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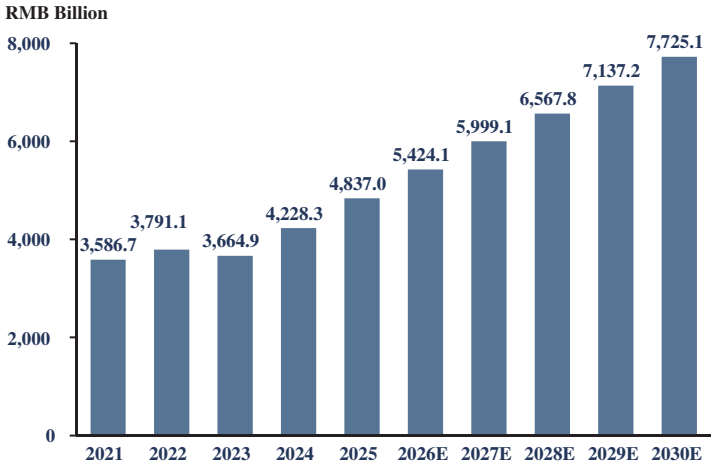
OVERVIEW OF THE SEMICONDUCTOR CHIP INDUSTRY

Market Overview of the Semiconductor Chip Industry

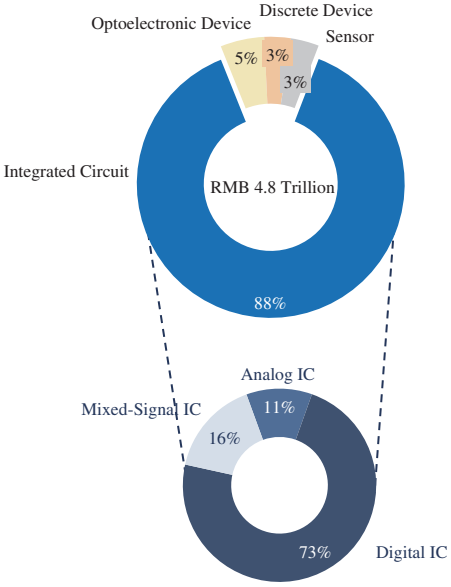
Semiconductor chips fall under four major product categories: optoelectronic devices, discrete devices, sensors, and integrated circuits ("**ICs**"). Optoelectronic devices emit, detect, and convert optical signals for high-speed communication, optical storage, and imaging systems, and serve as a critical bridge between light and electricity. Discrete devices, such as diodes, transistors, and power devices, handle high voltage, current, and power, making them essential for power management, signal switching, and energy conversion. Sensors refer to semiconductor components that can detect and perceive changes in physical, environmental, or chemical parameters and convert the collected information into signals that can be processed by equipment. Integrated Circuits integrate and package active devices such as transistors and diodes, passive components such as resistors and capacitors, and wiring onto a semiconductor wafer to perform specific functions. Based on the type of circuit that implements the main function of an IC, ICs are further divided into: 1) Digital ICs transmit, process, and handle digital signals. 2) Analog ICs process continuous analog signals such as light, sound, speed, and temperature. 3) Mixed-signal ICs convert, process, and coordinate control between analog and digital signals. Unlike digital and analog ICs, mixed-signal ICs focus on signal rate, bandwidth, jitter control, and signal integrity as their core performance indicators. Specifically, its interconnect chips, video bridge chips, video processing chips, and DDICs are classified as high-speed mixed-signal ICs, whereas TCONs are digital ICs. Under different communication protocols and signal-type scenarios, mixed-signal chips may be further classified into standard-speed mixed-signal chips and high-speed mixed-signal chips based on the processing speed of the relevant signals. High-speed mixed-signal chips refer to mixed-signal chips with high-rate processing capabilities, and generally have different quantitative definitions depending on different signal types and data transmission protocols. For example, under the USB protocol, according to the USB 2.0 Specification and USB 3.2 Specification, a data transmission rate of 480 Mbps or above is classified as High-Speed. Under the SATA protocol, according to the Serial ATA Revision 3.0 specification issued by the Serial ATA International Organization, a data rate of 1.5 Gbps or above is classified as high-speed serial data transmission. Under HDMI and other video transmission protocols, according to the HDMI 1.4 Specification, a maximum clock frequency of 340 MHz or above corresponds to the High-Speed category. Under automotive video transmission protocols, according to the HSMT standard, namely High-Speed Media Transmission, defined by the National Technical Committee of Auto Standardization, a forward transmission speed of 4 Gbps or above is classified as high-speed transmission. Our target markets are high-speed mixed-signal chips. According to Frost & Sullivan, high-speed mixed-signal chips constitute a clearly defined market segment supported by established quantitative criteria under applicable industry standards and are therefore regarded as an industry norm.

In terms of market size, the global semiconductor chip market has continued to expand, driven by rising demand for high-performance electronic systems in automotive, smart terminals and industrial applications. The semiconductor industry represents a multi-trillion RMB market characterized by robust growth momentum. Within this landscape, ICs stand as the most valuable and critical category, accounting for 88% of the total semiconductor market size in 2025. Among ICs, mixed-signal chips represent an important category, capturing a 16% share of the IC market.

