The information and statistics set out in this section and other sections of this document were extracted from the F&S Report, which was commissioned by the Company, and from various official government publications and available resources from public market research. The Company engaged Frost & Sullivan to prepare the F&S Report in connection with the ***[REDACTED]****. The information from official government sources has not been independently verified by any of the Sole Sponsor,* ***[REDACTED]****, any of their respective directors and advisers, or any other persons or parties involved in the* ***[REDACTED]****, and no representation is given as to its accuracy.*

OVERVIEW OF GLOBAL ELECTRONIC FABRIC MARKET

The electronic fabric is a plain-weave fabric made from electronic yarn through warping, sizing, and weaving. It features excellent insulation, high strength, high heat resistance, high chemical resistance, and high flame retardancy, and provides bi-directional or multi-directional reinforcement. It is a crucial foundational material in the electronics industry. The electronic fabric is a raw material used primarily in the manufacturing of copper clad laminates (CCL) and printed circuit boards (PCB), and is widely used in application fields such as AI and high-performance computing, high-end consumer electronics, automotive electronics and intelligent driving, and network communications.

The electronic fabric can be divided into general-purpose electronic fabric and special-purpose electronic fabric based on glass type. General-purpose electronic fabric is a basic material for PCB. It has relatively high dielectric constant (Dk) and dielectric loss, making it difficult to meet ultra-high-speed and high-frequency transmission requirements. It mainly includes thick fabric, thin fabric, super thin fabric, and ultra-thin fabric. Special-purpose electronic fabric refers to functional electronic fabric developed, based on conventional electronic fabric, through customized designs of glass fiber materials, yarn structures, and weaving processes to meet high-end application demands such as AI and high-performance computing, network communications, and advanced IC packaging substrates. It features improved key performance including low dielectric loss, low thermal expansion, high uniformity, and high reliability. It mainly includes low Dk/Df fabric low CTE fabric, and quartz glass fiber fabric and is commonly used in application fields such as AI servers, data centers and high-end communication base stations.

Comparative Analysis of Different Types of Electronic Fabric

	General-purpose electronic fabric				Special-purpose electronic fabric		
	Thick fabric	Thin fabric	Super-thin fabric	Ultra-thin fabric	Low Dk/Df fabric	Low CTE fabric	Quartz glass fiber fabric
Glass fiber types	Electronic glass, thick yarn	Electronic glass, thin yarn	Electronic glass, super-fine yarn	Electronic glass, ultra-fine yarn	Low Dk/Df yarn	Low CTE yarn	High-purity quartz fiber ($SiO_2 \geq$ 99.95%)
Characteristics	Thickness > 100μm	Thickness ranging from 36μm to 100μm	Typical thickness of 28μm to 35μm, light, thin, uniform	Thickness below 28μm with excellent dimensional stability	Low Dk/Df, reduced signal transmission loss and delay, dielectric loss as low as 0.0015–0.003	Low CTE, favorable dimensional stability, coefficient of thermal expansion (CTE) as low as $2.80–3.50 \times 10^{-6}$/°C	Dissipation factor as low as 0.0005–0.0007
Technical barriers	Difficulty in uniformity control	Poor weaving stability, high breakage risk	Highly demanding fiber drawing process, stringent weaving precision requirements	Stringent requirements on tension control and weaving accuracy	Highly demanding fiber drawing process, stringent resin bonding requirements	High complexity in glass fiber production, difficulty in tension control	Challenging weaving process, stringent surface treatment technical requirements, severely constrained production capacity

	General-purpose electronic fabric				Special-purpose electronic fabric		
	Thick fabric	Thin fabric	Super-thin fabric	Ultra-thin fabric	Low Dk/Df fabric	Low CTE fabric	Quartz glass fiber fabric
Applicable PCB types	Single-layer/ double-layer PCB	Multilayer PCB	High-build-up HDI PCB, high-layer-count PCB	Advanced IC packaging substrate, high-build-up HDI PCB, high-layer-count PCB	High-layer-count PCB, high-build-up HDI PCB	Advanced IC packaging substrate	High-layer-count PCB, high-build-up HDI PCB
Application scenarios	General home appliances, automotive electronics	Automotive electronics, consumer electronics, network communications	High-end consumer electronic products and others	High-end consumer electronic products and others	AI and high-performance computing, high-end communications	AI and high-performance computing, high-end consumer electronics, intelligent driving	AI and high-performance computing, high-end communications

