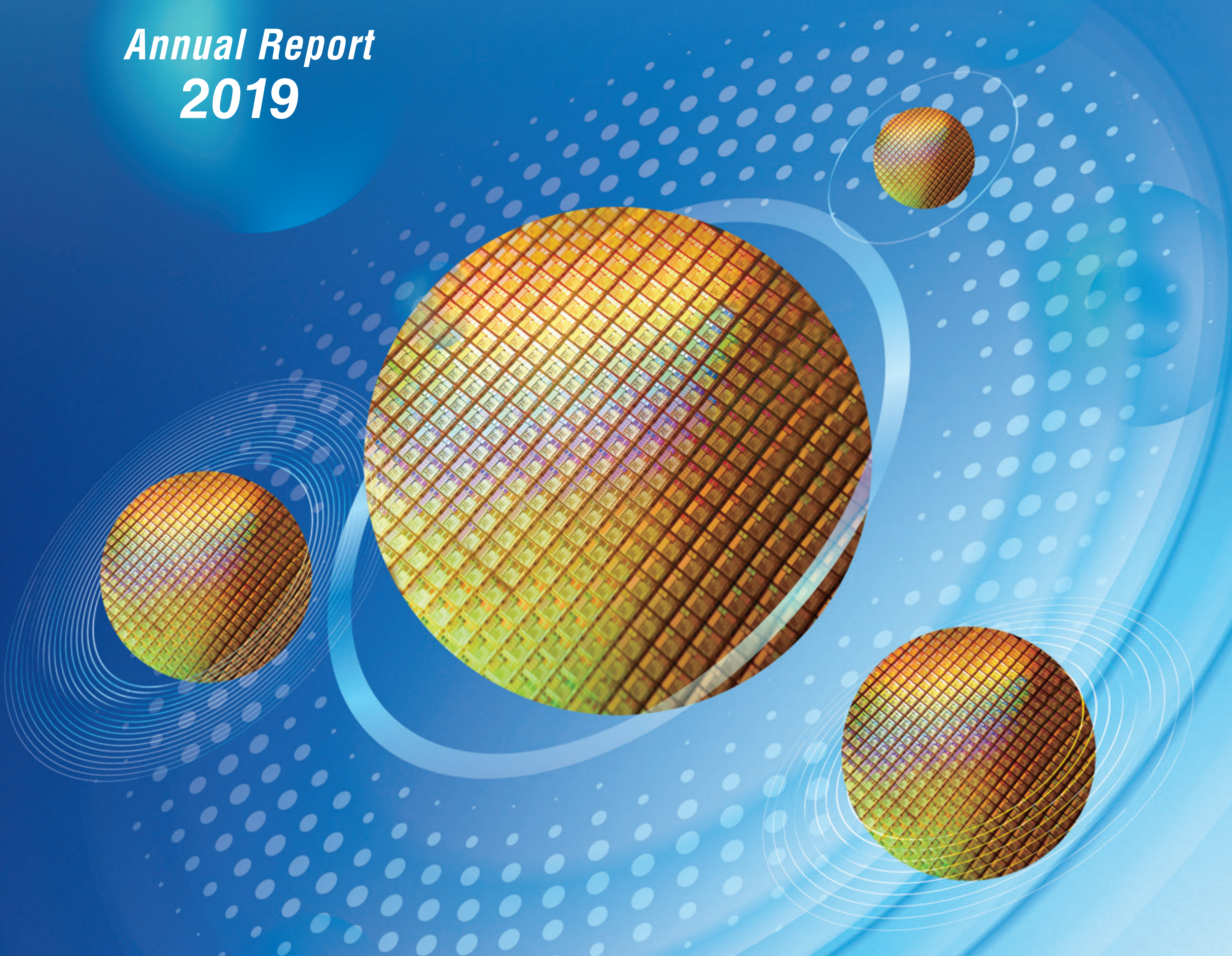
中芯國際集成電路製造有限公司*

Semiconductor Manufacturing International Corporation

(Incorporated in the Cayman Islands with limited liability)

Stock Code: 0981

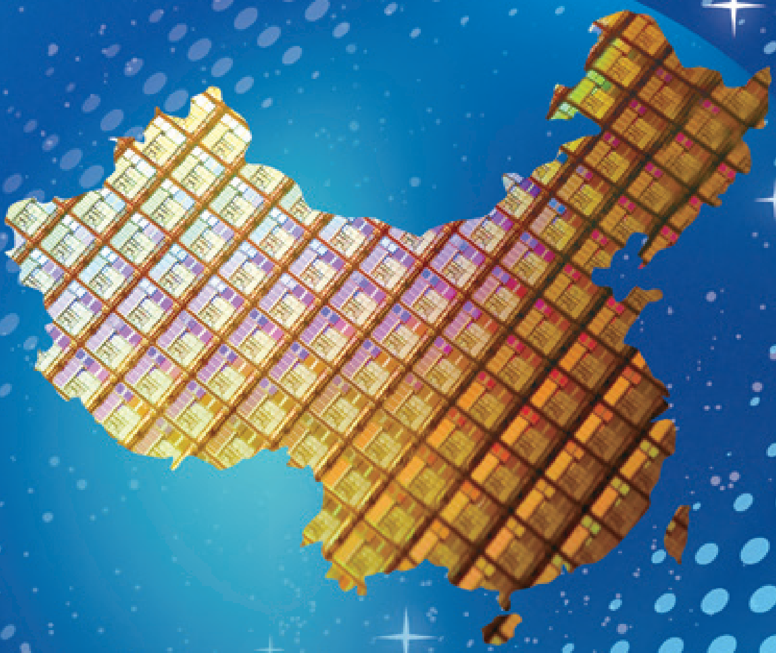
Annual Report 2019



* For identification purposes only

SMIC
GLOBAL NETWORK

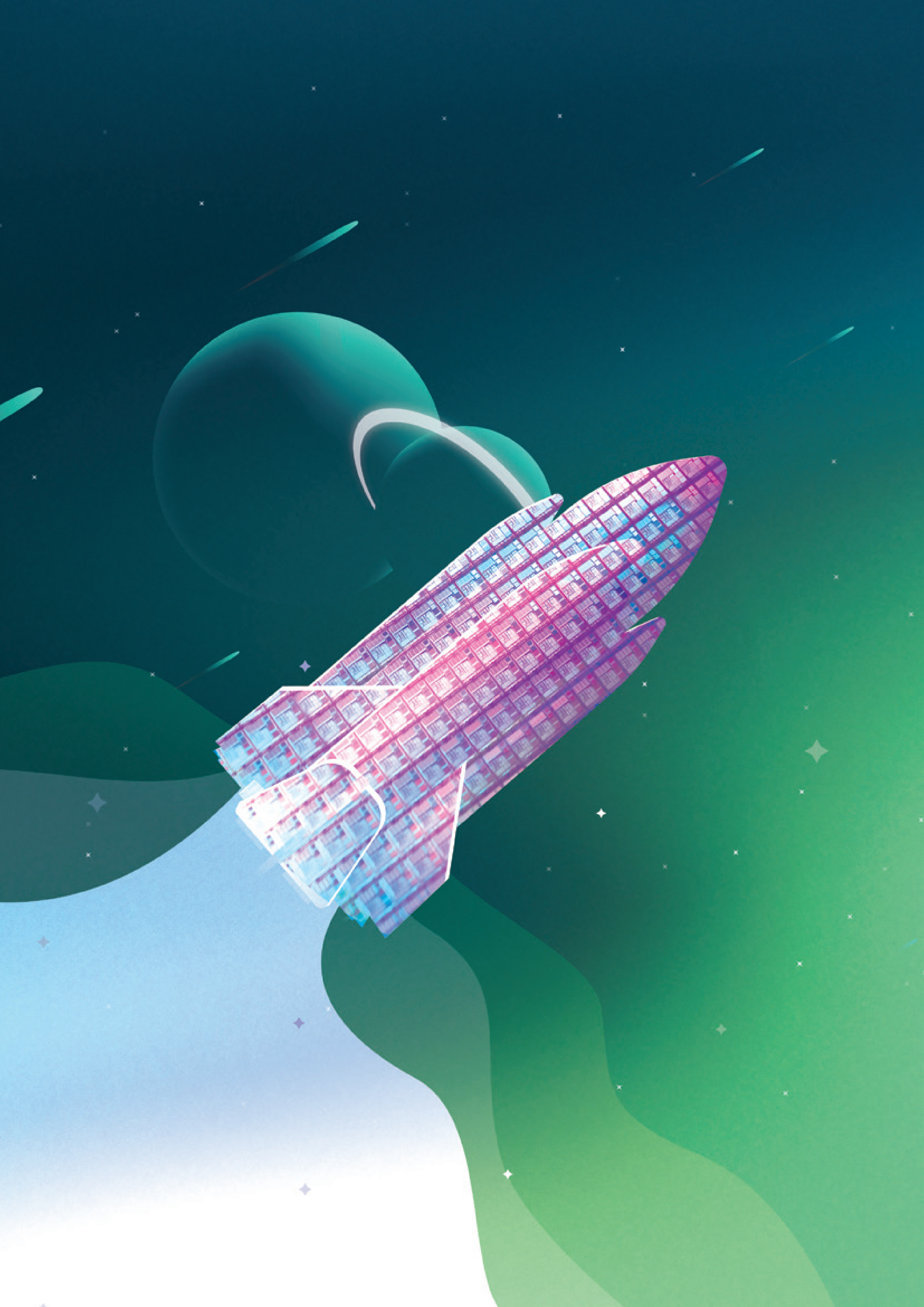
THE LARGEST ADVANCED FOUNDRY IN MAINLAND CHINA



EMPOWERED TECHNOLOGY

ENRICHED SERVICES,

ENHANCED COMPETITIVENESS



CONTENTS

CAUTIONARY STATEMENT FOR PURPOSES OF THE FORWARD-LOOKING STATEMENT

This annual report may contain, in addition to historical information, forward-looking statements. These forward-looking statements are based on SMIC's current assumptions, expectations, beliefs, plans, objectives, and projections about future events or performance. SMIC uses words like "believe", "anticipate", "intend", "estimate", "expect", "project", "target", "going forward", "continue", "ought to", "may", "seek", "should", "plan", "could", "vision", "goals", "aim", "aspire", "objective", "schedules", "outlook" and similar expressions to identify forward looking statements, although not all forward-looking statements contain these words. These forward-looking statements are necessary estimates reflecting judgment of SMIC's senior management and involve significant risks, both known and unknown, uncertainties and other factors that may cause SMIC's actual performance, financial condition or results of operations to be materially different from those suggested by the forward-looking statements including, among others, risks associated with cyclicality and market conditions in the semiconductor industry, intense competition in the semiconductor industry, SMIC's reliance on a small number of customers, timely wafer acceptance by SMIC's customers, timely introduction of new technologies, SMIC's ability to ramp new products into volume, supply and demand for semiconductor foundry services, industry overcapacity, shortages in equipment, components and raw materials, availability of manufacturing capacity, financial stability in end markets, orders or judgments from pending litigation, intensive intellectual property litigation in the semiconductor industry, general economic conditions and fluctuations in currency exchange rates.

Except as required by law, SMIC undertakes no obligation and does not intend to update any forward-looking statement, whether as a result of new information, future events or otherwise.

ABOUT NON-INTERNATIONAL FINANCIAL REPORTING STANDARDS ("NON-IFRS") FINANCIAL MEASURES

This annual report includes EBITDA, which is a non-IFRS financial measure. Such non-IFRS financial measure is not calculated or presented in accordance with, and are not alternatives or substitutes for financial measures prepared in accordance with IFRS, and should be read only in conjunction with the Group's financial measures prepared in accordance with IFRS. The Group's non-IFRS financial measures may be different from similarly-titled non-IFRS financial measures used by other companies. The presentation of non-IFRS financial measure is not intended to be considered in isolation or as a substitute for the financial information prepared and presented in accordance with IFRS. SMIC believes that use of these non-IFRS financial measures facilitates investors' and management's comparisons to SMIC's historical performance. The Group's management regularly uses these non-IFRS financial measures to understand, manage and evaluate the Group's business and make financial and operational decisions.

For more information and reconciliations of the non-IFRS financial measure to its most directly comparable IFRS financial measure, please see the disclosure on page 23.

ADDITIONAL INFORMATION

References in this annual report to:

- "2020 AGM" are to the Company's annual general meeting scheduled to be held on or around June 23, 2020;
- "Board" are to the board of Directors;
- "China" or the "PRC" are to the People's Republic of China, excluding for the purpose of this annual report, Hong Kong, Macau and Taiwan;
- "Company" or "SMIC" are to Semiconductor Manufacturing International Corporation;
- "Director(s)" are to the director(s) of the Company;
- "EUR" are to Euros;
- "Group" are to the Company and its subsidiaries;
- "HK$" are to Hong Kong dollars;
- "Hong Kong Stock Exchange Listing Rules", "Listing Rules" or "Hong Kong Listing Rules" are to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, as amended from time to time;
- "IFRS" are to International Financial Reporting Standards as issued by the International Accounting Standards Board;
- "JPY" are to Japanese Yen;
- "Ordinary Share(s)" are to the ordinary share(s), in the share capital of the Company, of US$0.0004 each before December 7, 2016 and to the ordinary share(s) of US$0.004 each upon the Share Consolidation becoming effective on December 7, 2016;
- "RMB" are to Renminbi;
- "SEHK", "HKSE" or "Hong Kong Stock Exchange" are to the Stock Exchange of Hong Kong Limited;
- "Share Consolidation" are to the consolidation of every ten (10) issued and unissued ordinary shares of US$0.0004 each in the existing share capital of the Company into one ordinary share of US$0.004 each with effect from December 7, 2016; and
- "US$" or "USD" are to U.S. dollars.

All references in this annual report to silicon wafer quantities are to 8-inch wafer equivalents, unless otherwise specified. Conversion of quantities of 12-inch wafers to 8-inch wafer equivalents is achieved by multiplying the number of 12-inch wafers by 2.25. When we refer to the capacity of wafer fabrication facilities, we are referring to the installed capacity based on specifications established by the manufacturers of the equipment used in those facilities. References to key process technology nodes, such as 0.35 micron, 0.25 micron, 0.18 micron, 0.15 micron, 0.13 micron, 90 nanometer, 65 nanometer, 45 nanometer, 28 nanometer and 14 nanometer include the stated resolution of the process technology, as well as intermediate resolutions down to but not including the next key process technology node of finer resolution. For example, when we state "0.25 micron process technology," that also includes 0.22 micron, 0.21 micron, 0.20 micron and 0.19 micron technologies and "0.18 micron process technology" also includes 0.17 micron and 0.16 micron technologies. The financial information presented in this annual report has been prepared in accordance with IFRS.


BEING
TRUSTWORTHY
AND RELIABLE
FOR OUR CUSTOMERS

CORPORATE INFORMATION

Registered name	Semiconductor Manufacturing International Corporation
Chinese name (for identification purposes only)	中芯國際集成電路製造有限公司
Registered office	PO Box 2681 Cricket Square Hutchins Drive Grand Cayman KY1-1111 Cayman Islands
Head office and place of business in PRC	18 Zhangjiang Road Pudong New Area Shanghai 201203 PRC
Place of business in Hong Kong	Suite 3003 30th Floor 9 Queen's Road Central Hong Kong
Website address	http://www.smics.com
Joint Company Secretaries	Gao Yonggang Liu Wei
Authorized representatives	Zhou Zixue Gao Yonggang
Places of listing	The Stock Exchange of Hong Kong Limited ("HKSE") On June 3, 2019, the Company filed the Form 25 with the U.S. Securities and Exchange Commission ("SEC") to effect the delisting of the Company's American Depositary Shares (ADSs). On June 14, 2019, the Company filed the Form 15F with the SEC to deregister and terminate its reporting obligations under the U.S. Securities Exchange Act. Since June 14, 2019, our ADSs are eligible for trading in the United States in the over-the-counter (OTC) market.
Stock code	981 (HKSE) SMICY (OTCQX)
Auditor	PricewaterhouseCoopers Certified Public Accountants and Registered PIE Auditor

Financial Calendar

Announcement of 2019 annual results	March 31, 2020
2020 Annual General Meeting	June 23, 2020
Book closure period for 2020 Annual General Meeting	June 18, 2020 to June 23, 2020, both days inclusive
Financial year end	December 31

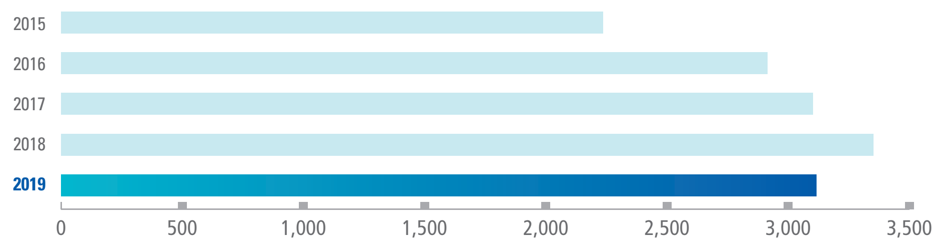
STRIVING FOR RETURNS

ON BEHALF OF SHAREHOLDERS

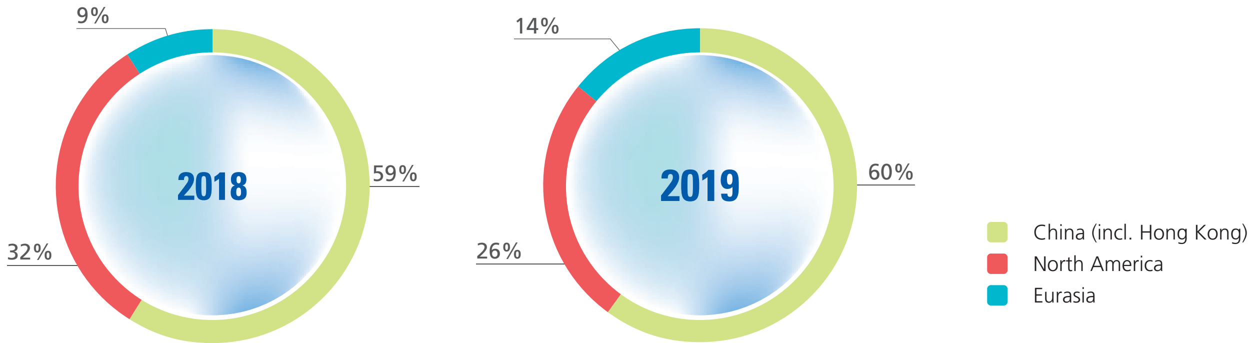
FINANCIAL HIGHLIGHTS

Total Revenue

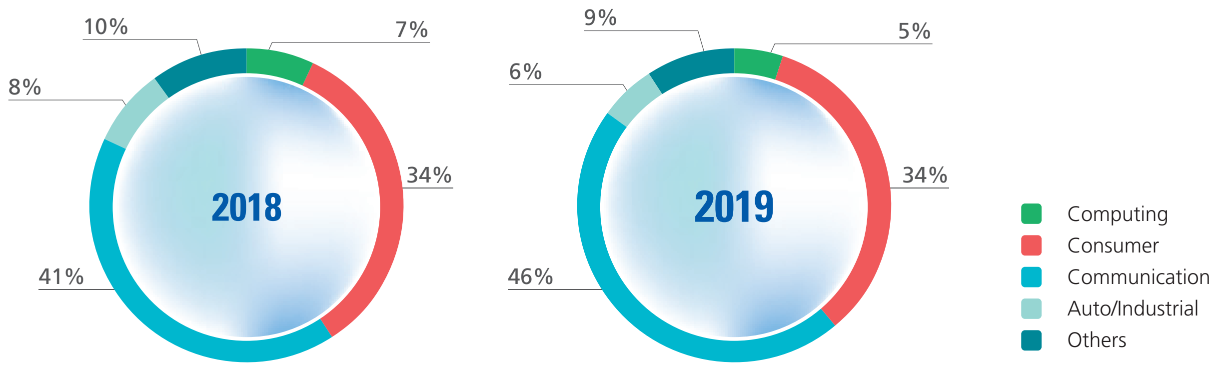
Revenue (US$ million)



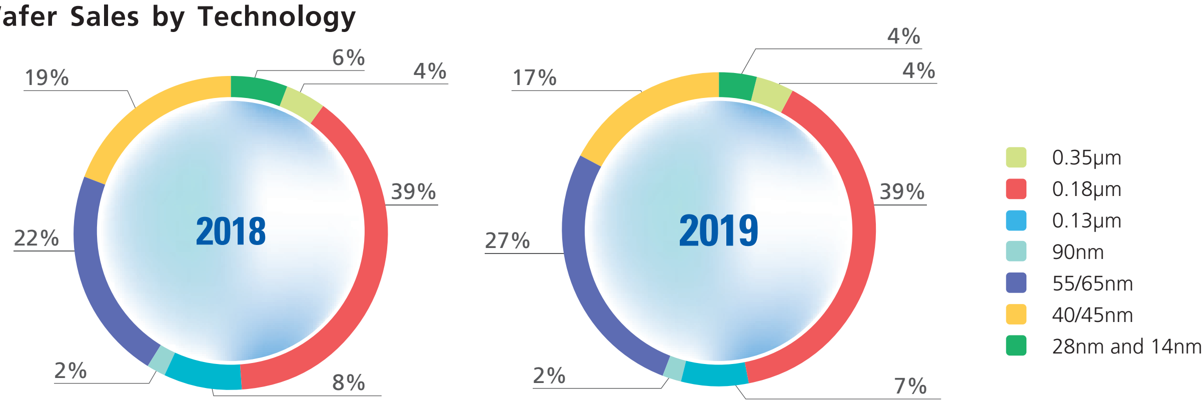
Sales by Region



Sales by Application



Wafer Sales by Technology



LETTER TO SHAREHOLDERS

LETTER TO SHAREHOLDERS

In 2019, the global economic environment faced many uncertainties, bringing challenges to the industry and the Company's operations. However, the Company has ridden the wave of industry changes and, through improvement and innovation, has sharpened its competitive edge, moved out of the transition period and returned to a stage of growth.

In 2019, the Company recorded total revenue of approximately US$3.116 billion, gross profit margin of 20.6%, net profit attributable to SMIC of US$235 million and a historical high EBITDA (earnings before interest, tax, depreciation and amortization) of US$1.37 billion. Contribution from Mainland China and Hong Kong, United States of America and Eurasia represented 59.5%, 26.4% and 14.1% of revenue respectively.

With regard to mature processes, customer demand remains strong. We continued to expand our product portfolio and mature specialty process technology applications, focusing our efforts on image sensors, power management, specialty memory, fingerprint sensors, Bluetooth and other product technology platforms to maintain our leading position in these sub-sectors. Mass production for our first generation of 14nm FinFET technology has commenced, contributing approximately 1% of wafer revenue for the fourth quarter of 2019, and is expected to steadily ramp up in 2020. Customer engagement for the second generation of FinFET continues. We have solidified our foundation and diversified our customer base in order to capture the business opportunities brought by such applications as 5G, Internet of Things and automotive electronics.

With a view to meeting customer and market demands, we shall commence a new round of capital expenditures and gradually expand production capacity in 2020. By the end of 2019, our cash-on-hand and financial assets (excluding restricted cash) was approximately US$4.6 billion, and net debt to equity ratio was approximately –6%. In February 2020, the Company successfully completed the issue of 5-year corporate bonds and raised approximately US$600 million in the global capital markets, reflecting the high recognition of global capital market to the Company's credit structure, financial strategy and industry development.

2019 was the seventh year in which we have sponsored the "SMIC Liver Transplant Program for Children." The Company announced in June 2019 that it had donated RMB2.32 million to China Soong Ching Ling Foundation for the program. In addition, our 62 industry business partners also donated RMB1.38 million to this program. The 7-year cumulative donation to the program is RMB24.80 million; through which, 420 afflicted and impoverished children from across the country have successfully received treatment and are able to enjoy their new lives. In early 2020, the novel coronavirus pandemic spread, the management of the Company was fully aware and carefully mapped out a plan to seriously prevent the spread of the disease on one hand and promote the production on the other, which enabled the Company to achieve stable operation during the pandemic. In February 2020, the employees and Directors of the Company together donated a total of RMB10 million for fighting against the new coronavirus pandemic, which reflected the Company's mission of "caring for people, environment and society".

In the coming years, the global macro environment is expected to be complex and the prospect of the semiconductor industry will still be full of challenges. However, the emergence of 5G and artificial intelligence will substantially stimulate market demand and new business opportunities for semiconductor industry growth. The accelerated development of these emerging applications will further boost semiconductor market demand. SMIC is currently in an unprecedented period of abundant opportunities. Over the past two years, through strenuous corporate reform, we have built up stronger and more competent R&D, operations, supporting teams, and management, while successfully developing and preparing a variety of technology platforms. We also have strengthened mutual trust and cooperation with domestic and oversea customers and suppliers. The foundation laid by these vigorous efforts has further strengthened our confidence in the future.

We would like to again express our sincere gratitude to our shareholders, customers, suppliers, and employees for their continued care and support of SMIC.

Zhou Zixue
Chairman of the Board and Executive Director

Zhao Haijun, Liang Mong Song
Co-Chief Executive Officers and Executive Directors

Shanghai, China
31 March, 2020

BUSINESS OVERVIEW

In 2019, the Group continued to successfully execute its long-term strategy with sustained profitability and at the same time advancing its technology capabilities on leading edge and value-added differentiated processes. The Group's technology portfolio and proximity to the China market, coupled with the management team's proven track record in operations, technology development and customer service, has positioned the Group well for long term growth. 2019 was a milestone year for SMIC in many aspects. It was the third year since the Group appointed Dr. Zhao Haijun and Dr. Liang Mong Song as Co-Chief Executive Officers, during which the Group generated annual revenue of US$3.12 billion. In 2019, the Group also continued to foster partnerships with leading industry players on 14nm Fin Field Effect Transistor ("FinFET") process technology. In 2019, there was significant progress on 14nm FinFET process with customers. The first generation of FinFET has already successfully begun mass production and began to contribute revenue in the fourth quarter; meanwhile, the development of second generation of FinFET is steady, and customer engagement is smooth. Our FinFET technology targets to address for mobile, wireless, computing, AI, IoT and automotive applications to expand our product and service offerings.

We believe the Group was the first pure-play foundry in Mainland China to enter into mass production with 28nm wafer process technology for mobile computing applications and the first pure-play foundry in Mainland China to offer 40nm embedded Flash ("eFlash"), Radio Frequencies ("RF") wafer solutions for SIM Card, Internet-of-Tings ("IoT") related wireless connectivity applications and 24nm NAND Flash memory wafer process technology. The Group also continued to drive its value-added wafer manufacturing process technologies for specialty products, such as Power Management IC ("PMIC"), Battery Management IC ("BMIC"), embedded Electrically Erasable Programmable Read-Only Memory ("eEEPROM"), eFlash, Microprocessor ("MCU"), Ultra-Low-Power technologies ("ULP"), RF and wireless connectivity, Touch Controller IC ("TCIC"), CMOS Image Sensors ("CIS") and Micro-Electrical-Mechanical System ("MEMS") sensors. These applications are the essential building blocks for the mobile computing market, the growing automotive electronics market and IoT market.

With an expanded manufacturing base, well-balanced technology portfolio and one-stop shop service offerings, the Group is well positioned with its global operations to serve both domestic and worldwide customers.

FINANCIAL OVERVIEW

Despite a challenging environment in 2019, the Group's sales totaled US$3,115.7 million, compared to US$3,360.0 million in 2018. Excluding the contribution from the Avezzano 200mm fab and the recognition of technology licensing revenue in 2018, the revenue in 2019 totaled US$3,014.0 million increased from US$2,973.1 million in 2018. The Group recorded a profit of US$158.9 million in 2019, an increase from US$77.2 million in 2018. During the year, we generated US$1,019.1 million in cash from operating activities, an increase of 27.5% from US$799.4 million in 2018. Capital expenditures in 2019 totaled US$2,032.6 million, compared to US$1,813.4 million in 2018. Looking ahead, our objective is to continue sustained profitability over the long term. To achieve this, we intend to focus on precision execution, efficiency improvement, customer service excellence while fostering innovation.

CUSTOMERS AND MARKETS

The Group continues to serve a broad global customer base comprising leading integrated device manufacturers, fabless semiconductor companies and system companies. Geographically, customers from the North America contributed 26.4% of the Group's overall revenue in 2019, compared to 31.6% in 2018. Leveraging on the Group's strategic position in China, our China revenue contributed 59.5% of the Group's overall revenue in 2019, compared to 59.1% in 2018. Eurasia contributed 14.1% of the overall revenue in 2019, compared to 9.3% in 2018.

In terms of applications, the Group has increased its revenue in communication applications from US$1,384.0 million in 2018 to US$1,423.8 million in 2019, representing 45.7% to the Group's overall revenue in 2019 as compared to 41.2% in 2018. Consumer applications contributed 34.3% to the Group's overall revenue in 2019 as compared to 34.4% in 2018. While the Group has very limited exposure to the PC market, the computer applications contributed 5.2% to the Group's overall revenue in 2019 as compared to 6.6% in 2018. The Group also has revenue in automotive and industrial applications for US$184.4 million in 2019 as compared to US$263.0 million in 2018, representing 5.9% to the Group's overall revenue in 2019 as compared to 7.8% in 2018. Furthermore, revenue in other related applications contributed US$276.3 million in 2019 as compared to US$335.5 million in 2018, representing 8.9% to the Group's overall revenue in 2019 as compared to 10.0% in 2018.

In terms of the revenue by technology, wafer revenue attributable to advanced technology at 90nm and below increased from 49.9% in 2018 to 50.7% in 2019, in particular, revenue contribution percentage from 65/55nm technology increased from 22.3% in 2018 to 27.3% in 2019. In addition, the Group continued to have steady revenue on 28nm, 40nm, 90nm, 0.13μm, 0.15/0.18μm, and 0.25μm/0.35μm related business in 2019.

We believe the Group is also well positioned with its continuous business growth in China. According to IHS Markit, China continues to be the number one region of the world in terms of semiconductor IC consumptions, mainly due to its high volume electronics manufacturing and mass consumer market. IHS estimates that US$208.5 billion worth of semiconductors were shipped to China in 2019, representing 49.1% of worldwide semiconductor value. In addition, we believe the overall local China's IC design market is still growing healthily and strongly. Local analyst, IHS Markit, estimated that the China's IC design market reached approximately US$40 billion in 2019, a 21.0% year to year increase from 2018 and projected that it might experience a compound annual growth rate of 21.4% till 2023, which would bring the worth of the China IC design market to US$86 billion by 2023. Global pure-play foundry market revenue year-on-year declined 3.2% in 2019 according to IHS Markit, relatively SMIC total revenue year-on-year increased by 1.4% in 2019 (Excluding the contribution from the Avezzano 200mm fab revenue US$101.7 million in 2018 and US$223.1 million in 2019, and excluding the recognized technology licensing revenue US$163.8 million authorized to an associate of Group in 2018). While the global pure-play foundry market is expected to grow by a compound annual growth rate of 8.5% during 2019 to 2023, our business revenue growth target is in line with the foundry industry growth rate.

Notably, as indicative of future revenue growth, we continued to see new designs using both specialty technology and advanced technology, in particular on 0.18μm, 0.11/0.13μm, 55/65nm, 40/45nm, 28nm and 14nm FinFET process technologies. The Group has, in each of its sales regions, customers utilizing its most competitive specialty technology and advanced node technology. We believe China is rapidly closing the gap with the rest of the world in terms of innovation and design capabilities. To fully leverage the market growth potential in China, the Group plans to continue to deepen its collaboration with Chinese customers while broadening relationships with its global customers and enable their success in China and various emerging markets, such as mobile computing, automotive electronics, IoT, high performance computing, 5G, industrial, security and surveillance, Artificial Intelligence ("AI"), and edge computing related applications.

LONG-TERM BUSINESS MODEL AND STRATEGY

SMIC's long-term goal is to focus on generating value for the benefit of all stakeholders. SMIC's long-term business model is to function as the foundry service provider of choice in mainland China, while targeting to be a world-class service provider. SMIC's strategy to generate sustainable growth and long-term profitability is three-fold. First, SMIC aims to accelerate advanced technology development, and expand product portfolios with various applications, in order to capture the market opportunities. Second, we are dedicated to offering our customers a total solution with one-stop services including masks making, IP development, wafer manufacturing, testing and packaging, to enable long-term commitment and customer relations. Third, we work hard to capture increased advanced node and semiconductor market share through strategic partnerships with key customers. We continue to evaluate the potential long-term value-addition of opportunities in our decision-making processes, and our management team is committed to building value in the long-term for the benefit of our employees and shareholders.

RESEARCH AND DEVELOPMENT

In 2019, SMIC's research and development was on track and progressed smoothly. The Company's 14nm technology platform has successfully completed R&D, engaged customers, and moved into production.

SMIC has built a robust foundation for FinFET and R&D execution, and as a result, the more advanced generations FinFET technology development are progressing much faster than previous FinFET nodes. SMIC established multiple specialty 14/12nm platforms, N+1 has made steady R&D progress and now in customer engagement and product qualification stage.

SMIC continues to expand its advanced node application portfolio to include high-end consumer, high-performance computing, media applications, application processors, artificial intelligence, and automotive ICs. We are now also developing RF-related applications to address a variety of consumer-related applications for mobile, televisions, and wearables.

SMIC carries on research and development activities for beyond N+1, as we strategically expand the addressable market to serve the growing sophistication of our customers. We are also tracking well in developing comprehensive solutions for our customers with robust IP libraries and advanced mask making for FinFET technology.

OUTLOOK FOR 2020

Looking forward, 2020 is the beginning of a new phase for SMIC as our labor on technology development is now translating into production and revenue. We are optimistic about business growth from our new technology, which will enter production and contribute new incremental revenue.

For many individuals, the start of 2020 is shadowed by the unfolding health situation of the novel coronavirus epidemic. At present, SMIC's fab operations have not been affected, with production lines running normally. Meanwhile, the effect of the virus on end-demand and supply chain is still unfolding, and we are still monitoring the situation closely. The current health crisis may have an impact on overall markets; however, we believe that going forward China will continue to expand its role in the semiconductor industry. We remain vigilant in tracking the situation and make preparations to adjust customer mix to maintain healthy fab loadings.

BUSINESS OVERVIEW

Nonetheless, foundry industry growth in 2020 is being driven by trends in Internet of Things, 5G, smart consumer, AI, and automotive. Going into 2020, we are excited to see positive momentum and strong orders. Given our outlook in the first quarter, we targeted annual growth in the teens-percent for 2020. We also targeted to maintain a gross margin of 20% and target sustained profitability. With the global economic environment facing uncertainties of the epidemic, we are cautiously optimistic about our target while paying close attention to the changes in the global markets.

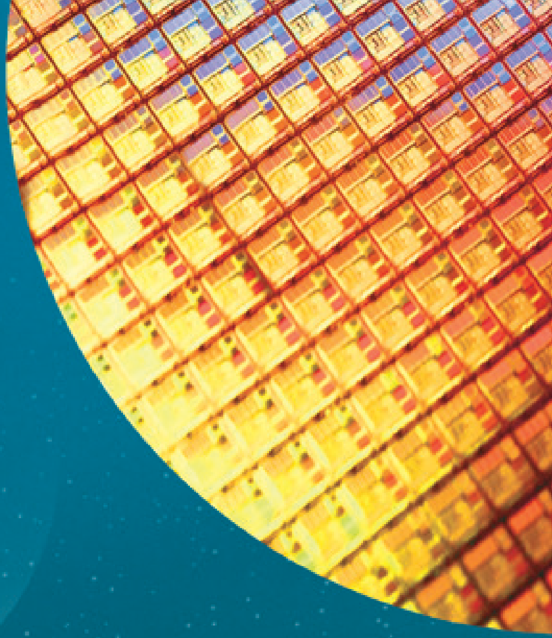
As we enter an expansion stage to address the market for advanced technology, we must also boost our expenditures. We are increasing investment in capacity to address the new ramp up of FinFET technology. SMIC remains prudent in its expansion, by carefully aligning customer demands, with company profitability and capability. We plan to move in equipment for FinFET production into the new fab this year in line with customer demand.

SMIC has executed in preparing technology platforms and advanced node development; thereby, leading SMIC to its current stage of new growth and investment. We target healthy expansion that aligns with our goal to be fundamentally solid, while building up mutual trust with our customers.

Our advanced technology is becoming a vital part of SMIC's business strategy. Previously SMIC had relied mainly on mature nodes for incremental revenue growth; however, in this new phase, SMIC is focusing efforts and will begin to see an increasing amount of revenue growth coming from advanced node technology.

SMIC's role in the China ecosystem is becoming increasingly important as we work hard to provide expanded technology, capacity, and solutions to address growing market demands. We are pleased to see growth from both existing and new customers. Meanwhile, we continue our focus to serve an international market, while having the natural advantage of being close to the largest IC market.

SMIC's aim is to be the first-choice in China for a comprehensive range of foundry services. We are gaining confidence in our ability to steadily climb, with focused prudent efforts, to become a respected provider in the advanced node foundry market.



MANAGEMENT'S DISCUSSION AND ANALYSIS

OF FINANCIAL CONDITION AND RESULTS OF OPERATION

MANAGEMENT DISCUSSION AND ANALYSIS

CONSOLIDATED FINANCIAL DATA

The summary consolidated financial data presented below as of and for the years ended December 31, 2015, 2016, 2017, 2018 and 2019 are derived from, and should be read in conjunction with, the audited consolidated financial statements, including the related notes, found elsewhere in this annual report. The summary consolidated financial data presented below have been prepared in accordance with IFRS.

PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME DATA

	For the year ended December 31,				
	2019	2018	2017	2016	2015
	(in US$ thousands, except per share, shares, percentages and units)				
Revenue	**3,115,672**	3,359,984	3,101,175	2,914,180	2,236,415
Cost of sales	**(2,473,213)**	(2,613,307)	(2,360,431)	(2,064,499)	(1,553,795)
Gross profit	**642,459**	746,677	740,744	849,681	682,620
Research and development expenses[1]	**(687,369)**	(663,368)	(509,356)	(370,764)	(273,448)
Sales and marketing expenses	**(26,836)**	(30,455)	(35,796)	(35,034)	(41,876)
General and administration Expenses	**(254,924)**	(199,818)	(198,036)	(167,582)	(213,190)
Net impairment losses (recognized) reversal on financial assets	**(1,076)**	(937)	137	10,211	13
Other operating income, net[1]	**376,656**	162,541	127,202	52,694	67,885
Profit from operations	**48,910**	14,640	124,895	339,206	222,004
Interest income	**138,988**	64,339	27,090	11,243	5,199
Finance costs	**(63,460)**	(24,278)	(18,021)	(23,037)	(12,218)
Foreign exchange gains (losses)	**9,495**	(8,499)	(12,694)	(1,640)	(26,349)
Other gains (losses), net	**42,981**	24,282	16,499	(2,113)	55,611
Share of gain (loss) of investment accounted for using equity method	**5,362**	21,203	(9,500)	(13,777)	(13,383)
Profit before tax	**182,276**	91,687	128,269	309,882	230,864
Income tax (expense) benefit	**(23,416)**	(14,476)	(1,846)	6,552	(8,541)
Profit for the year	**158,860**	77,211	126,423	316,434	222,323
Other comprehensive income (loss)					
Item that may be reclassified subsequently to profit or loss					
Exchange differences on translating foreign operations	**(16,769)**	(35,919)	23,213	(19,031)	(8,185)
Change in value of available-for-sale financial assets	**—**	—	(2,381)	807	452
Cash flow hedges	**(26,524)**	35,931	35,143	(34,627)	—
Share of other comprehensive income of joint ventures accounted for using equity method	**—**	—	17,646	—	—
Others	**—**	—	(131)	1	130
Items that will not be reclassified to profit or loss					
Actuarial gains or losses on defined benefit plans	**(1,532)**	129	(436)	1,520	—
Total comprehensive income for the year	**114,035**	77,352	199,477	265,104	214,720

MANAGEMENT DISCUSSION AND ANALYSIS

	For the year ended December 31,				
	2019	2018	2017	2016	2015
	(in US$ thousands, except per share, shares, percentages and units)				
Profit (loss) for the year attributable to:					
Owners of the Company	**234,681**	134,055	179,679	376,630	253,411
Non-controlling interests	**(75,821)**	(56,844)	(53,256)	(60,196)	(31,088)
	158,860	77,211	126,423	316,434	222,323
Total comprehensive income (loss) for the year attributable to:					
Owners of the Company	**188,831**	133,977	251,135	326,191	245,803
Non-controlling interests	**(74,796)**	(56,625)	(51,658)	(61,087)	(31,083)
	114,035	77,352	199,477	265,104	214,720
Earnings per share[(2)]					
Basic	**$0.04**	$0.03	$0.04	$0.09	$0.07
Diluted	**$0.04**	$0.03	$0.04	$0.08	$0.06
Shares issued and outstanding[(2)]	**5,056,868,912**	5,039,819,199	4,916,106,889	4,252,922,259	4,207,374,896
Financial Ratio					
Gross margin	**20.6%**	22.2%	23.9%	29.2%	30.5%
Net margin	**5.1%**	2.3%	4.1%	10.9%	9.9%
Operating Data					
Wafers shipped (in unit)	**5,028,796**	4,874,663	4,310,779	3,957,685	3,015,966

MAIN FINANCIAL POSITION DATA

	As of December 31,				
	2019	2018	2017	2016	2015
	(in US$ thousands)				
Total assets	**16,437,820**	14,424,320	11,918,451	10,115,278	7,115,347
Total non-current assets	**9,563,979**	8,274,729	7,749,467	6,431,525	4,525,297
Property, plant and equipment	**7,757,247**	6,777,970	6,523,403	5,687,357	3,903,818
Investments in associates	**1,139,317**	1,135,442	758,241	240,136	181,331
Total current assets	**6,873,841**	6,149,591	4,168,984	3,683,753	2,590,050
Inventories	**628,885**	593,009	622,679	464,216	387,326
Trade and other receivables	**836,143**	837,828	616,308	645,822	499,846
Financial assets at amortized cost[(3)]	**2,276,370**	1,996,808	—	—	—
Other financial assets[(3)]	**—**	—	683,812	31,543	282,880
Restricted cash — current	**804,547**	592,290	336,043	337,699	302,416
Cash and cash equivalent	**2,238,840**	1,786,420	1,838,300	2,126,011	1,005,201
Total liabilities	**6,239,958**	5,500,740	5,197,116	4,712,051	2,925,092
Total non-current liabilities	**3,034,759**	2,641,512	3,290,337	2,731,151	1,157,901
Total current liabilities	**3,205,199**	2,859,228	1,906,779	1,980,900	1,767,191
Total equity	**10,197,862**	8,923,580	6,721,335	5,403,227	4,190,255
Non-controlling interests	**3,964,617**	2,905,766	1,488,302	1,252,553	460,399

(1) In 2019, the Group has changed its accounting policy regarding the presentation of certain government funding and the comparative figures have also been reclassified to conform to the current period presentation. Please see Note 2 to our consolidated financial statements of this annual report for further information.

(2) The basic and diluted earnings per share and the number of shares for 2015 and 2016 have been adjusted to reflect the impact of the Share Consolidation, on the basis that every ten ordinary shares of US$0.0004 each consolidated into one ordinary share of US$0.004 each, which was accounted for as a reverse stock split effective on December 7, 2016.

(3) Other financial assets were mainly reclassified to financial assets at amortized cost as of January 1, 2018, compliment with IFRS 9.

MAIN CASH FLOW DATA

	For the year ended December 31,				
	2019	2018	2017	2016	2015
			(in US$ thousands)		
Net cash generated from operating activities	**1,019,057**	799,426	1,080,686	977,202	669,197
Profit for the year	**158,860**	77,211	126,423	316,434	222,323
Depreciation and amortization	**1,127,756**	1,048,410	971,382	729,866	523,549
Net cash used in investing activities	**(1,948,507)**	(3,197,261)	(2,662,139)	(2,443,333)	(789,556)
Payments for property, plant and equipment	**(1,869,563)**	(1,808,253)	(2,287,205)	(2,757,202)	(1,230,812)
Net cash from financing activities	**1,376,278**	2,376,922	1,271,591	2,614,778	537,078
Net increase (decrease) in cash and cash equivalent	**446,828**	(20,913)	(309,862)	1,148,647	416,719

YEAR ENDED DECEMBER 31, 2019 COMPARED TO YEAR ENDED DECEMBER 31, 2018

REVENUE

The Group's sales totaled US$3,115.7 million in 2019, compared to US$3,360.0 million in 2018. Excluding the contribution from the Avezzano 200mm fab and the recognition of technology licensing revenue in 2018, the revenue in 2019 totaled US$3,014.0 million increased from US$2,973.1 million in 2018, primarily due to the net impact of an increase in wafer shipments and decrease in average selling price in 2019.

The number of wafer shipments increased by 3.2% from 4,874,663 8-inch wafer equivalents for 2018 to 5,028,796 8-inch wafer equivalents for 2019. The average selling price, calculated as the revenue (excluding the licensing revenue) divided by total shipments, of the wafers the Group shipped decreased from US$656 per wafer in 2018 to US$620 per wafer in 2019.

On July 29, 2019, the Group disposed the Avezzano 200mm fab. The revenue contribution from the Avezzano 200mm fab for the seven-month ended July 29, 2019 and for the year ended December 31, 2018 were US$101.7 million and US$223.1 million, respectively.

In 2019, no technology licensing revenue was recognized. In 2018, the technology licensing revenue of US$163.8 million internally developed and not capitalized was authorized to Semiconductor Manufacturing Electronics (Shaoxing) Corporation (an associate of the Group) with no related cost of sales recognized by the Group.

COST OF SALES

Cost of sales decreased by 5.4% from US$2,613.3 million for the year ended December 31, 2018 to US$2,473.2 million for the year ended December 31, 2019, primarily due to the decrease in depreciation and product-mix change in 2019. Out of the total cost of sales, US$747.2 million and US$831.4 million were attributable to depreciation and amortization for the year ended December 31, 2019 and 2018, respectively.

GROSS PROFIT

The Group's gross profit was US$642.5 million for the year ended December 31, 2019, compared to US$746.7 million for the year ended December 31, 2018. Gross margin was 20.6% in 2019, compared to 22.2% in 2018. Excluding the contribution from the Avezzano 200mm fab and the recognition of technology licensing revenue in 2018, gross margin increased to 21.5% in 2019 from 19.1% in 2018, primarily due to the increase in wafer shipments and the product-mix change in 2019.

PROFIT FOR THE YEAR FROM OPERATIONS

Profit from operations increased from US$14.6 million for the year ended December 31, 2018 to US$48.9 million for the year ended December 31, 2019 primarily due to the combined effect of the changes of revenue, cost of sales and gross profit mentioned above, and the below following changes:

Research and development expenses increased from US$663.4 million for the year ended December 31, 2018 to US$687.4 million for the year ended December 31, 2019. The increase was mainly due to the higher level of R&D activities in 2019.

General and administrative expenses increased from US$199.8 million for the year ended December 31, 2018 to US$254.9 million for the year ended December 31, 2019. The increase was mainly due to the start-up cost relating to our majority-owned Shanghai 300mm fab in 2019.

Sales and marketing expenses decreased from US$30.5 million for the year ended December 31, 2018 to US$26.8 million for the year ended December 31, 2019.

Other operating incomes increased from US$162.5 million for the year ended December 31, 2018 to US$376.7 million for the year ended December 31, 2019. The increase was mainly due to 1) the gain on disposal of subsidiaries amounting to US$81.4 million in 2019, compared to US$3.5 million in 2018 and 2) the recognition of the government funding of US$293.3 million in 2019, compared to US$157.0 million in 2018.

PROFIT FOR THE YEAR

The Group had a profit of US$158.9 million for the year ended December 31, 2019, an increase of 105.7% from US$77.2 million for the year ended December 31, 2018 mainly due to the net impact of 1) the factors described above, 2) more interest net income, 3) increased foreign exchange gains, 4) more gains on investment in financial instruments and 5) less gains on investment in entities accounted for using equity method.

FUNDING SOURCES FOR CAPITAL EXPENDITURE

The Group's planned 2020 capital expenditures for foundry operations are approximately US$3.1 billion, of which US$2.0 billion and US$0.5 billion are expected to be spent on the equipment and facility in the majority-owned Shanghai 300mm fab and the majority-owned Beijing 300mm fab, respectively. The planned 2020 capital expenditures for non-foundry operations are approximately US$59.9 million, mainly for the construction of employee's living quarters.

The Group's actual expenditures may differ from its planned expenditures for a variety of reasons, including changes in its business plan, market conditions, equipment prices, or customer requirements. The Group will monitor the global economy, the semiconductor industry, the demands of its customers, and its cash flow from operations and will adjust its capital expenditures plans as necessary.

The primary sources of capital resources and liquidity include cash generated from operations, bank borrowings and debt or equity issuances, capital injections from non-controlling interests and other forms of financing. Future acquisitions, mergers, strategic investments, or other developments also may require additional financing. The amount of capital required to meet the Group's growth and development targets is difficult to predict in the highly cyclical and rapidly changing semiconductor industry.

DEBT ARRANGEMENTS

The aggregate amounts of the Group's future cash payment obligations were US$5,110.9 million, which is set out in the liquidity and interest risk table in Note 38 to our financial statements on Page 193.

As of December 31, 2019, the Group's outstanding long-term loans primarily consisted of secured bank loans of US$593.4 million and unsecured bank loans of US$1,973.3 million which are repayable in installments starting in January 2019, with the last payment due in May 2031. A summary of borrowing arrangements is disclosed in Note 31 to our financial statements for reference.

ASSETS PLEDGED AS SECURITY

Property, plant and equipment with carrying amount of approximately US$130.9 million have been pledged to secure borrowings of the Group under mortgages. The Group is not allowed to pledge these assets as security for other borrowings or to sell them to other entities.

COMMITMENTS

As of December 31, 2019, the Group had commitments of US$1,779.6 million, of which US$126.2 million for facilities construction obligations in connection with the Group's facilities, US$1,645.9 million to purchase machinery and equipment for its fabs and US$7.5 million to purchase intellectual property.

GEARING RATIO

As of December 31, 2019, the Group's net debt to equity ratio was approximately −6.0%. Please refer to Note 38 to our financial statements for calculation.

CAPITALIZED INTEREST

Interest, after netting off government funding received, incurred on borrowed funds used to construct plant and equipment during the active construction period is capitalized. The interest capitalized is determined by applying the borrowing interest rate to the average amount of accumulated capital expenditures for the assets under construction during the period. Capitalized interest is added to the cost of the underlying assets and is depreciated over the useful life of the assets. Capitalized interests of US$61.8 million and US$47.2 million in 2019 and 2018, respectively, were added to the cost of the underlying assets and are depreciated over the respective useful life of the assets. In 2019 and 2018, the Group recorded depreciation expenses relating to the capitalized interest of US$33.4 million and US$27.5 million, respectively.

EXCHANGE RATE AND INTEREST RATE RISKS

The Group's revenue, expense, and capital expenditures are primarily transacted in U.S. dollars. The Group also enters into transactions in other currencies that results the Group primarily exposed to changes in exchange rates for the Euro, Japanese Yen, and RMB. Additionally, the Group entered into or issued several RMB denominated loan facility agreements, short-term notes and medium-term notes and several RMB denominated financial assets at amortized cost that results the Group exposed to changes in the exchange rate for the RMB. Foreign-currency forward exchange contracts and cross currency swap contracts are used to minimize these risks.

The Group's exposure to interest rate risks relates primarily to the Group's long-term loans, which the Group generally assumes to fund capital expenditures and working capital requirements. The risk is managed by the Group by maintaining an appropriate mix between fixed and floating rate borrowings, and by the use of interest rate swap contracts and cross currency swap contracts.

Details of the Group's foreign exchange risk and interest rate risk are set out in Note 38 to our consolidated financial statements of this annual report for reference.

EARNINGS BEFORE INTEREST, TAX, DEPRECIATION AND AMORTIZATION ("EBITDA")

EBITDA is defined as profit for the period excluding the impact of the finance cost, depreciation and amortization, and income tax benefit and expense. SMIC uses EBITDA as a measure of operating performance; for planning purposes, including the preparation of the Group's annual operating budget; to allocate resources to enhance the financial performance of the Group's business; to evaluate the effectiveness of the Group's business strategies; and in communications with SMIC's board of directors concerning the Group's financial performance. Although EBITDA is widely used by investors to measure a company's operating performance without regard to items, such as net finance cost, income tax benefit and expense and depreciation and amortization that can vary substantially from company to company depending upon their respective financing structures and accounting policies, the book values of their assets, their capital structures and the methods by which their assets were acquired, EBITDA has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for analysis of the Group's results of operations as reported under IFRS. Some of these limitations are: it does not reflect the Group's capital expenditures or future requirements for capital expenditures or other contractual commitments; it does not reflect changes in, or cash requirements for, the Group's working capital needs; it does not reflect finance cost; it does not reflect cash requirements for income taxes; that, although depreciation and amortization are non-cash charges, the assets being depreciated or amortized will often have to be replaced in the future, and these measures do not reflect any cash requirements for these replacements; and that other companies in SMIC's industry may calculate these measures differently than SMIC does, limiting their usefulness as comparative measures.

The following table sets forth the reconciliation of EBITDA to their most directly comparable financial measures presented in accordance with IFRS, for the periods indicated.

	Year ended 12/31/19 USD'000	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000
Profit for the year	**158,860**	77,211	126,423
Finance costs	**63,460**	24,278	18,021
Depreciation and amortization	**1,127,756**	1,048,410	971,382
Income tax expense	**23,416**	14,476	1,846
EBITDA	**1,373,492**	1,164,375	1,117,672

DIRECTORS AND SENIOR MANAGEMENT

The composition of the Board during the year ended December 31, 2019 and up to the date of this report is set forth as follows:

Name of Director	Age	Position
Zhou Zixue	63	Chairman, Executive Director
Zhao Haijun	56	Co-Chief Executive Officer, Executive Director
Liang Mong Song	67	Co-Chief Executive Officer, Executive Director
Gao Yonggang	54	Chief Financial Officer, Executive Vice President, Joint Company Secretary, and Executive Director
Chen Shanzhi	50	Non-executive Director
Zhou Jie	52	Non-executive Director
Ren Kai	47	Non-executive Director
Lu Jun	51	Non-executive Director
Tong Guohua	62	Non-executive Director
William Tudor Brown	61	Independent Non-executive Director
Cong Jingsheng Jason	56	Independent Non-executive Director
Lau Lawrence Juen-Yee	75	Independent Non-executive Director
Fan Ren Da Anthony	59	Independent Non-executive Director
Young Kwang Leei	60	Independent Non-executive Director (Appointed on August 7, 2019)

Executive Directors


Zhou Zixue
Chairman


Zhao Haijun
Co-CEO

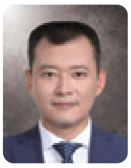

Liang Mong Song
Co-CEO


Gao Yonggang
CFO

Non-Executivve Directors


Tong Guohua


Chen Shanzhi


Lu Jun


Ren Kai


Zhou Jie

Independent Non-Executive Directors


Lau Lawrence Juen-Yee


William Tudor Brown


Cong Jingsheng Jason


Fan Ren Da Anthony


Young Kwang Leei

SENIOR MANAGEMENT

The Company's senior management is appointed by, and serves at the discretion of, the Board. The following table sets forth the names, ages and positions of the senior management as of the date of this annual report:

Name of Senior Management	Age	Position
Zhao Haijun	56	Co-Chief Executive Officer and Executive Director
Liang Mong Song	67	Co-Chief Executive Officer and Executive Director
Gao Yonggang	54	Executive Director, Chief Financial Officer, Executive Vice President, and Joint Company Secretary
Zhou Meisheng	61	Executive Vice President, Technology Research and Development

BRIEF BIOGRAPHICAL DETAILS

BOARD OF DIRECTORS

Zhou Zixue

Chairman of the Board, Executive Director

Dr. Zhou Zixue joined the Company on March 6, 2015 as an executive director and Chairman of the Board. Dr. Zhou received a Master of Management degree from the University of Science and Technology of China, and a Doctor of Economics degree from the Central China Normal University. Dr. Zhou has more than 30 years of experience in the economic operation, regulation and management of industry and information technology. Prior to his current employment, Dr. Zhou severed as the Chief Economist and the Director of Finance of the Ministry of Industry and Information Technology. Prior to that, he worked in several divisions in the Ministry of Information Industry, the Ministry of Electronics Industry, the Ministry of Machinery and Electronics Industry, and the state owned DongGuangDian Factory. Dr. Zhou is currently the Vice Chairman and Secretary General of the China Information Technology Industry Federation, the Chairman of the China Semiconductor Industry Association, the Chairman of the Board of Jiangsu Changdian Electronics Technology Co., Ltd (a company listed on Shanghai Stock Exchange: 600584), an independent director of Yunnan Nantian Electronics Information Co., Ltd (a company listed on Shenzhen Stock Exchange: 000948), an independent director of Hisense Electric Co., Ltd (a company listed on Shanghai Stock Exchange: 600060). Dr. Zhou also serves as a director of certain subsidiaries of the Company.

Zhao Haijun

Co-Chief Executive Officer, Executive Director

Dr. Zhao Haijun became an Executive Director of the Company on October 16, 2017, and Chief Executive Officer of the Company on May 10, 2017 and re-designated as Co-Chief Executive Officer on October 16, 2017. Dr. Zhao joined the Company in October 2010 and was appointed as Chief Operating Officer and Executive Vice President in April 2013. In July 2013, Dr. Zhao was appointed as General Manager of Semiconductor Manufacturing North China (Beijing) Corporation, a joint venture company established in Beijing and a subsidiary of the Company. Dr. Zhao received his degree in Bachelor of Science and Doctor of Philosophy in Electronic Engineering from Tsinghua University (Beijing) and master's degree in Business Administration from the University of Chicago. He has 27 years of experience in semiconductor operations and technology development. Dr. Zhao has also served as an independent director on the board of directors of Zhejiang Juhua Co., Ltd. (Stock Code: 600160), a company which is listed on the Shanghai Stock Exchange, since November 2016. Dr. Zhao also serves as a director of certain subsidiaries of the Company.

Liang Mong Song

Co-Chief Executive Officer, Executive Director

Dr. Liang Mong Song became the Executive Director and Co-Chief Executive Officer of the Company on October 16, 2017. Dr. Liang graduated with a doctor of philosophy degree in electrical engineering from the Department of Electrical Engineering and Computer Sciences at University of California, Berkeley. Dr. Liang has been engaged in the semiconductor industry for over 35 years. Dr. Liang held senior director position on research and development in Taiwan Semiconductor Manufacturing Company Limited between 1992 and 2009. Dr. Liang was involved in memories and advanced logic process technology developments. Dr. Liang owns over 450 patents and has published over 350 technical papers. He is a Fellow of Institute of Electrical and Electronics Engineers (IEEE).

DIRECTORS AND SENIOR MANAGEMENT

Gao Yonggang

Executive Director, Chief Financial Officer, Executive Vice President, and Joint Company Secretary

Dr. Gao Yonggang, a non-executive Director since 2009, was appointed as Executive Vice President, Strategic Planning of the Company and re-designated as an executive Director on June 17, 2013. He has been appointed as the Chief Financial Officer of the Company since February 17, 2014 and was further appointed as the Joint Company Secretary on July 3, 2017. Dr. Gao is a director of certain subsidiaries of the Company. Dr. Gao has more than 30 years of experience in the area of financial management and has worked as Chief Financial Officer or person in charge of finance in various industries, including commercial, industrial, and municipal utilities, and in various types of organizations, including state-owned enterprises, private companies, joint ventures, and government agencies.

Dr. Gao was the Chief Financial Officer of Datang Telecom Technology & Industry Group (China Academy of Telecommunications Technology), Chairman of Datang Telecom Group Finance Co., Ltd., etc. Dr. Gao is a standing committee member of Accounting Society of China, standing director of Enterprise Financial Management Association of China. Dr. Gao graduated from Nankai University with a Ph.D. in management. He has conducted studies in the field of financial investment, and has been involved in a number of key research projects and publications in this area. Dr. Gao is also a founding member, director of The Hong Kong Independent Non-Executive Director Association.

Chen Shanzhi

Non-Executive Director

Dr. Chen Shanzhi has been a non-executive Director of the Company since 2009. Dr. Chen is the vice president of China Information Communication Technologies Group Corporation (CICT), and head of specialist committee. Dr. Chen received his bachelor's degree from Xidian University, master's degree from China Academy of Posts and Telecommunications of the Ministry of Posts and Telecommunications, and Ph.D. from Beijing University of Posts and Telecommunications. Dr. Chen has 20 years of experience in the field of information and communication technology, during which he has been involved in research and development, technology and strategy management. Dr. Chen has made major contributions in the core technologies breakthroughs, international standards formulation and industrialization of China's leading TD-LTE-Advanced 4G technology. Currently he is leading 5G technologies, Internet of vehicles and standards research, as well as industrialization.

Besides, Dr. Chen is also the director of State Key Laboratory of Wireless Mobile Communication, chairman and director of State Engineering Laboratory of New Generation Mobile Communication Wireless Network and Chip Technology, member of Expert Advisory Group for National Science and Technology Platform, chairman of Chinese High-tech Industrialization Association for Information Technology Committee, a director of The Chinese Institute of Electronics, an executive director of China Institute of Communications, a director of China Communications Standards Association (CCSA) and a fellow of IEEE. Dr. Chen was a member of the IT Experts Panel of the National 863 Program and a member of the Programming Group of the major project of "The New-generation Broadband Wireless Mobile Communications Network".

Dr. Chen has published six academic monographs, which four of them were published by SPRINGER in English. He published more than 60 SCI papers in top journals such as IEEE, he has applied for and been authorized more than 50 invention patents, among of these more than 30 are written to 3GPP and ITU international standards which have become the standard necessary patent for 4G and 5G mobile communication systems and successfully applied in the global 4G commercial network and China's high-speed train mobile coverage, promoting the innovation and development of 4G and 5G Industries, and producing remarkable economic and social value.

Dr. Chen received the Grand Prize for National Science and Technology Progress Award China in 2016, the second prize for the State Award for Technological Invention China in 2015, the first prize for 2012 National Science and Technology Progress Award, the second prize for 2001 National Science and Technology Progress Award, 2017 Ho Leung Ho Lee Foundation Science and Technology Innovation Award, the Ninth Guanghua Engineering Science and Technology Award, the first prize for 2019 and 2012 China Institute of Communications Science and Technology Award and the first prize for 2009 National Enterprise Management Modernization Innovation Achievement Award and other honors.

DIRECTORS AND SENIOR MANAGEMENT

Zhou Jie

Non-Executive Director

Mr. Zhou Jie has been a Director since January 2009. Mr. Zhou is the Chairman of the Board and the secretary of CPC party committee of Haitong Securities Co., Ltd. (listed on the Shanghai Stock Exchange under the stock code of 600837; listed on the Hong Kong Stock Exchange under the stock code of 6837) since October 2016. From February 1992 to June 1996, Mr. Zhou served in the investment banking department of Shanghai Wanguo Holdings Ltd. From June 1996 to December 2001, Mr. Zhou served, successively, as the manager of investment department, the vice general manager, and the chairman of the board of directors and the general manager of Shanghai SIIC Asset Management Co., Ltd. From December 2001 to April 2003, he was the director and general manager of SIIC Medical Science and Technology (Group) Limited. From January 2002 to July 2016, he acted, successively, as the executive director and the vice executive officer, the executive director and the executive vice president, the vice chairman and chief executive officer of Shanghai Industrial Holdings Limited (listed on the Hong Kong Stock Exchange under the stock code of 0363). From August 2004 to July 2016, he was the chief planning officer, the executive director and vice president, the executive director and executive vice president, and the president and deputy secretary of CPC committee of SIIC Shanghai (Holding) Co., Ltd. From March 2010 to May 2012, he was the chairman of the supervisory committee of Shanghai Pharmaceuticals Holding Co., Ltd. (listed on the Shanghai Stock Exchange under the stock code of 601607; listed on the Hong Kong Stock Exchange under the stock code of 2607), of which he was the chairman of the board of directors and the secretary of CPC committee from June 2012 to June 2013 and from May 2016 to July 2016.

Mr. Zhou has been a supervisor, the chairman of the remuneration committee of Shanghai Stock Exchange, the president of Shanghai Securities Association since 2016, a member of Shanghai People's Congress, the vice chairman of Shanghai Financial Association, the president of Shanghai Association of Financial Planners, and an arbitrator of Shanghai Arbitration Commission since 2017. Mr. Zhou was graduated from the College of Management of Shanghai Jiao Tong University majoring in the management engineering with a master's degree of engineering in February 1992.