Semiconductor Chip Market Size (by Revenue), Global, 2021–2030E



Semiconductor Chip Market Structure by Product Category, Global, 2025



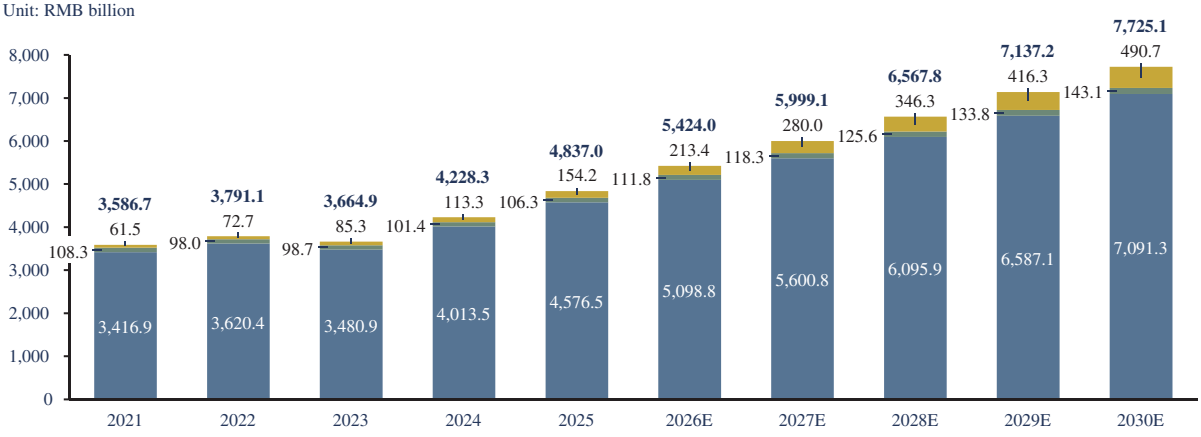
Source: Frost & Sullivan, World Semiconductor Trade Statistics

Overview of the Company's Addressable Market

The Company's addressable market includes two segments: Interconnect Chip and Smart Video Chip, which are two important sub-segments of the global semiconductor chip market. From 2021 to 2025, the combined market size of the Company's addressable market grew from RMB169.8 billion to RMB260.5 billion. It is expected to further increase to RMB633.8 billion by 2030. In terms of market share, the combined proportion of interconnect chip and smart video chip in the global semiconductor market increased from 4.7% to 5.4% from 2021 to 2025, and is projected to rise to 8.2% in 2030.

Semiconductor Chip Market Size (by Revenue), by Product, 2021–2030E

CAGR	2021–2025	2026E–2030E
Interconnect Chip	25.8%	23.1%
Smart Video Chip	-0.5%	6.4%
Other Semiconductor Chip	7.6%	8.6%
Total	**7.8%**	**9.2%**



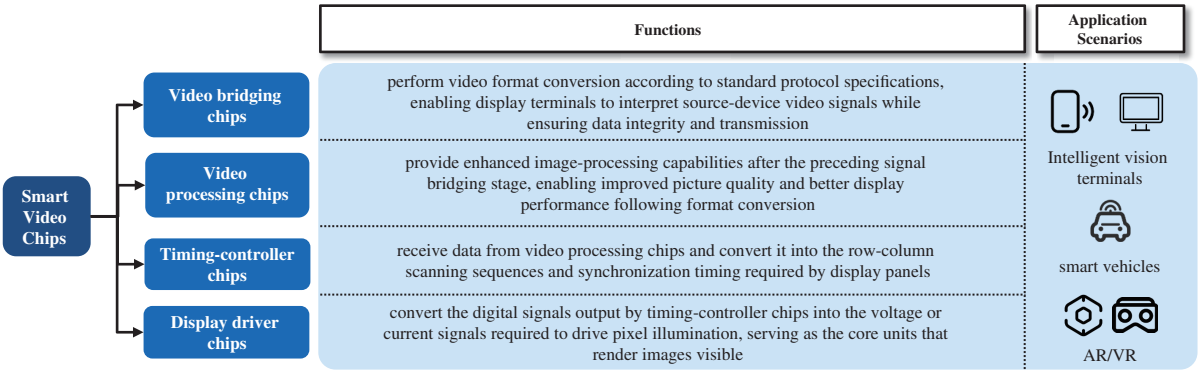
Source: Frost & Sullivan, World Semiconductor Trade Statistics

INDUSTRY ANALYSIS OF SMART VIDEO CHIPS

Definition and Classification of Smart Video Chips

Smart video chips are a foundational part of the terminal visual pipeline. Smart video chips cover processes including front-end video bridging, processing, and rear-end video display, thus forming a multi-functional and collaborative system of core components. Beyond traditional audio-video signal bridging, image processing, and codec functions, smart video chips are increasingly incorporating on-device computing capabilities to support the intelligent transformation of intelligent vision terminals, smart vehicles, AR/VR, etc. Based on functional categories, smart video chips primarily include video bridging chips, video processing chips, timing-controller chips, and display driver chips.

