SUMMARY

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Electronics Components Supply Chains & Imports

What is Shifting and Where is it Shifting?

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Issue

Strong supply chain management is critical to the success of all participants in the electronics industry. Procurement managers continually seek to optimize their understanding of the risks and evolving forces that continually reshape their supply ecosystem. A key element in their efforts is achieving the best visibility possible of both the macro and micro factors shaping the supply base. This typically means developing and managing data that can form the basis for informed decisions and action plans.

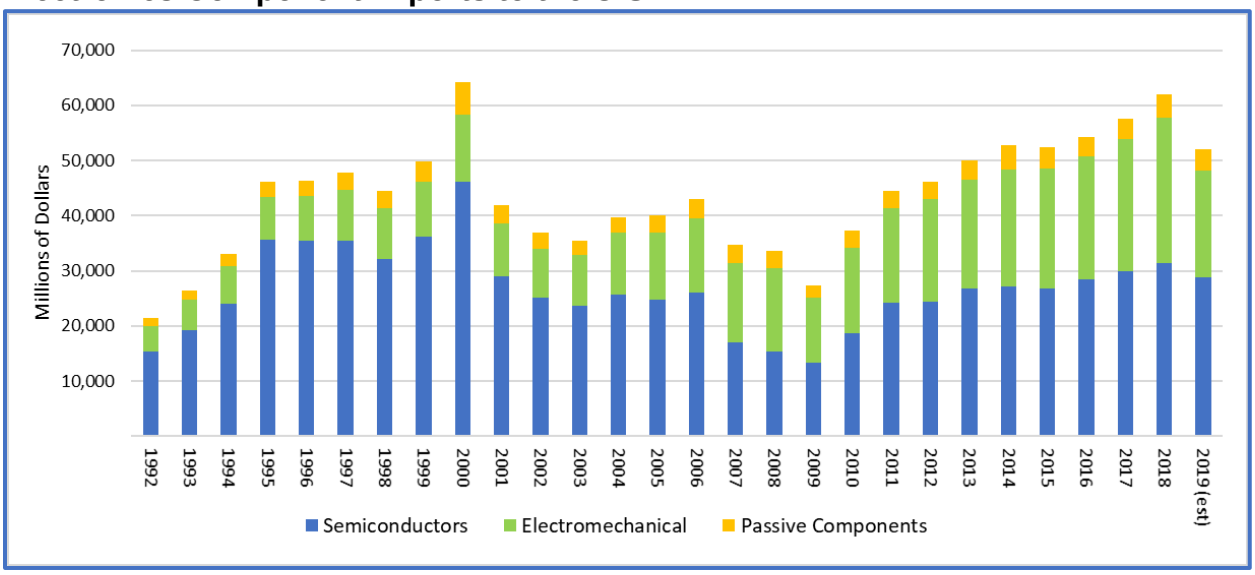
One highly valuable source of data on electronics and electronics components is found in the import/export data published by many governments. The U.S. Census Bureau, part of the U.S. Department of Commerce, publishes a vast and detailed set of U.S. import/export data covering the complete breadth of physical goods imported from 244 countries and entities on a monthly basis. However, the organization of this data does not necessarily follow the categories and standards commonly used in the electronics industry. In addition, categories are shifted and renamed over time as products and technologies evolve. This makes it very difficult to establish a set of data that is organized into useful categories and that can be analyzed consistently across time. Simply downloading data by various product codes results in a fragmented and incomplete picture that does not yield helpful insights.

To support association members, ECIA has developed a database that organizes data by common industry categories going back to 1992. Information extracted from this database can be used to understand the flow of imported electronics components into the U.S. and how the supply base is shifting around the world over time. The data that has been extracted from the larger database and presented in this report provides visibility into component categories that represent approximately 90% of the revenues that flow through the authorized distribution channel.

The overall database developed to this point covers imports of electronics components. Current plans anticipate future development of export data and expansion to the coverage of electronics equipment.

The data charted in the figure below illustrates the annual import revenues from electronics components split out by semiconductors, electromechanical and passive components. Import revenues have grown fairly steadily from 2009 to 2018 reaching a peak of $62B in 2018. The highest annual peak recorded was in 2000 at $64.2B. Of course, this was part of the dot-com boom and bust when large levels of excess inventory bloated the supply chain and resulted in an extended downturn in factory shipments of electronics components and required significant value to be scrapped and written off as part of rebalancing the supply chain. The current weak electronics production environment is seen in the extrapolated revenues for 2019 with a projected drop of -16% to $52.1B.

Electronics Component Imports to the U.S.



Source – U.S. Department of Commerce

The full ECIA Executive Analysis provides figures and statistics with historical revenues and growth rates by product category going back to 2003. Annual market shares by country for the top exporters of electronics components to the U.S. are presented beginning in 1992. Data with quarterly resolution is presented for 2018 through Q3 2019. These countries account for between 80% and 90% of revenue from all electronics components imported into the U.S. during this period.

To see the full ECIA Executive Analysis click on the “Members Only” section under Quick Links.