



**FUDAN
MICRO**

上海復旦微電子集團股份有限公司

Shanghai Fudan Microelectronics Group Company Limited*

(a joint stock limited company incorporated in the People's Republic of China)

(Stock Code: 1385)

2022

ANNUAL REPORT

Contents

	Pages
CORPORATE INFORMATION	2
CHAIRMAN'S STATEMENT	3
MANAGEMENT DISCUSSION AND ANALYSIS	5
DIRECTORS AND SUPERVISORS AND SENIOR MANAGEMENT BIOGRAPHIES	24
CORPORATE GOVERNANCE REPORT	28
REPORT OF THE DIRECTORS	40
REPORT OF THE SUPERVISORY COMMITTEE	54
AUDITED FINANCIAL STATEMENTS	
Auditors' Report	58
Consolidated Balance Sheet	64
Consolidated Income Statement	66
Consolidated Statement of Changes in Equity	68
Consolidated Statement of Cash Flows	69
Balance Sheet	71
Income Statement	73
Statement of Changes in Equity	74
Statement of Cash Flows	75
Notes to Financial Statements	77
SUPPLEMENTARY INFORMATION TO FINANCIAL STATEMENTS	204
FIVE YEAR FINANCIAL SUMMARY	206

Corporate Information

BOARD OF DIRECTORS

Executive Directors

Mr. Jiang Guoxing (*Chairman*)
Mr. Shi Lei (*Managing Director*)
Mr. Yu Jun (*Deputy Managing Director*)
Ms. Cheng Junxia

Non-executive Directors

Ms. Zhang Qianling
Mr. Wu Ping
Ms. Liu Huayan
Mr. Sun Zheng

Independent Non-executive Directors

Mr. Cao Zhongyong
Mr. Cai Minyong
Mr. Wang Pin
Ms. Zou Fuwen (appointed on 2 June 2022)

COMPANY SECRETARY

Mr. Chong Hing Cheong (appointed on 1 May 2022)

AUTHORISED REPRESENTATIVES

Mr. Shi Lei
Mr. Chong Hing Cheong (appointed on 1 May 2022)

AUDIT COMMITTEE

Mr. Wang Pin (*Chairman*)
Mr. Cai Minyong
Mr. Cao Zhongyong (appointed on 2 June 2022)

NOMINATION COMMITTEE

Mr. Cai Minyong (*Chairman*)
Ms. Cheng Junxia
Ms. Zou Fuwen (appointed on 2 June 2022)

REMUNERATION AND EVALUATION COMMITTEE

Mr. Cai Minyong (*Chairman*)
Ms. Cheng Junxia
Ms. Zou Fuwen (appointed on 2 June 2022)

STRATEGIC AND INVESTMENT COMMITTEE

Ms. Cheng Junxia (*Chairman*)
Mr. Jiang Guoxing
Mr. Shi Lei
Mr. Yu Jun
Mr. Cai Minyong

ENVIRONMENTAL, SOCIAL AND GOVERNANCE COMMITTEE

Mr. Jiang Guoxing (*Chairman*)
Ms. Cheng Junxia
Mr. Cao Zhongyong

SUPERVISORY COMMITTEE

Ms. Zhang Yanfeng (*Chairman*)
Mr. Ren Junyan
Ms. Tang Xiaojie

AUDITOR

Ernst & Young Hua Ming LLP

REGISTERED OFFICE

No. 220, Handan Road
Shanghai
People's Republic of China

PLACE OF BUSINESS IN HONG KONG

Flat 6, 5/F., East Ocean Centre
98 Granville Road, Tsimshatsui East
Kowloon, Hong Kong

H SHARE REGISTRAR AND TRANSFER OFFICE

Tricor Tengis Limited
17/F, Far East Finance Centre
16 Harcourt Road
Hong Kong

PRINCIPAL BANKERS

Industrial and Commercial Bank of China Shanghai branch

China Everbright Bank Co., Ltd. Shanghai branch

STOCK CODE

A shares: 688385
H shares: 01385

COMPANY'S WEBSITE

www.fmsh.com.cn

Chairman's Statement

Dear Shareholders,

On behalf of the board of directors (the "Board") of Shanghai Fudan Microelectronics Group Company Limited (the "Company"), I am pleased to present the results of the Company and its subsidiaries (the "Group") for the year ended 31 December 2022.

The Group is a domestic chips design enterprise with a wide range of products with four major product lines: security and identification chips, non-volatile memory, smart meter chips, and programmable gate array FPGA, and also provide chip testing services to customers through a subsidiary, Sino IC Technology Co., Ltd. (上海華嶺集成電路技術股份有限公司) ("Sino IC"). During the year of 2022, the Group achieved revenue of approximately RMB3,539 million, representing an increase of 37.31% when compared with the last year; net profit attributable to shareholders of the parent company of approximately RMB1,077 million, representing an increase of 109.31% when compared with the last year; and comprehensive gross profit margin of 64.67%. For the year ended 31 December 2022, the IC industry has transformed from a global chip shortage in 2021 to structural shortage. With significant downward trend in the price of consumption products electronic chips, the continuous shortage of automotive chips and the relatively large shortage of silicon carbide chips, the semiconductor industry was in a downward cycle generally during year 2022 which increased the operational challenges for companies. In order to deal with the declining demand for some chips which represented by consumption electronic products, the Group focused on key areas and emerging markets, and explored markets actively in industrial grade products, consumption and high reliability applications.

During the year 2022, the smart card and security chip markets of the product line of security and identification chips are relatively mature and the competition is stable. The Group maintained a steady development in the financial sector, secured continuous supply in the transportation sector and increased investment in the 3rd Generation of Social security sector, which achieved good results and strengthened the Group's market position in the smart card industry. In the aspect of RFID and sensor chips, the products are widely used in various consumption products due to the good reliability, security and radio frequency compatibility of the product line. In the aspect of smart identification device chips, the Group continued to focus on traditional areas such as smart door locks and electronic signage POS to secure its market share. At the same time, the Group also focused on exploring market opportunities in new applications such as overseas POS, automotive electronics and electric two-wheelers, and achieved mass production in a number of projects with promising future prospects. In the aspect of smart meter chips, the Group's smart meter MCU continued to maintain a leading position in the market share of single-phase smart meter MCUs in the national power grid. New products and new solutions are introduced to the market. The Group will seize the window of automotive electronics, strengthen contact with car manufacturers, create a good foundation and gain a deeper understanding of the needs and requirements of the automotive electronics industry. In the aspect of FPGA and other products, the Company is one of the leading companies in the field of FPGA technology in China. At present, we can provide three series of products: 10 million-gate-level FPGA chips, 100 million-gate-level FPGA chips and embedded programmable devices (PSoC). Also, the Group is actively developing 1 billion-gate-level products to ensure our leading position in domestic FPGA technology. We will strive to enhance the product competitiveness continuously, achieve sustainable and stable development and win the brand loyalty of our customers.

The Group places a high priority on research and development and has maintained a high level of investment in research and development over a long period of time. During the year 2022, the Group invested approximately RMB886 million in research and development, accounting for 25.04% of revenue for the year. The Group will continue to strengthen its advantages in product definition, systematic design, engineering implementation, marketing and brand building, and develop new products that can truly bring smart life to the public actively. We are also focusing on advanced technologies and products from overseas actively to build up our competitive edge in the international market.

Chairman's Statement

The subsidiary of the Company, Sino IC, completed the listing on the Beijing Stock Exchange in October 2022. Sino IC has carried out integrated circuit test research and development in China at the early stage, and has formed many technical achievements in the fields such as product test solution, mass production test automation and test informatization, and undertaken a number of major national science and technology special projects and provincial and ministerial level research projects. After the listing of Sino IC on the Beijing Stock Exchange, the Group received additional funding to expand its business and further strengthen its financial resources.

The stock prices of A shares and H shares of the Company hit new highs during the year. The Group will continue to improve the standard of its ESG management and adhere to its business philosophy of sustainable development; optimise management system to improve the Company's compliance management; focus on new markets and learn new standards to ensure that the Group's future development strategies and operational objectives are achieved and to bring more efficient and sustainable returns to shareholders. On 21 March 2023, the Board of Directors approved the profit distribution proposal for 2022 and proposed to distribute a cash dividend of RMB1.35 per ten shares, totaling RMB110,248,627.50. The proposed dividend distribution shall be submitted to the shareholders' general meeting for consideration and approval.

On behalf of the Board and the management team, I would like to express my sincere gratitude to all shareholders, clients and business partners. My heartfelt appreciation also goes to all the Directors for their contributions, and all the staff members for their hard work and collective efforts. The Company will continue to grow and strive to deliver ideal investment returns and income to shareholders.

Mr. Jiang Guoxing

Chairman

Shanghai, the PRC, 21 March 2023

Management Discussion and Analysis

I. DISCUSSION AND ANALYSIS OF OPERATION

For the year ended 31 December 2022 (the “reporting period”), the IC industry has transformed from a global chip shortage in 2021 to structural shortage. With significant downward trend in the price of consumption products electronic chips, the continuous shortage of automotive chips and the relatively large shortage of silicon carbide chips, the semiconductor industry was in a downward cycle generally during the reporting period which increased the operational challenges for companies. In order to deal with the declining demand for some chips which represented by consumption electronic products, the Group focused on its strengths and key markets, and explored markets actively in industrial grade products, consumption and high reliability applications which resulting in substantial growth in the Group’s revenue and profit. During the year of 2022, the Group achieved revenue of approximately RMB3,539 million, representing an increase of 37.31% when compared with the last year; net profit attributable to shareholders of the parent company of approximately RMB1,077 million, representing an increase of 109.31% when compared with the last year; and comprehensive gross profit margin of 64.67%. The report on the business situation in 2022 is as follows:

(1) Business situation for each product line

The Group is a domestic chips design enterprise with a wide range of products with four major product lines: security and identification chips, non-volatile memory, smart meter chips, and programmable gate array FPGA. We also provide chip testing services to customers through a subsidiary, Sino IC Technology Co., Ltd. (上海華嶺集成電路技術股份有限公司) (“Sino IC”).

1. *Product line of security and identification chips*

The product line has a number of sub-products including smart card and security chips, radio frequency identification (“RFID”) and sensor chips, and smart identification device chips, etc. In 2022, it achieved revenue of approximately RMB976 million.

The smart card and security chip markets are relatively mature and the competition is stable. During the reporting period, the Group maintained a steady development in the financial sector, secured continuous supply in the transportation sector and increased investment in the 3rd Generation of Social security sector, which achieved good results and strengthened the Group’s market position in the smart card industry. At the same time, the Group has made breakthroughs in the market of telecommunication SIM cards and security chips. In the future, the Group will increase exploration of applications of SE chips in access control, door locks, home appliances, digital property protection and anti-counterfeiting accessories, so as to discover business opportunities in the “internet of everything”.

In the aspect of RFID and sensor chips, the products are widely used in various consumption products due to the good reliability, security and radio frequency compatibility of the product line. During the reporting period, the Group’s high-frequency RFID series products continued to maintain leading market shares in areas such as anti-counterfeiting of consumables, education, game props, automated retail and libraries. In aspect of UHF RFID, we are promoting products actively such as EPC protocol reader chips and tag chips, and dual frequency temperature measurement chips, which are expected to form a new market breakthrough in the application scenario of UHF RFID. In the aspect of NFC chips, product introduction of a number of well-known smart appliance manufacturers was completed. Although demand in the consumption electronics market declined in 2022, the business of NFC chips is expected to grow continuously due to the improvement of economic situation and recover of consumer market.

Management Discussion and Analysis

I. DISCUSSION AND ANALYSIS OF OPERATION *(Continued)*

(1) Business situation for each product line *(Continued)*

1. *Product line of security and identification chips (Continued)*

In the aspect of smart identification device chips, during the reporting period, the Group continued to focus on traditional areas such as smart door locks and electronic signage POS to secure its market share. At the same time, the Group also focused on exploring market opportunities in new applications such as overseas POS, automotive electronics and electric two-wheelers, and achieved mass production in a number of projects with promising future prospects.

2. *Product line of non-volatile memory*

The product line has products including EEPROM memory, NOR Flash memory and SLC NAND Flash memory in a variety of capacities, interfaces and packages. In 2022, it achieved revenue of approximately RMB940 million.

After two years of rapid growth, the memory industry entered into a downturn in the second half of 2022. The Group's memory products are facing market pressure in consumption electronic devices such as home appliances, computer related and networking equipments. There were services strengthening and price adjustment of the Group's memory product line in order to cope with fluctuations in the consumer market, and on the other hand, the Group has strengthened its market expansion in the industrial market, high reliability market and automotive electronics to ensure the stability of its product line. The FM24C512DA1 (EEPROM) has passed the AEC-Q100 Grade 1 certification and is in use in vehicles. It is suitable for T-BOX, intelligent cockpit, domain controller, entertainment system, transmission system, security and site scenarios. NOR Flash and Nand Flash series are also under the process of certification and promotion.

3. *Product line of smart meter chips*

The product line mainly includes: smart meter MCU, and general low-power MCU. In 2022, it achieved revenue of approximately RMB595 million.

During the reporting period, the Group's smart meter MCU continued to maintain a leading position in the market share of single-phase smart meter MCUs in the national power grid. The current MCU market is characterised by fragmentation of applications and there are opportunities for nationalisation in a number of sub-segments. This product line is based on smart electric meters and extends to water, gas and heat meters. New products and new solutions are introduced actively according to the characteristics of white home appliances, motor drives, new energy and other fields. The Group will seize the window of automotive electronics, strengthen contact with car manufacturers, create a good foundation and gain a deeper understanding of the needs and requirements of the automotive electronics industry.

Management Discussion and Analysis

I. DISCUSSION AND ANALYSIS OF OPERATION *(Continued)*

(1) Business situation for each product line *(Continued)*

4. *FPGA and other products*

The Company is one of the leading companies in the field of FPGA technology in China. At present, we can provide three series of products: 10 million-gate-level FPGA chips, 100 million-gate-level FPGA chips and embedded programmable devices (PSoC). Other products are mainly including smart electrical chips and special chips for residual current protection. FPGA and other products achieved revenue of approximately RMB803 million in 2022. The Group has the first domestically marketed embedded programmable PSoC, which can well meet the needs of high-speed communication, signal processing, image processing, industrial control and other application fields, and has received good market response.

At present, the Group is actively developing 1 billion-gate-level products to ensure our leading position in domestic FPGA technology. At the same time, the Group is further enriching its 28nm FPGA and PSoC chip spectrum to meet the demands of different levels of the market, continuously enhancing its product competitiveness, achieving sustainable and stable development and winning the brand loyalty of our customers.

5. *Testing Services*

Sino IC, our subsidiary, has carried out integrated circuit test research and development in China at the early stage, and has formed many technical achievements in the fields such as product test solution, mass production test automation and test informatization, and undertaken a number of major national science and technology special projects and provincial and ministerial level research projects. The 10GHz high-speed wafer KGD test and over 10,000 pins high-density wafer test methods developed by Sino IC are in mass production, and we are actively developing test solutions and complete engineering technologies for artificial intelligence chips, high-performance computing chips and automotive chips.

(2) Supply chain consolidation and development

During the reporting period, the Group increased its investment in the supply chain and strengthened cooperation with suppliers in the areas of production capacity assurance and integration of manufacturing processes actively which based on its assessment of the medium to long-term chip manufacturing. Although there are still shortages of individual products, the Group's overall supply capacity has improved. The Group is highly conscious of the security of its inventory and analyses market conditions regularly to minimise the impact of supply chain fluctuations on the Group's operations.

(3) Research and development

The Group places a high priority on research and development and has maintained a high level of investment in research and development over a long period of time. During the reporting period, the Group invested approximately RMB886 million in research and development, accounting for 25.04% of revenue for the year. The Group will continue to strengthen its advantages in product definition, systematic design, engineering implementation, marketing and brand building, and develop new products that can truly bring smart life to the public actively.

Management Discussion and Analysis

II. PRINCIPAL BUSINESSES, MAIN PRODUCTS AND SERVICES OF THE GROUP, DURING THE REPORTING PERIOD

1. Principal activities

The Group engaged in the design, development and testing of very large integrated circuits as well as provision of system solutions to customers. The Group has established and improved product lines such as security and identification IC chips, non-volatile memory, smart meter chips, FPGA chips and testing services for IC products, and the products are widely used in numerous fields such as finance, social security, Anti-counterfeit and traceability, anti-counterfeiting and traceability, network communications, home appliances, automotive electronics, industrial control, signal processing, data centers, artificial intelligence and many other aspects.

2. Main products and services

2.1 Security and identification IC chips

The security and identification products rely on self-developed radio-frequency, memory chips and security anti-attack technologies, and has formed a number of product series, such as RFID and sensor chips, smart card and security chips, smart identification device chips, etc. The products include memory card, HF/UHF tag chips, NFC TAG, contact/contactless/dual interface smart card, security SE chips, security MCU chips, contactless reader equipment and mobile payment and dozens of other products. The Group is one of the suppliers with a complete range of domestic security and identification chip products.

Description and application fields of the security and identification chip product line of the Group are as follows:

Product type	Product description	Application fields
RFID and sensor chip series	It is mainly composed of FM11, FM13 and FM44 series products, including contactless logic encryption chips, NFC tag and access chips, high-frequency RFID chips, UHF RFID tag chips, reader chips, sensor chips, etc.	Identity identification, electronic shelf, smart household electrical appliances, logistics management, anti-counterfeiting and traceability, vehicle management, etc.
Smart card and security chip series	It is mainly composed of FM12, FM15 and other series products, including contactless CPU card chips, dual interface CPU card chips and security chips	Social security card, health card, bank card, bus card, citizen card, SIM card, etc.
Smart identification device chip series	It is mainly composed of FM17 series, and the product is of contactless reader chip type	Door lock, access control, contactless card reader, OBU, financial POS, subway gate, public bicycle system, etc.

Management Discussion and Analysis

II. PRINCIPAL BUSINESSES, MAIN PRODUCTS AND SERVICES OF THE GROUP, DURING THE REPORTING PERIOD *(Continued)*

2. Main products and services *(Continued)*

2.2 Non-volatile memory

The memory chip product line of the Group provides a variety of non-volatile memory products with multiple interfaces, packages, comprehensive capacity and cost-effectiveness. At present, the main products are EEPROM memory chips, NOR flash memory chips and SLC NAND Flash memory, with a variety of capacity, interfaces and packaging forms, which representing a leading market share in China.

Description and application fields of non-volatile memory products of the Group are as follows:

Product type	Product description	Application fields
EEPROM memory	It is mainly composed of FM24/FM25/FM93 series, supports I2C, SPI and Micro Wire interfaces with storage capacity of 1Kbit-1024Kbit	Mobile phone module, smart meter, communication, home appliances, display, LCD panel, automotive electronics, computer memory strip, medical instruments, industrial control instruments, password lock, etc.
NOR Flash memory	It is mainly composed of FM25/FM29 series, supports SPI and general parallel interface with storage capacity of 0.5Mbit-256Mbit	Network communication, IoT module, computer and peripheral products, mobile phone module, display and screen module, smart meter, security monitoring, on-board box, Ukey, automotive electronic medical instruments, industrial control instruments, wifi/Bluetooth module, high reliability application, etc.
SLC NAND Flash memory	It is mainly composed of FM25/FM9 series, supports SPI and ONFI parallel interfaces with storage capacity of 1Gbit-4Gbit	Network communication, security monitoring, wearable device, on-board box, automotive electronics, medical instruments, etc.

Management Discussion and Analysis

II. PRINCIPAL BUSINESSES, MAIN PRODUCTS AND SERVICES OF THE GROUP, DURING THE REPORTING PERIOD *(Continued)*

2. Main products and services *(Continued)*

2.3 Smart meter chips

Smart meter MCU is the core component of electronic watt-hour meter and smart meter, which can realize the functions, such as, power consumption information measurement, automatic reading, information transmission of industrial and household users; general low-power MCU products can be applied to many fields including smart meter, smart water, gas and heat meter, smart home, Internet of Things, etc.

Description and application fields of MCU chip product series of the Group are as follows:

Product type	Product description	Application fields
Smart meter MCU	It is mainly composed of FM33A series of products, and the product is of the type of smart meter MCU with 32-bit Cortex-M0 as the core	IR46 standard smart energy meter, State Grid 2020 standard smart energy meter, State Grid single-phase/three-phase smart energy meter, Southern Power Grid single-phase/three-phase smart energy meter, overseas single-phase/three-phase smart energy meter, etc.
General low-power MCU	It is mainly composed of FM33A, FM33G, FM33L, FM33LC, FM33LG, FM3316, FM33LG0xxA Series of MCU products, including 32-bit low-power MCU chips with ARM Cortex-M0 as the core and 16-bit enhanced 8xC251 processor with low-power MCU chips as the core	Domestic/overseas single-phase and three-phase smart meters, smart water meters/heat meters/gas meters, Internet of Things related instruments and communication modules, smoke alarm and sensor modules, smart home, display panel control, automobile electronics, etc.

Management Discussion and Analysis

II. PRINCIPAL BUSINESSES, MAIN PRODUCTS AND SERVICES OF THE GROUP, DURING THE REPORTING PERIOD *(Continued)*

2. Main products and services *(Continued)*

2.4 *FPGA chips*

FPGA, an on-site programmable gate array, is a hardware reconfigurable integrated circuit chip. FPGA has the programmability and flexibility of software, and is an ideal solution in 5G communication, artificial intelligence and other fields with frequent repeated operation and fast upgrading cycles and large technical uncertainty. The Company is one of the leading companies in the field of FPGA technology in China.

Description and application fields of FPGA chip product series of the Company are as follows:

Product type	Product description	Application fields
10-million gate FPGA chips	Using 65nm CMOS technology, it is a series of SRAM FPGA products with high performance and cost-effective	Applicable to high-performance and large-scale applications such as network communication, information security, industrial control and high reliability application
100-million gate FPGA chips	Using 28nm CMOS technology, it is a series of SRAM FPGA products with high performance and in large scale	Applicable to 5G communication, artificial intelligence, data center, high reliability and other high-performance, large bandwidth and ultra large- scale applications
Embedded programmable device PSoC	Using 28nm CMOS technology, it is a series of embedded programmable SoC products	Applicable to video, industrial control, security, AI, high reliability and other applications

2.5 *Testing services for IC products*

Through the subsidiary, Sino IC, the Group provides customers with integrated solutions of integrated circuit testing services from chip verification analysis, wafer testing to finished product testing. The specific scopes of integrated circuit testing include wafer testing and finished product testing. The testing capability covers a wide range of product fields, such as mobile intelligent terminals, information security, digital communications, FPGA, CIS, financial IC cards, automotive electronics, IOT devices, MEMS devices, three-dimensional high-density devices, new materials, new structures, etc.

Management Discussion and Analysis

MAIN BUSINESS ANALYSIS

1. ANALYSIS OF CHANGES IN INCOME STATEMENT AND CASH FLOW STATEMENT RELATED ITEMS

Item	RMB '0,000		
	2022	2021	Change(%)
Revenue	353,890.89	257,726.23	37.31
Cost of sales	125,027.12	105,892.35	18.07
Taxes and surcharges	2,456.03	1,226.31	100.28
Selling expenses	22,281.89	17,163.94	29.82
Administrative expenses	13,893.55	11,205.55	23.99
Finance expenses	(775.38)	(117.17)	561.76
Assets impairment losses	(16,280.43)	(6,488.05)	150.93
Net cash flows from operating activities	32,128.55	60,220.49	-46.65
Net cash flows from investing activities	(13,251.45)	(118,279.73)	-88.80
Net cash flows from financing activities	50,458.69	71,880.57	-29.80

Reasons for changes in revenue: mainly due to the Group achieved various level of revenue growth in major product lines of IC design business because the Group adjusted its product mix in a timely manner and explored new products and customers actively, with the facts that there were wide variation in demand and slowdown in demand for some product lines for downstream applications during the year.

Reasons for changes in cost of sales: mainly due to the increase in revenue and the cost of sales increased accordingly.

Reasons for changes in taxes and surcharges: mainly due to the increase in revenue and the taxes and subcharges increase accordingly.

Reasons for changes in selling expenses: mainly due to the increase in staff remuneration as a result of the expansion of the Group's operations and increment of number of staff and salary during the reporting period, as well as significant increase in share-based payments as a result of the implementation of the restricted share incentive scheme.

Reasons for changes in administrative expenses mainly due to the increase in staff remuneration as a result of the expansion of the Group's operations, increase in investment in human resources and reasonable salary increases, as well as increased depreciation and amortisation due to the acquisition of office buildings.

Reasons for changes in finance expenses mainly due to the increase of cash at bank and on hand attributable to the proceeds raised from issuance of shares by the Company and a subsidiary and increase in interest income accordingly.

Reasons for changes in assets impairment losses: mainly due to the weak market demand for consumption electronic products, which resulted in a significant increase in the provision of impairment of inventories due to the decrease in demand and price of some of the Group's chips products. For the year ended 31 December 2022, the Group recorded loss from write-down of inventories of RMB135,373,635.53. Inventories are stated at the lower of cost and net realisable value, which are written down below cost to net realisable value if the cost is higher than the net realisable value.

Management Discussion and Analysis

MAIN BUSINESS ANALYSIS *(Continued)*

1. ANALYSIS OF CHANGES IN INCOME STATEMENT AND CASH FLOW STATEMENT RELATED ITEMS *(Continued)*

Reasons for changes in net cash flows from operating activities: mainly due to the expansion of the Group's business scale and the significant increase in cash paid for the purchase of goods as a result of the increase in prepayments to suppliers and the increase in inventories to secure the supply chain.

Reasons for changes in net cash flows from investing activities mainly due to the non-renewal of some deposits upon maturity for the consideration of operating cashflows.

Reasons for changes in net cash flows from financing activities mainly due to the amount of funds raised from the public offering of a subsidiary, Sino IC, during the reporting period was less than the funds raised by the parent company in the last year; the repayment of bank borrowings; and the distribution of cash dividends.

2. STATUS OF ASSETS AND LIABILITIES

RMB '0,000

Item	As at 31 December 2022	Balance as at the end of the Reporting Period as a percentage of total assets (%)	As at 31 December 2021	Balance as at the end of last year as a percentage of total asset (%)	Change in balance as at the end of the Reporting Period as compared with balance as at the end of last year (%)
Cash at bank and on hand	119,082.83	19.49	80,164.72	19.26	48.55
Financial assets held for trading	8,016.80	1.31	39,094.81	9.39	-79.49
Notes receivable	25,214.41	4.13	37,236.36	8.94	-32.29
Accounts receivable	73,020.43	11.95	45,170.31	10.85	61.66
Receivables for financing	8,170.84	1.34	-	-	N/A
Prepayments	47,470.22	7.77	8,436.29	2.03	462.69
Inventories	148,326.45	24.27	91,608.31	22.01	61.91
Fixed assets	69,444.67	11.36	56,787.65	13.64	22.29
Development costs	31,652.17	5.18	17,272.81	4.15	83.25
Short-term borrowings	5,400.00	0.88	10.00	0.002	53,900.00
Contract liabilities	21,040.23	3.44	12,627.48	3.03	66.62

Management Discussion and Analysis

MAIN BUSINESS ANALYSIS *(Continued)*

2. STATUS OF ASSETS AND LIABILITIES *(Continued)*

Reasons for changes in cash at bank and on hand mainly due to the funds raised from the public offering of shares of a subsidiary, Sino IC, on the Beijing Stock Exchange during the reporting period.

Reasons for changes in financial assets held for trading: mainly due to non-renewal of some structured deposits upon maturity for the consideration of operating cashflow.

Reasons for changes in notes receivable: mainly due to discounting of certain bank acceptance bills and transfer of endorsements for the consideration of operating cashflow.

Reasons for changes in accounts receivable: mainly due to the increase in the scale of revenue and the corresponding increase in accounts receivable.

Reasons for changes in receivables for financing: mainly due to the discounting of bank acceptance bills and the reclassification of some notes receivable accounts to receivables for financing.

Reasons for changes in prepayments: mainly due to the expansion of the Group's operations and the structural tightness of the upstream supply chain which resulting in increased prepayments to suppliers to guarantee production capacity.

Reasons for changes in inventories: mainly due to there were differentiated demand in the downstream application markets of the products and the structural tightness in the upstream supply chain, therefore inventories increased to meet customer demand; and there were increase in inventories due to sluggish demand in the downstream markets of storage devices products.

Reasons for changes in fixed assets: mainly due to the expansion of the Group's operations and the purchase of testing equipment and office premises during the reporting period.

Reasons for changes in development costs: mainly due to the increase in expenditure as the Group continued to increase its investment in research and development, as well as the upgrading of the process of productised research and development projects.

Reasons for changes in short-term borrowings: mainly due to there was addition of short-term bank loans for operation.

Reasons for changes in contract liabilities: mainly due to the expansion of the Group's business scale which resulted in some customers made prepayments for the Group's production capacity.

Management Discussion and Analysis

CAPITAL MANAGEMENT

The key objective of the Group's capital management is to ensure the Group's ability to operate on a going concern basis and maintain healthy capital ratios so as to support business growth and maximise shareholder value.

The Group manages its capital structure and makes adjustments in response to changes in economic conditions and risk characteristics of the underlying assets. To maintain or adjust the capital structure, the Group may adjust the distribution of profits to shareholders, return capital to shareholders or issue new shares. The Group is not constrained by any external mandatory requirements on capital. The capital structure of the Group consists of equity attributable to owners of the Company, comprising issued share capital and various reserves. There was no change in the Group's capital management objectives, policies or procedures in 2022 and 2021.

The Group manages its capital with the gearing ratio. The gearing ratio of the Group, which is the total liabilities divided by the total liabilities and owner's equity as at 31 December 2022 is approximately 15.67% (2021: 19.16%).

PRINCIPAL RISKS AND UNCERTAINTIES

The Directors consider that developing and implementing rigorous risk management practices can efficiently and effectively reduce operational risks. The Board has delegated the responsibilities to relevant departments and will monitor, review and improve the practices from time to time.

The Directors believe that the Group is not exposed to risks associated with business regulations in view that there is no specific legislative control over the design, development and sales of integrated circuit where Group focuses its business on at present, and national policies are all advantageous to the development of the industry. In addition, the Group's business maintained a stable and healthy growth over the years. With the Group's existing customers and suppliers are all long-term partners, and business of the industry is still in the growth phase driven by national policies and huge market demands in most of its products, the Directors believe there will be no uncertainties.

The Group is exposed to various risks as analysed below:

I. CORE COMPETITIVENESS RISKS

1. *New product research and development and technical repetitive computing risks*

The integrated circuit design industry in which the Group operated in is a typical technology intensive industry. Technology upgrades and product iterations at a high speed, while chip products have higher technical barriers and obvious advantages of first-mover. If the Group makes mistakes in its judgment of market demand or slow development progress in the follow-up R&D process, it will face the risk of being grabbed for market share by competitors. In addition, the R&D of high-end chips has the characteristics of long development cycle, large capital investment, and high R&D risk. During the research and development process, there is a risk that certain key technologies cannot be broken through or product performance, parameters, and yield rates cannot meet market needs, leading to R&D failure and falling behind the new generation of technology.

Management Discussion and Analysis

PRINCIPAL RISKS AND UNCERTAINTIES *(Continued)*

I. CORE COMPETITIVENESS RISKS *(Continued)*

2. *Risks of attracting talents and maintaining innovative capabilities*

At present, the domestic chip design industry is developing rapidly, and the competition among enterprises for R&D talents is very fierce. If the Group cannot formulate a good talent incentive policy, or human resource management cannot meet the needs of rapid development, it will face the risk of core talent loss, and it may also fall into a situation where it is difficult to attract talents to join, resulting in the Group's failure to maintain continuous innovation ability.

II. OPERATIONAL RISKS

1. *Risk of decline in product sales price and gross profit margin*

In recent years, the integrated circuit design industry has received increasing attention from the society, market and capital, and the competition has gradually intensified. Internationally, for certain products of the Group, there exist great gaps between the Group and the leading enterprises in the same industry in the richness of product layout, the advanced level of technical indicators such as technology process and performance and the leading degree of operation scale or market share. Domestically, the number of competitors faced by each product line of the Group is also gradually increasing. Since the second half of 2022, due to the downturn in consumer electronics, the supply and demand relationship for some products has changed and the gross margin level for industry finishing has taken a significant hit. Meanwhile, if the Group cannot take effective measures to consolidate and enhance the competitiveness of products due to advances in technology, rising labor and raw material prices, and decline in the Group's product bargaining power in the future, the main product average selling prices and comprehensive gross profit margins of the Group will also face the risk of continuous decline, which will cause the Group to be in the disadvantageous position in the fierce market competition and with reduced sustainable profitability.

2. *Risks of high supplier concentration and cyclical fluctuations in capacity utilization*

The Group adopts the Fabless business model, and is mainly engaged in the design and sales of integrated circuits, and entrusts wafer manufacturing, packaging and testing and other production process to professional wafer OEM manufacturers as well as packaging and testing companies to complete the OEM. Since wafer manufacturing and packaging and testing are both capital and technology-intensive industries, the industry itself is highly concentrated, and the suppliers of the Group are also highly concentrated. The structural recovery of wafer production capacity is obvious, but it still takes time for the upstream and downstream price transmission mechanisms to become optimal. If the Group's technical standards, management capabilities or market development capabilities are inadequate, the Group's ability to absorb some of the wafer costs will slowdown, which will adversely affect the Group's profitability and product shipment.

Management Discussion and Analysis

PRINCIPAL RISKS AND UNCERTAINTIES *(Continued)*

III. FINANCIAL RISKS

1. *Risk of impairment of inventories*

The inventories of the Group mainly include chips and wafers. To safeguard the supply chain, the Group has invested more resources in inventories. At the end of the reporting period, the carrying amount of the inventories of the Group was approximately RMB1,483.2645 million, accounting for 34.28% of the corresponding total current assets at the end of the period. The Group makes corresponding impairment provisions every year according to the amount of the net realizable value of inventories lower than the cost. At the end of the reporting period of the reporting period, the balance of inventory impairment provisions of the Group was approximately RMB207.7592 million, and the proportion of inventory impairment provisions was 12.29%. If the market accelerates to go down in the future or the product replacement is accelerated due to technical repetitive computing, the risk of impairment of inventories may increase, which will have an adverse impact on the operating results of the Group.

2. *Financial risks associated with R&D investment*

The Group attaches great importance to the independent research and development of core technologies. During the reporting period, the R&D investment was approximately RMB886 million, accounting for 25.04% of the revenue during the reporting period. The R&D investment intensity was relatively high. The amortization provided for the intangible assets formed by development expenditure or write-off of the development expenditure and impairment of the intangible assets may have a significant impact on the profits of the Group.

3. *Risks of policy changes such as government subsidies and tax incentives*

The Group's integrated circuit design and integrated circuit testing related businesses are encouraged and supported by national industrial policies. The Group has strong scientific research capabilities and obtained more subsidies for scientific research projects during the reporting period, which can make up for the Group's R&D investment to a certain extent. As a high and new technology enterprise, the Group enjoys preferential tax policy support. If the national incentive policy changes, it may cause the risk of fluctuations in the profitability of the Group.

4. *Risk of collection of accounts receivable and notes receivable*

At the end of the reporting period, the book balance of the accounts receivable of the Group was approximately RMB746.6677 million, and the book balance of notes receivable was approximately RMB256.2356 million. The total book balance of accounts receivable and notes receivable accounted for 28.34% of the revenue. If the macroeconomic situation, industry development prospects and other factors adversely change in the future, and the operating conditions of customers experience major difficulties, the Group may face the risk of increasing bad debt losses due to uncollectible accounts receivable and notes receivable.

IV. INDUSTRY RISKS

Risk of slowdown in industry growth: Since the second half of 2022, demand for some chips, represented by consumer electronics products, has shown a downward trend due to factors such as the structural easing of production capacity and the absorption of existing inventories. Although the Group's product lines cover industrial grade products, consumer and high reliability applications and are more resilient to volatility, an industry-wide slowdown in growth could adversely affect the Group's results.

Management Discussion and Analysis

PRINCIPAL RISKS AND UNCERTAINTIES *(Continued)*

V. MACRO-ENVIRONMENTAL RISKS

The international trade environment has a greater impact on the Group's operation. In recent years, the uncertainty of the international trade environment has increased, and anti-globalization trade has further spread. Some countries have adopted trade protection measures and have repeatedly taken long-arm jurisdictional measures, which have had an impact on China's integrated circuit industry. The integrated circuit industry has typical characteristics of global division of labor and cooperation. If there are major adverse changes in the international trade environment, the trade friction between countries and regions further escalates, and global trade protectionism continues to heat up, the production and operation of upstream and downstream companies in the integrated circuit industry chain may be adversely affected, resulting in an increase in upstream and downstream transaction costs in the industry chain, which may adversely affect the operation of the Group.

VI. OTHER SIGNIFICANT RISKS

Chips design is a technology-intensive industry, and the final chip product is highly complex. Therefore, even if the Group has adopted strict intellectual property rights protection measures and quality control measures, etc., it is still unable to eliminate regulatory risks completely, such as intellectual property rights disputes, technical authorization risks (EDA design tools, IP core authorization, etc.) and disputes caused by product quality defects.

FUTURE OUTLOOK

In 2023, the Group will continue to consolidate and enhance its comprehensive competitive advantages in technology, services, quality and branding, further expand its production capacity and product applications, as well as continuously increase the coverage of the Group's business in the industrial chain, so as to achieve a sustainable, rapid and healthy development of the Group. Meanwhile, the Group will continue to consolidate the Group's technological advantages through technical cooperation between colleges and enterprises and continuous investment in research and development, and actively focus on advanced technologies and products overseas to build up the Group's competitive advantages in the international market. In terms of product technology, the Group will focus on product line layout, study industry trends actively, follow the market situation closely and accelerate product implementation. In terms of product planning and technology pre-research, each product line will closely follow the development trend of the industry, strengthen product differentiation, strive for technological advance and enhance its core competitiveness. In terms of marketing and operation, which is driven by the market and technology, to keep track of external information and changes in the situation in a timely manner, organize quality resources and formulate reasonable marketing strategies in accordance with the Group's product development strategy. Through reliable products and excellent service, we are able to build customers base and reputation, maintain our credibility and continue to create value for our customers. The Group insists on people-oriented, market-centric and customer-focused standards to maintain good customer relations, build corporate culture, create a positive corporate image and improve corporate social responsibility, thereby creating a solid foundation for the Group's sustainable development.

MATERIAL INVESTMENTS AND ACQUISITIONS AND DISPOSALS OF SUBSIDIARIES

Save as disclosed in this annual report, the Group had no other material investments and acquisitions and disposals of subsidiaries during the year.

Management Discussion and Analysis

FUTURE PLANS FOR MATERIAL INVESTMENTS

The Company has completed the issuance of A shares on 29 July 2021. Up to 31 December 2022, the Company made use of RMB510,040,737.31 according to the schedule to invest in research and development of programmable system on-chip and to industrialize projects and as reserve fund for development and technology. The remaining unutilized RMB160,972,522.22 balance from fund raising will be gradually applied to the relevant projects.

Sino IC completed the public offering and listing on the Beijing Stock Exchange on 28 October 2022. The proceeds of offering was RMB540,000,000 and the actual net proceeds after deducting issuing expenses (tax not inclusive) was RMB507,600,000. As at 31 December 2022, the unutilised proceeds of Sino IC amounted to RMB222,192,779.93, which will be used in the investment of IC testing industrialisation project and the construction of research and development center project.

Save as mentioned above, there was no other specific plan for material investments or capital assets as at 31 December 2022.

FINANCIAL RESOURCES AND LIQUIDITY

As at 31 December 2022, net assets of the Group amounted to RMB5,153,169,377.95 (2021: RMB3,366,902,546.50), a growth of approximately 53.05% over last year; of which current assets amounted to RMB4,327,100,944.42 (2021: RMB3,041,662,776.16), representing an increase of approximately 42.26% over last year, of which included cash at bank and on hand which were RMB1,190,828,339.52 (2021: RMB801,647,230.19), representing an increase of approximately 48.55% over last year.

The Group kept profiting for the past years, and thus profit, placement of shares and cash flows generated internally have been used to meet the operations and business development needs. The Company has completed in the issuance of A shares in 2021 and Sino IC completed public offering and listing on the Beijing Stock Exchange in 2022 which provided additional funds for the Group. With the cautious treasury policy adopted by the Group, the current cashflow is sufficient to cope with daily operation and future development. The Group may also obtain appropriate credit facilities from financial institutions when there is additional funding requirement for its business development in the future, including but not limited to bank borrowings, acceptance bills, discounted bills, trade finance and letters of credit, depending on the scale and duration of the funding requirements. The Group does not use any financial instruments for hedging purposes and does not have foreign currency net investments hedged by currency borrowings and other hedging instruments.

As at 31 December 2022, the Group had bank borrowings amounted to RMB50,000,000.00 (2021: RMB49,955,540.83).

Management Discussion and Analysis

PLEDGE OF ASSETS

As at 31 December 2022, the Group had fixed assets with carrying amounts RMB173,447,600.91 were pledged for the securities of bank borrowings which were fully repaid in Year 2022. As at the date of this report, the pledge has been released (2021: fixed assets with carrying amounts RMB178,037,972.67 were pledged for the securities of bank borrowings of RMB49,800,000.00).

COMMITMENTS AND CONTINGENCIES

1. Major Commitments

	2022	2021
Contracted but not provided Capital commitment	204,494,238.41	264,057,272.11

2. Contingencies

As at the balance sheet date, the Group has no contingent that need to be disclosed.

