The information in this section is derived from an independent report prepared by Frost & Sullivan. The industry report prepared by Frost & Sullivan is based on information from its database, publicly available sources, industry reports, data obtained from interviews and other sources. The information from official government sources has not been independently verified by us, the Sole Sponsor, the [**REDACTED**]*, the* [**REDACTED**] *or any other party involved in the* [**REDACTED**]*, and no representation is given as to its accuracy.*

SOURCES OF INFORMATION AND RESEARCH METHODOLOGY

The information and statistics set out in this section and other sections of this document were extracted from different official government publications, available sources from public market research and other sources from independent suppliers. In addition, we engaged Frost & Sullivan for preparing an independent industry report in respect of the [**REDACTED**]. The information from Frost & Sullivan disclosed in the document is extracted from the Frost & Sullivan Report, a report commissioned by us for a fee of RMB565,000, and is disclosed with the consent of Frost & Sullivan. The Frost & Sullivan Report has been prepared by Frost & Sullivan independently without any influence from us or other interested parties.

Frost & Sullivan is an independent global consulting firm founded in 1961 in New York. Its services include, among others, industry consulting, market strategic consulting and corporate training. Frost & Sullivan conducted (i) primary research, which involved discussing the status of the industry with certain leading industry participants, and interviews with industry experts on a best-effort basis to collect information in aiding in-depth analysis; and (ii) secondary research, which involved reviewing company reports, independent research reports and data based on its own research database.

Our Directors have confirmed that there has been no adverse change in the market information since the date of publication of the Frost & Sullivan report, which may qualify, contradict or impact the information in this Industry Overview section. Each of our Directors and the Sole Sponsor has exercised reasonable care in selecting and identifying the named information sources, compiling, extracting and reproducing the information, and ensuring that there has been no material omission of the information in this "*Industry Overview*" section.

OVERVIEW OF PRC'S ELECTRONICS INTERNATIONAL TRADE MARKET

Definition of the Electronics International Trade Market

The electronics industry refers to electronics manufactures, mainly including electronic components, electronic equipment, consumer electronics and other devices. As part of global commerce, the electronics international trade is a cross-border trade activity with electronics as trading items, playing a crucial role in fostering worldwide electronics market growth and prosperity.

Introduction of PRC's Electronics International Trade Market

Electronics international trade occupies an important position in the PRC's electronics industry, driving industrial advancement and technological progress by importing key electronic components and equipment, and promoting the national economic growth through exports. Driven by opening-up policies and enhancement in product competitiveness, the PRC's electronics international trade market has maintained strong resilience and growth potential.

With regard to modes of conducting international trade, electronics enterprises are prone to hire cross-border supply chain services providers compared with conducting on their own. The use of cross-border supply chain services has following advantages:

- Cross-border supply chain services providers can provide comprehensive solutions including logistics management, customs clearance and warehousing management, promoting the overall efficiency of cross-border supply chain.

- Cross-border supply chain services providers can reduce the unit cost of transportation and warehousing by consolidating the needs of multiple clients, and enable electronics enterprises to retrench on expenses of building their own warehouse and logistics network.

- Cross-border supply chain services providers have profound experience and professional capabilities in providing solutions regarding international trade regulations, protecting electronics enterprises from potential compliance issues, including those related to customs regulations and procedures.

- Cross-border supply chain services providers can effectively promote the efficiency of the settlement of purchase price, especially in foreign currency. By conducting foreign exchange payments for enterprises, cross-border supply chain services providers can help them reduce the cost of holding foreign exchange and the risks from exchange rate fluctuation. Meanwhile, cross-border supply chain services providers can protect enterprises from compliance issues in foreign exchange management.

Overall, the use of cross-border supply chain services can assist enterprises in navigating the complexities of international trade, effectively reduce trade costs and potential risks, optimize their supply chain, and foster their international competitiveness to achieve sustainable growth in business.

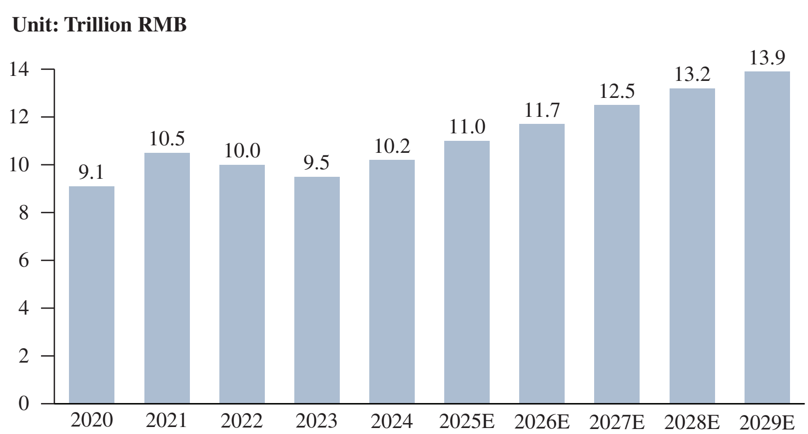
PRC's Electronics International Trade Market Size

The PRC's electronics international trade market has experienced fluctuation from 2020 to 2024 with a CAGR of 2.9%. The trade volume increased from RMB9.1 trillion to RMB10.0 trillion from 2020 to 2022 to fulfill accumulated orders owing to the production suspension during the Covid, while the gradual recovery of global electronic market induced the fluctuation of trade volume from RMB9.5 trillion to RMB10.2 trillion during 2023 and 2024.

In the foreseeable future, it is forecasted that the PRC's electronics international trade market will facilitate the recovery process, benefiting from the surging global electronics market driven by the global economic recovery and the emerging demand from the increasingly intimated regional trade cooperation. Meanwhile, the globalized layout of PRC's electronics supply chain has enhanced enterprises' resilience to deal with changes in international trade market, together with the strengthening in the competitiveness of electronics manufactured by Chinese enterprises, including new energy vehicles and consumer electronics. The volume of PRC's electronics international trade is projected to grow at a CAGR of 6.1% from 2025 to 2029, forecasted to reach RMB13.9 trillion by 2029.

