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HUA HONG SEMICONDUCTOR LIMITED

華虹半導體有限公司

(Incorporated in Hong Kong with limited liability)

(Stock Code: 1347)

ANNUAL RESULTS ANNOUNCEMENT FOR THE YEAR ENDED 31 DECEMBER 2021

FINANCIAL HIGHLIGHTS

The Board of Directors (“the Board”) of Hua Hong Semiconductor Limited (“the Company” or “Hua Hong Semiconductor”, together with its subsidiaries, the “Group”) is pleased to announce the consolidated results of the Company for the year ended 31 December 2021.

Highlights in comparison with 2020 figures are:

- Revenue was US\$1,630.8 million, an all-time high and an increase of 69.6% from the prior year.
- Gross margin was 27.7%, 3.3 percentage points over 2020, mainly due to improved average selling price, capacity utilization, and product mix, partially offset by increased depreciation expenses.
- Net profit was US\$231.0 million, 593.3% over 2020.
- Profit for the year attributable to owners of the parent was US\$261.5 million, 162.9% over 2020.
- Basic earnings per share was US\$0.201, 161.0% over 2020.
- Return on equity was 9.7%, 5.5 percentage points over 2020.
- Net cash flows generated from operating activities was US\$518.5 million, 92.7% over 2020.
- Capacity reached 313,000 8-inch equivalent wafers per month, compared to 223,000.
- Wafer shipments (in 8-inch equivalent wafers) was 3,328,000, compared to 2,191,000.
- In view of the Company’s “8-inch + 12-inch” strategy and the uncertainty in the impact of various factors on the global economy, such as the COVID-19 pandemic, the Company is maintaining a stable, prudent, and responsible policy for our shareholders. Based on the principles for a sustainable operation and long-term development, the Board did not recommend the payment of any dividend for the year ended 31 December 2021 (2020: nil). The Company will retain sufficient cash to continue its investment activities, in order to maximize benefits for our shareholders.

LETTER TO SHAREHOLDERS

Dear Shareholders,

2021 is a year of great development for the semiconductor industry. Global semiconductor sales exceeded US\$500 billion for the first time, a record high, with China remaining the world's largest semiconductor market. Severe fluctuations in the global economy, repeated partial pandemics, bottlenecks in the supply chain, and overall growth in emerging markets, such as Automotive Electronics, Renewable Energy Generation, National Integrated Big-data Center System, Internet of Things, and Smart Healthcare, have led to a continuous increase in chip demand. Additional excellent chip design houses in China are starting to demonstrate their capability and have generated higher requirements for local semiconductor manufacturing capacity. With our well-defined strategy of "IC + Power Discrete", Hua Hong Semiconductor seized on the resulting opportunity, achieving record revenue, profit, and growth for 2021. Furthermore, the Company is accelerating its capacity expansion of Hua Hong Semiconductor (Wuxi) Limited ("Hua Hong Wuxi") to address the global chip shortage and to continue our outstanding growth in 2022. Significant improvement is being achieved in the Company's comprehensive strengths, with deep penetration in the global industrial supply chain and greater leadership in the semiconductor industry.

Hua Hong Semiconductor's financial performance was outstanding in all categories for 2021. The Company's annual revenue hit a record high of US\$1,630.8 million, representing an increase of 69.6% compared with 2020. Despite increases in raw material costs and depreciation of the 12-inch production line, the Company recorded a gross margin of 27.7% for the year, representing an increase of 3.3 percentage points compared with the previous year. This was achieved through efforts including cost reduction, efficiency improvement, and product value enhancement. The three 8-inch production lines in Shanghai, with their traditional advantages, operated for the first time at a profit margin above 40%, showing their paramount commercial value. In 2021, profit attributable to owners of the parent was US\$261.5 million, representing an increase of 162.9% compared with the previous year; and the return on equity reached 9.7%, representing a year-on-year increase of 5.5 percentage points.

In 2021, Hua Hong Wuxi's 12-inch production line ushered in its third year of operation. Since October 2021, wafer-starts at Hua Hong Wuxi have exceeded 65,000 per month, with the utilization rate maintained at over 100%. The Company continuously migrated its Embedded Non-Volatile Memory (eNVM), Power Device, Analog & Power Management Integrated Circuits (PMIC), and Logic & Radio Frequency (RF) technology platforms from 8-inch to 12-inch. With the world's first 12-inch Power Device production line, our Power Device products in 12-inch have passed the IATF 16949 automotive quality management system certification with all electrical parameters at excellent levels, in preparation for opportunities in the era of electrification and intelligence, as well as the Automotive Electronics market. As a result of the stability and reliability of the 12-inch process, the high-yield 90nm Bipolar-CMOS-DMOS (BCD) platform enabled a more competitive manufacturing solution for chip applications, including Motor Drivers, Digital Power Supplies, and Digital Audio Amplifiers.

The Company is committed to continuous innovation of advanced specialty semiconductor technologies, having patent strategy for its core research and development competencies, with a focus on intellectual property rights for the eNVM, Power Device, Analog & PM, and Logic & RF technology platforms. In 2021, Shanghai Huahong Grace Semiconductor Manufacturing Corporation (“HHGrace”), a wholly-owned subsidiary of Hua Hong Semiconductor, distinguished itself from many other candidates in the 18th Shanghai International Intellectual Property Forum and was granted the “3rd Shanghai IPR Innovation Award (Creation).” As at the end of 2021, the Company has applied for a total of 6,593 patents in China and has obtained 3,575 domestic and 147 international patents.

In 2021, we once again demonstrated the Company’s leading position in eNVM innovation by launching the NORD-Flash memory cell, developed by the Company with proprietary intellectual property rights. This technology incorporates shared select gates, greatly reducing the cell area, with an extremely competitive number of photo layers and won the “2021 Excellent (Technology) Solution Award for Highly Reliable Microcontrollers (MCU)” by China Electronics News. MCU products utilizing this eNVM technology have been mass-produced, providing strong technical support for rapidly growing applications, such as Automotive Electronics, New Generation Communication, Internet of Things, and Smart Healthcare.

Looking forward to the “14th Five-Year Plan”, China’s development in the next five years and beyond puts forward more urgent requirements for accelerating scientific and technological innovation. Under the new “dual circulation” development pattern, in which the domestic economic cycle plays a leading role, while the international economic cycle remains its extension and supplement. We will continue to work on the capacity expansion of Hua Hong Wuxi’s 12-inch production line and do our best to build up total capacity to more than 90,000 wafers per month by the end of 2022. At the same time, the Company will expand and strengthen our “8 inch + 12 inch” strategy, by increasing research and development investment under the “Specialty IC” concept, developing narrower technology nodes and improving chip performance. In addition, by innovating new device structures and establishing our automotive grade process, we will create the leading “Advanced Power Discrete” capability. We believe that 2022 will be a year when the Company enters the fast lane of high-quality development, and realizes growth at accelerated speeds.

We will use our best efforts to achieve our goals. With the construction of our world-class IC industrial cluster, we will continuously improve the Company’s leadership, innovation, and execution. We would like to thank our investors, customers, and all of our stakeholders for supporting Hua Hong Semiconductor. We look forward to jointly forging ahead with you to achieve splendid results in the next level of development.

Mr. Suxin Zhang

Chairman and Executive Director

Mr. Junjun Tang

President and Executive Director

Shanghai, PRC

29 March 2022

BUSINESS REVIEW

Revenue Analysis

Revenue of Hua Hong Semiconductor for 2021 was US\$1,630.8 million, representing a significant increase of 69.6% compared to the previous year. As at the end of 2021, the Company has been profitable for 44 consecutive quarters. This good performance was mainly due to the expansion of the Company's production capacity and strong market demand. In 2021, short supply in the semiconductor industry supply chain was due to many factors: a structural increment as a result of the domestic industrial expansion; increased demand related to remote connection arising out of the pandemic; preference for domestic production due to the relocation of supply chains; and more extensive application of Automotive Electronics, Renewable Energy Generation, National Integrated Big-data Center System, Internet of Things, and Smart Healthcare. These factors gave rise to increases in volume and price, contributing to rapid development of Hua Hong Semiconductor. In order to meet the huge and diverse market demand, the Company's 8-inch product portfolio was continuously optimized; production capacity of its 12-inch production line was continuously expanded; and the development of differentiated process technologies for the 12-inch production line was accelerated. In 2021, the Company's Embedded Memory, Discrete, and Logic & RF platforms achieved relatively high growth and will continue to create value for shareholders and markets in 2022.

	Revenue by Service					
	2021 US\$'000	2021 %	2020 US\$'000	2020 %	YoY Change US\$'000	YoY Change %
Semiconductor wafers	1,561,846	95.8%	926,684	96.4%	635,162	68.5%
Others	68,908	4.2%	34,595	3.6%	34,313	99.2%
Total	<u>1,630,754</u>	<u>100.0%</u>	<u>961,279</u>	<u>100.0%</u>	<u>669,475</u>	<u>69.6%</u>

- In 2021, 95.8% of our revenue was generated from the sale of semiconductor wafers.

	Revenue by Customer					
	2021 US\$'000	2021 %	2020 US\$'000	2020 %	YoY Change US\$'000	YoY Change %
Systems and fabless companies	1,496,782	91.8%	814,410	84.7%	682,372	83.8%
Integrated device manufacturers (IDMs)	133,972	8.2%	146,869	15.3%	(12,897)	(8.8)%
Total	<u>1,630,754</u>	<u>100.0%</u>	<u>961,279</u>	<u>100.0%</u>	<u>669,475</u>	<u>69.6%</u>

- Our revenue from systems and fabless companies accounted for 91.8%.

	Revenue by Geography					
	2021 US\$'000	2021 %	2020 US\$'000	2020 %	YoY Change US\$'000	YoY Change %
China	1,205,149	73.9%	624,407	64.9%	580,742	93.0%
Other Asia	169,227	10.4%	121,885	12.7%	47,342	38.8%
North America	159,281	9.8%	121,642	12.7%	37,639	30.9%
Europe	70,627	4.3%	66,149	6.9%	4,478	6.8%
Japan	26,470	1.6%	27,196	2.8%	(726)	(2.7)%
Total	<u>1,630,754</u>	<u>100.0%</u>	<u>961,279</u>	<u>100.0%</u>	<u>669,475</u>	<u>69.6%</u>

- In 2021, China was our largest and fastest-growing market by revenue, with a year-on-year increase of 93.0% in revenue.