Management Discussion and Analysis

EMPLOYEES

1. Employees status

Number of employees in the parent company	1,262
Number of employees in major subsidiaries	429
Total number of employees	1,691
Number of retired employees whose expenses are to be paid by the parent company and the subsidiaries	0

Profession Class of Profession	Number (person)
Production personnel	331
Sales personnel	292
Technical personnel	885
Financial personnel	18
Administrative personnel	165
Total	1,691

Educational Background Class of education	Number (person)
Doctor's degree	16
Master's degree	592
Undergraduate	602
College and below	481
Total	1,691

Management Discussion and Analysis

EMPLOYEES *(Continued)*

2. Remuneration policy

The Group provides employees with competitive compensation and benefits, including salary, bonus, social insurance, housing provident fund, health examination, supplementary commercial medical insurance and other welfare systems. The Group provides employees with various leave in accordance with the law, including personal leave, sick leave, marriage leave, work injury leave, bereavement leave, annual leave, maternity leave, paternity leave and others.

The Group has established a complete performance appraisal system, and evaluates each employee according to the targeted appraisal objectives. At the end of each year, the Group formulates a salary adjustment plan based on the results of employee performance evaluation, and with reference to the market salary situation and the Group's current operating conditions. Besides, the Group optimizes the talent team through comprehensive talent evaluation mechanisms such as performance appraisal and talent promotion channels to achieve the development goal of building and developing a first-class talent team.

3. Training plan

The Human Resources Department has set up a human resource management process, based on an annual performance appraisal and assessment of the prior year and the development objectives of all departments, formulated the annual training plan. The implementation of training plan adopts two types of training being outsourcing and in-house. The effectiveness of the training plan will be assessed by examinations, feedbacks and performance appraisals with recommendations for the further improvements.

COMPLIANCE WITH LAWS AND REGULATIONS

The Directors deem the compliance with laws and regulations as the cornerstone of a business and attach considerable importance to it. The Group strictly complies with relevant laws and regulations of each country and region where the subsidiary companies perform business activities. Furthermore, as the A shares of the Company are listed on the Sci-Tech Innovation Board of the Shanghai Stock Exchange and H shares of the Company are listed on the main board of Stock Exchange of Hong Kong Limited ("The Stock Exchange"), the Company shall be bound by the rules governing the listing of securities on the Shanghai Stock Exchange and The Stock Exchange, relevant regulatory rules of the China Securities Regulatory Commission and the Securities and Futures Ordinance on Chapter 571 of the Laws of Hong Kong respectively. The Group's operating business is not subject to any specific regulation at the time being.

Management Discussion and Analysis

RELATIONSHIP WITH CUSTOMERS AND SUPPLIERS

Understanding that customer is the key factor for generating revenue and business development, the Group actively maintains close and long term partnerships with customers. With more than twenty years of business experience and expertise, the Group strives to fulfill the requirements of customers. All the Group's five largest customers were manufacturers of security IC chips, smart meter and high reliable products, which are renowned enterprises in the industry with business relationship with the Group for long years. These customers are traded with 30 days to 90 days credit that is the same credit term given by the Group to other customers. For the year ended 31 December 2022, the above-mentioned 5 customers have no indication of doubtful debt. In accordance with the risk management policies adopted by the Group, its customers and products are managed in well-balanced portfolios, there is no exposure on heavy reliance on individual products nor these major customers' orders.

The Group sees the suppliers as valued business partners, and is committed to maintain long term relationships with them and protect interests of both sides to ensure reasonable prices and stable supply of the Group. The Group does not rely on any major supplier that might lead to a significant impact on the operation.

Directors and Supervisors and Senior Management Biographies

Biographical details of the directors and the supervisors and the senior management of the Company are set out below:

DIRECTORS

Executive directors

Mr. Jiang Guoxing, aged 69, joined the Company in July 1998, is the Chairman of the Board and a member respectively of the Strategic and Investment Committee and the chairman of the Environmental, Social and Governance Committee of the Company. Mr. Jiang graduated with a Master's degree in Computer Science from the Fudan University and is a professor grade senior engineer. He was the executive manager of Hong Kong Huayu Technology Co. Ltd., from 1987 to 1993, the deputy general manager of Shanghai Fudan Forward Science and Technology Co., Limited from 1993 to 1994 and the chief of the Office of Research-product Industrialization and University Enterprise Management of the Fudan University from 1995 to 2007. From 2007 to 2017, he was the vice chairman and general manager of Shanghai Fudan Forward Science and Technology Co., Limited.

Mr. Shi Lei, aged 56, joined the Company in July 1998, is the Managing Director and a member of the Strategic and Investment Committee of the Company. He was graduated with a Master's degree in Management from the Fudan University and is a professor grade senior engineer. Mr. Shi was the deputy manager in the Development Division of Shanghai Agricultural Investments Company from 1993 to 1997; the general manager of Shanghai Pacific Commercial Trust Company Limited from 1997 to 1998; worked for Shanghai Commerce Investment Company from 1997 to 2001; the assistant to general manager, deputy general manager, general manager and chairman of Shanghai Commerce and Invest (Group) Corporation ("SCI") which is a major shareholder of the Company from 1997 to 2015.

Mr. Yu Jun, aged 55, joined the Company in July 1998, is the Deputy Managing Director and a member of the Strategic and Investment Committee of the Company and also a director respectively of the Company's substantial shareholder, Shanghai Fuxin Fangao IC Technology Co. Ltd. and the Company's subsidiary namely, Sino IC Technology Co., Ltd. ("Sino IC") and an associate namely Shanghai Fukong Hualong Micro-system Technology Co., Ltd. He graduated with a Bachelor's degree in Electronics Engineering and a Master's degree in Electrical Circuits and Systems professional from the Fudan University and is a professional grade senior engineer. Mr. Yu has held positions as the deputy director, professional grade senior engineer, deputy professor, tutor and assistant tutor of the Electronic Engineering department of the Fudan University since 1990.

Ms. Cheng Junxia, aged 76, joined the Company in July 1998, is a member of the Remuneration and Evaluation Committee, the Nomination Committee, the Environmental, Social and Governance Committee and the Strategic and Investment Committee and the chief engineer of the Company, and is also a director of the Company's subsidiary namely, Shanghai Fudan Microelectronics (Hong Kong) Limited ("Fudan Hong Kong"). She graduated in 1969 from the Fudan University with a degree in Physics and Semi-Conductor professional. She was a professor, tutor and assistant tutor of the Fudan University and a supervisor of its Research Institute for Integrated Circuit Designs from 1969 to 2006; the director and general manager of Shanghai Fudan High Tech Company from 1995 to 2015.

Directors and Supervisors and Senior Management Biographies

DIRECTORS *(Continued)*

Non-executive directors

Ms. Zhang Qianling, aged 86, joined the Company in July 1998. She is also the supervisor of Sino IC. since 2001 She graduated from the Department of Physics of Fudan University and was a principal professor and tutor to doctorate students at Fudan University from 1960 to 2001. She was a promoter and first supervisor of the ASIC and System State Key Laboratory of the Fudan University. She was a director of Shanghai Fudan High-Tech Company from 1995 to September 2021 and a director of Shanghai Huahong Integrated Circuit Co. Ltd. from 1998 to 2006.

Mr. Wu Ping, aged 58, joined the Company in August 2019. He holds a Bachelor's degree from Shanghai Second Polytechnic University. He previously served as the executive director of Shanghai Fosun High Technology (Group) Co., Ltd. from 1995 to 2018; the director and general manager of SCI and the chairman of Shanghai Fudan Fukong Technology Industry Holdings Co., Ltd. ("Fudan Fukong") since 2018. He has been a director of Shanghai No.1 Pharmacy Co., Ltd., a company listed on the Shanghai Stock Exchange, since 12 December 2018.

Ms. Liu Huayan, aged 51, joined the Company in November 2021. She graduated from the Shanghai University in Finance and Economics as an undergraduate and holds a Master's degree in Management, and is also an economist. She had worked as an auditor in Jiangnam Certified Public Accountants operated by the Shanghai Jiangnan Shipyard; vice chief officer of the investment banking division and internal control committee member of investment banking management of Haitong Securities Co. Ltd.; as executive director of investment banking division, vice officer of internal control, quality control officer and vice chief officer of merger and acquisition division of BOCI International Securities Co. Ltd.; as executive director and internal control committee member of the investment banking division of J.P. Morgan First Capital Securities Co., Ltd.; as managing director and investment committee member of Shang Finance Corporation. She is currently the deputy general manager of SCI and director of Fudan Fukong.

Mr. Sun Zheng, aged 48, joined the Company in November 2021. He holds a Bachelor's degree from the Shanghai University in Finance and Economics and a Master's degree in Business and Administration from the Fudan University, and is also an economist. He had worked for the subsidiaries of the SAIC Motor Group, namely SAIC Investment Co. as investment officer, SAIC Information Industry Investment Co. as assistant general manager, SAIC Motor Corporation Ltd. as assistant financial controller and SAIC Finance Ltd. as deputy manager in investment banking division; Shanghai Wenguang Multimedia Television Co. Ltd. as financial controller; Shanghai New Countryside Construction Co. Ltd. as assistant to general manager; Blockbuster Investment Management Co. Ltd. as deputy general manager; Shanghai First Financial Media Co. Ltd. as financial controller; Shanghai First Financial Investment Management Co. as executive director; Shanghai Wenguang Capital Management Co. Ltd. as legal representative and general manager. He is currently the deputy general manager of SCI and the financial controller of Shanghai No.1 Pharmacy Co., Ltd., a company listed on the Shanghai Stock Exchange.

Directors and Supervisors and Senior Management Biographies

DIRECTORS *(Continued)*

Independent non-executive directors

Mr. Cao Zhongyong, aged 64, joined the Company in June 2019 and is a member of the Audit Committee and the Environmental, Social and Governance Committee of the Company. He holds a Doctorate's degree in Economics from the Beijing Jiaotong University. He was a professor, Assistant Dean of International Economics and Management from 1992 to 1996 and a professor and deputy head of the Academic Technology Research Registry from 1997 to 1998 of the Shanghai Railways University; a visiting scholar in the John F. Kennedy School of Political of the Harvard University from 1997 to 1998; from 1998 to 2018, he had held positions as supervisor and deputy supervisor accreditation committee of qualifications for assigned directors and supervisors of state-owned enterprises of Shanghai, the supervisor of the Shanghai Executive Development Centre, supervisor of the Examination and Assessment Centre for Leader Cadres of Shanghai, and retired in 2018. He is currently a tutors to doctorate students of post-doctoral station of the Shanghai Maritime University; executive director of the Shanghai European and American Alumni Association; honorary chairman of the Alumni Association of the Harvard University and a core expert of Shanghai Lingang Integration of Industry and Education in New Engineering Institute.

Mr. Cai Minyong, aged 66, joined the Company in June 2019 and is a member of the Audit Committee and the Strategic and Investment Committee, chairman of the Nomination Committee and Remuneration and Evaluation Committee of the Company. He graduated in Fudan University with a Bachelor's degree in Economics and Management. He was the Party Secretary and Factory Manager of the Shanghai Wuzhou Pharmaceutical Factory, and the Chairman of Shanghai Wuzhou Hesite Pharmaceutical Co., Ltd. from 1993 to 1996; chairman of the Shanghai Jiuzhou Property Development Co., Ltd. from 1994 to 1996; chairman of the Shanghai Pioneer Antibeer Pharmaceutical Co., Ltd. and the party secretary and general manager of the Shanghai Pioneer Pharmaceutical Company from 1995 to 1996; the deputy director of the management office of the Organization Department of the Shanghai Municipal from 1996 to 1998, the supervisor of the Shanghai High-tech Achievement Transformation Service Center from 1998 to 2003, the president of Shanghai Technology Property Exchange from 1999 to 2003, the Supervisor of the Shanghai Science and Technology Development and Exchange Center from 2001 to 2004, the party secretary and president of the Shanghai United Assets and Equity Exchange from 2004 to 2014, chairman of the Common Market of Proprietary Rights Trading in the Yangtze River Delta from 2005 to 2014, the member of the Shanghai Arbitration Committee and the arbitrator of China International Economic and Trade Arbitration Commission from 2005 to 2019, a member of the Financial and Economic Committee of the Shanghai Municipal People's Congress from 2013 to 2018 and a member of the Budget Working Committee of the Standing Committee of Shanghai Municipal People's Congress from 2018 to 2019. He is currently the chairman of the Shanghai Association of Senior Scientists and Technologists and vice supervisor of the Shanghai Care Next Generation Work Committee.

Mr. Wang Pin, aged 49, joined the Company in June 2019 and is the chairman of the Audit Committee of the Company. He graduated in Shanghai National Accounting Institute with an EMBA degree and is a registered accountant of the PRC. He was the assurance manager of Shanghai Gongxin Zhongnan Accounting Firm from 1996 to 2005; the financial controller of Shanghai Prime Machinery Company Ltd. from 2005 to 2016. He is currently the executive director of Shanghai Shenyin Enterprise management consultant Ltd.; a partner of Shanghai Luanhai Investment Management Ltd. and the executive director of Shanghai Luanhai Puyu Investment Management Ltd.

Ms. Zou Fuwen, aged 55, joined the Company in June 2022 and is a member of Remuneration and Evaluation Committee and Nomination Committee. She graduated from the Law major of the East China University of Political Science and Law, and was a post-graduate in international trade of the Shanghai University of International Business and Economics as well as a registered lawyer in China. She was a lawyer of Shanghai Baoshan Law Firm and Shanghai Yinxin Law Firm; and was a supervisor of Shanghai Hao Kun Law Firm. She is currently a supervisor of Shanghai Parkway Law Firm and the vice president of Shanghai Lawyers Association and president of Shanghai Women Lawyers Fellowship Association.

Directors and Supervisors and Senior Management Biographies

SUPERVISORS

Ms. Zhang Yanfeng, aged 47, was appointed in June 2019 and is a staff representative supervisor and chairman of the Supervisory Committee of the Company. She joined the Company in 2005 and is the officer of Human Resource Department of the Company and holds a Master's degree in Business Administration of the University of Hong Kong.

Mr. Ren Junyan, aged 62, was appointed in June 2019 and is a shareholders' representative supervisor of the Company. He holds Master's degree in Semi-conductor physics and Semi-conductor Device Physical professional from the Fudan University. Mr. Ren is a professor and tutor to doctorate students of the Fudan University and a member of The Institute of Electrical and Electronics Engineers ("IEEE").

Ms. Tang Xiaojie, aged 41, was appointed in June 2019 and is a shareholders' representative supervisor of the Company. She graduated from the University of Ballarat in Australia as an undergraduate and holds a Master's degree in Commerce. Ms. Tang is the deputy general manager of the audit department of SCI and the supervisors of Fudan Fukong. She had worked for Shanghai Minqiang Investment (Group) Co. Ltd. as internal audit officer; HNA Group Co., Ltd. as internal audit; Industrial Bank Co. Ltd. as sales staff; Shanghai Nile Environmental Protection Technology Ltd. as accounting staff and Shanghai Dali Food Additives Co. Ltd. as accounting staff.

SENIOR MANAGEMENT

Mr. Diao Linshan, aged 56, joined the Company in 1999 and is the Deputy General Manager of the Company and a director of Fudan Hong Kong. He holds a Master's degree in Business Management and Administration from the Arizona State University of the United States. He worked as assistant engineer in the Shenyang Branch of the Chinese Academy of Sciences from 1990 to 1992; deputy manager in the sales department of Fuzhou Zhengda Ltd. from 1992 to 1993; as deputy general manager in Beijing Wantong Industrial Corporation Limited from 1993 to 1996; as assistant to general manager in Oxford and Cambridge International Group from 1996 to 1998; and as marketing manager in Beijing Quantum Communication Network Ltd. in 1998.

Mr. Zeng Shaobin, aged 53, joined the Company in 2016 and is the Deputy General Manager of the Company. He holds a Doctorate degree in Management Engineering from the Wuhan Polytechnic University. From 1989 to 2007, he served as the supervisor of the development and reform office of the Henan Nanyang Normal University in Henan and the director of headmaster's office. From 2007 to 2016, he served as the director of the United Front Work Department of Shanghai Municipal Committee and the general secretary of Shanghai Young and Middle-aged Intellectuals Association. He is currently the Vice President of Shanghai High-Tech Enterprises Association.

Ms. Li Qing, aged 54, joined the Company in 1998 and has served as a senior engineer, manager of the technical planning department, manager of the design department, and currently serves as the president of the Central Research Institute and the Deputy General Manager of the Company. Ms. Li holds a Bachelor's degree in Radio Technology and a Master's degree in Radio Electronics from the Department of Radio Electronics and is a professor grade senior engineer. She has worked in the State Key Laboratory of Dedicated Integrated Circuits and Systems of Fudan University to conduct works on integrated circuit design, and has been a lecturer, senior engineer, and instructor of master students.

Mr. Shen Lei, aged 56, joined the Company in 2001 and is currently the Deputy Chief Engineer and Deputy General Manager of the Company, and is the core technical staff of the Company. Mr. Shen holds a master's degree in semiconductor physics and devices and a master's degree in microelectronics and solid electronics. Mr. Shen joined the State Key Laboratory of Dedicated Integrated Circuits and Systems of Fudan University in 1995 to conduct research on integrated circuit design and process correlation, and has served as an engineer, senior engineer and master's degree instructor.

Ms. Fang Jing, aged 55, joined the Company in 2003 and is the Chief Financial Officer and Secretary to the Board of the Company, and also is the Supervisor of Sino IC and a director of Fudan Hong Kong. She holds a Master's degree in Business Management and Administration from the Arizona State University of the United States and is also a senior accountant. She served as deputy manager of financial planning department of Shanghai Pacific Commercial Trust Company Limited and chief financial officer of Shanghai Fudan Communications Co., Ltd.

Corporate Governance Report

DIRECTORS' RESPONSIBILITY ON THE FINANCIAL STATEMENTS

The directors of the Company (the "Directors") acknowledge their responsibility for preparing the financial statements for the year ended 31 December 2022, which were prepared in accordance with statutory requirements and applicable accounting standards. The reporting responsibilities of the external auditor on the financial statements are set out in the Auditors' Report on pages 58 to 63.

CORPORATE CULTURE

The Company has adopted, promoted and preserved a healthy corporate culture by which our directors, management and employees are bounded to strike for a sustainable development of the Company in a lawfully, ethically, and responsibly manner. Our culture is also about reaching a balance of benefits and risks of short terms goals with our long-term strategy.

The Board of the Directors has a collective responsibility for promoting robust corporate governance, at heart of which embedded with our corporate culture which has the following features.

- **Transparency**
Our directors and management shall be moulded to make decisions and to conduct our business based on the best information available to them and shared among them.
- **Integrity and Objectivity**
Our directors and management shall undertake to make decisions and to conduct our business with integrity and objectivity in the best interests of the Company and its shareholders.
- **Accountability**
Our directors and management shall be rewarded commensurately by the performance of the Company under their decisions and actions.

The Board is satisfied that our corporate culture has been well promoted and preserved based on its review of a set of culture-related factors, such as compliance history, staff turnover rate, numbers of stakeholders' complaints and performance of the Company.

CORPORATE GOVERNANCE PRACTICES

The Company has adopted the code provisions set out in the Corporate Governance Code (the "CG Code") contained in Appendix 14 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules"). In the opinion of the Directors, the Company has complied with the code provisions set out in the CG Code throughout the year ended 31 December 2022. The Board confirms and undertakes the ultimate responsibilities for acting as the corporate governance function of the Company.

SECURITIES TRANSACTIONS OF DIRECTORS AND SUPERVISORS

The Company has adopted a code of conduct on terms no less exacting than the model code for securities transactions by directors of listed issuers as set out in Appendix 10 of the Listing Rules. Having made specific enquiry to all directors and supervisors, the directors and supervisors have complied with such code of conduct and the required standard of dealings throughout the year ended 31 December 2022.

Corporate Governance Report

BOARD OF DIRECTORS AND BOARD MEETING

Composition and role

During the year ended 31 December 2022, the Board has 12 members and comprises 4 executive Directors, 4 non-executive Directors and 4 independent non-executive Directors.

Changes in the Board members during the year were as follows:

- a) Mr. Guo Li has resigned as the independent non-executive director on 2 June 2022; and
- b) Ms. Zou Fuwen has been appointed as the independent non-executive director on 2 June 2022.

The Board members have no financial, business, family or other material/relevant relationships with each other. The Board's composition is formed to be well balanced to ensure strong independence exists across the Board. The biographies of the Directors are set out on pages 24 to 27 of this annual report, with details of diversity of skills, expertise, experience and qualifications concerning the Directors.

The Board is responsible for the leadership and management of the Group's businesses as well as its strategic planning and performances. The Management was delegated the authority and responsibility by the Board for the management of the Group. In addition, the Board has also delegated various responsibilities to the Board committees. Details of these committees are set out below in this report.

The Board classifies Directors into chairman, executive directors, non-executive directors and independent non-executive directors and this has been disclosed in all the Company's announcements, circulars and the websites of the Company and the Stock Exchange.

For the year ended 31 December 2022, the Company has complied with the Listing Rules that the independent non-executive directors appointed must representing at least one-third of the Board. In addition, the Company has ensured that at least one of the independent non-executive Directors has appropriate professional qualifications, or accounting or related financial management expertise as required by the Listing Rules. The participation of independent non-executive Directors can provide the Board with independent judgements, knowledge and experience to ensure the interests of all shareholders have been duly considered.

The Board is satisfied with the overall board effectiveness of the Company based on its own annual review over the board diversity, independence, succession and performance. The current board gender diversity has fulfilled the principle set out in Rule 13.92 of the Listing Rules.

The Company has arranged appropriate insurance cover in respect of legal action against the Directors.

Chairman and Managing Director

The Company has, since the early stage of its incorporation in 1998, segregated the duties of the Chairman of the Board and the Managing Director. The Chairman of the Board and the Managing Director are separately held by Mr. Jiang Guoxing and Mr. Shi Lei in order to preserve independence and have a balanced judgement of views. The Chairman of the Board has the responsibilities to lead the Board and make sure it works effectively and discharges its responsibilities and that all key and appropriate issues are discussed by the Board in a timely manner. The Managing Director has the responsibilities to manage and execute the Group's business directions and operation decisions.

Corporate Governance Report

BOARD OF DIRECTORS AND BOARD MEETING *(Continued)*

Board diversity policy

The board diversity policy aims to set out the Company's approach on the diversity of the Board. This policy applies to the Board. It does not apply to diversity in relation to the employees of the Company, nor the Board and the employees of any subsidiary of the Company.

The Company recognizes and embraces the benefits of having a diverse Board and sees increasing diversity at the Board level as an essential element in maintaining the Company's competitive advantage. The Company believes that greater diversity of directors is good for corporate governance and is committed:

1. To attract and retain candidate(s) for Board with a combination of competencies from the widest possible pool of available talent.
2. To maintain a Board with diversity perspectives at all levels, in particular, those are aligning with the Company's strategy and objectives.
3. To assess regularly the diversity profile of the Board and, where applicable, senior management prepared for Board positions under the succession planning of the Company and the progress on achieving diversity objectives, if any.
4. To ensure that the selection and nomination of Board positions are appropriately structured so that a diverse range of candidates can be considered.
5. To set up appropriate procedures for development of a broader and more diverse pool of skilled and experienced senior management that would be prepared for Board positions.
6. To ensure that changes to the Board's composition can be managed without undue disruption.

The Nomination Committee will review annually the structure, size and composition of the Board and where appropriate, make recommendations on changes to the Board to complement the Company's corporate strategy. In reviewing and assessing the Board composition and the nomination of directors (as applicable), Board diversity has to be considered from a number of aspects, including but not limited to the following:

- Gender
- Age
- Cultural and educational background
- Ethnicity
- Professional qualifications
- Skills, knowledge and industry and regional experience
- Length of service

Corporate Governance Report

BOARD OF DIRECTORS AND BOARD MEETING *(Continued)*

Board diversity policy *(Continued)*

The Company aims to maintain an appropriate balance of diversity perspectives of the Board that are relevant to the Company's business growth. The Nomination Committee will discuss and where necessary, agree on the measurable objectives for achieving diversity on the Board and make recommendation to the Board. The Board may adopt and/or amend from time to time (as applicable) such diversity perspectives and/or measurable objectives that are appropriate to the Company's business and Board succession planning, as applicable. The ultimate decision will be made based on the merits and contributions that the candidates can provide to the Company as well as taking into account the business model and specific needs of the Company from time to time.

The Nomination Committee will review this policy as appropriate and recommend revisions, if any, to the Board for consideration and approval.

As for our workforce gender diversity, the Group has a gender ration of 31% (female): 69% (male). The Board considers that this gender ratio is commensurate with the business model and business development needs. The Board has set a target to maintain this ratio with a 5% reasonable deviations for the coming 2 years. Currently, there are no particular challenging factors or circumstances that may prevent us from achieving the target.

Appointment, re-election and removal of Directors

All appointments of Directors have to be first considered by the Nomination Committee and proposed by the Nomination Committee to the Board according to the skills, knowledge and experience of the nominee for further approval. Term of appointment of all Directors of the Company is three years for one session.

Terms of Appointment of Directors

Executive Directors

Each of the four executive Directors has entered into a service contract with the Company for a term of three years which commenced on 3 June 2022 unless terminated by a three months' prior written notice to be given by either party without payment of compensation.

Non-executive Directors

Each of the four non-executive directors has entered into service contracts with the Company for a term of three years which commenced on 3 June 2022 unless terminated by a three months' prior written notice to be given by either party without payment of compensation.

Corporate Governance Report

BOARD OF DIRECTORS AND BOARD MEETING *(Continued)*

Terms of Appointment of Directors *(Continued)*

Independent Non-executive Directors

Ms. Zou Fuwen, who was appointed on 2 June 2022, has entered into a service contract with the Company for a term of three years which commenced on 2 June 2022 and the remaining three independent non-executive Directors have entered into service contract with the Company for a term of three years which commenced on 3 June 2022 unless terminated by a three months' prior written notice to be given by either party without payment of compensation.

The Company has received written annual confirmations from the four independent non-executive Directors of their independence according to Rule 3.13 under the Listing Rules and recognised their independence.

Board meetings

The Board held 4 full board meetings in each year and meets as and when required. During the year, the Directors received details of agenda and related documentary materials for decision and to make sure they had sufficient information in advance of each board meeting.

Board minutes are kept by the company secretary of the Company and are sent to the Directors for records and are open for inspection by the Directors.

The number of Board meetings and general meetings and attendance of Directors during the year ended 31 December 2022 are set out below:

Name	Number of Board Meetings Attended/ Should Attend	Number of General Meeting Attended/ Should Attend
<i>Executive Directors:</i>		
Jiang Guoxing	10/10	1/1
Shi Lei	10/10	1/1
Yu Jun	10/10	1/1
Cheng Junxia	10/10	1/1
<i>Non-executive Directors:</i>		
Zhang Qianling	10/10	1/1
Wu Ping	10/10	1/1
Liu Huayan	10/10	1/1
Sun Zheng	10/10	1/1
<i>Independent non-executive Directors:</i>		
Cao Zhongyong	10/10	1/1
Cai Minyong	10/10	1/1
Wang Pin	10/10	1/1
Guo Li (resigned on 2 June 2022)	4/4	1/1
Zou Fuwen (appointed on 2 June 2022)	6/6	0/0

Corporate Governance Report

BOARD OF DIRECTORS AND BOARD MEETING *(Continued)*

Committees

The Board strives to maintain excellent corporate governance and has established committees with written terms of reference setting out the powers and duties of the committees:

1. *Audit Committee*

An audit committee has been established with written terms of reference in compliance with Listing Rules and has been published on the websites of the Stock Exchange and the Company. The primary duties of the audit committee include, among others:

- to supervise and assess the external audit works, to propose the engagement, reappoint, remove or replacement of the external auditing firms;
- to supervise and assess the internal audit works, and to be responsible for the coordination between internal and external auditing;
- to review the financial information of the Company and its disclosures;
- to review and assessment the internal control system of the Company; and
- to handle other matters as required by laws, regulations, Articles and authorities granted by the Board.

The audit committee comprises three independent non-executive Directors, Mr. Wang Pin (Chairman of the committee), Mr. Cao Zhongyong and Mr. Cai Minyong. The audit committee members are well experienced with professional knowledge in management, accounting, finance, commercial and electronic industry sectors.

During the year ended 31 December 2022, the Audit Committee (1) reviewed the Group's annual, interim and quarterly reports and result announcements, the related accounting principles and practices adopted by the Group and provided advice and comments thereon; (2) made recommendations to the Board and the management in respect of the Group's financial reporting, risk management and internal control procedures; and (3) reviewed the Group's discloseable and connected transactions.

The Audit Committee held 5 meetings during the year under review. Among which, the committee also held 2 meetings with the auditor for the discussions on issues including audit planning, accounting policies adopted by the Group, internal control, risk management and preparation of financial statements.

Corporate Governance Report

BOARD OF DIRECTORS AND BOARD MEETING *(Continued)*

Committees *(Continued)*

2. *Nomination Committee*

The Nomination Committee now comprises two independent non-executive Directors, Mr. Cai Minyong (Chairman of the committee) and Ms. Zou Fuwen and an executive Director, Ms. Cheng Junxia. The Nomination Committee was established with written terms of reference which has been published on the websites of the Stock Exchange and the Company. The main roles and functions of the Nomination Committee include periodical review on the structure, number of members and diversity (including without limitation, gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service) of the Board, and to assess the independence of independent non-executive Directors and to make recommendation as to the changes of Directors. The Nomination Committee identifies suitable candidates who can add value to the management through their contributions in the relevant strategic business areas, and makes recommendation to the Board in respect of the appointment and reappointment of Directors which will result on the constitution of a strong and diverse Board. In carrying out its responsibilities, the Nomination Committee would give adequate consideration to the principles under Rules B.1 and B.2 of Appendix 14 of the Listing Rules.

Nomination policy

The nomination policy sets out the procedures and criteria for the nomination process, selection and recommendation of suitable candidates for the purpose of achieving diversity of members.

When considering and accessing suitable candidates, the Nomination Committee will consider the diversity on the Board, including but not limited to gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge, length of service and understanding of the Group's business and achievements in the industry, and will also consider the adequacy of time commitment by candidate, the commitment to perform relevant duties and the assessment of the contribution to the Group. The Nomination Committee will review the nomination policy from time to time in response to changes in the business of the Group and specific needs to ensure that the relevant policies continue to be effective. The Nomination Committee is responsible for adopting the measurable objectives for achieving diversity on the Board and monitoring the achievement of measurable objectives and reporting the progress.

For the year ended 31 December 2022, the Nomination Committee held 2 meetings. These meetings reviewed the current structure, number of members, composition and diversity of the Board, and the effectiveness of the nomination policy, and assessed the independence of each independent non-executive Directors.

3. *Remuneration and Evaluation Committee*

The Remuneration and Evaluation Committee now comprises of independent non-executive Directors, Mr. Cai Minyong (Chairman of the committee) and Ms. Zou Fuwen and an executive Director, Ms. Cheng Junxia. The Remuneration and Evaluation Committee was established with written terms of reference which has been published on the websites of the Stock Exchange and the Company. The roles and functions of the Remuneration and Evaluation Committee included the determination of the remuneration packages of all executive Directors, including their benefits in kind, pension rights and compensation payments, any compensation payable for loss or termination of their office or appointment, and make recommendations to the Board for the remuneration of non-executive Directors. The Remuneration and Evaluation Committee also considers factors such as salaries of comparable companies in the same industry, time commitment and responsibilities of the Directors, employment conditions within the Group and performance appraisal.

Corporate Governance Report

BOARD OF DIRECTORS AND BOARD MEETING *(Continued)*

Committees *(Continued)*

3. *Remuneration and Evaluation Committee (Continued)*

During the year under review, 3 meetings of the Remuneration and Evaluation Committee were held. The Remuneration and Evaluation Committee has considered and reviewed the remuneration of the Directors for the year ended 31 December 2022 which considered to be fair and reasonable and has reviewed the implementation of the 2021 A Shares Restricted Share Incentive Scheme.

4. *Strategic and Investment Committee*

The Strategy and Investment Committee was established with duties to review, evaluate and approve or propose investment projects to the Board for approval; to supervise the implementation and to keep all investment projects within the limit approved; and to determine whether the proposed investment project is in the interests of the Company and the shareholders of the Company as a whole.

The Strategy and Investment Committee comprises of five members and four of which are executive directors of the Company and the remaining member is Mr. Cai Minyong, an independent non-executive Director. Ms. Cheng Junxia is the Chairman of the committee. The Strategy and Investment Committee held 2 meetings during the year for the review of the investment report of the Group and the discussions of potential investment opportunities available to the Company.

5. *Environmental, Social and Governance Committee*

The Environmental, Social and Governance Committee was established with 3 members which includes two executive Directors, namely Mr. Jiang Guoxing (Chairman of the committee) and Ms. Cheng Junxia, and an independent non-executive Director, namely Mr. Cao Zhongyong. The main duties of the Environmental, Social and Governance Committee are responsible for the reporting to the Board matters relating to the Group's environmental, social and governance of the Group, and monitoring the formulation and implementation of vision, strategy, objective and policy of environmental, social and governance.

The Environmental, Social and Governance Committee held 1 meeting during the year.

Record of number of committee meetings and Directors' attendance during the year ended 31 December 2022 are set out below:

Name	Audit Committee	Nomination Committee	Remuneration and Evaluation Committee	Strategy and Investment Committee	Environmental, Social and Governance Committee
Jiang Guoxing	N/A	N/A	N/A	2/2	1/1
Shi Lei	N/A	N/A	N/A	2/2	N/A
Yu Jun	N/A	N/A	N/A	2/2	N/A
Cheng Junxia	N/A	2/2	3/3	2/2	1/1
Cao Zhongyong (appointed as Audit Committee member on 2 June 2022)	3/3	N/A	N/A	N/A	1/1
Cai Minyong	5/5	2/2	3/3	2/2	N/A
Wang Pin	5/5	N/A	N/A	N/A	N/A
Guo Li (resigned on 2 June 2022)	2/2	2/2	1/1	N/A	N/A
Zou Fuwen (appointed on 2 June 2022)	N/A	0/0	2/2	N/A	N/A

Corporate Governance Report

BOARD OF DIRECTORS AND BOARD MEETING *(Continued)*

During the year, the Chairman of the Board and non-executive Directors (including independently non-executive Directors) held one meeting without presence of executive Directors, to discuss and review the performance of the executive Directors and management and the adequacy and effectiveness of risk management and internal control systems to safeguard the interests of the Group. Taking the opportunity of meeting, improvement suggestions on the development of strategies and policies of the Group were sought from the Directors who attended the meeting.

During the year, the independent non-executive Directors also held meeting with external auditor without the presence of executive Directors, to discuss audit fees, issues arising from the audit process and matters of concern, and any other matters raised by external auditor.

Directors' training

All Directors have participated in continuous professional development to develop and refresh their knowledge and skills in order to ensure their contributions to the Board remain informed and relevant. The Group has the responsibility for arranging and funding suitable training and placing an appropriate emphasis on the roles, functions and duties of director of a listed company. The Group also provides Directors with seminars regularly, to provide and update the Listing Rules as amended from time to time, the changes in company laws, the amendments to the accounting standards, and materials including corporate governance and references of non-compliance cases.

During the year ended 31 December 2022, all Directors have received relevant trainings and have provided their training records as follow:

Name	Training type
<i>Executive Directors:</i>	
Jiang Guoxing	A, B
Shi Lei	A, B
Yu Jun	A, B
Cheng Junxia	A, B
<i>Non-executive Directors:</i>	
Zhang Qianling	A, B
Wu Ping	A, B
Liu Huayan	A, B
Sun Zheng	A, B
<i>Independent non-executive Directors:</i>	
Cao Zhongyong	A, B
Cai Minyong	A, B
Wang Pin	A, B
Zou Fuwen (appointed on 2 June 2022)	A, B

Notes:

- A. Attending conference/forum/seminar/workshop
- B. Reading relevant articles and information relating to the business, economy, directors' duties and corporate governance

Corporate Governance Report

COMPANY SECRETARY

Mr. Chong Hing Cheong, an external service provider, has been appointed as the company secretary of the Company on 1 May 2022. The primary contact person of Mr. Chong Hing Cheong at the Company is Ms. Fang Jing, the Chief Financial Officer and Secretary of the Board.

During the year, Mr. Chong Hing Cheong has undertaken no less than 15 hours of professional training to update his skills and knowledge.

AUDITOR'S REMUNERATION

The statement of the auditor of the Company about their reporting responsibilities on the Group's financial statements for the year ended 31 December 2022 is set out in the section headed "Auditors' Report" of this report. During the year under review, the Group has paid the following fees to the external auditor:

	2022 RMB'000	2021 RMB'000
Audit fee	2,830	2,057

INTERNAL CONTROL AND RISK MANAGEMENT SYSTEM

The Company has established an internal control department. The Company and its subsidiaries have to conduct review on the internal control and risk management system at least once annually. The Board monitors the effectiveness of the Company's internal control and risk management system through internal audit procedures and risk management policies which include the function of finance, compliance control, operations and risk management. The reports and findings prepared by the internal audit team and the risk management team have to be circulated to the relevant committee delegated by the Board. The internal audit team and the risk management team may also submit their findings and the proposed audit plan to the Audit Committee for its approval if necessary.

The Company has developed its disclosure policy which provides a comprehensive guide to the Company's Directors, Supervisors, senior management, officers and relevant employees in handling confidential information, monitoring information disclosure and responding to enquiries. Control procedures have been implemented to ensure that unauthorized access and use of inside information are strictly prohibited.

A review of system of internal control and risk management has been undergone during the year under review and an internal control assessment report 2022 was prepared, details of which were set out in the Company's announcement date 21 March 2023 with headline of "Overseas Regulatory Announcement – 2022 Internal Control Assessment Report". Besides, the Company also engaged its external auditor, Ernst & Young Hua Ming LLP to carry out assurance reporting on the effectiveness of the internal control over the financial reporting and the relevant report was set out in the Company's announcement date 21 March 2023 with headline of "Overseas Regulatory Announcement – Assurance Report on the Company's Internal Control". The Directors considered that the Group has maintained sound and effective internal controls and risk management system.

The Board is responsible for the risk management and internal control systems and reviewing their effectiveness. Such systems are designed to manage rather than eliminate the risk of failure to achieve business objectives, and can only provide reasonable and not absolute assurance against material misstatement or loss. The Board will continue to assess the effectiveness of risk management and internal controls by considering reviews and recommendations made by the Audit Committee, senior management and internal control department.

Corporate Governance Report

CONSTITUTIONAL DOCUMENTS

There is no change in the Company's constitutional documents during the Year.

Up-to-date version of the Company's constitutional documents are also available on the Company's website and the Stock Exchange's website. The Company proposed amendments to its Articles of Association at the forthcoming annual general meeting.

SHAREHOLDERS' RIGHT

The Board and management shall ensure Shareholders' rights and all Shareholders are treated equally and fairly. Pursuant to the articles of association of the Company, shareholder(s) individually or collectively holding 10% or more of the paid-up capital of the Company carrying the right of voting at general meetings of the Company shall have the right, by written requisition to the Board or the Supervisory Committee of the Company, to require an extraordinary general meeting to be called by the Board or the Supervisory Committee for the transaction of any business specified in such requisition.

At general meetings of the Company, the Board, the Supervisory Committee, and shareholder(s) individually or jointly holding more than 3% of the Company's shares shall have the right to propose motions to the Company. The content of a proposal shall be under the terms of reference of the general meeting, have definite topics and specific issues for resolution, and shall comply with the provisions of the laws, regulations and the Articles of Association.

Shareholder(s) individually or jointly holding more than 3% of the Company's shares may submit a written provisional motion to the convener 10 days before a general meeting is convened; the convener shall issue a supplementary notice of general meeting within two days after receipt of the said provisional motion, to notify other shareholders and to submit the said provisional proposal to the general meeting for consideration.

To safeguard the shareholder interests and rights, a separate resolution should be proposed for each substantially separate issue at general meetings, including the election of individual Directors. All resolutions put forward at general meetings will be voted on by poll pursuant to the Listing Rules and poll results will be posted on the websites of the Company, the Stock Exchange and the Shanghai Stock Exchange after each general meeting.

Detailed procedures for the shareholders to convene an extraordinary general meeting, putting forward proposals at a general meeting and proposing a person for election as a Director are also available in the Articles of Association of the Company.

Shareholders may at any time send their enquiries and concerns to the Board in writing through the Company Secretary by mail or emails:

Address For H Shareholders: Flat 6, 5/F., East Ocean Centre, 98 Granville Road, Tsimshatsui East, Kowloon, Hong Kong

Address For A Shareholders: No. 220, Handan Road, Shanghai, People's Republic of China

Email: ir@finsh.com.cn

Shareholders may also make enquiries with the Board at the general meetings of the Company. Shareholders are encouraged to participate in general meetings or to appoint proxies to attend and vote at meetings for and on their behalf if they are unable to attend the meetings. The Board and management are dedicated to meeting and communicating with shareholders at the annual general meeting of the Group.

Corporate Governance Report

SHAREHOLDERS' RELATIONS

The Company has been publishing all of its announcements including annual, interim reports and quarterly reports, and inside information in time in accordance with the Listing Rules in order to provide financial information of the Group to shareholders. In addition to the post of spokesman established to liaise with shareholders and institutional investors, the Company also provides the most updated information on its website to maintain a different communication channel with its shareholders. Besides, significant issues were put as separate proposed resolutions in the annual general meeting, at the same time, Chairman of the Board, the executive Directors, the non-executive Directors (including independent non-executive Directors) and the Company's external auditor have presented in the annual general meeting of the Company to communicate and answer to the questions raised by shareholders. The Shareholders' communication policy is regularly reviewed to ensure its effectiveness.

DIVIDEND POLICY

The Company adopted a policy on payment of dividends (the "Dividend Policy"), which establishes an appropriate procedure on declaring and recommending the dividend payment of the Company.

