



HG Semiconductor Limited

宏光半導體有限公司

(Incorporated in the Cayman Islands with limited liability)

Stock Code: 6908

INTERIM REPORT 2024

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CORPORATE INFORMATION

DIRECTORS

Executive Directors

Dr. XU Zhihong (徐志宏) (*Chairman*)

Mr. ZHAO Yi Wen (趙奕文)

Mr. LU Kailin (呂鎧麟)
(*Deputy Chief Executive Officer*)

Mr. LI Yang (李陽)
(Re-designated as Executive Director on
9 February 2024)

Mr. LEUNG Kin Pang (梁健鵬)

Non-executive Director

Dr. WANG David Nin-kou (王寧國)
(Ceased on 17 June 2024)

Independent Non-executive Directors

Mr. ZOU Haiyan (鄒海燕)

Mr. SIU Miu Man, Simon, *MH* (蕭妙文)

Ms. LIU Wanwen (劉琬文)
(Appointed on 8 May 2024)

Mr. LI Yang (李陽)
(Re-designated as Executive Director on
9 February 2024)

AUDIT COMMITTEE

Mr. ZOU Haiyan (鄒海燕) (*Chairman*)

Mr. SIU Miu Man, Simon, *MH* (蕭妙文)

Ms. LIU Wanwen (劉琬文)
(Appointed as member on 8 May 2024)

Mr. LI Yang (李陽)
(Ceased as member on 9 February, 2024)

NOMINATION COMMITTEE

Mr. ZOU Haiyan (鄒海燕) (*Chairman*)

Dr. XU Zhihong (徐志宏)

Mr. SIU Miu Man, Simon, *MH* (蕭妙文)

Mr. LI Yang (李陽)
(Ceased as member on 9 February 2024)

REMUNERATION COMMITTEE

Dr. XU Zhihong (徐志宏) (*Chairman*)

Mr. ZOU Haiyan (鄒海燕)

Mr. SIU Miu Man, Simon, *MH* (蕭妙文)

Mr. LI Yang (李陽)
(Ceased as member on 9 February 2024)

COMPANY SECRETARY

Ms. TSANG Ngo Yin (曾傲嫻)

AUTHORISED REPRESENTATIVES

Mr. ZHAO Yi Wen (趙奕文)

Ms. TSANG Ngo Yin (曾傲嫻)

REGISTERED OFFICE

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Regatta Office Park
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Grand Cayman
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PRINCIPAL PLACE OF BUSINESS IN THE PEOPLE'S REPUBLIC OF CHINA (THE "PRC")

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HEAD OFFICE AND PLACE OF BUSINESS IN HONG KONG

Room 2607, 26/F
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Hong Kong

CAYMAN ISLANDS PRINCIPAL SHARE REGISTRAR AND TRANSFER OFFICE

Ocorian Trust (Cayman) Limited
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Regatta Office Park
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Cayman Islands

HONG KONG BRANCH SHARE REGISTRAR AND TRANSFER OFFICE

Boardroom Share Registrars (HK) Limited
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PRINCIPAL BANKERS

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Industrial and Commercial Bank of China
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LEGAL ADVISER

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2206–19 Jardine House
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Hong Kong

FINANCIAL ADVISER

Octal Capital Limited
801–805, 8th Floor
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88 Connaught Road Central
Hong Kong



CORPORATE INFORMATION (CONTINUED)

AUDITOR

BDO Limited
Certified Public Accountants
25th Floor
Wing On Centre
111 Connaught Road Central
Hong Kong

STOCK CODE

6908

COMPANY'S WEBSITE

www.hg-semiconductor.com

UNAUDITED CONDENSED CONSOLIDATED INTERIM RESULTS

For the six months ended 30 June 2024

The board (the “Board”) of the directors (the “Directors”) of HG Semiconductor Limited (the “Company”) announces the unaudited condensed consolidated interim results of the Company and its subsidiaries (collectively, the “Group”) for the six months ended 30 June 2024 (the “Period”), together with the comparative unaudited figures for the corresponding period in 2023 (the “Previous Period”), as follows:

CONDENSED CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the six months ended 30 June 2024

Six months ended 30 June			
	Notes	2024 RMB'000 (unaudited)	2023 RMB'000 (unaudited)
Revenue	4	34,252	45,905
Cost of sales		(31,534)	(42,866)
Gross profit		2,718	3,039
Other income and gains	4	6,785	1,036
Selling and distribution expenses		(1,595)	(2,302)
Administrative and other expenses		(62,949)	(46,994)
Provision on expected credit losses on trade and bills receivables		—	(583)
Finance costs	5	(2,164)	(6,273)
Loss before income tax credit		(57,205)	(52,077)
Income tax credit	6	—	138
Loss for the period		(57,205)	(51,939)
Other comprehensive income			
Item that will not be reclassified to profit or loss:			
Exchange difference on translation to presentation currency		8,504	2,784
Item that may be reclassified to profit or loss:			
Change in fair value of financial assets at fair value through other comprehensive income	14	(66,479)	(4,675)
Total comprehensive income for the period		(115,180)	(53,830)
Loss for the period attributable to:			
Owners of the Company		(54,246)	(49,114)
Non-controlling interests		(2,959)	(2,825)
		(57,205)	(51,939)
Total comprehensive income attributable to:			
Owners of the Company		(112,025)	(51,005)
Non-controlling interests		(3,155)	(2,825)
		(115,180)	(53,830)
Loss per share attributable to owners of the Company			
— Basic and diluted (RMB cents)	8	(7.22)	(8.39)

CONDENSED CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 30 June 2024

	Notes	As at 30 June 2024 RMB'000 (unaudited)	As at 31 December 2023 RMB'000 (audited)
ASSETS AND LIABILITIES			
Non-current assets			
Property, plant and equipment	9	189,728	189,110
Intangible assets	10	4,824	5,202
Financial assets at fair value through OCI	14	146,325	224,439
Prepayments and deposits	12	18,189	15,888
Deferred tax assets		6,431	6,431
		365,497	441,070
Current assets			
Inventories		55,354	48,788
Trade and bills receivables	11	77,293	68,693
Prepayments, deposits and other receivables	12	126,092	106,056
Financial assets at fair value through profit or loss	13	34,601	34,440
Cash and cash equivalents	15	21,691	49,287
Assets classified as held for sale		315,031 16,552	307,264 16,552
		331,583	323,816
Current liabilities			
Trade payables	16	12,342	11,018
Other payables and accruals		7,901	16,576
Bank and other borrowings	17	10,000	10,000
Lease liabilities		1,923	1,829
Tax payable		—	25
		32,166	39,448
Net current assets		299,417	284,368
Non-current liabilities			
Lease liabilities		4,136	4,828
		4,136	4,828
Net assets		660,778	720,610
EQUITY			
Equity attributable to owners of the Company			
Share capital		6,664	6,664
Reserves		590,895	677,066
Non-controlling interests		597,559 63,219	683,730 36,880
Total equity		660,778	720,610

CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the six months ended 30 June 2024

	Equity attributable to owners of the Company											
	Share capital	Share option/					Investment revaluation reserve	Exchange reserve	Accumulated		Non-controlling interests	Total equity
		Share premium	Share award reserve	Statutory reserve	Other reserve	Capital reserve			losses	Subtotal		
RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	
At 1 January 2024 (audited)	6,664	1,067,144	47,176	15,498	580	35,972	41,802	(9,088)	(522,018)	683,730	36,880	720,610
Loss for the period	-	-	-	-	-	-	-	-	(54,246)	(54,246)	(2,959)	(57,205)
Exchange differences on translating foreign operations	-	-	-	-	-	-	-	8,504	-	8,504	-	8,504
Change in fair value of financial assets at fair value through other comprehensive income	-	-	-	-	-	-	(66,283)	-	-	(66,283)	(196)	(66,479)
Total comprehensive income for the period	-	-	-	-	-	-	(66,283)	8,504	(54,246)	(112,025)	(3,155)	(115,180)
Disposal of equity interests to non-controlling interests (Note (i))	-	-	-	-	-	-	-	-	20,852	20,852	29,494	50,346
Forfeit of share options	-	-	(4,594)	-	-	-	-	-	4,594	-	-	-
Lapse of share options	-	-	(30,973)	-	-	-	-	-	30,973	-	-	-
Recognition of equity-settled share-based payment expenses	-	-	5,002	-	-	-	-	-	-	5,002	-	5,002
At 30 June 2024 (unaudited)	6,664	1,067,144	16,611	15,498	580	35,972	(24,481)	(584)	(519,845)	597,559	63,219	660,778
At 1 January 2023 (audited)	5,098	927,821	64,953	15,498	580	35,972	13,841	(5,572)	(464,437)	593,754	16,191	609,945
Loss for the period	-	-	-	-	-	-	-	-	(49,114)	(49,114)	(2,825)	(51,939)
Exchange differences on translating foreign operations	-	-	-	-	-	-	-	2,784	-	2,784	-	2,784
Change in fair value of financial assets at fair value through other comprehensive income	-	-	-	-	-	-	(4,675)	-	-	(4,675)	-	(4,675)
Total comprehensive income for the period	-	-	-	-	-	-	(4,675)	2,784	(49,114)	(51,005)	(2,825)	(53,830)
Placing of new shares (Note (ii))	367	32,634	-	-	-	-	-	-	-	33,001	-	33,001
Disposal of equity interests to non-controlling interests	-	-	-	-	-	-	-	-	4,319	4,319	19,874	24,193
Forfeit of share options	-	-	(7,158)	-	-	-	-	-	7,158	-	-	-
Recognition of equity-settled share-based payment expenses	-	-	3,668	-	-	-	-	-	-	3,668	-	3,668
At 30 June 2023 (unaudited)	5,465	960,455	61,463	15,498	580	35,972	9,166	(2,788)	(502,074)	583,737	33,240	616,977

Note (i): On 30 June 2024, the Group transferred 19.1% equity interest of its subsidiaries to its staff at consideration of RMB25.5 million under the Employee Share Incentive Scheme. The share award expenses arise from the Employee Share Incentive Scheme is approximately RMB24.8 million during the period. Details of the Employee Share Incentive Scheme are set out in the announcements of the Company dated 20 September 2023, 29 December 2023 and 2 July 2024.

Note (ii): An aggregate of 40,000,000 shares have been successfully placed on 13 June 2023 to not less than six places at the share price of HK\$0.90.

CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS

For the six months ended 30 June 2024

	Six months ended 30 June	
	2024 RMB'000 (unaudited)	2023 RMB'000 (unaudited)
Cash flows from operating activities		
Loss before income tax	(57,205)	(52,077)
Adjustments for:		
Depreciation of property, plant and equipment	6,525	9,483
Amortisation of intangible assets	176	2,517
Interest income	(23)	(39)
Finance costs	2,164	6,273
Share-based payment	29,817	3,668
Provision of expected credit losses on trade and bills receivables	—	583
Change in fair value of financial assets at fair value through profit or loss	(785)	87
Written off of property, plant and equipment	—	1,248
Operating loss before working capital changes	(19,331)	(28,257)
(Increase)/decrease in inventories	(6,566)	10,199
Increase in trade and bills receivables	(8,600)	(14,987)
Decrease in prepayments, deposits and other receivables	7,194	10,802
Decrease in trade and other payables	(7,351)	(2,176)
Cash used in operations	(34,654)	(24,419)
Income tax paid	(25)	(6)
Net cash flows used in operating activities	(34,679)	(24,425)

CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)

For the six months ended 30 June 2024

	Six months ended 30 June	
	2024	2023
	RMB'000	RMB'000
	(unaudited)	(unaudited)
Cash flows from investing activities		
Purchases of property, plant and equipment	(9,250)	(32,704)
Proceed from disposal of property, plant and equipment	261	—
Deposit paid for property, plant and equipment	—	(16,220)
Disposal of financial assets at fair value through OCI	17,780	—
Interest received	23	39
Net cash flows generated from/(used in) investing activities	8,814	(48,885)
Cash flows from financing activities		
Interest paid	(1,797)	(5,596)
Repayment of interest portion of the lease liabilities	(367)	(677)
Proceeds from placing of new shares	—	33,001
Repayments of principal portion of the lease liabilities	(598)	(2,765)
Proceeds from bank borrowings	10,000	10,000
Repayments of bank borrowings	(10,000)	(10,000)
Proceeds from other borrowings	—	56,097
Net cash flows (used in)/generated from financing activities	(2,762)	80,060
Net (decrease)/increase in cash and cash equivalents	(28,627)	6,750
Effect of exchange rate changes on cash and cash equivalents	1,031	1,461
Cash and cash equivalents at the beginning of period	49,287	43,794
Cash and cash equivalents at the end of period	21,691	52,005

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

For the six months ended 30 June 2024

1. GENERAL INFORMATION, BASIS OF PREPARATION AND ACCOUNTING POLICIES

HG Semiconductor Limited (the “**Company**”) was incorporated with limited liability in the Cayman Islands on 27 May 2015 and its shares have been listed on the Main Board of The Stock Exchange of Hong Kong Limited (the “**Stock Exchange**”) with stock code “6908”.

The address of the Company’s registered office is Windward 3, Regatta Office Park, PO Box 1350, Grand Cayman KY1-1108, Cayman Islands. The principal place of business of the Company and its subsidiaries (collectively referred to as the “**Group**”) is located in the People’s Republic of China (the “**PRC**”) at the North Side, 2nd Floor, No. 8 Pinggong Er Road, Nanping Technology Industrial Park, Zhuhai, the PRC.

The Company’s principal activity is investment holding. The Group is principally engaged in the design, development, manufacturing, subcontracting service and sales of semiconductor products, including light-emitting diode (“**LED**”) beads, gallium nitride (“**GaN**”) chips, GaN components and related application products, and fast charging products in the PRC.

The unaudited consolidated interim financial statements of the Group have been prepared in accordance with Hong Kong Accounting Standard (“**HKAS**”) 34, Interim Financial Reporting issued by the Hong Kong Institute of Certified Public Accountants (“**HKICPA**”) and comply with the applicable disclosure provisions of the Listing Rules.

The accounting policies and methods of computation used in the preparation of the unaudited condensed consolidated financial statements for the six months ended 30 June 2024 are consistent with those adopted by the Group in its audited consolidated financial statements for the year ended 31 December 2023 except for the adoption of the new and revised Hong Kong Financial Reporting Standards (the “**New and Revised HKFRSs**”) (which include all Hong Kong Financial Reporting Standards (“**HKFRSs**”), Hong Kong Accounting Standards (“**HKASs**”) and Interpretations) issued by the HKICPA which are effective to the Group for accounting periods beginning on or after 1 January 2024. The adoption of the new and revised HKFRSs has no material impact on the Group’s results and financial position for the current or prior periods.

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

1. GENERAL INFORMATION, BASIS OF PREPARATION AND ACCOUNTING POLICIES (Continued)

The Group has not applied any new and revised standards, amendments or interpretations that have been issued but are not yet effective. The Group is currently assessing the impact of the adoption of such new and revised standards, amendments or interpretations to the Group but is yet to be in a position to state whether they would have any material financial impact on the Group's results of operations and financial position.

The unaudited condensed consolidated financial statements for the six months ended 30 June 2024 have been prepared on the historical cost basis, except for the financial assets at fair value through other comprehensive income and financial assets at fair value through profit or loss which have been measured at fair value. The unaudited condensed consolidated financial statements for the six months ended 30 June 2024 are presented in Renminbi ("**RMB**"), which is also the functional currency of the Company.

The condensed consolidated financial statements have not been audited by the Company's auditors, but have been reviewed by the Audit Committee of the Company.

2. CHANGES IN HKFRSS

The Group has applied the same accounting policies in these interim condensed consolidated financial statements as in its 2023 annual consolidated financial statements, except that it has adopted the following amendments to HKFRSs:

Amendments to HKAS 1	Classification of Liabilities as Current or Non-current
Amendment to HKAS 1	Non-current Liabilities with Covenants
Amendments to HKFRS 16	Lease Liability in a Sale and Leaseback
Amendments to HKAS 7 and HKFRS 7	Supplier Finance Arrangements

The new and revised standards did not have material impact on the Group's interim condensed consolidated financial information.

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

3. SEGMENT INFORMATION

The chief operating decision makers are identified as Executive Directors of the Company. The Group has identified its operating segment based on the regular internal financial information reported to the Company's Executive Directors for their decisions about resources allocation and review of performance. The Group's operating segment is design, development, manufacturing, and sales of semiconductor products, including LED beads, GaN chips, GaN components and related application products in the PRC. The Executive Directors determined there were two reportable and operating segments which are (i) LED products and (ii) GaN and other semiconductor products.

Segment revenue and results

The following is an analysis of the Group's revenue and results by reportable and operating segments:

	Six months ended 30 June 2024			Six months ended 30 June 2023		
	LED products RMB'000 (unaudited)	GaN and other semiconductor products RMB'000 (unaudited)	Total RMB'000 (unaudited)	LED products RMB'000 (unaudited)	GaN and other semiconductor products RMB'000 (unaudited)	Total RMB'000 (unaudited)
Segment revenue	33,220	1,032	34,252	44,310	1,595	45,905
Segment result	(5,327)	(44,803)	(50,130)	(6,043)	(23,473)	(29,516)
Other unallocated						
Other income and gains			6,785			1,036
Other administrative expenses			(11,696)			(17,324)
Finance costs			(2,164)			(6,273)
Loss before income tax			(57,205)			(52,077)

No geographical information is presented as most of the Group's operations are located in the PRC.

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

4. REVENUE, OTHER INCOME AND GAINS

Revenue, which is also the Group's turnover, represents the net invoiced value of goods sold, less value added tax and other applicable local taxes during the reporting period. The Group is principally engaged in the design, development, manufacturing, and sales of semiconductor products, including LED beads, GaN chips, GaN components and related application products in the PRC.

The sales contract terms do not allow rebate, discount, warranties and return on revenue. During the six months ended 30 June 2024 and 2023, there were no rebate, discount, warranties and return on revenue.

An analysis of the Group's revenue, other income and gains are as follows:

	Six months ended 30 June	
	2024 RMB'000 (unaudited)	2023 RMB'000 (unaudited)
LED products		
Revenue recognised at a particular point in time		
Sales of LED beads	33,220	44,310
Sales of GaN and fast-charging products	1,032	1,595
	34,252	45,905
Other income and gains		
Bank interest income	23	39
Government grants (Note)	4,310	966
Other income	2,452	31
	6,785	1,036

Note: Government grants include various subsidies received by the Group from relevant government bodies in connection with certain subsidies to support the Group's businesses. There are no unfulfilled conditions or contingencies relating to these grants.

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

5. FINANCE COSTS

	Six months ended 30 June	
	2024 RMB'000 (unaudited)	2023 RMB'000 (unaudited)
Interest on bank and other borrowings	1,797	5,596
Interest on lease liabilities	367	677
	2,164	6,273

6. INCOME TAX CREDIT

The Group is subject to income tax on an entity basis on profit arising in or derived from the jurisdictions in which members of the Group are domiciled and operated.

Pursuant to the rules and regulations of the Cayman Islands and the British Virgin Islands (the "BVI"), the Group is not subject to any income tax in the Cayman Islands and the BVI.

The subsidiaries incorporated in Hong Kong are subject to income tax at the rate of 16.5% on the estimated assessable profits arising in Hong Kong for the six months ended 30 June 2024 and 2023. For the six months ended 30 June 2024, the first HK\$2,000,000 of profits earned by one of the group companies will be taxed at a rate of 8.25% whilst the remaining profits will continue to be taxed at 16.5%. No provision for Hong Kong profits tax has been made as the Group's Hong Kong subsidiaries had no estimated assessable profits for the reporting period (2023: Nil).

Corporate income tax is charged on a subsidiary operating in United States of America ("USA") at a rate of 21% (2023: 21%) on taxable income for the six months ended 30 June 2024.

In 2022, the Group's wholly-owned subsidiary, Zhuhai HongGuang Semiconductor Company Limited ("Zhuhai HongGuang") has successfully renewed the "New and High Technology Enterprise Certificate" (高新技術企業證書) for three years commencing from 1 January 2022. Pursuant to the relevant PRC enterprise income tax law, regulations and implementation guidance notes, Zhuhai HongGuang is entitled to a tax preference with a reduction of the enterprise income tax ("EIT") rate from 25% to 15%. The expiry date of Zhuhai HongGuang's New and High Technology Enterprise Certificate is 31 December 2024.

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

6. INCOME TAX CREDIT (Continued)

Therefore, provision for the EIT in the PRC for Zhuhai HongGuang is calculated based on the tax rate of 15% on Zhuhai HongGuang's estimated assessable profits for the six months ended 30 June 2024 and 2023.

7. DIVIDEND

No dividend has been paid or declared by the Company for the six months ended 30 June 2024 (2023: Nil), or by any of the companies now comprising the Group during the reporting period.

8. LOSS PER SHARE

The calculation of basic and diluted loss per share attributable to the ordinary equity holders of the Company is based on the following data:

	Six months ended 30 June	
	2024 RMB'000 (unaudited)	2023 RMB'000 (unaudited)
Loss		
Loss for the period attributable to owners of the Company	(54,246)	(49,114)
Number of shares		
Weighted average number of ordinary shares for the purpose of basic loss per share	751,054,785	585,578,901
Effect of dilutive potential ordinary shares in respect of the Company's share option schemes (notes (ii))	—	—
Weighted average number of ordinary shares for the purpose of diluted loss per share	751,054,785	585,578,901

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

8. LOSS PER SHARE (Continued)

Notes:

- (i) Basic loss per share is calculated by dividing loss for the period attributable to owners of the Company by the weighted average number of ordinary shares in issue of the Company during the period.
- (ii) For the six months ended 30 June 2024 and 2023, the potential ordinary shares from share options were not included in the calculation of loss per share as their inclusion would be anti-dilutive.

9. PROPERTY, PLANT AND EQUIPMENT

(a) Right-of-use assets

As at 30 June 2024, the right-of-use assets of the Group were mainly representing the property leases of Hong Kong office, Xuzhou plant and Zhuhai plant.

The property leases includes an amount of approximately RMB0.2 million (31 December 2023: approximately RMB0.3 million) leased from 珠海經濟特區利佳電子發展有限公司, a related party of the Group which is beneficially owned by the shareholder of the Company, Mr. Zhao Yi Wen, who is also Director of the Company, with lease term of 10 years from 1 April 2015 to 31 March 2025.