Ren Kai

Non-Executive Director

Mr. Ren Kai became a Director of the Company on August 11, 2015, received a bachelor degree in industry and international trade from Harbin Engineering University. Since September 2014, Mr. Ren has been serving as the Vice President of Sino IC Capital. From October 2007 to August 2014, he had served as the Director of the Review Board 4 of the Review Bureau 2 of China Development Bank. From October 2004 to December 2007, Mr. Ren served as a Deputy Director of each of the Review Board 3 and the Review Board 4 of the Review Bureau 2 of China Development Bank. From July 1995 to October 2004, Mr. Ren had worked in the Electromechanical Textile Credit Bureau, Chengdu representative office, the Review Bureau 4, the Review Bureau 3 and the Review Bureau 2 of China Development Bank. Mr. Ren has been engaged in loan review programs and investment operations in the fields of equipment and electronics; he is familiar with industrial policies and has in-depth understanding in integrated circuit and related industries. Mr. Ren had gained extensive experience in investment management while he was working in the Review Board 2 of China Development Bank as he led the team to complete the review of hundreds of major projects with annual review commitments of over RMB100 billion and accumulative review commitments of over RMB30 billion in the field of integrated circuit. Mr. Ren is also the director of SJ Semiconductor (Jiangyin) Corporation, the director of Jiangsu Changdian Electronics Technology Co., Ltd. (a company listed on Shanghai Stock Exchange: 600584), the director of San'an Optoelectronics Co., Ltd. (a company listed on Shanghai Stock Exchange: 600703), the director of Yangtze Memory Technologies Co., Ltd., the director of Wuhan Xinxin Semiconductor Manufacturing Co., Ltd., the vice chairman of Shanghai Silicon Industry Group Co., Ltd, and the vice Chairman of Shanghai Wanye Enterprise Co., Ltd. (a company listed on Shanghai Stock Exchange: 600641).

DIRECTORS AND SENIOR MANAGEMENT

Lu Jun

Non-Executive Director

Mr. Lu Jun became a Director of the Company on February 18, 2016, received the Master of Business Administration from Nanjing University and holding a bachelor degree in Shipping and Marine engineering from Hohai University. Since August 2014, Mr. Lu serve as President of Sino IC-Capital Co., Ltd, and since May 2010, Mr. Lu has been serving as Executive Vice President of China Development Bank Capital Co., Ltd (China Development Bank Capital Co., Ltd, a wholly-owned subsidiary of China Development Bank Co., Ltd, has been so far the only large- scale agency in China's banking industry for RMB equity investment, and has formed an integrated platform for strategic investments domestically and internationally). Previously, Mr. Lu has been worked for China Development Bank for more than 20 years and accumulated wealth of experience in credit, industry investment and fund investment. As Mr. Lu has been engaged in loan review programs and investment operations in the fields of equipment and electronics, he is familiar with industrial policies and has in- depth understanding in integrated circuit and related industries. From July 2007 to May 2010, Mr. Lu had served as the Deputy Director of China Development Bank Shanghai Branch. From April 2006 to July 2007, Mr. Lu served as the Director of industrial integration innovation of Investment business bureau of China Development Bank. From April 2003 to April 2006, Mr. Lu served as the Director of each of the Review Board of China Development Bank Jiangsu Branch and Nanjing Branch. From September 2002 to April 2003, Mr. Lu served as the Director of the Review Board of China Development Bank Nanjing Branch. From March 1994 to September 2002, Mr. Lu had worked in Traffic credit bureau, East China credit bureau, finance department of Nanjing Branch, and the Review Bureau 2 of Nanjing Branch of China Development Bank. Mr. Lu is currently the director of China IC Fund Co., Ltd, the director of Guokai Equipment Manufacturing Industry Investment Fund Co., Ltd, the director of Sino IC Leasing Co., Ltd, and the chairman of Guokai LongHua Industrial Fund Management Co., Ltd.

Tong Guohua

Non-Executive Director

Dr. Tong Guohua became a Director of the Company on February 14, 2017. Dr. Tong is a professorate senior engineer and doctoral tutor of the School of Public Administration of Huazhong University of Science and Technology. Dr. Tong became President and Secretary of Party of China Academy of Telecommunications Technology as well as Executive Director and President of Datang Telecom Technology & Industry Holdings Co., Ltd. in June 2016. Since December 2017, he served as the Chairman, General Manager and Secretary of Party of China Academy of Telecommunications Technology Co., Ltd as well as Executive Director and President of Datang Telecom Technology & Industry Holdings Co., Ltd. Since June 26, 2018, he became chairman and secretary of the Party Committee of China Information and Communication Technology Group Co., Ltd. He began working in August 1974 and was President and Secretary of Party of Wuhan Institute of Posts and Telecommunications from November 2004.

Dr. Tong has been elected as a "National Model Worker" and he was the representative of the eleventh and the twelfth National People's Congress, and member of the thirteenth CPPCC National Committee. Dr. Tong was awarded the title "Young Experts with Outstanding Contributions of Hubei Province" in 2004. In 2006, he was awarded as one of the "Top Ten Outstanding Entrepreneurs in the Brand Building of China", "Outstanding Employee Representative of Hubei Province" and "Entrepreneur with Outstanding Contribution of Wuhan City". In 2007, Dr. Tong was named "China's Information Industry Person of the Year" and awarded as a "Person with Outstanding Contribution in Brand Building of Wuhan Region". In 2008, he was awarded "Innovative Economic Contribution Prize of Hubei Province" and he was named one of the "Top 10 Most Important People in the 30 Years' Reform and Development of State-owned Enterprises of Hubei Province". In 2009, he was named as an "Outstanding Entrepreneur of Wuhan City."

Dr. Tong graduated from Wuhan University in 1982 with a bachelor's degree in chemistry. He received a master's degree in science and technology management from Fudan University in 1990. In 2002, he received his doctoral degree in management science and engineering from Huazhong University of Science and Technology.

DIRECTORS AND SENIOR MANAGEMENT

William Tudor Brown

Independent Non-executive Director

Mr. William Tudor Brown has been a Director since 2013. He is a Chartered Engineer, a Fellow of the Institution of Engineering and Technology and a Fellow of the Royal Academy of Engineering. He holds a MA (Cantab) Degree in Electrical Sciences from Cambridge University. Mr. Brown was one of the founders of ARM Holdings plc, a British multinational semiconductor IP company listed on London Stock Exchange and NASDAQ, and until May 2012 held many roles including President, Chief Operating Officer, EVP Global Development, Chief Technology Officer and Engineering Director. He had responsibility for developing high-level relationships with industry partners and governmental agencies and for regional development. He served as a director at ARM Holdings plc from 2001 to 2012. Before joining ARM, Mr. Brown was Principal Engineer at Acorn Computers and worked exclusively on the ARM R&D programme since 1984. Mr. Brown served on the UK Government Asia Task Force until May 2012. He sat on the advisory board of Annapurna Labs until 2015. He has previously been an independent non-executive director of ANT Software PLC (a company listed on AIM of London Stock Exchange) from 2005 until 2012; and Xperi (a company listed on NASDAQ) where he sat on the Compensation Committee and chaired the Nomination Committee from 2013 and May 2018. He is currently an independent non-executive director and a member of the Audit Committee and the Chairman of Compensation Committee of Lenovo Group Limited (a company listed on Main Board of The Stock Exchange of Hong Kong Limited); an independent non-executive director and a member of the Compensation Committee of Marvell Technology Group (a company listed on NASDAQ).

Cong Jingsheng Jason

Independent Non-Executive Director

Dr. Cong Jingsheng Jason became a Director of the Company on February 14, 2017. Dr. Cong received his B.S. degree in computer science from Peking University in 1985, his M.S. and Ph.D. degrees in computer science from the University of Illinois at Urbana-Champaign in 1987 and 1990, respectively. He is a Distinguished Chancellor's Professor and former Chair at the Computer Science Department of University of California, Los Angeles, the Director of Center for Domain-Specific Computing, and the Director of VLSI Architecture, Synthesis and Technology (VAST) Laboratory. Dr. Cong is a Co-founder and the Chief Scientific Advisor of Falcon Computing Solutions Inc., and also serving as its Chairman of Board of Directors. He is also a director of Inspirit, Inc. Dr. Cong's research interests include electronic design automation and energy-efficient computing. He has published over 500 research papers in these areas. He received 15 Best Paper Awards, three 10-Year Retrospective Most Influential Paper Awards, and the 2011 ACM/IEEE A. Richard Newton Technical Impact Award in Electric Design Automation. He was elected to IEEE Fellow in 2000, ACM Fellow in 2008, and the US National Academy of Engineering in 2017.

DIRECTORS AND SENIOR MANAGEMENT

Lau Lawrence Juen-Yee

Independent Non-Executive Director

Professor Lau Lawrence Juen-Yee became a Director on June 22, 2018. Professor Lau received his B.S. degree (with Great Distinction) in Physics from Stanford University in 1964 and his M.A. and Ph.D. degrees in Economics from the University of California at Berkeley in 1966 and 1969 respectively. He joined the faculty of the Department of Economics at Stanford University in 1966, was appointed Professor of Economics in 1976 and the first Kwoh-Ting Li Professor in Economic Development at Stanford University in 1992. From 1992 to 1996, he served as a Co-Director of the Asia-Pacific Research Center at Stanford University, and from 1997 to 1999, as the Director of the Stanford Institute for Economic Policy Research. He became Kwoh-Ting Li Professor in Economic Development, Emeritus, upon his retirement from Stanford University in 2006. From 2004 to 2010, Professor Lau served as Vice-Chancellor (President) of The Chinese University of Hong Kong. From September 2010 to September 2014, he served as Chairman of CIC International (Hong Kong) Co., Limited. Since 2007, Professor Lau has also been serving as the Ralph and Claire Landau Professor of Economics at The Chinese University of Hong Kong.

Professor Lau was a member of the 11th and 12th National Committees of the Chinese People's Political Consultative Conference and a Vice-Chairman of its Subcommittee of Economics. In addition, he currently serves as a Vice-Chairman of the China Center for International Economic Exchanges, a Vice-President of the China Science Center of the International Eurasian Academy of Sciences, a member of the International Advisory Council of the China Development Bank and Chairman of the Board of Directors of The Chinese University of Hong Kong (Shenzhen) Finance Institute. In addition, he also serves as a member of the Currency Board Sub-Committee of the Exchange Fund Advisory Committee of the Hong Kong Special Administrative Region, a member of the Hong Kong Trade Development Council (HKTDC) Belt and Road and Greater Bay Area Committee, a Vice-Chairman of Our Hong Kong Foundation, a Member and Chairman of the Prize Recommendation Committee, LUI Che Woo Prize Company, as well as a member of the Board of Directors of the Chiang Ching-kuo Foundation for International Scholarly Exchange, Taipei. He also serves as an Independent Non-executive Director of AIA Group Limited (Stock Code: 04457), CNOOC Limited (Stock Code: 00883), and Hysan Development Company Limited (Stock Code: 00014), all listed on the Hong Kong Stock Exchange, and an Independent Non- executive Director of Far EasTone Telecommunications Company Limited (Taiwan: 4904), Taipei, listed on the Taiwan Stock Exchange.

Fan Ren Da Anthony

Independent Non-Executive Director

Mr. Fan Ren Da Anthony became a Director on June 22, 2018. Mr. Fan holds a Master's Degree in Business Administration from the United States of America. He is the chairman and managing director of AsiaLink Capital Limited. He is also an independent non-executive director of CITIC Resources Holdings Limited (Stock Code: 1205), Uni-President China Holdings Ltd. (Stock Code: 220), Raymond Industrial Limited (Stock Code: 229), Shanghai Industrial Urban Development Group Limited (Stock Code: 563), China Development Bank International Investment Limited (Stock Code: 1062), Technovator International Limited (Stock Code: 1206), China Dili Group (Stock Code: 1387), Neo-Neon Holdings Limited (Stock Code: 1868), Hong Kong Resources Holdings Company Limited (Stock Code: 2882) and Tenfu (Cayman) Holdings Company Limited (Stock Code: 6868), all listed on the Main Board of the Stock Exchange. Mr. Fan is the Founding President of The Hong Kong Independent Non-Executive Director Association, and held senior positions with various international financial institutions.

DIRECTORS AND SENIOR MANAGEMENT

Young Kwang Leei

Independent Non-Executive Director

Dr. Young Kwang Leei, became a Director on August 7, 2019. Dr. Young graduated from the Department of Electrical Engineering at the National Taiwan University and received his Bachelor's degree in 1981 and received his Ph.D. degrees in Electrical Engineering and Computer Science at the University of California, Berkeley in 1986. He worked as a research staff at the Massachusetts Institute of Technology (MIT) Lincoln Laboratory, the United States of America from 1986 to 1989 and a senior technical staff at Hewlett Packard Company, USA from 1989 to 1994. From 1994 to 1995, he served as a senior manager at Chartered Semiconductor Manufacturing Ltd., Singapore. From 1995 to 1997 he served as the Deputy Director of Research and Development at Winbond Electronics Corporation, Taiwan. He joined Worldwide Semiconductor Manufacturing Corporation in 1997 and served as the Director of Engineering until March 1998. From April 1998 to June 2018, Dr. Young successively served in different positions including the Director of Research and Development in Taiwan Semiconductor Manufacturing Company in Taiwan and in the USA. Dr. Young then retired in June 2018.

Dr. Young is a columnist of Digitimes Taiwan since 2017, a non-executive co-founder and director of Yi-Yi Network Taiwan since 2018. Currently he is also an independent director of Taiwan MAYO Human Capital Inc. Dr. Young has published over 80 international academic and technical papers. He received the 14th National Industrial Innovation Award with "Research and Development Management Innovation Award" in 2006 and Outstanding Science and Technology Talent Award issued by Executive Yuan in 2003.

SENIOR MANAGEMENT

Dr. Zhao Haijun

Biographical details are set out on page 25 of this annual report.

Dr. Liang Mong Song

Biographical details are set out on page 25 of this annual report.

Dr. Gao Yonggang

Biographical details are set out on page 26 of this annual report.

Dr. Zhou Meisheng

Dr. Zhou Meisheng, age 61, was appointed as Executive Vice President of Technology Research and Development since October 12, 2017. Dr. Zhou is one professional of the "National Recruitment Program of Global Experts (abbreviation of the overseas high-level talent introduction plan). Before she joined the Company, she served in Lam Research China as Regional CTO, prior to that, Dr. Zhou has ever served as Vice President of the Company, and earlier to that, she has ever conducted various levels of management positions in Chartered Semiconductor Manufacturing, TSMC, UMC and Global Foundries. Dr. Zhou received BSc and MSc degrees from Fudan University China in 1982 & 1985 respectively, and Ph.D. degree in Chemistry from Princeton University in 1990. Equipped with more than 20 years' experience in world's leading foundry companies, Dr. Zhou has accumulated extensive and rich management experience in advanced technology R&D, technical cooperation, technology transfer, verification of mass production, the start-up operation/mass production/operation of 12" Fab, and gradually shaped her own distinctive management philosophy. Specialized in module device, process and integrated technology, Dr. Zhou has been awarded with more than 130 US patents and published over 40 papers as co-inventor/author.

JOINT COMPANY SECRETARY

Dr. Gao Yonggang

Biographical details are set out above.

Dr. Liu Wei

Dr. Liu Wei, aged 61, was appointed as SMIC's Joint Company Secretary in July 2017. Dr Liu is one of the senior partners of DLA Piper. Between 2008 and 2017, Dr. Liu was the Head of China Practice and managing partner of the Beijing Office of DLA Piper. Dr. Liu has PRC lawyer qualification and is a solicitor qualified to practice law in Hong Kong, England and Wales. Dr. Liu graduated from the Northwest University of China, the Chinese University of Political Science and Law, the University of Cambridge, with a bachelor in Chinese literature, a master degree in law, a PhD in Law in 1982, 1986 and 1996 respectively. He also completed his Postgraduate Certificate in Laws (PCLL) of the University of Hong Kong in 2000. Dr. Liu was the first student from the mainland of the PRC to obtain a PhD in law from the University of Cambridge after 1949. Dr. Liu worked for several local and state PRC governmental authorities. He is currently a member of the Shaanxi CPPCC. In 1988, Dr. Liu, as one of the lawyers working in Hong Kong in the early stage, participated in related work of the Hong Kong Basic Law, and then he was retained by the Securities and Futures Commission of Hong Kong as a PRC affairs officer responsible for the policies and supervision of law of red chip shares, H-shares and B-shares, and was responsible for coordination with the China Securities Regulatory Commission, the Shenzhen Stock Exchange and the Shanghai Stock Exchange.

CHANGES IN DIRECTORATE AND UPDATE OF DIRECTORS' INFORMATION

Dr. Chiang Shang-Yi resigned as an independent non-executive Director on June 21, 2019 due to personal reason and other work commitment. Dr. Young Kwang Leei was appointed as Class III independent non-executive Director on August 7, 2019.

As previously disclosed by the Company, there were no changes in the members of the Board, between the period from the date of the 2019 Interim Report and the date of this annual report. Except as disclosed in the section headed "Director and Senior Management" in this annual report, there was no change to any of the information required to be disclosed in relation to any Director pursuant to paragraphs (a) to (e) and (g) of rule 13.51(2) of the Listing Rules since the publication of the 2019 interim report of the Company.

REPORT OF THE DIRECTORS

BUSINESS REVIEW

Despite a challenging environment in 2019, the Group's sales totaled US$3,115.7 million, compared to US$3,360.0 million in 2018. Excluding the contribution from the Avezzano 200mm fab and the recognition of technology licensing revenue in 2018, the revenue in 2019 totaled US$3,014.0 million was increased from US$2,973.1 million in 2018. The Group recorded a profit of US$158.9 million in 2019, an increase from US$77.2 million in 2018. In 2019, the Group has expanded its capacity of its fabs in Shanghai and Beijing, as well as entered into key business partnerships and engagements.

The Group continues to serve a broad global customer base comprised of leading IDMs, fabless semiconductor companies and system companies. Looking ahead, our long-term goal is to achieve sustained profitability through optimal efficiency and utilization of existing assets, harnessing of our strong market position in China and investing further in advanced technology and capacity. For further details, please see pages 12 to 15 of the Annual Report.

The Group has implemented Internal controls and other risk management measures designed to mitigate the principal risks which the Group faces in its financial condition and operations, including but not limited to the cyclicality of the semiconductor manufacturing industry, fluctuations in purchase price of raw materials, fluctuations in global financial markets and currencies, inability to keep up with technology migration and difficulty to attract and retain technical and managerial talents.

We are committed to protecting the environment and have in place various environmental protection, safety and health ("ESH") policies, as well as international standards certifications. We have complied with all relevant laws and regulations, such as the European Union's Restriction of Hazardous Substances (RoHS) Directive. For further details, please see pages 102 to 104 of the Annual Report. The Company will publish a separate environmental, social and governance report on the Hong Kong Stock Exchange's website and the Company's website no later than three months after the publication of this report.

BOARD OF DIRECTORS

Members of the Board are elected or re-elected by the shareholders of the Company. The Directors shall have power at any time and from time to time to appoint any person to be a Director, either to fill a casual vacancy or as an addition to the existing Directors, to hold office until the next annual general meeting of the Company after such appointment and shall then be eligible for re-election at that meeting.

The composition of the Board during the year ended December 31, 2019 and up to the date of this report is set forth as follows:

Name of Director	Position	Class	Directorship Appointment Commencement Date
Zhou Zixue	Chairman, Executive Director	I	2015/3/6
Gao Yonggang	Chief Financial Officer, Executive Vice President, Joint Company Secretary and Executive Director	I	2009/6/23
William Tudor Brown	Independent Non-executive Director	I	2013/8/8
Tong Guohua	Non-executive Director	I	2017/2/14
Zhao Haijun	Co-Chief Executive Officer, Executive Director	II	2017/10/16
Chen Shanzhi	Non-executive Director	II	2009/6/23
Lu Jun	Non-executive Director	II	2016/2/18
Lau Lawrence Juen-Yee	Independent Non-executive Director	II	2018/6/22
Fan Ren Da Anthony	Independent Non-executive Director	II	2018/6/22
Liang Mong Song	Co-Chief Executive Officer, Executive Director	III	2017/10/16
Zhou Jie	Non-executive Director	III	2009/1/23
Ren Kai	Non-executive Director	III	2015/8/11
Cong Jingsheng Jason	Independent Non-executive Director	III	2017/2/14
Young Kwang Leei	Independent Non-executive Director	III	2019/8/7

SUBSIDIARIES

As of December 31, 2019, the Company's subsidiaries are as follows:

1. 中芯國際控股有限公司
SMIC Holdings Corporation*
Principal place of operation: Shanghai, PRC
Place of incorporation: Shanghai, PRC
Legal entity: Wholly foreign-owned enterprise
Total investment: N/A
Registered capital: US$50,000,000
Equity holder: the Company (100%)

2. 中芯國際集成電路製造 (上海) 有限公司
Semiconductor Manufacturing International (Shanghai) Corporation*
Principal place of operation: Shanghai, PRC
Place of incorporation: Shanghai, PRC
Legal entity: Wholly foreign-owned enterprise
Total investment: US$5,880,000,000
Registered capital: US$2,190,000,000
Equity holder: the Company (100%, indirectly through SMIC Investment (Shanghai) Corporation)

3. 中芯國際集成電路製造 (北京) 有限公司
Semiconductor Manufacturing International (Beijing) Corporation*
Principal place of operation: Beijing, PRC
Place of incorporation: Beijing, PRC
Legal entity: Wholly foreign-owned enterprise
Total investment: US$3,000,000,000
Registered capital: US$1,000,000,000
Equity holder: the Company (100%, indirectly through SMIC Investment (Shanghai) Corporation)

4. 中芯國際集成電路製造(天津)有限公司
Semiconductor Manufacturing International (Tianjin) Corporation*
Principal place of operation: Tianjin, PRC
Place of incorporation: Tianjin, PRC
Legal entity: Wholly foreign-owned enterprise
Total investment: US$2,600,000,000
Registered capital: US$1,290,000,000
Equity holder: the Company (100%, indirectly through SMIC Investment (Shanghai) Corporation)

5. 中芯北方集成電路製造(北京)有限公司
Semiconductor Manufacturing North China (Beijing) Corporation*
Principal place of operation: Beijing, PRC
Place of incorporation: Beijing, PRC
Legal entity: Majority-owned subsidiary
Total investment: US$7,200,000,000
Registered capital: US$4,800,000,000
Equity holder: the Company (51% in total, 13.0% indirectly through SMIC Investment (Shanghai) Corporation, 25.5% indirectly through SMIC Holdings Corporation and 12.5% indirectly through Semiconductor Manufacturing International (Beijing) Corporation)

6. エス・エム・アイ・シージャパン株式会社
SMIC Japan Corporation*
Principal country of operation: Japan
Place of incorporation: Japan
Authorized capital: JPY10,000,000 divided into 200 shares of a par value of JPY50,000
Equity holder: the Company (100%)

7. SMIC, Americas
Principal country of operation: U.S.A.
Place of incorporation: California, U.S.A.
Authorized capital: US$500,000 divided into 50,000,000 shares of a par value of US$0.01
Equity holder: the Company (100%)

8. Better Way Enterprises Limited
Principal country of operation: Samoa
Place of incorporation: Samoa
Authorized capital: US$1,000,000 divided into 1,000,000 shares of a par value of US$1.00
Issued share capital: US$1.00
Equity holder: the Company (100%)

REPORT OF THE DIRECTORS

9. SMIC Europe S.r.l.
Principal place of operation: Milan, Italy
Place of incorporation: Agrate Brianza (Monza and Brianza), Italy
Registered capital: EUR100,000
Equity holder: the Company (100%)

10. Semiconductor Manufacturing International (Solar Cell) Corporation
Principal country of operation: Cayman Islands
Place of incorporation: Cayman Islands
Authorized capital: US$11,000 divided into 11,000,000 shares of a par value of US$0.001
Equity holder: the Company (100%)

11. 中芯集電投資(上海)有限公司
SMIC Investment (Shanghai) Corporation* (formerly "SMIC Commercial Shanghai Limited Company")
Principal place of operation: Shanghai, PRC
Place of incorporation: Shanghai, PRC
Legal entity: Wholly foreign-owned enterprise
Total investment: US$1,300,000,000
Registered capital: US$465,800,000
Equity holder: the Company (100%)

12. 中芯國際開發管理(成都)有限公司
SMIC Development (Chengdu) Corporation*
Principal place of operation: Chengdu, PRC
Place of incorporation: Chengdu, PRC
Legal entity: Wholly foreign-owned enterprise
Total Investment: US$12,500,000
Registered capital: US$5,000,000
Equity holder: the Company (100%)

13. Magnificent Tower Limited
Principal country of operation: British Virgin Islands
Place of incorporation: British Virgin Islands
Authorized capital: US$50,000
Issued share capital: US$1.00
Equity holder: the Company (100%, indirectly through Better Way Enterprises Limited)

14. SMIC Shanghai (Cayman) Corporation
Principal country of operation: Cayman Islands
Place of incorporation: Cayman Islands
Authorized capital: US$50,000
Issued share capital: US$0.0004
Equity holder: the Company (100%)

15. SMIC Beijing (Cayman) Corporation
Principal country of operation: Cayman Islands
Place of incorporation: Cayman Islands
Authorized capital: US$50,000
Issued share capital: US$0.0004
Equity holder: the Company (100%)

16. SMIC Tianjin (Cayman) Corporation
Principal country of operation: Cayman Islands
Place of incorporation: Cayman Islands
Authorized capital: US$50,000
Issued share capital: US$0.0004
Equity holder: the Company (100%)

17. SMIC Beijing (HK) Company Limited
Principal place of operation: Hong Kong
Place of incorporation: Hong Kong
Authorized capital: HK$1,000
Issued share capital: HK$1.00
Equity holder: the Company (100%, indirectly through SMIC Beijing (Cayman) Corporation)

18. SMIC Tianjin (HK) Company Limited
Principal place of operation: Hong Kong
Place of incorporation: Hong Kong
Authorized capital: HK$1,000
Issued share capital: HK$1.00
Equity holder: the Company (100%, indirectly through SMIC Tianjin (Cayman) Corporation)

19. SMIC Solar Cell (HK) Company Limited
Principal place of operation: Hong Kong
Place of incorporation: Hong Kong
Authorized capital: HK$10,000
Issued share capital: HK$1.00
Equity holder: the Company (100%, indirectly through Semiconductor Manufacturing International (Solar Cell) Corporation)

20. Semiconductor Manufacturing International (BVI) Corporation
Principal country of operation: British Virgin Islands
Place of incorporation: British Virgin Islands
Authorized capital: US$10.00
Issued share capital: US$10.00
Equity holder: the Company (100%)

21. SMIC Shenzhen (Cayman) Corporation
Principal country of operation: Cayman Islands
Place of incorporation: Cayman Islands
Authorized capital: US$50,000
Issued share capital: US$0.0004
Equity holder: the Company (100%)

22. 中芯國際集成電路新技術研發 (上海) 有限公司
SMIC New Technology Research & Development (Shanghai) Corporation*
Principal place of operation: Shanghai, PRC
Place of incorporation: Shanghai, PRC
Legal entity: Wholly foreign-owned enterprise
Total investment: US$1,200,000,000
Registered capital: US$400,000,000
Equity holder: the Company (100%, indirectly through SMIC Investment (Shanghai) Corporation)

23. SMIC Shenzhen (HK) Company Limited
Principal place of operation: Hong Kong
Place of incorporation: Hong Kong
Authorized capital: HK$1,000
Issued share capital: HK$1.00
Equity holder: the Company (100%, indirectly through SMIC Shenzhen (Cayman) Corporation)

24. SilTech Semiconductor Corporation
Principal country of operation: Cayman Islands
Place of incorporation: Cayman Islands
Authorized capital: US$10,000
Issued share capital: US$10,000
Equity holder: the Company (100%)

25. SilTech Semiconductor (Hong Kong) Corporation Limited
Principal place of operation: Hong Kong
Place of incorporation: Hong Kong
Authorized capital: HK$1,000
Issued share capital: HK$1,000
Equity holder: the Company (100%, indirectly through SilTech Semiconductor Corporation)

26. 中芯國際集成電路製造 (深圳) 有限公司
Semiconductor Manufacturing International (Shenzhen) Corporation*
Principal place of operation: Shenzhen, PRC
Place of incorporation: Shenzhen, PRC
Legal entity: Wholly foreign-owned enterprise
Total Investment: US$2,100,000,000
Registered capital: US$700,000,000
Equity holder: the Company (100% in total, 82% indirectly through SMIC Holdings Corporation and 18% indirectly through SMIC Investment (Shanghai) Corporation)

27. 芯電半導體 (上海) 有限公司
SilTech Semiconductor (Shanghai) Corporation Limited*
Principal place of operation: Shanghai, PRC
Place of incorporation: Shanghai, PRC
Legal entity: Wholly foreign-owned enterprise
Total investment: US$35,000,000
Registered capital: US$12,000,000
Equity holder: the Company (100%, indirectly through SilTech Semiconductor (Hong Kong) Corporation Limited)

28. 中芯晶圓股權投資 (上海) 有限公司
China IC Capital Co., Ltd*
Principal place of operation: Shanghai, PRC
Place of incorporation: Shanghai, PRC
Legal entity: Wholly foreign-owned enterprise
Registered capital: RMB1,458,000,000
Equity holder: the Company (100%, indirectly through Semiconductor Manufacturing International (Shanghai) Corporation)

29. 上海合芯投資管理合夥企業 (有限合夥)
Shanghai Hexin Investment Management Limited Partnership*
Principal place of operation: Shanghai, PRC
Place of incorporation: Shanghai, PRC
Legal entity: Majority-owned subsidiary
Registered capital: RMB50,000,000
Equity holder: the Company (99%, indirectly through China IC Capital (Ningbo) Co., Ltd)

30. SJ Semiconductor Corporation
Principal place of operation: Cayman Islands
Place of incorporation: Cayman Islands
Authorized capital: US$15,000
Issued share capital: US$5,668.05
Equity holder: the Company (55.965%)

31. SJ Semiconductor (HK) Limited
Principal place of operation: Hong Kong
Place of incorporation: Hong Kong
Authorized capital: HK$1,000
Issued share capital: HK$1,000
Equity holder: the Company (55.965%, indirectly through SJ Semiconductor Corporation)

32. 中芯長電半導體 (江陰) 有限公司
SJ Semiconductor (Jiangyin) Corporation*
Principal place of operation: Jiangyin City, Jiangsu Province, PRC
Place of incorporation: Jiangyin City, Jiangsu Province, PRC
Legal entity: Majority-owned subsidiary
Total investment: US$1,140,000,000
Registered capital: US$399,500,000
Equity holder: the Company (55.965%, indirectly through SJ Semiconductor (HK) Limited)

33. 中芯南方集成電路製造有限公司
Semiconductor Manufacturing South China Corporation*
Principal place of operation: Shanghai, PRC
Place of incorporation: Shanghai, PRC
Legal entity: Majority-owned subsidiary
Total investment: US$10,240,000,000
Registered capital: US$3,500,000,000
Equity holder: the Company (50.1% in total, 4.43% indirectly through Semiconductor Manufacturing International (Shanghai) Corporation and 45.67% indirectly through SMIC Holdings Corporation)

34. SJ Semiconductor USA Co.
Principal place of operation: San Jose, California, USA
Place of incorporation: San Jose, California, USA
Authorized capital: US$2,000,000
Equity holder: the Company (55.965%, indirectly through SJ Semiconductor Corporation)

35. 中芯國際創新設計服務中心 (寧波) 有限公司
SMIC Innovation Design Center (Ningbo) Co., Ltd.*
Principal place of operation: Ningbo, PRC
Place of incorporation: Ningbo, PRC
Legal entity: Wholly foreign-owned enterprise
Registered capital: RMB20,000,000
Equity holder: the Company (100%, indirectly through Semiconductor Manufacturing International (Shanghai) Corporation)

36. 中芯晶圓股權投資 (寧波) 有限公司
China IC Capital (Ningbo) Co., Ltd*
Principal place of operation: Shanghai, PRC
Place of incorporation: Shanghai, PRC
Legal entity: Wholly foreign-owned enterprise
Registered capital: RMB1,200,000,000
Equity holder: the Company (100%, indirectly through China IC Capital Co., Ltd)

37. 北方集成電路技術創新中心 (北京) 有限公司
Semiconductor Technology Innovation Center (Beijing) Co., Ltd.*
Principal place of operation: Beijing, PRC
Place of incorporation: Beijing, PRC
Legal entity: Majority-owned subsidiary
Total investment: RMB150,000,000
Registered capital: RMB150,000,000
Equity holder: the Company (66.67% in total, 66% indirectly through SMIC Holdings Corporation and 0.67% indirectly through Semiconductor Manufacturing North China (Beijing) Corporation)

* For identification purposes only

DIVIDENDS AND DIVIDEND POLICY

As of December 31, 2019, the Company's retained earnings increased to US$550.5 million from US$331.3 million as of December 31, 2018. The Company has not declared or paid any cash dividends on the Ordinary Shares. We intend to retain any earnings for use in the Company's business and do not currently intend to pay cash dividends on the Ordinary Shares. Dividends, if any, on the outstanding Ordinary Shares will be declared by and subject to the discretion of the Board. The timing, amount and form of future dividends, if any, will also depend, among other things, on the Company's results of operations and cash flow, the Company's future prospects, the Company's capital requirements and surplus, the Company's financial condition, general business conditions, contractual restrictions on the payment of dividends by the Company to its shareholders or by the Company's subsidiaries to the Company, and other factors deemed relevant by the Board.

The Company's ability to pay cash dividends will also depend upon the amount of distributions, if any, received by the Company from its wholly-owned Chinese operating subsidiaries. Under the applicable requirements of China's Company Law, the Company's subsidiaries in China may only distribute dividends after they have made allowances for recovery of losses (if any), allocation to the statutory common reserve funds, allocation to staff and workers' bonus and welfare funds, and allocation to a discretionary common reserve fund if approved by the Company's shareholders.

More specifically, these operating subsidiaries may only pay dividends after 10% of their net profit has been set aside as statutory common reserves and a discretionary percentage of their net profit has been set aside for the staff and workers' bonus and welfare funds. These operating subsidiaries are not required to set aside any of their net profit as statutory common reserves if the accumulation of such reserves has reached at least 50% of their respective registered capital. Furthermore, if they record no net income for a year, they generally may not distribute dividends for that year.

SHARE CAPITAL

Movements in the share capital of the Company during the year are set out in the below section Issue of Equity Securities and Note 27 to the consolidated financial statement.

DISTRIBUTABLE RESERVE

The Company's reserves available for distribution to shareholders as of December 31, 2019 amounted to US$5,649 million.

ISSUE OF EQUITY SECURITIES

ISSUE OF US$200 MILLION ZERO COUPON CONVERTIBLE BONDS DUE 2022

On November 18, 2019, the Company and the UBS AG Hong Kong Branch (the "Manager") entered into a subscription agreement (the "Bonds Subscription Agreement"), pursuant to which the Manager has agreed to subscribe and pay for, or to procure subscribers to subscribe and pay for the zero coupon convertible bonds to be issued by the Company in an aggregate principal amount of US$200 million (the "2019 Issue") and to form a single series with the existing US$450 million zero coupon convertible bonds due 2022 issued in 2016. The issue price of the 2019 Issue was 116% of the principal amount. The net price per conversion share is HK$10.61. The market price of the Shares on the date of the Bonds Subscription Agreement was HK$10.60 per Share. On December 9, 2019, under the Bonds Subscription Agreement, all of the conditions for the 2019 Issue have been fulfilled and completion of the 2019 Issue in the principal amount of US$200.0 million took place. The Manager informed the Company that the convertible bonds issued in 2019 had been offered and sold to six or more independent placees (who are independent individual, corporate and/or institutional investors). Based on the effective conversion price of HK$10.73 per Share as at the date of the Bonds Subscription Agreement and assuming full conversion of the bonds at such effective conversion price, the bonds will be convertible into approximately 167,950,270 conversion shares. The bonds are listed on the Singapore Exchange on December 10, 2019. The net proceeds (net of fees, commissions and expenses) from the issue of the bonds are approximately US$229.5 million. For details, please refer to Note 32 to the Consolidated Financial Statements.

The total funds raised from the issue and details of the use of proceeds are as follows:

Total proceeds raised from the issue	Intended use of the proceeds as previously disclosed	Utilized proceeds during the year ended December 31, 2019	Utilized proceeds as of December 31, 2019	Unutilized proceeds as of December 31, 2019
US$229.5 million	The Company's capital expenditure for capacity expansion and general corporate purposes	US$0	US$0	US$229.5 million

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

Neither the Company nor any of its subsidiaries has repurchased, sold or redeemed any of the listed securities in 2019. For details, please refer to Note 27 to the Consolidated Financial Statements.

EQUITY-LINKED AGREEMENTS

The Company has issued a US$200 million zero coupon convertible bonds due 2022, which subsist as of December 31, 2019 as set out in Note 32 to the consolidated financial statements.

The Company has made various stock incentive plans which subsist as of December 31, 2019 as set out in Note 37 to the consolidated financial statements.

MATERIAL INVESTMENTS, ACQUISITIONS AND DISPOSALS

DISPOSAL OF SUBSIDIARIES

On March 29, 2019, SMIC Shanghai (Cayman) Corporation (the "Vendor", a wholly-owned subsidiary of the Company), and SMIC Hong Kong International Limited (the "Target Company", a wholly-owned subsidiary of the Vendor) entered into the share purchase agreement with Jiangsu CAS-IGBT Technology Co., Ltd. (the "Purchaser"). Pursuant to the share purchase agreement, the Vendor agreed to sell and the Purchaser agreed to purchase the sale shares at the consideration subject to the terms and conditions of the share purchase agreement. The Target Company directly owns 70% issued and outstanding corporate capital of LFoundry S.r.l. ("LFoundry"), that is Avezzano 200mm fab.

On June 27, 2019, the Vendor, the Target Company, the Purchaser and Wuxi Xichanweixin Semiconductor Co., Ltd (the "New Purchaser") entered into the assignment agreement, pursuant to which, the Purchaser agreed to assign and the New Purchaser agreed to take over and assume all the rights, benefits, obligations and liabilities of the Purchaser under the previous share purchase agreement, and the Vendor and the Target Company agreed to the assignment. After that, the Vendor and the Target Company entered into a new share purchase agreement with the New Purchaser.

The transaction was completed on July 29, 2019. For details, please refer to the announcements of the Company dated March 31, 2019, June 28, 2019 and July 22, 2019, and Note 26 to our consolidated financial statement of this annual report.

CAPITAL CONTRIBUTION

In 2019, the Company indirectly made the capital contributions of US$648.9 million, US$459.0 million, RMB99.0 million (approximately US$14.2 million) and RMB49.5 million (approximately US$7.1 million) into the registered capital of its subsidiaries, that is Semiconductor Manufacturing South China Corporation, Semiconductor Manufacturing North China (Beijing) Corporation, Semiconductor Technology Innovation Center (Beijing) Co., Ltd. and China IC Capital Co., Ltd, respectively.

ACQUISITION OF NON-CONTROLLING INTERESTS

In November 2019, the Company paid US$12.2 million to acquire the non-controlling interests of SMIC New Technology Research & Development (Shanghai) Corporation, followed by wholly-owning the subsidiary.

CONNECTED TRANSACTIONS

CONNECTED TRANSACTIONS

1. *RSUs Grant to Dr. Chen and Mr. Brown*

At the meeting of the Board held on February 14, 2019, the Board resolved to grant 125,000 RSUs (the "RSU Grants") under the 2014 Equity Incentive Plan. Among the 125,000 Restricted Share Units, 62,500 Restricted Share Units and 62,500 Restricted Share Units will be granted to Dr. Chen and Mr. Brown, respectively. Each of the Restricted Share Units granted to Dr. Chen and Mr. Brown represents the right to receive an Ordinary Share on the date it vests. It is intended that 62,500 and 62,500 Restricted Share Units granted to Dr. Chen and Mr. Brown respectively vested on 1 January 2020.

In accordance with the terms of the 2014 Equity Incentive Plan, the RSU Grants are intended to be made for no consideration, other than the minimum payment required by the applicable law in the Cayman Islands (which is the par value of the ordinary shares to be issued pursuant thereto).

The grant of 125,000 RSUs and any transactions contemplated thereunder constitutes non-exempt connected transaction of the Company under Chapter 14A of the Hong Kong Listing Rules and thus subject to reporting, announcement and the independent shareholders' approval requirements of Chapter 14A of the Hong Kong Listing Rules. The RSU Grant and the transactions were approved by the independent shareholders at the extraordinary general meeting of the Company held on February 13, 2020.

2. *RSUs Grant to Dr. Young*

At the meeting of the Board held on August 7, 2019, the Board resolved to grant to Dr. Young 187,500 RSUs (the "RSU Grants") under the 2014 Equity Incentive Plan. Each of the Restricted Share Units to be granted to Dr. Young represents the right to receive an Ordinary Share on the date it vests. It is intended that such Restricted Share Units will be vested over a period of three years at the rate of 33%, 33% and 34% for each 12 month period commencing on the date on which Dr. Young commenced his term of office as an independent non-executive Director.

In accordance with the terms of the 2014 Equity Incentive Plan, the RSU Grants are intended to be made for no consideration, other than the minimum payment required by the applicable law in the Cayman Islands (which is the par value of the ordinary shares to be issued pursuant thereto).

The grant of 187,500 RSUs and any transactions contemplated thereunder constitutes non-exempt connected transaction of the Company under Chapter 14A of the Hong Kong Listing Rules and thus subject to reporting, announcement and the independent shareholders' approval requirements of Chapter 14A of the Hong Kong Listing Rules. The RSU Grant and the transactions were approved by the independent shareholders at the extraordinary general meeting of the Company held on February 13, 2020.

3. *Capital Contribution in Semiconductor Technology Innovation Center (Beijing) Co., Ltd ("the Joint Venture Company")*

On December 23, 2019, the Joint Venture Company, SMIC Holdings Corporation ("SMIC Holdings"), Beijing E-Town International Investment & Development Co., Ltd. ("E-Town Capital") and Semiconductor Manufacturing North China (Beijing) Corporation ("SMNC") entered into a joint venture agreement, pursuant to which (i) SMIC Holdings has agreed to make cash contribution of RMB99 million into the registered capital of the Joint Venture Company, representing approximately 66% of the enlarged registered capital of the Joint Venture Company; (ii) E-Town Capital has agreed to make cash contribution of RMB50 million into the registered capital of the Joint Venture Company, representing approximately 33.33% of the enlarged registered capital of the Joint Venture Company; and (iii) SMNC has agreed to the capital contribution to be made by SMIC Holdings and E-Town Capital into the registered capital of the Joint Venture Company (the "Capital Contribution").

SMIC Holdings and E-Town Capital have completed their respective cash contribution on December 27, 2019. The parties' performance of the Capital Contribution obligations has led to an increase in the registered capital of the Joint Venture Company from RMB1 million to RMB150 million. The cash contributions will be applied by the Joint Venture Company to industry chain construction, technology innovation and working capital.

Reasons For and Benefits of the Capital Contribution

The Company's factory in Beijing is currently the largest 12-inch foundry by production capacity in the mainland China, and there is a strong demand for deeper cooperation with industrial chain enterprises. The Joint Venture Company can support the Group's better development in the future in terms of broadening supply chain channels and improving supply chain comprehensive capabilities. The Capital Contribution will help the Joint Venture Company carry out related business with industrial chain enterprises and build an integrated circuit industry ecosystem centering on Beijing for serving the Group, improving the Group's production line efficiency and reducing production line construction and operation costs.

The Directors (including independent non-executive Directors) consider that it is in the best interests of the Company and the Shareholders as a whole for SMIC Holdings to enter into this joint venture agreement and the transactions contemplated thereunder; the terms of this joint venture agreement are fair and reasonable; and the entering into of this joint venture agreement and the transactions contemplated thereunder are on normal commercial terms or better, in the ordinary and usual course of business of the Group and in the interests of the Company and the Shareholders as a whole.

Implication of Listing Rules

As China IC Fund holds approximately 15.77% equity interest in the Company through its wholly-owned subsidiary, Xinxin (Hongkong) Capital Co., Limited, it is a connected person of the Company at the issuer level under the Listing Rules. The registered capital of SMNC is held as to approximately 51% and 32% by the Group and China IC Fund, respectively, at the time of entering into this joint venture agreement, SMNC is therefore a connected subsidiary of the Company as defined under rule 14A.16 of the Listing Rules. As the registered capital of the Joint Venture Company is held as to 100% by SMNC prior to the Capital Contribution, the Joint Venture Company is therefore a connected subsidiary of the Company as defined under rule 14A.16 of the Listing Rules. SMIC Holdings' entering into of this joint venture agreement with SMNC, the Joint Venture Company and E-Town Capital constitutes a connected transaction under Chapter 14A of the Listing Rules.

As the highest applicable percentage ratios stipulated under rule 14.07 of the Listing Rules in respect of this joint venture agreement exceed 0.1% but are less than 5%, the transaction contemplated under this joint venture agreement constitutes a connected transaction of the Company and is subject to the reporting and announcement requirements under the Listing Rules, but is exempt from the independent Shareholders' approval requirements of Chapter 14A of the Listing Rules.

NON-EXEMPT CONTINUING CONNECTED TRANSACTIONS

1. Framework Agreement with Sino IC Leasing Co., Ltd. — 2016 to 2020 — and Supplemental Agreement to Framework Agreement

On March 30, 2016, the Company and Sino IC Leasing Co., Ltd. ("Sino IC Leasing") entered into a framework agreement ("Framework Agreement with Sino IC Leasing"), pursuant to which Sino IC Leasing should provide to the Company a range of financial services (including but not limited to leasing, factoring, loan entrustment, bills acceptance and discounting services) and certain other related services (including but not limited to financial advisory and consulting services), ending on December 31, 2020.

Sino IC Leasing should support the needs of the Company in its business expansion for funds in both RMB and other foreign currencies. Sino IC Leasing should provide the following services to the Company within the scope permitted by the relevant PRC laws, regulations and policies, as well as the internal operational and management policies of the Company:

1. Finance related Services

The finance related services which Sino IC Leasing will provide to the Company include but are not limited to leasing, factoring, loan entrustment, bills acceptance and discounting services.

2. Other related Services

The other related services which Sino IC Leasing will provide to the Company include but are not limited to financial advisory and consulting services.

The annual caps under the Framework Agreement with Sino IC Leasing are set out below.

Annual Caps	For the year ended December 31,				
	2020 **US$ billion**	2019 US$ billion	2018 US$ billion	2017 US$ billion	2016 US$ billion
Financial services Cap (the maximum rental and fees charged for provision of financial services per calendar year)	**1.5**	1.5	1.5	1.5	1.5
Other related services Cap (the maximum fees charged for provision of other related services per calendar year)	**0.15**	0.15	0.15	0.15	0.15

The price for the services provided by Sino IC Leasing to the Company contemplated under the Framework Agreement with Sino IC Leasing would be determined by reference to the current market conditions and the terms (including the prices) which are comparable to the quotes from independent third parties (to the extent available) providing services of a similar nature with comparable scale in the ordinary and usual course of business based on normal commercial terms and on arm's length negotiations, as well as the reasonable market prices which are applicable around that time, subject to compliance with requirements for related party transactions and connected transactions of the Hong Kong Stock Exchange.

The reasons for the Company to enter into the Framework Agreement with Sino IC Leasing are as follows:

1. the entering into of the Framework Agreement with Sino IC Leasing will enable the Group to broaden its existing financing channels; and

2. optimise the existing machinery of the Company and increase operating cash flow.

As China IC Fund holds approximately 17.55% equity interest in the Company at of time of entering into the Framework Agreement with Sino IC Leasing through its wholly-owned subsidiary, Xinxin (Hongkong) Capital Co., Limited, it is a connected person of the Company at the issuer level under the Listing Rules. China IC Fund also holds approximately 35.21% equity interest in Sino IC Leasing at time of entering into the Framework Agreement with Sino IC Leasing, therefore Sino IC Leasing is a connected person of the Company under the Listing Rules by virtue of being an associate of a connected person of the Company as defined under Rule 14A.13 of the Listing Rules. The Framework Agreement with Sino IC Leasing and the transactions contemplated thereunder constitute non-exempt continuing connected transactions subject to the reporting, announcement and independent shareholders' approval requirements of Chapter 14A of the Listing Rules. As the term of the Framework Agreement with Sino IC Leasing exceeds three years, the independent financial adviser, Messis Capital Ltd., also explained why a period longer than three years is required and confirmed that it is normal business practice for an agreement of this type to be of such duration.

Mr. Lu Jun, who is a Class II non-executive Director and a member of the nomination committee of the Company, holds the position of President in China IC Fund's sole manager, namely Sino IC Capital Co., Ltd. Mr. Ren Kai, who is a Class III non-executive Director, also holds the position of Vice President in Sino IC Capital Co., Ltd. As such, both Mr. Lu and Mr. Ren have abstained from voting on the relevant board resolutions in respect of the Framework Agreement with Sino IC Leasing.

The Framework Agreement with Sino IC Leasing and all transactions contemplated thereunder; and the annual caps in respect of the Framework Agreement with Sino IC Leasing were approved by the independent shareholders of the Company at the extraordinary general meeting of the Company held on August 10, 2016 as required under Chapter 14A of the Listing Rules.

On December 21, 2016, the Company and Sino IC Leasing entered into a supplemental agreement ("Supplemental Agreement") to amend the Framework Agreement with Sino IC Leasing.

Pursuant to the Supplemental Agreement, the Company and Sino IC Leasing agreed that (1) the Framework Agreement with Sino IC Leasing should apply not only to Sino IC Leasing but also to its subsidiaries and (2) references therein to Sino IC Leasing should include references to its subsidiaries. The Supplemental Agreement is subject to applicable laws and regulations, including the Listing Rules.

The reason for entering into the Supplemental Agreement was that the Company had been informed by Sino IC Leasing that, in order to take advantage of benefits which may be available to its subsidiaries which are established in certain areas in the PRC, it wished to have the ability to perform its services under the Framework Agreement with Sino IC Leasing through its subsidiaries.

The actual amounts generated by the Company from the transactions entered into pursuant to the Framework Agreement with Sino IC Leasing and the Supplemental Agreement during the year ended December 31, 2019 are set out below.

Transactions	**Actual Transaction Amounts for the year ended December 31,**			
	2019 US$ million	2018 US$ million	2017 US$ million	2016 US$ million
Financial Services	**89.2**	87.1	45.6	—
Other Related Services	—	—	—	—

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2019.

Pursuant to Rule 14A.55 of the Listing Rules, the independent non-executive Directors have reviewed the non-exempt continuing connected transactions and confirmed that the transactions under the Framework Agreement with Sino IC Leasing and the Supplemental Agreement that took place between the Company and Sino IC Leasing for the year ended December 31, 2019 had been entered into 1) in the ordinary and usual course of business of the Group; 2) on normal commercial terms or better; and 3) in accordance with the Framework Agreement with Sino IC Leasing and the Supplemental Agreement on terms that were fair and reasonable and in the interests of the shareholders of the Company as a whole.

Pursuant to Rule 14A.56 of the Listing Rules, the Company's external auditor performed certain agreed upon procedures in respect of the continuing connected transactions of the Company under the Framework Agreement with Sino IC Leasing and the Supplemental Agreement and had provided to the Board an unqualified letter containing findings and conclusions in respect of the aforesaid continuing connected transactions.

2. Framework Agreement with SJ Semiconductor Corporation — 2017 to 2019 — and Amendment Agreement to Framework Agreement

On December 27, 2016, the Company and its majority owned subsidiary SJ Semiconductor Corporation ("SJ Cayman") entered into a framework agreement in relation to supply of goods and services, transfer of equipment and provision of technical authorization or licensing with a term commencing on January 1, 2017 and ending on December 31, 2019 and subject to the terms and conditions provided therein ("Framework Agreement with SJ Cayman").

The Company and SJ Cayman agreed to enter into one or more of the following types of transaction with each other including supply of goods and services, transfer of equipment and provision of technical authorization or licensing:

1. Purchase and sale of spare parts and raw materials;

2. Rendering of or receiving services including, without limitation, (a) processing and testing service; (b) procurement service; (c) research, development and experiment support service; and (d) comprehensive administration, logistics, production management and IT service;

3. Transfer of equipment; and

4. Provision of technical authorization or licensing by the Company to SJ Cayman.

The price of the transactions contemplated under the Framework Agreement with SJ Cayman ("Continuing Connected Transactions with SJ Cayman") will be determined in accordance with the following general principles in ascending order:

(1) the price prescribed or approved by state or local price control department (if any);

(2) a reasonable price in accordance with the industry guided price for a particular type of service or product issued by the relevant industry association (if any);

(3) the comparable local market price, which shall be determined after arm's length negotiation between both parties of the contract with reference to (a) the market price charged by independent third parties for comparable product or services at the same time and in the same region; and (b) the lowest quotation that the purchaser can obtain by way of public tender. The Company will obtain at least two quotations or tenders from independent third parties before agreeing upon the applicable price;

(4) where there is no comparable local market price, price based on the principle of cost plus a fair and reasonable profit rate, being the aggregate sum of (a) the actual reasonable cost; and (b) a fair and reasonable profit rate. The expected range of profit is from 5% to 10%, which is in line with the industry and not lower than the profit rate charged by the Company or SJ Cayman (as applicable) to independent third parties (to the extent available).

As to price prescribed by the state or local price control department, state-prescribed fees apply to water, electricity, gas and communication services involved in providing procurement service and comprehensive administration, logistics, production management and IT service, which are relevant to the cost of such services and are determined by prices published from time by time by the relevant PRC government authority. Under the Pricing Law of the PRC, the state may implement state-prescribed or guidance price for specific goods and services if necessary, such price will be promulgated in accordance with the requirements of relevant laws, regulations or administrative rules from time to time. If any state-prescribed price or guidance price becomes available to the Continuing Connected Transactions with SJ Cayman in the future, the parties will execute such price first in accordance with pricing principle (1) above.

The annual caps for the Continuing Connected Transactions with SJ Cayman ("Existing Annual Caps with SJ Cayman") are set out below:

Annual Caps	For the year ended December 31,		
	2019	2018	2017
	US$ million	US$ million	US$ million
Supply of goods and services, transfer of equipment and provision of technical authorization or licensing by the Company	**11**	11	11
Supply of goods and services and transfer of equipment by SJ Cayman	**100**	100	100

In arriving at the annual caps, the Company considered the historical transaction amounts between the Company and SJ Cayman, as well as reasonable factors such as the expected occurrences of non-exempt continuing transactions in light of current market conditions of the semiconductor industry and the technological capability of the Company. The Company has also considered the fact that SJ Cayman has only been established recently in August 2014 and is expected to steadily progress towards establishing full operations in 2019.

On July 25, 2018, the Company and SJ Cayman entered into an amendment agreement ("Amendment Agreement") to revise the Existing Annual Caps with SJ Cayman.

Pursuant to the Amendment Agreement, the parties have agreed to revise the Existing Annual Caps with SJ Cayman such that the maximum annual transaction value for the supply of goods and services, transfer of equipment and provision of technical authorization or licensing by the Company to SJ Cayman contemplated under the Framework Agreement with SJ Cayman shall be adjusted from US$11 million (or its equivalent in other currencies) and US$11 million (or its equivalent in other currencies) for the years ending December 31, 2018 and 2019, respectively, to US$25 million (or its equivalent in other currencies) and US$25 million(or its equivalent in other currencies) for the years ending December 31, 2018 and 2019, respectively.

The reason for entering into the Amendment Agreement was that the continuous growth and expansion of the business operations of SJ Cayman. The Company expects that the Existing Annual Caps with SJ Cayman will not be sufficient.

The revised annual caps are set out below:

Annual Caps	For the year ended December 31,		
	2019	2018	2017
	US$ million	US$ million	US$ million
Supply of goods and services, transfer of equipment and provision of technical authorization or licensing by the Company	**25 (Revised)**	25 (Revised)	11
Supply of goods and services and transfer of equipment by SJ Cayman	**100**	100	100

The actual transaction amounts generated by the Company from the transactions entered into pursuant to the Framework Agreement with SJ Cayman and the Amendment Agreement for the year ended December 31, 2019 are set out below.

Transactions	Actual Transaction Amounts for the year ended December 31,		
	2019 **US$ million**	2018 US$ million	2017 US$ million
Supply of goods and services, transfer of equipment and provision of technical authorization or licensing generated by the Company	**10.4**	6.5	0.9
Supply of goods and services and transfer of equipment generated by SJ Cayman	**43.2**	45.7	20.8

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2019.

The Company considers that the entry into the Framework Agreement with SJ Cayman and the Continuing Connected Transactions with SJ Cayman will continue to bring the Company an effective and complete wafer turn-key solution.

As China IC Fund holds approximately 17.40% equity interest in the Company as at the date of entering into the Framework Agreement with SJ Cayman through its wholly-owned subsidiary, Xinxin (Hongkong) Capital Co., Limited, it is a connected person of the Company at the issuer level under the Listing Rules. China IC Fund holds approximately 29.41% equity interest in SJ Cayman as at the date of entering into the Framework Agreement with SJ Cayman through its wholly-owned subsidiary, Xun Xin. SJ Cayman is therefore a connected subsidiary of the Company as defined under Rule 14A.16 of the Listing Rules and thus a connected person of the Company under the Listing Rules. The Framework Agreement with SJ Cayman and the transactions contemplated thereunder are exempt from independent shareholders' approval requirements under Chapter 14A of the Listing Rules.

No Director is considered to have a material interest in the Framework Agreement with SJ Cayman which would have required the Director to abstain from voting at the Board Meeting authorizing the Framework Agreement with SJ Cayman.

Pursuant to Rule 14A.55 of the Listing Rules, the independent non-executive Directors have reviewed the non-exempt continuing connected transactions and confirmed that the transactions under the Framework Agreement with SJ Cayman and the Amendment Agreement that took place between the Company and its majority owned subsidiary SJ Cayman for the year ended December 31, 2019 had been entered into 1) in the ordinary and usual course of business of the Group; 2) on normal commercial terms or better; and 3) in accordance with the Framework Agreement with SJ Cayman and the Amendment Agreement on terms that were fair and reasonable and in the interests of the shareholders of the Company as a whole.

Pursuant to Rule 14A.56 of the Listing Rules, the Company's external auditor performed certain agreed upon procedures in respect of the continuing connected transactions of the Company under the Framework Agreement with SJ Cayman and the Amendment Agreement and had provided to the Board an unqualified letter containing findings and conclusions in respect of the aforesaid continuing connected transactions.

3. Framework Agreement with Semiconductor Manufacturing North China (Beijing) Corporation — 2018 to 2020 — and Amendment Agreement to Framework Agreement

On December 6, 2017 the Company and its subsidiary, Semiconductor Manufacturing North China (Beijing) Corporation ("SMNC") entered into a framework agreement in relation to the supply of goods, rendering of or receiving services, leasing of assets, transfer of assets, provision of technical authorization or licensing and provision of guarantee. The framework agreement is for a term of three years commencing on January 1, 2018 and ending on December 31, 2020 ("Framework Agreement with SMNC 2018–2020").

The Company and SMNC agreed to enter into one or more of the following types of transactions with each other including the supply of goods, rendering of or receiving services, leasing of assets, transfer of assets, provision of technical authorization or licensing and provision of guarantee:

1. Purchase and sale of spare parts, raw materials, photomasks and finished products;

2. Rendering of or receiving services, including, without limitation, (a) processing and testing service; (b) sales service; (c) overseas market promotion and customer service; (d) procurement service; (e) research, development and experiment support service; (f) comprehensive administration, logistics, production management and IT service; and (g) water, electricity, gas and heat provision service;

3. Leasing of assets, such as plant, office premises and equipment;

4. Transfer of assets;

5. Provision of technical authorization or licensing by the Company and/or its subsidiaries (other than SMNC and its subsidiaries) ("Group A") to SMNC and/or its subsidiaries ("Group B"), as well as the sharing of research and development costs in relation to 28-nanometer technologies; and

6. Provision of guarantee by Group A for SMNC's financing activities.

The price of the transactions contemplated under the Framework Agreement with SMNC 2018–2020 ("Continuing CTs") will be determined in accordance with the following general principles (in ascending order):

(1) the price prescribed or approved by state or local price control department (if any);

(2) a reasonable price in accordance with the industry guided price;

(3) the comparable local market price, which shall be determined after arm's length negotiation between both parties with reference to (a) the market price charged by independent third parties for comparable product or services at the same time and in the same region; and (b) the lowest quotation that the purchaser can obtain by way of public tender;

(4) where there is no comparable local market price, the price based on the principle of cost plus a fair and reasonable profit rate, being the aggregate sum of (a) the actual reasonable cost; and (b) a fair and reasonable profit rate;

(5) where none of the above general pricing principles are applicable, the price determined by other reasonable means as agreed upon by both parties on the condition that the relevant costs are identifiable and are allocated to each party involved on a fair and equitable basis.

Where general pricing principles (2) to (5) apply, to the extent possible, each of Group A and Group B will obtain at least two quotations or tenders from independent third parties before agreeing upon the applicable price.

As to the price prescribed by the state or local price control department, state-prescribed fees apply to water and electricity, which are relevant to the cost of such services and are determined by prices published from time by time by the relevant PRC government authority. Under the Pricing Law of the PRC, the PRC government may implement a state-prescribed or guidance price for specific goods and services if necessary, and such price will be promulgated in accordance with the requirements of relevant laws, regulations or administrative rules from time to time. If any state-prescribed price or guidance price becomes available to the Continuing CTs in the future, the parties will execute such price first in accordance with pricing principle (1) above.

The breakdown for the proposed annual caps for the Continuing CTs is set out below:

Annual Caps	**For the year ended December 31,**		
	2020 US$ million	2019 US$ million	2018 US$ million
Purchase and sale of goods	**1,500**	1,100	900
Rendering of or receiving services	**200**	150	100
Leasing of assets	**200**	200	200
Transfer of assets	**200**	200	200
Provision of technical authorization or licensing (including the sharing of research and development costs)	**100**	100	100
Provision of guarantee	**1,000**	1,000	1,000
Total	**3,200**	2,750	2,500

The Company believes that advancement in technology is one of the key growth factors. With respect to advanced nodes of 28nm and 40nm, which is one of the development focuses of the Group, the Group recorded a revenue growth of more than 90% in 2016 as compared to the year of 2015, and more than 30% during the first three quarters of 2017 as compared to the corresponding period in 2016. The continuous cooperation with SMNC, throughout the various steps in production as reflected in the Continuing CTs, helps the Company to meet demand from its customers and to attain higher profitability, especially for the advanced nodes.

The business partnership between the Company and SMNC has helped to eliminate some duplicated efforts on introducing and manufacturing advanced nodes for IC design houses, therefore reducing the time to market and some overhead expenses for both parties. With the expansion of its capacity and continuous innovation, the Company believes that it will be able to enhance its position in the industry and benefit from the increase in its economies of scale.

As SMNC had been continuously expanding its manufacturing capacity, the Company can therefore leverage SMNC's manufacturing capacity to expand the Company capacity based on its advanced technology in a capital-efficient manner.

The Framework Agreement with SMNC 2018–2020 and all transactions contemplated thereunder; and the annual caps in respect of the Framework Agreement with SMNC 2018–2020 were approved by the independent shareholders of the Company at the extraordinary general meeting of the Company held on February 8, 2018 as required under Chapter 14A of the Listing Rules.

On December 6, 2019, the Company (on behalf of itself and its subsidiaries (other than SMNC)) and SMNC (on behalf of itself and its subsidiaries) entered into an amendment agreement to the Framework Agreement with SMNC 2018–2020 (the "SMNC Amendment Agreement") to revise the existing annual cap for the transfer of assets between the Company and SMNC contemplated under the Framework Agreement with SMNC 2018–2020, which amounted to US$200 million (or its equivalent in other currencies) for the year ending December 31, 2020 (the "Existing Annual Cap").

Pursuant to the SMNC Amendment Agreement, the parties have agreed to revise the Existing Annual Cap such that the maximum annual transaction value for the transfer of assets between the Company and SMNC contemplated under the Framework Agreement with SMNC 2018–2020 shall be adjusted from US$200 million (or its equivalent in other currencies) to US$550 million (or its equivalent in other currencies) for the year ending December 31, 2020. Save for the said revision, all other terms of the Framework Agreement with SMNC 2018–2020 including the applicable pricing policies shall remain unchanged and the Framework Agreement with SMNC 2018–2020 remains valid and enforceable.

The existing annual caps for (i) the transfer of assets contemplated under the Framework Agreement with SMNC 2018–2020 for the year ending December 31, 2019 and (ii) the purchase and sale of goods, rendering of or receiving services, leasing of assets, provision of technical authorization or licensing and provision of guarantee contemplated under the Framework Agreement with SMNC 2018–2020 for the years ending December 31, 2019 and December 31, 2020 shall remain unchanged.

The reason for entering into the SMNC Amendment Agreement was that the continuous growth and expansion of the business operations of SMNC (on behalf of itself and its subsidiaries), the Company expects that the Existing Annual Cap will not be sufficient.

The breakdown for the annual caps for the continuing CTs and the transactions contemplated under the SMNC Amendment Agreement are set out below.

Annual Caps	**For the year ended December 31,**		
	2020 **US$ million**	2019 US$ million	2018 US$ million
Purchase and sale of goods	**1,500**	1,100	900
Rendering of or receiving services	**200**	150	100
Leasing of assets	**200**	200	200
Transfer of assets	**550 (revised)**	200	200
Provision of technical authorization or licensing (including the sharing of research and development costs)	**100**	100	100
Provision of guarantee	**1,000**	1,000	1,000
Total	**3,550 (revised)**	2,750	2,500

As China IC Fund holds approximately 15.06% and 15.77% equity interest in the Company through its wholly-owned subsidiary, Xinxin (Hongkong) Capital Co., Limited, at the time of entering into the Framework Agreement with SMNC 2018–2020 and at the time of entering into the SMNC Amendment Agreement, respectively, it is a connected person of the Company at the issuer level under the Listing Rules. As China IC Fund holds 32.00% equity interest in the registered capital of SMNC as at the date of entering into the Framework Agreement with SMNC 2018–2020, and at the time of entering into the SMNC Amendment Agreement, SMNC is therefore a connected subsidiary of the Company as defined under Rule 14A.16 of the Listing Rules and thus a connected person of the Company under the Listing Rules. The Framework Agreement with SMNC 2018–2020 and the SMNC Amendment Agreement and the transactions contemplated thereunder constitute non-exempt continuing connected transactions subject to the reporting, announcement and independent shareholders' approval requirements of Chapter 14A of the Listing Rules.

