The information and statistics set out in this section and other sections of this document were extracted from a report prepared by CIC under our commission, various official government publications and other publicly available sources. We engaged CIC to prepare an independent industry report, or the CIC Report, in connection with the [**REDACTED**]. *The information from official government sources has not been independently verified by us, or any of our directors and advisors, or any other persons or parties involved in the* [**REDACTED**]*, and no representation is given as to its accuracy.*

SOURCE OF INFORMATION

We engaged CIC, an independent market research and consulting company that provides industry consulting services, commercial due diligence and strategic consulting, to conduct detailed research on and analysis of Global PCB industry. We have agreed to pay a fee of RMB0.8 million to CIC in connection with the preparation of the CIC Report. We have incorporated certain information from the CIC Report into this section, as well as into the "Summary", "Business", "Financial Information" sections and elsewhere in this document to provide potential with a comprehensive presentation of the industries where we operate. During the preparation of the CIC Report, CIC conducted both primary and secondary research, and gathered knowledge, statistics, information and insights on industry trends within the target research markets. The primary research involved interviews with key industry experts and leading industry participants. The secondary research consisted of analyzing data from various publicly available sources, such as the National Bureau of Statistics. The CIC Report was compiled based on the following assumptions: (i) the overall social, economic and political environment in China is expected to remain stable during the forecast period; (ii) related key industry drivers are likely to propel continued growth in global PCB industry throughout the forecast period; and (iii) there will be no force majeure or unforeseen industry regulations through which the market may be affected in either a dramatic or fundamental way during the forecast period.

OVERVIEW OF THE GLOBAL PCB INDUSTRY

A PCB is a substrate for assembling electronic components, specifically a printed circuit that forms connections between designated points and components on a universal base material according to a predetermined design. The main function of the PCB is to enable a variety of electronic components to form a predetermined circuit connection, and play a relay transmission role. PCBs are irreplaceable in most electronic devices and products. According to product types, PCBs can be categorized into single/double-layer PCBs, MLPCBs, FPCs, HDI PCBs, and package substrates. In particular, MLPCBs can be further divided by layer count into eight layers and below, 10 to 20 layers, 22 to 30 layers, and 32 layers and above. PCBs are widely used in data communications, automobiles, consumer electronics, industrial control and other fields. Such layer-count classification and relevant application mapping are defined pursuant to prevailing industry-recognised standards.

Market Size of the Global PCB Market

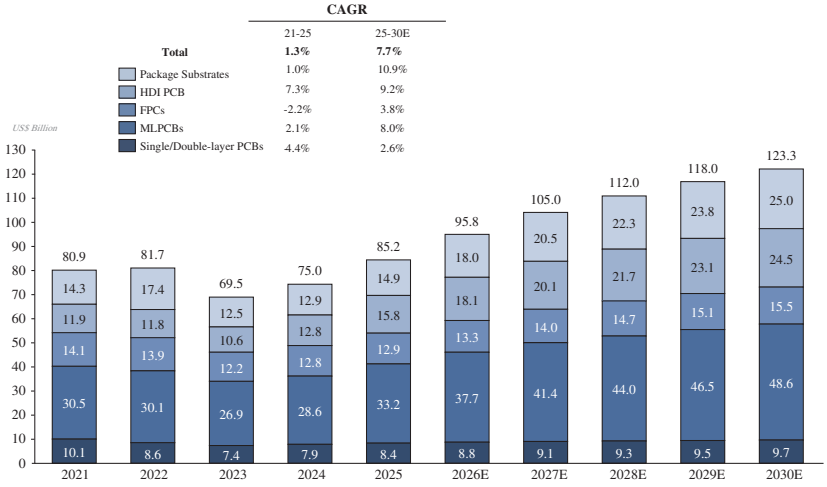
In terms of sales revenue, the global PCB market size increased from US$80.9 billion in 2021 to US$85.2 billion in 2025, representing a CAGR of 1.3% from 2021 to 2025. The growth during the period was mainly driven by the cyclical recovery of the consumer electronics

sector, coupled with sustained momentum from multiple factors including breakthroughs in AI technology, upgrades in high-speed network infrastructure, and the widespread adoption of automotive intelligence. These drivers have further propelled the overall development of the industry. In 2023, affected by global macroeconomic volatility and industry-wide inventory cycle adjustments, the global PCB market experienced a short-term cyclical downturn. Meanwhile, the industry continued to optimize capacity and rationalize supply and demand dynamics. With the gradual recovery of the global economy and the continued penetration of high-growth applications such as data communications and smart vehicles, the global PCB market is projected to achieve steady growth with a CAGR of 7.7% from 2025 to 2030.

By Product Types

By product types, in 2025, in terms of sales revenue, the global market sizes of single/double-layer PCBs, MLPCBs, FPCs, HDI PCBs, and package substrates were US$8.4 billion, US$33.2 billion, US$12.9 billion, US$15.8 billion, and US$14.9 billion, respectively. The growing demand for AI-driven data communications infrastructure, the continuous advancement in the electrification, intelligence and connectivity of automobiles, as well as the expansion of emerging application sectors, have brought continuous development opportunities to the industry. It is expected that by 2030, the global market sizes of single/double-layer PCBs, MLPCBs, FPCs, HDI PCBs, and package substrates will reach US$9.7 billion, US$48.6 billion, US$15.5 billion, US$24.5 billion, and US$25.0 billion, respectively.

Market Size of the Global PCB Market, by Product Type, as Measured by Sales Revenue, 2021-2030E

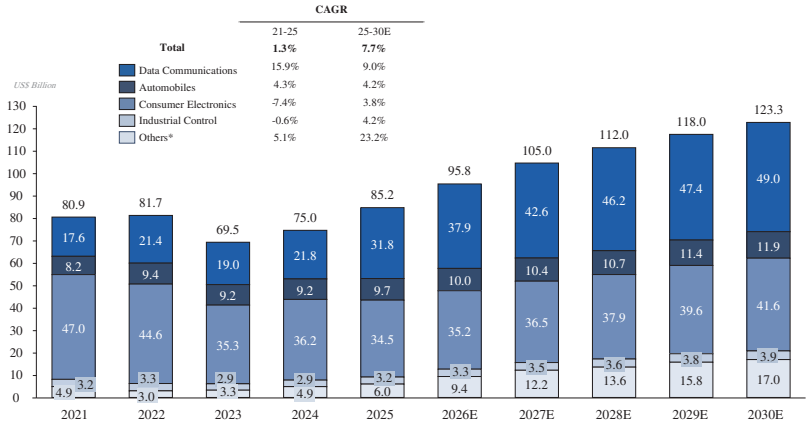


Source: Prismark, CIC Report

By Applications

By different applications, in terms of sales revenue, the global PCB market reached US$31.8 billion, US$9.7 billion, US$34.5 billion, and US$3.2 billion in the application fields of data communications, automobile, consumer electronics, and industrial control in 2025, respectively. The aforementioned market sizes are expected to grow to US$49.0 billion, US$11.9 billion, US$41.6 billion and US$3.9 billion by 2030, representing CAGRs of 9.0%, 4.2%, 3.8% and 4.2% from 2025 to 2030, respectively.