According to the Articles of Association of the Company and subject to the laws, regulations and supervisory requirements in force at the time, the Company shall distribute dividend by cash which not less than 10% of the distributable profits achieved in the year. The Company will declare and/or recommend the payment of dividends to the Shareholders after considering the Company's ability to pay dividends, which will depend on a number of factors, including but not limited to:

- (i) the Group's actual and expected financial performance;
- (ii) the Group's expected working capital requirements, capital expenditure requirements and future expansion plans;
- (iii) retained earnings and distributable reserves of the Company and each of the members of the Group;
- (iv) the Group's liquidity position;
- (v) the general economic conditions and other internal or external factors that may have an impact on the business or financial performance and position of the Group; and
- (vi) any other factors that the Board deems relevant.

The Board has complete discretion on whether to pay a dividend, subject to Shareholders' approval, where applicable. Even if the Board decides to recommend and pay dividends, the form, frequency and amount will depend upon the operations and earnings, capital requirements and surplus, general financial condition, contractual restrictions and other factors of and affecting the Group. The Board may also consider the recommendation of declaring interim dividends from time to time.

The Company shall review and reassess the Dividend Policy and its effectiveness on a regular basis or as required.

Report of the Directors

The Directors present their report and the audited financial statements of Shanghai Fudan Microelectronics Group Company Limited (the “Company”) and its subsidiaries (collectively referred to as the “Group”) for the year ended 31 December 2022.

PRINCIPAL ACTIVITIES AND BUSINESS REVIEW

The Group engaged in the design, development and testing of very large integrated circuits as well as provision of system solutions to customers. There were no significant changes in the nature of the Group’s principal activities during the year.

Further discussion and analysis of these activities, including a description of the principal risks and uncertainties facing the Group and an indication of likely future development in the Group’s business, can be found in the Management Discussion and Analysis set out on pages 5 to 23 of this annual report. This discussion forms part of this report of the directors.

RESULTS AND DIVIDENDS

The Group’s profit for the year ended 31 December 2022 and the Group’s assets and liabilities at that date are set out in the financial statements on pages 64 to 67 of this report.

On 21 March 2023, the Directors have considered and passed the “Resolution of the 2022 Distribution Plan”. It was proposed to use the total share capital registered on the equity registration date for the base of implementation of equity distribution, every 10 shares will be distributed with a cash dividend of RMB1.35 (tax included) with total cash dividend amounted to RMB110,248,627.50, representing 10.24% of the net profits attributable to the shareholders of the parent company for the year 2022. During the year, the Company paid a cash dividend of RMB0.65 (tax included) for every 10 shares to all shareholders with total cash dividend amounted to RMB52,942,630.00 (tax included) being distributed.

CLOSURE OF REGISTER OF MEMBERS

For the purpose of annual general meeting (“AGM”), the Register of Members of H Shares of the Company will be closed from Monday, 29 May 2023 to Friday, 2 June 2023 (both days inclusive) and during which no transfer of H Shares will be effected.

For holders of H shares whose names appear on the Register of Members of the Company as at 2 June 2023 shall be entitled to attend the AGM. To be qualified to attend the AGM, all transfers of H Shares accompanied by the relevant share certificates must be lodged at the Company’s Share Registrar in Hong Kong, Tricor Tengis Limited, at 17/F, Far East Finance Centre, 16 Harcourt Road, Hong Kong not later than 4:30 p.m. on 25 May 2023.

SUMMARY FINANCIAL INFORMATION

A summary of the published results and assets, liabilities and minority interests of the Group for the last five financial years, as extracted from the audited financial statements, is set out on page 206. This summary does not form part of the audited financial statements.

Report of the Directors

SHARE CAPITAL

A summary of movements in the Company's share capital is set out in note V (32) to the financial statements.

PRE-EMPTIVE RIGHTS

There are no provisions for pre-emptive rights under the Company's Articles of Association or the laws of the People's Republic of China (the "PRC") which would oblige the Company to offer new shares on a pro rata basis to existing shareholders.

PURCHASE, REDEMPTION OR SALE OF LISTED SECURITIES OF THE COMPANY

On 24 November 2022, the Company issued 2,154,500 new A Shares pursuant to the 2021 A Shares Restricted Share Incentive Scheme. With issue price of RMB17.935 per share and increment of share capital RMB215,450.00 with a premium of RMB38,425,507.50, the proceeds of which were used as daily working capital. At 31 December 2022, the Company's outstanding restricted shares under the 2021 A Shares Restricted Share Incentive Scheme were 7,537,750 (further details are set out in the circular dated 20 October 2021, and the Company's overseas regulatory announcements dated 5 November 2021, 6 December 2021, 28 October 2022, 7 December 2022 and 15 December 2022). According to the capital structure of the Company, if all the outstanding restricted shares are vested, 7,537,750 additional A Shares ordinary shares of the Company will be issued. Save as disclosed above and in note V, 32 of the notes to financial statements of this annual report, neither the Company nor any of its subsidiaries has purchased, sold or redeemed any of the Company's listed securities during the Reporting Period.

DISTRIBUTABLE RESERVES

According to the relevant regulations of the PRC, the Company's reserves available for distribution at 31 December 2022 amounted to RMB2,585,585,605.81 (At 31 December 2021: RMB1,535,601,355.62).

MAJOR CUSTOMERS AND SUPPLIERS

In the year under review, sales to the Group's five largest customers accounted for 32.86% of the total revenue for the year and sales to the largest customer included therein amounted to 12.40%. Purchases from the Group's five largest suppliers accounted for 83.82% of the total purchases for the year and purchase from the largest supplier included therein amounted to 20.33%.

None of the directors of the Company or any of their associates or any shareholders (which, to the best knowledge of the directors, own more than 5% of the Company's issued share capital) had any beneficial interest in the Group's five largest suppliers and customers.

KEY RISKS AND UNCERTAINTIES

Details of the Group's key risks and uncertain factors for the end of the reporting period are set out in the section headed "Management Discussion and Analysis" of this report.

BANK LOANS AND OTHER BORROWINGS

Details of bank loans and other borrowings of the Group as of the end of the reporting period are set out in note V (21) and (29) to the financial statements.

Report of the Directors

DIRECTORS

The directors of the Company during the year were:

Executive directors:

Mr. Jiang Guoxing
Mr. Shi Lei
Mr. Yu Jun
Ms. Cheng Junxia

Non-executive directors:

Ms. Zhang Qianling
Mr. Wu Ping
Ms. Liu Huayan
Mr. Sun Zheng

Independent non-executive directors:

Mr. Cao Zhongyong
Mr. Cai Minyong
Mr. Wang Pin
Ms. Zou Fuwen (appointed on 2 June 2022)
Mr. Guo Li (resigned on 2 June 2022)

The Company has received annual confirmations of independence from Mr. Cao Zhongyong, Mr. Cai Minyong, Mr. Wang Pin and Ms. Zou Fuwen, and as at the date of this report, still considers them to be independent.

DIRECTORS' AND SUPERVISORS' AND SENIOR MANAGEMENT'S BIOGRAPHIES

Biographical details of the directors and supervisors of the Company and the senior management of the Group are set out in the section headed "Directors and Supervisors and Senior Management Biographies" of this annual report.

DIRECTORS' SERVICE CONTRACTS

Each of the directors have entered into a service contract with the Company for terms of three years, unless terminated by a three months' prior written notice to be given by either party without payment of compensation.

No director has a service contract with the Company which is not determinable by the Company within one year without payment of compensation, other than statutory compensation.

DIRECTORS' REMUNERATION

The directors' fees are subject to shareholders' approval at general meetings. Other emoluments are determined by the Company's board of directors with reference to directors' duties, responsibilities and performance and the results of the Group. Details of remuneration of the management are set out on note XIV (3) to the financial statements.

PERMITTED INDEMNITY PROVISION

A permitted indemnity provision for the benefit of the Directors is currently in force and was in force throughout the financial year. The Company has taken out and maintained directors and officers liability insurance which provides appropriate cover for, among others, incurred by directors and officers to third parties.

Report of the Directors

CHANGE IN INFORMATION OF DIRECTORS DISCLOSED PURSUANT TO LISTING RULES 13.51B(1)

Pursuant to Rule 13.51B(1) of the Listing Rules, the changes in information of directors and supervisors since the Company's 2021 Annual Report and the Company's announcement dated 2 June 2022 in respect of the change of directors, other than the changes disclosed in other paragraphs of this report, are set out below:

Director	Change
Mr. Jiang Guoxing	For each year of the three-year term mandate since 3 June 2022, a fixed remuneration of RMB600,000 will be charged.
Mr. Shi Lei	For each year of the three-year term mandate since 3 June 2022, a fixed remuneration of RMB3,050,000 will be charged.
Mr. Yu Jun	For each year of the three-year term mandate since 3 June 2022, a fixed remuneration of RMB2,280,000 will be charged.
Ms. Cheng Junxia	For each year of the three-year term mandate since 3 June 2022, a fixed remuneration of RMB1,100,000 will be charged.
Ms. Zhang Qianling	For each year of the three-year term mandate since 3 June 2022, provide service to the Company free of charge.
Mr. Wu Ping	For each year of the three-year term mandate since 3 June 2022, provide service to the Company free of charge.
Ms. Liu Huayan	For each year of the three-year term mandate since 3 June 2022, provide service to the Company free of charge.
Mr. Sun Zheng	For each year of the three-year term mandate since 3 June 2022, provide service to the Company free of charge.
Mr. Cao Zhongyong	For each year of the three-year term mandate since 3 June 2022, a fixed remuneration of RMB200,000 will be charged.
Mr. Cai Minyong	For each year of the three-year term mandate since 3 June 2022. Mr. Cai Minyong did not receive remuneration during the year.
Mr. Wang Pin	For each year of the three-year term mandate since 3 June 2022, a fixed remuneration of RMB200,000 will be charged.
Ms. Zou Fuwen	For each year of the three-year term mandate since 2 June 2022, a fixed remuneration of RMB200,000 will be charged.

Supervisor	Change
Ms. Zhang Yanfeng	For each year of the three-year term mandate since 3 June 2022, provide supervisor service to the Company free of charge and will receive remuneration for the management position in the Company according to the performance.
Mr. Ren Junyan	For each year of the three-year term mandate since 3 June 2022, a fixed remuneration of RMB200,000 will be charged.
Ms. Tang Xiaojie	For each year of the three-year term mandate since 3 June 2022, provide service to the Company free of charge.

Report of the Directors

DIRECTORS' AND SUPERVISOR'S INTERESTS IN TRANSACTIONS, ARRANGEMENTS OR CONTRACTS

No director or superior nor a connected entity of a director or superior had a material interest, either directly or indirectly, in any transactions, arrangements or contracts of significance to the business of the Group to which the Company or any of the Company's subsidiaries was a party during the year.

MANAGEMENT CONTRACTS

No contracts concerning the management and administration of the whole or any substantial part of the business of the Company were entered into or were in existence during the year.

INTERESTS AND SHORT POSITIONS IN SHARES AND UNDERLYING SHARES AND DEBENTURES OF DIRECTORS AND SUPERVISORS AND CHIEF EXECUTIVES

At 31 December 2022, the interests or short positions of the directors and supervisors and chief executives of the Company in the share capital and underlying shares and debentures of the Company or any of its associated corporations (within the meaning of Part XV of the Securities and Futures Ordinance (the "SFO")) (i) which were required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests or short positions which they were taken or deemed to have under such provisions of the SFO); or (ii) which were required to be entered in the register referred to therein pursuant to section 352 of the SFO; or (iii) which were required to be notified to the Company and the Stock Exchange pursuant to the Model Code for Securities Transactions by directors of Listed Companies contained in the Listing Rules, were as follows:

Long positions in A shares of the Company:

	Number of issued shares held, capacity and nature of interest				Percentage of the Company's issued share capital	
	Directly beneficially owned	Through spouse or minor children	Through controlled corporation	Total		
Directors						
Mr. Jiang Guoxing	7,210,000	–	–	7,210,000	0.88	
Mr. Shi Lei	7,210,000	–	–	7,210,000	0.88	
Mr. Yu Jun	900,000*	–	–	900,000	0.11	
Ms. Cheng Junxia	400,000*	–	–	400,000	0.05	
	15,720,000	–	–	15,720,000		
Supervisor						
Ms. Zhang Yanfeng	–	–	220,500	220,500	0.03	

* Pursuant to the Strategic Allotment under the A Share Offering passed in the extraordinary general meeting held on 5 July 2021, through the arrangement by the manager under a special assets management plan and in which, as at 31 December 2022, Mr. Yu Jun holds 900,000 shares and Ms. Cheng Junxia holds 400,000 shares.

Report of the Directors

INTERESTS AND SHORT POSITIONS IN SHARES AND UNDERLYING SHARES AND DEBENTURES OF DIRECTORS AND SUPERVISORS AND CHIEF EXECUTIVES *(Continued)*

Long positions in H shares of the Company:

	Number of issued shares held, capacity and nature of interest				Percentage of the Company's issued share capital
	Directly beneficially owned	Through spouse or minor children	Through controlled corporation	Total	
Supervisor					
Ms. Zhang Yanfeng	–	108,000	–	108,000	0.01

Save as disclosed above, as at 31 December 2022, none of the directors and supervisors and chief executives of the Company had or was deemed to have any interests or short positions in the Shares, underlying shares or debentures of the Company and its associated corporations (within the meaning of Part XV of the SFO) (i) which were required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests or short positions which they were taken or deemed to have under such provisions of the SFO); or (ii) which were required to be entered in the register referred to therein pursuant to section 352 of the SFO; or (iii) which were required to be notified to the Company and the Stock Exchange pursuant to the Model Code for Securities Transactions by directors of Listed Companies contained in the Listing Rules.

RIGHTS TO ACQUIRE SHARES OR DEBENTURES OF DIRECTORS AND SUPERVISORS

At no time during the year were rights to acquire benefits by means of the acquisition of shares in or debentures of the Company granted to any director or supervisor or their respective spouse or minor children, or were any such rights exercised by them; or was the Company, or any of its subsidiaries a party to any arrangement to enable the directors or supervisors to acquire such rights in any other body corporate.

CONTRACT OF SIGNIFICANCE

No contracts of significance in relation to the Group's business in which the Company, any of its subsidiaries, or fellow subsidiaries, or its parent company was a party and in which a director of the Company had a material interest, whether directly or indirectly, subsisted during or at the end of the year.

Report of the Directors

SUBSTANTIAL SHAREHOLDERS' AND OTHER PERSONS' INTERESTS IN SHARES AND UNDERLYING SHARES

At 31 December 2022, so far as any Directors are aware, the interests owned by the following parties in the Shares or underlying shares of the Company which were required to be disclosed to the Company under Part XV of the SFO or were recorded in the register of interests required to be kept by the Company pursuant to section 336 of the SFO, were as follows:

Long positions in shares of the Company:

Name	Notes	Capacity and nature of interest	Number of ordinary shares held	Class of shares	Percentage of shareholding on relevant class of shares	Percentage of the Company's issued share capital
Shanghai Fudan Fukong Technology Enterprise Holdings Limited ("Fudan Fukong")	(1)	Directly beneficially owned	109,620,000	A shares	20.59	13.42
Shanghai Commerce and Invest (Group) Corporation ("SCI")	(1)	Interest of corporation controlled	109,620,000	A shares	20.59	13.42
Bailian Group Company Limited ("Bailian Group")	(1)	Interest of corporation controlled	109,620,000	A shares	20.59	13.42
Shanghai Fuxin Fangao IC Technology Co. Ltd. ("Fuxin Fangao")	(2)	Directly beneficially owned	106,730,000	A shares	20.05	13.07
Shanghai Fudan Asset Management Co., Ltd. ("Fudan Asset")	(2)	Interest of corporation controlled	106,730,000	A shares	20.05	13.07
Fudan University	(2)	Interest of corporation controlled	106,730,000	A shares	20.05	13.07
Shanghai Zhengben Corporate Management Consultant Partnership Enterprise ("Shanghai Zhengben")	(3)	Directly beneficially owned	52,167,270	A shares	9.80	6.39
Shanghai Yikun Investment Consultant Partnership Enterprise ("Shanghai Yikun")	(3)	Interest of corporation controlled	66,845,110	A shares	12.56	8.19
Zhang Yong	(3)	Interest of corporation controlled	66,845,110	A shares	12.56	8.19
Tenbagger Capital Management Co. Ltd.		Investment manager	17,149,000	H shares	6.03	2.10

Notes:

- (1) Bailian Group is a state-owned enterprise wholly owned by the Shanghai Municipal Government and wholly owned SCI, and SCI held 70.2% of the equity interest of Fudan Fukong. Accordingly, each of SCI and Bailian Group is deemed to be interested in Fudan Fukong's interest in the Company.
- (2) Fuxin Fangao is a state-owned enterprise wholly owned by Fudan Asset and Fudan Asset is wholly owned by Fudan University.
- (3) Zhang Yong held 95% of the equity interest in Shanghai Yikun, and Shanghai Yikun held 99.81% of the equity interest in Shanghai Zhengben. Accordingly, each of Shanghai Yikun and Zhang Yong is deemed to be interested in Shanghai Zhengben's interest in the Company. Shanghai Yikun and Zhang Yong further held the Company's interest through another controlled corporation.

Save as disclosed above, as at 31 December 2022, no person, other than the directors and supervisors of the Company, whose interests are set out in the section headed "Interests and short positions in shares and underlying shares and debentures of directors and supervisors and chief executives" above, had registered an interest or short position in the shares or underlying shares of the Company that was required to be disclosed to the Company under Part XV of the SFO or to be recorded in the register of interests required to be kept by the Company pursuant to section 336 of the SFO.

Report of the Directors

ENVIRONMENTAL POLICIES AND PERFORMANCE

The Environmental, Social and Governance (the “ESG”) Committee is the management and supervisor of the ESG system and responsible for the reporting to the Board matters relating to ESG issues of the Group, and monitoring the formulation and implementation of vision, strategy, objectively and policy of ESG. The Board has full responsibility of the Group’s ESG strategy and reporting and responsible for evaluating and determining related risks of ESG, and ensuring that appropriate and effective ESG risk management and internal control systems are in place. The Company prepared a separate ESG report for the year ended 31 December 2022 complying with the disclosure requirements under Appendix 27 of the Listing Rules and will be published at the same time as the publication of this annual report on the websites of the Stock Exchange at www.hkex.com.hk and the Company at www.fmsh.com.cn.

2021 A SHARES RESTRICTED SHARE INCENTIVE SCHEME

The Company implemented the 2021 A Shares Restricted Share Incentive Scheme (the “Scheme”) on 6 December 2021 (the “Grant Date”) for the purpose of motivating and rewarding persons who contribute to the operations of the Group. Eligible persons include those persons, other than directors and senior management, whom the Board of Directors considers to be in need of incentives. The Scheme is valid for a maximum period of 60 months from the date of grant of the A Shares restricted shares (the “restricted shares”) to the date when all the restricted shares granted to the incentive recipients vest or lapse. As at 31 December 2022, the remaining life of the Scheme is 5 years.

The total number of underlying shares involved in this Scheme during the entire validity period is 10,000,000 shares, which does not exceed 20.00% of shares of the Company in aggregate at the time of submitting this scheme to the shareholders’ meeting, which represent 1.22% of the issued shares at the date of this annual report. The cumulative number of shares of the Company granted to any one incentive recipient under this Scheme during the entire validity period does not exceed 1.00% of the total number of shares of the Company.

The grant price of the restricted shares under the first grant is RMB18.00 per Share, i.e., the incentive recipients who have satisfied the conditions of grant and conditions of vesting can subscribe for the restricted shares to be issued by the Company to them at the price of RMB18.00 per A Share. Grant price was adjusted to RMB17.935 per Share after distribution of cash dividend to shareholder in 2022. The pricing method for the restricted shares grant price under the Scheme is self-pricing.

The Company granted 1,066,000 restricted shares during the year 2022 (2021: 8,934,000 shares), of which the Group recognized share option expenses of RMB149,507,188.22 in the year (2021: RMB12,751,400.76).

Movements of restricted shares for the year

Name or category of participants	Grant date	Number of restricted shares				As at 31 December 2022 (Share)	Vesting period	Grant price
		As at 1 January 2022 (Share)	Granted (Share)	Vested (Share)	Lapsed (Share)			
Employee (total 648 employee)	6/12/2021 and 28/10/2022	8,934,000	1,066,000	(2,154,500)	(307,750)	7,537,750	6/12/2022 to 6/12/2027	RMB17.935
Total		8,934,000	1,066,000	(2,154,500)	(307,750)	7,537,750		

On 28 October 2022, the Company granted 1,066,000 restricted shares which represented 0.13% of the weighted average number of shares for the year 2022, the closing price of the A Shares immediately before the grant date is RMB95.87. On 14 December 2022, there were 2,154,500 restricted shares vested, the closing price of the A Shares immediately before the vesting date is RMB76.19. During the year, there were 307,750 restricted shares lapsed which the original vesting price is RMB17.935 per share.

Report of the Directors

2021 A SHARES RESTRICTED SHARE INCENTIVE SCHEME (Continued)

During the year, the number of restricted shares that may be granted under the Scheme is as follows.

	Employee category	Total
As at 1 January 2022 (Share)	1,066,000	1,066,000
Granted (Share)	(1,066,000)	(1,066,000)
As at 31 December 2022 (Share)	–	–

The Scheme is valid for five years from the date of grant of the restricted shares. The granted restricted shares will be exercised in four batches of 25%, 25%, 25% and 25% of the exercise ratio from the date of grant, after a 12-month exercise restriction period, provided that the exercise conditions are met, and the incentive recipients can exercise the restricted shares during the exercise period in accordance with the exercise price determined in the Scheme.

As at 31 December 2022, the Company had 7,537,750 restricted shares issued and outstanding under the Scheme, which represented approximately 0.92% of the Company's issued shares at that date. Based on the capital structure of the Company, if all the restricted shares issued and outstanding are exercised, 7,537,750 additional ordinary shares of the Company will be issued, increasing the share capital by RMB753,775 and the share premium by RMB134,435,771.25 of the Company (before deduction of issue expenses).

USE OF PROCEEDS

- A. On 28 October 2022, the subsidiary of the Company, Sino IC, completed public offering and listing on the Beijing Stock Exchange. Sino IC offered to the public 40,000,000 RMB ordinary shares, with aggregate nominal value RMB40,000,000, for an issuance price of RMB13.50 per share. The total amount raised was RMB540,000,000 and the actual net proceeds after deducting issuing expenses (tax not inclusive) was RMB507,600,000 which the proceeds will be invested in the IC testing industrialisation project and the construction of research and development center project before 30 September 2023.

As at 31 December 2022, the balance of fund raising amounted to RMB222,192,779.93, the use of proceeds and balance of funds were:

	RMB
Actual amount received from fund raising	507,600,000.00
Less: Replacement of Self-raised Funds Invested in advance	(86,754,716.98)
Expenditures of fund raising projects	(200,734,995.00)
Add: Accumulated interest income net of charges	2,082,491.91
Balance of special account for fund raising as at 31 December 2022	222,192,779.93

- B. On 24 November 2022, the Company issued 2,154,500 new A Shares pursuant to the 2021 A Shares Restricted Share Incentive Scheme. The issue price is RMB17.935 per share. The total amount raised and the actual net proceeds after deducting issuing expenses were RMB38,640,957.50. The proceeds of which were used as daily working capital in 2022.

USE OF PROCEEDS *(Continued)*

C. For year 2021, the Company had its first initial public offering of A shares in the PRC and listed on the Shanghai Stock Exchange upon completion of issuance. The Company offered to the public for 120,000,000 RMB ordinary shares of RMB0.1 each for an issuance price of RMB6.23 per share. The total amount raised was RMB747,600,000 and the actual net proceeds after deducting issuing expenses (tax not inclusive) was RMB680,282,800.

I. On 27 August 2021, the Board has approved:

1. the Proposal on the Replacement of Self-raised Funds Invested in Advance with Proceeds from the Issuance (關於使用募集資金置換預先投入的自籌資金的議案), which agreed the Company to replace the self-raised funds invested in advance in investment projects with proceeds from the Issuance amounting to RMB374,561,298.30, and the replacement of self-raised funds used in advance for the payment of issuance expenses with proceeds from the Issuance amounting to RMB5,730,425.73. In aggregate, the Company will replace self-raised funds invested in advance with proceeds amounting to RMB380,291,724.03.
2. The Proposal on Using Part of the Over-raised Proceeds to Permanently Supplement Working Capital (關於使用部分超募資金永久補充流動資金的議案), which agreed the Company to use part of the over-raised proceeds of RMB24 million for permanent supplement of working capital.

II. On 15 August 2022, the Board has approved:

The Proposal on Using Temporarily Idle Proceeds for Cash Management (關於使用暫時閒置募集資金進行現金管理的議案), which agreed the Company to use the idle proceeds for cash management under the condition that it does not affect the progress of the investment plan of the proceeds, does not affect the normal production and operation of the Company, and ensures the safety of funds. The Company can use the temporarily idle proceeds of not exceeding RMB160 million (inclusive) to purchase investment products with high security, good liquidity, and capital protection agreements (including but not limited to purchasing principal-guaranteed wealth management products, structured deposits, large deposit certificates, time deposits, call deposits and income certificates). The period of use is valid within 27 August 2022 to 26 August 2023. Within the aforesaid limit and period of use, the amounts can be used on a rolling basis.

Report of the Directors

USE OF PROCEEDS (Continued)

III. Use of proceeds and balance of funds

As at 31 December 2022, the balance of fund raising amounted to RMB160,972,522.22, the use of proceeds and balance of funds were:

	RMB
Actual amount received from fund raising on 29 July 2021 ^(note)	696,803,773.58
Less: Other issuing expenses	(10,790,566.05)
Replacement of Self-raised Funds Invested in advance already applied in the “SOPC Chips R&D and Industrialization Project”	(380,291,724.03)
Funds invested in advance in investment projects	(24,245,563.68)
Permanent supplement of working capital	(24,000,000.00)
Add: Accumulated income from cash management of fund raising	1,662,931.51
Accumulated interest income net of charges	1,474,565.70
<hr/>	
Balance of special account for fund raising as at 31 December 2021, including cash management products	260,613,417.03
<hr/>	
Less: Expenditures of fund raising projects – Development and Technology Reserve Funds	(105,503,449.60)
Add: Accumulated income from cash management of fund raising	4,889,007.84
Accumulated interest income net of charges	973,546.95
<hr/>	
Balance of special account for fund raising as at 31 December 2022, including cash management products	160,972,522.22

Note: The actual proceeds from fund raising after deducting underwriting expenses (excluding tax) of RMB50,796,226.42 was RMB696,803,773.58.

In accordance with the approval for revision of use of proceeds from fund raising on the extraordinary general meeting of the Company held on 28 September 2020, the Company will keep the expected timetable to use the unutilized balance for the purpose of “Development and Technology Reserve Funds” within two years after the listing date of its A shares (4 August 2021).

CHARITABLE DONATIONS

The donations by the Group for the end of the reporting period amounted to approximately RMB712,000.

CONNECTED TRANSACTIONS AND CONTINUING CONNECTED TRANSACTIONS

During the year, the Company and the Group had the following connected and continuing connected transactions, certain details of which are disclosed in compliance with the requirements of Chapter 14A of the Listing Rules.

CONNECTED TRANSACTIONS AND CONTINUING CONNECTED TRANSACTIONS *(Continued)*

Connected transactions

On 11 August 2022, the Company entered into an Initiate Establishment Agreement with Shanghai Haojun Venture Capital Partnership *(上海皓駿創業投資合夥企業) (“Haojun Venture”), Shanghai Fuwei xinxun Enterprise Management Consulting Partnership (Limited partnership)* (上海復微芯訊企業管理諮詢合夥企業(有限合夥)) (“Shanghai Fuwei xinxun”), Shanghai Yiyuan Enterprise Development Partnership (Limited partnership)* (上海翊垣企業發展合夥企業(有限合夥)) (“Shanghai Yiyuan”), Mr. Qian Wei, Mr. Wang Yuanbiao, Mr. Liu Yifei and Mr. Wang Wei pursuant to which the parties agreed to form a joint venture, Shanghai Fuwei Xunjie Digital Technology Co., Ltd.* (上海復微迅捷數字科技股份有限公司) (“Fuwei Xunjie”), in Shanghai of the PRC.

Pursuant to the Initiate Establishment Agreement, the registered capital of Fuwei Xunjie is RMB50,000,000 which was contributed by:

- (i) RMB20,426,700 was contributed by the Company;
- (ii) RMB12,000,000 was contributed by Haojun Venture;
- (iii) RMB7,500,000 was contributed by Shanghai Fuwei xinxun;
- (iv) RMB5,000,000 was contributed by Shanghai Yiyuan;
- (v) RMB1,573,300 was contributed by Mr. Qian Wei;
- (vi) RMB1,250,000 was contributed by Mr. Wang Yuanbiao;
- (vii) RMB1,250,000 was contributed by Mr. Liu Yifei; and
- (viii) RMB1,000,000 was contributed by Mr. Wang Wei.

The Company made contribution to Fuwei Xunjie by way of fixed assets and intangible assets. Fuwei Xunjie was set up on 16 August 2022 and the financial statements Fuwei Xunjie was consolidated to the Group.

Shanghai Yuji Enterprise Management Consulting Co., Ltd.* (上海煜冀企業管理諮詢有限公司) (“Shanghai Yuji”) is the general partner of Shanghai Fuwei xinxun which has the de facto control of Shanghai Fuwei xinxun. The supervisor of the Company, Ms. Zhang Yanfeng and the supervisor of Sino IC, Ms. Fang Jing holds 40% interests in the issued ordinary shares of Shanghai Yuji respectively. Mr. Qian Wei is the director of Sino IC. Therefore, Shanghai Fuwei xinxun and Mr. Qian Wei are connected persons of the Company under the Listing Rules. As such, the formation of Fuwei Xunjie constitutes a connected transaction of the Company under the Listing Rules.

Save as the connected transaction disclosed above and the continuing connected transactions disclosed below, details of certain connected transactions of the Group are also set out in note X to the financial statements.

Report of the Directors

CONNECTED TRANSACTIONS AND CONTINUING CONNECTED TRANSACTIONS *(Continued)*

Continuing connected transactions

- (a) On 12 December 2022, the Company signed the contract of technology development with Fudan University (“SFU”), the Company’s major shareholder, with total contract amount of RMB1,000,000. According to the contract, the Company needs to pay SFU technology service fees. In 2022, the Company incurred technical service fees of RMB485,436.89 (2021: Nil).

On 23 February 2021 and 28 October 2022, the Company entered into a Technology R&D Agreement with SFU, with total contract amount of RMB4,900,000 and the Company paid R&D expenses of RMB1,262,135.92 in 2022 (2021: RMB2,524,721.85).

- (b) On 12 January 2022 and 7 September 2022, the Group signed two contracts of technical service with SFU respectively, with total contract amount of RMB79,000. SFU entrusted the Group to provide testing services. In 2022, the Group recorded testing service income of RMB74,528.31 (2021: RMB4,708,490.55).

- (c) On 26 March 2021, the Company entered into a new products sales agreement with Shanghai Fudan Communication Co., Ltd. (“Fudan Communication”), with total contract amount of RMB1,050,000,000. The major shareholder of the Company, Shanghai Fudan Fukong Technology Enterprise Holdings Limited (“Fudan Fukong”), holds approximately 33.84% of the issued share capital of Fudan Communication, which Fudan Communication is a controlled company of Fudan Fukong. In 2022, the revenue of product sales by the Company to Fudan Communication amounted to RMB236,196,208.03 (2021: RMB119,449,206.21)

The independent non-executive directors of the Company have reviewed the continuing connected transactions set out above and have confirmed that these continuing connected transactions were entered into (i) in the ordinary and usual course of business of the Group; (ii) on normal commercial terms or on terms no less favourable to the Group than terms available to independent third parties; and (iii) in accordance with the relevant agreements governing them on terms that are fair and reasonable and in the interests of the shareholders of the Company as a whole.

Ernst & Young Hua Ming LLP, the Company’s auditor, was engaged to report on the Group’s continuing connected transactions in accordance with Hong Kong Standard on Assurance Engagements 3000 *Assurance Engagements Other Than Audits or Reviews of Historical Financial Information* and with reference to Practice Note 740 *Auditor’s Letter on Continuing Connected Transactions under the Hong Kong Listing Rules* issued by the Hong Kong Institute of Certified Public Accountants. Ernst & Young Hua Ming LLP have issued their unqualified letter containing their findings and conclusions in respect of the continuing connected transactions disclosed above by the Group in accordance with Listing Rules 14A.56. A copy of the auditor’s letter has been provided by the Company to the Hong Kong Stock Exchange.

TAX RELIEF AND EXEMPTION

The Directors are not aware of any tax relief and exemption available to the shareholders by reason of their holding of the Company’s securities.

SUFFICIENCY OF PUBLIC FLOAT

Based on information that is publicly available to the Company and within the knowledge of the directors, at least 25% of the Company’s total issued share capital was held by the public as at the date of this report.

Report of the Directors

DIRECTORS' AND SUPERVISOR'S INTERESTS IN A COMPETING BUSINESS

During the year and up to the date of this report, none of the directors or supervisors of the Company had an interest in a business which competes or is likely to compete, either directly or indirectly, with the businesses of the Group, as defined in the Listing Rules.

CORPORATE GOVERNANCE CODE

In the opinion of the directors, the Company has complied with the code provisions set out in the Corporate Governance Code contained in Appendix 14 of the Listing Rules throughout the accounting period covered by this annual report.

A report on the principal corporate governance practices adopted by the Company is set out in the section headed "Corporate Governance Report" of this annual report.

EVENTS AFTER THE REPORTING PERIOD

There was no significant events subsequent to 31 December 2022 which may materially affect the Group's operating and financial performance as at the date of this report.

AUDITOR

Having considered and resolved to unify the preparation of financial statements of the Company under the China Accounting Standards for Business Enterprises in the 24th board meeting of the 8th session, the Board proposed to terminate the engagement of Ernst & Young as external auditor and replaced by Ernst & Young Hua Ming LLP as the auditor for 2021.

The consolidated financial statements for the year ended 31 December 2022 have been audited by Ernst & Young Hua Ming LLP which will retire and, being eligible, offer itself for re-appointment at the forthcoming annual general meeting. A resolution to re-appoint Ernst & Young Hua Ming LLP and to authorise the directors to fix its remuneration will be proposed at the forthcoming annual general meeting.

ON BEHALF OF THE BOARD

Jiang Guoxing

Chairman

Shanghai, the PRC
21 March 2023

Report of the Supervisory Committee

WORK REPORT OF THE SUPERVISORY COMMITTEE OF 2022

In 2022, the supervisory committee of Shanghai Fudan Microelectronics Group Company Limited (hereinafter referred to as the “Company”), in strict compliance with the requirements of the Company Law, the Securities Law, the Rules Governing the Listing of Stocks on the STAR Market of the Shanghai Stock Exchange (hereinafter referred to as the “Listing Rules of the STAR Market”), the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (hereinafter referred to as the “Hong Kong Listing Rules”), the Articles of Association, the Rules of Procedures of the Supervisory Committee and other relevant laws and regulations, regulatory documents and the policies of the Company, earnestly performed the duties of the Supervisory Committee conferred by the shareholders, diligently carried out various work, and promoted the sustainable, healthy and stable development of the Company. The main work of the Supervisory Committee in 2022 is reported as follows:

I. MEETING OF THE SUPERVISORY COMMITTEE

Session No.	Date	Resolution
13th meeting of the eighth session of the Supervisory Committee	2022.3.18	Refer to notes
14th meeting of the eighth session of the Supervisory Committee	2022.4.26	
1st meeting of the ninth session of the Supervisory Committee	2022.6.2	
2nd meeting of the ninth session of the Supervisory Committee	2022.7.4	
3rd meeting of the ninth session of the Supervisory Committee	2022.8.15	
4th meeting of the ninth session of the Supervisory Committee	2022.10.28	
5th meeting of the ninth session of the Supervisory Committee	2022.12.7	

Notes:

The 13th meeting of the eighth session of the Supervisory Committee has considered and approved all resolutions as follows:

1. Related to the work report of the supervisory committee of 2021
2. Related to the final account report of 2021
3. Resolution related to the annual report of 2021 and its summary
4. Resolution related to the internal control evaluation report of 2021
5. Resolution related to the profit distribution plan of 2021
6. Resolution related to the special report on the deposit and use of funds raised in 2021
7. Resolution related to the re-appointment of overseas and domestic auditor of 2022
8. Resolution related to the remuneration of Directors and Supervisors of 2022
9. Resolution related to the purchase of liability insurance for Directors, Supervisors and Senior Management
10. Resolution related to the application for the consolidated credit facility for 2022
11. Resolution on by-election of bon-employee supervisors of the ninth session of the Supervisory Committee

Report of the Supervisory Committee

The 14th meeting of the eighth session of the Supervisory Committee has considered and approved all resolutions as follows:

1. Resolution related to the first quarterly report of 2022

The 1st meeting of the ninth session of the Supervisory Committee has considered and approved all resolutions as follows:

1. Resolution related to the election of the chairman of the ninth session of the Supervisory Committee of the Company

The 2nd meeting of the ninth session of the Supervisory Committee has considered and approved all resolutions as follows:

1. Resolution related to the external investment and connected transaction

The 3rd meeting of the ninth session of the Supervisory Committee has considered and approved all resolutions as follows:

1. Resolution related to the 2022 interim report and summary
2. Resolution related to the use of own funds for cash management
3. Resolution related to the use of temporarily idle proceeds for fund management
4. Resolution related to the interim report on the deposit and actual use of funds raised for the Half Year 2022

The 4th meeting of the ninth session of the Supervisory Committee has considered and approved all resolutions as follows:

1. Resolution related to the third quarterly report of 2022
2. Resolution related to the adjustment of the grant price of the 2021 restricted share incentive scheme
3. Resolution related to the granting of restricted shares to incentive persons
4. Resolution related to the provision for impairment of assets
5. Resolution related to the technical services contract and connected transaction with Fudan University

The 5th meeting of the ninth session of the Supervisory Committee has considered and approved all resolutions as follows:

1. Resolution related to the cancellation of some of the restricted shares granted that have not yet vested
2. Resolution related to the satisfaction with the vesting conditions for the first vesting period of the first grant portion of the Company's 2021 restricted share incentive scheme

Report of the Supervisory Committee

II. DAILY WORK OF THE SUPERVISORY COMMITTEE

During the Reporting Period, in strict accordance with the requirements of the Company Law, the Securities Law, the listing rules of Shanghai Stock Exchange and Hong Kong Stock Exchange, the Articles of Association, and the rules of procedure of the Supervisory Committee and relevant laws and regulations, and based on the principle of good faith, the Supervisory Committee has earnestly its supervisory duties from the perspective of safeguarding the interests of the Company and the rights and interests of all shareholders.

(I) The Company's operation in accordance with the law

During the Reporting Period, the Supervisors of the Company attended the Company's general meetings and Board meetings and supervised the convening, holding and voting procedures and resolution matters of the general meetings and Board meetings, the implementation of the resolutions of the general meetings by the Board and the performance of the Company's Directors and senior management.

The Supervisory Committee is of the opinion that: the Company is able to operate in accordance with the law, the operation of the Board is standardized and the business decisions are scientific and reasonable, and the resolutions of the general meetings are conscientiously implemented; the Directors and senior management of the Company are conscientiously performing their duties, and there is no abuse of authority, damage to the interests of the Company or infringement of the rights and interests of the Shareholders and the Company's employees.

(II) Inspection of the Company's financial situation

During the Reporting Period, the Supervisory Committee conducted an inspection of the Company's financial system and financial position, and considered the Company's periodic reports seriously.

The Supervisory Committee is of the opinion that: the Company had sound financial system, standardized financial management, good financial condition, and no illegal occupation of Company assets and capital loss. The Company's financial report truly, accurately and completely reflected the Company's financial situation, operating results and cash flow. No breach of confidentiality was found by those involved in the preparation and consideration of periodic reports.

(III) Related (connected) Transactions of the Company

During the Reporting Period, the Supervisory Committee supervised the related (connected) transactions of the Company.

The Supervisory Committee is of the opinion that: during the Reporting Period, the review procedures for the related (connected) transactions of the Company are in compliance with the relevant laws, regulations, normative documents and the Articles of Association. The terms of the transactions are fair and reasonable, and are in the interests of the Company and its shareholders as a whole, and no related (connected) transactions have been found to harm the interests of the Company.

Report of the Supervisory Committee

(IV) Use of share proceeds

During the Reporting Period, the Supervisory Committee supervised and audited the use of proceeds by the Company.

The Supervisory Committee is of the opinion that: the Company has disclosed the deposit, use and management of the raising proceeds of the Company in a timely, true, accurate and complete manner in accordance with the relevant laws and regulations such as the Administrative Measures for Raising Proceeds by Companies Listed on the Shanghai Stock Exchange (Revised in 2013) (《上海證券交易所上市公司募集資金管理辦法(2013年修訂)》). There is no violation of the management of raising proceeds. The exchange of and replenishment of working capital by raising proceeds, and cash management have fulfilled the necessary review procedures and information disclosure obligations in accordance with the requirements of relevant laws and regulations. The use of raising proceeds by the Company is consistent with what has been disclosed, and there is no violation of regulations.

(V) Implementation of Internal Control

During the Reporting Period, the Supervisory Committee supervised the implementation of the internal control of the Company.

The Supervisory Committee is of the opinion that: according to the Basic Standards of Corporate Internal Control and its ancillary guidelines and other internal control supervision requirements, together with the Company's internal control system and evaluation methods, and based on the daily supervision and special supervision of internal control, the evaluation on the effectiveness of the Company's internal control during the Reporting Period is true, accurate and complete, and there are no false records, misleading statements or major omissions. The Company has maintained effective internal control in all major aspects in accordance with the requirements of the enterprise internal control standard system and related regulations.