The SMNC Amendment Agreement and all transactions contemplated thereunder; and the revised annual cap in respect of the SMNC Amendment Agreement was approved by the independent shareholders of the Company at the extraordinary general meeting of the Company held on February 13, 2020 as required under Chapter 14A of the Listing Rules.

The actual amounts generated by the Company from the transactions entered into pursuant to the Framework Agreement with SMNC 2018–2020 and the SMNC Amendment Agreement during the year ended December 31, 2019 are set out below.

Transactions	Actual Transaction Amounts for the year ended December 31,	
	2019	2018
	US$ million	US$ million
Purchase and sale of goods	**607.5**	561.8
Rendering of or receiving services	**73.1**	84.5
Leasing of assets	**0.1**	0.3
Transfer of assets	**195.9**	—
Provision of technical authorization or licensing (including the sharing of research and development costs)	**—**	—
Provision of guarantee	**30.1**	7.4
Total	**906.7**	654.0

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2019.

Pursuant to Rule 14A.55 of the Listing Rules, the independent non-executive directors of the Company have reviewed and approved the continuing connected transactions above and confirmed that the continuing connected transactions under the Framework Agreement with SMNC 2018–2020 and the SMNC Amendment Agreement that took place between the Company and its majority owned subsidiary SMNC for year ended December 31, 2019 had been entered into (1) in the ordinary and usual course of business of the Group; (2) on normal commercial terms or better; and (3) in accordance with the Framework Agreement with SMNC 2018–2020 and the SMNC Amendment Agreement on terms that were fair and reasonable and in the interests of the Company's shareholders as a whole.

Pursuant to Rule 14A.56 of the Listing Rules, the Company's external auditor performed certain agreed upon procedures in respect of the continuing connected transactions of the Company under the Framework Agreement with SMNC 2018–2020 and the SMNC Amendment Agreement and had provided to the Board an unqualified letter containing findings and conclusions in respect of the aforesaid continuing connected transactions.

4. Centralized Fund Management Agreement with Semiconductor Manufacturing South China Corporation ("SMSC") — 2017 to 2020 — and SMSC Amendment Agreement

On June 1, 2017, the Company and its subsidiaries, Semiconductor Manufacturing International (Beijing) Corporation ("SMIC Beijing") and SMSC entered into the Centralized Fund Management Agreement (the "SMSC Centralized Fund Management Agreement"), pursuant to which: (i) the Company will procure its wholly-owned subsidiary SMIC Beijing to out Centralized management of the Company's RMB fund and foreign exchange in accordance with the relevant PRC laws and regulations; and (ii) SMSC and its Controlling Subsidiaries will participate in the Company's centralized fund management system, which will be managed by SMIC Beijing in accordance with the relevant PRC laws and regulations. The SMSC Centralized Fund Management Agreement is for a term commencing on June 1, 2017 and ending on December 31, 2020.

The price of the services provided by SMIC Beijing to SMSC contemplated under the SMSC Centralized Fund Management Agreement will be fair in the context of connected transactions and determined according to the market principle on an arm's length basis, and will be subject to compliance with regulatory requirements of the Hong Kong Stock Exchange and relevant requirements for connected transactions that are applicable to the parties.

1. *Internal Deposit Services*

   In relation to the transactions contemplated under the Centralized Fund Management Agreement with SMSC, the Internal Deposit Services to be provided by SMIC Beijing to SMSC will constitute continuing connected transactions by way of financial assistance received by SMIC Beijing from a connected person. Pursuant to Rule 14A.90 of the Listing Rules, as the Internal Deposit Services are conducted on normal commercial terms and not secured by the assets of the Group, the provision of the Internal Deposit Services is fully exempt from the reporting, announcement and/or the independent shareholders' approval requirements under the Listing Rules.

2. *Collection and Payment Services and Foreign Exchange Services*

   The terms in respect of the Collection and Payment Services and Foreign Exchange Services provided by SMIC Beijing to SMSC will be on normal commercial terms or better, in the ordinary and usual course of business of the Group and in the interests of the Company and the Shareholders as a whole, subject to the relevant provisions of PRC laws and regulations.

3. *Internal Loan Services*

   The terms in respect of the Internal Loan Services provided by SMIC Beijing to SMSC will be on normal commercial terms or better, in the ordinary and usual course of business of the Group and in the interests of the Company and the Shareholders as a whole, subject to the relevant provisions of PRC laws and regulations.

4. *Provision of Letter of Credit Services*

   The terms in respect of the Letters of Credit Services provided by the Company to SMSC will be on normal commercial terms or better, in the ordinary and usual course of business of the Group and in the interests of the Company and the Shareholders as a whole, subject to the relevant provisions of PRC laws and regulations.

5. *Other Financial Services*

   The terms in respect of the Other Financial Services provided by SMIC Beijing to SMSC will be on normal commercial terms or better, in the ordinary and usual course of business of the Group and in the interests of the Company and the Shareholders as a whole, subject to the relevant provisions of PRC laws and regulations.

The annual caps under the SMSC Centralized Fund Management Agreement are set out below.

Annual Caps	**For the year ended December 31,**		
	2020 **US$ million**	2019 US$ million	2018 US$ million
Collection and Payment and Foreign Exchange Cap	**2,000**	2,000	2,000
Internal Loan Cap	**2,000**	2,000	2,000
Letter of Credit Cap	**2,000**	2,000	2,000
Other Financial Services Cap	**50**	50	50

The Company considers that the entry into of the SMSC Centralized Fund Management Agreement and the transactions contemplated thereunder will have the following benefits:

1. Open up the domestic and foreign funding channels of the Group;

2. Reduce the Group's overall debt levels and increase efficient fund usage;

3. Reduce the Group's interest expense; and

4. Obtain favorable exchange rate for the Group.

On March 19, 2019, the Company and its subsidiaries, SMIC Beijing and SMSC, entered into an amendment agreement (the "SMSC Amendment Agreement") to revise the existing annual caps for the provision of internal deposit services contemplated under the SMSC Centralised Fund Management Agreement, which amount to US$2,000 million (or its equivalent in other currencies) for the year ended December 31, 2018 and the years ending December 31, 2019 and 2020, respectively (the "Existing SMSC Internal Deposit Services Annual Caps"). Pursuant to the SMSC Amendment Agreement, the parties have agreed to revise the Existing SMSC Internal Deposit Services Annual Caps as set out in the SMSC Centralised Fund Management Agreement such that the maximum annual transaction value for the internal deposit services provided by SMIC Beijing to SMSC contemplated under the SMSC Centralised Fund Management Agreement shall be adjusted from US$2,000 million (or its equivalent in other currencies) for the years ending December 31, 2019 and 2020, respectively, to US$3,500 million (or its equivalent in other currencies) for the years ending December 31, 2019 and 2020, respectively (the "Revised SMSC Internal Deposit Services Annual Caps"). Save for the revision set out above, all other terms of the SMSC Centralised Fund Management Agreement remain unchanged and the SMSC Centralised Fund Management Agreement remains valid and enforceable.

In view of the increasing balance of cash and cash equivalent of each of SMSC, being the service recipients of the internal deposit services provided by SMIC Beijing, the Company expects that the Existing SMSC Internal Deposit Services Annual Caps will not be sufficient to meet the increasing need for internal deposit services of SMSC. The Company has therefore proposed to revise the Existing SMSC Internal Deposit Services Annual Cap with the Revised SMSC Internal Deposit Services Annual Caps.

China IC Fund holds approximately 27.00% of the equity interest in SMSC as at the time of entering into the SMSC Amendment Agreement, SMSC is a connected subsidiary of the Company as defined under Rule 14A.16 of the Listing Rules and is thus a connected person of the Company under the Listing Rules.

The SMSC Centralized Fund Management Agreement and all transactions contemplated thereunder; and the annual caps in respect of the SMSC Centralized Fund Management Agreement were approved by the independent shareholders of the Company at the extraordinary general meeting of the Company held on November 7, 2018 as required under Chapter 14A of the Listing Rules.

The actual transaction amounts generated by the Company from the fund management services entered into pursuant to the SMSC Centralized Fund Management Agreement and the SMSC Amendment Agreement during the year ended December 31, 2019 are set out below.

Transactions	**Actual Transaction Amounts for the year ended December 31,**	
	2019 US$ million	2018 US$ million
Collection and Payment Services and Foreign Exchange Services	**3.0**	—
Internal Loan Services	—	—
Letter of Credit Services	**448.5**	—
Other Financial Services	—	—

No Director is considered to have a material interest in the SMSC Centralized Fund Management Agreement, the SMSC Amendment Agreement and the Revised SMSC Internal Deposits Service Annual Caps which would have required the Director to abstain from voting at the board meeting authorising the SMSC Centralized Fund Management Agreement, the SMSC Amendment Agreement and the Revised SMSC Internal Deposits Service Annual Caps.

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2019.

Pursuant to Rule 14A.55 of the Listing Rules, the independent non-executive directors of the Company have reviewed and approved the continuing connected transactions above and confirmed that the continuing connected transactions under the SMSC Centralized Fund Management Agreement and the SMSC Amendment Agreement that took place between the Company and its majority owned subsidiary SMSC for year ended December 31, 2019 had been entered into (1) in the ordinary and usual course of business of the Group; (2) on normal commercial terms or better; and (3) in accordance with the SMSC Centralized Fund Management Agreement and the SMSC Amendment Agreement on terms that were fair and reasonable and in the interests of the Company's shareholders as a whole.

Pursuant to Rule 14A.56 of the Listing Rules, the Company's external auditor performed certain agreed upon procedures in respect of the continuing connected transactions of the Company under the SMSC Centralized Fund Management Agreement and the SMSC Amendment Agreement and had provided to the Board an unqualified letter containing findings and conclusions in respect of the aforesaid continuing connected transactions.

5. *Framework Agreement with Semiconductor Manufacturing South China Corporation — 2018 to 2019*

On June 11, 2018, the Company and its subsidiaries, SMSC entered into a framework agreement in relation to the supply of goods, rendering of or receiving services, leasing of assets, transfer of assets, provision of technical authorization or licensing and provision of guarantee. The framework agreement is with a term commenced on April 26, 2018 and ending on December 31, 2019 ("Framework Agreement with SMSC").

The Company and SMSC agreed to enter into one or more of the following types of transactions with each other including the supply of goods and services, leasing of assets, transfer of assets, provision of technical authorization or licensing and provision of guarantee:

1. Purchase and sale of spare parts, raw materials, photomasks and finished products;

2. Rendering of or receiving services, including, without limitation, (a) processing and testing service; (b) sales service; (c) overseas market promotion and customer service; (d) procurement service; (e) research, development and experiment support service; (f) comprehensive administration, logistics, production management, IT and other service; and (g) water, electricity, gas and heat provision service;

3. Leasing of assets, such as plant, office premises and equipment;

4. Transfer of assets;

5. Provision of technical authorization or licensing as well as the sharing of research and development costs; and

6. Provision of guarantee by the Company and/or its subsidiaries (other than SMSC and its subsidiaries ("Group C") for SMSC's financing activities.

The price of the continuing connected transactions contemplated under the Framework Agreement with SMSC will be determined in accordance with the following general principles in ascending order:

(1) the price prescribed or approved by state or local price control department (if any);

(2) a reasonable price in accordance with the industry guided price;

(3) the comparable local market price, which shall be determined after arm's length negotiation between both parties with reference to (a) the market price charged by independent third parties for comparable product or services at the same time and in the same region; and (b) the lowest quotation that the purchaser can obtain by way of public tender;

(4) where there is no comparable local market price, the price based on the principle of cost plus a fair and reasonable profit rate, being the aggregate sum of (a) the actual reasonable cost; and (b) a fair and reasonable profit rate;

(5) where none of the above general pricing principles are applicable, the price determined by other reasonable means as agreed upon by both parties on the condition that the relevant costs are identifiable and are allocated to each party involved on a fair and equitable basis.

Where general pricing principles (2) to (5) apply, to the extent possible, each of Group C and SMSC will obtain at least two quotations or tenders from independent third parties before agreeing upon the applicable price.

The breakdown for the annual caps for the continuing connected transactions contemplated under the Framework Agreement with SMSC is set out below:

Annual Caps	**For the year ended December 31,**	
	2019 **US$ million**	2018 US$ million
Purchase and sale of goods	**61**	1
Rendering of or receiving services	**31**	11
Leasing of assets	**65**	7
Transfer of equipment	**316**	—
Provision of technical authorization or licensing (including the sharing of research and development costs)	**300**	100
Provision of guarantee	**500**	500
Total	**1,273**	619

The Company considers that the entry into the Framework Agreement with SMSC and the transactions contemplated thereunder will bring the Company an effective and complete wafer production needs.

The business partnership between the Company and SMSC will help to eliminate some duplicated efforts in introducing and manufacturing advanced nodes for IC design houses, thereby reducing the time to market and some overhead expenses for both parties. With the expansion of its capacity and continuous innovation, the Company believes that it will be able to enhance its position in the industry and benefit from the increase in its economies of scale.

China IC Fund holds approximately 24.71% of the equity interest in SMSC, SMSC is a connected subsidiary of the Company as defined under Rule 14A.16 of the Listing Rules and is thus a connected person of the Company under the Listing Rules.

The Framework Agreement with SMSC and all transactions contemplated thereunder; and the annual caps in respect of the Framework Agreement with SMSC were approved by the independent shareholders of the Company at the extraordinary general meeting of the Company held on November 7, 2018 as required under Chapter 14A of the Listing Rules.

The actual transaction amounts generated by the Company from the transactions entered into pursuant to the Framework Agreement with SMSC during the year ended December 31, 2019 are set out below.

Transactions	Actual Transaction Amounts for the year ended December 31, 2019 US$ million	2018 US$ million
Purchase and sale of goods	**7.2**	—
Rendering of or receiving services	**22.4**	2.2
Leasing of assets	**7.2**	—
Transfer of equipment	**127.2**	—
Provision of technical authorization or licensing	**300**	—
Provision of guarantee	**—**	—
Total	**464**	2.2

No Director is considered to have a material interest in the Framework Agreement with SMSC which would have required the Director to abstain from voting at the board meeting authorising the Framework Agreement with SMSC.

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2019.

Pursuant to Rule 14A.55 of the Listing Rules, the independent non-executive directors of the Company have reviewed and approved the continuing connected transactions above and confirmed that the continuing connected transactions under the Framework Agreement with SMSC that took place between the Company and its majority owned subsidiary SMSC for year ended December 31, 2019 had been entered into (1) in the ordinary and usual course of business of the Group; (2) on normal commercial terms or better; and (3) in accordance with the Framework Agreement with SMSC on terms that were fair and reasonable and in the interests of the Company's shareholders as a whole.

Pursuant to Rule 14A.56 of the Listing Rules, the Company's external auditor performed certain agreed upon procedures in respect of the continuing connected transactions of the Company under the Framework Agreement with SMSC and had provided to the Board an unqualified letter containing findings and conclusions in respect of the aforesaid continuing connected transactions.

6. *Centralized Fund Management Agreement with Semiconductor Manufacturing North China (Beijing) Corporation — 2019 to 2021 — and Revision*

On November 29, 2018, the Company, SMIC Beijing and SMNC entered into a centralized fund management agreement ("Centralized Fund Management Agreement with SMNC") in relation to: (i) the Company authorising its wholly-owned subsidiary SMIC Beijing to carry out Centralized management of the Group's RMB fund and foreign exchange in accordance with the relevant PRC laws and regulations; and (ii) SMNC participating in the Group's centralized fund management system. SMIC Beijing will provide internal deposit services, collection and payment services, foreign exchange services, internal loan services, provision of letter of credit services and other financial services to SMNC pursuant to the Centralized Fund Management Agreement with SMNC. The Centralized Fund Management Agreement with SMNC is for a term of three years commencing on January 1, 2019 and ending on December 31, 2021.

The Company will authorise its wholly-owned subsidiary SMIC Beijing to carry out centralized management of the Group's RMB fund and foreign exchange in accordance with the relevant PRC laws and regulations. Based on such authorization, SMIC Beijing will provide the following fund management services to SMNC within the scope permitted by the relevant PRC policies.

The price of the services provided by SMIC Beijing to SMNC contemplated under the Centralized Fund Management Agreement with SMNC will be fair and reasonable under the Listing Rules, determined according to the market principle on arm's length basis, subject to compliance with requirements for connected transactions of the Hong Kong Stock Exchange and relevant requirements for connected transactions that are applicable to the parties. The Company will ensure that the prices charged to SMNC will not be more favourable than prices charged to its other subsidiaries which are not connected persons under the Listing Rules.

1. *Internal Deposit Services*

   In relation to the transactions contemplated under the Centralized Fund Management Agreement with SMNC, the Internal Deposit Services to be provided by SMIC Beijing to SMNC will constitute continuing connected transactions by way of financial assistance received by SMIC Beijing from a connected person. Pursuant to Rule 14A.90 of the Listing Rules, as the Internal Deposit Services are conducted on normal commercial terms and not secured by the assets of the Group, the provision of the Internal Deposit Services is fully exempt from the reporting, announcement and/or the independent shareholders' approval requirements under the Listing Rules.

2. *Collection and Payment Services and Foreign Exchange Services*

   The terms (including fees charged by SMIC Beijing and exchange rates) in respect of the Collection and Payment Services and Foreign Exchange Services provided by SMIC Beijing to SMNC will be on normal commercial terms or better, in the ordinary and usual course of business of the Group and in the interests of the Company and the Shareholders as a whole, subject to the relevant provisions of PRC laws and regulations. The fees charged by SMIC Beijing to SMNC for providing such services will be determined based on arm's length negotiations by the parties which will not be less favourable to SMIC Beijing than (1) fees charged by SMIC Beijing to other subsidiaries which are not connected persons under the Listing Rules; and (2) fees charged to SMIC Beijing by other third-party commercial banks or financial institutions providing fund management services to SMIC Beijing for services of the same type during the same period.

3. *Internal Loan Services*

   The terms (including interest rates) in respect of the Internal Loan Services provided by SMIC Beijing to SMNC will be on normal commercial terms or better, in the ordinary and usual course of business of the Group and in the interests of the Company and the Shareholders as a whole, subject to the relevant provisions of PRC laws and regulations. The interest rate applicable to loans granted to SMNC by SMIC Beijing will be based on arm's length negotiations by the parties. The Company will make reference to the benchmark interest rate (if any) prescribed by the People's Bank of China ("PBOC") applicable to RMB loans from time to time and published on the PBOC's website for the same type of loans.

4. *Provision of Letter of Credit Services*

   The terms (including fees charged by the Company) in respect of the letters of credit provided by the Company to SMNC will be on normal commercial terms or better, in the ordinary and usual course of business of the Group and in the interests of the Company and the Shareholders as a whole, subject to the relevant provisions of PRC laws and regulations. The fees charged by the Company to SMNC for providing such services will be determined based on arm's length negotiations by the parties which will not be less favourable to SMIC Beijing than (1) fees charged by SMIC Beijing to other subsidiaries which are not connected persons under the Listing Rules; and (2) fees charged to SMIC Beijing by other third party-commercial banks or financial institutions providing fund management services to SMIC Beijing for services of the same type during the same period.

5. *Other Financial Services*

   The terms (including fees charged by SMIC Beijing) in respect of Other Financial Services provided by SMIC Beijing to SMNC will be on normal commercial terms or better, in the ordinary and usual course of business of the Group and in the interests of the Company and the Shareholders as a whole, subject to the relevant provisions of PRC laws and regulations. The fees charged by SMIC Beijing to SMNC for providing such services will be determined based on arm's length negotiations by the parties which will not be less favourable to SMIC Beijing than (1) fees charged by SMIC Beijing to other subsidiaries which are not connected persons under the Listing Rules; and (2) fees charged to SMIC Beijing by other third party-commercial banks or financial institutions providing fund management services to SMIC Beijing for services of the same type during the same period.

The annual caps under the Centralized Fund Management Agreement with SMNC are set out below.

Annual Caps	For the year ended December 31,		
	2021	2020	2019
	US$ million	US$ million	US$ million
Collection and Payment and Foreign Exchange Cap	**200**	200	200
Internal Loan Cap	**500**	500	500
Letter of Credit Cap	**500**	500	500
Other Financial Services Cap	**50**	50	50

The Company considers that the entry into of the Centralized Fund Management Agreement with SMNC and the transactions contemplated thereunder will open up the domestic and foreign funding channels of the Group, increase efficient fund usage and reduce the Group's overall debt levels and interest expense. The centralized management of foreign exchange risk exposure will also reduce the risks of exchange loss of the Group.

On February 14, 2019, the Directors (including the independent non-executive Directors) have approved the revision of the existing annual caps for the provision of internal deposit services contemplated under the Centralised Fund Management Agreement with SMNC, which amount to US$2,000 million (or its equivalent in other currencies) for the years ending December 31, 2019, 2020 and 2021, respectively (the "Existing SMNC Internal Deposit Services Annual Caps") such that the maximum annual transaction value for the internal deposit services provided by SMIC Beijing to SMNC contemplated under the Centralised Fund Management Agreement with SMNC shall be adjusted from US$2,000 million (or its equivalent in other currencies) for the years ending December 31, 2019, 2020 and 2021, respectively, to US$3,500 million (or its equivalent in other currencies) for the years ending December 31, 2019, 2020 and 2021, respectively (the "Revised SMNC Internal Deposit Services Annual Caps"). Save for the revision set out above (the "Revision"), all other terms of the Centralised Fund Management Agreement with SMNC remain unchanged and the Centralised Fund Management Agreement with SMNC remains valid and enforceable.

In view of the increasing balance of cash and cash equivalent of SMNC, being the service recipient of the internal deposit services provided by SMIC Beijing, the Company expects that the Existing SMNC Internal Deposit Services Annual Caps will not be sufficient to meet the increasing need for internal deposit services of SMNC. The Company has therefore proposed to revise the Existing SMNC Internal Deposit Services Annual Cap with the Revised SMNC Internal Deposit Services Annual Caps. The Revised SMNC Internal Deposit Services Annual Caps have been determined by the Company on the same basis as that in respect of the Existing SMNC Internal Deposit Services Annual Caps as set out in the circular of the Company dated December 21, 2018.

As China IC Fund holds approximately 15.81% equity interest in the Company through its wholly-owned subsidiary, Xinxin (Hongkong) Capital Co., Limited as at the time of the Revision, it is a connected person of the Company at the issuer level under the Listing Rules. As at the time of the Revision, the registered capital of SMNC is held as to approximately 51.00% and 32.00% by the Group and China IC Fund, respectively. SMNC is therefore a connected subsidiary of the Company as defined under Rule 14A.16 of the Listing Rules and thus a connected person of the Company under the Listing Rules.

Mr. Lu Jun, who is a Class II non-executive Director and a member of the nomination committee of the Company, holds the position of president in China IC Fund's sole manager Sino IC Capital Co., Ltd. and Mr. Ren Kai, who is a Class III non-executive Director and a member of the strategic advisory committee of the Company, holds the position of vice president in China IC Fund's sole manager Sino IC Capital Co., Ltd. Both Mr. Lu Jun and Mr. Ren Kai have abstained from voting on the relevant Board resolution in respect of the Centralized Fund Management Agreement with SMNC.

The Centralized Fund Management Agreement with SMNC and all transactions contemplated thereunder and the annual caps were approved by the independent shareholders of the Company at the extraordinary general meeting of the Company held on January 11, 2019 as required under Chapter 14A of the Listing Rules.

The actual transaction amounts generated by the Company from the fund management services entered into pursuant to the Centralized Fund Management Agreement with SMNC during the year ended December 31, 2019 are set out below.

Transactions	Actual Transaction Amounts for the year ended December 31,
	2019 US$ million
Collection and Payment Services and Foreign Exchange Services	**2.5**
Internal Loan Services	—
Letter of Credit Services	—
Other Financial Services	—

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2019.

Pursuant to Rule 14A.55 of the Listing Rules, the independent non-executive directors of the Company have reviewed and approved the continuing connected transactions above and confirmed that the continuing connected transactions under the Centralized Fund Management Agreement with SMNC and the Revision that took place between the Company and its majority owned subsidiary SMNC for year ended December 31, 2019 had been entered into (1) in the ordinary and usual course of business of the Group; (2) on normal commercial terms or better; and (3) in accordance with the Centralized Fund Management Agreement with SMNC and the Revision on terms that were fair and reasonable and in the interests of the Company's shareholders as a whole.

Pursuant to Rule 14A.56 of the Listing Rules, the Company's external auditor performed certain agreed upon procedures in respect of the continuing connected transactions of the Company under the Centralized Fund Management Agreement with SMNC and the Revision and had provided to the Board an unqualified letter containing findings and conclusions in respect of the aforesaid continuing connected transactions.

7. *Centralized Fund Management Contract with SJ Semiconductor Corporation ("SJ Cayman") — 2019 to 2021*

On December 6, 2018, the Company, SMIC Beijing and SJ Cayman entered into centralized fund management agreement ("Centralized Fund Management Agreement with SJ Cayman") in relation to: (i) the Company authorising its wholly-owned subsidiary SMIC Beijing to carry out centralized management of the Group's RMB fund and foreign exchange in accordance with the relevant PRC laws and regulations; and (ii) SJ Cayman participating in the Group's Centralized fund management system. The principal terms of the Centralized Fund Management Agreement with SJ Cayman. The Centralized Fund Management Agreement with SJ Cayman is for a term of three years commencing on January 1, 2019 and ending on December 31, 2021.

The Company will authorise its wholly-owned subsidiary SMIC Beijing to carry out centralized management of the Group's RMB fund and foreign exchange in accordance with the relevant PRC laws and regulations. Based on such authorization, SMIC Beijing will provide the following fund management services to SJ Cayman within the scope permitted by the relevant PRC policies.

The price of the services provided by SMIC Beijing to SJ Cayman contemplated under the Centralized Fund Management Agreement with SJ Cayman will be fair and reasonable under the Listing Rules, determined according to the market principle on arm's length basis, subject to compliance with requirements for connected transactions of the Hong Kong Stock Exchange and relevant requirements for connected transactions that are applicable to the parties. The Company will ensure that the prices charged to SMNC will not be more favourable than prices charged to its other subsidiaries which are not connected persons under the Listing Rules.

1. *Internal Deposit Services*

   In relation to the transactions contemplated under the Centralized Fund Management Agreement with SJ Cayman, the Internal Deposit Services to be provided by SMIC Beijing to SJ Cayman will constitute continuing connected transactions by way of financial assistance received by SMIC Beijing from a connected person. Pursuant to Rule 14A.90 of the Listing Rules, as the Internal Deposit Services are conducted on normal commercial terms and not secured by the assets of the Group, the provision of the Internal Deposit Services is fully exempt from the reporting, announcement and/or the independent shareholders' approval requirements under the Listing Rules.

2. *Collection and Payment Services and Foreign Exchange Services*

   The terms (including fees charged by SMIC Beijing and exchange rates) in respect of the Collection and Payment Services and Foreign Exchange Services provided by SMIC Beijing to SJ Cayman will be on normal commercial terms or better, in the ordinary and usual course of business of the Group and in the interests of the Company and the Shareholders as a whole, subject to the relevant provisions of PRC laws and regulations. The fees charged by SMIC Beijing to SJ Cayman for providing such services will be determined based on arm's length negotiations by the parties which will not be less favourable to SMIC Beijing than (1) fees charged by SMIC Beijing to other subsidiaries which are not connected persons under the Listing Rules; and (2) fees charged to SMIC Beijing by other third-party commercial banks or financial institutions providing fund management services to SMIC Beijing for services of the same type during the same period.

3. *Internal Loan Services*

   The terms (including interest rates) in respect of the Internal Loan Services provided by SMIC Beijing to SJ Cayman will be on normal commercial terms or better, in the ordinary and usual course of business of the Group and in the interests of the Company and the Shareholders as a whole, subject to the relevant provisions of PRC laws and regulations. The interest rate applicable to loans granted to SJ Cayman by SMIC Beijing will be based on arm's length negotiations by the parties. The Company will make reference to the benchmark interest rate (if any) prescribed by the PBOC applicable to RMB loans from time to time and published on the PBOC's website for the same type of loans.

4. *Provision of Letter of Credit Services*

   The terms (including fees charged by the Company) in respect of the letters of credit provided by the Company to SJ Cayman will be on normal commercial terms or better, in the ordinary and usual course of business of the Group and in the interests of the Company and the Shareholders as a whole, subject to the relevant provisions of PRC laws and regulations. The fees charged by the Company to SJ Cayman for providing such services will be determined based on arm's length negotiations by the parties which will not be less favourable to SMIC Beijing than (1) fees charged by SMIC Beijing to other subsidiaries which are not connected persons under the Listing Rules; and (2) fees charged to SMIC Beijing by other third party-commercial banks or financial institutions providing fund management services to SMIC Beijing for services of the same type during the same period.

5. *Other Financial Services*

   The terms (including fees charged by SMIC Beijing) in respect of Other Financial Services provided by SMIC Beijing to SJ Cayman will be on normal commercial terms or better, in the ordinary and usual course of business of the Group and in the interests of the Company and the Shareholders as a whole, subject to the relevant provisions of PRC laws and regulations. The fees charged by SMIC Beijing to SJ Cayman for providing such services will be determined based on arm's length negotiations by the parties which will not be less favourable to SMIC Beijing than (1) fees charged by SMIC Beijing to other subsidiaries which are not connected persons under the Listing Rules; and (2) fees charged to SMIC Beijing by other third party commercial banks or financial institutions providing fund management services to SMIC Beijing for services of the same type during the same period.

The annual caps under the Centralized Fund Management Agreement with SJ Cayman are set out below.

Annual Caps	For the year ended December 31,		
	2021	2020	2019
	US$ million	US$ million	US$ million
Collection and Payment and Foreign Exchange Cap	**130**	130	130
Internal Loan Cap	**130**	130	130
Letter of Credit Cap	**130**	130	130
Other Financial Services Cap	**50**	50	50

The Company considers that the entry into of the Centralized Fund Management Agreement with SJ Cayman and the transactions contemplated thereunder will open up the domestic and foreign funding channels of the Group, increase efficient fund usage and reduce the Group's overall debt levels and interest expense. The centralized management of foreign exchange risk exposure will also reduce the risks of exchange loss of the Group.

As China IC Fund holds approximately 15.82% equity interest in the Company through its wholly-owned subsidiary at the time of entering into the a Centralized Fund Management Agreement with SJ Cayman, Xinxin (Hongkong) Capital Co., Limited, it is a connected person of the Company at the issuer level under the Listing Rules. China IC Fund holds approximately 29.38% equity interest in SJ Cayman as at the date of entering into the a Centralized Fund Management Agreement with SJ Cayman, a majority owned subsidiary of the Company, through its wholly-owned subsidiary, Xun Xin. SJ Cayman is therefore a connected subsidiary of the Company as defined under Rule 14A.16 of the Listing Rules and thus a connected person of the Company under the Listing Rules.

On November 29, 2018, the Company and SMIC Beijing entered into a centralized fund management agreement with SMNC, another connected subsidiary of the Company (as defined under Rule 14A.16 of the Listing Rules), which is owned as to approximately 51.00% and 32.00% by the Group and China IC Fund, respectively, details of which are set out in the announcement of the Company dated November 29, 2018. Pursuant to Rule 14A.81 of the Listing Rules, as the nature of the transactions entered into by the Company and SMIC Beijing are similar, the transactions contemplated under the Centralized Fund Management Agreement with SJ Cayman shall be aggregated.

Mr. Lu Jun, who is a Class II non-executive Director and a member of the nomination committee of the Company, holds the position of president in China IC Fund's sole manager Sino IC Capital Co., Ltd. and Mr. Ren Kai, who is a Class III non-executive Director and a member of the strategic advisory committee of the Company, holds the position of vice president in China IC Fund's sole manager Sino IC Capital Co., Ltd. Both Mr. Lu Jun and Mr. Ren Kai have abstained from voting on the relevant Board resolution in respect of the Centralized Fund Management Agreement with SJ Cayman.

The Centralized Fund Management Agreement with SJ Cayman and all transactions contemplated thereunder and the annual caps were approved by the independent shareholders of the Company at the extraordinary general meeting of the Company held on January 11, 2019 as required under Chapter 14A of the Listing Rules.

The actual transaction amounts generated by the Company from the fund management services entered into pursuant to the Centralized Fund Management Agreement with SJ Cayman during the year ended December 31, 2019 are set out below.

Transactions	Actual Transaction Amounts for the year ended December 31,
	2019
	US$ million
Collection and Payment Services and Foreign Exchange Services	—
Internal Loan Services	**30.3**
Letter of Credit Services	**4.3**
Other Financial Services	—

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2019.

Pursuant to Rule 14A.55 of the Listing Rules, the independent non-executive directors of the Company have reviewed and approved the continuing connected transactions above and confirmed that the continuing connected transactions under the Centralized Fund Management Agreement with SJ Cayman that took place between the Company and its majority owned subsidiary SJ Cayman for year ended December 31, 2019 had been entered into (1) in the ordinary and usual course of business of the Group; (2) on normal commercial terms or better; and (3) in accordance with the Centralized Fund Management Agreement with SJ Cayman on terms that were fair and reasonable and in the interests of the Company's shareholders as a whole.

Pursuant to Rule 14A.56 of the Listing Rules, the Company's external auditor performed certain agreed upon procedures in respect of the continuing connected transactions of the Company under the Centralized Fund Management Agreement with SJ Cayman and had provided to the Board an unqualified letter containing findings and conclusions in respect of the aforesaid continuing connected transactions.

8. *Renewed Framework Agreement with Datang Telecom Technology & Industry Holding Co., Ltd. ("Datang Holdings") — 2019 to 2021*

On January 23, 2019, the Company entered into a renewed framework agreement with Datang Holdings ("Renewed Framework Agreement"), pursuant to which the Group and Datang Holdings (including its associates) agree to engage in business collaboration including but not limited to foundry service. The term of the Renewed Framework Agreement is three years commencing from January 1, 2019. The pricing for the transactions contemplated under the Renewed Framework Agreement is determined by reference to reasonable market price available from or to independent third parties in the ordinary and usual course of business based on normal commercial terms and on an arm's length negotiation, or on the actual production cost incurred plus a reasonable profit margin with reference to the general range of profit margins in the industry, and will be determined on terms not less favourable than those applicable to sales by independent third parties to the Company or its subsidiaries and not more favourable than those applicable to sales by the Company or its subsidiaries to independent third parties (if any). In relation to the provision of foundry services by the Company to Datang Holdings, the Company will have reference to the terms (including pricing) which it offers to independent third party customers for services of a comparable nature and quantity, as well as the reasonable market prices which are applicable.

The annual caps for the transactions contemplated under the Renewed Framework Agreement ("Non-Exempt Continuing Connected Transactions") with Datang Holdings are set out below:

Annual Caps	**For the year ended December 31,**		
	2021 **US$ million**	2020 US$ million	2019 US$ million
The maximum revenue on an aggregate basis expected to be generated by the Company from the Non-Exempt Continuing Transactions	**48**	35	20

In arriving at the expected caps, the Company has considered the potential extent of Non-Exempt Continuing Connected Transactions it may provide in light of current market conditions of the semiconductor industry and the technological capability of the Company, having regard to the historical transaction volume of Datang Holdings and its associates with the Company as well as the future business plans of Datang Holdings made based on the communication with its customers and the historical revenues generated by the Company from the transactions under the framework agreement dated December 28, 2015 (the "2015 Framework Agreement") entered into between the Company and Datang Holdings.

The Company considers that Datang Holdings plays a key role in China's semiconductor industry. By entering into the Renewed Framework Agreement and the Non-Exempt Continuing Connected Transactions with Datang Holdings, the Company believes that this will bring the Company sustainable business opportunities and also drive the Company's technological achievement.

The actual transaction amounts generated by the Group from the transactions entered into pursuant to the Renew Framework Agreement with Datang Holdings during the year ended December 31, 2019 are set out below.

Transactions	Actual Transaction Amounts for the year ended December 31,
	2019 US$ million
The revenue generated by the Group under the Renewed Framework Agreement	9.9

As Datang Holdings is the holding company of Datang Holdings (Hongkong) Investment Company Limited, a substantial shareholder of the Company holding approximately 17.05% of the total issued share capital of the Company as at the time of entering into the Renewed Framework Agreement, Datang Holdings is an associate of Datang (Hongkong) and hence a connected person of the Company under Chapter 14A of the Listing Rules. The Non-Exempt Continuing Connected Transactions constitute non-exempt continuing connected transactions of the Company under Chapter 14A of the Listing Rules and are subject to the reporting, announcement and annual review requirements but exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

No Director was considered to have a material interest in the Renewed Framework Agreement on the date of the Board meeting authorising the entering of the Renewed Framework Agreement which would have required the Director to abstain from voting at the relevant Board meeting.

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2019.

Pursuant to Rule 14A.55 of the Listing Rules, the independent non-executive Directors have reviewed the non-exempt continuing connected transactions and confirmed that the transactions under the Renewed Framework Agreement that took place between Datang Holdings (or any of its associates) and the Company (or any of its subsidiaries) for the year ended December 31, 2019 had been entered into 1) in the ordinary and usual course of business of the Group; 2) on normal commercial terms or better; and 3) in accordance with the Renewed Framework Agreement on terms that were fair and reasonable and in the interests of the shareholders of the Company as a whole.

Pursuant to Rule 14A.56 of the Listing Rules, the Company's external auditor performed certain agreed upon procedures in respect of the non-exempt continuing connected transactions of the Company under the Renewed Framework Agreement and had provided to the Board an unqualified letter containing findings and conclusions in respect of the aforesaid continuing connected transactions.

9. Framework Agreement with Ningbo Semiconductor International Corporation — 2019 to 2021

On May 15, 2019, the Company and Ningbo Semiconductor International Corporation ("NSI") entered into the Framework Agreement in relation to supply of goods, rendering of or receiving services, leasing of assets, transfer of assets, provision of technical authorisation or licensing (the "NSI Framework Agreement"). The NSI Framework Agreement has a term of three years commenced on January 1, 2019 and ending on December 31, 2021.

The Company and NSI agreed to enter into one or more of the following types of transactions with each other contemplated under the NSI Framework Agreement including the purchase and sale of goods, rendering of or receiving services, leasing of assets, transfer of assets and provision of technical authorisation or licensing:

a. Purchase and sale of spare parts, raw materials, photomasks and finished products;

b. Rendering of or receiving services, including, without limitation (a) processing and testing service; (b) procurement service; (c) research, development and experiment support service; (d) comprehensive, logistics, production management and IT service; and (e) water, electricity, gas and heat provision service;

c. Leasing of assets, such as plant, office premises and equipment;

d. Transfer of assets; and

e. Provision of technical authorisation or licensing by the Company to NSI.

The price of the continuing connected transactions contemplated under the NSI Framework Agreement will be determined in accordance with the following general principles in ascending order:

(1) the price prescribed or approved by state or local price control department (if any);

(2) a reasonable price in accordance with the industry guided price;

(3) the comparable local market price, which shall be determined after arm's length negotiation between both parties with reference to (a) the market price charged by independent third parties for comparable product or services at the same time and in the same region; and (b) the lowest quotation that the purchaser can obtain by way of public tender through equalization calculation;

(4) where there is no comparable local market price, the price based on the principle of cost plus a fair and reasonable profit rate, being the aggregate sum of (a) the actual reasonable cost; and (b) a fair and reasonable profit rate; or

(5) where none of the above general pricing principles are applicable, the price determined by other reasonable means as agreed upon by both parties on the condition that the relevant costs are identifiable and are allocated to each party involved on a fair and equitable basis.

Where general pricing principles (2) to (5) apply, to the extent possible, each of the Company and NSI will obtain at least two quotations or tenders from independent third parties before agreeing upon the applicable price.

As to the price prescribed by the state or local price control department, state-prescribed fees apply to water and electricity, which are relevant to the cost of such services and are determined by prices published from time by time by the relevant PRC government authority. Under the Pricing Law of the PRC, the PRC government may implement a state-prescribed or guidance price for specific goods and services if necessary, and such price will be promulgated in accordance with the requirements of relevant laws, regulations or administrative rules from time to time. If any state-prescribed price or guidance price becomes available to the continuing connected transactions contemplated under the NSI Framework Agreement in the future, the parties will execute such price first in accordance with pricing principle (1) above.

The annual caps for the continuing connected transactions between the parties contemplated under the NSI Framework Agreement are set out below:

Annual Caps	**For the year ended December 31,**		
	2021	2020	2019
	US$ million	US$ million	US$ million
Purchase and sale of goods	**120.0**	75.5	40.5
Rendering of or receiving services	**1.2**	1.2	1.2
Leasing of assets	**0.1**	0.1	0.1
Transfer of assets	**—**	—	—
Provision of technical authorization or licensing	**3.0**	3.0	3.0
Total	**124.3**	79.8	44.8

The Company considers that the entry into the NSI Framework Agreement and the continuing connected transactions contemplated under the NSI Framework Agreement will enable the Company to support customers in the integrated circuit design and product development for applications in smart home, industrial, and automotive electronics, new generations of radio communications, augmented reality, virtual reality, mixed reality, and other specialty systems. NSI will continue to bring the Company an effective and complete customer and product portfolio.

As China IC Fund holds approximately 15.78% interest in the Company through its wholly-owned subsidiary, Xinxin (Hongkong) Capital Co., Limited at the time of entering into the NSI Framework Agreement, it is a connected person of the Company at the issuer level under the Listing Rules. As at the date of entering into the NSI Framework Agreement, the registered capital of NSI is held as to approximately 38.57% and 32.97% by the Group and China IC Fund, respectively. NSI is therefore an associate of China IC Fund as defined under rule 14A.13 of the Listing Rules and thus a connected person of the Company under the Listing Rules.

No Director is considered to have a material interest in the NSI Framework Agreement which would have required the Director to abstain from voting at the board meeting authorizing the NSI Framework Agreement.

The actual transaction amounts generated by the Company from the transactions entered into pursuant to the NSI Framework Agreement during the year ended December 31, 2019 are set out below.

Transactions	Actual Transaction Amounts for the year ended December 31,
	2019 US$ million
Purchase and sale of goods	4.8
Rendering of or receiving services	0.8
Leasing of assets	—
Transfer of assets	—
Provision of technical authorization or licensing	—
Total	5.6

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2019.

Pursuant to Rule 14A.55 of the Listing Rules, the independent non-executive directors of the Company have reviewed and approved the continuing connected transactions above and confirmed that the continuing connected transactions under the NSI Framework Agreement that NSI is an associate of China IC Fund for year ended December 31, 2019 had been entered into (1) in the ordinary and usual course of business of the Group; (2) on normal commercial terms or better; and (3) in accordance with the NSI Framework Agreement on terms that were fair and reasonable and in the interests of the Company's shareholders as a whole.

Pursuant to Rule 14A.56 of the Listing Rules, the Company's external auditor performed certain agreed upon procedures in respect of the continuing connected transactions of the Company under the NSI Framework Agreement and had provided to the Board an unqualified letter containing findings and conclusions in respect of the aforesaid continuing connected transactions.

10. *Framework Agreement with Semiconductor Manufacturing South China Corporation — 2020 to 2021*

On December 6, 2019, the Company and its subsidiaries, SMSC entered into a framework agreement in relation to the supply of goods, rendering of or receiving services, leasing of assets, transfer of assets, provision of technical authorization or licensing and provision of guarantee. The framework agreement is for a term of two years commencing on January 1, 2020 and ending on December 31, 2021 ("Framework Agreement with SMSC 2020–2021").

The Company and SMSC agreed to enter into one or more of the following types of transactions with each other including the supply of goods and services, leasing of assets, transfer of assets, provision of technical authorization or licensing and provision of guarantee:

a. Purchase and sale of spare parts, raw materials, photomasks and finished products;

b. Rendering of or receiving services, including, without limitation, (a) processing and testing service; (b) sales service; (c) overseas market promotion and customer service; (d) procurement service; (e) research, development and experiment support service; (f) comprehensive administration, logistics, production management, IT and other service; and (g) water, electricity, gas and heat provision service;

c. Leasing of assets, such as plant, office premises and equipment;

d. Transfer of assets;

e. Provision of technical authorization or licensing as well as the sharing of research and development costs; and

f. Provision of guarantee by the Company and/or its subsidiaries (other than SMSC and its subsidiaries ("Group D") for SMSC's financing activities.

The price of the continuing connected transactions contemplated under the Framework Agreement with SMSC 2020–2021 will be determined in accordance with the following general principles in ascending order:

(1) the price prescribed or approved by state or local price control department (if any);

(2) a reasonable price in accordance with the industry guided price;

(3) the comparable local market price, which shall be determined after arm's length negotiation between both parties with reference to (a) the market price charged by independent third parties for comparable product or services at the same time and in the same region; and (b) the lowest quotation that the purchaser can obtain by way of public tender;

(4) where there is no comparable local market price, the price based on the principle of cost plus a fair and reasonable profit rate, being the aggregate sum of (a) the actual reasonable cost; and (b) a fair and reasonable profit rate;

(5) where none of the above general pricing principles are applicable, the price determined by other reasonable means as agreed upon by both parties on the condition that the relevant costs are identifiable and are allocated to each party involved on a fair and equitable basis.

Where general pricing principles (2) to (5) apply, to the extent possible, each of the Group D and SMSC will obtain at least two quotations or tenders from independent third parties before agreeing upon the applicable price.

The breakdown for the annual caps for the continuing connected transactions contemplated under the Framework Agreement with SMSC 2020–2021 is set out below:

Annual Caps	**For the year ending December 31,**	
	2021	2020
	US$ million	US$ million
Purchase and sale of goods	**832**	299
Rendering of or receiving services	**401**	133
Leasing of assets	**42**	42
Transfer of assets	**104**	90
Provision of technical authorization or licensing (including the sharing of research and development costs)	**617**	606
Provision of guarantee	**1,000**	1,000
Total	**2,996**	2,170

The Company considers that the entry into the Framework Agreement with SMSC 2020–2021 and the continuing connected transactions contemplated under the Framework Agreement with SMSC 2020–2021 will provide the Company with an effective and complete wafer production to meet its needs. SMSC operates a 12-inch wafer fab with advanced process capability. As the market demand for advanced process continues to surge, the Company will allocate some of its advanced node manufacturing to SMSC to ensure future wafer production needs of the Company are met.

The business partnership between the Company and SMSC will help to eliminate some duplicated efforts in introducing and manufacturing advanced nodes for IC design houses, thereby reducing the time to market and some overhead expenses for both parties. With the expansion of its capacity and continuous innovation, the Company believes that it will be able to enhance its position in the industry and benefit from the increase in its economies of scale.

China IC Fund holds approximately 15.77% interest in the Company through its wholly-owned subsidiary at the time of entering into the Framework Agreement with SMSC 2020–2021, Xinxin (Hongkong) Capital Co., Limited. Accordingly, it is a connected person of the Company at the issuer level pursuant to the Listing Rules. As at the date of entering into the Framework Agreement with SMSC 2020–2021, the registered capital of SMSC is held as to approximately 50.10% and 27.04% by the Group and China IC Fund, respectively. SMSC is therefore a connected subsidiary of the Company as defined under Rule 14A.16 of the Listing Rules and thus a connected person of the Company under the Listing Rules.

The Framework Agreement with SMSC 2020–2021 and all transactions contemplated thereunder; and the annual caps in respect of the Framework Agreement with SMSC 2020–2021 were approved by the independent shareholders of the Company at the extraordinary general meeting of the Company held on February 13, 2020 as required under Chapter 14A of the Listing Rules.

No Director is considered to have a material interest in the Framework Agreement with SMSC 2020–2021 which would have required the Director to abstain from voting at the board meeting authorising the Framework Agreement with SMSC 2020–2021.

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2019.

Pursuant to Rule 14A.55 of the Listing Rules, the independent non-executive directors of the Company have reviewed and approved the continuing connected transactions above and confirmed that the continuing connected transactions under the Framework Agreement with SMSC 2020–2021 that took place between the Company and its majority owned subsidiary SMSC for year ended December 31, 2019 had been entered into (1) in the ordinary and usual course of business of the Group; (2) on normal commercial terms or better; and (3) in accordance with the Framework Agreement with SMSC 2020–2021 on terms that were fair and reasonable and in the interests of the Company's shareholders as a whole.

Pursuant to Rule 14A.56 of the Listing Rules, the Company's external auditor performed certain agreed upon procedures in respect of the continuing connected transactions of the Company under the Framework Agreement with SMSC 2020–2021 and had provided to the Board an unqualified letter containing findings and conclusions in respect of the aforesaid continuing connected transactions.

11. Framework Agreement with SJ Semiconductor Corporation — 2020 to 2022

On December 26, 2019, the Company and its majority owned subsidiary SJ Semiconductor Corporation ("SJ Cayman") entered into a framework agreement in relation to the supply of goods and services, leasing of assets, transfer of assets and provision of technical authorization or licensing with a term commencing on January 1, 2020 and ending on December 31, 2022 and subject to the terms and conditions provided therein ("Framework Agreement with SJ Cayman 2020–2022").

The Company and SJ Cayman agreed to enter into one or more of the following types of transaction with each other including supply of goods and services, leasing of assets, transfer of assets and provision of technical authorization or licensing:

a. Purchase and sale of spare parts and raw materials;

b. Rendering of or receiving services including, without limitation, (a) processing and testing service; (b) procurement service; (c) research, development and experiment support service; and (d) comprehensive administration, logistics, production management and IT service;

c. Leasing of assets, such as plant, office premises and equipment;

d. Transfer of assets; and

e. Provision of technical authorization or licensing by the Company to SJ Cayman.

The price of the transactions contemplated under the Framework Agreement with SJ Cayman 2020–2022 ("Continuing Connected Transactions with SJ Cayman 2020–2022") will be determined in accordance with the following general principles in ascending order:

(1) the price prescribed or approved by state or local price control department (if any);

(2) a reasonable price in accordance with the industry guided price for a particular type of service or product issued by the relevant industry association (if any);

(3) the comparable local market price, which shall be determined after arm's length negotiation between both parties of the contract with reference to (a) the market price charged by independent third parties for comparable product or services at the same time and in the same region; and (b) the lowest quotation that the purchaser can obtain by way of public tender. The Company will obtain at least two quotations or tenders from independent third parties before agreeing upon the applicable price;

(4) where there is no comparable local market price, price based on the principle of cost plus a fair and reasonable profit rate, being the aggregate sum of (a) the actual reasonable cost; and (b) a fair and reasonable profit rate. The expected range of profit is from 5% to 10%, which is in line with the industry and not lower than the profit rate charged by the Company or SJ Cayman (as applicable) to independent third parties (to the extent available).

As to price prescribed by the state or local price control department, state-prescribed fees apply to water, electricity, gas and communication services involved in providing procurement service and comprehensive administration, logistics, production management and IT service, which are relevant to the cost of such services and are determined by prices published from time by time by the relevant PRC government authority. Under the Pricing Law of the PRC, the state may implement state-prescribed or guidance price for specific goods and services if necessary, such price will be promulgated in accordance with the requirements of relevant laws, regulations or administrative rules from time to time. If any state-prescribed price or guidance price becomes available to the Continuing Connected Transactions with SJ Cayman in the future, the parties will execute such price first in accordance with pricing principle (1) above.

The annual caps for the Continuing Connected Transactions with SJ Cayman 2020–2022 are set out below:

Annual Caps	For the year ended December 31,		
	2022	2021	2020
	US$ million	US$ million	US$ million
Supply of goods and services, transfer of equipment and provision of technical authorization or licensing by the Company	**28**	23	19
Supply of goods and services and transfer of equipment by SJ Cayman	**118**	91	70

In arriving at the annual caps for the Continuing Connected Transactions with SJ Cayman 2020–2022, the Company has considered the historical transaction amounts between the Company and SJ Cayman, as well as reasonable factors such as the historical transaction amount, the expected occurrences of the Continuing Connected Transactions with SJ Cayman 2020–2022 in light of current market conditions of the semiconductor industry and the technological capability of the Company well as the Company's historical revenues.

The Company considers that the entering into of the Framework Agreement with SJ Cayman 2020–2022 and the transactions contemplated thereunder with SJ Cayman will continue to bring the Company an effective and complete wafer turn-key solution.

China IC Fund holds approximately 15.77% equity interest in the Company through its wholly-owned subsidiary Company, Xinxin (Hongkong) Capital Co., Limited as at the date of entering into the Framework Agreement with SJ Cayman 2020–2022. Accordingly, it is a connected person of the Company at the issuer level under the Listing Rules. As at the date of entering into the Framework Agreement with SJ Cayman 2020–2022, the Company holds approximately 55.97% equity interest in SJ Cayman and China IC Fund holds approximately 29.36% equity interest in SJ Cayman through its wholly-owned subsidiary, Xun Xin. SJ Cayman is therefore a connected subsidiary of the Company as defined under rule 14A.16 of the Listing Rules and thus a connected person of the Company under the Listing Rules.

No Director was considered to have a material interest in the Framework Agreement with SJ Cayman 2020–2022 on the date of the Board meeting authorizing the Framework Agreement with SJ Cayman 2020–2022 which would have required the Director to abstain from voting at the relevant Board meeting.

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2019.

Pursuant to Rule 14A.55 of the Listing Rules, the independent non-executive Directors have reviewed the non-exempt continuing connected transactions and confirmed that the transactions under the Framework Agreement with SJ Cayman 2020–2022 that took place between the Company and its majority owned subsidiary SJ Cayman for the year ended December 31, 2019 had been entered into 1) in the ordinary and usual course of business of the Group; 2) on normal commercial terms or better; and 3) in accordance with the Framework Agreement with SJ Cayman 2020–2022 on terms that were fair and reasonable and in the interests of the shareholders of the Company as a whole.

Pursuant to Rule 14A.56 of the Listing Rules, the Company's external auditor performed certain agreed upon procedures in respect of the continuing connected transactions of the Company under the Framework Agreement with SJ Cayman 2020–2022 and had provided to the Board an unqualified letter containing findings and conclusions in respect of the aforesaid continuing connected transactions.

AUDITOR REVIEW OF CONTINUING CONNECTED TRANSACTIONS

The auditor of the Company was engaged to report on the Group's continuing connected transactions in accordance with the Hong Kong Standard on Assurance Engagements 3000, "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information," and with reference to Practice Note 740, "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules," issued by the Hong Kong Institute of Certified Public Accountants. The auditor has issued its unqualified letter containing its conclusions (with a copy provided to the Hong Kong Stock Exchange) in accordance with Rule 14A.56 of the Listing Rules and confirming that nothing has come to their attention that causes them to believe the continuing connected transactions:

(1) have not been approved by the Board;

(2) were not, in all material respects, in accordance with the pricing policies of the Group if the transactions involved provision of goods or services by the Group;

(3) were not entered into, in all material respects, in accordance with the relevant agreement governing the transactions; and

(4) have exceeded the caps.

RELATED PARTY TRANSACTIONS

In addition to the above, the Group entered into certain transactions with parties regarded as "related parties" under the applicable accounting standards which are not regarded as connected transactions as defined under the Hong Kong Stock Exchange Listing Rules. Details of these related party transactions are disclosed in Note 40 to the consolidated financial statements.

SUBSTANTIAL SHAREHOLDERS

Set out below are the names of the parties (not being a Director or chief executive of the Company) which were interested in 5% or more of the nominal value of the share capital of the Company and the respective numbers of Ordinary Shares in which they were interested as at December 31, 2019 as recorded in the register kept by the Company under section 336 of the SFO.

Name of Shareholder	Nature of Interests	Long/Short Position	Number of Shares held	Percentage of Shares Held to Total Issued Share Capital of the Company (Note 1)	Derivatives	Total Interests	Percentage of Total interests to Total Issued Share Capital of the Company (Note 1)
Datang Telecom Technology & Industry Holdings Co., Ltd.	Interest of corporation controlled	Long Position	859,522,595 (Note 2)	17.00%	122,118,935 (Note 3)	981,641,530	19.41%
Pagoda Tree Investment Company Limited	A concert party to an agreement to buy shares described in s.317(1)(a)	Long Position	859,522,595 (Note 4)	17.00%	122,118,935 (Note 4)	981,641,530	19.41%
China Integrated Circuit Industry Investment Fund Co., Ltd.	Interest of corporation controlled	Long Position	797,054,901 (Note 5)	15.76%	183,178,403 (Note 6)	980,233,304	19.38%

Notes:

(1) Based on 5,056,868,912 Shares in issue as at December 31, 2019.

(2) 859,522,595 Shares are held by Datang HK which is a wholly-owned subsidiary of Datang Telecom Technology & Industry Holdings Co., Ltd. ("Datang").

(3) On April 23, 2018, the Company entered into the Datang PSCS Subscription Agreement with Datang and Datang HK, pursuant to which, on and subject to the terms of the Datang PSCS Subscription Agreement, the Company conditionally agreed to issue, and Datang, through Datang HK, conditionally agreed to subscribe for, the Datang PSCS which are convertible into 122,118,935 Shares (assuming full conversion of the Datang PSCS at the initial Conversion Price of HK$12.78 per Share). In this regard, Datang and Datang HK are deemed to be interested in these 122,118,935 Shares under the SFO. Completion of the Datang PSCS Subscription Agreement has occurred on June 29, 2018.

(4) Lightmane Holdings Company Limited, a wholly-owned subsidiary of CNIC Corporation Limited, of which Compass Investment Company Limited, a wholly owned subsidiary of Pagoda Tree Investment Company Limited, has a 90% control, signed an agreement with Datang Holdings (Hongkong) Investment Company Limited ("Datang HK") with terms falling under the Section 317(1)(a) or (b) of the SFO. Lightmane Holdings Company Limited, CNIC Corporation Limited, Compass Investment Company Limited, Pagoda Tree Investment Company Limited are therefore deemed to be interested in 981,641,530 Shares of the Company.

(5) 797,054,901 Shares are held by Xinxin (Hongkong) Capital Co., Ltd ("Xinxin HK"), a wholly-owned subsidiary of Xunxin (Shanghai) Investment Co., Ltd., which in turn is wholly-owned by China IC Fund.

(6) On April 23, 2018, the Company entered into the China IC Fund PSCS Subscription Agreement with China IC Fund and Xinxin HK, pursuant to which, on and subject to the terms of the China IC Fund PSCS Subscription Agreement, the Company conditionally agreed to issue, and China IC Fund, through Xinxin HK, conditionally agreed to subscribe for, the China IC Fund PSCS which are convertible into 183,178,403 Shares (assuming full conversion of the China IC Fund PSCS at the initial Conversion Price of HK$12.78 per Share). In this regard, China IC Fund and Xinxin HK are deemed to be interested in these 183,178,403 Shares under the Securities and Futures Ordinance (Cap. 571) (the "SFO"). Completion of the China IC Fund PSCS Subscription Agreement has occurred on August 29, 2018.

TAX RELIEF

The Company is not aware of any relief from taxation available to the Shareholders by reason of their holding of the shares of the Company.

DIRECTOR'S INTERESTS IN SECURITIES

As at December 31, 2019, the interests or short positions of the Directors and the chief executive officer in the Shares, underlying Shares and debentures of the Company or any of its associated corporation (within the meaning of Part XV of the SFO), which were notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests or short positions which they are taken or deemed to have under such provisions of the SFO), and as recorded in the register required to be kept under section 352 of the SFO or as otherwise notified to the Company and the Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers were as follows:

Name of Director	Long/Short Position	Nature of Interests	Number of Shares held (Note 22)	Derivatives Share Options (Note 22)	Derivatives Other (Note 22)	Total Interests (Note 22)	Percentage of aggregate interests to total issued share capital of the Company (Note 1)
Executive Directors							
Zhou Zixue	Long Position	Beneficial Owner	—	2,521,163 (Note 2)	1,080,498 (Note 3)	3,601,661	0.071%
Zhao Haijun	Long Position	Beneficial Owner	163	1,875,733 (Note 4)	— (Note 5)	1,875,896	0.037%
Liang Mong Song	—	—	—	—	—	—	—
Gao Yonggang	Long Position	Beneficial Owner	—	1,649,472 (Note 6)	85,505 (Note 7)	1,734,977	0.034%
Non-executive Directors							
Chen Shanzhi	Long Position	Beneficial Owner	—	664,687 (Note 8)	350,156 (Note 9)	1,014,843	0.020%
Zhou Jie	—	—	—	—	—	—	—
Ren Kai	—	—	—	—	—	—	—
Lu Jun	—	—	—	—	—	—	—
Tong Guohua	Long Position	Beneficial Owner	—	187,500 (Note 10)	187,500 (Note 11)	375,000	0.007%
Independent non-executive Directors							
William Tudor Brown	Long Position	Beneficial Owner	—	150,000 (Note 12)	150,000 (Note 13)	300,000	0.006%
Cong Jingsheng Jason	Long Position	Beneficial Owner	123,750	187,500 (Note 14)	63,750 (Note 15)	375,000	0.007%
Lau Lawrence Juen-Yee	Long Position	Beneficial Owner	—	187,500 (Note 16)	187,500 (Note 17)	375,000	0.007%
Fan Ren Da Anthony	Long Position	Beneficial Owner	—	187,500 (Note 18)	187,500 (Note 19)	375,000	0.007%
Young Kwang Leei	Long Position	Beneficial Owner	—	187,500 (Note 20)	187,500 (Note 21)	375,000	0.007%

Notes:

(1) Based on 5,056,868,912 Shares in issue as at December 31, 2019.

(2) On May 20, 2015, Dr. Zhou was granted options to purchase 2,521,163 Shares at a price of HK$8.30 per Share pursuant to the 2014 Stock Option Plan. These options will expire on the earlier of May 19, 2025 or 120 days after termination of his service as a Director to the Board. As of December 31, 2019, none of these options has been exercised.

(3) On May 20, 2015, Dr. Zhou was granted an award of 1,080,498 Restricted Share Units (each representing the right to receive one Share) pursuant to the 2014 Equity Incentive Plan. These RSUs, 25% of which will vest on each anniversary of March 6, 2015, shall fully vest on March 6, 2019. As of December 31, 2019, 1,080,498 Restricted Share Units were vested.

(4) These options comprise: (a) options which were granted to Dr. Zhao on June 11, 2013 to purchase 1,505,854 Shares at a price of HK$6.40 per Share pursuant to the 2004 Stock Option Plan and will expire on the earlier of June 10, 2023 or 90 days after termination of his service, (b) options which were granted to Dr. Zhao on September 7, 2017 to purchase 1,687,500 Shares at a price of HK$7.9 per Share pursuant to the 2014 Stock Option Plan and will expire on the earlier of September 6, 2027 or 90 days after termination of his service as Co-Chief Executive Officer. As of December 31, 2019, 1,317,621 of these options have been exercised.

(5) On September 7, 2017, Dr. Zhao was granted an award of 1,687,500 Restricted Share Units (each representing the right to receive one Share) pursuant to the 2014 Equity Incentive Plan. These RSUs will vest over one year commencing on the date on which Dr. Zhao commenced his term of office as Chief Executive Officer. As of December 31, 2019, all of these RSUs have been exercised.

(6) These options comprise: (a) options which were granted to Dr. Gao on May 24, 2010 to purchase 314,531 Shares at a price of HK$6.4 per Share pursuant to the 2004 Stock Option Plan and will expire on the earlier of May 23, 2020 or 120 days after termination of his service as a Director to the Board, (b) options which were granted to Dr. Gao on June 17, 2013 to purchase 1,360,824 Shares at a price of HK$6.24 per Share pursuant to the 2004 Stock Option Plan and will expire on the earlier of June 16, 2023 or 120 days after termination of his service as a Director to the Board, (c) options which were granted to Dr. Gao on June 12, 2014 to purchase 288,648 Shares at a price of HK$6.4 per Share pursuant to the 2014 Stock Option Plan and will expire on the earlier of June 11, 2024 or 120 days after termination of his service as a Director to the Board. As of December 31, 2019, 314,531 options have been exercised.

(7) On November 17, 2014, Dr. Gao was granted an award of 291,083 Restricted Share Units pursuant to the 2014 Equity Incentive Plan, consisting of (a) 240,145 Restricted Share Units, 25% of which vest on each anniversary of June 17, 2013 and which shall fully vest on June 17, 2017; and (b) 50,938 Restricted Share Units, 25% of which vest on each anniversary of March 1, 2014 and which shall fully vest on March 1, 2018. As of December 31, 2019, a total of 291,083 Restricted Share Units were vested, among which, 205,578 were settled in cash.