Definition and Classification of Smart Video Chips

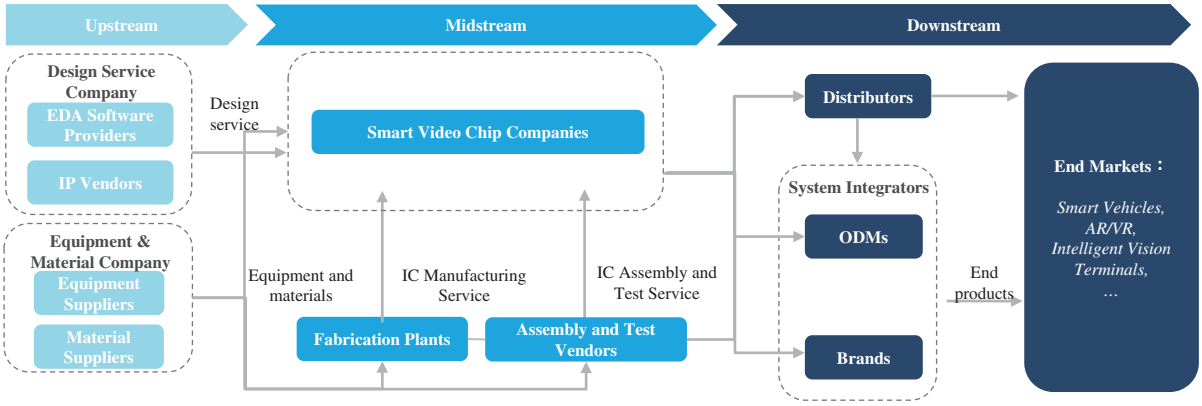


Source: Frost & Sullivan

Value Chain of the Smart Video Chip Industry

From an industry value-chain perspective, the upstream segment comprises EDA, software providers equipment suppliers and semiconductor material suppliers that support chip design and manufacturing. The midstream segment includes design companies, foundries and assembly and testing providers, with design houses as the central participants under a fabless model. The downstream segment consists of distributors, system integrators and terminal brands that commercialize smart video chips across end markets.

Smart Video Chip Industry Value Chain



Source: Frost & Sullivan

Market Size of Smart Video Chips

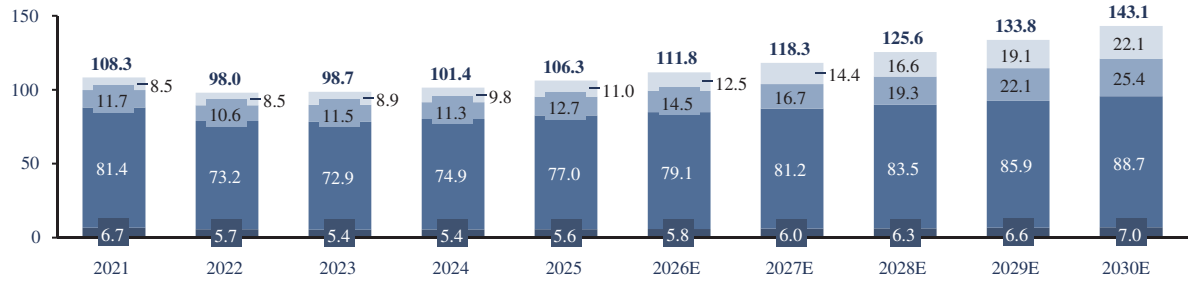
In terms of market size, between 2021 and 2025, the global market size decreased slightly from RMB108.3 billion to RMB106.3 billion, mainly due to cyclical fluctuations in downstream application sectors in 2022 and 2023, which led to a weakening in demand for smart video chips and consequently a decline in market size. Affected by the economic downturn caused by the global public health event, demand in the consumer electronics market was weak. Global shipments of consumer electronics products decreased from 2,327.7 million units in 2021 to 2,098.8 million units in 2022, a year-on-year decrease of 9.8%, and further declined to 2,016.4 million units in 2023, a year-on-year decrease of 3.9%, thus leading to a decrease in market size due to weakened demand for smart video chips. In 2024, with economic recovery and gradual easing of downstream cycles, demand for overall smart video chips began to rebound. Looking ahead, as AR/VR, smart vehicles, and intelligent terminal devices upgrade, the market for smart video chips is expected to grow rapidly. The market size of smart video chips will increase, at a CAGR of 6.4%, from RMB111.8 billion in 2026 to RMB143.1 billion in 2030. From 2026 to 2030, market growth is expected to be primarily driven by two structural factors. First, AI empowerment across terminal devices is accelerating, driving both replacement demand for existing devices and incremental demand from new application scenarios, thereby supporting a recovery in global consumer electronics shipments and stimulating corresponding growth in smart video chip demand. Second, both the number of chips per device and the value per chip are expected to increase simultaneously. On the one hand, rising levels of device intelligence are driving stronger requirements for video sensing, real-time processing and multimodal interaction, resulting in an increased number of smart video chips integrated per device. On the other hand, increasing functional complexity and performance requirements are elevating technical specifications, thereby enhancing the value of single chips. The combined effect of higher unit volumes and rising unit value constitutes the primary driver of the rapid expansion of the smart video chip market. China represents the largest regional market within the global smart video chip industry, accounting for approximately 55.3% of the global market size in 2025. The China market is expected to grow at a faster pace than the global average.