III. 2023 ANNUAL WORK PLAN OF THE SUPERVISORY COMMITTEE

In 2023, the Supervisory Committee will continue to strictly implement the "Company Law", "Securities Law", the listing rules of Shanghai and Hong Kong and the "Articles of Association" and other relevant regulations with the sense of responsibility for all shareholders, faithfully and diligently performs the functions of the Supervisory Committee, strengthens its own knowledge and supervision, promotes the perfection of corporate governance structure and the standardized operation of operation and management, maintains the legitimate rights and interests of the Company and shareholders, and enhance the governance standards of the Company for effective functioning.

AUDITORS' REPORT



Ernst & Young HM (2023) Shen Zi No. 60469429_B01
Shanghai Fudan Microelectronics Group Co., Ltd.

To all Shareholders of Shanghai Fudan Microelectronics Group Co., Ltd.

(I) OPINION

We have audited the accompanying financial statements of Shanghai Fudan Microelectronics Group Co., Ltd. which comprise the consolidated and company balance sheets as at 31 December 2022, and the consolidated and company income statements, the consolidated and company statements of changes in shareholders' equity, the consolidated and company statements of cash flows for the year ended and notes to the financial statements.

In our opinion, the accompanying financial statements present fairly, in all material respects, the consolidated and company's financial positions of Shanghai Fudan Microelectronics Group Co., Ltd. as at 31 December 2022, and their financial performance and cash flows for the year then ended in accordance with the requirements of Accounting Standards for Business Enterprises.

(II) BASIS FOR OPINION

We conducted our audit in accordance with China Standards on Auditing ("CSAs"). Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the Company in accordance with China Code of Ethics for Certified Public Accountants (the "Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

(III) KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.



(III) KEY AUDIT MATTERS *(continued)*

Key audit matter	How our audit addressed the key audit matter
<p><i>Capitalisation of development costs</i></p> <p>As of 31 December 2022, the carrying amounts of development costs in the consolidated and company financial statements of Shanghai Fudan Microelectronics Group Co., Ltd. and its subsidiaries (the “Group”) was RMB316,521,697.31 and RMB319,784,468.41, respectively. Expenditure incurred in developing new products is capitalised and deferred upon meeting the criteria as described in Accounting Standards for Business Enterprises No. 6 – Intangible Assets. The balances and transactions of deferred development costs were material to the financial statements and management exercised judgement and made estimation in determining the eligibility of the costs for capitalisation, the useful commercial lives and impairment, if any, of the capitalised development costs. Therefore, auditing the Group’s capitalisation of development costs involved complex auditor judgment and estimation.</p> <p>For the disclosure of the development costs capitalised, refer to Notes III, 15 and 29 Significant accounting policies and accounting estimates, and Notes V, 17 to key items of the consolidated financial statements.</p>	<p>We obtained an understanding, evaluated the design, and tested the operating effectiveness of controls over the Group’s accounting for the capitalisation of development costs.</p> <p>The audit procedures we performed include:</p> <ul style="list-style-type: none"> • Performing tests on the criteria for initial recognition; • Assessing the timeliness of the commencement of amortisation when the asset was available for use; • Reviewing the assumptions and methodologies used by management in estimating the useful economic lives and performing impairment assessment on the deferred development costs by focusing on the estimates surrounding future economic cash flows; • Comparing estimated and actual results from previous years of useful economic lives and cash flows.

AUDITORS' REPORT



(III) KEY AUDIT MATTERS *(continued)*

Key audit matter	How our audit addressed the key audit matter
<p><i>Provision for write-down of inventories to net realizable value (“NRV”)</i></p> <p>As at 31 December 2022, the carrying amounts of inventories in the consolidated and company financial statements of the Group were RMB1,483,264,548.04 and RMB1,480,135,764.37, respectively. Thereinto, the balance of provision for write-down of inventories to NRV was RMB207,759,185.29 and RMB207,589,283.48, respectively. The Group periodically assesses the net realizable value of its inventories and makes provision for inventory based on the difference between the cost of the inventory and the net realizable value. When estimating the net realizable value of inventories, management considers the purpose for which the inventories are held, as well as the age of the inventories, their storage status, historical consumption data and future use or sales as the basis for estimation.</p> <p>The balance of inventories was material to the financial statements and management exercised estimation in determining the write-down of inventories to net realisable value. Therefore, auditing the Group’s provision for impairment of inventories involved complex auditor judgment and estimation.</p> <p>For the disclosure of provision for impairment of inventories, refer to Notes III, 8 and 29 Significant accounting policies and accounting estimates, and Note V, 8 and 47 to key items of the consolidated financial statements.</p>	<p>We obtained an understanding, evaluated the design, and tested the operating effectiveness of controls over the Group’s accounting for the provision for impairment of inventories.</p> <p>The audit procedures we performed include:</p> <ul style="list-style-type: none">• Assessing the process, methods and assumptions used to determine the provision for inventories. These included comparing management’s calculations for consistency against those used in the prior year and considering whether there was any indication of management bias;• Combining with inventory monitoring procedure, tested the underlying data used by management to calculate the provision for obsolete inventories, typically an aged inventory analysis, by selecting samples to re-perform the ageing calculation;• Comparing the historical and subsequent sales and usage information of inventories;• Testing the estimated selling prices and estimated costs to be incurred to completion and re-calculated the provision for inventories on a sampling basis.



(IV) OTHER INFORMATION INCLUDED IN THE ANNUAL REPORT

Management of the Company is responsible for the other information. The other information comprises all of the information included in the Annual Report other than the consolidated financial statements and our auditors' report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

(V) RESPONSIBILITIES OF MANAGEMENT AND THOSE CHARGED WITH GOVERNANCE FOR THE FINANCIAL STATEMENTS

Management is responsible for the preparation and fair presentation of these financial statements in accordance with the CASs, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing these financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

(VI) AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with CSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are generally considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

AUDITORS' REPORT



(VI) AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

As part of an audit in accordance with CSAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- (1) Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- (2) Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of internal control.
- (3) Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- (4) Conclude on the appropriateness of the management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- (5) Evaluate the overall presentation (including the disclosures), structure and content of the financial statements, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- (6) Obtain sufficient and appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.



(VI) AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Ernst & Young Hua Ming LLP

Chinese Certified Public Accountant: **Meng Dong**

(Engagement partner)

Chinese Certified Public Accountant: **Wang Li Xin**

Beijing, the People's Republic of China

21 March 2023

Consolidated Balance Sheet

31 December 2022

Expressed in Renminbi Yuan

ASSETS	Note V	31 December 2022	31 December 2021
Current assets			
Cash at bank and on hand	1	1,190,828,339.52	801,647,230.19
Financial assets held for trading	2	80,167,958.90	390,948,111.87
Notes receivable	3	252,144,057.13	372,363,594.25
Accounts receivable	4	730,204,276.92	451,703,130.78
Receivables for financing	5	81,708,392.03	–
Prepayments	6	474,702,228.34	84,362,851.17
Other receivables	7	20,352,381.01	18,473,721.44
Inventories	8	1,483,264,548.04	916,083,064.72
Other current assets	9	13,728,762.53	6,081,071.74
Total current assets		4,327,100,944.42	3,041,662,776.16
Non-current assets			
Long-term equity investments	10	42,508,902.76	75,508,769.52
Investments in other equity instruments	11	33,902,315.43	32,987,123.03
Investment properties	12	122,687,909.50	–
Fixed assets	13	694,446,705.71	567,876,494.59
Construction in progress	14	193,776,441.01	54,689,418.17
Right-of-use assets	15	41,886,980.15	47,942,433.91
Intangible assets	16	85,750,633.28	74,833,172.67
Development costs	17	316,521,697.31	172,728,127.43
Long-term prepaid expenses	18	66,244,507.84	57,378,801.04
Deferred tax assets	19	3,243,844.60	7,484,219.27
Other non-current assets	20	182,817,172.08	31,922,847.40
Total non-current assets		1,783,787,109.67	1,123,351,407.03
Total assets		6,110,888,054.09	4,165,014,183.19

The accompanying notes to financial statements form an integral part of these financial statements.

Consolidated Balance Sheet

31 December 2022
Expressed in Renminbi Yuan

LIABILITIES AND EQUITY	Note V	31 December 2022	31 December 2021
Current liabilities			
Short-term borrowings	21	54,000,000.00	100,000.00
Accounts payable	22	201,182,480.44	200,262,918.53
Contract liabilities	23	210,402,283.73	126,274,826.25
Employee benefits payable	24	192,340,093.25	162,012,097.14
Taxes payable	25	10,735,058.29	15,731,095.55
Other payables	26	72,335,632.38	31,163,593.01
Current portion of non-current liabilities	27	15,181,384.65	44,832,935.50
Other current liabilities	28	147,699,399.83	132,771,061.35
Total current liabilities		903,876,332.57	713,148,527.33
Non-current liabilities			
Long-term borrowings	29	–	18,200,000.00
Lease liabilities	30	33,162,705.60	38,553,525.36
Deferred income	31	16,548,141.05	24,215,577.84
Deferred tax liabilities	19	4,131,496.92	3,994,006.16
Total non-current liabilities		53,842,343.57	84,963,109.36
Total liabilities		957,718,676.14	798,111,636.69
Shareholders' equity			
Share capital	32	81,665,650.00	81,450,200.00
Capital surplus	33	1,622,905,978.93	1,259,212,929.93
Other comprehensive income	34	13,684,518.28	10,509,082.70
Surplus reserves	35	40,832,825.00	40,725,100.00
Undistributed profits	36	2,772,141,379.40	1,748,348,393.72
Total equity attributable to shareholders of the parent company		4,531,230,351.61	3,140,245,706.35
Minority interests		621,939,026.34	226,656,840.15
Total shareholders' equity		5,153,169,377.95	3,366,902,546.50
Total liabilities and shareholders' equity		6,110,888,054.09	4,165,014,183.19

The financial statements have been signed by the following persons:

Legal representative:

Principal in charge of accounting:

Head of accounting department:

The accompanying notes to financial statements form an integral part of these financial statements.

Consolidated Income Statement

Year ended 31 December 2022
Expressed in Renminbi Yuan

	Note V	2022	2021
Revenue	37	3,538,908,884.94	2,577,262,346.93
Less: Cost of sales	37	1,250,271,225.31	1,058,923,542.46
Taxes and surcharges	38	24,560,276.91	12,263,146.20
Selling expenses	39	222,818,922.72	171,639,406.24
Administrative expenses	40	138,935,477.14	112,055,490.71
Research and development expenses	41	735,419,692.61	691,637,283.03
Finance expenses	42	(7,753,839.50)	(1,171,733.58)
Including: Interest expenses	42	4,354,699.62	4,527,523.11
Interest income	42	14,813,114.77	8,431,206.09
Add: Other income	43	106,915,037.93	108,883,535.56
Investment income (loss is expressed with negative value)	44	(1,674,356.94)	(2,713,577.29)
Including: Investment loss from associates and joint ventures	44	(8,129,075.27)	(5,526,536.20)
Profit or loss arising from changes in fair value (loss is expressed with negative value)	45	1,866,476.71	948,111.87
Credit impairment losses (loss is expressed with negative value)	46	1,109,908.97	(1,311,048.83)
Asset impairment losses (loss is expressed with negative value)	47	(162,804,292.45)	(64,880,461.60)
Gains on disposal of assets (loss is expressed with negative value)	48	1,329,678.22	519,205.28
Operating profit		1,121,399,582.19	573,360,976.86
Add: Non-operating income	49	111,404.79	104,975.63
Less: Non-operating expenses	50	300.00	16,433.13
Total profit		1,121,510,686.98	573,449,519.36
Less: Income tax expenses	52	4,245,922.69	14,124,809.57
Net profit		1,117,264,764.29	559,324,709.79
Classified by continuity of operations			
Net profit from continuing operations		1,117,264,764.29	559,324,709.79
Classified by ownership of the equity			
Net profit attributable to shareholders of the parent company		1,076,843,340.68	514,466,780.71
Gains or losses of minority interests		40,421,423.61	44,857,929.08

The accompanying notes to financial statements form an integral part of these financial statements.

Consolidated Income Statement

Year ended 31 December 2022
Expressed in Renminbi Yuan

	Note V	2022	2021
Other comprehensive income, net of tax	34	3,175,435.58	1,172,303.73
Other comprehensive income, net of tax, attributable to shareholders of the parent company		3,175,435.58	1,172,303.73
Other comprehensive income that may not be reclassified to profit or loss			
Changes in fair value of investments in other equity instruments		777,913.54	1,931,730.92
Other comprehensive income that will be reclassified to profit or loss			
Exchange differences on translation of foreign currency financial statements		2,397,522.04	(759,427.19)
Other comprehensive income, net of tax, attributable to minority interests	34	–	–
Total comprehensive income		1,120,440,199.87	560,497,013.52
Including:			
Attributable to shareholders of the parent company		1,080,018,776.26	515,639,084.44
Attributable to minority interests		40,421,423.61	44,857,929.08
Earnings per share	53		
Basic earnings per share		1.32	0.69
Diluted earnings per share		1.31	0.69

The accompanying notes to financial statements form an integral part of these financial statements.

Consolidated Statement of Changes in Equity

Year ended 31 December 2022
Expressed in Renminbi Yuan

2022

	Attributable to owners of the parent							Total shareholders' equity
	Share capital	Capital surplus	Other comprehensive income	Surplus reserves	Undistributed profits	Sub-total	Minority interests	
I. Balance at beginning of year	81,450,200.00	1,259,212,929.93	10,509,082.70	40,725,100.00	1,748,348,393.72	3,140,245,706.35	226,656,840.15	3,366,902,546.50
II. Changes for the year								
1. Total comprehensive income	-	-	3,175,435.58	-	1,076,843,340.68	1,080,018,776.26	40,421,423.61	1,120,440,199.87
2. Capital contribution and withdrawal by shareholders								
(1) Issuance of A-Share ordinary shares	215,450.00	38,425,507.50	-	-	-	38,640,957.50	530,418,583.02	569,059,540.52
(2) Amount of share-based payment included in owners' equity	-	149,709,721.06	-	-	-	149,709,721.06	-	149,709,721.06
3. Profit distribution								
(1) Appropriation to surplus reserve	-	-	-	107,725.00	(107,725.00)	-	-	-
(2) Distribution to owners	-	-	-	-	(52,942,630.00)	(52,942,630.00)	-	(52,942,630.00)
4. Transfer within equity								
(1) Others	-	175,557,820.44	-	-	-	175,557,820.44	(175,557,820.44)	-
III. Balance at end of year	81,665,650.00	1,622,905,978.93	13,684,518.28	40,832,825.00	2,772,141,379.40	4,531,230,351.61	621,939,026.34	5,153,169,377.95

The accompanying notes to financial statements form an integral part of these financial statements.

2021

	Attributable to owners of the parent							Total shareholders' equity
	Share capital	Capital surplus	Other comprehensive income	Surplus reserves	Undistributed profits	Sub-total	Minority interests	
I. Balance at beginning of year	69,450,200.00	576,858,667.16	9,336,778.97	35,478,142.63	1,239,128,570.38	1,930,252,359.14	181,798,911.07	2,112,051,270.21
II. Changes for the year								
1. Total comprehensive income	-	-	1,172,303.73	-	514,466,780.71	515,639,084.44	44,857,929.08	560,497,013.52
2. Capital contribution and withdrawal by shareholders								
(1) Issuance of A-Share ordinary shares	12,000,000.00	668,282,781.80	-	-	-	680,282,781.80	-	680,282,781.80
(2) Amount of share-based payment included in owners' equity	-	14,071,480.97	-	-	-	14,071,480.97	-	14,071,480.97
3. Profit distribution								
(1) Appropriation to surplus reserve	-	-	-	5,246,957.37	(5,246,957.37)	-	-	-
III. Balance at end of year	81,450,200.00	1,259,212,929.93	10,509,082.70	40,725,100.00	1,748,348,393.72	3,140,245,706.35	226,656,840.15	3,366,902,546.50

The accompanying notes to financial statements form an integral part of these financial statements.

Consolidated Statement of Cash Flows

Year ended 31 December 2022
Expressed in Renminbi Yuan

	Note V	2022	2021
1. Cash flows from operating activities			
Cash received from sale of goods or rendering of services		3,829,273,378.78	2,879,286,349.85
Receipts of taxes and surcharges refunds		58,069,775.06	16,630,632.78
Cash received relating to other operating activities	54	66,264,412.08	88,307,613.17
Sub-total of cash inflows		3,953,607,565.92	2,984,224,595.80
Cash paid for goods and services		2,407,204,691.13	1,474,143,467.75
Cash payments to and on behalf of employees		826,549,990.41	689,916,569.09
Payments of taxes and surcharges		186,077,346.55	92,029,827.76
Cash paid relating to other operating activities	54	212,490,067.42	125,929,853.12
Sub-total of cash outflows		3,632,322,095.51	2,382,019,717.72
Net cash flows from operating activities		321,285,470.41	602,204,878.08
2. Cash flows from investing activities			
Cash received from disposal of investments		1,146,259,800.00	514,000,000.00
Cash received from return on investments		6,454,718.33	2,812,958.91
Net cash received from disposal of fixed assets, intangible assets and other long-term assets		2,528,091.94	660,872.96
Cash received relating to other investing activities	54	7,769,636.95	2,225,150.98
Sub-total of cash inflows		1,163,012,247.22	519,698,982.85
Cash paid to acquire fixed assets, intangible assets and other long-term assets		782,526,753.65	564,496,903.97
Cash payments for investments		513,000,000.00	1,137,999,381.20
Sub-total of cash outflows		1,295,526,753.65	1,702,496,285.17
Net cash flows used in investing activities		(132,514,506.43)	(1,182,797,302.32)

The accompanying notes to financial statements form an integral part of these financial statements.

Consolidated Statement of Cash Flows

Year ended 31 December 2022

Expressed in Renminbi Yuan

	Note V	2022	2021
3. Cash flows from financing activities			
Cash received from capital contribution		575,814,257.50	696,803,773.58
Including: cash received from minority shareholders' investments to subsidiaries		530,418,583.02	–
Cash received from borrowings		78,569,230.20	167,250,104.08
Sub-total of cash inflow		654,383,487.70	864,053,877.66
Cash repayments of borrowings		73,669,230.20	117,350,104.08
Cash paid for distribution of dividends or profits or for interest expenses		55,133,885.75	2,191,029.83
Cash paid relating to other financing activities	54	20,993,509.81	25,707,026.35
Sub-total of cash outflows		149,796,625.76	145,248,160.26
Net cash flows from financing activities		504,586,861.94	718,805,717.40
4. Effect of foreign exchange rate changes on cash and cash equivalents			
		11,173,813.21	(1,827,353.70)
5. Net increase in cash and cash equivalents	55	704,531,639.13	136,385,939.46
Add: Cash and cash equivalents at beginning of year	55	415,755,306.55	279,369,367.09
6. Cash and cash equivalents at end of year	55	1,120,286,945.68	415,755,306.55

The accompanying notes to financial statements form an integral part of these financial statements.

Balance Sheet

31 December 2022
Expressed in Renminbi Yuan

ASSETS	Note XV	31 December 2022	31 December 2021
Current assets			
Cash at bank and on hand		680,733,206.51	531,198,432.32
Financial assets held for trading		80,167,958.90	390,948,111.87
Notes receivable		236,424,721.49	333,458,591.22
Accounts receivable	1	690,793,776.30	446,084,192.25
Receivables for financing		73,301,943.39	–
Prepayments		473,146,424.02	83,590,357.42
Other receivables	2	4,839,855.49	3,115,175.04
Inventories		1,480,135,764.37	913,224,523.66
Other current assets		759,429.46	444,878.11
Total current assets		3,720,303,079.93	2,702,064,261.89
Non-current assets			
Long-term equity investments	3	132,677,564.53	120,245,620.99
Investments in other equity instruments		27,526,636.02	26,611,443.62
Investment properties		122,687,909.50	–
Fixed assets		511,061,173.99	441,049,415.95
Construction in progress		30,792,034.96	27,126,966.12
Right-of-use assets		14,293,613.60	17,064,328.30
Intangible assets		85,445,571.92	74,833,172.67
Development costs		319,784,468.41	175,990,898.53
Long-term prepaid expenses		46,899,190.10	29,314,142.69
Other non-current assets		803,874.28	5,142,877.20
Total non-current assets		1,291,972,037.31	917,378,866.07
Total assets		5,012,275,117.24	3,619,443,127.96

The accompanying notes to financial statements form an integral part of these financial statements.

Balance Sheet

31 December 2022

Expressed in Renminbi Yuan

LIABILITIES AND EQUITY	31 December 2022	31 December 2021
Current liabilities		
Short-term borrowings	54,000,000.00	100,000.00
Accounts payable	218,480,732.01	201,228,542.50
Contract liabilities	208,945,883.83	124,745,290.02
Employee benefits payable	178,831,572.88	151,432,889.17
Taxes payable	10,593,506.93	10,966,486.24
Other payables	35,884,287.10	27,461,397.62
Current portion of non-current liabilities	5,424,494.65	37,065,328.94
Other current liabilities	117,787,219.89	100,288,476.70
Total current liabilities	829,947,697.29	653,288,411.19
Non-current liabilities		
Long-term borrowings	–	18,200,000.00
Lease liabilities	10,056,349.03	12,277,032.04
Deferred income	8,725,902.31	11,490,362.27
Deferred tax liabilities	4,128,995.40	3,991,716.54
Total non-current liabilities	22,911,246.74	45,959,110.85
Total liabilities	852,858,944.03	699,247,522.04
Owners' equity		
Share capital	81,665,650.00	81,450,200.00
Capital reserves	1,436,433,553.18	1,248,298,324.62
Other comprehensive income	14,898,539.22	14,120,625.68
Surplus reserves	40,832,825.00	40,725,100.00
Undistributed profits	2,585,585,605.81	1,535,601,355.62
Total equity	4,159,416,173.21	2,920,195,605.92
Total liabilities and equity	5,012,275,117.24	3,619,443,127.96

The accompanying notes to financial statements form an integral part of these financial statements.

Income Statement

Year ended 31 December 2022

Expressed in Renminbi Yuan

	Note XV	2022	2021
Revenue	4	3,312,532,626.72	2,324,594,310.84
Less: Cost of sales	4	1,160,870,397.60	964,416,957.35
Taxes and surcharges		24,356,976.82	12,156,447.79
Selling expenses		215,811,608.03	164,072,002.38
Administrative expenses		88,894,684.75	75,785,176.67
Research and development expenses	5	695,468,621.72	650,305,258.46
Finance expenses		(4,468,687.83)	98,038.84
Including: Interest expenses		2,183,783.43	2,853,080.23
Interest income		9,921,008.59	5,169,347.35
Add: Other income		88,897,247.30	80,878,958.22
Investment income	6	(1,937,356.62)	(2,713,577.29)
Including: Investment loss in associates and joint ventures		(7,994,756.46)	(5,526,536.20)
Gain on changes in fair value		1,866,476.71	948,111.87
Credit impairment losses (loss is expressed with negative value)		1,373,570.76	(633,212.22)
Asset impairment losses (loss is expressed with negative value)		(137,871,117.99)	(67,776,627.91)
Gains on disposals of assets (loss is expressed with negative value)		19,106,759.40	525,911.37
Operating profit		1,103,034,605.19	468,989,993.39
Add: Non-operating income		–	–
Less: Non-operating expenses		–	4,000.00
Total profit		1,103,034,605.19	468,985,993.39
Less: Income tax expenses		–	–
Net profit		1,103,034,605.19	468,985,993.39
Other comprehensive income, net of tax		777,913.54	1,931,730.92
Other comprehensive income that will not be reclassified to profit or loss			
Other equity instrument investments changes in fair value		777,913.54	1,931,730.92
Total comprehensive income		1,103,812,518.73	470,917,724.31

The accompanying notes to financial statements form an integral part of these financial statements.

Statement of Changes in Equity

Year ended 31 December 2022
Expressed in Renminbi Yuan

2022

	Share capital	Capital surplus	Other comprehensive income	Surplus reserves	Undistributed profits	Total shareholders' equity
I. Balance at beginning of year	81,450,200.00	1,248,298,324.62	14,120,625.68	40,725,100.00	1,535,601,355.62	2,920,195,605.92
II. Changes for the year						
1. Total comprehensive income	-	-	777,913.54	-	1,103,034,605.19	1,103,812,518.73
2. Capital contribution and withdrawal by shareholders						
(1) Issuance of A-Share ordinary shares	215,450.00	38,425,507.50	-	-	-	38,640,957.50
(2) Amount of share-based payment included in owners' equity	-	149,709,721.06	-	-	-	149,709,721.06
3. Profit distribution						
(1) Appropriation to surplus reserves	-	-	-	107,725.00	(107,725.00)	-
(2) Distribution to owners	-	-	-	-	(52,942,630.00)	(52,942,630.00)
III. Balance at end of year	81,665,650.00	1,436,433,553.18	14,898,539.22	40,832,825.00	2,585,585,605.81	4,159,416,173.21

The accompanying notes to financial statements form an integral part of these financial statements.

2021

	Share capital	Capital surplus	Other comprehensive income	Surplus reserves	Undistributed profits	Total shareholders' equity
I. Balance at beginning of year	69,450,200.00	565,944,061.85	12,188,894.76	35,478,142.63	1,071,862,319.60	1,754,923,618.84
II. Changes for the year						
1. Total comprehensive income	-	-	1,931,730.92	-	468,985,993.39	470,917,724.31
2. Capital contribution and withdrawal by shareholders						
(1) Issuance of A-Share ordinary shares	12,000,000.00	668,282,781.80	-	-	-	680,282,781.80
(2) Amount of share-based payment included in owners' equity	-	14,071,480.97	-	-	-	14,071,480.97
3. Profit distribution						
(1) Appropriation to surplus reserves	-	-	-	5,246,957.37	(5,246,957.37)	-
III. Balance at end of year	81,450,200.00	1,248,298,324.62	14,120,625.68	40,725,100.00	1,535,601,355.62	2,920,195,605.92

The accompanying notes to financial statements form an integral part of these financial statements.

Statement of Cash Flows

Year ended 31 December 2022

Expressed in Renminbi Yuan

	2022	2021
1. Cash flows from operating activities		
Cash received from sale of goods or rendering of services	3,615,873,624.69	2,633,306,323.32
Refund of taxes and surcharges	41,052,254.53	16,630,632.78
Cash received relating to other operating activities	54,647,773.10	69,675,883.80
Sub-total of cash inflows	3,711,573,652.32	2,719,612,839.90
Cash paid for goods and services	2,400,280,445.86	1,476,818,025.46
Cash paid to and on behalf of employees	722,535,252.26	579,176,192.54
Payments of taxes and surcharges	174,897,715.88	69,075,744.15
Cash paid relating to other operating activities	186,992,852.91	107,781,199.50
Sub-total of cash outflows	3,484,706,266.91	2,232,851,161.65
Net cash flows from operating activities	226,867,385.41	486,761,678.25
2. Cash flows from investing activities		
Cash received from disposal of investments	1,028,259,800.00	472,000,000.00
Cash received from return on investments	6,057,399.84	2,812,958.91
Net cash received from disposal of fixed assets, intangible assets and other long-term assets	2,507,737.95	659,103.04
Cash received relating to other investing activities	5,799,071.72	699,547.22
Sub-total of cash inflows	1,042,624,009.51	476,171,609.17
Cash paid to acquire fixed assets, intangible assets and other long-term assets	389,387,168.82	456,440,966.17
Cash payments for investments	513,000,000.00	1,121,397,683.62
Total cash outflows from investing activities	902,387,168.82	1,577,838,649.79
Net cash flows from/(used in) investing activities	140,236,840.69	(1,101,667,040.62)

The accompanying notes to financial statements form an integral part of these financial statements.

Statement of Cash Flows

Year ended 31 December 2022
Expressed in Renminbi Yuan

	2022	2021
3. Cash flows from financing activities		
Cash received from capital contribution	38,640,957.50	696,803,773.58
Cash received from borrowings	78,569,230.20	167,250,104.08
Sub-total of cash inflows	117,210,187.70	864,053,877.66
Cash repayments of borrowings	73,669,230.20	117,350,104.08
Cash paid for distribution of dividends or profits or for interest expenses	55,133,885.75	2,191,029.83
Cash paid relating to other financing activities	6,398,806.35	16,535,347.29
Sub-total of cash outflows	135,201,922.30	136,076,481.20
Net cash flows (used in)/from financing activities	(17,991,734.60)	727,977,396.46
4. Effect of foreign exchange rate changes on cash and cash equivalents	6,745,227.26	(289,223.76)
5. Net increase in cash and cash equivalents	355,857,718.76	112,782,810.33
Add: Cash and cash equivalents at beginning of year	254,334,093.91	141,551,283.58
6. Cash and cash equivalents at the end of year	610,191,812.67	254,334,093.91

The accompanying notes to financial statements form an integral part of these financial statements.

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

I. GENERAL INFORMATION

Shanghai Fudan Microelectronics Group Co., Ltd (the “Company”), which was established on 10 June, 1998 is a joint stock limited liability company incorporated in Shanghai, the People’s Republic of China. The RMB ordinary shares (A-Share) and H shares issued by the Company were listed on the Shanghai Stock Exchange (“SSE”) and the Stock Exchange of Hong Kong Limited (“SEHK”), respectively. The registered address of the company is No. 220, Handan Road, Shanghai.

The principal activities of the Company and its subsidiaries (hereinafter collectively referred to as the “Group”) include the design, development and sale of integrated circuit products; and integrated circuit product testing services.

The financial statements have been approved and reported by a resolution of the Board of Directors of the Company on 21 March 2023.

The scope of consolidation in the consolidated financial statements is determined on the basis of control. For changes in the current year, see Note VI.

II. BASIS OF PREPARATION OF THE FINANCIAL STATEMENTS

The financial statements have been prepared in accordance with the Accounting Standards for Business Enterprises – Basic Standards promulgated by the Ministry of Finance and the specific accounting standards, application guidelines, interpretations and other relevant regulations subsequently announced and revised (collectively “Accounting Standards for Business Enterprises” or “ASBEs”).

The financial statements are presented on a going concern basis.

Except for certain financial instruments, the financial statements have been prepared under the pricing principle of historical cost. If the assets are impaired, corresponding provisions for impairment shall be made according to relevant regulations.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES

The Group has formulated specific accounting policies and accounting estimates according to the characteristics of its actual production and operation, which is mainly embodied in the impairment of financial instruments, depreciation of fixed assets, amortization of intangible assets, eligibility of the development costs for capitalisation and recognition and measurement of revenue.

1. Declaration of compliance with ASBEs

The financial statements are prepared by the Group in compliance with the Accounting Standards for Business Enterprises, and give a true and complete view of the consolidated and parent company's financial positions of the Group as at 31 December 2022 and the consolidated and parent company's operating results and cash flows of the Group for 2022.

2. Accounting period

The Group adopts the Gregorian calendar year as its accounting year, commencing from 1 January to 31 December each year.

3. Functional currency

The Company's functional and presentation currency is Renminbi ("RMB"). The currency unit is RMB Yuan.

Each subsidiary or associate of the Group determines its own functional currency based on the primary economic environment in which it operates. In the preparation of the financial statements, their functional currencies are translated into RMB.

4. Consolidated financial statements

The scope of the consolidated financial statements, which include the financial statements of the Company and all of its subsidiaries, is determined on the basis of control. A subsidiary is an entity that is controlled by the Company.

The significant accounting policies and accounting periods adopted by the subsidiaries are determined based on the uniform accounting policies and accounting periods set out by the Company. The effects of all intra-group transactions between the Company and its subsidiaries and among subsidiaries on the consolidated financial statements are eliminated on consolidation.

When the amount of loss for the period attributable to the minority shareholders of a subsidiary exceeds the minority shareholders' portion of the opening balance of owners' equity of the subsidiary, the excess amount is still allocated against minority shareholders' interests.

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

4. Consolidated financial statements *(continued)*

For subsidiaries acquired through business combinations not involving entities under common control, the operating results and cash flows from the acquisition date (the date when control is obtained) are included in the consolidated income statement and consolidated cash flow statement, and continue to be consolidated until the date such control ceases. While preparing the consolidated financial statements, the Group shall adjust the subsidiary's financial statements, on the basis of the fair values of the identifiable assets, liabilities and contingent liabilities recognized on the acquisition date.

For subsidiaries acquired through a business combination involving entities under common control are included in the Group's scope of consolidation as if they had been included in the scope of consolidation from the date when they first came under the common control of the ultimate controlling party, and their operating results and cash flows from the beginning of the earliest reporting period are included in the consolidated income statement and consolidated cash flow statement, as appropriate.

The Group reassesses whether or not it controls an investee if any change in facts and circumstances indicates that there are changes to one or more of the three elements of control.

5. Cash and cash equivalents

Cash comprises the Group's cash on hand and deposits that can be readily withdrawn on demand. Cash equivalents are short-term, highly liquid investments held by the Group, that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

6. Foreign currency transactions and foreign currency translation

The Group translates foreign currency transactions into its functional currency.

Foreign currency transactions are initially recorded, on initial recognition in the functional currency using the spot exchange rates prevailing at the dates of transactions. Monetary items denominated in foreign currencies are translated at the spot exchange rates ruling at the balance sheet date. Differences arising on settlement or translation of monetary items are recognised in profit or loss, with the exception of those relating to foreign currency borrowings specifically for the construction and acquisition of qualifying assets, which are capitalised in accordance with the guidance for capitalisation of borrowing costs. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions, and the amount denominated in the functional currency is not changed. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was measured. The resulting exchange differences are recognised in profit or loss or other comprehensive income depending on the nature of the non-monetary items.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

6. Foreign currency transactions and foreign currency translation *(continued)*

For foreign operations, the Group translates their functional currency amounts into RMB when preparing the financial statements as follows: as at the balance sheet date, the assets and liabilities are translated using the spot exchange rate at the balance sheet date, and equity items other than “undistributed profit” are translated at the spot exchange rates at the dates of transactions; revenue and expense items in profit or loss are translated using the average exchange rates for the period during which the transactions occur. The resulting exchange differences are recognised in other comprehensive income. On disposal of a foreign operation, the component of other comprehensive income relating to that particular foreign operation is recognised in profit or loss. If the disposal only involves a portion of a particular foreign operation, the component of other comprehensive income relating to that particular foreign operation is recognised in profit or loss on a pro-rata basis.

Foreign currency cash flows and the cash flows of foreign subsidiaries are translated using the spot exchange rates for the period during which the cash flows occur. The effect of exchange rate changes on cash is separately presented as an adjustment item in the statement of cash flows.

7. Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Recognition and derecognition

The Group recognises a financial asset or a financial liability when it becomes a party to the contractual provisions of a financial instrument.

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e., removed from the Group’s consolidated balance sheet) when:

- (1) the rights to receive cash flows from the financial asset have expired; or
- (2) the Group has transferred its rights to receive cash flows from the financial asset, or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a “pass-through” arrangement; and either (a) has transferred substantially all the risks and rewards of the financial asset, or (b) has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the financial asset.

A financial liability is derecognised when the obligation under the liability is discharged or cancelled, or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and a recognition of a new liability, and the difference between the respective carrying amounts is recognised in profit or loss.

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

7. Financial instruments *(continued)*

Recognition and derecognition (continued)

Regular way purchases and sales of financial assets are recognised and derecognised using trade date accounting. Regular way purchases or sales are purchases or sales of financial assets that require delivery within the period generally established by regulation or convention in the marketplace. The trade date is the date that the Group committed to purchase or sell a financial asset.

Classification and measurement of financial assets

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them including financial assets at amortised cost, financial assets at fair value through other comprehensive income and financial assets at fair value through profit or loss. All affected related financial assets will be reclassified only if the Group changes its business model for managing financial assets.

Financial assets are measured at fair value on initial recognition, but accounts receivable or notes receivable arising from the sale of goods or rendering of services that do not contain significant financing components or for which the Group has applied the practical expedient of not adjusting the effect of a significant financing component due within one year, are initially measured at the transaction price.

For financial assets at fair value through profit or loss, relevant transaction costs are directly recognised in profit or loss, and transaction costs relating to other financial assets are included in the initial recognition amounts.

The subsequent measurement of financial assets depends on their classification as follows:

Debt investments measured at amortised cost

The Group measures financial assets at amortised cost if both of the following conditions are met: the financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows; the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. Financial assets at amortised cost are subsequently measured using the effective interest method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

Equity investments at fair value through other comprehensive income

The Group can elect to classify irrevocably its equity investments which are not held for trading as equity investments designated at fair value through other comprehensive income. Only the relevant dividend income (excluding the dividend income explicitly recovered as part of the investment cost) is recognised in profit or loss. Subsequent changes in the fair value are included in other comprehensive income, and no provision for impairment is made. When the financial asset is derecognised, the accumulated gains or losses previously included in other comprehensive income are transferred from other comprehensive income to retained earnings.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

7. Financial instruments *(continued)*

Classification and measurement of financial assets (continued)

Financial assets at fair value through profit or loss

The financial assets other than the above financial assets measured at amortised cost and financial assets at fair value through other comprehensive income are classified as financial assets at fair value through profit or loss. Such financial assets are subsequently measured at fair value with net changes in fair value recognised in profit or loss.

After an enterprise designates a financial asset as a financial assets at fair value through profit or loss at initial recognition, it cannot be reclassified as other types of financial assets; other types of financial assets cannot be redesignated as financial assets at fair value through profit or loss after initial recognition.

Classification and measurement of financial liabilities

Except for financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition or when the continuing involvement approach applies, the Group's financial liabilities are, on initial recognition, classified into financial liabilities at fair value through profit or loss or financial liabilities at amortized cost. For financial liabilities at fair value through profit or loss, relevant transaction costs are directly recognised in profit or loss, and transaction costs relating to financial liabilities at amortized cost are included in the initial recognition amounts.

The subsequent measurement of financial liabilities depends on their classification:

Financial liabilities at amortized cost

After initial recognition, such financial liabilities are measured at amortised cost using the effective interest method.

Impairment of financial instruments

Based on the expected credit losses ("ECLs"), the Group recognises an allowance for ECLs for the financial assets measured at amortised cost.

For trade receivables and contract assets that do not contain a significant financing component, the Group applies the simplified approach to recognise a loss allowance based on lifetime ECLs.

Except for financial assets which apply the simplified approach as mentioned above, the Group assesses whether the credit risk has increased significantly since initial recognition at each balance sheet date. If the credit risk has not increased significantly since initial recognition (stage 1), the loss allowance is measured at an amount equal to 12-month ECLs by the Group and the interest income is calculated according to the carrying amount and the effective interest rate; if the credit risk has increased significantly since initial recognition but are not credit-impaired (stage 2), the loss allowance is measured at an amount equal to lifetime ECLs by the Group and the interest income is calculated according to the carrying amount and the effective interest rate; if such financial assets are credit-impaired after initial recognition (stage 3), the loss allowance is measured at an amount equal to lifetime ECLs by the Group and the interest income is calculated according to the amortised cost and the effective interest rate. If the credit risk of financial instruments is low at the balance sheet date, the Group assumes that the credit risk has not increased significantly since initial recognition.

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

7. Financial instruments *(continued)*

Impairment of financial instruments (continued)

The Group assesses the expected credit losses of financial instruments on an individual and collective basis. Considering the credit risk characteristics of different customers, the Group divides the accounts receivable into a combination of sales of high-reliability products, a combination of sales of industrial products, and a combination of test services, combined with aging analysis to evaluate the expected credit losses of financial instruments.

For the disclosure of the Group's criteria on the significant increase in credit risk and the definition of credit impaired assets, refer to Note VIII. 3.

The Group measures expected credit losses on a financial instrument in a way that reflects: (a) an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes; (b) the time value of money; and (c) reasonable and supportable information that is available without undue cost or effort at the balance sheet date about past events, current conditions and forecasts of future economic conditions.

When the Group no longer reasonably expects to collect all or part of the contractual cash flows of the financial asset, the Group directly writes down the carrying amount of the financial asset.

Offsetting of financial instruments

Where the Group has a legal right that is currently enforceable to set off the recognised financial assets and financial liabilities, and intends either to settle on a net basis, or to realise the financial asset and settle the financial liability simultaneously, a financial asset and a financial liability shall be offset and the net amount is presented in the balance sheet.

Transfer of financial assets

A financial asset is derecognised when the Group has transferred substantially all the risks and rewards of the asset to the transferee. A financial asset is not derecognised when the Group retains substantially all the risks and rewards of the financial asset.

When the Group has neither transferred nor retained substantially all the risks and rewards of the financial asset, it either (i) derecognises the financial asset and recognises the assets and liabilities created in the transfer when it has not retained control of the asset; or (ii) continues to recognise the transferred asset to the extent of the Group's continuing involvement, in which case the Group also recognises an associated liability.

Continuing involvement that takes the form of a guarantee over the transferred financial asset is measured at the lower of the original carrying amount of the financial asset and the guarantee amount.

8. Inventories

Inventories comprise raw materials, work in progress, and finished goods.

Inventories are initially carried at cost. Cost of inventories comprises all costs of purchase, costs of conversion and other costs. The actual cost of inventories transferred out is determined by using the weighted average method. Turnover materials include low value consumables and packing materials, which are on the immediate write-off basis.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

8. Inventories *(continued)*

The Group adopts a perpetual inventory system.

At the balance sheet date, inventories are stated at the lower of cost and net realisable value. The inventories are written down below cost to net realisable value and the write-down is recognised in profit or loss if the cost is higher than the net realisable value. Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale and relevant taxes. The provision is made by item for raw materials and finished goods.

9. Long-term equity investments

Long-term equity investments include equity investments in subsidiaries and associates.