PRC's Electronics International Trade Market Size, by trade volume

CAGR	2020-2024	2025E-2029E
PRC's Electronics International Trade	2.9%	6.1%



Source: General Administration of Customs of the People's Republic of China, Frost & Sullivan Report

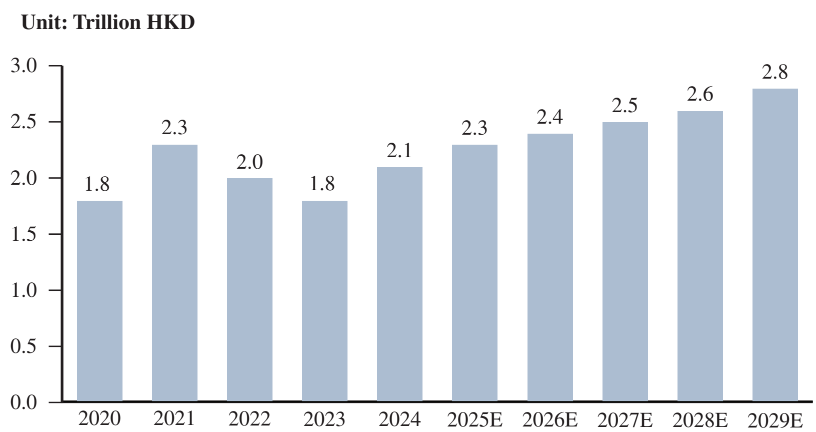
Hong Kong plays an important role in international trade of electronics as an indispensable transshipment hub connecting the Asia-Pacific area. An enormous volume of electronics from the Europe, Japan, South Korea and Taiwan are transhipped to the PRC through Hong Kong every year, when electronics from the PRC are exported overseas through Hong Kong.

The transshipment of electronics imports to Chinese Mainland through Hong Kong has shown a trend consistent with PRC's electronics international trade, with a CAGR of 4.1% from 2020 to 2024. The trade volume increased from HK$1.83 trillion to HK$2.02 trillion from 2020 to 2022 to satisfy the increasing demand of electronic materials and equipment deriving from accumulated orders during the Covid-19, and the fluctuation of PRC's electronic market drove the transshipment from HK$1.82 trillion to HK$2.15 trillion from 2023 to 2024.

In the foreseeable future, it is forecasted that the transshipment of electronics imports to Chinese Mainland through Hong Kong will experience a steady growth, with the trade volume increasing from HK$2.27 trillion in 2025 to HK$2.76 trillion in 2029 with a CAGR of 5.0%, benefiting from the continuous expansion of the PRC's electronics industry and increasing demand for imports of electronic components and equipment.

The transshipment of electronics imports to Chinese Mainland through Hong Kong, by trade volume

CAGR	2020-2024	2025E-2029E
The transshipment of electronics imports to Chinese Mainland through Hong Kong	4.1%	5.0%



Source: Census and Statistics Department of Hong Kong, Frost & Sullivan Report

The growth drivers of transshipment size of electronics from Hong Kong to Chinese Mainland mainly include:

- **Cost and timing efficiency:** Hong Kong is an international free port, adopting tariff-free policies and highly efficient customs clearance procedures for goods imported including electronic materials, equipment and products, increasing its priority as a transshipment hub option for electronics enterprises and cross-border supply chain operators aiming to reduce costs and increase timing efficiency in international trade.

- **Comprehensive and advanced transportation infrastructure:** Electronic components and equipment have high requirements for transportation, including temperature and humidity of storage and efficiency and timeliness of logistics. Hong Kong has comprehensive and advanced infrastructure to satisfy stringent and diversified transportation requirements from electronics products and equipment.

The challenges for Hong Kong as the transshipment center of electronics import of Chinese Mainland mainly include:

- **Competitions from the other major ports:** In recent years, the PRC's ports have achieved development in infrastructure, including intelligent warehousing systems and logistics hubs and parks. With the further provision of convenient customs clearance policies and favourable tariff terms carried out by the PRC's government to encourage the international trade of electronics, the status of Hong Kong as the transshipment center will face competitions from the PRC's ports.

- **Increasing demand for intelligentization:** The global supply chain is accelerating its transformation towards intelligence, forcing traditional hubs for technological upgrading. Hong Kong needs to accelerate the process of intelligentization through upgrading of infrastructure and equipment, and hiring professional talents with experience and skills in intelligent transformation to satisfy the increasing demand for intelligent supply chain.

Growth Drivers of Electronics International Trade Market

Favorable governmental policies

The PRC's electronics international trade market has received continuous support from the government. Chinese government has introduced a series of policies and regulations aimed at fostering the growth of electronics international trade market:

- The General Administration of Customs of People's Republic of China has continuously adjusted import tax rates of semiconductor raw materials, components and equipment for electronic manufactures to optimize the costs of electronics enterprises, and revised management regulations of imported and exported electronics to satisfy emerging trade demands of electronics enterprises. In the *Catalogue of Major Technological Equipment and Products Supported by the Government for Development* issued by the General Administration of Customs of People's Republic of China and other four departments in February, 2025, key equipment of integrated circuit and production equipment of electronic components are included, benefiting from preferential policies for import tax.

- *The Report on the Work of the Government* issued on *The Third Session of the 14th National People's Congress* in March 2025 stated that the PRC's government will continue to expand higher-standard opening up, stabilize foreign trade and investment, and promote stable development of foreign trade.

- In the *Multiple Policy Measures to Boost the Steady Growth of Foreign Trade* issued by the Ministry of Commerce in November 2024, the Ministry of Industry and Information Technology stated that enterprises will be actively guided to integrate into the international industrial chain, and the construction of overseas intelligent logistics platforms and cross-border e-commerce service platforms will be continuously promoted.