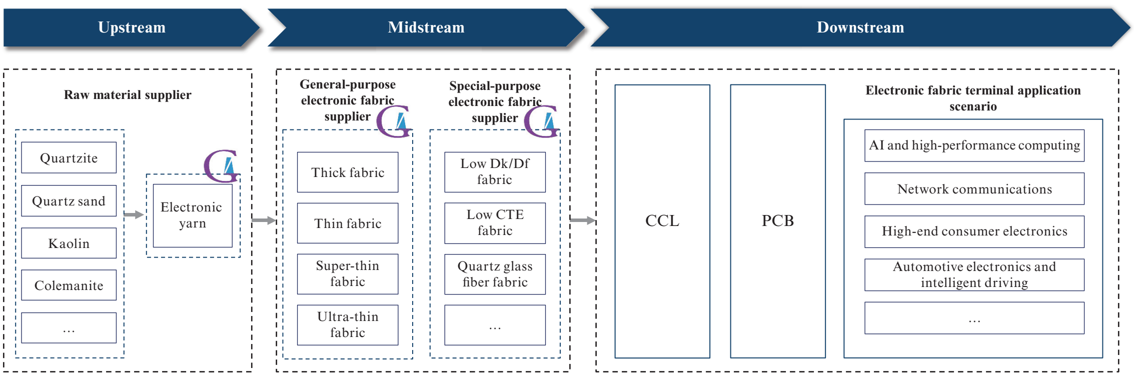
Source: Frost & Sullivan

Value Chain Analysis of Global Electronic Fabric Market

The industry chain of electronic fabric is relatively long. Its direct upstream industry is the electronic yarn sector, while its direct downstream industry is the CCL sector. The upstream of electronic yarn can extend to core raw materials including kaolin, limestone, and colemanite. The downstream of CCL can extend to PCB and terminal applications such as AI and high-performance computing, consumer electronics, automotive electronics, and network communications.

The upstream of the electronic fabric industry chain consists of raw material suppliers, where the electronic yarn — the primary raw material of electronic fabric — accounts for approximately 50%-75% of the total cost of electronic fabric. The midstream of the industry chain involves the R&D, and manufacturing of electronic fabric, with varying technical requirements for products of different thicknesses and performances. The downstream of the industry chain comprises CCL and PCB manufacturers. Electronic fabric is one of the main raw materials for CCLs, and CCL is a critical upstream material for PCBs. The vast application markets of AI and high-performance computing, consumer electronics, and automotive electronics generate strong demand for PCBs and CCLs, expanding the overall demand for electronic fabric.

Value Chain of Global Electronic Fabric Market



Source: Frost & Sullivan

Analysis of Primary Terminal Products of Global Electronic Fabric

Copper Clad Laminate (CCL)

CCL are the most important direct downstream application products of electronic fabric. Different types of electronic fabric correspond to differentiated application scenarios. General-purpose electronic fabric, with its mature technology, stable dielectric properties and mechanical strength, can meet most general signal transmission requirements and is therefore widely adopted in general PCB manufacturing processes. To address the challenges posed by high-frequency and high-speed signal transmission in more advanced applications, the industry has widely adopted special materials such as low Dk/Df fabric and quartz glass fiber fabric with core advantage in significantly reducing signal transmission loss and interference, thereby ensuring signal integrity. Similarly, certain IC packaging substrates, such as BT, and ABF material that require strict dimensional stability, materials are required to have higher thermal cycling resistance, making low CTE fabric an ideal choice as it can effectively suppress deformation caused by thermal stress and ensure excellent reliability under complex operating conditions.

Printed Circuit Board (PCB)

Among the wide application spectrum of PCB, conventional single-layer and double-layer boards, as the most basic form, are widely used in consumer electronics, home appliances, industry control and other fields. Such products have relatively conventional requirements for signal transmission. Therefore, general-purpose electronic fabric, coupled with mature manufacturing processes, meets the demand for mass production with high cost performance, forming the cornerstone of universal applications in the electronics industry. However, as electronic devices evolve toward high speed, high density and high reliability, PCB technology has diversified into multiple high-build-up categories, imposing specialized performance requirements on electronic fabric and driving the material system to shift from general-purpose to special functionality types.

- *High-layer-count PCB:* High-layer-count PCBs feature high layer counts and long signal links, imposing stringent requirements on material consistency and reliability. They mainly use ultra-thin fabric, low Dk/Df fabric and quartz glass fiber fabric. The dimensional advantage of ultra-thin fabric enables high-layer-count PCB to transmit signals while maintaining mechanical strength. The low dielectric loss property of low Dk/Df fabric can significantly improve system stability, reduce energy consumption and enhance signal transmission efficiency of high-layer-count PCBs. With extremely low Dk and excellent dielectric stability, quartz glass fiber fabric meets ultra-high-speed and high-frequency signal transmission requirements and is also an important material used in high-layer-count PCBs.

- *High-build-up HDI PCB:* High-build-up HDI PCB, characterized by high-density interconnection and fine circuits, imposes high requirements on thickness uniformity and surface flatness of electronic fabric. It usually uses ultra-thin fabric, super-thin fabric, low Dk/Df fabric or quartz glass fiber fabric. The low dielectric loss property of low Dk/Df fabric can effectively reduce attenuation and delay in high-speed signal transmission, while ultra-thin fabric and super-thin fabric enable more layers and provide more functions, making them indispensable basic materials for high-build-up HDI PCBs.

- *Advanced IC Packaging Substrates:* As the core carrier of advanced IC packaging, IC packaging substrates have strict requirements for dimensional stability, thermal reliability and signal integrity, and rely on ultra-thin fabric and low CTE fabric. Ultra-thin fabric, with its ultra-thin nature and dimensional stability, has become the core material used in advanced IC packaging substrates. Low CTE fabric can reduce CTE to a reasonable level, mitigating warpage risks under thermal cycling.

