

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

FORM 20-F

- ☐ REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934  
OR  
☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2018

- OR  
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
OR  
☐ SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number 1-31994

**Semiconductor Manufacturing International Corporation**

(Exact name of Registrant as specified in its charter)

**Not Applicable**

(Translation of Registrant's name into English)

**Cayman Islands**

(Jurisdiction of incorporation or organization)

**18 Zhangjiang Road, Pudong New Area, Shanghai, China 201203**

(Address of principal executive offices)

**Mr. Gao Yonggang, Chief Financial Officer**

**Telephone: (8621) 3861-0000**

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**18 Zhangjiang Road, Pudong New Area, Shanghai, China 201203**

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of each class	Name of each exchange on which registered
Ordinary Shares, par value US\$0.004 <sup>1</sup> American Depositary Shares	The Stock Exchange of Hong Kong Limited* The New York Stock Exchange, Inc.

<sup>1</sup> The par value of the ordinary share of the Company was US\$0.0004 each before December 7, 2016 and US\$0.004 each after December 7, 2016.

Securities registered or to be registered pursuant to Section 12(g) of the Act. **None**

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act. **None**

Indicate the number of outstanding shares of each of the issuer's classes of capital or ordinary shares as of the close of the period covered by the annual report.

As of December 31, 2018, there were 5,039,819,199 ordinary shares, par value US\$0.004 per share, outstanding, of which 17,423,991 ordinary shares were held in the form of 87,119,955 American Depositary Shares ("ADSs"). Each ADS represents 5 ordinary shares.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

☒ Yes ☐ No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15 (d) of the Securities Exchange Act of 1934.

☐ Yes ☒ No

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

☒ Yes ☐ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of "large accelerated filer", "accelerated filer" and "emerging growth company" in Rule 12b-2 of the Securities Exchange Act of 1934 (Check one):

Large accelerated filer ☒

Accelerated filer ☐

Non-accelerated filer ☐

Emerging growth company ☐

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ☐

International Financial Reporting Standards as issued  
by the International Accounting Standards Board ☒

Other ☐

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Securities Exchange Act of 1934).

☐ Yes ☒ No

\* Not for trading, but only in connection with the listing of American Depositary Shares on the New York Stock Exchange, Inc.

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## INTRODUCTION

Except where the context otherwise requires and for purposes of this annual report only:

- “ADSS” refer to American Depositary Shares;
- “Average selling price of wafers” refers to simplified average selling price which is calculated as total revenue divided by total shipments;
- “BGN” refers to Bulgarian Lev;
- “Board” refers to our board of directors;
- “China” or the “PRC” refers to the People’s Republic of China, excluding Hong Kong, Macau and Taiwan for the purpose of this annual report;
- “Company,” “SMIC,” “Registrant,” “we,” “our” and “us” refer to Semiconductor Manufacturing International Corporation, a Cayman Islands company;
- “Directors” refer to the members of the Board;
- “EUR” refers to Euros;
- “Global Offering” refers to the initial public offering of our ADSs and our ordinary shares, which was completed on March 18, 2004;
- “Group” refers to SMIC and all of its subsidiaries;
- “HK\$” refers to Hong Kong dollars;
- “IFRS” refers to International Financial Reporting Standards as issued by the International Accounting Standards Board;
- “JPY” refers to Japanese Yen;
- “NYSE” or “New York Stock Exchange” refers to the New York Stock Exchange, Inc.;
- “Ordinary Share(s)” refer 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,” “rmb” or “RMB” refers to Renminbi, the legal currency of China;
- “SEC” refers to the U.S. Securities and Exchange Commission;
- “SEHK,” “HKSE” or “Hong Kong Stock Exchange” refers to The Stock Exchange of Hong Kong Limited;
- “Share Consolidation” refers to the consolidation of every ten (10) issued and unissued ordinary shares and preferred shares of US\$0.0004 each in the existing share capital of the Company into one ordinary share and preferred share of US\$0.004 each with effect from December 7, 2016.
- “US\$” or “USD” refers to U.S. dollars.
- “U.S. GAAP” refers to Generally Accepted Accounting Principles in the United States; and
- The “Glossary of Technical Terms” contained in Annex A of this annual report sets forth the description of certain technical terms and definitions used in this annual report.

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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 and 28 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.

## FORWARD-LOOKING STATEMENTS

This annual report contains, in addition to historical information, "forward-looking statements" within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on our current assumptions, expectations and projections about future events. We use words like "believe," "anticipate," "intend," "estimate," "expect," "project" 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 the judgment of our senior management and involve significant risks, both known and unknown, uncertainties and other factors that may cause our 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 cyclicalities and market conditions in the semiconductor industry;
- intense competition;
- timely wafer acceptance by our customers;
- bad debt risk;
- timely introduction of new technologies;
- our 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;
- our anticipated capital expenditures;
- our anticipated investments in research and development, anticipated changes to our liability for unrecognized tax benefits; and
- financial stability in end markets.

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

**Part I**

**Item 1. Identity of Directors, Senior Management and Advisors**

Not applicable.

**Item 2. Offer Statistics and Expected Timetable**

Not applicable.

**Item 3. Key Information**

**A. Selected Consolidated Financial Data**

The selected consolidated financial data presented below as of and for the years ended December 31, 2014, 2015, 2016, 2017 and 2018 have been prepared in accordance with IFRS and are derived from, and should be read in conjunction with our audited consolidated financial statements, including the related notes, included elsewhere in this annual report.

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	For the year ended December 31,				
	2014	2015	2016	2017	2018
	(in US\$ thousands, except for earnings per share, shares, and units)				
Revenue	1,969,966	2,236,415	2,914,180	3,101,175	3,359,984
Cost of sales	(1,486,514)	(1,553,795)	(2,064,499)	(2,360,431)	(2,613,307)
Gross profit	483,452	682,620	849,681	740,744	746,677
Research and development expenses, net	(189,733)	(237,157)	(318,247)	(427,111)	(558,110)
Sales and marketing expenses	(38,252)	(41,876)	(35,034)	(35,796)	(30,455)
General and administration expenses	(137,871)	(213,190)	(167,582)	(198,036)	(199,818)
Net impairment losses (recognized) reversal on financial assets	(1,557)	13	10,211	137	(937)
Other operating income, net	14,206	31,594	177	44,957	57,283
Profit from operations	130,245	222,004	339,206	124,895	14,640
Interest income	14,230	5,199	11,243	27,090	64,339
Finance costs	(20,715)	(12,218)	(23,037)	(18,021)	(24,278)
Foreign exchange gains or losses	(5,993)	(26,349)	(1,640)	(12,694)	(8,499)
Other gains or losses, net	18,210	55,611	(2,113)	16,499	24,282
Share of profit (loss) of investment accounted for using equity method	2,073	(13,383)	(13,777)	(9,500)	21,203
Profit before tax	138,050	230,864	309,882	128,269	91,687
Income tax (expense) benefit	(11,789)	(8,541)	6,552	(1,846)	(14,476)
Profit for the year	126,261	222,323	316,434	126,423	77,211
Other comprehensive income (loss)					
Item that may be reclassified subsequently to profit or loss					
Exchange differences on translating foreign operations	(324)	(8,185)	(19,031)	23,213	(35,919)
Change in value of available-for-sale financial assets	—	452	807	(2,381)	—
Cash flow hedges	—	—	(34,627)	35,143	35,931
Share of other comprehensive income of joint ventures accounted for using equity method	—	—	—	17,646	—
Others	—	130	1	(131)	—
Items that will not be reclassified to profit or loss					
Actuarial gains or losses on defined benefit plans	—	—	1,520	(436)	129
Total comprehensive income for the year	125,937	214,720	265,104	199,477	77,352
Profit (loss) for the year attributable to:					
Owners of the Company	152,969	253,411	376,630	179,679	134,055
Non-controlling interests	(26,708)	(31,088)	(60,196)	(53,256)	(56,844)
	126,261	222,323	316,434	126,423	77,211
Total comprehensive income (loss) for the year attributable to:					
Owners of the Company	152,645	245,803	326,191	251,135	133,977
Non-controlling interests	(26,708)	(31,083)	(61,087)	(51,658)	(56,625)
	125,937	214,720	265,104	199,477	77,352
Earnings per share <sup>(1)</sup>					
Basic	\$ 0.05	\$ 0.07	\$ 0.09	\$ 0.04	\$ 0.03
Diluted	\$ 0.04	\$ 0.06	\$ 0.08	\$ 0.04	\$ 0.03
Shares issued and outstanding <sup>(1)</sup>	3,585,609,617	4,207,374,896	4,252,922,259	4,916,106,889	5,039,819,199
Financial Ratio					
Gross margin	24.5 %	30.5 %	29.2 %	23.9 %	22.2 %
Net margin	6.4 %	9.9 %	10.9 %	4.1 %	2.3 %
Operating Data					
Wafers shipped (in unit)	2,559,245	3,015,966	3,957,685	4,310,779	4,874,663

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	As of December 31,				
	2014	2015	2016 (in US\$ thousands)	2017	2018
<b>Statements of Financial Position Data:</b>					
Total assets	5,769,379	7,115,347	10,115,278	11,918,451	14,424,320
Total non-current assets	3,471,120	4,525,297	6,431,525	7,749,467	8,274,729
Property, plant and equipment	2,995,086	3,903,818	5,687,357	6,523,403	6,777,970
Investments in associates	57,631	181,331	240,136	758,241	1,135,442
Total current assets	2,298,259	2,590,050	3,683,753	4,168,984	6,149,591
Inventories	316,041	387,326	464,216	622,679	593,009
Trade and other receivables	456,388	499,846	645,822	616,308	837,828
Financial assets at amortized cost <sup>(2)</sup>	—	—	—	—	1,996,808
Other financial assets <sup>(2)</sup>	644,071	282,880	31,543	683,812	—
Restricted cash - current	238,051	302,416	337,699	336,043	592,290
Cash and cash equivalents	603,036	1,005,201	2,126,011	1,838,300	1,786,420
Total liabilities	2,461,657	2,925,092	4,712,051	5,197,116	5,500,740
Total non-current liabilities	1,311,416	1,157,901	2,731,151	3,290,337	2,641,512
Total current liabilities	1,150,241	1,767,191	1,980,900	1,906,779	2,859,228
Total equity	3,307,722	4,190,255	5,403,227	6,721,335	8,923,580
Non-controlling interests	359,307	460,399	1,252,553	1,488,302	2,905,766

- (1) The basic and diluted earnings per share for 2014, 2015 and 2016 have been adjusted to reflect the impact of the share consolidation, on the basis that every ten ordinary shares and preferred shares of US\$0.0004 each consolidated into one ordinary share and preferred share of US\$0.004 each, which was accounted for as a reverse stock split effective on December 7, 2016 ("Share Consolidation").
- (2) Other financial assets were mainly reclassified to financial assets at amortized cost as of January 1, 2018, to comply with IFRS 9. For details, please refer to Note 2 to the Consolidated Financial Statements.

#### **B. Capitalization and Indebtedness**

Not Applicable

#### **C. Reasons for the Offer and Use of Proceeds**

Not Applicable

#### **D. Risk Factors**

##### **Risk Factors Related to Our Financial Condition and Business**

**We may not be able to maintain or increase profitability, primarily due to the possibility of increasing fixed costs and market competition reflected in price erosion in the average selling prices of our products.**

Our profit amounted to US\$126.4 million and US\$77.2 million for the years ended December 31, 2017 and 2018, respectively. We have retained earnings of US\$331.3 million attributable to owners of the Company as of December 31, 2018. We may not be able to maintain or increase profitability on an annual or quarterly basis, primarily because our business is characterized by high fixed costs relating to advanced technology equipment purchases, which result in correspondingly high levels of depreciation expenses. We will continue to incur capital expenditures and depreciation expenses as we equip and ramp-up additional fabs and expand our capacity at our existing fabs. This may result in an increase of our fixed costs and possibly reduce our chances of maintaining or increasing profitability.

In addition, we are competing in the same technology environment as a number of other foundries and our competitors who operate these foundries, may lower price to secure business, resulting in an erosion of the average selling price of our product portfolio, which adversely affects our ability to maintain or increase profitability.



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**The cyclical nature of the semiconductor industry and periodic overcapacity make our business and operating results particularly vulnerable to economic downturns, such as a global economic crisis.**

The semiconductor industry has historically been highly cyclical and has experienced significant downturns characterized by fluctuations in end-user demand, reduced demand for integrated circuits, rapid erosion of average selling prices and production overcapacity at various times. Companies in the semiconductor industry have expanded aggressively during periods of increased demand in order to have the capacity needed to meet such increased demand or expected demand in the future. If actual demand is not sustained, does not increase or declines, or if companies in the industry expand too aggressively in light of the actual increase in demand, the industry will generally experience a period in which industry-wide capacity exceeds demand.

During periods when industry-wide capacity exceeds demand, our operations are subject to more intense competition, and our results of operations are likely to suffer because of the resulting pricing pressure and capacity underutilization. Severe pricing pressure could result in the overall foundry industry becoming less profitable, at least for the duration of the downturn, and could prevent us from maintaining or increasing profitability. We expect that industry cyclicality will continue.

In addition, an erosion of global consumer confidence amidst concerns over declining asset values, inflation, energy costs, geopolitical issues, the availability and cost of credit, rising unemployment, and the stability or solvency of financial institutions, financial markets, businesses and sovereign nations could have an adverse effect on our results of operations.

Adverse economic conditions could cause our expenses to vary materially from our expectations. The failure of financial institutions could negatively impact our treasury operations, as the financial condition of such parties may deteriorate rapidly and without notice in times of market volatility and disruption. Other income and expense could vary materially from expectations depending on changes in interest rates, borrowing costs and currency exchange rates. Economic downturns may also lead to restructuring actions and associated expenses.

If we cannot take appropriate or effective actions in a timely manner during any economic downturns, such as reducing our costs to sufficiently offset declines in demand for our services, our business and operating results may be adversely affected. A prolonged period of economic decline could have a material adverse effect on our results of operations. Economic uncertainty also makes it difficult for us to make accurate forecasts of revenue, gross margins and expenses.

Furthermore, a slowdown in the growth in demand for, or the continued reduction in selling prices of, devices that use semiconductors may decrease the demand for our products and reduce our profit margins.

**The loan agreements entered into by members of the Group contain certain restrictions that limit our flexibility in operating our business.**

The terms of certain existing loan agreements entered into by members of the Group contain, and certain future indebtedness of the Group would likely contain, a number of restrictive covenants that impose significant operating and financial restrictions on the Group, including restrictions on the ability of members of the Group to, among other things:

- pay dividends;
- repay outstanding shareholder loans and provide loans to subsidiaries; and
- consolidate, merge, sell or otherwise dispose of any of our assets under certain conditions.

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In addition, certain loan agreements of the Group contain, and any future loan agreements may contain, cross-default clauses whereby a default under one of the loan agreements may constitute an event of default under the other loan agreements. We may also be required to satisfy and maintain specified financial ratios and other financial covenants (see "Item 5.B — Operating and Financial Review and Prospects — Liquidity and Capital Resources — Bank borrowing" for details). The Group's ability to meet such financial ratios and other covenants can be affected by various events, and we cannot assure you that we will meet these ratios and comply with such covenants in the future. A breach of any of these covenants would result in a default under the existing loan agreements of the Group, which may allow the lenders to declare all amounts outstanding thereunder to be due and payable after the lapse of the relevant grace period and terminate all commitments to extend further credit, any of which could result in an event of default under the terms and conditions of the loan agreement.

**The impact of deteriorating economic conditions on our customers and suppliers could adversely affect our business.**

Customers' financial difficulties have resulted, and could result in the future, in increases in bad debt write-offs and additions to reserves in our receivables portfolio. In particular, our exposure to certain financially troubled customers could have an adverse effect on our results of operations. In addition, we depend on suppliers of raw materials, such as silicon wafers, gases and chemicals, and spare equipment parts, in order to maintain our production processes. Our business may be disrupted if, due to the insolvency of key suppliers, we are unable to obtain the raw materials required to sustain our operations.

**Demand instability for foundry services may result in a lower rate of return on investments than previously anticipated and our business and operating results may be adversely affected.**

The demand for foundry services by integrated device manufacturers ("IDM(s)"), fabless semiconductor companies and systems companies has been increasing. We have made significant investments in anticipation of the continuation of this trend and, as such, any reversal of this trend will likely result in a lower rate of return on our investments. During an industry slowdown, IDMs may allocate a smaller portion of their fabricating needs to foundry service providers and perform a greater amount of foundry services for system companies and fabless semiconductor companies in order to maintain their equipment's utilization rates. As a result, our business and operating results could be adversely affected.

**Our results of operations may fluctuate from year to year, making it difficult to predict our future performance which may be below our expectations or those of the public market analysts and investors in these periods.**

Our sales, expenses, and results of operations may fluctuate significantly from year to year due to a number of factors, many of which are outside our control. Our business and operations are subject to a number of factors, including:

- our customers' sales forecast, purchasing patterns and inventory adjustments based on general economic conditions or other factors;
- the loss of one or more key customers or the significant reduction or postponement of orders from such customers;
- timing of new technology development and timing of our customers' qualifying such technology;
- timing of our expansion and development of our facilities;
- our ability to obtain equipment and raw materials; and
- our ability to obtain financing in a timely manner.

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Due to the factors noted above and other risks discussed in this section, year-to-year comparisons cannot be relied upon to predict our future performance. Unfavorable changes in any of the above factors may adversely affect our business and operating results. In addition, our operating results may be below the expectations of public market analysts and investors in some future periods.

**If we are unable to maintain high capacity utilization, optimize the technology and product mix of our services or improve our yields, our margins may substantially decline, thereby adversely affecting our operating results.**

Our ability to maintain or increase profitability depends, in part, on our ability to:

- maintain high capacity utilization, which is the actual number of wafers we produce in relation to our capacity;
- optimize our technology and product mix, which is the relative number of wafers fabricated utilizing higher margin technologies as compared to commodity and lower margin technologies; and
- continuously maintain and improve our yield, which is the percentage of usable fabricated devices on a wafer.

Our capacity utilization affects our operating results because a large percentage of our costs are fixed. Our technology and product mix have direct impacts upon our average selling prices and overall margins. Our yields directly affect our ability to attract and retain customers, as well as the price of our products. If we are unable to maintain high capacity utilization, optimize the technology and product mix of our wafer production or continuously improve our yields, our margins may substantially decline, thereby adversely affecting our operating results.

**Our continuing expansion could present significant challenges to our management and administrative systems and resources, and as a result, we could experience difficulties managing our growth or maintaining high capacity utilization which could adversely affect our business and operating results.**

Over the next several years, we plan to increase our production capacity through expanding existing and new production sites. We have added and expect to continue to add capital equipment and increase our headcount to increase our production capacity. We cannot assure you that we will fully realize the expected returns on these investments for a variety of reasons. If we fail to develop and maintain management and administrative systems and resources sufficient to keep pace with our planned growth or if we fail to increase our customer base or create sufficient demand for our products, we may experience difficulties managing our growth or maintaining high capacity utilization and our business and operating results could be adversely affected.

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**We may not be able to successfully execute future acquisitions or investments or manage or effectively integrate any acquired personnel, operations and technologies.**

From time to time, we seek to acquire or invest in businesses that are complementary to ours. However, acquisition or investment in businesses may require a significant commitment of management time, capital investment and other management resources. We cannot assure you that we will be successful in identifying and negotiating acquisitions or investments on favorable terms. To integrate acquired businesses, we must implement our technology systems in the acquired operations and integrate and manage the personnel of the acquired operations. We also must effectively integrate the different cultures of acquired business organizations into our own in a way that aligns various interests. We may need to enter new markets, such as the automotive electronics market, in which we have no or limited experience and where competitors in such markets have stronger market positions. Failures or difficulties in integrating the operations of the businesses that we acquire, including their personnel, technology, financial systems, distribution and general business operations and procedures, and supply and other relationships, may affect our ability to increase our revenues and may result in us incurring asset impairment or restructuring charges. Furthermore, acquisitions and investments are often speculative in nature and the actual benefits we derive from them could be lower or take longer to materialize than we expect. If we are unable to execute, manage or integrate our acquisitions and investments effectively, our growth, operating results and financial condition may be materially and adversely affected.

**If we lose one or more of our key personnel without obtaining adequate replacements in a timely manner or if we are unable to retain and recruit skilled personnel, our operations could become disrupted and the growth of our business could be delayed or restricted.**

Our success depends on the continued service of our key management team members, and in particular, Dr. Zhou Zixue, Chairman of our Board and Executive Director, Dr. Zhao Haijun, Co-Chief Executive Officer and Executive Director as well as Dr. Liang Mong Song, Co-Chief Executive Officer and Executive Director. We do not carry full key person insurance. If we lose the services of any of our key executive officers, it could be very difficult to find, relocate and integrate adequate replacement personnel into our operations. As a result, our operations and the growth of our business could be materially and adversely affected.

We will require an increasing number of experienced executives, engineers and other skilled employees in the future to implement our growth plans. In addition, we expect demand for skilled and experienced personnel in China to increase in the future as new wafer fabrication facilities and other similar high technology businesses are established. There is intense competition for the services of these personnel in the semiconductor industry. If we are unable to retain our existing personnel or attract, assimilate and retain new experienced personnel in the future, our operations could become disrupted and the growth of our business could be delayed or restricted.

**Our customers generally do not place purchase orders far in advance, which makes it difficult for us to predict our future sales, adjust our production costs and efficiently allocate our capacity on a timely basis and could therefore have an adverse effect on our business and operating results.**

Our customers generally do not place purchase orders far in advance of the required shipping dates. In addition, due to the cyclical nature of the semiconductor industry, our customers' purchase orders have varied significantly from period to period. As a result, we do not typically operate with any significant backlog, which makes it difficult for us to forecast our sales in future periods. Moreover, since our cost of sales and operating expenses have high fixed cost components, including depreciation expenses and employee costs, we may be unable to adjust our cost structure in a timely manner to compensate for shortfalls in sales. Our current and anticipated customers may not place orders with us in accordance with our expectations. As a result, it may be difficult to plan our production capacity, which requires significant lead time to ramp-up and cannot be altered easily. If our production capacity does not match our customers' demand, we will either be burdened with expensive and unutilized overcapacity or unable to support our customers' requirements, both of which could have an adverse effect on our business and results of operations.

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**Our sales cycles can be long, which could adversely affect our short-term operating results and cause our long-term income stream to be unpredictable.**

Our sales cycles, which is measured as the time between our first contact with a particular customer and the first shipment of product to such customer, vary substantially and can last as long as one year or more, particularly for new technologies. Sales cycles to IDM customers typically are relatively longer since they usually require our engineers to become familiar with the customer's proprietary technology before production can commence. In addition, even after we make the initial product shipments, it may take the customer several more months to reach full production of that product using our foundry services. As a result of these long sales cycles, we may be required to invest substantial time and incur significant expenses in advance of the receipt of any product order and related revenue. Orders ultimately received may not be in accordance with our expectations and cause our long-term income stream to be unpredictable.

**If we do not consistently anticipate trends in technology development, we will not be able to maintain or increase our business and operating margins.**

The semiconductor industry is developing rapidly and the related technologies are constantly evolving. We must be able to anticipate the trends in technology development and rapidly develop and implement new and innovative technologies that our customers require to produce sufficiently advanced products at competitive prices and within the time window of market opportunities. To do this, we must make long-term investments, develop or obtain appropriate intellectual property and commit significant resources based on forecasts. If there is large variation between our forecasts and the actual outcome, our long-term investments will not yield satisfactory results and our business and operations will be adversely affected.

Further, as the life cycle for a process technology matures, the average selling price falls. Accordingly, unless we continually upgrade our capability to manufacture new products that our customers design, our customers may use the services of our competitors instead of ours. This can result in the average selling prices of our wafers falling, which could adversely affect our business and operating margins.

**Our sales are dependent upon a small number of customers and any decrease in sales to any of them could adversely affect our results of operations.**

We have been dependent on a small number of customers for a substantial portion of our business. For the years ended December 31, 2017 and 2018, our five largest customers accounted for 51.4% and 46.2% of our total sales, respectively. We expect that we will continue to be dependent on a relatively limited number of customers for a significant portion of our sales. Sales generated from these customers, individually or in the aggregate, may not reach our expectations or historical levels in any future period. Our sales could be significantly reduced if any of these customers cancels or reduces its orders, significantly changes its product delivery schedule, or demands lower prices, which could have an adverse effect on our results of operations.

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**Since our operating cash flows may not be sufficient to cover our planned capital expenditures, we will require additional external financing, which may not be available on acceptable terms, or at all. Any failure to raise adequate funds in a timely manner could adversely affect our business and operating results.**

For the year ended December 31, 2018, our capital expenditures amounted to approximately US\$1,813.4 million. For the year ended December 31, 2019, we expect that our capital expenditures for foundry operations will be approximately US\$2.1 billion, which are mainly for equipment and facility in our majority-owned Shanghai 300mm fab and FinFET R&D line, subject to adjustment based on market conditions. In addition, we have budgeted approximately US\$105.8 million as capital expenditures for non-foundry operations, mainly for the construction of living quarters for employees as part of our employee retention program. Our actual expenditures may exceed our planned expenditures for a variety of reasons, including changes in our business plan, our process technology, market conditions, equipment prices, customer requirements or interest rates. Future acquisitions, mergers, strategic investments, or other developments also may require additional financing. The amount of capital required to meet our growth and development targets is difficult to predict in the highly cyclical and rapidly changing semiconductor industry.

Our operating cash flows may not be sufficient to meet our capital expenditures requirements. If our operating cash flows are insufficient, we plan to fund the expected shortfall through bank loans. If necessary, we will also explore other forms of external financing, as issuance of ordinary shares and perpetual subordinated convertible securities in 2019. Our ability to obtain external financing is subject to a variety of uncertainties, including:

- our future financial condition, results of operations and cash flows;
- general market conditions for financing activities of semiconductor companies;
- our future stock price; and
- our future credit rating.

External financing may not be available in a timely manner, on acceptable terms, or at all. Since our capacity expansion is a key component of our overall business strategy, any failure to raise adequate funds could adversely affect our business and operating results.