- In December 2023, the Ministry of Commerce and other nine ministries and commissions jointly issued *Opinions on Enhancing the Development Level of Processing Trade*, encouraging the international trade of high-added-value products including electronics, and strengthening financial policy support on enterprises conducting electronics international trade.

- In April 2023, the Ministry of Industry and Information Technology and the Ministry of Finance jointly issued *Action Plan for Stable Growth of Electronic Information Manufacturing Industry from 2023 to 2024*, instructing the electronics industry to optimize the structure of export products, increasing the proportion of high-value-added product exports, and promoting the introduction of export tax rebate policies.

Constantly evolving infrastructure

The continuous improvement of infrastructure construction has laid a solid foundation for the development of PRC's electronics international trade market. The construction of digital logistics integration infrastructure, including intelligent warehousing systems and logistics hubs and parks, makes the logistics of electronics more efficient and intelligent, and improves the response speed and flexibility of the supply chain. Meanwhile, the improvement of infrastructure in transportation safety further satisfies the stringent transportation and warehousing requirements of advanced electronics and equipment.

Booming global electronics demands

As the global trend toward digitalization and intelligentization continues to accelerate, the demand for electronics is experiencing significant growth. As one of the key components and core technologies of electronics market, the demand for integrated circuits is in rapid growth. Due to the globalized distribution of semiconductor resources and technologies, international trade, including raw materials, components and equipment of semiconductor has become a critical part in the development of integrated circuits and is conducted on a larger scale and at a higher frequency. Furthermore, the growth of new energy vehicles has underscored the importance of global supply chain configuration, stimulating the demand for international trade of corresponding electronics such as controllers and sensors.

Elevated competitiveness in electronics manufacturing

With the elevation in the competitiveness of electronics manufacturing, the PRC has become an indispensable part in the global industrial chain, participating extensively in the processing and production stages of different industries, including semiconductors, photovoltaics and new energy vehicles. Therefore, the growing demand for international trade in both raw materials and finished products will foster the development of PRC's electronics international trade and increase the resilience in response to fluctuations in the international trade environment.

Trends of Electronics International Trade Market

Globalization of Chinese electronics enterprises

With the growing trend of a globalized industrial chain and the support of favorable policies, Chinese electronics enterprises have been actively carrying out international cooperation. In terms of technology, Chinese enterprises have achieved global leadership in technology areas such as communication technology, consumer electronics, new energy vehicles, etc. By implementing a globalization strategy, many Chinese enterprises have successfully entered the global market of electronics industry, stimulating the demand for international trade.

Improvement of digitalization

Digitalization has become a dominant force in electronics international trade market with the advancement in technologies such as artificial intelligence and big data, significantly improving the efficiency in transaction processes, including order processing, proxy procurement, customs declaration and logistics management. For instance, artificial intelligence has increased the effectiveness in inventory optimization and automated customer service, reducing the risk and cost of manual operation. Managing integrated digital platform with big data analysis contribute to the enhancement in data transparency and management efficiency in collaborating flow of commerce, flow of goods, flow of funds and flow of information, enabling the synergized management on a global scale. Therefore, enterprises with technological innovation in cross-border trade and supply chain industries will gain a competitive advantage.

Expansion in cross-border supply chain services market

With the transformation and upgrading of PRC's manufacturing industries, the demand for PRC's electronics international trade has been expanding rapidly, especially for advanced electronics. Meanwhile, the transportation and warehousing of advanced electronics impose higher requirements for both quality and timeliness, presenting greater challenges to electronics enterprises in ensuring efficient and reliable delivery. With cross-border supply chain services' advantages in improving trade quality, efficiency and reducing trade cost, it is forecasted that the demand for cross-border supply chain services will increase significantly, facilitating the expansion of the market scale.

OVERVIEW OF PRC'S ELECTRONICS CROSS-BORDER SUPPLY CHAIN SERVICES MARKET

Definition of Electronics Cross-border Supply Chain Services

Electronics cross-border supply chain services refer to the provision of the following services for the import and export trade of electronics through the integration of digital technology and specialized resources:

- Flow of commerce refers to the transaction process between buyers and sellers, including proxy procurement and order processing, supporting the transfer of ownership of goods and ensuring the smooth transaction of goods.

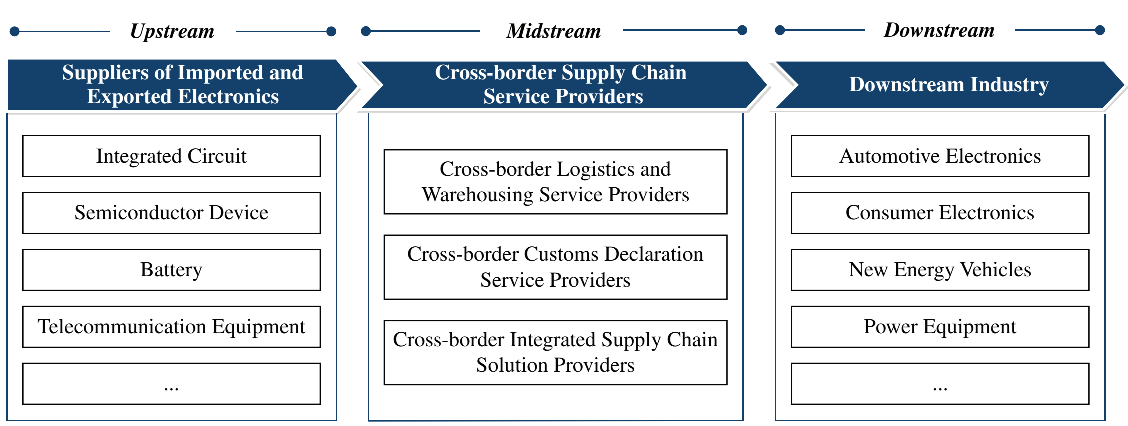
- Flow of goods refers to the physical movement of goods, including transportation services, warehouse management, and customs declaration, ensuring that goods are delivered to the destination on time, safely, and efficiently.