The global market for PCB was valued at USD76.9 billion in 2021 and USD86.7 billion in 2025 in terms of revenue, representing a CAGR of 3.0% from 2021 to 2025. Within this market, the global markets for high-layer-count PCBs, high-build-up HDIs, and advanced IC packaging substrates were valued at USD11.8 billion, USD5.1 billion and USD13.6 billion, respectively, in 2021 and USD14.8 billion, USD7.5 billion and USD15.0 billion in 2025, representing CAGRs of 5.8%, 10.0% and 2.5%, respectively, from 2021 to 2025.

The global PCB market is expected to reach USD118.5 billion by 2030, with a CAGR of 6.4% from 2025 to 2030. Within this market, the global market for high-layer-count PCBs, high-build-up HDIs, and IC packaging substrates is projected to grow to USD22.1 billion, USD12.2 billion and USD21.7 billion, representing CAGRs of 8.4%, 10.3% and 7.7% respectively from 2025 to 2030. As PCBs evolve toward high frequency, high speed, high layer count and high reliability, requirements for the performance of key raw materials have risen significantly. Special-purpose electronic fabric, featuring low Dk and low dielectric loss, excellent dimensional stability and uniformity, can meet the demands of high-speed signal transmission and precision manufacturing.

Terminal Application Scenarios

- *AI and High-performance Computing:* With the rapid development of cutting-edge technologies such as artificial intelligence, all regions worldwide are continuously increasing investment in the construction and upgrading of computing infrastructure to meet the growing demand for computing. In 2025, 2.5 million AI servers were sold globally. 6.8 million AI server are expected to be sold globally by 2030, representing a CAGR of 22.2% from 2025 to 2030. AI servers impose higher requirements for high-speed, low-latency and high-reliability data transmission, driving continuous upgrading of PCBs in integration density, signal integrity and heat dissipation performance, and further fueling sustained growth in demand for special-purpose electronic fabric.

- *Network Communications:* Requirements for high-frequency signal transmission and surging data traffic have rapidly boosted demand for high-layer-count PCBs. Special-purpose electronic fabric with low loss and high uniformity can effectively support stable transmission of high-speed and high-frequency signals, providing a critical foundation for reliable operation of network communication equipment.

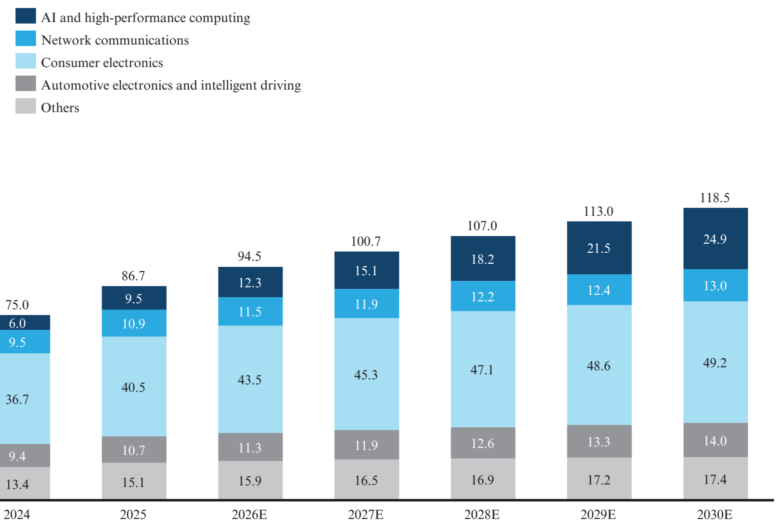
- *High-end Consumer Electronics:* With the continuous upgrading of smart terminal products such as AI mobile phones and AI PCs, demand for computing and high-speed data processing capabilities at the terminal has increased significantly, and combined with the trend toward miniaturization of terminal products, PCBs are required to have high integration, dimensional consistency, and reliability and support high-speed, low-latency signal transmission. This has boosted market demand for small-sized, high-specification special-purpose electronic fabric including super-thin fabric, ultra-thin fabric and low CTE fabric that effectively improve thermal stability and dimensional consistency.

- *Automotive Electronics and Intelligent Driving:* The popularization of new energy vehicles and development of intelligent driving technologies have continuously increased the complexity of on-board electronic systems, imposing higher requirements on PCBs in terms of reliability, high-speed signal processing and thermal management. Automotive electronics generally adopt high-layer-count PCBs to meet complex wiring and high-speed data interaction requirements, and use ultra-thin and super-thin fabric to improve wiring density and processing accuracy. IC packaging substrates used in intelligent driving chips mostly adopt low CTE fabric to reduce thermal stress, suppress deformation and enhance long-term operational stability.