**Expansion of our production sites is subject to certain risks that could result in delays or cost overruns, which could require us to expend additional capital and adversely affect our business and operating results.**

We spent approximately US\$2,694.7 million, US\$2,487.9 million and US\$1,813.4 million to construct, equip and ramp up our fabs for the years ended December 31, 2016, 2017 and 2018, respectively. We plan to increase our production capacity through expansion of existing production sites, such as Semiconductor Manufacturing International (Shanghai) Corporation ("SMIS" or "SMIC Shanghai"), Semiconductor Manufacturing International (Beijing) Corporation ("SMIC Beijing"), Semiconductor Manufacturing International (Tianjin) Corporation ("SMIC Tianjin"), Semiconductor Manufacturing International (Shenzhen) Corporation, ("SMIC Shenzhen" or "SMIZ"), all of which are our wholly-owned subsidiaries, as well as Semiconductor Manufacturing North China (Beijing) Corporation ("SMNC"), our majority-owned subsidiary in Beijing, Semiconductor Manufacturing South China Corporation ("SMSC"), our majority-owned subsidiary in Shanghai and SJ Semiconductor (Jiangyin) Corporation ("SJ Jiangyin"), our majority-owned bumping facility in Jiangyin. There are a number of events that could delay these expansion projects or increase the costs of building and equipping these or future projects in accordance with our plans. Such potential events include, but are not limited to:

- shortages and late delivery of building materials and facility equipment;
- delays in the delivery, installation, commissioning and qualification of our manufacturing equipment;

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- delays in securing financing for the expansion projects;
- disagreements with partners involved in the expansion projects;
- seasonal factors, such as extended periods of adverse weather that limit construction;
- labor disputes;
- design or construction changes with respect to building spaces or equipment layout;
- delays in securing necessary government approvals or land use rights; and
- changes in technology, capacity, or other changes in our plans for new fabs necessitated by changes in market conditions.

As a result, our projections relating to capacity, process technology capabilities, or technology developments may significantly differ from actual capacity, process technology capabilities, or technology developments.

Delays in the construction and equipping or expansion of any of our fabs could result in the loss or delayed receipt of earnings, an increase in financing costs, or the failure to meet profit and earnings projections, any of which could adversely affect our business and operating results.

**If we cannot compete successfully in our industry, particularly in China, our results of operations and financial condition will be adversely affected.**

The worldwide semiconductor foundry industry is highly competitive. We compete with other foundries, such as Taiwan Semiconductor Manufacturing Company Ltd. ("TSMC"), United Microelectronics Corporation ("UMC"), and Global Foundries, as well as the foundry services offered by some IDMs, such as Fujitsu Limited and Samsung Electronics Co. Ltd. We also compete with smaller semiconductor foundries in China, Korea, Malaysia and other countries. While different players in the wafer foundry market may compete on factors such as technical competence, production speed and cycle time, time-to-market, research and development quality, available capacity, yields, customer service and price, we seek to compete on the basis of process technology capabilities, performance, quality, service and price. The level of competition differs according to the process technology involved. Some of our competitors have greater access to capital and substantially higher capacity, longer or more established relationships with their customers, superior research and development capability, and greater marketing and other resources than we do. As a result, these companies may be able to compete more aggressively over a longer period of time than we can.

Some of our competitors have established operations in mainland China in order to compete for the growing domestic market in China. TSMC has its own fab in Shanghai, a wholly-owned 12-inch fab and a design service center in Nanjing. UMC has its majority-owned 8-inch fab in Suzhou and a 12-inch joint venture fab in Xiamen. In these cases, we understand that the ability of these fabs to manufacture wafers using certain more advanced technologies is subject to restrictions by the respective home jurisdiction of TSMC and UMC; however, such restrictions could be reduced or lifted at any time, which may lead to increased competition in China with such competitors and adversely affect our business and operating results.

In addition, various other factors such as import and export controls, foreign exchange controls, exchange rate fluctuations, interest rate fluctuations and political developments affect our ability to compete successfully. If we cannot compete successfully in our industry or are unable to maintain our position as a leading foundry in China, our results of operations and financial condition will be adversely affected.

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**We may be unable to obtain in a timely manner and at a reasonable cost the equipment necessary for our business and therefore may be unable to achieve our expansion plans or meet our customers' orders, which could negatively impact our competitiveness, financial condition and results of operations.**

The semiconductor industry is capital-intensive and requires investment in advanced equipment that is available from a limited number of manufacturers. The market for equipment used in semiconductor foundries is characterized, from time to time, by significant demand, limited supply and long delivery cycles. Our business plan depends upon our ability to obtain our required equipment in a timely manner and at acceptable prices. Therefore, we invest in advanced equipment based on advance forecasts of demand. During times of significant demand for the types of equipment we use, lead time for delivery can be one year. Shortages of equipment could result in an increase in equipment prices and longer delivery time. If we are unable to obtain equipment in a timely manner and at a reasonable cost, we may be unable to achieve our expansion plans or meet our customers' orders, which could negatively impact our competitiveness, financial condition, and results of operations.

**We expect to have an ongoing need to obtain licenses for the proprietary technology of others, which subjects us to the payment of license fees and potential delays in the development and marketing of our products.**

While we continue to develop and pursue patent protection for our own technologies, we expect to continue to rely on third party license arrangements to enable us to manufacture certain advanced wafers. As of December 31, 2018, we had been granted 9,076 patents worldwide, of which, 70 were in Taiwan, 1,158 were in the U.S., 7,819 were in China and 29 were in other jurisdictions. In comparison, we believe our competitors and other industry participants have been issued many more patents concerning wafer fabrication in multiple jurisdictions. Our limited patent portfolio may in the future adversely affect our ability to obtain licenses to the proprietary technology of others on favorable license terms due to our inability to offer cross-licensing arrangements. The fees associated with such licenses could adversely affect our financial condition and operating results. They might also render our services less competitive. If for any reason we are unable to obtain license necessary for using technology on acceptable terms, it may become necessary for us to develop alternative technology internally, which could be costly and delay the marketing and delivery of key products and therefore have an adverse effect on our business and operating results. In addition, we may be unable to independently develop the technology required by our customers on a timely basis or at all, in which case our customers may purchase wafers from our competitors. We expect there is no group of important patents set to expire in 2019 or 2020.

**We may be subject to claims of intellectual property rights infringement owing to the nature of our industry partly due to our limited patent portfolio and limitations of the indemnification provisions in our technology license agreements. These claims could adversely affect our business and operating results.**

There is frequent intellectual property litigation in our industry, involving patents, copyrights, trade secrets, mask works and other intellectual property subject matters. In some cases, a company attempts to avoid or settle litigation on favorable terms if it possesses patents that can be asserted against the plaintiff. The limited size of our current patent portfolio is unlikely to place us in such a favorable bargaining position. Moreover, some of our technology license agreements with our major technology partners do not provide for us to be indemnified in the event that the processes we obtain license pursuant to such agreements infringe third party intellectual property rights. We could be sued for infringing one or more patents as to which we will be unable to obtain a license and unable to design around. As a result, we would be prohibited from manufacturing or selling the products which are dependent upon such technology, which could have a material adverse effect on our business. We may litigate the issues of whether these patents are valid or infringed, but in the event of loss of such lawsuit, we may be required to pay substantial monetary damages and be enjoined from further production or sale of such products.



**If we are unable to maintain relationships with certain technology partners or are unable to enter into new technology alliances on a timely basis, we may not be able to continue providing our customers with leading edge process technology, which could adversely affect our competitive position and operating results.**

Enhancing our process technologies is critical to our ability to provide high quality services for our customers. One way to enhance our process technologies is the formation of technology alliances under which we expect to leverage our technology partners to advance our portfolio of process technologies to minimize development risk and shorten development cycle. We currently have joint technology development arrangements and technology sharing arrangements with several companies and research institutes. If we are unable to continue our technology alliances with these entities or maintain mutually beneficial terms on our other joint development arrangements, research and development alliances and other similar agreements or enter into new technology alliances with other leading developers of semiconductor technology, we may not be able to continue providing our customers with leading edge process technology on time, which could adversely affect our competitive position and operating results.

**Global or regional economic, political and social conditions could adversely affect our business and operating results.**

External factors such as potential terrorist attacks, acts of war, financial crises, the global economic crisis, or political, geopolitical and social turmoil in those parts of the world that serve as markets for our products could significantly adversely affect our business and operating results in ways that cannot presently be predicted. These uncertainties could make it difficult for our customers and us to accurately plan future business activities. For example, we purchase raw materials and other services from numerous suppliers, and, even if our facilities were not directly affected by such events, we could be affected by interruptions at such suppliers. Such suppliers may be less likely to be able to quickly recover from such events and may be subject to additional risks such as financial problems that limit their ability to conduct their operations. We cannot assure you that we will have insurance to adequately compensate us for any of these events. More generally, these geopolitical, social and economic conditions could result in increased volatility in worldwide financial markets and economies that could adversely impact our sales. We are not insured for losses and interruptions caused by terrorist acts or acts of war. Therefore, any of these events or circumstances could adversely affect our business and operating results.

**The recurrence of an outbreak of the H7N9 and H5N1 strain of flu (Avian Flu), the H1N1 strain of flu (Swine Flu), Severe Acute Respiratory Syndrome (SARS), or an outbreak of any other similar epidemic could, directly or indirectly, adversely affect our operating results.**

Concerns about the spread of the H7N9 strain of flu (Avian Flu) in China and outbreaks of the H1N1 virus (Swine Flu) in North America, Europe and Asia in the past have caused governments to take measures to prevent spread of the virus. The spread of epidemics could negatively affect the economy. For example, past occurrences of epidemics such as SARS have caused different degrees of damage to the national and local economies in China. If any of our employees are identified as a possible source of spreading Swine Flu, Avian Flu or any other similar epidemic, we may be required to quarantine employees that are suspected of being infected, as well as others that have come into contact with those employees. We may also be required to disinfect our affected premises, which could cause a temporary suspension of our manufacturing capacity, thus adversely affecting our operations. A recurrence of an outbreak of Swine Flu, SARS, Avian Flu or other similar epidemic could restrict the level of economic activities generally and/or slow down or disrupt our business activities which could in turn adversely affect our results of operations.

**Exchange rate fluctuations could increase our costs, which could adversely affect our operating results and the value of our ADSs.**

Our financial statements are prepared in U.S. dollars. The majority of our sales are denominated in U.S. dollars and Renminbi. Our manufacturing costs and capital expenditures are generally denominated in U.S. dollars, Japanese Yen, Euros and Renminbi. Although we enter into foreign currency forward exchange contracts and cross currency swap contracts to partially hedge our exposure to exchange rate fluctuations, we are still affected by fluctuations in exchange rates between the U.S. dollar and each of the Japanese Yen, the Euros and the Renminbi. Any significant fluctuations among these currencies may lead to an increase in our costs, which could adversely affect our operating results. See “Item 3.D — Key information — Risk Factors — Risks Related to Conducting Operations in China — Devaluation or appreciation in the value of the Renminbi or restrictions on convertibility of the Renminbi could adversely affect our business and operating results” for a discussion of risks relating to the Renminbi.

Fluctuations in the exchange rate of the Hong Kong dollar against the U.S. dollar will affect the U.S. dollar value of the ADSs, since our ordinary shares are listed and traded on the Hong Kong Stock Exchange and the price of such shares are denominated in Hong Kong dollars. While the Hong Kong government has continued to pursue a pegged exchange rate policy, with the Hong Kong dollar trading in the range of HK\$7.8078 to HK\$7.8500 per US\$1.00 for 2018, we cannot assure you that this policy will be maintained. Exchange rate fluctuations also will affect the amount of U.S. dollars received upon the payment of any cash dividends or other distributions paid in Hong Kong dollars and the Hong Kong dollar proceeds received from any sales of ordinary shares. Therefore, such fluctuations could also adversely affect the value of our ADSs.

**If we fail to maintain an effective system of internal control, we may not be able to achieve the business objectives in operations, financial reporting integrity, and compliance with applicable laws and regulations.**

We are required to comply with various PRC, Hong Kong and U.S. laws and regulations. For example, we are subject to reporting obligations under the U.S. securities laws. The SEC, as required by Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, adopted rules requiring public companies to include a management report on such company's internal controls over financial reporting in its annual report, which contains management's assessment of the effectiveness of our internal controls over financial reporting. Effective internal controls are necessary for us to provide reasonable assurance with respect to our financial reports, compliance with applicable laws and regulations, and to effectively achieve our operation objectives. In addition, because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. As a result, if we fail to maintain effective internal controls, including any failure to implement required new or improved controls, or should we be unable to prevent or detect material misstatements due to error or fraud on a timely basis, our operating results could be harmed, and investors could lose confidence in the reliability of our financial statements. As a result, our business and the trading price of our securities could be negatively impacted.

**Internet security system breaches, cyber-attacks and other disruptions could compromise our information and systems, which would cause our business and reputation to suffer.**

We store sensitive data, including intellectual property and proprietary business information belonging to our company, our customers, our suppliers and our business partners. The secure maintenance of this information is critical. Despite our security measures, our information technology and infrastructure may be vulnerable to breaches by hackers, employee error, malfeasance or other disruptions such as natural disasters, power losses or telecommunication failures. Any such breach could compromise our networks and the information stored, possibly resulting in legal and regulatory actions, disruption of operations and customer services, and otherwise harming our business and future operations.

**Our tangible and intangible assets may be written down when impaired, any impairment charges may adversely affect our net income.**

Under IFRS, we are required to assess our assets to determine whether an asset may be impaired. An impairment loss exists and is recorded in our books when the carrying value of an asset exceeds its recoverable value. With the exception of goodwill and certain intangible assets for which an annual impairment test is required, we are required to conduct impairment tests where there is an indication of impairment of an asset.

At the end of each reporting period, we are required to assess whether there is any indication that an impairment loss recognized in prior periods for an asset other than goodwill may no longer exist or may have decreased. If any such indication exists, the impairment loss will be reversed up to the newly estimated recoverable amount, not to exceed the original value recorded. Goodwill impairment will not be reversed. As of December 31, 2018, the carrying amount of property, plant and equipment was US\$6,778.0 million and the carrying amount of intangible assets was US\$122.9 million.

Currently we are not able to estimate the amount of impairment loss or when the loss will occur for future years. Any potential changes of the business assumptions, such as forecasted sales, selling prices and utilization, may have a material adverse effect on our net income.

See "Item 5.A — Operating and Financial Review and Prospects — Operating Results — Critical Accounting Policies" for a discussion of how we assess if an impairment charge is required and, if so, how the amount is determined.

**Proceedings instituted by the SEC against certain PRC-based accounting firms, including our independent registered public accounting firm, could result in financial statements being determined to not be in compliance with the requirements of the Exchange Act.**

In December 2012, the SEC instituted administrative proceedings against the Big Four PRC-based accounting firms, including our independent registered public accounting firm, alleging that these firms had violated U.S. securities laws and the SEC's rules and regulations thereunder by failing to provide to the SEC the firms' audit work papers with respect to certain PRC-based companies that are publicly traded in the United States.

On January 22, 2014, the administrative law judge, or the ALJ, presiding over the matter rendered an initial decision that each of the firms had violated the SEC's rules of practice by failing to produce audit papers and other documents to the SEC. The initial decision censured each of the firms and barred them from practicing before the SEC for a period of six months.

On February 6, 2015, the four China-based accounting firms each agreed to a censure and to pay a fine to the SEC to settle the dispute and avoid suspension of their ability to practice before the SEC and audit U.S.-listed companies. The settlement required the firms to follow detailed procedures and to seek to provide the SEC with access to Chinese firms' audit documents via the CSRC. Under the terms of the settlement, the underlying proceeding against the four China-based accounting firms was deemed dismissed with prejudice four years after entry of the settlement. The four-year mark occurred on February 6, 2019. While we cannot predict if the SEC will further challenge the four China-based accounting firms' compliance with U.S. law in connection with U.S. regulatory requests for audit work papers or if the results of such a challenge would result in the SEC imposing penalties such as suspensions, if the accounting firms are subject to additional remedial measures, our ability to file our financial statements in compliance with SEC requirements could be impacted. A determination that we have not timely filed financial statements in compliance with SEC requirements could ultimately lead to the delisting of our ordinary shares from Nasdaq or the termination of the registration of our ordinary shares under the Securities Exchange Act of 1934, or both, which would substantially reduce or effectively terminate the trading of our ordinary shares in the United States.

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**Proceedings instituted by the SEC against Chinese affiliates of the “big four” accounting firms, including our independent registered public accounting firm, could result in financial statements being determined to not be in compliance with the requirements of the Exchange Act.**

Starting in 2011 the Chinese affiliates of the “big four” accounting firms, including our independent registered public accounting firm, were affected by a conflict between U.S. and Chinese law. Specifically, for certain U.S.-listed companies operating and audited in mainland China, the SEC and the PCAOB sought to obtain from the Chinese firms access to their audit work papers and related documents. The firms were, however, advised and directed that under Chinese law, they could not respond directly to the U.S. regulators on those requests, and that requests by foreign regulators for access to such papers in China had to be channeled through the CSRC.

In late 2012, this impasse led the SEC to commence administrative proceedings under Rule 102(e) of its Rules of Practice and also under the Sarbanes-Oxley Act of 2002 against the Chinese accounting firms, including our independent registered public accounting firm. A first instance trial of the proceedings in July 2013 in the SEC’s internal administrative court resulted in an adverse judgment against the firms. The administrative law judge proposed penalties on the firms including a temporary suspension of their right to practice before the SEC, although that proposed penalty did not take effect pending review by the Commissioners of the SEC. On February 6, 2015, before a review by the Commissioner had taken place, the firms reached a settlement with the SEC. Under the settlement, the SEC accepted that future requests by the SEC for the production of documents will normally be made to the CSRC. The firms were to receive matching Section 106 requests, and were required to abide by a detailed set of procedures with respect to such requests, which in substance require them to facilitate production via the CSRC. If they failed to meet specified criteria, the SEC retained authority to impose a variety of additional remedial measures on the firms depending on the nature of the failure.

Under the terms of the settlement, the underlying proceeding against the four China-based accounting firms was deemed dismissed with prejudice four years after entry of the settlement. The four-year mark occurred on February 6, 2019. We cannot predict if the SEC will further challenge the four China-based accounting firms’ compliance with U.S. law in connection with U.S. regulatory requests for audit work papers or if the results of such a challenge would result in the SEC imposing penalties such as suspensions. If additional remedial measures are imposed on the Chinese affiliates of the “big four” accounting firms, including our independent registered public accounting firm, we could be unable to timely file future financial statements in compliance with the requirements of the Exchange Act.

In the event that the Chinese affiliates of the “big four” become subject to additional legal challenges by the SEC or PCAOB, depending upon the final outcome, listed companies in the United States with major PRC operations may find it difficult or impossible to retain auditors in respect of their operations in the PRC, which could result in financial statements being determined to not be in compliance with the requirements of the Exchange Act, including possible delisting. Moreover, any negative news about any such future proceedings against these audit firms may cause investor uncertainty regarding China-based, U.S.-listed companies and the market price of our common stock may be adversely affected.

If our independent registered public accounting firm was denied, even temporarily, the ability to practice before the SEC and we were unable to timely find another registered public accounting firm to audit and issue an opinion on our financial statements, our financial statements could be determined not to be in compliance with the requirements of the Exchange Act. Such a determination could ultimately lead to the delisting of the ADSs from [the New York Stock Exchange/Nasdaq Stock Market] or deregistration from the SEC, or both, which would substantially reduce or effectively terminate the trading of the ADSs in the United States.

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**Our auditor, like other independent registered public accounting firms operating in China, is not permitted to be subject to inspection by Public Company Accounting Oversight Board, and as such, investors may be deprived of the benefits of such inspection.**

Our auditor, the independent registered public accounting firm that issued the audit reports included elsewhere in this annual report, as an auditor of companies that are traded publicly in the United States and a firm registered with the Public Company Accounting Oversight Board (United States), or PCAOB, is subject to laws in the United States pursuant to which the PCAOB conducts regular inspections to assess its compliance with applicable professional standards. Our auditor is located in, and organized under the laws of, the PRC, which is a jurisdiction where the PCAOB has been unable to conduct inspections without the approval of the Chinese authorities. In May 2013, PCAOB announced that it had entered into a Memorandum of Understanding on Enforcement Cooperation with the CSRC and the PRC Ministry of Finance, which establishes a cooperative framework between the parties for the production and exchange of audit documents relevant to investigations undertaken by PCAOB, the CSRC or the PRC Ministry of Finance in the United States and the PRC, respectively. PCAOB continues to be in discussions with the China Securities Regulatory Commission, or CSRC, and the PRC Ministry of Finance to permit joint inspections in the PRC of audit firms that are registered with PCAOB and audit Chinese companies that trade on U.S. exchanges.

On December 7, 2018, the SEC and the PCAOB issued a joint statement highlighting continued challenges faced by the U.S. regulators in their oversight of financial statement audits of U.S.-listed companies with significant operations in China. However, it remains unclear what further actions, if any, the SEC and PCAOB will take to address the problem.

This lack of PCAOB inspections in China prevents the PCAOB from fully evaluating audits and quality control procedures of our independent registered public accounting firm. As a result, we and investors in our ordinary shares are deprived of the benefits of such PCAOB inspections. The inability of the PCAOB to conduct inspections of auditors in China makes it more difficult to evaluate the effectiveness of our independent registered public accounting firm's audit procedures or quality control procedures as compared to auditors outside of China that are subject to PCAOB inspections, which could cause investors and potential investors in our stock to lose confidence in our audit procedures and reported financial information and the quality of our financial statements.

**The SEC's "conflict minerals" rule has caused us to incur additional expenses, could limit the supply and increase the cost of certain minerals used in manufacturing our products, and could make us less competitive in our target markets.**

The SEC's conflict minerals rule requires disclosure by public companies of the origin, source and chain of custody of specified minerals, known as conflict minerals, that are necessary to the functionality or production of products manufactured or contracted to be manufactured. The rule requires companies to obtain sourcing data from suppliers, engage in supply chain due diligence, and file annually with the SEC a specialized disclosure report on Form SD covering the prior calendar year. The rule could limit our ability to source at competitive prices and to secure sufficient quantities of certain minerals (or derivatives thereof) used in the manufacture of our products, specifically tantalum, tin, gold and tungsten, as the number of suppliers that provide conflict-free minerals may be limited. We have and will continue to incur material costs associated with complying with the rule, such as costs related to the determination of the origin, source and chain of custody of the minerals used in our products, the adoption of conflict minerals-related governance policies, processes and controls, and possible changes to products or sources of supply as a result of such activities. Within our supply chain, we may not be able to sufficiently verify the origins of the relevant minerals used in our products through the data collection and due diligence procedures that we implement, which may harm our reputation. Furthermore, we may encounter challenges in satisfying those customers that require that all of the components of our products be certified as conflict free, and if we cannot satisfy these customers, they may choose a competitor's products. We continue to investigate the presence of conflict materials within our supply chain.

**Risks Related to Manufacturing**

**Our manufacturing processes are highly complex, costly and potentially vulnerable to impurities and other disruptions, which could significantly increase our costs and delay product shipments to our customers.**

Our manufacturing processes are highly complex, require advanced and costly equipment, demand a high degree of precision and may have to be modified to improve yields and product performance. Dust and other impurities, difficulties in the fabrication process or defects with respect to the equipment or facilities used can lower yields, because quality control problems interrupt production or result in losses of products in process. As system complexity has increased and process technology has become more advanced, manufacturing tolerances have been reduced and requirements for precision have become even more demanding. As a result, we may experience production difficulties, which could significantly increase our costs and delay product shipments to our customers. For products that cannot meet the quality, standards of our customers, we may suffer indemnification losses in addition to the production cost.

**We may have difficulty in ramping up production, which could cause delays in product deliveries and loss of customers and otherwise adversely affect our business and operating results.**

We may experience difficulty in ramping up production at new or existing facilities. This could be due to a variety of factors, including hiring and training new personnel, implementing new fabrication processes, recalibrating and re-qualifying existing processes and the inability to achieve required yield levels.

In the future, we may face construction delays or interruptions, infrastructure failure, or delays in upgrading or expanding existing facilities or changing our process technologies, which may adversely affect our ability to ramp up production in accordance with our plans. Our failure to ramp up our production on a timely basis could cause delays in product deliveries, which may result in the loss of customers and sales. It could also prevent us from recouping our investments in a timely manner or at all, and otherwise adversely affect our business and operating results.

**We have formed joint ventures that, if not successful, could adversely impact our business and operating results.**

In July 2004, we announced an agreement with Toppan Printing Co., Ltd., to establish Toppan SMIC Electronics (Shanghai) Co., Ltd., a joint venture in Shanghai, to manufacture color filters and micro-lenses for CMOS image sensors.

In December 2013, we lost control of Brite Semiconductor Corporation and its subsidiaries ("Brite"), but still have significant influence over it. We recorded our ownership interest of Brite as investment in associate. Brite is principally engaged in development and design of integrated circuits.

On December 22, 2014, (i) SilTech Semiconductor (Shanghai) Corporation Limited ("SilTech Shanghai"), one of our indirectly wholly-owned subsidiary;(ii) Jiangsu Changjiang Electronics Technology Co., Ltd ("JCET"); and (iii) China Integrated Circuit Industry Investment Fund Co. Ltd. ("China IC Fund") entered into a co-investment agreement to form an investment consortium in connection with the proposed acquisition of STATS ChipPAC Ltd. ("STATS ChipPAC"), a leading provider of advanced semiconductor packaging and test services in the world and a company incorporated in the Republic of Singapore, shares of which were listed on the Singapore Exchange Securities Trading Limited before the acquisition. On June 18, 2015, according to the co-investment agreement, we invested US\$102 million as a capital contribution for 19.6% ownership interest in Suzhou Changjiang Electric Xinke Investment Co., Ltd. ("Changjiang Xinke"), a company incorporated in Jiangsu province, China, which is accounted as an associate of the Group.

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On April 27, 2016, SilTech Shanghai and JCET entered into a disposal agreement, pursuant to which SilTech Shanghai agreed to sell its 19.61% ownership interest in Changjiang Xinke to JCET in consideration of RMB664 million, which will be satisfied by JCET's issue of 43,229,166 shares of JCET to SilTech Shanghai at RMB15.36 per share. On the same day, SilTech Shanghai and JCET entered into a subscription agreement, pursuant to which SilTech Shanghai agreed to subscribe for and JCET agreed to issue 150,681,044 shares of JCET in consideration of an aggregate subscription price of RMB2,655 million in cash. On May 10, 2017, the Company was notified by JCET that the China Securities Regulatory Commission has granted approval for this transaction, and the disposal agreement and the subscription agreement became effective accordingly. On June 19, 2017, the transactions were completed and SMIC became the single largest shareholder of JCET. The Group recorded its ownership interest of JCET as investment in associate due to its right to nominate directors of JCET's board. On August 30, 2018, the Company has, through its wholly-owned subsidiary Siltech Semiconductor (Shanghai) Corporation Limited, completed a subscription for 34,696,198 shares in JCET in cash by way of private placement (the "Subscription"). The shares were subscribed at a price of RMB14.89 per share, with the total subscription price being RMB516.6 million. Immediately before and after completion of the Subscription, the shareholding interest of the Company in JCET is 14.28%.