A long-term equity investment is initially measured at its initial investment cost on acquisition. For a business combination involving entities under common control, the initial investment cost of the long-term equity investment is the carrying amount of the absorbing party's share of the owner's equity of the party being absorbed on the consolidated financial statements of the ultimate controller. The difference between the initial investment cost and the carrying amount of the consideration paid for the combination shall be adjusted against capital reserve (where the capital reserve is not sufficient to absorb the difference, any excess shall be adjusted against retained earnings). Other comprehensive income prior to the date of the business combination is accounted for on the same basis as that used to account for direct disposal of such assets or liabilities by the investee, and shareholders' equity recognised as a result of changes in other shareholders' equity of the investee other than net profit or loss, other comprehensive income and profit distribution is transferred to profit or loss for the current period upon such disposal, of which the investment which remains long-term equity investment upon the disposal is transferred in proportion, and the investment which is converted into financial instruments upon the disposal is transferred in full. The initial investment cost of the long-term equity investment is the cost of acquisition for a business combination not under common control (for a business combination not under common control achieved in stages, the initial investment cost is measured at the carrying amount of the equity investments in the acquiree before the acquisition date plus the additional investment cost incurred on the acquisition date). The cost of combination includes the assets transferred and the liabilities incurred or assumed by the acquirer, and the fair value of equity securities issued. Other comprehensive income held prior to the date of the acquisition and recognised using the equity method is accounted for on the same basis as that used to account for direct disposal of such assets or liabilities by the investee, and shareholders' equity recognised as a result of changes in other shareholders' equity of the investee other than net profit or loss, other comprehensive income and profit distribution is transferred to profit or loss for the current period upon such disposal, of which the investment which remains long-term equity investment upon the disposal is transferred in proportion, and the investment which is converted into other equity instruments investments upon the disposal is transferred in full. For a long-term equity investment acquired other than through a business combination, the initial investment cost is determined as follows: if acquired by paying cash, the initial investment cost is the actual purchase price paid and those costs, taxes and other necessary expenditures directly attributable to the acquisition of the long-term equity investment; if acquired by the issue of equity securities, the initial investment cost is the fair value of the securities issued.

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

9. Long-term equity investments *(continued)*

For a long-term equity investment where the Group can exercise control over the investee, the long-term investment is accounted for using the cost method in the Company's individual financial statements. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

Under the cost method, the long-term equity investment is measured at its initial investment cost. When additional investment is made or the investment is recouped, the cost of long-term equity investment is adjusted accordingly. Cash dividends or profit distributions declared by the investee are recognised as investment income in profit or loss.

The equity method is adopted when the Group has joint control, or exercises significant influence over the investee. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control with other parties over those policies.

Under the equity method, where the initial investment cost of a long-term equity investment exceeds the Group's interest in the fair value of the investee's identifiable net assets at the acquisition date, no adjustment is made to the initial investment cost. Where the initial investment cost is less than the Group's interest in the fair values of the investee's identifiable net assets at the acquisition date, the difference is charged to profit or loss, and the cost of the long-term equity investment is adjusted accordingly.

When equity method is adopted in accounting, the investment income and other comprehensive income shall be recognised respectively according to the share of net profit or loss and other comprehensive income realised by the investee, and the carrying amount of long-term equity investment shall be adjusted at the same time. When recognising the share of the net profit or loss of the investee, the net profit of the investee shall be adjusted and recognised on the basis of the fair value of the identifiable assets of the investee at the time of acquisition. If the accounting policies and accounting periods adopted by the investee are inconsistent with those of the Group, the financial statements of the investee shall be adjusted in accordance with the accounting policies and accounting period of the Group. The investment income and other comprehensive income shall be recognised accordingly. For transactions between the Group and associates or joint ventures, if the assets invested or sold do not constitute business, the gains and losses of internal transactions are offset by the shareholding attributable to the Group. On this basis, the investment gains or losses are recognised. However, the unrealised internal transaction losses between the Group and the investee shall not be offset if they belong to the impairment losses of the transferred assets. The carrying amount of long-term equity investment shall be reduced accordingly by calculating the portion to be enjoyed according to the profit or cash dividend declared to be distributed by the investee. The Group discontinues recognising its share of net losses of the investee after the carrying amount of the long-term equity investment together with any long-term interests that in substance form part of its net investment in the invested entity is reduced to zero unless the Group has incurred obligations to assume additional losses of the investee. The carrying amount of long-term equity investment shall be adjusted and included in capital reserve for other changes in the owners' equity of the investee except net profit or loss, other comprehensive income and profit distribution.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

9. Long-term equity investments *(continued)*

Upon disposal of a long-term equity investment, the difference between the proceeds actually received and the carrying amount is recognised in profit or loss. For a long-term equity investment accounted for using the equity method, when the Group discontinues it using the equity method due to disposal, all amounts previously recognised in other comprehensive income are accounted for on the same basis as would have been required if the investee had directly disposed of the related assets or liabilities. Equity previously recognised resulting from the investee's equity changes other than profit or loss, other comprehensive income and profit distribution is reclassified to profit or loss in its entirety. When the Group continues to use the equity method, the amounts previously recognised in other comprehensive income are accounted for on the same basis as would have been required if the investee had directly disposed of the related assets or liabilities and reclassified to profit or loss on a pro-rata basis. Equity previously recognised resulting from the investee's equity changes other than profit or loss, other comprehensive income and profit distribution is reclassified to profit or loss on a pro-rata basis.

10. Investment properties

Investment properties are properties held to earn rental income and/or for capital appreciation. Investment properties include buildings leased out.

An investment property is measured initially at cost. If the economic benefits relating to an investment property will probably flow in and the cost can be reliably measured, subsequent costs incurred for the property are included in the cost of the investment property. Otherwise, subsequent costs are recognised in profit or loss as incurred.

The Group uses the cost model for the subsequent measurement of its investment properties.

Depreciation is calculated using the straight-line method for investment properties. The useful lives, estimated residual value rates and annual depreciation rates of each category of investment properties are as follows:

	Useful life	Estimated residual value rate	Annual depreciation rate
Buildings	37 years	5%	2.59%

The Group reviews the useful life and estimated net residual value of a fixed asset and the depreciation method applied at least at each year end, and makes adjustments if necessary.

11. Fixed assets

A fixed asset is recognised only when the economic benefits associated with the asset will probably flow into the Group and the cost of the asset can be measured reliably. Subsequent expenditures incurred for a fixed asset are included in the cost of the fixed asset if it is probable that the associated economic benefits will flow to the Group and its costs can be reliably measured, and the carrying amount of the component of the fixed asset that is replaced shall be derecognised. Otherwise, such expenditures shall be recognised in the profit or loss for the period in which they are incurred.

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

11. Fixed assets *(continued)*

Fixed assets are initially measured at cost. The cost of a purchased fixed asset comprises the purchase price, relevant taxes and any directly attributable expenditure for bringing the asset to working condition for its intended use. Depreciation is calculated using the straight-line method.

The useful lives, estimated residual value rates and annual depreciation rates of each category of the fixed assets are as follows:

	Useful life	Estimated residual value rate	Annual depreciation rate
Buildings	50 years	5%	1.90%
Machinery	3-5 years	0%-5%	19.00%-33.33%
Vehicles	3-5 years	4%-5%	19.00%-32.00%
Electronic and other equipment	3-5 years	0%-5%	19.00%-33.33%

The Group reviews the useful life and estimated net residual value of a fixed asset and the depreciation method applied at least at each year end, and make adjustments if necessary.

12. Construction in progress

The cost of construction in progress is measured at actual cost, including all necessary construction expenditures incurred during the construction period and other relevant expenditures.

An item of construction in progress is transferred to fixed assets or long-term deferred expenditures when the asset is ready for its intended use.

13. Borrowing costs

The borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalised. The amounts of other borrowing costs incurred are recognised as an expense in the period in which they are incurred. Qualifying assets are assets (fixed assets, investment properties, inventories) that necessarily take a substantial period of time of acquisition, construction or production to get ready for their intended use or sale.

The capitalisation of borrowing costs commences only when all of the following conditions are satisfied:

- (1) expenditures for the asset have been incurred;
- (2) borrowing costs have been incurred; and
- (3) activities that are necessary to acquire, construct or produce the asset for its intended use or sale have been undertaken.

Capitalisation of borrowing costs ceases when the qualifying asset being acquired, constructed or produced gets ready for its intended use or sale. Any borrowing costs subsequently incurred are recognised in profit or loss.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

13. Borrowing costs *(continued)*

During the capitalisation period, the amount of interest eligible for capitalisation for each accounting period shall be determined as follows:

- (1) where funds are borrowed specifically for the purpose of obtaining a qualifying asset, the amount of interest eligible for capitalisation is the actual interest costs incurred on that borrowing for the period less any bank interest earned from depositing the borrowed funds before being used on the asset or any investment income on the temporary investment of those funds; or
- (2) where funds are borrowed generally for the purpose of obtaining a qualifying asset, the amount of interest eligible for capitalisation is determined by applying a weighted average interest rate on the general borrowings to the weighted average of the excess of the cumulative expenditures on the asset over the expenditures on the asset funded by the specific borrowings.

14. Right-of-use assets

At the commencement date of the lease, the Group recognises a right-of-use asset, which are initially measured at cost. The cost of the right-of-use asset comprises: the amount of the initial measurement of the lease liability; any lease payments made at or before the commencement date of the lease less any lease incentives received; any initial direct cost incurred; and an estimate of costs incurred by the lessee in dismantling and removing the underlying asset, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease. If the Group remeasures the lease liability due to changes in lease payments, the carrying amount of the right-of-use asset is adjusted accordingly. The right-of-use assets are depreciated on a straight-line basis subsequently by the Group. If the Group is reasonably certain that the ownership of the underlying asset will be transferred to the Group at the end of the lease term, the Group depreciates the asset from the commencement date to the end of the useful life of the asset. Otherwise, the Group depreciates the assets from the commencement date to the earlier of the end of the useful life of the asset or the end of the lease term.

Capitalisation of borrowing costs is suspended during periods in which the acquisition, construction or production of a qualifying asset is suspended abnormally by activities other than those necessary to get the asset ready for its intended use or sale, when the suspension is for a continuous period of more than 3 months. Borrowing costs incurred during these periods are recognised as an expense in profit or loss until the acquisition, construction or production is resumed.

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

15. Intangible assets

An intangible asset shall be recognised only when it is probable that the economic benefits associated with the asset will flow to the Group and the cost of the asset can be measured reliably. Intangible assets are measured initially at cost. However, intangible assets acquired in a business combination not involving entities under common control with a fair value that can be measured reliably are recognised separately as intangible assets and initially measured at the fair value at the date of acquisition.

The useful life of an intangible asset is determined according to the period over which it is expected to generate economic benefits for the Group. An intangible asset is regarded as having an indefinite useful life when there is no foreseeable limit to the period over which the asset is expected to generate economic benefits for the Group.

The useful lives of the intangible assets are as follows:

	Useful life
Software	The shorter of the expected useful life and the authorised life
Patents	3 years

An intangible asset with a finite useful life is amortised using the straight-line method over its useful life. For an intangible asset with a finite useful life, the Group reviews the useful life and amortisation method at least at each year end and makes adjustment if necessary.

The Group classifies the expenditures on an internal research and development project into expenditure on the research phase and expenditure on the development phase. Expenditure on the research phase is recognised in profit or loss as incurred. Expenditure on the development phase is capitalised only when the Group can demonstrate all of the following: (i) the technical feasibility of completing the intangible asset so that it will be available for use or sale; (ii) the intention to complete the intangible asset and use or sell it; (iii) how the intangible asset will generate probable future economic benefits (among other things, the Group can demonstrate the existence of a market for the output of the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset); (iv) the availability of adequate technical, financial and other resources to complete the development and the ability to use or sell the intangible asset; and (v) the ability to measure reliably the expenditure attributable to the intangible asset during the development phase. Expenditure on the development phase which does not meet these above criteria is recognised in profit or loss when incurred.

The Group's specific criteria for classifying expenditures in the research phase and development phase of internal research and development projects is: the research phase is the phase of original planned investigations and research activities to acquire and understand scientific or new technical knowledge; the development phase is the phase of applying research results or other knowledge to a plan or design in order to produce a new or substantially improved product prior to commercial production or use. According to whether the R&D projects meet the capitalization conditions, the Group's R&D projects can be classified into capitalized R&D projects and expensed R&D projects. The Group's capitalized R&D projects are based on the project approval review as the node to divide the research stage and development stage. The research stage is before the project approval review, and the relevant R&D investment is included in the current profit and loss; after the project approval review and the satisfaction of the capitalization criteria of the R&D expenditure, the project enters the development stage, and the relevant R&D investment can be included in the development expenditure.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

16. Impairment of assets

Determines the impairment of assets, other than the impairment of inventories, deferred tax assets and financial assets, using the following methods. Assesses at the balance sheet date whether there is any indication that an asset may be impaired. If any indication exists that an asset may be impaired, the Group estimates the recoverable amount of the asset and performs impairment testing. Goodwill arising from a business combination, an intangible asset with an indefinite useful life and an intangible asset reaching the working condition for its intended use are tested for impairment at least at each year end, irrespective of whether there is any indication that the asset may be impaired.

The recoverable amount of an asset is the higher of its fair value less costs to sell and the present value of the future cash flows expected to be derived from the asset. The Group estimates the recoverable amount on an individual basis unless it is not possible to estimate the recoverable amount of the individual asset, in which case the recoverable amount is determined for the asset group to which the asset belongs. Identification of an asset group is based on whether major cash inflows generated by the asset group are largely independent of the cash inflows from other assets or asset groups.

When the recoverable amount of an asset or asset group is less than its carrying amount, the carrying amount is reduced to the recoverable amount by the Group. The reduction in the carrying amount is treated as an impairment loss and recognised in profit or loss. A provision for impairment loss of the asset is recognised accordingly.

Once the above impairment loss is recognised, it cannot be reversed in subsequent accounting periods.

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

17. Long-term prepaid expenses

Long-term prepaid expenses are amortised using the straight-line method as follows:

Amortisation period	
Office lease and plant decoration	the shorter of the lease term and the remaining useful life of the lease assets

18. Employee benefits

Employee benefits refer to all forms of consideration or compensation other than share-based payments given by the Group in exchange for services rendered by employees or for termination of employment. Employee benefits include short-term employee benefits, post-employment benefits, termination benefits and other long-term employee benefits. Benefits given by the Group to an employee's spouse, children and dependents, family members of deceased employees and other beneficiaries are also employee benefits.

Short-term remuneration

During the accounting period in which the employees render services, the Group recognises the short-term employee compensation payable as liabilities and includes the same into relevant asset costs or expenses according to the object which benefits from the services rendered by employees.

Post-employment benefits (defined contribution plan)

The employees of the Group in mainland China are required to participate in the pension insurance and unemployment insurance scheme administered by the local government. The Group's subsidiary in Hong Kong operates a defined contribution Mandatory Provident Fund retirement benefit scheme (the "MPF Scheme") under the Mandatory Provident Fund Schemes Ordinance for those employees who are eligible to participate in the MPF Scheme. Contributions are made based on a percentage of the employees' basic salaries. The subsidiary's employer contributions vest fully with the employees when contributed into the MPF Scheme.

Termination benefits

The Group provides termination benefits to employees and recognises an employee benefits liability for termination benefits, with a corresponding charge to profit or loss, at the earlier of when the Group can no longer withdraw the offer of those benefits resulting from an employment termination plan or a curtailment proposal and when the Group recognises costs involving the payment of termination benefits.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

19. Lease liabilities

At the commencement date of the lease, the Group measures the lease liability at the present value of the lease payments that are not paid at that date, except for short-term leases and leases of low-value assets. The lease payment comprises the fixed lease payment, the in-substance fixed lease payment less any lease incentives received, the variable lease payment measured at the index or rate at the measurement date, the projected payment calculated based on the residual value of the guarantee and the exercise price of a purchase option or a termination option, the premise of which is that the Group will reasonably ensure the option will be exercised or the lease period will reflect that the Group will exercise the termination option.

In calculating the present value of the lease payments, the Group uses the interest rate implicit in the lease as the discount rate. If that rate cannot be readily determined, the Group uses the lessee's incremental borrowing rate. The Group calculates the interest expenses of the lease liability in each period during the lease term using the constant periodic rate of interest, and recognises such interest expenses in profit or loss, except those in the costs of the related asset as required. Variable lease payments that are not included in the measurement of the lease liabilities are recognised in profit or loss as incurred, except those in the costs of the related asset as required.

After the commencement date of the lease, the Group measures the carrying amount of the lease liability through increasing interest charges on the outstanding liability and reducing lease payments made. The Group remeasures the lease liability at the present value of the changed lease payments if there is a modification, a change in the substantive fixed payments, a change in the amount expected to be payable for the guaranteed residual value, a change in the index or rate used to determine the lease payments, or a change in the evaluation result or actual exercise of the purchase option, extension option or termination option.

20. Provisions

An obligation related to a contingency shall be recognised by the Company as a provision when all of the following conditions are satisfied:

- (1) the obligation is a present obligation of the Company;
- (2) it is probable that an outflow of economic benefits from the Company will be required to settle the obligation; and
- (3) a reliable estimate can be made of the amount of the obligation.

A provision is initially measured at the best estimate of the expenditure required to settle the related present obligation, taking into account factors pertaining to a contingency such as the risks, uncertainties and time value of money as a whole. Provisions are reviewed at each balance sheet date. Where there is clear evidence that the carrying amount of a provision does not reflect the current best estimate, the carrying amount is adjusted to the current best estimate.

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

21. Share-based payments

A share-based payment is classified as either an equity-settled share-based payment or a cash-settled share-based payment. An equity-settled share-based payment is a transaction in which the Group receives services and uses shares or other equity instruments as consideration for settlement.

An equity-settled share-based payment in exchange for services received from employees is measured at the fair value of the equity instruments granted to the employees. If such equity-settled share-based payment could vest immediately, related costs or expenses at an amount equal to the fair value on the grant date are recognised, with a corresponding increase in capital reserves; if such equity-settled share-based payment could not vest until the completion of services for a vesting period, or until the achievement of a specified performance condition, the Group at each balance sheet date during the vesting period recognises the services received for the current period as related costs and expenses, with a corresponding increase in capital reserves, at an amount equal to the fair value of the equity instruments at the grant date, based on the best estimate of the number of equity instruments expected to vest. The fair value of equity instruments has been determined by the Black-Scholes option pricing model, see Note XI.

For awards that do not ultimately vest because non-market performance and service conditions have not been met, no expense is recognised. Where awards include a market or non-vesting condition, the transactions are treated as vesting irrespective of whether the market or non-vesting condition is satisfied, provided that all other performance and service conditions are satisfied.

Where the terms of an equity-settled share-based award are modified, as a minimum an expense is recognised as if the terms had not been modified. In addition, an expense is recognised for any modification that increases the total fair value of the share-based payments, or is otherwise beneficial to the employee as measured at the date of modification.

Where an equity-settled share-based award is cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognised for the award is recognised immediately. This includes any award where non-vesting conditions within the control of either the Group or the employee are not met. However, if a new award is substituted for the cancelled award, and is designated as a replacement on the date that it is granted, the cancelled and new awards are treated as if they were a modification of the original award.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

22. Revenue from contracts with customers

Revenue from contracts with customers is recognised when the Group has fulfilled its performance obligations in the contracts, that is, when the customer obtains control of relevant goods or services. Control of relevant goods or services refers to the ability to direct the use of the goods, or the provision of the services, and obtain substantially all of the remaining benefits from the goods or services.

Contracts for sale of goods

A contract for the sale of goods between the Group and the customer usually only includes the performance obligation to transfer the integrated circuit products. The revenue is recognised at the point in time when the customer obtains control of relevant goods based on the following indicators, which include: a present right to payment for goods, the transfer of significant risks and rewards of ownership of goods, the transfer of legal title to goods, the transfer of physical possession of goods, the customer's acceptance of goods.

Contracts for the rendering of services

A contract for the rendering of services between the Group and the customer usually includes performance obligation to provide integrated circuit testing, and the Group recognises revenue at the point of delivery of the test service results.

Warranties

The Company provides a warranty in connection with the sale of a good in accordance with the contract and the relevant laws and regulations, etc. For an assurance-type warranty that provides the customer the assurance that the good complies with agreed-upon specifications, the Company accounts for the warranty in accordance with Note III.20. For a service-type warranty that provides a customer with a service in addition to the assurance that the product complies with agreed-upon specifications, the Company accounts for it as a separate performance obligation. On the basis of the relative proportion between the stand-alone selling price of the good and the service-type warranty, a portion of the transaction price is allocated to the service-type warranty and revenue is recognised when a customer obtained control of the good. When assessing whether a service-type warranty provides a customer with a separate service in addition to the assurance that the good complies with agreed-upon specifications, the Company considers whether the warranty is required by law, the length of the warranty coverage period and the nature of the tasks that the Company promises to perform, etc.

23. Contract liabilities

The Group presents contract liabilities depending on the relationship between the satisfaction of its performance obligations and the customer's payment in the balance sheet.

A contract liability is the obligation to transfer goods or services to a customer for which the Group has received consideration or an amount of consideration is due from the customer, such as an amount of consideration that an entity has received before the transfer of the promised goods or services.

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

24. Government grants

Government grants are recognised when all attaching conditions can be complied with and the grant can be received. If a government grant is in the form of a transfer of a monetary asset, it is measured at the amount received or receivable. If a government grant is in the form of a transfer of a nonmonetary asset, it is measured at fair value; if fair value cannot be reliably determined, it is measured at a nominal amount.

Government grants shall be recognised as government grants related to assets where long-term assets are built or otherwise developed in accordance with the requirements of government documents. If there are no specific requirements of government documents, judgment shall be exercised based on the basic conditions required for the grants. Government grants shall be recognised as government grants related to assets where the building or otherwise development of long-term assets is considered as the basic condition; otherwise, they shall be recognised as government grants related to income.

A government grant related to income is accounted for as follows: (i) if the grant is a compensation for related expenses or losses to be incurred in subsequent periods, the grant is recognised as deferred income, and released in profit or loss or offset against related expenses over the periods in which the related costs are recognised; or (ii) if the grant is a compensation for related expenses or losses already incurred, it is recognised immediately in profit or loss or offset against relevant expenses.

A government grant relating to an asset shall be offset against the carrying amounts of relevant assets, or recognised as deferred income and amortised in profit or loss over the useful life of the related asset by annual instalments in a systematic and rational way (however, a government grant measured at a nominal amount is recognised directly in profit or loss). Where the assets are sold, transferred, retired or damaged before the end of their useful lives, the rest of the remaining deferred income is released to profit or loss for the period in which the relevant assets are disposed of.

25. Deferred tax

Deferred tax is provided using the balance sheet liability method, on all temporary differences at the balance sheet date between the tax bases of assets and liabilities and their carrying amounts, and temporary differences between the tax bases and the carrying amounts of the items, which have a tax base according to related tax laws but are not recognised as assets and liabilities.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- (1) when the taxable temporary difference arises from an asset or liability in a transaction that is not a business combination and, at the time of transaction, affects neither accounting profit nor taxable profit or loss; and
- (2) in respect of taxable temporary differences associated with investments in subsidiaries, associates and joint ventures, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not be reversed in the foreseeable future.

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

25. Deferred tax *(continued)*

Deferred tax assets are recognised for all deductible temporary differences, and the carryforward of unused tax losses and any unused tax credits. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, the carryforward of unused tax losses and unused tax credits can be utilised, except:

- (1) when the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- (2) in respect of the deductible temporary differences associated with investments in subsidiaries, associates and joint ventures, deferred tax assets are only recognised to the extent that it is probable that the temporary differences will be reversed in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised in the future.

At the balance sheet date, deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, in accordance with the requirements of tax laws. The measurement of deferred tax assets and deferred tax liabilities reflects the tax consequences that would follow from the manner in which the Group expects, at the balance sheet date, to recover the assets or settle the liabilities.

The carrying amount of deferred tax assets is reviewed at the balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available in future periods to allow the deferred tax assets to be utilised. Unrecognised deferred tax assets are reassessed at the balance sheet date and are recognised to the extent that it has become probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be recovered.

Deferred tax assets and deferred tax liabilities are offset if and only if the Group has a legally enforceable right to set off current tax assets and current tax liabilities, and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

26. Leases

At the inception of a contract, the Group assesses whether the contract is, or contains, a lease. If one party of the contract conveys the right to control the use of one or several identified assets for a period of time in exchange for consideration, the contract can be regarded as a lease or an inclusion of a lease.

As lessee

Except for short-term leases and low value leases, the Group recognises right-of-use assets and lease liability. The general accounting treatment of the Group as a lessee is described in Note III, 14 and Note III, 19.

Short-term leases and leases of low-value assets

The Group considers a lease that, at the commencement date of the lease, has a lease term of 12 months or less, and does not contain any purchase option as a short-term lease; and a lease for which the value of the individual underlying asset is not more than RMB40,000 when it is new as a lease of low-value assets. If the Group subleases an asset, or expects to sublease an asset, the head lease does not qualify as a lease of a low-value asset. The Group does not recognise the right-of-use assets and lease liabilities for equipment short-term leases and low-value assets. The Group recognises lease payments on short-term leases and leases of low-value assets in the costs of the related asset or profit or loss on a straight-line basis.

As lessor

A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership of an underlying asset, except that a lease is classified as an operating lease at the inception date.

As lessor of an operating lease

Rental income under an operating lease is recognised on a straight-line basis over the lease term, through profit or loss. Variable lease payments that are not included in the measurement of lease receivables are charged to profit or loss as incurred. Initial direct costs are capitalised and amortised over the lease term on the same basis as rental income is recognised, and are charged to current profit or loss as incurred.

27. Profit distribution

The Company's cash dividends are recognized as liabilities upon approval by a general meeting of the shareholders.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

28. Fair value measurement

The Group measures its financial assets held for trading and equity investments at fair value at each balance sheet date. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 – based on quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 – based on valuation techniques for which the lowest level input that is significant to the fair value measurement is observable, either directly or indirectly;
- Level 3 – based on valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For assets and liabilities that are measured at fair value in the financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by reassessing categorisation at each balance sheet date.

29. Significant accounting judgements and estimates

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenue, expenses, assets and liabilities, and their accompanying disclosures, and the disclosure of contingent liabilities at the balance sheet date. Uncertainty about these assumptions and estimates could result in outcomes that could require a material adjustment to the carrying amounts of the assets or liabilities affected in the future.

Judgements

In the process of applying the Group's accounting policies, management has made the following judgements which have a significant effect on the amounts recognised in the financial statements:

Consolidation of entities in which the Group holds less than a majority of voting rights

The Group considers that it controls Sino IC Technology Co., Ltd. (Sino IC) even though it owns less than 50% of the voting rights. This is because the Group is the single largest shareholder of Sino IC with a 42.75% equity interest. The remaining equity shares in Sino IC are widely held by many other shareholders. There has been no history of the other shareholders collaborating to exercise their votes collectively or to outvote the Group.

Operating leases – the Company as lessor

The Company has entered into lease agreements on its property portfolio. The Company has determined these leases to be operating leases, based on an evaluation of the terms and conditions of the agreements, that it retains all the significant risks and rewards of ownership of these properties.

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

29. Significant accounting judgements and estimates *(continued)*

Judgements (continued)

Business models

The classification of financial assets at initial recognition depends on the Group's business model for managing financial assets. When determining the business model, the Group considers the methods to include evaluation and report financial asset performance to key management, the risks affecting the performance of financial assets and the risk management, and the manner in which the relevant management receives remuneration. When assessing whether the objective is to collect contractual cash flows, the Group needs to analyse and judge the reason, timing, frequency and value of the sale before the maturity date of the financial assets.

Contractual cash flow characteristics

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics, and the judgements on whether the contractual cash flows are solely payments of principal and interest on the principal amount outstanding, including when assessing the modification of the time value of money, the judgement on whether there is any significant difference from the benchmark cash flow and whether the fair value of the prepayment features is insignificant for financial assets with prepayment features, etc.

Estimation uncertainty

The key assumptions concerning the future and other key sources of estimation uncertainty at the balance sheet date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the future accounting periods, are described below.

Impairment of financial instruments

The Group uses the expected credit loss model to assess the impairment of financial instruments. The Group is required to perform significant judgement and estimation and take into account all reasonable and supportable information, including forward-looking information. When making such judgements and estimates, the Group infers the expected changes in the debtor's credit risk based on historical repayment data combined with economic policies, macroeconomic indicators, industry risks and other factors. The different estimates may impact the impairment assessment, and the provision for impairment may also not be representative of the actual impairment loss in the future.

Impairment of inventories

The Group periodically assesses the net realizable value of its inventories and provides for inventory impairment based on the difference between the cost of the inventory category and the net realizable value. When estimating the net realizable value of inventories, management considers the purpose for which the inventories are held, as well as future use or sales as the basis for estimation. Where the expectation is different from the original estimate, such difference will impact on the carrying value of the inventories and write-down of inventories in the period in which such estimates have been changed.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

29. Significant accounting judgements and estimates *(continued)*

Estimation uncertainty (continued)

Impairment of non-current assets other than financial assets

The Group assesses whether there are any indications of impairment for all non-current assets other than financial assets at the balance sheet date. Intangible assets with indefinite useful lives are tested for impairment annually and at other times when such an indication exists. Other non-current assets other than financial assets are tested for impairment when there are indications that the carrying amounts may not be recoverable. An impairment exists when the carrying amount of an asset or asset group exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and the present value of the future cash flows expected to be derived from it. The calculation of the fair value less costs of disposal is based on available data from binding sales transactions in an arm's length transaction of similar assets or observable market prices less incremental costs for disposing of the assets. When the calculations of the present value of the future cash flows expected to be derived from an asset or asset group are undertaken, management must estimate the expected future cash flows from the asset or asset group and choose a suitable discount rate in order to calculate the present value of those cash flows.

Fair value of unlisted equity investments

The Group uses the market approach to determine the fair value of its investments in unlisted equity securities. This requires the Group to identify comparable listed companies, select market multipliers, estimate liquidity discounts and is therefore subject to uncertainty.

Development costs

Development costs are capitalised in accordance with the accounting policy for research and development costs in Note III, 15 to the financial statements. Determining the amounts to be capitalised requires management to make assumptions regarding the expected future cash flows from the assets, discount rates to be applied and the expected period of benefits.

Deferred tax assets

Deferred tax assets are recognised for all unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and level of future taxable profits together with future tax planning strategies.

Lessee's incremental borrowing rate

If the interest rate implicit in the lease cannot be readily determined, the Group measures the lease liability at the present value of the lease payments discounted using the lessee's incremental borrowing rate. According to the economic environment, the Group takes the observable interest rate as the reference basis for determining the incremental borrowing rate, then adjusts the observable interest rate based on its own circumstances, underlying assets, lease terms and amounts of lease liabilities to determine the applicable incremental borrowing rate.

III. SIGNIFICANT ACCOUNTING POLICIES AND ESTIMATES *(continued)*

29. Significant accounting judgements and estimates *(continued)*

Estimation uncertainty (continued)

Useful life of intangible assets

The Group's management determines the useful lives of intangible assets based on an assessment of the expected useful lives or expected pattern of consumption of future economic benefits embodied in the assets. The determination of a reasonable useful life requires management estimates. Where the expectation is different from the original estimate, such difference will impact on the carrying value of the intangible assets and the amortisation expenses in the period in which such estimates have been changed.

30. Changes in accounting policies and estimates

Changes in accounting policies

Accounting for trial sales

According to Accounting Standards for Business Enterprises Interpretation No.15, the Group recognises the proceeds from external sales of any products or by-products produced while bringing fixed assets to working condition for intended use or during the research and development process (hereinafter referred to as "trial sales") and the costs of such products or by-products, respectively, in profit or loss (For items produced that are output of the Company's ordinary activities, they are presented in "Revenue" and "Cost of sales", or "Gains on disposal of non-current assets" if otherwise), i.e., not offsetting the net amount of the proceeds less costs from trial sales against the costs of fixed assets or research and development expenditures; the Group recognises, before external sales, products or by-products produced in a trial operation that meet the conditions for asset recognition in inventories or other relevant assets. For trial sales in 2021, the Group has adjusted comparative amounts retrospectively in accordance with Accounting Standards for Business Enterprises Interpretation No.15. The implementation of this change has not made a material impact on the Group's financial position and operating performance.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

IV. TAXES

1. Major Categories of Tax and Tax Rate

- | | | |
|--|---|---|
| Value-added tax (VAT) | – | VAT payable is the difference between VAT output and deductible VAT input for the current period. VAT output has been calculated by applying a rate of 13% and 6% to the taxable value. |
| Urban maintenance and construction tax | – | It is levied at 7% on the VAT paid. |
| Corporate income tax | – | Except for the subsidiaries subject to tax preferences described in Note IV, 2, the Company and the other subsidiaries incorporated in Mainland China is levied at 25% on the taxable profit. |

In accordance with the Inland Revenue (Amendment) (No.3) Ordinance 2018, under the two-tiered profits tax rates regime effective from the year of assessment 2018/2019, the first Hong Kong Dollar (“HK\$”) 2,000,000 of assessable profits of a qualifying entity is taxed at 8.25% and the remaining assessable profits are taxed at 16.5%. Since 2018, the corporate income tax rate for Shanghai Fudan Microelectronics Group Co.,Ltd.(HK), a subsidiary of the Group, is subject to the income tax rate of 8.25% for the first HK\$2 million assessable profit and 16.5% for the assessable profits in excess of HK\$2 million, respectively.

Fudan Microelectronics (USA) Inc., a subsidiary of the Group was subject to tax rates of 21% and 8.84% in accordance with the nominal federal corporate tax rate in the United States of America and state tax rate respectively.

- | | | |
|--------------|---|--|
| Property tax | – | It is paid at 1.2% of the original value of the property after deducting 30% or 10%. |
|--------------|---|--|

2. Tax Preference

According to “Corporate Income Tax Law of the People’s Republic of China” and “Measures for Administration of the Recognition of High-tech Enterprises”, the preferential income tax rate of 15% is applicable to high-new technology enterprises. In 2020, the Company and Sino IC Technology Co., Ltd., a subsidiary of the Group, obtained the high-tech enterprise certificates No. GR202031002423 and GR202031000027 respectively, which are valid for three years. Accordingly, the Company and Sino IC will pay corporate income tax at a reduced rate of 15% for the year 2022.

According to the Notice of the Ministry of Finance and the State Administration of Taxation on the VAT Policy for Software Products (Finance and Taxation [2011] No. 100), the Company’s software products enjoy the policy of immediate refund of VAT.

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS

1. Cash at bank and on hand

	2022	2021
Cash on hand	45,887.35	73,804.10
Cash at bank	1,190,782,452.17	801,572,420.39
Other cash and bank balances	–	1,005.70
	1,190,828,339.52	801,647,230.19
Less: Time deposits	70,000,000.00	383,259,800.00
Accrued interest on time deposits	541,393.84	2,632,123.64
Cash and cash equivalents	1,120,286,945.68	415,755,306.55

At 31 December 2022, the Group had no cash at bank and on hand with restricted ownership (31 December 2021: Nil).

At 31 December 2022, the carrying amount of the currency funds deposited abroad was RMB21,150,180.78 (31 December 2021: RMB48,989,879.44).

Interest income earned on current deposits is calculated by using the current deposit interest rate. The deposit periods for term time deposits vary from 7 days to 12 months depending on the cash requirements of the Group and the Group earns interest income according to the respective time deposit rates.

2. Financial assets held for trading

	2022	2021
Financial assets at fair value through current profit or loss – debt instrument investments	80,167,958.90	390,948,111.87

At 31 December 2022, the debt instrument investments of RMB80,167,958.90 held by the Group were all structured deposits (31 December 2021: RMB390,948,111.87).

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

3. Notes receivable

	2022	2021
Bank acceptance bills	44,206,905.70	222,633,952.12
Commercial acceptance bills	212,028,645.42	156,701,047.72
	256,235,551.12	379,334,999.84
Less: Provision for bad debts	4,091,493.99	6,971,405.59
	252,144,057.13	372,363,594.25

Notes receivable that were endorsed or discounted but not yet due at the balance sheet date were as follows:

	2022		2021	
	Termination of confirmation	Non-termination confirmation	Termination of confirmation	Non-termination confirmation
Bank acceptance bills	–	4,000,000.00	15,702,190.06	–

The movement in the provision for bad debts on notes receivable is as follows:

	Opening balance	Provision	Reversal or transfer	Closing balance
2022	6,971,405.59	–	(2,879,911.60)	4,091,493.99
2021	3,704,348.00	3,267,057.59	–	6,971,405.59

At 31 December 2022, for the carrying amount of the notes receivable with restricted ownership, refer to Note V.56.

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

4. Accounts receivable

The credit period of accounts receivable is generally one month, extending up to three months for major customers. Accounts receivable are non-interest-bearing.

An ageing analysis of accounts receivable recognised by invoice date is as follows:

	2022	2021
Within 1 year	688,650,408.23	406,261,790.71
1 to 2 years	45,143,732.53	33,402,497.07
2 to 3 years	5,857,596.33	13,381,307.68
3 to 4 years	1,307,312.70	8,972,172.29
4 to 5 years	996,764.59	36,902.43
Over 5 years	4,711,864.53	6,957,587.19
	746,667,678.91	469,012,257.37
Less: Provision for bad debts	16,463,401.99	17,309,126.59
	730,204,276.92	451,703,130.78

	31 December 2022				Book value Amount
	Book balance		Provision for bad debts		
	Amount	Proportion (%)	Amount	Proportion (%)	
Accounts receivable for which bad debt allowance is provided by portfolio of credit risk characteristics					
Highly Reliable Product Sales Portfolio	462,229,531.89	61.90	4,980,898.80	1.08	457,248,633.09
Industrial Sales Portfolio	235,327,373.81	31.52	10,002,872.63	4.25	225,324,501.18
Testing Services Portfolio	49,110,773.21	6.58	1,479,630.56	3.01	47,631,142.65
	746,667,678.91	100.00	16,463,401.99	2.20	730,204,276.92

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

4. Accounts receivable (continued)

An ageing analysis of accounts receivable recognised by invoice date is as follows:(continued)

	31 December 2021				Book value Amount
	Book balance		Provision for bad debts		
	Amount	Proportion (%)	Amount	Proportion (%)	
Accounts receivable for which bad debt allowance is provided by portfolio of credit risk characteristics					
Highly Reliable Product Sales					
Portfolio	220,338,215.38	46.98	5,120,432.94	2.32	215,217,782.44
Industrial Sales Portfolio	208,153,293.48	44.38	10,972,724.87	5.27	197,180,568.61
Testing Services Portfolio	40,520,748.51	8.64	1,215,968.78	3.00	39,304,779.73
	469,012,257.37	100.00	17,309,126.59	3.69	451,703,130.78

Accounts receivable with bad debt provision based on a combination of sale of high-reliability products are as follows:

	31 December 2022		
	Estimated gross carrying amount at default	Expected credit loss ratio (%)	Lifetime expected credit loss
Within 1 year	412,420,543.90	–	–
1 to 5 years	49,808,987.99	10.00	4,980,898.80
	462,229,531.89	1.08	4,980,898.80

	31 December 2021		
	Estimated gross carrying amount at default	Expected credit loss ratio (%)	Lifetime expected credit loss
Within 1 year	169,133,882.88	–	–
1 to 5 years	51,184,332.50	9.96	5,100,432.94
Over 5 years	20,000.00	100.00	20,000.00
	220,338,215.38	2.32	5,120,432.94

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

4. Accounts receivable *(continued)*

Accounts receivable with bad debt provision based on a combination of industrial sales amounts are as follows:

	31 December 2022		
	Estimated gross carrying amount at default	Expected credit loss ratio (%)	Lifetime expected credit loss
Within 6 months	204,293,951.58	–	–
6 to 9 months	23,125,994.36	9.45	2,186,134.07
9 to 12 months	14,513.18	20.00	2,902.64
1 to 2 years	158,157.54	50.00	79,078.77
Over 2 years	7,734,757.15	100.00	7,734,757.15
	235,327,373.81	4.25	10,002,872.63

	31 December 2021		
	Estimated gross carrying amount at default	Expected credit loss ratio (%)	Lifetime expected credit loss
Within 6 months	196,402,697.82	–	–
6 to 9 months	198,395.21	10.00	19,839.52
9 to 12 months	23,382.28	20.00	4,676.46
1 to 2 years	1,161,218.57	50.00	580,609.29
Over 2 years	10,367,599.60	100.00	10,367,599.60
	208,153,293.48	5.27	10,972,724.87

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

4. Accounts receivable (continued)

The accounts receivable with bad debt provision based on a combination of test service payments are as follows:

	31 December 2022		
	Estimated gross carrying amount at default	Expected credit loss ratio (%)	Lifetime expected credit loss
Within 1 year	48,795,405.21	3.00	1,463,862.16
1 to 2 years	315,368.00	5.00	15,768.40
	49,110,773.21	3.01	1,479,630.56

	31 December 2021		
	Estimated gross carrying amount at default	Expected credit loss ratio (%)	Lifetime expected credit loss
Within 1 year	40,503,432.51	3.00	1,215,102.98
1 to 2 years	17,316.00	5.00	865.80
	40,520,748.51	3.00	1,215,968.78

The movements on the provision for bad debts in relation to the accounts receivable are as follows:

	Opening balance	Provision	Translation of foreign currency	Reversal	Written-off	Closing balance
2022	17,309,126.59	1,770,002.63	-	-	(2,615,727.23)	16,463,401.99
2021	20,902,190.36	677,836.61	(770.58)	(2,633,845.37)	(1,636,284.43)	17,309,126.59

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

4. Accounts receivable *(continued)*

At 31 December 2022, the top five accounts receivable amounts are as follows:

	31 December 2022		Provision for bad debts
	Book balance	Amount proportion (%)	
The first place	93,477,877.90	12.52	–
The second place	83,016,450.00	11.12	–
The third place	36,100,660.00	4.83	–
The fourth place	28,368,000.00	3.80	–
The fifth place	26,153,900.00	3.50	315,200.00
Total	267,116,887.90	35.77	315,200.00

At 31 December 2021, the top five accounts receivable amounts are as follows:

	31 December 2021		Provision for bad debts
	Book balance	Amount proportion (%)	
The first place	78,499,476.00	16.74	–
The second place	21,373,360.00	4.56	–
The third place	18,766,000.00	4.00	–
The fourth place	18,606,781.94	3.97	–
The fifth place	18,014,716.80	3.84	–
Total	155,260,334.74	33.11	–

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

5. Receivables for financing

	31 December 2022	31 December 2021
Bank acceptance bills	81,708,392.03	–

Notes receivable that were endorsed or discounted but not yet due at the balance sheet date were as follows:

	31 December 2022		31 December 2021	
	Termination of confirmation	Non-termination confirmation	Termination of confirmation	Non-termination confirmation
Bank acceptance bills	36,113,749.15	–	–	–

6. Prepayments

An ageing analysis of prepayments is as follows:

	31 December 2022		31 December 2021	
	Book balance	Proportion (%)	Book balance	Proportion (%)
Within 1 year	467,802,626.73	98.55	79,915,144.94	94.73
1 to 2 years	6,899,601.61	1.45	4,447,706.23	5.27
	474,702,228.34	100.00	84,362,851.17	100.00

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

6. Prepayments *(continued)*

At 31 December 2022, the top five prepayment amounts are as follows:

Company	Book balance	Proportion (%)
The first place	250,525,779.70	52.78
The second place	108,982,953.98	22.96
The third place	27,360,870.32	5.76
The fourth place	24,172,357.31	5.09
The fifth place	13,269,393.68	2.80
	424,311,354.99	89.39

At 31 December 2021, the top five prepayments amounts are as follows:

Company	Book balance	Proportion (%)
The first place	31,381,198.44	37.20
The second place	13,020,424.81	15.43
The third place	10,207,789.50	12.10
The fourth place	5,783,495.40	6.86
The fifth place	4,177,926.00	4.95
	64,570,834.15	76.54

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

7. Other receivables

An ageing analysis of other receivables is as follows:

	2022	2021
Within 1 year	4,327,386.87	14,298,260.06
1 to 2 years	14,111,987.13	885,586.48
2 to 3 years	498,246.07	793,108.98
Over 3 years	1,414,760.94	2,496,765.92
	20,352,381.01	18,473,721.44

Other receivables classified by nature are as follows:

	2022	2021
Deposit guarantee	17,443,458.91	16,991,100.39
Collection on behalf of payment	1,139,096.00	1,242,464.07
Reserve fund	54,000.00	90,021.95
Others	1,715,826.10	150,135.03
	20,352,381.01	18,473,721.44

At 31 December 2022, the management of the Group considers that no bad debt provision is required for other receivables (31 December 2021: Nil).

