

Global and China Automotive PCB Industry Report, 2014-2015

https://marketpublishers.com/r/G5C2FBB3139EN.html

Date: October 2015

Pages: 115

Price: US\$ 2,400.00 (Single User License)

ID: G5C2FBB3139EN

Abstracts

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

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

Global Automotive Display Market Size by Shipments, 2013-2019E

Global Automotive Display Market Size by Value, 2013-2019E

Automotive Display Shipments Breakdown by Application, 2015-2019E

Global Automotive Infotainment (in Broad Sense) Market Size, 2011-2018E

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

Global Automotive PCB Market Size, 2011-2019E

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

Revenue and Margin of Profit Attributable to Equity Shareholders of Kingboard

Chemical, 2002-2015

Revenue of Kingboard Chemical by Business, 2008-2015

Organizational Structure of Elec & Eltek

Revenue and Operating Margin of Elec & Eltek, 2005-2015

Balance Sheet of Elec & Eltek, 2010-2014

Revenue of Elec & Eltek by Region, 2006-2014

Revenue of Elec & Eltek by Application, 2014

Revenue of Elec & Eltek by Layer, 2006-2013

Capacity of Elec & Eltek's Factories

Technical Capacity of Elec & Eltek

Revenue of Express Electronics' Dongguan Factory, 2009-2013

Revenue of Express Electronics' Suzhou Factory, 2009-2013

Organizational Structure of Liang Dar

Revenue and Operating Profit of Kyoden, FY2011-FY2016

Total Assets of Kyoden, FY2011-FY2015

Capital and R&D of Kyoden, FY2011-FY2015

Revenue of Kyoden by Region, FY2012-FY2016

Revenue and Operating Profit of Shirai, FY2011-FY2016

Revenue of Shirai by Technology, FY2011-FY2015

Revenue of Shirai by Application, FY2011-FY2015

Revenue and Gross Margin of Unitech Printed Circuit Board, 2006-2014

Revenue and Operating Margin of Unitech Printed Circuit Board, 2009-2015

Monthly Revenue and Growth Rate of Unitech Printed Circuit Board, Aug 2013-Aug 2015

Technology Roadmap for Rigid PCB

Technology Roadmap for Flexible PCB

Financial Data of Shanghai Unitech Electronics, 2010&2013

Equity Structure of Guangdong Ellington Electronics Technology

Revenue and Gross Margin of Guangdong Ellington Electronics Technology, 2007-2015

Revenue of Guangdong Ellington Electronics Technology by Layer, 2009-2014



Revenue of Guangdong Ellington Electronics Technology by Application, 2009-2013

Revenue of Guangdong Ellington Electronics Technology by Region, 2009-2013

Revenue Structure of WUS Printed Circuit by Customer, 2007-2012

Revenue and Operating Profit of WUS Printed Circuit, 2007-2014

Revenue of WUS Printed Circuit by Layer, 2010-2013

Revenue of WUS Printed Circuit by Application, 2007-2015

Gross Margin of WUS Printed Circuit by Application, 2012-2015

Main Customers of WUS Printed Circuit, 2013

Shareholder Structure of KCE

Financial Summary of KCE, 2013-2017E

Production of KCE by Layer, 2011-2014

Sales of KCE by Region, 2011-2014

Quarterly Sales and GP Margin of KCE, 2012Q1-2015Q2Q

Sales of KCE by Application, 2015Q2

Capacity Expansion of KCE, 2014-2017E

Revenue and Operating Profit of ELNA, 2008-2015

Revenue of ELNA by Business, 2012-2015

Revenue of ELNA by Region, 2013-2014

Revenue and Gross Margin of Tripod Technology, 2006-2015

Revenue and Operating Margin of Tripod Technology, 2009-2015

Monthly Revenue of Tripod Technology, Aug 2013-Aug 2015

Revenue of Tripod Technology by Application, 2013

Revenue of Tripod Technology by Layer, 2013

Capacity of Tripod Technology, 2006-2011

Financial Data of Tripod Technology's Subsidiaries in Mainland China, 2013

Financial Data of Tripod Technology's Subsidiaries in Mainland China, 2014

EBITDA Margin of AT&S, FY2005-FY2016

Chongqing Substrate Plant Ramp of AT&S

Revenue of AT&S by Business/Region, FY2014

Revenue of AT&S by Business/Region, FY2015

Revenue of AT&S by Business/Region, FY2016Q1

Quarterly Revenue of AT&S' Mobile Devices & Substrates Business, 2014Q2-2015Q2

Main Customers of AT&S' Mobile Devices & Substrates Business

Quarterly Revenue of AT&S' Industrial & Automotive Business, 2014Q2-2015Q2

Main Customers of AT&S' Industrial & Automotive Business

AT&S' Employees, 2010-2015

CAPEX of AT&S, 2011-2015

Revenue and Operating Margin of Meiko Electronics, FY2006-FY2016

Operating Margin of Meiko Electronics, FY2014



Revenue and Operating Margin of Meiko Electronics' Subsidiaries in Mainland China, FY2009-FY2014

Revenue and Operating Margin of Meiko Electronics' Subsidiaries in Mainland China, FY2015

Revenue of Meiko Electronics by Application, FY2013-FY2015 Revenue of Meiko Electronics by Layer, FY2010-FY2015



I would like to order

Product name: Global and China Automotive PCB Industry Report, 2014-2015

Product link: https://marketpublishers.com/r/G5C2FBB3139EN.html

Price: US\$ 2,400.00 (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/G5C2FBB3139EN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:		
Last name:		
Email:		
Company:		
Address:		
City:		
Zip code:		
Country:		
Tel:		
Fax:		
Your message:		
	**All fields are required	
	Custumer signature	

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970