	Revenue by Technology Type					
	2021 US\$'000	2021 %	2020 US\$'000	2020 %	YoY Change US\$'000	YoY Change %
eNVM	459,104	28.2%	334,663	34.8%	124,441	37.2%
Standalone Non-Volatile						
Memory (NVM)	88,796	5.4%	11,711	1.2%	77,085	658.2%
Discrete	557,893	34.2%	353,019	36.8%	204,874	58.0%
Logic & RF	272,053	16.7%	124,952	13.0%	147,101	117.7%
Analog & Power						
Management (PM)	250,466	15.4%	135,581	14.1%	114,885	84.7%
Others	2,442	0.1%	1,353	0.1%	1,089	80.5%
Total	<u>1,630,754</u>	<u>100.0%</u>	<u>961,279</u>	<u>100.0%</u>	<u>669,475</u>	<u>69.6%</u>

- eNVM technology continued to grow in 2021, with continuous and outstanding growth in the results for MCU products.
- In 2021, there was a year-on-year increase of 58.0% in revenue from Discrete, which remained the Company's largest business segment.
- Revenue from Logic & RF technology platforms increased rapidly by 117.7%, mainly driven by the mass production of 12-inch CMOS image sensor (CIS) products.
- Revenue from Analog & PM increased by 84.7%, mainly attributable to the mass production of 12-inch technology platforms.

	Revenue by Technology Node					
	2021 US\$'000	2021 %	2020 US\$'000	2020 %	YoY Change US\$'000	YoY Change %
55nm & 65nm	157,854	9.7%	6,692	0.7%	151,162	2,258.8%
90nm & 95nm	280,235	17.2%	100,315	10.4%	179,920	179.4%
0.11μm & 0.13μm	302,920	18.6%	229,965	24.0%	72,955	31.7%
0.15μm & 0.18μm	164,260	10.1%	141,317	14.7%	22,943	16.2%
0.25μm	22,926	1.4%	16,536	1.7%	6,390	38.6%
≥0.35μm	702,559	43.0%	466,454	48.5%	236,105	50.6%
Total	<u>1,630,754</u>	<u>100.0%</u>	<u>961,279</u>	<u>100.0%</u>	<u>669,475</u>	<u>69.6%</u>

- Revenue from 55nm & 65nm technology nodes increased sharply, primarily due to the contribution of Standalone NVM, CIS, and Logic & RF products.
- Revenue from 90nm & 95nm technology nodes increased rapidly, mainly due to the contribution of image sensors, smart card IC, MCU, and power management IC.
- Revenue from 0.35μm technology nodes increased by 50.6%, mainly due to the contribution of power discrete.

	Revenue by End Market					
	2021 US\$'000	2021 %	2020 US\$'000	2020 %	YoY Change US\$'000	YoY Change %
Consumer Electronics	1,039,325	63.7%	594,087	61.8%	445,238	74.9%
Industrial & Automotive						
Electronics	316,194	19.4%	203,890	21.2%	112,304	55.1%
Communications	218,946	13.4%	127,413	13.3%	91,533	71.8%
Computing	56,289	3.5%	35,889	3.7%	20,400	56.8%
Total	<u>1,630,754</u>	<u>100.0%</u>	<u>961,279</u>	<u>100.0%</u>	<u>669,475</u>	<u>69.6%</u>

- All end markets recorded strong growth in revenue in 2021.

Fab (In thousands of wafers per month)	Capacity and Capacity Utilization		
	2021	2020	YoY Change
Fab 1	65	65	—
Fab 2	60	60	—
Fab 3	53	53	—
Total monthly 8-inch wafer capacity	178	178	—
Fab 7 (12-inch wafer capacity)	60	20	40
Capacity Utilization (8-inch wafer equivalent)	<u>107.5%</u>	<u>92.7%</u>	<u>14.8%</u>

- In 2021, capacity utilization (8-inch wafer equivalent) was 107.5%.

In thousands of wafers	Wafer shipments		
	2021	2020	YoY Change
Wafer shipments (8-inch wafer equivalent)	<u>3,328</u>	<u>2,191</u>	<u>51.9%</u>

- In 2021, there was a year-on-year increase of 51.9% in the Company's wafer shipments.

Research and Development

Hua Hong Semiconductor is committed to research and development (R&D), innovation, and optimization of differentiated technologies, with a focus on eNVM, Discrete, Analog and PM, and Logic & RF. It continues to provide customers with well-featured process technologies and services that meet market demand. In 2021, the “8-inch + 12-inch” strategic endeavour of Hua Hong Semiconductor was more complete, while the “IC + Power Discrete” strategy continued to be implemented in the 12-inch technology platforms.

The eNVM technology platforms remained one of the major revenue sources of Hua Hong Semiconductor in 2021, mainly for two applications: smart card IC and MCUs. With respect to smart card IC, 90nm embedded flash memory technology, with independently developed intellectual property rights, was successfully transferred to the 12-inch fab for production of smart card IC products. Competitiveness of this platform was maintained at a high level, with rapid growth in shipments. With respect to MCUs, double-digit growth in sales of embedded flash MCU continued in 2021 due to the addition of 12-inch capacity, contributing to double-digit growth CAGR in revenue and shipments from 2014 to 2021. Our industry-leading 0.11 μ m technology platform and 90nm low power and ultra-low leakage embedded flash memory technology platform, with independently developed intellectual property rights, were widely recognized by customers around the world. An increasing number of new products were launched on these platforms for general MCU, Type-C interface IC, touch controller, smart meter controller, highly reliable Automotive Electronics, etc. The 90nm embedded flash memory technology platform will also be further optimized to better meet demand in the MCU and smart card IC markets. Meanwhile, the 55nm high-speed MCU embedded flash memory technology platform, with independently developed intellectual property rights, was developed and mass produced. More diversified and detailed applications of the embedded flash memory technology platform help enhance competitiveness and provide customers with better differentiated technology services and capacity support.

In 2021, the Company's power discrete device technology platform benefited from the explosive growth of new energy vehicles and supporting infrastructure markets, as well as the gradual improvement in the domestic substitution rate in home appliance, communication, and industrial markets. Our proprietary technology, which was in the development pipeline for years, earned fantastic returns. Insulated Gate Bipolar Transistor (IGBT) technology was the most eye-catching, with high growth for the last seven consecutive years. With optimization in terms of high current, high reliability, and small pitch size, the Company's IGBT technology showed competitive strength for electric vehicle inverters and charging piles. In addition, market demand for power devices accelerated due to the development of emerging markets, such as next generation communication, Internet of Things, and new energy promoted by the carbon peaking and carbon neutrality goals. Demand in these markets for energy conversion efficiency improvement boosted our domestic industry-leading development of Double-diffused Metal Oxide Semiconductor/Shielded Gate Trench (DMOS/SGT) technology with smaller pitch size and lower on-resistance. In the consumer field, compatibility of fast charging high-power supplies in mobile phones, laptops, etc. with USB Power Delivery (PD) stimulated the Company's development of Super Junction (SJ) Metal Oxide Semiconductor Field Effect Transistor (MOSFET) technology. The Company accumulated valuable experience in mass production and built a good reputation for the new-generation Deep-Trench technology. This technology was successfully applied to data center power supplies as well as on-board chargers (OBC) and charging piles for new energy vehicles. A new generation of IGBT technology has been successfully developed, and its mass-produced products have entered new energy markets, such as main inverters for new energy vehicles, photovoltaics, and wind energy. The Company's existing four main power discrete technologies (DMOS/SGT/SJ/IGBT) were upgraded from 8-inch to 12-inch and are now in mass production with stable supply. Shipments of IGBT and SJ made outstanding contributions to our financial results, strongly ensuring continuous high-speed growth of the discrete product line and satisfaction of market demand.

With the increasing variety and application scenarios of portable intelligent hardware and demand for increased performance of power management IC, Hua Hong Semiconductor's Analog and PM technology platform developed more rapidly with wider technology portfolios and a larger customer base. In 2021, shipments from the BCD technology platform showed triple-digit growth, including low-medium, high and ultra-high voltage products. For application in analog power ICs and motor drivers, the Company developed a new-generation 8-inch 0.18μm BCD process technology platform, with rapid production ramp-up and performance metrics at the most advanced level of the industry. The 12-inch 90nm BCD platform, with better electrical performance, was developed and launched for digital power, digital audio power amplifier, and other IC devices. For ultra-high voltage products, 600-700V BCD technology platforms were developed for lighting control, industrial applications, and household motor drivers. Due to domestic demand and the improvement and maturity of this technology, growth of the 600V BCD technology platform was the most significant.

In addition to the above main technology platforms, Hua Hong Semiconductor continued to expand into new differentiated technology fields. With greater demands on the performance of semiconductor products for smartphones, wearable hardware, Automotive Electronics, etc., the Company continuously strengthened research and development of the radio frequency, standalone memory, image sensor, and other technology platforms, which paid off in 2021. In terms of patents, it applied for 618 patents throughout the year and was granted a total of over 3,800 Chinese and U.S. invention patents. The Company is committed to providing customers with a rich selection of technology platforms and extensive IP support.

While innovating and optimizing existing 8-inch technology, the Company also cooperated with the Government of Wuxi, Jiangsu to establish Hua Hong Wuxi as an important step for Hua Hong Semiconductor's development of its business outside Shanghai and to integrate into and serve the Yangtze River Delta integration strategy. Through efforts in 2021, Phase I production capacity rapidly increased to 60,000 wafers per month; the number of products increased rapidly; the number of talented employees gradually expanded; and the established phased R&D and capacity targets were achieved. This was the most important growth engine for the Company's results in 2021. Excellent performance of the Wuxi project in 2021 fully achieved the strategic positioning of "8-inch + 12-inch" and laid a foundation for further capacity expansion in 2022. The Company will more powerfully meet market demand in the future.

OUTLOOK

Looking forward to 2022, the global economy is expected to progress while maintaining stability. According to the latest World Economic Outlook released by the International Monetary Fund (IMF), the global gross domestic product (GDP) growth rate is expected to be 4.4% in 2022 and China's GDP is expected to grow 4.8%. Due to emerging markets, including new generation communication, new energy generation, and new energy vehicles, the semiconductor content of end-user applications is increasing and global demand for semiconductor components will remain strong. However, due to limited global production capacity, strained supply is expected to dominate the global semiconductor market in 2022. Benefiting from active pandemic control in China, the local supply chain has gained a good operating environment and market momentum, providing high-quality products to the world with more stability. The Company's performance in the new year will also be more robust.