On March 22, 2018, NSI, SMIC Holdings Corporation ("SMIC Holdings") and China IC Fund entered into the equity transfer agreement, pursuant to which SMIC Holdings has agreed to sell its equity Interests to China IC Fund. Upon the completion of the equity transfer, the shareholding of SMIC Holdings in NSI will decrease from approximately 66.76% to 38.59%, and NSI will cease to be a subsidiary of the Company and its financial results will cease to be consolidated with the Group's results. The equity transfer was completed in April 2018 and the Group recorded its ownership interest of NSI as investment in associate.

On March 23, 2018, NSI, SMIC Holdings, China IC Fund, Ningbo Senson Electronics Technology Co., Ltd, Beijing Integrated Circuit Design and Testing Fund, Ningbo Integrated Circuit Industry Fund and Infotech National Emerging Fund entered into the capital increase agreement, pursuant to which (i) SMIC Holdings has agreed to make further cash contribution of RMB565.0 million into the registered capital of NSI. Its shareholding in NSI will decrease from approximately 38.59% to approximately 38.57%; (ii) China IC Fund has agreed to make further cash contribution of RMB500.0 million into the registered capital of NSI. Its shareholding in NSI will increase from approximately 28.17% to approximately 32.97%.

In March 2018, we announced an agreement with SMIC, Shaoxing Government, and Shengyang Group, to establish Semiconductor Manufacturing Electronics (Shaoxing) Corporation., a joint venture in Shaoxing, to manufacture the manufacture of MEMS and power devices.

Semiconductor Manufacturing Electronics (Shaoxing) Corporation

The results of our joint ventures which we do not have control are reflected in our operating results to the extent of our ownership interest, and gains of the joint ventures could impact our operating results. As integration of assets and operations being contributed by each partner will involve complex activities that must be completed in a short period of time, the joint ventures may face numerous challenges to successful operation, including all operational risks that customarily relate to manufacturing, sales, service, marketing, and corporate functions, which, if unsuccessful, may adversely impact our business and operating result.

**If we are unable to obtain raw materials, spare parts and outsourcing services in a timely manner, our production schedules could be delayed and our costs could increase.**

We depend on suppliers of raw materials, such as silicon wafers, gases and chemicals, and spare equipment parts, in order to maintain our production processes. To maintain operations, we must obtain from our suppliers sufficient quantities of quality raw materials and spare equipment parts at acceptable prices in a timely manner. The most important raw material used in our production is silicon in the form of raw wafers, almost all of which are sourced outside China. We currently purchase approximately 74.5% of our overall raw wafer requirements from our top three raw wafer suppliers. In addition, a portion of our gas and chemical requirements currently must be sourced outside China. We may not be able to obtain adequate supplies of raw materials and spare parts in a timely manner and at a reasonable cost. In addition, from time to time, we may need to reject raw materials and parts that do not meet our specifications, resulting in potential delays or declines in output. If the supply of raw materials and necessary spare parts is substantially reduced or disrupted; if there are significant increases in their prices; or if the lead time for the supply of raw materials and necessary spare parts are extended, we may incur additional costs to acquire sufficient quantities of these parts and materials to maintain our production schedules and commitments to customers.

We outsource certain wafer manufacturing, assembly and testing services to third parties. Any delay or interruption in the provision of supplies and/or services could result in our inability to meet customers' demand or fulfill contract terms, damage our reputation and customer relationships and adversely affect our business.

**Our production may be interrupted, limited or delayed if we cannot maintain sufficient sources of fresh water and electricity, which could adversely affect our business and operating results.**

The semiconductor fabrication process requires extensive amounts of fresh water and a stable source of electricity. As our production capabilities increase and our business grows, our requirements for these resources will grow substantially. While we have not, to date, experienced any instances of the lack of sufficient supplies of water or material disruptions in the electricity supply to any of our fabs, we may not have access to sufficient supplies of water and electricity to accommodate our planned growth. Droughts, pipeline interruptions, power interruptions, electricity shortages or government intervention, particularly in the form of rationing, are factors that could restrict our access to these utilities in the areas in which our fabs are located. In particular, our fabs in Tianjin and Beijing are located in areas that are susceptible to severe water shortages during the summer months. If there is an insufficient supply of fresh water or electricity to satisfy our requirements, we may need to limit or delay our production, which could adversely affect our business and operating results. In addition, a power outage, even of very limited duration, could result in a loss of wafers in production and deterioration in yield. In February 2016, a temporary power supply suspension occurred at our fabs in Beijing but it did not cause any casualty or equipment damage, and there was no material adverse financial impact on the Company.

**Our operations may be delayed or interrupted due to natural disasters which could adversely affect our business and operating results.**

We depend on suppliers of raw materials, such as silicon wafers, gases and chemicals, and spare equipment parts, in order to maintain our production processes in addition to requiring extensive amounts of fresh water and a stable source of electricity. The occurrence of natural disasters such as the April 2016 earthquake in Japan may disrupt this required access to goods and services provided by our suppliers as well as access to fresh water and electricity. As a result of such risk, our production could be limited or delayed due to the disruption of access to required supplies, in addition to possible damage caused to our manufacturing equipment and related infrastructure, which could adversely affect our business and operating results.



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**We are subject to the risk of damage due to fires or explosions because the materials we use in our manufacturing processes are highly flammable. Such damage could temporarily reduce our manufacturing capacity, thereby adversely affecting our business and operating results.**

We use highly flammable materials such as silane and hydrogen in our manufacturing processes and are therefore subject to the risk of loss arising from explosions and fires. The risk of explosion and fire associated with these materials cannot be completely eliminated. Our comprehensive fire insurance and insurance for the loss of property and the loss of profit resulting from business interruption, may not be sufficient to cover all of our potential losses due to an explosion or fire. If any of our fabs were to be damaged or cease operations as a result of an explosion or fire, it could temporarily reduce our manufacturing capacity, which could adversely affect our business and operating results.

**Our operations may be delayed or interrupted and our business could suffer as a result of steps we may be required to take in order to comply with environmental regulations.**

We are subject to a variety of Chinese, Italian and European Union environmental regulations relating to the use, discharge and disposal of toxic or otherwise hazardous materials used in our production processes. Any failure or any claim that we have failed to comply with these regulations could cause delays in our production and capacity expansion and affect our company's public image, either of which could harm our business. In addition, any failure to comply with these regulations could subject us to substantial fines or other liabilities or require us to suspend or adversely modify our operations.

**Any new regulations or customer requirements related to climate change or environmental protection could negatively impact our operating results.**

There is global concern that an increase in global average temperatures due to emissions of greenhouse gases (GHG) and other human activities have caused or will cause significant changes in weather patterns, including natural disasters. Such climate change creates risks, such as the physical risks of increased sea levels or extreme weather events, and the financial risks of causing adverse effects on our operations, financial condition, supply chain, increased manufacturing costs, or reduced demand for products believed to contribute to climate change.

We may become subject to legislation, regulation, or treaty obligations designed to address global climate change, Chinese air quality, and other environmental concerns. Compliance with any new rules could be difficult and costly, causing us to incur additional energy and environmental costs, as well as costs for defending and resolving legal claims.

Furthermore, continued serious air pollution in Chinese cities where we operate could pose long-term health risks to our employees and make recruiting and retaining employees more difficult.

**Risks related to Our New Investment Fund**

**Our performance may be affected by the performance of our new investment fund and we may incur losses as a result of ineffective investment.**

On February 27, 2014, our wholly-owned subsidiary, SMIC Shanghai, established a wholly-owned investment fund in Shanghai which is called China IC Capital Co., Ltd (the "Fund"). As of December 31, 2018, the Fund has a capital of RMB1,342.5 million, all funded by SMIC Shanghai. With an operating period of 15 years from the date of the issuance of its business license, the Fund is operated and managed by an equity investment management company named China Fortune-Tech Capital Co., Ltd ("China Fortune-Tech"), which was established by SMIC Shanghai and an independent third party on February 27, 2014. As of December 31, 2018, we held 19.5% ownership interest of China Fortune-Tech, which was accounted as investment in associates.

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The Fund is intended to invest primarily in the integrated circuits industry but will also invest in other strategic emerging industries such as energy saving and environmental protection, information technology and new energy as well as some other traditional industries. While we generally expect China's integrated circuits industry to develop rapidly in the next decade and we believe that the other industries we will invest in also have a promising prospect of development, uncertainties due to the slow recovery of the world economy, the global market demand and consumption behaviors may lead to weak market demand in the industries in which we may choose to invest and our investees may not be able to execute their business strategies as successfully as they expect.

As a result, there is no assurance that our investment will be successful. We may incur losses in our investments through the Fund and our overall financial results may be adversely affected by such failure in the Fund's investment activities.

**Risks Related to Conducting Operations in China**

**Our business is subject to extensive government regulation and benefits from certain government incentives, and changes in these regulations or incentives could adversely affect our business and operating results.**

The Chinese government has broad discretion and authority to regulate the technology industry in China. China's government has also implemented policies from time to time to regulate economic expansion in China. The economy of China has been transitioning from a planned economy to a market-oriented economy. Although in recent years the Chinese government has implemented measures emphasizing the utilization of market forces for economic reform, the reduction of state ownership of productive assets, and the establishment of sound corporate governance in business enterprises, a substantial portion of productive assets in China is still owned by the Chinese government. In addition, the Chinese government continues to play a significant role in regulating industrial development. It also exercises significant control over China's economic growth through the allocation of resources, controlling payment of foreign currency-denominated obligations, setting monetary policy, and providing preferential treatment to particular industries or companies. New regulations or the readjustment of previously implemented regulations could require us to change our business plan, increase our costs or limit our ability to sell products and conduct activities in China, which could adversely affect our business and operating results.

In addition, the Chinese government has provided and continued to provide, various incentives to domestic companies in the semiconductor industry, including our company, in order to encourage the development of the industry. Such incentives include tax rebates, reduced tax rates, favorable lending policies, and other measures. Any of these incentives could be reduced or eliminated by governmental authorities at any time, which would adversely affect our business and operating results.

**We face uncertainty from PRC's Circular on Strengthening the Management of Enterprise Income Tax Collection of Income Derived by Non-resident Enterprises from Equity Transfers.**

The State Administration of Taxation of PRC issued the Public Notice of the State Administrative of Taxation Regarding Certain Corporate Income Tax Matters on Indirect Transfer of Properties by Non-Tax Resident Enterprises ("Circular No.7") on February 3, 2015, which further regulates and enhances the administration of Corporate Income Tax (the "CIT") on indirect transfer of the ownership interest in a China Tax Resident Enterprise (the "TRE"), and other properties in China by non-TREs. Please be reminded that Circular No. 7 takes effect from its issuance date (February 3, 2015). And the unsettled tax matters before the effective date shall follow the instructions of Circular No. 7.

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Under Article 1 in Circular No. 7, where a Non-TRE indirectly transfers the ownership interest in a China TRE and other properties in China through the implementation of a scheme without a reasonable commercial purpose and resulting in the avoidance of CIT liability, such indirect transfer should be re-characterized as a direct transfer of the ownership interest in the TRE and other properties in China. In addition, under Circular No. 7, the "indirect transfer of taxable properties in China" should refer to the Non-TRE, through the transfer of the equity and other similar rights ("the equity") of an overseas enterprise (not including overseas incorporated Chinese TREs) ("Overseas Enterprise") which directly or indirectly owns taxable properties in China, generates the same or similar substantive outcome as compared with a direct transfer of taxable properties in China, including change in shareholder of an Overseas Enterprises resulting from restructurings of the Non-TRE. The Non-TRE who indirectly transfers taxable properties in China is referred as the "Equity Transferor".

We do not believe that the transfer of our ordinary shares or ADSs by our non-PRC shareholders should be treated as an indirect transfer of ownership interest in our PRC subsidiaries subject to Circular No. 7, as the share transfer is carried out for listing purpose and not carried for the main purposes of avoiding PRC taxes. However, Circular No.7 is relatively new and there is uncertainty as to the interpretation and application of Circular No.7 by the PRC tax authorities in practice. If you are required to pay PRC withholding tax on the transfer of our ordinary shares or ADSs, your investment in us may be materially and adversely affected. In addition, we cannot predict how Circular No.7 will affect our financial conditions or operations. For example, we may be required to expend valuable resources on complying with Circular No. 7 or establishing that we should not be taxed under Circular No.7, any of which could have an adverse effect on our financial condition and results of operations.

**Because our business is highly dependent on growth in the electronics manufacturing supply chain in China, any slowdown in this growth could adversely affect our business and operating results.**

Our business is highly dependent upon the economy and the business environment in China. In particular, our growth strategy is based upon the assumption that demand in China for devices that use semiconductors will continue to grow. Therefore, any slowdown in the growth of consumer demand in China for products that use semiconductors, such as computers, mobile phones or other consumer electronics, could have a serious adverse effect on our business. In addition, our business plan assumes that an increasing number of non-Chinese IDMs, fabless semiconductor companies and systems companies will establish operations in China. Any decline in the rate of migration to China of semiconductor design companies or companies that require semiconductors as components for their products could adversely affect our business and operating results.

**Limits placed on exports into China could harm our business and operating results.**

The growth of our business depends on the ability of our suppliers to export and our ability to import, into China, equipment, materials, spare parts, process know-how and other technologies and hardware. Any burdensome new restrictions placed on the import and export of these items could adversely impact our growth and substantially harm our business. In particular, the international export control regime led by the United States requires our suppliers and us to obtain licenses to export and import, as applicable, certain of the above items. If we or our suppliers are unable to obtain such licenses in a timely manner, our business and operating results could be adversely affected.

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**Devaluation or appreciation in the value of the Renminbi or restrictions on convertibility of the Renminbi could adversely affect our business and operating results.**

The value of the Renminbi is subject to changes in China's governmental policies and to international economic and political developments. Since 1994, the conversion of Renminbi into foreign currencies, including Hong Kong and U.S. dollars, has been based on rates set by the People's Bank of China (the "PBOC"), which are set daily based on the previous day's interbank foreign exchange market rates and current exchange rates on the world financial markets. The Renminbi to U.S. dollar exchange rate experienced significant volatility prior to 1994, including periods of sharp devaluation. On July 21, 2005, the PBOC announced an adjustment of the exchange rate of the U.S. dollar to Renminbi from 1:8.27 to 1:8.11 and modified the system by which the exchange rates are determined. The central parity rate of the U.S. Dollar to Renminbi was set at 6.8632 on December 31, 2018 compared with 6.5342 on December 31, 2017 by the PBOC. The cumulative appreciation of the Renminbi against the U.S. dollar in 2018 was approximately 5.04%. There still remains significant international pressure on the PRC government to adopt an even more flexible currency policy, which could result in a further and more significant fluctuation of exchange rate of the Renminbi against the U.S. dollar. As a result, the exchange rate may become volatile which could have an adverse effect on our business and operating results.

In the past, financial markets in many Asian countries have experienced severe volatility and, as a result, some Asian currencies have experienced significant devaluation from time to time. The devaluation of some Asian currencies may have the effect of rendering exports from China more expensive and less competitive and therefore place pressure on China's government to devalue the Renminbi. An appreciation in the value of the Renminbi could have a similar effect. Any devaluation of the Renminbi could result in an increase in volatility of Asian currency and capital markets. Future volatility of Asian financial markets could have an adverse impact on our ability to expand our product sales into Asian markets outside of China.

We receive a portion of our sales in Renminbi, which is currently not a freely convertible currency. For the year ended December 31, 2018, approximately 37.1% of our sales were denominated in Renminbi. While we have used these proceeds for the payment of our Renminbi expenses, we may in the future need to convert these proceeds into foreign currencies to allow us to purchase imported materials and equipment, particularly as we expect the proportion of our sales to China-based companies to increase in the future. Under China's existing foreign exchange regulations, payments of current account items, including profit distributions, interest payments and expenditures from trade may be made in foreign currencies without government approval, except for certain procedural requirements. The Chinese government may, however, at its discretion, restrict access in the future to foreign currencies for current account transactions and prohibit us from converting our Renminbi sales into foreign currencies. If this were to occur, we may not be able to meet our foreign currency payment obligations.

**China's legal system embodies uncertainties that could adversely affect our business and operating results.**

Since 1979, many new laws and regulations covering general economic matters have been promulgated in China. Despite this activity to develop a legal system, China's system of laws has not been fully implemented. Even where adequate laws exist, enforcement of existing laws or contracts based on such laws may be uncertain and sporadic, and it may be difficult to obtain swift and equitable enforcement or to obtain enforcement of a judgment of another jurisdiction. The relative inexperience of China's judiciary system in many cases creates additional uncertainty as to the outcome of any litigation. In addition, interpretation of statutes and regulations may be effected by government policies reflecting domestic political changes.

Our activities in China will be subject to administrative review and approval by various national and local Chinese government agencies. Because of the changes occurring in China's legal and regulatory structure, we may not be able to timely secure the requisite governmental approval for our activities, which would adversely affect our business and operating results.

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**Our corporate structure may restrict our ability to receive dividends from, and transfer funds to, our Chinese operating subsidiaries, which could restrict our ability to act in response to changing market conditions and reallocate funds from one Chinese subsidiary to another in a timely manner.**

We are a Cayman Islands holding company. The majority of our operations are conducted through our Chinese operating subsidiaries, SMIC Shanghai, SMIC Beijing, SMIC Tianjin, SMIC Shenzhen, SMIC New Technology Research & Development (Shanghai) Corporation, SMNC, SMSC, and SJ Jiangyin. The ability of these Chinese subsidiaries to distribute dividends and other payments to us may be restricted by factors that include changes in applicable foreign exchange and other laws and regulations. In particular, under Chinese law, these operating subsidiaries may only pay dividends after 10% of their net profit has been set aside as reserve funds, unless such reserves have reached at least 50% of their respective registered capital. In addition, the profit available for distribution from our Chinese operating subsidiaries is determined in accordance with generally accepted accounting principles in China. This calculation may differ from the one performed in accordance with IFRS. As a result, we may not have sufficient distributions from our Chinese subsidiaries to enable necessary profit distributions to us or any distributions to our shareholders in the future.

Distributions by our Chinese subsidiaries to us may be subject to governmental approval and taxation. Any transfer of funds from us to our Chinese subsidiaries, either as a shareholder loan or as an increase in registered capital, is subject to registration or approval of Chinese governmental authorities, including the relevant administration of foreign exchange and/or the relevant examining and approval authority. In addition, it is not permitted under Chinese law for our Chinese subsidiaries to directly lend money to one another. Therefore, it is difficult to change our capital expenditures plans once the relevant funds have been remitted from us to our Chinese subsidiaries. These limitations on the free flow of funds between us and our Chinese subsidiaries could restrict our ability to act in response to changing market conditions and reallocate funds from one Chinese subsidiary to another in a timely manner.

**Risks Related to Ownership of Our Shares and ADSs**

**Future sales of securities by us or our shareholders may decrease the value of your investment.**

Future sales by us or our existing shareholders of substantial amounts of our ordinary shares or ADSs in the public markets could adversely affect market prices prevailing from time to time.

We cannot predict the effect, if any, of any such future sales or of the perception that any such future sales will occur, on the market price for our ordinary shares or ADSs.

**Holders of our ADSs will not have the same voting rights as the holders of our shares and may not receive voting materials in time to be able to exercise their right to vote.**

Holders of our ADSs may not be able to exercise voting rights attaching to the shares evidenced by our ADSs on an individual basis. Holders of our ADSs have appointed the depositary or its nominee as their representative to exercise the voting rights attaching to the shares represented by the ADSs. Holders of our ADSs may not receive voting materials in time to instruct the depositary to vote, and it is possible that holders of our ADSs, or persons who hold their ADSs through brokers, dealers or other third parties, will not have the opportunity to exercise a right to vote.

**You may not be able to participate in rights offerings and may experience dilution of your holdings as a result.**

We may from time to time distribute rights to our shareholders, including rights to acquire our securities. Under the deposit agreement for the ADSs, the depositary will not offer those rights to ADS holders unless both the rights and the underlying securities to be distributed to ADS holders are either registered under the U.S. Securities Act of 1933, as amended, or the Securities Act, or exempt from registration under the Securities Act with respect to all holders of ADSs. We are under no obligation to file a registration statement with respect to any such rights or underlying securities or to endeavor to cause such a registration statement to be declared effective. In addition, we may not be able to take advantage of any exemptions from registration under the Securities Act. Accordingly, holders of our ADSs may be unable to participate in our rights offerings and may experience dilution in their holdings as a result.

**The laws of the Cayman Islands and China may not provide our shareholders with benefits provided to shareholders of corporations incorporated in the United States.**

Our corporate affairs are governed by our memorandum and articles of association, and by the Companies Law, as revised from time to time, and the common law of the Cayman Islands. The rights of shareholders to take action against our directors, actions by minority shareholders and the fiduciary responsibilities of our directors to us under Cayman Islands law are to a large extent governed by the common law of the Cayman Islands. The common law in the Cayman Islands is derived in part from comparatively limited judicial precedent in the Cayman Islands and from English common law, the decisions of whose courts are of persuasive authority but are not binding on a court in the Cayman Islands. The rights of our shareholders and the fiduciary responsibilities of our directors under Cayman Islands law are not as clearly established as they would be under statutes or judicial precedents in the United States. In particular, the Cayman Islands have a less developed body of securities laws as compared to the United States. Therefore, our public shareholders may have more difficulty protecting their interests in the face of actions by our management, directors or controlling shareholders than shareholders of a corporation incorporated in a jurisdiction in the United States. In addition, Cayman Islands companies may not have standing to initiate a shareholder derivative action before the federal courts of the United States.

**It may be difficult to enforce any judgment obtained in the United States against our company, which may limit the remedies otherwise available to our shareholders.**

Substantially all of our assets are located outside the United States. The majority of our current operations are conducted in China. Moreover, a number of our directors and officers are nationals or residents of countries other than the United States. All or a substantial portion of the assets of these persons are located outside the United States. As a result, it may be difficult for a person to effect service of process within the United States upon these persons. In addition, there is uncertainty as to whether the courts of the Cayman Islands or China would recognize or enforce judgments of U.S. courts obtained against us or such persons predicated upon the civil liability provisions of the securities law of the United States or any state thereof, or be competent to hear original actions brought in the Cayman Islands or China, respectively, against us or such persons predicated upon the securities laws of the United States or any state thereof. See "Item 4.B — Information on the Company — Business Overview — Enforceability of Civil Liabilities.

**Item 4. Information on the Company**

**A. History and Development of the Company**

We were established as an exempted company under the laws of the Cayman Islands on April 3, 2000. Our legal name is Semiconductor Manufacturing International Corporation. Our principal place of business is 18 Zhangjiang Road, Pudong New Area, Shanghai, China, 201203, and our telephone number is (86) 21- 3861-0000. Our registered office is located at P.O. Box 2681, Cricket Square, Hutchins Drive, Grand Cayman KY1-1111, Cayman Islands. Since March 18, 2004, we have been listed on the New York Stock Exchange under the symbol "SMI" and the Stock Exchange of Hong Kong under the stock code "0981.HK". CT Corporation System is our agent in the United States of America and its address is 111 Eighth Avenue, New York, New York 10011, U.S.A.

We are now the largest semiconductor foundry in mainland China. We operate wafer fabrication facilities, including facilities at Beijing, Shanghai, Tianjin and Shenzhen in China and at Avezzano in Italy, as we acquired 70% of the ownership interest of LFoundry S.r.l. or LFoundry on July 29, 2016, with an aggregate capacity of producing up to 451,325 8-inch wafer equivalents per month.

**SMIC Shenzhen**

SMIC Shenzhen, which our wholly-owned subsidiary, principally engages in, among others, the testing, development, design, manufacturing, packaging and sale of integrated circuits entered into mass production since the third quarter of 2015.

**SMNC**

SMNC, our majority-owned subsidiary in Beijing, principally engages in, among others, the testing, development, design, manufacturing, packaging and sale of integrated circuits entered into mass production since the fourth quarter of 2015.

On May 10, 2016, the Company, SMIC Beijing, China IC Fund, Beijing Semiconductor Manufacturing and Equipment Equity Investment Centre (Limited Partnership) ("Beijing Semi Fund"), Beijing Industrial Developing Investment Management Co., Ltd. ("IDIMC") and Zhongguancun Development Group ("ZDG") have agreed to amend the previous joint venture agreement through an amended joint venture agreement, pursuant to which: (i) the Company and SMIC Beijing's outstanding aggregate capital contribution obligations as contained in the previous joint venture agreement will decrease from US\$804.38 million to US\$708.38 million, and their aggregate shareholding in SMNC, will decrease from 55% to 51%; and (ii) China IC Fund has agreed to make cash contribution of US\$636 million into the registered capital of SMNC. The parties' performance of their capital contribution obligations will lead to an increase in the registered capital of SMNC from US\$1.2 billion to US\$2.4 billion. The capital contribution from China IC Fund was completed in June 2016.

On August 10, 2017, the Company, SMIC Beijing, SMIC Holdings, China IC Fund, Beijing Semi Fund, IDIMC, ZDG and Beijing E-Town International Investment & Development Co., Ltd ("E-Town Capital") 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 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 million into the registered capital of the Joint Venture Company. Its shareholding in the Joint Venture Company will increase from 26.5% to 32%; and (iii) E-Town Capital has agreed to make cash contribution of US\$276 million into the registered capital of the Joint Venture Company representing 5.75% of the enlarged registered capital of the Joint Venture Company. The capital contribution is expected to be completed before the end of 2019.

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According to the joint venture agreements entered into by the Group and the non-controlling interest shareholders of SMNC, additional capital injection into SMNC was received in 2015, 2016, 2017 and 2018. The additional capital injection from non-controlling interest shareholders amounted to US\$61.9 million in 2015, US\$754.1 million in 2016, US\$294.0 million in 2017, and US\$441.0 million in 2018, respectively.

#### **SilTech Shanghai**

On December 22, 2014, (i) SilTech Shanghai, one of our indirectly wholly-owned subsidiary; (ii) JCET; and (iii) China IC Fund entered into a co-investment agreement to form an investment consortium in connection with the proposed acquisition of STATS ChipPAC, a leading provider of advanced semiconductor packaging and test services in the world and a company incorporated in the Republic of Singapore, shares of which were listed on the Singapore Exchange Securities Trading Limited before the acquisition. On June 18, 2015, according to the co-investment agreement, we invested US\$102 million as a capital contribution for 19.6% ownership interest in Changjiang Xinke, a company incorporated in Jiangsu province, China, which is accounted as an associate of the Group.