- Flow of funds refers to the transfer of funds in the supply chain process, including financing, and foreign currency settlement, ensuring secure and timely flow of funds.

- Flow of information refers to the transmission of information in the supply chain process, including demand information, inventory information, and logistics information, achieving information collection, processing, transmission, and sharing, enhancing the transparency and collaborative efficiency of the supply chain.

The Industry Chain of Electronics Cross-border Supply Chain Services Market

The following chart illustrates the industry chain of electronics cross-border supply chain services market.



Source: Frost & Sullivan Report

Upstream segment primarily includes suppliers of imported and exported electronics. These entities are responsible for the production of electronics. This segment forms the foundation of the cross-border supply chain, ensuring that a steady flow of electronics is available for further processing and distribution.

Midstream participants include cross-border supply chain services providers, which encompass cross-border logistics and warehousing services providers, cross-border customs declaration services providers, and cross-border integrated supply chain solution providers. These entities facilitate the movement and storage of cross-border electronics, manage customs declarations, and offer comprehensive solutions to streamline the supply chain process. Their services are essential for ensuring the efficient progress of electronics cross- border trade from the suppliers to the customers.

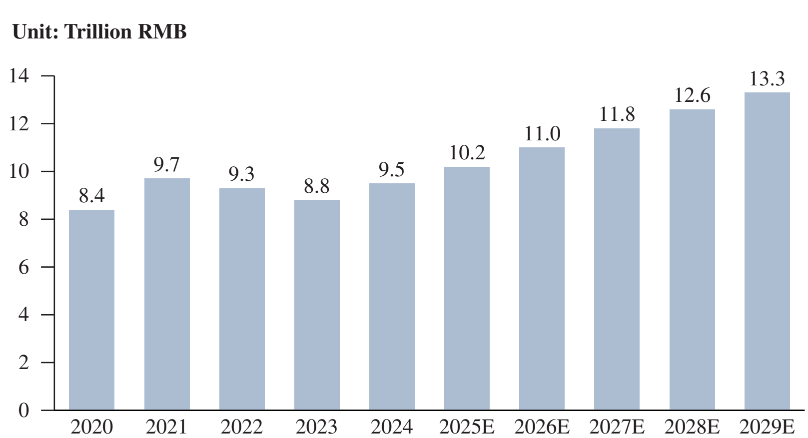
In the downstream segment, the cross-border supply chain services in the electronics are ultimately applied to downstream industries, containing automotive electronics, consumer electronics, new energy vehicles and power equipment. The successful delivery of goods marks the completion of the supply chain process, ensuring that the electronics reach their intended markets.

Market Size of PRC's Electronics Cross-border Supply Chain Services Market

Driven by sustained international trade, demands for supply chain services from downstream customers, and the upgrading of supply chain services, the market size of electronics cross-border supply chain services in the PRC increased rapidly and is expected to continue to grow in the future. According to Frost & Sullivan, the GMV of electronics cross-border supply chain services market in the PRC grew from RMB8.4 trillion in 2020 to RMB9.5 trillion in 2024, representing a CAGR of 3.1%, and is expected to reach RMB13.3 trillion in 2029, representing a CAGR of 6.9% from 2025 to 2029.

PRC's Electronics Cross-border Supply Chain Services Market Size, by GMV

CAGR	2020-2024	2025E-2029E
PRC's Electronics Cross-border Supply Chain Service	3.1%	6.9%



Source: Frost & Sullivan Report

Definition of Electronics Cross-border Integrated Supply Chain Solution

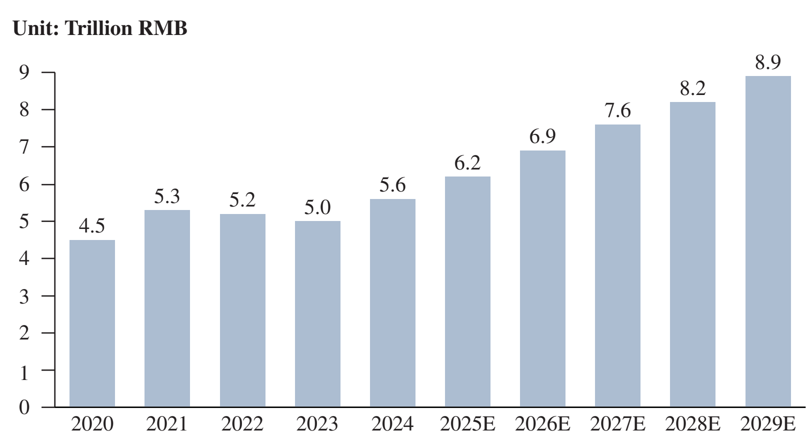
Electronics cross-border integrated supply chain solution refers to the integration of flow of commerce, flow of goods, flow of funds and flow of information among electronics cross-border supply chain services. Specifically, it integrates fragmented and isolated functions such as order processing, proxy procurement, customs declaration, logistics management, financing, data management, trade operations, and settlement into a unified system, providing clients with a comprehensive services solution.

Market Size of PRC's Electronics Cross-border Supply Chain Services Integrated Solution Market

Owing to intensifying market competition and increasing cost pressure, enterprises are opting for cross-border integrated supply chain solution providers to manage their international supply chain operations. The GMV of electronics cross-border integrated supply chain solution market in the PRC grew from RMB4.5 trillion in 2020 to RMB5.6 trillion in 2024, representing a CAGR of 5.6%. As the integrated solution providers leverage their scale and expertise to reduce costs, while also offer value-added services and information analytics to enhance operational efficiency, an increasing number of PRC companies (including in particular a vast number of them that have specific requirements for electronics) are inclined to outsource their supply chain processes to integrated supply chain solution providers. Therefore, the GMV of electronics cross-border integrated supply chain solution market in the PRC is expected to reach RMB8.9 trillion in 2029, representing a CAGR of 9.5% from 2025 to 2029.