In 2022, Hua Hong Wuxi's 12-inch production capacity will continue to be expanded. More diversified and advanced differentiated technology will continue to be the growth engine for the results of the Company. As the strained supply of semiconductor components in the world is expected to persist, the Company will fully implement its "8-inch + 12-inch" strategy to increase production capacity, further accelerating optimization of the existing 8-inch platform and capacity expansion of the 12-inch platform to meet market demand. All fabs of the Company are IATF16949 compliant and will continuously improve their Automotive Electronics product lines in 2022 to seize the market opportunity of great demand in the domestic automotive semiconductor component supply chain. In terms of technology research and development, the Company is actively promoting research and development of 40nm basic logic RF technology and advancing early-stage research and development of 40nm eFlash technology, based on mass production of the 55nm eFlash technology platform. The more outstanding performance and power consumption indicators of 40nm eFlash technology will make the eFlash platform more competitive for MCU market applications. In the field of power discrete, with the improvement and optimization of the 12-inch SJ and IGBT technology platform, supporting facilities in the industry have become more mature and performance growth has become more stable. Research, development, and implementation of new generation technologies will strengthen the product competitiveness of our customers and address more end markets. In terms of PMIC, the 12-inch 90 nm BCD platform is yielding good results. With the increasing number of customers for mass production and faster capacity expansion, PMIC will be more and more capable of contributing to growth. In terms of other platforms, the 12-inch production platform enhances the Company's development path to smaller nodes, and we will continuously upgrade our differentiated technologies to more advanced nodes.

2022 will be a year of both challenges and opportunities. The Company will unswervingly focus on promoting our differentiation strategy. The "IC+ Power Discrete" product strategy with support of the "8-inch +12-inch" production platforms will meet the needs of global market development. Hua Hong Semiconductor will maintain its position as a wafer foundry enterprise with specialty technology, which is deeply trusted by its customers and highly worthy of investment.

MANAGEMENT DISCUSSION AND ANALYSIS

FINANCIAL PERFORMANCE

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>	Change
Revenue	1,630,754	961,279	69.6%
Cost of sales	(1,179,156)	(726,486)	62.3%
Gross profit	451,598	234,793	92.3%
Other income and gains	60,758	57,313	6.0%
Fair value gain on an investment property	183	198	(7.6)%
Selling and distribution expenses	(10,673)	(8,169)	30.7%
Administrative expenses	(198,920)	(261,139)	(23.8)%
Other expenses	(165)	(10)	1,550.0%
Finance costs	(13,226)	(2,968)	345.6%
Share of profit of associates	6,765	26,059	(74.0)%
Profit before tax	296,320	46,077	543.1%
Income tax expense	(65,349)	(12,762)	412.1%
Profit for the year	230,971	33,315	593.3%
Attributable to:			
Owners of the parent	261,476	99,443	162.9%
Non-controlling interests	(30,505)	(66,128)	(53.9)%

Revenue

Revenue was US\$1,630.8 million, an all-time high and an increase of 69.6% over the prior year, due to increased wafer shipments and improved average selling price.

Cost of sales

Cost of sales was US\$1,179.2 million, 62.3% over 2020, primarily due to increased wafer shipments and increased depreciation costs.

Gross profit

Gross profit was US\$451.6 million, an increase of 92.3% compared to 2020, mainly due to improved average selling price, capacity utilization, and product mix, partially offset by increased depreciation expenses.

Other income and gains

Other income and gains was US\$60.8 million, an increase of 6.0% compared to 2020, primarily due to increased foreign exchange gains.

Selling and distribution expenses

Selling and distribution expenses were US\$10.7 million, an increase of 30.7% from 2020, primarily due to increased labor expenses.

Administrative expenses

Administrative expenses were US\$198.9 million, a decrease of 23.8% from 2020, largely due to decreased research and development expenses, and increased government grants for research and development.

Other expenses

Other expenses were US\$0.2 million, compared to US\$0.01 million in 2020.

Finance costs

Finance costs were US\$13.2 million, an increase of 345.6% from 2020, primarily due to increased bank borrowings.

Share of profit of associates

Share of profit of associates was US\$6.8 million, a decrease of 74.0% from 2020, due to decreased profit realized by the associates.

Income tax expense

Income tax expense was US\$65.3 million, an increase of 412.1% compared to 2020, primarily due to increased taxable profit.

Profit for the year

As a result of the cumulative effect of the above factors, profit for the year increased to US\$231.0 million, from US\$33.3 million in 2020. Net profit margin was 14.2%, compared to 3.5% in 2020.

FINANCIAL STATUS

	31 December 2021 US\$'000	31 December 2020 US\$'000	Change
Non-current assets			
Property, plant and equipment	3,116,501	2,510,442	24.1%
Investment property	184,883	180,476	(4.9)%
Right-of-use assets	75,331	79,221	2.4%
Investments in associates	122,040	105,218	16.0%
Equity instruments designated at fair value through other comprehensive income	257,788	230,265	12.0%
Other non-current assets	54,364	56,706	(4.1)%
Total non-current assets	3,810,907	3,162,328	20.5%
Current assets			
Inventories	432,917	226,476	91.2%
Trade and notes receivables	181,042	120,952	49.7%
Due from related parties	6,910	4,706	46.8%
Other current assets	157,935	130,979	20.6%
Restricted and time deposits	2,248	359	526.2%
Cash and cash equivalents	1,610,140	922,786	74.5%
Total current assets	2,391,192	1,406,258	70.0%
Current liabilities			
Trade payables	194,385	130,980	48.4%
Interest-bearing bank borrowings	195,024	47,784	308.1%
Due to related parties	7,501	12,647	(40.7)%
Government grants	66,837	58,926	13.4%
Other current liabilities	616,654	414,711	48.7%
Total current liabilities	1,080,401	665,048	62.5%
Net current assets	1,310,791	741,210	76.8%
Non-current liabilities			
Interest-bearing bank borrowings	1,395,279	518,391	169.2%
Lease liabilities	16,137	17,405	(7.3)%
Deferred tax liabilities	25,735	13,621	88.9%
Total non-current liabilities	1,437,151	549,417	161.6%
Net assets	3,684,547	3,354,121	9.9%

Explanation of items with fluctuation over 10% from 31 December 2020 to 31 December 2021

Property, plant and equipment

Property, plant and equipment increased from US\$2,510.4 million to US\$3,116.5 million, mainly as a result of the capacity expansion of Hua Hong Wuxi.

Investments in associates

Investments in associates increased from US\$105.2 million to US\$122.0 million, primarily due to increased investment in an associate and profit shared from the associates.

Equity instruments designated at fair value through other comprehensive income

Equity instruments designated at fair value through other comprehensive income increased from US\$230.3 million to US\$257.8 million, primarily due to increase of fair value and a purchase of equity instruments.

Inventories

Inventories increased from US\$226.5 million to US\$432.9 million, primarily due to increased customer demand.

Trade and notes receivables

Trade and notes receivables increased from US\$121.0 million to US\$181.0 million, mainly due to increased revenue.

Due from related parties

Due from related parties increased from US\$4.7 million to US\$6.9 million, primarily due to increased receivables from one of our related parties.

Other current assets

Other current assets increased from US\$131.0 million to US\$157.9 million, primarily due to increased prepayments.

Restricted and time deposits

Restricted and time deposits increased from US\$0.4 million to US\$2.2 million, primarily due to increased pledged deposits.

Cash and cash equivalents

Cash and cash equivalents increased from US\$922.8 million to US\$1,610.1 million, mainly due to reasons stated in the cash flow analysis below.

Trade payables

Trade payables increased from US\$131.0 million to US\$194.4 million, primarily due to increased purchase of materials.

Due to related parties

Due to related parties decreased from US\$12.6 million to US\$7.5 million, primarily due to recognition of rental income from one of our related parties.

Government grants

Government grants increased from US\$58.9 million to US\$66.8 million, primarily due to increased receipts of government grants.

Other current liabilities

Other current liabilities increased from US\$414.7 million to US\$616.7 million, primarily due to increased advances from customers, income tax payables, and payroll payables.

Interest-bearing bank borrowings

Total interest-bearing bank borrowings increased from US\$566.2 million to US\$1,590.3 million, due to drawdowns of bank borrowings.

Deferred tax liabilities

Deferred tax liabilities increased from US\$13.6 million to US\$25.7 million, primarily due to increased withholding tax accrued for dividend distribution.

CASH FLOW

	2021 US\$'000	2020 US\$'000	Change
Net cash flows generated from operating activities	518,471	269,110	92.7%
Net cash flows used in investing activities	(863,059)	(405,661)	112.8%
Net cash flows generated from financing activities	1,014,640	540,427	87.7%
Net increase in cash and cash equivalents	670,052	403,876	65.9%
Cash and cash equivalents at beginning of the year	922,786	476,286	93.7%
Effect of foreign exchange rate changes, net	17,302	42,624	(59.4)%
Cash and cash equivalents at end of the year	<u>1,610,140</u>	<u>922,786</u>	<u>74.5%</u>

Net cash flows generated from operating activities

Net cash flows generated from operating activities were US\$518.5 million, an increase of 92.7% from 2020, mainly due to increased revenue, partially offset by (i) increased payments for materials and labor costs, and (ii) decreased receipts of the VAT return.

Net cash flows used in investing activities

Net cash flows used in investing activities were US\$863.1 million, primarily attributed to (i) US\$938.9 million for capital investments, (ii) US\$7.4 million for investment in an associate, and (iii) US\$6.3 million of investment in an equity instrument, offset by (i) receipts of US\$83.6 million of government grants, and (ii) US\$5.9 million of interest income.

Net cash flows generated from financing activities

Net cash flows generated from financing activities were US\$1,014.6 million, including (i) US\$1,070.8 million of proceeds from bank borrowings, and (ii) US\$7.4 million of proceeds from issue of shares, offset by (i) US\$47.9 million of repayments of bank borrowings, (ii) US\$11.7 million of interest payments, and (iii) US\$4.0 million payment of principal portion of lease payments.

Net increase in cash and cash equivalents

As a result of the cumulative effect of the above factors, cash and cash equivalents increased from US\$922.8 million as at 31 December 2020 to US\$1,610.1 million as at 31 December 2021.

FINANCIAL RISKS

Interest rate risk

Our exposure to the risk of changes in market interest rates relates primarily to the Group's interest-bearing bank borrowings with a floating interest rate. Our policy is to manage interest rate risk using a mix of fixed and variable rate debts.

As at 31 December 2021, if the interest rates had been 100 basis points higher/lower with all other variables held constant, profit before tax for the year would have been US\$7.8 million lower/higher, mainly as a result of higher/lower interest expense on floating rate bank borrowings.