On April 27, 2016, SilTech Shanghai and JCET entered into a disposal agreement, pursuant to which SilTech Shanghai agreed to sell its 19.61% ownership interest in Changjiang Xinke to JCET in consideration of RMB664 million, which will be satisfied by JCET's issue of 43,229,166 shares of JCET to SilTech Shanghai at RMB15.36 per share. On the same day, SilTech Shanghai and JCET entered into a subscription agreement, pursuant to which SilTech Shanghai agreed to subscribe for and JCET agreed to issue 150,681,044 shares of JCET in consideration of an aggregate subscription price of RMB2,655 million in cash.

On May 10, 2017, the Company was notified by JCET that the China Securities Regulatory Commission has granted approval for this transaction, and the disposal agreement and the subscription agreement became effective accordingly. On June 19, 2017, the transactions were completed and SMIC became the single largest shareholder of JCET. The Group recorded its ownership interest of JCET as investment in associate due to its right to nominate directors of JCET's board.

On August 30, 2018, Siltech Shanghai completed a subscription for 34,696,198 shares in JCET in cash by way of private placement (the "Subscription"). The shares were subscribed at a price of RMB14.89 per share, with the total subscription price being RMB516.6 million. Immediately before and after completion of the Subscription, the shareholding interest of the Company in JCET is 14.28%.

#### **SMIC New Technology Research & Development (Shanghai) Corporation**

On June 23, 2015, Huawei, Qualcomm Global Trading Pte. Ltd. ("Qualcomm"), IMEC International ("IMEC") and we jointly issued a press release in relation to the formation of SMIC Advanced Technology Research & Development (Shanghai) Corporation, an equity joint venture company renamed as SMIC New Technology Research & Development (Shanghai) Corporation in 2017. The joint venture company focused on research and development ("R&D") towards next generation CMOS logic technology and is designed to build most advanced integrated circuit (IC) development R&D platform in China. SMIC is the major shareholder of the joint venture company, while Huawei, IMEC, and Qualcomm are minority shareholders. The current focus of the joint venture company is on developing 14nm logic technology.

#### **LFoundry S.r.l.**

On June 24, 2016, we, LFoundry Europe and Marsica entered into a sale and purchase agreement pursuant to which LFoundry Europe and Marsica agreed to sell and we agreed to purchase 70% of the corporate capital of LFoundry for an aggregate cash consideration of EUR49 million subject to adjustment. The acquisition was completed as of July 29, 2016.



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On March 29, 2019, SMIC Shanghai (Cayman) Corporation (the “Vendor”, a wholly-owned subsidiary of the Company), and SMIC Hong Kong (International) Company 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% of the share capital of LFoundry. The consideration of the Target Company and its subsidiaries amounted to US\$112.8 million was considered to be fair and reasonable and in the interest of the Company and its shareholders taken as a whole. Further, the Purchaser agreed to purchase from the Target Company the creditor’s rights for the outstanding balance (being the total outstanding principal and total aggregate accrued interest) under the loans from the Group.

**Ningbo Semiconductor International Corporation**

On October 14, 2016, Ningbo Semiconductor International Corporation (“NSI”) was jointly established by China IC Capital (the wholly-owned investment fund of SMIC), Ningbo Sensen Electronics Technology Co., Ltd, and Beijing Integrated Circuit Design and Testing Fund with a registered capital of RMB355 million, equal to US\$52.8 million. SMIC holds 66.76% of the ownership interest.

On March 22, 2018, NSI, SMIC Holdings and China IC Fund entered into the equity transfer agreement, pursuant to which SMIC Holdings has agreed to sell the equity interest to China IC Fund. Upon the completion of the equity transfer, the shareholding of SMIC Holdings in NSI will decrease from approximately 66.76% to 38.59%, and NSI will cease to be a subsidiary of the Company and its financial results will cease to be consolidated with the Group’s results. There is no gain or loss expected to accrue to the Company as a result of the equity transfer.

On March 23, 2018, NSI, SMIC Holdings, China IC Fund, Ningbo Sensen Electronics Technology Co., Ltd, Beijing Integrated Circuit Design and Testing Fund, Ningbo Integrated Circuit Industry Fund and Infotech National Emerging Fund entered into the capital increase agreement, pursuant to which (i) SMIC Holdings has agreed to make further cash contribution of RMB565 million into the registered capital of NSI. Its shareholding in the Joint Venture Company will decrease from approximately 38.59% to approximately 38.57%; (ii) China IC Fund has agreed to make further cash contribution of RMB500 million into the registered capital of NSI. Its shareholding in NSI will increase from approximately 28.17% to approximately 32.97%. The all above parties’ performance of the Capital Contribution obligations will lead to an increase in the registered capital from RMB355 million to RMB1.82 billion.

**Semiconductor Manufacturing South China Corporation**

On December 1, 2016, Semiconductor Manufacturing South China Corporation (“SMSC”) was established by SMIC Holdings and SMIC Shanghai. On January 30, 2018, SMIC Holdings, SMIC Shanghai, China IC Fund and 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 million, respectively. As a result of the capital contribution: (i) the registered capital of SMSC will increase from US\$210 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.

**SJ Semiconductor Corporation**

SJ Semiconductor Corporation, a majority-owned 300mm bumping and probing factory in Jiangyin, entered into mass production in July 2016. Chip probing has been in production for mobile SoC, consumer and memory devices since April 2015. The products manufactured by SJ Semiconductor Corporation adopt most advanced technologies from early stage to mass production with high quality.

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According to the joint venture agreements entered into by the Company and the non-controlling interest shareholders of SJ Semiconductor Corporation, additional capital injection into SJ Semiconductor Corporation was completed in 2015 and 2016. The additional capital injection from non-controlling interest shareholders amounted to US\$60.0 million in 2015 and US\$60.0 million in 2016, respectively.

## Share Consolidation

On December 7, 2016, the Share Consolidation was effective on the basis that every ten authorized ordinary shares (whether issued or not) and preferred shares of US\$0.0004 each in the existing share capital of the Company are consolidated into one ordinary share and preferred share of US\$0.004 each, respectively.

## Capital Expenditures

Our capital expenditures amounted to approximately US\$2,694.7 million, US\$2,487.9 million and US\$1,813.4 million for the years ended December 31, 2016, 2017 and 2018, respectively, which were primarily used to construct, equip and ramp up our fabs. Our planned capital expenditures for the year ending December 31, 2019 for foundry operations are approximately US\$2.1 billion, which are mainly for equipment and facility in our majority-owned Shanghai 300mm fab and FinFET R&D line, subject to adjustment based on market conditions. We plan to fund our capital expenditure through the cash on hand, cash flows from operations for the year ending December 31, 2019, borrowings under existing credit facilities, proceeds from the note financings, the capital contribution from non-controlling interest shareholders and other external financing. See "Item 5. A — Operating and Financial Review and Prospects — Operating Results—Factors that Impact Our Results of Operations — Substantial Capital Expenditures" for details.

## Where to Find Further Information

SEC maintains an Internet site that contains reports, proxy and information statements, and other information of our Company that were filed electronically with the SEC at <http://www.sec.gov>. Our Internet Address is <http://www.smics.com/en/site/investor>.

## B. Business Overview

We provides integrated circuit ("IC") foundry and technology services on process nodes from 0.35 micron to 28 nanometer. Headquartered in Shanghai, China, SMIC has an international manufacturing and service base. In China, SMIC has a 300mm wafer fabrication facility ("fab") and a 200mm fab in Shanghai; a 300mm fab and a majority-owned 300mm fab for advanced nodes in Beijing; 200mm fabs in Tianjin and Shenzhen; and a majority-owned joint-venture 300mm bumping facility in Jiangyin. Additionally, SMIC has a majority-owned 200mm fab in Italy. SMIC also has marketing and customer service offices in the U.S., Europe, Japan, and Taiwan, and a representative office in Hong Kong.

We also have customer service and marketing offices in the U.S., Europe, Japan, and Taiwan, and a representative office in Hong Kong. The table below sets forth a summary of our fabs as of December 31, 2018:

Number and Type of fab	SMIC Shanghai		SMIC Beijing	SMIC Tianjin	SMIC Shenzhen		SMNC	LFoundry
	200mm fab	300mm fab	300mm fab	200mm fab	200mm fab	300mm fab	300mm fab	200mm fab
Wafer size	200mm	300mm	300mm	200mm	200mm	300mm	300mm	200mm
Current most advanced technology for volume production	0.11 micron	0.028 micron	0.055 micron	0.15 micron	0.11 micron	0.055 micron	0.028 micron	0.09 micron
Production, supporting, testing and maskshop clean room size	35,070m <sup>2</sup>	15,611m <sup>2</sup>	26,276m <sup>2</sup>	17,540m <sup>2</sup>	19,760m <sup>2</sup>	14,305m <sup>2</sup>	37,524m <sup>2</sup>	10,270m <sup>2</sup>

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In addition to wafer fabrication, our service offerings include a comprehensive portfolio consisting of IC design libraries, circuit design blocks, design support, mask-making, wafer probing and gold/solder bumping. We have a majority-owned 300mm bumping factory in Jiangyin, China and we also work with our partners to provide IC assembly and testing services.

We have a global and diversified customer base that includes some of the world's leading IDMs and fabless semiconductor companies.

## Our Products and Services

### Manufacturing of Wafers and Our Manufacturing Capacity

We currently manufacture silicon wafers based on proprietary designs provided by our customers or third party designers.

The following table sets forth the historical capacity and utilization rate of our wafer fabrication and facilities (all output and capacity data is provided as 8-inch wafers or 8-inch wafer equivalents per month):

Fab	2016	2017	2018
Wafer fabrication capacity as of December 31 <sup>(1)</sup>			
Shanghai 200mm Fab	108,000	109,000	109,000
Shanghai 300mm Fab	45,000	38,250	22,500
Beijing 300mm Fab	96,750	103,500	94,500
Tianjin 200mm Fab	45,000	50,000	60,000
Shenzhen 200mm Fab	31,000	30,000	42,000
Shenzhen 300mm Fab	—	6,750	6,750
Majority-Owned Beijing 300mm Fab	40,500	65,250	74,250
Majority-Owned Avezzano 200mm Fab	40,000	40,000	42,325
Total monthly wafer fabrication capacity as of December 31	406,250	442,750	451,325
Wafer Fabrication capacity utilization	97.5 %	86.7 %	91.7 %

(1) Conversion of 12-inch wafers to 8-inch wafer equivalents is achieved by multiplying the number of 12-inch wafers by 2.25.

Our factories manufacture the following types of semiconductors:

- Logic (including Baseband, Application Processor, SoC, Secure ICs, Display Driver IC, ASIC/ASSP, Flash Controller, Interface Controller, Timing Controller, Audio/Video IC and FPGA);
- Mixed-Signal and RF (including RF Combo, Wi-Fi, Bluetooth, RFID, NFC, GPS, Zigbee, RF PA, RF-FEM, RF Tx/Rx, Fingerprint Sensor, Demodulator and Tuner IC);
- Power IC (including BCD, Power Management IC, LED Driver IC, Quick Charging IC, Wireless Charging IC, Linear Regulators, and Switch Regulators);
- Micro Processor (including MCU-64/32/16/8-bits, Touch Controller IC, Touch Display Driver IC, DSP, GPU and MPU);
- Memory related (including SRAM, EEPROM, low-density NAND Flash, NOR Flash, eEEPROM and eFlash, OTP/MTP and etc.);
- Optoelectronics (including FSI and BSI CIS - CMOS Image Sensor, 3D, SPAD, Analog PDs);

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- Other Sensors (including MEMS Microphone, Accelerometer, Gyroscope, Smart Sensors, IMU, Micro-display, and etc.);
- Discrete (IGBT, IPD);
- Others (including TSV, IPD, 3DIC, Hybrid Bonding and Bumping).

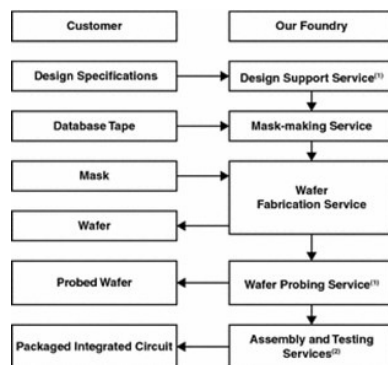
The following table sets forth a percentage breakdown of wafer sales by process technology for the years ended December 31, 2016, 2017 and 2018 and each of the quarters in the year ended December 31, 2018:

Process Technologies	For the year ended December 31,		For the three months ended				For the year ended December 31,
	December 31,		March 31,	June 30,	September 30,	December 31,	December 31,
	2016	2017	2018	2018	2018	2018	2018
	(based on sales in US\$)						
0.028 micron	1.59 %	7.97 %	3.22 %	8.63 %	7.12 %	5.40 %	6.20 %
0.045 micron	22.38 %	20.85 %	21.67 %	17.51 %	18.69 %	20.30 %	19.45 %
0.065 micron	20.60 %	20.38 %	20.89 %	24.22 %	20.96 %	23.03 %	22.31 %
0.09 micron	2.28 %	1.48 %	3.77 %	1.21 %	1.39 %	1.65 %	1.95 %
0.13 micron	12.04 %	11.64 %	7.57 %	7.61 %	8.73 %	7.35 %	7.83 %
0.15 micron	0.29 %	3.32 %	7.39 %	5.88 %	6.16 %	7.56 %	6.71 %
0.18 micron	37.82 %	31.45 %	31.47 %	31.23 %	33.25 %	31.06 %	31.78 %
0.25 micron	0.21 %	0.24 %	0.17 %	0.16 %	0.14 %	0.13 %	0.15 %
0.35 micron and above	2.79 %	2.67 %	3.85 %	3.55 %	3.56 %	3.52 %	3.62 %
Total	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %

***Our Integrated Solutions***

In addition to wafer fabrication, we provide our customers with a range of complementary services, from circuit design support and mask-making to wafer level probing and testing. This range of services is supported by our network of partners that assist in providing design, probing, final testing, packaging, assembly and distribution services.

The diagram below sets forth our service model and our key points of interaction with our customers:



(1) A portion of this work is outsourced to our service partners.

(2) A portion of these services are outsourced to our service partners.

#### **Design Support Services**

Our design support services provide our customers with access to the fundamental technology files and libraries that facilitate customers' own integrated circuit design. We also offer design reference flows and access to our design center alliance, as well as layout services to our customers. In addition, we collaborate with industry leaders in electronic design automation, library and IP (intellectual property) services to create a worldwide network of expertise, resources and services that are available to our customers.

#### **Libraries and Intellectual Property**

As part of the fundamental building blocks for our customers' integrated circuit designs, we have a dedicated team of engineers who work with our research and development department to develop, license or acquire from third parties selected key libraries and intellectual property so that our customers can quickly design sophisticated integrated circuits that utilize our new process technologies. These include standard cell, I/O, memory compilers, embedded memory, high-speed interface, peripheral controllers, and embedded processors, among others, using 0.35 micron down to 14 nanometer process technologies. They have been developed primarily through our third party alliances, as well as by our internal research and development team, to facilitate easy design and fast integration into the overall design system. Our library partners include ARM, Synopsys, Inc., VeriSilicon, and M31.

#### **Mask-making Services**

While most of our mask-making services are for customers who use our wafer fabrication services, we also produce masks for other domestic and overseas fabs as a separate revenue-generating service.

Our mask-making facility, which is located in Shanghai, includes a 4,400 square meters clean room with up to class I specifications. At present, our mask shop offers five-inch by five-inch, six-inch by six-inch and seven-inch circular reticles. Our facility is capable of producing binary masks, optical proximity correction masks and phase shift masks. Our mask facility also offers mask repair services.

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**Wafer Probing, Bumping, Assembly and Testing Services**

We have a majority-owned probing facility in Shanghai that provides test program development, probe card fabrication, wafer probing, failure analysis, and failure testing. We also outsource these services to our partners. The probing facility in Shanghai, China occupies a clean room space of 2,500 square meters, which is rated at Class 1000 cleanliness equipped with advanced testers, probers and laser repair machines. We have experienced engineers to provide test solution development, probe card fabrication, wafer probing, characterization and failure analysis services for most of eMemory, Logics, SoC, Mix-Signal, CIS and MEMS applications.

We also have a probing facility in Avezzano, Italy which occupies a clean room space of about 800 square meters rated at Class 100 cleanliness and equipped with advanced testers and probers to provide test solution development, probe card design, wafer probing, characterization and failure analysis services for most of eMemory, Logics, SoC, Mix-Signal and CIS applications.

In addition, we have a majority-owned 300mm bumping and probing factory in Jiangyin, which entered into mass production in July 2016. Chip probing has been in production for mobile SoC, consumer and memory devices since April 2015. Their products adopt most advanced technologies from early stage to mass production with high quality. We have established a network of partners that provide additional probing and bumping services, as well as assembly and testing services, to serve our customers. These partners, which include worldwide and domestic leading assembly and testing companies, have helped to enhance the range of services that we are able to offer to our customers.

**Customers and Markets**

We categorize our sales geographically based on the headquarters of customer operations instead of shipment destination. The following table sets forth the geographical distribution of our sales and percentage of sales for the periods indicated:

Region	For the year ended December 31,					
	2016		2017		2018	
	Sales	Percentage	Sales	Percentage	Sales	Percentage
(in US\$ thousands, except percentages)						
United States <sup>(1)</sup>	858,858	29.47 %	1,240,906	40.01 %	1,062,134	31.61 %
Mainland China and Hong Kong	1,447,427	49.67 %	1,465,553	47.26 %	1,985,292	59.09 %
Eurasia <sup>(2)</sup>	607,895	20.86 %	394,716	12.73 %	312,558	9.30 %
Total	2,914,180	100.00 %	3,101,175	100.00 %	3,359,985	100.00 %

(1) Presenting revenue generated through sales to those companies whose headquarters are in the United States, but ultimately selling products to their global customers.

(2) Europe and Asia Pacific, excluding Mainland China and Hong Kong

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The following table sets forth the breakdown of our revenue by product and service type for the periods indicated:

Product and Service Type	For the year ended December 31,					
	2016		2017		2018	
	Sales	Percentage	Sales	Percentage	Sales	Percentage
(in US\$ thousands, except percentages)						
<b>Sales of wafers</b>	2,803,819	96.21 %	3,038,947	97.99 %	3,031,771	90.23 %
<b>Mask making, testing and others</b>	110,361	3.79 %	62,228	2.01 %	328,214	9.77 %
<b>Total</b>	2,914,180	100.00 %	3,101,175	100.00 %	3,359,985	100.00 %

We have a global and diversified customer base that includes IDMs, fabless semiconductor companies and systems companies. A significant portion of our sales is attributable to a relatively small number of our customers. For the year ended December 31, 2018, our five largest customers accounted for 46.2% of our total sales.

The following table sets forth a breakdown of our sales by application type for the periods indicated:

Application Type	For the year ended December 31,					
	2016		2017		2018	
	Sales	Percentage	Sales	Percentage	Sales	Percentage
(in US\$ thousands, except percentages)						
<b>Computing<sup>(1)</sup></b>	122,451	4.20 %	192,294	6.20 %	221,011	6.58 %
<b>Communication<sup>(2)</sup></b>	1,390,716	47.72 %	1,373,251	44.28 %	1,383,976	41.19 %
<b>Consumer<sup>(3)</sup></b>	1,112,821	38.19 %	1,158,313	37.35 %	1,156,438	34.42 %
<b>Auto/Industrial<sup>(4)</sup></b>	112,713	3.87 %	244,818	7.89 %	263,016	7.83 %
<b>Other</b>	175,479	6.02 %	132,499	4.28 %	335,544	9.98 %
<b>Total</b>	2,914,180	100.00 %	3,101,175	100.00 %	3,359,985	100.00 %

(1) "Computing" consists of integrated circuits such as hard disk drive controllers, DVD-ROM/CD-ROM driver, graphic processors and other components that are commonly used in desktop and notebook computers and peripherals.

(2) "Communication" consists of integrated circuits used in both wired and wireless data communications and telecommunications applications.

(3) "Consumer" consists of integrated circuits used for stand-alone DVD players, TV, set top box, game consoles, digital cameras, smart cards and toys.

(4) "Auto/Industrial" consists of integrated circuits used for automotive control, infotainment, security/safety, industrial controller and power management.

#### Intellectual Property, Patents

We have several thousand patents and patent applications, in addition to third party licenses. Research and development is important for us to maintain our competitiveness. We also have various trademark registrations worldwide. However, we are not dependent on any single patent, license, or trademark, or any group of related patents, licenses or trademarks. Please also see "Item 5.C — Operating and Financial Review and Prospects — Research and Development, Patents and Licenses, etc." for details.

## **Competition and Marketing Channels**

We compete internationally and domestically in mainland China with dedicated foundry service providers, as well as with semiconductor companies that allocate a portion of their fabrication capacity to foundry operations. While different players in the wafer foundry market may compete on factors such as technical competence, production speed and cycle time, time-to-market, research and development quality, available capacity, yields, customer service and price, we seek to compete on the basis of process technology capabilities, performance, quality, service and price. The level of competition differs according to the process technology involved.

Our competitors are other pure-play foundries such as TSMC, UMC and Global Foundries. Another group of potential competitors consists of IDMs that have established their own foundry capabilities including Fujitsu Limited and Samsung Electronics Co., Ltd.

We have customer service and marketing offices located in the United States, Europe, Japan, mainland China and Taiwan and a representative office in Hong Kong. Our mainland China offices serve mainland China, Hong Kong and other non-Japan, non-Taiwan Asian markets, our U.S. office serves the North American market, our Taiwan office serves the Taiwanese market and our Europe and Japan offices serve the European and Japanese markets, respectively. We also sell some products through sales agents in selected markets.

Some of our competitors have established operations in mainland China in order to compete for the growing domestic market in China. TSMC has its own fab in Shanghai and currently builds a wholly-owned 12-inch wafer manufacturing facility and a design service center in Nanjing. UMC has its majority-owned 8-inch fab in Suzhou and has a 12-inch joint venture fab in Xiamen. In these cases, we understand that the ability of these fabs to manufacture wafers using certain more advanced technologies is subject to restrictions by the respective home jurisdiction of TSMC and UMC; however, such restrictions could be reduced or lifted at any time, which may lead to increased competition in China with such competitors and adversely affect our business and operating results.

## **Business Seasonality**

In general, semiconductor foundry business is subject to seasonal behavior patterns in which business normally would peak in the third quarter of a calendar year and bottom in the first quarter. As a result, our revenue is generally higher in the third quarter of our financial year and lower in the first quarter of our financial year.

## **Raw Materials**

Our fabrication processes use many raw materials, which primarily consist of silicon wafers, chemicals, gases, and various types of precious and other metals. Raw material costs constituted 30%, 27% and 27% of our manufacturing costs for the years ended December 31, 2016, 2017 and 2018, respectively.

The three largest components of raw material costs - raw wafers, chemicals and gases - accounted for approximately 31%, 30% and 10% of our raw material costs for the year ended December 31, 2016, respectively, approximately 31%, 31% and 9% of our raw material costs for the year ended December 31, 2017, respectively, and approximately 35%, 2% and 9% of our raw material costs for the year ended December 31, 2018, respectively. We generally purchase most of our raw materials from several suppliers, but substantially all of our principal raw materials are currently be purchased from suppliers outside China.

The most important raw material used in our production is silicon in the form of raw wafers. For the year ended December 31, 2018, we purchased approximately 74.5% of our overall raw wafers from our three major raw wafer suppliers. The prices of our principal raw materials are not considered to be volatile.



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For the year ended December 31, 2016, our largest and five largest raw materials suppliers accounted for approximately 12.4% and 38.3% of our overall raw materials purchases, respectively. For the year ended December 31, 2017, our largest and five largest raw materials suppliers accounted for approximately 13.8% and 38.3% of our overall raw materials purchases, respectively. For the year ended December 31, 2018, our largest and five largest raw materials suppliers accounted for approximately 13.8% and 43.3% of our overall raw materials purchases, respectively. Our largest and second-largest raw materials suppliers were the same in last three years. Most of our raw materials are imported free of value-added tax and import duties due to concessions granted to our industry in China.

#### **Electricity and Water**

We use substantial amounts of electricity in our manufacturing process. This electricity is sourced from Pudong Electricity Corporation, Beijing Municipal Electricity Department, Tianjin Municipal Electricity Department, Shenzhen PanGuShi Municipal Electricity Department and Jiangyin Municipal Electricity Department for our facilities located in Shanghai, Beijing, Tianjin, Shenzhen and Jiangyin, respectively. We maintain uninterrupted power supply systems and emergency back-up generators and other critical equipment and systems for emergencies at each of our fabs.

The electricity for the Avezzano site is “self-produced” by a cogeneration plant owned by LFoundry inside the plant site. The cogeneration plant is connected to the external grid that is used as a backup in case of cogeneration plant shut down. Back up electricity is provided by Enel S.p.A.

The semiconductor manufacturing process also uses extensive amounts of fresh water. We source our fresh water for our Shanghai 200mm and 300mm fabs from Pudong Veolia Water Corporation Limited, for our Beijing 300mm fab from Beijing Waterworks Group Co. Ltd., for our Tianjin 200mm fab from the Tianjin Municipal Water Department, for our majority-owned Beijing 300mm fab from Beijing Bixing High Quality Regeneration Water Co. Ltd., for our Shenzhen 200mm and 300mm fabs from Grand Industrial Zone Water Company of Shenzhen, for our majority-owned Jiangyin 300mm bumping fab from Jiangsu Jiangnan Water Co. Ltd and for our Avezzano 200mm fab from Consorzio Acquedottistico Marsicano. Because Beijing and Tianjin are subject to potential water shortages in the summer, our fabs in Beijing and Tianjin are equipped with back-up reservoirs. Our fab located in Shenzhen is also equipped with back-up reservoirs and our fab in Avezzano uses internal well and reclaims water consumption as a back-up to avoid unpredictable water shortages. We have taken steps to reduce fresh water consumption in our fabs and capture rainwater for use at our Beijing, Tianjin and Shenzhen facilities, and our water recycling systems in most of our fabs allow us to recycle up to 80% of the water used during the manufacturing process. The Beijing, Tianjin and Shenzhen sites are also equipped to use recycled/treated industrial waste water for non-critical operations.

#### **Regulation**

The integrated circuit industry in China is subject to substantial regulations by the Chinese government. This section sets forth a summary of the most significant Chinese regulations that affect our business in China.

