



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 **2022**

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CORPORATE INFORMATION

Directors

Executive Directors

- Mr. ZHAO Yi Wen (趙奕文)
(Chairman and Chief Executive Officer)
- Mr. LIN Qi Jian (林啟建)
(Resigned on 22 June 2022)
- Mr. CHAN Wing Kin (陳永健)
(Resigned on 22 June 2022)
- Mr. LYU Xiangrong (呂向榮)
(Appointed on 19 April 2022)
- Mr. LEUNG Kin Pang (梁健鵬)
(Appointed on 22 June 2022)
- Ms. LIU Yang (劉洋)
(Appointed on 22 June 2022)

Non-executive Directors

- Mr. CHIU Kwai San (趙桂生)
(Resigned on 27 January 2022)
- Dr. Wang David Nin-kou (王寧國)
- Mr. WANG Jie Chuan (王潔川)
(Appointed on 19 April 2022)

Independent Non-executive Directors

- Professor CHOW Wai Shing, Tommy (周偉誠)
- Mr. WU Wing Kuen, B.B.S. (胡永權)
- Mr. CHAN Chung Kik, Lewis (陳仲戟)
- Mr. LI Yang (李陽)
(Appointed on 19 April 2022)

Audit Committee

- Mr. CHAN Chung Kik, Lewis (陳仲戟)
(Chairman)
- Mr. WU Wing Kuen, B.B.S. (胡永權)
- Professor CHOW Wai Shing, Tommy (周偉誠)
- Mr. LI Yang (李陽)
(Appointed as member on 19 April 2022)

Nomination Committee

- Mr. CHAN Chung Kik, Lewis (陳仲戟)
(Chairman)
- Mr. WU Wing Kuen, B.B.S. (胡永權)
- Professor CHOW Wai Shing, Tommy (周偉誠)
- Mr. LI Yang (李陽)
(Appointed as member on 19 April 2022)

Remuneration Committee

- Mr. CHAN Chung Kik, Lewis (陳仲戟)
(Chairman)
- Mr. WU Wing Kuen, B.B.S. (胡永權)
- Professor CHOW Wai Shing, Tommy (周偉誠)
- Mr. LI Yang (李陽)
(Appointed as member on 19 April 2022)

Company Secretary

- Mr. CHAN Wing Kin (陳永健)

Authorised Representatives

- Mr. CHAN Wing Kin (陳永健)
- Mr. ZHAO Yi Wen (趙奕文)

Registered Office

Windward 3
Regatta Office Park
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Grand Cayman
KY1-1108
Cayman Islands

Head Office and Principal Place of Business in the People's Republic of China (the "PRC")

The North Side
2nd Floor
No. 8 Pinggong Er Road
Nanping Technology Industrial Park
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PRC

Place of Business in Hong Kong

Unit B, 26/F, One Island South,
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Hong Kong

Cayman Islands Principal Share Registrar and Transfer Office

Ocorian Trust (Cayman) Limited
Windward 3
Regatta Office Park
P.O. Box 1350
Grand Cayman
KY1-1108
Cayman Islands

Hong Kong Branch Share Registrar and Transfer Office

Boardroom Share Registrars (HK) Limited
Room 2103B, 21/F, 148 Electric Road
North Point
Hong Kong

Principal Bankers

Bank of China
Zhuhai Xiangzhou Sub-branch
1st Floor
Anping Building
274 Cuixiang Road
Xiangzhou, Zhuhai
PRC

Industrial and Commercial Bank of China
Zhuhai Gongbei Sub-branch
ICBC Tower
36 Guihuanan Road
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PRC

Compliance Adviser

Lego Corporate Finance Limited
Room 1601
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29 Queen's Road Central
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CORPORATE INFORMATION (CONTINUED)

Legal Adviser

TC & Co., Solicitors
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Tai Tung Building
8 Fleming Road
Wanchai
Hong Kong

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 2022

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 2022 (the “**Period**”), together with the comparative unaudited figures for the corresponding period in 2021 (the “**Previous Period**”), as follows:

CONDENSED CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the six months ended 30 June 2022

	Notes	Six months ended 30 June	
		2022 RMB'000 (unaudited)	2021 RMB'000 (unaudited)
Revenue	4	43,437	75,300
Cost of sales		(35,356)	(59,834)
Gross profit		8,081	15,466
Other income and gains	4	791	346
Selling and distribution expenses		(1,644)	(1,114)
Administrative and other expenses		(56,120)	(54,378)
Provision on expected credit losses on trade and bills receivables		(2,660)	—
Finance costs	5	(997)	(319)
Loss before income tax credit/(expense)		(52,549)	(39,999)
Income tax credit/(expense)	6	1,034	(1,159)
Loss for the period attributable to owners of the Company		(51,515)	(41,158)
Other comprehensive income			
Item that may be reclassified to profit or loss:			
Exchange differences on translating foreign operations		10,390	287
Total comprehensive income for the period attributable to owners of the Company		(41,125)	(40,871)
Loss per share attributable to owners of the Company			
— Basic and diluted (RMB cents)	8	(9.14)	(9.70)

CONDENSED CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 30 June 2022

	Notes	As at 30 June 2022 RMB'000 (unaudited)	As at 31 December 2021 RMB'000 (audited)
ASSETS AND LIABILITIES			
Non-current assets			
Property, plant and equipment	9	89,904	58,632
Intangible assets	10	63,928	63,951
Financial assets at fair value through other comprehensive income	14	194,238	186,333
Prepayments and deposits	12	47,570	40,843
Deferred tax assets		2,397	1,688
		398,037	351,447
Current assets			
Inventories		53,832	35,615
Trade and bills receivables	11	96,062	97,378
Prepayments, deposits and other receivables	12	19,917	42,373
Financial assets at fair value through profit or loss	13	32,994	25,383
Current tax recoverables		55	37
Cash and cash equivalents	15	35,722	113,640
		238,582	314,426
Current liabilities			
Trade payables	16	23,896	18,640
Other payables and accruals		4,582	6,373
Bank borrowings	17	10,000	7,000
Lease liabilities		7,103	6,651
		45,581	38,664
Net current assets		193,001	275,762
Non-current liabilities			
Lease liabilities		14,739	17,868
		14,739	17,868
Net assets		576,299	609,341
EQUITY			
Equity attributable to owners of the Company			
Share capital		4,937	4,937
Reserves		571,362	604,404
Total equity		576,299	609,341

CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the six months ended 30 June 2022

	Share					Investment			Retained earnings	Total
	Share capital	Share premium	option reserve	Statutory reserve	Other reserve	Capital reserve	revaluation reserve	Exchange reserve		
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2022 (audited)	4,937	877,632	53,999	15,498	580	35,972	1,309	(8,837)	(371,749)	609,341
Loss for the period	—	—	—	—	—	—	—	—	(51,515)	(51,515)
Exchange differences on translating foreign operations	—	—	—	—	—	—	—	10,390	—	10,390
Total comprehensive income for the period	—	—	—	—	—	—	—	10,390	(51,515)	(41,125)
Recognition of equity-settled share-based payment expenses	—	—	8,083	—	—	—	—	—	—	8,083
At 30 June 2022 (unaudited)	4,937	877,632	62,082	15,498	580	35,972	1,309	1,553	(423,264)	576,299
At 1 January 2021 (audited)	3,580	46,162	—	14,805	580	35,972	—	(4,712)	75,770	172,157
Loss for the period	—	—	—	—	—	—	—	—	(41,158)	(41,158)
Exchange differences on translating foreign operations	—	—	—	—	—	—	—	287	—	287
Total comprehensive income for the period	—	—	—	—	—	—	—	287	(41,158)	(40,871)
Acquisition of subsidiaries	664	63,070	—	—	—	—	—	—	—	63,734
Recognition of equity-settled share-based payment expenses	—	—	45,680	—	—	—	—	—	—	45,680
Transfer to statutory reserve	—	—	—	854	—	—	—	—	(854)	—
At 30 June 2021 (unaudited)	4,244	109,232	45,680	15,659	580	35,972	—	(4,425)	33,758	240,700

CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS

For the six months ended 30 June 2022

	Six months ended 30 June	
	2022	2021
	RMB'000 (unaudited)	RMB'000 (unaudited)
Cash flows from operating activities		
Loss before income tax	(52,549)	(39,999)
Adjustments for:		
Depreciation of property, plant and equipment	6,342	3,198
Amortisation of intangible assets	23	341
Interest income	(70)	(4)
Finance costs	997	319
Equity-settled share-based payment expenses	8,083	45,964
Provision of expected credit losses on trade and bills receivables	2,660	—
Change in fair value of financial assets at fair value through profit or loss	221	—
Operating (loss)/profit before working capital changes	(34,293)	9,819
Increase in inventories	(18,217)	(3,750)
(Increase)/decrease in trade and bills receivables	(1,345)	9,381
Decrease in prepayments, deposits and other receivables	15,728	605
Increase/(decrease) in trade and other payables	3,465	(9,414)
Cash (used in)/generated from operations	(34,662)	6,641
Income tax recovered/(paid)	307	(5,142)
Net cash flows (used in)/generated from operating activities	(34,355)	1,499

CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)

For the six months ended 30 June 2022

	Six months ended 30 June	
	2022	2021
	RMB'000	RMB'000
	(unaudited)	(unaudited)
Cash flows from investing activities		
Purchases of property, plant and equipment	(36,610)	(8,374)
(Purchase of)/proceeds from financial assets at fair value through profit or loss, net	(6,696)	2,230
Purchase of financial assets at fair value through other comprehensive income, net	—	(32,306)
Interest received	70	4
Net cash flows used in investing activities	(43,236)	(38,446)
Cash flows from financing activities		
Interest paid	(997)	(319)
Advance from a shareholder	—	36,121
Repayments of principal portion of the lease liabilities	(3,409)	(702)
Proceeds from bank borrowings	10,000	7,000
Repayments of bank borrowings	(7,000)	(7,000)
Net cash flows (used in)/generated from financing activities	(1,406)	35,100
Net decrease in cash and cash equivalents	(78,997)	(1,847)
Effect of exchange rate changes on cash and cash equivalents	1,079	51
Cash and cash equivalents at the beginning of period	113,640	9,174
Cash and cash equivalents at the end of period	35,722	7,378

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

For the six months ended 30 June 2022

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 2022 are consistent with those adopted by the Group in its audited consolidated financial statements for the year ended 31 December 2021 except for the adoption of the new and revised Hong Kong Financial Reporting Standards (the “**New and Revised HKFRSs**”) (which include all 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 2022. 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 2022

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 2022 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 2022 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 2021 annual consolidated financial statements, except that it has adopted the following amendments to HKFRSs:

Amendments to HKFRS 1, HKFRS 9, HKFRS 16 and HKAS 41	Annual Improvements to HKFRS Standards 2018–2020
Amendment to HKAS 16	Property, Plant and Equipment — Proceeds before Intended Use
Amendment to HKAS 37	Onerous Contracts — Cost of Fulfilling a Contract
Amendment to HKFRS 3	Reference to the Conceptual Framework

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 2022

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. For the period ended 30 June 2021, the Executive Directors have considered the only operating segment of the Group is design, development, manufacturing, subcontracting service and sales of LED beads. For the period ended 30 June 2022, the Group's operating segment is design, development, manufacturing, subcontracting service and sales of semiconductor products, including LED beads, GaN chips, GaN components and related application products, and fast charging 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 2022			Six months ended 30 June 2021		
	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	43,437	—	43,437	75,300	—	75,300
Segment result	(5,623)	(32,789)	(38,412)	9,137	—	9,137
Other unallocated						
Other income and gains			791			346
Other administrative expenses			(13,931)			(49,163)
Finance costs			(997)			(319)
Loss before income tax			(52,549)			(39,999)

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 2022

4. Revenue, Other Income and Gains

Revenue, which is also the Group's turnover, represents the net invoiced value of goods sold, less discounts, returns, value added tax and other applicable local taxes during the reporting period. The Group is principally engaged in the design, development, manufacturing, subcontracting service and sales of semiconductor products, including LED beads, GaN chips, GaN components and related application products, and fast charging 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 2022 and 2021, 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	
	2022	2021
	RMB'000	RMB'000
	(unaudited)	(unaudited)
LED products		
Revenue recognised at a particular point in time		
Sales of LED beads	43,437	75,300
	43,437	75,300
Other income and gains		
Bank interest income	70	4
Government grants	710	342
Other income	11	—
	791	346

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2022

5. Finance Costs

	Six months ended 30 June	
	2022	2021
	RMB'000	RMB'000
	(unaudited)	(unaudited)
Interest on bank borrowings	142	273
Interest on lease liabilities	855	46
	997	319

6. Income Tax Credit/(Expense)

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 provision for Hong Kong Profits Tax for the six months ended 30 June 2022 is calculated at 16.5% (2021: 16.5%) of the estimated assessable profits, except for one subsidiary of the Group which is a qualifying corporation under the two-tiered Profits Tax rate regime. For this subsidiary, the first HK\$2.0 million of assessable profits are taxed at 8.25% and the remaining assessable profits are taxed at 16.5%. The provision for Hong Kong Profits Tax for this subsidiary was calculated at the same basis in 2021.

In 2017, the Group's wholly-owned subsidiary, Zhuhai HongGuang Semiconductor Company Limited (“**Zhuhai HongGuang**”) was awarded a “New and High Technology Enterprise Certificate” (the “**Certificate**”) (高新技術企業證書). The Certificate has to be renewed over three years. In 2019, the Group has successfully renewed the Certificate for three years. 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 1 December 2022.

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 2022 and 2021.

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2022

7. Dividend

No dividend has been paid or declared by the Company for the six months ended 30 June 2022 (2021: 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	
	2022	2021
	RMB'000	RMB'000
	(unaudited)	(unaudited)
Loss		
Loss for the period attributable to owners of the Company	(51,515)	(41,158)
Number of shares		
Weighted average number of ordinary shares for the purpose of basic loss per share	563,591,000	424,309,393
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	563,591,000	424,309,393

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 2022 and 2021, the potential ordinary shares from share options were not included in the calculation of loss per share as their inclusion would be anti-dilutive.

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2022

9. Property, Plant and Equipment

(a) Right-of-use assets

As at 30 June 2022, 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 RMB0.9 million (31 December 2021: approximately RMB1.1 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 2022, the Group acquired items of property, plant and equipment with a cost of approximately RMB36.6 million (six months ended 30 June 2021: approximately RMB8.4 million). There was no disposal of property, plant and equipment during the six months ended 30 June 2022 (six months ended 30 June 2021: nil).

10. Intangible Assets

For the year ended 31 December 2021, technology know-how acquired initially recognised at cost. The cost of intangible assets acquired in a subsidiary is its fair value at the date of acquisition. Subsequently technology know-how have estimated useful life of 16 years and are carried at cost less accumulated amortisation and accumulated impairment losses. Amortisation is calculated using the straight-line method to allocate the cost of technology know-how over their estimated useful lives from the point at which the asset is ready for use.

As at 30 June 2022, the carrying amount of the Group's intangible assets includes an amount of approximately RMB63.7 million of technology know-how (31 December 2021: approximately RMB63.7 million).

NOTES TO THE CONDENSED CONSOLIDATED
FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2022

11. Trade and Bills Receivables

	As at 30 June 2022 RMB'000 (unaudited)	As at 31 December 2021 RMB'000 (audited)
Trade receivables	82,720	80,330
Bills receivables	13,342	17,048
	96,062	97,378

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

	As at 30 June 2022 RMB'000 (unaudited)	As at 31 December 2021 RMB'000 (audited)
0 to 30 days	21,848	28,900
31 to 60 days	11,626	18,092
61 to 90 days	12,691	9,691
91 to 120 days	4,729	5,964
121 to 365 days	6,251	19,923
Over 1 year	45,126	18,357
	102,271	100,927
Less: Impairment of trade and bills receivables	(6,209)	(3,549)
	96,062	97,378

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2022

12. Prepayments, Deposits and Other Receivables

	As at 30 June 2022 RMB'000 (unaudited)	As at 31 December 2021 RMB'000 (audited)
Other receivables	1,507	246
Prepayments and deposits (note)	65,980	82,970
	67,487	83,216
Less: non-current portion		
Prepayments and deposits for acquisition of property, plant and equipment	(47,570)	(40,843)
Current portion	19,917	42,373

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

Note: The amounts includes the prepayment to the independent third parties suppliers amounted to approximately RMB15,875,000 (31 December 2021: approximately RMB17,824,000) for purchase of raw material.