The global PCB market reached USD9.5 billion, USD10.9 billion, USD40.5 billion and USD10.7 billion, respectively, in 2025 in terms of revenue in downstream application sectors including AI and high-performance computing, network communications, consumer electronics, and automotive electronics and intelligent driving. In particular, with the rapid development of global cloud computing and AI technologies and related applications in recent years, demand for cloud infrastructure such as servers and data centers has continued to expand, driving corresponding growth in PCB usage in AI sector. The global PCB market in AI and high-performance computing is projected to further grow to USD24.9 billion by 2030, representing a CAGR of 21.1% from 2025 to 2030.

Market Size of Global PCB Market, by Applications, in terms of Revenue (USD billion, 2021–2030E)

CAGR	2021–2025	2025–2030E
Total	**3.0%**	**6.4%**
AI and high-performance computing	37.1%	21.1%
Network communications	4.4%	3.6%
Consumer electronics	-2.5%	4.0%
Automotive electronics and intelligent driving	8.5%	5.6%
Others	4.7%	2.9%



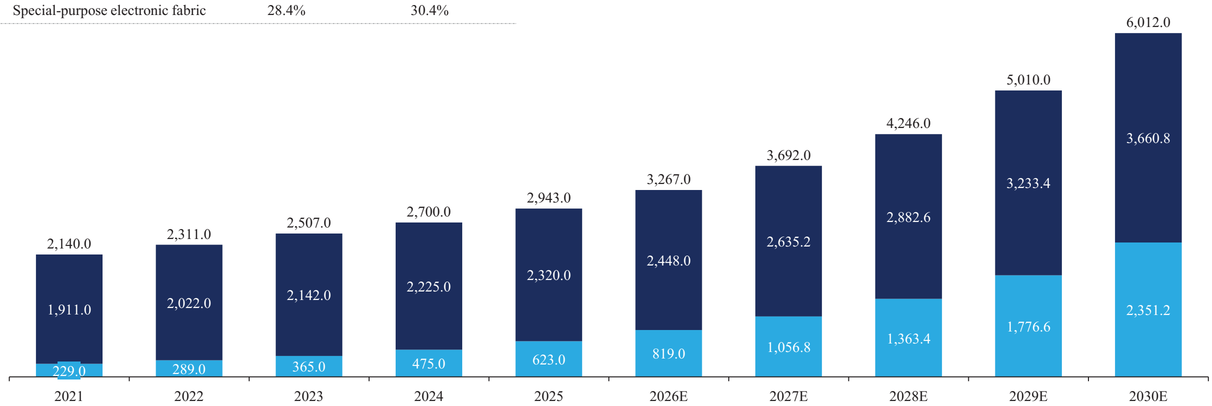
Source: Frost & Sullivan

Market Size of Global Electronic Fabric Market

The global market size of electronic fabric market grew from USD2,140.0 million in 2021 to USD2,943.0 million in 2025 in terms of revenue, representing a CAGR of 8.3% from 2021 to 2025. The global market size of electronic fabric market is expected to grow to USD6,012.0 million by 2030, with a CAGR of 15.4% from 2025 to 2030.

Market Size of Global Electronic Fabric Market, by Product Types, in terms of Revenue (USD million, 2021–2030E)

CAGR	2021-2025	2025-2030E
Total	**8.3%**	**15.4%**
General-purpose electronic fabric	5.0%	9.6%
Special-purpose electronic fabric	28.4%	30.4%