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

7. Other receivables *(continued)*

At 31 December 2022, the top five other receivable amounts are as follows:

	Closing balance	Proportion (%)	Classification	Ageing	Provision for bad debts
The first place	13,895,708.12	68.28	Deposit guarantee	1 to 2 years	–
The second place	1,184,472.88	5.82	Deposit guarantee	Within 1 years	–
The third place	737,117.50	3.62	Deposit guarantee	Above 5 years	–
The fourth place	502,100.00	2.47	Receivables	Within 1 year	–
The fifth place	243,725.39	1.20	Deposit guarantee	3 to 5 years	–
	16,563,123.89	81.39			–

At 31 December 2021, the top five other receivable amounts are as follows:

	Closing balance	Proportion (%)	Classification	Ageing	Provision for bad debts
The first place	12,718,585.60	68.85	Deposit guarantee	Within 1 year	–
The second place	2,094,573.99	11.34	Deposit guarantee	0 to 7 years	–
The third place	737,117.50	3.99	Deposit guarantee	0 to 5 years	–
The fourth place	540,000.00	2.92	Receivables	Within 1 year	–
The fifth place	243,725.39	1.32	Deposit guarantee	2 to 4 years	–
	16,334,002.48	88.42			–

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

8. Inventories

	31 December 2022		
	Book balance	Provision for write-down of inventories	Book value
Raw materials	336,443,161.24	35,803,055.12	300,640,106.12
Work in process	832,093,996.87	89,816,100.19	742,277,896.68
Finished goods	522,486,575.22	82,140,029.98	440,346,545.24
	1,691,023,733.33	207,759,185.29	1,483,264,548.04

	31 December 2021		
	Book balance	Provision for write-down of inventories	Book value
Raw materials	175,843,052.64	17,189,710.15	158,653,342.49
Work in process	502,350,897.86	30,705,167.24	471,645,730.62
Finished goods	331,237,956.71	45,453,965.10	285,783,991.61
	1,009,431,907.21	93,348,842.49	916,083,064.72

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

8. Inventories (continued)

The movements in provision for write-down of inventories are as follows:

2022

	Opening balance	Provision	Decrease Reversal	Transfer	Closing balance
Raw materials	17,189,710.15	20,264,268.97	(1,650,924.00)	–	35,803,055.12
Work in process	30,705,167.24	61,793,768.87	(2,682,835.92)	–	89,816,100.19
Finished goods	45,453,965.10	53,315,597.69	(16,643,925.40)	14,392.59	82,140,029.98
	93,348,842.49	135,373,635.53	(20,977,685.32)	14,392.59	207,759,185.29

2021

	Opening balance	Provision	Decrease Reversal	Transfer	Closing balance
Raw materials	37,401,327.79	–	(20,211,617.64)	–	17,189,710.15
Work in process	16,309,894.86	25,714,370.48	(11,319,098.10)	–	30,705,167.24
Finished goods	23,262,743.00	28,748,921.77	(6,553,127.21)	(4,572.46)	45,453,965.10
	76,973,965.65	54,463,292.25	(38,083,842.95)	(4,572.46)	93,348,842.49

9. Other current assets

	2022	2021
Amortized expenses	775,523.42	1,694,878.11
Equipment to be returned	3,443,834.00	–
Prepaid tax	6,559,875.16	–
Input VAT to be verified	2,949,529.95	4,386,193.63
	13,728,762.53	6,081,071.74

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

10. Long-term equity investments

2022

	Opening balance	Changes for the year				Closing balance	Provision
		Increase	Investment profit or loss under the equity method	Other equity changes	Foreign currency translation		
Associated companies							
Shanghai Xihongqiao Navigation Technology Co., Ltd.	2,587,918.24	-	946,209.03	-	-	3,534,127.27	-
Shanghai Fudan-Holding Hualong Microsystem Technology Co., Ltd.	45,220,181.33	-	(8,210,712.19)	-	-	37,009,469.14	(24,933,174.46)
Shanghai Fudan Sci-Tech. Park Venture Investment Co., Ltd.	17,065,710.31	-	(432,971.62)	-	-	16,632,738.69	-
Shanghai Haojun Venture Capital Partnership (Limited Partnership)	9,895,378.44	-	(297,281.68)	-	-	9,598,096.76	-
Spear Innovations Oy Ltd	739,581.20	-	(134,318.81)	-	62,382.97	667,645.36	-
	75,508,769.52	-	(8,129,075.27)	-	62,382.97	67,442,077.22	(24,933,174.46)

2021

	Opening balance	Changes for the year			Closing balance
		Increase	Investment profit or loss under the equity method	Other equity changes	
Associated companies					
Shanghai Xihongqiao Navigation Technology Co., Ltd.	2,393,689.18	-	194,229.06	-	2,587,918.24
Shanghai Fudan-Holding Hualong Microsystem Technology Co., Ltd.	49,259,701.21	-	(4,039,519.88)	-	45,220,181.33
Shanghai Fudan Sci-Tech. Park Venture Investment Co., Ltd.	18,642,334.13	-	(1,576,623.82)	-	17,065,710.31
Shanghai Haojun Venture Capital Partnership (Limited Partnership)	-	10,000,000.00	(104,621.56)	-	9,895,378.44
Spear Innovations Oy Ltd	-	739,581.20	-	-	739,581.20
	70,295,724.52	10,739,581.20	(5,526,536.20)	-	75,508,769.52

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

10. Long-term equity investments

The impairment of long-term equity investments:

2022

	Opening balance	Increase	Decrease	Closing balance
Shanghai Fudan-Holding Hualong Microsystem Technology Co., Ltd.	-	24,933,174.46	-	24,933,174.46

11. Investments in other equity instruments

2022

	Changes in fair value accumulated in other comprehensive income	Dividend income in the year			The reason for being designated as financial assets at fair value through other comprehensive income
		Fair value	Equity instruments derecognized during the year	Equity instruments held	
Shanghai Fudan Communication Co., Ltd.	18,083,190.02	27,526,636.02	-	-	Non-trading
Zhejiang Jingchang Electronics Co., Ltd.	-	-	-	-	Non-trading
MuMec, Inc	(326,243.37)	-	-	-	Non-trading
EtopusTechnology, Inc	-	3,187,850.00	-	-	Non-trading
ScaleFlux, Inc	-	3,187,829.41	-	-	Non-trading
	17,756,946.65	33,902,315.43	-	-	

2021

	Changes in fair value accumulated in other comprehensive income	Dividend income in the year			The reason for being designated as financial assets at fair value through other comprehensive income
		Fair value	Equity instruments derecognized during the year	Equity instruments held	
Shanghai Fudan Communication Co., Ltd.	17,167,997.62	26,611,443.62	-	-	Non-trading
Zhejiang Jingchang Electronics Co., Ltd.	-	-	-	-	Non-trading
MuMec, Inc	(326,243.37)	-	-	-	Non-trading
EtopusTechnology, Inc	-	3,187,850.00	-	-	Non-trading
ScaleFlux, Inc	-	3,187,829.41	-	-	Non-trading
	16,841,754.25	32,987,123.03	-	-	

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

12. Investment properties

Subsequent measurement adopting the cost model:

2022

	Buildings
Cost	
Addition and closing balance	125,119,202.98
Accumulated depreciation	
Depreciation provided and closing balance	2,431,293.48
Carrying amount	
At end of year	122,687,909.50
At beginning of year	–

All of the forementioned investment properties are located in the PRC and are used for operating commercial leases. The residual useful life of the Group's title deeds is 37 years, which can be used for medium to long-term leasing.

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

13. Fixed assets

2022

	Buildings	Machinery	Vehicles	Electronic and other equipment	Total
Original book value					
Opening balance	361,821,534.47	684,558,273.74	8,900,089.69	52,607,574.70	1,107,887,472.60
Purchases	66,865,332.12	20,528,176.98	650,364.62	10,242,445.15	98,286,318.87
Transfers from construction in progress	-	138,855,246.79	-	-	138,855,246.79
Foreign currency financial statement translation	-	-	-	12,332.62	12,332.62
Disposals or retirements	(4,397,272.86)	(7,138,691.67)	(445,783.22)	(1,338,949.65)	(13,320,697.40)
Closing balance	424,289,593.73	836,803,005.84	9,104,671.09	61,523,402.82	1,331,720,673.48
Accumulated depreciation					
Opening balance	34,229,387.65	471,230,311.04	6,766,961.31	27,784,318.01	540,010,978.01
Provision	9,831,971.04	97,412,147.09	598,665.48	1,533,299.40	109,376,083.01
Foreign currency financial statement translation	-	-	-	9,190.43	9,190.43
Disposals or retirements	(4,177,409.22)	(6,578,751.13)	(426,161.75)	(939,961.58)	(12,122,283.68)
Closing balance	39,883,949.47	562,063,707.00	6,939,465.04	28,386,846.26	637,273,967.77
Carrying amount					
At end of year	384,405,644.26	274,739,298.84	2,165,206.05	33,136,556.56	694,446,705.71
At beginning of year	327,592,146.82	213,327,962.70	2,133,128.38	24,823,256.69	567,876,494.59

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

13. Fixed assets (continued)

2021

	Buildings	Machinery	Vehicles	Other equipment	Total
Original book value					
Opening balance	182,635,968.86	563,442,829.60	9,380,846.21	37,836,436.93	793,296,081.60
Purchases	179,185,565.61	16,442,902.44	1,515,817.01	14,779,191.22	211,923,476.28
Transfers from construction in progress	-	105,768,576.67	-	-	105,768,576.67
Foreign currency financial statement translation	-	-	-	(3,024.95)	(3,024.95)
Disposals or retirements	-	(1,096,034.97)	(1,996,573.53)	(5,028.50)	(3,097,637.00)
Closing balance	361,821,534.47	684,558,273.74	8,900,089.69	52,607,574.70	1,107,887,472.60
Accumulated depreciation					
Opening balance	29,139,510.31	382,065,710.73	8,146,534.05	26,356,029.35	445,707,784.44
Provision	5,089,877.34	90,216,928.70	519,291.12	1,435,592.27	97,261,689.43
Foreign currency financial statement translation	-	-	-	(2,526.54)	(2,526.54)
Disposals or retirements	-	(1,052,328.39)	(1,898,863.86)	(4,777.07)	(2,955,969.32)
Closing balance	34,229,387.65	471,230,311.04	6,766,961.31	27,784,318.01	540,010,978.01
Carrying amount					
At end of year	327,592,146.82	213,327,962.70	2,133,128.38	24,823,256.69	567,876,494.59
At beginning of year	153,496,458.55	181,377,118.87	1,234,312.16	11,480,407.58	347,588,297.16

At 31 December 2021, the Group obtained long-term borrowings of RMB49,800,000.00 secured by fixed assets with a carrying value of RMB178,037,972.67, which was repaid in advance in 2022. At 31 December, 2022, the carrying amount of these fixed assets was RMB173,447,600.91. The Group is still in the process of releasing the mortgage of the property. Refer to Note V.29, Note V.56.

At at 31 December 2022, the Group had no fixed assets with outstanding title certificates.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

14. Construction in progress

	2022			2021		
	Book balance	Impairment provision	Book value	Book balance	Impairment provision	Book value
Decoration	17,711,167.99	-	17,711,167.99	1,176,224.28	-	1,176,224.28
Equipment to be commissioned	176,065,273.02	-	176,065,273.02	53,513,193.89	-	53,513,193.89
	193,776,441.01	-	193,776,441.01	54,689,418.17	-	54,689,418.17

Changes of major construction in progress during the year ended 31 December 2022 are as follows:

	Opening balance	Addition	Transfer to fixed assets or long-term prepaid expenses	Closing balance	Sources of funding
Decoration	53,892.05	19,063,422.73	(1,406,146.79)	17,711,167.99	Self-financing
Equipment to be commissioned	54,635,526.12	260,284,993.69	(138,855,246.79)	176,065,273.02	Self-financing
	54,689,418.17	279,348,416.42	(140,261,393.58)	193,776,441.01	

Changes of major construction in progress during the year ended 31 December 2021 are as follows:

	Opening balance	Addition	Transfer to fixed assets or long-term prepaid expenses	Closing balance	Sources of funding
Decoration	8,803,541.24	9,996,020.23	(18,745,669.42)	53,892.05	Self-financing
Equipment to be commissioned	40,466,341.25	119,937,761.54	(105,768,576.67)	54,635,526.12	Self-financing
	49,269,882.49	129,933,781.77	(124,514,246.09)	54,689,418.17	

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

15. Right-of-use assets

2022

	Buildings
Original value	
Opening balance	74,481,210.39
Increase	9,082,978.35
Foreign currency financial statement translation	(182,376.72)
Disposal	(3,079,561.95)
Closing balance	80,302,250.07
Accumulated depreciation	26,538,776.48
Provision	15,172,556.23
Foreign currency financial statement translation	(216,500.84)
Disposal	(3,079,561.95)
Closing balance	38,415,269.92
Net amount	
Closing balance	41,886,980.15
Opening balance	47,942,433.91

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

15. Right-of-use assets *(continued)*

2021

	Buildings
Original value	
Opening balance	63,368,811.32
Increase	13,560,987.53
Foreign currency financial statement translation	(41,055.43)
Disposal	(2,407,533.03)
Closing balance	74,481,210.39
Accumulated depreciation	
Opening balance	15,692,504.74
Provision	13,282,931.12
Foreign currency financial statement translation	(29,126.35)
Disposal	(2,407,533.03)
Closing balance	26,538,776.48
Net amount	
Closing balance	47,942,433.91
Opening balance	47,676,306.58

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

16. Intangible assets

2022

	Land use rights	Patents	Total
Original book value			
Opening balance	83,993,829.08	493,508,634.74	577,502,463.82
Additions	22,285,659.98	–	22,285,659.98
Internal R&D	–	42,790,900.98	42,790,900.98
Closing balance	106,279,489.06	536,299,535.72	642,579,024.78
Accumulated amortisation			
Opening balance	64,456,071.94	345,830,483.36	410,286,555.30
Provision	15,759,219.22	35,902,398.67	51,661,617.89
Closing balance	80,215,291.16	381,732,882.03	461,948,173.19
Provision for impairment			
Opening balance	–	92,382,735.85	92,382,735.85
Provision	–	2,497,482.46	2,497,482.46
Closing balance	–	94,880,218.31	94,880,218.31
Carrying amount			
Closing balance	26,064,197.90	59,686,435.38	85,750,633.28
Opening balance	19,537,757.14	55,295,415.53	74,833,172.67

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

16. Intangible assets (continued)

2021

	Land use rights	Patents	Total
Original book value			
Opening balance	57,446,702.63	436,523,782.02	493,970,484.65
Additions	26,547,126.45	–	26,547,126.45
Internal R&D	–	56,984,852.72	56,984,852.72
Closing balance	83,993,829.08	493,508,634.74	577,502,463.82
Accumulated amortisation			
Opening balance	29,359,255.64	278,280,314.20	307,639,569.84
Provision	35,096,816.30	67,550,169.16	102,646,985.46
Closing balance	64,456,071.94	345,830,483.36	410,286,555.30
Provision for impairment			
Opening balance	–	69,168,490.57	69,168,490.57
Provision	–	23,214,245.28	23,214,245.28
Closing balance	–	92,382,735.85	92,382,735.85
Carrying amount			
Closing balance	19,537,757.14	55,295,415.53	74,833,172.67
Opening balance	28,087,446.99	89,074,977.25	117,162,424.24

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

17. Development costs

2022

	Opening balance	Increase	Decrease		Closing balance
			Recognised as intangible assets	Included in profit or loss	
Security and Identification chips	45,016,100.16	39,134,010.16	(23,274,159.16)	(2,024,065.04)	58,851,886.12
Non-Volatile memory	13,744,842.59	28,097,372.58	-	-	41,842,215.17
Smart Meter chips	10,154,931.00	24,186,081.33	(10,237,085.76)	(12,793.49)	24,091,133.08
FPGA and other chips	103,812,253.68	123,939,490.24	(9,279,656.06)	(26,735,624.92)	191,736,462.94
	172,728,127.43	215,356,954.31	(42,790,900.98)	(28,772,483.45)	316,521,697.31

2021

	Opening balance	Increase	Decrease		Closing balance
			Recognised as intangible assets	Included in profit or loss	
Security and Identification chips	14,822,294.29	42,021,155.51	(3,695,964.22)	(8,131,385.42)	45,016,100.16
Non-Volatile memory	7,313,815.95	14,054,762.24	(6,862,455.27)	(761,280.33)	13,744,842.59
Smart Meter chips	26,924,713.21	10,954,420.55	(18,456,313.90)	(9,267,888.86)	10,154,931.00
FPGA and other chips	55,814,712.70	75,967,660.31	(27,970,119.33)	-	103,812,253.68
	104,875,536.15	142,997,998.61	(56,984,852.72)	(18,160,554.61)	172,728,127.43

The Group considers the commencement of capitalization of Development costs by holding a project review meeting for development expenditure projects and passing the review. The internal review meeting mainly considers whether the Company has the technical reserve to complete the development expenditure project, whether the development expenditure project can subsequently result in products, whether there is a future market for the products resulting from the development expenditure project, and whether the Company has sufficient resources to complete the development expenditure project.

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

18. Long-term prepaid expenses

2022

	Opening balance	Increase	Amortization for the year	Closing balance
Decoration expenses of leased offices and plants	57,378,801.04	23,640,723.77	(14,775,016.97)	66,244,507.84

2021

	Opening balance	Increase	Amortization for the year	Closing balance
Decoration expenses of leased offices and plants	29,039,916.72	38,177,044.20	(9,838,159.88)	57,378,801.04

19. Deferred tax assets/liabilities

Deferred income tax assets/liabilities before offsetting:

	2022		2021	
	Deductible temporary differences and deductible losses	Deferred income tax assets	Deductible temporary differences and deductible losses	Deferred income tax assets
Deferred tax assets				
Provision for impairment of assets	1,635,010.00	245,251.50	1,215,968.74	182,395.31
Government grants	37,048,571.14	5,557,285.67	44,061,715.57	6,609,257.34
Accrued expenses	1,407,094.70	211,064.21	283,018.87	42,452.83
Lease liabilities	30,767,898.55	4,615,184.78	32,724,692.67	4,908,703.90
Deductible losses	3,980,140.89	597,021.13	–	–
Unrealised profit of intra-group transaction	1,746,221.13	261,933.17	1,183,711.87	177,556.78
	76,584,936.41	11,487,740.46	79,469,107.72	11,920,366.16

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

19. Deferred tax assets/liabilities (continued)

Deferred income tax assets/liabilities before offsetting: (continued)

	2022		2021	
	Taxable temporary difference	Deferred income tax liabilities	Taxable temporary difference	Deferred income tax liabilities
Deferred tax liabilities				
Changes in fair value of investments in other equity instruments	27,526,636.02	4,128,995.40	26,611,443.62	3,991,716.54
Depreciation of fixed assets	15,160.73	2,501.52	13,876.48	2,289.62
Right-of-use assets	26,630,991.51	3,994,648.73	29,574,312.59	4,436,146.89
Super deduction of high-tech enterprise innovation input	28,328,314.20	4,249,247.13	–	–
	82,501,102.46	12,375,392.78	56,199,632.69	8,430,153.05

Deferred income tax assets or liabilities presented at net amount after offsetting:

	2022		2021	
	Offset amount of deferred income tax assets and liabilities at the end of the year	Remaining deferred income tax assets or liabilities after offset at the end of the year	Offset amount of deferred income tax assets and liabilities at the beginning of the year	Remaining deferred income tax assets or liabilities after offset at the beginning of the year
Deferred income tax assets	(8,243,895.86)	3,243,844.60	(4,436,146.89)	7,484,219.27
Deferred income tax liabilities	(8,243,895.86)	4,131,496.92	(4,436,146.89)	3,994,006.16

Deductible temporary differences and deductible losses that are not recognised as deferred income tax assets:

	2022	2021
Deductible temporary differences	748,895,105.85	407,905,616.59
Deductible losses	42,440,501.86	569,023,135.78
	791,335,607.71	976,928,752.37

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

19. Deferred tax assets/liabilities *(continued)*

Deductible losses that are not recognised as deferred income tax assets will expire in the following years:

	2022	2021
2022	–	1,377,988.63
2023	1,200,928.90	1,200,928.90
2024	2,593,017.71	371,334,156.51
2025	29,374,661.89	192,935,705.42
2026	2,174,356.32	2,174,356.32
2027	7,097,537.04	–
	42,440,501.86	569,023,135.78

20. Other non-current assets

	2022	2021
Prepaid plant	133,899,851.00	26,779,970.20
Prepaid equipment	22,687,579.80	5,142,877.20
Prepayment for public housing acquisition	23,865,060.90	–
Lease deposit	2,364,680.38	–
	182,817,172.08	31,922,847.40

21. Short-term borrowings

	2022	2021
Unsecured borrowings	50,000,000.00	100,000.00
Bill discounting	4,000,000.00	–
	54,000,000.00	100,000.00

At 31 December 2022, the annual interest rate for the above borrowings was 2.8% (31 December 2021: 3.5%). The annual interest rate for the bill discounting was 1.3% (31 December 2021: Nil).

At 31 December 2022, the Group had no short-term borrowings that were due but not repaid (31 December 2021: Nil).

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

22. Accounts payable

Accounts payable are non-interest-bearing and are generally settled on terms of within 3 months.

An ageing analysis of accounts payable is as follows:

	2022	2021
Within 1 year	187,918,075.41	200,135,123.53
1 to 2 years	13,264,405.03	127,795.00
	201,182,480.44	200,262,918.53

At 31 December 2022, the Group had no significant accounts payable aged over 1 year (31 December 2021: Nil).

23. Contract Liabilities

	2022	2021
Advances from sale of goods and testing fee	210,402,283.73	126,274,826.25

At the balance sheet date, the total transaction price apportioned to the remaining performance obligations will be recognised as revenue in one year as the related services are rendered and the sale of goods is still in progress.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

24. Employee benefits payable

2022

	Opening balance	Increase	Decrease	Closing balance
Short-term employee benefits	157,588,171.21	793,137,241.37	763,609,509.76	187,115,902.82
Post-employment benefits (defined contribution plan)	4,423,925.93	62,887,779.19	62,087,514.69	5,224,190.43
Termination benefits	–	1,000,000.00	1,000,000.00	–
	162,012,097.14	857,025,020.56	826,697,024.45	192,340,093.25

2021

	Opening balance	Increase	Decrease	Closing balance
Short-term employee benefits	114,006,633.61	681,613,624.42	638,032,086.82	157,588,171.21
Post-employment benefits (defined contribution plan)	401,640.58	57,925,040.35	53,902,755.00	4,423,925.93
Termination benefits	12,000.00	18,200.00	30,200.00	–
	114,420,274.19	739,556,864.77	691,965,041.82	162,012,097.14

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

24. Employee benefits payable (continued)

Details of short-term compensation are as follows:

2022

	Opening balance	Increase	Decrease	Closing balance
Wages and salaries, bonus, allowances and subsidies	117,070,899.74	720,709,340.29	692,187,475.81	145,592,764.22
Staff welfare	–	2,863,649.24	2,863,649.24	–
Social insurance contributions	2,418,238.59	40,829,728.30	40,006,086.97	3,241,879.92
Including: Medical insurance	2,060,899.16	35,568,754.59	34,839,323.74	2,790,330.01
Work injury insurance	294,764.13	1,516,894.28	1,499,465.99	312,192.42
Maternity insurance	62,575.30	3,744,079.43	3,667,297.24	139,357.49
Housing funds	1,789,498.55	27,728,228.93	27,489,278.93	2,028,448.55
Labour union funds and employee education funds	36,309,534.33	1,006,294.61	1,063,018.81	36,252,810.13
	157,588,171.21	793,137,241.37	763,609,509.76	187,115,902.82

2021

	Opening balance	Increase	Decrease	Closing balance
Wages and salaries, bonus, allowances and subsidies	74,073,589.20	622,285,937.36	579,288,626.82	117,070,899.74
Staff welfare	–	6,504,836.51	6,504,836.51	–
Social insurance contributions	1,875,318.33	30,323,645.23	29,780,724.97	2,418,238.59
Including: Medical insurance	1,750,648.82	25,862,453.79	25,552,203.45	2,060,899.16
Work injury insurance	93,036.95	2,510,886.00	2,309,158.82	294,764.13
Maternity insurance	31,632.56	1,950,305.44	1,919,362.70	62,575.30
Housing funds	1,573,122.67	21,201,483.54	20,985,107.66	1,789,498.55
Labour union funds and employee education funds	36,484,603.41	1,297,721.77	1,472,790.85	36,309,534.33
	114,006,633.61	681,613,624.41	638,032,086.81	157,588,171.21

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

24. Employee benefits payable *(continued)*

Details of defined contribution plans are as follows:

2022

	Opening balance	Increase	Decrease	Closing balance
Basic pensions	4,210,795.97	60,999,706.17	60,223,682.74	4,986,819.40
Unemployment insurance	213,129.96	1,888,073.02	1,863,831.95	237,371.03
	4,423,925.93	62,887,779.19	62,087,514.69	5,224,190.43

2021

	Opening balance	Increase	Decrease	Closing balance
Basic pensions	310,551.70	48,405,045.10	44,504,800.83	4,210,795.97
Unemployment insurance	91,088.88	9,519,995.25	9,397,954.17	213,129.96
	401,640.58	57,925,040.35	53,902,755.00	4,423,925.93

25. Taxes payable

	2022	2021
Individual income tax	7,952,129.32	6,454,450.00
Property tax	1,042,086.75	736,452.08
VAT	792,819.31	3,668,197.40
Stamp duties	569,375.47	23,323.51
Urban maintenance and construction tax	371,564.49	368,433.05
Land-use tax	7,082.95	5,065.97
Corporate income tax	–	4,212,007.07
Education surcharge	–	157,899.88
Local education surcharge	–	105,266.59
	10,735,058.29	15,731,095.55

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

26. Other payables

	2022	2021
Payable expenses	57,591,981.23	16,112,219.75
Disability deposit	8,071,642.60	8,071,642.60
Collection and payment	3,903,219.18	3,615,080.90
Others	2,768,789.37	3,364,649.76
	72,335,632.38	31,163,593.01

27. Current portion of non-current liabilities

	2022	2021
Current portion of long-term borrowings (Note V. 29)	–	31,655,540.83
Current portion of lease liabilities (Note V. 30)	15,181,384.65	13,177,394.67
	15,181,384.65	44,832,935.50

28. Other current liabilities

	2022	2021
Government grants	101,583,000.00	101,246,500.00
Output tax to be transferred	26,349,277.48	15,970,501.99
Accrued expenses	19,767,122.35	15,554,059.36
	147,699,399.83	132,771,061.35

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

29. Long-term borrowings

	2022	2021
Pledged borrowings	–	49,855,540.83
Less: Current portion of long-term borrowings (Note V. 27)	–	31,655,540.83
	–	18,200,000.00

The expiration dates of long-term borrowings (excluding the portion due within one year) are analysed as follows:

	2022	2021
1 to 2 years	–	18,200,000.00

At 31 December 2021, RMB49,800,000.00 of the long-term borrowings were secured by fixed assets of the Group, the annual interest rate was 3.60%-3.65%, which was repaid in advance in 2022.

30. Lease liabilities

	2022	2021
Lease liabilities	48,344,090.25	51,730,920.03
Less: Current portion of lease liabilities (Note V,27)	15,181,384.65	13,177,394.67
	33,162,705.60	38,553,525.36

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

31. Deferred Income

2022

	Opening balance	Increase	Decrease	Closing balance
Government grants related to assets	20,499,998.17	2,906,840.00	11,239,782.84	12,167,055.33
Government grants related to revenue	3,715,579.67	34,678,254.79	34,012,748.74	4,381,085.72
	24,215,577.84	37,585,094.79	45,252,531.58	16,548,141.05

2021

	Opening balance	Increase	Decrease	Closing balance
Government grants related to assets	33,542,219.43	6,076,153.96	19,118,375.22	20,499,998.17
Government grants related to revenue	10,544,668.66	49,681,227.16	56,510,316.15	3,715,579.67
	44,086,888.09	55,757,381.12	75,628,691.37	24,215,577.84

At 31 December 2022, the liabilities related to government grants are as follows:

	Opening balance	Increase	Transferred to other income	Closing balance	Related to assets/revenue
Chip design	11,490,362.27	33,128,254.79	35,892,714.75	8,725,902.31	Assets/revenue
Test services	11,386,888.88	4,000,000.00	8,463,828.10	6,923,060.78	Assets/revenue
Others	1,338,326.69	456,840.00	895,988.73	899,177.96	Assets
	24,215,577.84	37,585,094.79	45,252,531.58	16,548,141.05	

At 31 December 2021, the liabilities related to government grants are as follows:

	Opening balance	Increase	Transferred to other income	Closing balance	Related to assets/revenue
Chip design	18,779,972.99	44,439,931.12	51,729,541.84	11,490,362.27	Assets/revenue
Test services	23,638,755.92	10,981,000.00	23,232,867.04	11,386,888.88	Assets/revenue
Others	1,668,159.18	336,450.00	666,282.49	1,338,326.69	Assets
	44,086,888.09	55,757,381.12	75,628,691.37	24,215,577.84	

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

32. Share capital

2022

	Changes for the year				Closing balance
	Opening balance	Issue of new shares	Others	Total	
RMB-denominated ordinary shares	53,017,200.00	215,450.00	–	215,450.00	53,232,650.00
Foreign shares listed overseas	28,433,000.00	–	–	–	28,433,000.00
	81,450,200.00	215,450.00	–	215,450.00	81,665,650.00

On 24 November 2022, the Company issued its RMB ordinary shares to the incentive recipients who satisfied the vesting conditions of the first vesting period of the portion first grant of the 2021 Restricted Share Incentive Plan, resulting in an increase in share capital of RMB215,450.00, refer to Note V.33.

2021

	Changes for the year				Closing balance
	Opening balance	Issue of new shares	Others	Total	
RMB-denominated ordinary shares	41,017,200.00	12,000,000.00	–	12,000,000.00	53,017,200.00
Foreign shares listed overseas	28,433,000.00	–	–	–	28,433,000.00
	69,450,200.00	12,000,000.00	–	12,000,000.00	81,450,200.00

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

33. Capital surplus

2022

	Opening balance	Increase	Decrease	Closing balance
Capital premium (Note 1)	1,213,969,600.18	108,379,775.00	–	1,322,349,375.18
Other capital surplus (Note 2)	45,243,329.75	325,267,541.50	69,954,267.50	300,556,603.75
	1,259,212,929.93	433,647,316.50	69,954,267.50	1,622,905,978.93

2021

	Opening balance	Increase	Decrease	Closing balance
Capital premium (Note 1)	545,686,818.38	668,282,781.80	–	1,213,969,600.18
Other capital surplus (Note 2)	31,171,848.78	14,071,480.97	–	45,243,329.75
	576,858,667.16	682,354,262.77	–	1,259,212,929.93

Note 1: On 24 November 2022, the Company issued 2,154,500 ordinary shares with a par value of RMB0.1 each at a vesting price of RMB17.935 per share to the incentive recipients who met the vesting conditions of the first vesting period of the first portion of grant of the 2021 Restricted Stock Incentive Plan, raising net proceeds of RMB38,640,957.50, of which there was an increase in share capital of RMB215,450.00 and an increase in capital surplus of RMB38,425,507.50. Meanwhile, as the vesting of the first vesting period of the initial grant portion was completed, the related other capital surplus of RMB69,954,267.50 was transferred to equity premium.

Note 2: In addition to the transfer of other capital surplus to share premium mentioned above, movements in other capital surplus are as follows:

- 1) In 2022, the Company implements an employee incentive plan and recognises expenses and other capital surplus amounting to RMB149,709,721.06 (2021: RMB14,071,480.97) in instalments over the waiting period, as detailed in Note XI.
- 2) On 28 October 2022, Sino IC publicly issued 40 million shares (par value of RMB1 per share) to unspecific qualified investors and listed on the Beijing Stock Exchange. After this issue, the Company's shareholding in Sino IC was reduced from 50.29% to 42.75%, and increased capital surplus RMB175,557,820.44.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

34. Other comprehensive income

Accumulated balance of other comprehensive income attributable to owners of the parent in the consolidated balance sheet:

2022

	1 January 2022	Increase or decrease	31 December 2022
Changes in the fair value of other equity instrument investments	13,794,382.31	777,913.54	14,572,295.85
Differences on translation of foreign currency financial statements	(3,285,299.61)	2,397,522.04	(887,777.57)
	10,509,082.70	3,175,435.58	13,684,518.28

2021

	1 January 2021	Increase or decrease	31 December 2021
Changes in the fair value of other equity instrument investments	11,862,651.39	1,931,730.92	13,794,382.31
Differences on translation of foreign currency financial statements	(2,525,872.42)	(759,427.19)	(3,285,299.61)
	9,336,778.97	1,172,303.73	10,509,082.70

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

34. Other comprehensive income (continued)

Other comprehensive income Amount:

2022

	Amount before tax	Less: Previously included in other comprehensive income to profit or loss	Less: Reclassified from other comprehensive income to retained earnings	Less: Income tax	Attributable to owners of the parent after tax	Attributable to non-controlling interests after tax
Other comprehensive income that will not be reclassified to profit or loss						
Change in the fair value of other equity instrument investments	915,192.40	-	-	137,278.86	777,913.54	-
Other comprehensive income that may be reclassified to profit or loss						
Exchange differences on translation of foreign currency financial statements	2,397,522.04	-	-	-	2,397,522.04	-
Total	3,312,714.44	-	-	137,278.86	3,175,435.58	-

2021

	Amount before tax	Less: Previously included in other comprehensive income to profit or loss	Less: Reclassified from other comprehensive income to retained earnings	Less: Income tax	Attributable to owners of the parent after tax	Attributable to non-controlling interests after tax
Other comprehensive income that will not be reclassified to profit or loss						
Change in the fair value of other equity instrument investments	2,272,624.61	-	-	340,893.69	1,931,730.92	-
Other comprehensive income that may be reclassified to profit or loss						
Exchange differences on translation of foreign currency financial statements	(759,427.19)	-	-	-	(759,427.19)	-
Total	1,513,197.42	-	-	340,893.69	1,172,303.73	-

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

35. Surplus reserve

2022

	Opening balance	Increase	Decrease	Closing balance
Statutory surplus reserves	40,725,100.00	107,725.00	–	40,832,825.00

2021

	Opening balance	Increase	Decrease	Closing balance
Statutory surplus reserves	35,478,142.63	5,246,957.37	–	40,725,100.00

According to the provisions of the Company Law and the Company's Articles of Association, the Company appropriates 10% of the net profit to the statutory surplus reserves. Where the accumulated amount of the surplus reserves reaches 50% or more of the Company's registered capital, further appropriation is not required.

After the appropriation to the statutory surplus reserves, the Company may appropriate the discretionary surplus reserves. When approved, the discretionary surplus reserves can be used to make up for accumulated losses or converted to the paid-in capital.

36. Undistributed profits

	2022	2021
Balance at beginning of the year	1,748,348,393.72	1,239,128,570.38
Net profit attributable to owners of the parent	1,076,843,340.68	514,466,780.71
Appropriation to statutory surplus reserves	(107,725.00)	(5,246,957.37)
Distributions to owners (Note)	(52,942,630.00)	–
Balance at end of the year	2,772,141,379.40	1,748,348,393.72

Note: according to the resolution of the 2021 annual general meeting of the Company held on 2 June 2022, the Company proposed a total cash dividend of RMB52,942,630.00 (including tax) based on the total share capital of the Company of 814,502,000 shares as of 31 December 2021.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

37. Revenue and costs of sales

	2022		2021	
	Revenue	Cost of sales	Revenue	Cost of sales
Principal operations	3,510,573,053.08	1,241,292,662.24	2,551,976,044.49	1,048,745,666.61
Other operations	28,335,831.86	8,978,563.07	25,286,302.44	10,177,875.85
	3,538,908,884.94	1,250,271,225.31	2,577,262,346.93	1,058,923,542.46

Revenue is as follows:

	2022	2021
Revenue arising from the transactions with the customers	3,532,711,433.96	2,575,857,955.81
Leasing income	6,197,450.98	1,404,391.12
	3,538,908,884.94	2,577,262,346.93

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

37. Revenue and costs of sales *(continued)*

Disaggregation of revenue from contracts with customers is as follows:

2022

Reporting segments	Design and sale of integrated circuits	Integrated circuit test services	Total
Place of business			
Mainland China	3,151,244,113.01	209,134,158.97	3,360,378,271.98
Others	162,848,220.67	9,484,941.31	172,333,161.98
	3,314,092,333.68	218,619,100.28	3,532,711,433.96
Main product types			
Security and identification chips	976,052,956.98	–	976,052,956.98
Non-volatile memory	940,310,039.15	–	940,310,039.15
Smart meter chips	594,579,681.69	–	594,579,681.69
FPGA and other chips	803,149,655.86	–	803,149,655.86
Integrated circuit test services	–	218,619,100.28	218,619,100.28
	3,314,092,333.68	218,619,100.28	3,532,711,433.96
Time of revenue recognition			
Revenue recognised at a certain point of time			
Sale of goods	3,314,092,333.68	–	3,314,092,333.68
Service	–	218,619,100.28	218,619,100.28
	3,314,092,333.68	218,619,100.28	3,532,711,433.96

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

37. Revenue and costs of sales (continued)

Disaggregation of revenue from contracts with customers is as follows: (continued)

2021

Reporting segments	Design and sale of integrated circuits	Integrated circuit test services	Total
Place of business			
Mainland China	2,106,150,622.56	236,959,957.10	2,343,110,579.66
Others	229,430,816.66	3,316,559.49	232,747,376.15
	2,335,581,439.22	240,276,516.59	2,575,857,955.81
Main product types			
Security and identification chips	866,262,870.90	–	866,262,870.90
Non-volatile memory	721,026,182.95	–	721,026,182.95
Smart meter chips	295,785,007.36	–	295,785,007.36
FPGA and other chips	452,507,378.01	–	452,507,378.01
Integrated circuit test services	–	240,276,516.59	240,276,516.59
	2,335,581,439.22	240,276,516.59	2,575,857,955.81
Time of revenue recognition			
Revenue recognised at a certain point of time			
Sale of goods	2,335,581,439.22	–	2,335,581,439.22
Service	–	240,276,516.59	240,276,516.59
	2,335,581,439.22	240,276,516.59	2,575,857,955.81

Revenue recognised that was included in contract liabilities at the beginning of the year:

	2022	2021
Sale of goods	124,745,290.02	22,108,959.16
Service	195,844.44	3,584,039.40
	124,941,134.46	25,692,998.56

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

37. Revenue and costs of sales *(continued)*

Information about the Group's performance obligations is summarised below:

Sale of goods

Fulfill performance obligations when delivering goods to customers. Usually, the payment obligation is performed after the customer signs for the goods, and the company gives different credit arrangements to different customers.