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 RMB221,000 was recognised in profit or loss during the period ended 30 June 2022.

As at 30 June 2022, the fair value of financial assets at fair value through profit or loss was approximately RMB33.0 million (31 December 2021: approximately RMB25.4 million).

NOTES TO THE CONDENSED CONSOLIDATED
FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2022

**14. Financial Assets at Fair Value Through Other
Comprehensive Income (“FVTOCI”)**

	As at 30 June 2022 RMB'000 (unaudited)	As at 31 December 2021 RMB'000 (audited)
Financial asset at fair value through other comprehensive income		
Unlisted equity securities, at fair value	194,238	186,333

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

- a. The Group invested 10% of the ordinary shares of a company in the PRC at the consideration of RMB15,000,000 for investment purpose. The fair value as at 30 June 2022 is HK\$20,000,000, equivalents to approximately RMB16,309,000 (31 December 2021: HK\$20,000,000, equivalents to approximately RMB16,309,000).
- b. The Group acquired 206,367 non-redeemable preference shares, which representing 0.37% of total equity share in a Canadian company at the consideration of approximately US\$1.75 million. The fair value as at 30 June 2022 is US\$1.75 million, equivalents to approximately RMB11.7 million (31 December 2021: US\$1.75 million, equivalents to approximately RMB11.1 million).
- c. The Group acquired 1,749,961 non-redeemable series E preferred shares, which representing 19.85% of total equity share in 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 fair value as at 30 June 2022 is US\$25.0 million, equivalents to approximately RMB166.2 million (31 December 2021: US\$25.0 million, equivalents to approximately RMB158.9 million).

During the six months ended 30 June 2022, 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 2022. No fair value gain or loss was recognised in other comprehensive income during the period ended 30 June 2022.

NOTES TO THE CONDENSED CONSOLIDATED
FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2022

15. CASH AND CASH EQUIVALENTS

	As at 30 June 2022 RMB'000 (unaudited)	As at 31 December 2021 RMB'000 (audited)
Bank balances and cash	35,722	113,640
Denominated in RMB	26,615	2,094
Denominated in HK\$	1,678	53,014
Denominated in US\$	7,429	58,532

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.

16. Trade Payables

	As at 30 June 2022 RMB'000 (unaudited)	As at 31 December 2021 RMB'000 (audited)
Trade payables	23,896	18,640

NOTES TO THE CONDENSED CONSOLIDATED
FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2022

16. Trade Payables (Continued)

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

	As at 30 June 2022 RMB'000 (unaudited)	As at 31 December 2021 RMB'000 (audited)
0 to 30 days	11,567	8,116
31 to 60 days	1,299	3,431
61 to 90 days	6,469	1,795
91 to 120 days	2,011	4,000
121 to 365 days	1,949	831
Over 1 year	601	467
	23,896	18,640

17. Bank Borrowings

	As at 30 June 2022 RMB'000 (unaudited)	As at 31 December 2021 RMB'000 (audited)
Unsecured interest-bearing bank borrowings:		
— Repayable on demand or within one year from the reporting date	10,000	7,000

As at 30 June 2022, the effective interest rates of the unsecured interest-bearing bank borrowings was 3.75% (31 December 2021: 3.80%) 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 2022

18. Related Party Transactions

During the six months ended 30 June 2022, 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	
		2022	2021
		RMB'000	RMB'000
		(unaudited)	(unaudited)
珠海經濟區利佳電子發展有限公司	Utility expense	895	1,067
珠海經濟區利佳電子發展有限公司	Rental expense	186	186
		1,081	1,253

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

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2022

19. Share-based Payment Transactions

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.

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 for a consideration of HK\$1 per grant.

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2022

19. Share-based Payment Transactions (Continued)

The following tables disclose details of movements of the Company's 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 2022	Number of share options				Transfer between category during the Period	Outstanding at 30 June 2022	Vested and exercisable at 30 June 2022
					Granted during the Period	Exercised during the Period	Cancelled during the Period	Lapsed during the Period			
Directors of the Company											
17/6/2021	Nil (Note 5 & 8)	17/6/2021-16/6/2024	7.50	6,600,000	—	—	—	—	(5,760,000)	840,000	840,000
	Nil (Note 5 & 9)	17/6/2021-16/6/2029	7.50	—	—	—	—	—	2,400,000	2,400,000	2,400,000
	17/6/2021-16/6/2022 (Note 6)	17/6/2022-16/6/2026	7.50	1,200,000	—	—	—	—	—	1,200,000	1,200,000
	17/6/2021-16/6/2023 (Note 6)	17/6/2023-16/6/2027	7.50	1,200,000	—	—	—	—	—	1,200,000	—
	17/6/2021-16/6/2024 (Note 6)	17/6/2024-16/6/2028	7.50	1,200,000	—	—	—	—	—	1,200,000	—
	17/6/2021-16/6/2025 (Note 6)	17/6/2025-16/6/2029	7.50	1,200,000	—	—	—	—	—	1,200,000	—
				11,400,000	—	—	—	—	(3,360,000)	8,040,000	4,440,000
Senior management and other employees											
17/6/2021	Nil (Note 5 & 8)	17/6/2021-16/6/2024	7.50	5,760,000	—	—	—	—	5,760,000	11,520,000	11,520,000
	Nil (Note 5 & 9)	17/6/2021-16/6/2029	7.50	4,050,000	—	—	—	—	(2,400,000)	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	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	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	—	—	—	—	—	500,000	—
	17/6/2021-16/6/2029 (Note 3)	From vesting date-16/6/2029	7.50	2,500,000	—	—	—	—	—	2,500,000	—
	17/6/2021-16/6/2029 (Note 4)	From vesting date-16/6/2029	7.50	3,500,000	—	—	—	—	—	3,500,000	—
				23,110,000	—	—	—	—	3,360,000	26,470,000	14,870,000
				34,510,000	—	—	—	—	—	34,510,000	19,310,000

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2022

19. Share-based Payment Transactions (Continued)

Notes:

1. Vesting of the Share Options is conditional upon achievement of certain sales targets of the Group by the grantees within the vesting period.
2. Vesting of the Share Options is conditional upon successfully develops a new technology and product that appreciated by the board by the grantee within the vesting period of the Group.
3. Vesting of the Share Options is conditional upon successfully procures financing for the Group in the amount and from financial institutions of the satisfaction of the Group by the grantees within the vesting period.
4. Vesting of the Share Options is conditional upon successfully procures certain target company to become a customer of the Group by the grantees within the vesting period.
5. Vesting of the Share Options immediately at grant date.
6. Share Options are exercisable when the grantees retain employment in the Group until the end of the vesting period.
7. 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.
8. During the Period, two executive Directors and one non-executive Director were re-designated as senior management and other employees of the Group. And the number of share options transferred from the "Directors" category to the "Senior management and other employees" category during the Period was 5,760,000.
9. During the Period, Ms. Liu Yang was promoted to an executive Director of the Company. And the number of share options transferred from the "Senior management and other employees" category to the "Directors" category during the Period was 2,400,000.

The estimated fair value of the 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.

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2022

19. Share-based Payment Transactions (Continued)

The fair values of the share options at the dates of grant were calculated using the Binomial Option Pricing model after taking into account the different vesting periods. The assumptions used for the calculation for options granted are as follows:

Share options granted on 17 June 2021:

Closing share price at date of grant	HK\$7.50
Exercise price	HK\$7.50
Fair value per share option	HK\$3.0807–HK\$4.5977
Risk free rate	0.276%–1.102%
Time to maturity	3–8 years
Time to vest	0–8 years
Expected dividend yield	0%
Expected volatility	63%–74%
Early exercise multiple	Directors: 280% Non-directors: 220%

The variables and assumptions used above are based on the directors' best estimate. The value of an option varies with different variables of certain subjective assumptions.