(8) These options comprise: (a) On May 24, 2010, Dr. Chen was granted options to purchase 314,531 Shares at a price of HK$6.4 per Share pursuant to the 2004 Stock Option Plan. These options will expire on the earlier of May 23, 2020 or 120 days after termination of his service as a Director to the Board. (b) On May 25, 2016, options to purchase 98,958 Shares at a price of HK$6.42 per Share pursuant to the 2014 Stock Option Plan were granted to Dr. Chen. These options are vested immediately and will expire on the earlier of May 24, 2026 or 120 days after termination of his service as a Director to the Board. (c) On September 12, 2016, options to purchase 1,198 Shares at a price of HK$8.72 per Share pursuant to the 2014 Stock Option Plan were granted to Dr. Chen. These options are vested immediately and will expire on the earlier of September 11, 2026 or 120 days after termination of his service as a Director to the Board. (d) On April 5, 2017, options to purchase 62,500 Shares at a price of HK$9.834 per Share pursuant to the 2014 Stock Option Plan were granted to Dr. Chen. These options are vested immediately and will expire on the earlier of April 4, 2027 or 120 days after termination of his service as a Director to the Board. (e) On May 23, 2018, options to purchase 125,000 Shares at a price of HK$10.512 per Share pursuant to the 2014 Stock Option Plan were granted to Dr. Chen. These options will expire on the earlier of May 22, 2028 or 120 days after termination of his service as a Director to the Board. (f) On May 21, 2019, options to purchase 62,500 Shares at a price of HK$8.580 per Share pursuant to the 2014 Stock Option Plan were granted to Dr. Chen. These options vested on January 1, 2020 and will expire on the earlier of May 20, 2029 or 120 days after termination of his service as a Director to the Board. As of December 31, 2019, none of these options has been exercised.

(9) These Restricted Share Units comprise: (a) On May 25, 2016, 98,958 Restricted Share Units were granted to Dr. Chen pursuant to the 2014 Equity Incentive Plan. Dr. Chen's Restricted Share Units are vested immediately. (b) On September 12, 2016, 1,198 Restricted Share Units were granted to Dr. Chen pursuant to the 2014 Equity Incentive Plan. Dr. Chen's Restricted Share Units are vested immediately. (c) On April 5, 2017, 62,500 Restricted Share Units were granted to Dr. Chen pursuant to the 2014 Equity Incentive Plan. Dr. Chen's Restricted Share Units are vested immediately. (d) On May 23, 2018, 125,000 Restricted Share Units were granted to Dr. Chen pursuant to the 2014 Equity Incentive Plan. Among the 125,000 Restricted Share Units, 62,500 Restricted Share Units are vested immediately and 62,500 Restricted Share Units shall vest on January 1, 2019. (e) On May 21, 2019, 62,500 Restricted Share Units were granted to Dr. Chen pursuant to the 2014 Equity Incentive Plan, These Restricted Share Units shall vest on January 1, 2020. As of December 31, 2019, none of these RSUs has been exercised.

(10) On April 5, 2017, Dr. Tong was granted options to purchase 187,500 Shares at a price of HK$9.834 per Share pursuant to the 2014 Stock Option Plan. These options will expire on the earlier of April 4, 2027 or 120 days after termination of his service as a Director to the Board. As of December 31, 2019, none of these options has been exercised.

(11) On April 5, 2017, Dr. Tong was granted an award of 187,500 Restricted Share Units (each representing the right to receive one Share) pursuant to the 2014 Equity Incentive Plan. These RSUs, over a period of three years at the rate of 33%, 33% and 34% of which will vest on each anniversary of February 14, 2017, shall fully vest on February 14, 2020. As of December 31, 2019, none of these RSUs has been exercised.

(12) These options comprise: (a) On May 23, 2018, options to purchase 87,500 Shares at a price of HK$10.512 per Share pursuant to the 2014 Stock Option Plan were granted to Mr. Brown. These options will expire on the earlier of May 22, 2028 or 120 days after termination of his service as a Director to the Board. (b) On May 21, 2019, options to purchase 62,500 Shares at a price of HK$8.580 per Share pursuant to the 2014 Stock Option Plan were granted to Mr. Brown. These options shall vest on January 1, 2020 and will expire on the earlier of May 20, 2029 or 120 days after termination of his service as a Director to the Board. As of December 31, 2019, none of these options has been exercised.

(13) (a) On May 23, 2018, 87,500 Restricted Share Units were granted to Mr. Brown pursuant to the 2014 Equity Incentive Plan. Among the 87,500 Restricted Share Units, 25,000 Restricted Share Units are vested immediately and 62,500 Restricted Share Units will vest on January 1, 2019. (b) On May 21, 2019, 62,500 Restricted Share Units were granted to Mr. Brown pursuant to the 2014 Equity Incentive Plan. These Restricted Share Units shall vest on 1 January 2020. As of December 31, 2019, none of these RSUs has been exercised.

(14) On April 5, 2017, Dr. Cong was granted options to purchase 187,500 Shares at a price of HK$9.834 per Share pursuant to the 2014 Stock Option Plan. These options will expire on the earlier of April 4, 2027 or 120 days after termination of his service as a Director to the Board. As of December 31, 2019, none of these options has been exercised.

(15) On April 5, 2017, Dr. Cong was granted an award of 187,500 Restricted Share Units (each representing the right to receive one Share) pursuant to the 2014 Equity Incentive Plan. These RSUs, over a period of three years at the rate of 33%, 33% and 34% of which will vest on each anniversary of February 14, 2017, shall fully vest on February 14, 2020. As of December 31, 2019, 123,750 of these Restricted Share Units were exercised.

(16) On September 13, 2018, Professor Lau was granted options to purchase 187,500 Shares at a price of HK$8.574 per Share pursuant to the 2014 Stock Option Plan. These options will expire on the earlier of September 12, 2028 or 120 days after termination of his service as a Director to the Board. As of December 31, 2019, none of these options has been exercised.

(17) On September 13, 2018, Professor Lau was granted an award of 187,500 Restricted Share Units (each representing the right to receive one Share) pursuant to the 2014 Equity Incentive Plan. These RSUs, over a period of three years at the rate of 33%, 33% and 34% of which will vest on each anniversary of June 22, 2019, shall fully vest on June 22, 2021. As of December 31, 2019, none of these Restricted Share Units was exercised.

(18) On September 13, 2018, Mr. Fan was granted options to purchase 187,500 Shares at a price of HK$8.574 per Share pursuant to the 2014 Stock Option Plan. These options will expire on the earlier of September 12, 2028 or 120 days after termination of his service as a Director to the Board. As of December 31, 2019, none of these options has been exercised.

(19) On September 13, 2018, Mr. Fan was granted an award of 187,500 Restricted Share Units (each representing the right to receive one Share) pursuant to the 2014 Equity Incentive Plan. These RSUs, over a period of three years at the rate of 33%, 33% and 34% of which will vest on each anniversary of June 22, 2018, shall fully vest on June 22, 2021. As of December 31, 2019, none of these Restricted Share Units was exercised.

(20) On September 12, 2019, Dr. Young was granted options to purchase 187,500 Ordinary Shares at a price of HK$9.820 per Ordinary Share pursuant to the 2014 Stock Option Plan. These options will expire on September 11, 2029 or 120 days after termination of his service as a Director to the Board. As of December 31, 2019, none of these options has been exercised.

(21) On September 12, 2019, Dr. Young was granted an award of 187,500 Restricted Share Units (each representing the right to receive one Ordinary Share) pursuant to the 2014 Equity Incentive Plan. These RSUs, over a period of three years at the rate of 33%, 33% and 34% of which will vest on each anniversary of August 7, 2019, shall fully vest on August 7, 2022. As of December 31, 2019, none of these Restricted Share Units was exercised.

(22) These interests have been adjusted upon the Share Consolidation taking effect from December 7, 2016 on the basis of consolidating every ten ordinary shares of US$0.0004 each into one ordinary share of US$0.004 each.

DIRECTORS' INTERESTS IN TRANSACTIONS, ARRANGEMENTS OR CONTRACTS OF SIGNIFICANCE

Save as disclosed in the section headed "Connected Transactions", no Director or entity connected with the Directors had a material interest, directly or indirectly, in any transaction, arrangement or contract of significance to the business of the Group to which the Company or any of its subsidiaries was a party during 2019.

DIRECTOR'S SERVICE CONTRACTS

No Director proposed for re-election at the 2019 AGM has or proposes to have a service contract which is not terminable by the Company or any of its subsidiaries within one year without payment of compensation, other than statutory compensation.

PERMITTED INDEMNITY PROVISION

Pursuant to the Company's Article of Association of the Company, subject to relevant laws, every Director shall be indemnified out of the assets of the Company against all losses and liabilities which the Directors may sustain or incur in or about the execution of his/her office or otherwise in relation thereto. The Company has taken out insurance against the liability and costs associated with defending any proceedings which may be brought against Directors of the Company.

EMOLUMENTS TO THE DIRECTORS

Details regarding the emoluments to each of the Directors in 2019, 2018 and 2017 are set out in Note 12 to the consolidated financial statements.

During the year ended December 31, 2019, the Board granted 312,500 Restricted Share Units to Directors as compensation for their service on the Board.

EMOLUMENTS TO THE KEY MANAGEMENT

The emoluments of senior management personnel, included Zhou Zixue (Chairman and Executive Director), Liang Mong Song (Executive Director and Co-Chief Executive Officer), Zhao Haijun (Executive Director and Co-Chief Executive Officer) and Gao Yonggang (Executive Director, Chief Financial Officer and Joint Company Secretary), details of whose remuneration are set out in Note 12 to the consolidated financial statements, for the year ended December 31, 2019, 2018 and 2017 are as follows:

	year ended 12/31/19 USD'000	year ended 12/31/18 USD'000	year ended 12/31/17 USD'000
Salaries, bonus and benefits	**2,842**	2,419	2,553
Equity-settled share-based payments	**18**	825	1,955
	2,860	3,244	4,508

REPORT OF THE DIRECTORS

The number of senior management whose remuneration fell within the following bands for the year ended December 31, 2019, 2018 and 2017 are as follows:

	Number of individuals		
Emoluments to Senior Management	**2019**	2018	2017
HK$500,001 (US$64,221) to HK$1,000,000 (US$128,440)	**—**	—	2
HK$2,500,001 (US$321,101) to HK$3,000,000 (US$385,320)	**1**	—	—
HK$3,500,001 (US$449,541) to HK$4,000,000 (US$513,760)	**1**	1	—
HK$4,000,001 (US$513,761) to HK$4,500,000 (US$577,980)	**1**	—	—
HK$4,500,001 (US$577,981) to HK$5,000,000 (US$642,200)	**—**	2	1
HK$5,000,001 (US$642,201) to HK$5,500,000 (US$706,420)	**—**	—	1
HK$5,500,001 (US$706,421) to HK$6,000,000 (US$770,640)	**2**	—	—
HK$6,500,001 (US$834,861) to HK$7,000,000 (US$899,080)	**—**	—	1
HK$12,000,001 (US$1,541,281) to HK$12,500,000 (US$1,605,500)	**—**	1	—
HK$17,500,001 (US$2,247,701) to HK$18,000,000 (US$2,311,920)	**—**	—	1
	5	4	6

The fees paid or payable to other senior management (excluded Zhou Zixue, Liang Mong Song, Zhao Haijun and Gao Yonggang) and other key management of the company during the year were as follows:

2019	Salaries, bonus and benefits USD'000	Equity-settled share-based payment USD'000	Total remuneration USD'000
Other senior management:			
Zhou Meisheng	512	—	512
Other key management:			
Peng Jin	365	—	365
Zhang Xin	389	—	389
Ge Hong	307	—	307
Ning Xianjie	259	—	259
Chen Chi-Chun	215	—	215
Wu Jingang	254	—	254
Yu Bo	263	—	263
Lin Hsin-Fa	223	—	223
	2,787	—	2,787

FIVE HIGHEST PAID INDIVIDUALS

The five individuals whose emoluments were the highest in the Group for the year ended December 31, 2019, included Zhou Zixue (Chairman and Executive Director of the Company) Zhao Haijun (Co-Chief Executive Officer and Executive Director of the Company) and Gao Yonggang (Executive Director, Chief Financial Officer and Joint Company Secretary).

The five highest paid individuals information are set out in Note 13 to the consolidated financial statements.

EMPLOYEES

The following table sets forth, as of the dates indicated, the number of the Group's employees serving in the capacities indicated:

	As of December 31,		
Position	**Y2019**	Y2018	Y2017
Managers	**966**	1,058	1,380
Professionals[(1)]	**7,220**	8,735	8,230
Technicians	**7,036**	7,468	7,549
Clerical staff	**724**	754	667
Total[(2)]	**15,946**	18,015	17,826

Notes:

(1) Professionals include engineers, lawyers, accountants and other personnel with specialized qualifications, excluding managers.

(2) Includes 42, 73 and 49 temporary and part-time employees in 2019, 2018 and 2017 respectively.

The following table sets forth, as of the dates indicated, a breakdown of the number of the Group's employees by geographic location:

	As of December 31,		
Location	**Y2019**	Y2018	Y2017
Shanghai	**7,634**	8,084	8,077
Beijing	**4,540**	4,699	4,607
Tianjin	**1,889**	1,981	1,636
Chengdu	**10**	10	10
Shenzhen	**1,159**	1,217	1,477
Jiangyin	**681**	479	356
Ningbo	**—**	—	82
United States	**14**	15	23
Europe	**6**	1,516	1,541
Japan	**3**	3	4
Taiwan Office	**8**	9	10
Hong Kong	**2**	2	3
Total	**15,946**	18,015	17,826

The Group's success depends to a significant extent upon, among other factors, the Group's ability to attract, retain and motivate qualified personnel.

As of December 31, 2019, 2,976 and 283 of the Group's employees held master's degrees and doctorate degrees, respectively. As of the same date, 5,047 of the Group's employees possessed a bachelor's degree.

The Group's Employees received an average of 18.9 hours of internal and external training per person in 2019.

To support the Group's business growth and develop more talents, SMIC partners with Peking University, Fudan University, Tianjin University, Shanghai University, Beihang University, Beijing Institute of Petrochemical Technology University and Shenzhen University to offer junior college, undergraduate and graduate programs to technical employees. Employees who are eligible will also receive tuition subsidies. SMIC provides a good learning environment to employees.

As a supplement to their salaries, the Group's employees have the opportunity to earn performance bonuses based on profitability, business achievements, and individual performance. Additional benefits include participation in the Group's global equity incentive compensation program, paid leave, social welfare benefits and the global medical insurance plan for qualified employees, optional housing benefits and educational programs for employees with families.

The Group provides occupational health and hygiene management for the welfare of the Group's employees. This includes occupational physical examination, the monitoring of air quality, illumination, radiation, noise and drinking water. Parts of the Group's employees are covered by collective bargaining agreements.

REMUNERATION POLICY

The Group's employees are compensated by cash and a variety of additional incentives. As a supplement to their salaries, the Group's employees have the opportunity to earn performance bonus based on the Group's profitability, business achievement, and individual performance. Additional benefits include participation in the Group's global equity incentive compensation program, paid leave, social welfare benefits for qualified employees, a global medical insurance plan for qualified employees and optional housing benefits and educational programs for employees with families.

The Directors are compensated for their services as Directors, primarily by salaries and grants of options to purchase Ordinary Shares under the Stock Option Plan (as defined below) and Restricted Share Units. The compensation committee of the Company (the "Compensation Committee") proposes, and the Board, other than interested Directors, approves, for the Directors, a remuneration package, which is comparable with the compensation received by directors in other similarly situated publicly-traded companies. The Directors' remuneration is disclosed in Note 12 to the consolidated financial statement for further information.

The Group's local Chinese employees are entitled to a retirement benefit based on their salary and their length of service in accordance with a state-managed pension plan. The PRC government is responsible for the pension liability to these retired staff. We are required to make contributions to the state-managed retirement plan at a rate equal to 16.0% to 20.0% (the standard in Shenzhen site ranges from 13% to 14% according to Shenzhen government regulation) of the monthly salary of current employees. Employees are required to make contributions at a rate equal to 8% of their monthly salary. The retirement benefits apply to expatriate employees according to the requirements of local government. The employee benefits expense is disclosed in Note 11 to the consolidated financial statement for further information.

STOCK INCENTIVE SCHEMES

2004 STOCK OPTION PLAN

The Company's shareholders adopted on February 16, 2004, that certain 2004 Stock Option Plan which then became effective on March 18, 2004 and was amended it on June 23, 2009.

Movement of the 2004 Stock Option Plan during the year ended December 31, 2019 is as follows:

Name/Eligible Employees	Date Granted	Period during which Rights Exercisable	No. of Options Granted	Exercise Price Per Share (USD)	Options Outstanding as of 12/31/18	Additional Options Granted During Period	Options Lapsed During Period	Options Lapsed Due to Repurchase of Ordinary Shares During Period	Options Exercised During Period	Options Cancelled During Period	Options Outstanding as of 12/31/19	Weighted Average Closing Price of Shares immediately before Dates on which Options were Exercised (USD)	Weighted Average Closing Price of Shares immediately before Dates on which Options were Granted (USD)
Employees	2/17/2009	2/17/2009–2/16/2019	131,943,000	$0.35	479,700	—	237,200	—	242,500	—	—	$0.96	$0.32
Employees	5/11/2009	5/11/2009–5/10/2019	24,102,002	$0.43	290,600	—	900	—	289,700	—	—	$1.05	$0.44
Employees	2/23/2010	2/23/2010–2/22/2020	337,089,466	$0.99	4,793,631	—	255,876	—	2,134,326	—	2,403,429	$1.29	$1.00
Yonggang Gao	5/24/2010	5/24/2010–5/23/2020	3,145,319	$0.82	314,531	—	—	—	314,531	—	—	$1.19	$0.72
Shanzhi Chen	5/24/2010	5/24/2010–5/23/2020	3,145,319	$0.82	314,531	—	—	—	—	—	314,531	$—	$0.72
Employees	5/24/2010	5/24/2010–5/23/2020	18,251,614	$0.82	65,700	—	58,100	—	1,600	—	6,000	$1.27	$0.72
Employees	9/8/2010	9/8/2010–9/7/2020	46,217,577	$0.67	165,495	—	—	—	29,895	—	135,600	$1.14	$0.68
Employees	11/12/2010	11/12/2010–11/11/2020	39,724,569	$0.83	387,565	—	5,200	—	148,200	—	234,165	$1.12	$0.78
Employees	5/31/2011	5/31/2011–5/30/2021	148,313,801	$0.85	2,699,210	—	84,066	—	806,355	—	1,808,789	$1.23	$0.83
Others	9/8/2011	9/8/2011–9/7/2021	21,746,883	$0.58	594,688	—	—	—	350,000	—	244,688	$1.34	$0.56
Employees	9/8/2011	9/8/2011–9/7/2021	42,809,083	$0.58	316,913	—	5,530	—	117,181	—	194,202	$1.22	$0.56
Employees	11/17/2011	11/17/2011–11/16/2021	16,143,147	$0.51	128,200	—	—	—	11,450	—	116,750	$1.24	$0.51
Employees	5/22/2012	5/22/2012–5/21/2022	252,572,706	$0.45	5,788,263	—	85,999	—	1,421,382	—	4,280,882	$1.14	$0.45
Employees	9/12/2012	9/12/2012–9/11/2022	12,071,250	$0.37	93,275	—	6,000	—	27,975	—	59,300	$1.18	$0.37
Employees	11/15/2012	11/15/2012–11/14/2022	18,461,000	$0.47	204,166	—	450	—	41,600	—	162,116	$1.17	$0.47
Employees	5/7/2013	5/7/2013–5/6/2023	24,367,201	$0.76	382,196	—	4,412	—	43,466	—	334,318	$1.25	$0.77
Employees	6/11/2013	6/11/2013–6/10/2023	102,810,000	$0.82	3,242,429	—	107,458	—	856,554	—	2,278,417	$1.21	$0.79
Senior Management	6/11/2013	6/11/2013–6/10/2023	74,755,756	$0.82	188,233	—	—	—	—	—	188,233	$—	$0.79
Yonggang Gao	6/17/2013	6/17/2013–6/16/2023	13,608,249	$0.80	1,360,824	—	—	—	—	—	1,360,824	$—	$0.78
Employees	9/6/2013	9/6/2013–9/5/2023	22,179,070	$0.72	354,337	—	12,575	—	122,350	—	219,412	$1.20	$0.73
Employees	11/4/2013	11/4/2013–11/3/2023	19,500,000	$0.74	458,236	—	8,500	—	237,495	—	212,241	$1.14	$0.72
					22,622,723	—	872,266	—	7,196,560	—	14,553,897		

Summary of the share incentive scheme is as follows:

Purpose

The purposes of the 2004 Stock Option Plan are to attract, retain and motivate employees and directors of, and other service providers to, the Company; to provide a means on and after the public offering of compensating them for their contributions to the growth and profits of the Company; and to allow such employees, directors and service providers to participate in such growth and profitability.

Participants

The Company's 2004 Stock Option Plan is administered by the Company's compensation committee or by the Board acting in place of the Company's compensation committee. The Company's 2004 Stock Option Plan provides for the grant of options to the Company's employees, officers or other service providers located in China, the United States or elsewhere, or to a trust established in connection with any employee benefit plan of the Company.

Options granted under the 2004 Stock Option Plan may not be transferred in any manner other than by will or by the laws of descent and distribution, or pursuant to a domestic relations order or as determined by the compensation committee.

Maximum number of shares

The number of the Ordinary Shares that may be issued pursuant to our 2004 Stock Option Plan shall not, in the aggregate, exceed 243,466,873 Ordinary Shares adjusted as impact of the Share Consolidation, representing 4.81% of the issued Ordinary Shares as at December 31, 2019.

Maximum entitlement of each participant

The total number of Ordinary Shares issued and to be issued upon exercise of options (including both exercised and outstanding) granted in any 12-month period to each participant may not exceed at any time 1% of the then issued and outstanding Ordinary Shares.

In no event may the number of Ordinary Shares that may be issued pursuant to any outstanding purchase right granted under the all Company's stock incentive schemes, in the aggregate, 30% of the issued and outstanding Ordinary Shares in issuance from time to time.

Option period

Options granted under the 2004 Stock Option Plan vest over a four-year period. Options may vest based on time or achievement of performance conditions. The Company's compensation committee may provide for options to be exercised only as they vest or to be immediately exercisable with any Ordinary Shares or American depositary shares issued on exercise being subject to the Company's right of repurchase that lapses as the shares vest. The maximum term of options granted under the 2004 Stock Option Plan is ten years, subject to changes under the Hong Kong Stock Exchange Listing Rules, as determined by the compensation committee of the Company.

Options to purchase Ordinary Shares issued to new employees and then-existing employees generally vest at a rate pursuant to which 25% of the shares shall vest on the first anniversary of the vesting commencement date, an additional 1/36 of the remaining shares shall vest monthly thereafter over 3 years of the vesting commencement date, respectively.

Acceptance and payments

2004 Stock Option Plan does not provide for any payment upon application or acceptance of an option.

Exercise price

The exercise price of stock options must be at least equal to the fair market value of the Ordinary Shares on the date of grant.

Remaining life of the scheme

The 2004 Stock Option Plan and its amendment were terminated on November 15, 2013. The stock options granted before such termination remains outstanding and continue to vest and become exercisable in accordance with, and subject to, the terms of the 2004 Stock Option Plan.

2014 STOCK OPTION PLAN

The Company adopted a 2014 Stock Option Plan that became effective on November 15, 2013 when the 2014 Stock Option Plan was registered with the PRC State Administration of Foreign Exchange.

Movement of the2014 Stock Option Plan during the year ended December 31, 2019 is as follows:

Name/Eligible Employees	Date Granted	Period during which Rights Exercisable	No. of Options Granted	Exercise Price Per Share (USD)	Options Outstanding as of 12/31/18	Additional Options Granted During Period	Options Lapsed During Period	Options Lapsed Due to Repurchase of Ordinary Shares During Period	Options Exercised During Period	Options Cancelled During Period	Options Outstanding as of 12/31/19	Weighted Average Closing Price of Shares immediately before Dates on which Options were Exercised (USD)	Weighted Average Closing Price of Shares immediately before Dates on which Options were Granted (USD)
Yonggang Gao	12/06/2014	6/12/2014–6/11/2024	2,886,486	$0.82	288,648	—	—	—	—	—	288,648	$—	$0.82
Employees	12/06/2014	6/12/2014–6/11/2024	26,584,250	$0.82	615,208	—	—	—	284,646	—	330,562	$0.99	$0.82
Senior Management	17/11/2014	11/17/2014–11/16/2024	11,758,249	$1.09	582,778	—	—	—	—	—	582,778	$—	$1.10
Employees	17/11/2014	11/17/2014–11/16/2024	107,881,763	$1.09	4,129,056	—	433,379	—	755,702	—	2,939,975	$1.26	$1.10
Employees	24/02/2015	2/24/2015–2/23/2025	12,293,017	$0.91	481,748	—	—	—	155,999	—	325,749	$1.13	$0.88
Employees	20/05/2015	5/20/2015–5/19/2025	12,235,000	$1.06	365,456	—	28,363	—	82,854	—	254,239	$1.19	$1.05
Zi Xue Zhou	20/05/2015	5/20/2015–5/19/2025	25,211,633	$1.06	2,521,163	—	—	—	—	—	2,521,163	$—	$1.05
Employees	11/09/2015	9/11/2015–9/10/2025	1,120,000	$0.89	52,400	—	—	—	—	—	52,400	$—	$0.91
Employees	25/05/2016	5/25/2016–5/24/2026	5,146,000	$0.82	214,514	—	60,055	—	71,571	—	82,888	$1.17	$0.83
Shanzhi Chen	25/05/2016	5/25/2016–5/24/2026	989,583	$0.82	98,958	—	—	—	—	—	98,958	$—	$0.83
Shanzhi Chen	9/12/2016	9/12/2016–9/11/2026	11,986	$1.12	1,198	—	—	—	—	—	1,198	$—	$1.13
GUO HUA TONG	4/5/2017	4/5/2017–4/4/2027	187,500	$1.26	187,500	—	—	—	—	—	187,500	$—	$1.24
JASON CONG	4/5/2017	4/5/2017–4/4/2027	187,500	$1.26	187,500	—	—	—	—	—	187,500	$—	$1.24
SHANG-YI CHIANG	4/5/2017	4/5/2017–4/4/2027	187,500	$1.26	187,500	—	187,500	—	—	—	—	$—	$1.24
Shanzhi Chen	4/5/2017	4/5/2017–4/4/2027	62,500	$1.26	62,500	—	—	—	—	—	62,500	$—	$1.24
Employees	5/22/2017	5/22/2017–5/21/2027	345,000	$1.09	210,000	—	90,959	—	42,041	—	77,000	$1.10	$1.07
Hai Jun Zhao	9/7/2017	9/7/2017–9/6/2027	1,687,500	$1.01	1,687,500	—	—	—	—	—	1,687,500	$—	$1.00
Employees	5/23/2018	5/23/2018–5/22/2028	18,493,834	$1.34	16,386,344	—	2,970,275	—	151,300	—	13,264,769	$1.42	$1.32
Shanzhi Chen	5/23/2018	5/23/2018–5/22/2028	125,000	$1.34	125,000	—	—	—	—	—	125,000	$—	$1.32
WILLIAM TUDOR BROWN	5/23/2018	5/23/2018–5/22/2028	87,500	$1.34	87,500	—	—	—	—	—	87,500	$—	$1.32
ANTHONY FAN	9/13/2018	9/13/2018–9/12/2028	187,500	$1.09	187,500	—	—	—	—	—	187,500	$—	$1.07
LAWRENCE LAU	9/13/2018	9/13/2018–9/12/2028	187,500	$1.09	187,500	—	—	—	—	—	187,500	$—	$1.07
Employees	11/19/2018	11/19/2018–11/18/2028	138,000	$0.87	138,000	—	—	—	—	—	138,000	$—	$0.88
Shanzhi Chen	5/21/2019	5/21/2019–5/20/2029	62,500	$1.24	—	62,500	—	—	—	—	62,500	$—	$1.11
WILLIAM TUDOR BROWN	5/21/2019	5/21/2019–5/20/2029	62,500	$1.24	—	62,500	—	—	—	—	62,500	$—	$1.11
Employees	9/12/2019	9/12/2019–9/11/2029	848,000	$1.39	—	848,000	100,000	—	—	—	748,000	$—	$1.25
YOUNG Kwang Leei	9/12/2019	9/12/2019–9/11/2029	187,500	$1.39	—	187,500	—	—	—	—	187,500	$—	$1.25
Employees	11/26/2019	11/26/2019–11/25/2029	70,000	$1.44	—	70,000	—	—	—	—	70,000	$—	$1.30
					28,985,471	1,230,500	3,870,531	—	1,544,113	—	24,801,327		

Summary of the share incentive scheme is as follows:

Purpose

The purposes of the 2014 Stock Option Plan are to attract, retain and motivate employees and directors of, and other service providers to, the Company; to provide a means on and after the public offering of compensating them for their contributions to the growth and profits of the Company; and to allow such employees, directors and service providers to participate in such growth and profitability.

Participants

The Company's 2014 Stock Option Plan is administered by the Company's compensation committee or by the Board acting in place of the Company's compensation committee. The Company's 2014 Stock Option Plan provides for the grant of options to the Company's employees, officers or other service providers located in China, the United States or elsewhere, or to a trust established in connection with any employee benefit plan of the Company.

Options granted under the 2014 Stock Option Plan may not be transferred in any manner other than by will or by the laws of descent and distribution, or pursuant to a domestic relations order or as determined by the compensation committee.

Maximum number of shares

The number of Ordinary Shares that may be issued pursuant to the 2014 Stock Option Plan shall not, in the aggregate, exceed 320,737,712 Ordinary Shares adjusted as impact of the Share Consolidation, representing 6.34% of the issued Ordinary Shares as at December 31, 2019.

In no event may the number of Ordinary Shares that may be issued pursuant to any outstanding purchase right granted under all the Company's stock incentive schemes, in the aggregate, 30% of the issued and outstanding Ordinary Shares in issuance from time to time.

Maximum entitlement of each participant

The total number of Ordinary Shares issued and to be issued upon exercise of options (including both exercised and outstanding) granted in any 12-month period to each participant may not exceed at any time 1% of the then issued and outstanding Ordinary Shares.

Option period

Options granted under the 2014 Stock Option Plan vest over a four-year period. Options may vest based on time or achievement of performance conditions. The Company's compensation committee may provide for options to be exercised only as they vest or to be immediately exercisable with any Ordinary Shares or American depositary shares issued on exercise being subject to the Company's right of repurchase that lapses as the shares vest. The maximum term of options granted under the 2014 Stock Option Plan is ten years, subject to changes under the Hong Kong Stock Exchange Listing Rules, as determined by the compensation committee of the Company.

Options to purchase Ordinary Shares granted before January 1, 2018 and issued to new employees and then-existing employees generally vest at a rate pursuant to which 25% of the shares shall vest on the first anniversary of the vesting commencement date, an additional 1/36 of the remaining shares shall vest monthly thereafter over 3 years of the vesting commencement date, respectively.

Options to purchase Ordinary Shares granted after January 1, 2018 and issued to new employees and existing employees generally vest at a rate of 25% upon the first, second, third, and fourth anniversaries of the vesting commencement date, respectively.

Acceptance and payments

2014 Stock Option Plan does not provide for any payment upon application or acceptance of an option.

Exercise price

The exercise price of stock options must be at least equal to the fair market value of the Ordinary Shares on the date of grant.

Remaining life of the scheme

The 2014 Stock Option Plan will terminate ten years from the date of registration of the Plan with the PRC State Administration of Foreign Exchange, unless it is terminated earlier by the Board. The Board may amend or terminate the 2014 Stock Option Plan at any time without necessary of asking for shareholders' approval of the amendment unless required by applicable law.

2014 EQUITY INCENTIVE PLAN

The Company adopted a 2014 Equity Incentive Plan that became effective on November 15, 2013 when the 2014 Equity Incentive Plan was registered with the PRC State Administration of Foreign Exchange.

Movement of the 2014 Equity Incentive Plan during the year ended December 31, 2019 is as follows:

Name/Eligible Employees	Date Granted	Period during which Rights Exercisable	No. of RSUs Granted	Exercise Price Per Share (USD)	RSUs Outstanding as of 12/31/18	Additional RSUs Granted During Period	RSUs Lapsed During Period	RSUs Lapsed Due to Repurchase of Ordinary Shares During Period	RSUs Exercised During Period	RSUs Cancelled During Period	RSUs Outstanding as of 12/31/19	Weighted Average Closing Price of Shares immediately before Dates on which Restricted Share Units were Vested (USD)	Weighted Average Closing Price of Shares immediately before Dates on which Restricted Share Units were Granted (USD)
Yonggang Gao	11/17/2014	2014/11/17–2024/11/16	2,910,836	$0.00	85,505	—	—	—	—	—	85,505	$—	$1.10
Employees	5/20/2015	5/20/2015–5/19/2025	134,008,000	$0.00	2,406,075	—	76,675	—	2,329,400	—	—	$1.02	$1.05
Zi Xue Zhou	5/20/2015	5/20/2015–5/19/2025	10,804,985	$0.00	1,080,498	—	—	—	—	—	1,080,498	$—	$1.05
Employees	9/11/2015	9/11/2015–9/10/2025	1,640,000	$0.00	13,000	—	13,000	—	—	—	—	$—	$0.91
Employees	11/23/2015	11/23/2015–11/22/2025	400,000	$0.00	10,000	—	—	—	10,000	—	—	$1.24	$1.11
Employees	5/25/2016	5/25/2016–5/24/2026	68,070,000	$0.00	2,316,100	—	355,950	—	1,095,750	—	864,400	$1.02	$0.83
Shanzhi Chen	5/25/2016	5/25/2016–5/24/2026	989,583	$0.00	98,958	—	—	—	—	—	98,958	$—	$0.83
Shanzhi Chen	9/12/2016	9/12/2016–9/11/2026	11,986	$0.00	1,198	—	—	—	—	—	1,198	$—	$1.13
Employees	9/12/2016	9/12/2016–9/11/2026	1,560,000	$0.00	52,000	—	10,000	—	26,000	—	16,000	$1.10	$1.13
Employees	11/18/2016	11/18/2016–11/17/2026	2,268,600	$0.00	74,000	—	16,000	—	29,000	—	29,000	$1.14	$1.31
Employees	4/5/2017	4/5/2017–4/4/2027	376,000	$0.00	174,000	—	70,000	—	43,000	—	61,000	$1.11	$1.24
GUO HUA TONG	4/5/2017	4/5/2017–4/4/2027	187,500	$0.00	187,500	—	—	—	—	—	187,500	$—	$1.24
JASON CONG	4/5/2017	4/5/2017–4/4/2027	187,500	$0.00	125,625	—	—	—	61,875	—	63,750	$1.05	$1.24
SHANG-YI CHIANG	4/5/2017	4/5/2017–4/4/2027	187,500	$0.00	187,500	—	187,500	—	—	—	—	$—	$1.24
Shanzhi Chen	4/5/2017	4/5/2017–4/4/2027	62,500	$0.00	62,500	—	—	—	—	—	62,500	$—	$1.24
Employees	5/22/2017	5/22/2017–5/21/2027	7,469,000	$0.00	4,027,650	—	629,850	—	1,291,500	—	2,106,300	$1.02	$1.07
Hai Jun Zhao	9/7/2017	9/7/2017–9/6/2027	1,687,500	$0.00	1,687,500	—	—	—	1,687,500	—	—	$1.31	$1.00
Tzu Yin Chiu	9/7/2017	9/7/2017–9/6/2027	187,500	$0.00	61,875	—	—	—	61,875	—	—	$1.45	$1.00
Employees	12/7/2017	12/7/2017–12/6/2027	364,000	$0.00	210,000	—	39,000	—	57,000	—	114,000	$1.29	$1.32
Employees	5/23/2018	5/23/2018–5/22/2028	6,957,966	$0.00	6,006,230	—	973,380	—	1,467,890	—	3,564,960	$1.03	$1.32
Shanzhi Chen	5/23/2018	5/23/2018–5/22/2028	125,000	$0.00	125,000	—	—	—	—	—	125,000	$—	$1.32
WILLIAM TUDOR BROWN	5/23/2018	5/23/2018–5/22/2028	87,500	$0.00	87,500	—	—	—	—	—	87,500	$—	$1.32
Employees	9/13/2018	9/13/2018–9/12/2028	344,000	$0.00	344,000	—	39,000	—	86,000	—	219,000	$1.15	$1.07
ANTHONY FAN	9/13/2018	9/13/2018–9/12/2028	187,500	$0.00	187,500	—	—	—	—	—	187,500	$—	$1.07
LAWRENCE LAU	9/13/2018	9/13/2018–9/12/2028	187,500	$0.00	187,500	—	—	—	—	—	187,500	$—	$1.07
Employees	11/19/2018	11/19/2018–11/18/2028	54,000	$0.00	54,000	—	—	—	13,500	—	40,500	$1.11	$0.88
Shanzhi Chen	5/21/2019	5/21/2019–5/20/2029	62,500	$0.00	—	62,500	—	—	—	—	62,500	$—	$1.11
WILLIAM TUDOR BROWN	5/21/2019	5/21/2019–5/20/2029	62,500	$0.00	—	62,500	—	—	—	—	62,500	$—	$1.11
Employees	9/12/2019	9/12/2019–9/11/2029	330,000	$0.00	—	330,000	39,000	—	48,750	—	242,250	$1.34	$1.25
YOUNG Kwang Leei	9/12/2019	9/12/2019–9/11/2029	187,500	$0.00	—	187,500	—	—	—	—	187,500	$—	$1.25
Employees	11/26/2019	11/26/2019–11/25/2029	70,000	$0.00	—	70,000	—	—	—	—	70,000	$—	$1.30
					19,853,214	712,500	2,449,355	—	8,309,040	—	9,807,319		

Summary of the share incentive scheme is as follows:

Purpose

The purposes of the 2014 Equity Incentive Plan are to attract, retain and motivate employees and directors of, and other service providers to, the Company; to provide a means on and after the public offering of compensating them for their contributions to the growth and profits of the Company; and to allow such employees, directors and service providers to participate in such growth and profitability.

Participants

The Company's 2014 Equity Incentive Plan is administered by the Company's compensation committee or by the Board acting in place of the Company's compensation committee. The Company's 2014 Equity Incentive provides for the grant of options to the Company's employees, officers or other service providers located in China, the United States or elsewhere, or to a trust established in connection with any employee benefit plan of the Company.

Awards granted under the 2014 Equity Incentive Plan may not be transferred in any manner other than by will or by the laws of descent and distribution, or pursuant to a domestic relations order or as determined by the compensation committee.

Maximum number of shares

The aggregate number of the Ordinary Shares that may be issued pursuant to the 2014 Equity Incentive Plan may not exceed 80,184,428 Ordinary Shares adjusted as impact of the Share Consolidation, representing 1.59% of the issued Ordinary Shares as at December 31, 2019.

In no event may the number of Ordinary Shares that may be issued pursuant to any outstanding purchase right granted under all the Company's stock incentive schemes, in the aggregate, 30% of the issued and outstanding Ordinary Shares in issuance from time to time.

Maximum entitlement of each participant

The total number of Ordinary Shares issued and to be issued upon exercise of awards (including both exercised and outstanding) granted in any 12-month period to each participant may not exceed at any time 1% of the then issued and outstanding Ordinary Shares.

Awards period

Awards under the 2014 Equity Incentive Plan vest over a four-year period. Awards may vest based on time or achievement of performance conditions. The Company's compensation committee may provide for awards to be exercised only as they vest or to be immediately exercisable with any Ordinary Shares or American depositary shares issued on exercise being subject to the Company's right of repurchase that lapses as the shares vest. The maximum term of grant under the 2014 Equity Incentive Plan is ten years, subject to changes under the Hong Kong Stock Exchange Listing Rules, as determined by the compensation committee of the Company.

Awards issued to new employees and existing employees generally vest at a rate of 25% upon the first, second, third, and fourth anniversaries of the vesting commencement date, respectively.

Acceptance and payments

2014 Equity Incentive Plan does not provide for any payment upon application or acceptance of an option.

Exercise price

The price HKD0.031 of each restricted share units was determined by the compensation committee.

Remaining life of the scheme

The 2014 Equity Incentive Plan will terminate ten years from the date of registration of the Plan with the PRC State Administration of Foreign Exchange, unless it is terminated earlier by the Board. The Board may amend or terminate the 2014 Equity Incentive Plan at any time without necessary of asking for shareholders' approval of the amendment unless required by applicable law.

SHARE OPTION PLAN FOR SUBSIDIARY

The subsidiary of the Company, SJ Semiconductor Corporation, adopted a share option plan (the "Subsidiary Plan") that became effective on January 5, 2015 to eligible participants such as employees, directors and service providers of the Group that was approved by the shareholders.

Movement of the Subsidiary Plan during the year ended December 31, 2019 is as follows:

Name/Eligible Employees	Date Granted	Period during which Rights Exercisable	No of Options of the Subsidiary Granted	Exercise Price per Share (USD)	Options of the Subsidiary Outstanding as of 12/31/18	Additional Options Granted During Period	Options Exercised During Period	Options cancelled During Period	Options Lapsed During Period	Options of the Subsidiary Outstanding as of 12/31/19
Employees	1/4/2015	1/4/2015–1/3/2024	4,560,000	$0.05	3,130,000	—	—	—	250,000	2,880,000
Employees	5/4/2015	5/4/2015–5/3/2024	1,380,000	$0.06	1,225,833	—	—	—	95,833	1,130,000
Employees	9/15/2015	9/15/2015–9/14/2024	2,390,000	$0.08	1,640,000	—	—	—	—	1,640,000
Employees	12/27/2016	12/27/2016–12/26/2025	7,753,750	$0.31	6,363,802	—	81,666	—	639,480	5,642,656
Employees	8/9/2017	8/9/2017–8/8/2026	1,598,750	$0.31	1,301,250	—	59,916	—	208,834	1,032,500
Employees	3/13/2018	3/13/2018–3/12/2019	7,349,500	$0.36	6,385,750	—	92,500	—	1,063,948	5,229,302
Employees	3/26/2019	3/26/2019–3/25/2029	5,488,832	$0.36	—	5,488,832	43,750	—	550,417	4,894,665
Employees	12/3/2019	12/3/2019–12/2/2029	5,603,500	$0.36	—	5,603,500	—	—	—	5,603,500
Total			36,124,332		20,046,635	11,092,332	277,832	—	2,808,512	28,052,623

Summary of the Subsidiary Plan is as follows:

Purpose

The purposes of the Subsidiary Plan are to attract, retain and motivate employees and directors of and other service providers to the Group, to provide a means of compensating them through the grant of stock options for their contributions to the growth and profits of the Group, and to allow such employees, directors and service providers to participate in such growth and profitability.

Participants

The compensation committee of the board of directors of the subsidiary (the "Subsidiary Committee") may, at its discretion, invite any employee, officer or other service provider of the Group whether located in China, the United States or elsewhere to take up options to subscribe for shares ("Subsidiary Shares") in the subsidiary. The Subsidiary Committee may also grant stock options to a director who is not an employee of the subsidiary.

A subsidiary stock option is personal to the subsidiary participant and shall be exercisable by such subsidiary participant or his permitted transferee only. A subsidiary option shall not be transferred other than by will, by the laws of descent and distribution or pursuant to a domestic relations order.

Maximum number of shares

The Subsidiary Plan, under which no more than 56,666,666 Subsidiaries Shares can be issued, was representing 10.00% of outstanding Subsidiaries Shares on the date of approval of Subsidiary Plan by the board of directors of the relevant subsidiary.

The number of Subsidiary Shares which may be issued pursuant to any outstanding Subsidiary Stock Options granted and yet to be exercised under the Subsidiary Plan must not exceed in aggregate 30% of the issued and outstanding Subsidiary Shares of the subsidiary in issuance from time to time.

Maximum entitlement of each participant

The total number of Subsidiary Shares underlying Subsidiary Stock Options in any 12-month period may not exceed at any time 1% (or 0.1% in the case of an independent non-executive Director of the subsidiary) of the then issued and outstanding Subsidiary Shares.

Option period

A Subsidiary Stock Option shall terminate or lapse automatically upon the expiry of ten years from the date of grant or the termination of a subsidiary participant's employment or service with the subsidiary.

Options to purchase ordinary shares of subsidiaries issued to new employees and then-existing employees of subsidiaries generally vest at a rate pursuant to which 25% of the shares shall vest on the first anniversary of the vesting commencement date, an additional 1/36 of the remaining shares shall vest monthly thereafter over 3 years of the vesting commencement date, respectively.

Acceptance and payments

The Subsidiary Plan does not provide for any payment upon application or acceptance of an option.

Exercise price

In the absence of an established market for the Subsidiary Shares, the fair market value thereof shall be determined in good faith by the Subsidiary Committee in accordance with any applicable law, rule or regulation.

Remaining life of the scheme

The form of the Subsidiary Plan shall be approved by the shareholders of the Company and of the subsidiary respectively, and shall become effective upon its approval by the board of directors of the subsidiary ("Subsidiary Board"), that is January 5, 2015. Each Subsidiary Plan shall remain in force for a period of ten years commencing on the date of Subsidiary Board approval of the Subsidiary Plan.

The Subsidiary Plan may be changed, altered, amended in whole or in part, suspended and terminated by the Subsidiary Board, subject to such prior approval by the Board of Directors of the Company.

PRE-EMPTIVE RIGHTS

The Company confirms there are no statutory pre-emptive rights under the law of the Cayman Islands.

PUBLIC FLOAT

Based on publicly available information and within the Directors' knowledge, more than 25% of the Company's issued share capital was held by the public as at the date of this annual report.

MAJOR SUPPLIERS AND CUSTOMERS

In 2019, the Group's largest and five largest raw materials suppliers, as a group, accounted for approximately 15.4% and 48.6%, respectively, of the Group's overall raw materials purchases. None of the Directors or other shareholders (which to the knowledge of the Directors own 5% or more of the Company's issued share capital) or their respective associates had interests in any of the Group's five largest suppliers. Almost all of the Group's materials are imported free of value-added tax and import duties due to concessions granted to the semiconductor industry in China.

In 2019, the Company's largest and five largest customers, as a group, accounted for approximately 18.9% and 44.3%, respectively, of the Company's total overall sales. To the best of our knowledge, China IC Fund, which owned more than 5% of the Company's issued share capital, owned 9.72% interests in one of the Company's five largest customers in 2019. Save as disclosed above and to the best of the Company's knowledge, none of the other Directors or shareholders (which to the knowledge of the Directors own 5% or more of the Company's issued share capital) or their respective associates had interests in any of the Company's five largest customers.

AUDITORS

The financial statements have been audited by PricewaterhouseCoopers who retire and, being eligible, offer themselves for re-appointment.

By order of the Board
Semiconductor Manufacturing International Corporation
Gao Yonggang
Executive Director, Chief Financial Officer and Joint Company Secretary

Shanghai, China
March 31, 2020

CORPORATE GOVERNANCE REPORT

The Company is committed to remaining an exemplary corporate citizen and maintaining a high level of corporate governance in order to protect the interests of its shareholders.

CORPORATE GOVERNANCE PRACTICES

The HKSE's Corporate Governance Code (the "CG Code") as set out in Appendix 14 to the Hong Kong Stock Exchange Listing Rules contains code provisions (the "Code Provisions") to which an issuer, such as the Company, is expected to comply or advise as to reasons for deviations and recommends best practices which an issuer is encouraged to implement (the "Recommended Practices"). The Company has adopted a set of Corporate Governance Policy (the "CG Policy") since January 25, 2005 as its own code of corporate governance, which was amended from time to time to comply with the CG Code. The CG Policy, a copy of which can be obtained on the Company's website at www.smics.com under "Investor Relations > Corporate Governance > Policy and Procedures", incorporates all of the Code Provisions of the CG Code except for Code Provision E.1.3, which relates to the notice period of general meetings of the Company, and many of the Recommended Practices. In addition, the Company has adopted or put in place various policies, procedures, and practices in compliance with the provisions of the CG Policy.

During the year ended December 31, 2019, the Company was in compliance with all the Code Provisions set out in the CG Code except as explained below:

Code Provision A.4.2 of the CG Code requires that all directors appointed to fill a casual vacancy should be subject to election by shareholders at the first general meeting after appointment. According to Article 126 of the Articles of Association of the Company, any Director appointed by the Board to fill a casual vacancy or as an addition to the existing Directors shall hold office only until the next following annual general meeting of the Company after appointment and shall then be eligible for re-election at that meeting.

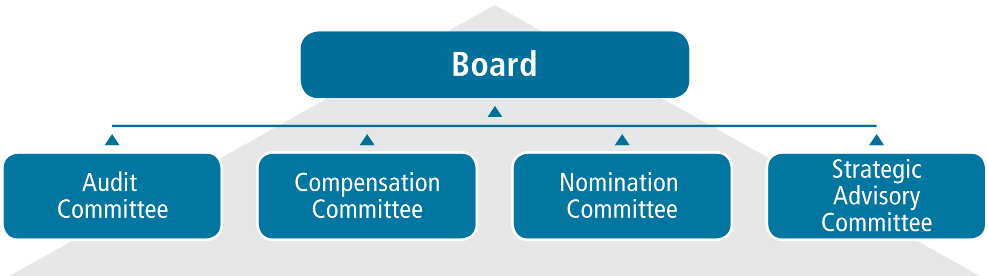
Save as the aforesaid and in the opinion of the Directors, the Company had complied with all Code Provisions set out in the CG Code during the year ended December 31, 2019.

MODEL CODE FOR SECURITIES TRANSACTIONS BY DIRECTORS OF LISTED ISSUERS

The Company has adopted an Insider Trading Compliance Program (the "Insider Trading Policy") which encompasses the requirements of the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 to the Hong Kong Stock Exchange Listing Rules (the "Model Code"). The Company, having made specific enquiry of all Directors, confirms that all Directors have complied with the Insider Trading Policy and the Model Code throughout the year ended December 31, 2019. The senior management of the Company as well as all officers, Directors, and employees of the Company and its subsidiaries are also required to comply with the provisions of the Insider Trading Policy.

THE BOARD

The Board has a duty to the Company's shareholders to direct and oversee the affairs of the Company in order to maximize shareholder value. The Board, acting by itself and through the various committees of the Board, actively participates in and is responsible for the determination of the overall strategy of the Company, the establishment and monitoring of the achievement of corporate goals and objectives, the oversight of the Company's financial performance and the preparation of the accounts, the establishment of corporate governance practices and policies, the review of the Company's system of internal controls and risk management. The management of the Company is responsible for the implementation of the overall strategy of the Company and its daily operations and administration. The Board has access to the senior management of the Company to discuss enquiries on management information.



CORPORATE GOVERNANCE REPORT

The Board consists of fourteen Directors as of the date of this annual report. Directors may be elected to hold office until the expiration of their respective term upon a resolution passed at a duly convened shareholders' meeting by holders of a majority of the Company's issued shares being entitled to vote in person or by proxy at such meeting. The Board is divided into three classes with one class of Directors eligible for re-election at each annual general meeting of the Company. Each class of Directors (including all non-executive Directors) will serve a term of three years.

The following table sets forth the names, classes and categories of the Directors as at the date of this annual report:

Name of Director	Category of Director	Class of Director	Year of Re-election
Zhou Zixue	Chairman, Executive Director	Class I	2020
Gao Yonggang	Chief Financial Officer, Executive Director	Class I	2020
William Tudor Brown	Independent Non-executive Director	Class I	2020
Tong Guohua	Non-executive Director	Class I	2020
Zhao Haijun	Co-Chief Executive Officer, Executive Director	Class II	2021
Chen Shanzhi	Non-executive Director	Class II	2021
Lu Jun	Non-executive Director	Class II	2021
Lau Lawrence Juen-Yee	Independent Non-executive Director	Class II	2021
Fan Ren Da Anthony	Independent Non-executive Director	Class II	2021
Liang Mong Song	Co-Chief Executive Officer, Executive Director	Class III	2022
Zhou Jie	Non-executive Director	Class III	2022
Ren Kai	Non-executive Director	Class III	2022
Cong Jingsheng Jason	Independent Non-executive Director	Class III	2022
Young Kwang Leei[1]	Independent Non-executive Director	Class III	2020 & 2022

1 Dr. Young Kwang Leei, whose initial appointment as Director took effect from August 7, 2019, shall retire from office at the 2020 AGM pursuant to Article 126 of the Company's Articles of Association. Dr. Young will, being eligible, offer himself for re- election as a Class III Director at the 2020 AGM to hold office until the 2022 AGM.

The Company confirms that each independent non-executive Director ("INED") has given an annual confirmation of his/her independence to the Company, and the Company considers each of them independent under Rule 3.13 of the Hong Kong Stock Exchange Listing Rules. There are no relationships among members of the Board, including between the Chairman of the Board and the Co-Chief Executive Officers.

During the year ended December 31, 2019, the roles of the Chairman and the Co-Chief Executive Officers are segregated and such roles are exercised by Dr. Zhou Zixue as the Chairman and Dr. Zhao Haijun and Dr. Liang Mong Song as the Co-Chief Executive Officers.

The Board meets in person at least on a quarterly basis and on such other occasions as may be required to discuss and vote upon significant issues affecting the Company. The Board meeting schedule for the year is planned in the preceding year. The Company Secretary assists the Chairman in preparing the agenda for meetings and the Board in complying with relevant rules and regulations. The relevant papers for the Board meetings are dispatched to Board members in accordance with the CG Code. Directors may include matters for discussion in the agenda if the need arises. Upon the conclusion of the Board meeting, minutes are circulated to all Directors for their comment and review prior to their approval of the minutes at the following or subsequent Board meeting. The minutes record the matters considered by the Board, the decisions reached, and any concerns raised or dissenting views expressed. Transactions in which Directors are considered to have a conflict of interest or material interests are dealt with by a physical board meeting rather than by written resolutions and the interested Directors are not counted in the quorum and abstain from voting on the relevant matters.

The Chairman of the Board holds meetings with the non-executive Directors (including INEDs) without the other executive Directors present at least once a year.

Every Board member is entitled to have access to documents provided at the Board meeting or filed into the Company's minute-book. Furthermore, the Board has established the procedures pursuant to which a Director, upon reasonable request, may seek independent professional advice at the Company's expense in order for such Director to exercise such Director's duties.

During the year ended December 31, 2019, the Board held a total of five (5) meetings on February 14, May 8, August 7, August 8 and November 12 in 2019. The directors' attendance at the Board meetings and general meetings is set out below:

	Number of meetings attended/held			
	Board Meetings	Board Strategic Meeting	Annual General Meeting	Extraordinary General Meetings
Executive Director				
Zhou Zixue (Chairman)	5/5	1/1	1/1	1/1
Zhao Haijun	5/5	1/1	0/1	1/1
Liang Mong Song	5/5	0/1	1/1	0/1
Gao Yonggang	5/5	1/1	1/1	1/1
Non-executive Director				
Chen Shanzhi	3/5	1/1	1/1	1/1
Zhou Jie	5/5	1/1	1/1	1/1
Ren Kai	4/5	1/1	1/1	1/1
Lu Jun	2/5	1/1	1/1	0/1
Tong Guohua	1/5	0/1	1/1	1/1
Independent Non-executive Director				
William Tudor Brown	5/5	1/1	1/1	1/1
Chiang Shang-Yi[1] (resigned on June 21, 2019)	2/2	N/A	N/A	1/1
Cong Jingsheng Jason	5/5	1/1	1/1	1/1
Lau Lawrence Juen-Yee	5/5	1/1	1/1	1/1
Fan Ren Da Anthony	5/5	1/1	1/1	1/1
Young Kwang Leei[2] (appointed on August 7, 2019)	2/2	1/1	N/A	N/A

Note 1: During the year ended December 31, 2019, there were two meetings of the Board held before the cessation of Dr. Chiang Shang-Yi as a member of the Board on June 21, 2019.

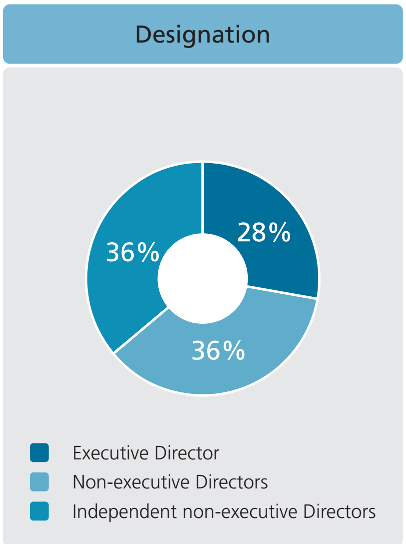
Note 2: During the year ended December 31, 2019, there were two meetings of the Board held after Dr. Young Kwang Leei was appointed as a member of the Board on August 7, 2019.

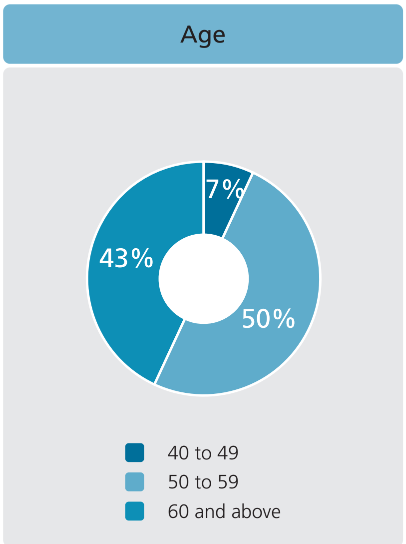
DIRECTORS' TRAINING AND PROFESSIONAL DEVELOPMENT

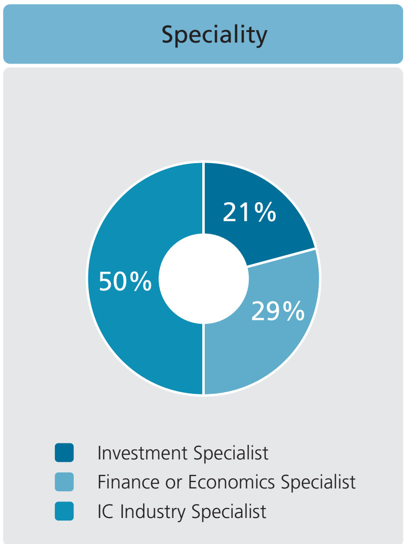
All Directors should keep abreast of the responsibilities as a director, and of the conduct and business activities of the Company. The Company is responsible for arranging and funding suitable training for its Directors. Each new Director is provided with training with respect to such Director's responsibilities under the Hong Kong Stock Exchange Listing Rules and other regulatory requirements and the Company's corporate governance policies and practices. From time to time, the Company updates the Directors on the latest changes and development of the Hong Kong Stock Exchange Listing Rules, the corporate governance practices and other law and regulations applicable to the Company, organizes in-house seminars on the latest development of regulatory requirements related to director's duties and responsibilities, and arranges fab visit to provide directors a better understanding of the operation and latest technology and products developments of the Group. The Company Secretary maintains the training records of all Directors. In 2019, the Directors complied with Code Provision A.6.5 of the CG Code through participation in the above-mentioned continuous professional development and reading relevant materials and journals to develop and refresh their knowledge and skills.

BOARD DIVERSITY POLICY

The Board has adopted a Board Diversity Policy since August 8, 2013 to comply with a new Code Provision A.5.6 of the CG Code on board diversity which has become effective from September 1, 2013. The Nomination Committee of the Board will give consideration to that policy when identifying suitably qualified candidates to become members of the Board. Nonetheless, Board appointments will always be made on merit against objective criteria, taking into account factors based on the Company's business model and specific needs from time to time, as well as the benefits of diversity on the Board, and the Board will review the Board Diversity Policy on a regular basis to ensure its effectiveness.







PROCEDURE REGARDING THE APPOINTMENT OF DIRECTORS

The standard procedure regarding the appointment of Directors, which was adopted by the Board on September 22, 2005, sets forth the process by which individuals are appointed as members of the Board. Under the policy, the Board will consider, among other factors, (i) the skills, qualifications and experience of the nominee, including other directorships held in listed public companies in the last three years and other major appointments; (ii) the nominee's shareholding in the Company; (iii) the independence of the nominee under United States and/or Hong Kong listing rules; and (iv) the impact with respect to the Company's status as a "foreign private issuer" under the United States securities laws. The Board will then decide whether to appoint such nominee to fill a casual vacancy on the Board or to add the nominee to the existing Directors and to appoint such nominee into one of the three classes of Directors as stipulated in the Articles of Association of the Company.

BOARD COMMITTEES

The Board has established the following principal committees to assist it in exercising its obligations. These committees consist of a majority of independent non-executive Directors who have been invited to serve as members. The committees are governed by their respective charters setting out clear terms of reference. The updated terms of reference of the committees are available on the websites of the Company and the Hong Kong Stock Exchange.

COMPENSATION COMMITTEE

As of December 31, 2019, the members of the Company's Compensation Committee ("Compensation Committee") are Mr. William Tudor Brown (Chairman of Compensation Committee), Mr. Zhou Jie, Professor Lau Lawrence Juen-Yee, Dr. Tong Guohua, and Dr. Young Kwang Leei. None of these members has been an executive officer or employee of the Company or any of its subsidiaries.

The responsibilities of the Compensation Committee include, among other things:

- approving and overseeing the total compensation package for the Company's executive officers and any other officer, evaluating the performance of and determining and approving the compensation to be paid to the Company's Co-Chief Executive Officers and reviewing the results of the Co-Chief Executive Officers' evaluation of the performance of the Company's other executive officers;

- determining the compensation packages of executive Directors and making recommendations to the Board with respect to non-executive Director compensation, including equity-based compensation;
- administering and periodically reviewing and making recommendations to the Board regarding the long- term incentive compensation or equity plans made available to the Directors, employees and consultants;
- reviewing and making recommendations to the Board regarding executive compensation philosophy, strategy and principles and reviewing new and existing employment, consulting, retirement and severance agreements proposed for the Company's executive officers; and
- ensuring appropriate oversight of the Company's human resources policies and reviewing strategies established to fulfill the Company's ethical, legal, and human resources responsibilities.

The Compensation Committee shall have the delegated authority to determine the remuneration packages of individual executive Directors and the Company's executive officers, and make recommendations to the Board on the remuneration of non-executive Directors. During the year ended December 31, 2019, the Compensation Committee reviewed:

- the optimized compensation and appraisal plan for executive directors and senior management team;
- the long term incentive plan for management team, high potential or high performance employees;
- company performance achievement results in 2019 and the short-term incentive proposals for executives based on the performance achievement rate;
- compensation package for new independent non-executive Director;
- proposed bonus and stock grant plan to non-executive Directors; and
- amendment of Compensation Committee charter.

The Compensation Committee meets in person at least on a quarterly basis and on such other occasions as may be required to discuss and vote upon significant issues affecting the compensation policy of the Company. The meeting schedule for a given year is planned in the preceding year. The Company Secretary assists the chairman of the Compensation Committee in preparing the agenda for meetings and assists the Compensation Committee in complying with the relevant rules and regulations. The relevant papers for the Compensation Committee meetings were dispatched to Committee members in accordance with the CG Code. Members of the Compensation Committee may include matters for discussion in the agenda if the need arises. Upon the conclusion of the Compensation Committee meeting, minutes are circulated to the Committee members for their comment and review prior to their approval of the minutes at the following or a subsequent Compensation Committee meeting.

During the year ended December 31, 2019, the Compensation Committee held a total of five (5) meetings. Details of Directors' attendance at the Compensation Committee meetings are set forth below:

Compensation Committee	Attendance	Note
Independent Non-executive Director		
William Tudor Brown	5/5	—
Lau Lawrence Juen-Yee	5/5	—
Chiang Shang-Yi	2/2	1
Young Kwang Leei	2/2	2
Non-executive Director		
Zhou Jie	4/5	—
Tong Guohua	1/5	—

Note 1: During the year ended December 31, 2019, there were two meetings of the Compensation Committee held before the cessation of Dr. Chiang Shang Yi as a member of the Compensation Committee on June 21, 2019.

Note 2: During the year ended December 31, 2019, there were two meetings of the Compensation Committee held after Dr. Young Kwang Leei was appointed as a member of the Compensation Committee on August 7, 2019.

NOMINATION COMMITTEE

As of December 31, 2019, the members of the Company's Nomination Committee ("Nomination Committee") were Dr. Zhou Zixue (Chairman of Nomination Committee), Mr. Lu Jun, Mr. William Tudor Brown, Lau Lawrence Juen-Yee and Fan Ren Da Anthony.

BOARD NOMINATION POLICY

This policy sets out the principles which guide the Nomination Committee of the Company to identify and evaluate a candidate suitably qualified to become a director of the Board and make recommendations to the Board on the selection of candidates nominated for directorships with reference to the formulated criteria. The Board is ultimately responsible for selection and appointment of new Directors.

NOMINATION CRITERIA

The Nomination Committee shall consider a number of factors in making nominations, including but not limited to the following:

Skills and Experience: The candidate should possess the skills, knowledge and experience which are relevant to the operations of the Company and its subsidiaries.

Diversity: Candidates should be considered on merit and against objective criteria, with due regard to the diversity perspectives set out in the Board Diversity Policy of the Company and the balance of skills and experience in board composition.

Commitment: The candidate should be able to devote sufficient time to attend board meetings and participate in induction, trainings and other board associated activities. In particular, if the proposed candidate will be nominated as an independent non-executive director ("INED") and will be holding his/her seventh (or more) listed company directorship, the Nomination Committee should consider the reason given by the candidate for being able to devote sufficient time to the Board.

Standing: The candidate must satisfy the Board and The Stock Exchange of Hong Kong Limited that he/she has the character, experience and integrity, and is able to demonstrate a standard of competence commensurate with the relevant position as a director of the Company.

Independence: The candidate to be nominated as an INED must satisfy the independence criteria set out in Rule 3.13 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited.

NOMINATION PROCEDURES

1. If the Nomination Committee determines that an additional or replacement director is required, the Committee may take such measures that it considers appropriate in connection with its identification and evaluation of a candidate.