Foreign currency risk

We have transactional currency exposures, arising primarily from sales or purchases by our significant subsidiaries operating in Mainland China in US\$ rather than the subsidiary's functional currency, which is RMB. As at 31 December 2021, if the US dollar had strengthened or weakened against the RMB by five percent, with all other variables held constant, our profit before tax for the year would have been approximately US\$48.2 million lower or higher.

Credit risk

We trade only with recognized and creditworthy third parties and related parties. It is our policy that all customers who wish to trade on credit terms are subject to credit verification procedures. In addition, receivable balances are monitored on an ongoing basis, and our exposure to bad debts is not significant.

Our maximum exposure to credit risk in relation to our financial assets is: the carrying amounts of cash and cash equivalents, trade and notes receivables, financial assets included in prepayments, other receivables and other assets, amounts due from related parties, and restricted and time deposits included in the consolidated statement of financial position. We have no other financial assets which carry significant exposure to credit risk.

Liquidity risk

To meet liquidity requirements in the short and long term, our policy is to monitor regularly the current and expected liquidity requirements to ensure that we maintain sufficient reserves of cash and adequate committed lines of funding from major financial institutions.

Capital management

Our primary objectives of capital management are to safeguard our ability to continue as a going concern and to maintain healthy capital ratios to support our business and maximize shareholders' value.

We manage our capital structure and make adjustments in light of changes in economic conditions. To do this, we may adjust the dividend payment to shareholders, return capital to shareholders, or issue new shares. We are not subject to any externally imposed capital requirements. No changes were made in the objectives, policies, or processes for managing capital during the year.

DIVIDENDS

The Board did not recommend the payment of any dividend for the year ended 31 December 2021.

PURCHASE, SALE OR REDEMPTION OF LISTED SHARES OF THE COMPANY

Neither the Company, nor any of its subsidiaries purchased, sold or redeemed any of the Company's listed securities in the year ended 31 December 2021.

CLOSURE OF REGISTER OF MEMBERS

For determining the eligibility of shareholders to attend and vote at the annual general meeting

Latest time to lodge transfer documents for registration	4:30 p.m. on 5 May 2022
Closure of register of members	6 to 12 May 2022 (both dates inclusive)
Record date	12 May 2022

In order to be eligible to attend and vote at the annual general meeting, unregistered holders of shares should ensure all share transfer forms accompanied by the relevant share certificates are lodged with the Company's branch share registrar Tricor Investor Services Limited, at Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong for registration no later than the aforementioned latest time.

CORPORATE GOVERNANCE

The Company is committed to maintaining a high standard of corporate governance with a view to safeguarding the interests of its shareholders and enhancing corporate value. Detailed corporate governance practices will be stated in the Company's annual report for the year ended 31 December 2021. The Board is of the view that the Company has complied with the code provisions set out in the Corporate Governance Code as contained in Appendix 14 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules") during the year ended 31 December 2021.

ANNUAL RESULTS FOR THE YEAR ENDED 31 DECEMBER 2021

The Board of the Company is pleased to announce the audited consolidated annual results of the Group for the year ended 31 December 2021 with comparative figures for the year 2020 as follows:

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

Year ended 31 December 2021

	<i>Notes</i>	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
Revenue	4	1,630,754	961,279
Cost of sales		(1,179,156)	(726,486)
Gross profit		451,598	234,793
Other income and gains	4	60,758	57,313
Fair value gain on an investment property		183	198
Selling and distribution expenses		(10,673)	(8,169)
Administrative expenses		(198,920)	(261,139)
Other expenses	4	(165)	(10)
Finance costs	6	(13,226)	(2,968)
Share of profit of associates		6,765	26,059
PROFIT BEFORE TAX	5	296,320	46,077
Income tax expense	7	(65,349)	(12,762)
PROFIT FOR THE YEAR		230,971	33,315
Attributable to:			
Owners of the parent		261,476	99,443
Non-controlling interests		(30,505)	(66,128)
		230,971	33,315
EARNINGS PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE PARENT:	9		
Basic			
– For profit for the year		US\$0.201	US\$0.077
Diluted			
– For profit for the year		US\$0.198	US\$0.076

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
PROFIT FOR THE YEAR	<u>230,971</u>	<u>33,315</u>
OTHER COMPREHENSIVE INCOME		
Other comprehensive income that may be reclassified to profit or loss in subsequent periods:		
Exchange differences on translation of foreign operations	<u>80,630</u>	<u>213,916</u>
Net other comprehensive income that may be reclassified to profit or loss in subsequent periods	<u>80,630</u>	<u>213,916</u>
Other comprehensive income that will not be reclassified to profit or loss in subsequent periods:		
Equity investments designated at fair value through other comprehensive income:		
Changes in fair value	<u>15,564</u>	<u>8,211</u>
Income tax effect	<u>(2,335)</u>	<u>(1,232)</u>
Net other comprehensive income that will not be reclassified to profit or loss in subsequent periods	<u>13,229</u>	<u>6,979</u>
OTHER COMPREHENSIVE INCOME FOR THE YEAR, NET OF TAX	<u>93,859</u>	<u>220,895</u>
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	<u>324,830</u>	<u>254,210</u>
Attributable to:		
Owners of the parent	<u>336,438</u>	<u>266,532</u>
Non-controlling interests	<u>(11,608)</u>	<u>(12,322)</u>
	<u>324,830</u>	<u>254,210</u>

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	<i>Notes</i>	31 December 2021 US\$'000	31 December 2020 US\$'000
NON-CURRENT ASSETS			
Property, plant and equipment		3,116,501	2,510,442
Investment property		184,883	180,476
Right-of-use assets		75,331	79,221
Intangible assets		35,312	36,947
Investments in associates	<i>10</i>	122,040	105,218
Equity investments designated at fair value through other comprehensive income		257,788	230,265
Long term prepayments to third parties		15,573	10,768
Long term prepayments to related parties	<i>17(c)</i>	–	26
Deferred tax assets		3,479	8,965
		<hr/>	<hr/>
Total non-current assets		3,810,907	3,162,328
CURRENT ASSETS			
Properties under development		114,492	–
Inventories		432,917	226,476
Trade and notes receivables	<i>11</i>	181,042	120,952
Prepayments, other receivables and other assets		43,443	130,979
Due from related parties	<i>17(c)</i>	6,910	4,706
Pledged deposits	<i>12</i>	2,248	359
Cash and cash equivalents	<i>12</i>	1,610,140	922,786
		<hr/>	<hr/>
Total current assets		2,391,192	1,406,258
CURRENT LIABILITIES			
Trade payables	<i>13</i>	194,385	130,980
Other payables and accruals		560,435	386,305
Interest-bearing bank borrowings	<i>14</i>	195,024	47,784
Lease liabilities		1,676	4,235
Government grants		66,837	58,926
Due to related parties	<i>17(c)</i>	7,501	12,647
Income tax payable		54,543	24,171
		<hr/>	<hr/>
Total current liabilities		1,080,401	665,048
NET CURRENT ASSETS			
		<hr/>	<hr/>
TOTAL ASSETS LESS CURRENT LIABILITIES		5,121,698	3,903,538
		<hr/>	<hr/>

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	<i>Notes</i>	31 December 2021 US\$'000	31 December 2020 US\$'000
NON-CURRENT LIABILITIES			
Interest-bearing bank borrowings	<i>14</i>	1,395,279	518,391
Lease liabilities		16,137	17,405
Deferred tax liabilities		25,735	13,621
		<hr/>	<hr/>
Total non-current liabilities		1,437,151	549,417
		<hr/>	<hr/>
Net assets		3,684,547	3,354,121
		<hr/>	<hr/>
EQUITY			
Share capital		1,986,152	1,979,033
Reserves		884,207	549,409
		<hr/>	<hr/>
Total equity attributable to owners of the parent		2,870,359	2,528,442
Non-controlling interests		814,188	825,679
		<hr/>	<hr/>
Total equity		3,684,547	3,354,121
		<hr/>	<hr/>

NOTES TO FINANCIAL STATEMENTS

1. CORPORATE AND GROUP INFORMATION

Hua Hong Semiconductor Limited (the “Company”) is a limited liability company incorporated in Hong Kong on 21 January 2005. The registered office of the Company is located at Room 2212, Bank of America Tower, 12 Harcourt Road, Central, Hong Kong. The principal place of business is located at No. 288, Halei Road, Zhangjiang Hi-Tech Park, Shanghai.

The principal activity of the Company is investment holding. During the year, the Company’s subsidiaries were principally engaged in the manufacture and sale of semiconductor products and real estate development.

In the opinion of the directors, the parent and the ultimate parent of the Company is Shanghai Huahong (Group) Co., Ltd. (“Huahong Group”), which is a state-owned company established in the People’s Republic of China (“PRC”), supervised by the Shanghai State-owned Assets Supervision and Administration Commission.

2.1 BASIS OF PREPARATION

These financial statements have been prepared in accordance with Hong Kong Financial Reporting Standards (“HKFRSs”) (which include all Hong Kong Financial Reporting Standards, Hong Kong Accounting Standards (“HKASs”) and Interpretations) issued by the Hong Kong Institute of Certified Public Accountants (“HKICPA”), accounting principles generally accepted in Hong Kong and the Hong Kong Companies Ordinance. They have been prepared under the historical cost convention, except for an investment property, equity investments designated at fair value through other comprehensive income and financial assets at fair value through profit or loss which have been measured at fair value. These financial statements are presented in United States dollars (“US\$”) and all values are rounded to the nearest thousand except when otherwise indicated.

Basis of consolidation

The consolidated financial statements include the financial statements of the Company and its subsidiaries (collectively referred to as the “Group”) for the year ended 31 December 2021. A subsidiary is an entity (including a structured entity), directly or indirectly, controlled by the Company. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee (i.e., existing rights that give the Group the current ability to direct the relevant activities of the investee).

When the Company has, directly or indirectly, less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- (a) the contractual arrangement with the other vote holders of the investee;
- (b) rights arising from other contractual arrangements; and
- (c) the Group’s voting rights and potential voting rights.

The financial statements of the subsidiaries are prepared for the same reporting period as the Company, using consistent accounting policies. The results of subsidiaries are consolidated from the date on which the Group obtains control, and continue to be consolidated until the date that such control ceases.