#### ***Preferential Industrial Policies Relating to ICPEs (“Integrated Circuit Production Enterprises”)***

ICPEs which are duly accredited in accordance with relevant laws and regulations may qualify for preferential industrial policies. Under the Accreditation Measures, an integrated circuit enterprise refers to an independent legal entity duly established in the PRC (except for Hong Kong, Macao, and Taiwan) engaging in the production of single chip integrated circuits, multi-chip integrated circuits and hybrid integrated circuits, excluding the integrated circuit design enterprise.

Since 2015, in response to the move of the government to streamline administrative power, the State Council has promulgated various circulars to abolish relevant administrative approval for the qualification assessment, product registration and other administrative/non-administrative licensing examination and approval of IC enterprises.

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

*Encouragement of Domestic Investment in ICPEs*

Pursuant to the Interim Provisions on Promoting Industrial Structure Adjustment (the "Interim Provisions"), issued by the State Council on December 2, 2005, and the Catalogue for the Guidance of Industrial Structure Adjustment (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, March 10, 2015 and July 28, 2017, the Chinese government encourages (i) the design of integrated circuits, (ii) the fabrication of integrated circuits with a line width of less than 0.11 micron (including 0.11 micron) and (iii) the advanced packaging and testing of BGA, PGA, FPGA, 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 the Notice of the State Council on Adjusting the Taxation Policies for Imported Equipment (Guo Fa [1997] No.37).

*Encouragement of Foreign Investment in ICPEs*

Pursuant to the Integrated Circuit Policies and the Guideline Catalogue of Foreign Investment Industries promulgated jointly by the State Development and Reform Commission and the Ministry of Commerce on July 28, 2017, the following foreign investment categories are encouraged:

- design of integrated circuits;
- fabrication of large scale integrated circuits with a line width of less than 28 nanometer (including 28 nanometer);
- fabrication of analog and analog digital integrated circuits with a line width of less than 0.11 micron (including 0.11 micron);
- advanced packaging and testing of BGA, PGA, CSP, MCM;
- MEMS and compound semiconductor integrated circuits.

Foreign investment in such encouraged projects may enjoy preferential treatment as stipulated by the laws and regulations.

***Preferential Taxation Policies***

SMIC is incorporated in the Cayman Islands and not currently subject to taxation in the Cayman Islands.

The Law of the People's Republic of China on Enterprise Income Tax ("EIT Law") was promulgated on March 16, 2007, which became effective January 1, 2008. Under the EIT Law, domestically-owned enterprises and foreign-invested enterprises ("FIEs") are subject to a uniform tax rate of 25%, except where a special preferential rate applies. The EIT Law provides a five-year transition period starting from its effective date for those companies which were established before the promulgation date of the EIT Law and which were entitled to a preferential lower tax rate under the then effective tax laws or regulations. In accordance with regulations issued by the State Council, the tax rate of such companies may gradually transit to the uniform tax rate within the transition period.

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For those companies which are enjoying tax holidays, such tax holidays may continue until their expiration in accordance with the regulations issued by the State Council, but where the tax holiday has not yet started because of losses, such tax holiday shall be deemed to commence from the first effective year of the EIT Law.

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 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 Cai Shui [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 assertion and preferential tax policy of integrated circuit enterprise established before December 31, 2010, is 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 tax incentive measures for integrated circuit production enterprises established before and after January 1, 2018 and updated certain criteria for tax incentive entitlement. Circular No. 49 is partially abolished by 2018 Circular No. 27.

#### ***Preferential Policies Encouraging Research and Development***

The EIT Law and the Implementation Regulations of the EIT Law have provided tax incentives in relation to technologies as a means to encourage advancement and adoption of new technologies. The EIT Law provides an additional 50% deduction of the research and development expenses incurred from the research and development of new technologies, new products, and new techniques on the basis of the actual deductions when relevant enterprise has no intangible asset to be formed and calculated into the current gains and losses. R&D super deduction is subject to certain application with the in-charge tax bureau with other supporting documents (i.e. specialized R&D audit report, etc.).

#### ***Legal Framework Concerning the Protection of Intellectual Property Relating to Integrated Circuits***

China has formulated various laws and regulations on intellectual property protection in respect of integrated circuits including:

- the Patent Law of the People's Republic of China, adopted at the fourth meeting of the Standing Committee of the Sixth National People's Congress on March 12, 1984, effective April 1, 1985 and amended by the Ninth National People's Congress on August 25, 2000 and third amended by the Eleventh People's Congress on December 27, 2008, effective October 1, 2009;

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- the Paris Convention for the Protection of Industrial Property of the World Intellectual Property Organization, in which China became a member state as of March 19, 1985;
- the General Principles of the Civil Law of the People's Republic of China adopted at the fourth session of the Sixth National People's Congress on April 12, 1986, effective January 1, 1987 and revised at the tenth meeting of the Standing Committee of the Eleventh National People's Congress on August 27, 2009. In this legislation, intellectual property rights were defined in China's basic civil law for the first time as the civil rights of citizens and legal persons. The General Principles of the Civil Law of the People's Republic of China was subsequently developed into the General Provisions of the Civil Law of the People's Republic of China, which was formally adopted at the fifth session of the twelfth National People's Congress on March 15, 2017, effective October 1, 2017;
- the Copyright Law of the People's Republic of China, adopted by the 15th meeting of the Seventh National People's Congress Standing Committee on September 7, 1990, effective June 1, 1991, first amended by the Ninth National People's Congress on October 27, 2001 and amended again by the Eleventh National People's Congress on February 26, 2010, effective April 10, 2010;
- the Regulations for the Protection of the Layout Design of Integrated Circuits, or the Layout Design Regulations, adopted April 2, 2001 at the thirty-sixth session of the executive meeting of the State Council, effective October 1, 2001; and
- the World Intellectual Property Organization's Washington Treaty on Intellectual Property in Respect of Integrated Circuits, for which China was among the first signatory states in 1990.

#### ***Protection of the Layout Design of Integrated Circuits***

Under the Layout Design Regulations, layout design of an integrated circuit refers to a three dimensional configuration in an integrated circuit that has two or more components, with at least one of these being an active component, and part or all of the interconnected circuitry or the three-dimensional configuration prepared for the production of integrated circuits.

Chinese natural persons, legal persons or other organizations that create layout designs are entitled to the proprietary rights in the layout designs in accordance with the Layout Design Regulations. Foreign persons or enterprises that create layout designs and have them first put into commercial use in China are entitled to the proprietary rights in the layout designs in accordance with the Layout Design Regulations. Foreign persons or enterprises that create layout designs and that are from a country that has signed agreements with China regarding the protection of layout designs, or is a party to an international treaty concerning the protection of layout designs to which China is also a party, are entitled to the proprietary rights of the layout designs in accordance with the Layout Design Regulations.

#### ***Proprietary Rights in Layout Design of Integrated Circuits***

Holders of proprietary rights in a layout design are entitled to the following proprietary rights:

- to duplicate the whole protected layout design or any part of the design that is original; and
- to make commercial use of the protected layout design, the integrated circuit containing the layout design, or commodities containing the integrated circuit.

Proprietary rights in layout designs become valid after being registered with the administrative department of the State Council responsible for intellectual property. Unregistered layout designs are not protected by the Layout Design Regulations.

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The protection period of the proprietary rights in a layout design is ten years, commencing from the date of the application for registration of the layout design or the date that it is first put into commercial use anywhere in the world, whichever is earlier. However, regardless of whether or not a layout design is registered, or whether or not it is put into commercial use, it is not protected after 15 years from the time of its creation.

***Registration of a Layout Design***

The administrative departments of the State Council responsible for intellectual property are responsible for the registration of layout designs and accepting applications for the registration of layout designs. If an application for a layout design registration is not made with the administrative department of the State Council responsible for intellectual property within two years after it has been first put into commercial use anywhere in the world, the administrative department of the State Council responsible for intellectual property will not register the application. A holder of proprietary rights in a layout design may transfer the proprietary rights or give permission for other parties to use the layout design.

***Compulsory Licenses for Exploitation of Patents in Respect of Semiconductor Technology***

Under the Patent Law and the Implementing Regulations of the Patent Law, three years after a patent right is granted and four years after a patent application is filed, any person or enterprise that has made good faith reasonable proposals to the holder of proprietary rights seeking a license to such right, but has been unable to obtain such license after an extended period of time, may request the administrative department responsible for patents under the State Council to grant a compulsory license for the relevant patent, provided that the patent owner fails to exploit or fails to adequately exploit the patent without justified reasons. However, where a compulsory license involves semiconductor technology, the implementation of a compulsory license is restricted to public and non-commercial uses, or to uses that counteract anti-competitive actions, as determined by judicial or administrative procedures.

***PRC Tax for “Resident Enterprises”***

Under China's EIT Law, an enterprise established under the laws of non-PRC jurisdictions, but whose “de facto management body” is located in the PRC is treated as a resident enterprise for PRC tax purpose. If we are classified as a “resident enterprise” in China, we could be subject to unfavorable tax consequences to us and our non-PRC shareholders. The implementing rules of the EIT Law define de facto management bodies as “management bodies that exercises substantial and overall management and control over the production and operations, personnel, accounting, and properties” of the enterprise. In April 2009, the State Administration of Taxation further specified criteria for the determination of the location of “de facto management bodies” for foreign enterprises, which include: (i) the enterprise's day-to-day operational management is primarily exercised in the PRC, (ii) decisions relating to the enterprise's financial and human resource matters are made or subject to approval by organizations or personnel in the PRC, (iii) the enterprise's primary assets, accounting books and records, company seals, and board and shareholders' meeting minutes are located or maintained in the PRC and (iv) 50% or more of voting board members or senior executives of the enterprise habitually reside in the PRC.

If the PRC tax authorities determine that our Cayman Islands holding company is a “resident enterprise” for PRC enterprise income tax purposes, a number of unfavorable PRC tax consequences could follow. First, we may be subject to enterprise income tax at a rate of 25% on our worldwide taxable income as well as PRC enterprise income tax reporting obligations. Second, although under the EIT Law and its implementing rules dividends income between qualified resident enterprises is tax exempted income, it is not clear how a qualified resident enterprise which is incorporated overseas would be treated under the EIT Law. Finally, it is possible that future guidance issued with respect to the “resident enterprise” classification could result in a situation in which a 10% withholding tax is imposed on dividends we pay to our non-PRC shareholders and with respect to gains derived by our non-PRC shareholders from transferring our shares or ADSs. Similarly, these unfavorable consequences could apply to our other overseas intermediary holding companies if they are classified as PRC resident enterprises.

Our Chinese subsidiaries are subject to a variety of Chinese environmental laws and regulations promulgated by the central and local governments, for example, the Environmental Protection Law of the People's Republic of China, effective December 26, 1989 and amended on April 24, 2014, effective January 1, 2015, and our majority-owned Italian subsidiary is subject to a variety of Italian and European Union environmental laws and regulations promulgated by the central and local governments, for example, our operations in Europe are subject to the Environmental Protection Law Dlgs 152 effective 2006, 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 the 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 of such projects is also required. After receiving approval of the environmental impact assessment report, a semiconductor manufacturer is required to apply to and register with (in Italy, the paperwork needs to be submitted as an environmental permit request also including a declaration to) 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. LFoundry has received approval with respect to its discharge registrations.

From time to time during the operation of our Chinese subsidiaries and our majority-owned Italian subsidiary, 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.

#### **Enforceability of Civil Liabilities**

We are a Cayman Islands holding company. We are incorporated in the Cayman Islands because of the following benefits associated with being a Cayman Islands corporation:

- political and economic stability;
- an effective judicial system;
- a favorable tax system;
- the absence of exchange control or currency restrictions; and
- the availability of professional and support services.

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However, the Cayman Islands have a less developed body of securities laws as compared to the United States and provide significantly less protection for investors. In addition, Cayman Islands companies may not have standing to initiate a shareholder derivative action before the federal courts of the United States. Substantially all of our assets are located outside the United States. In addition, most of our directors and officers are nationals and/or residents of countries other than the United States, and all or a substantial portion of our or such persons' assets are located outside the United States. As a result, it may be difficult for a shareholder to effect service of process within the United States upon us or such persons or to enforce against them or against us, judgments obtained in United States courts, including judgments predicated upon the civil liability provisions of the securities laws of the United States or any state thereof.

Conyers Dill & Pearman (Cayman) Limited, our counsel as to Cayman Islands law, DLA Piper Hong Kong, our counsel as to Hong Kong law, and Shanghai LanBai Law Firm, as well as Shanghai AllBright Law Offices, our counsels as to Chinese law, have advised us that there is uncertainty as to whether the courts of the Cayman Islands, Hong Kong and China, respectively, would:

- recognize or enforce judgments of United States courts obtained against us or our directors or officers predicated upon the civil liability provisions of the securities laws of the United States or any state thereof, or
- be competent to hear original actions brought in each respective jurisdiction, against us or our directors or officers predicated upon the securities laws of the United States or any state thereof.

Conyers Dill & Pearman (Cayman) Limited has further advised us that a final and conclusive judgment in the federal or state courts of the United States under which a sum of money is payable, other than a sum payable in respect of taxes, fines, penalties or similar charges, may be subject to enforcement proceedings as a debt in the Courts of the Cayman Islands under the common law doctrine of obligation.

### **C. Organizational Structure**

We operate primarily through SMIC Shanghai, SMIC Beijing, SMIC Tianjin, SMIC Shenzhen, SMNC, SMSC, SJ Jiangyin in China and LFoundry in Italy. The chart below sets forth also our subsidiaries or affiliates, including their jurisdictions of incorporation and principal activities as of December 31, 2018:

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Name of company	Place and date of incorporation/establishment	Direct or Indirect equity ownership held	Principal Activity
Better Way Enterprises Limited ("Better Way")*	Samoa April 5, 2000	100 %	Provision of marketing related activities
Semiconductor Manufacturing International (Shanghai) Corporation ("SMIS" or "SMIC Shanghai")#	People's Republic of China (the "PRC") December 21, 2000	100 %	Manufacturing and trading of semiconductor products
SMIC, Americas	United States of America June 22, 2001	100 %	Provision of marketing related activities
Semiconductor Manufacturing International (Beijing) Corporation ("SMIB" or "SMIC Beijing")#	PRC July 25, 2002	100 %	Manufacturing and trading of semiconductor products
SMIC Japan Corporation	Japan October 8, 2002	100 %	Provision of marketing related activities
SMIC Europe S.R.L.	Italy July 3, 2003	100 %	Provision of marketing related activities
Semiconductor Manufacturing International (Solar Cell) Corporation	Cayman Islands June 30, 2005	100 %	Investment holding
SMIC Investment (Shanghai) Corporation# (formerly "SMIC Commercial Shanghai Limited Company")	PRC September 30, 2003	100 %	Provision of marketing related activities
Semiconductor Manufacturing International (Tianjin) Corporation ("SMIT" or "SMIC Tianjin")#	PRC November 3, 2003	100 %	Manufacturing and trading of semiconductor products
SMIC Development (Chengdu) Corporation ("SMICD")#	PRC December 29, 2005	100 %	Construction, operation and management of SMICD's living quarters, schools and supermarket
Semiconductor Manufacturing International (BVI) Corporation ("SMIC (BVI)")	British Virgin Islands April 26, 2007	100 %	Provision of marketing related activities
Admiral Investment Holdings Limited	British Virgin Islands October 10, 2007	100 %	Investment holding
SMIC Shanghai (Cayman) Corporation	Cayman Islands November 8, 2007	100 %	Investment holding
SMIC Beijing (Cayman) Corporation	Cayman Islands November 8, 2007	100 %	Investment holding
SMIC Tianjin (Cayman) Corporation	Cayman Islands November 8, 2007	100 %	Investment holding
SiTech Semiconductor Corporation	Cayman Islands February 13, 2008	100 %	Investment holding
SMIC Shenzhen (Cayman) Corporation	Cayman Islands January 21, 2008	100 %	Investment holding
SMIC New Technology Research & Development (Shanghai) Corporation	PRC October 28, 2014	97.450 %	Research and development activities
SMIC Holdings Corporation#	PRC August 26, 2015	100 %	Investment holding
SJ Semiconductor Corporation	Cayman Islands August 19, 2014	56.045 %	Investment holding
Magnificent Tower Limited	British Virgin Islands January 5, 2006	100 %	Investment holding
SMIC Hong Kong International Company Limited (formerly "SMIC Shanghai (HK) Company Limited")	Hong Kong December 3, 2007	100 %	Investment holding
SMIC Beijing (HK) Company Limited	Hong Kong December 3, 2007	100 %	Investment holding
SMIC Tianjin (HK) Company Limited	Hong Kong December 3, 2007	100 %	Investment holding
SMIC Solar Cell (HK) Company Limited	Hong Kong December 3, 2007	100 %	Investment holding
SMIC Shenzhen (HK) Company Limited	Hong Kong January 29, 2008	100 %	Investment holding
SiTech Semiconductor (Hong Kong) Corporation Limited	Hong Kong March 20, 2008	100 %	Investment holding
Semiconductor Manufacturing International (Shenzhen) Corporation#	PRC March 20, 2008	100 %	Manufacturing and trading of semiconductor products
SiTech Semiconductor (Shanghai) Corporation Limited#	PRC March 3, 2009	100 %	Manufacturing and trading of semiconductor products
Semiconductor Manufacturing North China (Beijing) Corporation ("SMNC")*	PRC July 12, 2013	51 %	Manufacturing and trading of semiconductor products
China IC Capital Co., Ltd#	PRC January 17, 2014	100 %	Investment holding
Shanghai Hexin Investment Management Limited Partnership	PRC August 1, 2014	99 %	Investment holding
SJ Semiconductor (HK) Limited ("SJ Hong Kong")*	Hong Kong September 2, 2014	56.045 %	Investment holding
SJ Semiconductor (Jiangyin) Corporation ("SJ Jiangyin")*	PRC November 25, 2014	56.045 %	Bumping and circuit probe testing activities
LFfoundry S.r.l. ("LFfoundry")	Italy July 24, 1998, acquired by SMIC on July 29, 2016	70 %	Manufacturing and trading of semiconductor products
Semiconductor Manufacturing South China Corporation#	PRC December 1, 2016	100 %	Manufacturing and trading of semiconductor products
SJ Semiconductor USA Co.	United States of America April 6, 2016	56.045 %	Provision of marketing related activities
SMIC (Sofia) EOOD	Bulgaria March 31, 2017	100 %	Designing activities
North China IC Innovation Center (Beijing) Co., Ltd#	PRC September 25, 2017	51 %	Designing activities
SMIC Innovation Design Center (Ningbo) Co., Ltd.#	PRC October 13, 2017	100 %	Designing activities
China IC Capital (Ningbo) Co., Ltd#	PRC February 28, 2018	100 %	Investment holding

\* For identification purposes only.



# Companies registered as wholly-owned foreign enterprises in the People's Republic of China, excluding Hong Kong, Macau, and Taiwan for the purpose of this report.

## **D. Property, Plant and Equipment**

### **Equipment**

The quality and level of technology of the equipment used in the semiconductor fabrication process are important because they dictate the limits of the process technology that we use. Advances in process technology cannot be achieved without corresponding advances in equipment technology. The principal pieces of equipment used by us to fabricate semiconductors are scanners, cleaners and track equipment, inspection equipment, etchers, furnaces, wet stations, strippers, implanters, sputterers, CVD equipment, testers and probers. We source substantially all of our equipment from vendors located in the United States, Europe and Japan.

In implementing our capacity expansion and technology advancement plans, we expect to make significant purchases of equipment required for semiconductor fabrication. Some of the equipment is available from a limited number of vendors and/or is manufactured in relatively limited quantities, and in some cases has only recently become commercially available. Our ability to obtain certain kinds of equipment outside of China may be subject to restrictions. See "Item 3.D — Key information — Risk Factors — Risks Related to Conducting Operations in China — Limits placed on exports into China could substantially harm our business and operating results."

We maintain our equipment through a combination of in-house maintenance and outside contracting to our equipment vendors. We decide whether to maintain ourselves, or subcontract the maintenance of, a particular piece of equipment based on a variety of factors, including cost, complexity and regularity of the required periodic maintenance and the availability of maintenance personnel in China. Most of our equipment vendors offer maintenance services through technicians based in China.

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**Property**

The following table sets forth the location, size and primary use of our real properties and whether such real properties are owned or leased.

Location	Size (Land/Building) (in square meters)	Primary Use	Owned <sup>(1)</sup> or Leased (Land/Building)
Zhangjiang High-Tech Park, Pudong New Area, Shanghai	45,840/26,870	Headquarters	owned/owned
Zhangjiang High-Tech Park, Pudong New Area, Shanghai	361,805/201,772	Wafer fabrication	owned/owned
Beijing Economic and Technological Development Area <sup>(2)</sup>	240,140/428,958	Wafer fabrication	owned/owned
Xiqing Economic Development Area, Tianjin	215,733/70,578	Wafer fabrication	owned/owned
Shenzhen Export Processing Zone, Shenzhen Pingshan New Area, Guangdong	200,060/225,236	Wafer fabrication	owned/owned
Avezzano (AQ), Italy	240,009/53,583	Wafer fabrication	owned/owned
Jiangyin National High-Tech Industrial Development Zone, Jiangsu Province	182,082/59,891	Bumping and circuit probe testing	owned/leased and owned
Japan	na/103	Marketing activities	na/leased
USA	na/2,092	Marketing activities	na/leased
Milan, Italy	na/309	Marketing activities	na/owned
Taiwan	na/500	Marketing activities	na/leased
Sofia, Bulgaria	na/224	Research and Development	na/leased
Hong Kong <sup>(3)</sup>	na/300	Representative Office	na/owned

(1) With respect to land located in China, "ownership" refers to holding a valid land use rights certificate. All land within municipal zones in China is owned by the Chinese government. Limited liability companies, joint stock companies, foreign-invested enterprises, privately held companies and individual natural persons must pay fees to be granted rights to use land within municipal zones. Legal use of land is evidenced and sanctioned by land use certificates issued by the local municipal administration of land resources. Land use rights granted for industrial purposes are limited to a term of no more than 50 years.

(2) Including SMIC Beijing and SMNC.

(3) In February 2006, we purchased approximately 300 square meters of property in Hong Kong through our indirect wholly-owned subsidiary, Magnificent Tower Limited, a company incorporated in the British Virgin Islands.

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Our right to continued use of the land is subject to our continued compliance with the land use agreement that each of our Chinese subsidiaries has executed. The Chinese government has reserved the right to revoke our land use rights for special eminent domain purposes, in which case the government will compensate us. In addition, pursuant to our domestic bank loan agreements, SMIC Shanghai had pledged a portion of its land use right to the lenders. See "Item 5.A — Operating and Financial Review and Prospects — Operating Results — Liquidity and Capital Resources."

For further discussion concerning our capacity, capacity utilization rate and capacity expansion plans, please see "Item 5.A — Operating and Financial Review and Prospects — Operating Results — Factors that Impact our Results of Operations."

#### **Environmental Matters**

The semiconductor production process generates gaseous chemical wastes, liquid waste, waste water, and other industrial wastes in various stages of the fabrication process. We have installed various types of pollution control equipment for the treatment of gaseous chemical waste and liquid waste and equipment for the recycling of treated water in our fabs. Our operations in China and Italy are subject to regulation and periodic monitoring by the PRC's and Italian State Environmental Protection Ministry, as well as local environmental protection authorities, including those under the Shanghai Pudong Municipal Government, the Beijing Municipal Government, the Tianjin Municipal Government, the Shenzhen Municipal Government, the Jiangyin Municipal Government and local environmental protection authority in Italy, which may in some cases, establish stricter standards than those imposed by the State Environmental Protection Ministry. The Chinese and Italian national and local environmental laws and regulations impose fees for the discharge of waste substances above prescribed levels, require the payment of fines for serious violations, and authorize the Chinese and Italian national and local governments to suspend any facility that fails to comply with orders requiring it to cease or remedy operations causing environmental damage.

We believe our pollution control measures are effective and comply with the requirements applicable to the semiconductor industry in China, Italy and comparable to other countries. Waste generated from our operations, including acid waste, alkaline waste, flammable waste, toxic waste, oxidizing waste and self-igniting waste, are collected and sorted for proper disposal. Furthermore, we have in many cases implemented waste reduction steps beyond the scope of current regulatory requirements. In addition, we continuously investigate methods to lower our energy consumption, including making existing processes more efficient and reclaiming waste heat.

The ISO 14001 standard is a voluntary standard and part of a comprehensive series of standards for environmental management published by the International Standards Organization. The ISO 14001 standard covers environmental management principles, systems and supporting techniques. SMIC first received ISO 14001 certification in August 2002.

In addition, all fabs, except for SJ Jiangyin, in operation have been QC 080000 certified to be in compliance with the hazardous substances management directives such as RoHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment), which bans the use of various chemicals determined to be harmful to humans and the environment. The Jiangyin site plans to apply for QC080000 certification in the future.

We are also proactively protecting the environment by implementing energy saving measures to reduce greenhouse gas emissions. In order to calculate our greenhouse gas output and to reach a reduction goal, SMIC Shanghai and SMIC Tianjin obtained ISO 14064 certification since 2010, SMIC Beijing obtained external certification from a third party according to Beijing's local regulation on carbon trading since 2014, SMIC Shenzhen obtained ISO 14064 certification since 2017. ISO 14064 is an international standard pursuant to which greenhouse gas (GHG) emissions reports are voluntarily verified. SMNC and the Jiangyin site plan to apply for the ISO 14064 certification in the future.

**Item 4A. Unresolved Staff Comments**

Not applicable

**Item 5. Operating and Financial Review and Prospects**

The following discussion of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes prepared in accordance with IFRS as described in “Notes to Consolidated Financial Statements” as of and for the years ended, December 31, 2016, 2017 and 2018. This report contains forward-looking statements. See

“Forward-Looking Information.” In evaluating our business, you should carefully consider the information provided under the caption

“Item 3.D — Key Information — Risk Factors” in this annual report on Form 20-F. We caution you that our business and financial performance are subject to substantial risks and uncertainties.

**A. Operating Results**

**Overview**

Our operations are primarily based in China. We continued to achieve profitability on a full-year basis for the year ended December 31, 2018. Our revenue increased by US\$258.8 million, or 8.3%, from US\$3,101.2 million for the year ended December 31, 2017 to US\$3,360.0 million for the year ended December 31, 2018. Our net profit was US\$77.2 million and our cash generated from operating activities amounted to US\$799.4 million for the year ended December 31, 2018, compared to our net profit of US\$126.4 million and our cash generated from operating activities of US\$1,080.7 million for the year ended December 31, 2017. Revenue from China-region customers accounted for 57.0% of our total revenue, excluding technology licensing, for the year ended December 31, 2018, compared to 47.3% for the year ended December 31, 2017, representing an increase of 24.3%.