During the six months ended 30 June 2022, the Company recognised total expense in relation to share options granted of approximately RMB8.1 million. (30 June 2021: approximately RMB46.0 million)

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

For the six months ended 30 June 2022

20. Events After the Reporting Period

On 4 August 2022, the placing agent and the Company entered into the Placing Agreement pursuant to which the Company has conditionally agreed to place, through the placing agent, on a best effort basis, maximum of 30,000,000 new ordinary shares of the Company under the Company's general mandate.

Moreover, on 4 August 2022, an investor and the Company entered into the Investment Agreement pursuant in relation to the (i) possible issue of new ordinary shares of the Company under the Company's specific mandate; and (ii) possible issue of unlisted warrants under the Company's specific mandate, pursuant to which the Company has conditionally agreed to issue, and the investor has conditionally agreed to subscribe for, 60,000,000 new ordinary shares of the Company and 60,000,000 unlisted warrants to be issued by the Company.

The details of the aforesaid (i) placing of new shares under the general mandate; and (ii) possible issue of new shares and warrants under specific mandate were set out in the Company's announcement dated 5 August 2022. As at the date of this report, both the (i) placing of new shares under the general mandate; and (ii) possible issue of new shares and warrants under specific mandate are still pending completion in accordance with the Placing Agreement and Investment Agreement respectively.

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 sale of semiconductors, including light-emitting diode (“**LED**”) beads and LED lighting products in China. Leveraging its expertise, strong team and research and development (“**R&D**”) capabilities in LED manufacturing, the Group is on a path of strategic transformation and has vigorously expanded its business into R&D, design, manufacturing and sales of gallium nitride (“**GaN**”) third-generation semiconductors and related products, including GaN components, fast-charging products and other types of semiconductor-related products.

In the first half of 2022, the Group remained committed to accelerating its R&D efforts to rapidly expand into the third-generation semiconductor design and production markets, and to providing integrated solutions that offer higher efficiency and keener competitiveness in terms of system costs. With its primary focus on the design and manufacture of semiconductors, the Group is determined to evolve as an integrated device manufacturing (“**IDM**”) enterprise covering full-chain operation including R&D, manufacturing, packaging, testing, and sales. Pressing ahead with R&D and the manufacture of GaN-related products, the Group aims to be the industry leader in supplying third-generation GaN semiconductors to the Greater China market. As such, the Group can also make a positive contribution to China’s national strategy of reaching a “carbon peak” and “carbon neutrality”.

Industry Review

During the first half of 2022, the global economy was afflicted by uncertainty due to factors such as the persistence of coronavirus disease 2019 (“**COVID-19**” or the “**Pandemic**”), geopolitical tensions and inflationary pressures. As the emergence of the Omicron variant of COVID-19 weighed on the global supply chains, recovery was hindered, logistics costs increased, and transportation delays occurred. In China, a number of production-oriented enterprises in the semiconductor, wafer fabrication, packaging and testing segments were hit by regional lockdowns and other pandemic control measures, leading to suspensions of the entire production lines. The industry as a whole has entered a destocking cycle.

Although logistics delays affected the semiconductor industry chain, the sector managed to maintain continuous growth. The World Semiconductor Trade Statistics Association predicts that the global semiconductor market will achieve double-digit growth in 2022, giving it a value of US\$646 billion, following strong growth of 26.2% in 2021. The market is expected to reach US\$680 billion in 2023.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

The world is currently in a crucial period of technological and industrial transformation. The third-generation semiconductor industry, which is at the core of the new generation of electronic information technology, has brought about changes leading to a revolution in energy. Third-generation semiconductors are technology-driven and have a high production value but low capital requirements, making them a new focus in the industry as their potential gains recognition. GaN and silicon carbide (“**SiC**”), as materials commonly used in third-generation semiconductors, are deemed to be a growth driver leading to the upgrading and transformation of the industry.

The markets for GaN products are huge, and include but are not limited to (i) electric vehicles, (ii) wireless fast-charging, (iii) data centres, new energy and radio frequency (RF) communications. During the first half of 2022, sales of electric vehicles using GaN-related products increased significantly. According to data released by the Ministry of Public Security of the People's Republic of China, ownership of electric vehicles in the country in the first half of the year exceeded 10 million, amounted to 10,010,000 units. Alongside the immense popularity of electric vehicles and strong policy support, the fast-charging market in China has grown rapidly. According to the data released by iiMedia Research, in 2021, ownership of public charging piles in China reached 2,617,000, representing a year-on-year increase of 224.3% and serving nearly 8 million electric vehicles. To meet the demand for the safe charging of electric vehicles, the Chinese government stated that by the end of the “14th Five-Year Plan”, China's charging infrastructure should be able to satisfy charging demand accounting for more than 20 million electric vehicles by 2025, and that the number of charging piles in the country is expected to reach 6,543,000 in the same timeframe.

As a core, cutting-edge technology for fast-charging products, GaN is expected to be the fastest growing segment in the entire third-generation semiconductor industry. Against a backdrop of surging data collection and use, and the increasing penetration of technologies such as cloud computing and edge computing, the market for data centres in China is expected to enjoy continuous growth. Because of the extensive use of GaN in the fast-charging segment, the technology has steadily rolled out to electric vehicles, wireless charging, 5G infrastructure, and other areas, pointing to great market potential in the future.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

The Chinese government places a high priority on technological innovation, from the central to the local level, with policies and measures to support the development of the industry implemented from time to time, making the third-generation semiconductor sector increasingly important. In 2021, China focused on R&D and the launch of the key project “New Display and Strategic Electronic Materials”, at the heart of which are third-generation semiconductors. The country’s “Made in China 2025” strategy is aimed at increasing the domestic proportion of applications in the market for advanced semiconductor materials for 5G communications and efficient-energy management to 50% by 2025, alongside large-scale applications for new-energy vehicles and consumer electronics products. Supported by favourable national policies, the Group will continue to focus on the third-generation semiconductor business. It will also speed up R&D and develop GaN-related products while continuing to strengthen its business presence along the GaN industry chain, promoting the rapid development of various businesses.

Business Review

During the Period, apart from developing its existing LED beads, the Group continued to expand its business presence in the third-generation semiconductor industry chain, building its core GaN capacity by a range of means. The Group intends to speed up GaN production capacity and swiftly move to a period of yielding returns on investment.

During the Period, the economic situation in China was challenging due to the pandemic. Supply chains and manufacturing industry were hard hit by various pandemic precautions and control measures, including mandatory lockdowns. The Group’s business was inevitably affected. During the Period, revenue was approximately RMB43.4 million, a decrease of approximately RMB31.9 million from RMB75.3 million for the Previous Period.

The Group recorded a loss of approximately RMB51.5 million for the Period, compared to a loss of approximately RMB41.2 million for the Previous Period. The loss for the Period was mainly attributable to the decrease in revenue under the poor market environment with suppressed demand and delayed procurement plans from the Group’s customers in China. Moreover, during the Period, owing to the Group’s extended efforts on research and development of semiconductor-related products and also an increased number of professional staff at the Group’s Xuzhou factory and Shenzhen R&D centre, the research and development costs increased from approximately RMB3.0 million for the Previous Period to approximately RMB16.9 million for the Period, and the administrative staff costs increased from approximately RMB2.2 million for the Previous Period to approximately RMB11.3 million for the Period, respectively.

Active Development of the New-Energy Vehicle and Fast-charging Pile Segment; Accelerated Development of the GaN Business

The Group strategically invested in multiple leading third-generation semiconductor enterprises in China and overseas, and actively entered into strategic and framework cooperation agreements, with the aim of leveraging its existing platform and resource advantages and to speed up R&D and the technological applications of GaN. Following the acquisition of GSR GO Holding Corporation (which is primarily engaged in R&D of fast-charging solutions for battery system) and its subsidiaries (the “**GSR GO Group**”) in the previous year, the Group focused on high-voltage new-energy vehicles by investing in VisIC Technologies Ltd. (“**VisIC**”), an Israel-based developer of GaN-related products. The Group also focused on consumer products by investing in GaN Systems Inc. (“**GaN Systems**”), a Canadian GaN technology leader. In the first half of 2022, the Group continued to seek cooperation with domestic and overseas enterprises in the GaN segment, and to develop GaN products alongside related sales and marketing.