(b) Acquisitions and disposals of owned assets

During the six months ended 30 June 2024, the Group acquired items of property, plant and equipment with a cost of approximately RMB9.3 million (six months ended 30 June 2023: approximately RMB83.1 million). There was written off of property, plant and equipment with a net book value of approximately RMB3.0 million during the six months ended 30 June 2024 (six months ended 30 June 2023: approximately RMB1.2 million).

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

10. INTANGIBLE ASSETS

As at 30 June 2024 and 31 December 2023, the Group's other intangible assets consist of patent sublicense and computer software. During the six months ended 30 June 2024, the Group did not acquire or dispose any intangible assets (six months ended 30 June 2023: Nil). Amortisation charged for the six months ended 30 June 2024 amounted to approximately RMB0.2 million (six months ended 30 June 2023: approximately RMB2.5 million).

As at 30 June 2024, the carrying amount of the Group's intangible assets was approximately RMB4.8 million (31 December 2023: approximately RMB5.2 million).

11. TRADE AND BILLS RECEIVABLES

	As at 30 June 2024 RMB'000 (unaudited)	As at 31 December 2023 RMB'000 (audited)
Trade receivables	60,949	61,529
Bills receivables	16,344	7,164
	77,293	68,693

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

11. TRADE AND BILLS RECEIVABLES (Continued)

The aging analysis of the trade and bills receivables, based on the invoice date, is as follows:

	As at 30 June 2024 RMB'000 (unaudited)	As at 31 December 2023 RMB'000 (audited)
0 to 30 days	26,076	25,067
31 to 60 days	21,395	6,718
61 to 90 days	7,996	7,115
91 to 120 days	5,552	8,420
121 to 365 days	4,860	7,025
Over 1 year	17,883	20,817
	83,762	75,162
Less: Impairment of trade and bills receivables	(6,469)	(6,469)
	77,293	68,693

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

12. PREPAYMENTS, DEPOSITS AND OTHER RECEIVABLES

	As at 30 June 2024 RMB'000 (unaudited)	As at 31 December 2023 RMB'000 (audited)
Other receivables (Note i)	91,032	68,172
Prepayments and deposits (Note ii)	53,249	53,772
	144,281	121,944
Less: non-current portion Prepayments and deposits for acquisition of property, plant and equipment	(18,189)	(15,888)
Current portion	126,092	106,056

Prepayments, deposits and other receivables do not contain impaired assets.

Notes:

- (i) The amount includes receivables from non-controlling interests amounted to approximately RMB90,244,000 (31 December 2023: approximately RMB64,407,000).
- (ii) The amounts includes the prepayment to the independent third parties suppliers amounted to approximately RMB39.6 million (31 December 2023: approximately RMB35.3 million) for purchase of raw materials.

13. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

The financial assets at fair value through profit or loss represent the investment in an unlisted fund. Fair value loss of approximately RMB0.8 million was recognised in profit or loss during the six months ended 30 June 2024.

As at 30 June 2024, the fair value of financial assets at fair value through profit or loss was approximately RMB34.6 million (31 December 2023: approximately RMB34.4 million).

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

14. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME (“FVTOCI”)

	As at 30 June 2024 RMB'000 (unaudited)	As at 31 December 2023 RMB'000 (audited)
Financial asset at fair value through other comprehensive income		
Unlisted equity securities, at fair value	146,325	224,439

The unlisted equity securities were irrevocably designated at FVTOCI as the Group considers these investments to be strategic in nature, which includes:

- a. In 2021, the Group invested in 10% of the ordinary shares of a company in the PRC at the consideration of RMB15 million for investment purpose. The number of shares acquired represented approximately 7.73% of the total issued ordinary shares of this PRC company as at 30 June 2024. The fair value as at 30 June 2024 was approximately RMB9.7 million (31 December 2023: approximately RMB10.6 million).
- b. In 2021, the Group acquired 1,749,961 non-redeemable series E preferred shares of an unlisted company in Israel principally engaged in developing GaN related products including high-power transistors and modules at the consideration of approximately US\$25.0 million. The total number of shares acquired represented approximately 15.09% of the total equity shares of this Israeli company as at 30 June 2024. The fair value as at 30 June 2024 was approximately US\$18.8 million, equivalent to approximately RMB136.7 million (31 December 2023: approximately US\$27.8 million, equivalent to approximately RMB196.7 million).

In 2021, the Group acquired 206,367 non-redeemable preference shares, which represented 0.37% of total equity share in a Canadian company at the consideration of approximately US\$1.75 million. In 2024, the Group has completed the sale of 206,367 non-redeemable preference shares at the considerations of approximately US\$2.4 million (equivalent to approximately RMB17.8 million). Fair value gain of approximately RMB0.2 million was recognised during the six months ended 30 June 2024.

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

14. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME (“FVTOCI”) (Continued)

Save as disclosed above, during the six months ended 30 June 2024, there was no acquisition of and disposal on the FVTOCI.

The Company engaged an independent professional valuer to measure the fair value of the unlisted equity securities as at 30 June 2024. Fair value loss of approximately RMB66.5 million (six months ended 30 June 2023: approximately RMB4.7 million) was recognised in other comprehensive income during the six months ended 30 June 2024.

15. CASH AND CASH EQUIVALENTS

	As at 30 June 2024 RMB'000 (unaudited)	As at 31 December 2023 RMB'000 (audited)
Bank balances and cash	21,691	49,287
Denominated in RMB	14,543	36,116
Denominated in HK\$	1,252	4,592
Denominated in US\$	5,896	8,579

The bank balances are deposited with creditworthy banks with no history of default. The carrying amounts of the bank balances and cash approximated their fair values at the end of the reporting period. Bank balances and cash denominated in RMB are not freely convertible and the remittance of such funds out of the PRC is subject to exchange restrictions imposed by the PRC Government.

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

16. TRADE PAYABLES

	As at 30 June 2024 RMB'000 (unaudited)	As at 31 December 2023 RMB'000 (audited)
Trade payables	12,342	11,018

The aging analysis of the trade payables, based on the invoice date, is as follows:

	As at 30 June 2024 RMB'000 (unaudited)	As at 31 December 2023 RMB'000 (audited)
0 to 30 days	7,470	4,088
31 to 60 days	—	3,088
61 to 90 days	2,162	1,830
91 to 120 days	974	1,140
121 to 365 days	1,372	644
Over 1 year	364	228
	12,342	11,018

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

17. BANK AND OTHER BORROWINGS

	As at 30 June 2024 RMB'000 (unaudited)	As at 31 December 2023 RMB'000 (audited)
Bank loans — unsecured (Note i)	10,000	10,000
	10,000	10,000

Notes:

- (i) As at 30 June 2024, the effective interest rates of the unsecured interest-bearing bank borrowings was 3.75% (31 December 2023: 3.75%) per annum.

All of the banking facilities are subject to the fulfillment of covenants commonly found in lending arrangements with financial institutions. If the Group was to breach the covenants, the borrowings would become repayable on demand. The Group regularly monitors its compliance with these covenants. At the end of each of reporting period, none of the covenants related to drawn down facilities had been breached.

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

18. RELATED PARTY TRANSACTIONS

During the six months ended 30 June 2024, the Group entered into certain transactions with “related parties” as defined under the applicable accounting standards and the details of the material related party transactions (the “**Transactions**”) are disclosed as follows:

Name of related party	Nature of transactions	Six months ended 30 June	
		2024 RMB'000 (unaudited)	2023 RMB'000 (unaudited)
珠海經濟特區利佳電子發展有限公司	Utility expense	813	982
珠海經濟特區利佳電子發展有限公司	Rental expense	186	186
		999	1,168

Note: The related party is beneficially owned by the shareholder of the Company, Mr. Zhao Yi Wen, who is also Director of the Company.

19. SHARE-BASED PAYMENT TRANSACTIONS

Share Option Scheme

The Company’s share option scheme was conditionally approved by the Company pursuant to the written resolutions of the then all shareholders of the Company dated 2 December 2016 (the “**Share Option Scheme**”). The Share Option Scheme remains valid and effective following the transfer of listing of the Company’s shares from the GEM to the Main Board on 13 November 2019 and is implemented in full compliance with the requirements under Chapter 17 of the Listing Rules.

The Company operates the Share Option Scheme for the purpose of providing incentives and/or rewards to eligible participants (including the Company’s directors and other employees of the Group) who render services and/or contribute to the success of the Group’s operations. Eligible participants receive remuneration in the form of share-based payments, whereby eligible participants render services as consideration for share options.

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

19. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

Share Option Scheme (Continued)

The fair value of options granted is recognised as an employee benefits expense with a corresponding increase in equity. The total amount to be expensed is determined by reference to the fair value of the options granted on grant date. The total expense is recognised over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied. At the end of each period, the entity revises its estimates of the number of options that are expected to vest based on the non-market vesting and service conditions. It recognises the impact of the revision to original estimates, if any, in profit or loss, with a corresponding adjustment to equity.

On 17 June 2021, the Company conditionally granted 34,510,000 options to 26 grantees to subscribe for an aggregate of 34,510,000 shares under the Share Option Scheme (“**2021 Share Options**”) for a consideration of HK\$1 per grant.

On 28 July 2023, the Company conditionally granted 7,890,000 options to 48 grantees to subscribe for an aggregate of 7,890,000 shares under the Share Option Scheme (“**2023 Share Options**”) for a consideration of HK\$1 per grant.

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

19. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

Share Option Scheme (Continued)

The following tables disclose details of movements of the Company's 2021 Share Options held by directors and employees during the Period:

Date of grant	Vesting period	Exercisable period	Subscription price per Share (HK\$)	Outstanding at 1 January 2024	Number of share options			Outstanding at 30 June 2024	Vested and exercisable at 30 June 2024
					Granted during the Period	Exercised during the Period	Cancelled during the Period		
Directors of the Company									
17/6/2021	Nil (Note 8)	17/6/2021-16/6/2024	7.50	480,000	-	-	-	(480,000)	-
	17/6/2021-16/6/2022 (Note 9)	17/6/2022-16/6/2026	7.50	1,200,000	-	-	-	(1,200,000)	-
	17/6/2021-16/6/2023 (Note 9)	17/6/2023-16/6/2027	7.50	1,200,000	-	-	-	(1,200,000)	-
	17/6/2021-16/6/2024 (Note 9)	17/6/2024-16/6/2028	7.50	1,200,000	-	-	-	(1,200,000)	-
	17/6/2021-16/6/2025 (Note 9)	17/6/2025-16/6/2029	7.50	1,200,000	-	-	-	(1,200,000)	-
				5,280,000	-	-	-	(5,280,000)	-
Senior management and other employees									
17/6/2021	Nil (Note 8)	17/6/2021-16/6/2024	7.50	6,720,000	-	-	-	(6,720,000)	-
	Nil (Note 9)	17/6/2021-16/6/2029	7.50	1,650,000	-	-	-	-	1,650,000
	17/6/2021-16/6/2022 (Note 6)	17/6/2022-16/6/2026	7.50	1,637,500	-	-	-	-	1,637,500
	17/6/2021-16/6/2023 (Note 6)	17/6/2023-16/6/2027	7.50	250,000	-	-	-	-	250,000
	17/6/2021-16/6/2024 (Note 6)	17/6/2024-16/6/2028	7.50	250,000	-	-	-	-	250,000
	17/6/2021-16/6/2025 (Note 6)	17/6/2025-16/6/2029	7.50	250,000	-	-	-	-	250,000
	17/6/2021-16/6/2022 (Note 6 & 7)	17/6/2022-16/6/2026	7.50	62,500	-	-	-	-	62,500
	17/6/2021-16/6/2023 (Note 6 & 7)	17/6/2023-16/6/2027	7.50	62,500	-	-	-	-	62,500
	17/6/2021-16/6/2024 (Note 6 & 7)	17/6/2024-16/6/2028	7.50	62,500	-	-	-	-	62,500
	17/6/2021-16/6/2025 (Note 6 & 7)	17/6/2025-16/6/2029	7.50	62,500	-	-	-	-	62,500
	17/6/2021-16/6/2023 (Note 1 & 6)	17/6/2023-16/6/2027	7.50	1,387,500	-	-	-	-	1,387,500
	17/6/2021-16/6/2024 (Note 1 & 6)	17/6/2024-16/6/2028	7.50	1,387,500	-	-	-	-	1,387,500
	17/6/2021-16/6/2025 (Note 1 & 6)	17/6/2025-16/6/2029	7.50	1,387,500	-	-	-	-	1,387,500
	17/6/2021-16/6/2029 (Note 2)	From vesting date-16/6/2029	7.50	500,000	-	-	-	(310,000)	190,000
	17/6/2021-16/6/2029 (Note 3)	From vesting date-16/6/2029	7.50	2,500,000	-	-	-	(1,500,000)	1,000,000
	17/6/2021-16/6/2029 (Note 4)	From vesting date-16/6/2029	7.50	3,500,000	-	-	-	(2,500,000)	1,000,000
				21,670,000	-	-	-	(11,030,000)	10,640,000
				26,950,000	-	-	-	(16,310,000)	10,640,000