PRC's Electronics Cross-border Integrated Supply Chain Solution Market Size, by GMV

CAGR	2020-2024	2025E-2029E
PRC's Electronics Cross-border Integrated Supply Chain Solution	5.6%	9.5%



Source: Frost & Sullivan Report

Competitive Landscape of PRC'S Electronics Cross-border Supply Chain Services Integrated Solution Market

According to Frost & Sullivan, the market size of electronics cross-border integrated supply chain solution market in the PRC reached RMB5.6 trillion in 2024, with the top five players accounting for 5.21% of the market. In 2024, we ranked as the fourth largest provider of electronics cross-border supply chain services integrated solution in China, accounting for 0.64% of the market.

The following table presents the ranking of PRC's electronics cross-border integrated supply chain solution market, as measured by GMV in 2024:

Ranking	Company	Company Background	Market Share
1	Company A	A supply chain services provider integrating supply chain platform services, industry chain integration and operation, brand marketing, and corporate financing. It was founded in 1997 and listed on Shenzhen Stock Exchange.	1.56%
2	Company B	An international supply chain logistics services provider, offering end-to-end one-stop intelligent supply chain logistics services. It was founded in 1996 and listed on Shanghai Stock Exchange.	1.43%
3	Company C	An integrated supply chain services provider leveraging digital information systems and integration capabilities across upstream and downstream resources. It was founded in 2001.	1.10%
4	The Company	–	0.64%
5	Company D	An integrated supply chain services provider focusing on information and communication technology industry. It was founded in 2005 and listed on Shenzhen Stock Exchange.	0.48%

Source: Frost & Sullivan Report

The following table presents comparison analysis on key service offerings among major players in PRC's electronics cross-border integrated supply chain solution market:

Company	Types of key services offerings	Type of products	Average Fee Rate of cross-border supply chain solutions, 2024 (% of GMV)[1]
The Company	Specialized in the provision of cross-border supply chain solutions for electronics, including in particular integrated circuits of various complexities and types	Electronic components, devices and equipment covering industries of IoT communication, semiconductor, computer, smart and robotic solutions and new energies	0.22%
Company A	Focus on supply chain logistics and is dedicated to building an international platform with end-to-end one-stop smart logistics services	Semiconductors, electronics, and large-volume e-commerce products	Approximately 0.70%-0.90%
Company B	Provide intelligent integrated supply chain platform services, including supply chain, industrial chain and industrial incubator	Electronic products, components and communication equipment, covering fields of semiconductor storage categories and AI computing power	Approximately 0.25%-0.30%
Company C	Provide integrated supply chain services including procurement and distribution, warehousing and logistics, and supply chain finance	Computers and related accessories, network equipment, electronic components, servers and storage devices	Approximately 0.20%-0.25%

Company	Types of key services offerings	Type of products	Average Fee Rate of cross-border supply chain solutions, 2024 (% of GMV)[1]
Company D . . .	Offer integrated supply chain management services including supply chain solution design, procurement and distribution, inventory management, and customs clearance logistics	Electronic components and equipment of semiconductor storage and computing facilities	Approximately 0.30%-0.35%

Source: Official websites of related companies, Frost & Sullivan Report

Note:

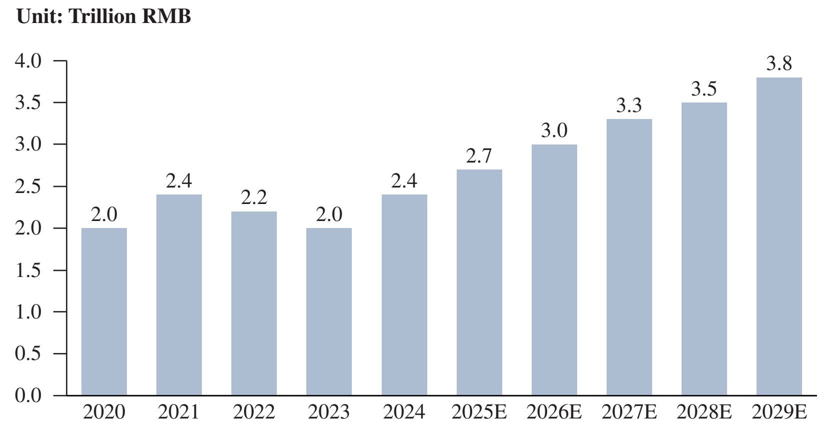
1. Multiple factors should be considered when further analyses on the competitiveness of enterprises are conducted, including types of key services offering with diversity including integrated supply chain solutions, supply chain finance services and other services, scope of products including semiconductors, consumer electronics and electronic equipment, and major costs including logistics, warehousing and customs clearance.

Market Size of PRC's Electronics Import Integrated Supply Chain Solution Market

In recent years, the stable demand for the import of advanced electronics in the PRC has driven the development of electronics import integrated supply chain solution market in the PRC. According to Frost & Sullivan, the GMV of electronics import integrated supply chain solution market in the PRC grew from RMB2.0 trillion in 2020 to RMB2.4 trillion in 2024, representing a CAGR of 4.7%, and is expected to reach RMB3.8 trillion in 2029, representing a CAGR of 8.9% from 2025 to 2029.

PRC's Electronics Import Integrated Supply Chain Solution Market Size, by GMV

CAGR	2020-2024	2025E-2029E
PRC's Electronics Import Integrated Supply Chain Solution	4.7%	8.9%



Source: Frost & Sullivan Report

Competitive Landscape of PRC's Electronics Import Integrated Supply Chain Solution Market

According to Frost & Sullivan, the market size of electronics import integrated supply chain solution market in the PRC reached RMB2.4 trillion in 2024, with the top five players accounting for 5.66% of the market.