In terms of the revenue breakdown by technology, revenue generated through wafer manufacturing and sales that were attributable to advanced technology at 90nm and below increased from 50.7% for the year ended December 31, 2017 to 49.9% for the year ended December 31, 2018.

The major factors affecting our results of operations and financial condition are discussed below.

**Factors that Impact Our Results of Operations**

***Cyclicality of the Semiconductor Industry***

The semiconductor industry experiences business cycles mainly due to the cyclicality of demand in the markets for the products that use semiconductors. As these markets fluctuate, the semiconductor market also fluctuates. This fluctuation in the semiconductor market is exacerbated by the tendency of semiconductor companies, including foundries, to make capital investments in plant and equipment during periods of high demand since it may require several years to plan, construct and commence operations at a fab. Absent sustained growth in demand, this increase in capacity often leads to overcapacity in the semiconductor market, which in the past has led to a significant underutilization of capacity and a sharp drop in semiconductor prices. The semiconductor industry is generally slow to react to declines in demand due to its capital-intensive nature and the need to make commitments for equipment purchases well in advance of the planned expansion. See “Item 3.D — Key information — Risk Factors — Risks Related to Our Financial Condition and Business.”

**Substantial Capital Expenditures**

The semiconductor foundry industry is characterized by a demand for substantial capital expenditures. This is particularly true for our Company as we have recently constructed and equipped fabs and are continuing to construct and equip new fabs. In connection with the construction and ramp-up of our capacity, we incurred capital expenditures of US\$2,694.7 million, US\$2,487.9 million and US\$1,813.4 million for the years ended December 31, 2016, 2017 and 2018, respectively. Depreciation of our manufacturing machinery and equipment is calculated on a straight-line basis over an estimated useful life of five to seven years. We recorded depreciation expenses of US\$673.2 million, US\$906.0 million and US\$994.6 million for the years ended December 31, 2016, 2017 and 2018, respectively.

The semiconductor industry is also characterized by rapid changes in technology, frequently resulting in obsolescence of process technologies and products. As a result, our research and development efforts are essential to our overall success. Our research and development expenses amounted to approximately US\$318.2 million, US\$427.1 million and US\$558.1 million, which represented 10.9%, 13.8% and 16.6% of our revenue for the year ended December 31, 2016, 2017 and 2018, respectively. Our research and development costs can generally be partially offset by related government fundings and include the costs associated with the ramp-up of a new wafer facility.

We expect that our capital expenditures for the year ended December 31, 2019 for foundry operations will be approximately US\$2.1 billion, subject to adjustment based on market conditions, which are mainly for which equipment and facility in our majority-owned Shanghai 300mm fab and FinFET R&D line. In addition, we have budgeted approximately US\$105.8 million as capital expenditures for non-foundry operations mainly for the construction of living quarters for employees as part of our employee retention program.

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

**Capacity Expansion**

We have expanded our production capacity in the past years and plan to continue to expand through organic growth, joint ventures and acquisitions. An increase in capacity may have a significant effect on our results of operations, by allowing us to produce and sell more wafers and achieve higher sales, and increasing our costs in the form of acquisition costs and depreciation expenses. For the year ending December 31, 2019, we expect most of our expansion will be in our Shanghai 200mm fab and in our Beijing 300mm fab. Our target, subject to market conditions, is to reach 115,000 8-inch wafers per month installed capacity in our Shanghai 200mm fab and 50,000 12-inch wafers per month installed capacity in our Beijing 300mm fab by December 31, 2019.

**Pricing**

We price our foundry services on either a per wafer or a per die basis, taking into account the complexity of the technology, the prevailing market conditions, the order size, the market cycle, the strength and history of our relationship with the customer, and our capacity utilization. Since a majority of our costs and expenses are fixed or semi-fixed, fluctuations in the average selling prices of semiconductor wafers have historically had a substantial impact on our profit margins. The average selling price\* of the wafers we shipped decreased from US\$719 per wafer for the year ended December 31, 2017 to US\$656 per wafer for the year ended December 31, 2018.

\* Based on simplified average selling price which is calculated as the revenue (excluding licensing revenue) divided by total shipments.

**Change in Process Mix and Technology Migration**

Because the price of wafers processed with different technologies varies significantly, the mix of wafers that we produce is one of the primary factors that affect our sales and profitability. The value of a wafer is determined principally by the complexity of the process technology used to fabricate the wafer. In addition, production of devices with higher levels of functionality and greater system-level integration requires more fabrication steps, and these devices generally sell for higher prices.

Prices for wafers of a given level of technology generally decline over the relevant process technology's life cycle. As a result, we and our competitors are constantly in the process of developing and acquiring more advanced process technologies and migrating our customers to use such technologies to maintain or improve our profit margins. This technology migration requires continuous investment in research and development and technology-related acquisitions, and we may spend a substantial amount of capital on upgrading our technologies.

**Capacity Utilization Rates**

Operations at or near full capacity utilization have a significant positive effect on our profitability because a substantial percentage of our cost of sales is of a fixed or semi-fixed nature. If we increase our utilization rates, the number of wafers we fabricate will increase, and therefore our average fixed costs per wafer will decrease. Therefore, our capacity utilization rates have a significant effect on our margins. Our capacity utilization rates have varied from period to period mainly due to the mix of wafers produced and fluctuations in customer orders. Our capacity utilization rate was 97.5%, 86.7% and 91.7% as of December 31, 2016, 2017 and 2018, respectively. Factors affecting capacity utilization rates are the overall industry conditions, the level of customer orders, the complexity of the wafers and of the mix of wafers produced, mechanical failures and other operational disruptions such as the expansion of capacity or the relocation of equipment, and our ability to manage the production facilities and product flows efficiently.

Our capacity is determined by us based on the capacity ratings for each piece of equipment, as specified by the manufacturers of such equipment, adjusted for, among other factors, actual output during uninterrupted trial runs, expected down time due to set up for production runs and maintenance, and expected product mix. Because these factors include subjective elements, our measurement of capacity utilization rates may not be comparable to those of our competitors.

**Yield Rates**

Yield per wafer is the ratio of the number of functional dies on one wafer to the maximum number of dies that can be produced on that wafer. We continuously upgrade the process technologies that we use. At the beginning of each technology migration, the yield utilizing the new technology is generally lower, sometimes substantially lower, than the yield under the then-current technology. This is because it requires time to stabilize, optimize and test a new process technology. We do not ship wafers to a customer until we have achieved that customer's minimum yield requirements. Yield is generally improved through the expertise and cooperation of our research and development personnel, process engineers, and equipment suppliers.

**Critical Accounting Policies**

We prepare our financial statements in conformity with IFRS, which requires us to make judgments, estimates and assumptions. We regularly evaluate these estimates and assumptions based on the most recently available information, our own historical experience and various other assumptions that we believe to be reasonable under the circumstances. Since the use of estimates is an integral component of the financial reporting process, actual results could differ from our expectations as a result of changes in our estimates.

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An accounting policy is considered critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time such estimate is made, and if different accounting estimates that reasonably could have been used, or changes in the accounting estimates that are reasonably likely to occur periodically, could materially impact the consolidated financial statements. We believe that the following accounting policies involve a higher degree of judgment and complexity in their applications and require us to make significant accounting estimates. You should read the following descriptions of critical accounting policies, judgments and estimates in conjunction with our consolidated financial statements and other disclosures included in this annual report.

**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." We estimate 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, we record a write-down to cost of sales for the difference between the carrying cost and NRV.

The cost of inventories recognized as expenses in respect of inventory provision were US\$3.7 million, US\$46.9 million and US\$6.4 million for the years ended December 31, 2016, 2017 and 2018, respectively.

**Long-lived assets**

We assess 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 we consider 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. Currently we are not able to estimate the amount of impairment loss or when a loss may occur for future years. Any potential changes of the business assumptions, such as forecasted sales, selling prices, utilizations, may have a material adverse effect on our net income.

We make 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. We measure the recoverability of assets that will continue to be used in our operations by comparing the carrying value of CGU to our 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 used for extrapolation purposes.

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In order to remain technologically competitive in the semiconductor industry, we have entered into technology transfer and technology license arrangements with third parties in an attempt to advance our 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. We routinely review the remaining estimated useful lives of these intangible assets and deferred costs. We also evaluate 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, we will impair such assets and write down their carrying amounts to recoverable amount in the year when such determination was made.

**Share-based Compensation Expense**

The fair value of options and shares issued pursuant to our 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, the estimated forfeiture rates 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. We estimated forfeiture rates using historical data to estimate option exercise and employee termination within the pricing formula. We use projected volatility rates based upon the Company's historical volatility rates. These assumptions are inherently uncertain. Different assumptions and judgments would affect our 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.

For further discussion on our share-based employee compensation plans see "Item 6.E — Directors, Senior Management and Employees — Share Ownership."

**Taxes**

As a company incorporated in the Cayman Islands, we are not subject to taxation in the Cayman Islands.

Our other subsidiaries are subject to their respective jurisdictions' income tax laws, including Japan, Taiwan, the United States and Europe. Our income tax obligations to date have been minimal.

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. We established provisions, based on reasonable estimates, for possible consequences of audits by the tax authorities of the respective countries 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 us.

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.



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We incurred tax losses of US\$444.0 million, US\$235.1 million and US\$457.3 million for the years ended December 31, 2016, 2017 and 2018, respectively. As of December 31, 2018, no deferred tax asset was recognized due to the unpredictability of future profit streams. 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. For further details on taxes see "Note 10 to Consolidated Financial Statements".

**Fair Value Measurements and Valuation Processes**

Some of our assets and liabilities are measured at fair value for financial reporting purposes.

In estimating the fair value of an asset or a liability, we use market-observable data to the extent it is available. Where Level 1 inputs are not available, we engage third party qualified appraisers to perform the valuation.

We use valuation techniques that include inputs that are not based on observable market data to estimate the fair value of certain types of financial instruments.

Acting as limited partner, we have invested in a number of investment funds. Based on the assessments performed by management, we 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.

**Impairment of Financial Instruments**

We recognize 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, we recognize 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, we measure the loss allowance for that financial instruments at an amount equal to 12-month ECL.

**Sales and Lease Back**

We entered into arrangements to sell and leaseback a batch of production equipment with a repurchase option at a pre-determined price. We made judgements on whether the arrangements are lease arrangements and whether they are operating lease. We estimate the fair value of production equipment based on the price of similar production equipment to judge whether the repurchase option was set at a significant discount to the estimated fair value when it becomes exercisable and whether the repurchase option will be almost certain to be exercised under the scope of IAS 17 Leases and SIC 27 Evaluating the Substance of Transactions in the Legal Form of a Lease.

## Foreign Currency Fluctuations

Our revenue, expenses, and capital expenditures are primarily transacted in U.S. dollars. We also enter into transactions in other currencies. We are primarily exposed to changes in exchange rates for the Euro, the Japanese Yen, and RMB. Accordingly, we are affected by fluctuations in exchange rates between the U.S. dollar and each of the Japanese Yen, the Euro and the RMB. See "Item 3.D — Key Information — Risk Factors — Risks Related to Conducting Operations in China — Devaluation or appreciation in the value of the Renminbi or restrictions on convertibility of the Renminbi could adversely affect our operating results" and "Risk Factors — Risks Related to Our Financial Condition and Business — Exchange rate fluctuations could increase our costs, which could adversely affect our operating results and the value of our ADSs" for a discussion of the effects on our company of fluctuating exchange rates and "Item 11 — Quantitative and Qualitative Disclosures About Market Risk — Foreign Exchange Rate Fluctuation Risk" for a discussion of our efforts to minimize such risks".

## Recent Accounting Pronouncements

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

IFRS 16 — Lease	On or after January 1, 2019
<b>New or revised IFRSs</b>	<b>Effective date</b>
IFRS 16 — Lease	On or after January 1, 2019
IFRS 17 — Insurance Contracts	On or after January 1, 2022
IFRIC 23 — Uncertainty over Income Tax Treatments	On or after January 1, 2019
Amendments to IFRS 9 — Prepayment Features with Negative Compensation	On or after January 1, 2019
Amendments to IAS 28 — Long-term Interests in Associates and Joint Ventures	On or after January 1, 2019
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
Annual Improvements to IFRS Standards 2015–2017 Cycle	On or after January 1, 2019
Amendments to IFRS 10 and IAS 28 — Sale or contribution of assets between an investor and its association or joint venture	Not yet determined

The new IFRS 16 standard will result in almost all leases being recognized on the balance sheet by lessees, as the distinction between operating and finance leases is removed. Under the new standard, an asset (the right to use the leased item) and a financial liability to pay rentals are recognized. The only exceptions are short-term and low-value leases.

We have set up a project team which has reviewed all of the Group's leasing arrangements over the last year in light of the new lease accounting rules in IFRS 16. The standard will affect primarily the accounting for our operating leases and sales and leaseback transaction.

As at the reporting date, we have lease expense of US\$303.5 million on non-cancellable operating lease commitments.

We expect to recognize right-of-use assets and lease liabilities of approximately US\$279.7 million on January 1, 2019.

We will apply the standard from its mandatory adoption date of January 1, 2019. We intend to apply the simplified transition approach and will not restate comparative amounts for the year prior to first adoption. Right-of-use assets for property leases will be measured on transition as if the new rules had always been applied. All other right-of-use assets will be measured at the amount of the lease liability on adoption.

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There are no other standards that are not yet effective and that would be expected to have a material impact to us in the current or future reporting periods and on foreseeable future transactions.

**Incentives from the Chinese Government**

The chart below sets forth a brief summary of the material incentives received by our Chinese subsidiaries as qualified integrated circuit production enterprises (ICPE) from the Chinese government. Our Shanghai, Beijing, Tianjin, Shenzhen and Jiangyin subsidiaries are qualified as ICPEs under the Integrated Circuit Policies. Under these policies, ICPEs whose total investment exceeds RMB8,000 million or whose integrated circuits have a line width of less than 0.25 micron are entitled to the benefits listed below. For a more detailed discussion of these incentives, see "Item 4.B — Information on the Company — Business Overview — Regulation."

Incentive	SMIS; SMIB; SMIT; SMIC Shenzhen; SMNC and SJ Jiangyin
Preferential Enterprise Income Tax Policies	Five-year full exemption and five-year 50% reduction upon approval from the local tax bureau
Incentive	SMIS; SMIB; SMIT; SMNC and SJ Jiangyin
Preferential Customs Duties and Import-related VAT Policies	Exemption from customs duties and imported-related VAT with respect to its qualified spare parts, and raw materials pursuant to the Tax-Exemption Categories (SMIC Shenzhen is located in Shenzhen Export Processing Zone).

**Operating Results**

The following table sets forth a summary of our consolidated results of operations for the periods indicated. We believe that period-to-period comparisons of results of operations should not be relied upon as indicative of future performance.

	For the year ended December 31,		
	2016	2017	2018
	(in US\$ thousands, except for earnings per share)		
Revenue	2,914,180	3,101,175	3,359,984
Cost of sales	(2,064,499)	(2,360,431)	(2,613,307)
Gross profit	849,681	740,744	746,677
Research and development expenses, net	(318,247)	(427,111)	(558,110)
Sales and marketing expenses	(35,034)	(35,796)	(30,455)
General and administration expenses	(167,582)	(198,036)	(199,818)
Net impairment losses (recognized) reversal on financial assets	10,211	137	(937)
Other operating income (expense), net	177	44,957	57,283
Profit from operations	339,206	124,895	14,640
Interest income	11,243	27,090	64,339
Finance costs	(23,037)	(18,021)	(24,278)
Foreign exchange gains or losses	(1,640)	(12,694)	(8,499)
Other gains or losses, net	(2,113)	16,499	24,282
Share of profit (loss) of investment accounted for using equity method	(13,777)	(9,500)	21,203
Profit before tax	309,882	128,269	91,687
Income tax (expense) benefit	6,552	(1,846)	(14,476)
Profit for the year	316,434	126,423	77,211
Other comprehensive income (loss)			
<i>Items that may be reclassified subsequently to profit or loss</i>			
Exchange differences on translating foreign operations	(19,031)	23,213	(35,919)
Change in value of available-for-sale financial assets	807	(2,381)	—
Cash flow hedges	(34,627)	35,143	35,931
Share of other comprehensive income of joint ventures accounted for using equity method	—	17,646	—
Others	1	(131)	—
<i>Items that will not be reclassified to profit or loss</i>			
Actuarial gains or losses on defined benefit plans	1,520	(436)	129
Total comprehensive income for the year	265,104	199,477	77,352
Profit (loss) for the year attributable to:			
Owners of the Company	376,630	179,679	134,055
Non-controlling interests	(60,196)	(53,256)	(56,844)
	316,434	126,423	77,211
Total comprehensive income (expense) for the year attributable to:			
Owners of the Company	326,191	251,135	133,977
Non-controlling interests	(61,087)	(51,658)	(56,625)
	265,104	199,477	77,352
Earnings per share*			
Basic	\$ 0.09	\$ 0.04	\$ 0.03
Diluted	\$ 0.08	\$ 0.04	\$ 0.03

\* The basic and diluted earnings per share and the number of shares for 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.

### **Revenue**

We generate our revenue primarily from fabricating semiconductors. We also derive a relatively small portion of our revenue from the mask-making, wafer probing, and other services that we perform for third parties separately from our foundry services. A significant portion of our revenue is generated from sales to a relatively small number of our customers. For the years ended December 31, 2016, 2017, and 2018 our five largest customers accounted for approximately 54.6%, 51.4% and 46.2%, of our sales, respectively.

### **Cost of sales**

Our cost of sales principally consists of:

- depreciation and amortization;
- overhead, including maintenance of production equipment, indirect materials, including chemicals, gases and various types of precious and other metals, utilities, royalties and inventory provision;
- direct materials, which consist of raw wafer costs;
- labor, including share-based compensation expenses for employees directly involved in manufacturing activities; and
- production support, including facilities, utilities, quality control, automated systems and management functions.

### **Income (expenses) and gains (loss) from operations**

- Research and development expenses. Research and development expenses consist primarily of salaries and benefits of research and development personnel, materials costs, depreciation and maintenance on the equipment used in our research and development efforts, contracted technology development costs, and the costs associated with the ramp-up of new fabs. Research and development expenses are partially offset by related government fundings.
- Selling and marketing expenses. Selling and marketing expenses consist primarily of salaries and benefits of personnel engaged in sales and marketing activities, costs of customer wafer samples, other marketing incentives and related marketing expenses.
- General and administrative expenses. General and administrative expenses consist primarily of salaries and benefits for our administrative support, finance and human resource personnel, commercial insurance, fees for professional services, city maintenance and construction tax expenses, educational surtax expenses and bad debt expenses.
- Net impairment losses (recognized) reversal on financial assets. Net impairment losses (recognized) reversal on financial assets consist primarily of the expected loss allowance for all trade receivables.
- Other operating income (loss). Other operating income (loss) consist primarily of gains or losses arising from disposal of our living quarters, gains or losses arising from disposal of subsidiaries, losses arising from disposal of equipment and impairment loss of long-lived assets.

**Finance cost**

Our finance costs consist of interest expenses, net of government fundings and capitalized portions, which have been primarily attributable to our bank loans, corporate bonds, medium-term and short-term notes, finance leases and the imputed interest rate on the outstanding interest-free convertible bonds.

**Other gains or losses, net**

Our other gains or losses mainly consist of:

- gains or losses from our schools, kindergartens and living quarters;
- the changes of fair value and disposal gains or losses of the financial products sold by banks;
- the changes of fair value of the put option related to our investment in Changjiang Xinke; and
- the changes of fair value of the cross currency swap contracts before being designated as hedging instrument of cash flow hedges.

**Year to Year Comparison of Our Results of Operations**

*Year Ended December 31, 2018 Compared to Year Ended December 31, 2017*

**Revenue**

Revenue increased by 8.3%, from US\$3,101.2 million for the year ended December 31, 2017 to US\$3,360.0 million for the year ended December 31, 2018. Excluding the recognition of technology licensing revenue, revenue increased by 3.1%, from US\$3,101.2 million for the year ended December 31, 2017 to US\$3,196.2 million for the year ended December 31, 2018, primarily due to the net impact of an increase in wafer shipments and decrease in average selling price for the year ended December 31, 2018. The number of wafer shipments increased by 13.1%, from 4,310,779 8-inch wafer equivalents for the year ended December 31, 2017 to 4,874,663 8-inch wafer equivalents for the year ended December 31, 2018.

The average selling price\* of the wafers we shipped decreased from US\$719 per wafer for the year ended December 31, 2017 to US\$656 for the year ended December 31, 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 our Group.

\* Based on simplified average selling price which is calculated as the revenue (excluding licensing revenue) divided by total shipments.

**Cost of sales**

Cost of sales increased by 10.7%, from US\$2,360.4 million for the year ended December 31, 2017 to US\$2,613.3 million for the year ended December 31, 2018, primarily due to the increase in depreciation expenses and in wafer shipment and product-mix change the year ended December 31, 2018. Out of the total cost of sales, US\$774.3 million and US\$831.4 million were attributable to depreciation and amortization for the year ended December 31, 2017 and 2018, respectively.

**Gross profit**

Our gross profit was US\$740.7 million and US\$746.7 million for the years ended December 31, 2017 and 2018, respectively. Gross margin decreased from 23.9% for the year ended December 31, 2017 to 22.2% for the year ended December 31, 2018, as our cost of sales increased by 10.7%, while our revenue increased by 8.3% from the year ended December 31, 2017 to the year ended December 31, 2018. Excluding the recognition of technology licensing revenue, gross margin decreased from 23.9% for the year ended December 31, 2017 to 18.2% for the year ended December 31, 2018, primarily due to product-mix change and lower average selling price in 2018.

**Profit from operations**

Profit from operations decreased from US\$124.9 million for the year ended December 31, 2017 to US\$14.6 million for the year ended December 31, 2018 primarily due to the combined effect of the changes of revenue, cost of sales and gross profit as mentioned above, as well as the following changes:

Research and development expenses increased by 30.7%, from US\$427.1 million for the year ended December 31, 2017 to US\$558.1 million for the year ended December 31, 2018. The increase was mainly due to increased research and development activities for the year ended December 31, 2018 to improve our ability to compete more effectively in the semiconductor industry. As a result of our research and development activities, SMIC successfully established its 14 nanometer technology platform, received customer recognition and moved into customer engagement and product verification.

General and administrative expenses increased from US\$198.0 million for the year ended December 31, 2017 to US\$199.8 million for the year ended December 31, 2018.

Sales and marketing expenses decreased from US\$35.8 million for the year ended December 31, 2017 to US\$30.5 million for the year ended December 31, 2018.

Other operating incomes increased from US\$45.0 million for the year ended December 31, 2017 to US\$57.3 million for the year ended December 31, 2018. The increase was mainly due to increased gain on disposal of property, plant and equipment for the year ended December 31, 2018.

**Profit for the Year**

Interest income increased by 137.3%, from US\$27.1 million for the year ended December 31, 2017 to US\$64.3 million for the year ended December 31, 2018, primarily due to increased gains from investment in bank deposits.

Finance cost increased from US\$18.0 million for the year ended December 31, 2017 to US\$24.3 million for the year ended December 31, 2018. The increase was mainly due to the deduction of the interest subsidies received from the government less than last year.

Foreign exchange losses decreased by US\$4.2, million from US\$12.7 million net loss for the year ended December 31, 2017 to US\$8.5 million net loss for the year ended December 31, 2018. The change was mainly due to the net impact of cash flow hedging and the depreciation of RMB against USD for the year ended December 31, 2018.

Other gains (losses), net increased by US\$7.8 million from US\$16.5 million net gain for the year ended December 31, 2017 to US\$24.3 million net gain for the year ended December 31, 2018. The increase was mainly due to 1) increased gains of US\$5.4 million from investment in financial products sold by banks and 2) increased gains of US\$2.0 million from investment in equity securities for the year ended December 31, 2018.

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Income tax expense increased from US\$1.8 million expense for the year ended December 31, 2017 to US\$14.5 million expense for the year ended December 31, 2018. The increase was mainly due to the beginning of some subsidiaries to be levied income tax in 2018 after utilizing all prior years' tax losses.

Share of profit (loss) of investment accounted for using equity method increased by US\$30.7 million, from US\$9.5 million share of loss for the year ended December 31, 2017 to US\$21.2 million share of profit for the year ended December 31, 2018, primarily due to the fair value change of investments in joint ventures and associates.

Due to the factors described above, our Group recorded a profit of US\$77.2 million in 2018 compared to US\$126.4 million in 2017.

*Year Ended December 31, 2017 Compared to Year Ended December 31, 2016*

**Revenue**

Revenue increased by 6.4%, from US\$2,914.2 million for 2016 to US\$3,101.2 million for 2017, primarily due to an increase in wafer shipments in 2017. The number of wafer shipments increased by 8.9% from 3,957,685 8-inch wafer equivalents for 2016 to 4,310,779 8-inch wafer equivalents for 2017, mainly due to the higher demand for the wafer by using advanced 45nm and below technologies in 2017.

The average selling price of the wafers we shipped decreased from US\$736 per wafer in 2016 to US\$719 in 2017. The percentage of wafer revenues from advanced 45nm and below technologies increased from 24.0% in 2016 to 28.8% in 2017. The revenue dollar amount contributed from advanced 45nm and below technologies increased from US\$672.1 million in 2016 to US\$875.8 million in 2017.

**Cost of sales**

Cost of sales increased by 14.3% from US\$2,064.5 million for 2016 to US\$2,360.4 million for 2017, primarily due to the increase in wafer shipments in 2017 and the increase in depreciation in 2017 caused by the increased capital expenditure. Out of the total cost of sales, US\$583.7 million and US\$774.3 million were attributable to depreciation and amortization for the year ended December 31, 2016 and 2017, respectively.

**Gross profit**

Our gross profit was US\$740.7 million for 2017 compared to US\$849.7 million for 2016, representing a decrease of 12.8%. Gross margin was 23.9% in 2017 compared to 29.2% in 2016. The decline in gross margin was primarily due to the lower average selling price, the increase in depreciation and the decrease in utilization in 2017.

**Profit for the year from operations**

Profit from operations decreased from US\$339.2 million for the year ended December 31, 2016 to US\$124.9 million for the year ended December 31, 2017 primarily due to the combined effect of the increase in depreciation and in wafer shipments, the decrease in utilization, and the following changes:

Research and development expenses increased by 34.2% from US\$318.2 million for the year ended December 31, 2016 to US\$427.1 million for the year ended December 31, 2017. The increase was mainly due to the higher level of research and development activities in 2017.