Market Size of the Global PCB Market, by Application Scenarios, as Measured by Sales Revenue, 2021-2030E



Source: Prismark, CIC Report

[*] *Others mainly include medical equipment, aerospace sectors, etc.*

With the continuous development of the global PCB industry, the supply and demand dynamics have exhibited structural changes. The rapidly growing demand for high-end, high-value-added products, such as higher-layer-count PCBs used in data centers, cannot be fulfilled by the existing production capacity, which has resulted in a shortage of supply in the high-end PCB market. With the addition of new production capacity in the high-end segment, such shortage of supply is expected to gradually resolved.

Global data communications PCBs are the fastest-growing application segment in the global PCB market, with a CAGR of 15.9% from 2021 to 2025. Affected by weak demand for general-purpose servers, the data communications PCB market experienced a short-term decline in 2023, but this did not change its long-term high-growth trend. It is projected to continue to exhibit the strongest growth from 2025 to 2030 with a CAGR of 9.0%, driven by rapid development of AI and cloud computing technologies. The accelerated construction of AI infrastructure, large-scale expansion of data centers, and iterative upgrading of high-speed networks have jointly driven robust growth in demand for high-end PCB products. Supported by strong demand, capacity utilization rates within the segment have remained elevated, leading to a constrained supply of high-end data communications PCB products.

Global automobile PCBs are the second fastest-growing application segment in the global PCB market, with a CAGR of 4.3% from 2021 to 2025. Affected by amid short-term corrections in the global automotive market and moderating end-user demand for automobiles, the market size declined slightly in 2023, but this did not change its long-term upward trend. Supported by the ongoing trends of vehicle electrification and intelligence, the industry is projected to continue expanding at a CAGR of 4.2% from 2025 to 2030. As the global penetration rate of new energy vehicles continues to rise and high-level autonomous driving technologies gradually achieve commercialization and large-scale promotion, market demand will further concentrate on high-value-added automobile PCB products, and the PCB value per vehicle is expected to maintain steady growth. Leading enterprises in the industry will

continuously expand high-end automobile PCB production capacity and deepen the research and development of core technologies to alleviate the supply gap of high-end products and promote the balanced development of supply and demand in the industry.

Affected by weak demand for traditional consumer electronic products (personal computers, smartphones, and televisions), the global consumer electronics PCB industry experienced contraction from 2022 to 2023. Driven by the new demand generated from the iteration and upgrading of the smart terminal industry, the industry is expected to resume growth from 2025 to 2030, with a CAGR of 3.8% during the period. The global industrial control PCB industry has maintained overall stable development, with a CAGR of -0.6% from 2021 to 2025. Affected by slower infrastructure investment and weak end-market demand, the industry size declined slightly in 2023, but this did not alter its long-term development trend. It is forecast to grow at a CAGR of 4.2% from 2025 to 2030 as it continues to benefit from the advancement of industrial automation, intelligent manufacturing, and IoT. On the supply side, leading enterprises focus on expanding high-end industrial control PCB production capacity to break technical bottlenecks in high-reliability and anti-interference, alleviate the tight supply of high-end products and promote the industrial upgrading.

Drivers and Development Trends of the Global PCB Industry

Upgrading of AI computing infrastructure drives growth in demand for high-end PCBs. The continuous iteration of generative AI large language models and the accelerated construction of global intelligent computing centers have driven the rapid growth in shipments of core computing infrastructure including AI servers and HPC, and high-speed switches and routers. The number of newly added global data center cabinet units grew from 850.0 thousand in 2021 to 1,376.1 thousand in 2025, achieving a CAGR of 12.8% during this period. It is projected to reach 2,123.7 thousand by 2030. In particular, driven by the boom in artificial intelligence, the number of newly added cabinet units in AI data centers is expected to grow from 435.8 thousand in 2025 to 649.0 thousand by 2030, further fueling robust demand for supporting PCB products. As computing equipment continues to upgrade toward higher transmission rates and greater computing density, it imposes increasingly stringent requirements on PCB products in terms of high-frequency and high-speed transmission performance, wiring density, signal integrity and long-term operational reliability. This is accelerating the upgrade of related PCB products toward higher layer counts, enhanced performance and greater integration, with this technological upgrade trend emerging as a core growth driver for the global PCB industry. In 2025, the global data center PCB market size reached US$19.8 billion. It is expected that the market size will increase to US$22.8 billion in 2026 and will continue to expand at a CAGR of 9.6% from 2025 to 2030, a growth rate significantly higher than the overall global PCB industry's CAGR of 7.7%.

The dual drivers of automotive electrification and intelligentisation have positioned automotive PCBs as a growing segment within the global PCB industry. The continuous increase in global new energy vehicle penetration and the scaled deployment of advanced autonomous driving are accelerating the transition of automotive electronic and electrical architectures from distributed to domain-centralized and central computing designs, profoundly reshaping the demand structure for automobile PCBs. Electrification creates essential demand for the battery, motor, and electronic control systems, significantly boosting the use of high-reliability PCBs per vehicle. Simultaneously, vehicle intelligentization and

upgrades to electrical and electronic architectures are driving strong demand for high-layer-count, high-frequency, high-speed, and highly integrated PCBs used in domain controllers, in-vehicle sensing systems, and high-speed communication modules, which together upgrade the overall product structure toward higher-end applications. Global NEV sales reached 23.3 million in 2025 and is projected to reach approximately 53.8 million in 2030, marking an accelerated phase of industry electrification. The penetration rate of L1-L4 automated driving features in mass-produced passenger vehicles reached 69.1% globally in 2025 and is expected to rise to 72.5% in 2026. Driven by these trends, the growth potential of the global automobile PCB market is poised for sustained expansion.