2. The Nomination Committee may propose to the Board a candidate as a nominee for election to the Board.

3. The Board may appoint the candidate as director to fill a casual vacancy or as an addition to the Board or recommend.

4. The Shareholders approve the election of candidate, who stands for election at the next following annual general meeting, as a director.

The responsibilities of the Nomination Committee include, among other things:

- reviewing the structure, size and composition (including the skills, knowledge and experience) of the Board at least annually and making recommendations on any proposed changes to the Board to complement the Company's corporate strategy;
- monitor the implementation of Board Diversity Policy (including any measurable objectives and the progress in achieving those objectives), and ensure that appropriate disclosures are made regarding board diversity in the Corporate Governance Report set out in the Company's annual report;
- identifying individuals suitably qualified to become Board members and making recommendations to the Board on the selection of individuals nominated for directorships;
- assessing the independence of independent non-executive directors; and
- making recommendations to the Board on the appointment or re-appointment of directors and succession planning for Directors, in particular the Chairman of the Board and the Chief Executive Officer.

The Nomination Committee meets at least once a year and on such other occasions as may be required to discuss and vote upon significant issues relating to Board composition. The Company Secretary assists the chairman of the Nomination Committee in preparing the agenda for meetings and assists the Committee in complying with the relevant rules and regulations. The relevant papers for the Nomination Committee meetings were dispatched to Committee members in accordance with the CG Code. Members of the Nomination Committee may include matters for discussion in the agenda if the need arises. Upon the conclusion of the Nomination Committee meeting, minutes are circulated to the Nomination Committee members for their comment and review prior to their approval of the minutes at the following or a subsequent Committee meeting. During the year ended December 31, 2019, the Nomination Committee:

- reviewed the structure, size and composition (including the skills, knowledge and experience) of the Board;
- set criteria and reviewed potential nominees for directorships;
- evaluated the independence of the independent non-executive Directors;
- reviewed the re-election of Directors;
- nominated independent non-executive Director; and
- nominated new members for Compensation Committee.

During the year ended December 31, 2019, the Nomination Committee held two (1) meetings. Details of Directors' attendance at the Nomination Committee meetings are set forth below:

Nomination Committee	Attendance	Note
Executive Director		
Zhou Zixue (Chairman)	1/1	—
Non-executive Director		
Lu Jun	1/1	—
Independent Non-executive Director		
Lau Lawrence Juen-Yee	1/1	—
William Tudor Brown	1/1	—
Fan Ren Da Anthony	1/1	—

AUDIT COMMITTEE

As of December 31, 2019, the members of the Company's Audit Committee ("Audit Committee") are Fan Ren Da Anthony (Chairman of Audit Committee), Mr. Zhou Jie and Mr. William Tudor Brown. None of these members has been an executive officer or employee of the Company or any of its subsidiaries.

The responsibilities of the Audit Committee include, among other things:

- making recommendations to the Board concerning the appointment, reappointment, retention, evaluation, oversight and termination of the work of the Company's independent auditor;
- reviewing the experience, qualifications and performance of the senior members of the independent auditor team;
- pre-approving all non-audit services to be provided by the Company's independent auditor;
- approving the remuneration and terms of engagement of the Company's independent auditor;
- reviewing reports from the Company's independent auditor regarding the independent auditor's internal quality-control procedures; and any material issues raised in the most recent internal or peer review of such procedures, or in any inquiry, review or investigation by governmental, professional or other regulatory authority, respecting independent audits conducted by the independent auditor, and any steps taken to deal with these issues; and (to assess the independent auditor's independence) all relationships between the Company and the independent auditor;
- pre-approving the hiring of any employee or former employee of the Company's independent auditor who was a member of the audit team during the preceding three years and the hiring of any employee or former employee of the independent auditor holding senior positions regardless of whether that person was a member of the Company's audit team;
- reviewing the Company's annual, interim and quarterly financial statements, earnings releases, critical accounting policies and practices used to prepare financial statements, alternative treatments of financial information, the effectiveness of the Company's disclosure controls and procedures and important trends and developments in financial reporting practices and requirements;
- reviewing the scope, planning and staffing of internal audits, the organization, responsibilities, plans, results, budget and staffing of the Company's Internal Audit Department (as defined and discussed below), the quality, adequacy and effectiveness of the Company's internal controls (including financial, operational and compliance controls) and any significant deficiencies or material weaknesses in the design or operation of internal controls;
- considering the adequacy of resources, staff qualifications and experience, training programs and budget of the Company's accounting and financial reporting function;
- reviewing the Company's internal controls, risk assessment and management policies;
- reviewing any legal matters that may have a material impact and the adequacy and effectiveness of the Company's legal and regulatory compliance procedures;
- establishing procedures for the treatment of complaints received by the Company regarding financial reporting, internal control or possible improprieties in other matters; and
- obtaining and reviewing reports from management, the Company's internal auditor and the Company's independent auditor regarding compliance with applicable legal and regulatory requirements.

During the year ended December 31, 2019, the Audit Committee reviewed:

- the Company's budget for 2019;
- the financial reports for the year ended December 31, 2018 and the six months ended June 30, 2019;
- the quarterly financial statements, earnings releases and any updates thereto;
- the report and management letter submitted by the Company's outside auditors summarizing the findings of and recommendations based on their audit of the Company's financial reports;
- the effectiveness of the Company's internal control structure in operations, financial reporting integrity and compliance with applicable laws and regulations;
- 2018 risk management systems and assessment results;
- 2019 audit plan and audit team;
- 2019 audit scope of internal control audit and audit results for the nine months ended 2019;
- the quarterly audit plan and quarterly audit items result;
- the quarterly risk assessment early warning index;
- the audit fees and non-audit related fees for the Company's independent auditors and the independent auditors' engagement letters; and
- the reports of the Company's ethics hotline, the results of investigation and handling of violation cases, and the amendment of the Company's Reward and Punishment Policy.

The Audit Committee reports its work, findings and recommendations to the Board regularly. In addition, the Audit Committee meets in person with the Company's external auditor four times a year.

The Audit Committee meets in person at least four times a year on a quarterly basis and on such other occasions as may be required to discuss and vote upon significant issues. The meeting schedule for the year is planned in the preceding year. The Company Secretary assists the chairman of the Audit Committee in preparing the agenda for meetings and assists the Audit Committee in complying with the relevant rules and regulations. The relevant papers for the Audit Committee meetings were dispatched to the Audit Committee in accordance with the CG Code. Members of the Audit Committee may include matters for discussion in the agenda if the need arises. Within a reasonable time after an Audit Committee meeting is held, minutes are circulated to the members of the Audit Committee for their comment and review prior to their approval of the minutes at the following or a subsequent Audit Committee meeting.

During the year ended December 31, 2019, the Audit Committee held a total of four (4) meetings. Details of individual members' attendance at the Audit Committee meetings are set forth below:

Audit Committee	Attendance	Note
Independent Non-executive Director		
Fan Ren Da Anthony	4/4	—
William Tudor Brown	4/4	—
Non-executive Director		
Zhou Jie	3/4	—

At each quarterly Audit Committee meeting, the Audit Committee, the Chief Financial Officer and the Company's independent auditors review the financial statements for the financial period and the financial and accounting principles, policies and controls of the Company and its subsidiaries. In particular, the Committee discusses (i) the changes in accounting policies and practices, if any; (ii) the going concern assumptions; (iii) compliance with accounting standards and applicable rules and other legal requirements in relation to financial reporting and (iv) the internal controls of the Company and the accounting and financial reporting systems. Upon the recommendation of the Audit Committee, the Board approves the financial statements.

STRATEGIC ADVISORY COMMITTEE

As of December 31, 2019, the members of the Company's Strategic Advisory Committee ("Strategic Advisory Committee") were Dr. Chen Shanzhi (Chairman of Strategic Advisory Committee), Mr. Ren Kai, Mr. William Tudor Brown and Mr. Lau Lawrence Juen-Yee.

The purpose of the Strategic Advisory Committee is to assist the Board and the management of the Company to evaluate and consider various strategic alternatives.

The responsibilities of the Strategic Advisory Committee include, among other things:

- to evaluate and consider any strategic alternative;
- to contribute and participate in discussions with potential strategic partners with respect to any strategic alternative; and
- to make recommendations to the Board and the management of the Company with respect to any strategic alternative.

BOARD STRATEGIC MEETING

The Board considers strategy planning is important for the sustainability and development of the Company. Together with Strategic Advisory Committee, the Board holds strategic meeting once a year to:

- assess opportunities and challenges of the Company;
- set strategic goals and measurable targets;
- determines the scope of Company's business operation to support the goals;
- review and evaluate the progress of strategies implementation.

CORPORATE GOVERNANCE FUNCTIONS

Pursuant to the Board Delegation Policy of the Company which came into effect on September 22, 2005, the Board (or any of its committees) is responsible for performing the following corporate governance duties:

(a) to develop and review the Company's policies and practices on corporate governance;

(b) to review and monitor the training and continuous professional development of Directors and senior management;

(c) to review and monitor the Company's policies and practices on compliance with legal and regulatory requirements;

(d) to develop, review and monitor the code of conduct and compliance manual (if any) applicable to employees and Directors; and

(e) to review the Company's compliance with the code and disclosure in the Corporate Governance Report.

During the year ended December 31, 2019, the aforesaid corporate governance functions had been carried out by the Board pursuant to the Board Delegation Policy.

AUDITORS' REMUNERATION

The following table sets forth the aggregate audit fees, Sarbanes-Oxley compliance testing fee, audit- related fees, tax fees and all other fees we paid or incurred for audit and audit-related services, tax services and other services rendered by our auditors during the fiscal year ended December 31, 2019.

	2019 USD'000
Audit and Audit-Related Fees	**1,312**
Tax Fees	**42**
All Other Fees	**57**
Total	**1,411**

DIRECTORS' RESPONSIBILITY FOR FINANCIAL REPORTING IN RESPECT OF FINANCIAL STATEMENTS

The Directors acknowledge their responsibilities for the preparation of the financial statements of the Company and the Group. The Directors were not aware of any material uncertainties relating to events or conditions which may cast significant doubt upon the Group's ability to continue as a going concern.

The statement by the auditors of the Company regarding their reporting responsibilities is set out in the Independent Auditor's Report on pages 105 to 108 of this annual report.

RISK MANAGEMENT AND INTERNAL CONTROLS

The Board is responsible for ensuring that the Group maintains sound and effective risk management and internal control systems and for overseeing management in the operating of such systems on an ongoing basis. Under the Corporate Governance Code issued by HKEX, management should provide a confirmation to the Board on the effectiveness of such systems. The successful risk management and internal control systems are designed to ensure the achievement of business objectives in operations, financial reporting and compliance with applicable laws and regulations. They are also designed to manage, rather than completely eliminate, risks impacting the Group's ability to achieve its business objectives. Accordingly, the risk management and internal control systems can only provide reasonable but not absolute assurance that the financial statements do not contain a material misstatement or loss.

Based on the Enterprise Risk Management — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), the Board supervises the management's designing, implementing and monitoring the risk management system to ensure the effectiveness of the risk management programs. The implementation methods of the management are as follows:

- identifying risks, such as operational risk, strategy risk, market risk, legal risk and financial risk, etc.;
- assessing the identified risks by considering the impacts (including financial, reputation, business continuity & operational) and likelihoods of their occurrence;
- designing, operating and monitoring internal control systems, and evaluating the effectiveness of implementation to mitigate and control such risks; and
- monitoring the risk early warning index on the material risks.

The Board has reviewed the effectiveness of risk management and internal control systems of the Group once a year and has required strengthening the comprehensive anti-fraud mechanism ensured that the risk management and internal control systems in place are effective.

INTERNAL AUDIT

Internal Audit supports the Audit Committee to evaluate the effectiveness of and contribute to the improvement of risk management, internal control, and corporate governance systems. On an annual basis, the risk-based audit plan and resources are reviewed and approved by the Audit Committee and the Chairman of the Board. In addition to the agreed plan, the Internal Audit conducts reviews and investigations of concern identified by senior management on an ad hoc basis. Material audit results are reported to the Chairman of the Board and the Co-Chief Executive Officers. A summary of audit reports is quarterly reported to the Audit Committee.

Based on this annual audit plan, the Internal Audit audits the policies, procedures, and internal controls in the Group including all subsidiaries. The scope of the audit includes:

- reviewing management's internal controls to ensure the reliability and integrity of financial and operating information and the means used to identify, measure, classify, and report such information;
- reviewing the internal control systems established or to be established to ensure compliance with plans, procedures, policies, laws and regulations that could have a significant impact on operations and reports, and determining whether the Group is in compliance;
- reviewing the means of safeguarding assets and, when appropriate, verifying the existence of assets;
- identifying significant risks, including fraud risks, to the ability of the Group to meet its business objectives, communicating them to management and monitoring that management has taken appropriate action to guard against those risks;
- evaluating the effectiveness of controls supporting the operations of the Group and providing recommendations of audit findings as to how those controls could be improved;
- coordinating the work on internal control with independent auditor; and
- assisting to improve the anti-fraud mechanism, determine the key areas, key processes and main contents of anti-fraud, and paying reasonable attention to and inspect possible fraud in the process of internal audit.

In conducting these audits, the Internal Audit has free and full access to all necessary functions, records, properties and personnel.

After completing an audit, the Internal Audit notified the Group's management team with the audit results. Appropriate managers of the Group are responsibility for determining and implementing the corrective action necessary to eliminate deficiencies in the system of internal control.

The Internal Audit may meet privately with the Audit Committee, without the presence of members of the Group's management or the independent auditor upon request.

JOINT COMPANY SECRETARIES

The biographical details of joint Company Secretaries Dr. Gao Yonggang and Dr. Liu Wei are set out on page 26 and page 32 of this annual report.

The Joint Company Secretaries report to the chairman of the Board. All Directors have access to the Joint Company Secretaries, who are responsible for assisting the Board in complying with applicable procedures regarding compliance matters. The Joint Company Secretaries continuously updates all Directors on the latest development of the Hong Kong Stock Exchange Listing Rules and other applicable regulatory requirements to assist the Company's compliance with and maintenance of good corporate governance practices.

Pursuant to Rule 3.29 of the Hong Kong Stock Exchange Listing Rules, Dr. Gao and Dr. Liu had taken no less than 15 hours of relevant professional training for the year ended December 31, 2019.

SHAREHOLDER RIGHTS

The Company's shareholders may put forth proposals at an annual general meeting of the Company's shareholders by written notice of those proposals being submitted by shareholders, addressed to the Company Secretary at the principal executive offices of the Company. In order for a shareholder to put a proposal before the Company's shareholders, such shareholder must (a) be a member of record on both the date of giving of the notice by such shareholder and the record date for the determination of members entitled to vote at such meeting and (b) comply with the notice requirements, in each case, as specified in the Articles of Association. The notice requirements include requirements regarding the timing of delivery of the notice as well as the contents of such notice. The detailed procedures for the notice requirements vary depending on whether the proposal constitutes an ordinary resolution or a special resolution or whether the proposal relates to a nomination for election of a Director. The procedures for shareholders to propose a person for election as a Director is available on the Company's website. The procedures for shareholders to put forward proposals at an annual general meeting are also available upon request from the Company Secretary at the Company's Hong Kong office as stated below:

Semiconductor Manufacturing International Corporation
Suite 3003, 30th Floor, 9 Queen's Road Central
Hong Kong

Enquiries may be submitted to the Board by contacting either the Company Secretary at the above address, or directly by questions at an annual general meeting or an extraordinary general meeting. Questions on the procedures for putting forward proposals at an annual general meeting may also be raised to the Company Secretary by the same means.

According to Article 61 of the Company's Articles of Association, only the Board or the Chairman of the Board may, whenever they or he think fit to proceed, convene a general meeting of the Company. The ability of shareholders to call any general meeting of the Company is specifically denied.

SHAREHOLDER COMMUNICATIONS

The Company and the Board recognizes the importance of maintaining open and frequent communications with its shareholders. At the annual general meeting of the Company, which was held on June 21, 2019 at the Company's headquarters in Shanghai, China ("2019 AGM"), Directors, members of the management team, as well as the Company's outside auditors, were present to answer questions from the shareholders. The 2019 AGM circular was distributed to all shareholders within the prescribed time period required by the Hong Kong Stock Exchange Listing Rules. The circular and the accompanying materials set forth information relevant to the proposed resolutions. Separate resolutions are proposed at these annual general meetings on each substantially separate issue, including the re-election of individual Directors. The chairman of the meeting reveals how many proxies for and against have been filed in respect to each resolution. The poll results will be published in accordance with the requirements of the Hong Kong Stock Exchange Listing Rules.

During the 2019 AGM, the Company's shareholders:

- received and considered the audited consolidated financial statements and the reports of the Directors and Auditors of the Company for the year ended December 31, 2018;
- re-elected Mr. Zhou Jie, Mr. Ren Kai, Dr. Cong Jingsheng Jason,Dr. Liang Mong Song as Class III directors to hold office until 2022 AGM, re-elected Professor Lau Lawrence Juen-Yee and Mr. Fan Ren Da Anthony as Class II director to hold office until 2021 AGM and authorized the Board to fix their remuneration;
- appointed PricewaterhouseCoopers as the auditor of the Company for Hong Kong financial reporting purpose and authorized the Audit Committee of the Board to fix their remuneration;
- approved the general mandate to the Board to allot, issue, grant, distribute and otherwise deal with additional shares in the Company, not exceeding 20% of the issued share capital of the Company as at the date of 2019 AGM;
- approved the general mandate to the Board to repurchase shares of the Company, not exceeding 10% of the issued share capital of the Company as at the date of 2019 AGM;

- authorized the Board to exercise the powers to allot, issue, grant, distribute and otherwise deal with the additional authorized but unissued shares repurchased by the Company.

A key element of effective communication with shareholders and investors is the timely dissemination of information relating to the Company. In addition to announcing annual and interim reports, the Company announces its quarterly financial results approximately one month after the end of each quarter. In connection with such announcements, the Company holds conference calls which are open and available to the Company's shareholders. During these conference calls, the Co-chief Executive Officers and senior management report about the latest developments in the Company and answer questions from participants. The members of the Company's Investor Relations Department and senior members of the Company's management also hold regular meetings with equity research analysts and other institutional shareholders and investors.

A table setting forth information regarding the beneficial owners as of December 31, 2019 of the Ordinary Shares, who is known by the Company to beneficially own 5% or more of the Company's outstanding shares, is contained on page 70.

The market capitalization of the Company as of December 31, 2019 was approximately HK$60,379,014,809.28 (issued share capital of 5,056,868,912 Ordinary Shares at the closing market price of HK$11.94 per Ordinary Share). The public float as of such date was approximately 67.24%.

The 2020 AGM is scheduled to be held at the Company's headquarters at 18 Zhangjiang Road, PuDong New Area, Shanghai 201203, China on or around June 23, 2020. All shareholders of the Company are invited to attend.

CODE OF BUSINESS CONDUCT AND ETHICS

The Board has adopted a code of business conduct and ethics (the "Code of Conduct") which provides guidance about doing business with integrity and professionalism. The Code of Conduct addresses issues including among others, fraud, conflicts of interest, corporate opportunities, protection of intellectual property, transactions in the Company's securities, use of the Company's assets, and relationships with customers and third parties. Any violation of the Code of Conduct is reported to the Company's Compliance Office, which will subsequently report such violation to the Audit Committee.

COMPLIANCE WITH LAWS AND REGULATIONS

In 2019, the Group has complied with the substantial laws and regulations promulgated by the Chinese government in relation to the integrated circuit industry in China which have a significant impact on the Group.

PREFERENTIAL INDUSTRIAL POLICIES RELATING TO ICPES ("INTEGRATED CIRCUIT PRODUCTION ENTERPRISES")

SMIC Shanghai, SMIC Beijing, SMIC Tianjin, SMIC Shenzhen, SMNC,SMSC and SJ Jiangyin are entitled to the preferential industrial policies described below.

Pursuant to the Interim Provisions on Promoting Industrial Structure Adjustment, or the Interim Provisions, issued by the State Council on December 2, 2005, and the Catalogue for the Guidance of Industrial Structure Adjustment, or the Guidance Catalogue, which is the basis and criteria for implementing the Interim Provisions, issued by the National Development and Reform Commission and all the State Council Institutions on March 27, 2011 and amended on February 16, 2013 and March 10, 2015, the Chinese government encourages (1) the design of integrated circuits, (2) the production of integrated circuits with a line width of less than 0.11 micron (including 0.11 micron) and (3) the advanced packaging and testing of BGA, PGA, CSP and MCM.

Under the Interim Provisions, imported equipment that is used for a qualifying domestic investment project and that falls within such project's approved total investment amount is exempt from custom duties except for such equipment listed in the Catalogue of Import Commodities for Domestic Investment Projects Not Entitled to Tax Exemptions, as stipulated by the State Council and amended in 2006, 2008 and 2012, as well as in the General Administration of Customs' announcement on the relevant matters arising from the implementation of the Industrial Restructuring Guidance Catalogue (2011) by the customs (Announcement No. 36 [2011] of the General Administration of Customs) and in the Notice of the State Council on Adjusting the Taxation Policies for Imported Equipment (Guo Fa [1997] No. 37).

ENVIRONMENTAL REGULATIONS

Our Chinese subsidiaries are subject to a variety of Chinese environmental laws and regulations promulgated by the central and local governments, concerning examination and acceptance of environmental protection measures in construction projects, the use, discharge and disposal of toxic and hazardous materials, the discharge and disposal of waste water, solid waste, and waste gases, control of industrial noise and fire prevention. These laws and regulations set out detailed procedures that must be implemented throughout a project's construction and operation phases.

A key document that must be submitted for approval of a project's construction is an environmental impact assessment report that is reviewed by the relevant environmental protection authorities. Upon completion of construction, and prior to commencement of operations, an additional examination and acceptance by the relevant environmental authority of such project is also required. After receiving approval of the environmental impact assessment report, a semiconductor manufacturer is required to apply to and register with the competent environmental authority of the types and quantities of liquid, solid and gaseous wastes it plans to discharge, the manner of discharge or disposal, as well as the level of industrial noise and other related factors. If the above wastes and noise are found by the authorities to have been managed within regulatory levels, renewable discharge registrations for the above wastes and noise are then issued for a specified period of time. SMIC Shanghai, SMIC Beijing, SMIC Tianjin, SMIC Shenzhen, SMNC and SJ Jiangyin have all received approval with respect to their relevant environmental impact assessment reports and discharge registrations.

From time to time during the operation of our Chinese subsidiaries, and also prior to renewal of the necessary discharge registrations, the relevant environmental protection authority will monitor and audit the level of environmental protection compliance of these subsidiaries. Discharge of liquid, solid or gaseous waste over permitted levels may result in imposition of fines or penalties, imposition of a time period within which rectification must occur or even suspension of operations.

PREFERENTIAL TAXATION POLICIES

The Company is incorporated in the Cayman Islands and not currently subject to taxation in the Cayman Islands. The subsidiaries of the Company are subject to different preferential taxation policies.

Under the Law of the People's Republic of China (the "PRC") on Enterprise Income Tax, or the EIT Law (became effective on January 1, 2008), the profits of a foreign invested enterprise arising in 2008 and beyond that distributed to its immediate holding company who is a non-PRC tax resident will be subject to a withholding tax rate of 10%. A lower withholding tax rate may be applied if there is a favorable tax treaty between mainland China and the jurisdiction of the foreign holding company. For example, holding companies in Hong Kong that are also tax residents in Hong Kong (which should have commercial substance and proceed the formal treaty benefit application with in-charge tax bureau) are eligible for a 5% withholding tax on dividends under the Tax Memorandum between China and the Hong Kong Special Administrative Region.

The EIT law applies a uniform 25% enterprise income tax rate to both tax resident enterprise and non-tax resident enterprise, except where a special preferential rate applies.

Pursuant to Caishui Circular [2008] No. 1 ("Circular No. 1") promulgated on February 22, 2008, integrated circuit production enterprises whose total investment exceeds RMB8,000 million (approximately US$1,095 million) or whose integrated circuits have a line width of less than 0.25 micron are entitled to a preferential tax rate of 15%. Enterprises with an operation period of more than 15 years are entitled to a full exemption from income tax for five years starting from the first profitable year after utilizing all prior years' tax losses and 50% reduction of the tax for the following five years. Pursuant to Caishui Circular [2009] No. 69 ("Circular No. 69"), the 50% reduction should be based on the statutory tax rate of 25%.

On January 28, 2011, the State Council of China issued Guofa [2011] No. 4 ("Circular No. 4"), the Notice on Certain Policies to Further Encourage the Development of the Software and Integrated Circuit Industries which reinstates the EIT incentives stipulated by Circular No. 1 for the software and integrated circuit enterprises.

On April 20, 2012, State Tax Bureau issued CaiShui [2012] No. 27 (“Circular No. 27”), stipulating the income tax policies for the development of integrated circuit industry. Circular No. 1 was partially abolished by Circular No. 27 and the preferential taxation policy in Circular No. 1 was replaced by Circular No. 27.

On July 25, 2013, State Tax Bureau issued [2013] No. 43 (“Circular No. 43”), clarifying that the accreditation and preferential tax policy of integrated circuit enterprise established before December 31, 2010, is applied pursuant to Circular No. 1.

On May 4, 2016, State Tax Bureau, Ministry of Finance and other joint ministries issued Caishui [2016] No. 49 (“Circular No. 49”), which highlights the implementation of the record-filing system, clarification on certain criteria for tax incentive entitlement and establishment of a post-record filing examination mechanism and enhancement of post-administration.

On March 28, 2018, State Tax Bureau, Ministry of Finance and other joint ministries issued Caishui [2018] No. 27 (“2018 Circular No. 27”), which further announced the tax encouragement for integrated circuit production enterprises established before and after January 1, 2018 and also updated the certain criteria for tax incentive entitlement. Circular No. 49 is partially abolished by 2018 Circular No. 27.

SOCIAL RESPONSIBILITY

At SMIC, we comply with strict legal requirements for corporate governance, financial accounting, and transparent reporting. Our business practices also are ethical, safe, environmental friendly, and fair to our employees, in accordance with all the laws, rules, and regulations of the countries where we operate. In addition to obeying the letter and mandates of such laws, we seek to promote their spirits. Through our CSR Program (http://www.smics.com/en/site/responsibility_social), we hope to advance social, environmental, and ethical responsibility according to internationally recognized standards.

To achieve these goals:

- Declare our support for the Responsible Business Alliance (Formerly the Electronic Industry Citizenship Coalition) Code of Conduct (http://www.responsiblebusiness.org/standards/code-of-conduct/) and will actively pursue conformance to the Code and participation by our suppliers.

- Uphold the human rights of our staff and the highest standards of business integrity, as required by the RBA Code, the SMIC Code of Business Conduct & Ethics (http://www.smics.com/uploads/ethic_codebusiness.pdf), SMIC Human Resources policies, and all other SMIC policies.

- Strive to maintain a safe workplace for our employees and a healthy environment for the public while minimizing adverse effects on the community, environment, and natural resources, consistent with our Environmental Protection, Safety & Health Policy and our related ISO and other international certifications (http://www.smics.com/en/site/about_ESH).

- Develop and maintain management systems to implement this CSR Policy with continual improvement as part of a holistic CSR Program. See our latest CSR Report at http://www.smics.com/uploads/2018%20CSR%20Report-EN.pdf

Our CSR practices comply with all the laws where we operate and align with the leading international standards for our industry. These practices help us to reduce costs and risks, increase efficiency and integration, and improve employee morale and retention, all while benefiting our local communities and contributing to a cleaner and greener electronics industry supply chain. Visit our CSR Web page at http://www.smics.com/en/site/responsibility_social. To help us preserve and develop our socially responsible culture, key managers serve on our CSR Committee to oversee our CSR program and reporting.

Our CSR practices have led to our ongoing inclusion in the Hang Seng Corporate Sustainability Index Series for maintaining a "high standard of performance in environmental, social, and corporate governance" areas. See www.hsi.com.hk. In 2019, we received the "Outstanding Corporate Social Responsibility Award" for a sixth consecutive year in the 8th Corporate Social Responsibility Award hosted by Mirror Post for its excellence in corporate social responsibility. The selection process involved a number of strict criteria in "shareholder commitment, employee care, environmental protection, customer commitment, community ties and leadership skills" for the companies selected.

SMIC IN THE COMMUNITY

As the Group grows and prospers, so do the communities where we operate. We also serve them as neighbors through the scores of programs and activities held on our own campuses, and through charitable outreach to the larger community. For example, in 2019, we and our cooperative partner donated an additional RMB3.7 million to our "SMIC Liver Transplant Program for Children" to fund liver transplants for impoverished children. To date, a grand total of RMB24.8 million were donated towards the program. By the end of 2019, 451 children from around China had received another chance at life. We also encourage individual efforts by our employees, who support local charities and churches, lecture at local universities, finance rural schools, provide disaster relief, and volunteer for projects throughout the region, focusing on community development and environmental preservation.

SUPPORT FOR EDUCATION

Our award-winning company schools serve our employees' children at low cost. They also provide a highly-affordable education for non-SMIC children who live in the communities where we operate. Together with our employees, we also support education in many other ways. For example, we donate books to children of rural and migrant workers and provide gift bags of winter clothes and school supplies for school children from migrant communities.

SUPPORT FOR THE ENVIRONMENT

SMIC is a conscientious steward of natural resources. This commitment to the environment is reflected in our environmental protection, safety, and health ("ESH") policies and international standards certifications. See our ESH Web page at http://www.smics.com/en/site/about_ESH.

SMIC first earned ISO 14001 certification in 2002. To retain this certification, we must maintain a world- class environmental management system that abides by a rigorous set of international standards. This management system helps us ensure responsible use of energy and materials through recycling, waste reduction, and pollution prevention.

For many years, SMIC has held QC 080000 certification, demonstrating our products and processes are free of environmentally hazardous substances, fulfilling customer requirements, the European Union's Restriction of Hazardous Substances (RoHS) Directive and regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

SMIC also established ISO 14064 carbon verification certification at all sites in 2010. We maintain systems to monitor greenhouse gas emissions, and are prepared for increasingly stringent carbon emission controls and regulations.

We achieve environmental protection largely through:

- Expanding environmental protection projects, such as energy saving, and waste reduction;
- Promoting green products and supply chains while sorting and recycling waste products;
- Managing the transfer and safe handling of hazardous waste by qualified vendors;
- Controlling hazardous substances in our products and processes; and
- Monitoring environmental impact, including carbon verification, and publicizing the results.

Our ISO and other international standards certificates are available on our Web pages for ESH (link above) and for Quality and Reliability (http://www.smics.com/en/site/about_quality).

EMPLOYEE WELL-BEING

Our group's success depends on the well-being of our staff and the communities where we operate. We ensure that our employees receive fair treatment, good health and safety benefits, and meaningful opportunities for advancement. Together, we fuel the economic and social development of our communities. From our founding in 2000, SMIC has attracted far-sighted people who make a difference across our industry and around the world. Our employees and their families have inspired and led our good corporate citizenship. For more information, see our latest CSR report at the link above.

EMPLOYEE HEALTH & SAFETY

SMIC attained OHSAS 18001 (Occupational Health and Safety Assessment Series) certification in 2003. The OHSAS 18001/ISO 45001 standard is a key component of our comprehensive health and safety management system and is based on international safety and health standards. With this certification, we have demonstrated our commitment to safety, risk management, and a healthier environment for our employees. Our safety management philosophy embraces accident prevention, ownership management, frequent safety audits, safety education, engineering control, personal accountability, and enforcement. This safety management philosophy is implemented through:

- Mandatory, recurrent safety training for employees and vendors;
- Equipment and facilities compliance with domestic and international safety standards, such as those of Semiconductor Equipment and Materials International (SEMI), the National Fire Protection Association (NFPA), and Factory Mutual Research Corporation (FMRC);

- Maintenance of process standards;
- An Emergency Response Center to centralize response at each site, staffed 24 hours a day;
- Continuous monitoring of work area conditions via gas monitoring system and closed-circuit TV;
- Constant monitoring of airborne chemicals, radiation, noise, and drinking water;
- Regular occupational hazards monitoring for work area by third-party professionals;
- Regular occupational health examinations;
- Regular emergency drills and routine emergency training and drills.

SMIC provides occupational health and hygiene management for the welfare of employees. In addition, SMIC provides on-site health monitoring and primary care services such as:

- A 24-hour, professionally staffed health clinic at each manufacturing site;
- Medical emergency response and disaster planning;
- Occupational physical examinations and record keeping;
- General physical examinations and record keeping; and
- Injury and illness case management.

For more information, visit our ESH Web page and our latest CSR report at the links above.

EMPLOYEE CARE

At SMIC, we enable better living and continuous self-improvement for our employees. In addition to the housing and schooling described above, our employees and their families enjoy good health insurance as well as access to the professionally staffed health clinics located at our manufacturing sites, residential campuses, and schools. We also care for our employees through on-the-job training, subsidized university education, counseling services, social clubs and activities, and athletic and recreational facilities.

INDEPENDENT AUDITOR'S REPORT

羅兵咸永道

To the Shareholders of
Semiconductor Manufacturing International Corporation
(incorporated in the Cayman Islands with limited liability)

OPINION

WHAT WE HAVE AUDITED

The consolidated financial statements of Semiconductor Manufacturing International Corporation (the "Company") and its subsidiaries (the "Group") set out on pages 109 to 204, which comprise:

- the consolidated statement of financial position as at 31 December 2019;
- the consolidated statement of profit or loss and other comprehensive income for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the consolidated statement of cash flows for the year then ended; and
- the notes to the consolidated financial statements, which include a summary of significant accounting policies.

OUR OPINION

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2019, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRSs") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

We conducted our audit in accordance with International Standards on Auditing ("ISAs"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

INDEPENDENCE

We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants ("IESBA Code"), and we have fulfilled our other ethical responsibilities in accordance with the IESBA Code.

KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter identified in our audit is summarised as follows:

- Fair value measurement of joint ventures and associates' portfolio investments

Key Audit Matter	How our audit addressed the Key Audit Matter
Fair value measurement of joint ventures and associates' portfolio investments Refer to note 4, note 20 and note 21 to the consolidated financial statements. Acting as limited partner, the Group has invested in a number of investment funds. Based on the assessments performed by management, the Group accounted for such investment funds as investments in joint ventures or associates by using equity method. The investment funds measured their investments in portfolio investments at fair value. These investment funds held a number of portfolio investments. The valuation of such portfolio investments is primarily based on a combination of adoption of applicable valuation methodology and the application of appropriate assumptions in the valuation. We identified the fair value measurement of joint ventures or associates' portfolio investments as a key audit matter due to the significance of the balance of the investment funds, a huge quantity of the Group's joint ventures and associates' portfolio investments, the degree of complexity involved in valuing certain investment funds and the significant degree of judgement exercised by management in determining the valuation methodology and assumptions used in the valuation process.	**Our procedures in relation to the fair value measurement of joint ventures and associates' portfolio investments include:** (i) We tested the key controls in relation to the valuation process including management's approval of assumptions used in the valuation model. (ii) With the assistance of our internal valuation experts, we assessed the appropriateness of valuation methodology and assumptions used. We performed the following procedures on a sample basis: — for portfolio investment that traded in active markets, we assessed the fair value by comparing the fair value applied by the Group with publicly available market data; — for portfolio investment that had recent equity transaction, we assessed the fair value by reading the recent investment agreements, understanding the relevant investment terms and comparing the fair value of investment with the transaction price specified in the related agreements; — for portfolio investment that did not have direct open market quoted value or recent equity transaction, we assessed the appropriateness of the valuation methodology (e.g. market approach) adopted and the key assumptions in the valuation based on our industry knowledge as well as the information of comparable companies; and — we tested the accuracy of mathematical calculation applied in the valuation models.

OTHER INFORMATION

The directors of the Company are responsible for the other information. The other information comprises all of the information included in the annual report other than the consolidated financial statements and our auditor's report thereon.

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

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

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

RESPONSIBILITIES OF DIRECTORS AND THOSE CHARGED WITH GOVERNANCE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The directors of the Company are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRSs and the disclosure requirements of the Hong Kong Companies Ordinance, and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

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

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. We report our opinion solely to you, as a body, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

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

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

INDEPENDENT AUDITOR'S REPORT

- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

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

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

The engagement partner on the audit resulting in this independent auditor's report is Jane Kong.

PricewaterhouseCoopers
Certified Public Accountants

Hong Kong, 31 March 2020

SEMICONDUCTOR MANUFACTURING INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the years ended December 31, 2019, 2018 and 2017

(In USD'000, except share and per share data)

	Notes	Year ended 12/31/19	Year ended 12/31/18	Year ended 12/31/17
Revenue	5	**3,115,672**	3,359,984	3,101,175
Cost of sales		**(2,473,213)**	(2,613,307)	(2,360,431)
Gross profit		**642,459**	746,677	740,744
Research and development expenses[1]		**(687,369)**	(663,368)	(509,356)
Sales and marketing expenses		**(26,836)**	(30,455)	(35,796)
General and administration expenses		**(254,924)**	(199,818)	(198,036)
Net impairment losses (recognized) reversal on financial assets	38	**(1,076)**	(937)	137
Other operating income, net[1]	7	**376,656**	162,541	127,202
Profit from operations		**48,910**	14,640	124,895
Interest income		**138,988**	64,339	27,090
Finance costs	8	**(63,460)**	(24,278)	(18,021)
Foreign exchange gain (loss)		**9,495**	(8,499)	(12,694)
Other gains, net	9	**42,981**	24,282	16,499
Share of gain (loss) of investment accounted for using equity method		**5,362**	21,203	(9,500)
Profit before tax		**182,276**	91,687	128,269
Income tax expense	10	**(23,416)**	(14,476)	(1,846)
Profit for the year	11	**158,860**	77,211	126,423
Other comprehensive income (loss)				
Items that may be reclassified subsequently to profit or loss				
Exchange differences on translating foreign operations		**(16,769)**	(35,919)	23,213
Change in value of available-for-sale financial assets		**—**	—	(2,381)
Cash flow hedges	28	**(26,524)**	35,931	35,143
Share of other comprehensive income of investment accounted for using the equity method	28	**—**	—	17,646
Others		**—**	—	(131)
Items that will not be reclassified to profit or loss				
Actuarial gains or losses on defined benefit plans		**(1,532)**	129	(436)
Total comprehensive income for the year		**114,035**	77,352	199,477
Profit (loss) for the year attributable to:				
Owners of the Company[2]		**234,681**	134,055	179,679
Non-controlling interests		**(75,821)**	(56,844)	(53,256)
		158,860	77,211	126,423
Total comprehensive income (loss) for the year attributable to:				
Owners of the Company[2]		**188,831**	133,977	251,135
Non-controlling interests		**(74,796)**	(56,625)	(51,658)
		114,035	77,352	199,477
Earnings per share				
Basic	14	**$0.04**	$0.03	$0.04
Diluted	14	**$0.04**	$0.03	$0.04

(1) In 2019, the Group has changed its accounting policy regarding the presentation of certain government funding and the comparative figures have also been reclassified to conform to the current period presentation. Please see Note 2 for further information.

(2) Profit for the year attributable to owners of the Company contains the distribution paid to perpetual subordinated convertible securities holders. Please see Note 14 for further information.

SEMICONDUCTOR MANUFACTURING INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As of December 31, 2019, 2018 and 2017

(In USD'000)

	Notes	12/31/19	12/31/18	12/31/17
Assets				
Non-current assets				
Property, plant and equipment	16	**7,757,247**	6,777,970	6,523,403
Right-of-use assets	17	**376,867**	105,436	97,477
Intangible assets	18	**96,943**	122,854	219,944
Investments in associates	20	**1,139,317**	1,135,442	758,241
Investments in joint ventures	21	**27,117**	15,687	31,681
Deferred tax assets	10	**62,975**	45,426	44,875
Financial assets at fair value through profit or loss	22	**90,067**	55,472	—
Derivative financial instruments	22	**1,872**	5,266	—
Other financial assets	22	**—**	—	17,598
Restricted cash	23	**—**	—	13,438
Other assets		**11,574**	11,176	42,810
Total non-current assets		**9,563,979**	8,274,729	7,749,467
Current assets				
Inventories	24	**628,885**	593,009	622,679
Prepayment and prepaid operating expenses		**34,256**	28,161	34,371
Trade and other receivables	25	**836,143**	837,828	616,308
Financial assets at fair value through profit or loss	22	**42,985**	41,685	—
Financial assets at amortized cost	22	**2,276,370**	1,996,808	—
Derivative financial instruments	22	**—**	2,583	—
Other financial assets	22	**—**	—	683,812
Restricted cash	23	**804,547**	592,290	336,043
Cash and cash equivalent	39	**2,238,840**	1,786,420	1,838,300
		6,862,026	5,878,784	4,131,513
Assets classified as held-for-sale	26	**11,815**	270,807	37,471
Total current assets		**6,873,841**	6,149,591	4,168,984
Total assets		**16,437,820**	14,424,320	11,918,451

SEMICONDUCTOR MANUFACTURING INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As of December 31, 2019, 2018 and 2017

(In USD'000)

	Notes	12/31/19	12/31/18	12/31/17
Equity and liabilities				
Capital and reserves				
Ordinary shares, $0.004 par value, 10,000,000,000 shares authorized, 5,056,868,912, 5,039,819,199 and 4,916,106,889 shares issued and outstanding at December 31, 2019, 2018 and 2017, respectively	27	**20,227**	20,159	19,664
Share premium	27	**5,011,915**	4,993,163	4,827,619
Reserves	28	**86,749**	109,346	134,669
Retained earnings	29	**550,506**	331,298	187,008
Equity attributable to owners of the Company		**5,669,397**	5,453,966	5,168,960
Perpetual subordinated convertible Securities	30	**563,848**	563,848	64,073
Non-controlling interests		**3,964,617**	2,905,766	1,488,302
Total equity		**10,197,862**	8,923,580	6,721,335
Non-current liabilities				
Borrowings	31	**2,003,836**	1,760,763	1,743,939
Lease liabilities	17	**167,081**	—	—
Bonds payable	39	**—**	—	496,689
Convertible bonds	32	**—**	418,592	403,329
Medium-term notes	33	**214,193**	—	228,483
Deferred tax liabilities	10	**34,360**	1,639	16,412
Deferred government funding	34	**535,266**	393,902	299,749
Derivative financial instruments	22	**58,243**	15,540	—
Other financial liabilities	22	**—**	11,948	1,919
Other liabilities	22	**21,780**	39,128	99,817
Total non-current liabilities		**3,034,759**	2,641,512	3,290,337
Current liabilities				
Trade and other payables	35	**1,034,079**	964,860	1,007,424
Contract liabilities	5	**92,333**	44,130	43,036
Borrowings	31	**562,833**	530,005	440,608
Lease liabilities	17	**80,651**	—	—
Bonds payable	39	**—**	498,551	—
Convertible bonds	32	**630,428**	—	—
Medium-term notes	33	**—**	218,247	—
Short-term notes	33	**286,512**	—	—
Deferred government funding	34	**329,545**	244,708	193,158
Accrued liabilities	36	**151,178**	164,604	180,912
Derivative financial instruments	22	**4,782**	15,806	—
Other financial liabilities	22	**11,747**	—	744
Current tax liabilities	10	**3,210**	2,607	270
Other liabilities	22	**17,901**	32,263	40,627
		3,205,199	2,715,781	1,906,779
Liabilities directly associated with assets classified as held-for-sale	26	**—**	143,447	—
Total current liabilities		**3,205,199**	2,859,228	1,906,779
Total liabilities		**6,239,958**	5,500,740	5,197,116
Total equity and liabilities		**16,437,820**	14,424,320	11,918,451

SEMICONDUCTOR MANUFACTURING INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the years ended December 31, 2019, 2018 and 2017

(In USD'000)

	Ordinary shares	Share premium	Equity-settle employee benefits reserve	Foreign currency translation reserve	Change in value of available-for-sale financial assets	Convertible bonds equity reserve
	(Note 27)	(Note 27)	(Note 28)	(Note 28)		(Note 28)
Balance at December 31, 2016	17,012	4,950,948	65,703	(22,087)	1,245	81,678
Profit for the year	—	—	—	—	—	—
Other comprehensive income (losses) for the year	—	—	—	21,590	(2,356)	—
Total comprehensive income (losses) for the year	—	—	—	21,590	(2,356)	—
Issuance of ordinary shares	966	325,174	—	—	—	—
Exercise of stock options	130	35,178	(18,220)	—	—	—
Share-based compensation	—	—	17,495	—	—	—
Capital contribution from non-controlling interests	—	—	—	—	—	—
Conversion options of convertible bonds exercised during the year	1,556	427,168	—	—	—	(29,625)
Perpetual subordinated convertible securities	—	—	—	—	—	—
Share premium reduction	—	(910,849)	—	—	—	—
Non-controlling interest on transfer of business operation	—	—	—	—	—	—
Subtotal	2,652	(123,329)	(725)	—	—	(29,625)
Balance at December 31, 2017	19,664	4,827,619	64,978	(497)	(1,111)	52,053
Adoption of IFRS 9	—	—	—	—	1,111	—
Restated total equity at January 1, 2018	19,664	4,827,619	64,978	(497)	—	52,053
Profit for the year	—	—	—	—	—	—
Other comprehensive income (losses) for the year	—	—	—	(36,138)	—	—
Total comprehensive income (losses) for the year	—	—	—	(36,138)	—	—
Issuance of ordinary shares	474	160,404	—	—	—	—
Cancellation of treasury stock	(76)	(19,981)	—	—	—	—
Exercise of stock options	97	25,121	(17,211)	—	—	—
Share-based compensation	—	—	10,912	—	—	—
Capital contribution from non-controlling interests	—	—	—	—	—	—
Perpetual subordinated convertible securities	—	—	—	—	—	—
Distribution to perpetual subordinated convertible securities	—	—	—	—	—	—
Deconsolidation of subsidiaries due to loss of control	—	—	—	(1,774)	—	—
Share of other capital reserve of associates accounted for using equity method	—	—	—	—	—	—
Subtotal	495	165,544	(6,299)	(1,774)	—	—
Balance at December 31, 2018	20,159	4,993,163	58,679	(38,409)	—	52,053
Profit for the year	—	—	—	—	—	—
Other comprehensive income (losses) for the year	—	—	—	(17,794)	—	—
Total comprehensive income (losses) for the year	—	—	—	(17,794)	—	—
Exercise of stock options	68	18,752	(11,884)	—	—	—
Share-based compensation	—	—	5,756	—	—	—
Issuance of convertible bonds	—	—	—	—	—	34,147
Capital contribution from non-controlling interests	—	—	—	—	—	—
Transaction with non-controlling interests	—	—	—	—	—	—
Distribution to perpetual subordinated convertible securities	—	—	—	—	—	—
Deconsolidation of subsidiaries due to loss of control	—	—	—	(72)	—	—
Subtotal	68	18,752	(6,128)	(72)	—	34,147
Balance at December 31, 2019	20,227	5,011,915	52,551	(56,275)	—	86,200

SEMICONDUCTOR MANUFACTURING INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the years ended December 31, 2019, 2018 and 2017

(In USD'000)

Defined benefit pension reserve	Cash flow hedges	Share of other comprehensive income of joint ventures accounted for using equity method	Others	Retained earnings (accumulated deficit)	Attributable to owner of the Company	Perpetual subordinated convertible securities	Non-controlling interest	Total equity
	(Note 28)			(Note 29)		(Note 30)		
1,520	(34,627)	—	131	(910,849)	**4,150,674**	—	1,252,553	**5,403,227**
—	—	—	—	179,679	**179,679**	—	(53,256)	**126,423**
(436)	35,143	17,646	(131)	—	**71,456**	—	1,598	**73,054**
(436)	35,143	17,646	(131)	179,679	**251,135**	—	(51,658)	**199,477**
—	—	—	—	—	**326,140**	—	—	**326,140**
—	—	—	—	—	**17,088**	—	17	**17,105**
—	—	—	—	—	**17,495**	—	719	**18,214**
—	—	—	—	—	**—**	—	294,000	**294,000**
—	—	—	—	—	**399,099**	—	—	**399,099**
—	—	—	—	—	**—**	64,073	—	**64,073**
—	—	—	—	910,849	**—**	—	—	**—**
—	—	—	—	7,329	**7,329**	—	(7,329)	**—**
—	—	—	—	918,178	**767,151**	64,073	287,407	**1,118,631**
1,084	516	17,646	—	187,008	**5,168,960**	64,073	1,488,302	**6,721,335**
—	—	(17,646)	—	16,535	**—**	—	—	**—**
1,084	516	—	—	203,543	**5,168,960**	64,073	1,488,302	**6,721,335**
—	—	—	—	134,055	**134,055**	—	(56,844)	**77,211**
129	35,931	—	—	—	**(78)**	—	219	**141**
129	35,931	—	—	134,055	**133,977**	—	(56,625)	**77,352**
—	—	—	—	—	**160,878**	—	—	**160,878**
—	—	—	—	—	**(20,057)**	—	—	**(20,057)**
—	—	—	—	—	**8,007**	—	69	**8,076**
—	—	—	—	—	**10,912**	—	749	**11,661**
—	—	—	—	—	**—**	—	1,488,900	**1,488,900**
—	—	—	—	—	**—**	499,775	—	**499,775**
—	—	—	—	(6,300)	**(6,300)**	—	—	**(6,300)**
—	—	—	—	—	**(1,774)**	—	(15,629)	**(17,403)**
—	—	—	(637)	—	**(637)**	—	—	**(637)**
—	—	—	(637)	(6,300)	**151,029**	499,775	1,474,089	**2,124,893**
1,213	36,447	—	(637)	331,298	**5,453,966**	563,848	2,905,766	**8,923,580**
—	—	—	—	234,681	**234,681**	—	(75,821)	**158,860**
(1,532)	(26,524)	—	—	—	**(45,850)**	—	1,025	**(44,825)**
(1,532)	(26,524)	—	—	234,681	**188,831**	—	(74,796)	**114,035**
—	—	—	—	—	**6,936**	—	94	**7,030**
—	—	—	—	—	**5,756**	—	1,076	**6,832**
—	—	—	—	—	**34,147**	—	—	**34,147**
—	—	—	—	—	**—**	—	1,146,770	**1,146,770**
—	—	—	(5,013)	(3,854)	**(8,867)**	—	(3,330)	**(12,197)**
—	—	—	—	(11,300)	**(11,300)**	—	—	**(11,300)**
319	—	—	—	(319)	**(72)**	—	(10,963)	**(11,035)**
319	—	—	(5,013)	(15,473)	**26,600**	—	1,133,647	**1,160,247**
—	9,923	—	(5,650)	550,506	**5,669,397**	563,848	3,964,617	**10,197,862**

SEMICONDUCTOR MANUFACTURING INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF CASH FLOWS

For the years ended December 31, 2019, 2018 and 2017

(In USD'000)

	Notes	**Year ended 12/31/19**	Year ended 12/31/18	Year ended 12/31/17
Operating activities				
Profit for the year		**158,860**	77,211	126,423
Adjustments for:				
Income tax expense	10	**23,416**	14,476	1,846
Depreciation and amortization expense	11	**1,127,756**	1,048,410	971,382
Expense recognized in respect of equity-settled share-based payments	11	**6,832**	11,661	18,214
Interest income		**(138,988)**	(64,339)	(27,090)
Finance costs	8	**63,460**	24,278	18,021
Gain on disposal of property, plant and equipment and assets classified as held-for-sale	7	**(4,912)**	(30,838)	(17,513)
Gain on disposal and deconsolidation of subsidiaries	7	**(81,377)**	(3,466)	—
Gain on disposal of associates		**—**	—	(18,884)
Impairment losses on assets	11	**39,312**	16,567	46,720
Net gain arising on financial instruments at fair value through profit or loss	9	**(34,200)**	(9,773)	(6,890)
Net loss on foreign exchange		**26,433**	8,632	26,101
Share of (gain) loss of investment accounted for using equity method		**(5,362)**	(21,203)	9,500
		1,181,230	1,071,616	1,147,830
Operating cash flows before movements in working capital:				
(Increase) decrease in trade and other receivables		**(35,685)**	(106,404)	59,084
Increase in inventories		**(71,164)**	(31,063)	(205,320)
Increase in restricted cash relating to operating activities		**(352,548)**	(325,512)	(81,795)
(Increase) decrease in prepayment and prepaid operating expense		**(6,121)**	2,000	(6,722)
Decrease in other operating assets		**13,511**	6,660	2,938
Increase in trade and other payables		**18,006**	56,598	109,285
Increase in contract liabilities		**48,203**	1,094	89
Increase in deferred government funding		**226,201**	143,485	110,999
(Decrease) increase in other operating liabilities		**(4,042)**	17,866	(40,604)
Cash generated from operations		**1,017,591**	836,340	1,095,784
Interest paid		**(110,302)**	(47,850)	(34,086)
Interest received		**125,963**	34,840	19,425
Income taxes paid		**(14,195)**	(23,904)	(437)
Net cash generated from operating activities		**1,019,057**	799,426	1,080,686

SEMICONDUCTOR MANUFACTURING INTERNATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF CASH FLOWS

For the years ended December 31, 2019, 2018 and 2017

(In USD'000)

	Year ended 12/31/19	Year ended 12/31/18	Year ended 12/31/17
Investing activities			
Payments to acquire financial assets at fair value through profit or loss	**(91,634)**	(447,717)	—
Proceeds from sale of financial assets at fair value through profit or loss	**70,573**	540,166	—
Payments to acquire financial assets at amortized cost	**(3,490,637)**	(4,407,790)	—
Proceeds from maturity of financial assets at amortized cost	**3,064,543**	2,954,346	—
Payments to acquire financial assets	**—**	—	(829,371)
Proceeds on sale of financial assets	**—**	—	186,509
Payments for property, plant and equipment	**(1,869,563)**	(1,808,253)	(2,287,205)
Proceeds from disposal of property, plant and equipment and assets classified as held-for-sale	**11,698**	398,162	688,192
Payments for intangible assets	**(11,274)**	(9,817)	(43,755)
Payments for land use right	**(1,402)**	(14,425)	—
Payments for deposit of acquire land use right	**(1,287)**	(45,503)	—
Proceeds from disposal of subsidiaries	**140,298**	—	—
Net cash outflow from deconsolidation of subsidiaries	**(3,065)**	(5,549)	—
Payments for joint ventures, associates and other financial assets	**(19,206)**	(427,197)	(467,885)
Proceeds from disposal of joint ventures and other financial assets	**—**	9,251	1,028
Distributions received from joint ventures and associates	**914**	12,322	255
Proceeds from release of restricted cash relating to investing activities	**251,535**	54,743	90,093
Net cash used in investing activities	**(1,948,507)**	(3,197,261)	(2,662,139)
Financing activities			
Proceeds from borrowings	**1,320,042**	782,402	1,194,659
Repayment of borrowings	**(1,020,002)**	(536,752)	(537,016)
Principal elements of lease payments	**(89,215)**	—	—
Proceeds from issuance of new shares	**—**	160,878	326,351
Repayment of bonds	**(500,000)**	—	—
Proceeds from issuance of convertible bonds	**229,680**	—	—
Proceeds from issuance of medium-term notes	**224,024**	—	—
Repayment of medium-term notes	**(217,954)**	—	—
Proceeds from issuance of short-term notes	**725,885**	—	—
Repayment of short-term notes	**(426,485)**	—	(87,858)
Proceeds from issuance of perpetual subordinated convertible securities	**—**	499,775	64,350
Distribution paid to perpetual subordinated convertible securities holders	**(11,300)**	(6,300)	—
Proceeds from exercise of employee stock options	**7,030**	8,076	17,105
Payments to acquire treasury shares	**—**	(20,057)	—
Proceeds from non-controlling interests — capital Contribution	**1,146,770**	1,488,900	294,000
Payments to acquire non-controlling interests	**(12,197)**	—	—
Net cash from financing activities	**1,376,278**	2,376,922	1,271,591
Net increase (decrease) in cash and cash equivalent	**446,828**	(20,913)	(309,862)
Cash and cash equivalent at the beginning of the year	**1,800,974**	1,838,300	2,126,011
Effects of exchange rate changes on the balance of cash held in foreign currencies	**(8,962)**	(16,413)	22,151
Cash and cash equivalent at the end of the year	**2,238,840**	1,800,974[1]	1,838,300

[1] As of December 31, 2018, cash and cash equivalent included US$14.6 million that were presented as assets classified as held-for-sale in the consolidated statement of financial position.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended December 31, 2019

1. GENERAL INFORMATION

Semiconductor Manufacturing International Corporation (the "Company" or "SMIC") was established as an exempt company incorporated under the laws of the Cayman Islands on April 3, 2000. The address of the principal place of business is 18 Zhangjiang Road, Pudong New Area, Shanghai, China, 201203. The registered address is at P.O. Box 2681, Cricket Square, Hutchins Drive, Grand Cayman KY1-1111, Cayman Islands.

SMIC is an investment holding company. The various subsidiaries of SMIC (SMIC and its subsidiaries are hereinafter collectively referred to as the "Group") are engaged in the different business activities, such as the computer-aided design, sales and marketing, technical research and development, manufacturing, testing, packaging and trading of integrated circuits and other services, as well as designing and manufacturing semiconductor masks, respectively. The principal subsidiaries and their activities are set out in Note 19.

These financial statements are presented in US dollars, unless otherwise stated.

2. CHANGES IN ACCOUNTING POLICIES AND DISCLOSURES

NEW AND REVISED INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs") THAT ARE MANDATORILY EFFECTIVE FOR THE YEAR ENDED DECEMBER 31, 2019

IFRS 16

The Group has adopted IFRS 16 retrospectively from January 1, 2019, but has not restated comparatives for the 2018 reporting period, as permitted under the specific transitional provisions in the standard. The reclassifications and the adjustments arising from the new leasing rules are therefore recognized in the opening consolidated statement of financial position on January 1, 2019.

On adoption of IFRS 16, the Group recognized lease liabilities in relation to leases which had previously been classified as 'operating leases' under the principles of IAS 17 Leases. These liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate as of January 1, 2019. The weighted average lessee's incremental borrowing rate applied to the lease liabilities on January 1, 2019 was 4.30%.

	USD'000
Operating lease commitments disclosed as at December 31, 2018	352,540
Lease liabilities recognized as at January 1, 2019 discounted using the lessee's incremental borrowing rate of at the date of initial application, of which are:	279,681
Current lease liabilities	88,793
Non-current lease liabilities	190,888

Right-of use assets were measured at the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognized in the consolidated statement of financial position as at December 31, 2018. There were no onerous lease contracts that would have required an adjustment to the right-of-use assets at the date of initial application.

The recognized right-of-use assets were buildings, machinery and equipment.

2. CHANGES IN ACCOUNTING POLICIES AND DISCLOSURES *(continued)*

NEW AND REVISED INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs") THAT ARE MANDATORILY EFFECTIVE FOR THE YEAR ENDED DECEMBER 31, 2019 *(continued)*

IFRS 16 *(continued)*

The change in accounting policy affected the following items in the consolidated statement of financial position on January 1, 2019:

- Right-of-use assets — increase by US$279.7 million, and
- Lease liabilities — increase by US$279.7 million.

In applying IFRS 16 for the first time, the Group has used the following practical expedients permitted by the standard:

- the use of a single discount rate to a portfolio of leases with reasonably similar characteristics;
- reliance on previous assessments on whether leases are onerous the accounting for operating leases with a remaining lease term of less than 12 months as at January 1, 2019 as short-term leases; and
- the exclusion of initial direct costs for the measurement of the right-of-use asset at the date of initial application.

The Group has also elected not to reassess whether a contract is or contains a lease at the date of initial application.

NEW OR REVISED IFRSs IN ISSUE BUT NOT YET EFFECTIVE

The Group has not applied the following new and revised IFRSs that have been issued but are not yet effective:

New or revised IFRS	Effective date
Amendments to IFRS 3 — Definition of business	On or after January 1, 2020
Amendments to IAS 1 and IAS 8 — Definition of material	On or after January 1, 2020
Revised conceptual framework for financial reporting	On or after January 1, 2020
Amendments to IFRS 9, IAS 39 and IFRS 37 — Interest rate benchmark reform	On or after January 1, 2020
IFRS 17 — Insurance contracts	On or after January 1, 2021
Amendments to IAS 1 — Classification of liabilities as current or non-current	On or after January 1, 2022
Amendments to IFRS 10 and IAS 28 — Sale or contribution of assets between an investor and its association or joint venture	Not yet determined

CHANGE IN ACCOUNTING POLICY OF GOVERNMENT FUNDING

In 2019, the Group has changed its accounting policy regarding the presentation of government funding in relation to research and development activities in consolidated statement of profit or loss and other comprehensive income. Previously, government funding in relation to Research and development activities is deducted in reporting the related expense. To make the presentation more comparable to other companies in the foundry sector, the Group decided to present such government funding as income in the profit or loss. Comparative figures have been reclassified to conform to the current period presentation.

2. CHANGES IN ACCOUNTING POLICIES AND DISCLOSURES *(continued)*

CHANGE IN ACCOUNTING POLICY OF GOVERNMENT FUNDING *(continued)*

The Group has changed the accounting policy of government funding retrospectively with restating comparatives for the 2017 and 2018 financial years.

(In USD'000)

Consolidated statement of profit or loss and other comprehensive income (extract)	As originally presented as of 12/31/18	Impact	Restated as of 12/31/18	As originally presented as of 12/31/17	Impact	Restated as of 12/31/17
Research and development expenses	(558,110)	(105,258)	(663,368)	(427,111)	(82,245)	(509,356)
Other operating income, net	57,283	105,258	162,541	44,957	82,245	127,202

3. SIGNIFICANT ACCOUNTING POLICIES

STATEMENT OF COMPLIANCE

The consolidated financial statements have been prepared in accordance with all applicable IFRS issued by the IASB. In addition, the consolidated financial statements include applicable disclosures required by the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited.

BASIS OF PREPARATION

The consolidated financial statements have been prepared on a historical cost basis, except for certain financial instruments that are measured at fair value as explained in the accounting policies set out below. The consolidated financial statements are presented in US dollars and all values are rounded to the nearest thousand, except when otherwise indicated.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these consolidated financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of IFRS 2, and measurements that have some similarities to fair value but are not fair value, such as net realizable value in IAS 2 or value in use in IAS 36.

In addition, for financial reporting purposes, fair value measurements are categorized into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active market for identical assets or liabilities;
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices);
- Level 3 inputs are unobservable inputs for the asset or liability.

The principal accounting policies are set out below.

3. SIGNIFICANT ACCOUNTING POLICIES *(continued)*

BASIS OF CONSOLIDATION

The consolidated financial statements incorporate the financial statements of the Group and entities (including structured entities) controlled by the Group. Control is achieved when the Group:

- has power over the investee;
- is exposed, or has rights, to variable returns from its involvement with the investee; and
- has the ability to use its power to affect its returns.

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 listed above.

When the Group has less than a majority of the voting rights of an investee, it has power over the investee when the voting rights are sufficient to give it the practical ability to direct the relevant activities of the investee unilaterally. The Group considers all relevant facts and circumstances in assessing whether or not the Group's voting rights in an investee are sufficient to give it power, including:

- the size of the Group's holding of voting rights relative to the size and dispersion of holdings of the other vote holders;
- potential voting rights held by the Group, other vote holders or other parties;
- rights arising from other contractual arrangements; and
- any additional facts and circumstances that indicate that the Group has, or does not have, the current ability to direct the relevant activities at the time that decisions need to be made, including voting patterns at previous shareholders' meetings.

Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Specifically, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of profit or loss and other comprehensive income from the date the Group gains control until the date when the Group ceases to control the subsidiary.

Profit or loss and each component of other comprehensive income are attributed to the owners of the Company and to the non-controlling interests. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies.

All intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

3. SIGNIFICANT ACCOUNTING POLICIES *(continued)*

CHANGES IN THE GROUP'S OWNERSHIP INTERESTS IN EXISTING SUBSIDIARIES

Changes in the Group's ownership interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the Group's interests and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity and attributed to owners of the Company.

When the Group loses control of a subsidiary, a gain or loss is recognized in profit or loss and is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the previous carrying amount of the assets (including goodwill), and liabilities of the subsidiary and any non-controlling interests. All amounts previously recognized in other comprehensive income in relation to that subsidiary are accounted for as if the Group had directly disposed of the related assets or liabilities of the subsidiary (i.e. reclassified to profit or loss or transferred to another category of equity as specified/permitted by applicable IFRSs). The fair value of any investment retained in the former subsidiary at the date when control is lost is regarded as the fair value on initial recognition for subsequent accounting under IFRS 9, when applicable, the cost on initial recognition of an investment in an associate or a joint venture.

SEPARATE PRINCIPAL STATEMENT

Investments in subsidiaries are accounted for at the equity method in accordance with IAS 27 and IAS 28. Under the equity method, the investments are initially recognized at cost and adjusted thereafter to recognize the Group's share of the post-acquisition profits or losses of the investee in profit or loss, and the Group's share of movements in other comprehensive income of the investee in other comprehensive income. When the Group's share of losses in an equity-accounted investment equals or exceeds its interest in the entity, including any other unsecured long-term receivables, the Group does not recognize further losses, unless it has incurred obligations or made payments on behalf of the other entity.