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

19. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

Share Option Scheme (Continued)

The following tables disclose details of movements of the Company's 2023 Share Options held by directors and employees during the Period:

Date of grant	Vesting period	Exercisable period	Subscription price per Share (HK\$)	Outstanding at 1 January 2024	Granted during the Period	Number of share options			Outstanding at 30 June 2024	Vested and exercisable at 30 June 2024
						Exercised during the Period	Cancelled during the Period	Lapsed or forfeited during the Period		
Senior management and other employees										
28/7/2023	28/7/2023-1/9/2023 (Note 6)	1/9/2023-1/9/2024	1.40	725,000	-	-	-	-	725,000	725,000
	28/7/2023-30/6/2024 (Note 6)	30/6/2024-30/6/2025	1.40	2,936,250	-	-	-	-	2,936,250	2,936,250
	28/7/2023-30/6/2025 (Note 6)	30/6/2025-30/6/2026	1.40	2,936,250	-	-	-	-	2,936,250	-
				6,597,500	-	-	-	-	6,597,500	3,661,250

Notes:

- Vesting of the Share Options is conditional upon achievement of certain sales targets of the Group by the grantees within the vesting period.
- Vesting of the Share Options is conditional upon successfully developing a new technology and product that appreciated by the board by the grantee within the vesting period of the Group.
- Vesting of the Share Options is conditional upon successfully procuring financing for the Group in the amount and from financial institutions of the satisfaction of the Group by the grantees within the vesting period.
- Vesting of the Share Options is conditional upon successfully procuring certain target company to become a customer of the Group by the grantees within the vesting period.
- Vesting of the Share Options immediately at grant date.
- Share Options are exercisable when the grantees retain employment in the Group until the end of the vesting period.
- Vesting of the Share Options is conditional upon achievement of satisfaction on relationship between the PRC local government authorities and the Group by the grantee within the vesting period.
- Lapsed as the exercisable period has ended on 16 June 2024.
- Forfeited as Dr. Wang David Nin-kou ceased to be a Non-executive Director on 17 June 2024.

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

19. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

Share Option Scheme (Continued)

The estimated fair value of the 2021 Share Options granted on the grant date is approximately HK\$122,873,000. On the date of grant, the closing price was HK\$7.5 per Share.

The estimated fair value of the 2023 Share Options granted on the grant date is approximately HK\$4,177,000. On the date of the grant, the closing price was HK\$1.25 per Share.

During the six months ended 30 June 2024, the Company recognised expense for services rendered during the vesting period under the share options scheme of approximately RMB3.0 million (Six months ended 30 June 2023: expenses of approximately RMB3.7 million).

Share Award Scheme

The Company has adopted a share award scheme (the “**2023 Share Award Scheme**”) on 29 December 2023 (the “**Adoption Date**”). The 2023 Share Award Scheme shall be valid and effective for a term of 10 years commencing on the Adoption Date, after which period no further Awards shall be granted but the rules of the 2023 Share Award Scheme shall remain in full force and effect to the extent necessary to give effect to any Awards made before the expiry of such period.

The objectives of the 2023 share award scheme are (i) to recognize the contributions by certain Eligible Participants and to provide them with incentives in order to retain them for the continual operation and development of the Group; and (ii) to attract suitable personnel for further development of the Group. The maximum number of Shares in respect of which Awards may be granted under the 2023 Share Award Scheme and Shares in respect of which options and/or awards may be granted or which may be awarded under any other share schemes must not in aggregate exceed 10% of the Shares in issue (i.e. 751,054,785 Shares) as at the Adoption Date.

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

19. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

Share Award Scheme (Continued)

On 31 January 2024, a total of 7,540,000 Awarded Shares were granted by the Company, to 25 Employee Participants, under the 2023 Share Award Scheme.

As at 30 June 2024, details of the interests of the Grantees in the 2023 Share Award Scheme are set out below:

Grantee	Category of grantees	Date of grant	Number of Awarded Shares		Number of Awarded Shares as at 1 January 2024	Granted during the Period	Vested during the Period	Cancelled during the Period	Lapsed or forfeited during the Period	Number of Awarded Shares as at 30 June 2024
			Shares	Vesting period						
Other employees in aggregate	Employee Participants	31/1/2024	7,540,000	31/1/2024-30/1/2025	-	7,540,000	-	-	-	7,540,000
Total					-	7,540,000	-	-	-	7,540,000

The estimated fair value of the Awarded Shares granted on 31 January 2024 is approximately RMB5.0 million. On the date of grant, the closing price was HK\$0.69 per Share. The fair value measurement was made based on the number of Awarded Shares and the closing price per Share on the date of grant and also on the part that no performance target is required and the Awarded Shares will be vested in the grantees on the expiry of 12 months from the date of grant.

During the six months ended 30 June 2024, the Company recognised expense under the 2023 Share Award Scheme of approximately RMB2.0 million (Six months ended 30 June 2023: Nil).

Employee Share Incentive Scheme

The Group has adopted an employee share incentive scheme (the “**Employee Share Incentive Scheme**”) to recognise the contributions made by certain employees of the Group (the “**Awardees**”) and to provide the Awardees with opportunities to indirectly invest in Jiangsu Jiahong Semiconductor Co., Ltd and share the future growth and success of Jiangsu Jiahong Semiconductor Co., Ltd through the partnership interests in Xuzhou Dihang Semiconductor Technology Partnership* (徐州地恒半導體科技合夥企業(有限合伙)) (the “**Employee Shareholding Platform**”).

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2024

19. SHARE-BASED PAYMENT TRANSACTIONS (Continued)

Employee Share Incentive Scheme (Continued)

An aggregate of 99% partnership interests in the Employee Shareholding Platform to Selected Participants under the Employee Share Incentive Scheme to recognise and reward the contributions of the Selected Participants for the growth and development of Shenzhen Jiahong Semiconductor Company Limited (the “Grant”), representing all of the Incentive Interests under the Employee Share Incentive Scheme, have been granted to the Selected Participants as of 30 June 2024. The fair value of approximately 19.10% equity interests of Shenzhen Jiahong Semiconductor Company Limited held by the Employee Shareholding Platform relating to the Grant was approximately US\$6.9 million (equivalent to approximately RMB50.3 million) as of 30 June 2024. Consideration of approximately US\$3.5 million (equivalent to approximately RMB25.5 million) was received by the Group on 28 August 2024.

During the six months ended 30 June 2024, the Company recognised expense under the Employee Share Incentive Scheme of approximately RMB24.8 million (Six months ended 30 June 2023: Nil).

MANAGEMENT DISCUSSION AND ANALYSIS

INTRODUCTION

HG Semiconductor Limited (the “**Company**”, together with its subsidiaries, the “**Group**”) is principally engaged in the design, development, manufacturing, subcontracting and sales of semiconductor products, including light-emitting diode (“**LED**”) beads, new generation of semiconductor gallium nitride (“**GaN**”) chips, and GaN device related application products in the China. With the Group’s expertise in LED manufacturing, strong scientific research team and research and development (“**R&D**”) capability, the Group has in recent years devoted itself to the application of GaN-related products in the third-generation of semiconductors and has gradually achieved business transformation.

The Group focuses on developing its third-generation semiconductor business, aiming to provide customers with more efficient and competitive solutions in terms of energy efficiency. By further accelerating the development and application of GaN technology, the Group is moving towards its goal of becoming an integrated device manufacturer (“**IDM**”) of semiconductor to serve the whole industrial chain with a core focus on semiconductor design and manufacturing, integrating R&D, manufacturing, packaging and package testing and sales. The Group will continue to implement its established business strategies to capture market opportunities and to strive to become a leading third-generation semiconductor supplier in the Greater China region.

INDUSTRY REVIEW

In the first half of 2024, the LED lighting industry, which is widely connected with fields of architectural lighting and electronic consumer products, suffered continuous negative impacts due to factors such as the sluggish real estate market and weak consumer demand for electronic products. Meanwhile, the competition in the LED industry was increasingly intensified. Many large LED manufacturers and suppliers had competitive advantages in technology research and development, product quality, and pricing. All of the abovementioned had an impact on the overall demand for the Group’s products.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

In the semiconductor industry, according to the data released by the Semiconductor Industry Association (SIA), China is the largest semiconductor market in the world, and its market demand has shown good growth momentum in various segments, including technological innovation, power devices, automotive electronics, artificial intelligence, and the Internet of Things. Favorable government policies and industrial development strategies have also provided good development opportunities for China's semiconductor industry, especially in the fields of new energy and new energy vehicle electronics. China's new energy investment has grown rapidly, along with leading position in photovoltaic, wind power generation, energy storage, batteries, and other industries globally. China's new energy vehicle market is experiencing rapid development, and the market demand for related automotive intelligent driving chips and power chips is growing quickly.

According to the Spring 2024 Semiconductor Market Forecast released by the World Semiconductor Trade Statistics ("WSTS"), WSTS has adjusted its Spring 2024 forecast upwards to a 16.0 percent growth in the global semiconductor market compared to the previous year. The updated market valuation for 2024 is estimated at US\$611 billion. Looking ahead to 2025, WSTS forecasts a 12.5 percent growth in the global semiconductor market, reaching an estimated valuation of US\$687 billion.