Further Breakthroughs in New Materials and Advanced Processes. On the material front, the breakthrough development of new materials such as low dielectric constant laminates, high-temperature resistant resins, ultra-low profile copper foils, and quartz glass has achieved performance improvement from the base material perspective. Low-loss base materials can significantly reduce high-frequency signal transmission loss, matching the high-speed transmission requirements of AI computing equipment. High thermal conductivity materials can further enhance the thermal conductivity of base materials, solving the heat dissipation and reliability challenges of new energy vehicles and high-power equipment. On the process front, the iteration of advanced manufacturing processes such as femtosecond laser drilling, ultra-precision circuit manufacturing, and high-precision multi-layer lamination has realized the mass production of micro-scale microvias and ultra-fine circuits, greatly improving PCB wiring density, integration, and interconnection reliability to meet the miniaturization needs of electronic products. The further innovation of new materials and advanced processes not only comprehensively optimizes the core performance of PCBs to match the needs of high-end scenarios, but also optimizes production costs through yield improvement, driving the industry towards high-end and high-value-added transformation.

Green transformation. Driven by carbon neutrality objectives, global attention to environmental protection and sustainable development has been continuously enhanced, and the global PCB industry is accelerating its transition towards low-carbon and sustainable manufacturing models. The industry has gradually reduced the use and emission of hazardous substances at the source through the promotion and application of environmentally friendly materials. Research and development breakthroughs in recyclable and biodegradable materials as well as other related technologies further provide solid support for the green development of PCB products throughout their entire life cycle. Meanwhile, supported by the circular economy concept, closed-loop production technologies, including waste circuit board resource recycling and recycled copper foil, have continued to undergo innovation, and the industry is gradually establishing a green industrial chain ecosystem covering the entire process from production to recycling.

Competitive Landscape of the Global PCB Market

The PCB industry is intensely competitive, with more than 2,500 enterprises worldwide with independent mass production capabilities participating in the competition, while the resources and production capacity of the industry are highly concentrated towards the leading manufacturers. Compared with industry peers, the Company offers high-layer-count PCBs, which are primarily used in the fields of data communications, smart vehicles, industrial control and others.

Company	Company Profile and Main Products	Main Application Scenarios
The Company	**The Company is a public company founded in 1992 and listed on the Shenzhen Stock Exchange, headquartered in Jiangsu, China, mainly engaged in the production and sale of high-layer-count MLPCBs and high-build-up HDI PCBs.**	**Data communications (high-speed network switches and routers, AI servers and HPC), smart vehicles and industrial control**
Company A	Company A is a public company founded in 2006 and listed on the Taiwan Stock Exchange, headquartered in Taiwan, mainly engaged in the production and sale of FPCs and HDI PCBs.	Consumer electronics and automobiles
Company B	Company B is a public company founded in 1990 and listed on the Taiwan Stock Exchange, headquartered in Taiwan, mainly engaged in the production and sale of package substrates, high-layer-count MLPCBs and HDI PCBs.	Data communications (wireless telecommunications) and consumer electronics
Company C	Company C is a public company founded in 1998 and listed on the Shenzhen Stock Exchange, headquartered in Jiangsu, China, mainly engaged in the R&D, production and sale of FPCs, HDI PCBs, precision manufacturing components and optoelectronic display devices.	Consumer electronics and automobiles
Company D	Company D is a public company founded in 1984 and listed on the Shenzhen Stock Exchange, headquartered in Guangdong, China, primarily engaged in production and sale of high-layer-count MLPCBs, high-build-up HDI PCBs and package substrates.	Data communications (high-speed network switches and routers, wireless telecommunications, AI servers and HPC), automobiles and industrial control
Company E	Company E is a public company founded in 1978 and listed on Nasdaq, headquartered in the United States, committed to providing high-layer-count MLPCBs, high-build-up HDI PCBs, radio frequency and microelectronic components, as well as system integration services.	Data communications (high-speed network switches and routers, AI servers and HPC), aerospace, automobiles and industrial control
Company F	Company F is a public company founded in 2006 and listed on the Shenzhen Stock Exchange and Hong Kong Stock Exchange, headquartered in Guangdong, China, mainly engaged in the R&D, production and sale of diversified high-precision high-layer-count MLPCBs and high-build-up HDI PCBs.	Consumer electronics, industrial control and automobiles
Company G	Company G is a public company founded in 1973 and listed on the Taiwan Stock Exchange, headquartered in Taiwan, primarily engaged in production and sale of MLPCBs and high-build-up HDI PCBs.	Data communications (wireless telecommunications, general-purpose servers and AI servers and HPC) and consumer electronics
Company H	Company H is a public company founded in 1991 and listed on the Taiwan Stock Exchange, headquartered in Taiwan, mainly engaged in the production and sale of high-layer-count MLPCBs and high-build-up HDI PCBs.	Data communications (storage, general-purpose servers), automobile and industrial control
Company I	Company I is an enterprise founded in 1969 and headquartered in Japan, mainly engaged in the production and sale of FPCs and HDI PCBs.	Consumer electronics and automobiles
Company J	Company J is a public company founded in 1978 and listed on the Taiwan Stock Exchange, headquartered in Taiwan, mainly engaged in the design, production and sale of high-layer-count MLPCBs and HDI PCBs and other related electronic components.	Data communications (general-purpose servers, AI servers and HPC) and automobile
Company K	Company K is a public company founded in 1993 and listed on the Shanghai Stock Exchange, headquartered in Guangdong, China, mainly engaged in the production and sales of MLPCBs, FPCs and high-end electronic materials.	Automobiles and consumer electronics and industrial control
Company L	Company L is a public company founded in 1985 and listed on the Shanghai Stock Exchange, headquartered in Guangdong, China, mainly engaged in the R&D, production and sale of high-layer-count MLPCBs and HDI PCBs.	Data communications (high-speed network switches and routers, AI servers and HPC) and automobile
Company M	Company M is a public company founded in 2002 and listed on the Shenzhen Stock Exchange and Hong Kong Stock Exchange, headquartered in Guangdong, China, mainly engaged in the design, production and sale of .high-layer-count MLPCBs and high-build-up HDI PCBs.	Data communications (high-speed network switches and routers) and automobile
Company N	Company N is a public company founded in 1972 and listed on the Korea Exchange, headquartered in South Korea, mainly engaged in the R&D, production and sale of high-layer-count MLPCBs and HDI PCBs.	Data communications (wireless telecommunications, general-purpose servers, switches and routers)
Company O	Company O is a public company founded in 1975 and listed on the Tokyo Stock Exchange, headquartered in Japan mainly engaged in the design, production and sale of MLPCBs, HDI PCBs and package substrates.	Automobile , data communications (wireless telecommunications) and consumer electronics
Company P	Company P is a public company founded in 1961 and listed on the Tokyo Stock Exchange, headquartered in Japan, mainly engaged in the R&D, production and sale of MLPCBs and HDI PCBs.	Automobiles
Company Q	Company Q is a public company founded in 1979 and listed on the Taiwan Stock Exchange, headquartered in Taiwan, mainly engaged in the R&D, production and sale of MLPCBs and HDI PCBs.	Automobile and data communications (wireless telecommunications)
Company R	Company R is a public company founded in 1988 and listed on the Taiwan Stock Exchange, headquartered in Taiwan, mainly engaged in the R&D, production and sale of MLPCBs and HDI PCBs.	Automobile
Company S	Company S is a public company founded in 1987 and listed on the Vienna Stock Exchange Prime Market, headquartered in Austria, mainly engaged in the R&D, production and sale of MLPCBs, FPCs and HDI PCBs.	Consumer electronics, industrial control and automobile
Company T	Company T is a public company founded in 1995 and listed on the Shenzhen Stock Exchange, headquartered in Guangdong, mainly engaged in the R&D, production and sale of MLPCBs, HDI PCB and FPC.	Industrial control consumer electronics and automobile