Profit or loss and each component of other comprehensive income are attributed to the owners of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control described above. A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Group loses control over a subsidiary, it derecognises (i) the assets (including goodwill) and liabilities of the subsidiary, (ii) the carrying amount of any non-controlling interest and (iii) the cumulative translation differences recorded in equity; and recognises (i) the fair value of the consideration received, (ii) the fair value of any investment retained and (iii) any resulting surplus or deficit in profit or loss. The Group's share of components previously recognised in other comprehensive income is reclassified to profit or loss or retained profits, as appropriate, on the same basis as would be required if the Group had directly disposed of the related assets or liabilities.

2.2 CHANGES IN ACCOUNTING POLICIES AND DISCLOSURES

The Group has adopted the following revised HKFRSs for the first time for the current year's financial statements.

Amendments to HKFRS 9, HKAS 39,
HKFRS 7, HKFRS 4 and HKFRS 16
Amendment to HKFRS 16

Interest Rate Benchmark Reform – Phase 2

Covid-19-Related Rent Concessions beyond 30 June 2021 (early adopted)

The nature and the impact of the revised HKFRSs are described below:

- (a) Amendments to HKFRS 9, HKAS 39, HKFRS 7, HKFRS 4 and HKFRS 16 address issues not dealt with in the previous amendments which affect financial reporting when an existing interest rate benchmark is replaced with an alternative risk-free rate ("RFR"). The amendments provide a practical expedient to allow the effective interest rate to be updated without adjusting the carrying amount of financial assets and liabilities when accounting for changes in the basis for determining the contractual cash flows of financial assets and liabilities, if the change is a direct consequence of the interest rate benchmark reform and the new basis for determining the contractual cash flows is economically equivalent to the previous basis immediately preceding the change. In addition, the amendments permit changes required by the interest rate benchmark reform to be made to hedge designations and hedge documentation without the hedging relationship being discontinued. Any gains or losses that could arise on transition are dealt with through the normal requirements of HKFRS 9 to measure and recognise hedge ineffectiveness. The amendments also provide a temporary relief to entities from having to meet the separately identifiable requirement when an RFR is designated as a risk component. The relief allows an entity, upon designation of the hedge, to assume that the separately identifiable requirement is met, provided the entity reasonably expects the RFR risk component to become separately identifiable within the next 24 months. Furthermore, the amendments require an entity to disclose additional information to enable users of financial statements to understand the effect of interest rate benchmark reform on an entity's financial instruments and risk management strategy.

The Group had certain interest-bearing bank borrowings denominated in United States dollars based on the London Interbank Offered Rate ("LIBOR") as at 31 December 2021. For the LIBOR-based borrowings, since the interest rates of these instruments were not replaced by RFRs during the year, the amendments did not have any impact on the financial position and performance of the Group. If the interest rates of these borrowings are replaced by RFRs in a future period, the Group will apply this the above-mentioned practical expedient upon the modification of these borrowings when instruments provided that the "economically equivalent" criterion is met.

- (b) Amendment to HKFRS 16 issued in April 2021 extends the availability of the practical expedient for lessees to elect not to apply lease modification accounting for rent concessions arising as a direct consequence of the covid-19 pandemic by 12 months. Accordingly, the practical expedient applies to rent concessions for which any reduction in lease payments affects only payments originally due on or before 30 June 2022, provided the other conditions for applying the practical expedient are met. The amendment is effective retrospectively for annual periods beginning on or after 1 April 2021 with any cumulative effect of initially applying the amendment recognised as an adjustment to the opening balance of retained profits at the beginning of the current accounting period. Earlier application is permitted.

The Group has early adopted the amendment on 1 January 2021. However, the Group has not received covid-19-related rent concessions and plans to apply the practical expedient when it becomes applicable within the allowed period of application.

2.3 ISSUED BUT NOT YET EFFECTIVE HONG KONG FINANCIAL REPORTING STANDARDS

The Group has not applied the following new and revised HKFRSs, that have been issued but are not yet effective, in these financial statements.

Amendments to HKFRS 3	<i>Reference to the Conceptual Framework</i> ¹
Amendments to HKFRS 10 and HKAS 28 (2011)	<i>Sale or Contribution of Assets between an Investor and its Associate or Joint Venture</i> ³
HKFRS 17	<i>Insurance Contracts</i> ²
Amendments to HKFRS 17	<i>Insurance Contracts</i> ^{2,5}
Amendments to HKAS 1	<i>Classification of Liabilities as Current or Non-current</i> ^{2,4}
Amendments to HKAS 1 and HKFRS Practice Statement 2	<i>Disclosure of Accounting Policies</i> ²
Amendments to HKAS 8	<i>Definition of Accounting Estimates</i> ²
Amendments to HKAS 12	<i>Deferred Tax related to Assets and Liabilities arising from a Single Transaction</i> ²
Amendments to HKAS 16	<i>Property, Plant and Equipment: Proceeds before Intended Use</i> ¹
Amendments to HKAS 37	<i>Onerous Contracts – Cost of Fulfilling a Contract</i> ¹
<i>Annual Improvements to HKFRSs 2018-2020</i>	Amendments to HKFRS 1, HKFRS 9, Illustrative Examples accompanying HKFRS 16, and HKAS 41 ¹

¹ Effective for annual periods beginning on or after 1 January 2022

² Effective for annual periods beginning on or after 1 January 2023

³ No mandatory effective date yet determined but available for adoption

⁴ As a consequence of the amendments to HKAS 1, Hong Kong Interpretation 5 *Presentation of Financial Statements – Classification by the Borrower of a Term Loan that Contains a Repayment on Demand Clause* was revised in October 2020 to align the corresponding wording with no change in conclusion

⁵ As a consequence of the amendments to HKFRS 17 issued in October 2020, HKFRS 4 was amended to extend the temporary exemption that permits insurers to apply HKAS 39 rather than HKFRS 9 for annual periods beginning before 1 January 2023

Further information about those HKFRSs that are expected to be applicable to the Group is described below.

Amendments to HKFRS 3 are intended to replace a reference to the previous *Framework for the Preparation and Presentation of Financial Statements* with a reference to the *Conceptual Framework for Financial Reporting* issued in June 2018 without significantly changing its requirements. The amendments also add to HKFRS 3 an exception to its recognition principle for an entity to refer to the Conceptual Framework to determine what constitutes an asset or a liability. The exception specifies that, for liabilities and contingent liabilities that would be within the scope of HKAS 37 or HK(IFRIC)-Int 21 if they were incurred separately rather than assumed in a business combination, an entity applying HKFRS 3 should refer to HKAS 37 or HK(IFRIC)-Int 21 respectively instead of the Conceptual Framework. Furthermore, the amendments clarify that contingent assets do not qualify for recognition at the acquisition date. The Group expects to adopt the amendments prospectively from 1 January 2022. Since the amendments apply prospectively to business combinations for which the acquisition date is on or after the date of first application, the Group will not be affected by these amendments on the date of transition.

Amendments to HKFRS 10 and HKAS 28 (2011) address an inconsistency between the requirements in HKFRS 10 and in HKAS 28 (2011) in dealing with the sale or contribution of assets between an investor and its associate or joint venture. The amendments require a full recognition of a gain or loss resulting from a downstream transaction when the sale or contribution of assets between an investor and its associate or joint venture constitutes a business. For a transaction involving assets that do not constitute a business, a gain or loss resulting from the transaction is recognised in the investor's profit or loss only to the extent of the unrelated investor's interest in that associate or joint venture. The amendments are to be applied prospectively. The previous mandatory effective date of amendments to HKFRS 10 and HKAS 28 (2011) was removed by the HKICPA in January 2016 and a new mandatory effective date will be determined after the completion of a broader review of accounting for associates and joint ventures. However, the amendments are available for adoption now.

Amendments to HKAS 1 *Classification of Liabilities as Current or Non-current* clarify the requirements for classifying liabilities as current or non-current. The amendments specify that if an entity's right to defer settlement of a liability is subject to the entity complying with specified conditions, the entity has a right to defer settlement of the liability at the end of the reporting period if it complies with those conditions at that date. Classification of a liability is unaffected by the likelihood that the entity will exercise its right to defer settlement of the liability. The amendments also clarify the situations that are considered a settlement of a liability. The amendments are effective for annual periods beginning on or after 1 January 2023 and shall be applied retrospectively. Earlier application is permitted. The amendments are not expected to have any significant impact on the Group's financial statements.

Amendments to HKAS 1 *Disclosure of Accounting Policies* require entities to disclose their material accounting policy information rather than their significant accounting policies. Accounting policy information is material if, when considered together with other information included in an entity's financial statements, it can reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements. Amendments to HKFRS Practice Statement 2 provide non-mandatory guidance on how to apply the concept of materiality to accounting policy disclosures. Amendments to HKAS 1 are effective for annual periods beginning on or after 1 January 2023 and earlier application is permitted. Since the guidance provided in the amendments to HKFRS Practice Statement 2 is non-mandatory, an effective date for these amendments is not necessary. The Group is currently assessing the impact of the amendments on the Group's accounting policy disclosures.

Amendments to HKAS 8 clarify the distinction between changes in accounting estimates and changes in accounting policies. Accounting estimates are defined as monetary amounts in financial statements that are subject to measurement uncertainty. The amendments also clarify how entities use measurement techniques and inputs to develop accounting estimates. The amendments are effective for annual reporting periods beginning on or after 1 January 2023 and apply to changes in accounting policies and changes in accounting estimates that occur on or after the start of that period. Earlier application is permitted. The amendments are not expected to have any significant impact on the Group's financial statements.

Amendments to HKAS 12 narrow the scope of the initial recognition exception so that it no longer applies to transactions that give rise to equal taxable and deductible temporary differences, such as leases and decommissioning obligations. Therefore, entities are required to recognise a deferred tax asset and a deferred tax liability for temporary differences arising from these transactions. The amendments are effective for annual reporting periods beginning on or after 1 January 2023 and shall be applied to transactions related to leases and decommissioning obligations at the beginning of the earliest comparative period presented, with any cumulative effect recognised as an adjustment to the opening balance of retained profits or other component of equity as appropriate at that date. In addition, the amendments shall be applied prospectively to transactions other than leases and decommissioning obligations. Earlier application is permitted. The amendments are not expected to have any significant impact on the Group's financial statements.

Amendments to HKAS 16 prohibit an entity from deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognises the proceeds from selling any such items, and the cost of those items, in profit or loss. The amendments are effective for annual periods beginning on or after 1 January 2022 and shall be applied retrospectively only to items of property, plant and equipment made available for use on or after the beginning of the earliest period presented in the financial statements in which the entity first applies the amendments. Earlier application is permitted. The amendments are not expected to have any significant impact on the Group's financial statements.