In March 2022, the Group entered into a strategic cooperation agreement with Cogobuy Group (“**Cogobuy**”; stock code: 400.HK). Cogobuy is a leading enterprise service platform in the integrated circuit industry, and Comtech, a Cogobuy subsidiary, is a well-known transaction-based e-commerce platform for integrated circuits and other electronic components in China. The platform connects to hundreds of upstream high-end chip suppliers and tens of thousands of downstream intelligent hardware (artificial intelligence of things, AIoT) companies, providing those companies with chip application and design solutions alongside marketing services. The aim of this cooperation includes helping the Group to sell its own chips in China, and to engage the two parties into a long-term strategic cooperation arrangement involving chip application and development.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

In addition, the Group entered into a strategic cooperation agreement with China Titans Energy Technology Group Co., Limited (“**China Titans Energy**”; stock code: 2188.HK) in May 2022. The two parties will jointly engage in R&D of next-generation fast-charging stations using third-generation semiconductor technology developed by the Group in the next three years, develop fast-charging pile services in Hong Kong, and jointly launch a fast-charging system solution. Besides partnering with local listed companies, the Group will also leverage its advantageous connection with Hong Kong’s statutory bodies, wherein both sides will jointly research and promote “smart city” development in Hong Kong and upgrade local electric vehicle and charging facilities to achieve 400-kilowatt direct current (“**DC**”) charging, in compliance with international standards, and also adopt smart management systems such as cloud-based data and security monitoring. Moreover, the Group has entered into a non-legally binding memorandum of understanding with GUH Holdings Berhad (“**GUH**”; stock code: 3247.KL) during the Period. Through this cooperation, the Group will expand its sales of fast-charging batteries and GaN components to Malaysia and Southeast Asia with a view to increasing its sources of income, and provide GUH with a construction plan for a battery cell factory and the procurement of related equipment, as well as full modular equipment for a 100 MWh energy storage station.

Actively Promoting GaN Site Testing and Positively Contributing to “Carbon Peak” and “Carbon Neutrality”

The Group is committed to implementing a strategic transformation by actively developing its third-generation semiconductor business. At present, the Group operates a semiconductor production factory (the “**Xuzhou Factory**”) covering more than 7,000 square metres in the Xuzhou Economic and Technological Development Zone in Jiangsu Province, China. The Group also owns an R&D centre in Shenzhen that enhances the design and production of materials and components. Alongside its entry into the third-generation semiconductor business last year, the Group continues to strengthen its R&D capabilities. In addition to the six patents secured last year related to fast-charging battery systems, charging conversion systems, charging modules and fast-charging facilities used for electric vehicle charging piles, the Group also applied for the registration of five invention patents, one utility model and one appearance patent during the Period. All of the above patent applications have been accepted.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

In March 2022, Xuzhou GSR Semiconductor Company Ltd.* (“**Xuzhou GSR Semiconductor**”), a wholly-owned subsidiary of the Group, conducted the first publicised industry field trial of GaN with GaN systems in the power infrastructure of an internet data centre (“**IDC**”), a milestone event. The test results¹ showed that the total energy consumption of IDCs could be reduced by 10%. Compared to traditional silicon-based power supplies, this is expected to yield power savings of up to 20%. This energy-saving result potentially increases the profit margins of IDCs, reduces operating costs and lowers energy consumption, supporting a sustainable future as the Group hopes to reduce the carbon footprints of IDCs. As part of the overall drive to achieve a green environment, the use of GaN power transistors for more energy-efficient power supply units and power modules offers a solid technical foundation for the high-quality, green development of IDCs, which also aligns with China's goal of “carbon neutrality”.

Focusing on R&D; World-class R&D Standards and the Management Team

R&D capability and scientific research teams are mutually reliant when it comes to achieving success. While strengthening its R&D capabilities, the Group has continued to recruit cutting-edge talent and management expertise from the semiconductor industry to provide valuable guidance to its third-generation semiconductor business, and for strategic investment and development. During the Period, the Group engaged a number of experts in the semiconductor sector to manage its Xuzhou Factory and scientific research projects, giving strong technical support to its semiconductor product operations. Core experts include Dr. Chen Zhen (陳振博士), who is in the GaN semiconductor business, and Dr. Thomas Hu, in device design and technical manufacturing of GaN high-electron mobility transistors (HEMT), alongside Mr. Lu Ruilin (呂瑞霖) and Mr. Min Junhui (閔軍輝), who each have extensive experience in the semiconductor industry and in wafer fabrication technology and management. The R&D team has extensive third-generation semiconductor production and management expertise and experience, and they work together with a number of leading industrial developers and manufacturers on R&D projects. The Group has managed to secure multiple patents in China and overseas for projects in which they have participated previously.

1 The test reflects the result when the new power supply has reached 50% load. The test was newly launched in March 2022 in the High Performance Computing Center of the Physics Department of the Northwest University (NWU-HPC). The power supply of the test was designed in Beijing, and the technology was provided by GaN Systems and Xuzhou GSR Semiconductor.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

During the Period, the Group's global strategic advisory committee was formally established. Members of the committee have extensive experience of the GaN semiconductor industry, as well as of strategic investment and development. Each member is expected to provide effective strategies and tactical advice to the Group, including but not limited to matters relating to the GaN and SiC semiconductor industries, which has strengthened the Group's business. In addition, the Group has also appointed a number of management executives as executive Directors and independent non-executive Directors with substantial experience during the Period. These executives bring years of experience of mergers and acquisitions, investment, fund management, and business administration, and are poised to lead the Group into a bright future.

Thanks to the technical expertise and R&D capabilities of the various experts and management executives, and to their professional knowledge and experience of semiconductor production, the Group is confident that these experts will propel the Group into the design and production of world-class semiconductor products, setting it apart from its market peers. The Group's proactive approach to expanding its business has enabled it to win trust and confidence among its shareholders, who will continue to support its business. In addition to the decision by its two major shareholders to make a lock-up commitment, one has made the decision to allocate 8,000,000 shares from its current total holdings of 24,000,000 shares as an incentive to encourage top performance by the core management team in 2022 and 2023.

Outlook

The year 2022 represents a crucial phase of industrial upgrading and the implementation of China's "dual-carbon" policy, with the semiconductor industry has become a focus of attention. The Third-Generation Semiconductor Industry Development Report (第三代半導體產業技術發展報告), issued by the China Advanced Semiconductor Industry Innovation Alliance, stated that the market for the third-generation semiconductor electronic devices in China will worth nearly RMB20 billion in 2024, with a compound annual growth rate (CAGR) exceeding 40% in the next five years. With favourable national policies and amid the positive dynamics of the industry and innovation chain and downstream industries, we expect to see continuous technology and product innovation breakthroughs in the third-generation semiconductor industry.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

Consulting firm Grand View Research predicts that the global GaN semiconductor device market will reach US\$5.85 billion in 2027, with a CAGR of 20% from 2020 to 2027, as third-generation semiconductors boasting high efficiency and low power consumption become hot items. GaN, as a third-generation semiconductor material, has a higher band gap and is the material with theoretically the highest enhancement of electro-optical and photoelectric conversion efficiency in theory. At present, third-generation semiconductor devices are moving rapidly into applications in new-energy vehicles, photovoltaic inverters, 5G base stations, power delivery and fast-charging, among other GaN devices are mainly used in 5G base stations. Electric vehicle manufacturers in China, the world's largest new-energy vehicle market, have jump-started development at scale, sparking rapid growth in the use of third-generation semiconductor device in the automotive sector, and enabled their market penetration rate to outperform that of the electric vehicle market. Thanks to China's ever-increasing demand for high-efficiency, high-performance RF components, and the strong growth of electric vehicle production, the country is poised to become the fastest-growing regional market for GaN.

