mr ☐ Mrs ☐ Dr ☐ Miss ☐ Ms ☐ Prof ☐
First Name: ___________________________ Last Name: ___________________________
Email Address: * _______________________
Job Title: ______________________________
Organisation: __________________________
Address: ____________________________________________
City: __________________________
Postal / Zip Code: ________________________
Country: ________________________________
Phone Number: __________________________
Fax Number: ____________________________

* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)
Payment Information

Please indicate the payment method you would like to use by selecting the appropriate box.

☐ Pay by credit card: You will receive an email with a link to a secure webpage to enter your credit card details.

☐ Pay by check: Please post the check, accompanied by this form, to:
Research and Markets,
Guinness Center,
Taylors Lane,
Dublin 8,
Ireland.

☐ Pay by wire transfer: Please transfer funds to:

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account number</td>
<td>833 130 83</td>
</tr>
<tr>
<td>Sort code</td>
<td>98-53-30</td>
</tr>
<tr>
<td>Swift code</td>
<td>ULSBIE2D</td>
</tr>
<tr>
<td>IBAN number</td>
<td>IE78ULSB9853308313083</td>
</tr>
<tr>
<td>Bank Address</td>
<td>Ulster Bank, 27-35 Main Street, Blackrock, Co. Dublin, Ireland.</td>
</tr>
</tbody>
</table>

If you have a Marketing Code please enter it below:

Marketing Code: ____________________________

Please note that by ordering from Research and Markets you are agreeing to our Terms and Conditions at http://www.researchandmarkets.com/info/terms.asp

Please fax this form to:
(646) 607-1907 or (646) 964-6609 - From USA
+353-1-481-1716 or +353-1-653-1571 - From Rest of World