The following table presents the ranking of PRC's electronics import integrated supply chain solution market, as measured by GMV in 2024:

Ranking	Company	Company Background	Market Share
1.	The Company	–	1.45%
2.	Company C	An integrated supply chain services provider leveraging digital information systems and integration capabilities across upstream and downstream resources. It was founded in 2001.	1.25%
3.	Company B	An international supply chain logistics services provider, offering end-to-end one-stop intelligent supply chain logistics services. It was founded in 1996 and listed on Shanghai Stock Exchange.	1.18%

Ranking	Company	Company Background	Market Share
4.	Company A	A supply chain services provider integrating supply chain platform services, industry chain integration and operation, brand marketing, and corporate financing. It was founded in 1997 and listed on Shenzhen Stock Exchange.	1.10%
5.	Company D	An integrated supply chain services provider focusing on information and communication technology industry. It was founded in 2005 and listed on Shenzhen Stock Exchange.	0.68%

Source: Frost & Sullivan Report

Entry Barriers of Electronics Cross-border Supply Chain Services Market

Qualification barriers

Qualifications including AEO advanced certification, ISO certifications and TAPA FSR 2023 Facility Security Requirements can provide enterprises majored in import supply chain integrated solution with proof of their comprehensive service capabilities and can provide enterprises with stronger competitiveness.

- **AEO advanced certification:** The AEO Advanced Certification mandates robust creditworthiness, financial stability, security systems, and customs compliance. As a high-level qualification of the General Administration of Customs of China, AEO advanced certification makes stringent requirements including a comprehensive risk control system, health financial status and credit record for consecutive years, and capabilities of data management and goods tracking, which requires exceptional management capabilities of electronics import supply chain integrated solution providers.

- **ISO certifications:** ISO certifications necessitate the implementation of standardized systems in production processes, environmental management, and data security. ISO certifications are issued by International Organization for Standardization, raising various requirements on the operation of enterprises. For example, ISO 9001 requires a comprehensive system including standardized procurement, transportation and warehousing, risk control of cargo damage and delayed customs clearance, and customer satisfaction monitoring.

- **TAPA FSR 2023:** TAPA FSR requires for the security of warehousing and storage in transportation, which is a critical requirement for electronics enterprises to choose qualified cross-border supply chain service providers. TAPA FSR 2023 is issued by Transported Assets Protection Association, an international organization specialized in supply chain security standards development. TAPA FSR 2023 sets high standards for transportation, including safety and process management of warehousing, technical protection and staff training, requiring continuously investment and dynamic upgrading from enterprises.

The number of market players that have obtained the Authorized Economic Operator Advanced Certification, Facility Security Requirements certification issued by the Transported Asset Protection Association, and relevant ISO certifications are shown as below:

Company	**AEO Advanced Certification**	**FSR TAPA**	**ISO 9001**	**ISO 14001**	**ISO 45001**
The Company	√	√	√	√	√
Company A	√	√	√	√	√
Company B	√	×	√	√	√
Company C	√	√	√	×	×
Company D	√	×	√	×	√

Source: Official websites of related companies, Official websites of authoritative certification institutes, Frost & Sullivan Report

Funding barriers

Cross-border operations require enterprises to maintain stable capital reserves for managing cash flow fluctuations and extended settlement cycles. Enterprises majored in the PRC's electronics import supply chain integrated solution may involve advance payment in operations including procurement, logistics, warehousing, customs clearance, etc. In the stage of procurement, enterprises may need to prepay suppliers for their clients. In the stage of customs clearance, enterprises need to make advance payment including tariffs, VAT (Value Added Tax), GST (Goods and Services Tax) and customs clearance charge for clients. Consequently, enterprises need to establish in-depth collaborations with financial institutions to reduce financing costs and improve funding efficiency. Additionally, utilizing financial instruments to hedge currency risks and earn interest rate spread income is essential for operational resilience, which requires extensive experience and frequent communication with commercial banks.

Customer loyalty barriers

Possessing comprehensive advantages of resources encompassing logistics and warehousing, integrated supply chain solution providers deeply embed themselves into customers' business operations through integrated services and customized value-added solutions, cultivating operational inertia through high supply chain synergy. For electronics enterprises relied on import supply chain, they may incur significant costs in order to switch their import supply chain integrated solution providers, making them reluctant to disrupt existing supply chain dynamics. Consequently, an import supply chain integrated solution provider with long-term market verification and recognition will accumulate abundant customer resources and possess advantages in market development.

Growth Drivers of Electronics Cross-border Supply Chain Services Market

Growth in the Need for electronics international trade

The technological leadership of overseas countries in advanced electronics such as integrated circuits and semiconductor devices has stimulated import demand from the PRC's electronics manufacturers. The import supply chain services market is expanding to meet this demand, ensuring timely delivery and minimal disruption to production processes. Meanwhile, as the global manufacturing hub for electronics, the PRC's export of electronic products, including computers, mobile phones, and consumer electronics, relies on the support of cross-border supply chain services to ensure efficient global distribution.

Demand from downstream customers

Faced with intensifying market competition, enterprises in the electronics industry need to strengthen cost control and enhance operational efficiency. The situation has prompted these enterprises to strategically outsource functions such as warehousing, logistics, cross-border customs declaration, and foreign currency settlement to professional supply chain service providers, particularly supply chain services integrated solution providers.

Upgrading of supply chain services

Cross-border supply chain services have undergone significant upgrades in various dimensions, enhancing their capabilities and driving market growth. First, the application of big data technology integrates logistics, capital, and information to achieve more efficient and streamlined operation. Second, supply chain services are capable of transporting a growing number of segmented electronic products with optimization in packaging and transportation monitoring to satisfy more stringent and diversified transportation requirements. Additionally, tailored solutions better fulfill clients' personalized demands, providing customized transportation methods and conditions to ensure the safety and timeliness of orders. These advancements boost service quality, driving the development of the market.