Amendments to HKAS 37 clarify that for the purpose of assessing whether a contract is onerous under HKAS 37, the cost of fulfilling the contract comprises the costs that relate directly to the contract. Costs that relate directly to a contract include both the incremental costs of fulfilling that contract (e.g., direct labour and materials) and an allocation of other costs that relate directly to fulfilling that contract (e.g., an allocation of the depreciation charge for an item of property, plant and equipment used in fulfilling the contract as well as contract management and supervision costs). General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract. The amendments are effective for annual periods beginning on or after 1 January 2022 and shall be applied to contracts for which an entity has not yet fulfilled all its obligations at the beginning of the annual reporting period in which it first applies the amendments. Earlier application is permitted. Any cumulative effect of initially applying the amendments shall be recognised as an adjustment to the opening equity at the date of initial application without restating the comparative information. The amendments are not expected to have any significant impact on the Group's financial statements.

Annual Improvements to HKFRSs 2018-2020 sets out amendments to HKFRS 1, HKFRS 9, Illustrative Examples accompanying HKFRS 16, and HKAS 41. Details of the amendments that are expected to be applicable to the Group are as follows:

- *HKFRS 9 Financial Instruments*: clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf. An entity applies the amendment to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment. The amendment is effective for annual periods beginning on or after 1 January 2022. Earlier application is permitted. The amendment is not expected to have a significant impact on the Group's financial statements.
- *HKFRS 16 Leases*: removes the illustration of payments from the lessor relating to leasehold improvements in Illustrative Example 13 accompanying HKFRS 16. This removes potential confusion regarding the treatment of lease incentives when applying HKFRS 16.

3. OPERATING SEGMENT INFORMATION

For management purposes, the Group is organised into one single business unit that includes primarily the manufacture and sale of semiconductor products. Management reviews the consolidated results when making decisions about allocating resources and assessing the performance of the Group. Accordingly, no segment analysis is presented.

The principal assets employed by the Group are located in Shanghai and Wuxi, the PRC. Therefore, no segment information based on the geographical location of non-current assets is presented for the year.

Revenues are attributed to geographical areas based on the locations of customers. Revenues by geographical segment based on the locations of customers for the year are presented as follows:

	2021 US\$'000	2020 US\$'000
China (including Hong Kong)	1,205,149	624,407
Asia (excluding China and Japan)	169,227	121,885
United States of America	159,281	121,642
Europe	70,627	66,149
Japan	26,470	27,196
	1,630,754	961,279

The Group is involved in the business of the manufacture and sale of semiconductor products. Revenue from the sale of semiconductor products is recognised at the point in time when control of the asset is transferred to the customer, generally on delivery of the semiconductor products, where the performance obligation is satisfied. The normal credit term is 30 to 45 days upon delivery. Payment in advance is required for some contracts.

Information about major customers

No revenue amounting to 10% or more of the Group's revenue was derived from sales to a single customer for the year ended 31 December 2021 (2020: Nil).

4. REVENUE, OTHER INCOME AND GAINS AND OTHER EXPENSES

An analysis of revenue, other income and gains and other expenses is as follows:

	2021 US\$'000	2020 US\$'000
<u>Revenue from contracts with customers</u>		
Sale of goods	1,630,754	961,279
<u>Other income</u>		
Gross rental income from investment property operating leases:		
Fixed lease payments	14,488	12,788
Interest income	13,437	10,707
Other interest income from financial assets at fair value through profit or loss	–	5,337
Government subsidies	7,288	11,680
Sale of scrap materials	586	278
Others	1,015	725
	36,814	41,515

	2021 US\$'000	2020 US\$'000
<u>Gains</u>		
Foreign exchange gains, net	23,944	15,798
	60,758	57,313
<u>Other expenses</u>		
Loss on disposal of items of property, plant and equipment	76	–
Others	89	10
	165	10
<u>Types of goods</u>		
Sales of semiconductor products and total revenue from contracts with customers	1,630,754	961,279
<u>Timing of revenue recognition</u>		
Goods transferred at a point in time and total revenue from contracts with customers	1,630,754	961,279

The disaggregation of the Group's revenue based on the geographical region for the year ended 31 December 2021 is given in note 3.

5. PROFIT BEFORE TAX

The Group's profit before tax is arrived at after charging/(crediting):

	2021 US\$'000	2020 US\$'000
Cost of inventories sold	1,179,156	726,486
Depreciation of property, plant and equipment	302,245	194,338
Depreciation of right-of-use assets	5,676	5,628
Amortisation of intangible assets	10,095	6,388
Research and development costs	86,068	108,042
Lease payments not included in the measurement of lease liabilities	1,572	637
Auditor's remuneration	660	597
Employee benefit expense (including directors' and chief executive's remuneration):		
Wages, salaries and other benefits	289,787	205,454
Equity-settled share option expense	296	8,144
Pension scheme contributions (defined contribution scheme)*	28,287	13,991
	318,370	227,589
Impairment of items of property, plant and equipment	3,914	1,136
Impairment of trade receivables	273	–
(Reversal)/write-down of inventories to net realisable value	(180)	5,614
Changes in fair value of an investment property	(183)	(198)

* There are no forfeited contributions that may be used by the Group as the employer to reduce the existing level of contributions.

6. FINANCE COSTS

	2021 US\$'000	2020 US\$'000
Interest on bank borrowings	12,347	2,005
Interest on lease liabilities	879	963
	<u>13,226</u>	<u>2,968</u>

7. INCOME TAX

Profits arising in Hong Kong were subject to profits tax at the rate of 16.5% during the year (2020: 16.5%). No provision for Hong Kong profits tax has been made as the Company and a subsidiary incorporated in Hong Kong had no assessable income during the year (2020: Nil).

The Company's subsidiary incorporated in the Cayman Islands is not subject to corporate income tax ("CIT") as it does not have a place of business (other than a registered office) or carry on any business in the Cayman Islands.

All of the Company's subsidiaries registered in the PRC and only having operations in Mainland China are subject to PRC enterprise income tax on the taxable income as reported in their PRC statutory accounts adjusted in accordance with relevant PRC income tax laws based on a statutory rate of 25%.

Pursuant to the relevant laws and regulations in the PRC and with approval from the tax authorities in charge, one of the Group's subsidiaries, HHGrace, is qualified as a "High and New Technology Enterprise" and was therefore entitled to a preferential tax rate of 15% from 2020 to 2023.

Pursuant to the relevant laws and regulations in the PRC and with approval from the tax authorities in charge, one of the Group's subsidiaries, Hua Hong Wuxi, is entitled to an exemption from CIT for five years, commencing from the first year that Hua Hong Wuxi generates taxable profit, and a deduction of 50% on the CIT rate for the following five years. Hua Hong Wuxi was in accumulated tax loss positions as at 31 December, 2021 and the tax holiday has not begun.

The Company's subsidiary incorporated and operating in Japan was subject to corporation tax at a rate of 33.58% (2020: 33.58%).

The Company's subsidiary incorporated and operating in the United States was subject to federal corporation income tax at a rate of 21% during the year (2020: 21%), as well as state tax at 8.84% (2020: 8.84%).

The major components of income tax expense of the Group are as follows:

	2021 US\$'000	2020 US\$'000
Current income tax – PRC	49,910	18,414
Current income tax – elsewhere	41	37
Deferred tax	<u>15,398</u>	<u>(5,689)</u>
	<u>65,349</u>	<u>12,762</u>

A reconciliation of the tax expense applicable to profit before tax at the statutory rate of 25% for the jurisdiction in which the Company and the majority of its subsidiaries are domiciled to the tax expense at the effective tax rate is as follows:

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
Profit before tax	296,320	46,077
Tax at the statutory tax rate of 25%	74,080	11,519
Effect of different tax rates for specific provinces and countries or enacted by local authority	(39,700)	(18,620)
Adjustments in respect of current tax of previous periods	71	54
Profits attributable to associates	(1,015)	(3,909)
Expenses not deductible for tax	153	215
Tax losses not recognised due to tax holiday	47,629	47,042
Tax losses not recognised due to improbable future taxable profits	2,144	189
Temporary differences not recognised	927	170
Additional deduction of research and development costs	(33,753)	(18,988)
Effect of withholding tax at 10% (2020: 10%) on the distributable profits of the Group's PRC subsidiary	14,813	(4,910)
Tax charge at the Group's effective rate	65,349	12,762

8. DIVIDEND

The directors did not recommend the payment of any dividend for the year ended 31 December 2021 (2020: Nil).

9. EARNINGS PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE PARENT

The calculation of the basic earnings per share amount is based on the profit for the year attributable to ordinary equity holders of the parent and the weighted average number of ordinary shares of 1,300,169,098 (2020: 1,293,227,187) in issue during the year.

The calculation of the diluted earnings per share amount is based on the profit for the year attributable to ordinary equity holders of the parent. The weighted average number of ordinary shares used in the calculation is the number of ordinary shares in issue during the year, as used in the basic earnings per share calculation, and the weighted average number of ordinary shares assumed to have been issued at the exercise price on the deemed exercise or conversion of all dilutive potential ordinary shares into ordinary shares.

The calculations of basic and diluted earnings per share are based on:

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
<u>Earnings</u>		
Profit attributable to ordinary equity holders of the parent	261,476	99,443
	Number of shares	
	2021	2020
<u>Shares</u>		
Weighted average number of ordinary shares in issue during the year used in the basic earnings per share calculation	1,300,169,098	1,293,227,187
Effect of dilution – weighted average number of ordinary shares:		
Share options	19,996,637	17,386,000
	1,320,165,735	1,310,613,187

10. INVESTMENTS IN ASSOCIATES

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
Carrying amount	122,040	105,218

Particulars of the material associate are as follows:

Name of company	Place of registration and business	Paid-in capital <i>RMB'000</i>	Percentage of equity interest attributable to the Group	Principal activities
Shanghai Huahong Technology Development Co., Ltd. (“Huahong Technology Development”)	PRC/Mainland China	548,000	50%	Technology development and investment

The Group’s voting power held and profit sharing arrangement in relation to Huahong Technology Development are 40% and 50%, respectively.

The Group’s shareholding in the associate is held through a wholly-owned subsidiary of the Company.