Source: CPCA, Prismark, Annual Reports of Listed Companies, Interviews with Industry Experts by CIC, CIC Report

In 2025, the Company's PCB revenue reached US$2,661.2 million, ranking sixth among global PCB manufacturers with a market share of 3.1%.

Ranking of the Global Manufacturers of PCB, in terms of Sales Revenue of PCBs, 2025

Rank	Company	Revenue, 2025 (US$ million)	Market Share (%)
1	Company A	5,895.5	6.9%
2	Company B	4,235.1	5.0%
3	Company C	3,758.0	4.4%
4	Company D	3,275.0	3.8%
5	Company E	2,906.4	3.4%
6	**The Company**	**2,661.2**	**3.1%**
7	Company F	2,652.5	3.1%
8	Company G	2,534.5	3.0%
9	Company H	2,447.9	2.9%
10	Company I	2,176.5	2.6%
	Sum of Top 10	**32,542.6**	**38.2%**

Source: Annual Reports of Listed Companies, Interviews with Industry Experts by CIC, CIC Report

Analysis of the Main Costs in the Global PCB Market

The main raw material costs for PCBs include CCL, copper foil, and copper balls. Copper-related materials account for 60% to 70% of PCB total raw material costs, making PCB costs highly correlated with copper prices. Its price fluctuations are mainly affected by factors including the global macroeconomic environment, market supply and demand dynamics. To mitigate the impact of volatility in raw material prices, leading PCB manufacturers typically implement refined cost management and control, optimize production processes so as to minimize raw material wastage, conduct dynamic adjustments to raw material inventories, and enter into long-term price-locking agreements with core suppliers — thereby locking in core procurement costs and stabilizing cost expectations across the supply chain. During the Track Record Period, the Company's PCB products with 22 layers and above consistently maintained a high revenue share with an upward trend, growing from 38.4% in 2023 to 54.9% in 2025. Such products provide high-performance and high-reliability hardware support for downstream end applications including high-speed network switches, AI servers and HPC. Their value proposition is underpinned by technological capabilities and quality barriers. The Company adopts a flexible pricing mechanism guided by technological value and quality premium, with dynamic adjustments in line with market supply and demand. Accordingly, the marginal impact of copper price fluctuations on the Company's average selling prices of its products was limited during the Track Record Period. See "Business — Our Supply Chain — Raw Material" for further details about our measures implemented to manage and mitigate the impact of fluctuations in the prices of raw materials.

Average Copper Settlement Price, 2021-2030E

Source: London Metal Exchange, Shanghai Metals Market, CIC Report

Industry Threats and Challenges for the Global PCB Industry

Intensifying market competition: The PCB industry features numerous participants and a fragmented competitive landscape. Intensifying market competition has driven downstream customers to raise stricter requirements for PCB manufacturers in product quality stability, delivery capacity and technical capability. To sustain competitiveness, PCB manufacturers need to continuously invest resources to improve product quality, delivery efficiency and technical expertise.

Rising technical requirements amid rapid downstream technological iteration. The PCB industry is inherently technology-intensive. Rapid technological iteration in downstream sectors including automobile, data communications and consumer electronics has continuously raised market requirements for PCB performance, process precision and material adaptability. Failure to keep up with industry technological trends and meet downstream demand will weaken suppliers' product competitiveness and result in loss of market share.

OVERVIEW OF THE GLOBAL MLPCB MARKET

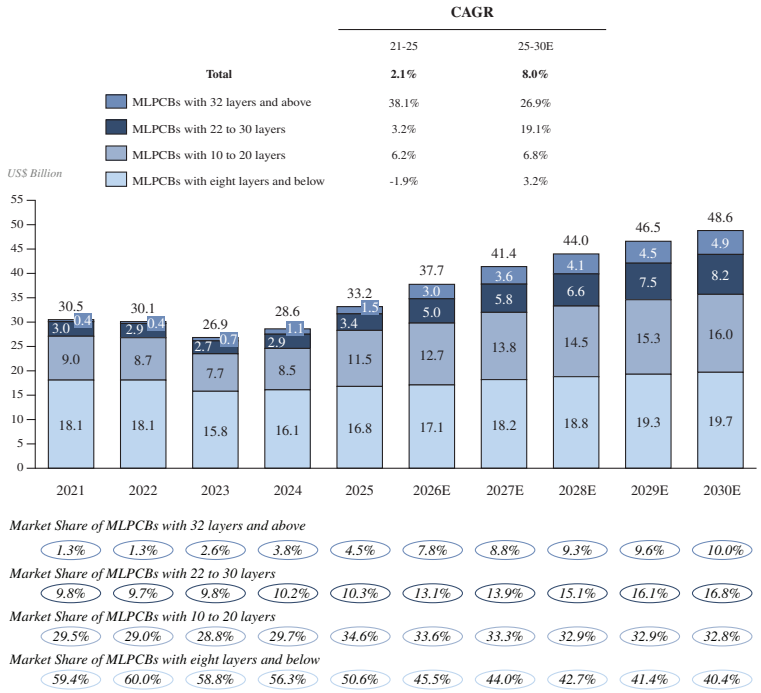
In 2025, the global MLPCB market size represented US$ 33.2 billion. MLPCBs are a core and mainstream product type of PCBs. In 2025, the proportion of the global market size of MLPCBs to the global market size of PCBs reached 38.9%. Based on single/double-layer PCBs, MLPCBs are products formed by alternately laminating multiple layers of conductive copper foils and insulating dielectric materials, with electrical interconnection between layers achieved through plated through holes, blind vias and buried vias. Compared with single/double-layer PCBs, MLPCBs have core advantages in supporting more sophisticated circuit designs and achieving higher-density component layout, enabling the integration of more functional modules within a limited space. Within the multilayer PCB industry, products are typically categorized by layer count and corresponding technical capabilities into four major segments: eight layer and below, 10 to 20 layer, 22 to 30 layer, and 32 layer and above MLPCBs. Each segment, defined by distinct technical barriers and performance characteristics, serves specific downstream application areas.