From a product-segment perspective, video bridging chips and video processing chips are expected to represent the two fastest-growing segments within smart video chips. Driven by increasing demand from intelligent vision terminals, AR/VR devices and smart vehicles, their market sizes are projected to expand at a pace significantly exceeding that of other smart video chip categories.

Global Market Size of Smart Video Chips (by Revenue), by Product Segment, 2021–2030E

CAGR	2021–2025	2026E–2030E
Video bridging chips	6.6%	15.3%
Video processing chips	2.0%	15.1%
Display driver chips	-1.4%	2.9%
Timing-controller chips	-4.7%	4.9%
Total	**-0.5%**	**6.4%**

Unit: RMB billion



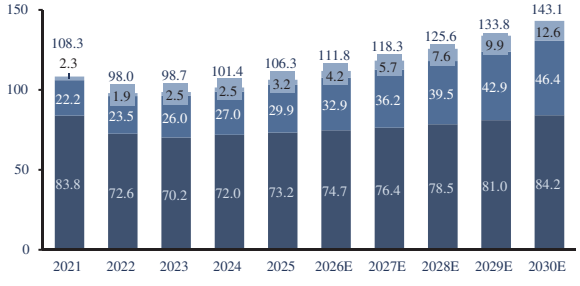
Source: Frost & Sullivan, World Semiconductor Trade Statistics

From the perspective of downstream application sectors, AR/VR and smart vehicles are expected to become the two fastest-growing and most promising core sub-segments. In the AR/VR segment, deeper penetration across consumer and commercial scenarios, together with enhanced immersive display and real-time interaction capabilities, is expected to drive rapid growth in demand for smart video chips. In the smart vehicles segment, the increasing adoption of multi-screen intelligent cockpits and the continued advancement of autonomous-driving technologies are expected to raise both chipset count and functional complexity per vehicle, thereby supporting sustained market expansion.

Global Market Size of Smart Video Chips (by Revenue), by Downstream Application, 2021–2030E

CAGR	2021–2025	2026E–2030E
AR/VR	8.9%	31.8%
smart vehicles	7.7%	8.9%
intelligent vision terminals	-3.3%	3.0%
Total	**-0.5%**	**6.4%**

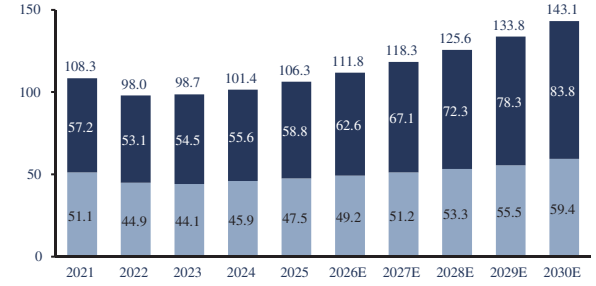
Unit: RMB billion



Global Market Size of Smart Video Chips (by Revenue), by Region, 2021–2030E

CAGR	2021–2025	2026E–2030E
China	0.7%	7.6%
Other Regions	-1.8%	4.8%
Total	**-0.5%**	**6.4%**

Unit: RMB billion



Source: Frost & Sullivan, World Semiconductor Trade Statistics, China Semiconductor Industry Association

Drivers and Trends in the Smart Video Chip Industry

Steadily Rising Demand Across Diversified Downstream Markets. As core visual processors in terminal devices, smart video chips benefit from the continued expansion of downstream sectors such as smart vehicles, AR/VR and intelligent vision terminals. In smart vehicles, electrification and intelligent cockpit upgrades are driving higher vehicle shipments and increased chip demand. In the AR/VR sector, accelerating commercialization and enhanced immersive interaction are supporting rising device adoption, thereby boosting demand for smart video chips.

Multi-Dimensional Product Performance Upgrades. Continuous upgrades in downstream terminal products are raising performance requirements for smart video chips, driving simultaneous increases in chip demand and value per device. In smart vehicles, the growing complexity of intelligent cockpits and in-vehicle systems is increasing performance requirements and chip content per vehicle. In AR/VR devices, more advanced rendering and interaction capabilities are accelerating integration and processing upgrades, further supporting higher chip demand and value.

Products Evolving Toward Highly Integrated Architectures Combining Bridging, Computing and Perception. As intelligent terminals evolve toward lighter form factors, higher performance and lower latency, smart video chips are advancing toward higher levels of integration between bridging and perception functions. Upgrades in AR/VR devices, smart vehicles and intelligent vision terminals are driving demand for improved real-time processing, lower power consumption and more efficient system architectures, making integrated designs increasingly essential. At the same time, smart video chips are expected to incorporate lightweight front-end computing capabilities to support more complex on-device vision tasks, enhancing overall processing efficiency and reducing system-level latency.

Continued Progress Toward Supply-Chain Independence. Driven by growing demand for intelligent terminals, China is steadily advancing supply-chain independence in smart video chips. Although the industry has long been dominated by overseas players, domestic companies have narrowed the technology gap through sustained R&D investment. As local design and manufacturing capabilities continue to improve, the competitiveness and market penetration of domestic smart video chips are expected to increase across key application fields.