Over the past few decades, China has relied excessively on imports as the source of semiconductor materials. Given that the country is not yet self-sufficient in the supply of its own semiconductors, China had less than glittering prospects in the information technology industry. However, thanks to the support of the "14th Five-Year Plan", led by the central government, the third-generation semiconductor industry now has strong momentum. The Group will further develop and explore third-generation semiconductor products, with a particular focus on GaN, and is committed to becoming an IDM enterprise specialising in third-generation semiconductors. The Group will continue to promote the construction and commissioning of production lines at its Xuzhou Factory, which is currently undergoing renovation, and for which machinery is being purchased, with production expected to commence by early 2024. In the future, as the Group will continue to expand its market presence in GaN, quality and efficiency improvements at related businesses along the industry chain will take place. The future of the GaN business should be more than just promising.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

The Group aims to strengthen its existing business and its R&D capabilities. In the future, it will continue to cooperate with leading enterprises and attract more semiconductor industry talents to further accelerate R&D and expand the applications of GaN-related products. Meanwhile, the Group will hire more experienced sales talents to build a strong team of sales professionals and put it in the best possible position to attract new customers. In terms of product design, the Group will initiate innovation along all parts of the industry chain by offering products best aligned with customer preferences, markets, and commercial needs. Considering the increasing popularity of electric vehicles in Mainland China and Hong Kong, the prospects for developing and commercialising the next generation of charging piles in both jurisdictions appear to be very encouraging. The Group will explore every opportunity to establish a strong foothold in the fast-charging battery solution business in Mainland China and Hong Kong. Through all of these efforts, the Group aims to inject new life into its business development and provide long-term returns to its shareholders.

Financial Review

Revenue

For the Period, the total revenue was approximately RMB43.4 million, representing a decrease of approximately 42.4% as compared with that for the Previous Period (Previous Period: approximately RMB75.3 million). The decrease was mainly attributable to the decrease in revenue from the sales of LED beads.

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

	Six months ended 30 June			
	2022		2021	
	RMB'000	%	RMB'000	%
	(unaudited)		(unaudited)	
LED products				
LED beads	43,437	100.0	75,300	100.0
Total	43,437	100.0	75,300	100.0

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

For the Period, revenue from LED beads amounted to approximately RMB43.4 million (Previous Period: approximately RMB75.3 million), accounting for 100% of the total revenue (Previous Period: 100%). The decrease in revenue was mainly due to the decrease in sales volume during the Period, as the demand for semiconductor products in the PRC has substantially decreased as a result of the recurrences of COVID-19 outbreaks and the emergence of mutated variants of the virus, which adversely impacted the Chinese economy.

Cost of Sales

Cost of sales of the Group primarily consisted of the cost of material used, direct labour, and production overheads. It decreased by approximately 40.8% from approximately RMB59.8 million for the Previous Period to approximately RMB35.4 million for the Period, reflecting a decrease in the sales volume of the LED beads, which mainly led to the decrease in the cost of material used.

Gross Profit and Gross Profit Margin

The gross profit decreased from approximately RMB15.5 million for the Previous Period to approximately RMB8.1 million for the Period. The gross profit margin decreased from approximately 20.5% for the Previous Period to approximately 18.6% 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 2022		Six months ended 30 June 2021	
	Gross profit RMB'000 (unaudited)	Gross profit margin %	Gross profit RMB'000 (unaudited)	Gross profit margin %
LED products				
LED beads	8,081	18.6	15,466	20.5
Total gross profit/gross profit margin	8,081	18.6	15,466	20.5

The gross profit margin of LED beads decreased from approximately 20.5% for the Previous Period to approximately 18.6% for the Period. Such decrease was mainly attributable to the decrease in the average selling price of the LED beads.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

Other Income and Gains

Other income and gains of the Group increased by approximately 166.7% from approximately RMB0.3 million for the Previous Period to approximately RMB0.8 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 increased by approximately 45.5% from approximately RMB1.1 million for the Previous Period to approximately RMB1.6 million for the Period. The increase in selling and distribution expenses was mainly attributable to the increase in travelling expenses and entertainment expenses as a result of increased marketing activities.

Administrative and Other Expenses

The Group's administrative and other expenses increased by approximately 3.1% from approximately RMB54.4 million for the Previous Period to approximately RMB56.1 million for the Period. The administrative and other expenses mainly include 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 (i) research and development costs and (ii) administrative staff costs. The research and development costs were approximately RMB16.9 million for the Period (Previous Period: approximately RMB3.0 million). The increase in research and development costs during the Period was mainly due to the extended efforts on research and development of semiconductor-related products. The administrative staff costs were approximately RMB11.3 million for the Period (Previous Period: approximately RMB2.2 million). The increase in administrative staff costs during the Period was mainly due to the increase in the number of professional staff at the Group's Xuzhou factory and Shenzhen R&D centre.

The equity-settled share-based payment expenses were approximately RMB8.1 million during the Period (Previous Period: approximately RMB46.0 million).

Finance Costs

The Group's finance costs were approximately RMB1.0 million for the Period (Previous Period: approximately RMB0.3 million). The increase in finance costs was mainly attributable to the increase in interest on lease liabilities for the Period, as compared to that for the Previous Period.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

Income Tax Credit

Income tax credit of the Group for the Period was approximately RMB1.0 million (Previous Period: income tax expense of approximately RMB1.2 million). The income tax credit was primarily attributable to an over provision of income tax expenses in the Previous Period.

Loss for the Period

The loss for the Period was approximately RMB51.5 million, as compared to a loss of approximately RMB41.2 million for the Previous Period. The increase in loss for the Period was mainly attributable to the decrease in revenue during the Period.

Net Margin

The Group recorded a net margin of approximately -118.6% for the Period, compared to that of a net margin of approximately -54.7% for the Previous Period. The decrease in net margin for the Period was mainly attributable to the decrease in revenue during the Period.

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

For the Period, the Group recorded net cash flows used in operating activities of approximately RMB34.4 million as compared to the net cash flows generated from operating activities of approximately RMB1.5 million for the Previous Period, primarily due to the presence of a operating loss before working capital changes for the Period, compared to that of a operating profit before working capital changes for the Previous Period.

As at 30 June 2022, the Group had net current assets of approximately RMB193.0 million (31 December 2021: approximately RMB275.8 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 2022 was approximately 5.2 (31 December 2021: approximately 8.1). The decrease was primarily due to the decrease in cash and cash equivalents for the Period.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

As at 30 June 2022, the Group had total cash and bank balances of approximately RMB35.7 million (31 December 2021: approximately RMB113.6 million). The decrease in total cash and bank balances was mainly due to the net cash flows used in operating activities of approximately RMB34.4 million and net cash flows used in investing activities of approximately RMB43.2 million.

As at 30 June 2022, the total available banking facilities of the Group were RMB10.0 million (31 December 2021: RMB7.0 million). The total drawn down from the banking facilities as at 30 June 2022 was RMB10.0 million (31 December 2021: RMB7.0 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 2022, the equity attributable to owners of the Company amounted to approximately RMB576.3 million (31 December 2021: approximately RMB609.3 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 2022 was approximately 1.7% (31 December 2021: approximately 1.1%).

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 2022, the interests and short positions of the Directors and chief executive of the Company in the shares (the “Share(s)”), 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 10 of the Listing Rules were as follows:

Long positions in the ordinary 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)	100,500,000 (L)	17.83%
	Beneficial owner (Note 4)	480,000 (L)	0.09%
Mr. Lyu Xiangrong	Beneficial owner	834,000 (L)	0.15%
Ms. Liu Yang	Beneficial owner (Note 5)	2,400,000 (L)	0.43%
Dr. Wang David Nin-kou	Beneficial owner (Note 6)	4,800,000 (L)	0.85%
Professor Chow Wai Shing, Tommy	Beneficial owner (Note 7)	120,000 (L)	0.02%

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

Name	Capacity/Nature of interest	Number of Shares held/ interested (Note 1)	Approximate percentage of shareholding (Note 2)
Mr. Wu Wing Kuen	Beneficial owner (Note 8)	120,000 (L)	0.02%
Mr. Chan Chung Kik, Lewis	Beneficial owner (Note 9)	120,000 (L)	0.02%

Notes:

1. The letter "L" denotes a long position.
2. There were 563,591,000 Shares in issue as at 30 June 2022.
3. The 100,500,000 Shares in which Mr. Zhao Yi Wen is interested consist of 100,500,000 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.
4. Mr. Zhao Yi Wen is interested in the 480,000 underlying Shares which may be allotted and issued to him upon full exercise of all the options granted to him under the Share Option Scheme.
5. Ms. Liu Yang is interested in the 2,400,000 underlying Shares which may be allotted and issued to him upon full exercise of all the options granted to her under the Share Option Scheme.
6. Dr. Wang David Nin-kou is interested in the 4,800,000 underlying Shares which may be allotted and issued to him upon full exercise of all the options granted to him under the Share Option Scheme.
7. Professor Chow Wai Shing, Tommy is interested in the 120,000 underlying Shares which may be allotted and issued to him upon full exercise of all the options granted to him under the Share Option Scheme.
8. Mr. Wu Wing Kuen is interested in the 120,000 underlying Shares which may be allotted and issued to him upon full exercise of all the options granted to him under the Share Option Scheme.
9. Mr. Chan Chung Kik, Lewis is interested in the 120,000 underlying Shares which may be allotted and issued to him upon full exercise of all the options granted to him under the Share Option Scheme.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

Save as disclosed above, as at 30 June 2022, 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 positions of other persons in the Shares and underlying Shares

As at 30 June 2022, 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)
First Global Limited	Beneficial owner (Note 3)	100,500,000 (L)	17.83%
Ms. Zhuang Chan Ling	Interest of spouse (Note 4)	100,980,000 (L)	17.92%
Wide Yield Investment Holding Limited	Beneficial owner (Note 5)	100,500,000 (L)	17.83%
Ms. Qin Anqi	Interest in a controlled corporation (Note 5)	100,500,000 (L)	17.83%
GSR Capital Special Opportunity Fund L.P. ("GSR")	Beneficial owner (Note 6)	56,000,000 (L)	9.94%

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

Name	Capacity/Nature of interest	Number of Shares held/ interested (Note 1)	Approximate percentage of shareholding (Note 2)
GoldenSand Capital Ltd ("GoldenSand")	Interest in a controlled corporation (Note 6)	56,000,000 (L)	9.94%
Wu Sonny	Interest in a controlled corporation (Note 6)	56,000,000 (L)	9.94%

Notes:

1. The letter "L" denotes a long position.
2. There were 563,591,000 Shares in issue as at 30 June 2022.
3. 100,500,000 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.
4. 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.
5. 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.
6. 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.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

Save as disclosed above, as at 30 June 2022, 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 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 the then 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, with exercise price of HK\$7.5 per Share, to the Directors and certain eligible employees of the Group. On the date immediately before the options were granted, the closing price was HK\$7.35 per Share.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

As at 30 June 2022, 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 outstanding options as at 1 January 2022	Granted during the Period	Exercised during the Period	Cancelled during the Period	Lapsed during the Period	Transfer between category during the Period	Number of Shares in relation to outstanding options as at 30 June 2022	
<i>Executive Directors:</i>												
Mr. Zhao Yi Wen	17/6/2021	Nil	17/6/2021–16/6/2024	7.5	480,000	—	—	—	—	—	480,000	
Mr. Lin Qi Jian	17/6/2021	Nil (Note 2)	17/6/2021–16/6/2024	7.5	480,000	—	—	—	—	(480,000)	—	
Mr. Chan Wing Kin	17/6/2021	Nil (Note 2)	17/6/2024–16/6/2024	7.5	4,800,000	—	—	—	—	(4,800,000)	—	
Ms. Liu Yang	17/6/2021	Nil (Note 3)	17/6/2021–16/6/2029	7.5	—	—	—	—	—	2,400,000	2,400,000	
<i>Non-executive Directors:</i>												
Dr. Wang David Nin-kou	17/6/2021	17/6/2021–16/6/2022	17/6/2022–16/6/2026	7.5	1,200,000	—	—	—	—	—	1,200,000	
		17/6/2021–16/6/2023	17/6/2023–16/6/2027	7.5	1,200,000	—	—	—	—	—	1,200,000	
		17/6/2021–16/6/2024	17/6/2024–16/6/2028	7.5	1,200,000	—	—	—	—	—	1,200,000	
		17/6/2021–16/6/2025	17/6/2025–16/6/2029	7.5	1,200,000	—	—	—	—	—	1,200,000	
Mr. Chiu Kwai San	17/6/2021	Nil (Note 2)	17/6/2021–16/6/2024	7.5	480,000	—	—	—	—	(480,000)	—	
<i>Independence Non-executive Directors:</i>												
Professor Chow Wai Shing, Tommy	17/6/2021	Nil	17/6/2021–16/6/2024	7.5	120,000	—	—	—	—	—	120,000	
Mr. Wu Wing Kuen, B.B.S.	17/6/2021	Nil	17/6/2021–16/6/2024	7.5	120,000	—	—	—	—	—	120,000	
Mr. Chan Chung Kik, Lewis	17/6/2021	Nil	17/6/2021–16/6/2024	7.5	120,000	—	—	—	—	—	120,000	
Subtotal					11,400,000	—	—	—	—	(3,360,000)	8,040,000	
<i>Senior management and other employees in aggregate</i>												
Senior management and other employees in aggregate	17/6/2021	Nil (Note 2)	17/6/2021–16/6/2024	7.5	5,760,000	—	—	—	—	—	5,760,000	
		Nil (Note 3)	17/6/2021–16/6/2029	7.5	4,050,000	—	—	—	—	(2,400,000)	1,650,000	
		17/6/2021–16/6/2022	17/6/2022–16/6/2026	7.5	250,000	—	—	—	—	—	250,000	
		17/6/2021–16/6/2023	17/6/2023–16/6/2027	7.5	250,000	—	—	—	—	—	250,000	
		17/6/2021–16/6/2024	17/6/2024–16/6/2028	7.5	250,000	—	—	—	—	—	250,000	
		17/6/2021–16/6/2025	17/6/2025–16/6/2029	7.5	250,000	—	—	—	—	—	250,000	
		17/6/2021–16/6/2022	17/6/2022–16/6/2026	7.5	1,450,000	—	—	—	—	—	1,450,000	
		(Note 1)										
		17/6/2021–16/6/2023	17/6/2023–16/6/2027	7.5	1,450,000	—	—	—	—	—	—	1,450,000
		(Note 1)										
		17/6/2021–16/6/2024	17/6/2024–16/6/2028	7.5	1,450,000	—	—	—	—	—	—	1,450,000
(Note 1)												
17/6/2021–16/6/2025	17/6/2025–16/6/2029	7.5	1,450,000	—	—	—	—	—	—	1,450,000		
(Note 1)												
17/6/2021–16/6/2029	From vesting date –16/6/2029	7.5	6,500,000	—	—	—	—	—	—	6,500,000		
(Note 1)												
Subtotal					23,110,000	—	—	—	—	3,360,000	26,470,000	
Total					34,510,000	—	—	—	—	—	34,510,000	

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

Notes:

1. Vesting of the Share Options is conditional upon achievement of certain performance targets by the Grantees.
2. During the Period, two executive Directors and one non-executive Director were re-designated as senior management and other employees of the Group, and the number of share options transferred from the “Directors” category to the “Senior management and other employees” category during the Period was 5,760,000.
3. During the Period, Ms. Liu Yang was promoted to an executive Director, and the number of share options transferred from the “Senior management and other employees” category to the “Directors” category during the Period was 2,400,000.

Exempted Continuing Connected Transaction

During the Period, 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 in note 18 to the condensed consolidated financial statements of this report.

The Transactions fall under the definition of “connected transactions” or “continuing connected transactions” under Chapter 14A of the Listing Rules, but are fully exempted from shareholders’ approval, annual review, and all disclosure requirements under Chapter 14A of the Listing Rules.