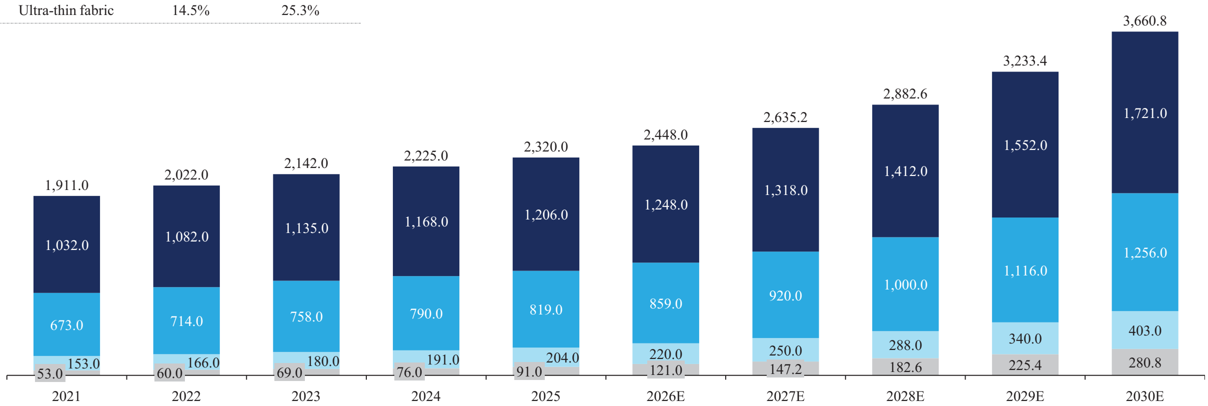


Source: Frost & Sullivan

The global market for general-purpose electronic fabric grew from USD1,911.0 million in 2021 to USD2,320.0 million in 2025, in terms of revenue, representing a CAGR of 5.0% from 2021 to 2025. The global markets for thick fabric, thin fabric, super-thin fabric and ultra-thin fabric reached USD1,206.0 million, USD819.0 million, USD204.0 million and USD91.0 million respectively in 2025 in terms of electronic fabric thickness, accounting for 8.8% and 3.9% of the total market for super-thin fabric and ultra-thin fabric respectively. The global market for general-purpose electronic fabric is expected to grow to USD3,660.8 million by 2030, with a CAGR of 9.6% from 2025 to 2030. Within this market, the global market for super-thin fabric and ultra-thin fabric will reach USD403.0 million and USD280.8 million respectively by 2030, accounting for 11.0% and 7.7% of the total market, with a CAGR of 14.6% and 25.3% respectively from 2025 to 2030.

Market Size of Global General-purpose Electronic Fabric Market, by Product Types, in terms of Revenue (USD million, 2021–2030E)

CAGR	2021-2025	2025-2030E
Total	**5.0%**	**9.6%**
Thick fabric	4.0%	7.4%
Thin fabric	5.0%	8.9%
Super-thin fabric	7.5%	14.6%
Ultra-thin fabric	14.5%	25.3%

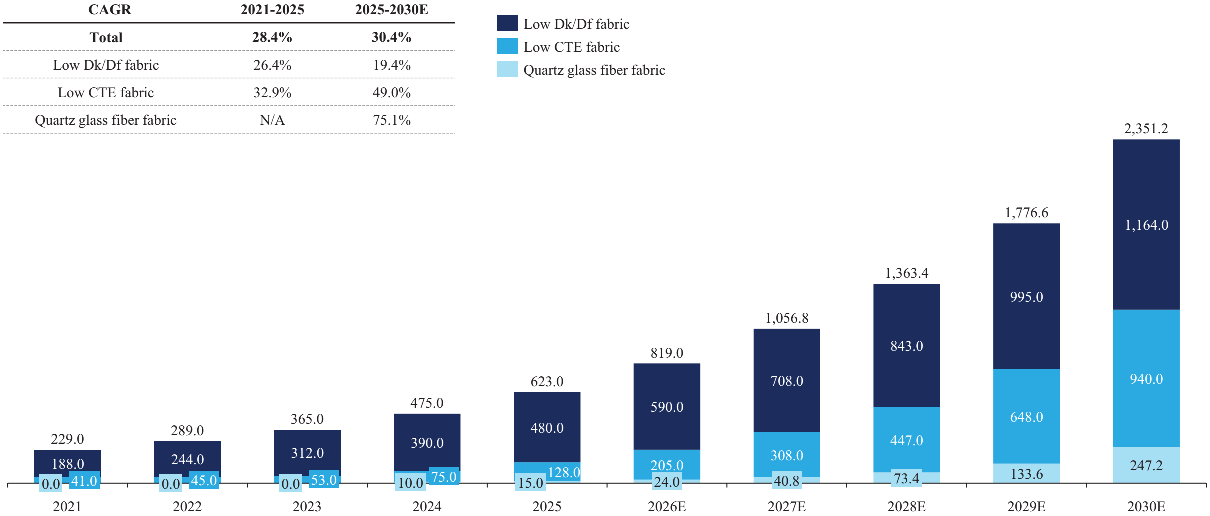


Source: Frost & Sullivan

The global market for special-purpose electronic fabric grew from USD229.0 million in 2021 to USD623.0 million in 2025 in terms of revenue, representing a CAGR of 28.4% during 2021–2025. From 2021 to 2025, the global market for low Dk/Df fabric increased from USD188.0 million to USD480.0 million, representing a CAGR of 26.4%, while the global market for low CTE fabric increased from USD41.0 million to USD128.0 million, representing a CAGR of 32.9%. Within this market, the global market for second-generation low Dk/Df fabric reached USD70.0 million in 2025, accounting for 14.6% of the total low Dk/Df fabric market, with a CAGR of 36.8% from 2021 to 2025. The global market for special-purpose electronic fabric is projected to grow to USD2,351.2 million by 2030, with a CAGR of 30.4% from 2025 to 2030. Within this market, the CAGRs of the global markets for low Dk/Df fabric and low CTE fabric will reach 19.4% and 49.0%, respectively, from 2025 to 2030. Second-generation low Dk/Df fabric — representing a key material direction for performance requirements — is expected to reach a market of USD350.0 million by 2030, accounting for 30.0% of the total low Dk/Df fabric market, growing at a CAGR of 37.9% from 2025 to 2030.

