
Description: Global and China Automotive PCB Industry Report, 2014-2015 highlights the followings:

1. Global and China's automobile market and industry
2. Downstream market of automotive PCB
3. Automotive PCB Industry and Market
4. 19 Automotive PCB companies

Global automotive PCB market size was around USD4.96 billion in 2014, and is expected to grow by 6.5% to USD5.28 billion in 2015, compared with an overall global PCB market scale of roughly USD59.6 billion in 2014 and an estimated growth of 0.8% in 2015. Automotive PCB is the fastest-growing field in PCB industry, and will sustain the momentum until at least 2019.

In automotive PCB field, powertrain holds the largest proportion, about 32% for the time being, including mainly Engine Control Unit, Starter, Alternator, Transmission Control, Fuel Injection, and Power Steering. For xEV, complexity, high voltage, high current and high temperature of Inverter and Converter pose extremely high requirements on PCB. Powertrain seizes over 50%, followed by Body with about 25% (primarily Lighting, HVAC, Power Door & Seat, Keyless, and TPMS). LED lighting, which enjoys a high share, is highly demanding on PCB, usually adopting MCPCB (Metal Core PCB). Thirdly, Safety systems, consisting mainly of ADAS, ABS, and Airbag, make up about 22%. The last is Cockpit systems, mainly covering Instrument Display and Infotainment.

Automotive PCB has exceedingly high requirement on reliability, creating the biggest threshold. Recall system in automobile industry requires makers to take risks of faulty products. As small makers cannot afford this, they are usually ruled out. Challenges for automotive PCB include reliability, high temperature, high frequency, and high current.

PCBs in automotive engine and gearbox need to withstand high temperature above 150?, so ceramic substrates must be used, for ceramic multi-layer substrate contains mainly alumina (Al2O3) and aluminum nitride (AlN). High temperature co-fired ceramic (HTCC) PCB is usually sintered at temperature of over 1600?, and the conductor is high-melting point tungsten or molybdenum, which can be sintered together at the same time. Japanese Murata puts forward low temperature co-fired ceramic (LTCC), which finds few applications. Ceramic substrates are mostly supplied by Japanese KYOCERA and U.S. Rogers. PCBs used by European and U.S. carmakers are largely provided by German Schweizer, Duwel, and Wurth, and U.S. TTM. Japanese carmakers are mainly served by CMK and Meiko.

Automotive safety systems, especially ABS, generally adopt MCPCB (Metal Core PCB). Automotive ADAS needs to use a large quantity of radar which finds shipment of 19 million sets in 2014 and is expected to reach 96 million sets in 2020. In this case, high-frequency PCB will be employed. The PCB usually needs PTFE ceramic and can only be done by the companies (mainly from U.S. Europe and Japan) that are very experienced in RF. xEV is developing rapidly, especially after the outbreak of scandal over VW cheating pollution emissions tests.

Supply of cockpit PCBs are almost taken on by Taiwanese companies. HDI may be needed, as Infotainment becomes more complicated and the size of screen larger. Moreover, the number of automotive displays used also increases, like BMW 7 series using up to 7 displays for each vehicle. All these factors fuel a robust market.

Contents:
1 Global and Chinese Automobile Market
1.1 Global Automotive Market
1.2 Overview of Chinese Automotive Market
1.3 Recent Developments of Chinese Automotive Market

2 Downstream Market of Automotive PCB
2.1 ECU
2.2 Automotive Display
2.3 Automotive Infotainment
2.4 Automotive ADAS
2.5 Automotive Radar

3 Automotive PCB Industry and Market
3.1 Overview of PCB Industry
3.2 Overview of China's PCB Industry
3.3 Automotive PCB Market Size
3.4 Engine and Powertrain PCB
3.5 Metal Core PCB (MCPCB)
3.6 High Frequency PCB
3.7 Heavy Copper PCB
3.8 Electronic Systems in xEV
3.9 Ranking of Automotive PCB Companies

4 Automotive PCB Companies
4.1 CMK
4.2 TTM
4.3 Viasystems
4.4 Chin Poon Industrial
4.5 Schweizer
4.6 NOK
4.6.1 MEKTEC (Zhuhai)
4.6.2 MEKTEC (Suzhou)
4.7 Kingboard Chemical
4.7.1 Elec & Eltek
4.7.2 Techwise Circuits
4.7.3 Express Electronics
4.8 Liang Dar Technology
4.9 Kyoden
4.10 Shirai
4.11 Unitech Printed Circuit Board
4.12 Guangdong Ellington Electronics Technology
4.13 WUS Printed Circuit
4.14 KCE
4.15 ELNA
4.16 Tripod Technology
4.17 3CEMS
4.18 AT&S
4.19 Meiko