Resilience of Chinese enterprises in international trade

With the steady enhancement of enterprises' comprehensive competitiveness, the PRC's position and influence in global trade have been continuously strengthening. Despite fluctuations in global trade policies, Chinese enterprises still exhibit robust import and export demand, demonstrating remarkable resilience, which in turn drives the development of the cross-border supply chain services market.

Efficiency improvement compared to in-house supply chain

In the electronics industry, enterprises tend to focus on core business including R&D, manufacturing and selling, and outsource non-core business to supply chain services integrated solution providers. Supply chain services integrated solution providers can utilize their resources to provide services with efficiency and gain the advantage of scale for cost control. Supply chain services integrated solution providers can assist enterprises to establish an effective supply chain with lower costs.

Compared to the enterprises' in-house supply chain process, the processing efficiency for the flow of goods from upstream international supplier to the location designated by enterprises may be effectively improved by supply chain integrated solution providers with their professionalism in each process. The time for customs declaration data collation and product classification can be shorten from approximately one day to approximately one hour with supply chain integrated solution providers' standardized process, when the whole process can be shortened by three to four days.

Growth Drivers of Electronics Import Supply Chain Integrated Solutions

Growth in the demand for electronics imports

The PRC's electronics industry has achieved significant development in technology and expansion in scale, especially in the manufacture of advanced electronic product including semiconductors, IoT communication, robotic solutions and new energy. Due to the globalized distribution of electronics industry, the production and manufacturing of electronic raw materials, components, and equipment are dispersed across various regions worldwide. Electronics enterprises rely on import supply chain integrated solutions to achieve cost optimization and technology communication. Correspondingly, the demand for import of electronic materials, components and equipment is increasing.

Raising requirements on the quality and timeliness of supply chain

With the industrial upgrading of the PRC's electronics industry, enterprises' demand for importing advanced and sophisticated electronics including electronic components and equipment has gradually increased, which have stringent requirements on the security and timeliness of supply chain. Compared to inhouse supply chain of electronics enterprises, electronics import supply chain provider can offer advanced logistic and warehousing services and devices to satisfy the transportation and storage conditions required, and their experience in customs clearance can facilitate the efficiency of supply chain to meet timeliness.

Trends of Electronics Cross-border Supply Chain Services Market

Specialization

In the future, cross-border supply chain services providers in the electronics industry will accelerate their transition to specialized and customized services models. By continuously accumulating niche-scenario know-how, they will deliver refined and professional services to clients. These services encompass professional quality inspection to ensure products meet high standard requirements, and efficient classification management to optimize inventory structure and enhance logistics efficiency.

Digitalization

Looking forward, the cross-border supply chain services in the electronics industry will enter a new era of greater digitalization. By deeply integrating big data with supply chain services, the intelligence and automation level of the supply chain management process will be enhanced, which can not only reduce operating costs but also greatly improve overall efficiency. This digital transformation will make supply chain services more transparent, flexible, and responsive.

Comprehensiveness

In the future, cross-border supply chain services providers of electronic components will enhance their service capacity by building intelligent warehouses and establishing own transportation fleet. Intelligent warehouses will integrate automated storage systems, retrieval systems and automated guided vehicles to minimize human errors and enhance productivity by swiftly and consistently handling repetitive tasks. By establishing own fleet, cross-border supply chain service providers will significantly improve operation efficiency, enhance service responsiveness and increase profitability by optimizing transportation routes and utilization of the vehicle space.

Export expansion

The global expansion of PRC's consumer and new energy electronics markets is set to drive growth in the demand for electronics export supply chain services. In the consumer electronics sector, the PRC enterprises are accelerating brand premiumization while expanding into emerging markets such as Southeast Asia and Latin America. Meanwhile, surging exports of new energy vehicles and photovoltaic products are driving mid-to-downstream supply chain players to establish operations overseas, which in turn stimulates exports of the core components, further boosting demand for export supply chain services.

Diversified fund arrangement

Cross-border supply chain integrated solution providers tend to operate cross-border fund arrangements to satisfy settlement demands from customers and to optimize their profitability and mitigate risk exposures. Means of cross-border fund arrangement widely applied by the industry peers mainly include Telegraphic Transfer (T/T), foreign exchange forward contract and forfaiting agreement:

- T/T is a common electronic method of transferring funds from one bank account to another, which is welcomed by its flexibility for urgent settlement demands.
- Foreign exchange forward contract is an agreement between cross-border supply chain integrated solution providers and bank to exchange currencies at a predetermined exchange rate on a specified future date, which effectively prevents currency risks and provide stable returns.
- Forfaiting agreement is a financial instrument typically secured or discounted against letters of credit issued by the deposit bank, which is secured against large-denomination certificates of deposits or fixed deposits.

In addition to means mentioned above, commercial banks offer a variety of financial products, with the function of mitigating interest rate risks and exchange rate risks so that cross-border supply chain integrated solution providers can achieve stable profitability. Therefore, it is concluded that the mechanisms of the Group's cross-border fund arrangements are similar to the industry peers as it adopts similar means in its practices, when specific terms may vary depending on the cooperation with commercial banks.

The identities and backgrounds of market players who operate fund arrangements are as below:

Company[1]	Identity and background
Company A	A supply chain services provider integrating supply chain platform services, industry chain integration and operation, brand marketing, and corporate financing. It was founded in 1997 and listed on Shenzhen Stock Exchange.
Company B	An international supply chain logistics services provider, offering end-to-end one-stop intelligent supply chain logistics services. It was founded in 1996 and listed on Shanghai Stock Exchange.

Company[1]	Identity and background
Company C	An integrated supply chain services provider leveraging digital information systems and integration capabilities across upstream and downstream resources. It was founded in 2001.
Company D	An integrated supply chain services provider focusing on information and communication technology industry. It was founded in 2005 and listed on Shenzhen Stock Exchange.