General and administrative expenses increased by 18.2% from US\$167.6 million for the year ended December 31, 2016 to US\$198.0 million for the year ended December 31, 2017. The increase was primarily due to 1) the start-up cost relating to our new Shenzhen 300mm fab, 2) increased utility cost, depreciation and patent application expenses in 2017.



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Sales and marketing expenses increased by 2.2% from US\$35.0 million for the year ended December 31, 2016 to US\$35.8 million for the year ended December 31, 2017.

Other operating incomes increased from US\$0.2 million for the year ended December 31, 2016 to US\$45.0 million for the year ended December 31, 2017. The increase was mainly due to 1) increased gain on disposal of property, plant and equipment and 2) increased government funding received in 2017.

**Profit for the Year**

Finance cost decreased by 21.8% from US\$23.0 million for the year ended December 31, 2016 to US\$18.0 million for the year ended December 31, 2017. The decrease was mainly due to the deduction of the interest subsidies received from the government.

Foreign exchange losses decreased US\$11.1 million from US\$1.6 million net loss for the year ended December 31, 2016 to US\$12.7 million net loss for the year ended December 31, 2017. The change was mainly due to an appreciation of RMB against USD in 2017.

Other gains (losses), net increased by US\$18.6 million from US\$2.1 million net loss for the year ended December 31, 2016 to US\$16.5 million net gain for the year ended December 31, 2017. The increase was mainly due to 1) a gain of US\$18.5 million arising from the consummation of the transactions contemplated by the disposal agreement and the subscription agreement entered by SilTech Shanghai and JCET on April 27, 2016, 2) a loss of contingent cash compensation of US\$12.5 million that may be incurred depending on the profit generated by Changjiang Xinke during a three-year period from 2017 to 2019, which will become payable in one installment at the end of 2019 and 3) the gains arising from the fair value change of cross currency swap contracts designated as hedging instrument of cash flow hedges in 2017 against losses in 2016.

Income tax (expense) benefit changed from US\$6.6 million benefit for the year ended December 31, 2016 to US\$1.8 million expense for the year ended December 31, 2017. The change was mainly due to the reversal of deferred tax asset for previously recognized temporary differences which will not be utilized.

Due to the factors described above, the Group recorded a profit of US\$126.4 million in 2017 compared to US\$316.4 million in 2016.

**B. Liquidity and Capital Resources**

We anticipate our working capital to be sufficient for our present requirements. We will require access to significant capital to fund our future capital expenditures and capacity expansion requirements, which are difficult to plan in the rapidly changing semiconductor manufacturing industry.

In 2018, SMIC Shanghai entered into a loan facility in the aggregate principal amount of RMB950.0 million with The Export-Import Bank of China. SMIC Beijing 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. SMIC Tianjin entered into a loan facility in the aggregate principal amount of RMB540.0 million with The Export-Import Bank of China. Please see Note 30 of Notes to the Consolidated Financial Statements for further information regarding the borrowing.

On June 29, 2018, pursuant to the share subscription agreement between the Company, Datang Telecom Technology & Industry Holdings Co., Ltd. ("Datang") and Datang Holdings (Hongkong) Investment Company Limited ("Datang HK"), our Company allotted and issued 61,526,473 ordinary shares, representing an aggregate nominal value of approximately US\$246,106, at the price of HK\$10.65 per share. The net price per share under the issue was HK\$10.65. The market price of the shares on the date of the share subscription agreement was HK\$10.34.

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On June 29, 2018, pursuant to the PSCS subscription agreement between our Company, Datang and Datang HK, our Company completed the issue of the PSCS in the principal amount of US\$200.0 million. Assuming full conversion of the PSCS at the initial conversion price of HK\$12.78, the PSCS will be convertible into 122,118,935 ordinary shares, representing an aggregate nominal value of approximately US\$488,476. The net price per conversion share under the issue was HK\$12.77. The market price of the shares on the date of the PSCS subscription agreement was HK\$10.34.

On August 29, 2018, pursuant to the share subscription agreement between our Company, China Integrated Circuit Industry Investment Fund Co., Ltd ("China IC Fund") and Xinxin (Hongkong) Capital Co., Ltd ("Xinxin HK", wholly-owned by China IC Fund), our Company allotted and issued 57,054,901 ordinary shares, representing an aggregate nominal value of approximately US\$228,220, at the price of HK\$10.65 per share. The net price per share under the issue was HK\$10.65. The market price of the shares on the date of the share subscription agreement was HK\$9.11.

On August 29, 2018, pursuant to the PSCS subscription agreement between our Company, China IC and Xinxin HK, our Company completed the issue of the PSCS in the principal amount of US\$300.0 million. Assuming full conversion of the PSCS at the initial conversion price of HK\$12.78, the PSCS will be convertible into 183,178,403 ordinary shares, representing an aggregate nominal value of approximately US\$732,714. The net price per conversion share under the issue was HK\$12.77. The market price of the shares on the date of the PSCS subscription agreement was HK\$9.11.

For the year ended December 31, 2018, the capital contributions from non-controlling interests shareholders amounted to approximately US\$441.0 million into the registered capital of SMNC and US\$1,047.9 million into the registered capital of SMSC.

We plan to fund our capital expenditures through cash on hand, cash flows from operations in 2019, borrowings under existing credit facilities, proceeds from the above described note financings, the capital contribution from non-controlling interest shareholders and other external financing. See "Item 3.D — Key information — Risk Factors — Risks Related to Our Financial Condition and Business — Since our operating cash flows may not be sufficient to cover our planned capital expenditures, we will require additional external financing, which may not be available on acceptable terms, or at all. Any failure to raise adequate funds in a timely manner could adversely affect our business and operating results."

The following table sets forth a condensed summary of our consolidated statements of cash flows for the periods indicated:

	For the Years Ended December 31,		
	2016	2017	2018
	(in US\$ thousands)		
Cash Flow Data:			
Profit for the year	316,434	126,423	77,211
Non-cash adjustment to reconcile profit to net operating cash flow:			
Depreciation and amortization	729,866	971,382	1,048,410
Net cash generated from operating activities	977,202	1,080,686	799,426
Payments for property, plant and equipment	(2,757,202)	(2,287,205)	(1,808,253)
Net cash used in investing activities	(2,443,333)	(2,662,139)	(3,197,261)
Net cash from financing activities	2,614,778	1,271,591	2,376,922
Net increase (decrease) in cash and cash equivalents	1,148,647	(309,862)	(20,913)

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**Operating Activities**

Our cash inflow was mainly generated from selling goods and rendering services, and the cash outflow was mainly for the purchase of goods and services and for payment made to and on behalf of employees. As of December 31, 2018, we had US\$1,786.4 million in cash and cash equivalents. These cash and cash equivalents were held in the form of United States dollars, Japanese Yen, Euros, and Renminbi. Our net cash generated from operating activities for the year ended December 31, 2018 was US\$799.4 million, which was primarily attributable to 1) the profit from operation of US\$14.6 million, added back, 2) an increase US\$1,048.4 million in depreciation and amortization and deducted by the increase of US\$235.3 million in working capital. The decrease in net cash generated from operating activities is mainly due to the increase in sales of goods offset by the increase in the payment of goods, services and salaries both for the manufacturing activities and the high level R&D activities, and the increase in working capital in 2018.

As of December 31, 2017, we had US\$1,838.3 million in cash and cash equivalents. These cash and cash equivalents were held in the form of United States dollars, Japanese Yen, Euros, and Renminbi. Our net cash generated from operating activities in 2017 was US\$1,080.9 million, which was primarily due to the net profit of US\$126.4 million and the added back of US\$971.4 million in depreciation and amortization. The cash inflow was mainly generated from selling goods and rendering services, and the cash outflow was mainly for the purchase of goods and services and for payment made to and on behalf of employees. The increase in net cash generated from operating activities is mainly due to the increase in sales of goods partially offset by the decrease in trade and other receivables in 2017.

As of December 31, 2016, we had US\$2,126.0 million in cash and cash equivalents. These cash and cash equivalents were held in the form of United States dollars, Japanese Yen, Euros, and Renminbi. Our net cash generated from operating activities in 2016 was US\$977.2 million, which was primarily due to the net profit of US\$316.4 million and the add-back of US\$729.9 million in depreciation and amortization, partially offset by an increase of US\$100.9 million in trade and other receivables. The cash inflow was mainly generated from selling goods and rendering services, and the cash outflow was mainly for the purchase of goods and services and for payment made to and on behalf of employees. The increase in net cash generated from operating activities is mainly due to the increase in sales of goods in 2016.

The majority of our cash and cash equivalents were held by our PRC subsidiaries in the form of United States dollars.

**Investing Activities**

Our net cash used in investing activities was US\$2,443.3 million, US\$2,662.1 million and US\$3,197.3 million for the years ended December 31, 2016, 2017 and 2018, respectively. These amounts were primarily attributable to purchases of plant and equipment for our fabs in Shanghai, Beijing, Tianjin, Shenzhen and Jiangyin and payments to acquire financial assets. In particular, for the year ended December 31, 2018, our net cash used in investing activities was primarily attributable to 1) US\$4,407.8 million payments to acquire financial assets at amortized costs, and 2) payments for property, plant and equipment of US\$1,808.3 million for our fabs.

**Financing Activities**

Our net cash from financing activities for the year ended December 31, 2018 was US\$2,377.0 million, which was primarily attributable to US\$782.4 million in the proceeds from borrowings, US\$160.9 million in the proceeds from issuance of ordinary shares, US\$500.0 million in the proceeds from issuance of perpetual subordinated convertible securities, and US\$1,488.9 million in the capital contribution from non-controlling interest shareholders. These were partially offset by US\$536.8 million in the repayment of borrowings.

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Our net cash from financing activities in 2017 was US\$1,271.6 million. This was primarily derived from US\$1,194.7 million in the proceeds from borrowings, US\$326.4 million in the proceeds from issuance of ordinary shares, US\$64.4 million in the proceeds from issuance of perpetual subordinated convertible securities, and US\$294.0 million in the capital contribution from non-controlling interest shareholders, which was partially offset by US\$537.0 million in the repayment of borrowings and by US\$87.9 million in the repayment of short-term notes.

Our net cash from financing activities in 2016 was US\$2,614.8 million. This was primarily derived from US\$1,239.3 million in the proceeds from borrowings, US\$441.2 million in the proceeds from issuance of convertible bonds, US\$314.4 million in the proceeds from issuance of short-term and medium-term notes and US\$831.3 million in the capital contribution from non-controlling interest shareholders, which was partially offset by US\$228.9 million in the repayment of borrowings.

**Capital Expenditures**

We incurred capital expenditures of US\$2,694.7 million, US\$2,487.9 million and US\$1,813.4 million for the years ended December 31, 2016, 2017 and 2018, respectively. We expect our capital expenditures for foundry operations to be approximately US\$2.1 billion for the year ending December 31, 2019, subject to adjustment based on market conditions, which are mainly for the equipment and facility in our majority-owned Shanghai 300mm fab and FinFET R&D line.

The construction in progress balance of approximately US\$2,325.5 million as of December 31, 2018, primarily consisted of US\$543.3 million used for the machinery and equipment of the two 300mm fabs in Beijing; US\$434.9 million, US\$563.2 million and US\$480.1 million used for the facilities construction, machinery and equipment of the fabs in Shanghai, the fabs in Shenzhen and the 200mm fab in Tianjin, respectively; US\$251.9 million used for purchasing machinery and equipment acquired for more research and development activities; in addition, US\$52.1 million was related to various ongoing capital expenditures projects of other SMIC subsidiaries, which are expected to be completed by the end of 2019.

Any transfer of funds from our company to our Chinese subsidiaries, either as a shareholder loan or as an increase in registered capital, is subject to registration or approval of Chinese governmental authorities, including the relevant administration of foreign exchange and/or the relevant examining and approval authority. In addition, it is not permitted under Chinese law for our Chinese subsidiaries to directly lend money to each other. Therefore, it is difficult to change our capital expenditure plans once the relevant funds have been remitted from our company to our Chinese subsidiaries. These limitations on the free flow of funds between us and our Chinese subsidiaries could restrict our ability to act in response to changing market conditions and reallocate funds from one Chinese subsidiary to another in a timely manner.

**Commitments**

As of December 31, 2018, we had commitments of US\$333.2 million for facilities construction obligations in connection with our Shanghai, Beijing, Tianjin, Shenzhen and Jiangyin facilities, US\$1,209.3 million to purchase machinery and equipment for our Shanghai, Beijing, Tianjin, Shenzhen and Jiangyin fabs and US\$5.7 million to purchase intellectual property. In addition, we had commitments for a total future minimum lease payments of US\$352.5 million under the non-cancellable operating leases. We anticipate that the cash on hands, cash flows from operations in 2019, the proceeds from new loans, new ordinary shares and perpetual subordinated convertible securities issued, the capital contribution from non-controlling interest shareholders and other necessary external financing will be sufficient to finance the commitments. For additional information, see "Item 5.A — Operating and Financial Review and Prospects — Operating Results".

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**Bank Borrowings**

As of December 31, 2018, we had 33 short-term credit agreements that provided total credit facilities up to US\$2,710.7 million on a revolving credit basis. As of December 31, 2018, we had drawn down US\$192.2 million under these credit agreements. The outstanding borrowings under these credit agreements are unsecured. The interest rate on this loan facility ranged from 1.93% to 4.35% for the year ended December 31, 2018. As of December 31, 2018, our short-term borrowings and long-term borrowings amounted to US\$192.2 million and US\$2290.8 million, respectively.

As of December 31, 2018, our outstanding long-term loans primarily consisted of secured bank loans of US\$524.1 million and unsecured bank loans of US\$1,574.5 million, which are repayable in installments starting in January 2019, with the last payment due in May 2031.

Please see Note 30 of Notes to the Consolidated Financial Statements for further information regarding the borrowing.

Please see "Item 8.A — Financial Information- Consolidated Statements and Other Financial Information — Dividends and Dividend Policy" on our ability to pay dividends on our ordinary shares.

Please see "Item 11 — Quantitative and Qualitative Disclosures About Market Risk" regarding the risk of loss related to adverse changes in market prices, including foreign currency exchange rates and interest rates of financial instruments.

**C. Research and Development, Patents and Licenses, etc.**

Our research and development activities are principally directed toward the development and implementation of new process technology. Our research and development expenses amounted to US\$318.2 million, US\$ 558.1million and US\$ 427.1million, representing 10.9%, 13.8% and 16.6% of our revenue for the years ended December 31, 2016, 2017 and 2018, respectively. Our research and development costs included the costs associated with the ramp-up of a new wafer facility, and were partially offset by related government fundings of US\$52.5 million, US\$82.2 million and US\$105.3 million for the years ended December 31, 2016, 2017 and 2018, respectively. We plan to continue to invest significant resources in research and development for the year ending December 31, 2019.

We primarily focus our R&D efforts on advanced logic and value-added specialty technologies. SMIC aims to accelerate advanced technology development with an emphasis on FinFET technology.

In 2018, SMIC successfully established its 14 nanometer technology platform, received customer recognition and moved into customer engagement and product verification. Our 14 nanometer technology will enter production in 2019. Meanwhile, 12 nanometer technology development also achieved breakthrough.

In 2018, SMIC launched the second generation 28HKMG platform, 28HKC+, for both Base Band and RF applications, with 15% performance improvement and 25% power reduction as compared with first generation 28HKMG technology 28HKC. Our 28HKC+ will enter production in 2019.

SMIC has also worked to enhance its R&D organizational structure in 2018, resulting in expanded capability, high efficiency, and increased resource allocation for accelerating technology developments, including advanced and specialty technologies.

As of December 31, 2018, we had been granted 9,076 patents worldwide, of which, 70 were in Taiwan, 1,158 were in the U.S., 7,819 were in China, and 29 were in other jurisdictions.

#### D. Trend Information

See "Item 5.A — Operating and Financial Review and Prospects — Operating Results — Factors that Impact Our Results of Operations" for a discussion of the most significant recent trends affecting our operations.

#### E. Off-Balance Sheet Arrangements

We have not entered into any off-balance sheet transactions.

#### F. Tabular Disclosure of Contractual Obligations

Set forth in the table below are the aggregate amounts, as of December 31, 2018, of our future cash payment obligations (excluding estimated interest payment obligations) under our existing contractual arrangements on a consolidated basis:

Contractual obligations	Payments due by period (consolidated, in US\$ thousands)				
	Total	Less than 1 year	1 – 2 years	2 – 5 years	Over 5 years
Short-Term borrowings <sup>(1)</sup>	192,198	192,198	—	—	—
Long-Term borrowings <sup>(1)</sup>	2,098,570	337,807	434,998	895,135	430,630
Convertible bonds	418,592	—	—	418,592	—
Bonds payable	498,551	498,551	—	—	—
Medium-term notes	218,247	218,247	—	—	—
Purchase commitment <sup>(2)</sup>	1,548,278	1,548,278	—	—	—
Lease commitment <sup>(3)</sup>	352,540	121,588	230,952	—	—
<b>Total contractual obligations</b>	<b>5,326,976</b>	<b>2,916,669</b>	<b>665,950</b>	<b>1,313,727</b>	<b>430,630</b>

(1) These amounts represent outstanding borrowings. Refer to F-75, "Borrowings" for a description of the short-term and long-term borrowings.

(2) These amounts represent commitments for construction or purchase of semiconductor equipment, and other property or services.

(3) These amounts represent commitments for non-cancellable operating leases of equipment.

(4) Please refer to F-93, "Financial instruments" for our non-derivative financial liabilities with both estimated interest and principal.

#### Item 6. Directors, Senior Management and Employees

##### A. Directors and Senior Management

Members of our Board are elected by our shareholders. As of March 31, 2019, our Board consists of fourteen directors.

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The composition of the Board during the year ended December 31, 2018 and up to the date of this report is set forth as follows:

Name	Age	Position
<b>Directors</b>		
Zhou Zixue	62	Chairman, Executive Director
Zhao Haijun	55	Co-Chief Executive Officer, Executive Director
Liang Mong Song	66	Co-Chief Executive Officer, Executive Director
Gao Yonggang	54	Executive Director, Chief Financial Officer, Executive Vice President, and Joint Company Secretary
Chen Shanzhi	50	Non-executive Director
Zhou Jie	51	Non-executive Director
Ren Kai	46	Non-executive Director
Lu Jun	50	Non-executive Director
Tong Guohua	61	Non-executive Director
William Tudor Brown	60	Independent Non-executive Director
Chiang Shang-Yi	72	Independent Non-executive Director
Cong Jingsheng Jason	55	Independent Non-executive Director
Lau Lawrence Juen-Yee	74	Independent Non-executive Director (Appointed on June 22, 2018)
Fan Ren Da Anthony	58	Independent Non-executive Director (Appointed on June 22, 2018)
<b>Senior Management</b>		
Zhao Haijun	55	Co-Chief Executive Officer and Executive Director
Liang Mong Song	66	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

Datang Telecom Technology & Industry Holdings Co., Ltd. ("Datang Holdings"), has the right to nominate two members of our board of directors pursuant to the Share Purchase Agreement between us and Datang Holdings dated November 6, 2008 Xinxin (Hongkong) Capital Co., Ltd., a wholly-owned subsidiary of China IC Fund, has the right to nominate one member of our board of directors pursuant to the Share Subscription Agreement between us and China IC Fund dated February 12, 2015. Save as disclosed above, no other shareholder has a contractual right to designate a person to be elected to our board of directors.

There are no family relationships among any of our directors and executive officers.

**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 served 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, an independent director of the Yunnan Nantian Electronics Information Co., Ltd (a company listed on Shenzhen Stock Exchange: 000948), an independent director of the 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 redesignated 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 26 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 33 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).

**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 Fellow of the Institute of Chartered Accountants in Australia. Founding Member, director of The Hong Kong Independent Non-Executive Director Association.



**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 projects.

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 senior member 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 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.

**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, and the representative of members of National Internet Finance Association of China since 2016, 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.

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**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, in addition to serve as President of Sino IC-Capital Co., Ltd, he is also the Chairman of Sino IC-Leasing 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.

**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 as 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.

**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 master's degree in Electrical Sciences from Cambridge University. Mr. Brown was one of the founders of ARM Holdings PLC, a British multinational semiconductor IP company, and held many roles, including President, Chief Operating Officer, EVP Global Development, Chief Technology Officer and Engineering Director in ARM Holdings PLC until May 2012, during which he was responsible for developing high-level relationships with industry partners and governmental agencies and for regional development. He also served as a director at ARM Holdings PLC from 2001 to 2012. Before joining ARM, Mr. Brown was the 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 to 2012; and Xperi (a company listed on NASDAQ) where he sat on the Compensation Committee and chaired the Nomination Committee from 2013 to May 2018. He is currently an independent non-executive director and a member of the Audit Committee and the Compensation Committee of Lenovo Group Limited (a company listed on Main Board of The Stock Exchange of Hong Kong Limited), and an independent non-executive director and a member of the Compensation Committee of Marvell Technology Group (a company listed on NASDAQ).

**Chiang Shang-Yi**

Independent Non-Executive Director

**Dr. Chiang Shang-Yi** became a Director of the Company on December 20, 2016. During Dr. Chiang's 40-year career in the semiconductor industry, he has contributed to the research and development of CMOS, NMOS, Bipolar, DMOS, SOS, SOI, GaAs lasers, LED, E-Beam lithography and silicon solar cells. At TSMC, Dr. Chiang led TSMC R&D team and set milestones in semiconductor technology in the 0.25 $\mu$ m, 0.18 $\mu$ m, 0.15 $\mu$ m, 0.13 $\mu$ m, 90nm, 65nm, 40nm, 28nm, 20nm and 16nm FinFET generations, which transformed TSMC from a technology follower to a technology leader. He worked at Texas Instruments and Hewlett-Packard after completing his study. Then, he returned to Taiwan in 1997 to serve as TSMC's Vice President of Research and Development. He was Co-Chief Operating Officer until he retired at the end of 2013. After that, Dr. Chiang served two more years as the Adviser to Chairman at TSMC.

Dr. Chiang has won many awards and honours. In 2001, he was chosen as one of the 50 "Stars of Asia" by Businessweek Magazine. This award recognizes the outstanding performance of TSMC's R&D team under his leadership, his vision and his determination. He was made a Life Fellow of the Institute of Electrical and Electronics Engineers (IEEE) in 2002. He received ERSO Award and was honoured as a Distinguished Alumni of National Taiwan University in 2013. He won IEEE Ernst Weber Managerial Leadership Award and was elected ITRI (Industrial Technology Research Institute) Laureate by the Taiwan government in 2015.

Dr. Chiang has devoted his career to advancing the semiconductor technology and developing the semiconductor industry, and is a pioneer in making digital technology commonplace in our society.

Dr. Chiang earned his Bachelor of Science degree from National Taiwan University in 1968, his Master of Science degree from Princeton University in 1970 and his Doctorate from Stanford University in 1974, all in Electrical Engineering.

**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 currently serving as a Distinguished Chancellor's Professor 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. He served as the chair of the UCLA Computer Science Department from 2005 to 2008. He is a co-director of the Peking University-UCLA Joint Research Institute since 2009 and also a distinguished visiting professor at Peking University. Dr. Cong is a Co-founder and the Chief Scientific Advisor of Falcon Computing Solutions Inc., and currently he is serving as its Chairman of Board of Directors. He is currently also a director of Inspirit, Inc. Dr. Cong's research interests include electronic design automation and energy-efficient computing. He has published over 400 research papers in these areas. He received 12 Best Paper Awards and three 10-Year Retrospective Most Influential Paper Awards. He received the 2011 ACM/IEEE A. Richard Newton Technical Impact Award in Electric Design Automation "for pioneering work on technology mapping for FPGA that has made significant impact on the FPGA research community and industry". He was elected IEEE Fellow in 2000 and ACM Fellow in 2008. He received the 2010 IEEE Circuits and System (CAS) Society Technical Achievement Award and the 2016 IEEE Computer Society Technical Achievement Award. Dr. Cong was elected as a member of the US National Academy of Engineering in 2017.

**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, an Adviser to the National Bureau of Statistics of the People's Republic of China, 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 Exchange Fund Advisory Committee of Hong Kong and the Chairman of its Governance Sub-Committee, a member of the Hong Kong Trade Development Council (HKTDC) Belt and Road 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), Renhe Commercial Holdings Company Limited (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 President of The Hong Kong Independent Non-Executive Director Association, and held senior positions with various international financial institutions.

**Senior Management**

**Dr. Zhao Haijun**

Biographical details are set out on page 70 of this annual report.

**Dr. Liang Mong Song**

Biographical details are set out on page 70 of this annual report.

**Dr. Gao Yonggang**

Biographical details are set out on page 70 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.

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**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.

**B. Director and Executive Compensation**

Details of the emoluments paid or payable by us to our directors, including Zhou Zixue, our Chairman and Executive director, Zhao Haijun, our Co-Chief Executive Officer and Executive Director, Liang Mong Song, our Co-Chief Executive Officer and Executive Director and Gao Yonggang, our Chief Financial Officer and Executive Director, in 2018 are set out as below:

	Salaried and wages	Employee settled share-base payment (in US\$ thousands)	Total remuneration
<b>Executive Directors:</b>			
Zhou Zixue	695	129	824
Zhao Haijun**	714	824	1,538
Liang Mong Song**	478	—	478
Gao Yonggang	607	1	608
<b>Non-executive directors:</b>			
Chen Shanzhi	70	269	339
Zhou Jie	—	—	—
Ren Kai	65	—	65
Lu Jun	—	—	—
Tong Guohua	63	119	182
Tzu-Yin Chiu***	292	138	430
<b>Independent non-executive directors:</b>			
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
Total remuneration	3,353	2,390	5,743

\* Lip-Bu Tan and Carmen I-Hua Chang did not offer themselves for re-election to independent non-executive directors and their term as independent non-executive directors expired on June 22, 2018.

\*\* Zhao Haijun and Liang Mong Song are also the Co-Chief Executive Officers of the Company.

\*\*\* Tzu-Yin Chiu resigned as non-executive director with effect from June 30, 2018.

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The remuneration paid or payable by us to our senior management personnel, including Zhao Haijun, Liang Mong Song and Gao Yonggang during the year ended December 31, 2018 were as follows:

	<b>For the Year ended December 31, 2018 (in US\$ thousands)</b>
Short-term benefits	2,419
Share-based payments	825
<b>Total</b>	<b>3,244</b>

We do not provide pension, retirement or similar benefits to our executive officers and directors except statutorily required benefits.

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 and 125,000 Restricted Share Units (each representing the right to receive one Share) pursuant to the 2014 Equity Incentive Plan were granted to Dr. Chen.

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 and 87,500 Restricted Share Units pursuant to the 2014 Equity Incentive Plan were granted to Mr. Brown.