Favourable Policies Supporting Smart Video Chips. The smart video chip industry has benefited from recent policies that are directly tied to audiovisual electronics, smart terminals and high-definition display applications. The Electronic Information Manufacturing Industry Steady Growth Action Plan (2025–2026) *(《電子信息製造業2025–2026年穩增長行動方案》)* further supported the iteration and upgrade of audiovisual equipment, new displays, smart security, smart homes, smart wearables and XR terminals, and set a target for the domestic penetration rate of colour televisions of 75 inches and above to exceed 40% by 2026. The Opinions of the State Council on Deeply Implementing the "AI Plus" Initiative *(《國務院關於深入實施"人工智能+"行動的意見》)* also promoted the proliferation of new-generation intelligent terminals and agents. These policies support the adoption of smart displays, video conferencing, intelligent education, AR/VR/XR and smart IoT terminals, thereby creating favourable downstream demand for smart video chips.

INDUSTRY ANALYSIS OF INTERCONNECT CHIPS

Definition and Classification of Interconnect Chips

Interconnect chips are critical interface components in high-speed signal chains. By performing signal amplification, equalization, jitter compensation, clock-data recovery, and error correction, they ensure high signal integrity and stability under high-bandwidth and high-speed transmission conditions. Interconnect chips can be categorized into high-speed signal interconnect chips and AI interconnect chips. High-speed signal interconnect chips support high-speed transmission and signal integrity control

for video and audio links, while AI interconnect chips enable high-speed data interconnection across computing systems. The two categories share a common technical foundation based on high-speed signal integrity and protocol adaptation, and are often deployed together in smart vehicles and intelligent terminals, creating natural synergy in both technology architecture and downstream applications.

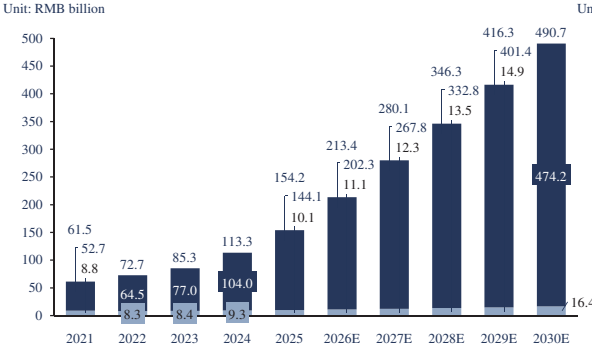
Market Size of Interconnect Chips

The global interconnect chip market grew steadily from 2021 to 2025 and is expected to expand further, driven by the rising demand for data processing and visual display in the AI era. China's interconnect chip market has significantly outperformed the global market. Driven by technological upgrades, policy support and the rapid expansion of domestic digital infrastructure, it is expected to maintain a higher growth rate than the global market.

AI interconnect chips represent critical infrastructure for high-speed data transmission across AI servers, high-performance computing systems and intelligent terminals. Driven by the clustering of computing power, the upgrading of smart vehicle architectures and the broader adoption of high-speed interfaces, AI interconnect chips are expected to continue to grow.

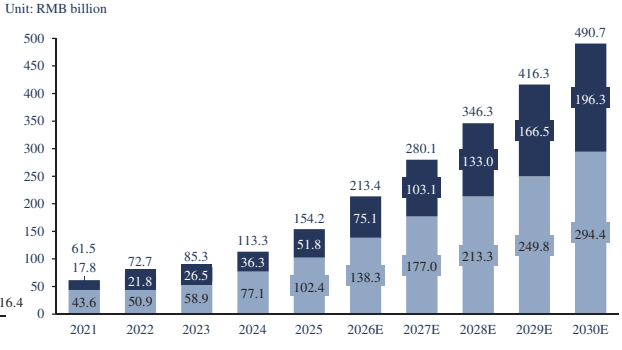
Global Market Size of Interconnect Chips (by Revenue), 2021–2030E

CAGR	2021-2025	2026E-2030E
AI interconnect chips	28.6%	23.7%
High-speed video interconnect chips	3.6%	10.4%
Total	**25.8%**	**23.1%**



Global Market Size of Interconnect Chips (by Revenue), by Region, 2021–2030E

CAGR	2021-2025	2026E-2030E
China	30.6%	27.1%
Other Regions	23.8%	20.8%
Total	**25.8%**	**23.1%**



Source: Frost & Sullivan, Semiconductor Industry Association, China Semiconductor Industry Association

Drivers and Development Trends of the Interconnect Chip Industry

Global Growth in Signal-Interconnect Demand Supports Expansion of the Interconnect Chip Market. The rapid growth of global data, video and audio signals has become a core driver of the interconnect chip industry. Global data generation is projected to rise from 197ZB in 2025 to over 630ZB by 2030, representing a CAGR of approximately 25%, fueled by AI servers, high-performance computing, smart vehicles and intelligent terminals. This trend is pushing AI interconnect chips to iterate in bandwidth, latency and stability. Meanwhile, wider adoption of smart vehicles, AR/VR, robots and drones is lifting video and audio traffic, boosting demand for high-speed signal interconnect chips.