Testing services

For existing customers, the customer usually pays the contract price after the service is completed and the customer receives the tested product; for new customers, prepayment is usually required.

38. Taxes and surcharges

	2022	2021
Urban maintenance and construction tax	11,890,251.53	5,194,656.89
Education surcharge	4,412,697.46	2,226,281.54
Local education surcharge	2,941,798.29	1,484,187.68
Property tax	1,835,094.13	2,249,784.26
Land use tax	13,001.82	17,082.82
Vehicle and vessel tax	10,020.00	7,040.00
Stamp duties	3,457,413.68	1,084,113.01
	24,560,276.91	12,263,146.20

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

39. Selling expenses

	2022	2021
Staff costs	143,863,996.41	119,365,419.19
Equity incentive expense	30,483,239.99	2,449,228.16
Professional service fees	16,102,197.50	16,984,816.02
Business hospitality	8,292,873.07	7,930,265.76
Office and administrative expenses	6,373,792.12	9,919,721.41
Travelling expense	4,858,732.44	6,703,006.82
Rental, property management and utilities	1,269,095.20	1,148,365.77
Advertising and marketing expenses	1,134,022.87	1,678,876.58
Others	10,440,973.12	5,459,706.53
	222,818,922.72	171,639,406.24

40. Administrative expenses

	2022	2021
Payroll	80,020,517.91	64,662,863.65
Depreciation and amortization	17,018,568.41	11,203,887.94
Office charges	11,140,501.81	10,673,414.97
Repair charge	5,477,408.30	4,062,745.28
Professional service fees	4,943,110.97	6,135,707.61
Equity incentive expense	2,745,712.21	1,567,001.24
Business entertainment expenses	1,954,629.13	3,541,694.86
Advertising and marketing expenses	1,412,793.11	2,771,786.96
Travelling expense	1,342,072.83	2,638,095.44
Others	12,880,162.46	4,798,292.76
	138,935,477.14	112,055,490.71

The forementioned administrative expenses included the taxable annual audit fee paid to Ernst & Young Hua Ming LLP and its subsidiaries, amounting to RMB2,830,000.00 (2021: RMB2,480,000.00).

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

41. Research and development expenses

	2022	2021
Staff costs	418,839,734.93	384,159,560.36
Material costs	125,150,466.01	135,924,354.34
Equity incentive fees	93,728,472.47	9,628,492.10
Depreciation and amortisation	67,828,247.23	124,286,979.87
Professional service fee	20,668,756.06	26,651,854.34
Office and administrative expenses	2,378,849.85	4,405,321.44
Travelling expense	623,146.36	1,354,903.07
Others	6,202,019.70	5,225,817.51
	735,419,692.61	691,637,283.03

42. Finance expenses

	2022	2021
Interest expenses	4,354,699.62	4,527,523.11
<i>Including: Loan interest to be repaid within 5 years</i>	1,335,714.92	2,246,570.66
<i>Interest expenses of lease liabilities</i>	3,018,984.70	2,280,952.45
Less: Interest income	14,813,114.77	8,431,206.09
Foreign exchange differences	1,768,911.55	2,357,571.03
Others	935,664.10	374,378.37
	(7,753,839.50)	(1,171,733.58)

43. Other income

	2022	2021
Government subsidies related to daily activities	104,174,464.77	105,617,364.70
Other subsidies (Note)	1,631,985.40	2,342,990.41
Refund of commission for paying individual income tax	1,108,587.76	923,180.45
	106,915,037.93	108,883,535.56

Note: Other subsidies mainly involve the Group's offsetting of taxable amount by 10% of the current deductible input tax amount based on the relevant policy of the Ministry of Finance, the General Administration of Taxation and the General Administration of Customs Announcement No. 39 of 2019 "Announcement on Relevant Policies for Deepening VAT Reform".

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

43. Other income (continued)

Government subsidies related to daily activities are as follows:

	2022	2021	Related to assets/ revenue
Research grants	11,239,782.84	19,118,375.22	Assets
Research grants	34,012,748.74	56,266,467.10	Revenue
Other government subsidies	17,869,678.66	13,601,889.60	Revenue
VAT refundable	41,052,254.53	16,630,632.78	Revenue
	104,174,464.77	105,617,364.70	

44. Investment income (loss is expressed with negative value)

	2022	2021
Investment income from long-term equity investments under the equity method	(8,129,075.27)	(5,526,536.20)
Investment income from held-for-trading financial assets during the period of holding	6,454,718.33	2,812,958.91
	(1,674,356.94)	(2,713,577.29)

45. Profit or loss arising from changes in fair value (loss is expressed with negative value)

	2022	2021
Financial assets at fair value through current profit or loss	1,866,476.71	948,111.87

46. Credit impairment losses (loss is expressed with negative value)

	2022	2021
Bad debt reversal/(loss) on notes receivable	2,879,911.60	(3,267,057.59)
Bad debt (loss)/reversal on accounts receivable	(1,770,002.63)	1,956,008.76
	1,109,908.97	(1,311,048.83)

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

47. Asset impairment losses (loss is expressed with negative value)

	2022	2021
Loss from write-down of inventories	(135,373,635.53)	(41,666,216.32)
Loss from impairment of intangible assets	(2,497,482.46)	(23,214,245.28)
Loss from impairment of Long-term equity investments	(24,933,174.46)	–
	(162,804,292.45)	(64,880,461.60)

48. Gains on disposal of assets (loss is expressed with negative value)

	2022	2021
Gain on disposal of fixed assets	1,329,678.22	519,205.28

49. Non-operating income

	2022	2021	Non-recurring gains and losses of 2022
Others	111,404.79	104,975.63	111,404.79

50. Non-operating expenses

	2022	2021	Non-recurring gains and losses of 2022
Compensation from default	–	15,359.61	–
Others	300.00	1,073.52	300.00
	300.00	16,433.13	300.00

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

51. Trial sales

Gains and losses generated from external sales of products and by-products produced during the research and development process are as follows:

	2022	2021
Revenue	102,366,803.41	95,194,046.11
Cost of sales	28,350,767.97	20,612,749.82

52. Income tax expenses

	2022	2021
Current income tax expenses	5,336.12	12,554,716.48
Deferred income tax expenses	4,240,586.57	1,570,093.09
	4,245,922.69	14,124,809.57

The reconciliation between income tax expenses and total profit is as follows:

	2022	2021
Accounting profit	1,121,510,686.98	573,449,519.36
Income tax expense at the rate of 15%	168,226,603.05	86,017,427.90
Effect of different tax rates for some subsidiaries	(1,333,257.11)	(554,453.91)
Expenses not deductible for tax purposes	4,704,899.77	4,589,004.53
Super deduction of research and development costs	(116,406,048.21)	(64,667,763.05)
Tax impact of utilisation of unrecognized deductible losses and deductible temporary differences in previous years	(90,967,921.59)	(15,768,326.09)
Tax impact of unrecognised deductible temporary differences and deductible losses in the year	44,371,796.98	4,503,759.95
Super deduction of high-tech enterprise innovation input (Note)	(4,350,150.20)	–
Others	–	5,160.24
Tax charge at the Company's effective tax rate	4,245,922.69	14,124,809.57

Note: According to the relevant policy of the Ministry of Finance, the General Administration of Taxation, and the Ministry of Science and Technology Announcement No. 28 of 2022 "Announcement of the Ministry of Finance, the General Administration of Taxation, and the Ministry of Science and Technology on Facilitating Support for Pre-tax Deductions for Scientific and Technological Innovation", the new acquisition of equipment and apparatus in the fourth quarter of 2022 is allowed to be deducted in full in the calculation of taxable income in a lump sum in the current year, and 100% additional deduction is allowed to be applied before tax.

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

53. Earnings per share

	2022 RMB/share	2021 RMB/share
Basic earnings per share		
Continuing operations	1.32	0.69
Diluted earnings per share		
Continuing operations	1.31	0.69

Basic earnings per share is calculated by dividing net income for the net profit for the year attributable to the Company's common stockholders by the weighted-average number of common shares issued and outstanding. The number of newly issued common shares is determined by calculating from the month following the issuance of shares.

The numerator of diluted earnings per share is determined by using the net income for the net profit for the year attributable to the Company's common shareholders, adjusted for (1) interest on dilutive potential common shares recognized as an expense in the net profit for the year; (2) income or expense to be incurred upon conversion of dilutive potential common shares; and (3) the income tax effect related to the above adjustments.

The denominator of diluted earnings per share is equal to the sum of (1) the weighted-average number of common shares of the parent outstanding for basic earnings per share; and (2) the weighted-average number of common shares that would have been added assuming the conversion of dilutive potential common shares into common shares.

In calculating the weighted average number of common shares added by the conversion of dilutive potential common shares into outstanding common shares, dilutive potential common shares issued in prior periods are assumed to be converted at the beginning of the current period; dilutive potential common shares issued in the current period are assumed to be converted on the date of issuance.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

53. Earnings per share *(continued)*

Basic earnings per share and diluted earnings per share are calculated as follows.

	2022	2021
Earnings		
Net profit for the year attributable to ordinary shareholders of the Company		
Continuing operation	1,076,843,340.68	514,466,780.71
Attributable to:		
Continuing operation	1,076,843,340.68	514,466,780.71
Shares		
Weighted average number of ordinary shares in issue	814,681,542.00	745,460,904.00
Dilution effect – weighted average of common Shares		
Stock options	6,686,339.00	217,494.00
Weighted average number of common shares of the Company issued and outstanding	821,367,881.00	745,678,398.00

54. Notes to the statements of cash flows

	2022	2021
Cash received relating to other operating activities		
Government grants	56,982,777.72	78,141,536.96
Interest income	9,134,207.62	4,904,244.59
Others	147,426.74	5,261,831.62
	66,264,412.08	88,307,613.17

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

54. Notes to the statements of cash flows *(continued)*

	2022	2021
Cash paid relating to other operating activities		
Cash-paid expenses	209,440,263.32	97,915,278.51
Payments of deposits	2,845,150.06	12,993,786.76
Payments of pawn money	–	13,837,600.00
Others	204,654.04	1,183,187.85
	212,490,067.42	125,929,853.12

	2022	2021
Cash paid relating to other financing activities		
Regular Interest	7,769,636.95	2,225,150.98

	2022	2021
Other cash related to financing activities		
Listing Fees	5,504,716.98	12,040,566.05
Rental and interest	15,488,792.83	13,666,460.30
	20,993,509.81	25,707,026.35

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

55. Supplementary Information of statements of cash flows

(1) *Supplementary information of statements of cash flows:*

Reconciliation of net profit to net cash flows from operating activities:

	2022	2021
Net profit	1,117,264,764.29	559,324,709.79
Add: Provisions for asset impairment	162,804,292.45	64,880,461.60
Depreciation of investment property	2,431,293.48	–
Depreciation of fixed assets	109,376,083.01	97,261,689.43
Depreciation of right-of-use assets	15,172,556.23	13,282,931.12
Amortisation of intangible assets	51,661,617.89	102,646,985.46
Amortisation of long-term prepaid expenses	14,775,016.97	9,838,159.88
Losses from disposal of fixed assets, intangible assets and other long-term assets	(1,329,678.22)	(519,205.28)
Gains on changes in fair value	(1,866,476.71)	(948,111.87)
Finance expenses	(12,498,020.74)	2,827,915.31
Equity Incentive Fee	128,429,651.12	14,071,480.97
Losses on investment	1,674,356.94	2,713,577.29
Credit impairment (reversal)/losses	(1,109,908.97)	1,311,048.83
Decrease in deferred income tax assets	4,240,374.67	1,568,163.03
Increase in deferred income tax liabilities	211.90	1,930.06
Increase in inventories	(681,591,826.12)	(347,151,723.80)
Increase in operating receivables	(735,797,538.29)	(172,777,508.60)
Increase in operating payables	147,648,700.51	253,872,374.86
Net cash flows from operating activities	321,285,470.41	602,204,878.08

Significant investing and financing activities not involving cash:

	2022	2021
Right-to-use assets acquired by assuming lease liabilities	9,082,978.35	13,560,987.53

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS *(continued)*

55. Supplementary Information of statements of cash flows *(continued)*

(1) Supplementary information of statements of cash flows: *(continued)*

Net change in cash and cash equivalents:

	2022	2021
Cash at the end of the year	1,120,286,945.68	415,755,306.55
Less: Cash at the beginning of the year	415,755,306.55	279,369,367.09
Net increase in cash and cash equivalents	704,531,639.13	136,385,939.46

(2) Cash and cash equivalents

	2022	2021
Cash	1,120,286,945.68	415,755,306.55
Including: Cash on hand	45,887.35	73,804.10
Bank deposits on demand	1,120,241,058.33	415,680,496.75
Other currency funds on demand	–	1,005.70
Closing balance of cash and cash equivalents	1,120,286,945.68	415,755,306.55

56. Assets with restricted ownership or use right

	2022	2021	
Notes receivable	4,000,000.00	–	Note 1
Fixed assets	173,447,600.91	178,037,972.67	Note 2
	177,447,600.91	178,037,972.67	

Note 1: At 31 December 2022, the Group had no endorsed but outstanding bank acceptance bills and discounted but outstanding banker's acceptances of RMB4,000,000 (31 December 2021: Nil).

Note 2: At 31 December 2022, the Group's fixed assets with the carrying amount of RMB173,447,600.91 were used as collaterals for bank borrowings. The related long-term borrowings have been repaid in 2022 in advance. The Group is still in the process of releasing the mortgage of the property (31 December 2021: RMB178,037,972.67).

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

V. NOTES TO KEY ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

57. Monetary Items Denominated in Foreign Currency

	2022			2021		
	Original currencies	Exchange rate	RMB equivalent	Original currencies	Exchange rate	RMB equivalent
Cash and bank balances						
US\$	12,316,503.59	6.9646	85,779,520.90	22,763,289.51	6.3757	145,131,904.93
HK\$	9,991,336.97	0.8933	8,925,261.32	12,002,873.09	0.8176	9,813,549.04
NT\$	1,186,876.00	0.2273	269,776.91	1,210,106.00	0.2296	277,840.34
S\$	31,875.74	5.1831	165,215.15	34,493.07	4.7179	162,734.85
Accounts receivable						
US\$	3,737,069.26	6.9646	26,027,192.57	7,108,062.65	6.3757	45,318,875.04
HK\$	1,066.34	0.8933	952.56	4,109,626.77	0.8176	3,360,030.85
Accounts payable						
US\$	7,801,371.33	6.9646	54,333,430.76	3,376,343.16	6.3757	21,526,551.09
HK\$	-	0.8933	-	986,138.24	0.8176	806,266.63

The significant foreign operating entities in the Group's consolidated financial statements are Fudan Microelectronics (Hong Kong) Limited and Fudan Microelectronics (USA) Inc., both of which are denominated in Hong Kong dollars and United States dollars, respectively, with their principal places of operation in Hong Kong and the United States, respectively.

VI. CHANGES IN CONSOLIDATION SCOPE

1. Newly Established Subsidiaries

In 2022, the Company subscribed the capital contribution of RMB20,426,700.00 with machinery and equipment, proprietary technology and patents to establish Xunjie Digital Technology Co., Ltd. (with a registered capital of RMB50,000,000.00) and held its 40.85% of shares, which received its business license on 16 August, 2022.

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

VII. INTERESTS IN OTHER ENTITIES

1. Interests in significant subsidiaries

The Company's significant subsidiaries are as follows:

	Main business site	Place of registration	Business nature	Issued and paid-up share capital/ Registered capital	Shareholding ratio (%)	
					Direct	Indirect
Subsidiaries acquired through establishment or investment						
Sino IC Technology Co., Ltd. (Sino IC) Note 1	Shanghai	Shanghai	IC products testing	RMB 226,800,000	42.75	–
Shanghai Fudan Microelectronics (HK) Ltd.	Hong Kong	Hong Kong	Investment and sale of IC products	HK\$ 30,400,000	100.00	–
Fudan Microelectronics (USA) Inc	United States	United States	Sale of IC products	USD 5,000,000	100.00	–
Shenzhen Fudan Microelectronics Company Ltd.	Shenzhen	Shenzhen	Sale of IC products	RMB 5,000,000	100.00	–
Beijing Fudan Microelectronics Technology Co., Ltd.	Beijing	Beijing	Sale of IC products	RMB 10,000,000	100.00	–
Shanghai Fuwei Xunjie Digital Technology Co., Ltd. (Fuwei Xunjie) Note 2	Shanghai	Shanghai	technology services and technology development	RMB 50,000,000	40.85	–

The Company and its subsidiaries are all corporate enterprises. As at 31 December 2022, the Company and its subsidiaries had no debt securities in issue.

Note 1: The Company originally held 50.29% shares of Sino IC. On 28 October 2022, additional shares of Sino IC were issued to the public and the Company's shares of Sino IC was reduced to 42.75%. Management believes that the Company still has control over Sino IC because the Company is the largest single shareholder of Sino IC and the other shares are widely held by numerous other shareholders.

Note 2: The Company has entered into a concert party agreement with another shareholder of Fuwei Xunjie (holding 15% shares of Fuwei Xunjie), which stipulates that in exercising the voting rights of Fuwei Xunjie shareholders' meeting and board of directors' motions, the other party guarantees to be consistent with the Company in exercising the voting rights, and through the agreement arrangement is able to exercise control over Fuwei Xunjie's financial and operating decisions and include Fuwei Xunjie in the scope of consolidation.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

VII. INTERESTS IN OTHER ENTITIES *(continued)*

1. Interests in significant subsidiaries *(continued)*

The subsidiaries with significant minority interests are listed below:

2022

	Percentage of minority shareholding	Profit or loss attributable to minority shareholders	Dividend paid to minority shareholders	Accumulated equity attributable to minority shareholders at the end of the year
Sino IC Technology Co.,Ltd.	57.25%	34,825,008.37	–	586,769,311.10
Shanghai Fuwei Xunjie Digital Technology Co., Ltd.	59.15%	(5,596,415.24)	–	35,169,715.24

2021

	Percentage of minority shareholding	Profit or loss attributable to minority shareholders	Dividend paid to minority shareholders	Accumulated equity attributable to minority shareholders at the end of the year
Sino IC Technology Co.,Ltd.	49.71%	44,799,857.19	–	227,245,263.31

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

VII. INTERESTS IN OTHER ENTITIES *(continued)*

1. Interests in significant subsidiaries *(continued)*

The following table lists the main financial information of the above-mentioned subsidiaries. The information represents amount before intragroup offsetting:

	Sino IC Technology Co.,Ltd.	Shanghai Fuwei Xunjie Digital Technology Co., Ltd.
2022		
Current assets	569,437,448.64	29,014,877.01
Non-current assets	576,029,260.97	20,563,156.62
Total assets	1,145,466,709.61	49,578,033.63
Current liabilities	87,985,560.26	4,152,751.48
Non-current liabilities	29,626,655.45	1,840,847.13
Total liabilities	117,612,215.71	5,993,598.61
Revenue	275,493,855.32	5,615,096.19
Net profit/(loss)	69,867,260.95	(6,415,564.98)
Total comprehensive income/(loss)	69,867,260.95	(6,415,564.98)
Net cash flows generated from/(used in) operating activities	148,227,008.38	(7,190,610.80)

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

VII. INTERESTS IN OTHER ENTITIES *(continued)*

2. Equity in joint ventures and associates

	Main business site	Place of registration	Business nature	Registered capital	Shareholding ratio (%)		Accounting treatment
					Direct	Indirect	
Associated Companies							
Shanghai Xihongqiao Navigation Technology Co., Ltd.	Shanghai	Shanghai	Satellite navigation	RMB 30,000,000	10.00	-	Equity method
Shanghai Fudan-Holding Hualong Microsystem Technology Co., Ltd.	Shanghai	Shanghai	IC design	RMB 72,000,000	21.25	-	Equity method
Shanghai Fudan Sci-Tech. Park Venture Investment Co., Ltd.	Shanghai	Shanghai	Equity investment	RMB 100,000,000	20.00	-	Equity method
Shanghai Haojun Venture Capital Partnership (Limited Partnership)	Shanghai	Shanghai	Equity investment	RMB 106,000,000	22.03	-	Equity method
Spear Innovations Oy Ltd	Pori, Finland	Pori, Finland	Chip design	EUR 1,000,000	10.00	-	Equity method

In accordance with the Company's articles of Shanghai Xihongqiao Navigation Technology Co., Ltd., the Company holds one of the seven board seats and is able to participate in its major business decisions, and therefore has significant influence on it. In accordance with the Company's articles of Spear Innovations Oy Ltd., the Company holds one of the five board seats and is able to participate in major business decisions, and therefore has significant influence on it.

Shanghai Fudan-Holding Hualong Microsystem Technology Co., Ltd., Shanghai Fudan Sci-Tech. Park Venture Investment Co., Ltd., and Shanghai Haojun Venture Capital Partnership (Limited Partnership), are significant associates of the Group, and are engaged in IC design, sales and equity investment as strategic partners of the Group, and are accounted for using the equity method and the investments are strategic to the Group's activities.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

VII. INTERESTS IN OTHER ENTITIES *(continued)*

2. Equity in joint ventures and associates *(continued)*

2021

	Shanghai Fudan- Holding Hualong Microsystem Technology Co., Ltd.	Shanghai Fudan Sci-Tech. Park Venture Investment Co., Ltd.	Shanghai Haojun Venture Capital Partnership (Limited Partnership)
Current assets	95,066,373.48	34,498,967.90	42,400,133.33
Non-current assets	11,029,460.60	47,518,086.01	–
Total assets	106,095,834.08	82,017,053.91	42,400,133.33
Current liabilities	5,616,946.46	5,221,357.53	435,000.00
Non-current liabilities	5,110,000.00	–	–
Total liabilities	10,726,946.46	5,221,357.53	435,000.00
Equity attributable to owners of the parent company	95,368,887.62	76,795,696.38	41,965,133.33
Share of net assets based on percentage of shareholding	20,265,888.62	17,065,710.31	9,895,378.44
Adjustments	24,954,292.71	–	–
Carrying amounts of investments	45,220,181.33	17,065,710.31	9,895,378.44

	Shanghai Fudan- Holding Hualong Microsystem Technology Co., Ltd.	Shanghai Fudan Sci-Tech. Park Venture Investment Co., Ltd.	Shanghai Haojun Venture Capital Partnership (Limited Partnership)
Operating income	20,752,283.11	519,108.82	–
Net loss	(19,108,885.33)	(4,724,843.74)	(434,866.67)
Total comprehensive loss	(19,108,885.33)	(4,724,843.74)	(434,866.67)

The following table presents summarized financial information on joint ventures and associates that are not material to the Group:

	2022	2021
Associates		
Total carrying value of investments	4,201,772.63	3,327,499.44
The total number of the following items based on shareholding ratio		
Net profit	811,890.22	194,229.06
Other comprehensive income	62,382.97	–
Total comprehensive income	874,273.19	194,229.06

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

VIII. FINANCIAL INSTRUMENTS AND RELATED RISKS

1. Financial instruments by category

The carrying amounts of each of the categories of financial instruments as at the end of 2022 and 2021 are as follows:

2022

Financial assets

	Financial assets at fair value through profit or loss	Financial assets at amortised cost	Financial assets at fair value through other comprehensive income		Total
			Required by the standard	Designated	
Cash and bank balances	-	1,190,828,339.52	-	-	1,190,828,339.52
Financial assets held for trading	80,167,958.90	-	-	-	80,167,958.90
Notes receivable	-	252,144,057.13	-	-	252,144,057.13
Receivables for financing	-	-	81,708,392.03	-	81,708,392.03
Accounts receivable	-	730,204,276.92	-	-	730,204,276.92
Other receivables	-	20,352,381.01	-	-	20,352,381.01
Other equity instruments investments	-	-	-	33,902,315.43	33,902,315.43
	80,167,958.90	2,193,529,054.58	81,708,392.03	33,902,315.43	2,389,307,720.94

Financial liabilities

	Financial liabilities at amortized cost
Short-term borrowings	54,000,000.00
Accounts payable	201,182,480.44
Other payables	72,335,632.38
Non-current liabilities due within one year	15,181,384.65
Lease liabilities	33,162,705.60
	375,862,203.07

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

VIII. FINANCIAL INSTRUMENTS AND RELATED RISKS (continued)

1. Financial instruments by category (continued)

2021

Financial assets

	Financial assets at fair value through profit or loss	Financial assets at amortised cost	Financial assets at fair value through other comprehensive income		Total
			Required by the standard	Designated	
Cash and bank balances	–	801,647,230.19	–	–	801,647,230.19
Financial assets held for trading	390,948,111.87	–	–	–	390,948,111.87
Notes receivable	–	372,363,594.25	–	–	372,363,594.25
Accounts receivable	–	451,703,130.78	–	–	451,703,130.78
Other receivables	–	18,473,721.44	–	–	18,473,721.44
Other equity instruments investments	–	–	–	32,987,123.03	32,987,123.03
	390,948,111.87	1,644,187,676.66	–	32,987,123.03	2,068,122,911.56

Financial liabilities

	Financial liabilities at amortized cost
Short-term borrowings	100,000.00
Accounts payable	200,262,918.53
Other payables	31,163,593.01
Non-current liabilities due within one year	44,832,935.50
Long-term borrowings	18,200,000.00
Lease liabilities	38,553,525.36
	333,112,972.40

VIII. FINANCIAL INSTRUMENTS AND RELATED RISKS *(continued)*

2. Transfers of financial assets

Transferred financial assets that are not derecognised in their entirety

At 31 December 2022, the Group has discounted to commercial banks the bank acceptance bills of the carrying value of RMB4,000,000.00 (31 December 2021: Nil). The Group is of the opinion that the Group retains nearly all the risks and rewards, including default risks related to it. Therefore, the amount obtained from discounting bank acceptance bills (the carrying value) will be recognised as financial liability charged to short-term borrowing. Subsequent to discounting, the Group will no longer retain the use right, including the rights for selling, transferring or pledging such assets to other third parties.

Transferred financial assets that are derecognised in their entirety in which continuing involvement exists

On 31 December 2022, the carrying value of the bank acceptance endorsed to suppliers for settlement of accounts payable amounted to RMB36,113,749.15 (31 December 2021: RMB15,702,190.06). On 31 December 2022, the bank acceptance is due within 1 to 6 months. If acceptance banks dishonored the notes, endorses shall have the right to turn to the Group for recourse (“Continuous Involvement”) according to the Law of Bill. The Group considered that substantially all the risks and rewards of the notes have been transferred. Therefore, the Group has derecognised carrying amounts of the notes and the related accounts payable that have been settled. The maximum loss and the undiscounted cash flow of Continuous Involvement and repurchase are equal to the carrying amounts of the notes. The Group believes that the fair value of Continuous Involvement is insignificant.

In 2022, the Group did not recognise gains or losses on the date of its transfer. The Group had no current or accumulated income or expense related to Continuous Involvement of financial assets which had been derecognised. Endorsement is recorded evenly during the period.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

VIII. FINANCIAL INSTRUMENTS AND RELATED RISKS *(continued)*

3. Financial instruments risks

The Group is exposed to various types of risks from financial instruments in day-to-day operation, mainly including credit risk, liquidity risk and market risk (including foreign exchange risk, interest rate). The major financial instruments of the Group primarily include cash and bank balances, equity investments, borrowings, notes receivables, accounts receivable and accounts payable, etc. Risks in connection with such financial instruments, and the risk management strategies adopted by the Group to mitigate such risks are summarized as follows.

Credit risk

The Group only has trade with recognized third party with good credit standing. Based on the Group's policies, customers who conduct credit transaction will be subject to credit review. In addition, the Group will continuously monitor balance of accounts receivable to ensure that the Group will not be exposed to significant risk of bad debts.

Since counterparties of cash and bank balances, bank acceptance notes receivables and structured deposits are banks with good reputation and high credit ratings, credit risk arising from these financial instruments is insignificant.

Other financial assets of the Group include commercial acceptance notes receivable, accounts receivable and other receivables. Credit risk of such financial assets is from default of counterparties, and its maximum risk exposure is equivalent to the carrying amount of such instruments.

The Group's maximum credit risk exposure at each balance sheet date is the total amount charged to customers less the amount of impairment allowances.

Since the Group only trades with recognised third parties with good credit standing, no guarantee is required. Credit risk concentration is managed based on customer/counterparty, geographical region and industry sector. At 31 December 2022, the Group is exposed to certain credit risk concentration, as 35.77% (31 December 2021: 33.11%) of accounts receivables are from top five customers. The Group does not hold any security or other credit increment over the balances of accounts receivable.

Criteria for judging significant increases in credit risk

The Group will evaluate whether credit risk in connection with financial instruments is increased significantly from initial recognition on each balance sheet date. When determining whether credit risk is increased significantly after initial recognition, the Group will consider obtaining reasonable information with supporting basis without paying extra cost or efforts, including qualitative and quantitative analysis over the historical data of the Group, external credit risk ratings and forward-looking information. Based on a single financial instrument or group of financial instruments with similar credit risk characteristics, the Group will determine estimated changes in default risks of financial instruments during the period of existence, by comparing the default risk of financial instruments on the balance sheet date and that upon initial recognition.

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

VIII. FINANCIAL INSTRUMENTS AND RELATED RISKS *(continued)*

3. Financial instruments risks *(continued)*

Criteria for judging significant increases in credit risk (continued)

When one or more of the following quantitative and qualitative standards is triggered, credit risk in connection with financial instrument is increased significantly:

- (1) For quantitative standards, the probability of default in the remaining existence period after the reporting date is increased to a certain proportion as compared with that upon initial recognition;
- (2) For qualitative standards, there are significant adverse changes in operation or financial position of debtors and early-warning customer list;
- (3) For upper limit indicator, the debtor's contractual payments (including principal and interest) are more than 30 days overdue.

Definition of credit-impaired assets

To determine whether there is credit impairment, the defining standards adopted by the Group are consistent with the objective of internal credit risk management for related financial instruments, by reference to the quantitative and qualitative indicators. When debtors are evaluated for credit impairment, the following factors will be taken into account:

- (1) significant financial difficulty of issuers or debtors;
- (2) breach of contract by debtors, such as default or overdue payment in interest or principal repayment;
- (3) a concession granted by the creditor to the debtor due to economic or contractual considerations related to the debtor's financial difficulty, which will not be granted under any other circumstances;
- (4) possible bankruptcy or other financial reorganization of the debtors;
- (5) disappearance of an active market for the financial asset due to financial difficulty of the issuer or the debtor;
- (6) purchase or creation of a financial asset at significant discount reflecting the fact of credit loss.

Credit impairment of financial assets may be a joint result of multiple events, rather than a single identifiable event.

Refer to Notes V, 3,4,5 and 7 for the information on Group's credit risk exposure from notes receivable, accounts receivable, receivables for financing and other receivables.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

VIII. FINANCIAL INSTRUMENTS AND RELATED RISKS (continued)

3. Financial instruments risks (continued)

Liquidity risk

The Group uses a revolving liquidity planning tool to manage the risk of funding shortfalls. This tool considers both the maturity of its financial instruments and the expected cash flows generated from the Group's operations.

The Group's objective is to maintain a balance between continuity and flexibility of funding through the use of financing including bank borrowings and other interest-bearing borrowings.

The tables below summarise the maturity profile of the Group's financial liabilities based on contractual undiscounted payments:

2022

	Within 1 year	1 to 3 years	Over 3 years	Total
Short-term borrowings	55,404,333.33	–	–	55,404,333.33
Accounts payable	201,182,480.44	–	–	201,182,480.44
Other receivables	72,335,632.38	–	–	72,335,632.38
Non-current liabilities due within one year	17,283,958.98	–	–	17,283,958.98
Lease liabilities	–	31,253,360.27	4,096,037.02	35,349,397.29
	346,206,405.13	31,253,360.27	4,096,037.02	381,555,802.42

2021

	Within 1 year	1 to 3 years	Over 3 years	Total
Short-term borrowings	101,045.21	–	–	101,045.21
Accounts payable	200,262,918.53	–	–	200,262,918.53
Other receivables	31,163,593.01	–	–	31,163,593.01
Non-current liabilities due within one year	48,143,536.49	–	–	48,143,536.49
Long-term borrowings	–	18,922,060.00	–	18,922,060.00
Lease liabilities	–	32,331,678.37	16,865,972.14	49,197,650.51
	279,671,093.24	51,253,738.37	16,865,972.14	347,790,803.75

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

VIII. FINANCIAL INSTRUMENTS AND RELATED RISKS (continued)

3. Financial instruments risks (continued)

Market risk

Interest rate risk

The Group's exposure to the risk of changes in market interest rates primarily relates to the floating-rate long-term liabilities of the Group.

The Group's policy is to manage its interest cost using a mix of fixed and variable rate debts to avoid interest rate risks. The Group determines the ratio of fixed-rate and floating-rate financial instruments according to the market environment, and maintains an appropriate financial instruments portfolio through regular review and monitoring.

The table below demonstrates a sensitivity analysis of interest rate risk, which reflects the impact on net profit or loss (through the impact on floating-rate borrowings) and net other comprehensive income after tax when a reasonably possible change in interest rates occurs, with all other variables held constant.

2022

	Increase/(decrease) in basis points	Increase/(decrease) in net profit or loss (RMB0'000)	Increase/ (decrease) in other comprehensive income (RMB0'000)	Increase/ (decrease) in total shareholders' equity (RMB0'000)
RMB	50	-	-	-
RMB	(50)	-	-	-

2021

	Increase/(decrease) in basis points	Increase/(decrease) in net profit or loss (RMB0'000)	Increase/ (decrease) in other comprehensive income (RMB0'000)	Increase/ (decrease) in total shareholders' equity (RMB0'000)
RMB	50	(212,075.00)	-	(212,075.00)
RMB	(50)	212,075.00	-	212,075.00

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

VIII. FINANCIAL INSTRUMENTS AND RELATED RISKS *(continued)*

3. Financial instruments risks *(continued)*

Market risk (continued)

Exchange rate risk

The Group is exposed to exchange rate risk on a transactional basis. Such risk arises from sales or purchases made by operating entities with currencies other than their reporting currency. Approximately 5% (2021: 9%) of the Group's sales are denominated in a currency other than the reporting currency of the operating unit in which the sales occur.

The following table presents a sensitivity analysis of exchange rate risk, reflecting the impact that a reasonable and probable change in the U.S. dollar exchange rate, with all other variables remain constant, would have on net profit or loss.

2022

	Exchange rate Increase/ (decrease) %	Net profit or loss Increase/(decrease)	Other comprehensive income, net of tax Increase/(decrease)	Total shareholders' equity Increase/ (decrease)
RMB depreciates against USD	5%	412,610.08	6,375.74	417,777.54
RMB appreciates against USD	(5%)	(412,610.08)	(6,375.74)	(417,777.54)
RMB depreciates against HKD	5%	499,620.17	84,489.12	584,109.29
RMB appreciates against HKD	(5%)	(499,620.17)	(89,981.95)	(584,109.29)

2021

	Exchange rate Increase/ (decrease) %	Net profit or loss Increase/(decrease)	Other comprehensive income, net of tax Increase/(decrease)	Total shareholders' equity Increase/ (decrease)
RMB depreciates against USD	5%	7,078,303.56	628,550.49	7,706,854.05
RMB appreciates against USD	(5%)	(7,078,303.56)	(628,550.49)	(7,706,854.05)
RMB depreciates against HKD	5%	516,336.34	2,071,199.56	2,587,535.90
RMB appreciates against HKD	(5%)	(516,336.34)	(2,071,199.56)	(2,587,535.90)

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

VIII. FINANCIAL INSTRUMENTS AND RELATED RISKS *(continued)*

4. Capital management

The key objective of the Group's capital management is to ensure the Group's ability to operate on a going concern basis and maintain healthy capital ratios so as to support business growth and maximise shareholder value.

The Group manages its capital structure and makes adjustments in response to changes in economic conditions and risk characteristics of the underlying assets. To maintain or adjust the capital structure, the Group may adjust the distribution of profits to shareholders, return capital to shareholders or issue new shares. The Group is not constrained by any external mandatory requirements on capital. There was no change in the Group's capital management objectives, policies or procedures in 2022 and 2021.

The Group manages its capital with the debt-to-asset ratio, which refers to total liabilities divided by total assets. The debt-to-asset ratio of the Group as at the end of 2022 and 2021 is as follows:

	2022	2021
Total assets	6,110,888,054.09	4,165,014,183.19
Total liabilities	957,718,676.14	798,111,636.69
Debt-to-asset ratio	15.67%	19.16%

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

IX. DISCLOSURE OF FAIR VALUE

1. Assets and liabilities measured at fair value

2022

	Inputs used in the measurement of fair value			Total
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	
Continuous fair value measurement				
Financial assets held for trading				
Financial assets measured at fair value through profit or loss				
Debt investments	–	80,167,958.90	–	80,167,958.90
Financial assets designed at fair value through other comprehensive income				
Receivables financing	–	81,708,392.03	–	81,708,392.03
Financial assets designed at fair value through other comprehensive income				
Other equity instrument investments	–	–	33,902,315.43	33,902,315.43
	–	161,876,350.93	33,902,315.43	195,778,666.36

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

IX. DISCLOSURE OF FAIR VALUE *(continued)*

1. Assets and liabilities measured at fair value *(continued)*

2021

	Inputs used in the measurement of fair value			Total
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	
Continuous fair value measurement				
Financial assets held for trading				
Financial assets measured at fair value through profit or loss				
Debt investments	–	390,948,111.87	–	390,948,111.87
Financial assets designed at fair value through other comprehensive income				
Other equity instrument investments	–	–	32,987,123.03	32,987,123.03
	–	390,948,111.87	32,987,123.03	423,935,234.90

2. Fair value valuation

Fair Value of Financial Instruments

Management has assessed the cash and bank balances, notes receivable, accounts receivable, other receivables, short-term borrowings, accounts payable, other payables, non-current liabilities due within one year, etc., which approximate to their carrying amounts due to the short residual term of these instruments.

The financial department of the Group, headed by the financial manager, is responsible for determining the policies and procedures for the fair value measurement of financial instruments. The financial manager directly reports to the Chief Financial Officer. As at each balance sheet date, the financial department analyses the change in value of financial instruments and determines the major inputs applied in the valuation. The valuation is subject to review and approval by the Chief Financial Officer.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

IX. DISCLOSURE OF FAIR VALUE (continued)

2. Fair value valuation (continued)

Fair Value of Financial Instruments (continued)

The fair values of financial assets and liabilities are determined as per the amount for which an asset could be exchanged, or a liability could be settled, between knowledgeable, willing parties in an arm's length transaction, instead of the amount under forced sale or under liquidation. The following methods and assumptions are used to estimate the fair value.

The fair values of investments in debt instruments and receivables for financing are determined by discounting the future cash flows using market yields currently available for other financial instruments with similar contractual terms, credit risk and remaining term as the discount rate. At 31 December 2022, the non-performance risk associated with investments in debt instruments and receivables for financing was assessed to be insignificant.

The fair values of non-listed equity instrument investments are estimated using discounted valuation model, and the assumptions adopted are not supported by observable market prices or interest rates. The Group needs to make estimation for the expected future cash flows (including expected future dividend and disposal income). The Group believes that the fair values and changes thereof estimated by valuation technique are reasonable and also the most appropriate values at the balance sheet date.

3. Unobservable Inputs

The following is an overview of significant unobservable inputs for the measurement of level-3 fair value:

	Fair value at year end	Valuation technique(s)	Unobservable inputs	Range (Weighted average)
Equity instruments investments	2022:27,526,636.02			2022:2.3%
	2021:26,611,443.62	Cash Flow	Perpetual growth rate	2021:2.3%
			Discount rate	2022:14% 2021:14%
			Liquidity discount	2022:20% 2021:20%
			Non-controlling interest discount	2022:15% 2021:15%

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS

1. Parent of the Company

The shareholding structure of the Company is dispersed, with no single shareholder holding more than 20% of the shares or determine a majority of the board of directors during the reporting period. Since no party can determine and exercise substantial influence, the Company has no actual controller.

2. Subsidiaries

For details of the subsidiaries of the Company, refer to Note VII, 1.

3. Joint ventures and associates

Refer to Note VII, 2.

4. Other related parties

Related party relationships	
Fudan University	Shareholder who indirectly holds more than 5% of the Company's shares
Shanghai Fudan Communication Co., Ltd.	Company in which related natural persons serve as directors
Shanghai Fudan Science PARK Co., Ltd.	Company in which related natural persons serve as directors (No longer a related party after September 2022)
Shanghai Poyang Equity Investment Management Co., Ltd.	Subsidiary of associated companies

5. Major transactions between the Group and related parties

(1) Related party transactions of goods and services

Purchase of goods and services from related parties

	Notes	2022	2021
Fudan University	(1) a	1,747,572.81	2,588,878.85
Shanghai Fudan Communication Co., Ltd.	(1) b	2,064,201.03	–
Shanghai Fudan Science PARK Co., Ltd.	(1) c	1,603,983.07	1,213,414.79
Shanghai Fudan-Holding Hualong Microsystem Technology Co., Ltd.	(1) d	–	1,329,513.17
		5,415,756.91	5,131,806.81

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS *(continued)*

5. Major transactions between the Group and related parties *(continued)*

(1) *Related party transactions of goods and services (continued)*

Sale of goods and services to related parties

	Notes	2022	2021
Fudan University	(1) e	74,528.31	4,708,490.55
Shanghai Fudan Communication Co., Ltd.	(1) f	236,196,208.03	119,449,206.21
Spears Innovations Oy Ltd	(1) g	1,756,730.92	1,878,324.21
Shanghai Fudan-Holding Hualong Microsystem Technology Co., Ltd.	(1) h	–	1,090,490.95
		238,027,467.26	127,126,511.92

(2) *Lease of related parties*

As a lessee

	Notes	Lease asset type	2022 Rental fee	2021 Rental fee
Shanghai Fudan Science PARK Co., Ltd.	(1) c	Office	–	1,072,413.14

(3) *Co-Investment*

During the year, the Group invested in Shanghai Haojun Venture Capital Partnership (Limited Partnership) jointly with Shanghai Poyang Equity Investment Management Co., Ltd. with a capital contribution of RMB25,000,000.00, of which RMB10,000,000.00 has been paid at 31 December 2022.