Market Size of Global Special-purpose Electronic Fabric Market, by Product Types, in terms of Revenue (USD million, 2021–2030E)

CAGR	2021-2025	2025-2030E
Total	**28.4%**	**30.4%**
Low Dk/Df fabric	26.4%	19.4%
Low CTE fabric	32.9%	49.0%
Quartz glass fiber fabric	N/A	75.1%



Source: Frost & Sullivan

Market Drivers and Development Trends of Global Electronic Fabric Market

- *High-end Applications Drive Demand Growth:* In the fields of AI servers, data centers and rising computing density and data transmission rates impose higher material performance requirements for high-speed and high-frequency PCBs. Low Dk/Df fabric can effectively reduce signal transmission loss and improve transmission stability. Meanwhile, as chip shipments increase and package sizes expand, IC packaging substrates demand higher material stability. Low CTE fabric reduces risks caused by thermal mismatch, thus it becomes a key direction for electronic fabric performance upgrading. In addition, as smart phones, tablets, wearables and other consumer electronics continue to evolve toward products that are lighter, thinner and having high integration, PCB requirements for thickness control and dimensional stability keep rising, driving electronic fabric toward super-thin and ultra-thin types to meet high wiring density and compact design needs. As the update and iteration of consumer electronics are accelerating, the demand for high-performance PCBs grows, further boosting market demand for electronic fabric.

- *Core Technology R&D Drives Product Upgrading:* Through the development of low CTE formulations combined with ultra-fine fiber drawing technology, electronic fabric has achieved a qualitative leap in electrical properties while maintaining physical strength. Meanwhile, maturing precision weaving and spreading technologies have brought electronic fabric uniformity and surface thickness control to the micron level, effectively solving phase difference and impedance control challenges in high-frequency signal transmission. Breakthroughs in core technologies not only meet stringent stability requirements of high-speed and high-frequency CCL and high-end PCBs, but also support the penetration of electronic fabric into high value-added sectors. Continuing R&D on core technologies keeps generating new electronic fabric product categories, expanding material application boundaries and directly driving demand for special-purpose electronic fabric.

- *Lower Dk/Df Materials Becomes a key Development Direction:* As AI servers, data centers and high-speed communication equipment raise requirements for signal transmission speed and stability, PCB materials face increasingly stringent demands for dielectric constant and loss. Low Dk/Df fabric can effectively reduce signal transmission loss and delay, improving signal integrity, and is gradually becoming a critical material for high-end PCBs. Second-generation low Dk/Df fabric features further optimized dielectric performance, with lower signal loss during transmission dielectric constant and loss factor than 1st generation, helping reduce. In addition, quartz glass fiber fabric, represented by high-purity quartz fiber, offers extremely low dielectric loss and excellent electrical properties, and has been piloted in certain high-end applications.

- *Rising Demand for Lower CTE Materials:* Against the backdrop of expanding chip package sizes and rising computing density, advanced IC packaging substrates face stricter reliability requirements under thermal cycling. Low CTE fabric can effectively reduce thermal mismatch between materials, and lower warpage, thereby improving long-term stability and reliability. Rising demand for low CTE fabric keeps growing with the development of advanced IC packaging, AI servers and other applications.

Cost Analysis of Electronic Fabric

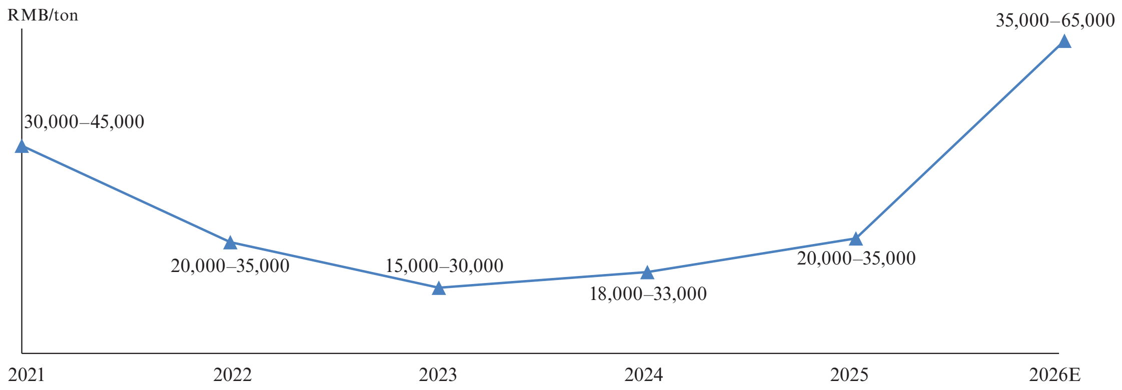
Electronic yarn constitutes the core cost of electronic fabric, typically accounting for 50%-75% of total production cost. This share is generally higher for high-performance products such as super-thin and ultra-thin fabric due to stricter requirements on material performance and thickness control. The properties of electronic yarn directly affect the strength, stability, and process compatibility of electronic fabric. In particular, super-fine yarn and ultra-fine yarn products are placing higher demands on process control capability.

The unit price of electronic yarn has exhibited a fluctuating trend of decline followed by recovery. Affected by volatile downstream demand and phased industry capacity expansion, electronic yarn prices have been reduced and showed a notable downward trend around 2023. As the supply-demand structure improves and the share of special-purpose electronic yarn products increases, electronic yarn prices gradually increase.