In the first half of 2024, the chip war between China and the United States continued to heat up. The United States successively imposed export control sanctions on Chinese enterprises involved in manufacturing chips and related technologies, and restricted the sales of high-end chips by United States enterprises to China, so as to curb the development of China's semiconductor industry. Subsequently, the Netherlands and Japan also reached agreements with the United States to implement export control measures on semiconductor manufacturing equipment such as extreme ultraviolet (EUV) lithography, deep ultraviolet (DUV) lithography, and chemical materials, etc., to restrict the export of such equipment to China, jointly curbing the development of China's chip manufacturing industry. Nevertheless, the various restrictions imposed by various countries on China's semiconductor industry have transformed into China's driving force. As the world's largest importer of semiconductor chips as well as an important chip consumption market, to overcome the restrictions imposed by various countries, China has invested more resources and funds in scientific research, causing the semiconductor industry to undergo rapid development. In addition to the accelerated domestic manufacturing of semiconductor materials, downstream wafer fabs have also expanded their productivity rapidly, the number of China's integrated circuit enterprises also continued to grow. In addition, according to the annual report of China Semiconductor Industry Association (CSIA), the number of domestic chip design manufacturers has increased from 1,362 in 2016 to 3,243 in 2022, representing a compound annual growth rate of 22.4% from 2016 to 2022, indicating China's remarkable results in promoting self-development of the semiconductor industry.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

As a key member of the third-generation of semiconductors, GaN can operate at high frequencies and maintain high performance and efficiency with lower loss than previously used silicon transistors. As the development of the third-generation semiconductor enters into a booming period, the demand for third-generation semiconductor materials in different fields is surging, semiconductor products are becoming more diversified and the speed of iteration and innovation continues to accelerate. Although the consumer electronics sector continues to be sluggish, new energy and new energy vehicles will bring sustained application space for GaN. In terms of new energy, in 2023, energy investment maintained rapid growth, with the completed investment in new energy increasing year-on-year by over 34%. New energy vehicles are one of the most core key application markets for third-generation semiconductor materials, which contribute strong demand continuously for third-generation semiconductor power devices. In 2023, the production and sales of new energy vehicles in China reached 9.587 million units and 9.495 million units respectively, representing year-on-year growth of 35.8% and 37.9% respectively, with a market share of 31.6%. Among the main varieties of new energy vehicles, the production and sales of the three major categories of new energy vehicles have shown significant growth compared with the Previous Year.

In recent years, China has been giving great support and encouragement to innovative high-tech enterprises, in particular the new energy and third-generation semiconductors as the representatives of the technological innovation enterprises are gradually becoming a vital driving force for economic development. In the Outline of the Fourteenth Five-Year Plan and Long-Range Objectives Through the Year 2035 (《十四五規劃和2035年遠景目標綱要》), China advocates accelerating the industrialisation process of new materials and technologies for third-generation semiconductors, so as to create a new batch of fast-growing new material enterprises.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

BUSINESS REVIEW

In the first half of 2024, HG Semiconductor continued to fully deploy the third-generation semiconductor industry chain while maintaining its solid foundation in initial LED bead business. The Group is committed to accelerating the pace of GaN production during the Year. The Group completed the production and commissioning of GaN epitaxial wafer equipment at the beginning of the Year and met the conditions for epitaxial wafer production. The Group also completed the purchase, installation and commissioning of the core equipment of the wafer production line, leading to the establishment of the wafer production line. As the third-generation semiconductor business is still in the investment and R&D stage, the Group's revenue for the first six months period in 2024 ("**Period**") was mainly derived from the LED bead business. During the Period, the weak real estate and consumer electronics markets in China also affected the industrial chain of the Group's LED bead business. During the Period, the revenue was approximately RMB34.3 million, representing a decrease of approximately 25% as compared with that for the Previous Period, but gross profit decreased by approximately 10% at approximately RMB2.7 million.

During the period under review, China's economic recovery was slow due to the sharp tightening of monetary policies in the European and American countries, the continuous downturn of the real estate market sentiment and the lack of market confidence, which indirectly affected the Group's performance. The Group's revenue for the Period was approximately RMB34.3 million, representing an decrease of approximately RMB11.6 million from approximately RMB45.9 million for the Previous Period. The loss for the Period attributable to owners of the Company was approximately RMB54.2 million.

GaN epitaxial wafer R&D and production breakthrough boost up the development of third-generation semiconductor industry chain

In the past year, HG Semiconductor's team has devoted its efforts in developing the new GaN business in the third-generation semiconductor industry by enhancing its core equipment and various R&D and production facilities, including the upgrade of its semiconductor factory in the Xuzhou Economic and Technological Development Zone (徐州經濟技術開發區), Jiangsu Province, PRC ("**Xuzhou Factory**"), covering an area of over 7,000 square meters. Currently, the Group has installed two production lines in the Xuzhou Factory for the epitaxial wafer production such as GaN-related products, and has completed the installation of equipment and production testing, which put the Group in a position to produce epitaxial wafers. In addition, the core machines imported from Europe and Japan have been delivered to the Xuzhou Factory and are ready for chips manufacturing to meet the market needs. The Group will continue to expand its production capacity and upgrade its technologies, and actively improve its factory efficiency and quality control.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

Moreover, with the efforts of the Group's scientist team and strong R&D capabilities, the Group has basically completed the installation and commissioning of the chip production line and other preparatory work on the basis of successful production of its own 6-inch GaN power device epitaxial wafer, which is well-prepared for the production of chip products in the near future. The manufacturing process of GaN chips is complex and involves different stages. The Group's success in manufacturing the epitaxial wafers is well ahead of the expected schedule, representing an important achievement in the Group's transformation into a third-generation semiconductor supplier, and paving the way for mass production of GaN chips. As the Group's aim of R&D, manufacturing and implementation of GaN third-generation semiconductors have realized, and quickly channelled into the production of epitaxial wafer, the Group is confident that its hard work will pay off in the foreseeable future.

Orderly development of GaN epitaxial wafer production and chip research and development to improve the layout of the third-generation semiconductor industry chain

During the Period, through persistent strategies, the Group continued to upgrade the core equipment of the Xuzhou Plant and promoted the development of the third-generation semiconductor GaN business at full speed. Including GaN-based inverters and power supply modules, the Group has obtained one invention patent and twenty utility model and appearance patents so far as at the end of the Period.

With the unremitting efforts of the team of scientists, strong in-house research and development capabilities, and product development experience of over decades, the Group has successfully installed production lines for the production of GaN related products. At present, the Group is actively exploring sales with customers, expanding sales channels through the sales team, striving to form a new layout of development of the entire industry chain. In addition, the Group has completed the testing of production equipment and technology in just three months and successfully produced epitaxial wafers complying with the high-yield standard of international large-scale manufacturers, demonstrating its scientific research capability and laying a solid foundation for its research and development of chips. With its determination to cultivate the GaN chip field, the Group plans to complete the positive process of power chip in the last quarter of 2024 and commence mass production during the year. The Group believes that by continuously improving and optimising its management model, it will gradually move towards the harvest period in the future.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

Building a world-class scientific research team with scientific research and innovation as the core value of the Company

The rapid growth in the number of third-generation semiconductor enterprises has led to increasingly fierce competition for outstanding technical talents in the industry. In view of this, the Group has always adhered to the people-oriented principle and firmly believes that excellent scientific research leaders are necessary to secure innovation and technological progress. The Group is committed to the construction of scientific research teams and strive to build a world-class scientific research team.

During the Period, the Group has recruited scientist with cutting-edge technologies in the industry, who has more than decades of mature experience in semiconductor research, development and production. The Group believes that his joining will greatly enhance its scientific research capabilities, fortifying its technologies capabilities and effectively empower the Group to enhance its own competitive advantages and industrial adaptability, thereby improving and consolidating its position in the industry. In order to maintain its leading position, the Group will spare no effort to continue to identify top experts in the industry in the future and strive to expand its semiconductor research and technology team to further improve the third-generation semiconductor GaN industry chain.

OUTLOOK

Currently, China's economy is in a critical period of a new round of industrial transformation, with semiconductors widely used in integrated circuits, consumer electronics, communication systems, photovoltaic power generation and other fields. With the rise of technologies such as 5G and artificial intelligence, the research and application of third-generation semiconductors represented by GaN have also been included in national strategic planning. According to market analysis firm Yole Développement's prediction, with the increasing demand for green energy generation, electric vehicles, charging piles and energy storage, the GaN power device market is expected to grow from US\$46 million in 2020 to US\$1.1 billion in 2026, with a compound annual growth rate of 70%.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

Benefiting from the huge market demand in consumer electronics, new energy and new-energy vehicles, coupled with the general trend of industrial upgrading and process substitution, as well as the strong demand for GaN power products in the market, the GaN power market has become the fastest growing segment of the third-generation semiconductor industry in terms of output value. Among these products, new-energy vehicles represent the main growth driver, with brands in China accounting for more than 80% of PRC's electric vehicle market and increasingly expanding their exports. This trend offers huge business opportunities across the whole supply chain, and has spurred PRC electric vehicle manufacturers to accelerate the development of third-generation semiconductor devices in the automotive field. With national policy support and solid market demand, the further development of GaN power products is expected to be rapid.

The Group will continue to make increased efforts to develop the third-generation semiconductor GaN industry chain in order to accelerate the pace of R&D, and to expand the applications of GaN-related products. Following the successful development of GaN epitaxial wafers, along with the upgrade of the Xuzhou Factory and the production lines and machines being well in place, the Group's R&D team and experts will continue to focus on production research, aiming to accelerate the realization of production capacity.

The Group will also actively seek strategic partners and upgrade its industrial chain while upholding the principle of achieving synergy in the use of resources and win-win cooperation. The Group will continue to strengthen its R&D capabilities and bring in outstanding experts and talents in the field of semiconductor to enhance its production and R&D, striving to become an IDM enterprise integrating R&D, manufacturing, packaging and package testing, and sales in the whole GaN industry chain. In addition, the Group will steadily develop its existing LED bead business. As the impact of the pandemic gradually subsides, the LED bead business is expected to stabilize progressively. The Group will continue to identify more licensed patents in the market in order to expand its product scope.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

Securing independent control of the chip sector has been elevated by the Chinese Government to the level of national key strategy so that the PRC can accelerate the pace of replacing imported components with domestic substitute products and independent innovation, providing strong, long-term support for the semiconductor segment. Buoyed by three factors — the PRC Government’s favourable policies, the extensive downstream application market, and the opportunities for component replacement using domestic substitute products — the Group will benefit from tailwinds in further exploring and developing third-generation semiconductor products and applications with GaN at their core, and continue its enhancement of production capacity and the progress of product R&D to boost quality and efficiency, maximising value for the shareholders of the Company.

FINANCIAL REVIEW

Revenue

For the Period, total revenue was approximately RMB34.3 million, representing a decrease of approximately 25.3% as compared with that for the Previous Period (Previous Period: approximately RMB45.9 million). The decrease was mainly attributable to the decrease in revenue from the sales of LED products.

The following table sets forth the breakdown of the Group’s revenue by segment:

	2024		2023	
	RMB'000 (unaudited)	%	RMB'000 (unaudited)	%
LED products	33,220	97.0	44,310	96.5
GaN and other semiconductor products	1,032	3.0	1,595	3.5
Total	34,252	100.0	45,905	100.0

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

For the Period, revenue from LED products amounted to approximately RMB33.2 million (Previous Period: approximately RMB44.3 million), accounting for approximately 97.0% of the total revenue (Previous Period: approximately 96.5%). The decrease in revenue was mainly due to the decrease in the sales volume and the average selling price of LED beads during the Period, as consumer confidence has continued to fall short of pre-pandemic level. Cautious consumer approach to spending on electronic products has continued to negatively impact the sales of LED beads of the Group.

Revenue from GaN and other semiconductor products during the Period was approximately RMB1.0 million (Previous Period: approximately RMB1.6 million), accounting for approximately 3.0% of the total revenue (Previous Period: approximately 3.5%).