INVESTMENTS IN ASSOCIATES

An associate is an entity over which the Group has significant influence and that is neither a subsidiary nor an interest in a joint venture. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

The results and assets and liabilities of associates are incorporated in these consolidated financial statements using the equity method of accounting. Under the equity method, investments in associates are initially recognized in the consolidated statement of financial position at cost and adjusted thereafter to recognize the Group's share of the profit or loss and other comprehensive income of the associates. When the Group's share of losses of an associate exceeds the Group's interest in that associate (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate), the Group discontinues recognizing its share of further losses. Additional losses are recognized only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of that associate.

An investment in an associate is accounted for using the equity method from the date on which the investee becomes an associate. On acquisition of the investment in an associate, any excess of the cost of the investment over the Group's share of the net fair value of the identifiable assets and liabilities of the investee is recognized as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of the investment, after reassessment, is recognized immediately in profit or loss in the period in which the investment is acquired.

3. SIGNIFICANT ACCOUNTING POLICIES *(continued)*

INVESTMENTS IN ASSOCIATES *(continued)*

The requirements of IAS 28 are applied to determine whether it is necessary to recognize any impairment loss with respect to the Group's investment in an associate. When necessary, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with IAS 36 Impairment of Assets as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs to sell) with its carrying amount. The difference between the recoverable amount and the carrying amount is recognized as impairment loss in the profit or loss. Any reversal of that impairment loss is recognized in accordance with IAS 36 to the extent that the recoverable amount of the investment subsequently increases.

The Group discontinues the use of the equity method from the date when the investment ceases to be an associate, or when the investment is classified as held-for-sale. When the Group retains an interest in the former associate and the retained interest is a financial asset, the Group measures the retained interest at fair value at that date and the fair value is regarded as its fair value on initial recognition in accordance with IFRS 9. The difference between the carrying amount of the associate at the date the equity method was discontinued, and the fair value of any retained interest and any proceeds from disposing of a part interest in the associate is included in the determination of the gain or loss on disposal of the associate. In addition, the Group accounts for all amounts previously recognized in other comprehensive income in relation to that associate on the same basis as would be required if that associate had directly disposed of the related assets or liabilities. Therefore, if a gain or loss previously recognized in other comprehensive income by that associate would be reclassified to profit or loss on the disposal of the related assets or liabilities, the Group reclassifies the gain or loss from equity to profit or loss (as a reclassification adjustment) when the equity method is discontinued.

When the Group reduces its ownership interest in an associate but the Group continues to use the equity method, the Group reclassifies to profit or loss the proportion of the gain or loss that had previously been recognized in other comprehensive income relating to that reduction in ownership interest if that gain or loss would be reclassified to profit or loss on the disposal of the related assets or liabilities.

When a group entity transacts with an associate of the Group, profits and losses resulting from the transactions with the associate are recognized in the Group's consolidated financial statements only to the extent of interests in the associate that are not related to the Group. Unrealized losses are eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates have been changed where necessary to ensure consistency with the policies adopted by the Group.

In accordance with IAS 28, when the financial statements of an associate used in applying the equity method are prepared as of a different reporting date from that of the Group, adjustments are made by the Group for the effects of significant transactions or events. In no circumstances can the difference between the reporting date of the associate and that of the Group be more than three months and the length of the reporting periods and any difference in the reporting dates are the same from period to period.

INVESTMENTS IN JOINT VENTURES

The Group has applied IFRS 11 to all joint arrangements. Under IFRS 11 investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations each investor. The Group has assessed the nature of its joint arrangements and determined them to be joint ventures. Joint ventures are accounted for using the equity method.

Under the equity method of accounting, interests in joint ventures are initially recognized at cost and adjusted thereafter to recognize the Group's share of the post-acquisition profits or losses and movements in other comprehensive income. The Group's investments in joint ventures include goodwill identified on acquisition. Upon the acquisition of the ownership interest in a joint venture, any difference between the cost of the joint venture and the Group's share of the net fair value of the joint venture's identifiable assets and liabilities is accounted for as goodwill. When the Group's share of losses in a joint venture equals or exceeds its interests in the joint ventures (which includes any long-term interests that, in substance, form part of the Group's net investment in the joint ventures), the Group does not recognize further losses, unless it has incurred obligations or made payments on behalf of the joint ventures.

3. SIGNIFICANT ACCOUNTING POLICIES *(continued)*

INVESTMENTS IN JOINT VENTURES *(continued)*

Unrealized gains on transactions between the Group and its joint ventures are eliminated to the extent of the Group's interest in the joint ventures. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of the joint ventures have been changed where necessary to ensure consistency with the policies adopted by the Group.

NON-CURRENT ASSETS HELD-FOR-SALE

Non-current assets and disposal groups are classified as held-for-sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the non-current asset (or disposal group) is available for immediate sale in its present condition. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

Non-current assets (and disposal groups) classified as held-for-sale are measured at the lower of their previous carrying amount and fair value less costs of disposal.

REVENUE RECOGNITION

The new IFRS 15 standard establishes a single revenue recognition framework. The core principle of the framework is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods and services.

IFRS 15 requires the application of a 5 steps approach to revenue recognition:

- Step 1: Identify the contract(s) with a customer
- Step 2: Identify the performance obligations in the contract
- Step 3: Determine the transaction price
- Step 4: Allocate the transaction price to each performance obligation
- Step 5: Recognize revenue when each performance obligation is satisfied

IFRS 15 includes specific guidance on particular revenue related topics that may change the current approach taken under IFRS. The standard also significantly enhances the qualitative and quantitative disclosures related to revenue.

The standard permits either a full retrospective method to each prior reporting period presented or a modified retrospective approach with the cumulative effect of initially applying the guidance recognized at the date of initial application. The Group has performed a detailed assessment on the impact of the adoption of IFRS 15 and decided to adopt a full retrospective approach. The adoption of IFRS 15 did not have any significant impact on the Group's financial statements.

The Group has adopted IFRS 15 Revenue from Contracts with Customers from January 1, 2018 which resulted in changes in accounting policies and adjustments to the amounts recognized in the financial statements. In accordance with the transition provisions in IFRS 15, the Group has adopted the new rules retrospectively and has restated comparatives for the 2017 financial year. Contract liabilities has been presented in the consolidated statement of financial position to reflect the terminology of IFRS 15, in relation to advance payment received from customers were previously included in trade and other payables.

3. SIGNIFICANT ACCOUNTING POLICIES *(continued)*

REVENUE RECOGNITION *(continued)*

Sale of goods

The Group manufactures semiconductor wafers for its customers based on the customers' designs and specifications pursuant to manufacturing agreements and/or purchase orders. The Group also sells certain semiconductor standard products to customers.

Revenues are recognized when, or as, the control of the goods or services is transferred to the customer. Depending on the terms of the contract and the laws applicable, control of the goods and services may be transferred over time or at a point in time. Control of the goods and services is transferred over time if the Group's performance:

- provides all of the benefits received and consumed simultaneously by the customer;
- creates and enhances an asset that the customer controls as the Group performs; or
- does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

If control of the goods and services transfers over time, revenue is recognized over the period of the contract by reference to the progress towards complete satisfaction of that performance obligation. Otherwise, revenue is recognized at a point in time when the customer obtains control of the goods and services.

Contracts with customers may include multiple performance obligations. For such arrangements, the Group allocates revenue to each performance obligation based on its relative standalone selling price. The Group generally determines standalone selling prices based on the prices charged to customers. If the standalone selling price is not directly observable, it is estimated using expected cost plus a margin or adjusted market assessment approach, depending on the availability of observable information. Assumptions and estimations have been made in estimating the relative selling price of each distinct performance obligation, and changes in judgements on these assumptions and estimates may impact the revenue recognition.

When either party to a contract has performed, the Group presents the contract in the statement of financial position as a contract asset or a contract liability, depending on the relationship between the entity's performance and the customer's payment.

A contract asset is the Group's right to consideration in exchange for goods and services that the Group has transferred to a customer when that right is considered on something other than the passage of time.

Incremental costs incurred to obtain a contract, if recoverable, are capitalized and presented as contract assets and subsequently amortized when the related revenue is recognized.

If a customer pays consideration or the Group has a right to an amount of consideration that is unconditional, before the Group transfers a good or service to the customer, the Group presents the contract as a contract liability when the payment is made or the a receivable is recorded (whichever is earlier). A contract liability is the Group's obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer.

A receivable is recorded when the Group has an unconditional right to consideration. A right to consideration is unconditional if only the passage of time is required before payment of that consideration is due.

3. SIGNIFICANT ACCOUNTING POLICIES *(continued)*

REVENUE RECOGNITION *(continued)*

Sale of goods (continued)

Customers have the right of return within one year pursuant to warranty provisions. The Group typically performs tests of its products prior to shipment to identify yield rate per wafer. Occasionally, product tests performed after shipment identify yields below the level agreed with the customer. In those circumstances, the customer arrangement may provide for a reduction to the price paid by the customer or for the costs to return products and to ship replacement products to the customer. The Group estimates the amount of sales returns and the cost of replacement products based on the historical trend of returns and warranty replacements relative to sales as well as a consideration of any current information regarding specific known product defects at customers that may exceed historical trends.

Transfer of intellectual property

The Group transferred certain pieces of intellectual property to customers. If the license to a customer is to provide the customer a right to access the Group's intellectual property as it exists throughout the license period, revenues from licensing are recognized over time when the control of the license is transferred to the customer. If the license to a customer is to provide the customer a right to use the Group's intellectual property as it exists at the point in time at which the license is granted, revenues from licensing are recognized at a point in time as the control of the technology license is transferred to the customer.

GAIN ON SALE OF REAL ESTATE PROPERTY

Gain from sales of real estate property is recognized when all the following conditions are satisfied: 1) sales contract executed, 2) full payment collected, or down payment collected and non-cancellable mortgage contract is executed with borrowing institution, 3) the legal title has passed to the buyers, 4) and the control over the property has been transferred to the buyers.

INTEREST INCOME

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Group and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable.

FOREIGN CURRENCIES

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ("the functional currency"). The consolidated financial statements are presented in Untied States dollar ("US dollar"), which is the Company's functional and the Group's presentation currency.

In preparing the financial statements of each individual group entity transactions in currencies other than the entity's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences on monetary items are recognized in profit or loss in the period in which they arise.

For the purposes of presenting consolidated financial statements, the assets and liabilities of the Group's foreign operations are translated into United States dollars using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period, unless exchange rates fluctuate significantly during that period, in which case the exchange rates at the dates of the transactions are used. Exchange differences arising, if any, are recognized in other comprehensive income and accumulated in equity (attributed to non-controlling interests as appropriate).

3. SIGNIFICANT ACCOUNTING POLICIES *(continued)*

FOREIGN CURRENCIES *(continued)*

On the disposal of a foreign operation (i.e. a disposal of the Group's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, or a disposal involving loss of significant influence over an associate that includes a foreign operation), all of the exchange differences accumulated in equity in respect of that operation attributable to the owners of the Company are reclassified to profit or loss.

BORROWING COSTS

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

All other borrowing costs are recognized in profit or loss in the period in which they are incurred.

GOVERNMENT FUNDING

Government funding relating to property, plant and equipment, whose primary condition is that the Group should purchase, construct or otherwise acquire non-current assets, are recognized as deferred income in the consolidated statement of financial position and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

Government funding that is receivable as compensation for expenses or losses already incurred is recorded as a liability upon receipt and recognized as other operating income until the requirements (if any) specified in the terms of the funding have been reached.

Government funding that is receivable as compensation for interest expenses already incurred is recorded as a liability upon receipt and recognized as deductions to interest expenses until the requirements (if any) specified in the terms of the funding have been reached.

RETIREMENT BENEFITS

The Group's local Chinese employees are entitled to a retirement benefit based on their salary and their length of service in accordance with a state-managed pension plan. The PRC government is responsible for the pension liability to these retired staff. The Group is required to make contributions to the state-managed retirement plan at a rate equal to 19.0% to 20.0% (the standard in Shenzhen site ranges from 13% to 14% according to Shenzhen government regulation) of the monthly basic salary of current employees. The Group has no further payment obligations once the contributions have been paid. The costs are recognized in profit or loss when incurred.

SHARE-BASED PAYMENT ARRANGEMENTS

Equity-settled share-based payments to employees and others providing similar services are measured at the fair value of the equity instruments at the grant date.

The fair value determined at the grant date of the equity-settled share-based payments is expensed on a graded vesting basis over the vesting period, based on the Group's estimate of equity instruments that will eventually vest, with a corresponding increase in equity. At the end of each reporting period, the Group revises its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates, if any, is recognized in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to the equity-settled employee benefits reserve. When share options are exercised, the amount previously recognized in the reserve will be transferred to share premium.

Equity-settled share-based payment transactions with parties other than employees are measured at the fair value of the goods or services received, except where that fair value cannot be estimated reliably, in which case they are measured at the fair value of the equity instruments granted, measured at the date the entity obtains the goods or the counterparty renders the service.

3. SIGNIFICANT ACCOUNTING POLICIES *(continued)*

TAXATION

Income tax expense represents the sum of the tax currently payable and deferred tax.

Current tax

The tax currently payable is based on taxable profit for the year. Taxable profit differs from profit before tax as reported in the consolidated statement of profit or loss and other comprehensive income because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized. Such deferred tax assets and liabilities are not recognized if the temporary difference arises from goodwill or from the initial recognition other than in a business combination of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset is realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment held for use in the production or supply of goods or services, or for administrative purposes, are stated in the consolidated statement of financial position at their costs, less any subsequent accumulated depreciation and subsequent accumulated impairment losses. Such cost includes the cost of replacing part of the property, plant and equipment and borrowing costs for long-term construction projects if the recognition criteria are met.

The Group constructs certain of its plant and equipment. In addition to costs under the construction contracts, external costs that are directly related to the construction and acquisition of such plant and equipment are capitalized. Depreciation is recorded at the time assets are ready for their intended use. Such properties are classified to the appropriate categories of property, plant and equipment when completed and ready for intended use. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

3. SIGNIFICANT ACCOUNTING POLICIES *(continued)*

PROPERTY, PLANT AND EQUIPMENT *(continued)*

Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. All other repairs and maintenance are charged to the profit or loss during the financial period in which they are incurred.

An item at property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognized in profit or loss.

Depreciation is recognized so as to write off the cost of items of property, plant and equipment other than properties under construction over their estimated useful lives, using the straight-line method. The estimated useful lives and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

The following useful lives are used in the calculation of depreciation.

Buildings	25 years
Plant and equipment	5–10 years
Office equipment	3–5 years

INTANGIBLE ASSETS

Acquired intangible assets which consists primarily of technology, licenses and patents, are carried at cost less accumulated amortization and any accumulated impairment loss. Amortization is computed using the straight-line method over the expected useful lives of the assets of three to ten years. The estimated useful life and amortization method are reviewed at the end of each reporting period, with effect of any changes in estimate being accounted for on a prospective basis.

GOODWILL

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred, the amount recognized for non-controlling interests and any fair value of the Group's previously held equity interests in the acquiree over the identifiable net assets acquired and liabilities assumed. If the sum of this consideration and other items is lower than the fair value of the net assets acquired, the difference is, after reassessment, recognized in profit or loss as a gain on bargain purchase.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. Goodwill is tested for impairment annually or more frequently if events or changes in circumstances indicate that the carrying value may be impaired. The Group performs its annual impairment test of goodwill as at December 31. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units, or groups of cash-generating units, that are expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the Group are assigned to those units or groups of units.

3. SIGNIFICANT ACCOUNTING POLICIES *(continued)*

GOODWILL *(continued)*

Impairment is determined by assessing the recoverable amount of the cash-generating unit ("CGU") to which the goodwill relates. Where the recoverable amount of the CGU is less than the carrying amount, an impairment loss is recognized. An impairment loss recognized for goodwill is not reversed in a subsequent period.

Where goodwill has been allocated to a CGU and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on the disposal. Goodwill disposed of in these circumstances is measured based on the relative value of the operation disposed of and the portion of the CGU retained.

IMPAIRMENT OF TANGIBLE AND INTANGIBLE ASSETS OTHER THAN GOODWILL

At the end of each reporting period, the Group reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. When a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or CGU) is estimated to be less than its carrying amount, the carrying amount of the asset (or CGU) is reduced to its recoverable amount. An impairment loss is recognized immediately in profit or loss.

When an impairment loss subsequently reverses, the carrying amount of the asset (or a CGU) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or CGU) in prior years. A reversal of an impairment loss is recognized as income.

LEASES

The Group leases equipment. Rental contracts are typically made for fixed periods of 2 to 5 years but may have extension options. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants, but leased assets may not be used as security for borrowing purposes.

Until the 2018 financial year, leases of building, machinery and equipment were classified as either finance or operating leases. Payments made under operating leases (net of any incentives received from the lessor) were charged to profit or loss as the lease agreements.

From January 1, 2019, leases are recognized as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis.

3. SIGNIFICANT ACCOUNTING POLICIES *(continued)*

LEASES *(continued)*

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable,
- variable lease payment that are based on an index or a rate,
- amounts expected to be payable by the lessee under residual value guarantees,
- the exercise price of a purchase option if the lessee is reasonably certain to exercise that option, and
- payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be determined, the lessee's incremental borrowing rate is used, being the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability,
- any lease payments made at or before the commencement date less any lease incentives received,
- any initial direct costs, and
- restoration costs.

Payments associated with short-term leases and leases of low-value assets are recognized on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less. Low-value assets comprise IT-equipment and small items of office furniture.

Land use rights, which are all located in the PRC, are recorded at cost and are charged to profit or loss ratably over the term of the land use agreements which range from 50 to 70 years.

CASH AND CASH EQUIVALENTS

Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and are subjected to an insignificant risk of changes in value, with original maturities of three months or less.

RESTRICTED CASH

Restricted cash consists of bank deposits pledged against letters of credit, short-term and long-term credit facilities, and unused government funding for certain research and development projects. Changes of restricted cash paid for property, plant and equipment are presented as investing activity in consolidated statement of cash flows. Changes of restricted cash of pledged against letter of credit, short-term and long-term credit facilities and unused government funding for expensed research and development activities are presented as operating activity in consolidated statement of cash flows.

INVENTORIES

Inventories are stated at the lower of cost and net realizable value. Costs of inventories are determined on a weighted average basis. Net realizable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale.

3. SIGNIFICANT ACCOUNTING POLICIES *(continued)*

PROVISIONS

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (when the effect of the time value of money is material).

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognized as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

INVESTMENTS AND OTHER FINANCIAL ASSETS

Classification

From January 1, 2018 the Group classifies its financial assets in the following measurement categories:

- those to be measured subsequently at fair value (through profit or loss), and
- those to be measured at amortized cost.

The classification depends on the entity's business model for managing the financial assets and the contractual terms of the cash flows. For assets measured at fair value, gains and losses will be recorded in profit or loss.

Measurement

At initial recognition, the Group measures a financial asset at its fair value plus, in the case of a financial asset not at FVPL, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at FVPL are expensed in profit or loss.

Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

Debt instruments

Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the asset. There are three below measurement categories and the Group recognizes its debt instruments as amortized cost and FVPL only:

- Amortized cost: Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortized cost. Interest income from these financial assets is included in finance income using the effective interest rate method. Any gain or loss arising on derecognition is recognized directly in profit or loss and presented in other gains or losses, together with foreign exchange gains and losses. Impairment losses are presented as separate line item in the statement of profit or loss.
- FVPL: Assets that do not meet the criteria for amortized cost or fair value through other comprehensive income ("FVOCI") are measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognized in profit or loss and presented net within other gains or losses in the period in which it arises.

3. SIGNIFICANT ACCOUNTING POLICIES *(continued)*

INVESTMENTS AND OTHER FINANCIAL ASSETS *(continued)*

Debt instruments (continued)

- FVOCI: Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at FVOCI. Movements in the carrying amount are taken through other comprehensive income ("OCI"), except for the recognition of impairment gains or losses, interest income and foreign exchange gains and losses which are recognized in profit or loss. When the financial asset is derecognized, the cumulative gain or loss previously recognized in OCI is reclassified from equity to profit or loss and recognized in other gains/(losses). Interest income from these financial assets is included in finance income using the effective interest rate method. Foreign exchange gains and losses are presented in other gains/(losses) and impairment expenses are presented as separate line item in the statement of profit or loss.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of the Group after deducting all of its liabilities. Equity instruments issued by the Group are recognized at the proceeds received, net of direct issue costs. The Group subsequently measures all equity investments at fair value through profit or loss. Changes in the fair value of financial assets at FVPL are recognized in other gains or losses in the statement of profit or loss as applicable.

Impairment

From January 1, 2018, the Group assesses on a forward looking basis the expected credit losses associated with its debt instruments carried at amortized cost and FVOCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For trade receivables, the Group applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognized from initial recognition of the receivables.

Derivatives and hedging

The Group has made the accounting policy choice to continue applying hedge accounting under IAS 39.

Accounting policies applied until December 31, 2017

The Group has applied IFRS 9 retrospectively, but has elected not to restate comparative information. As a result, the comparative information provided continues to be accounted for in accordance with the Group's previous accounting policy.

Classification

Until December 31, 2017, the Group classifies its financial assets in the following categories:

- financial assets at fair value through profit or loss,
- loans and receivables, and
- available-for-sale financial assets.

The classification determined on the purpose for which the investments were acquired. Management determined the classification of its investments at initial recognition and, in the case of assets classified as held-to-maturity, re-evaluated this designation at the end of each reporting period.

Subsequent measurement

The measurement at initial recognition did not change an adoption of IFRS 9.

Subsequent to the initial, recognition loans and receivables were subsequently carried at amortized cost using the effective interest method.

3. SIGNIFICANT ACCOUNTING POLICIES *(continued)*

INVESTMENTS AND OTHER FINANCIAL ASSETS *(continued)*

Accounting policies applied until December 31, 2017 *(continued)*

Subsequent measurement (continued)

Available-for-sale financial assets and financial assets at FVPL were subsequently carried at fair value. Gains or losses arising from changes in the fair value are recognized as follows:

- for 'financial assets at FVPL' — in profit or loss within other gains/(loss)
- for available-for-sale financial assets that are monetary securities denominated in a foreign currency — translation differences related to changes in the amortized cost of the security were recognized in profit or loss and other changes in the carrying amount were recognized in other comprehensive income
- for other monetary and non-monetary securities classified as available-for-sale — in other comprehensive income

When securities classified as available-for-sale were sold, the accumulated fair value adjustments recognized in other comprehensive income were reclassified to profit or loss as gains and other losses from investment securities.

Impairment

The Group assessed at the end of each reporting period whether there was objective evidence that a financial asset or Group of financial assets was impaired. A financial asset or a Group of financial assets was impaired and impairment losses were incurred only if there was objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a 'loss event') and that loss event (or events) had an impact on the estimated future cash flows of the financial asset or group of financial assets that could be reliably estimated. In the case of equity investments classified as available-for-sale, a significant or prolonged decline in the fair value of the security below its cost was considered an indicator that the assets are impaired.

Assets carried at amortized cost

For loans and receivables, the amount of the loss was measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that had not been incurred) discounted at the financial asset's original effective interest rate. The carrying amount of the asset was reduced and the amount of the loss was recognized in profit or loss. If a loan or held-to-maturity investment had a variable interest rate, the discount rate for measuring any impairment loss was the current effective interest rate determined under the contract. As a practical expedient, the Group could measure impairment on the basis of an instrument's fair value using an observable market price.

If, in a subsequent period, the amount of the impairment loss decreased and the decrease could be related objectively to an event occurring after the impairment was recognized (such as an improvement in the debtor's credit rating), the reversal of the previously recognized impairment loss was recognized in profit or loss.

Assets classified as available-for-sale

If there was objective evidence of impairment for available-for-sale financial assets, the cumulative loss — measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognized in profit or loss — was removed from equity and recognized in profit or loss.

Impairment losses on equity instruments that were recognized in profit or were not reversed through profit or loss in a subsequent period.

If the fair value of a debt instrument classified as available-for-sale increased in a subsequent period and the increase could be objectively related to an event occurring after the impairment loss was recognized in profit or loss, the impairment loss was reversed through profit or loss.

3. SIGNIFICANT ACCOUNTING POLICIES *(continued)*

CONVERTIBLE BONDS

The component parts of the convertible bonds issued by the Group are classified separately as financial liabilities and equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument. Conversion option that will be settled by the exchange of a fixed amount of cash or another financial asset for a fixed number of the Group's own equity instruments is an equity instrument.

At the date of issue, the fair value of the liability component is estimated using the prevailing market interest rate for similar non-convertible instruments. This amount is recorded as a liability on an amortized cost basis using the effective interest method until extinguished upon conversion or at the instrument's maturity date.

The conversion option classified as equity is determined by deducting the amount of the liability component from the fair value of the compound instrument as a whole. This is recognized and included in equity, net of income tax effects, and is not subsequently remeasured. In addition, the conversion option classified as equity will remain in equity until the conversion option is exercised, in which case, the balance recognized in equity will be transferred to share premium. Where the conversion option remains unexercised at the maturity date of the convertible note, the balance recognized in equity will be transferred to retained earnings. No gain or loss is recognized in profit or loss upon conversion or expiration of the conversion option.

The Group assesses if the embedded derivatives in respect of the early redemption features are deemed to be clearly and closely related to the host debt contract. Embedded derivatives need not be separated if they are regarded as closely related to its host contract. If they are not, they would be separately accounted for.

Transaction costs that relate to the issue of the convertible bonds are allocated to the liability and equity components in proportion to the allocation of the gross proceeds. Transaction costs relating to the equity component are charged directly to equity. Transaction costs relating to the liability component are included in the carrying amount of the liability portion and amortized over the period of the convertible bonds using the effective interest method.

FINANCIAL LIABILITIES

Financial liabilities are classified as either financial liabilities 'at FVPL' or 'other financial liabilities'.

Financial liabilities at FVPL

Financial liabilities are classified as at FVPL (including foreign currency forward contracts, cross currency swap contracts and contingent consideration) when the financial liability is held for trading.

Financial liabilities at FVPL are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any interest paid on the financial liability and is included in the 'other gains, net' line item.

Other financial liabilities

Other financial liabilities (including borrowings, trade and other payables, long-term payables, long-term financial liabilities, short-term and medium-term notes and bonds payable) are subsequently measured at amortized cost using the effective interest method.

The effective interest method is a method of calculating the amortized cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability or (where appropriate) shorter period, to the net carrying amount on initial recognition.

3. SIGNIFICANT ACCOUNTING POLICIES *(continued)*

FINANCIAL LIABILITIES *(continued)*

Derecognition of financial liabilities

The Group derecognizes financial liabilities when, and only when, the Group's obligations are discharged, cancelled or they expire. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in profit or loss.

DERIVATIVE FINANCIAL INSTRUMENTS AND HEDGING ACCOUNTING

The Group enters into a variety of derivative financial instruments to manage its exposure to interest rate and foreign exchange rate risks, including a put option, foreign exchange forward contracts and cross currency swap contracts. Further details of derivative financial instruments are disclosed in Note 22 and Note 38.

Derivatives are initially recognized at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognized in profit or loss immediately unless the derivative is designated and effective as a hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedge relationship.

Any gains or losses arising from changes in fair value of derivatives are taken directly to the statement of profit or loss, except for the effective portion of gain or loss on cash flow hedges.

The effective portion of the gain or loss on cash flow hedges is recognized directly in other comprehensive income in the hedging reserve, while any ineffective portion is recognized immediately in the statement of profit or loss.

Amounts recognized in other comprehensive income are transferred to profit or loss when the hedged transaction affects profit or loss, such as when hedged financial income or financial expense is recognized or when a forecast sale occurs. Where the hedged item is the cost of a non-financial asset or non-financial liability, the amounts recognized in other comprehensive income are transferred to the initial carrying amount of the non-financial asset or non-financial liability.

If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover (as part of the hedging strategy), or if its designation as a hedge is revoked, or when the hedge no longer meets the criteria for hedge accounting, the amounts previously recognized in other comprehensive income remain in other comprehensive income until the forecast transaction occurs or the foreign currency firm commitment is met.

4. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

CRITICAL ACCOUNTING JUDGMENTS

In the application of the Group's accounting policies, which are described in Note 3, the Group is required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

KEY SOURCES OF ESTIMATION UNCERTAINTY

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

4. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY *(continued)*

KEY SOURCES OF ESTIMATION UNCERTAINTY *(continued)*

Inventories

Inventories are stated at the lower of cost (weighted average) or net realizable value ("NRV"), with NRV being the "estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale". The Group estimates the recoverability for such finished goods and work-in-progress based primarily upon the latest invoice prices and current market conditions. If the NRV of an inventory item is determined to be below its carrying value, the Group records a write-down to cost of sales for the difference between the carrying cost and NRV.

Long-lived assets

The Group assesses the impairment of long-lived assets when events or changes in circumstances indicate that the carrying value of asset or cash-generating unit ("CGU") may not be recoverable. Factors that the Group considers in deciding when to perform an impairment review include, but are not limited to significant under-performance of a business or product line in relation to expectations, significant negative industry or economic trends, and significant changes or planned changes in the use of the assets.

An impairment analysis is performed at the lowest level of identifiable independent cash flows for an asset or CGU. Impairment exists when the carrying value of an asset or cash-generating unit exceeds its recoverable amount, which is the higher of its fair value less costs to sell and its value in use. The fair value less costs to sell calculation is based on available data from binding sales transactions, conducted at arm's length, for similar assets or observable market prices less incremental costs for disposing of the asset. The value in use calculation is based on a discounted cash flow model.

The Group makes subjective judgments in determining the independent cash flows that can be related to a specific CGU based on its asset usage model and manufacturing capabilities. The Group measures the recoverability of assets that will continue to be used in the Group's operations by comparing the carrying value of CGU to the Group's estimate of the related total future discounted cash flows. If a CGU's carrying value is not recoverable through the related discounted cash flows, the impairment loss is measured by comparing the difference between the CGU's carrying value and its recoverable amount, based on the best information available, including market prices or discounted cash flow analysis. The recoverable amount is most sensitive to the discount rate used for the discounted cash flow model as well as the expected future cash-inflows and the growth rate and sales margin used for extrapolation purposes.

In order to remain technologically competitive in the semiconductor industry, the Group has entered into technology transfer and technology license arrangements with third parties in an attempt to advance the Group's process technologies. The payments made for such technology licenses are recorded as an intangible asset or as a deferred cost and amortized on a straight-line basis over the estimated useful life of the asset. The Group routinely reviews the remaining estimated useful lives of these intangible assets and deferred costs. The Group also evaluates these intangible assets and deferred costs for impairment whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. When the carrying amounts of such assets are determined to exceed their recoverable amounts, the Group will impair such assets and write down their carrying amounts to recoverable amount in the year when such determination was made.

4. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY *(continued)*

KEY SOURCES OF ESTIMATION UNCERTAINTY *(continued)*

Share-based compensation expense

The fair value of options and shares issued pursuant to the Group's option plans at the grant date was estimated using the Black-Scholes option pricing model. This model was developed for use in estimating the fair value of traded options that have no vesting restrictions and are fully transferable. In addition, option-pricing models require the input of highly subjective assumptions, including the expected term of the options and the expected stock price volatility. The expected term of options granted represents the period of time that options granted are expected to be outstanding. The Group estimated forfeiture rates using historical data to estimate option exercise and employee termination within the pricing formula. The Group uses projected volatility rates based upon the Group's historical volatility rates. These assumptions are inherently uncertain. Different assumptions and judgments would affect the Group's calculation of the fair value of the underlying ordinary shares for the options granted, and the valuation results and the amount of share-based compensation would also vary accordingly. Further details on share-based compensation are disclosed in Note 37.

Taxes

Uncertainties exist with respect to the interpretation of complex tax regulations, changes in tax laws, and the amount and timing of future taxable income. Given the wide range of international business relationships and the long-term nature and complexity of existing contractual agreements, differences arising between the actual results and the assumptions made, or future changes to such assumptions, could necessitate future adjustments to tax income and expense already recorded. The Group establishes provisions, based on reasonable estimates, for possible consequences of audits by the tax authorities of the respective counties in which it operates. The amount of such provisions is based on various factors, such as experience of previous tax audits and differing interpretations of tax regulations by the taxable entity and the responsible tax authority. Such differences of interpretation may arise on a wide variety of issues depending on the conditions prevailing in the respective domicile of the Group companies.

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

The realizability of the deferred tax asset mainly depends on whether sufficient profits or taxable temporary differences will be available in the future. In cases where the actual future profits generated are less than expected, a material reversal of deferred tax assets may arise, which would be recognized in profit or loss for the period in which such a reversal takes place.

Fair value of financial instruments

Some of the Group's assets and liabilities are measured at fair value for financial reporting purposes.

In estimating the fair value of an asset or a liability, the Group uses market-observable data to the extent it is available. Where Level 1 inputs are not available, the Group engages third party qualified valuers to perform the valuation.

The Group uses valuation techniques that include inputs that are not based on observable market data to estimate the fair value of certain types of financial instruments. Notes 38 provide detailed information about the valuation techniques, inputs and key assumptions used in the determination of the fair value of various assets and liabilities.

Acting as limited partner, the Group has invested in a number of investment funds. Based on the assessments performed by management, the Group accounted for such investment funds as investments in joint ventures or associate by using equity method. The investment funds measured their investments in portfolio investments at fair value. These investment funds held a number of portfolio investments. The valuation of such portfolio investments is primarily based on a combination of adoption of applicable valuation methodology and the application of appropriate assumptions in the valuation.

4. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY *(continued)*

KEY SOURCES OF ESTIMATION UNCERTAINTY *(continued)*

Impairment of financial instruments

The Group recognizes lifetime expected credit losses ("ECL") for trade receivables. The expected credit losses on trade receivables are estimated using a provision matrix based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current as well as the forecast direction of conditions at the reporting date.

For all other financial instruments, the Group recognizes lifetime ECL when there has been a significant increase in credit risk since initial recognition. However, if the credit risk on the financial instruments has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instruments at an amount equal to 12-month ECL.

5. SEGMENT INFORMATION

DISAGGREGATION OF REVENUE FROM CONTRACTS WITH CUSTOMERS

For management purposes, the Group operates in one segment, engaging principally in the computer-aided design, manufacturing and trading of integrated circuits. Management makes high level strategic decisions and reviews the consolidated results of the Group. The measurement of the whole segment profit is based on profit from operation as presented in the statements of profit or loss and other comprehensive income and no other segment analysis is presented.

The Group deriving revenue from the transfer of goods and services only at a point in time in the three geographical areas — North America, Mainland China and Hong Kong, and Eurasia. The Group's operating revenue from customers, based on the location of their headquarters, is detailed below.

	Revenue from external customers		
	Year ended 12/31/19	Year ended 12/31/18	Year ended 12/31/17
At a point in time	**USD'000**	USD'000	USD'000
North America[1]	**821,136**	1,062,134	1,240,906
Mainland China and Hong Kong	**1,850,516**	1,985,292	1,465,553
Eurasia[2]	**444,020**	312,558	394,716
	3,115,672	3,359,984	3,101,175

(1) Presenting the revenue to those companies whose headquarters are in the United States, but ultimately selling and shipping the products to their global customers.

(2) Not including Mainland China and Hong Kong.

5. SEGMENT INFORMATION *(continued)*

DISAGGREGATION OF REVENUE FROM CONTRACTS WITH CUSTOMERS *(continued)*

The Group's operating revenue transferred by product and service type only at a point in time is detailed below:

	Revenue from external customers		
	Year ended	Year ended	Year ended
	12/31/19	12/31/18	12/31/17
At a point in time	**USD'000**	USD'000	USD'000
Sales of wafers	**2,896,883**	3,031,770	3,038,947
Mask making, testing and others(1)	**218,789**	328,214	62,228
	3,115,672	3,359,984	3,101,175

(1) Including the recognized technology licensing revenue of US$163.8 million for the year ended December 31, 2018. The technology licensing internally developed and not capitalized was authorized to Semiconductor Manufacturing Electronics (Shaoxing) Corporation ("SMEC", an associate of the Group) with no related cost of sales recognized by the Group.

LIABILITIES RELATED TO CONTRACTS WITH CUSTOMERS

The Group has recognized the liabilities related to contracts with customers as contract liabilities of US$92.3 million as of December 31, 2019 (December 31, 2018: US$44.1 million and December 31, 2017: US$43.0 million). The contract liabilities comprises of the prepayments received from customers, to which wafers have not been transferred. Revenue recognized that was included in the contract liabilities balance at the beginning of the year was US$44.1 million (2018: US$43.0 million and 2017: US$42.9 million).

UNSATISFIED PERFORMANCE OBLIGATIONS

The Group selected to choose a practical expedient and omitted disclosure of remaining performance obligations as all related contracts have a duration of one year or less.

SEGMENT ASSETS

The Group's business is characterized by high fixed costs relating to advanced technology equipment purchases, which result in correspondingly high levels of depreciation expenses. The Group will continue to incur capital expenditures and depreciation expenses as it equips and ramps-up additional fabs and expand its capacity at the existing fabs. The following table summarizes property, plant and equipment of the Group by geographical location. As of December 31, 2019, 2018 and 2017, substantially all of the non-current assets other than financial instruments, deferred tax assets and property, plant and equipment listed below of the Group were located in Mainland China.

	Property, plant and equipment		
	12/31/19	12/31/18	12/31/17
	USD'000	USD'000	USD'000
North America	**—**	15	45
Europe	**1,454**	1,603	137,778
Asia(1)	**42**	66	117
Hong Kong	**2,228**	2,415	2,618
Mainland China	**7,753,523**	6,773,871	6,382,845
	7,757,247	6,777,970	6,523,403

(1) Not including Mainland China and Hong Kong.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended December 31, 2019

6. SIGNIFICANT CUSTOMERS

The following table summarizes net revenue or gross accounts receivable for customers, which accounted for 10% or more of net revenue and gross accounts receivable:

	Net revenue Year ended December 31,			Gross accounts receivable December 31,		
	2019	2018	2017	**2019**	2018	2017
Customer A	**590,349**	582,349	538,102	**100,906**	75,510	95,575
Customer B	**397,618**	527,633	636,662	**86,627**	67,734	133,281
Customer A	**19%**	17%	17%	**21%**	18%	23%
Customer B	**13%**	16%	21%	**18%**	16%	33%

7. OTHER OPERATING INCOME, NET

	Year ended 12/31/19 USD'000	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000
Gain on disposal of property, plant and equipment and assets classified as held-for-sale[(1)]	**4,912**	30,838	17,513
Impairment loss recognized on tangible and intangible assets (Note 11)	**(2,948)**	(9,218)	—
Government funding (Note 34)[(2)]	**293,305**	137,457	109,689
Gain on disposal and deconsolidation of subsidiaries[(3)]	**81,377**	3,466	—
Others	**10**	(2)	—
	376,656	162,541	127,202

(1) The gain on disposal of property, plant and equipment and assets classified as held-for-sale for the years ended December 31, 2019, 2018 and 2017 were primarily from the sales of the staff living quarters to employees, the disposal of equipment and the disposal of equipment related to sale and leaseback transactions, respectively.

(2) In 2019, the Group has changed its accounting policy regarding the presentation of certain government funding and the comparative figures have also been reclassified to conform to the current period presentation. Please see Note 2 for further information.

(3) On July 29, 2019, the Group recorded a gain of US$81.4 million from the sales of several subsidiaries (Note 26).

An analysis of the gain and the cash flows in respect of the deconsolidation is as follows:

	Year ended 12/31/19 USD'000
Gain on disposal and deconsolidation of subsidiaries	
Cash consideration received	**163,116**
Carrying amount of net assets disposed and deconsolidated	**(81,460)**
Reclassification of foreign currency translation reserve	**72**
Tax expense	**(351)**
	81,377
Net cash flows arising on disposal and deconsolidation of subsidiaries	
Cash consideration received	**163,116**
Tax expense	**(351)**
Cash outflow of disposal of subsidiaries	**(22,467)**
Proceeds from disposal of subsidiaries	**140,298**
Cash outflow of deconsolidation of subsidiaries	**(3,065)**
	137,233

8. FINANCE COSTS

	Year ended 12/31/19 USD'000	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000
Interest on:			
Bank and other borrowings	**63,083**	44,668	25,543
Leases (Note 17)	**10,442**	190	232
Convertible bonds (Note 32)	**16,508**	15,263	15,818
Corporate bonds	**16,918**	22,487	22,405
Medium-term notes (Note 33)	**10,102**	8,335	8,185
Short-term notes (Note 33)	**8,193**	—	1,164
Less: government funding	**—**	(19,496)	(24,182)
	125,246	71,447	49,165
Less: amounts capitalized	**(61,786)**	(47,169)	(31,144)
	63,460	24,278	18,021

The weighted average effective interest rate on the above borrowed funds is 3.17% per annum (2018: 2.10% per annum and 2017: 1.65% per annum).

9. OTHER GAINS, NET

	Year ended 12/31/19 USD'000	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000
Net gain (loss) arising on financial instruments at FVPL			
Cross currency swap contracts — cash flow hedges	**505**	2,265	2,150
Cross currency swap contracts	**(1,158)**	1,158	—
Foreign currency forward contracts	**—**	(2,108)	2,109
Financial products sold by banks and monetary funds	**6,454**	6,443	1,087
Equity securities	**28,399**	2,015	—
Other derivative financial instrument	**—**	—	1,544
	34,200	9,773	6,890
Others	**8,781**	14,509	9,609
	42,981	24,282	16,499

10. INCOME TAXES

INCOME TAX EXPENSE (BENEFIT)

	Year ended 12/31/19 USD'000	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000
Current tax — Land Appreciation Tax	**866**	(172)	179
Current tax — Enterprise Income Tax	**8,222**	15,598	(469)
Deferred tax	**14,328**	(950)	2,136
	23,416	14,476	1,846

The income tax expense (benefit) for the year can be reconciled to the accounting profit as follows:

	Year ended 12/31/19 USD'000	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000
Profit before tax	**182,276**	91,687	128,269
Income tax expense calculated at 15% (2018: 15% and 2017: 15%)	**27,341**	13,753	19,240
Effect of tax holiday	**(60,318)**	(69,581)	(50,258)
Additional deduction for research and development expenditures	**(49,676)**	(47,541)	(25,260)
Tax losses for which no deferred tax assets were recognized(1)	**112,749**	127,686	70,341
Reversal of temporary differences	**—**	—	5,687
Effect of different tax rates of subsidiaries operating in other jurisdictions	**(7,546)**	(9,669)	(18,082)
Others	**866**	(172)	178
	23,416	14,476	1,846

(1) The tax losses were calculated from the profit or loss of some subsidiaries after adjusting the additional deduction for research and development expenditures and the effect of different tax rates and cannot be carried forward from prior years to offset future profits in five years.

The Company has undistributed earnings of US$1,852.0 million (2018: US$1,176.7 million) which, if paid out as dividends, would be subject to tax in the hands of the recipient. An assessable temporary difference exists, but no deferred tax liability has been recognized as the Company is able to control the timing of distributions from subsidiaries and is not expected to distribute these profits in the foreseeable future.

The tax rate used for the 2019, 2018 and 2017 reconciliation above is the corporate tax rate of 15% payable by most of the Group's entities in Mainland China under tax law in that jurisdiction.

CURRENT TAX LIABILITIES

The Group has recognized the income tax payable as liabilities of US$3.2 million as of December 31, 2019 (December 31, 2018: US$2.6 million and December 31, 2017: US$0.2 million).

10. INCOME TAXES *(continued)*

DEFERRED TAX BALANCES

The following is the analysis of deferred tax assets (liabilities) presented in the consolidated statement of financial position:

	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000
Deferred tax assets			
Property, plant and equipment	**49,188**	42,613	41,271
Intangible assets	**1,531**	1,688	1,844
Others	**12,256**	1,125	1,760
	62,975	45,426	44,875
Deferred tax liabilities			
Property, plant and equipment	**(34,360)**	(1,588)	(16,412)
Others	**—**	(51)	—
	(34,360)	(1,639)	(16,412)
	28,615	43,787	28,463

December 31, 2019	Opening balance USD'000	Deconsolidation of subsidiary USD'000	Recognize in profit or loss USD'000	Closing balance USD'000
Net deferred tax assets in relation to				
Property, plant and equipment	**41,025**	**—**	**(26,197)**	**14,828**
Intangible assets	**1,688**	**—**	**(157)**	**1,531**
Others	**1,074**	**(845)**	**12,026**	**12,256**
	43,787	**(845)**	**(14,328)**	**28,615**

December 31, 2018	Opening balance USD'000	Deconsolidation of subsidiary USD'000	Reclassified as held-for-sale USD'000	Recognize in profit or loss USD'000	Closing balance USD'000
Net deferred tax assets in relation to					
Property, plant and equipment	24,859	—	14,437	1,729	41,025
Intangible assets	1,844	—	—	(156)	1,688
Others	1,760	(63)	—	(623)	1,074
	28,463	(63)	14,437	950	43,787

December 31, 2017	Opening balance USD'000	Recognize in profit or loss USD'000	Closing balance USD'000
Net deferred tax assets in relation to			
Property, plant and equipment	30,599	(5,740)	24,859
Intangible assets	—	1,844	1,844
Others	—	1,760	1,760
	30,599	(2,136)	28,463

The Company is incorporated in the Cayman Islands, where it is not currently subject to taxation. The detailed tax status of SMIC's principal PRC entities with tax holidays is elaborated as follows:

10. INCOME TAXES *(continued)*

DEFERRED TAX BALANCES *(continued)*

Semiconductor Manufacturing International (Shanghai) Corporation ("SMIS" or "SMIC Shanghai")

Pursuant to the relevant tax regulations, SMIS is qualified as an integrated circuit enterprise and enjoyed a 10-year tax holiday (five year full exemption followed by five year half reduction) beginning from 2004 after utilizing all prior years' tax losses. The income tax rate for SMIS was 15% in 2019 (2018: 15% and 2017: 15%).

Semiconductor Manufacturing International (Tianjin) Corporation ("SMIT" or "SMIC Tianjin")

In accordance with Caishui Circular [2013] No. 43 ("Circular No. 43") and Caishui Circular [2008] No. 1 ("Circular No. 1"), SMIT is qualified as an integrated circuit enterprise and enjoying a 10-year tax holiday (five year full exemption followed by five year half reduction) beginning from 2013 after utilizing all prior years' tax losses. The income tax rate for SMIT was 0% from 2013 to 2017 and 12.5% from 2018 to 2022.

Semiconductor Manufacturing International (Beijing) Corporation ("SMIB" or "SMIC Beijing")

In accordance with Circular No. 43 and Circular No. 1, SMIB is qualified as an integrated circuit enterprise and enjoying a 10-year tax holiday (five year full exemption followed by five year half reduction) beginning from 2015 after utilizing all prior years' tax losses. The income tax rate for SMIB was 0% from 2015 to 2019 and 12.5% from 2020 to 2024.

Semiconductor Manufacturing International (Shenzhen) Corporation ("SMIC Shenzhen"), Semiconductor Manufacturing North China (Beijing) Corporation ("SMNC") and SJ Semiconductor (Jiangyin) Corporation ("SJ Jiangyin")

In accordance with Circular No. 43, Circular No. 1 and Caishui Circular [2012] No. 27 ("Circular No. 27"), SMIC Shenzhen, SMNC and SJ Jiangyin are entitled to the preferential tax rate of 15% and 10-year tax holiday (five year full exemption followed by five year half reduction) subsequent to its first profit-making year after utilizing all prior tax losses on or before December 31, 2019. SMIC Shenzhen, SMNC and SJ Jiangyin were in accumulative loss positions as of December 31, 2019 and the tax holiday has not begun to take effect.

Other PRC entities

All the other PRC entities of SMIC are subject to income tax rate of 25%.

UNUSED TAX LOSSES

At the end of the reporting period, no deferred tax asset was recognized in respect of tax losses of US731.9 million (December 31, 2018: US$457.3 million and December 31, 2017: US$235.1 million) due to the unpredictability of future profit streams, of which US$76.1 million, US$100.0 million, US$62.0 million, US$322.4 million and US$171.4 million will expire in 2020, 2021, 2022, 2023 and 2024, respectively.

11. PROFIT FOR THE YEAR

Profit for the year has been arrived at after charging (crediting):

	Year ended 12/31/19 USD'000	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000
Impairment losses on assets			
Bad debt allowance on trade receivables (Note 38)	**1,449**	964	301
Reversal of bad debt allowance on doubtful trade receivables (Note 38)	**(373)**	(27)	(438)
Impairment losses on inventory (Note 24)	**35,288**	6,412	46,857
Impairment losses on tangible assets (Note 16)	**—**	990	—
Impairment losses on intangible assets (Note 18)	**2,948**	8,228	—
	39,312	16,567	46,720
Depreciation and amortization expense			
Depreciation of property, plant and equipment (Note 16)	**995,580**	994,642	906,034
Depreciation of right-of-use assets (Note 17)	**99,950**	2,173	2,250
Amortization of intangible assets (Note 18)	**32,226**	51,595	63,098
	1,127,756	1,048,410	971,382
Employee benefits expense			
Wages, salaries and social security contributions	**506,045**	550,060	499,238
Bonus	**83,198**	64,130	57,289
Non-monetary benefits	**35,587**	48,837	47,204
Equity-settled share-based payments (Note 37)	**6,832**	11,661	18,214
	631,662	674,688	621,945
Royalties expense	**32,290**	30,678	37,466
Government funding (Note 34)	**(293,305)**	(156,953)	(133,871)
Auditors' remuneration			
Audit services	**1,312**	1,372	1,413
Non-audit services	**99**	1,255	85
	1,411	2,627	1,498

12. DIRECTORS' REMUNERATION

	Year ended 12/31/19 USD'000	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000
Salaries, bonus and benefits	**2,672**	3,353	4,490
Equity-settled share-based payments	**751**	2,390	8,158
	3,423	5,743	12,648

The equity-settled share-based payments granted to directors include both stock options and restricted share units ("RSUs").

During the year ended December 31, 2019, 312,500 stock options were granted to the directors (2018: 712,500 and 2017: 5,726,477). No stock options were exercised (2018: 6,050,202 and 2017: 1,949,229) and 310,701 stock options were expired (2018: 4,758,542 and 2017: nil).

12. DIRECTORS' REMUNERATION *(continued)*

During the year ended December 31, 2019, 312,500 RSUs were granted to the directors (2018: 712,500 and 2017: 5,726,477), 821,595 RSUs automatically vested (2018: 2,367,859 and 2017: 3,774,432) and 274,430 RSUs were forfeited (2018: 188,125 and 2017: nil).

In 2019, 2018 and 2017 no emoluments were paid by the Group to any of the directors as an inducement to join or upon joining the Group or as compensation for loss of office. Except for the waiver of all salaries and wages since Lu Jun was appointed as non-executive director subject to his request in 2017, no other directors waived any emoluments in 2019, 2018 and 2017.

The Group has no pension schemes for directors or past directors, except for the state-managed pension as employee benefits expense for the executive directors.

INDEPENDENT NON-EXECUTIVE DIRECTORS

The fees paid or payable to independent non-executive directors of the Company during the year were as follows:

2019	**Salaries, bonus and benefits USD'000**	**Equity-settled share-based payment USD'000**	**Total remuneration USD'000**
William Tudor Brown	**81**	**108**	**189**
Cong Jingsheng Jason	**51**	**45**	**96**
Lau Lawrence Juen-Yee	**63**	**148**	**211**
Fan Ren Da Anthony	**68**	**148**	**216**
Young Kwang Leei	**20**	**96**	**116**
Chiang Shang-Yi*	**30**	**35**	**65**
	313	**580**	**893**

2018	Salaries, bonus and benefits USD'000	Equity-settled share-based payment USD'000	Total remuneration USD'000
William Tudor Brown	90	188	278
Chiang Shang-Yi*	65	100	165
Cong Jingsheng Jason	58	119	177
Lau Lawrence Juen-Yee	32	110	142
Fan Ren Da Anthony	34	110	144
Lip-Bu Tan	51	269	320
Carmen I-Hua Chang	39	14	53
	369	910	1,279

2017	Salaries, bonus and benefits USD'000	Equity-settled share-based payment USD'000	Total remuneration USD'000
Lip-Bu Tan	91	128	219
William Tudor Brown	89	8	97
Carmen I-Hua Chang	70	40	110
Chiang Shang-Yi*	47	250	297
Cong Jingsheng Jason	35	217	252
	332	643	975

12. DIRECTORS' REMUNERATION *(continued)*

There were no other emoluments payable to the independent non-executive directors during the year (2018: nil and 2017: nil).

EXECUTIVE DIRECTORS AND NON-EXECUTIVE DIRECTOR

2019	**Salaries, bonus and benefits USD'000**	**Equity-settled share-based payment USD'000**	**Total remuneration USD'000**
Executive directors:			
Zhou Zixue	**713**	**18**	**731**
Zhao Haijun**	**750**	**—**	**750**
Liang Mong Song**	**341**	**—**	**341**
Gao Yonggang	**526**	**—**	**526**
	2,330	**18**	**2,348**
Non-executive directors:			
Chen Shanzhi	**15**	**108**	**123**
Zhou Jie	**—**	**—**	**—**
Ren Kai	**—**	**—**	**—**
Lu Jun	**—**	**—**	**—**
Tong Guohua	**14**	**45**	**59**
	29	**153**	**182**

2018	Salaries, bonus and benefits USD'000	Equity-settled share-based payment USD'000	Total remuneration USD'000
Executive directors:			
Zhou Zixue	695	129	824
Zhao Haijun**	714	824	1,538
Liang Mong Song**	478	—	478
Gao Yonggang	607	1	608
	2,494	954	3,448
Non-executive directors:			
Chen Shanzhi	70	269	339
Zhou Jie	—	—	—
Ren Kai	65	—	65
Lu Jun	—	—	—
Tong Guohua	63	119	182
Tzu-Yin Chiu	292	138	430
	490	526	1,016

12. DIRECTORS' REMUNERATION *(continued)*

EXECUTIVE DIRECTORS AND NON-EXECUTIVE DIRECTOR *(continued)*

2017	Salaries, bonus and benefits USD'000	Equity-settled share-based payment USD'000	Total remuneration USD'000
Executive directors:			
Zhou Zixue	765	311	1,076
Zhao Haijun**	726	1,514	2,240
Liang Mong Song**	65	—	65
Gao Yonggang	634	24	658
	2,190	1,849	4,039
Non-executive directors:			
Tzu-Yin Chiu	1,783	5,321	7,104
Chen Shanzhi	75	128	203
Zhou Jie	—	—	—
Ren Kai	70	—	70
Lu Jun	—	—	—
Tong Guohua	40	217	257
Li Yonghua (Alternate to Chen Shanzhi)	—	—	—
	1,968	5,666	7,634

* Chiang Shang-Yi did not offer themselves for re-election to independent non-executive directors and their term as independent non-executive directors expired on June 21, 2019.

** Zhao Haijun and Liang Mong Song are also the Co-Chief Executive Officers of the Company.

There was no other arrangement under which a director waived or agreed to waive any remuneration in 2019.

13. FIVE HIGHEST PAID EMPLOYEES

The five highest paid individuals during the year included three (2018: three and 2017: three) directors, details of whose remuneration are set out in Note 12 above. Details of the remuneration of the remaining two (2018: two and 2017: two) non-directors, highest paid individuals for the year are as follows:

	Year ended 12/31/19 USD'000	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000
Salaries and benefits	**712**	954	630
Bonus	**408**	325	746
Equity-settled share-based payment	**—**	—	338
	1,120	1,279	1,714

The bonus is determined on the basis of the basic salary and the performance of the Group and the individual.

In 2019, 2018 and 2017, no emoluments were paid by the Group to any of the five highest paid individuals as an inducement to join or upon joining the Group or as compensation for loss of office.

The number of non-director, highest paid individuals whose remuneration fell within the following bands is as follows:

	Number of employees		
	2019	2018	2017
HK$3,500,001 (US$449,541) to HK$4,000,000 (US$513,760)	**1**	—	—
HK$4,500,001 (US$577,981) to HK$5,000,000 (US$642,200)	**1**	1	—
HK$5,000,001 (US$642,201) to HK$5,500,000 (US$706,420)	**—**	1	—
HK$6,500,001 (US$834,861) to HK$7,000,000 (US$899,080)	**—**	—	2
	2	2	2

14. EARNINGS PER SHARE

BASIC EARNINGS PER SHARE

The earnings and weighted average number of ordinary shares used in the calculation of basic earnings per share are as follows:

(In USD'000, except share and per share data)	Year ended 12/31/19	Year ended 12/31/18	Year ended 12/31/17
Profit for the year attributable to owners of the Company	**234,681**	134,055	179,679
Distribution to perpetual subordinated convertible securities holders	**(11,300)**	(6,300)	—
Earnings used in the calculation of basic earnings per share	**223,381**	127,755	179,679
Weighted average number of ordinary shares for the purposes of basic earnings per share	**5,049,540,755**	4,976,275,431	4,628,850,686
Basic earnings per share	**$0.04**	$0.03	$0.04

DILUTED EARNINGS PER SHARE

The earnings used in the calculation of diluted earnings per share are as follows:

(In USD'000, except share and per share data)	Year ended 12/31/19	Year ended 12/31/18	Year ended 12/31/17
Earnings used in the calculation of basic earnings per share	**223,381**	127,755	179,679
Interest expense from convertible bonds	**15,840**	—	905
Distribution to perpetual subordinated convertible securities holders	**11,300**	—	—
Earnings used in the calculation of diluted earnings per share	**250,521**	127,755	180,584
Weighted average number of ordinary shares used in the calculation of basic earnings per share	**5,049,540,755**	4,976,275,431	4,628,850,686
Employee option and restricted share units	**17,614,079**	36,411,011	44,496,788
Convertible bonds	**371,589,975**	—	38,241,356
Perpetual subordinated convertible securities	**344,985,992**	—	1,848,513
Weighted average number of ordinary shares used in the calculation of diluted earnings per share	**5,783,730,801**	5,012,686,442	4,713,437,343
Diluted earnings per share	**$0.04**	$0.03	$0.04

During the year ended December 31, 2019, the Group had 16,609,700 weighted average outstanding employee stock options (2018: 14,115,014 and 2017: 5,214,138) excluded from the computation of diluted earnings per share due to the exercise price higher than the average market price of the ordinary shares, 9,662,892 potential shares upon the conversion of convertible bonds (2018: 371,589,975 and 2017: 377,137,509) and no potential shares upon the conversion of perpetual subordinated convertible securities (2018: 163,815,024 and 2017: nil) excluded from the computation of diluted earnings per share due to anti-dilutive effect.

15. DIVIDEND

The Board did not recommend the payment of any dividend for the year ended December 31, 2019 (December 31, 2018: nil and December 31, 2017: nil).

16. PROPERTY, PLANT AND EQUIPMENT

	Land USD'000	Buildings USD'000	Machinery and equipment USD'000	Office equipment USD'000	Construction in progress ("CIP") USD'000	Total USD'000
Cost						
Balance at December 31, 2016	2,485	724,967	11,523,217	167,558	1,333,014	13,751,241
Transfer from (out) CIP	—	174,143	1,696,092	31,355	(1,901,590)	—
Addition	—	—	—	—	2,425,697	2,425,697
Disposals	—	(28,543)	(767,210)	(3,588)	(5,518)	(804,859)
Balance at December 31, 2017	2,485	870,567	12,452,099	195,325	1,851,603	15,372,079
Transfer from (out) CIP	—	44,127	1,142,788	32,997	(1,219,912)	—
Addition	—	—	—	—	1,757,031	1,757,031
Disposals	—	(1,089)	(593,647)	(2,528)	(27,862)	(625,126)
Deconsolidation of subsidiary due to loss of control	—	—	(375)	—	(8,275)	(8,650)
Reclassified as held-for-sale	(2,485)	(43,182)	(98,253)	(8,550)	(13,790)	(166,260)
Exchange differences	—	—	(19,615)	(322)	(2,723)	(22,660)
Balance at December 31, 2018	—	870,423	12,882,997	216,922	2,336,072	16,306,414
Transfer from (out) CIP	—	209,764	1,611,604	26,884	(1,848,252)	—
Addition	—	—	—	—	1,988,493	1,988,493
Disposals	—	(1,099)	(45,043)	(4,566)	(1,465)	(52,173)
Deconsolidation of subsidiary due to loss of control	—	—	—	(3,997)	(40)	(4,037)
Exchange differences	—	—	(5,907)	(100)	(1,350)	(7,357)
Balance at December 31, 2019	—	1,079,088	14,443,651	235,143	2,473,458	18,231,340
Accumulated depreciation and impairment						
Balance at December 31, 2016	—	153,382	7,763,327	124,363	22,812	8,063,884
Disposal	—	(5,819)	(108,370)	(1,822)	(5,231)	(121,242)
Depreciation expense	—	41,243	839,351	25,440	—	906,034
Balance at December 31, 2017	—	188,806	8,494,308	147,981	17,581	8,848,676
Disposal	—	(924)	(266,143)	(2,459)	(7,011)	(276,537)
Depreciation expense	—	37,031	928,978	28,633	—	994,642
Impairment loss	—	—	990	—	—	990
Deconsolidation of subsidiary due to loss of control	—	—	(78)	—	—	(78)
Reclassified as held-for-sale	—	(4,206)	(28,017)	(4,514)	—	(36,737)
Exchange differences	—	—	(2,431)	(81)	—	(2,512)
Balance at December 31, 2018	—	220,707	9,127,607	169,560	10,570	9,528,444
Disposal	—	(1,099)	(42,707)	(1,691)	—	(45,497)
Depreciation expense	—	37,719	928,161	29,700	—	995,580
Deconsolidation of subsidiary due to loss of control	—	—	—	(2,677)	—	(2,677)
Exchange differences	—	—	(1,696)	(61)	—	(1,757)
Balance at December 31, 2019	—	257,327	10,011,365	194,831	10,570	10,474,093
Net carrying amount						
Balance at December 31, 2017	2,485	681,761	3,957,791	47,344	1,834,022	6,523,403
Balance at December 31, 2018	—	649,716	3,755,390	47,362	2,325,502	6,777,970
Balance at December 31, 2019	—	821,761	4,432,286	40,312	2,462,888	7,757,247

16. PROPERTY, PLANT AND EQUIPMENT *(continued)*

CONSTRUCTION IN PROGRESS

The construction in progress balance of approximately US$2,473.5 million as of December 31, 2019, primarily consisted of US$1,726.1 million, US$281.1 million, US$149.1 and US$122.3 million used for the facilities construction, machinery and equipment of the fabs in Shanghai, the two 300mm fabs in Beijing, the fabs in Shenzhen and the 200mm fab in Tianjin, respectively; US$126.9 million used for purchasing machinery and equipment acquired for more research and development activities; in addition, US$68.0 million was related to various ongoing capital expenditures projects of other SMIC subsidiaries, which are expected to be completed by the end of 2020.

IMPAIRMENT LOSSES RECOGNIZED IN THE YEAR

In 2019, no impairment loss of equipment was recorded by the Group (2018: US$1.0 million and 2017: nil). The whole amount of impairment loss in 2018 was recognized as other operating expense in profit or loss.

ASSETS PLEDGED AS SECURITY

Property, plant and equipment with carrying amount of approximately US$130.9 million (2018: approximately US$207.2 million and 2017: approximately US$362.3 million) have been pledged to secure borrowings of the Group under mortgages (Note 31). The Group is not allowed to pledge these assets as security for other borrowings or to sell them to other entities.

CAPITALIZED INTEREST

Interest incurred on borrowed funds used to construct plant and equipment during the active construction period is capitalized. The interest capitalized is determined by applying the borrowing interest rate to the average amount of accumulated capital expenditures for the assets under construction during the period. Capitalized interest is added to the cost of the underlying assets and is amortized over the useful life of the assets. Capitalized interest of US$61.8 million in 2019 (2018: US$47.2 million and 2017: US$31.1 million) was added to the cost of the underlying assets and was amortized over the respective useful life of the assets. In 2019, the Group recorded depreciation expenses relating to the capitalized interest of US$33.4 million (2018: US$27.5 million and 2017: US$22.7 million).

17. LEASES

The consolidated financial statements show the following amounts relating to leases:

	12/31/19 USD'000
Right-of-use assets	
Buildings	1,884
Machinery and equipment	236,719
Land use right	138,264
	376,867
Lease liabilities	
Current	80,651
Non-current	167,081
	247,732
	Year ended 12/31/19
Depreciation charge of right-of-use assets	
Buildings	383
Machinery and equipment	97,653
Land use right	1,914
	99,950
Interest expense	10,442
Cash outflow for leases	101,059

In the previous year, the Group only recognized lease assets and lease liabilities in relation to leases that were classified as 'finance leases' under IAS 17 Leases. The assets were presented in property, plant and equipment and the liabilities as part of the Group's borrowings. For adjustments recognized on adoption of IFRS 16 on January 1, 2019, please refer to Note 2.

From January 1, 2019, the Group has recognized right-of-use assets for non-cancellable operating leases, except for the short-term and low-value leases with not significant amounts.

Additions to the right-of-use assets for the year ended December 31, 2019 were US$57.0 million.