As the core raw material for the thin fabric within the general-purpose electronic fabric category, price trends for D450 are highly indicative of overall price movements in the electronic fabric industry. Due to a temporary supply surplus caused by the concentrated release of industry capacity in the early stages, coupled with weak demand from the downstream consumer electronics sector, the price of D450 electronic yarn has continued to decline from RMB30,000–45,000 per ton in 2021 to RMB15,000–30,000 per ton in 2023.

Driven by optimized supply-demand structures, the price of D450 electronic yarn is expected to rise gradually, rebounding to RMB18,000–33,000 per ton in 2024 and reaching RMB20,000–35,000 per ton in 2025. Looking ahead, as demand for electronic fabrics continues to rise, the price of D450 electronic yarn is projected to reach RMB35,000–65,000 per ton by 2026 and is expected to remain at a high price range in the future, driving higher costs for electronic fabrics.

Price Analysis of D450 Electronic Yarn, 2021–2026E



Source: Frost & Sullivan

Competitive Landscape of Global Electronic Fabric Market

The global electronic fabric market is highly competitive and relatively concentrated. In 2025, there were more than 40 electronic fabric manufacturers worldwide. Our Company ranked second in global electronic fabric markets and first among manufacturers in Chinese mainland in terms of revenue from super-thin fabric in 2025, with a market share of 13.3%. Our Company ranked first in global electronic fabric markets in terms of revenue from ultra-thin fabric in 2025, with a market share of 36.7%. Our Company ranked first in global electronic fabric markets in terms of total revenue from super-thin and ultra-thin fabric in 2025, with a market share of 20.5%.

Ranking of Top Global Electronic Fabric Providers in 2025, in terms of Revenue of Super-thin Fabric and Ultra-thin Fabric

In terms of revenue of super-thin fabric					In terms of revenue of ultra-thin fabric				
Ranking	Providers	Headquarter	Revenue	Market share	Ranking	Providers	Headquarter	Revenue	Market share
			(RMB million)	*(%)*				*(RMB million)*	*(%)*
1	Company A	Taiwan, China	203.0	14.2%	**1**	**Our Company**	**Chinese mainland**	**233.8**	**36.7%**
2	**Our Company**	**Chinese mainland**	**189.2**	**13.3%**	2	Company A	Taiwan, China	142.0	22.3%
3	Company B	Taiwan, China	176.0	12.3%	3	Company C	Japan	85.0	13.4%
4	Company C	Japan	158.0	11.1%	4	Company E	Japan	37.0	5.9%
5	Company D	Chinese mainland	146.0	10.2%	5	Company F	Chinese mainland	30.0	4.7%

Notes:

(1) Company A is a public company founded in 1964 and listed on the Taiwan Stock Exchange, headquartered in Taiwan, China, committed to providing glass products.

(2) Company B is a public company founded in 1958 and listed on the Taiwan Stock Exchange, headquartered in Taiwan, China, committed to providing processed plastic products, chemical products, electronic fabrics, polyester fiber and related engineering services.

(3) Company C is a public company founded in 1923 and listed on the Tokyo Stock Exchange, headquartered in Japan, committed to providing electronic materials.

(4) Company D is a public company founded in 1991 and listed on the Shenzhen Stock Exchange, headquartered in Chinese mainland, committed to providing fiberglass and composite material products.

(5) Company E is a public company founded in 1931 and listed on the Tokyo Stock Exchange, headquartered in Japan, committed to providing diversified chemical and material products.

(6) Company F is a private company founded in 2011, headquartered in Chinese mainland, committed to providing electronic fabrics.

Source: Frost & Sullivan

Our Company ranked seventh in global electronic fabric markets and third among manufacturers in Chinese mainland in terms of revenue from low Dk/Df fabric in 2025, with a market share of 4.0%. Our Company ranked third in global electronic fabric markets and first among manufacturers in Chinese mainland in terms of revenue from low CTE fabric in 2025, with a market share of 5.0%. In terms of revenue growth rate for low CTE fabric, our Company achieved a quarter-on-quarter increase of 190.8% from Q4 2025 to Q1 2026, ranking first in the global electronic fabric market.

Ranking of Top Global Electronic Fabric Providers in 2025, in terms of Revenue of Low Dk/Df Fabric and Low CTE Fabric

In terms of revenue of low Dk/Df fabric					In terms of revenue of low CTE fabric				
Ranking	Providers	Headquarter	Revenue	Market share	Ranking	Providers	Headquarter	Revenue	Market share
			(RMB million)	*(%)*				*(RMB million)*	*(%)*
1	Company C	Japan	1,186.0	35.3%	1	Company C	Japan	622.0	69.4%
2	Company E	Japan	668.0	20.0%	2	Company I	Japan	111.0	12.4%
3	Company G	Chinese mainland	443.0	13.2%	**3**	**Our Company**	**Chinese mainland**	**44.9**	**5.0%**
4	Company A	Taiwan, China	426.0	12.7%					
5	Company H	Taiwan, China	239.0	7.1%					
6	Company F	Chinese mainland	136.0	4.1%					
7	**Our Company**	**Chinese mainland**	**133.1**	**4.0%**					

Notes:

(1) Company G is a private company founded in 1997, headquartered in Chinese mainland, committed to providing glass fibers and articles thereof.