The following table illustrates the summarised financial information of Huahong Technology Development:

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
Current assets	27,884	34,869
Non-current assets	324,496	311,701
Current liabilities	(100,312)	(114,178)
Non-current liabilities	(23,233)	(21,956)
Net assets	<u>228,835</u>	<u>210,436</u>
Net assets, excluding goodwill	228,835	210,436
Reconciliation to the Group's interest in the associate:		
Proportion of the Group's interest in the associate	50%	50%
Carrying amount of the investment	<u>114,418</u>	<u>105,218</u>
	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
Revenue	29,423	21,214
Profit and total comprehensive income	<u>13,342</u>	<u>52,118</u>

The following table illustrates the aggregate financial information of the Group's associate that is not individually material:

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
Share of the associate's profit and total comprehensive income for the year	94	—
Aggregate carrying amount of the Group's investment in the associate	<u>7,622</u>	<u>—</u>

11. TRADE AND NOTES RECEIVABLES

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
Trade receivables	154,339	97,809
Notes receivable	<u>28,424</u>	<u>24,762</u>
	182,763	122,571
Impairment of trade receivables	<u>(1,721)</u>	<u>(1,619)</u>
	<u>181,042</u>	<u>120,952</u>

The Group's trading terms with its customers are mainly on credit and the credit period is generally 30 to 45 days. There is no significant concentration of credit risk. The Group does not hold any collateral or other credit enhancements over its trade receivable balances. Trade receivables are non-interest-bearing.

An ageing analysis of the trade receivables, based on the invoice date and net of loss allowances, is as follows:

	2021 US\$'000	2020 <i>US\$'000</i>
Within 3 months	149,900	91,156
3 to 6 months	2,718	4,849
Over 6 months but within one year	<u>–</u>	<u>185</u>
	<u>152,618</u>	<u>96,190</u>

The movements in loss allowance for impairment of trade receivables are as follows:

	2021 US\$'000	2020 <i>US\$'000</i>
At 1 January	1,619	1,529
Impairment losses, net (<i>note 5</i>)	273	–
Write-off	(199)	–
Exchange realignment	<u>28</u>	<u>90</u>
As at 31 December	<u>1,721</u>	<u>1,619</u>

The Group applies a simplified approach in calculating ECLs prescribed by HKFRS 9, which permits the use of the lifetime expected loss for all trade receivables. To measure the expected credit losses, trade and notes receivables have been grouped based on shared credit risk characteristics and the days past due. The expected credit losses have also incorporated forward-looking information. The expected credit loss rates for trade and notes receivables that were not yet past due or aged within 3 months are minimal.

The credit quality of the trade receivables is as follows:

	2021 US\$'000	2020 <i>US\$'000</i>
Neither past due nor impaired	152,574	89,676
Less than 1 month past due	44	6,164
1 to 3 months past due	–	325
3 to 6 months past due	–	25
Past due and impaired	<u>1,721</u>	<u>1,619</u>
	<u>154,339</u>	<u>97,809</u>

12. CASH AND CASH EQUIVALENTS AND PLEDGED DEPOSITS

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
Cash and bank balances	379,995	226,582
Time deposits	<u>1,232,393</u>	<u>696,563</u>
	1,612,388	923,145
Less: pledged deposits:		
Pledged deposits for letters of credit	(2,221)	(332)
Others	<u>(27)</u>	<u>(27)</u>
Cash and cash equivalents	<u><u>1,610,140</u></u>	<u><u>922,786</u></u>

At the end of the reporting period, the cash and bank balances and time deposits of the Group denominated in Renminbi (“RMB”) amounted to US\$975,405,000 (2020: US\$630,887,000). The RMB is not freely convertible into other currencies; however, under Mainland China’s Foreign Exchange Control Regulations and Administration of Settlement, Sale and Payment of Foreign Exchange Regulations, the Group is permitted to exchange RMB for other currencies through banks authorised to conduct foreign exchange business.

Cash at banks earns interest at floating rates based on daily bank deposit rates. Short term time deposits are made for varying periods of between seven days and three months depending on the immediate cash requirements of the Group and earn interest at the respective short term time deposit rates. The bank balances are deposited with creditworthy banks with no recent history of default.

13. TRADE PAYABLES

An ageing analysis of the trade payables of the Group as at the end of the reporting period, based on the invoice date, is as follows:

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
Within 1 month	131,102	91,935
1 to 3 months	41,450	20,514
3 to 6 months	7,223	6,041
6 to 12 months	2,767	1,946
Over 12 months	<u>11,843</u>	<u>10,544</u>
	<u><u>194,385</u></u>	<u><u>130,980</u></u>

The trade payables are unsecured, non-interest-bearing and are normally settled on terms of 30 to 60 days.

14. INTEREST-BEARING BANK BORROWINGS

	2021		
	Effective interest rate (%)	Maturity	US\$'000
Current			
Bank loans – unsecured	12-month LIBOR+0.50 to 12-month LIBOR+0.80	2022	180,989
Current portion of long term bank loans – secured	LPR5Y-0.55 to LPR5Y-0.30	2022	1,050
Current portion of long term bank loans – secured	1.20	2022	4,705
Current portion of long term bank loans – secured	6-month LIBOR+1.48	2022	8,280
			<u>195,024</u>
Non-current			
Secured bank loans	LPR5Y-0.55 to LPR5Y-0.30	2023-2024	10,378
Secured bank loans	1.20	2023-2025	14,116
	6-month LIBOR-0.50 to 6-month LIBOR-0.22	2024-2028	94,000
Secured bank loans	6-month LIBOR+1.48	2023-2028	1,276,785
			<u>1,395,279</u>
			<u><u>1,590,303</u></u>
	2020		
	Effective interest rate (%)	Maturity	US\$'000
Current			
Bank loans – unsecured	12-month LIBOR+0.57	2021	43,186
Current portion of long term bank loans – secured	1.20	2021	4,598
			<u>47,784</u>
Non-current			
Secured bank loans	1.20	2022-2025	18,391
Secured bank loans	6-month LIBOR+1.20 to 6-month LIBOR+1.48	2022-2028	500,000
			<u>518,391</u>
			<u><u>566,175</u></u>

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
Analysed into:		
Bank loans repayable:		
Within one year	195,024	47,784
In the second year	107,943	4,849
In the third to fifth years, inclusive	677,961	153,542
Beyond five years	609,375	360,000
	<u>1,590,303</u>	<u>566,175</u>

Except for bank loans of US\$30,249,000 (2020: US\$22,989,000) which are denominated in RMB, all borrowings are dominated in United States dollars.

As at 31 December 2021 and 2020, certain of the Group's bank loans were secured by pledges of the Group's assets with carrying values as follows:

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
Property, plant and equipment	2,256,289	1,289,808
Right-of-use assets	46,604	46,636
	<u>2,302,893</u>	<u>1,336,444</u>

15. SHARE OPTION SCHEME

The Company operates a share option scheme (the “Scheme”) for the purpose of providing incentives and rewards to eligible participants who contribute to the success of the Group’s operations. The Scheme includes two batches, each of which was effective on 4 September 2015 (the “2015 Options”) and on 24 December 2018 (the “2018 Options”), respectively. Eligible participants of the Scheme include the Company’s directors, including a non-executive director, an executive director and other employees of the Group. The share options, unless otherwise cancelled or amended, will remain in force for 7 years from the respective effective dates.

The maximum number of unexercised share options currently permitted to be granted under the Scheme is an amount equivalent, upon their exercise, to 10% of the shares of the Company in issue at any time. The maximum number of shares issuable under share options to each eligible participant in the Scheme within any 12-month period is limited to 1% of the shares of the Company in issue at any time. Any further grant of share options in excess of this limit is subject to shareholders’ approval in a general meeting.

Share options granted to a director, chief executive or substantial shareholder of the Company, or to any of their associates, are subject to approval in advance by the independent non-executive directors. In addition, any share options granted to a substantial shareholder or an independent non-executive director of the Company, or to any of their associates, in excess of 0.1% of the shares of the Company in issue at any time or with an aggregate value (based on the price of the Company’s shares at the date of grant) in excess of HK\$5 million, within any 12-month period, are subject to shareholders’ approval in advance in a general meeting.

The exercise period of the share options granted is determinable by the directors, and commences after a vesting period of two to five years and ends on a date which is not later than the expiry date of the Scheme.

The exercise price of share options is determinable by the directors, but may not be less than the higher of (i) the Stock Exchange closing price of the Company’s shares on the date of offer of the share options; and (ii) the average Stock Exchange closing price of the Company’s shares for the five trading days immediately preceding the date of offer.

Share options do not confer rights on the holders to dividends or to vote at shareholders’ meetings.

2015 Options

The following 2015 Options were outstanding during the year:

	2021		2020	
	Weighted average exercise price <i>HK\$ per share</i>	Number of options <i>’000</i>	Weighted average exercise price <i>HK\$ per share</i>	Number of options <i>’000</i>
At 1 January	6.912	5,935	6.912	13,947
Exercised during the year	6.912	(1,197)	6.912	(7,892)
Forfeited during the year	6.912	—	6.912	(120)
At 31 December	6.912	<u>4,738</u>	6.912	<u>5,935</u>

The exercise prices and exercise periods of the outstanding 2015 Options as at the end of the reporting period are as follows:

2021 Number of options '000	2020 Number of options '000	Exercise price* HK\$ per share	Exercise period
1,952	2,551	6.912	4 September 2018 to 3 September 2022
2,786	3,384	6.912	4 September 2019 to 3 September 2022
4,738	5,935		

* The exercise price of the share options is subject to adjustment in the case of rights or bonus issues, or other similar changes in the Company's share capital.

No share option expense of the 2015 Options was recognised (2020: Nil) during the year.

The 1,197,000 (2020: 7,892,000) share options exercised under the 2015 Options during the year resulting in the issue of 1,197,000 (2020: 7,892,000) ordinary shares of the Company for a total cash consideration of US\$1,065,000 (2020: US\$7,035,000). An amount of US\$465,000 (2020: US\$3,080,000) was transferred from the share option reserve to share capital upon the exercise of the share options.

At the end of the reporting period, the Company had 4,738,000 2015 Options outstanding. The exercise in full of the outstanding share options would, under the present capital structure of the Company, result in the issue of 4,738,000 additional ordinary shares of the Company and additional share capital of US\$6,038,000 (including US\$1,838,000 transferred from the share option reserve to share capital).

At the date of approval of these financial statements, the Company had 4,557,999 2015 Options outstanding, which represented approximately 0.4% of the Company's shares in issue as at that date.