Selected Charts

Global Automobile Sales Volume, 2010-2015
Global Light Vehicle Output by Region, 2003-2015
China's Automobile Sales Volume, 2005-2015
YoY Growth in Annual Automobile Output in China, 2005-2014
Automotive ECU Market Size, 2013-2018E
Automotive ECU Shipments, 2014-2019E
Market Share of Automotive ECU Suppliers, 2015
Automotive Display Shipments Breakdown by Application, 2015-2019E
Global Infotainment Shipments, 2013-2020E
Structure Diagram of ADAS
Development History of ADAS
Output Value of Global PCB Industry, 2001-2016E
Geographic Migration of PCB Production, 2013&2014&2019E
Global PCB Industry Income by Headquarters of Companies, 2012-2015
Chinese Top 26 PCB Companies, 2013-2014
Production Value of Chinese PCB Companies by Layer, 2013-2014
Production Volume of Chinese PCB Companies by Layer, 2013-2014
Automotive PCB Market by Position, 2015&2020E
Delphi Ceramic Substrate ECU
Metal PCB by Technology, 2015
Four Layer MCPCB Construction
Comparison of High-frequency PCB and Ordinary PCB
24GHz Radar PCB
77GHz Radar PCB
Schweizer Heavy Copper PCB
Heavy Copper PCB Trend
Composition of Power Electronics in xEV
Main Board of Honda Accord Hybrid
Ranking of Automotive PCB Suppliers, 2013-2015
Revenue and Operating Margin of CMK, FY2005-FY2016
Revenue of CMK by Application, FY2007-FY2015
Revenue of CMK by Layer, FY2007-FY2015
Revenue of CMK by Region, FY2007-FY2014
Revenue and Operating Margin of TTM, 2005-2014
Revenue of TTM +Viasystems by Application
Quarterly Revenue of TTM by Region, 2013Q1-2015Q2
Quarterly Revenue and Gross Margin of TTM, 2013Q1-2015Q2
Customers of TTM, 2014
Revenue of TTM by Technology, 2014
Revenue of TTM by Application, 2008-2014
Global Factories of TTM
Revenue and Operating Margin of Viasystems, 2006-2014
Revenue of Viasystems by Business, 2008-2014
Global Footprint of Viasystems
Revenue of Viasystems by Application, 2008-2014
Main Customers of Viasystems, 2008-2014
Main Customers of Viasystems
Net Sales of Viasystems by Country of Destination, 2012-2014
Net Sales of Viasystems by Country of Manufacture, 2012-2014
Revenue of DDI by Region and End Market
Factories of DDI
Main Customers of DDI
Revenue and Gross Margin of Chin Poon Industrial, 2005-2015
Revenue and Operating Margin of Chin Poon Industrial, 2005-2015
Monthly Revenue and Growth Rate of Chin Poon Industrial, Aug 2013-Aug 2015
Sales Regions of Chin Poon Industrial, 2012-2014
Shareholder Structure of Schweizer
Turnover and EBIT Margin of Schweizer, 2010-2015
Net Profit of Schweizer, 2010-2014
Cashflow and Working Capital of Schweizer, 2013-2014
Balance Structure of Schweizer, 2013-2014
Order Intake of Schweizer, 2014Q1-2015Q1
Sales of Schweizer by Application, 2011-2015
Sales of Schweizer by Region, 2011-2015
Organizational Structure of Mektron
Revenue and Operation Margin of NOK, FY2006-FY2016
Net Sales of NOK by Industry, 2013-2015
Capital of NOK by Region, 2013-2015
Depreciation of NOK by Region, 2013-2015
Profit Bridge of NOK FPC (Electric Devices) Segment, 2013-2014
Profit Bridge of NOK FPC (Electric Devices) Segment, 2014-2015
Revenue of NOK by Product, FY2006-FY2015
Operating Profit of NOK by Product, FY2013-FY2015
Revenue of NOK by Region, FY2010-FY2014
Revenue of MEKTRON's FPC Division by Region, FY2010-FY2014
Global Footprint of Mektron
Revenue and Operating Profit of MEKTEC (Zhuhai), 2004-2014
Organizational Structure of Kingboard Chemical
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.

Web Address: http://www.researchandmarkets.com/reports/3449218/
Office Code: SCDK3XQR

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 2400</td>
</tr>
<tr>
<td>Hard Copy:</td>
<td>USD 2600 + USD 58 Shipping/Handling</td>
</tr>
<tr>
<td>Electronic (PDF)</td>
<td></td>
</tr>
<tr>
<td>Enterprisewide:</td>
<td>USD 3700</td>
</tr>
</tbody>
</table>

* Shipping/Handling is only charged once per order.

Contact Information
Please enter all the information below in BLOCK CAPITALS

<table>
<thead>
<tr>
<th>Title:</th>
<th>Mr</th>
<th>Mrs</th>
<th>Dr</th>
<th>Miss</th>
<th>Ms</th>
<th>Prof</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Name:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last Name:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Email Address:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Title:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postal / Zip Code:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone Number:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fax Number:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 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:
Account number 833 130 83
Sort code 98-53-30
Swift code ULSBIE2D
IBAN number IE78ULSB98533083313083
Bank Address Ulster Bank,
27-35 Main Street,
Blackrock,
Co. Dublin,
Ireland.

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