MLPCBs with 22 and above layers (covering the 22 to 30 layer and 32 layer and above segments) are mainly used in applications with extremely stringent requirements for high-frequency/high-speed signal transmission, signal integrity, wiring density and long-term operational reliability, acting as core components enabling cutting-edge high-end fields such as AI servers, HPC, 400G and above high-speed switches and routers, and other data center and AI computing infrastructure. These products represented 14.8% of global MLPCB market revenue in 2025, and amid the continued explosive growth in AI computing demand, their market share is forecast to increase to 26.8% by 2030.

Market Size of the Global MLPCB Market

In terms of sales revenue, the global market size of MLPCBs increased from US$30.5 billion in 2021 to US$33.2 billion in 2025, representing a CAGR of 2.1% during 2021 to 2025. The global market size of MLPCBs is expected to reach US$48.6 billion by 2030, representing a CAGR of 8.0% from 2025 to 2030. The market sizes of MLPCBs with eight layers and below, 10 to 20 layers, 22 to 30 layers, and 32 layers and above reached US$16.8 billion, US$11.5 billion, US$3.4 billion and US$1.5 billion in 2025, respectively, and are expected to reach US$19.7 billion, US$16.0 billion, US$8.2 billion and US$4.9 billion by 2030, respectively. In terms of market share by layer count, the global MLPCB market in 2025 was dominated by MLPCBs with eight layers and below, accounting for 50.6% of the total sales revenue of the global MLPCB market. This was followed by MLPCBs with 10 to 20 layers, accounting for 34.6% of total sales revenue, while MLPCBs with 22 to 30 layers and 32 layers and above accounted for 10.3% and 4.5%, respectively.

Market Size of the Global MLPCB Market, by Layer Count, as Measured by Sales Revenue, 2021-2030E



Source: Prismark, CIC Report

Competitive Landscape of the Global MLPCB Market

In 2025, the global MLPCB market size was US$33.2 billion. The global MLPCB market is a mainstream sub-segment of the overall PCB market, accounting for approximately 38.9% of the total PCB market size in 2025. The MLPCB sector has approximately 1,200 to 1,500 market participants worldwide and demonstrates a relatively fragmented competitive landscape. In terms of revenue in 2025, the Company ranked first globally in the market for MLPCBs with MLPCB revenue of US$1,498.3 million, representing a 4.5% global market share. The market for high-layer MLPCBs with 22 layers and above is a sub-segment of the global MLPCB market, accounting for approximately 14.8% of the global MLPCB market size in 2025. The global market for high-layer MLPCBs with 22 layers and above features a concentrated competitive landscape, with only about 50 to 70 core market participants worldwide. In 2025, the Company reached US$724.8 million sales revenue of MLPCBs with 22 layers and above and ranked first globally in the market with a market share of 14.9%.

Ranking of the Global Manufacturers of PCBs, in terms of Sales Revenue of MLPCBs, 2025

Rank	Company	Revenue, 2025 (US$ million)	Market Share (%)
1	**The Company**	**1,498.3**	**4.5%**
2	Company D	1,495.4	4.5%
3	Company H	1,486.4	4.5%
4	Company J	1,356.7	4.1%
5	Company E	1,318.8	4.0%
6	Company F	1,219.8	3.7%
7	Company K	1,042.9	3.1%
8	Company L	1,019.5	3.1%
9	Company A	637.9	1.9%
10	Company G	628.0	1.9%
	Sum of Top 10	**11,703.7**	**35.3%**

Source: Annual Reports of Listed Companies, Interviews with Industry Experts by CIC, CIC Report

Ranking of the Global PCB Manufacturers, in terms of Sales Revenue of MLPCBs with 22 Layers and Above, 2025

Rank	Company	Revenue, 2025 (US$ million)	Market Share (%)
1	**The Company**	**724.8**	**14.9%**
2	Company D	643.0	13.2%
3	Company E	593.4	12.2%
4	Company F	541.5	11.1%
5	Company J	530.3	10.9%
	Sum of Top 5	**3,033.0**	**62.3%**

Source: CIC Report, Annual Reports of Listed Companies, Interviews with industry experts by CIC

Industry Threats and Challenges for the Global MLPCB Industry

Technological Complexity and Challenges of High-layer MLPCBs: AI servers, high-speed switches and routers drive the demand for higher PCB layer counts, raising the complexity of inter-layer alignment. Micrometre-level precision in imaging and lamination is essential to avoid signal transmission failures. To meet the signal integrity and thermal stability requirements of AI hardware, MLPCBs adopt specialty materials with narrow process windows, including high glass-transition-temperature substrates, ultra-low loss laminates and thick copper foils, which creates challenges for mass production capacity expansion. Failure to overcome these technical bottlenecks through continuous R&D investment may push up costs, lengthen lead times and weaken market competitiveness.

Challenges from Key Material Supply Chain Imbalance: The global MLPCB industry is exposed to structural supply chain pressures for core inputs including copper foils, epoxy resins, glass fiber fabrics and CCLs, which require long-term technology accumulation and rigorous customer qualification. Driven by AI and high-speed networking demand, the 12 to 18 months capacity expansion cycle for these high-end specialty materials creates a lead time mismatch, resulting in periodic material shortages and extended procurement lead times across the global MLPCB supply chain.