2018 Options

The following 2018 Options were outstanding during the year:

	2021		2020	
	Weighted average exercise price HK\$ per share	Number of options '000	Weighted average exercise price HK\$ per share	Number of options '000
At 1 January	15.310	33,547	15.303	35,811
Exercised during the year	15.088	(2,177)	15.056	(1,106)
Forfeited during the year	15.357	(6,407)	15.266	(1,158)
At 31 December	15.317	24,963	15.310	33,547

The exercise prices and exercise periods of the 2018 Options outstanding as at the end of the reporting period are as follows:

2021 Number of options '000	2020 Number of options '000	Exercise price* HK\$ per share	Exercise period
6,954	9,188	15.056	24 December 2020 to 23 December 2025
4,943	10,219	15.056	24 December 2021 to 23 December 2025
9,859	10,220	15.056	24 December 2022 to 23 December 2025
1,025	1,058	15.056	24 December 2023 to 23 December 2025
62	125	18.400	29 March 2021 to 28 March 2026
125	125	18.400	29 March 2022 to 28 March 2026
125	125	18.400	29 March 2023 to 28 March 2026
125	125	18.400	29 March 2024 to 28 March 2026
316	763	17.952	23 December 2021 to 22 December 2026
677	762	17.952	23 December 2022 to 22 December 2026
677	762	17.952	23 December 2023 to 22 December 2026
75	75	17.952	23 December 2024 to 22 December 2026
24,963	33,547		

* The exercise price of the share options is subject to adjustment in the case of rights or bonus issues, or other similar changes in the Company's share capital.

The Group recognised a share option expense of the 2018 Options of US\$296,000 (2020: US\$8,144,000) during the year.

The 2,177,000 (2020: 1,106,000) share options exercised under the 2018 Options during the year, resulting in the issue of 2,177,000 (2020: 1,106,000) ordinary shares of the Company for a total cash consideration of US\$4,235,000 (2020: US\$2,140,000). An amount of US\$1,354,000 (2020: US\$683,000) was transferred from the share option reserve to share capital upon the exercise of the share options, as further detailed in note 30 to the financial statements.

At the end of the reporting period, the Company had 24,963,000 2018 Options outstanding. The exercise in full of the outstanding share options would, under the present capital structure of the Company, result in the issue of 24,963,000 additional ordinary shares of the Company and additional share capital of US\$65,144,000 (including US\$16,111,000 transferred from the share option reserve to share capital).

At the date of approval of these financial statements, the Company had 24,551,436 2018 Options outstanding, which represented approximately 1.9% of the Company's shares in issue as at that date.

16. COMMITMENTS

The Group had the following capital commitments at the end of the reporting period:

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
Contracted, but not provided for:		
Property, plant and equipment	<u><u>283,019</u></u>	<u><u>180,581</u></u>

17. RELATED PARTY TRANSACTIONS AND BALANCES

(a) Name and relationship

Name of related party	Relationship with the Group
Huahong Group and its subsidiaries	
– Hua Hong International Inc. (“Huahong International”)	26.9% shareholder of the Company
– Shanghai Huahong Zealcore Electronics Co., Ltd. (“Huahong Zealcore”)	Subsidiary of Huahong Group
– Shanghai Hongri International Electronics Co., Ltd. (“Hongri”)	Subsidiary of Huahong Group
– Shanghai Integrated Circuit Research and Development Center (“ICRD”)	Subsidiary of Huahong Group
– Shanghai Hua Hong Jitong Smart System Co., Ltd. (“Jitong”)	Subsidiary of Huahong Group
– Shanghai Huali	Subsidiary of Huahong Group
NEC Corporation (“NEC”)*	Shareholder of the Company (before 19 February 2021)
– NEC Management Partner, Ltd. (“NEC Management”)	Subsidiary of NEC
SAIL and its subsidiaries	
– Shanghai Alliance Investment Ltd. (“SAIL”)	Holding company of Sino-Alliance International Ltd.
– Sino-Alliance International Ltd. (“SAIL International”)	14.5% shareholder of the Company
– QST**	Subsidiary of SAIL (before 1 September 2020)
INESA and its subsidiaries	
– INESA (Group) Co., Ltd. (“INESA”)**	Shareholder of Huahong Group
– Shanghai INESA Intelligent Electronics Co., Ltd. (“Shanghai INESA”)**	Subsidiary of INESA
– Shanghai Nanyang Software System Integration Co., Ltd. (“Nanyang Software”)**	Subsidiary of INESA
– Shanghai Nanyang Wanbang Software Technology Co., Ltd. (“Wanbang”)**	Subsidiary of INESA
Huahong Technology Development	Associate of the Group
– Shanghai Huahong Real Estate Co., Ltd. (“Huahong Real Estate”)	Subsidiary of Huahong Technology Development
– Shanghai Huajin Property Management Co., Ltd. (“Huajin”)	Subsidiary of Huahong Technology Development

* NEC disposed of all of its shareholdings in the Company on 19 February 2021. From then on, NEC and its subsidiaries are no longer related parties to the Group.

** QST issued new ownership interests to third parties on 1 September 2020 and therefore a dilution in the SAIL’s interests occurred. From then on, QST ceased to be a subsidiary of SAIL and is no longer a related party to the Group.

*** INESA, a shareholder of Huahong Group, and its subsidiaries are no longer related parties to the Group since 1 January 2021.

(b) Related party transactions

In addition to the transactions and balances disclosed elsewhere in these financial statements, the Group had the following material transactions with related parties during the year:

	2021 US\$'000	2020 US\$'000
Sales of goods to related parties (<i>note (i)</i>)		
ICRD [#]	8,742	8,861
Huahong Zealcore [#]	6,404	2,797
Hongri [#]	3,376	2,056
QST	–	3,027
Shanghai Huali	–	42
	=====	=====
Purchases of goods from related parties (<i>note (ii)</i>)		
Hongri [#]	18,247	15,321
Huahong Zealcore [#]	688	525
Shanghai Huali	519	1,832
Jitong	249	280
NEC Management	233	1,375
ICRD	–	2,065
	=====	=====
Purchases of intangible assets from related parties (<i>note (ii)</i>)		
Shanghai Huali	–	17,100
ICRD	–	1,350
	=====	=====
Rental income from a related party (<i>note (iii)</i>)		
Shanghai Huali [#]	14,497	13,036
	=====	=====
Service fees charged by related parties (<i>note (iv)</i>)		
Huajin	338	224
Huahong Real Estate	28	51
Shanghai INESA	–	3,453
Wanbang	–	388
Nanyang Software	–	33
	=====	=====
Interest expense charge by a related party (<i>notes (iv and vi)</i>)		
Huahong Real Estate	795	788
	=====	=====
Expense paid on behalf of a related party (<i>note (v)</i>)		
Shanghai Huali	30,760	26,641
	=====	=====

The related party transactions also constitute continuing connected transactions as defined in Chapter 14A of the Listing Rules.

Note (i) The sales of goods to related parties were made according to the prices and terms agreed between the related parties.

Note (ii) The purchases of goods and intangible assets from related parties were made according to the prices and terms offered by the related parties.

Note (iii) The rental income received from a related party was based on the prices and terms agreed between the related parties.

Note (iv) The service fees and interest expense charged by related parties were based on the prices and terms agreed between the related parties.

Note (v) The expense paid on behalf of the related party is interest-free and repayable on demand.

Note (vi) The Group entered into a 20-year lease in respect of certain dormitory properties from Huahong Real Estate. The amount of rent payable by the Group under the lease is US\$1,783,000 per year. At 31 December 2021, the balances of those right-of-use assets and lease liabilities were US\$14,573,000 (2020: US\$15,426,000) and US\$17,225,000 (2020: US\$17,845,000), respectively.

(c) Outstanding balances with related parties

	2021 US\$'000	2020 <i>US\$'000</i>
Long-term prepayments to related parties		
Jitong	—	26
	—	26
	<u>—</u>	<u>26</u>
Amounts due from related parties		
Shanghai Huali	6,359	3,046
Huahong Zealcore	406	489
ICRD	145	1,171
	6,910	4,706
	<u>6,910</u>	<u>4,706</u>

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
Amounts due to related parties		
Shanghai Huali	3,673	5,639
Hongri	2,995	4,695
ICRD	468	468
Huahong Zealcore	304	255
Jitong	32	29
Huahong Real Estate	24	12
Huajin	5	3
Shanghai INESA	–	988
NEC Management	–	365
Wanbang	–	188
Nanyang Software	–	5
	<u>7,501</u>	<u>12,647</u>

(d) Compensation of key management personnel of the Group

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
Short term employee benefits	6,569	3,960
Pension scheme contributions	81	59
Equity-settled share option expense	<u>364</u>	<u>1,047</u>
Total compensation paid to key management personnel	<u>7,014</u>	<u>5,066</u>

SIGNIFICANT EVENTS AFTER THE REPORTING PERIOD

There is no material subsequent event affecting the Group after 31 December 2021.

AUDIT COMMITTEE

The audit committee of the Board, comprising all the independent non-executive directors of the Company, has reviewed the results of the Group for the year ended 31 December 2021 and has discussed with the management on the accounting principles and practices adopted by the Group, internal controls and financial reporting matters.

SCOPE OF WORK OF ERNST & YOUNG

The figures in respect of the Group's consolidated statement of financial position, consolidated statement of profit or loss and other comprehensive income and the related notes thereto for the year ended 31 December 2021 as set out in this preliminary announcement have been agreed by the Company's auditor, Ernst & Young, Certified Public Accountants, to the amounts set out in the Group's audited consolidated financial statements for the year. The work performed by Ernst & Young in this respect did not constitute an assurance engagement in accordance with Hong Kong Standards on Auditing, Hong Kong Standards on Review Engagements or Hong Kong Standards on Assurance Engagements issued by the HKICPA and consequently no assurance has been expressed by Ernst & Young on this announcement.

PUBLICATION OF ANNUAL RESULTS ON THE WEBSITES OF THE STOCK EXCHANGE AND THE COMPANY

This announcement is published on the website of the Stock Exchange (www.hkexnews.hk) and on the website of the Company (www.huahonggrace.com). The annual report for year ended 31 December 2021 containing information required by Appendix 16 of the Listing Rules will be dispatched to shareholders and published on the websites of the Stock Exchange and the Company in due course.

APPRECIATION

The Board would like to express its sincere appreciation to the shareholders, customers, suppliers and staff for their continued support to the Group.

By Order of the Board
Hua Hong Semiconductor Limited
Suxin Zhang
Chairman and Executive Director

Shanghai, PRC, 29 March 2022

As at the date of this announcement, the directors of the Company are:

Executive Directors

Suxin Zhang (*Chairman*)

Junjun Tang (*President*)

Non-executive Directors

Guodong Sun

Jing Wang

Jun Ye

Independent Non-executive Directors

Stephen Tso Tung Chang

Kwai Huen Wong, JP

Long Fei Ye