Cost of Sales

Cost of sales of the Group primarily consisted of cost of material used, direct labour and production overheads. It decreased by approximately 26.6% from approximately RMB42.9 million for the Previous Period to approximately RMB31.5 million for the Period, reflecting a decrease in the sales volume of the LED products, which mainly led to the decrease in the cost of material used.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

Gross Profit and Gross Profit Margin

The gross profit decreased from approximately RMB3.0 million for the Previous Period to approximately RMB2.7 million for the Period. The gross profit margin increased from approximately 6.6% for the Previous Period to approximately 7.9% for the Period. The following table sets forth a breakdown of the gross profit and gross profit margin by segment for the periods indicated:

	Six months ended 30 June 2024		Six months ended 30 June 2023	
	Gross profit RMB'000 (unaudited)	Gross profit margin %	Gross profit RMB'000 (unaudited)	Gross profit margin %
LED products	3,495	10.5	5,873	13.3
GaN and other semiconductor products	(777)	-75.3	(2,834)	-177.7
Total gross profit/gross profit margin	2,718	7.9	3,039	6.6

The gross profit margin of LED products decreased from approximately 13.3% for the Previous Period to approximately 10.5% for the Period. Such decrease was mainly attributable to the decrease in the average selling price of the LED beads.

Other Income and Gains

Other income and gains of the Group increased by approximately 580% from approximately RMB1.0 million for the Previous Period to approximately RMB6.8 million for the Period, which was mainly due to the increase in Government grants from the PRC Government during the Period.

Selling and Distribution Expenses

The selling and distribution expenses decreased by approximately 30.4% from approximately RMB2.3 million for the Previous Period to approximately RMB1.6 million for the Period. The decrease in selling and distribution expenses was mainly attributable to the decrease in sales and marketing staff costs, traveling expenses and entertainment expenses.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

Administrative and Other Expenses

The Group's administrative and other expenses increased by approximately 33.8% from approximately RMB47.0 million for the Previous Period to approximately RMB62.9 million for the Period. The administrative and other expenses mainly included administrative staff costs, research and development costs, professional services expenses and equity-settled share-based payment expenses. The increase in administrative and other expenses was mainly due to the increase in equity-settled share-based payment expenses.

The equity-settled share-based payment expenses were approximately RMB29.8 million for the Period (Previous Period: approximately RMB3.7 million). The increase in equity-settled share-based payment expenses was mainly attributable to the expense of approximately RMB24.8 million recognised during the Period in relation to the Group's Employee Share Incentive Scheme (Previous Period: nil).

The research and development costs were approximately RMB11.4 million for the Period (Previous Period: approximately RMB12.1 million).

Finance Costs

The Group's finance costs was approximately RMB2.2 million for the Period (Previous Period: approximately RMB6.3 million). The decrease in finance costs was mainly attributable to the decrease in the amount of loan drawn down by the Group during the Period.

Income Tax Credit

Income tax credit of the Group for the Period was nil (Previous Period: approximately RMB0.1 million).

Loss for the Period

The loss for the Period was approximately RMB57.2 million, as compared to a loss of approximately RMB51.9 million for the Previous Period. The increase in loss for the Period was mainly attributable to the increase in administrative and other expenses during the Period.

Net Margin

The Group recorded a negative net margin of approximately 167.0% for the Period, compared to that of a negative net margin of approximately 113.1% for the Previous Period. The decrease in net margin for the Period was mainly attributable to the increase in administrative and other expenses during the Period.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

DIVIDEND

The Directors do not recommend the payment of an interim dividend for the Period (Previous Period: nil), in order to cope with the future business development of the Group.

LIQUIDITY, FINANCIAL RESOURCES AND CAPITAL STRUCTURE

As at 30 June 2024, the Group had net current assets of approximately RMB299.4 million (31 December 2023: approximately RMB284.4 million). The Group's current ratio (i.e. total current assets at the end of the period divided by total current liabilities at the end of the period) as at 30 June 2024 was approximately 10.3 (31 December 2023: approximately 8.2).

As at 30 June 2024, the Group had total cash and bank balances of approximately RMB21.7 million (31 December 2023: approximately RMB49.3 million).

As at 30 June 2024, the total available banking facilities of the Group were RMB10.0 million (31 December 2023: RMB10.0 million). The total drawn down from the banking facilities as at 30 June 2024 was RMB10.0 million (31 December 2023: RMB10.0 million).

The shares of the Company were successfully listed on the GEM of the Stock Exchange on 30 December 2016 and the listing of the Company's shares has been transferred from the GEM to the Main Board of the Stock Exchange since 13 November 2019. The share capital of the Company comprises only ordinary shares. As at 30 June 2024, the equity attributable to owners of the Company amounted to approximately RMB597.6 million (31 December 2023: approximately RMB683.7 million).

GEARING RATIO

The Group's gearing ratio (i.e. total debt at the end of the Period divided by total equity at the end of the Period) as at 30 June 2024 was approximately 1.5% (31 December 2023: approximately 1.4%).

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

DISCLOSURE OF INTERESTS

Interests and short positions of Directors and chief executive in the shares, underlying shares and debentures of the group and its associated corporations

As at 30 June 2024, the interests and short positions of the Directors and chief executive of the Company in the shares (the “**Shares**”), underlying Shares and debentures of the Company or any of its associated corporations (as defined in Part XV of the Securities and Futures Ordinance (the “**SFO**”)) which were required to be notified to the Company and the Stock Exchange under Divisions 7 and 8 of Part XV of the SFO (including any interests or short positions which they are taken or deemed to have under such provisions of the SFO) or required to be entered in the register of the Company pursuant to section 352 of the SFO, or required to be notified to the Company and the Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers (the “**Model Code**”) as set out in Appendix C3 of the Listing Rules were as follows:

Long positions in the Shares and underlying Shares

Name	Capacity/Nature of interest	Number of Shares held/ interested (Note 1)	Approximate percentage of shareholding (Note 2)
Mr. Zhao Yi Wen	Interest in a controlled corporation (Note 3)	56,500,000 (L)	7.52%
Mr. Lu Kailin (formerly known as Mr. Lyu Xiangrong)	Beneficial owner	834,000 (L)	0.11%

Notes:

1. The letter “L” denotes a long position.
2. There were 751,054,785 Shares in issue as at 30 June 2024.
3. The 56,500,000 Shares in which Mr. Zhao Yi Wen is interested consist of 56,500,000 Shares held by First Global Limited, a company wholly owned by Mr. Zhao Yi Wen, in which Mr. Zhao Yi Wen is deemed to be interested under the SFO.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

Save as disclosed above, as at 30 June 2024, none of the Directors and chief executive of the Company had any interest or short position in the Shares, underlying Shares and debentures of the Company or any of its associated corporations (as defined in Part XV of the SFO) which were required to be (i) notified to the Company and the Stock Exchange under Divisions 7 and 8 of Part XV of the SFO (including any interests or short positions which they are taken or deemed to have under such provisions of the SFO); (ii) entered in the register of the Company pursuant to section 352 of the SFO; or (iii) notified to the Company and the Stock Exchange pursuant to the Model Code.

The interests of substantial shareholders and the interests and short position of other persons in the shares and underlying Shares

As at 30 June 2024, so far as the Directors are aware, the interests or short positions owned by the following persons (other than the Directors or chief executive of the Company) in the Shares or underlying Shares which are required to be notified to the Company under Divisions 2 and 3 of Part XV of the SFO, or which are required to be recorded in the register of the Company required to be kept under section 336 of the SFO are as follows:

Name	Capacity/Nature of interest	Number of Shares held/interested (Note 1)	Approximate percentage of shareholding (Note 2)
Jovial Star International Limited	Beneficial owner (Note 3)	129,453,785 (L)	17.24%
Zhan Haisu	Interest in a controlled corporation (Note 3)	129,453,785 (L)	17.24%
Wide Yield Investment Holding Limited	Beneficial owner (Note 4)	100,500,000 (L)	13.38%
Ms. Qin Anqi	Interest in a controlled corporation (Note 4)	100,500,000 (L)	13.38%
First Global Limited	Beneficial owner (Note 5)	56,500,000 (L)	7.52%
Ms. Zhuang Chan Ling	Interest of spouse (Note 6)	56,500,000 (L)	7.52%
GSR Capital Special Opportunity Fund L.P. ("GSR")	Beneficial owner (Note 7)	56,000,000 (L)	7.46%
GoldenSand Capital Ltd ("GoldenSand")	Interest in a controlled corporation (Note 7)	56,000,000 (L)	7.46%
Wu Sonny	Interest in a controlled corporation (Note 7)	56,000,000 (L)	7.46%
Qin Xiaolu	Beneficial owner	39,085,000 (L)	5.20%

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

Notes:

1. The letter "L" denotes a long position.
2. There were 751,054,785 Shares in issue as at 30 June 2024.
3. The 129,453,785 Shares in which Mr. Zhan Haisu is interested consist of 129,453,785 Shares in which Jovial Star International Limited is interested in. Jovial Star International Limited is a company wholly owned by Mr. Zhan Haisu, in which Mr. Zhan Haisu is deemed to be interested under the SFO.
4. The 100,500,000 Shares held by Wide Yield Investment Holding Limited, a company wholly owned by Ms. Qin Anqi, in which Ms. Qin Anqi is deemed to be interested under the SFO.
5. The 56,500,000 Shares held by First Global Limited, a company wholly owned by Mr. Zhao Yi Wen, in which Mr. Zhao Yi Wen is deemed to be interested under the SFO.
6. Ms. Zhuang Chan Ling is the spouse of Mr. Zhao Yi Wen and is deemed, or taken to be, interested in the Shares in which Mr. Zhao Yi Wen has interest under the SFO.
7. GSR is an exempted limited partnership with GoldenSand (a company which is wholly owned by Sonny Wu and being the general partner of GSR) and Sonny Wu (being the limited partner of GSR) holding 50% and 50% of the total capital contribution to GSR respectively, and therefore GoldenSand and Sonny Wu are deemed to be interested in the 56,000,000 Shares held by GSR under SFO.

Save as disclosed above, as at 30 June 2024, the Directors are not aware of any interests or short positions owned by any persons (other than the Directors or Chief Executive of the Company) in the shares or underlying shares of the Company which were required to be disclosed under Divisions 2 and 3 of Part XV of the SFO or which were required to be recorded in the register of the Company required to be kept under section 336 of the SFO.

SHARE OPTION SCHEME

The Company's share option scheme (the "**Share Option Scheme**") was conditionally approved and adopted by the Company pursuant to the written resolutions of all shareholders of the Company dated 2 December 2016. Unless otherwise cancelled or amended, the Share Option Scheme will remain in force for a period of 10 years from the date of its adoption.

On 17 June 2021, the Company granted a total of 34,510,000 options (the "**Options**"), with exercise price of HK\$7.5 per share of the Company (the "**Share**"), to the Directors and certain eligible employees of the Group pursuant to the Share Option Scheme. On the date immediately before the Options were granted, the closing price was HK\$7.35 per Share.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

On 28 July 2023, the Company granted a total of 7,890,000 Options, with exercise price of HK\$1.4 per Share, to certain eligible employees of the Group. On the date immediately before the Options were granted, the closing price was HK\$1.27 per Share.