18. INTANGIBLE ASSETS

	Goodwill USD'000	Patents and license USD'000	Total USD'000
Cost			
Balance at December 31, 2016	3,933	446,037	449,970
Additions	—	34,461	34,461
Balance at December 31, 2017	3,933	480,498	484,431
Additions	—	8,749	8,749
Deconsolidation of subsidiary due to loss of control	—	(40,509)	(40,509)
Reclassified as held-for-sale	(3,933)	(8,340)	(12,273)
Exchange differences	—	(2,790)	(2,790)
Balance at December 31, 2018	—	437,608	437,608
Additions	—	9,845	9,845
Exchange differences	—	(2,332)	(2,332)
Balance at December 31, 2019	—	445,121	445,121
Accumulated amortization and impairment			
Balance at December 31, 2016	—	201,389	201,389
Amortization expense for the year	—	63,098	63,098
Balance at December 31, 2017	—	264,487	264,487
Amortization expense for the year	—	51,595	51,595
Impairment loss	—	8,228	8,228
Deconsolidation of subsidiary due to loss of control	—	(4,748)	(4,748)
Reclassified as held-for-sale	—	(4,061)	(4,061)
Exchange differences	—	(747)	(747)
Balance at December 31, 2018	—	314,754	314,754
Amortization expense for the year(1)	—	32,226	32,226
Impairment loss(2)	—	2,948	2,948
Exchange differences	—	(1,750)	(1,750)
Balance at December 31, 2019	—	348,178	348,178
Net carrying amount			
Balance at December 31, 2017	3,933	216,011	219,944
Balance at December 31, 2018	—	122,854	122,854
Balance at December 31, 2019	—	96,943	96,943

(1) Amortization expenses are mainly included in cost of sales (US$15.5 million, 2018: US$31.0 million and 2017: US$36.8 million) and research and development expenses (US$15.3 million, 2018: US$18.8 million and 2017: US$20.5 million).

(2) In 2019, the Group recorded US$2.9 million (2018: US$8.2 million and 2017: nil) impairment loss of other intangible assets due to the recoverable amount of a batch of intellectual property was estimated to be less than its carrying amount. The whole amount of impairment loss in 2019 and 2018 was recognized as other operating expense in profit or loss.

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19. SUBSIDIARIES

The principle subsidiaries of the Company at the end of the reporting period are as follows:

Name of entity	Place of establishment and operation	Class of shares held	Paid up registered capital	Proportion of ownership interest held by the Company		Proportion of voting power held by the Company	Principal activities
Semiconductor Manufacturing International (Shanghai) Corporation ("SMIS" or "SMIC Shanghai")#	People's Republic of China (the "PRC")	Ordinary	USD1,770,000,000	Indirectly	100%	100%	Manufacturing and trading of semiconductor products
Semiconductor Manufacturing International (Beijing) Corporation ("SMIB" or "SMIC Beijing")#	PRC	Ordinary	USD1,000,000,000	Indirectly	100%	100%	Manufacturing and trading of semiconductor products
Semiconductor Manufacturing North China (Beijing) Corporation ("SMNC")# (2)	PRC	Ordinary	USD4,800,000,000	Indirectly	51%	51%	Manufacturing and trading of semiconductor products
Semiconductor Manufacturing South China Corporation ("SMSC")# (1)	PRC	Ordinary	USD3,500,000,000	Indirectly	50.1%	50.1%	Manufacturing and trading of semiconductor products
Semiconductor Manufacturing International (Tianjin) Corporation ("SMIT" or "SMIC Tianjin")#	PRC	Ordinary	USD770,000,000	Indirectly	100%	100%	Manufacturing and trading of semiconductor products
Semiconductor Manufacturing International (Shenzhen) Corporation ("SMIZ" or "SMIC Shenzhen")#	PRC	Ordinary	USD700,000,000	Indirectly	100%	100%	Manufacturing and trading of semiconductor products
SMIC New Technology Research & Development (Shanghai) Corporation	PRC	Ordinary	USD400,000,000	Indirectly	100%	100%	Research and development activities
SJ Semiconductor (Jiangyin) Corp. ("SJ Jiangyin")#	PRC	Ordinary	USD330,000,000	Indirectly	55.965%	55.965%	Bumping and circuit probe testing activities
SMIC, Americas	United States of America	Ordinary	USD500,000	Directly	100%	100%	Provision of marketing related activities
SMIC Japan Corporation	Japan	Ordinary	JPY10,000,000	Directly	100%	100%	Provision of marketing related activities
SMIC Europe S.r.l.	Italy	Ordinary	EUR100,000	Directly	100%	100%	Provision of marketing related activities
SMIC Development (Chengdu) Corporation ("SMICD")#	PRC	Ordinary	USD5,000,000	Directly	100%	100%	Management of living quarters
SMIC Holdings Corporation ("SMIC Holdings")#	PRC	Ordinary	USD50,000,000	Directly	100%	100%	Investment holding
SMIC Investment (Shanghai) Corporation (formerly "SMIC Commercial (Shanghai) Limited Company")	PRC	Ordinary	USD465,800,000	Directly	100%	100%	Investment holding
Magnificent Tower Limited	British Virgin Islands	Ordinary	USD50,000	Indirectly	100%	100%	Investment holding
SJ Semiconductor Corporation	Cayman Islands	Ordinary	USD5,668	Directly	55.965%	55.965%	Investment holding
China IC Capital Co., Ltd	PRC	Ordinary	RMB1,392,000,000	Indirectly	100%	100%	Investment holding
Shanghai Hexin Investment Management Limited Partnership	PRC	Ordinary	RMB17,775,918	Indirectly	99%	99%	Investment holding
Semiconductor Technology Innovation Center (Beijing) Co., Ltd.	PRC	Ordinary	RMB100,000,000	Indirectly	66.67%	66.67%	Designing activities

Abbreviation for identification purposes.

(1) On January 30, 2018, SMIC Holdings Corporation ("SMIC Holdings"), SMIC Shanghai, China Integrated Circuit Industry Investment Fund Co., Ltd ("China IC Fund") and Shanghai Integrated Circuit Industry Investment Fund Co., Ltd ("Shanghai IC Fund") entered into the joint venture agreement and the capital contribution agreement pursuant to which SMIC Holdings, China IC Fund and Shanghai IC Fund agreed to make cash contribution to the registered capital of SMSC in the amount of US$1.5435 billion, US$946.5 million and US$800.0 million, respectively. As a result of the capital contribution: (i) the registered capital of SMSC will increase from US$210.0 million to US$3.5 billion; (ii) the Company's equity interest in SMSC, through SMIC Holdings and SMIC Shanghai, will decrease from 100% to 50.1%; and (iii) SMSC will be owned as to 27.04% and 22.86% by China IC Fund and Shanghai IC Fund, respectively. The capital contribution was completed in 2019.

(2) On August 10, 2017, the Company, SMIC Beijing, SMIC Holdings, China Integrated Circuit Industry Investment Fund Co., Ltd., Beijing Semiconductor Manufacturing and Equipment Equity Investment Centre (Limited Partnership), Beijing Industrial Development Investment Management Co., Ltd., Zhongguancun Development Group and Beijing E-Town International Investment & Development Co., Ltd. agreed to amend the previous joint venture agreement through the amended joint venture agreement, pursuant to which: (i) the Company, SMIC Beijing and SMIC Holdings have agreed to make further cash contribution of US$1,224.0 million into the registered capital of SMNC. The Company's aggregate shareholding in SMNC will remain at 51%; (ii) China IC Fund has agreed to make further cash contribution of US$900.0 million into the registered capital of SMNC. Its shareholding in SMNC will increase from 26.5% to 32%; and (iii) E-Town Capital has agreed to make cash contribution of US$276.0 million into the registered capital of SMNC representing 5.75% of the enlarged registered capital of SMNC. The capital contribution was completed in 2019.

(3) As at December 31, 2018, the investment in SMIC Hong Kong International Limited and its subsidiaries was classified as the held-for-sale assets and the liabilities directly associated with the held-for-sale assets as the effect to sell the subsidiary commenced. The sale was completed with Wuxi Xichanweixin Semiconductor Co., Ltd. on July 29, 2019 (Note 26).

19. SUBSIDIARIES *(continued)*

MATERIAL NON-CONTROLLING INTERESTS ("NCI")

The table below shows details of the non-wholly owned subsidiaries of the Company that have material non-controlling interests:

Name of company	Place of establishment and operation	Proportion of ownership interests and voting rights held by non-controlling interests			Profit (loss) allocated to non-controlling interests			Accumulated non-controlling interests		
		12/31/19	12/31/18	12/31/17	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000
SMNC	Beijing, PRC	**49.0%**	49.0%	49.0%	**(22,878)**	(39,213)	(39,113)	**2,150,340**	1,726,377	1,324,590
SMSC	Shanghai, PRC	**49.9%**	48.7%	—	**(46,786)**	(5,349)	—	**1,693,231**	1,042,551	—
SJ Semiconductor Corporation and its subsidiaries	Cayman Islands	**44.0%**	44.0%	44.0%	**783**	(2,493)	(4,896)	**123,952**	122,505	124,180
					(68,881)	(47,055)	(44,009)	**3,967,523**	2,891,433	1,448,770

According to the joint venture agreements entered into by the Group and the NCI of SMNC, additional capital injection into SMNC was completed in 2019, 2018 and 2017. The additional capital injection from NCI amounted to US$441.0 million in 2019, US$441.0 million in 2018 and US$294.0 million in 2017 respectively.

According to the joint venture agreements entered into by the Company and the NCI of SMSC, additional capital injection into SMSC was completed in 2019 and 2018. The additional capital injection from NCI amounted to US$698.6 million in 2019 and US$1,047.9 million in 2018.

19. SUBSIDIARIES *(continued)*

MATERIAL NON-CONTROLLING INTERESTS ("NCI") *(continued)*

Summarized financial information in respect of the Company's subsidiaries that have material non-controlling interests are set out below. The summarized financial information below represents amounts before intragroup eliminations.

SMNC

	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000
Current assets	**3,669,273**	2,582,534	1,559,016
Non-current assets	**2,230,247**	1,918,935	2,046,290
Current liabilities	**(1,064,404)**	(629,152)	(596,500)
Non-current liabilities	**(446,666)**	(358,793)	(315,718)
Net assets	**4,388,450**	3,513,524	2,693,088
Equity attributable to owners of the Company	**2,238,110**	1,787,147	1,368,498
Non-controlling interests	**2,150,340**	1,726,377	1,324,590
Net assets	**4,388,450**	3,513,524	2,693,088

	Year ended 12/31/19 USD'000	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000
Revenue	**623,485**	597,257	471,174
Expense	**(718,501)**	(709,627)	(574,386)
Other income	**48,327**	32,345	23,389
Loss for the year	**(46,689)**	(80,025)	(79,823)
Loss attributable to owners of the Company	**(23,811)**	(40,812)	(40,710)
Loss attributable to the non-controlling interests	**(22,878)**	(39,213)	(39,113)
Loss for the year	**(46,689)**	(80,025)	(79,823)
Total comprehensive loss attributable to owners of the Company	**(23,811)**	(40,812)	(40,710)
Total comprehensive loss attributable to the non-controlling interests	**(22,878)**	(39,213)	(39,113)
Total comprehensive loss for the year	**(46,689)**	(80,025)	(79,823)
Dividends paid to non-controlling interests	**—**	—	—
Net cash inflow from operating activities	**333,822**	101,384	188,115
Net cash outflow from investing activities	**(1,218,357)**	(936,942)	(820,606)
Net cash inflow from financing activities	**779,562**	890,109	590,091
Net cash (outflow) inflow	**(104,973)**	54,551	(42,400)

19. SUBSIDIARIES *(continued)*

SMSC

	12/31/19 USD'000	12/31/18 USD'000
Current assets	**2,117,356**	2,031,682
Non-current assets	**1,824,094**	166,037
Current liabilities	**(409,432)**	(58,254)
Non-current liabilities	**(138,770)**	—
Net assets	**3,393,248**	2,139,465
Equity attributable to owners of the Company	**1,700,017**	1,096,914
Non-controlling interests	**1,693,231**	1,042,551
Net assets	**3,393,248**	2,139,465

	Year ended 12/31/19 USD'000	Year ended 12/31/18 USD'000
Revenue	**9,031**	—
Expense	**(133,578)**	(19,625)
Other income	**30,787**	4,336
Loss for the year	**(93,760)**	(15,289)
Loss attributable to owners of the Company	**(46,974)**	(9,940)
Loss attributable to the non-controlling interests	**(46,786)**	(5,349)
Loss for the year	**(93,760)**	(15,289)
Total comprehensive loss attributable to owners of the Company	**(46,974)**	(9,940)
Total comprehensive loss attributable to the non-controlling interests	**(46,786)**	(5,349)
Total comprehensive loss for the year	**(93,760)**	(15,289)
Dividends paid to non-controlling interests	**—**	—
Net cash outflow from operating activities	**(48,106)**	(10,775)
Net cash outflow from investing activities	**(1,288,188)**	(1,937,066)
Net cash inflow from financing activities	**1,339,419**	1,951,830
Net cash inflow	**3,125**	3,989

19. SUBSIDIARIES *(continued)*

SJ SEMICONDUCTOR CORPORATION AND ITS SUBSIDIARIES

	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000
Current assets	**135,576**	141,016	205,957
Non-current assets	**245,931**	180,061	131,041
Current liabilities	**(92,783)**	(38,280)	(46,608)
Non-current liabilities	**(7,238)**	(4,257)	(7,002)
Net assets	**281,486**	278,540	283,388
Equity attributable to owners of the Company	**157,534**	156,035	159,208
Non-controlling interests	**123,952**	122,505	124,180
Net assets	**281,486**	278,540	283,388

	Year ended 12/31/19 USD'000	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000
Revenue	**115,127**	51,042	21,862
Expense	**(122,887)**	(68,011)	(39,504)
Other income	**9,538**	11,303	6,505
Profit (loss) for the year	**1,778**	(5,666)	(11,137)
Profit (loss) attributable to owners of the Company	**995**	(3,173)	(6,241)
Profit (loss) attributable to the non-controlling interests	**783**	(2,493)	(4,896)
Profit (loss) for the year	**1,778**	(5,666)	(11,137)
Total comprehensive income (loss) attributable to owners of the Company	**995**	(3,173)	(6,241)
Total comprehensive income (loss) attributable to the non-controlling interests	**783**	(2,493)	(4,896)
Total comprehensive income (loss) for the year	**1,778**	(5,666)	(11,137)
Dividends paid to non-controlling interests	**—**	—	—
Net cash inflow from operating activities	**28,858**	14,429	6,115
Net cash (outflow) inflow from investing activities	**(55,116)**	1,144	(65,993)
Net cash inflow (outflow) from financing activities	**30,121**	69	(1,983)
Net cash inflow (outflow)	**3,863**	15,642	(61,861)

20. INVESTMENTS IN ASSOCIATES

The details of the Company's associates, which are all unlisted companies except for JCET listed on the Shanghai Stock Exchange, at the end of the reporting period are as follows:

Name of entity	Place of establishment and operation	Class of share held	Proportion of ownership interest and voting power held by the Group		
			12/31/19	12/31/18	12/31/17
Toppan SMIC Electronic (Shanghai) Co., Ltd ("Toppan")	Shanghai, PRC	Ordinary	**30.0%**	30.0%	30.0%
Zhongxin Xiecheng Investment (Beijing) Co., Ltd ("Zhongxin Xiecheng")	Beijing, PRC	Ordinary	**49.0%**	49.0%	49.0%
Brite Semiconductor (Shanghai) Corporation ("Brite Shanghai")	Shanghai, PRC	Ordinary	**46.6%**	46.6%	46.6%
Jiangsu Changjiang Electronics Technology Co., Ltd. ("JCET")	Jiangsu, PRC	Ordinary	**14.3%**[(1)]	14.3%[(1)]	14.3%[(1)]
Sino IC Leasing Co., Ltd. ("Sino IC Leasing")[(4)]	Shanghai, PRC	Ordinary	**7.4%**[(1)]	7.4%[(1)]	8.1%[(1)]
China Fortune-Tech Capital Co., Ltd ("China Fortune-Tech")	Shanghai, PRC	Ordinary	**19.5%**[(1)]	19.5%[(1)]	30.0%
Beijing Wu Jin Venture Investment Center (Limited Partnership) ("WuJin")[(2)]	Beijing, PRC	Limited partner interest	**32.6%**	32.6%	32.6%
Shanghai Fortune-Tech Qitai Invest Center (Limited Partnership) ("Fortune-Tech Qitai")[(2)]	Shanghai, PRC	Limited partner interest	**33.0%**	33.0%	33.0%
Shanghai Fortune-Tech Zaixing Invest Center (Limited Partnership) ("Fortune-Tech Zaixing")[(2)]	Shanghai, PRC	Limited partner interest	**66.2%**[(1)]	66.2%[(1)]	66.2%[(1)]
Suzhou Fortune-Tech Oriental Invest Fund Center (Limited Partnership) ("Fortune-Tech Oriental")[(2)]	Jiangsu, PRC	Limited partner interest	**44.8%**	44.8%	44.8%
Juyuan Juxin Integrated Circuit Fund ("Juyuan Juxin")[(2)]	Shanghai, PRC	Limited partner interest	**31.6%**	31.6%	31.6%
Ningbo Semiconductor International Corporation ("NSI")[(3)]	Ningbo, PRC	Ordinary	**38.6%**	38.6%	NA
Semiconductor Manufacturing Electronics (Shaoxing) Corporation ("SMEC")	Shaoxing, PRC	Ordinary	**23.5%**	23.5%	NA
Semiconductor Global Solutions ("SGS")	Ningbo, PRC	Ordinary	**27.3%**	35.0%	NA
Shanghai IC Manufacturing Innovation Center Co., Ltd ("Shanghai Innovation Center")	Shanghai, PRC	Ordinary	**33.3%**	50.0%[(1)]	NA

(1) In accordance with investment agreements, the Group has significant influence, but not control, over JCET, Sino IC Leasing, China Fortune-Tech, Fortune-Tech Zaixing and Shanghai Innovation Center through the right the Group owned to appoint director(s) to the Board of directors of these companies or to cast voters at the partners meeting of the partnership entity.

(2) The Group invested in these associates indirectly though China IC Capital Co., Ltd (the "Fund"), a wholly-owned investment fund company of SMIC, as set out in Note 19. The Fund is intended to invest primarily in integrated circuits related fund products and investment projects.

(3) On April 13, 2018, the Group lost control of NSI due to a capital increase agreement, but still has significant influence over it. The Group recorded its ownership interest of NSI as investment in associate. The remeasurement gain at the date of deconsolidation of NSI was US$3.5 million. The deconsolidation has no material impact on the consolidated financial statements.

(4) Subject to the amended joint venture agreement, revised on July 20, 2017, the Company agreed to increase its capital contribution obligation towards Sino IC Leasing from RMB600.0 million to RMB800.0 million (from approximately US$88.3 million to US$117.8 million), while its shareholding in Sino IC Leasing decreased to approximately 7.44%.

All of these associates are accounted for using the equity method in these consolidated financial statements.

20. INVESTMENTS IN ASSOCIATES *(continued)*

JCET AND ITS SUBSIDIARIES

The Group applies the equity method to account for its investment in JCET on one quarter lag by basis since the annual financial statements of JCET were not available as of December 31, 2019.

	09/30/19 USD'000	09/30/18 USD'000	09/30/17 USD'000
Current assets	**1,409,646**	1,803,128	1,401,575
Non-current assets	**3,401,347**	3,456,513	3,305,615
Current liabilities	**(2,472,655)**	(2,214,747)	(1,639,114)
Non-current liabilities	**(597,465)**	(1,081,027)	(1,661,532)
Net assets	**1,740,873**	1,963,867	1,406,544
Less: non-controlling interests	**(588)**	(20,973)	(21,172)
Equity attributable to owners of the associate	**1,740,285**	1,942,894	1,385,372
Proportion of the Group's interest	**14.3%**	14.3%	14.3%
	248,513	277,446	197,832
Valuation premium	**338,967**	338,967	340,561
Carrying amount of the Group's interest	**587,480**	616,413	538,393

	Twelve months ended 09/30/19 USD'000	Twelve months ended 09/30/18 USD'000	Three months ended 09/30/17 USD'000
Total revenue	**3,105,723**	3,645,925	985,087
(Loss) profit attributable to owners	**(160,986)**	28,439	11,480
Total comprehensive (loss) income attributable to owners	**(149,416)**	76,299	(8,496)
Dividends received from the associate	**—**	761	—

As of December 31, 2019 the closing market value of JCET listed on the Shanghai Stock Exchange was approximately US$5,045.8 million.

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20. INVESTMENTS IN ASSOCIATES *(continued)*

SINO IC LEASING AND ITS SUBSIDIARIES

The Group applies the equity method to account for its investment in Sino IC Leasing on one quarter lag by basis since the annual financial statements of Sino IC Leasing were not available as of December 31, 2019.

	09/30/19 USD'000	09/30/18 USD'000	12/31/17 USD'000
Current assets	**2,639,624**	2,423,414	1,038,538
Non-current assets	**3,985,404**	4,056,971	3,464,412
Current liabilities	**(1,720,069)**	(1,441,959)	(523,228)
Non-current liabilities	**(3,074,994)**	(3,241,264)	(2,509,732)
Net assets	**1,829,965**	1,797,162	1,469,990
Less: non-controlling interests	**(112,814)**	(114,368)	(103,623)
Equity attributable to owners of the associate	**1,717,151**	1,682,794	1,366,367
Proportion of the Group's interest	**7.4%**	7.4%	8.1%
	127,711	125,156	110,162
Dividends received in advance	**—**	(316)	—
Less: unrealized profit	**(540)**	(580)	—
Carrying amount of the Group's interest	**127,171**	124,260	110,162

	Twelve months ended 09/30/19 USD'000	Twelve months ended 09/30/18 USD'000	Twelve months ended 12/31/17 USD'000
Total revenue	**368,888**	280,219	215,538
Profit attributable to owners	**81,530**	59,282	39,003
Total comprehensive income attributable to owners	**93,160**	73,346	28,797
Dividends received from the associate	**1,077**	—	255

20. INVESTMENTS IN ASSOCIATES *(continued)*

SMEC

	12/31/19 USD'000	12/31/18 USD'000
Current assets	498,003	611,874
Non-current assets	702,327	287,048
Current liabilities	(446,580)	(74,316)
Net assets	753,750	824,606
Proportion of the Group's interest	23.5%	23.5%
	176,900	193,530
Less: unrealized profit	(46,155)	(52,722)
Carrying amount of the Group's interest	130,745	140,808

	Year ended 12/31/19 USD'000	Ten months ended 12/31/18 USD'000
Total revenue	46,273	14,070
Loss for the year	(70,173)	(23,747)
Total comprehensive loss for the year	(70,173)	(23,747)
Dividends received from the associate	—	—

NSI

	12/31/19 USD'000	12/31/18 USD'000
Current assets	102,025	135,606
Non-current assets	185,073	145,039
Current liabilities	(25,628)	(18,089)
Non-current liabilities	(38,206)	—
Net assets	223,264	262,556
Proportion of the Group's interest	38.6%	38.6%
	86,114	101,268
Valuation premium	2,646	2,646
Less: unrealized profit	(730)	(816)
Carrying amount of the Group's interest	88,030	103,098

	Year ended 12/31/19 USD'000	Nine months ended 12/31/18 USD'000
Total revenue	21,272	4,186
(Loss) profit for the year	(35,122)	3,131
Total comprehensive (loss) income for the year	(35,122)	3,131
Dividends received from the associate	—	—

21. INVESTMENTS IN JOINT VENTURES

The details of the Group's joint venture, which is unlisted entities invested indirectly through China IC Capital (Ningbo) Co., Ltd, at the end of the reporting period are as follow:

Name of entity	Place of establishment and operation	Class of share held	Proportion of ownership interest and voting power held by the Group		
			12/31/19	12/31/18	12/31/17
Shanghai Xinxin Investment Centre (Limited Partnership) ("Shanghai Xinxin")	Shanghai, PRC	Limited partner interest	**49.0%**	49.0%	49.0%

Summarized financial information in respect of the Group's joint venture is set out below.

SHANGHAI XINXIN

	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000
Current assets	**3,428**	3,956	1,453
Non-current assets	**46,838**	16,462	53,782
Current liabilities	**—**	(268)	(6)
Net assets	**50,266**	20,150	55,229
Proportion of the Group's interest	**49.0%**	49.0%	49.0%
	24,630	9,874	27,062
Distribution to general partner	**2,487**	3,179	—
Carrying amount of the Group's interest	**27,117**	13,053	27,062

	Year ended 12/31/19 USD'000	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000
Total revenue	**—**	—	—
(Loss) profit for the year	**(200)**	4,827	(390)
Total comprehensive (loss) income for the year	**(200)**	4,827	30,051
Dividends received from the joint venture	**—**	—	2,027

22. FINANCIAL ASSETS AND FINANCIAL LIABILITIES

The Group holds the following financial instruments:

Financial assets	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000
Non-current			
Financial assets at fair value through profit or loss			
Listed equity securities	**749**	1,508	—
Unlisted equity securities	**89,318**	53,964	—
Derivative financial instruments			
Cross currency swap contracts			
— cash flow hedges	**—**	5,266	—
Interest rate swap contracts			
— cash flow hedges	**1,872**	—	—
Other financial assets			
Cross currency swap contracts			
— cash flow hedges	**—**	—	17,598
Other assets			
Available-for-sale financial assets	**—**	—	24,844
Current			
Financial assets at fair value through profit or loss			
Financial products sold by banks	**—**	2,345	—
Monetary funds	**42,985**	39,340	—
Financial assets at amortized cost			
Bank deposits to be matured over 3 months[1]	**2,275,797**	1,952,106	—
Debentures	**573**	44,702	—
Trade and other receivables (Note 25)	**836,143**	837,828	616,308
Derivative financial instruments			
Cross currency swap contracts			
— cash flow hedges	**—**	1,425	—
Cross currency swap contracts	**—**	1,158	—
Other financial assets			
Cross currency swap contracts			
— cash flow hedges	**—**	—	4,739
Foreign currency forward contracts	**—**	—	2,111
Financial products sold by banks	**—**	—	117,928
Bank deposits to be matured over 3 months	**—**	—	559,034
	3,247,437	2,939,642	1,342,562

(1) The credit risk on bank deposits to be matured over 3 months is limited because the counterparties are banks with high credit-ratings.

The Group's exposure to various risks associated with the financial instruments is discussed in Note 38. The maximum exposure to credit risk at the end of the year is the carrying amount of each class of financial assets mentioned above.

22. FINANCIAL ASSETS AND FINANCIAL LIABILITIES *(continued)*

Financial liabilities	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000
Non-current			
Liabilities at amortized cost			
Borrowings (Note 31)	**2,003,836**	1,760,763	1,743,939
Lease liabilities (Note 17)	**167,081**	—	—
Bonds payable	**—**	—	496,689
Convertible bonds (Note 32)	**—**	418,592	403,329
Medium-term notes (Note 33)	**214,193**	—	228,483
Derivative financial instruments			
Cross currency swap contracts			
— cash flow hedges	**58,243**	15,540	—
Other financial liabilities			
Contingent consideration[(1)]	**—**	11,948	—
Cross currency swap contracts			
— cash flow hedges	**—**	—	1,919
Other liabilities			
Contingent consideration[(1)]	**—**	—	12,549
Long-term payables[(2)]	**21,780**	39,128	57,593
Current			
Liabilities at amortized cost			
Trade and other payables (Note 35)	**1,034,079**	964,860	1,007,424
Borrowings (Note 31)	**562,833**	530,005	440,608
Lease liabilities (Note 17)	**80,651**	—	—
Bonds payable	**—**	498,551	—
Convertible bonds (Note 32)	**630,428**	—	—
Medium-term notes (Note 33)	**—**	218,247	—
Short-term notes (Note 33)	**286,512**	—	—
Derivative financial instruments			
Cross currency swap contracts			
— cash flow hedges	**4,782**	15,806	—
Other financial liabilities			
Contingent consideration[(1)]	**11,747**	—	—
Cross currency swap contracts			
— cash flow hedges	**—**	—	742
Foreign currency forward contracts	**—**	—	2
Other liabilities			
Long-term payables[(2)]	**17,901**	32,263	40,627
	5,094,066	4,505,703	4,433,904

(1) The Group had contingent consideration in respect of a potential cash compensation accrued in 2017 that may be incurred depending on the profit of Suzhou Changjiang Electric Xinke Investment Co., Ltd. during the three years of 2017, 2018 and 2019. Contingent consideration was reclassified from other liabilities to other financial liabilities as of January 1, 2018, compliment with IFRS 9.

(2) Long-term payables for the purchased tangible assets were classified into the non-current and current liabilities as of December 31, 2019.

22. FINANCIAL ASSETS AND FINANCIAL LIABILITIES *(continued)*

FAIR VALUE OF FINANCIAL INSTRUMENTS CARRIED AT AMORTIZED COST

The Group considers that the carrying amounts of financial assets and financial liabilities recognized in the consolidated financial statements approximate their fair values.

VALUATION TECHNIQUES AND ASSUMPTIONS APPLIED FOR THE PURPOSES OF MEASURING FAIR VALUE

The fair value of financial instruments based on quoted market prices in active markets, valuation techniques that use observable market-based inputs or unobservable inputs that are corroborated by market data. Pricing information that the Group obtains from third parties is internally validated for reasonableness prior to use in the consolidated financial statements. When observable market prices are not readily available, the Group generally estimates the fair value using valuation techniques that rely on alternate market data or inputs that are generally less readily observable from objective sources and are estimated based on pertinent information available at the time of the applicable reporting periods. In certain cases, fair values are not subject to precise quantification or verification and may fluctuate as economic and market factors vary and the Group's evaluation of those factors changes.

FAIR VALUE MEASUREMENTS RECOGNIZED IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

The following tables provide an analysis of financial instruments that are measured at fair value on a recurring basis subsequent to initial recognition, grouped into Levels 1 to 3 based on the degree to which the fair value is observable. There is no transfer within different levels of the fair value hierarchy in the year ended December 31, 2019, 2018 and 2017:

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active market for identical assets or liabilities;

- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and

- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

22. FINANCIAL ASSETS AND FINANCIAL LIABILITIES *(continued)*

FAIR VALUE MEASUREMENTS RECOGNIZED IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION *(continued)*

December 31, 2019	Valuation techniques	Level 1 USD'000	Level 2 USD'000	Level 3 USD'000	Total USD'000
Financial assets					
Financial assets at fair value through profit or loss					
Listed equity securities	Using quoted market prices	**749**	**—**	**—**	**749**
Unlisted equity securities	Using recent transaction price or market approach	**—**	**—**	**89,318**	**89,318**
Monetary funds	Using observable prices	**—**	**42,985**	**—**	**42,985**
Derivative financial instruments					
Interest rate swap contracts — cash flow hedges	Using the present value of the estimated future cash flows based on observable yield curves	**—**	**1,872**	**—**	**1,872**
		749	**44,857**	**89,318**	**134,924**
Financial liabilities					
Derivative financial instruments					
Cross currency swap contracts — cash flow hedges	Using the present value of the estimated future cash flows based on observable yield curves	**—**	**63,025**	**—**	**63,025**
Other financial liabilities					
Contingent consideration	Using discounted cash flow analysis	**—**	**—**	**11,747**	**11,747**
		—	**63,025**	**11,747**	**74,772**

December 31, 2018	Valuation techniques	Level 1 USD'000	Level 2 USD'000	Level 3 USD'000	Total USD'000
Financial assets					
Financial assets at fair value through profit or loss					
Listed equity securities	Using quoted market prices	1,508	—	—	1,508
Unlisted equity securities	Using recent transaction price or market approach	—	—	53,964	53,964
Financial products sold by banks	Using indicated return rate provided by financial institution	—	—	2,345	2,345
Monetary funds	Using observable prices	—	39,340	—	39,340
Derivative financial instruments					
Cross currency swap contracts — cash flow hedges	Using the present value of the estimated future cash flows based on observable yield curves	—	6,691	—	6,691
Cross currency swap contracts	Using forward exchange rates at the balance sheet date	—	1,158	—	1,158
		1,508	47,189	56,309	105,006
Financial liabilities					
Derivative financial instruments					
Cross currency swap contracts — cash flow hedges	Using the present value of the estimated future cash flows based on observable yield curves	—	31,346	—	31,346
Other financial liabilities					
Contingent consideration	Using discounted cash flow analysis	—	—	11,948	11,948
		—	31,346	11,948	43,294

22. FINANCIAL ASSETS AND FINANCIAL LIABILITIES *(continued)*

FAIR VALUE MEASUREMENTS RECOGNIZED IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION *(continued)*

December 31, 2017	Valuation techniques	Level 1 USD'000	Level 2 USD'000	Level 3 USD'000	Total USD'000
Financial assets measured at fair value					
Short-term investment carried at fair value through profit or loss	Using indicated return rate provided by financial institution	—	—	117,928	117,928
Available-for-sale investment	Using quoted market prices	2,531	—	—	2,531
Available-for-sale investment	Using discounted cash flow analysis	—	—	20,134	20,134
Cross currency swap contracts classified as other financial assets — cash flow hedges	Using the present value of the estimated future cash flows based on observable yield curves	—	22,337	—	22,337
Foreign currency forward contracts classified as other financial assets	Using forward exchange rates at the balance sheet date	—	2,111	—	2,111
		2,531	24,448	138,062	165,041
Financial liabilities measured at fair value					
Cross currency swap contracts classified as other financial liabilities — cash flow hedges	Using the present value of the estimated future cash flows based on observable yield curves	—	2,661	—	2,661
Foreign currency forward contracts classified as other financial liabilities	Using forward exchange rates at the balance sheet date	—	2	—	2
Contingent consideration	Using discounted cash flow analysis	—	—	12,549	12,549
		—	2,663	12,549	15,212

22. FINANCIAL ASSETS AND FINANCIAL LIABILITIES *(continued)*

FAIR VALUE MEASUREMENTS USING SIGNIFICANT UNOBSERVABLE INPUTS (LEVEL 3)

The following table presents the changes in level 3 instruments for the twelve months ended December 31, 2019:

	Unlisted equity securities USD'000	Financial products sold by banks USD'000	Contingent consideration USD'000	Total USD'000
Opening balance as at December 31, 2018	53,964	2,345	(11,948)	44,361
Addition	7,091	11,106	—	18,197
Disposals	—	(13,409)	—	(13,409)
Gains (losses) recognized in other gains, net	28,263	(42)	201	28,422
Closing balance as at December 31, 2019	89,318	—	(11,747)	77,571

VALUATION PROCESSES

The finance department performs the valuations of financial assets required for financial reporting purposes and reports directly to the chief financial officer. Discussions of valuation processes, results and change analyses are held by the chief financial officer and the financial team annually, in line with the Group's yearly reporting periods. The valuation is reviewed by the audit committee.

23. RESTRICTED CASH

As of December 31, 2019, the current restricted cash consisted of US$316.4 million (December 31, 2018: US$185.8 million and December 31, 2017: US$14.9 million) of bank time deposits pledged against letters of credit and borrowings, and US$488.1 million (December 31, 2018: US$406.5 million and December 31, 2017: US$235.3 million) of government funding received for the payment of the research and development equipment and expenses to be incurred.

24. INVENTORIES

	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000
Raw materials	**177,602**	143,990	149,574
Work in progress	**350,062**	331,782	321,695
Finished goods	**101,221**	117,237	151,410
	628,885	593,009	622,679

The cost of inventories recognized as an expense during the year in respect of inventory provision was US$35.3 million (2018: US$6.4 million and 2017: US$46.9 million).

25. TRADE AND OTHER RECEIVABLES

	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000
Trade receivables	**488,225**	412,053	407,975
Allowance on doubtful trade receivables (Note 38)	**(3,164)**	(2,155)	(1,335)
	485,061	409,898	406,640
Value-added tax to be deducted	**220,262**	170,804	124,765
Other receivables	**117,704**	193,339	78,645
Refundable deposits[1]	**13,116**	63,787	6,258
	836,143	837,828	616,308

(1) As of December 31, 2018, the balance included a deposit of investing in land use right, amounted US$45.5 million.

The following is an aged analysis of trade receivables presented based on the invoice date at the end of the reporting period.

Age of receivables	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000
Within 30 days	**240,464**	219,813	148,131
31–60 days	**163,407**	141,852	187,623
Over 60 days	**84,354**	50,388	72,221
Total trade receivables	**488,225**	412,053	407,975

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. They are generally due for settlement within 30 days and therefore are all classified as current. Trade receivables are recognized initially at the amount of consideration that is unconditional unless they contain significant financing components, when they are recognized at fair value. The Group holds the trade receivables with the objective to collect the contractual cash flows and therefore measures them subsequently at amortized cost using the effective interest method. Details about the Group's impairment policies and the calculation of the loss allowance are provided in Note 38.

Due to the short-term nature of the current receivables, the carrying amounts of trade and other receivables are considered to be the same as their fair value.

26. ASSETS AND LIABILITIES CLASSIFIED AS HELD-FOR-SALE

	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000
Assets classified as held-for-sale			
Assets of disposal group as held-for-sale	**—**	255,330	—
Machinery and equipment	**7,090**	5,846	—
Assets related to employee's living quarters	**4,725**	9,631	37,471
	11,815	270,807	37,471
Liabilities directly associated with assets classified as held-for-sale			
Liabilities of disposal group as held-for-sale	**—**	143,447	—

26. ASSETS AND LIABILITIES CLASSIFIED AS HELD-FOR-SALE *(continued)*

Non-current assets are classified as held-for-sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the non-current asset is available for immediate sale in its present condition. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

As of December 31, 2018, the investment in SMIC Hong Kong International Limited and its subsidiaries was classified as the held-for-sale assets amounted to US$255.3 million and the liabilities directly associated with the held-for-sale assets amounted to US$143.4 million. The sale was completed with Wuxi Xichanweixin Semiconductor Co., Ltd. on July 29, 2019.

The consideration amounted to US$162.8 million was considered to be fair and reasonable and in the interest of the Company and its shareholders taken as a whole. Based on the consideration deducted by the carrying value of the net asset, The Group recorded a gain of US$81.4 million from the transaction.

27. SHARES AND ISSUED CAPITAL

FULLY PAID ORDINARY SHARES

	Number of shares	Share capital	Share premium
		USD'000	USD'000
Balance at December 31, 2016	4,252,922,259	17,012	4,950,948
Issuance of shares under the Company's employee share option plan	32,723,622	130	35,178
Conversion of convertible bonds during the year	389,042,383	1,556	427,168
Share premium reduction	—	—	(910,849)
Ordinary shares issued at December 6, 2017	241,418,625	966	325,174
Balance at December 31, 2017	4,916,106,889	19,664	4,827,619
Issuance of shares under the Company's employee share option plan	24,071,936	97	25,121
Ordinary shares issued at June 29, 2018	61,526,473	246	83,256
Ordinary shares issued at August 29, 2018	57,054,901	228	77,148
Shares bought back on-market and cancelled	(18,941,000)	(76)	(19,981)
Balance at December 31, 2018	5,039,819,199	20,159	4,993,163
Issuance of shares under the Company's employee share option plan (Note 37)	17,049,713	68	18,752
Balance at December 31, 2019	5,056,868,912	20,227	5,011,915

On April 23, 2018, the Company entered into the China IC Fund Pre-emptive Share Subscription Agreement with China IC Fund and Xinxin (Hongkong) Capital Co., Ltd ("Xinxin HK", wholly-owned by China IC Fund), pursuant to which, on and subject to the terms of the China IC Fund Pre-emptive Share Subscription Agreement, the Company conditionally agreed to issue, and China IC Fund, through Xinxin HK, conditionally agreed to subscribe for, the 57,054,901 Ordinary Shares at the price of HK$10.65 per Ordinary Share. On August 29, 2018, the Company completed the issue of the China IC Fund pre-emptive shares in the principal amount of HK$607.6 million (approximately US$77.4 million).

On April 23, 2018, the Company entered into the Datang Pre-emptive Share Subscription Agreement with Datang Telecom Technology & Industry Holdings Co., Ltd. ("Datang") and Datang Holdings (Hongkong) Investment Company Limited ("Datang HK"), pursuant to which, on and subject to the terms of the Datang Pre-emptive Share Subscription Agreement, the Company conditionally agreed to issue, and Datang, through Datang HK, conditionally agreed to subscribe for, the 61,526,473 Ordinary Shares at the price of HK$10.65 per Ordinary Share. On June 29, 2018, the Company completed the issue of the Datang pre-emptive shares in the principal amount of HK$655.3 million (approximately US$83.5 million).

27. SHARES AND ISSUED CAPITAL *(continued)*

FULLY PAID ORDINARY SHARES *(continued)*

On September 27, 2018, the company repurchased 7,291,000 ordinary shares on Hong Kong Stock Exchange. The buy-back was approved by shareholders at the annual general meeting on June 22, 2018. The ordinary shares were acquired at an average price of HK$8.32 per share, with prices ranging from HK$8.27 to HK$8.36. The total cost of HK$60.8 million (approximately US$7.8 million) was deducted from the shareholder equity.

On October 4, 2018, the company repurchased 11,650,000 ordinary shares on Hong Kong Stock Exchange. The buy-back was approved by shareholders at the annual general meeting on June 22, 2018. The ordinary shares were acquired at an average price of HK$8.23 per share, with prices ranging from HK$8.11 to HK$8.32. The total cost of HK$96.1 million (approximately US$12.3 million) was deducted from the shareholder equity. On October 25, 2018, the company cancelled 18,941,000 ordinary shares amounted at US$20.0 million, in respect of the repurchase on September 27, 2018 and October 4, 2018.

On December 6, 2017, pursuant to the terms and conditions of the placing agreement entered by the Company and joint placing agents, the Company allotted and issued 241,418,625 placing shares, representing approximately 4.92% of the issued share capital of the Company as enlarged by the issue of the placing shares, to not less than six independent placees at the price of HK$10.65 per placing share. The net proceeds are recorded as share capital of approximately US$1.0 million and share premium of approximately US$325.2 million in the statements of financial position after the deduction of issue expenses of US$2.9 million. Net proceeds of issue are measured after deducting directly attributable transaction costs of the share issue.

On June 23, 2017, the Board has been approved by the shareholders at the Annual General Meeting to reduce the amount standing to the credit of the share premium account of the Company by an amount of US$910.8 million and to apply such amount to eliminate the accumulated losses of the Company as of December 31, 2016.

On June 23, 2017, the Board has been approved by the shareholders at the Annual General Meeting to increase the authorized share capital of the Company to US$42,000,000 divided into 10,000,000,000 ordinary shares and 500,000,000 preferred shares by the creation of an additional 5,000,000,000 ordinary shares in the share capital of the Company, which will rank pari passu with all existing ordinary shares.

STOCK INCENTIVE PLANS

The Company has adopted the stock incentive plans under which options to subscribe for the Company's shares have been granted to certain employees, officers and other service providers (Note 37).

28. RESERVES

EQUITY-SETTLED EMPLOYEE BENEFITS RESERVE

The equity-settled employee benefits reserve related to share options and RSUs granted by the Company to the Group's employees and service providers under stock incentive plans. Items included in equity-settled employee benefits reserve will not be reclassified subsequently to profit or loss.

FOREIGN CURRENCY TRANSLATION RESERVE

Exchange differences relating to the translation of the results and net assets of the Group's foreign operations from their functional currencies to the Group's presentation currency (i.e. United States dollars) are recognized directly in other comprehensive income and accumulated in the foreign currency translation reserve. Exchange differences previously accumulated in the foreign currency translation reserve (in respect of translating both the net assets of foreign operations and hedges of foreign operations) are reclassified to profit or loss on the disposal/deconsolidation of the foreign operation.

28. RESERVES *(continued)*

CONVERTIBLE BONDS EQUITY RESERVE

The conversion option from the issuance of convertible bonds classified as equity is determined by deducting the amount of the liability component from the fair value of the compound instrument (i.e. convertible bond) as a whole. This is recognized and included in equity, net of income tax effects, and is not subsequently remeasured. In addition, the conversion option classified as equity will remain in equity until the conversion option is exercised, in which case, the balance recognized in equity will be transferred to ordinary shares and share premium. Where the conversion option remains unexercised at the maturity date of the convertible bond, the balance recognized in equity will be transferred to retained earnings. No gain or loss is recognized in profit or loss upon conversion or expiration of the conversion option.

CASH FLOW HEDGES

The hedging reserve is used to record gains or losses on derivatives that are designated and qualify as cash flow hedges and that are recognized in other comprehensive income, as described in Note 38. Amounts will be reclassified to profit or loss when the associated hedged transaction affects profit or loss.

29. RETAINED EARNINGS

As stipulated by the relevant laws and regulations applicable to China's foreign investment enterprise, the Company's PRC subsidiaries are required or allowed to make appropriations to non-distributable reserves. The general reserve fund requires annual appropriation of 10% of after tax profit (as determined under accounting principles generally accepted in the PRC at each year-end), after offsetting accumulated losses from prior years, until the accumulative amount of such reserve fund reaches 50% of registered capital of the relevant subsidiaries. The general reserve fund can only be used to increase the registered capital and eliminate future losses of the relevant subsidiaries under PRC regulations. The staff welfare and bonus reserve is determined by the board of directors of the respective PRC subsidiaries and used for the collective welfare of the employee of the subsidiaries. The enterprise expansion reserve is for the expansion of the subsidiaries' operations and can be converted to capital subject to approval by the relevant authorities. These reserves represent appropriations of the retained earnings determined in accordance with Chinese law.

In 2019, 2018 and 2017 the Company did not declare or pay any cash dividends on the ordinary shares.

In 2019 and 2018, the Company paid the distribution to perpetual subordinated convertible securities holders amounted to US$11.3 million and US$6.3 million respectively.

The sale of SMIC Hong Kong International Limited and its subsidiaries completed with Wuxi Xichanweixin Semiconductor Co., Ltd. on July 29, 2019 decreased the retained earnings for the Company by US$4.2 million and the non-controlling interests by US$9.7 million.

On December 29, 2017, SMIC Shanghai and SJ Jiangyin had entered into an asset transfer agreement in relation to the disposal and sale of unvalued assets. The purpose of the disposal was to transfer the business operation of the Shanghai Testing Centre from SMIC Shanghai to SJ Jiangyin and merge the business operation of Shanghai Testing Centre to SJ Jiangyin. The transfer of business operation raised a gain in retained earnings of US$7.3 million for the Company and a corresponding loss for non-controlling interests.

On June 23, 2017, the accumulated losses of the Company as of December 31, 2016 were eliminated by an amount of US$910.8 million. Please refer to Note 27 for more details.

30. PERPETUAL SUBORDINATED CONVERTIBLE SECURITIES

On April 23, 2018, the Company entered into the perpetual subordinated convertible securities ("PSCS") subscription agreement with China IC Fund and Xinxin HK, pursuant to which, on and subject to the terms of the PSCS subscription agreement, the Company conditionally agreed to issue, and China IC Fund, through Xinxin HK, conditionally agreed to subscribe for PSCS in an aggregate principal amount of US$300.0 million. On August 29, 2018, the Company completed the issue of the PSCS in the principal amount of US$300.0 million.

On April 23, 2018, the Company entered into the PSCS subscription agreement with Datang and Datang HK, pursuant to which, on and subject to the terms of the PSCS subscription agreement, the Company conditionally agreed to issue, and Datang, through Datang HK, conditionally agreed to subscribe for PSCS in an aggregate principal amount of US$200.0 million. On June 29, 2018, the Company completed the issue of the PSCS in the principal amount of US$200.0 million.

On December 14, 2017, the Company issued the PSCS at a par value of US$250,000 each in the principal amount of US$65.0 million.

The PSCS are included in equity in the Group's consolidated financial statements as the Group does not have a contractual obligation to deliver cash or other financial assets arising from the issue of the PSCS. The PSCS will remain as equity reserve until the PSCS are converted, in which case, the balance recognized in equity will be transferred to ordinary shares and share premium.

As at the issue date and the year ended December 31, 2019, the net book value of PSCS amounted to US$563.8 million after the deduction of issue expenses of US$1.2 million.

As at December 31, 2019, assuming full conversion of the PSCS, the PSCS will be convertible into 344,985,992 ordinary shares.

Up to the date of the authorization of the Group's consolidated financial statements for the year ended December 31, 2019, no PSCS have been converted into ordinary shares of the Company and the Company paid the distribution amounted to US$11.3 million.

KEY TERMS OF THE PSCS

The PSCS will be paid semi-annually in arrears at 2.00% per annum with distribution payment date on June 14, and December 14, in each year, commencing on June 14, 2018.

The Company may elect to defer distribution unless payments is not made in full on a distribution payment date or a compulsory distribution payment event has occurred. The Company will procure that no dividend or other payment is made on any junior securities or parity securities; or redeem, reduce, cancel, buy-back or acquire for any consideration any junior securities or parity securities unless and until the Company satisfies in full all outstanding arrears of distribution and any additional distribution amounts; or it is permitted to do so by an extraordinary resolution of the securityholders.

The PSCS has no fixed redemption date. The Company may redeem the PSCS in whole, but not in part, at their principal amount, together with distribution accrued on or at any time after December 14, 2020 in certain specified circumstances specified in the agreements.

In the event of the winding-up of the Company, the rights and claims of the securityholders shall rank ahead of those persons whose claims are in respect of any junior securities of the Company, but shall be subordinated in right of payment to the claims of all other present and future senior and subordinated creditors of the Company, other than the claims of holders of parity securities.

Securityholders may convert their PSCS into ordinary shares at any time on or after 40 days from the Issue date at the conversion price in effect on the relevant conversion date. The initial conversion ratio was 152,648.6697 shares per US$250,000 principal amount at the initial conversion price, HK$12.78 per Share with a fixed exchange rate of 7.8034 HK$/US$. The Conversion Price will be adjusted in certain circumstances, including subdivisions, consolidation or redenomination, rights issue, bonus issue, reorganization, capital distributions and certain other dilutive event.

Upon the occurrence of any delisting or suspension arising from or as a result of an application to HKSE having been initiated or made by the Group, the securityholders will have the right to require the Company to redeem all or some only of PSCS at their principal amount, together with any distribution accrued. In the opinion of the management of the Company, the occurrence of such events is highly remote.

31. BORROWINGS

At amortized cost	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000
Short-term commercial bank loans(1)	100,000	192,198	308,311
Short-term borrowings	100,000	192,198	308,311
2013 USD loan (SMIC Shanghai)	—	—	10,760
2015 CDB RMB loan I (SMIC Shanghai)(2)	143,256	145,705	153,041
2015 CDB RMB loan II (SMIC Shanghai)(3)	55,154	64,839	72,694
2015 CDB RMB loan (SMIC Beijing)(4)	23,637	26,227	29,231
2016 CDB RMB loan (SMIC Beijing)(5)	185,517	202,529	223,440
2017 CDB RMB loan (SMIC Shenzhen)(6)	308,821	322,153	185,792
2015 EXIM RMB loan (SMIC Shanghai)(7)	71,628	72,852	76,520
2017 EXIM RMB loan (SMIC Shanghai)	—	145,705	153,041
2018 EXIM RMB loan I (SMIC Shanghai)(8)	136,093	138,419	—
2019 EXIM RMB loan I (SMIC Shanghai)(9)	143,256	—	—
2019 EXIM RMB loan II (SMIC Shanghai)(10)	93,117	—	—
2019 EXIM RMB loan III (SMIC Shanghai)(11)	200,000	—	—
2016 EXIM RMB loan I (SMIC Beijing)	—	—	36,730
2016 EXIM RMB loan II (SMIC Beijing)	—	58,282	61,216
2017 EXIM RMB loan (SMIC Beijing)(12)	61,600	69,938	76,520
2018 EXIM RMB Loan I (SMIC Beijing)(13)	28,651	29,141	—
2018 EXIM RMB Loan II (SMIC Beijing)(14)	34,381	34,969	—
2019 EXIM RMB Loan I (SMIC Beijing)(15)	8,595	—	—
2019 EXIM RMB Loan II (SMIC Beijing)(16)	48,707	—	—
2019 EXIM RMB Loan III (SMIC Beijing)(17)	35,098	—	—
2016 EXIM RMB loan (SMIC)	—	72,852	76,520
2019 EXIM RMB loan (SMIC)(18)	199,067	—	—
2017 EXIM RMB loan (SMIC Tianjin)(19)	71,628	72,852	76,520
2017 EXIM USD loan (SMIC Tianjin)	—	—	25,000
2018 EXIM RMB loan (SMIC Tianjin)(20)	83,805	78,680	—
2017 EXIM RMB loan (SMIC Shenzhen)(21)	63,033	68,481	76,520
Loan to LFoundry S.r.l.	—	—	55,036
Others(22)	471,625	494,946	487,655
Long-term borrowings	2,466,669	2,098,570	1,876,236
	2,566,669	2,290,768	2,184,547
Current			
Short-term borrowings	100,000	192,198	308,311
Current maturities of long-term borrowings	462,833	337,807	132,297
	562,833	530,005	440,608
Non-current			
Non-current maturities of long-term borrowings	2,003,836	1,760,763	1,743,939
	2,566,669	2,290,768	2,184,547
Borrowing by repayment schedule			
Within 1 year	562,833	530,005	440,608
1–2 years	836,765	434,998	399,301
2–5 years	944,308	895,135	877,315
Over 5 years	222,763	430,630	467,323
	2,566,669	2,290,768	2,184,547

31. BORROWINGS *(continued)*

SUMMARY OF BORROWING ARRANGEMENTS

(1) As of December 31, 2019, the Group had 28 short-term credit agreements that provided total credit facilities up to US$2,839.1 million on a revolving credit basis. As of December 31, 2019, the Group had drawn down US$100.0 million under these credit agreements. The outstanding borrowings under these credit agreements are unsecured. The interest rate on this loan facility ranged from 2.34% to 4.20% in 2019.

(2) In December 2015, SMIS entered into a loan facility in the aggregate principal amount of RMB1,000.0 million with China Development Bank, which is guaranteed by SMIC. This fifteen-year bank facility was used for new SMIS' 300mm fab. As of December 31, 2019, SMIS had drawn down RMB1,000.0 million (approximately US$143.3 million) on this loan facility. The outstanding balance is repayable from November 2021 to November 2030. The interest rate on this loan facility was 1.20% in 2019.

(3) In December 2015, SMIS entered into a loan facility in the aggregate principal amount of RMB475.0 million with China Development Bank, which is guaranteed by SMIC. This ten-year bank facility was used to expand the capacity of SMIS' 300mm fab. As of December 31, 2019, SMIS had drawn down RMB475.0 million and repaid RMB90.0 million on this loan facility. The outstanding balance of RMB385.0 million (approximately US$55.2 million) is repayable from June 2020 to December 2025. The interest rate on this loan facility was 1.20% in 2019.

(4) In December 2015, SMIB entered into an RMB loan, a fifteen-year working capital loan facility in the principal amount of RMB195.0 million with China Development Bank, which is unsecured. As of December 31, 2019, SMIB had drawn down RMB195.0 million and repaid RMB30.0 million on this loan facility. The outstanding balance of RMB165.0 million (approximately US$23.6 million) is repayable from June 2020 to December 2030. The interest rate on this loan facility was 1.20% in 2019.

(5) In May 2016, SMIB entered into the RMB loan, a fifteen-year working capital loan facility in the principal amount of RMB1,460.0 million with China Development Bank, which is guaranteed by SMIC. As of December 31, 2019, SMIB had drawn down RMB1,460.0 million and repaid RMB165.0 million on this loan facility. The outstanding balance of RMB1,295.0 million (approximately US$185.5 million) is repayable from May 2020 to May 2031. The interest rate on this loan facility was 1.20% in 2019.

(6) In December 2017, SMIZ entered into a loan facility in the aggregate principal amount of RMB5,400.0 million with China Development Bank, which is unsecured. This seven-year bank facility was used to finance the planned expansion for SMIZ's 300mm fab. As of December 31, 2019, SMIZ had drawn down RMB2,211.0 million and repaid RMB55.3 million on this loan facility. The outstanding balance of RMB2,155.7 million (approximately US$308.8 million) is repayable from December 2020 to December 2024. The interest rate on this loan facility is 4.46% per annum in 2019.

(7) In December 2015, SMIS entered into a loan facility in the aggregate principal amount of RMB500.0 million with The Export-Import Bank of China, which is unsecured. This three-year bank facility was used for working capital purposes. In December 2018, the tenor of this bank facility was extended for one and a half years. As of December 31, 2019, SMIS had drawn down RMB500.0 million (approximately US$71.6 million) on this loan facility. The outstanding balance is repayable in June 2020. The interest rate on this loan facility was 2.65% in 2019.

(8) In October 2018, SMIS entered into a loan facility in the aggregate principal amount of RMB950.0 million with The Export-Import Bank of China, which is unsecured. This two-year bank facility was used for working capital purposes. As of December 31, 2019, SMIS had drawn down RMB950.0 million (approximately US$136.1 million) on this loan facility. The outstanding balance is repayable in October 2020. The interest rate on this loan facility is 2.92% per annum in 2019.

31. BORROWINGS *(continued)*

SUMMARY OF BORROWING ARRANGEMENTS *(continued)*

(9) In March 2019, SMIS entered into a loan facility in the aggregate principal amount of RMB1,000.0 million with The Export-Import Bank of China, which is unsecured. This two-year bank facility was used for working capital purposes. As of December 31, 2019, SMIS had drawn down RMB1,000.0 million (approximately US$143.3 million) on this loan facility. The outstanding balance is repayable in March 2021. The interest rate on this loan facility is 2.92% per annum in 2019.

(10) In April 2019, SMIS entered into a loan facility in the aggregate principal amount of RMB650.0 million with The Export-Import Bank of China, which is secured by bank time deposits. This two-year bank facility was used for working capital purposes. As of December 31, 2019, SMIS had drawn down RMB650.0 million (approximately US$93.1 million) on this loan facility. The outstanding balance is repayable in April 2021. The interest rate on this loan facility is 2.92% per annum in 2019.

(11) In August 2019, SMIS entered into a loan facility in the aggregate principal amount of US$200.0 million with The Export-Import Bank of China, which is guaranteed by SMIC. This five-year bank facility was used for SMIS's 300mm fab. As of December 31, 2019, SMIS had drawn down US$200.0 million on this loan facility. The outstanding balance is repayable from February 2020 to August 2024. The interest rate on this loan facility is 2.60% per annum in 2019.

(12) In September 2017, SMIB entered into a loan facility in the aggregate principal amount of RMB500.0 million with The Export-Import Bank of China, which is unsecured. This five-year bank facility was used for SMIB's 300mm fab. As of December 31, 2019, SMIB had drawn down RMB500.0 million and repaid RMB70.0 million on this loan facility. The outstanding balance of RMB430.0 million (approximately US$61.6 million) is repayable from March 2020 to September 2022. The interest rate on this loan facility is 2.92% per annum in 2019.

(13) In June 2018, SMIB entered into a loan facility in the aggregate principal amount of RMB200.0 million with The Export-Import Bank of China, which is secured by bank time deposits. This two-year bank facility was used for SMIB's 300mm fab. As of December 31, 2019, SMIB had drawn down RMB200.0 million (approximately US$28.7 million) on this loan facility. The outstanding balance is repayable in June 2020. The interest rate on this loan facility is 2.92% per annum in 2019.

(14) In December 2018, SMIB entered into the RMB loan, a two-year working capital loan facility in the principal amount of RMB240.0 million with The Export-Import Bank of China, which is unsecured. This two-year bank facility was used for working capital purposes. As of December 31, 2019, SMIB had drawn down RMB240.0 million (approximately US$34.4 million) on this loan facility. The outstanding balance is repayable in December 2020. The interest rate on this loan facility was 2.92% in 2019.

(15) In January 2019, SMIB entered into the RMB loan, a two-year working capital loan facility in the principal amount of RMB60.0 million with The Export-Import Bank of China, which is unsecured. This two-year bank facility was used for working capital purposes. As of December 31, 2019, SMIB had drawn down RMB60.0 million (approximately US$8.6 million) on this loan facility. The outstanding balance is repayable in December 2020. The interest rate on this loan facility was 2.92% in 2019.

(16) In January 2019, SMIB entered into the RMB loan, a two-year working capital loan facility in the principal amount of RMB340.0 million with The Export-Import Bank of China, which is unsecured. This two-year bank facility was used for working capital purposes. As of December 31, 2019, SMIB had drawn down RMB340.0 million (approximately US$48.7 million) on this loan facility. The outstanding balance is repayable in January 2021. The interest rate on this loan facility was 4.75% in 2019.

(17) In July 2019, SMIB entered into a loan facility in the aggregate principal amount of RMB260.0 million with The Export-Import Bank of China, which is unsecured. This five-year bank facility was used for SMIB's 300mm fab. As of December 31, 2019, SMIB had drawn down RMB260.0 million and repaid RMB15.0 million on this loan facility. The outstanding balance of RMB245.0 million (approximately US$35.1 million) is repayable from June 2020 to June 2024. The interest rate on this loan facility is 2.65% per annum in 2019.

31. BORROWINGS *(continued)*

SUMMARY OF BORROWING ARRANGEMENTS *(continued)*

(18) In August 2019, SMIC entered into a loan facility in the aggregate principal amount of US$199.1 million with Industrial and Commercial Bank of China (Asia), which is unsecured. This five-year bank facility was used to finance the planned expansion for 300mm fab. As of December 31, 2019, SMIC had drawn down US$199.1 million on this loan facility. The outstanding balance is repayable from August 2020 to August 2024. The interest rate on this loan facility is 2.50% per annum in 2019.

(19) In February 2017, SMIT entered into a RMB loan, a three-year working capital loan facility in the principal amount of RMB500.0 million with The Export-Import Bank of China, which is unsecured. This three-year bank facility was used for working capital purposes. As of December 31, 2019, SMIT had drawn down RMB500.0 million (approximately US$71.6 million) on this loan facility. The outstanding balance is repayable in February 2020. The interest rate on this loan facility is 4.04% per annum in 2019.

(20) In December 2018, SMIT entered into a loan facility in the aggregate principal amount of RMB596.0 million with The Export-Import Bank of China, which is unsecured. This five-year bank facility was used to finance the planned expansion for SMIT's 300mm fab. As of December 31, 2019, SMIT had drawn down RMB585.0 million (approximately US$83.8 million) on this loan facility. The outstanding balance of RMB585.0 million is repayable in December 2023. The interest rate on this loan facility is 2.92% per annum in 2019.

(21) In December 2017, SMIZ entered into a loan facility in the aggregate principal amount of RMB500.0 million with The Export-Import Bank of China, which is unsecured. This five-year bank facility was used to finance the planned expansion for SMIZ's 300mm fab. As of December 31, 2019, SMIZ had drawn down RMB500.0 million and repaid RMB60.0 million on this loan facility. The outstanding balance of RMB440.0 million (approximately US$63.0 million) is repayable from March 2020 to December 2022. The interest rate on this loan facility is 3.40% per annum in 2019.

(22) Other borrowings represented several batches of production equipment of the Group sold and leased back under the below arrangements:

US$31.1 million (December 31, 2018: US$35.2 million) of borrowings under new two arrangements entered into by the Group and third-party financing companies in the form of a sale and leaseback transaction with a repurchase option.

US$440.5 million (December 31, 2018: US$459.7 million and December 31, 2017: US$487.7 million) of borrowings under three arrangements entered into by the Group and third-party financing companies in the form of a sale and leaseback transaction with a repurchase option.

As the repurchase prices are set at below US$1.0 which are minimal compared to the expected fair value and the Group is certain that it will exercise the repurchase options, the above arrangements have been accounted for as collateralized borrowings of the Group.

As of December 31, 2019, property, plant and equipment and land use right with carrying amount of approximately US$130.9 million (December 31, 2018: US$207.2 million and December 31, 2017: US$362.3 million) have been pledged to secure borrowings of the Group.

32. CONVERTIBLE BONDS

ISSUE OF ZERO COUPON CONVERTIBLE BONDS DUE 2022

The Company issued the convertible bonds (the "2016 Convertible Bonds") at a par value of US$250.0 thousand each with the aggregate principal amounts of US$450.0 million issued on July 7, 2016 (the "2016 Issue") and US$200.0 million issued on December 10, 2019 (the "2019 Issue").

The 2016 Convertible Bonds is a compound instrument included a liability component and an equity component. There are embedded derivatives in respect of the early redemption features of the 2016 Convertible Bonds. For the 2016 Issue, such embedded derivatives are deemed to be clearly and closely related to the host contract and therefore do not need to be separately accounted for. For the 2019 Issue, such embedded derivatives are deemed to be not clearly and closely related to the host contract and therefore need to be separately accounted for. As of December 31, 2019, the fair value of embedded derivatives in relation to the 2019 Issue is not significant.

As at the date of issue, the fair value of the liability component of the 2016 Convertible Bonds was disclosed as below:

	2019 Issue	2016 Issue
	USD'000	USD'000
Principal amount	**200,000**	450,000
Premium of issuance	**32,000**	—
Transaction cost	**(2,525)**	(9,194)
Liability component	**(195,328)**	(387,871)
Equity component	**34,147**	52,935

Subsequent to the initial recognition, the liability component of the 2016 Convertible Bonds was carried at amortized cost using the effective interest method. The effective interest rate of the liability component of the 2016 Convertible Bonds was 3.88% per annum as at December 31, 2019. The movement of the liability component and the equity component of the 2016 Convertible Bonds for the year ended December 31, 2019 is set out below:

	Liability Component	**Equity Component**	**Total**
	USD'000	USD'000	USD'000
Balance at December 31, 2016	395,210	52,935	448,145
Interest charged	14,913	—	14,913
Conversion options exercised	(6,794)	(882)	(7,676)
Balance at December 31, 2017	403,329	52,053	455,382
Interest charged	15,263	—	15,263
Balance at December 31, 2018	418,592	52,053	470,645
Issuance	195,328	34,147	229,475
Interest charged	16,508	—	16,508
Balance at December 31, 2019	630,428	86,200	716,628

The equity component will remain in convertible bond equity reserve until the embedded conversion option is exercised or the 2016 Convertible Bonds mature.