OVERVIEW OF THE GLOBAL DATA COMMUNICATIONS PCB INDUSTRY

Data communications PCBs underpin digital information transmission, with market trends closely tied to the development of data centers and network infrastructure. Driven by AI computing power growth and global digital transformation, it represents a highly resilient and innovative segment in the PCB industry. The global data communications PCB market reached US$31.8 billion in 2025, accounting for 37.3% of the total PCB market. It is projected to grow to US$49.0 billion by 2030. Based on application scenarios, data communications PCBs are mainly classified into two core categories, namely data center PCBs and telecommunication infrastructure PCBs.

Data Center PCBs. In 2025, the global data center PCB market size represented 62.3% of the total global data communications PCB market size. Data center PCBs are primarily used in AI servers and HPC, switches and routers, as well as general-purpose servers. Their core function is to support high-speed interconnection and stable operation of the foregoing equipment, and to safeguard the stability and efficiency of computing power output and signal transmission in data centers:

AI Servers and HPC. AI server and HPC PCBs enable high-speed interconnection among accelerator chips such as GPUs, ASICs, and FPGAs. Compared with general-purpose server PCBs, they have more advanced technical specifications and design requirements, and usually adopt high-end HDI technology combined with low dielectric constant materials as a standard design. In 2025, the AI server and HPC PCB market size accounted for 34.5% of the total global data center PCB market size.

Switches and Routers. PCBs in switches and routers act as the critical interconnection and physical substrate that enables high-speed, high-bandwidth, low-latency signal transmission, stable power distribution, and efficient thermal management for reliable and high-performance network operation. In 2025, the global switch and router PCB market size accounted for 37.4% of the total global data center PCB market size.

General-purpose Servers: PCBs for general-purpose servers mainly adopt multilayer board design and low-loss dielectric design, which ensure efficient and stable internal data transmission while enhancing overall computing performance. In 2025, the global general purpose PCB market size accounted for 21.8% of the total global data center PCB market size.

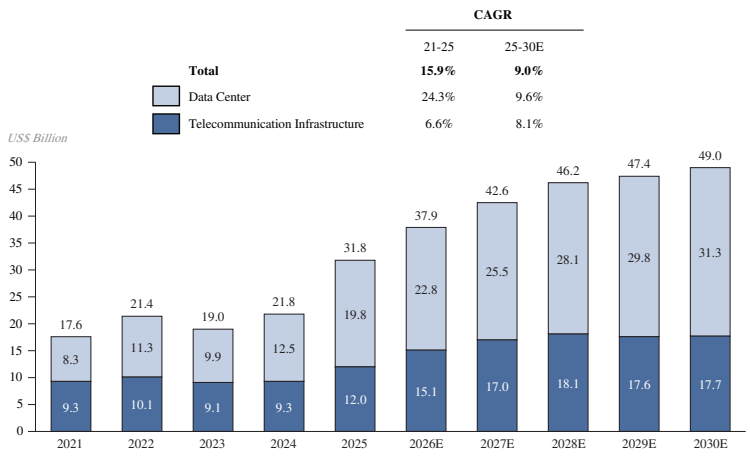
Others: Others mainly include storage and power supply PCBs, accounting for 6.3% of the global data center PCB market in terms of 2025 sales revenue.

Telecommunication Infrastructure PCBs: Telecommunication infrastructure PCBs are key components for communication equipment, supporting circuit interconnection, signal transmission and functional integration. In 2025, this market accounted for 37.7% of the global data communications PCB market.

Market Size of the Global Data Communications PCB Industry

By application scenario, in terms of sales revenue, the global market size of data center PCBs increased from US$8.3 billion in 2021 to US$19.8 billion in 2025, representing a CAGR of 24.3% for the period 2021 to 2025. The global market size of data center PCBs is expected to reach US$31.3 billion by 2030, representing a CAGR of 9.6% for the period 2025 to 2030. In terms of sales revenue, the global market size of telecommunication infrastructure PCBs increased from US$9.3 billion in 2021 to US$12.0 billion in 2025, representing a CAGR of 6.6% for the period 2021 to 2025. The global market size of telecommunication infrastructure PCBs is expected to reach US$17.7 billion by 2030, representing a CAGR of 8.1% for the period 2025 to 2030.

Market Size of the Global Data Communications PCB Market, as Measured by Sales Revenue, 2021-2030E



Source: Prismark, CIC Report

Competitive Landscape of the Global Data Communications PCB Market

In 2025, the global data communications PCB market size reached US$31.8 billion, accounting for 37.3% of the overall PCB market. The global data communications PCB industry features relatively fragmented, with more than 900 market participants engaged in the market as of 2025, and resources and production capacity are highly concentrated among the leading players. In 2025, the Company's data communications PCB revenue was US$2,149.8 million, ranking first among data communications PCB manufacturers globally with a market share of 7.0% in terms of global data communications PCB sales revenue.

The data center PCB market is a core sub-segment of the broader data communications PCB market. In 2025, the global market size of data center PCBs accounted for approximately 62.3% of the overall data communications PCB market. While the data communications PCB market is characterized by a large number of participants and a relatively fragmented competitive landscape, the global data center PCB market presents a relatively concentrated competitive pattern, with about 150 to 200 market participants worldwide engaged in the data center PCB business. In 2025, the Company's data center PCB revenue was US$2,011.8 million, and the Company ranked first globally in the data center PCB market with a market share of 10.2%.

With the rapid advancement of AI and other emerging technologies, the global demand for AI computing has been continuously on the rise, which has driven the construction of data centers into a new phase of rapid development. From a long-term development perspective, as the core carrier of the digital economy and AI computing infrastructure, data center PCBs are expected to embrace long-term and extensive growth space in conjunction with the continuous upgrading of computing power demand, and the development of the industry demonstrates strong sustainability.