As at 30 June 2024, details of the interests of the Directors, chief executive, senior management and other employees of the Group in the Share Option Scheme are set out below:

Grantee	Date of grant	Vesting period	Exercisable period	Subscription price per Share (HK\$)	Number of Shares in relation to				Number of Shares in relation to outstanding Options as at 30 June 2024				
					Options as at 1 January 2024	Granted during the Period	Exercised during the Period	Cancelled during the Period		Lapsed or forfeited during the Period			
<i>Executive Director:</i>													
Mr. Zhao Yi Wen	17/6/2021	Nil (Note 2)	17/6/2021–16/6/2024	7.5	480,000	–	–	–	(480,000)	–			
<i>Non-executive Director:</i>													
Dr. Wang David Nin-kou (ceased to be a Non-executive Director on 17 June 2024)	17/6/2021	17/6/2021–16/6/2022 (Note 3)	17/6/2022–16/6/2026	7.5	1,200,000	–	–	–	(1,200,000)	–			
		17/6/2021–16/6/2023 (Note 3)	17/6/2022–16/6/2027	7.5	1,200,000	–	–	–	(1,200,000)	–			
		17/6/2021–16/6/2024 (Note 3)	17/6/2022–16/6/2028	7.5	1,200,000	–	–	–	(1,200,000)	–			
		17/6/2021–16/6/2025 (Note 3)	17/6/2022–16/6/2029	7.5	1,200,000	–	–	–	(1,200,000)	–			
Subtotal					5,280,000	–	–	–	(5,280,000)	–			
<i>Senior management and other employees in aggregate</i>													
17/6/2021	Nil (Note 2)	17/6/2021–16/6/2024	17/6/2021–16/6/2024	7.5	6,720,000	–	–	–	(6,720,000)	–			
			17/6/2021–16/6/2029	7.5	1,650,000	–	–	–	–	1,650,000			
			17/6/2021–16/6/2022	7.5	1,637,500	–	–	–	–	1,637,500			
			17/6/2021–16/6/2023	7.5	250,000	–	–	–	–	250,000			
			17/6/2021–16/6/2024	7.5	250,000	–	–	–	–	250,000			
			17/6/2021–16/6/2025	7.5	250,000	–	–	–	–	250,000			
			17/6/2021–16/6/2022 (Note 1)	7.5	62,500	–	–	–	–	62,500			
			17/6/2021–16/6/2023 (Note 1)	7.5	1,450,000	–	–	–	–	1,450,000			
			17/6/2021–16/6/2024 (Note 1)	7.5	1,450,000	–	–	–	–	1,450,000			
			17/6/2021–16/6/2025 (Note 1)	7.5	1,450,000	–	–	–	–	1,450,000			
			17/6/2021–16/6/2029 (Note 1)	7.5	6,500,000	–	–	–	(4,310,000)	2,190,000			
			28/7/2023	17/6/2023–19/6/2024	1/9/2023–1/9/2024	17/6/2023–19/6/2024	1.4	725,000	–	–	–	–	725,000
						28/6/2024–30/6/2025	1.4	2,936,250	–	–	–	–	2,936,250
						28/6/2025–30/6/2026	1.4	2,936,250	–	–	–	–	2,936,250
28/6/2025–30/6/2026	1.4	2,936,250				–	–	–	–	2,936,250			
Subtotal					28,267,500	–	–	–	(11,030,000)	17,237,500			
Total					33,547,500	–	–	–	(16,310,000)	17,237,500			

Notes:

- Vesting of the Options is conditional upon achievement of certain performance targets by the Grantees.
- Lapsed as the exercisable period has ended on 16 June 2024.
- Forfeited as Dr. Wang David Nin-kou ceased to be a Non-executive Director on 17 June 2024.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

No Option was available for grant under the Share Option Scheme as at 1 January 2024 and 30 June 2024. No service provider sublimit was set under the Share Option Scheme.

The number of Shares that may be issued in respect of Options granted under the Share Option Scheme was 17,237,500 as at 30 June 2024, representing approximately 2.30% of the weighted average number of Shares in issue for the six months ended 30 June 2024.

SHARE AWARD SCHEME

The Company has adopted the Share Award Scheme (the “**2023 Share Award Scheme**”) on 29 December 2023 (the “**Adoption Date**”). Details of the 2023 Share Award Scheme can be referred to the circular of the Company dated 13 December 2023 and the announcement of the Company dated 29 December 2023. The following is a summary of the Share Award Scheme:

(1) Purposes and objectives

The objectives of the 2023 Share Award Scheme are (i) to recognise the contributions by certain Eligible Participants and to provide them with incentives in order to retain them for the continual operation and development of the Group; and (ii) to attract suitable personnel for further development of the Group.

(2) Eligible Participants

The Eligible Participants of the 2023 Share Award Scheme shall comprise:

- (i) any director and employee (including full-time and part-time employee) of the Company or any of its subsidiaries (including any persons who are granted awards (the “**Awards**”) under the 2023 Share Award Scheme as an inducement to enter into employment contracts with the Group) (“**Employee Participant**”);
- (ii) any director and employee of a related entity (“**Related Entity**”), being holding company(ies), fellow subsidiary(ies) or associated company(ies) of the Company (“**Related Entity Participant**”); and
- (iii) any person who provided services to the Group on a continuing or recurring basis in its ordinary and usual course of business which are in the interest of long term growth of the Group (excluding placing agents or financial advisers providing advisory services to the Group for fundraising, mergers or acquisitions and professional service providers including auditors or valuers who provide assurance or are required to perform their services to the Group with impartiality and objectivity) (“**Service Provider**”).

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

(3) Shares available for issue

The total number of Shares (the “**Awarded Shares**”) available for issue under the 2023 Share Award Scheme is 75,105,478 Shares, representing approximately 10% of the total number of issued Shares (i.e. 751,054,785 Shares) as at the date of this report.

(4) Maximum entitlement of each Eligible Participant

Scheme Mandate Limit

The maximum number of Shares which may be awarded under the 2023 Share Award Scheme is 75,105,478 Shares, which is approximately 10% of the Shares in issue as at the Adoption Date (the “**Scheme Mandate Limit**”).

Service Provider Sublimit

The maximum number of Shares which may be awarded to Service Providers under the 2023 Share Award Scheme is 7,510,547 Shares, which is approximately 1% of the Shares in issue as at the Adoption Date (the “**Service Provider Sublimit**”). The Service Provider Sublimit was determined based on 10% of the Scheme Mandate Limit.

1% Individual Limit

No Award shall be granted to any selected participant under the 2023 Share Award Scheme (a “**Selected Participant**”) which would result in the total number of (a) Shares issued and to be issued under the Awards granted or to be granted to such Selected Participant under the 2023 Share Award Scheme (excluding any Awards lapsed in accordance with the rules of the 2023 Share Award Scheme); (b) the Shares issued and to be issued upon exercise of all options or awards granted and proposed to be granted to such Selected Participant under any other (a) scheme(s) involving the grant of Shares by the Company (including the 2023 Share Award Scheme); and (b) scheme(s) involving the grant of options by the Company (including the Share Option Scheme) over Shares (“**Share Scheme(s)**”) (including exercised and outstanding options but excluding any options or awards lapsed in accordance with the terms of such Share Scheme); and (c) any cancelled Shares which were the subject of Awards or options or awards under any other Share Scheme(s) which had been granted to and accepted by that Selected Participant, in the 12-month period up to and including the date of such grant representing in aggregate over 1% of the total number of Shares in issue, subject to the rules of the 2023 Share Award Scheme.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

(5) Vesting of the Awarded Shares

The Board is entitled to impose any terms and conditions (including a period of continued employment, engagement and/or service within the Group and/or any Related Entity after the Award shall become entitled and/or vested) as it deems appropriate in its absolute discretion with respect to the entitlement and/or vesting of the Awarded Shares on the Selected Participant and shall inform such Selected Participant the relevant conditions of the Award and the Awarded Shares provided that the vesting period for Awards shall not be less than 12 months unless under the specific circumstances as set out in the 2023 Share Award Scheme.

(6) Grant of Awards and acceptance of offers

A Selected Participant granted with an Award shall be responsible for paying up the aggregate nominal value of the Awarded Shares being vested in such Selected Participant. An Award shall automatically lapse if the Selected Participant fails to sign and return the acceptance form attached to the grant notice within five (5) Business Days after the date of the grant notice (i.e. the acceptance period) or the Board does not receive the reply slip, the relevant duly signed documents and the remittance from the Selected Participant at least ten (10) Business Days prior to the Vesting Date.

(7) Period of the 2023 Share Award Scheme

The 2023 Share Award Scheme shall be valid and effective for a term of 10 years commencing on the Adoption Date, after which period no further Awards shall be granted but the rules of the 2023 Share Award Scheme shall remain in full force and effect to the extent necessary to give effect to any Awards made before the expiry of such period.

Reference is made to the announcement of the Company dated 31 January 2024 (the “**Grant of Awards Announcement**”), unless otherwise stated herein, capitalised terms used below shall have the same meaning as those defined in the Grant of Awards Announcement. On 31 January 2024, a total of 7,540,000 Awarded Shares were granted by the Company, to 25 Employee Participants. On the date immediately before the awards were granted, the closing price was HK\$0.67 per Share. The estimated fair value of the Awarded Shares granted on 31 January 2024 is approximately RMB5.0 million. The Group had recorded the expenses associated with the Awarded Shares granted under the 2023 Share Award Scheme of approximately RMB2.0 million during the Period.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

As at 30 June 2024, details of the interests of the Grantees in the 2023 Share Award Scheme are set out below:

Grantee	Category of grantees	Date of grant	Number of		Number of	Granted	Vested	Cancelled	Lapsed or	Number of
			Awarded	Vesting period						
			Shares		January 2024	during	during	during	forfeited during	as at 30 June
						the Period	the Period	the Period	the Period	2024
Other employees in aggregate	Employee Participants	31/1/2024	7,540,000	31/1/2024–30/1/2025	–	7,540,000	–	–	–	7,540,000
Total					–	7,540,000	–	–	–	7,540,000

The number of Shares available for grant under the Scheme Mandate Limited and the Service Provider Sublimit as at 1 January 2024 were 75,105,478 and 7,510,547 respectively. The number of Shares available for grant under the Scheme Mandate Limited and the Service Provider Sublimit as at 30 June 2024 were 67,565,478 and 7,510,547 respectively.

The number of Shares that may be issued in respect of Awarded Shares under the Share Award Scheme was 7,540,000 as at 30 June 2024, representing approximately 1% of the weighted average number of Shares in issue for the six months ended 30 June 2024.

EMPLOYEE SHARE INCENTIVE SCHEME

References are made to (i) the announcement of the Company dated 20 September 2023 in relation to the Equity Transfer for the purpose of implementing and facilitating the administration and operation of the Employee Share Incentive Scheme; (ii) the announcement of the Company dated 29 December 2023 in relation to the adoption of the Employee Share Incentive Scheme; and (iii) the announcement of the Company dated 2 July 2024 in relation to the grant of the Incentive Interest Pursuant to Employee Share Incentive Scheme (the “**Employee Share Incentive Scheme Announcements**”). Capitalized terms used in this report shall have the same meanings as defined in the Employee Share Incentive Scheme Announcements unless otherwise stated.

An aggregate of 99% partnership interests in the Employee Shareholding Platform, representing all of the Incentive Interests under the Employee Share Incentive Scheme, have been granted to the Selected Participants as of 30 June 2024. No further partnership interests in the Employee Shareholding Platform are available for future grant under the Employee Share Incentive Scheme.