As at December 31, 2019, 539,540,243 ordinary shares will be issued upon full conversion of the 2016 Convertible Bonds.

KEY TERMS OF THE 2016 CONVERTIBLE BONDS

The 2016 Convertible Bonds with no interest born will mature on July 7, 2022. If payment of principal or premium is improperly withheld or refused, such unpaid amount shall bear interest at the rate of 2.00% per annum. All the 2016 Convertible Bonds which are redeemed, converted or purchased by the Company will forthwith be cancelled.

The Company will redeem the outstanding 2016 Convertible Bonds at principal amount on July 7, 2022 or in certain specified circumstances specified in the agreements.

32. CONVERTIBLE BONDS *(continued)*

KEY TERMS OF THE 2016 CONVERTIBLE BONDS *(continued)*

The Company may at any time and from time to time purchase the 2016 Convertible Bonds at any price in the open market or otherwise.

Bondholders may convert their bonds into ordinary shares at any time on or after August 17, 2016. Conversion shares will be issued upon full conversion of the 2016 Convertible Bonds based on the conversion price of HK$9.25 with a fixed exchange rate of 7.7677 HK$/US$.

Upon the occurrence of a change of control of the Company, the bondholders will have the right, at such holder's option, to require the Company to redeem all or some only of such holder's bonds on the change of control put date at their principal amount of the 2016 Convertible Bonds. The bondholders will also have the right to require the Company to redeem all or some only of the 2016 Convertible Bonds of such holders on July 7, 2020 at their principal amount.

REDEMPTION OF ZERO COUPON CONVERTIBLE BONDS DUE 2018

The Company exercised its right to redeem the US$200.0 million zero coupon convertible bonds due 2018, the US$86.8 million zero coupon convertible bonds due 2018, the US$95.0 million zero coupon convertible bonds due 2018 and the US$22.2 million zero coupon convertible bonds due 2018 (the "Bonds") on March 10, 2017 being the option redemption date when all of the Bonds would be redeemed in cash at 100% of the Bonds' principal amount. The conversion price is HK$7.965, approximately US$1.027. On March 3, 2017, the Company received notices from all holders of the Bonds for the full conversion of the outstanding Bonds. As all outstanding Bonds have been fully converted and no Bonds remain outstanding, no redemption of the Bonds will be carried out. The Company delisted the Bonds from the Singapore Exchange Securities Trading Limited.

33. MEDIUM-TERM AND SHORT-TERM NOTES

In 2019, the Company issued the three-year medium-term notes of RMB1,500.0 million (approximately US$224.0 million) on March 4 (the "2019 Medium-term Notes") and some short-term notes of RMB500.0 million (approximately US$74.3 million) issued on April 29 for six months, RMB1,000.0 million (approximately US$148.6 million) issued on April 29 for six months, RMB1,500.0 million (approximately US$212.1 million) issued on October 11 for seventy-five days and RMB2,000.0 million (approximately US$291.0 million) issued on July 23, 2019 for nine months all through National Association of Financial Market Institutional Investors ("NAFMII").

The short-term notes of RMB2,000.0 million carry a coupon interest rate 3.10% per annum with note interest payable due on April 20, 2020. The 2019 Medium-term Notes carry a coupon rate of 3.57% per annum with interest due annually on March 4, 2020, March 4, 2021 and March 4, 2022.

The short-term notes of RMB500.0 million, RMB1,000.0 million and RMB1,500.0 million with the coupon rates of 3.05%, 3.10% and 2.5% per annum, respectively were repaid on October 23, 2019. The three-year medium-term notes of RMB1,500.0 million issued on June 8, 2016 with a coupon rate of 3.35% per annum was repaid on June 5, 2019.

As at the issue date, the net book values of the liabilities of medium-term and short-term notes issued in 2019 are set out as below:

	Medium-term Notes	**Short-term Notes**
	USD'000	USD'000
Principal amount	224,024	725,891
Transaction cost	(984)	(256)
	223,040	725,635

33. MEDIUM-TERM AND SHORT-TERM NOTES *(continued)*

The movement of the medium-term and short-term notes for the period ended December 31, 2019 is set out below:

	Medium-term Notes USD'000	**Short-term Notes** USD'000
Balance at December 31, 2018	218,247	—
Issuance	223,040	725,635
Repayment	(217,954)	(426,485)
Interest charged	10,102	8,193
Interest payable recognized	(9,533)	(7,937)
Foreign exchange gain	(9,709)	(12,894)
Balance at December 31, 2019	214,193	286,512

34. DEFERRED GOVERNMENT FUNDING

The Group received government funding under specific R&D projects (including those with primary condition that the Group should purchase, construct or otherwise acquire non-current assets) of US$444.5 million, US$265.0 million and US$178.3 million and recognized US$210.4 million, US$105.3 million and US$82.2 million as other operating income in 2019, 2018 and 2017 for several specific R&D projects respectively (please refer to Note 2 for details of the change in accounting policy of government funding). The government funding is recorded as a liability upon receipt and recognized as other operating income over the useful life of R&D equipment or until the milestones specified in the terms of the funding have been reached.

In addition, the Group received government funding for specific intended use of US$82.9 million, US$51.7 million and US$51.6 million in 2019, 2018 and 2017, respectively. The Group recognized nil, US$19.5 million and US$24.2 million a as reduction of interest expense (Note 8) and recognized US$82.9 million, US$32.2 million and US$27.4 million as other operating income (Note 7) in 2019, 2018 and 2017, respectively. The government funding is recorded as a liability upon receipt and recognized as reduction of interest expense or as other operating income until the requirements (if any) specified in the terms of the funding have been reached.

35. TRADE AND OTHER PAYABLES

	12/31/19 **USD'000**	12/31/18 USD'000	12/31/17 USD'000
Trade payables	**894,460**	823,443	837,843
Deposit received	**29,523**	38,713	54,895
Other payable	**110,096**	102,704	114,686
	1,034,079	964,860	1,007,424

Trade payables are non-interest bearing and are normally settled on 30-day to 60-day terms.

As of December 31, 2019, 2018 and 2017, payables for property, plant and equipment were US$578.8 million, US$461.6 million and US$506.7 million, respectively.

35. TRADE AND OTHER PAYABLES *(continued)*

The following is an aged analysis of trade payables presented based on the invoice date at the end of the reporting period.

Age of payables	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000
Within 30 days	**548,963**	657,172	658,804
31–60 days	**49,741**	50,815	68,358
Over 60 days	**295,756**	115,456	110,681
	894,460	823,443	837,843

The carrying amounts of trade and other payables are considered to be the same as their fair values, due to their short-term nature.

36. ACCRUED LIABILITIES

The amounts of accrued liabilities as of December 31, 2019, 2018 and 2017 were US$151.2 million, US$164.6 million and US$180.9 million, within which the amounts of accrued payroll expenses were US$70.9 million, US$73.7 million and US$116.7 million, respectively.

37. SHARE-BASED PAYMENTS

STOCK INCENTIVE PLANS

The Company's stock incentive plans allow the Company to offer the below incentive awards to employees, consultants or external service advisors of the Group.

The expense arising from equity-settled share-based payments for the year ended December 31, 2019 was US$6.8 million (2018: US$11.6 million and 2017: US$18.2 million).

Stock option plan

The options are granted at the fair market value of the Company's ordinary shares and expire 10 years from the date of grant and vest over a requisite service period of four years.

The fair value of each option granted is estimated on the date of grant using the Black-Scholes option pricing model, taking into account the terms and conditions upon which the share options were granted.

Restricted share units ("RSUs")

The Company adopted the Equity Incentive Plan ("EIP") whereby the Company provided additional incentives to the Group's employees, directors and external consultants through the issuance of restricted shares, RSUs and stock appreciation rights to the participants at the discretion of the Board of Directors. The RSUs vest over a requisite service period of 4 years and expire 10 years from the date of grant.

The fair value of each RSU granted is estimated on the date of grant using the Black-Scholes option pricing model, taking into account the terms and conditions upon which the instruments were granted.

Share option plan for subsidiary ("Subsidiary Plan")

The options granted under the Subsidiary Plan shall entitle a participant of the Subsidiary Plan to purchase a specified number of subsidiary shares during a specified period at the price fixed by the relevant subsidiary committee at the time of grant or by a method specified by the relevant subsidiary committee at the time of grant and expire 10 years from the date of grant. The options vest over a requisite service period of four years.

The fair value of each option granted is estimated on the date of grant using the Black-Scholes option pricing model, taking into account the terms and conditions upon which the share options were granted.

37. SHARE-BASED PAYMENTS *(continued)*

MOVEMENTS DURING THE YEAR

(i) The following table illustrates the number and weighted average exercise prices ("WAEP") of, and movements in, share options during the year (excluding Restricted Share Units ("RSUs") and share option plan for subsidiary ("Subsidiary Plan"):

	2019 Number	2019 WAEP	2018 Number	2018 WAEP	2017 Number	2017 WAEP
Outstanding at January 1	**51,608,194**	**US$1.00**	52,881,278	US$0.83	72,482,764	US$0.82
Granted during the period	**1,230,500**	**US$1.24**	19,344,334	US$1.33	6,071,477	US$1.14
Forfeited and expired during the period	**(4,742,797)**	**US$1.08**	(8,879,102)	US$1.13	(3,842,461)	US$1.33
Exercised during the period	**(8,740,673)**	**US$0.79**	(11,738,316)	US$0.68	(21,830,502)	US$0.78
Outstanding at December 31	**39,355,224**	**US$1.04**	51,608,194	US$1.00	52,881,278	US$0.83
Exercisable at December 31	**18,661,149**	**US$0.83**	25,796,944	US$0.79	39,511,002	US$0.78

The weighted average remaining contractual life for the share options outstanding as at December 31, 2019 was 5.45 years (2018: 5.66 years and 2017: 5.21 years).

The range of exercise prices for options outstanding at the end of the year was from US$0.34 to US$1.35 (2018: from US$0.34 to US$1.34 and 2017: from US$0.23 to US$1.38).

The weighted average closing price of the Company's shares immediately before the dates while the share options were exercised was US$1.21 (2018: US$1.12 and 2017: US$1.44).

During the year ended December 31, 2019, share options were granted on May 21, September 12 and November 26, 2019 with the fair values calculated by the Black-Scholes Option Pricing model of US$0.65, US$0.48 and US$0.58, respectively (May 23, September 13 and November 19, 2018: US$0.50, US$0.73 and US$0.38, respectively and April 5, May 22 and September 7, 2017: US$0.56, US$0.42 and US$0.40, respectively).

The following table list the inputs to the Black-Scholes Option Pricing models used for the option granted during the years ended December 31, 2019, 2018 and 2017 respectively:

	2019	2018	2017
Dividend yield (%)	**—**	—	—
Expected volatility	**43.64%**	40.16%	42.80%
Risk-free interest rate	**1.75%**	2.84%	1.84%
Expected life of share options	**6 years**	5 years	6 years

The risk-free rate for periods within the contractual life of the option is based on the yield of the US Treasury Bond. The expected term of options granted represents the period of time that options granted are expected to be outstanding. Expected volatilities are based on the average volatility of the Company's stock prices with the time period commensurate with the expected term of the options. The dividend yield is based on the Company's intended future dividend plan.

The valuation of the options are based on the best estimates from Company by taking into account a number of assumptions and is subject to limitation of the valuation model. Changes in variables and assumptions may affect the fair value of these options.

37. SHARE-BASED PAYMENTS *(continued)*

MOVEMENTS DURING THE YEAR *(continued)*

(ii) The following table illustrates the number and weighted average fair value ("WAFV") of, and movements in, RSUs during the year (excluding stock option plan and Subsidiary Plan):

	2019 Number	2019 WAFV	2018 Number	2018 WAFV	2017 Number	2017 WAFV
Outstanding at January 1	**19,853,214**	**US$1.12**	28,701,097	US$1.05	26,489,152	US$0.98
Granted during the period	**712,500**	**US$1.22**	8,068,466	US$1.27	14,055,477	US$1.11
Forfeited during the period	**(2,449,355)**	**US$1.10**	(4,582,729)	US$1.07	(950,412)	US$1.04
Exercised during the period	**(8,309,040)**	**US$1.06**	(12,333,620)	US$1.03	(10,893,120)	US$0.97
Outstanding at December 31	**9,807,319**	**US$1.16**	19,853,214	US$1.12	28,701,097	US$1.05

The weighted average remaining contractual life for the RSUs outstanding as at December 31, 2019 was 7.66 years (2018: 8.29 years and 2017: 8.51 years).

The exercise prices for options outstanding was HKD0.031 (approximately US$0.004).

The weighted average closing price of the Company's shares immediately before the dates on which the RSUs were exercised was US$1.33 (2018: US$1.33 and 2017: US$1.29).

During the year ended December 31, 2019, RSUs were granted on May 21, September 12 and November 26, 2019. The fair values calculated by the Black-Scholes Option Pricing model of US$1.09, US$1.25 and US$1.28, respectively (May 23, September 13 and November 19, 2018: US$1.30, US$1.09 and US$0.87, respectively and April 5, May 22, September 7 and December 7, 2017: US$1.24, US$1.09, US$1.01 and US$1.31, respectively).

The following table list the inputs to the models used for the plans for the years ended December 31, 2019, 2018 and 2017, respectively:

	2019	2018	2017
Dividend yield (%)	**—**	—	—
Expected volatility	**45.23%**	39.77%	39.45%
Risk-free interest rate	**1.82%**	2.54%	1.24%
Expected life of share options	**1 year**	2 years	2 years

The risk-free rate for periods within the contractual life of the RSUs is based on the yield of the US Treasury Bond. The expected term of RSUs granted represents the period of time that RSUs granted are expected to be outstanding. Expected volatilities are based on the average volatility of the Company's stock prices with the time period commensurate with the expected term of the RSUs. The dividend yield is based on the Company's intended future dividend plan.

The valuation of the RSUs is based on the best estimates from Company by taking into account a number of assumptions and is subject to limitation of the valuation model. Changes in variables and assumptions may affect the fair value of these RSUs.

37. SHARE-BASED PAYMENTS *(continued)*

MOVEMENTS DURING THE YEAR *(continued)*

(iii) The following table illustrates the number and weighted average exercise prices ("WAEP") of, and movements in, share options of the Subsidiary Plan during the year (excluding stock option plan and RSUs):

	2019 Number	2019 WAEP	2018 Number	2018 WAEP	2017 Number	2017 WAEP
Outstanding at January 1	**20,046,635**	**US$0.25**	14,918,802	US$0.20	14,598,750	US$0.19
Granted during the period	**11,092,332**	**US$0.36**	7,349,500	US$0.36	1,598,750	US$0.31
Forfeited and expired during the period	**(2,808,512)**	**US$0.31**	(2,029,167)	US$0.29	(934,948)	US$0.05
Exercised during the period	**(277,832)**	**US$0.33**	(192,500)	US$0.36	(343,750)	US$0.25
Outstanding at December 31	**28,052,623**	**US$0.29**	20,046,635	US$0.25	14,918,802	US$0.20
Exercisable at December 31	**14,500,187**	**US$0.22**	10,333,724	US$0.17	7,079,401	US$0.15

The weighted average remaining contractual life for the share options outstanding as at December 31, 2019 was 7.9 years (2018: 7.9 years and 2017: 8.3 years).

The range of exercise prices for options outstanding at the end of the year was from US$0.05 to US$0.36 (2018: from US$0.05 to US$0.36 and 2017: from US$0.05 to US$0.31).

During the year ended December 31, 2019, share options of the Subsidiary Plan were granted on March 26 and December 3, 2019 with the fair values calculated by the Black-Scholes Option Pricing model of US$0.19 and US$0.21, respectively (March 13, 2018: US$0.19 and August 9, 2017: US$0.11).

The following table list the inputs to the Black-Scholes Option Pricing models used for the option of the Subsidiary Plan granted during the years ended December 31, 2019, 2018 and 2017, respectively:

	2019	2018	2017
Dividend yield (%)	**—**	—	—
Expected volatility	**50%**	53.0%	32.0%
Risk-free interest rate	**1.6%–2.2%**	2.70%	1.90%
Expected life of share options	**6 years**	6 years	6 years

The risk-free rate for periods within the contractual life of the option of the Subsidiary Plan is based on the yield of the US Treasury Bond. The expected term of options of the Subsidiary Plan granted represents the period of time that options of the Subsidiary Plan granted are expected to be outstanding. Expected volatilities are based on the average volatility of the relevant subsidiary's set of public comparables with the time period commensurate with the expected term of the options. The dividend yield is based on the relevant subsidiary's intended future dividend plan.

The valuation of the options of the Subsidiary Plan are based on the best estimates from the relevant subsidiary by taking into account a number of assumptions and is subject to limitation of the valuation model. Changes in variables and assumptions may affect the fair value of these options.

38. RISK MANAGEMENT

CAPITAL MANAGEMENT

The Group manages its capital to ensure that entities in the Group will be able to continue as going concerns while maximizing the return to stakeholders through the optimization of the capital structure.

The capital structure of the Group consists of net debt and equity of the Group.

The Group manages its capital through issuing/repurchasing shares and raising/repayment of debts and reviews the capital structure on a semi-annual basis. As part of this review, the Group considers the cost of capital and the risks associates with each class of capital. The Group will balance its overall capital structure through the payment of dividends, new share issues and share buy-backs as well as the issue of new debt or the redemption of existing debt.

The gearing ratio at end of the reporting period was as follows.

	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000
Net debt (Note 39)	**(612,661)**	(398,755)	790,936
Equity	**10,197,862**	8,923,580	6,721,335
Net debt to equity ratio	**−6.0%**	−4.5%	11.8%

FINANCIAL RISK MANAGEMENT

The Group's corporate treasury function co-ordinates access to domestic and international financial markets, monitors and manages the financial risks relating to the operations of the Group through internal risk reports which analyze exposures by degree and magnitude of risks. These risks include market risk foreign currency risk, interest rate risk, credit risk and liquidity risk.

The Group seeks to minimize the effects of these risks by using derivative financial instruments to hedge risk exposures. The use of financial derivatives is governed by the Group's policies approved by the board of directors, which provide written principles on foreign exchange risk, interest rate risk, credit risk, the use of financial derivatives and non-derivative financial instruments, and the investment of excess liquidity. Compliance with policies and exposure limits is reviewed on continuous basis. The Group does not enter into or trade financial instruments, including derivative financial instruments, for speculative purposes.

MARKET RISK

The Group's activities expose it primarily to the financial risks of changes in foreign currency exchange rates and interest rates. The Group enters into a variety of derivative financial instruments to manage its exposure to foreign currency risk and interest rate risk, including:

- forward foreign exchange contracts to hedge the exchange rate risk arising on the import from suppliers;
- interest rate swaps to mitigate the risk of rising interest rates; and
- cross-currency interest rate swap contracts to protect against volatility of future cash flows caused by the changes in both interest rates and exchange rates associated with outstanding long-term debts and financial asset at amortized cost denominated in a currency other than the US dollar.

Market risk exposures are measured using the sensitivity analysis and the analysis in the following sections relate to the position as at December 31, 2019, 2018 and 2017.

There has been no change to the Group's exposure to market risks or the manner in which these risks are managed and measured.

38. RISK MANAGEMENT *(continued)*

FOREIGN CURRENCY RISK

The Group undertakes transactions denominated in foreign currencies, consequently, exposures to exchange rate fluctuations arise. Exchange rate exposures are managed within approved policy parameters utilizing forward foreign exchange contracts.

The carrying amounts of the Group's foreign currency denominated monetary assets and monetary liabilities at the end of the reporting period are as follows:

	Liabilities			Assets		
	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000	**12/31/19 USD'000**	12/31/18 USD'000	12/31/17 USD'000
EUR	**7,242**	50,601	125,171	**568**	37,800	72,181
JPY	**52,529**	54,166	30,422	**33,103**	41,589	29,245
RMB	**2,929,860**	2,757,762	2,410,284	**3,154,481**	2,989,434	1,765,846
Others	**59,967**	51,829	43,824	**4,725**	905	8,688

Foreign currency sensitivity analysis

The Group is mainly exposed to the currency of RMB, Japanese Yen ("JPY") and Euros ("EUR").

The following table details the Group's sensitivity to a 5% increase in the foreign currencies against USD. 5% represents management's assessment of the reasonably possible change in foreign exchange rates. The sensitivity analysis includes only outstanding foreign currency denominated monetary items and adjusts their translation at the period end for a 5% change in foreign currency rates. For a 5% decrease of the foreign currency against USD, there would be an equal and opposite impact on the profit or equity below predicted.

	EUR			JPY			RMB			Others		
	2019 USD'000	2018 USD'000	2017 USD'000	**2019 USD'000**	2018 USD'000	2017 USD'000	**2019 USD'000**	2018 USD'000	2017 USD'000	**2019 USD'000**	2018 USD'000	2017 USD'000
Profit or loss	**(334)**	(640)	(2,650)	**(1,022)**	(662)	(62)	**11,822**	12,193	(33,918)	**(2,906)**	(2,679)	(1,848)
Equity	**(334)**	(640)	(2,650)	**(1,022)**	(662)	(62)	**11,822**	12,193	(33,918)	**(2,906)**	(2,679)	(1,848)

Forward foreign exchange contracts

It is the policy of the Group to enter into forward foreign exchange contracts to cover specific foreign currency payments and receipts within the exposure generated. The Group also enters into forward foreign exchange contracts to manage the foreign currency exposure from purchases/sales and financing activities.

The following table details the forward foreign currency ("FC") contracts outstanding at the end of the reporting period:

	Average exchange rate			Foreign currency			Notional value			Net fair value assets (liabilities)		
	2019	2018	2017	**12/31/19 FC'000**	12/31/18 FC'000	12/31/17 FC'000	**12/31/19 USD'000**	12/31/18 USD'000	12/31/17 USD'000	**12/31/19 USD'000**	12/31/18 USD'000	12/31/17 USD'000
Buy EUR												
Less than 3 months	**—**	—	1.2019	**—**	—	2,080	**—**	—	2,500	**—**	—	(2)
Buy RMB												
Less than 3 months	**—**	—	6.7622	**—**	—	648,364	**—**	—	95,881	**—**	—	2,111
							—	—	98,381	**—**	—	2,109

The Group does not enter into foreign currency exchange contracts for speculative purposes.

38. RISK MANAGEMENT *(continued)*

FOREIGN CURRENCY RISK *(continued)*

Cross currency swap contracts

It is the policy of the Group to enter into cross currency swap contracts to protect against volatility of future cash flows caused by the changes in exchange rates associated with outstanding debt denominated in a currency other than the US dollar.

In 2019, 2018 and 2017, the Group entered into or issued several RMB denominated loan facility agreements, short-term notes and medium-term notes (the "RMB Debts") in the aggregate principal amount of RMB2,760.9 million, RMB3,321.5 million and RMB3,714.0 million (approximately US$395.5 million, US$484.0 million and US$568.4 million), respectively. In addition in 2019 and 2018, the Group held several RMB denominated financial assets at amortized cost (the "RMB Assets") in the aggregate principal amount of RMB5,872.2 million and RMB2,130.1 million (approximately US$841.2 million and US$258.0 million). The Group was primarily exposed to changes in the exchange rate for the RMB.

To minimize the currency risk, the Group entered into cross currency swap contracts with a contract term fully matching the repayment schedule of the whole part of these RMB Debts and repurchase schedule of the whole part of these RMB Assets to protect against the adverse effect of exchange rate fluctuations arising from the RMB Debts and Assets. As of December 31, 2019, the Group had outstanding cross currency swap contracts with notional amounts of RMB8,077.3 million (approximately US$1,157.1 million, as of December 31, 2018: US$1,388.2 million and as of December 31, 2017: US$979.2 million) to buy RMB and notional amounts of RMB2,803.9 million (approximately US$401.7 million, as of December 31, 2018: US$441.3 million and as of December 31, 2017: nil) to sell RMB.

The cross currency swap contracts were designated as hedging instrument of cash flow hedges since October 2016. Any gains or losses arising from changes in fair value of cross currency swap contracts are taken directly to the statement of profit or loss, except for the effective portion of cash flow hedges, which is recognized in other comprehensive income and later reclassified to profit or loss when the hedged item affects profit or loss.

During the year, US$0.5 million gain of fair value change of cross currency swap as cash flow hedges was recognized in other gains, net (Note 9, 2018: US$2.3 million gain and 2017: US$2.2 million gain). The following foreign- exchange related amounts of cash flow hedges were recognized in profit or loss and other comprehensive income or loss:

	Year ended 12/31/19 USD'000	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000
Other comprehensive income (loss) on cash flow hedges recognized during the year:			
Total fair value (loss) gain included in other comprehensive income (loss)	**(51,331)**	(48,714)	95,185
Reclassified from other comprehensive income (loss) to offset foreign exchange gains or losses	**24,807**	84,645	(60,042)
	(26,524)	35,931	35,143
Balance of cash flow hedges reserve at beginning of the year	**36,447**	516	(34,627)
Balance of cash flow hedges reserve at end of the year	**9,923**	36,447	516

38. RISK MANAGEMENT *(continued)*

FOREIGN CURRENCY RISK *(continued)*

Cross currency swap contracts *(continued)*

The following table details the cross currency swap contracts outstanding at the end of the reporting period:

	Average exchange rate			Foreign currency			Notional value			Net fair value assets (liabilities)		
	2019	2018	2017	**12/31/19 FC'000**	12/31/18 FC'000	12/31/17 FC'000	**12/31/19 USD'000**	12/31/18 USD'000	12/31/17 USD'000	**12/31/19 USD'000**	12/31/18 USD'000	12/31/17 USD'000
Buy RMB												
Within 1 year	**6.7906**	6.8681	6.6369	**800,000**	5,852,000	1,040,000	**114,605**	852,663	159,163	**(2,920)**	(11,650)	3,997
1–5 years	**6.6379**	6.8635	6.6356	**7,277,254**	3,675,529	5,358,000	**1,042,512**	535,542	819,993	**(58,243)**	(10,274)	15,679
Sell RMB												
Within 1 year	**7.0092**	6.8912	—	**2,803,930**	3,028,809	—	**401,680**	441,312	—	**(1,862)**	(1,573)	—
							1,558,797	1,829,517	979,156	**(63,025)**	(23,497)	19,676

The Group does not enter into cross currency swap contracts for speculative purposes.

INTEREST RATE RISK

The Group is exposed to interest rate risk relates primarily to the Group's long-term borrowing obligations, which the Group generally assumes to fund capital expenditures and working capital requirements. The risk is managed by the Group by maintaining an appropriate mix between fixed and floating rate borrowings, and by the use of interest rate swap contracts and cross currency swap contracts.

The Group's exposures to interest rates on financial assets and financial liabilities are detailed in the liquidity risk management section of this note.

Interest rate sensitivity analysis

The sensitivity analyses below have been determined based on the exposure to interest rates for both derivatives and non-derivative instruments at the end of the reporting period. For floating rate liabilities, the analysis is prepared assuming the amount of the liability outstanding at the end of the reporting period was outstanding for the whole year.

A 10 basis point increase or decrease represents management's assessment of the reasonably possible change in interest rates. If interest rates had been 10 basis points higher and all other variables were held constant, the Group's profit for the year ended December 31, 2019 would increase by US$2.3 million (2018: profit increase by US$0.9 million and 2017: profit increase by US$0.4 million). This is mainly attributable to the Group's exposure to interest rates on its variable rate borrowings.

38. RISK MANAGEMENT *(continued)*

INTEREST RATE RISK *(continued)*

Interest rate swap contracts

Under interest rate swap contracts, the Company agrees to exchange the difference between fixed and floating rate interest amounts calculated on agreed notional principal amounts. Such contracts enable the Company to mitigate the risk of changing interest rates on the fair value of issued fixed rate debt and the cash flow exposures on the issued variable rate debt. The fair value of interest rate swaps at the end of the reporting period is determined by discounting the future cash flows using the curves at the end of the reporting period and the credit risk inherent in the contracts, and is disclosed below.

All interest rate swap contracts exchanging floating rate interest amounts for fixed rate interest amounts are designated as cash flow hedges in order to reduce the Group's cash flow exposure resulting from variable interest rates on borrowings. The interest rate swaps and the interest payments on the loan occur simultaneously and the amount accumulated in equity is reclassified to profit or loss over the period that the floating rate interest payments on debt affect profit or loss.

The average interest rate is based on the outstanding balances at the end of the reporting period. The following tables detail the notional principal amounts and remaining terms of interest rate swap contracts outstanding at the end of the reporting period.

	Average fixed rate			Foreign currency			Notional value			Net fair value assets		
	2019	2018	2017	**12/31/19 FC'000**	12/31/18 FC'000	12/31/17 FC'000	**12/31/19 USD'000**	12/31/18 USD'000	12/31/17 USD'000	**12/31/19 USD'000**	12/31/18 USD'000	12/31/17 USD'000
Receive floating pay fixed rates												
1–5 years	**2.6%**	—	—	**200,000**	—	—	**28,651**	—	—	**1,872**	—	—

The interest rate swaps settle on a quarterly basis. The floating rate on the interest rate swaps is linking to 3 month Libor. The Company will settle the difference between the fixed and floating interest rate on a net basis.

PRICE RISK

The Group's exposure to equity securities price risk arises from investments held by the Group and classified in the consolidated statement of financial position as at fair value through profit or loss (Note 22).

To manage its price risk arising from investments in equity securities, the Group diversifies its portfolio. Diversification of the portfolio is done in accordance with the limits set by the Group.

CREDIT RISK

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group is mainly exposed to credit risk from trade receivables, other financial assets at amortized cost and financial assets at FVPL.

38. RISK MANAGEMENT *(continued)*

CREDIT RISK *(continued)*

Customer credit risk is managed by each business unit subject to the Group's established policy, procedures and control relating to customer credit risk management. It is the Group's policy that all customers who wish to trade on credit terms are subject to credit verification procedures and is offered credit terms only with the approval from Finance and Sales Division. Credit quality of a customer is assessed using publicly available financial information and its own trading records to rate its major customers. The Group's exposure and credit ratings of its counterparties are continuously monitored. In addition, receivable balances are monitored on an ongoing basis with the result that the Group's exposure to bad debts is not significant.

Trade receivables consist of a large number of customers, spread across diverse industries and geographical areas.

Apart from the four largest customers of the Group, the Group does not have significant credit risk exposure to any single counterparty or any group of counterparties having similar characteristics. The Group defines counterparties as having similar characteristics if they are related entities. Concentration of credit risk related to the four largest customers did not exceed 2%, 2%, 1% and 1% respectively of gross monetary assets at the end of current year. Concentration of credit risk to any other counterparty did not exceed 1% of gross monetary assets at the end of current year.

Net revenue and accounts receivable for customers which accounted for 10% or more of the Group's net sales and gross accounts receivable is disclosed in Note 6.

Trade receivables

The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables. To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and the days past due.

The loss allowance as at December 31, 2019, December 31, 2018 and January 1, 2018 (on adoption of IFRS 9) was determined as follows for trade receivables:

December 31, 2019	**Current USD'000**	**31–60 days USD'000**	**61–90 days USD'000**	**91–120 days USD'000**	**Over 120 days USD'000**	**Total USD'000**
Expected loss rate	**0.1%**	**2%**	**4%**	**15%**	**44%**	
Trade receivables	**433,875**	**36,792**	**10,027**	**5,733**	**1,798**	**488,225**
Allowance on doubtful trade receivables	**376**	**736**	**401**	**860**	**791**	**3,164**

December 31, 2018	Current USD'000	31–60 days USD'000	61–90 days USD'000	91–120 days USD'000	Over 120 days USD'000	Total USD'000
Expected loss rate	0.1%	2%	4%	14%	44%	
Trade receivables	385,633	11,174	10,742	2,508	1,996	412,053
Allowance on doubtful trade receivables	276	173	481	342	883	2,155

January 1, 2018	Current USD'000	31–60 days USD'000	61–90 days USD'000	91–120 days USD'000	Over 120 days USD'000	Total USD'000
Expected loss rate	0.1%	2%	4%	15%	42%	
Trade receivables	394,079	9,796	1,960	732	1,408	407,975
Allowance on doubtful trade receivables	343	212	79	110	591	1,335

38. RISK MANAGEMENT *(continued)*

CREDIT RISK *(continued)*

Trade receivables *(continued)*

The closing allowance on doubtful trade receivables as at December 31, 2019 reconcile to the opening balance as follows:

	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000
Balance at the beginning of the year	**2,155**	1,335	1,491
Addition in allowance on doubtful trade receivables	**1,449**	964	301
Reversal of allowance on doubtful trade receivables	**(373)**	(27)	(438)
Amounts written off during the year as uncollectible	**(67)**	—	(19)
Reclassified as held-for-sale	**—**	(117)	—
Balance at the end of the year	**3,164**	2,155	1,335

Trade receivables are written off when there is no reasonable expectation of recovery. Indicators that there is no reasonable expectation of recovery include, amongst others, the failure of a debtor to engage in a repayment plan with the Group, and a failure to make contractual payments for a period of greater than 180 days past due.

Other financial assets at amortized cost

Other financial assets at amortized cost include bank deposits will mature over 3 months, debentures, refundable deposits and other receivables. The main credit risk on bank deposits will mature over 3 months is limited because the counterparties are banks with high credit-ratings. All of the Group's financial assets at amortized cost are considered to have low credit risk as no significant increase in credit risk since the initial recognition.

Based on the assessment, the loss allowance recognized during the year for other financial assets at amortized cost was immaterial to 12 months expected losses. Thus there were no loss allowance for other financial assets at amortized cost as at December 31, 2019, December 31, 2018 and as at December 31, 2017 reconciles to the opening loss allowance on January 1, 2018.

Financial assets at fair value through profit or loss

The Group is also exposed to credit risk in relation to financial assets that are measured at fair value through profit or loss. The maximum exposure at the end of the year is the carrying amount of these investments, amounted to US$133.1 million (December 31, 2018: US$97.2 million).

LIQUIDITY RISK

The Group manages liquidity risk by maintaining adequate cash reserves, banking facilities and reserve borrowing facilities, by continuously monitoring forecast and actual cash flows, and by matching the maturity profiles of financial assets and liabilities.

38. RISK MANAGEMENT *(continued)*

LIQUIDITY RISK *(continued)*

Liquidity and interest risk tables

The following tables detail the Group's remaining contractual maturity for its non-derivative financial liabilities with agreed repayment periods. The tables have been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Group can be required to pay. The tables include both interest and principal cash flows. To the extent that interest flows are floating rate, the undiscounted amount is derived from interest rate curves at the end of the reporting period. The contractual maturity is based on the earliest date on which the Group may be required to pay.

December 31, 2019		**Weighted average effective interest rate**	**Less than 3 months USD'000**	**3 months to 1 year USD'000**	**1–5 years USD'000**	**5+ years USD'000**	**Total USD'000**
Interest-bearing bank	**Fixed**	**2.54%**	**178,342**	**44,593**	**570,108**	**223,472**	**1,016,515**
and other borrowings	**Floating**	**2.49%**	**22,009**	**319,658**	**1,216,555**	**—**	**1,558,222**
Lease payable		**3.70–5.00%**	**26,630**	**62,960**	**175,356**	**—**	**264,946**
Convertible bonds		**3.88%**	**—**	**642,500**	**—**	**—**	**642,500**
Medium-term notes		**3.57%**	**7,997**	**—**	**240,018**	**—**	**248,015**
Short-term notes		**3.10%**	**—**	**293,174**	**—**	**—**	**293,174**
Trade and other payables			**781,731**	**15,770**	**230,443**	**6,135**	**1,034,079**
Other liabilities			**—**	**31,087**	**22,382**	**—**	**53,469**
			1,016,709	**1,409,742**	**2,454,862**	**229,607**	**5,110,920**

December 31, 2018		Weighted average effective interest rate	Less than 3 months USD'000	3 months to 1 year USD'000	1–5 years USD'000	5+ years USD'000	Total USD'000
Interest-bearing bank	Fixed	2.26%	2,192	124,797	282,735	270,316	680,040
and other borrowings	Floating	2.70%	215,561	190,894	1,050,020	161,621	1,618,096
Convertible bonds		3.79%	—	—	442,500	—	442,500
Bonds payable		4.52%	—	500,000	—	—	500,000
Medium-term notes		3.70%	—	226,162	—	—	226,162
Trade and other payables			911,415	15,129	36,105	2,211	964,860
Other liabilities			14,570	19,670	53,768	—	88,008
			1,143,738	1,076,652	1,865,128	434,148	4,519,666

38. RISK MANAGEMENT *(continued)*

LIQUIDITY RISK *(continued)*

Liquidity and interest risk tables *(continued)*

December 31, 2017		Weighted average effective interest rate	Less than 3 months USD'000	3 months to 1 year USD'000	1–5 years USD'000	5+ years USD'000	Total USD'000
Interest-bearing bank	Fixed	3.20%	140,338	24,757	313,497	338,632	817,224
and other borrowings	Floating	2.36%	16,712	87,753	958,367	307,003	1,369,835
Convertible bonds		3.79%	—	—	442,500	—	442,500
Bonds payable		4.52%	—	—	500,000	—	500,000
Medium-term notes		3.70%	—	—	226,162	—	226,162
Finance lease payables		3.68%	434	1,308	4,935	—	6,677
Trade and other payables			880,795	5,492	161,169	3,004	1,050,460
Other liabilities			—	20,661	77,011	—	97,672
			1,038,279	139,971	2,683,641	648,639	4,510,530

The following table details the Group's expected maturity for its non-derivative financial assets. The table has been drawn up based on the undiscounted contractual maturities of the financial assets including interest that will be earned on those assets. The inclusion of information on non-derivative financial assets is necessary in order to understand the Group's liquidity risk management as the liquidity is managed on a net asset and liability basis.

December 31, 2019	**Weighted average effective interest rate**	**Less than 3 months USD'000**	**3 months to 1 year USD'000**	**1–5 years USD'000**	**5+ years USD'000**	**Total USD'000**
Trade and other receivables		**811,050**	**25,093**	**—**	**—**	**836,143**
Cash and cash equivalent, restricted cash* and financial assets at amortized cost	**3.01%**	**4,094,674**	**640,549**	**174,622**	**—**	**4,909,845**
Financial assets at fair value through profit or loss		**42,985**	**—**	**—**	**90,067**	**133,052**
		4,948,709	**665,642**	**174,622**	**90,067**	**5,879,040**

December 31, 2018	Weighted average effective interest rate	Less than 3 months USD'000	3 months to 1 year USD'000	1–5 years USD'000	5+ years USD'000	Total USD'000
Trade and other receivables		837,828	—	—	—	837,828
Cash and cash equivalent, restricted cash* and financial assets at amortized cost	2.29%	2,698,067	1,293,246	—	—	3,991,313
Financial assets at fair value through profit or loss		41,805	—	—	55,472	97,277
		3,577,700	1,293,246	—	55,472	4,926,418

38. RISK MANAGEMENT *(continued)*

LIQUIDITY RISK *(continued)*

Liquidity and interest risk tables (continued)

December 31, 2017	Weighted average effective interest rate	Less than 3 months USD'000	3 months to 1 year USD'000	1–5 years USD'000	5+ years USD'000	Total USD'000
Trade and other receivables		616,308	—	—	—	616,308
Cash and cash equivalent, restricted cash* and short-term investments	1.25%	2,231,089	276,723	116,282	—	2,624,094
Available-for-sale financial assets		—	—	—	24,844	24,844
		2,847,397	276,723	116,282	24,844	3,265,246

* The above restricted cash excludes the cash received from government funds.

The amounts included above for variable interest rate instruments for both non-derivative financial assets and liabilities is subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period.

The Group has access to short-term borrowings, of which US$2,739.1 million were unused at the end of the reporting period (2018: US$2,518.5 million and 2017: US$1,810.2 million). The Group expects to meet its other obligations from operating cash flows and proceeds of maturing financial assets.

The following table details the Group's liquidity analysis for its derivative financial instruments. The table has been drawn up based on the undiscounted contractual net cash inflows and outflows on derivative instruments that settle on a net basis, and the undiscounted gross inflows and outflows on those derivatives that require gross settlement. When the amount payable or receivable is not fixed, the amount disclosed has been determined by reference to the projected interest rates as illustrated by the yield curves at the end of the reporting period.

December 31, 2019	Less than 3 months USD'000	3 months to 1 year USD'000	1–5 years USD'000	5+ years USD'000	Total USD'000
Cross currency swap contracts					
— cash flow hedges					
Gross settled:					
— inflows	—	400,000	719,514	—	1,119,514
— (outflows)	—	(405,265)	(746,905)	—	(1,152,170)
Net settled:					
— net outflows	(1,044)	(1,479)	(15,756)	—	(18,279)
	(1,044)	(6,744)	(43,147)	—	(50,935)

38. RISK MANAGEMENT *(continued)*

LIQUIDITY RISK *(continued)*

Liquidity and interest risk tables *(continued)*

December 31, 2018	Less than 3 months USD'000	3 months to 1 year USD'000	1–5 years USD'000	5+ years USD'000	Total USD'000
Cross currency swap contracts					
— cash flow hedges					
Gross settled:					
— inflows	—	607,595	508,984	—	1,116,579
— (outflows)	—	(613,270)	(528,383)	—	(1,141,653)
Net settled:					
— net outflows	(8,783)	—	(738)	—	(9,521)
Cross currency swap contracts					
Gross settled:					
— inflows	—	262,652	—	—	262,652
— (outflows)	—	(261,472)	—	—	(261,472)
	(8,783)	(4,495)	(20,137)	—	(33,415)

December 31, 2017	Less than 3 months USD'000	3 months to 1 year USD'000	1–5 years USD'000	5+ years USD'000	Total USD'000
Cross currency swap contracts					
— cash flow hedges					
Gross settled:					
— inflows	—	37,703	512,067	—	549,770
— (outflows)	—	(34,254)	(480,984)	—	(515,238)
Net settled:					
— net inflows	—	2,854	20,730	—	23,584
	—	6,303	51,813	—	58,116

39. CASH FLOW INFORMATION

NET DEBT RECONCILIATION

This section sets out an analysis of net debt and the movements in net debt for each of the periods presented.

Net Debt	**12/31/19 USD'000**	12/31/18 USD'000	12/31/17 USD'000
Cash and cash equivalent	**2,238,840**	1,786,420	1,838,300
Liquid investments[(1)]	**2,319,355**	2,038,493	683,812
Borrowings	**(2,566,669)**	(2,290,768)	(2,184,547)
Lease liabilities	**(247,732)**	—	—
Bonds payable	**—**	(498,551)	(496,689)
Convertible bonds	**(630,428)**	(418,592)	(403,329)
Medium-term notes	**(214,193)**	(218,247)	(228,483)
Short-term notes	**(286,512)**	—	—
	612,661	398,755	(790,936)

39. CASH FLOW INFORMATION *(continued)*

NET DEBT RECONCILIATION *(continued)*

	Liabilities from financing activities									
	Borrowings	Lease liabilities	Bonds payable	Convertible bonds	Medium-term notes	Short-term notes	Subtotal	Cash and cash equivalents	Liquid investments	Total
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	**USD'000**	USD'000	USD'000	**USD'000**
Balance at December 31, 2016	(1,442,768)	—	(494,909)	(786,611)	(214,502)	(86,493)	**(3,025,283)**	2,126,011	31,543	**(867,729)**
Net cash flows	(657,643)	—	—	—	—	87,858	**(569,785)**	(309,862)	642,862	**(236,785)**
Conversion options exercised	—	—	—	399,099	—	—	**399,099**	—	—	**399,099**
Foreign exchange loss	(84,136)	—	—	—	(13,246)	(1,365)	**(98,747)**	22,151	9,468	**(67,128)**
Other changes[2]	—	—	(1,780)	(15,817)	(735)	—	**(18,332)**	—	(61)	**(18,393)**
Balance at December 31, 2017	(2,184,547)	—	(496,689)	(403,329)	(228,483)	—	**(3,313,048)**	1,838,300	683,812	**(790,936)**
Net cash flows	(245,650)	—	—	—	—	—	**(245,650)**	(20,913)	1,360,995	**1,094,432**
Reclassified as held- for-sale	58,467	—	—	—	—	—	**58,467**	(14,554)	—	**43,913**
Foreign exchange gain	80,962	—	—	—	10,978	—	**91,940**	(16,413)	(8,094)	**67,433**
Other changes[2]	—	—	(1,862)	(15,263)	(742)	—	**(17,867)**	—	1,780	**(16,087)**
Balance at December 31, 2018	(2,290,768)	—	(498,551)	(418,592)	(218,247)	—	**(3,426,158)**	1,786,420	2,038,493	**398,755**
Recognized on adoption of IFRS 16	—	(279,681)	—	—	—	—	**(279,681)**	—	—	**(279,681)**
Balance at January 1, 2019	(2,290,768)	(279,681)	(498,551)	(418,592)	(218,247)	—	**(3,705,839)**	1,786,420	2,038,493	**119,074**
Net cash flows	(300,040)	89,215	500,000	(229,680)	(6,070)	(299,400)	**(245,975)**	461,382	447,155	**662,562**
Acquisition of leases	—	(56,959)	—	—	—	—	**(56,959)**	—	—	**(56,959)**
Equity component of convertible bonds	—	—	—	34,147	—	—	**34,147**	—	—	**34,147**
Foreign exchange gain	24,139	—	—	—	9,709	12,894	**46,742**	(8,962)	(54,339)	**(16,559)**
Other changes[2]	—	(307)	(1,449)	(16,303)	415	(6)	**(17,650)**	—	(111,954)	**(129,604)**
Balance at December 31, 2019	(2,566,669)	(247,732)	—	(630,428)	(214,193)	(286,512)	**(3,945,534)**	2,238,840	2,319,355	**612,661**

(1) Liquid investments comprise current investments of financial products sold by banks, monetary funds, bank deposits to be matured over 3 months and debentures, being the financial assets disclosed in Note 22.

(2) Other changes include non-cash movements, including accrued interest expense which will be presented as operating cash flows in the statement of cash flows when paid.

NON-CASH INVESTING ACTIVITIES

No acquisition of tangible and intangible assets by means of long-term payables occurred for the year ended December 31, 2019 (December 31, 2018: nil and December 31, 2017: US$97.6 million), respectively. Non-cash investing activities in relation to leases are disclosed in Note 17.

40. RELATED PARTY TRANSACTIONS

The names of the related parties which had transactions with the Group for the year ended December 31, 2019 and the relationships with the Group are disclosed below:

Related party name	Relationship with the Group
Datang Microelectronics Technology Co., Ltd.	A subsidiary of Datang Group
Datang Semiconductor Co., Ltd.	A subsidiary of Datang Group
Leadcore Technology Co., Ltd. and Leadcore Technology (Hong Kong) Co., Ltd. ("Leadcore")	A subsidiary of Datang Group
Xingtang Telecommunications Technology Co., Ltd. ("Xingtang")	A subsidiary of Datang Group
Toppan SMIC Electronic (Shanghai) Co., ("Toppan")	An associate of the Group
Brite Semiconductor (Shanghai) Corporation and its subsidiaries ("Brite")	An associate of the Group
China Fortune-Tech Capital Co., Ltd. ("China Fortune-Tech")	An associate of the Group
Jiangsu Changjiang Electronics Technology Co., Ltd. ("JCET") and its subsidiaries	An associate of the Group
Sino IC Leasing Co., Ltd. ("Sino IC Leasing")	An associate of the Group
Semiconductor Manufacturing Electronics (Shaoxing) Corp. ("SMEC")	An associate of the Group
Ningbo Semiconductor International Corporation ("NSI")	An associate of the Group
Semiconductor Global Solutions Corporation ("SGS")	An associate of the Group

TRADING TRANSACTIONS

During the year, group entities entered into the following trading transactions with related parties that are not members of the Group:

	Sale of goods Year ended			Sale of services Year ended		
	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000	**12/31/19 USD'000**	12/31/18 USD'000	12/31/17 USD'000
Datang Microelectronics Technology Co., Ltd[(1)]	**8,669**	9,783	15,667	**—**	—	—
Datang Semiconductor Co., Ltd[(1)]	**76**	117	535	**—**	—	—
Leadcore[(1)]	**922**	2,018	3,960	**—**	—	—
Xingtang[(1)]	**199**	—	—	**—**	—	—
Toppan	**—**	—	—	**—**	4,050	3,896
Brite	**43,535**	33,568	44,212	**415**	—	—
JCET and its subsidiaries	**26,901**	64	17	**690**	89	48
SMEC	**36,920**	11,346	—	**9,303**	—	—
NSI	**4,816**	862	—	**785**	2,128	—
SGS	**—**	—	—	**11**	—	—

40. RELATED PARTY TRANSACTIONS *(continued)*

	Purchase of goods			Purchase of services		
	Year ended			Year ended		
	12/31/19	12/31/18	12/31/17	**12/31/19**	12/31/18	12/31/17
	USD'000	USD'000	USD'000	**USD'000**	USD'000	USD'000
Datang Microelectronics Technology Co., Ltd[1]	**—**	—	—	**23**	106	—
Toppan	**6,063**	7,277	11,275	**99**	32	59
Brite	**—**	—	—	**—**	96	2,016
China Fortune-Tech	**—**	—	—	**297**	352	959
SMEC	**152**	—	—	**490**	—	—
JCET and its subsidiaries	**7,231**	9,923	1,778	**896**	819	620
Sino IC Leasing[1]	**—**	—	—	**—[2]**	87,071	51,739

	Sale of equipment			Grant of licensing		
	Year ended			Year ended		
	12/31/19	12/31/18	12/31/17	**12/31/19**	12/31/18	12/31/17
	USD'000	USD'000	USD'000	**USD'000**	USD'000	USD'000
Sino IC Leasing[2]	**—**	306,750	661,455	**—**	—	—
SMEC[3]	**3,150**	68,829	—	**—**	163,845	—

	Purchase of equipment			Increase of right-of-use assets		
	Year ended			Year ended		
	12/31/19	12/31/18	12/31/17	**12/31/19**	12/31/18	12/31/17
	USD'000	USD'000	USD'000	**USD'000**	USD'000	USD'000
SGS	**736**	—	—	**—**	—	—
Sino IC Leasing[2]	**—**	—	—	**54,692**	—	—
JCET and its subsidiaries[5]	**22**	—	—	**2,267**	—	—

The following balances were outstanding at the end of the reporting period:

	Amounts due from related parties			Amounts due to related parties		
	12/31/19	12/31/18	12/31/17	**12/31/19**	12/31/18	12/31/17
	USD'000	USD'000	USD'000	**USD'000**	USD'000	USD'000
Datang Microelectronics Technology Co., Ltd	**810**	3,379	4,279	**—**	—	—
Datang Semiconductor Co., Ltd	**36**	10	302	**—**	—	—
Leadcore	**143**	936	—	**—**	—	—
Toppan	**—**	2,365	670	**492**	737	888
Brite	**15,534**	10,775	12,951	**—**	—	—
JCET and its subsidiaries	**13,497**	47	21	**2,582**	948	3
SMEC	**37,243**	104,506	—	**70**	—	—
NSI	**6,146**	2,922	—	**—**	—	—
SGS	**4**	—	—	**46**	—	—
Sino IC Leasing	**—**	44,702[4]	—	**245,768[2]**	—	—

(1) The related party transactions in respect of (1) above constituted non-exempt continuing connected transactions as defined in Chapter 14A of the Listing Rules. Details are disclosed in the section Non-exempt Continuing Connect Transactions in the annual report. The other party transactions did not constitute non-exempt continuing connected transaction under Chapter 14A of the Listing Rules.

40. RELATED PARTY TRANSACTIONS *(continued)*

(2) In February 2017, July 2017 and July 2018, there were three, seven and four arrangements in consideration of US$250.6 million, US$410.8 million and US$306.8 million, respectively entered into by the Group with the subsidiaries of Sino IC Leasing in the form of a sale and leaseback transaction with a repurchase option.

As the repurchase prices are set at the expected fair value and the Group is not reasonably certain that it will exercise the repurchase options, the above transactions have been accounted for a disposal of property, plant and equipment followed with an operating lease. The total discounted future minimum lease payments under the lease arrangements was recorded as right-of-use assets.

With the adoption of IFRS 16 from January 1, 2019, the Group recognized right-of-use assets and lease liabilities for the leases engaged with Sino IC Leasing. Please refer to Note 17. As of December 31, 2019, the balance of lease liabilities amounted to US$245.8 million. For year ended December 31, 2019, the increase of right-of-use assets was US$54.7 million, the interest expenses recognized were US$10.3 million and the payment of lease liabilities was US$89.2 million.

(3) In 2018, the technology licensing internally developed and not capitalized was authorized to SMEC with the revenue of US$163.8 million and no related cost of sales recognized by the Group.

(4) On July 6, 2018 and August 10, 2018, SMIC Beijing has respectively subscribed for, an amount of RMB200.0 million (approximately US$30.2 million) and RMB100.0 million (approximately US$14.6 million) out of the total issue of an aggregate principal amount of RMB500.0 million of the oriented debt financing instrument issued by Sino IC Leasing, which was recorded as financial assets at amortized cost.

(5) With the adoption of IFRS 16 from January 1, 2019, the Group recognized right-of-use assets and lease liabilities for the leases engaged with JCET and its subsidiaries. Please refer to Note 17. As of December 31, 2019, the balance of lease liabilities amounted to US$1.9 million. For year ended December 31, 2019, the increase of right-of-use assets was US$2.3 million, the interest expenses recognized were US$0.1 million and the payment of lease liabilities was US$0.5 million.

COMPENSATION OF DIRECTORS AND SENIOR MANAGEMENT PERSONNEL

Directors and senior management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly.

The remuneration of directors and senior management personnel during the year are as follows:

	Year ended 12/31/19 USD'000	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000
Salaries, bonus and benefits	**3,184**	3,973	4,853
Equity-settled share-based payments	**751**	2,390	8,264
	3,935	6,363	13,117

The remuneration of directors and senior management personnel is determined by the Compensation Committee having regard to the Group's profitability, business achievement, individual performance and market trends.

ARRANGEMENTS/CONTRACTS FOR SALE OF SELF-DEVELOPED LIVING QUARTER UNIT

In January 2018, the Group sold self-developed living quarter unit amounted to US$1.2 million to one director of the Company. In May 2018, the Group entered into arrangement/contracts with one senior management of the company for sale of self-developed living quarter unit and the amount of the consideration was approximately US$1.1 million. The transaction was completed in March 2019.

In July 2018, the Group entered into arrangement/contracts with one director of the company for sale of self-developed living quarter unit and the amount of the consideration was approximately US$0.9 million. The transaction was completed in September 2019.

41. COMMITMENTS

CAPITAL COMMITMENTS

As of December 31, 2019, 2018 and 2017, the Group had the following commitments to purchase machinery, equipment and construction obligations. The machinery and equipment is scheduled to be delivered to the Group's facility by December 31, 2020.

	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000
Commitments for the facility construction	**126,233**	333,211	484,468
Commitments for the acquisition of machinery and equipment	**1,645,867**	1,209,335	476,132
Commitments for the acquisition of intangible assets	**7,507**	5,732	5,596
	1,779,607	1,548,278	966,196

NON-CANCELLABLE OPERATING LEASES

The Group leases certain of its production equipment under operating lease arrangements. Leases are negotiated for terms ranging from three to five years. Please refer to Note 40 for details.

The Group had total future minimum lease payments under non-cancellable operating leases falling due as follows:

	12/31/19 USD'000	12/31/18 USD'000	12/31/17 USD'000
Within 1 year	**—**	121,588	91,181
1–5 years	**—**	230,952	203,684
	—	352,540	294,865

From January 1, 2019, the Group has recognized right-of-use assets for these leases. Please see Note 17 for further information.

42. FINANCIAL INFORMATION OF PARENT COMPANY

STATEMENT OF FINANCIAL POSITION

	(In USD'000)		
	12/31/19	12/31/18	12/31/17
Assets			
Non-current assets			
Property, plant and equipment	**63,414**	48,168	47,090
Intangible assets	**20,630**	32,437	59,138
Investment in subsidiaries	**5,311,361**	5,051,780	4,779,485
Investments in associates	**147,425**	145,285	132,427
Derivative financial instruments	**—**	5,266	—
Other financial assets	**—**	—	11,732
Other assets	**11,354**	141,603	372,275
Total non-current assets	**5,554,184**	5,424,539	5,402,147
Current assets			
Prepayment and prepaid operating expenses	**1,173**	298	428
Trade and other receivables	**28,557**	28,982	29,061
Due from subsidiaries	**2,190,675**	2,027,008	1,609,556
Financial asset at amortized cost	**—**	40,000	—
Derivative financial instruments	**—**	1,323	—
Other financial assets	**—**	—	95,440
Cash and cash equivalent	**95,097**	107,795	140,411
Total current assets	**2,315,502**	2,205,406	1,874,896
Total assets	**7,869,686**	7,629,945	7,277,043

42. FINANCIAL INFORMATION OF PARENT COMPANY *(continued)*

STATEMENT OF FINANCIAL POSITION *(continued)*

	(In USD'000)		
	12/31/19	12/31/18	12/31/17
Equity and liabilities			
Capital and reserves			
Ordinary shares, $0.004 par value, 10,000,000,000 shares authorized, 5,056,868,912, 5,039,819,199 and 4,916,106,889 shares issued and outstanding at December 31, 2019, 2018 and 2017, respectively	**20,227**	20,159	19,664
Share premium	**5,011,915**	4,993,163	4,827,619
Reserves	**86,749**	109,346	134,669
Retained earnings	**550,506**	331,298	187,008
Equity attributable to owners of the Company	**5,669,397**	5,453,966	5,168,960
Perpetual subordinated convertible securities	**563,848**	563,848	64,073
Total equity	**6,233,245**	6,017,814	5,233,033
Non-current liabilities			
Borrowings	**187,267**	—	76,520
Convertible bonds	**—**	418,592	403,329
Bonds payable	**—**	—	496,689
Medium-term notes	**214,193**	—	228,483
Derivative financial instruments	**41,174**	8,711	—
Other financial liabilities	**—**	—	1,885
Other liabilities	**—**	—	520
Total non-current liabilities	**442,634**	427,303	1,207,426
Current liabilities			
Trade and other payables	**19,444**	18,033	17,489
Due to subsidiaries	**176,393**	351,017	804,476
Borrowings	**61,800**	72,852	—
Convertible bonds	**630,428**	—	—
Bonds payable	**—**	498,551	—
Medium-term notes	**—**	218,247	—
Short-term notes	**286,512**	—	—
Accrued liabilities	**16,310**	13,789	13,877
Derivative financial instruments	**2,920**	12,339	—
Other financial liabilities	**—**	—	742
Total current liabilities	**1,193,807**	1,184,828	836,584
Total liabilities	**1,636,441**	1,612,131	2,044,010
Total equity and liabilities	**7,869,686**	7,629,945	7,277,043

42. FINANCIAL INFORMATION OF PARENT COMPANY *(continued)*

STATEMENT OF CHANGES IN EQUITY

(In USD'000)

	Ordinary shares	Share premium	Equity-settle employee benefits reserve	Foreign currency translation reserve	Change in value of available-for-sale financial assets	Convertible bonds equity reserve	Defined benefit pension reserve	Cash flow hedges	Share of other comprehensive income of joint ventures accounted for using equity method	Others	Retained earnings (accumulated deficit)	Perpetual subordinated convertible securities	Total equity
Balance at December 31, 2016	17,012	4,950,948	65,703	(22,087)	1,245	81,678	1,520	(34,627)	—	131	(910,849)	—	**4,150,674**
Profit for the year	—	—	—	—	—	—	—	—	—	—	179,679	—	**179,679**
Other comprehensive income (losses) for the year	—	—	—	21,590	(2,356)	—	(436)	35,143	17,646	(131)	—	—	**71,456**
Total comprehensive income (losses) for the year	—	—	—	21,590	(2,356)	—	(436)	35,143	17,646	(131)	179,679	—	**251,135**
Exercise of stock options	130	35,178	(18,220)	—	—	—	—	—	—	—	—	—	**17,088**
Share-based compensation	—	—	17,495	—	—	—	—	—	—	—	—	—	**17,495**
Conversion options of convertible bonds exercised during the year	1,556	427,168	—	—	—	(29,625)	—	—	—	—	—	—	**399,099**
Issuance of ordinary shares	966	325,174	—	—	—	—	—	—	—	—	—	—	**326,140**
Perpetual subordinated convertible securities	—	—	—	—	—	—	—	—	—	—	—	64,073	**64,073**
Share premium reduction	—	(910,849)	—	—	—	—	—	—	—	—	910,849	—	**—**
Gain on transfer of business operation	—	—	—	—	—	—	—	—	—	—	7,329	—	**7,329**
Subtotal	2,652	(123,329)	(725)	—	—	(29,625)	—	—	—	—	918,178	64,073	**831,224**
Balance at December 31, 2017	19,664	4,827,619	64,978	(497)	(1,111)	52,053	1,084	516	17,646	—	187,008	64,073	**5,233,033**
Adoption of IFRS 9	—	—	—	—	1,111	—	—	—	(17,646)	—	16,535	—	**—**
Restated total equity at January 1, 2018	19,664	4,827,619	64,978	(497)	—	52,053	1,084	516	—	—	203,543	64,073	**5,233,033**
Profit for the year	—	—	—	—	—	—	—	—	—	—	134,055	—	**134,055**
Other comprehensive income (losses) for the year	—	—	—	(36,138)	—	—	129	35,931	—	—	—	—	**(78)**
Total comprehensive income (losses) for the year	—	—	—	(36,138)	—	—	129	35,931	—	—	134,055	—	**133,977**
Issuance of ordinary shares	474	160,404	—	—	—	—	—	—	—	—	—	—	**160,878**
Cancellation of treasury stock	(76)	(19,981)	—	—	—	—	—	—	—	—	—	—	**(20,057)**
Exercise of stock options	97	25,121	(17,211)	—	—	—	—	—	—	—	—	—	**8,007**
Share-based compensation	—	—	10,912	—	—	—	—	—	—	—	—	—	**10,912**
Perpetual subordinated convertible securities	—	—	—	—	—	—	—	—	—	—	—	499,775	**499,775**
Distribution to perpetual subordinated convertible securities	—	—	—	—	—	—	—	—	—	—	(6,300)	—	**(6,300))**
Deconsolidation of subsidiary due to loss of control	—	—	—	(1,774)	—	—	—	—	—	—	—	—	**(1,774)**
Share of other capital reserve of associates accounted for using equity method	—	—	—	—	—	—	—	—	—	(637)	—	—	**(637)**
Subtotal	495	165,544	(6,299)	(1,774)	—	—	—	—	—	(637)	(6,300)	499,775	**650,804**
Balance at December 31, 2018	20,159	4,993,163	58,679	(38,409)	—	52,053	1,213	36,447	—	(637)	331,298	563,848	**6,017,814**
Profit for the year	—	—	—	—	—	—	—	—	—	—	234,681	—	**234,681**
Other comprehensive income (losses) for the year	—	—	—	(17,794)	—	—	(1,532)	(26,524)	—	—	—	—	**(45,850)**
Total comprehensive income (losses) for the year	—	—	—	(17,794)	—	—	(1,532)	(26,524)	—	—	234,681	—	**188,831**
Exercise of stock options	68	18,752	(11,884)	—	—	—	—	—	—	—	—	—	**6,936**
Share-based compensation	—	—	5,756	—	—	—	—	—	—	—	—	—	**5,756**
Issuance of convertible bond	—	—	—	—	—	34,147	—	—	—	—	—	—	**34,147**
Transaction with non-controlling interests	—	—	—	—	—	—	—	—	—	(5,013)	(3,854)	—	**(8,867)**
Distribution to perpetual subordinated convertible securities	—	—	—	—	—	—	—	—	—	—	(11,300)	—	**(11,300)**
Deconsolidation of subsidiaries due to loss of control	—	—	—	(72)	—	—	319	—	—	—	(319)	—	**(72)**
Subtotal	68	18,752	(6,128)	(72)	—	34,147	319	—	—	(5,013)	(15,473)	—	**26,600**
Balance at December 31, 2019	20,227	5,011,915	52,551	(56,275)	—	86,200	—	9,923	—	(5,650)	550,506	563,848	**6,233,245**

43. SUBSEQUENT EVENTS

ISSUE OF CORPORATE BONDS

On February 27, 2020, the Company issued 5-year unsecured corporate bonds for a total amount of US$600.0 million. The corporate bonds carry a coupon interest rate of 2.693% with bond interest payable semi-annually on February 27 and August 27. The net proceeds (net of fees, commissions and expenses) from the issue of the bonds were approximately US$596.4 million.

EFFECT OF OUTBREAK OF NOVEL CORONAVIRUS

Since January 2020, there was a widespread of a novel coronavirus (named COVID-19 by the World Health Organization) within the PRC. Certain businesses in major cities in the PRC had been temporarily suspended after the Chinese New Year holidays in order to contain and mitigate the current outbreak. However, the Group managed to maintain the majority of its business operation.

Based on the current assessment and subject to the development of the COVID-19 epidemic, the Directors of the Group are of the view that the COVID-19 epidemic is unlikely to have a material and adverse effect on the Group's overall operation and financial performance after 31 December 2019.

44. APPROVAL OF FINANCIAL STATEMENTS

The financial statements were approved and authorized for issue by the board of directors of the Company on March 31, 2020.

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