Notes:

1. *As an integral part of the business model of cross-border supply chain services, top companies provide cross-border fund arrangement services generated from the GMV of cross-border supply chain services to increase the overall profitability.*

The impact on the PRC's electronics cross-border supply chain integrated solution market and PRC's electronics import supply chain integrated solution market of the trend to promote domestic substitution in the PRC

In recent years, the PRC's electronics industry has been accelerating the process of domestic substitution, especially in advanced electronics including semiconductors, IoT communication, robotic solutions and new energy. With continuous investment and research, electronics enterprises have achieved technological breakthroughs in key fields, gradually reducing the reliance on imports of basic electronic components and equipment.

The industrial chain of electronics is characterized as globalized distribution of materials, technologies and manufacturing. The electronics industry demands for a variety of raw materials, when resources are distributed in different regions globally, relying on global supply chains for transportation and distribution. From the perspective of technology, different countries have advantages in different subsectors of the electronics industry, requiring for the international supply chains of related products. Furthermore, the globalized production system is an important way for electronic enterprises to achieve cost optimization, relying on cross-border supply chains for transportation.

In the foreseeable future, the PRC's electronics industry will gradually shift to the core of the industrial value chain. Correspondingly, with the nature of the globalized distribution of electronic supply chain, the major content of electronic import will gradually migrate from primary products such as components of consuming electronics to advanced products, key materials and equipment such as high-performance chips and high-precision stepper, proposing more stringent requirement on the professional capabilities of supply chain services.

With cross-border supply chain integrated solutions' advantages in improving trade quality, efficiency and reducing trade cost, the demand for cross-border supply chain services will increase, and electronics import supply chain integrated solution providers with more professional capabilities and competitive advantages will further seize market share.

Geopolitical and international trade tensions

In recent years, the geopolitical environment has shown an unstable state in form of international trade tensions in the form of trade restriction policies including punitive tariffs, significantly affecting the order of international trade. In the electronics industry, especially for advanced electronic components, products and equipment, policies of technological blockage and trade restrictions have been consecutively introduced and implemented, bringing uncertainty development of the electronics industry in a global scale.

The fluctuation in the international trade has certainly impacted the industrial development and business operations of China's electronics industry. Electronics companies relying on import supply chain of key components and equipment may face the risk of operational stability, while enterprises focusing on export of electronic products may experience a decline in business demand due to increasing export costs caused by restriction policies such as punitive tariffs. The contraction of imports and exports of electronics may reduce the demand for cross-border supply chain services, influencing the growth momentum of the electronics cross-border supply chain services market.

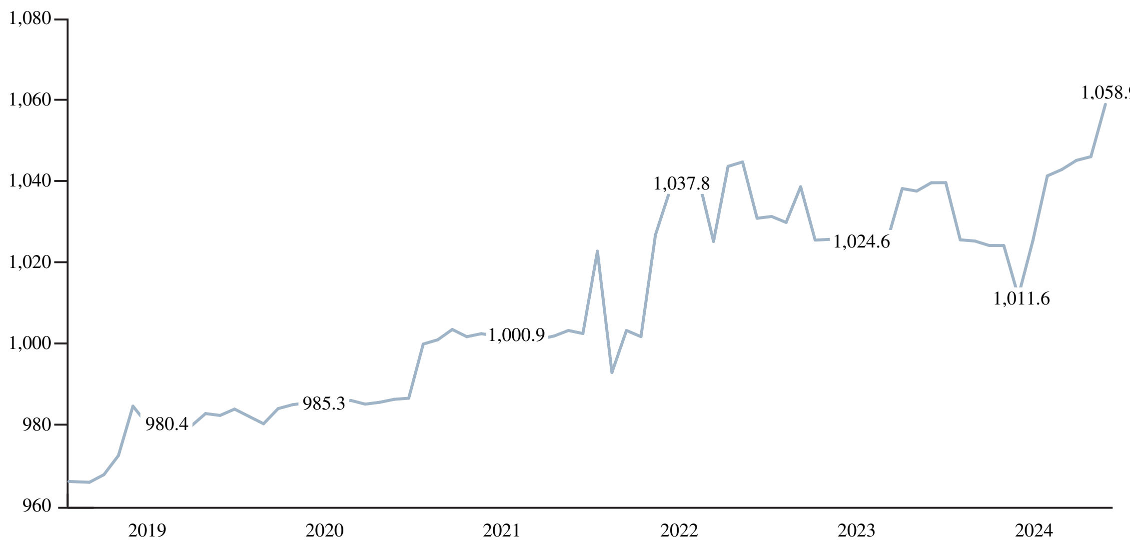
Despite significant challenges, China's electronics industry has demonstrated strong resilience with its advancement in comprehensive competitiveness in mature industrial ecology and technological development. With the progress in technology, China's electronics companies are becoming more independent in some technical field, achieving a higher degree of domestic substitution of some key components and core technologies and shifting the import demand towards raw materials. Meanwhile, the advancement in product competitiveness enhances irreplaceability of Chinese electronic products, guaranteeing the resilience in export demand. Correspondingly, the electronics cross-border supply chain services market will keep a strong resilience in the fluctuation of international trade.

Historical price of China's road logistics

Road logistics is a part of the cost composition of cross-border supply chain services, which can be reflected by China's road logistics price index. Due to factors including ascending fuel price fluctuation, increased labor and vehicle costs and other compliance-related operating costs, China's road logistics price index has shown an upward trend each year since 2019. By December 2024, the index had reached 1,058.9 points.

With the continued recovery of China's economy and steady growth in logistics demand, the road logistics price index is expected to experience mild fluctuations while maintaining an overall upward trend. Upward pressure on the index may persist due to factors including rising labor costs, and fluctuation in fuel prices. However, in the long term, technological advancements — particularly the adoption of autonomous driving technologies, intelligent dispatching systems, and new energy trucks — are anticipated to improve operational efficiency and reduce overall costs, which may help mitigate the upward pressure on road logistics price index.

China Road Logistics Price Index



Source: China Federation of Logistics & Purchasing, Frost & Sullivan Report