

# Automotive Circuit Protection Components!

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# Automotive Circuit Protection Components: World Markets, Technologies & Opportunities: 2017-2022

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-A Paumanok Granular Report†

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## 1.0 REPORT INTRODUCTION:

### About The Author

Mr. Zogbi is president and CEO of Paumanok Publications, Inc., a market research company located in Cary, North Carolina specializing in market research studies, consulting, mergers and acquisitions, conferences and seminars with emphasis upon passive electronic automotive circuit protection components. Mr. Zogbi has 300 customers worldwide in the field of market research on capacitors, resistors, inductors, circuit protection and electronic materials. Mr. Zogbi also owns Passive Component Industry Magazine with global circulation of 14,000. Mr. Zogbi engages in single client research related to new product development, due diligence for mergers and acquisitions and for establishing business growth for passive component companies worldwide.

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### Scope of Report Coverage:

#### *Automotive Markets For For Circuit Protection Automotive circuit protection components: Market Outlook*

Automotive electronics include engine control units, ABS cards, SRS electronics, car stereos, HVAC systems, driver information and diagnostic systems, powertrain electronics, HEV integration, door locks, seat motors, interior and exterior lighting, instrument clusters and related electronics. Circuit protection component consumption in automotive electronic subassemblies has been excellent since 2012 and in 2017 will account for 20% of circuit protection component consumption value worldwide, worth \$1,100 Million USD. Component revenues in 2017 will be up by about 7% on a year-over-year basis compared to 2016.

In 2017 automotive electronic demand for automotive circuit protection components increased due to lease expirations and an aging fleet of class 3 to 7 sedans and light trucks in established economies and continued demand for automobiles in emerging economies. The combination of an increase in electronic content per automobile, coupled with increased unit sales of cars and light trucks globally has increased the automotive sector from 12% of total passive component consumption value in 2011 to 20% in 2017. The market is expected to continue to be robust going forward because of greater electronic content per vehicle and more vehicles sold to support





demand in emerging economies such as China, India and Brazil.

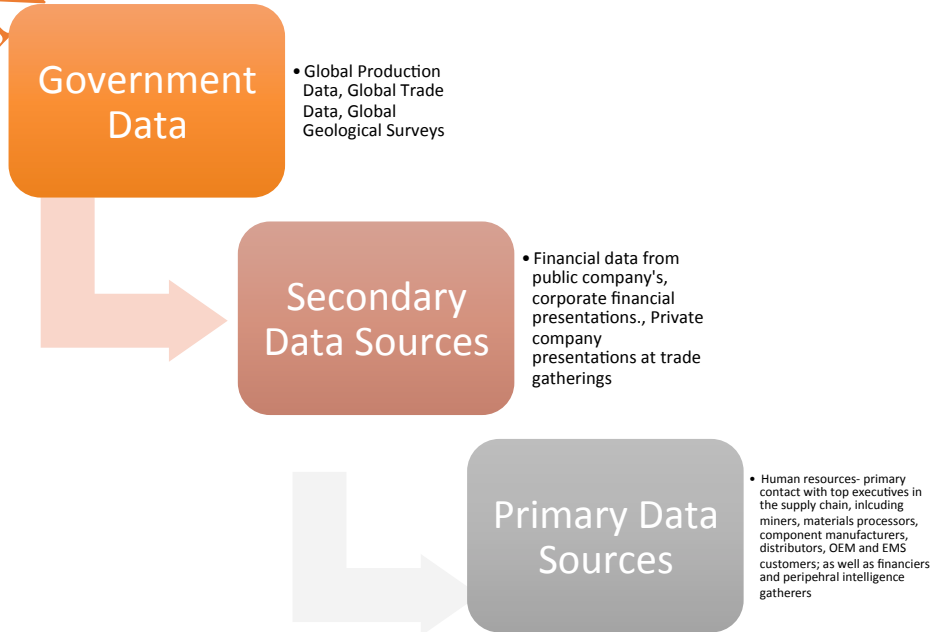
#### Research Methodology Employed:

The methodology employed to do this study combines secondary and primary data sources, including government data; company financial data and primary human intelligence resources to draw conclusions. This is called a “legacy” of data that is designed to make sure that all pieces of the market “puzzle” fit together. Also we have the unique capability to benchmark the markets we study with previous studies under the same title produced in the past two decades. This enables us to establish the “Delphi -Method” which suggests that the trend of sales over time will support a similar rate of growth in the future. We caveat this approach by also employing “Box-Jenkins” methods of market research which adjust forecasts based upon our knowledge of current events and their impact on the supply chain, and how that might impact future forecasts.



The Paumanok Research Methodology: 28 Years Studying Passive Component Markets

Figure 1: Paumanok Research Methodology



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Government Data Collection and Resources:

There are many government resources that we apply to research on the electronic automotive circuit protection components industry. Our primary use of government data is to establish component production in specific countries, as well as imports and exports by country of destination and country of origin respectively. Government data can also be used to establish OEM pricing because of the availability in some instances of both value and volume data, which can be divided to learn OEM pricing data. We also will employ government statistics as they relate to the geology of countries to establish links to raw material trade.



**Secondary Published Sources:**

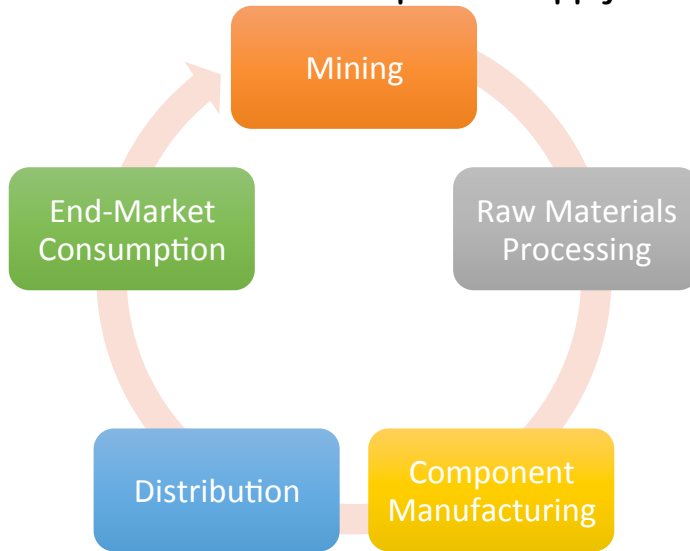
We employ many secondary resources in our market research, including financial data from public companies; especially 10-K and annual, as well as quarterly financial reports and technical data from both public and private companies that is found in trade journals and from conference proceedings. We also employ analyst data from financial institutions as well as a variety of paid intelligence subscriptions.

**Primary Intelligence Gathering:**

Paumanok maintains a database of 14,000 subscribers that can provide intelligence on a variety of subjects related to passive electronic automotive circuit protection components. These contacts are global in nature, but are largely centered in Japan, China, Korea, USA, Germany, France, UK, Italy, Czech Republic, Brazil, Canada, Mexico and Australia.

The Passive Component Supply Chain:

**Figure 2: The Passive Electronic Component Supply Chain**



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