SIGNIFICANT INVESTMENTS

VisIC Technologies Limited (“VisIC”)

On 24 June 2021, the Company’s wholly-owned subsidiary, FastSemi Holding Limited (“**FastSemi**”), acquired 349,992 series E preferred shares of VisIC, an unlisted company in Israel principally engaged in the development of GaN-related products, which include high-power transistors and modules, at the consideration of approximately US\$5 million. On 23 August 2021, FastSemi further acquired 1,399,969 series E preferred shares of VisIC, at the consideration of approximately US\$20 million. In 2021, the total number of shares acquired was 1,749,961 with an investment cost of approximately US\$25 million. The total number of shares acquired represented approximately 15.09% of the enlarged issued share capital of VisIC as at 30 June 2024. Such investment was classified as an equity instrument at fair value through other comprehensive income amounting to approximately RMB136.7 million as at 30 June 2024, representing approximately 20% of the Group’s consolidated total assets as at 30 June 2024. Fair value loss of approximately RMB65.6 million was recognised through other comprehensive income during the Period. There was no dividends received from this investment for the Period. As VisIC is one of the largest players in the third-generation field of GaN devices, the Group plans to hold VisIC as a long-term investment.

Beijing Hongzhi Electric Technology Co., Ltd.* (“Beijing Hongzhi”)

On 6 August 2021, the then Company’s wholly-owned subsidiary, Xuzhou GSR Semiconductor Co., Ltd.* (“**Xuzhou GSR**”), invested in 10% of the ordinary shares of Beijing Hongzhi with a consideration of RMB15 million. Such investment was classified as an equity instrument at fair value through other comprehensive income amounting to approximately RMB9.7 million as at 30 June 2024 representing approximately 1.4% of the Group’s consolidated total assets as at 30 June 2024. Fair value loss of approximately RMB0.9 million was recognised through other comprehensive income during the Period. There was no dividends received from this investment for the Period. Beijing Hongzhi has more than 20 years of experience in chip design and technology, and holds numerous registered patents and technology-related intellectual property rights which helps the Group to maintain high potential for future growth.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

GaN Systems Inc. (“GaN Systems”)

On 30 November 2021, FastSemi acquired 206,367 series F-2 preferred shares of GaN Systems, a Canadian company principally engaged in the development of a broad range of GaN-related products, which include high current GaN power semiconductors, at a consideration of approximately US\$1.75 million, representing approximately 0.37% of the total issued share capital of GaN Systems as at 31 December 2023.

In March 2024, FastSemi has completed the sale of 206,367 series F-2 preferred shares of GaN Systems at a consideration of approximately US\$2.4 million.

HighTec SP2 Fund (the “Fund”)

In December 2021, FastSemi subscribed 4,000 shares of the Fund at a consideration of US\$4 million. The Fund’s investment strategies are principally to invest directly or through other investment vehicles in the equity securities of the world’s leading semiconductor design and production companies, which include technology companies focusing on providing fast-charging solutions, R&D companies with technical knowledge and product experience, R&D companies focusing on power devices in electric vehicle applications, and technology companies focusing on high-power automotive solutions.

In January 2022, FastSemi further subscribed for 1,002,466 shares of the Fund at a consideration of approximately US\$1 million.

Such investment was classified as an equity instrument at fair value through profit or loss amounting to approximately RMB34.6 million as at 30 June 2024, representing approximately 4.96% of the Group’s consolidated total assets as at 30 June 2024. Fair value loss of approximately RMB785,000 was recognised through profit or loss during the Period. As the Fund’s main focus is on investing in the semiconductor industry and semiconductors have a wide range of applications in a huge and growing market, the outlook for the Fund remains positive.

MATERIAL ACQUISITIONS AND DISPOSALS

The Group did not have any material acquisitions and disposals of subsidiaries and associated companies during the Period.

CAPITAL COMMITMENTS

As at 30 June 2024, the Group has capital commitments for the acquisition of property, plant and equipment, the amount contracted for amounted to approximately RMB10.4 million (31 December 2023: approximately RMB5.3 million).

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

CHARGE ON THE GROUP'S ASSETS

As at 30 June 2024 and 31 December 2023, the Group did not have any charge on its assets.

CONTINGENT LIABILITIES

As at 30 June 2024, the Group did not have any significant contingent liabilities.

FOREIGN EXCHANGE EXPOSURE

The Group's main operations are in the PRC with most of its transactions settled in RMB. The Directors are of the opinion that the Group's exposure to foreign exchange risk is insignificant. During the Period, the Group did not hedge any exposure to foreign exchange risk.

EMPLOYEES AND REMUNERATION POLICIES

As at 30 June 2024, the Group employed 149 employees (31 December 2023: 158 employees). Employee costs (including Directors' remuneration, wages, salaries, performance related bonuses, other benefits and contribution to defined contribution pension plans) amounted to approximately RMB44.2 million for the Period (Previous Period: approximately RMB22.9 million). Apart from basic remuneration, share options and/or share awards may be granted under the share option scheme and/or share award scheme of the Company to eligible employees by reference to the Group's performance as well as the individual's contribution. The employee costs for the Period have included the share-based payment expenses of approximately RMB29.8 million (Previous Period: approximately RMB3.7 million), in relation to the incentives provided under the Group's Share Option Scheme, Share Award Scheme and Employee Share Incentive Scheme. The Group will endeavor to ensure that the employees' salary levels are in line with industry practice and prevailing market conditions and that employees' overall remuneration is determined based on the performance of the Company and the employees.

PURCHASE, SALE OR REDEMPTION OF THE COMPANY'S LISTED SECURITIES

During the Period, neither the Company nor any of its subsidiaries had purchased, sold or redeemed any of the Company's listed securities.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

USE OF PROCEEDS

Placing of New Shares under General Mandate

(1) **Placing on 13 June 2023**

In order to strengthen the Group's research and development capabilities, and provide general working capital to meet the needs of its business development plan, on 23 May 2023, the Company entered into a placing agreement with VC Brokerage Limited in relation to the placing of a maximum of 40,000,000 new ordinary shares of HK\$0.01 each in the share capital of the Company at a price of HK\$0.9 per share (the "**June 2023 Placing**"). The closing price for the Company's shares on 22 May 2023 (being the last trading day prior to the date of signing the placing agreement) was HK\$1.06 per share. On 13 June 2023, the June 2023 Placing was completed and the Company issued and allotted an aggregate of 40,000,000 new ordinary shares to not less than six independent third parties. The net price for such shares was approximately HK\$0.88 per share and the aggregate nominal value of such shares was HK\$400,000. The June 2023 Placing generated net proceeds of approximately HK\$35.1 million (the "**June 2023 Placing Proceeds**"). Details of the June 2023 Placing were set out in the Company's announcements dated 23 May 2023 and 13 June 2023.

As at 30 June 2024, the Group's planned application and the actual utilisation of the June 2023 Placing Proceeds are set out below:

	Net proceeds HK\$ million	Utilised HK\$ million	Unutilised HK\$ million
Strengthening research and development capabilities	17.55	17.55	—
Provision of general working capital	17.55	17.55	—
	35.1	35.1	—

The June 2023 Placing Proceeds have been fully utilised as at 30 June 2024.

DIRECTORS' SECURITIES TRANSACTIONS

The Company has adopted the Model Code for Securities Transactions by Directors of Listed Issuers set out in Appendix C3 of the Listing Rules as the code of conduct for dealing in securities of the Company by the Directors (the “**Required Standard of Dealings**”). The Company had also made specific enquiry of all the Directors and the Company is not aware of any non-compliance with the Required Standard of Dealings regarding securities transactions by the Directors during the Period.

CHANGE IN DIRECTOR'S INFORMATION

Pursuant to Rule 13.51B(1) of the Listing Rules, the changes in information of the Directors subsequent to the date of the Annual Report 2023 and up to the date of this report are set out below:

Mr. Li Yang (“**Mr. Li**”) was appointed as the chairman of the board and an executive director of Virtual Mind Holding Company Limited (formerly known as CEFC Hong Kong Financial Investment Company Limited) (stock code: 1520) on 19 January 2022, and ceased to be the chairman of the board and continues to act as an executive Director of Virtual Mind Holding Company Limited on 2 August 2024.

On 29 July 2024, Mr. Li Yang has been appointed as an executive director of Asia Television Holdings Limited, a company whose shares are listed on the Main Board of the Stock Exchange (stock code: 707).

Mr. Li has been appointed as an executive director and deputy chairman of IBO Technology Company Limited (stock code: 2708) since 21 March 2023, the company was ordered to be wound up by the Hight Court of the Hong Kong and trading on the Stock Exchange in the shares of the company was suspended on 29 April 2024.

Save as disclosed above, as at the date of this report, the Company is not aware of any other changes in the Directors' information which is required to be disclosed pursuant to Rule 13.51B(1) of the Listing Rules.

CORPORATE GOVERNANCE AND COMPLIANCE WITH THE CORPORATE GOVERNANCE CODE

The Company adopted the Corporate Governance Code (the “**CG Code**”) contained in Appendix C1 to the Listing Rules as its own code of corporate governance. The Board is satisfied that the Company had complied with the CG Code during the Period.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

NON-COMPLIANCE AND RE-COMPLIANCE WITH RULES 3.10(1), 3.10A AND 3.21 OF LISTING RULES

Mr. Li Yang, was re-designated from an independent non-executive Director to an executive Director with effect from 9 February 2024. In light of the above re-designation, the Company was not in compliance with (i) Rule 3.10(1) of the Listing Rules, which stipulates that the Board must include at least three independent non-executive Directors; (ii) Rule 3.21 of Listing Rules, which requires that the Audit Committee shall comprise non-executive Directors only and have a minimum of three members; and (iii) Rule 3.10A of the Listing Rules, which stipulates that the number of independent non-executive Directors shall represent at least one-third of the Board.

Following the appointment of Ms. Liu Wanwen as an independent non-executive Director and a member of the Audit Committee on 8 May 2024, the Company has three independent non-executive Directors, representing one-third of the Board, and the Audit Committee comprise the three independent non-executive Directors. Such number and composition of independent non-executive Directors and of the Audit Committee comply with Rules 3.10(1), 3.10A and 3.21 of the Listing Rules.

AUDIT COMMITTEE AND REVIEW OF ACCOUNTS

The audit committee of the Company (the “**Audit Committee**”) has reviewed and discussed with management the unaudited condensed consolidated financial statements of the Group for the Period, which was of the opinion that such statements complied with the applicable accounting standards and requirements, and that adequate disclosures have been made. The Audit Committee comprises three Independent Non-executive Directors, namely Mr. Zou Haiyan, Mr. Siu Miu Man, Simon, MH and Ms. Liu Wanwen. Mr. Zou Haiyan is the chairman of the Audit Committee who has appropriate professional qualifications and experience as required by the Listing Rules.

By order of the Board
HG Semiconductor Limited
Dr. Xu Zhihong
Chairman and Executive Director

Hong Kong, 30 August 2024

As at the date of this report, the executive Directors are Dr. Xu Zhihong, Mr. Zhao Yi Wen, Mr. Lu Kailin, Mr. Li Yang and Mr. Leung Kin Pang; and the independent non-executive Directors are Mr. Zou Haiyan, Mr. Siu Miu Man, Simon, MH and Ms. Liu Wanwen.

* For identification purpose only