Interconnection Protocol Iteration and Architectural Innovation Drive Product Value Upgrade. Accelerated iterations of interconnect protocols and continuous system architecture upgrades are driving higher value for interconnect chips. For AI interconnect chips, increasing transmission rates and

computing-scale expansion are raising requirements for link stability and connectivity complexity, thereby enhancing product specifications and value. Meanwhile, the growth of high-resolution, multi-display and low-latency applications in intelligent terminals is increasing link complexity in video transmission, further elevating the importance and value of high-speed signal interconnect chips.

Favourable Policies Supporting Interconnect Chips. The interconnect chip industry has benefited from recent policies relating to AI computing infrastructure, high-speed data transmission, servers, edge computing, intelligent terminals, smart vehicles, audiovisual electronics and next-generation electronic equipment. The "Electronic Information Manufacturing Industry Steady Growth Action Plan (2025 -2026)" *(《電子信息製造業2025–2026年穩增長行動方案》)* set a target for China's server industry scale to exceed RMB400 billion by 2026 and encouraged the development of AI servers, efficient storage and advanced computing systems, while also promoting the intelligent and high-end upgrade of personal computers, smartphones, audiovisual equipment, new displays, smart wearables and XR terminals. These policy directions support high-speed data interconnection not only in cloud-side infrastructure, but also in edge-side and terminal-side application scenarios. The "15th Five-Year Plan" *(《中華人民共和國國民經濟和社會發展第十五個五年規劃綱要》)* further emphasized the strengthening of efficient supply of computing power, algorithms and data, and the full implementation of the "AI+" initiative, supporting long-term demand for AI computing infrastructure and distributed intelligent applications across cloud, edge and terminal environments. In addition, the "Action Plan for High-quality Development of Computing Infrastructure" *(《算力基礎設施高質量發展行動計劃》)* set quantitative targets for intelligent computing, inter-cluster network latency, OTN coverage and IPv6/SRv6 deployment by 2025, further raising requirements for bandwidth, latency, signal integrity and protocol interoperability across AI servers, data centers, edge computing nodes, smart vehicles, AR/VR devices and intelligent terminals. These policies support demand for interconnect chips used in high-speed data transmission, video and audio signal interconnection, protocol conversion, signal integrity enhancement and low-latency connectivity across cloud-side, edge-side and terminal-side scenarios.

INDUSTRY COMPETITION ANALYSIS

Overview of the Competitive Landscape

The markets for smart video chips and interconnect chips are large and highly competitive, with stringent performance requirements in video processing and high-speed interconnect. International companies currently hold significant market share due to earlier technology deployment and more established product portfolios. However, with continued investment in core technologies, domestic companies are accelerating capability upgrades and demonstrating strong growth momentum. From the Group's business perspective, the Group has completed, or is in the process of completing, its strategic layout across various sub-segments within these two core markets. Among them, the Group has established a relatively strong position in the video bridging chip segment. An overview of the competitive landscape across each sub-segment is set out below.

The video processing chip market, timing-controller chip market, display driver chip market, and high-speed signal interconnect chip market each have approximately 50 participants and exhibit moderate fragmentation. In these segments, Taiwanese, Korean and other foreign companies generally hold strong leadership, while domestic Chinese vendors are steadily gaining more market share. Specifically, the video processing chip market is led by international players such as Qualcomm, Xilinx, and Texas Instruments. The timing-controller chip market is dominated by Taiwanese companies like Novatek and MediaTek. The display driver chip market is led by Samsung, LX Semicon, and Novatek, with domestic companies such as Himax Technologies and Eswin gradually expanding their presence. The high-speed signal interconnect chip market is dominated by Texas Instruments, Parade Technologies, and Analog Devices.

In comparison, the AI interconnect chip market and video bridging chip market are more concentrated with 20 participants in each market. The AI interconnect chip market is led by Broadcom, NVIDIA, Marvell, and Astera Labs. Domestic players including Montage Technology and Huawei have achieved certain breakthroughs in this area. The video bridging chip market has approximately 30 participants while domestic manufacturers have made rapid progress in recent years.

In 2025, the global video bridging chip market remained highly concentrated. The top eight companies together held approximately 81.4% of the market. The Company, as one of the leading players in the segment, recorded revenue of RMB0.5 billion and held a market share of 4.1%. The Company ranked fifth globally and first among Chinese Mainland-based companies.

Global Ranking of Video Bridging Chip Companies (by Revenue), 2025

Ranking	Company Name	Revenue	Market Share
		(RMB billion)	*%*
1	Company A	4.0	36.4%
2	Company B	2.4	22.2%
3	Company C	0.7	6.1%
4	Company D	0.5	4.3%
5	**The Company**	**0.5**	**4.1%**
6	Company E	0.4	3.3%
7	Company F	0.3	3.1%
8	Company G	0.2	2.0%
	Others	2.0	18.6%
	Total	**11.0**	**100%**

Source: Frost & Sullivan, Companies' Annual Reports

Notes:

(1) Company A is a listed company founded in 1930 and headquartered in Texas, United States, providing video bridging chips, video interface conversion chips and signal-chain devices used in industrial equipment, automotive electronics and consumer electronics.

(2) Company B is a listed company founded in 1965 and headquartered in Massachusetts, United States, providing high-speed data converters, SerDes interface chips and signal-processing devices for video transmission links used in industrial control, communication equipment and automotive electronics.