Significant Investments

VisIC Technologies Limited (“VisIC”)

On 24 June 2021, the Group’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 USD5 million. On 23 August 2021, FastSemi further acquired 1,399,969 series E preferred shares of VisIC, at the consideration of approximately USD20 million. During the year ended 31 December 2021, the total number of shares acquired was 1,749,961 with an investment cost of approximately USD25 million. The total number of shares acquired represents approximately 19.9% of the enlarged issued share capital of VisIC as at 30 June 2022. Such investment was classified as an equity instrument at fair value through other comprehensive income amounting to approximately RMB166.2 million as at 30 June 2022, representing approximately 26.1% of the Group’s consolidated total assets as at 30 June 2022. There was no realised and unrealized gain or loss nor any 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 Group’s wholly-owned subsidiary, Xuzhou GSR Semiconductor Co., Ltd.* (“**Xuzhou GSR**”), invested 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 RMB16.3 million as at 30 June 2022. There was no realised and unrealized gain or loss nor any 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 company 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 USD1.75 million, representing 0.37% of the total issued share capital of GaN Systems as at 30 June 2022. Such investment was classified as an equity instrument at fair value through other comprehensive income amounting to approximately RMB11.7 million as at 30 June 2022. There was no realised and unrealized gain or loss nor any dividends received from this investment for the Period. GaN Systems have in-depth knowledge of GaN technology and a management team with decades of GaN product experience. GaN System is also a GaN power transistor company currently shipping to automotive, consumer, industrial, and data centre customers globally.

HighTec SP2 Fund (the “Fund”)

In December 2021, the Group’s wholly-owned subsidiary, FastSemi Holding Limited (“**FastSemi**”) subscribed 4,000 shares of the Fund at a consideration of USD4 million. The Fund’s investment strategies are principally to invest directly or through other investment vehicles in 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 1,002,466 shares of the Fund at a consideration of approximately USD1 million.

Such investment was classified as an equity instrument at fair value through profit or loss amounting to approximately RMB33.0 million as at 30 June 2022, representing approximately 5.2% of the Group’s consolidated total assets as at 30 June 2022. Fair value loss of approximately RMB221,000 was recognised through profit or loss during the Period. As the Fund’s main focus is on investing 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 of Subsidiary

The Group did not carry out any material acquisition nor disposal of any subsidiary during the Period.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

Capital Commitments

As at 30 June 2022, the Group has capital commitments for the acquisition of property, plant and equipment, the amount contracted for amounted to approximately RMB90.8 million (31 December 2021: approximately RMB76.7 million).

Charge on the Group's assets

As at 30 June 2022, the Group did not have any charge on its assets (31 December 2022: nil).

Contingent Liabilities

As at 30 June 2022, 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 2022, the Group employed 239 employees (31 December 2021: 179 employees). Employee costs (including Directors' remuneration, wages, salaries, performance-related bonuses, other benefits and contribution to defined contribution pension plans) amounted to approximately RMB25.6 million for the Period (Previous Period: approximately RMB50.1 million). Apart from basic remuneration, share options may be granted under the share option 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 RMB8.1 million (Previous Period: approximately RMB46.0 million), in relation to the share options granted by the Company on 17 June 2021. 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, Sales 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.

Use of Proceeds

Placing of New Shares under General Mandate

(1) Placing on 22 July 2021

In order to expand the production capacity of the Group, strengthen the Group's research and development capabilities and provide general working capital to meet the needs of its business development plan, on 13 June 2021, the Company entered into a placing agreement with VC Brokerage Limited in relation to the placing of a maximum of 96,000,000 new ordinary shares of HK\$0.01 each in the share capital of the Company at a price of HK\$5.8 per share (the "**July 2021 Placing**"). The closing price for the Company's shares on 11 June 2021 (being the last trading day prior to the date of signing the placing agreement) was HK\$7.10 per share. On 22 July 2021, the July 2021 Placing was completed and the Company issued and allotted an aggregate of 69,245,000 new ordinary shares to not less than six independent third parties. The net price for such shares was approximately HK\$5.63 per share and the aggregate nominal value of such shares was HK\$692,450. The July 2021 Placing generated net proceeds of approximately HK\$389.6 million (the "**July 2021 Placing Proceeds**"). Details of the July 2021 Placing were set out in the Company's announcements dated 15 June 2021 and 22 July 2021.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

As at 30 June 2022, the Group's planned application and the actual utilisation of the July 2021 Placing Proceeds are set out below:

	Net proceeds	Utilised	Unutilised	Expected timeline for utilising the unutilised proceeds ^(Note)
	HK\$ million	HK\$ million	HK\$ million	
Expansion of production capacity	144.9	106.2	38.7	On or before 31 December 2022
Strengthening research and development capabilities	74.8	74.8	—	N/A
Repayment of borrowings	11.3	11.3	—	N/A
Provision of general working capital	158.6	158.6	—	N/A
	389.6	350.9	38.7	

Note: The expected timeline for utilising the unutilised proceeds is based on the best estimation of the future market conditions made by the Group. It will be subject to change based on the current and future development of market conditions.

(2) Placing on 1 December 2021

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 4 November 2021, the Company entered into a placing agreement with VC Brokerage Limited in relation to the placing of a maximum of 26,755,000 new ordinary shares of HK\$0.01 each in the share capital of the Company at a price of HK\$6.2 per share (the "**December 2021 Placing**"). The closing price for the Company's shares on 3 November 2021 (being the last trading day prior to the date of signing the placing agreement) was HK\$6.8 per share. On 1 December 2021, the December 2021 Placing was completed and the Company issued and allotted an aggregate of 14,346,000 new ordinary shares to not less than six independent third parties. The net price for such shares was approximately HK\$6.01 per share and the aggregate nominal value of such shares was HK\$143,460. The December 2021 Placing generated net proceeds of approximately HK\$86.2 million (the "**December 2021 Placing Proceeds**"). Details of the December 2021 Placing were set out in the Company's announcements dated 4 November 2021 and 1 December 2021.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

As at 30 June 2022, the Group's planned application and the actual utilisation of the December 2021 Placing Proceeds are set out below:

	Net proceeds HK\$ million	Utilised HK\$ million	Unutilised HK\$ million
Strengthening research and development capabilities	64.3	64.3	—
Provision of general working capital	21.9	21.9	—
	86.2	86.2	—

The Company intends to continue to apply the July 2021 Placing Proceeds in the manner consistent with that mentioned above. Nonetheless, the Directors will constantly evaluate the Group's business objectives and may change or modify the plans against changing market conditions to ascertain the business growth of the Group. All unutilised proceeds have been placed in licensed banks in Hong Kong and the PRC.

Directors' Securities Transactions

The Company has adopted the Model Code for Securities Transactions by Directors of Listed Issuers set out in Appendix 10 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 enquiries 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.

Corporate Governance and Compliance with the Corporate Governance Code

The Company adopted the Corporate Governance Code (the "**CG Code**") contained in Appendix 14 to the Listing Rules as its own code of corporate governance. Save for the Code Provision C.2.1 of the CG Code, the Board is satisfied that the Company had complied with the CG Code during the Period.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

Code Provision C.2.1 of the CG Code stipulates that the roles of chairman and chief executive should be separate and should not be performed by the same individual. Mr. Zhao Yi Wen (“**Mr. Zhao**”) is both the chairman of the Board and the chief executive officer of the Company. In view of Mr. Zhao being one of the founders of the Group and has been operating and managing Zhuhai HongGuang, the operating subsidiary of the Company, since 2010, the Board believes that it is in the best interest of the Group to have Mr. Zhao taking up both roles for effective management and business development.

Audit Committee and Review of Accounts

The audit committee of the Company (the “**Audit Committee**”) has discussed and reviewed 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 four independent non-executive Directors, namely Mr. Chan Chung Kik, Lewis, Mr. Wu Wing Kuen, B.B.S., Professor Chow Wai Shing, Tommy and Mr. Li Yang. Mr. Chan Chung Kik, Lewis 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
Zhao Yi Wen
Chairman and Executive Director

Hong Kong, 30 August 2022

As at the date of this report, the executive Directors are Mr. Zhao Yi Wen, Mr. Lyu Xiangrong, Mr. Leung Kin Pang and Ms. Liu Yang; the non-executive Directors are Dr. Wang David Nin-kou and Mr. Wang Jie Chuan; and the independent non-executive Directors are Professor Chow Wai Shing, Tommy, Mr. Wu Wing Kuen, B.B.S., Mr. Chan Chung Kik, Lewis and Mr. Li Yang.

* *For identification purpose only*