(2) Company H is a public company founded in 1999 and listed on the Taipei Exchange, headquartered in Taiwan, China, committed to electronic fabrics.

(3) Company I is a public company founded in 1889 and listed on the Tokyo Stock Exchange, headquartered in Japan, committed to providing polymer and electronic fabrics.

Source: Frost & Sullivan

Key Success Factors and Barriers to Entry into Global Electronic Fabric Market

- *Technical and R&D:* The electronic fabric industry is technology-intensive with high technical barriers. The production of electronic fabric involves a number of key technologies, including furnace structure design, fiber drawing control, and weaving process optimization, which impose stringent requirements on glass formulation stability, fiber diameter uniformity, and yarn performance consistency. In addition, electronic fabric must meet PCB manufacturing requirements in structural uniformity, dimensional stability, and surface flatness, while maintaining consistent mechanical properties, thermal stability, and long-term reliability. The overall production technology system is complex, placing high demands on enterprises' R&D and process control capabilities, thus forming high industry entry barriers.

- *Customer Certification and Brand:* As a critical basic material for manufacturing of CCLs and PCBs, electronic fabric must pass large numbers of testings and verifications by CCL and PCB manufacturers, which include but are not limited to performance, long-term stability, supply system review, and so on. High-end applications impose even stricter requirements on special-purpose electronic fabric, and suppliers shall demonstrate long-term stable delivery capacity and mature quality management experience. Upon completion of certification, customers are required to conduct retesting and re-evaluation if switching suppliers, which incurs high time costs and usage risks, resulting in strong customer stickiness for existing suppliers. As stable delivery experience continues to accumulate, product reliability gradually evolves into a foundation of customer trust, enabling leading manufacturers to establish sustainable competitive advantages in high-end markets. As a result, new entrants can hardly gain recognition from core customers in the short term.

- *Manufacturing:* Core equipment for the industry features high technical requirements and a long lead time. The stable operation of equipment in practical production also relies on companies' ongoing experience in commissioning and optimization. In this regard, leading enterprises have to gain their own advantages in production efficiency and product stability through consistent equipment modification and parameter optimization by accumulating such experience over a long-term. Furthermore, the production of electronic fabric involves multiple processes including fiber drawing, weaving, and finishing, which require smooth coordination. This demands strong capabilities in equipment synergy and process management to ensure consistent product quality and the sustained, stable operation of the production process. Some enterprises have established an integrated production system from electronic yarn to electronic fabric, enabling systematic management of key process parameters, thereby enhancing product performance stability and better meeting the needs of downstream customers. In contrast, new entrants find it difficult to establish a mature and stable manufacturing system in the short term. Therefore, manufacturing capabilities and the level of integrated production represent one of the major barriers to entry into the electronic fabric industry.

- *Talent:* The development and mass production of electronic fabric, particularly special-purpose electronic fabric, highly rely on professional technical and management teams with long-term accumulated expertise, covering glass fiber formulation design, fiber drawing, weaving, finishing optimization, quality system management, and other key processes. Improvements in the performance of high-end products cannot be achieved by upgrading individual equipment, but are based on in-depth understanding of material systems and process windows, as well as accumulated long-term operational experience. It takes a long time to cultivate relevant core technical personnel, who must possess both materials science expertise and industrialization practice. It is difficult to rapidly build capabilities through short-term recruitment. Supported by sound training and incentive mechanisms, these teams maintain stability and collaboration efficiency, forming continuously iterative technological accumulation and organizational advantages.

Source of Information

We commissioned Frost & Sullivan, an independent global consulting firm that offers industry research and market strategies and provides growth consulting and corporate training to conduct a detailed research on and analysis of the global electronic fabric market. We have agreed to pay a fee of RMB600,000 to Frost & Sullivan in connection with the preparation of the F&S Report. We have extracted certain information from the F&S Report in this section, as well as in "Summary", "Business", "Financial Information", and elsewhere in this document to provide our potential **[REDACTED]** with a more comprehensive presentation of the industries where we operate. During the preparation of the F&S Report, Frost & Sullivan performed both primary and secondary research, and obtained knowledge, statistics, information, and industry insights on the industry trends of the target research markets. Primary research involved discussing the status of the market with leading industry participants and industry experts.

Secondary research involved reviewing company reports, independent research reports and data based on Frost & Sullivan's own database. Frost & Sullivan has independently verified the information, but the accuracy of the conclusions of its review largely relies on the accuracy of the information collected. Frost & Sullivan's research may be affected by the accuracy of assumptions used and the choice of primary and secondary sources.

The F&S Report was compiled based on the following assumptions: (i) the economy of Chinese mainland and the global economy are likely to maintain steady growth in the near future; and (ii) the social, economic, and political environment of Chinese mainland and the world is likely to remain stable from 2025 to 2030.

Our Directors confirm that, after making reasonable enquiries, there is no adverse change in the market information since the date of the F&S Report that may qualify, contradict or have a material impact on the information.