(3) Company C is a listed company founded in 1958 and headquartered in Kyoto Prefecture, Japan, providing video driver chips, display interface chips and high-speed signal-conditioning devices used in automotive electronics, industrial equipment and consumer electronics.

(4) Company D is a listed company founded in 1996 and headquartered in Taiwan, China, providing video bridging chips and multi-format interface conversion chips supporting HDMI, DisplayPort, VGA and other standards used in notebook computers, monitors and consumer electronics.

(5) Company E is a private company founded in 1875 and headquartered in Tokyo, Japan, providing in-vehicle image-processing chips, video interface driver devices and image signal-processing chips used in automotive electronics, industrial equipment and consumer electronics.

(6) Company F is a listed company founded in 2005 and headquartered in Hsinchu, Taiwan, providing high-speed video interface chips including DisplayPort, HDMI and USB-C, as well as multi-protocol video bridging chips used in notebook computers, monitors and consumer electronics.

(7) Company G is a private company founded in 2002 and headquartered in Beijing, China, providing high-speed SerDes transmission and processing solutions, mixed-signal circuit technologies and protocol-conversion chips used in consumer electronics and smart vehicle applications.

In 2025, the global interconnect chip market remained highly concentrated and was primarily dominated by established international semiconductor companies, which benefited from strong technological capabilities, broad product portfolios and extensive customer resources. The global interconnect chip market has around 60 participants. The top five companies together held approximately 89.9% of the market, indicating a highly concentrated competitive landscape. Chinese Mainland-based players currently accounted for a relatively small share of the global interconnect chip market, as the market remains at an early stage of domestic substitution and technological catch-up. Looking ahead, driven by ongoing technological advancement among domestic players, increasing demand for localized supply chains, and rising demand for high-speed data and video interconnection, Chinese Mainland-based players are expected to gradually expand their presence and increase their market share.

Global Ranking of Interconnect Chip Companies (by Revenue), 2025

Ranking	Company Name	Revenue	Market Share
		(RMB billion)	*%*
1.	Company H	65.0	42.2%
2.	Company I	47.0	30.5%
3.	Company J	15.5	10.1%
4.	Company K	6.1	4.0%
5.	Company L	5.0	3.2%
...	**The Company**	**0.1**	**0.1%**

Source: Frost & Sullivan, Companies' Annual Reports

Notes:

(1) Company H is a listed company founded in 1993 and headquartered in California, United States, providing high-performance interconnect chips, networking solutions and data center connectivity products used in AI computing, cloud infrastructure and high-performance computing applications.

(2) Company I is a listed company founded in 1961 and headquartered in California, United States, providing high-speed connectivity chips, switching solutions and interface products used in data centers, enterprise networking equipment and AI infrastructure.

(3) Company J is a listed company founded in 1995 and headquartered in California, United States, providing data infrastructure semiconductor solutions, including high-speed interconnect chips, networking devices and connectivity products used in AI infrastructure, cloud computing and enterprise networking applications.

(4) Company K is a listed company founded in 2017 and headquartered in California, United States, providing high-speed connectivity and interconnect solutions used in AI servers, cloud computing infrastructure and data center applications.

(5) Company L is a private company founded in 1987 and headquartered in Shenzhen, China, providing ICT infrastructure, data communications products, AI computing infrastructure and high-speed interconnect solutions used in communications networks, cloud computing and data center applications.

Market Entry Barriers

The smart video chip and interconnect chip industry is characterized by significant technical barriers, customer barriers, and supply chain barriers. Technical barriers arise because smart video chips and interconnect chips require advanced capabilities in high-speed transmission, low latency and power efficiency, supported by long-term technological accumulation and cross-application development experience, while lengthy development cycles and complex validation processes make it difficult for new entrants to deliver production-ready solutions. Customer barriers arise from stringent qualification and verification requirements imposed by customers, together with long cooperation cycles, high ecosystem compatibility standards and high switching costs, which make it difficult for new entrants to

displace established vendors. Supply chain barriers arise because the industry requires stable coordination across wafer fabrication and assembly-testing partners to ensure capacity, quality and timely delivery, and building reliable and diversified supply chain partnerships typically takes a long time.

Threats and Challenges for the Smart Video Chip Market and the Interconnect Chip Market