Ranking of the Global Manufacturers of PCBs, in terms of Sales Revenue of Data Communications PCBs, 2025

Rank	Company	Revenue, 2025 (US$ million)	Market Share (%)
1	**The Company**	**2,149.8**	**7.0%**
2	Company J	1,724.9	5.6%
3	Company F	1,504.6	4.9%
4	Company D	1,369.0	4.4%
5	Company H	1,327.6	4.3%
6	Company E	1,165.4	3.8%
7	Company L	1,059.7	3.4%
8	Company B	927.5	3.0%
9	Company G	783.1	2.5%
10	Company M	553.0	1.8%
	Sum of Top 10	**12,564.6**	**40.7%**

Source: Annual Reports of Listed Companies, Interviews with Industry Experts by CIC, CIC Report

Ranking of the Global Manufacturers of PCBs, in terms of Sales Revenue of Data Center PCBs, 2025

Rank	Company	Revenue, 2025 (US$ million)	Market Share (%)
1	**The Company**	**2,011.8**	**10.2%**
2	Company J	1,579.5	8.0%
3	Company F	1,223.5	6.2%
4	Company H	1,209.2	6.1%
5	Company E	930.0	4.7%
6	Company D	889.9	4.5%
7	Company L	657.3	3.3%
8	Company B	533.6	2.7%
9	Company M	497.7	2.5%
10	Company N	456.2	2.3%
	Sum of Top 10	**9,988.7**	**50.5%**

Source: Annual Reports of Listed Companies, Interviews with Industry Experts by CIC, CIC Report

Industry Threats and Challenges for the Global Data Communications PCB Industry

Shortage of specialised production equipment: Manufacturing of data communications PCBs relies predominantly on specialised precision equipment sourced from overseas suppliers. Driven by surging global demand for computing power, equipment manufacturers are operating at full capacity with substantially extended order lead times, resulting in persistently tight supply of such specialised equipment across the industry. Constrained by insufficient equipment availability, PCB manufacturers fail to implement capacity expansion schedules as planned. The growth of data communication PCB capacity lags behind rising orders from downstream orders, which in turn prolongs product delivery cycles and constitutes a critical bottleneck restricting capacity expansion of the industry.

Rapid process iteration and high mass production threshold pressure: Driven by AI high-bandwidth transmission demands, data communications PCBs are rapidly iterating toward high-layer count, ultra-fine circuit and high-precision drilling processes, bringing unprecedented manufacturing and technical barriers. Advanced production technologies such as mSAP and laser drilling require high-precision imported equipment and sophisticated procession, resulting in high investment costs and slow yield ramp-up. Enterprises incapable of keeping up with rapid process upgrades and standardized precision production will be eliminated from the highend market, suffering shrinking high-margin business and insufficient capacity to meet upgraded downstream customer demands.

OVERVIEW OF THE GLOBAL AUTOMOBILE PCB INDUSTRY

As a core foundational component supporting the advancement of automotive intelligence, PCBs have evolved from meeting the demand for simple module control as traditional auxiliary circuit connection carriers to serving as integrated platforms and fulfilling comprehensive functions including domain-level integrated control, integrated computing and

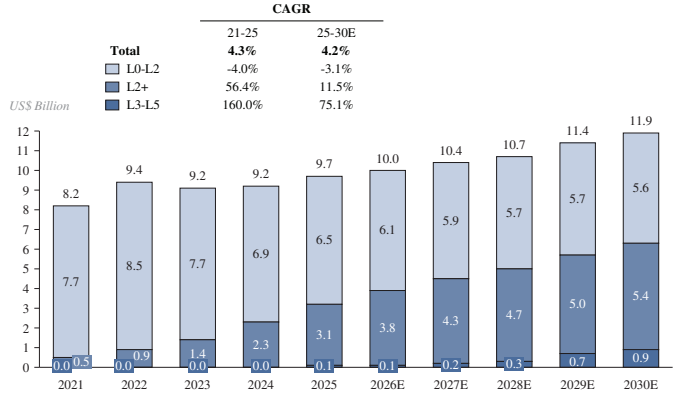
signal transmission. Currently, the evolution of automated driving systems is centered on the large-scale application of fused perception (millimeter-wave radar, lidar), visual perception (high-definition cameras), and central computing & decision-making (automated driving domain controllers). Among these, the perception and computing platforms represented by automated driving domain controllers constitute the core segment with the greatest growth potential in the PCB industry, and their development is directly linked to the future commercialization of automated driving above L2+. This transformation has reshaped the demand for automotive-grade PCBs, with the PCB value per smart vehicle reaching approximately six to eight times that of traditional vehicles.

Market size of the Global Automobile PCB Industry

Due to the installation of more intelligent cockpits and automated driving perception modules, new energy vehicles have much higher requirements for the quantity, performance, and reliability of interconnected components than traditional internal combustion engine vehicles, becoming the core engine for the growth of demand for electronic components. With the continuous increase in the penetration rate of new energy vehicles and automated driving technology, the functional requirements and application scenarios of PCBs in the automobile field are constantly expanding, which is expected to continuously drive the growth of the global automobile PCB market size. Notably, this overall growth is accompanied by structurally differentiated performance across different automated driving levels, reflecting the varying demand for PCBs driven by different degrees of automotive intelligence.

The L0-L2 automobile PCB, as the current mainstay, reached a market size of US$6.5 billion in 2025 and is projected to decline to US$5.6 billion in 2030, representing a CAGR of -3.1% from 2025 to 2030. The L2+ automobile PCB has emerged as the core growth engine of the industry, expanding rapidly from US$0.5 billion in 2021 to US$3.1 billion in 2025, and is projected to reach US$5.4 billion by 2030, with CAGRs of 56.4% from 2021 to 2025 and 11.5% from 2025 to 2030. Meanwhile, the L3-L5 automobile PCB segment remains in its early developmental stage, with a market size of US$0.1 billion in 2025, which is projected to reach US$0.9 billion by 2030, representing a CAGR of 75.1% from 2025 to 2030, underscoring its strong long-term growth potential.

Market Size of the Global Automobile PCB, by Automated Driving Levels, 2021-2030E



Source: Prismark, CIC Report

Competitive Landscape of the Global Automobile PCB Market

In 2025, the global automobile PCB market size reached US$9.7 billion, accounting for 11.4% of the overall PCB market. The global automobile PCB sector comprises more than 700 participants and comprise traditional and smart vehicle PCB segments. Smart vehicle PCBs require rigorous compliance with automotive-grade reliability and durability standards, involving lengthy certification processes and resulting in a concentrated market led by major players. Conversely, traditional automobile PCBs follow established technical standards, feature product homogeneity, and have low entry barriers, fostering intense price competition and a fragmented supplier landscape. In 2025, the Company's automobile PCB revenue was US$446.6 million, and, the Company ranks sixth globally in the automobile PCB industry with a market share of 4.6%.