(4) *Other major related party transactions*

	Note	2022	2021
Compensation of key management personnel	(2) a	20,036,627.04	17,382,114.31

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS *(continued)*

5. Major transactions between the Group and related parties *(continued)*

(5) Notes:

(1) *Related party transactions of goods and services*

- (a) On 12 August 2003, the Company signed a contract with Fudan University, the Company's major shareholder. According to the contract, the Company needs to pay Fudan University the technical equipment support fee based on the price negotiated by both parties. In 2022, there is no technical equipment support fees (2021: RMB64,157.00).

On 23 February 2021, the Company signed the contract of technology development with Fudan University, the Company's major shareholder. In 2022 the Company incurred technology development fees of RMB1,262,135.92 (2021: RMB2,524,721.85).

On 12 December 2022, the Company signed the contract of technology development with Fudan University, the Company's major shareholder. According to the contract, the Company needs to pay Fudan University technology service fees. In 2022, the Company incurred technical service fees of RMB485,436.89 (2021: Nil).

- (b) On 12 December 2022, the Company signed the contract of technical service with Shanghai Fudan Telecom Co., Ltd ("Fudan Telecom"), pursuant to which the Company is required to pay technical service fees to Fudan Telecom. In 2022, the Company incurred technical service fees of RMB1,179,245.28 (2021: Nil).

On 7 November 2022, the Company signed the contract of a chip purchase with Shanghai Fudan Telecom Co., Ltd ("Fudan Telecom"), pursuant to which the Company is required to pay for chips. In 2022, the Company incurred chip purchase fees of RMB884,955.75 (2021: Nil).

- (c) On 1 July 2019, the Company signed the contract of housing lease with Shanghai Fudan Science Park Co., Ltd.. From January to September in 2022, the Company incurred lease expenses of RMB835,851.40 (2021: RMB1,072,413.14) and property fees of RMB768,131.67 (2021: RMB1,213,414.79) under the lease contract.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS *(continued)*

5. Major transactions between the Group and related parties *(continued)*

(5) Notes: *(continued)*

(1) Related party transactions of goods and services *(continued)*

- (d) On 20 April 2020, the Company signed the contract of technology development with Shanghai Fudan-Holding Hualong Microsystem Technology Co., Ltd. According to the contract, the Company needs to pay Fudan-Holding Hualong the technology development fee. In 2022, the Company didn't incur incurred technology development fees (2021: RMB1,329,513.17).
- (e) On 12 January 2022 and 7 September 2022, the Group signed two contracts of technical service with Fudan University. Fudan University entrusts the Group to provide testing services. In 2022, the Group realised testing service income of RMB74,528.31 (2021: RMB4,708,490.55).
- (f) On 26 March 2021, the Company signed the product sales contract with Shanghai Fudan Communications Co., Ltd. ("Fudan Communications"). In 2022, the Company's realized sales revenue of RMB236,196,208.03 from sale of goods to Fudan Communications (2021: RMB119,449,206.21).
- (g) On 23 September 2021, 17 November 2021 and 6 July 2022, the Company signed the product sales contract with Spear Innovations Oy Ltd. In 2022, the Company's realized sales revenue of RMB1,756,730.92 from sale of goods to Spear Innovations Oy Ltd (2021: RMB1,878,324.21).
- (h) On 28 May 2021, 20 June 2021, 21 June 2021, 7 July 2021 and 10 September 2021, the Group and Shanghai Fudan-Holding Hualong Microsystem Technology Co., Ltd. signed product sales contracts and an entrusted testing processing contract. In 2022, the Group didn't realise revenue from sale of goods and services to Fudan-Holding Hualong (2021: RMB1,090,490.95).

Note: In addition to related-party transactions with associates, the above-mentioned other major transactions between the Group and related parties also partially constitute connected transactions or continuing connected transactions as defined in Chapter 14A of the Hong Kong Listing Rules and connected transactions as defined in Chapter 7 of the Shanghai Stock Exchange Sci-Tech Innovation Board Listing Rules.

(2) Other major related transactions

- (a) In 2022, the Group incurred total remuneration of key management personnel (including in money, physical form and other forms) of RMB20,036,627.04 (2021: RMB17,382,114.31).

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS *(continued)*

6. Receivable balances from related parties

(1) *Accounts receivable*

	2022		2021	
	Book balance	Provision for bad debts	Book balance	Provision for bad debts
Spear Innovations Oy Ltd	819,176.25	–	–	–
Shanghai Fudan-Holding Hualong Microsystem Technology Co., Ltd.	–	–	252,080.00	7,562.40
	819,176.25	–	252,080.00	7,562.40

(2) *Notes receivable*

	2022		2021	
	Book balance	Provision for bad debts	Book balance	Provision for bad debts
Shanghai Fudan Communication Co., Ltd.	72,023,108.64	–	50,400,601.93	–

(3) *Receivables for financing*

	2022		2021	
	Book balance	Provision for bad debts	Book balance	Provision for bad debts
Shanghai Fudan Communication Co., Ltd	445,000.00	–	–	–

Receivables from related parties are interest free, unsecured and with no fixed maturity date.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

X. RELATED PARTIES AND RELATED PARTY TRANSACTIONS *(continued)*

7. Payment balances from related parties

(1) *Contract liabilities*

	2022	2021
Fudan University	23,400.00	23,400.00
Shanghai Fudan Communication Co., Ltd.	47,117,153.60	42,566,917.60
	47,140,553.60	42,590,317.60

(2) *Other payables*

	2022	2021
Shanghai Fudan Communication Co., Ltd Ltd.	1,179,245.28	–
Fudan University	1,747,572.81	84,800.00
	2,926,818.09	84,800.00

Payables to related parties are interest free, unsecured and with no fixed maturity date.

(3) *Account payables*

	2022	2021
Shanghai Fudan Communication Co., Ltd	1,000,000.00	–

Amounts due to related parties are non-interest-bearing, unsecured and have no fixed repayment terms.

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

XI. SHARE-BASED PAYMENT

1. Overview

	2022	2021
Total amount of each equity instrument granted	179,350,000.00	160,812,000.00
Total amount of each equity instrument exercised	38,640,957.50	–
Total amount of each equity instrument expired	5,519,496.25	–
Exercise price of outstanding share options at the end of the year	RMB17.935 per share	RMB18.00 per share
Remaining contractual term of outstanding share options at the end of the year	4 years	5 years
Total services received from employees in exchange for share-based payments	149,709,721.06	14,071,480.97

Of which, equity-settled share-based payments were as follows:

	2022	2021
Accumulated amount of equity-settled share-based payments charged to capital surplus	166,479,228.98	16,769,507.92
Total expense recognized for equity-settled share-based payments	149,709,721.06	14,071,480.97

2. Share-based payment plans

In order to motivate and retain the Company's core workforce and technical expertise, the Company implemented an employee equity subscription plan (the "Employee Equity Subscription Plan") by way of a private offering of domestic shares through four partnership platforms. Eligible subscribers under the Employee Equity Subscription Plan include the Company's corporate department heads, core management, senior technical experts and project leaders. Following the listing of the Company on the Sci-Tech Innovation Board in 2021, a Class II Restricted Stock Incentive Plan was implemented for the purpose of motivating and rewarding individuals who contribute to the Group's operations.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

XI. SHARE-BASED PAYMENT *(continued)*

2. Share-based payment plans *(continued)*

(1) 2018 Share Incentive Plan

On 12 December 2018 (the “Grant Date”), the Company issued 35,172,000 domestic shares to eligible subscribers through a non-public offering at a subscription price of RMB5.73 per share in accordance with the relevant provisions of the Employee Equity Subscription Plan. The lock-up period of this employee equity subscription plan starts from the date of grant and ends on the date of expiration of the 3-year service period, which begins on the date of completion of the commercial and industrial change registration of this equity subscription.

The total fair value of the shares granted under this employee share subscription plan is RMB205,756,200.00. The Company calculated the services acquired during the lock-up period based on the difference between the total fair value of the shares granted on the grant date and the total issue price (RMB201,535,560.00) of RMB4,220,640 and included it in the corresponding period cost or expense, with a corresponding increase in capital surplus of RMB202,532.84 in 2022 (2021: RMB1,320,080.21).

The fair value of the shares granted under the Employee Equity Subscription Plan on the date of grant is determined by the market approach, adjusted for liquidity restrictions on the basis of the Company’s share price.

(2) 2021 Share Incentive Plan

The Company implemented a restricted stock plan (the “Plan”) on 6 December 2021 (the “Grant Date”) for the purpose of motivating and rewarding persons who contribute to the operations of the Group. Eligible persons include those persons, other than directors and senior management, whom the Board of Directors considers to be in need of incentives. The Plan is valid for a maximum period of 60 months from the date of grant of the restricted shares to the date when all the restricted shares granted to the incentive recipients vest or lapse. The conditions for the reserved grant of restricted stock under the 2021 Restricted Stock Incentive Plan have been fulfilled, and the Company’s additional ordinary shares were issued to the incentive recipients on 28 October 2022 (the “Reserved Grant Date”).

The total number of underlying shares involved in this plan during the entire validity period does not exceed 20.00% of shares of the company in aggregate at the time of submitting this plan to the shareholders’ meeting. The cumulative number of shares of the Company granted to any one incentive recipient under this Plan during the entire validity period does not exceed 1.00% of the total number of shares of the Company.

The grant price of the initial grant of restricted stock is RMB18.00 per share, i.e. after meeting the grant conditions and vesting conditions, the incentive recipients can purchase additional A shares of common stock of the Company issued to the incentive recipients at a price of RMB17.935 per share. The pricing method of the restricted stock grant price under this plan is self-pricing.

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

XI. SHARE-BASED PAYMENT (continued)

2. Share-based payment plans (continued)

(2) 2021 Share Incentive Plan (continued)

The fair value of the 2021 restricted share plan granted by the Company is RMB368,615,624.00 (2021: RMB296,742,810.00), of which the Group recognised share option expenses of RMB149,507,188.22 in 2022, including the initial portion of grant of RMB141,793,032.99 (2021: RMB12,751,400.76) and the portion of the reserved grant of RMB7,714,155.23.

The fair value of equity-settled restricted stock plan granted at the grant date has been estimated using the Black-Scholes option pricing model, taking into account the terms and conditions of the share options granted. The following table presents the input variables for the model used for first grant:

	First vesting period	Second vesting period	Third vesting period	Fourth vesting period
Dividend Ratio (%)	0.25	0.25	0.25	0.25
Historical volatility (%)	35.0845	40.4499	38.0941	38.7671
Risk-free interest rate (%)	2.2550	2.5364	2.6240	2.6907
Expected maturity of share options (years)	1	2	3	4
Weighted average share price (RMB)	32.37	32.92	33.45	34.12

The following table presents the input variables of the model used for the reservation grant:

	First vesting period	Second vesting period	Third vesting period
Dividend Ratio (%)	0.18	0.18	0.18
Historical volatility (%)	33.7762	34.4808	38.7623
Risk-free interest rate (%)	1.7551	2.0886	2.2573
Expected maturity of share options (years)	1	2	3
Weighted average share price (RMB)	76.97	77.22	77.53

The other characteristics of the share options granted are not taken into account in the calculation of the fair value.

The Plan is valid for five years from the date of restricted stock grant. The restricted stock of first grant will be exercised in four batches of 25%, 25%, 25% and 25% of the exercise ratio from the date of first grant, after a 12-month exercise restriction period, provided that the exercise conditions are met. The restricted stock of reserved grant will be exercised in three batches of 30%, 30% and 40% of the exercise ratio from the date of the reserved grant, after a 12-month exercise restriction period, provided that the exercise conditions are met. The incentive recipients can exercise the restricted stock during the exercise period in accordance with the exercise price determined in the Plan.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

XI. SHARE-BASED PAYMENT *(continued)*

2. Share-based payment plans *(continued)*

(2) 2021 Share Incentive Plan *(continued)*

The share options issued and outstanding under the Plan are as follows:

	2022		2021	
	Weighted average Exercise price (RMB per share)	Share Options Quantity	Weighted average Exercise price (RMB per share)	Share Options Quantity
Beginning of the year	18.00	8,934,000.00	–	–
Grant	17.935	1,066,000.00	18.00	8,934,000.00
Nullify	17.935	(307,750.00)	–	–
Exercise	17.935	(2,154,500.00)	–	–
End of the year	17.935	7,537,750.00	18.00	8,934,000.00

In 2022, the Company issued 2,154,500 ordinary shares upon the exercise of 2,154,500 share options, resulting in additional share capital of RMB215,450.00 and share capital premium of RMB38,425,507.50 (before deduction of issue expenses). Refer to Note V, 32 and Note V, 33.

As at 31 December 2022, the Company had 7,537,750 restricted stock issued and outstanding under the Plan. Based on the capital structure of the Company, if all the restricted stock issued and outstanding are exercised, 7,537,750 additional ordinary shares of the Company will be issued, increasing the share capital by RMB753,775 and the share premium by RMB134,435,771.25 of the Company (before deduction of issue expenses).

The weighted average number of share options granted by the Company during 2022 divided by the number of shares in issue in 2022 is 0.13%.

As at the date of approval of these financial statements, the Company had 7,537,750 share options issued and outstanding under the Plan, accounting for approximately 0.92% of the Company's shares in issue on that date.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

XII. COMMITMENTS AND CONTINGENCIES

1. Significant Commitments

	2022	2021
Contracted, but not provided for: Capital commitments	204,494,238.41	264,057,272.11

For lease commitments as a lessee, refer to Note XIV, 2.

2. Contingencies

As at the balance sheet date, the Group had no significant contingencies that should be disclosed.

XIII. EVENTS AFTER THE BALANCE SHEET DATE

On 21 March 2023, the eighth meeting of the ninth session of the Board of Directors of the Company was held to approve the profit distribution proposal for the year 2022 to distribute cash dividends of RMB110,248,627.50 (i.e. cash dividends of RMB0.135 per share).

XIV. OTHER SIGNIFICANT EVENTS

1. Segment reporting

Operating segment

For management purposes, the Group is organised into business units based on their products and services and has two reportable segments as follows:

- (1) The Design and Sales of Integrated Circuits segment (“Design segment”) manufactures products including Security and Identification Chips, Non-Volatile Memory, Smart Meter Chips, FPGA and Other Chips;
- (2) The integrated circuit testing services segment (“Testing segment”) provides testing services for Integrated Circuit chips and products.

Management monitors the results of the Group’s operating segments separately for the purpose of making decisions about resource allocation and performance assessment. Segment performance is evaluated based on reportable segment profit/loss before tax. The segment profit/loss before tax is measured consistently with the Group’s profit/loss of continuing operation.

Intersegment sales and transfers are transacted with reference to the selling prices used for sales made to third parties at the then prevailing market prices.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

XIV. OTHER SIGNIFICANT EVENTS *(continued)*

1. Segment reporting *(continued)*

Operating segment *(continued)*

2022

	Design segment	Testing segment	Offsets between segments	Consolidation
Sales to external customers	3,320,289,784.66	218,619,100.28	-	3,538,908,884.94
Intersegment sales	-	56,874,755.04	(56,874,755.04)	-
Loss from investments in joint ventures and associates	8,129,075.27	-	-	8,129,075.27
Assets impairment loss	162,804,292.45	-	-	162,804,292.45
Depreciation and amortisation	113,732,265.77	79,684,301.81	-	193,416,567.58
Total profit	1,044,270,275.62	74,471,328.17	2,929,933.03	1,121,671,536.82
Income tax	5,336.12	4,443,217.38	(202,630.81)	4,245,922.69
Total assets	4,961,230,529.35	1,149,715,956.74	(58,432.00)	6,110,888,054.09
Total liabilities	835,915,645.30	121,861,462.84	(58,432.00)	957,718,676.14
Long-term equity investments in joint ventures and associates	42,508,902.76	-	-	42,508,902.76
Capital expenditure (Note)	508,335,862.88	411,720,789.83	-	920,056,652.71

Note: Capital expenditures include investment properties, fixed assets, construction in progress, right-of-use assets, intangible assets, development expenditures, long-term amortization expenses and other non-current assets expenditures.

2021

	Design segment	Testing segment	Offsets between segments	Consolidation
Sales to external customers	2,335,581,439.22	241,680,907.71	-	2,577,262,346.93
Intersegment sales	75,862,823.65	42,744,978.16	(118,607,801.81)	-
Loss from investments in joint ventures and associates	5,526,536.20	-	-	5,526,536.20
Assets impairment loss	64,880,461.60	-	-	64,880,461.60
Depreciation and amortisation	145,735,812.36	77,291,426.99	-	223,027,239.35
Total profit	470,202,245.89	103,793,567.81	(546,294.34)	573,449,519.36
Income tax	412,836.09	13,671,143.36	40,830.12	14,124,809.57
Total assets	3,613,951,802.61	556,241,695.09	(5,179,314.51)	4,165,014,183.19
Total liabilities	704,191,206.04	99,099,745.16	(5,179,314.51)	798,111,636.69
Long-term equity investments in joint ventures and associates	75,508,769.52	-	-	75,508,769.52
Capital expenditure	450,308,386.25	112,832,028.59	-	563,140,414.84

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

XIV. OTHER SIGNIFICANT EVENTS *(continued)*

1. Segment reporting *(continued)*

Other information

Products and services

Revenue from external transactions

	2022	2021
Security and identification IC	976,052,956.98	866,262,870.90
Non-volatile memory	940,310,039.15	721,026,182.95
Smart meter IC	594,579,681.69	295,785,007.36
FPGA and other IC	803,149,655.86	452,507,378.01
IC test services	218,619,100.28	240,276,516.59
Lease income	6,197,450.98	1,404,391.12
	3,538,908,884.94	2,577,262,346.93

Geographic information

Revenue from external transactions

	2022	2021
Mainland China	3,366,575,722.96	2,344,514,970.78
Others	172,333,161.98	232,747,376.15
	3,538,908,884.94	2,577,262,346.93

Total non-current assets

	2022	2021
Mainland China	1,745,341,002.45	1,080,802,722.46
Others	1,299,947.19	2,077,342.27
	1,746,640,949.64	1,082,880,064.73

Non-current assets are attributable to the geographic locations where the assets are located, excluding financial assets and deferred income tax assets.

Major customers information

In 2022, the operating revenue of RMB438,971,141.68 (2021:Nil), which achieved or exceeded 10% of the Group's revenue, came from an individual customer of the Group.

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

XIV. OTHER SIGNIFICANT EVENTS *(continued)*

2. Leases

(1) As a lessor

The Group used some idle machinery and equipment for leasing for a period of 3 years, forming an operating lease. According to the lease contract, the rental is subject to annual adjustment based on the market rental conditions. In 2022, the Group no generated revenue due to the leasing of machinery and equipment. (2021: RMB1,404,391.12) Refer to Note V, 37.

The Group used part of the buildings for a period of 2 years, forming an operating lease. In 2022, the Group generated revenue of RMB6,197,450.98 from leasing the buildings (2021: Nil). For details, refer to Note V, 12 and Note V, 37.

Operating leases

Profit or losses related to operating leases are presented as follows:

	2022	2021
Rental income	6,197,450.98	1,404,391.12

According to the lease contract with the lessee, the minimum lease receivables for non-cancelable leases are as follows:

	2022	2021
Within 1 year, inclusive	6,250,768.85	–
1 to 2 years, inclusive	2,070,981.00	–
	8,321,749.85	–

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

XIV. OTHER SIGNIFICANT EVENTS *(continued)*

2. Leases *(continued)*

(2) *As a lessee*

	2022	2021
Interest expense of lease liabilities	3,018,984.70	2,278,071.57
Short-term lease expenses with simplified treatment recognized in profit or loss	1,532,453.28	1,492,608.78
Lease expenses of low-value assets (other than short-term leases) with simplified treatment recognized in profit or loss	186,352.40	148,000.00
Total cash outflow related to leases	17,207,598.51	15,307,069.08

The leased assets leased to the Group include buildings used in the operations, which are usually leased for a period of 3 to 5 years. The lease contracts usually stipulate that the Group cannot sublease the leased assets, and some of the lease contracts require the Group to maintain a certain level of financial indicators. A few of the lease contracts contain article for renewal options.

Other lease information

For right-of-use assets, see Note V, 15; for simplified treatment of short-term leases and leases of low-value assets, see Note III, 26; and for lease liabilities, see Note V, 30.

3. Remuneration of key management personnel

The remuneration of directors and supervisors disclosed in accordance with the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited and Section 161 of the Hong Kong Companies Ordinance is as follows:

	2022	2021
Fees	600,012.00	127,800.00
Salaries, allowances and benefits in kind	7,761,524.63	7,300,565.92
Bonus	2,095,593.03	1,496,666.66
Pension scheme contributions and social welfare	125,187.84	113,339.52
	10,582,317.50	9,038,372.10

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

XIV. OTHER SIGNIFICANT EVENTS *(continued)*

3. Remuneration of key management personnel *(continued)*

(1) Remuneration of independent non-executive director

Directors fee paid to the independent non-executive directors during the year were as follows:

	2022	2021
Mr. Cao Zhongyong	200,004.00	42,600.00
Mr. Wang Pin	200,004.00	42,600.00
Ms. Zou Fuwen	116,669.00	–
Mr. Guo Li	83,335.00	42,600.00
Mr. Cai Minyong	–	–
	600,012.00	127,800.00

(2) Remuneration of executive directors, non-executive directors and supervisors

2022

	Salaries, allowances and benefits in kind	Bonus	Pension scheme contributions and social welfare	Total
Executive directors:				
Mr. Jiang Guoxing	–	300,000.00	–	300,000.00
Mr. Shi Lei	3,293,362.06	762,500.00	62,593.92	4,118,455.98
Mr. Yu Jun	2,366,980.00	570,000.00	–	2,936,980.00
Ms. Cheng Junxia	1,125,457.96	275,593.03	–	1,401,050.99
	6,785,800.02	1,908,093.03	62,593.92	8,756,486.97
Non-executive directors:				
Ms. Zhang Qianling	–	–	–	–
Mr. Wu Ping	–	–	–	–
Ms. Liu Huayan	–	–	–	–
Mr. Sun Zheng	–	–	–	–
	–	–	–	–
Supervisors:				
Ms. Zhang Yanfeng	775,720.61	187,500.00	62,593.92	1,025,814.53
Ms. Tang Xiaokoe	–	–	–	–
Me. Ren Junyan	200,004.00	–	–	200,004.00
	975,724.61	187,500.00	62,593.92	1,225,818.53
	7,761,524.63	2,095,593.03	125,187.84	9,982,305.50

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

XIV. OTHER SIGNIFICANT EVENTS *(continued)*

3. Remuneration of key management personnel *(continued)*

(2) Remuneration of executive directors, non-executive directors and supervisors *(continued)*

2021

	Salaries, allowances and benefits in kind	Bonus	Pension scheme contributions and social welfare	Total
Executive directors:				
Mr. Jiang Guoxing	–	300,000.00	–	300,000.00
Mr. Shi Lei	3,060,507.96	508,333.33	56,669.76	3,625,511.05
Mr. Yu Jun	2,316,800.00	380,000.00	–	2,696,800.00
Ms. Cheng Junxia	1,124,857.96	183,333.33	–	1,308,191.29
	6,502,165.92	1,371,666.66	56,669.76	7,930,502.34
Non-executive directors:				
Ms. Zhang Qianling	–	–	–	–
Mr. Wu Ping	–	–	–	–
Ms. Liu Huayan	–	–	–	–
Mr. Sun Zheng	–	–	–	–
	–	–	–	–
Supervisors:				
Ms. Zhang Yanfeng	755,800.00	125,000.00	56,669.76	937,469.76
Ms. Tang Xiaokoe	–	–	–	–
Me. Ren Junyan	42,600.00	–	–	42,600.00
	798,400.00	125,000.00	56,669.76	980,069.76
	7,300,565.92	1,496,666.66	113,339.52	8,910,572.10

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

XIV. OTHER SIGNIFICANT EVENTS *(continued)*

3. Remuneration of key management personnel *(continued)*

(3) Five highest paid employees

The five highest paid employees during the year included 2 directors (2021: 2 directors), details of whose remuneration are set out in Note XIV, 3(2). Details of the remuneration of the remaining three highest paid employees who are neither a director nor supervisor of the Group are as follows:

	2022	2021
Salaries, allowances and benefits in kind	6,119,663.89	5,211,997.60
Pension scheme contributions and social welfare	125,187.84	56,669.76
	6,244,851.73	5,268,667.36

The number of non-director and non-supervisor highest paid employees whose remuneration fell within the following bands is as follows:

	2022	2021
HK\$1,000,000 to HK\$1,500,000	–	–
HK\$1,500,001 to HK\$2,000,000	–	–
HK\$2,000,001 to HK\$2,500,000	3	3
	3	3

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

XV. NOTES TO KEY ITEMS OF THE COMPANY FINANCIAL STATEMENTS

1. Accounts receivable

The credit period of accounts receivable is generally one month, extending up to three months for major customers. Accounts receivable are non-interest-bearing.

An aging analysis of accounts receivable recognised by invoice date is as follows:

	2022	2021
Within 1 year	648,075,645.05	399,444,199.69
Over 1 year	56,921,902.68	61,926,952.80
	704,997,547.73	461,371,152.49
Less: Provision for bad debts	14,203,771.43	15,286,960.24
	690,793,776.30	446,084,192.25

	31 December 2022				Book value
	Book balance	Amount	Provision for bad debts	Proportion of	
	Amount	proportion (%)	Amount	provision (%)	
Accounts receivable for which bad debt allowance is provided by portfolio of credit risk characteristics					
Highly Reliable Product Sales Portfolio	462,229,531.89	66.00	4,980,898.80	1.08	457,248,633.09
Industrial Sales Portfolio	227,958,545.99	32.00	9,222,872.63	4.05	218,735,673.36
Related party portfolio in the scope of consolidation	14,809,469.85	2.00	-	-	14,809,469.85
	704,997,547.73	100.00	14,203,771.43	2.01	690,793,776.30

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

XV. NOTES TO KEY ITEMS OF THE COMPANY FINANCIAL STATEMENTS

(continued)

1. Accounts receivable (continued)

	31 December 2021				Book value
	Book balance	Amount proportion (%)	Provision for bad debts	Proportion of provision (%)	
	Amount		Amount		
Accounts receivable for which bad debt allowance is provided by portfolio of credit risk characteristics					
Highly Reliable Product Sales					
Portfolio	220,338,215.38	47.76	5,120,433.25	2.32	215,217,782.13
Industrial Sales Portfolio	204,013,262.63	44.22	10,166,526.99	4.98	193,846,735.64
Related party portfolio in the scope of consolidation	37,019,674.48	8.02	–	–	37,019,674.48
	461,371,152.49	100.00	15,286,960.24	3.31	446,084,192.25

Accounts receivable with bad debt provision based on a combination of sales of highly reliable products are as follows:

	Estimated gross carrying amount at default	31 December 2022	
		Expected credit loss ratio (%)	Lifetime expected credit loss
Within 1 year	412,420,543.90	–	–
1 to 5 years	49,808,987.99	10.00	4,980,898.80
	462,229,531.89	1.08	4,980,898.80

	Estimated gross carrying amount at default	31 December 2021	
		Expected credit loss ratio (%)	Lifetime expected credit loss
Within 1 year	169,133,882.88	–	–
1 to 5 years	51,184,332.50	9.96	5,100,433.25
Over 5 years	20,000.00	100.00	20,000.00
	220,338,215.38	2.32	5,120,433.25

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

XV. NOTES TO KEY ITEMS OF THE COMPANY FINANCIAL STATEMENTS

(continued)

1. Accounts receivable (continued)

Accounts receivable with bad debt provision based on a combination of industrial sales amounts are as follows:

	31 December 2022		
	Estimated gross carrying amount at default	Expected credit loss ratio (%)	Lifetime expected credit loss
Within 6 months	198,969,774.90	—	—
6 to 9 months	21,861,343.22	10.00	2,186,134.08
9 to 12 months	14,513.18	20.00	2,902.63
1 to 2 years	158,157.54	50.00	79,078.77
Over 2 years	6,954,757.15	100.00	6,954,757.15
	227,958,545.99	4.05	9,222,872.63

	31 December 2021		
	Estimated gross carrying amount at default	Expected credit loss ratio (%)	Lifetime expected credit loss
Within 6 months	193,068,864.84	—	—
6 to 9 months	198,395.21	10.00	19,839.52
9 to 12 months	23,382.28	20.00	4,676.46
1 to 2 years	1,161,218.57	50.00	580,609.28
Over 2 years	9,561,401.73	100.00	9,561,401.73
	204,013,262.63	4.98	10,166,526.99

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

XV. NOTES TO KEY ITEMS OF THE COMPANY FINANCIAL STATEMENTS

(continued)

1. Accounts receivable (continued)

Accounts receivable with bad debt provision based on a combination of amounts from related parties within the scope of consolidation are as follows:

	Estimated gross carrying amount at default	31 December 2022 Expected credit loss ratio (%)	Lifetime expected credit loss
Within 1 year	14,809,469.85	–	–

	Estimated gross carrying amount at default	31 December 2021 Expected credit loss ratio (%)	Lifetime expected credit loss
Within 1 year	37,019,674.48	–	–

The movements in provision for bad debts of accounts receivable are as follows:

	Opening balance	Provision	Others	Reversal or transfer	Write-off	Closing balance
2022	15,286,960.24	1,506,340.84	–	–	(2,589,529.65)	14,203,771.43
2021	19,433,890.04	–	–	(2,633,845.37)	(1,513,084.43)	15,286,960.24

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

XV. NOTES TO KEY ITEMS OF THE COMPANY FINANCIAL STATEMENTS

(continued)

2. Other receivables

An ageing analysis of other receivables is as follows:

	2022	2021
Within 1 year	2,305,340.81	1,303,113.95
1 to 2 years	728,607.67	380,278.20
2 to 3 years	395,646.07	298,712.82
Over 3 years	1,410,260.94	1,133,070.07
	4,839,855.49	3,115,175.04
Less: Provision for bad debts	–	–
	4,839,855.49	3,115,175.04

Other receivables classified by nature are as follows:

	2022	2021
Deposit guarantee	2,014,659.59	1,921,965.15
Intermediary service fee	1,139,096.00	1,119,687.94
Reserve fund	54,000.00	73,521.95
Others	1,632,099.90	–
	4,839,855.49	3,115,175.04

At 31 December 2022, the management of the Company considers that no bad debt provision is required for other receivables (31 December 2021: Nil).

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

XV. NOTES TO KEY ITEMS OF THE COMPANY FINANCIAL STATEMENTS

(continued)

3. Long-term equity investments

	2022	2021
Subsidiaries	90,836,307.13	70,409,607.13
Associated companies	41,841,257.40	49,836,013.86
	132,677,564.53	120,245,620.99

Subsidiaries

2022

	Opening balance	Increase	Decrease	Closing balance	Provision
Sino Ic Technology Co.,Ltd.	25,146,906.64	-	-	25,146,906.64	-
Shanghai Fudan Microelectronics (HK) Limited	40,262,700.49	-	-	40,262,700.49	-
Shenzhen Fudan Microelectronics Co., Ltd.	5,000,000.00	-	-	5,000,000.00	-
Beijing Fudan Micro-Electronic Technology Co., Ltd.	10,000,000.00	-	-	10,000,000.00	10,000,000.00
Shanghai Fuwei Xunjie Digital Technology Co., Ltd.	-	20,426,700.00	-	20,426,700.00	-
Total	80,409,607.13	20,426,700.00	-	100,836,307.13	10,000,000.00

2021

	Opening balance	Increase	Decrease	Closing balance	Provision
Sino Ic Technology Co.,Ltd.	25,146,906.64	-	-	25,146,906.64	-
Shanghai Fudan Microelectronics (HK) Limited	27,343,300.49	12,919,400.00	-	40,262,700.49	-
Shenzhen Fudan Microelectronics Co., Ltd.	5,000,000.00	-	-	5,000,000.00	-
Beijing Fudan Micro-Electronic Technology Co., Ltd.	10,000,000.00	-	-	10,000,000.00	10,000,000.00
Total	67,490,207.13	12,919,400.00	-	80,409,607.13	10,000,000.00

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

XV. NOTES TO KEY ITEMS OF THE COMPANY FINANCIAL STATEMENTS

(continued)

3. Long-term equity investments (continued)

Subsidiaries (continued)

Provision for impairment of long-term equity investments:

2022

	Opening balance	Increase	Decrease	Closing balance
Beijing Fudan Micro-Electronic Technology Co., Ltd.	10,000,000.00	–	–	10,000,000.00

2021

	Opening balance	Increase	Decrease	Closing balance
Beijing Fudan Micro-Electronic Technology Co., Ltd.	7,103,833.69	2,896,166.31	–	10,000,000.00

Associated companies

2022

	Opening balance	Changes for the year			Closing balance
		Increase	Investment profit or loss under the equity method	Other equity changes	
Shanghai Xihongqiao Navigation Technology Co., Ltd.	2,587,918.24	–	946,209.03	–	3,534,127.27
Shanghai Fudan-Holding Hualong Microsystem Technology Co., Ltd.	20,287,006.87	–	(8,210,712.19)	–	12,076,294.68
Shanghai Fudan Sci-Tech. Park Venture Investment Co., Ltd.	17,065,710.31	–	(432,971.62)	–	16,632,738.69
Shanghai Haojun Venture Capital Partnership (Limited Partnership)	9,895,378.44	–	(297,281.68)	–	9,598,096.76
	49,836,013.86	–	(7,994,756.46)	–	41,841,257.40

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

XV. NOTES TO KEY ITEMS OF THE COMPANY FINANCIAL STATEMENTS

(continued)

3. Long-term equity investments (continued)

Associated companies (continued)

2021

	Opening balance	Increase	Changes for the year Investment profit or loss under the equity method	Other equity changes	Closing balance
Shanghai Xihongqiao Navigation Technology Co., Ltd.	2,393,689.18	–	194,229.06	–	2,587,918.24
Shanghai Fudan-Holding Hualong Microsystem Technology Co., Ltd.	24,326,526.75	–	(4,039,519.88)	–	20,287,006.87
Shanghai Fudan Sci-Tech. Park Venture Investment Co., Ltd.	18,642,334.13	–	(1,576,623.82)	–	17,065,710.31
Shanghai Haojun Venture Capital Partnership (Limited Partnership)	–	10,000,000.00	(104,621.56)	–	9,895,378.44
	45,362,550.06	10,000,000.00	(5,526,536.20)	–	49,836,013.86

4. Revenue and cost of sales

	2022		2021	
	Revenue	Cost	Revenue	Cost
Primary business	3,283,724,006.75	1,150,912,519.68	2,299,310,227.56	954,239,081.50
Other businesses	28,808,619.97	9,957,877.92	25,284,083.28	10,177,875.85
	3,312,532,626.72	1,160,870,397.60	2,324,594,310.84	964,416,957.35

Operation revenue is as follows:

	2022	2021
Revenue from contracts with customers	3,306,335,175.74	2,324,594,310.84
Revenue from lease	6,197,450.98	–
	3,312,532,626.72	2,324,594,310.84

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

XV. NOTES TO KEY ITEMS OF THE COMPANY FINANCIAL STATEMENTS

(continued)

4. Revenue and cost of sales (continued)

The breakdown of operating revenue is as follows:

2022

Reporting segments	Design and sales of integrated circuits
Place of business	
Mainland China	3,146,810,792.93
Others	159,524,382.81
	3,306,335,175.74
Main product types	
Security and identification chips	975,445,941.52
Non-volatile memory	937,593,216.75
Smart meter chips	594,579,681.69
FPGA and other chips	798,716,335.78
	3,306,335,175.74
Timing of revenue recognition	
Revenue recognised at a point in time	
Sale of goods	3,306,335,175.74

Notes to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

XV. NOTES TO KEY ITEMS OF THE COMPANY FINANCIAL STATEMENTS

(continued)

4. Revenue and cost of sales (continued)

The breakdown of operating revenue is as follows: (continued)

2021

Reporting segments	Design and sales of integrated circuits
Place of business	
Mainland China	2,106,150,622.56
Others	218,443,688.28
	<hr/>
	2,324,594,310.84
	<hr/>
Main product types	
Security and identification chips	865,870,474.63
Non-volatile memory	710,433,670.00
Smart meter chips	295,785,007.36
FPGA and other chips	452,505,158.85
	<hr/>
	2,324,594,310.84
	<hr/>
Timing of revenue recognition	
Revenue recognised at a point in time	
Sale of goods	2,324,594,310.84
	<hr/>

Notes to Financial Statements

Year ended 31 December 2022

Expressed in Renminbi Yuan

XV. NOTES TO KEY ITEMS OF THE COMPANY FINANCIAL STATEMENTS

(continued)

4. Revenue and cost of sales (continued)

Revenue recognized in the current year included in the opening carrying value of contract liabilities is as follows:

	2022	2021
Sale of goods	124,745,290.02	22,108,959.16

The Company's information related to its performance obligations is as follows:

Sale of goods

Fulfill performance obligations when delivering goods to customers. Usually, the goods are sent first, and the contract price is paid after confirmation by the customer.

5. Research and development expenses

	2022	2021
Staff costs	392,535,949.79	361,730,690.16
Material costs	117,260,441.74	120,542,020.74
Depreciation and amortisation	65,275,116.36	124,286,979.87
Professional service fee	20,668,756.06	26,748,156.23
Office expenses	2,378,849.85	4,405,321.44
Travel expenses	623,146.36	1,342,001.17
Equity incentive fee	93,728,472.47	9,628,492.10
Others	2,997,889.09	1,621,596.75
	695,468,621.72	650,305,258.46

6. Investment income

	2022	2021
Investment income from long-term equity investments under equity method	(7,994,756.46)	(5,526,536.20)
Investment income during the holding period of financial assets held for trading	6,057,399.84	2,812,958.91
	(1,937,356.62)	(2,713,577.29)

Supplementary Information to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

1. STATEMENT OF NON-RECURRING PROFIT OR LOSS

	Amount in 2022
Gains or losses on disposal of non-current assets, including the write-off of the provision for impairment of assets	1,329,678.22
Government grants charged to profit or loss for the current period (other than government grants which are closely related to corporate business and granted based on a fixed amount or a fixed quantity unified by the state on an ongoing basis)	63,122,210.24
Except for the effective hedging activities related to the Group's ordinary operation, profit or loss arising from changes in the fair value of financial assets held for trading, derivative financial assets, financial liabilities held for trading and derivative financial liabilities, and investment income from the disposal of financial assets held for trading, derivative financial assets, financial liabilities held for trading, derivative financial liabilities and other debt investments	8,321,195.04
Non-operating income and expenses other than aforesaid items	111,104.79
Other profit or loss item under the definition of non-recurring profit or loss	7,090,723.36
	79,974,911.65
Effect of income tax	(12,005,509.93)
Effect of non-controlling interests (net of tax)	(10,531,515.31)
	57,437,886.41

The Group recognized non-recurring profit and loss items in accordance with the provisions of "Explanatory Announcement No. 1 on Information Disclosure for Companies Offering Public Securities – Non-recurring Profit and Loss" (CSRC Announcement [2008] No. 43).

Supplementary Information to Financial Statements

Year ended 31 December 2022
Expressed in Renminbi Yuan

2. RETURN ON NET ASSETS AND EARNINGS PER SHARE

2022

	Weighted average return on net assets (%)	Earnings per share	
		Basic	Diluted
Net profit attributable to ordinary shareholders of the Company	28.48	1.32	1.31
Net profit attributable to ordinary shareholders of the Company after deducting non-recurring profit or loss	26.96	1.25	1.24

2021

	Weighted average return on net assets (%)	Earnings per share	
		Basic	Diluted
Net profit attributable to ordinary shareholders of the Company	20.77	0.69	0.69
Net profit attributable to ordinary shareholders of the Company after deducting non-recurring profit or loss	17.93	0.60	0.60

Five Year Financial Summary

A summary of the results and of the assets, liabilities and non-controlling interests of the Group for the last five financial years, as extracted from the published audited financial statements and restated/reclassified as appropriate, is set out below.

ASSETS, LIABILITIES AND MINORITY INTERESTS

	At 31 December				
	2022 RMB'000	2021 RMB'000	2020 RMB'000	2019 RMB'000	2018 RMB'000
TOTAL ASSETS	6,110,888	4,165,014	2,678,603	2,459,127	2,546,328
TOTAL LIABILITIES	(957,719)	(798,112)	(566,552)	(520,019)	(437,488)
MINORITY INTERESTS	(621,939)	(226,657)	(181,799)	(154,385)	(165,512)
	4,531,230	3,140,245	1,930,252	1,784,723	1,943,328

	For the year ended 31 December				
	2022 RMB'000	2021 RMB'000	2020 RMB'000	2019 RMB'000	2018 RMB'000
RESULTS					
REVENUE	3,538,909	2,577,262	1,690,897	1,472,839	1,409,630
NET PROFIT/(LOSS)	1,117,265	559,325	160,282	(148,961)	129,352
ATTRIBUTABLE TO:					
SHAREHOLDERS OF THE PARENT					
COMPANY	1,076,843	514,467	132,868	(161,936)	107,482
MINORITY INTERESTS	40,422	44,858	27,414	12,975	21,870
EARNINGS/(LOSS) PER SHARE					
BASIC (RMB)	1.32	0.69	0.19	(0.23)	0.16
DILUTED(RMB)	1.31	0.69	N/A	N/A	N/A