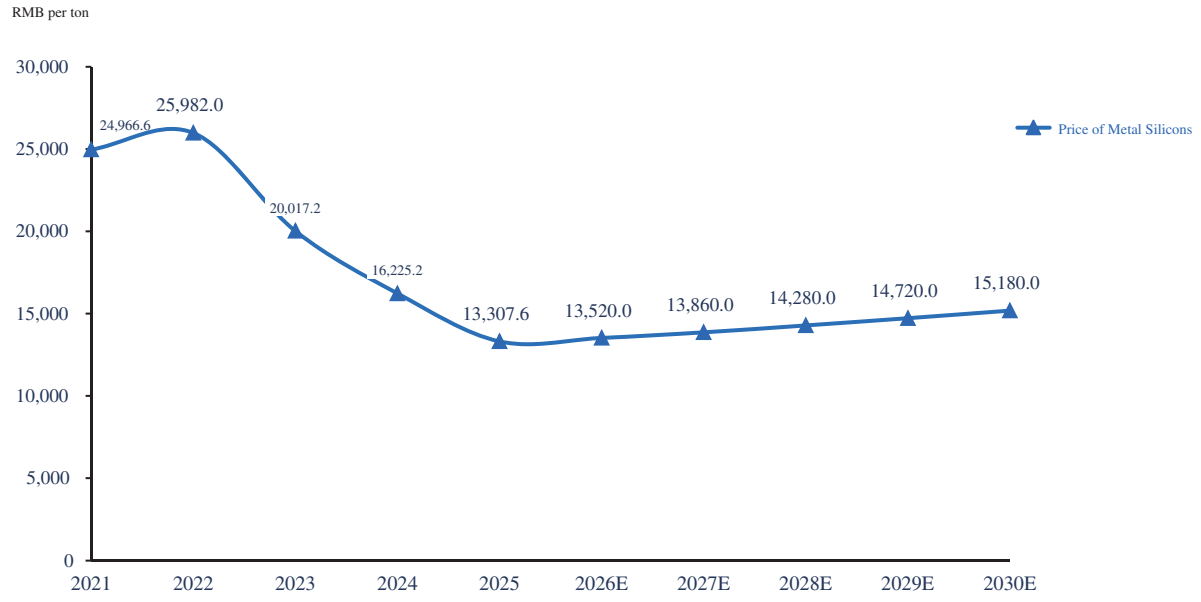
As segments of the broader semiconductor industry, the smart video chip and interconnect chip markets face similar risks arising from demand volatility, supply-chain reliance, competitive pressure and rapid technological change. On the demand side, fluctuations in downstream application markets and macroeconomic cycles may lead to variability in market growth and shipment volumes. On the supply side, the prevalent fabless model creates reliance on third-party foundries and assembly partners, making product availability and cost structures sensitive to capacity constraints or operational disruptions. In addition, intense competition from established international players and increasingly capable domestic peers may result in pricing pressure and margin compression. Finally, fast-paced technological advancement and evolving industry standards require sustained R&D investment, and failure to keep pace may weaken competitiveness or lead to product obsolescence.

Price Analysis of Smart Video Chip and Interconnect Chip and Their Raw Materials

Smart video chips and interconnect chips encompass a wide range of product categories, comprising hundreds of distinct models with varying specifications, performance characteristics, and functional configurations. Many are designed for specific end-application scenarios, and even within the same application, different device models typically serve differentiated performance and functional requirements. As a result, ASP of these products vary significantly. In general, the ASP of smart video chips ranges from approximately RMB1 to over RMB350 per unit, while interconnect chips typically range from approximately RMB1 to over RMB700 per unit, depending on product type and application scenario.

The Group operates under a fabless business model and does not directly procure production inputs. Accordingly, its discussion of historical and projected cost movements primarily refers to the prices of key inputs used by wafer foundries. The price volatility in 2021–2022 resulted mainly from a temporary mismatch between supply and demand. On the demand side, rapid growth in downstream industries drove a sharp increase in semiconductor orders at wafer foundries. During this period, the widespread adoption of electric vehicles and the acceleration of automotive electrification and intelligence significantly increased semiconductor content per vehicle, thereby further supporting demand growth. In addition, heightened geopolitical uncertainties led certain downstream customers to build precautionary inventories, intensifying short-term demand pressures across the semiconductor supply chain. On the supply side, semiconductor manufacturing capacity remains structurally concentrated among a limited number of leading wafer foundries, while pandemic-related disruptions constrained the timely release of capacity. These conditions resulted in tight conditions at the wafer fabrication level, which were transmitted upstream and contributed to elevated prices of major cost items.

Average Industry Price of 533-Grade Metallurgical Silicon, 2021–2030E



Source: Frost & Sullivan

Source of Information

We engaged Frost & Sullivan, an independent market research consultant, to conduct an analysis of, and to prepare the Frost & Sullivan Report on, the smart video chip and interconnect chip market. Frost & Sullivan is an independent global consulting firm founded in 1961 in New York and its services include, among others, industry consulting, market strategy consulting and corporate training. We commissioned Frost & Sullivan to provide market research services for a total fee of RMB720,000.

In compiling and preparing the Frost & Sullivan Report, Frost & Sullivan conducted (i) primary research, including interviews with industry participants, competitors, downstream customers and recognized third-party industry associations; and (ii) secondary research, including reviews of corporate annual reports, databases of relevant official authorities, as well as the exclusive database established by Frost & Sullivan over the past decades. The market projections in the Frost & Sullivan Report are based on the following key assumptions during the forecast period: (i) the social, economic and political conditions in the Chinese markets discussed will remain stable during the forecast period, (ii) government policies on China's smart video chip and interconnect chip markets will remain consistent during the forecast period, and (iii) smart video chip and interconnect chip markets will be driven by the factors stated in the Frost & Sullivan Report.

Except as otherwise noted, all the data and forecasts contained in this section are derived from the Frost & Sullivan Report. The commissioned report was prepared independently by Frost & Sullivan without influence from the Company or other stakeholders. Our Directors confirm that, to the best of their knowledge, after making reasonable inquiries, there has been no material adverse change in the market information since the date of the Frost & Sullivan Report, which may qualify, contradict or have an impact on information in this section.