Ranking of the Global Manufacturers of PCBs, in terms of Sales Revenue of Automobile PCBs, 2025

Rank	Company	Revenue, 2025 (US$ million)	Market Share (%)
1	Company K	1,019.9	10.5%
2	Company O	641.0	6.6%
3	Company P	576.4	5.9%
4	Company I	477.3	4.9%
5	Company H	450.1	4.6%
6	**The Company**	**446.6**	**4.6%**
7	Company D	421.2	4.3%
8	Company Q	397.0	4.1%
9	Company R	373.0	3.8%
10	Company F	365.7	3.8%
	Sum of Top 10	**5,168.2**	**53.1%**

Source: Annual Reports of Listed Companies, Interviews with Industry Experts by CIC, CIC Report

Industry Threats and Challenges for the Global Automobile PCB Industry

Intensified market competition and raw material cost fluctuations. As the demand for automobile PCB maintains steady growth, domestic and overseas manufacturers continue to expand production capacity, driving intensified market competition. High-end automobile PCBs require premium specialty materials with strict certification and low substitutability, making them more vulnerable to raw material price volatility.

Technical challenges from vehicle electrification and intelligence. Vehicle electrification and intelligence set strict technical requirements for automobile PCBs. NEVs and smart vehicles require PCBs to withstand high voltage and high current, adopting heavy copper boards, metal substrates and embedded copper structures. Domain controller PCBs need high-speed data fusion, signal isolation and long-term reliability under extreme temperature and vibration. Such stringent requirements demand premium materials and advanced lamination processes, leading to low production yields and higher costs. Manufacturers lacking signal integrity design capability and harsh environment adaptability cannot meet technical standards and will lose market share in the global automobile PCB market.

OVERVIEW OF THE GLOBAL INDUSTRIAL CONTROL PCB INDUSTRY

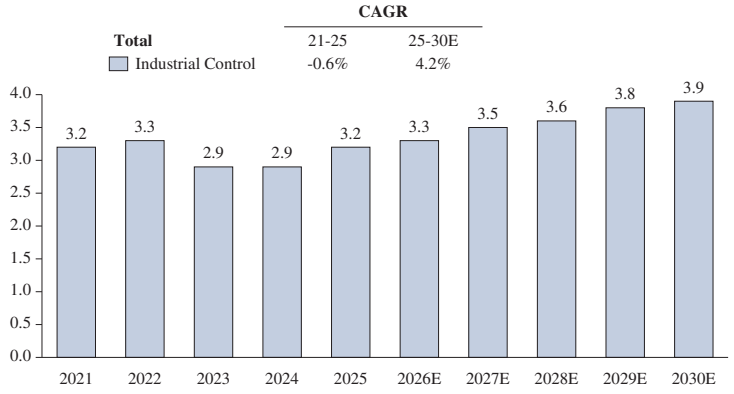
Industrial control PCBs are high-reliability core components in the industrial control sector, enabling precise production control, equipment coordination, and data exchange. They are designed for long-term stable operation under harsh conditions, featuring high precision, strong reliability, robust anti-interference, wide temperature tolerance, and extended lifespan. In industrial production, they are primarily used in automation systems, industrial robots, and smart manufacturing equipment, serving as the core control, signal processing, and motion control units that ensure automated and intelligent operation.

Market Size of the Global Industrial Control PCB Industry

The global industrial digitalization and automation transformation are advancing at an accelerated pace, with prominent trends in smart manufacturing, industrial Internet of Things (IIoT), and high-end equipment upgrading, directly driving the steady expansion of the global industrial control PCB market. Benefiting from the accelerated automation transformation of factories, the popularization of industrial robots, and the mass production of new energy manufacturing equipment. The market size is expected to further increase to US$3.9 billion by 2030, with a CAGR of 4.2% from 2025 to 2030.

The widespread adoption of smart manufacturing drives robust demand for high-performance PCBs. Amid global industrial digitalisation and automation, industrial control systems require PCBs with higher layer counts, greater routing density and better signal integrity, with eight to 12 layer PCBs as mainstream and growing demand for 16+ layer ones, directly driving market growth. The integration between the device interconnection and information silos has driven the growing demand in areas such as edge computing gateways, industrial Ethernet modules and smart grids, which in turn has created the demand for more communication and sensor interfaces, ultimately leading to a sustained increase in demand for high-end PCB products.

Market Size of the Global Industrial Control PCB Industry, as Measured by Sales Revenue, 2021-2030E



Source: Prismark, CIC Report

Competitive Landscape of the Global Industrial Control PCB Market

In 2025, the global industrial control PCB market size reached US$3.2 billion, accounting for 3.7% of the overall PCB market. The global industrial control PCB industry presents a fragmented competitive landscape with more than 800 market participants worldwide. This segment is characterized by a relatively modest overall market size, with scattered customer demand. Benefiting from its technical capabilities in high-reliability and high-stability PCB solutions, the Company ranks sixth globally in the industrial control PCB market with US$58.4 million sales revenue of industrial control PCB, holding a 1.9% market share.

Ranking of the Global Manufacturers of PCBs, in terms of Sales Revenue of Industrial Control PCBs, 2025

Rank	Company	Revenue, 2025 (US$ million)	Market Share (%)
1	Company S	192.6	6.1%
2	Company E	162.8	5.2%
3	Company K	155.8	4.9%
4	Company F	120.3	3.8%
5	Company D	63.2	2.0%
6	**The Company**	**58.4**	**1.9%**
7	Company G	58.0	1.8%
8	Company M	56.9	1.8%
9	Company T	49.2	1.6%
10	Company J	46.5	1.5%
	Sum of Top 10	**963.7**	**30.6%**

Source: Annual Reports of Listed Companies, Interviews with Industry Experts by CIC, CIC Report

Industry Threats and Challenges for the Global Industrial Control PCB Industry

Fragmented market structure and intense homogenized competition: The global industrial control PCB market is highly fragmented, giving rise to fierce homogeneous competition and compressed profit margins across the industry. Such products demand long-term stable supply and high operational reliability. If industrial control PCB manufacturers cannot sustain standardized production, strict quality control and comprehensive after-sales services, they may face declining customer trust, shrinking market share and weakened brand influence.

Upgrading of industrial scenarios driving higher performance requirements: The development of Industry 4.0, smart manufacturing and the Industrial Internet of Things (IIoT) has driven equipment integration and intelligence. Industrial control PCBs must withstand extreme temperatures, vibration and electromagnetic interference. Consequently, materials must possess high temperature resistance, corrosion resistance, vibration resistance, high signal integrity and long-term stability. Industrial control PCB manufacturers failing to upgrade processes or optimize material selection through R&D risk will be unable to satisfy complex industrial requirements, leading to a decline in market competitiveness.