On June 22, 2018, 187,500 Restricted Share Units were granted to Mr. Fan pursuant to the 2014 Equity Incentive Plan. On September 13, 2018, options to purchase 187,500 Shares at a price of HK\$8.574 per Share pursuant to the 2014 Stock Option Plan and 187,500 Restricted Share Units pursuant to the 2014 Equity Incentive Plan were granted to Mr. Fan.

On June 22, 2018, options to purchase 187,500 Shares at a price of HK\$8.574 per Share pursuant to the 2014 Stock Option Plan and 187,500 Restricted Share Units pursuant to the 2014 Equity Incentive Plan were granted to Professor Lau.

For details of options and other share-based payments granted to our executives and directors, please see Item 6. E — Share Ownership" of this report.

For the year ended December 31, 2018, we have not granted options to purchase ordinary shares under our 2014 Stock Option Plan nor awarded restricted share units under our 2014 Equity Incentive Plan to our executive officers and directors, other than as disclosed above. For details of our 2014 Stock Option Plan and our 2014 Equity Incentive Plan, please see "Item 6.E - Stock Incentive Schemes".

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



	Salaried and wages	Employee settled share-base payment (in US\$ thousands)	Total remuneration
<b>2018</b>			
<b>Other senior management:</b>			
Zhou Meisheng	620	—	620
<b>Other key management:</b>			
Li Zhi	401	27	428
Peng Jin	350	29	379
Sun Xiaobei	379	42	421
Zhang Xin	391	30	421
Chang Shun-teh	311	28	339
Ge Hong	231	44	275
Ning Xianjie	253	22	275
Chen Chi-chun	173	—	173
Wu Jingang	254	26	280
Yu Bo	268	33	301
Lin Hsin-fa	242	20	262
	<b>3,873</b>	<b>301</b>	<b>4,174</b>

### C. Board Practices

#### 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. For the year ended December 31, 2018, our directors did not have service contracts with us, or any of our subsidiaries that provide benefits upon termination of their employment.

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The composition of the Board during the year ended December 31, 2018 and up to the date of this report is set forth as follows:

The composition of the Board during the year ended December 31, 2018 and up to the date of this report is set forth as follows:

Name of Director	Position	Class	Appointment Commencement Date
Zhou Zixue	Chairman and Executive Director	I	2015/3/6
Gao Yonggang	Chief Financial Officer, 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
Chiang Shang-Yi	Independent Non-executive Director	III	2016/12/20
Cong Jingsheng Jason	Independent Non-executive Director	III	2017/2/14

#### Committees of Our Board of Directors

Our board of directors has an audit committee, a compensation committee and a nomination committee. The composition and responsibilities of these committees are described below.

##### Audit Committee

As of December 31, 2018, the members of the Company's Audit Committee ("Audit Committee") consisted of 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;

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- reviewing reports from the Company's independent auditor regarding the independent auditor's internal quality-control procedures; 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, 2018, the audit committee reviewed:

- the Company's budget for 2018;
- the financial reports for the year ended December 31, 2017 and the six months ended June 30, 2018;
- 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 findings and recommendations of the Company's outside auditors regarding the Company's compliance with the requirements of the Sarbanes-Oxley Act of 2002 (the "SOX");

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- the effectiveness of the Company's internal control structure in operations, financial reporting integrity and compliance with applicable laws and regulations;
- 2017 risk management systems and assessment results;
- 2018 audit plan and audit team;
- 2018 SOX audit scope and SOX audit results for the year ended 2017 and six months ended 2018;
- the quarterly audit plan and quarterly audit items result;
- the quarterly risk assessment early warning index;
- the reports of the Company's ethics hotline; and
- the audit fees and non-audit related fees for the Company's independent auditors and the independent auditors' engagement letters.

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.

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.

**Compensation Committee**

As of December 31, 2018, the members of the Company's Compensation Committee ("Compensation Committee") consisted of Mr. William Tudor Brown (Chairman of Compensation Committee), Mr. Zhou Jie, Professor Lau Lawrence Juen-Yee, Dr. Tong Guohua, and Dr. Chiang Shang-Yi. 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 Chief Executive Officer and reviewing the results of the Chief Executive Officer's evaluation of the performance of the Company's other executive officers;

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- 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 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, and legal 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/senior management, and make recommendations to the Board on the remuneration of non-executive Directors. During the year ended December 31, 2018, in addition to reviewing the remuneration of executive Directors and the members of the Company's management, the Compensation Committee reviewed:

- short-term incentive and long-term incentive proposal for executives;
- retention incentive proposal for employees;
- long term compensation strategy, including the granting of stock options and RSU pursuant to the terms of the stock option plans;
- salary increment and bonus proposals for some employees;
- compensation package of Co-CEO Dr. Zhao Haijun;
- compensation package for new Independent non-executive Directors;
- company performance achievement results in 2018 and the short-term incentive proposals for executives based on the performance achievement rate; and
- proposed bonus and stock grant plan to non-executive Directors.

The Compensation Committee reports its work, findings and recommendations. The Compensation Committee reports its work, findings and recommendations to the Board during each quarterly Board meeting.

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.

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**Nomination Committee**

As of December 31, 2018, the members of the Company's Nomination Committee ("Nomination Committee") consisted of Dr. Zhou Zixue (Chairman of Nomination Committee), Mr. Lu Jun, Mr. William Tudor Brown, Lau Lawrence Juen-Yee and Fan Ren Da Anthony.

The responsibilities of the Nomination Committee include:

- 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, 2018, 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 directors; and
- nominated new members for compensation committee, audit committee, nomination committee and strategic advisory committee.

## D. Employees

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

Position	As of December 31,		
	2016	2017	2018
Managers	1,210	1,380	1,058
Professionals <sup>(1)</sup>	7,978	8,230	8,735
Technicians	8,100	7,549	7,468
Clerical staff	679	667	754
Total <sup>(2)</sup>	17,967	17,826	18,015

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

(2) Includes 56, 49 and 73 temporary and part-time employees in 2016, 2017 and 2018 respectively.

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

Location of Facility	As of December 31,		
	2016	2017	2018
Shanghai	8,404	8,077	8,084
Beijing	4,721	4,607	4,699
Tianjin	1,663	1,636	1,981
Chengdu	10	10	10
Shenzhen	1,284	1,477	1,217
Jiangyin	314	356	479
Ningbo	—	82	—
United States	20	23	15
Europe	1,537	1,541	1,516
Japan	2	4	3
Taiwan Office	9	10	9
Hong Kong	3	3	2
Total	17,967	17,826	18,015

Our employees are not covered by any collective bargaining agreements.

**E. Share Ownership**

The table below sets forth the ordinary shares beneficially owned by each of our Directors and options to purchase ordinary shares as of December 31, 2018:

	Number of Ordinary Shares Held <sup>(22)</sup>	Derivatives		Aggregate Interest <sup>(22)</sup>	Percentage of Aggregate Interests to Total Issued Share Capital of the Company <sup>(1)</sup>
Board Member		Share Options <sup>(22)</sup>	Other <sup>(22)</sup>		
Executive Directors					
Zhou Zixue	—	2,521,163 <sup>(2)</sup>	1,080,498 <sup>(3)</sup>	3,601,661	0.071 %
Zhao Haijun	49,311	1,875,733 <sup>(4)</sup>	1,687,500 <sup>(5)</sup>	3,612,544	0.072 %
Liang Mong Song	—	—	—	—	—
Gao Yonggang	—	1,964,003 <sup>(6)</sup>	85,505 <sup>(7)</sup>	2,049,508	0.041 %
Non-executive Director					
Chen Shanzhi	—	602,187 <sup>(8)</sup>	287,656 <sup>(9)</sup>	889,843	0.018 %
Zhou Jie	—	—	—	—	—
Ren Kai	—	—	—	—	—
Lu Jun	—	—	—	—	—
Tong Guo Hua	—	187,500 <sup>(10)</sup>	187,500 <sup>(11)</sup>	375,000	0.007 %
Independent Non-executive Director					
William Tudor Brown	—	87,500 <sup>(12)</sup>	87,500 <sup>(13)</sup>	175,000	0.003 %
Chiang Shang-yi	—	187,500 <sup>(14)</sup>	187,500 <sup>(15)</sup>	375,000	0.007 %
Cong Jingsheng Jason	61,875	187,500 <sup>(16)</sup>	125,625 <sup>(17)</sup>	375,000	0.007 %
Lau Lawrence Juen-Yee	—	187,500 <sup>(18)</sup>	187,500 <sup>(19)</sup>	375,000	0.007 %
Fan Ren Da Anthony	—	187,500 <sup>(20)</sup>	187,500 <sup>(21)</sup>	375,000	0.007 %

**Notes:**

- (1) Based on 5,039,819,199 Shares in issue as at December 31, 2018.
- (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, 2018, 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, 2018, 810,373 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, 2018, 1,317,621 of these options have been exercised.



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- (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, 2018, none of these RSUs has 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, 2018, none of these options has 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, 2018, 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. As of December 31, 2018, 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 will vest on January 1, 2019. As of December 31, 2018, none of these RSUs has been exercised.

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- (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, 2018, 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, 2018, none of these RSUs has been exercised.
- (12) These options comprise: (a) On September 6, 2013, Mr. Brown was granted options to purchase 449,229 Shares at a price of HK\$5.62 per Share pursuant to the 2004 Stock Option Plan. These options will expire on the earlier of September 5, 2023 or 120 days after termination of his service as a Director to the Board. (b) 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. As of December 31, 2018, 449,229 options have been exercised.
- (13) 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. As of December 31, 2018, none of these RSUs has been exercised.
- (14) On April 5, 2017, Dr. Chiang 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, 2018, none of these options has been exercised.
- (15) On April 5, 2017, Dr. Chiang 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 December 20, 2016, shall fully vest on December 20, 2019. As of December 31, 2018, none of these RSUs has been exercised..
- (16) 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, 2018, none of these options has been exercised.
- (17) 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, 2018, 61,875 of these Restricted Share Units were exercised.
- (18) 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, 2018, none of these options has been exercised.

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- (19) 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, 2018, shall fully vest on June 22, 2021. As of December 31, 2018, none of these Restricted Share Units was exercised.
- (20) 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, 2018, none of these options has been exercised.
- (21) 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, 2018, 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.

The shareholdings set forth above excludes shares beneficially owned by entities affiliated with our Directors. Each of our Directors disclaims beneficial ownership of the shares beneficially owned by such affiliated entity, except to the extent of such director's pecuniary interest therein as disclosed above.

The exercise price of our options is denominated in Hong Kong dollars. Such exercise prices of our options in Hong Kong dollar was converted into U.S. dollars at the exchange rates that were in effect as of the applicable option grants dates.

The compensation committee has approved the grant of options to each of our executive officers options to purchase ordinary shares pursuant to our 2004 Stock Option Plan and 2014 Stock Option Plan, as applicable, and restricted share units that represent rights to receive ordinary shares pursuant to our 2004 Equity Incentive Plan and 2014 Equity Incentive Plan. The exercise price of the options ranges from US\$0.35 to US\$1.47. The options expire between May 15, 2017 and September 11, 2026. The majority of the options and restricted share units are subject to a four-year vesting period. Each executive officer owns less than 1% of the total outstanding shares.

The purposes of the our stock incentive plans are to attract, retain and motivate employees and our directors, and our other service providers, to provide a means on and after the public offering of compensating them for their contributions to our growth and profits and to allow such employees, directors and service providers to participate in such growth and profitability.

**Stock Incentive Schemes**

*2004 Stock Option Plan*

Our 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.

(1) *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.

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(2) *Participants*

Our 2004 Stock Option Plan is administered by our compensation committee or by the Board acting in place of our compensation committee. Our 2004 Stock Option Plan provides for the grant of options to our employees, officers or other service providers located in China, the United States or elsewhere, or to a trust established in connection with our 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.

(3) *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 4.83% of the issued Ordinary Shares as at December 31, 2018.

(4) *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.

(5) *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.

(6) *Acceptance and payments*

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

(7) *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.

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(8) *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*

We 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.

(1) *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.

(2) *Participants*

Our 2014 Stock Option Plan is administered by Our compensation committee or by the Board acting in place of Our compensation committee. Our 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.

(3) *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 6.36% of the issued Ordinary Shares as at December 31, 2018.

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.

(4) *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.

(5) *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.

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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.

(6) *Acceptance and payments*

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

(7) *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.

(8) *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*

We 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.

(1) *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.

(2) *Participants*

Our 2014 Equity Incentive Plan is administered by our compensation committee or by the Board acting in place of our compensation committee. Our 2014 Equity Incentive provides for the grant of options to our 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.

(3) *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, 2018.

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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.

(4) *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.

(5) *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.

(6) *Acceptance and payments*

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

(7) *Exercise price*

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

(8) *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 our employees, directors and service providers that was approved by the shareholders.

(1) *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.

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(2) *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.

(3) *Maximum number of shares*

The Subsidiary Plans, under which no more than 56,666,666 Subsidiaries Shares can be issued, 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.

(4) *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.

(5) *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.

(6) *Acceptance and payments*

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

(7) *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.

(8) *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.



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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.

**Item 7. Major Shareholders and Related Party Transactions**

**A. Major Shareholders**

**Ordinary Shares**

The following table sets forth information regarding the beneficial ownership of our Ordinary Shares as of December 31, 2018, by each shareholder who is known by us to beneficially own 5% or more of our outstanding ordinary shares as of such date.

Name of Shareholder	Nature of Interest	Long/Short Position	Number of Ordinary Shares Held	Percentage of Ordinary Shares Held to Total Issued Share Capital of the Company <sup>(1)</sup>	Derivatives	Total Interest	Percentage of Total Interests to Total Issued Share Capital of the Company <sup>(1)</sup>
Datang Telecom Technology & Industry Holdings Co., Ltd.	Interest of corporation controlled	Long Position	859,522,595 <sup>(2)</sup>	17.06 %	122,118,935 <sup>(3)</sup>	981,641,530	19.48 %
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 <sup>(4)</sup>	17.06 %	122,118,935 <sup>(4)</sup>	981,641,530	19.48 %
China Integrated Circuit Industry Investment Fund Co., Ltd.	Interest of corporation controlled	Long Position	797,054,901 <sup>(5)</sup>	15.82 %	183,178,403 <sup>(6)</sup>	980,233,304	19.45 %
Tsinghua University	Interest of corporation controlled	Long Position	374,665,110 <sup>(7)</sup>	7.43 %	—	374,665,110	7.43 %
Zhao Weiguo	Interest of corporation controlled	Long Position	350,301,600 <sup>(7)</sup>	6.95 %	—	350,301,600	6.95 %

**Notes:**

- (1) Based on 5,039,819,199 Shares in issue as at December 31, 2018.
- (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").

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- (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.
- (7) Tsinghua University holds 374,665,110 Shares in long position through Tsinghua Unigroup Co., Ltd. (a 51% indirectly held subsidiary of Tsinghua University and a 49% indirectly held subsidiary of Zhao Weiguo) and another corporation controlled by it. On September 4, 2018, Tsinghua Holdings Co., Ltd., a subsidiary of Tsinghua University, entered into equity transfer agreements with each of Suzhou High-speed Rail New Town State-owned Assets Management and Operation Co., Ltd. and Hainan Union Asset Management Corporation to transfer 30% and 6% of the entire equity interest in Tsinghua Unigroup Co., Ltd. respectively.
- (8) Zhao Weiguo holds 70% of Beijing Jiankun Investment Group Co., Ltd. which in turns holds 49% of Tsinghua Unigroup Co., Ltd. Zhao Weiguo is therefore deemed to be interested in 350,301,600 Shares held in long position through Tsinghua Unigroup Co., Ltd.

As of the date of this report, we were not aware of any arrangements that may result in a change in control of the company at a subsequent date.

#### **B. Related Party Transactions**

The following disclosure is for the purpose of fulfilling disclosure requirements pursuant to the rules and regulations promulgated pursuant to the Exchange Act only, and may contain disclosure of related party transactions not required to be disclosed in our financial statements under IFRS.

## **Director Service Contracts**

We have entered into service contracts with indemnification provisions with each of our current directors. Except for the indemnification provisions, the service contracts as stated in the preceding sentence do not provide for benefits upon termination of service or employment.

## **Capital Contribution in Semiconductor Manufacturing South China Corporation ("SMSC") and Deemed Disposal of Equity Interest**

On January 30, 2018, SMIC Holdings, Semiconductor Manufacturing International (Shanghai) Corporation ("SMIC Shanghai"), China IC Fund and Shanghai IC Fund entered into the Joint Venture Agreement and the Capital Contribution Agreement pursuant to which SMIC Holdings, China IC Fund and Shanghai Integrated Circuit Industry Investment Fund Co., Ltd ("Shanghai IC Fund") agreed to make cash contribution to the Registered Capital of Semiconductor Manufacturing South China Corporation ("SMSC") in the amount of US\$1.5435 billion, US\$946.5 million and US\$800 million, respectively. As a result of the Capital Contribution: (i) the Registered Capital of SMSC would increase from US\$210 million to US\$3.5 billion; (ii) the Company's equity interest in SMSC, through SMIC Holdings and SMIC Shanghai, would decrease from 100% to 50.1%; and (iii) SMSC would be owned as to 27.04% and 22.86% by China IC Fund and Shanghai IC Fund, respectively.

### *Summary of principal terms of the joint venture agreement*

Date: January 30, 2018

Parties:

- (a) SMIC Holdings
- (b) SMIC Shanghai
- (c) China IC Fund
- (d) Shanghai IC Fund

### *Total Investment and Registered Capital*

The total investment in SMSC by the parties was estimated to be US\$10.24 billion. The parties would contribute in aggregate US\$3.5 billion of the total investment as Capital Contribution in the following manner:

- (a) SMIC Holdings had committed to contribute US\$1.5985 billion, representing 45.67% of the enlarged Registered Capital after the Capital Contribution. US\$55 million has been contributed prior to entering into the Joint Venture Agreement and US\$1.5435 billion is outstanding;
- (b) SMIC Shanghai had committed to contribute US\$155 million, which has been fully contributed prior to entering into the Joint Venture Agreement, representing 4.43% of the enlarged Registered Capital after the Capital Contribution;
- (c) China IC Fund had committed to contribute US\$946.5 million, which is outstanding, representing 27.04% of the enlarged Registered Capital after the Capital Contribution; and
- (d) Shanghai IC Fund had committed to contribute US\$800 million, which is outstanding, representing 22.86% of the enlarged Registered Capital after the Capital Contribution.

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The consideration was arrived at after arm's length negotiation among the parties with reference to the net asset value, future business prospects and development potential of SMSC. The difference between the total investment of US\$10.24 billion and enlarged Registered Capital after the Capital Contribution of US\$3.5 billion was intended to be funded through debt financing.

Each party shall complete 30% of its outstanding contributions prior to June 30, 2018, complete 30% of its outstanding contributions prior to December 31, 2018, and complete the remaining 40% of the contributions prior to June 30, 2019 (the "Time Frame").

Notwithstanding the above, the capital contribution by China IC Fund is subject to the following conditions ("Condition Precedent"):

- (i) receipt of the written approval from the competent government authority(ies) in Shanghai, pursuant to which a government subsidy lasting for not less than five years with an amount each year not less than 4% of the total capital contribution of China IC Fund shall be granted to SMSC; and
- (ii) the validity of the investment period of China IC Fund (after which China IC fund cannot make capital contribution to SMSC). The parties had further agreed that if China IC Fund fails to make Capital Contribution in accordance with the Time Frame, due to (i) the Condition Precedent is not satisfied or only satisfied within one month prior to the any deadline of the Time Frame; or (ii) the expiry of the investment period of China IC Fund, the failure by China IC Fund to make its Capital Contribution will not constitute a breach of the Joint Venture Agreement. However, if the Condition Precedent is satisfied within one month prior to any deadline of the Time Frame, or beyond any such deadline (but within the investment period of China IC Fund), China IC Fund shall make the relevant capital contribution in accordance with the Joint Venture Agreement within one month after the satisfaction of the Condition Precedent. If China IC Fund fails to make capital contribution due to the Condition Precedent cannot be met on or before August 25, 2019, and/or if China IC Fund is unable to make capital contribution due to the expiry of its investment period, such failure to make capital contribution will not constitute a breach by China IC Fund, and the parties will further negotiate and amend the Joint Venture Agreement and the articles of association of SMSC as well as other relevant legal documents.

The cash capital contribution by SMIC Holdings would be funded by the internal cash flow. The proceeds of the Capital Contribution would be used by SMSC as capital expenditure and working capital.

*Summary of principal terms of the capital contribution agreement*

Date: January 30, 2018

Parties:

- (a) SMIC Holdings
- (b) SMIC Shanghai
- (c) China IC Fund
- (d) Shanghai IC Fund

*Subscription of Registered Capital*

The Registered Capital of SMSC would increase from US\$210 million to US\$3.5 billion. In respect of the increase of US\$3.29 billion, the parties had agreed that SMIC Holdings would contribute the amount of US\$1.5435 billion in cash while China IC Fund and Shanghai IC Fund would contribute the RMB equivalent of US\$946.5 million and US\$800 million in cash (calculated at the middle exchange rate of RMB to US\$ as announced by the People's Bank of China on the date of the contribution), respectively.

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*Reasons for and Benefits of the Capital Contribution*

SMSC is a 12-inch wafer fab with advanced process capability built in line with the schedule of the Company's 14 nanometre and below advanced technology node research and development and mass production. China IC Fund and Shanghai IC Fund mainly invest in the value chain of integrated circuit industry via various approaches, primarily in integrated circuit chip manufacturing as well as chip designing, packaging test and equipment and materials. The 12-inch wafer fab will be built by joint venture partnership with China IC Fund and Shanghai IC Fund and the Company could speed up the introduction of advanced manufacturing process and products with the support of the government industry funds. This will also relieve the Company from spending large amount of cash investment and depreciation cost caused by the expansion of advanced production capacity.

The Company believes that such partnership with China IC Fund and Shanghai IC Fund through the Joint Venture Agreement and the Capital Contribution Agreement and transactions contemplated thereunder are in the interests of the Company and the Shareholders as a whole and beneficial to the sustainable development of the Company. The Directors (excluding independent non-executive Directors whose view will be given after taking into account the advice from the independent financial adviser) consider that it is in the best interests of the Company and the Shareholders as a whole to enter into the Joint Venture Agreement and the Capital Contribution Agreement and the transactions contemplated thereunder; the terms of the Joint Venture Agreement and the Capital Contribution Agreement are fair and reasonable; and the entering into of the Joint Venture Agreement and the Capital Contribution 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.

**Equity Transfer in Ningbo Semiconductor International Corporation and Capital Contribution in Ningbo Semiconductor International Corporation**

On March 22, 2018, Ningbo Semiconductor International Corporation ("the Joint Venture Company"), SMIC Holdings Corporation ("SMIC Holdings") and China Integrated Circuit Industry Investment Fund Co., Ltd ("China IC Fund") entered into the Equity Transfer Agreement, pursuant to which SMIC Holdings had agreed to sell 28.17% equity interest in Ningbo Semiconductor International Corporation held by SMIC Holdings prior to the equity transfer (the "Equity Interest") to China IC Fund. Upon the completion of the Equity Transfer, the shareholding of SMIC Holdings in the Joint Venture Company would decrease from approximately 66.76% to 38.59%, and the Joint Venture Company would cease to be a subsidiary of the Company and its financial results would cease to be consolidated with the Group's results.

On March 22, 2018, SMIC Holdings, China IC Fund, Ningbo Sensen Electronics Technology Co., Ltd ("Ningbo Sensen") and Beijing Integrated Circuit Design and Testing Fund ("Beijing Fund") had agreed to amend the previous joint venture agreement through the First Amended Joint Venture Agreement for the Equity Transfer.

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***Capital Contribution in Ningbo Semiconductor International Corporation***

On March 23, 2018, the Joint Venture Company, SMIC Holdings, China IC Fund, Ningbo Senson, Beijing Fund, Ningbo Integrated Circuit Industry Fund Management Co., Ltd ("IC Spaces") and Infotech National Emerging Industry Venture Capital Guiding Fund ("Infotech") entered into the Capital Increase Agreement, pursuant to which (i) SMIC Holdings had agreed to make further cash contribution of RMB565 million into the registered capital of the Joint Venture Company. Its shareholding in the Joint Venture Company will decrease from approximately 38.59% to approximately 38.57%; (ii) China IC Fund had agreed to make further cash contribution of RMB500 million into the registered capital of the Joint Venture Company. Its shareholding in the Joint Venture Company will increase from approximately 28.17% to approximately 32.97%; (iii) Ningbo Senson had agreed to make further cash contribution of RMB200 million into the registered capital of the Joint Venture Company. Its shareholding in the Joint Venture Company will decrease from approximately 24.79% to approximately 15.82%; (iv) Beijing Fund would make no further cash contribution and its shareholding in the Joint Venture Company will decrease from approximately 8.45% to approximately 1.65%; (v) IC Spaces had agreed to make cash contribution of RMB100 million into the registered capital of the Joint Venture Company, representing approximately 5.50% of the enlarged registered capital of the Joint Venture Company; and (vi) Infotech had agreed to make cash contribution of RMB100 million into the registered capital of the Joint Venture Company, representing approximately 5.50% of the enlarged registered capital of the Joint Venture Company. The above parties' performance of the Capital Contribution obligations would lead to an increase in the registered capital from RMB355 million to RMB1.82 billion.

On March 23, 2018, SMIC Holdings, China IC Fund, Ningbo Senson, Beijing Fund, IC Spaces and Infotech agreed to amend the First Amended Joint Venture Agreement through the Second Amended Joint Venture Agreement for the Capital Contribution.

***Reasons for and Benefits of the Equity Transfer and the Capital Contribution***

The Joint Venture Company is positioned as a new research and manufacturing base for specialised analog semiconductor industry in China. It adopts a new business model by combining professional foundry and customized ODM, while providing a platform for the design service of related products. The Joint Venture Company focuses on the segments of high-voltage analog, radio frequency front-end and the integrated technology of silicon semiconductor for new optoelectronics and magnetic materials. Its products, working together with the Company's products with advanced logic technology, will provide related systems with a comprehensive solution, and effectively support the currently rapid development of 4G/5G mobile communication and handheld devices, smart home appliances, industrial smart control and robots, automobiles with advanced energy sources, which will successfully complete the integration of upstream and downstream resources in the relevant semiconductor industry chain. The Joint Venture Company will provide a strong support to the expansion of the Company's current product mix and has an important strategic position for achieving the grand strategic goal of the Company, where important impact will be made on the development of the Company from now on. The Company is of the view that the Equity Transfer, Capital Contribution and the transactions contemplated thereunder are in the interests of the Company and its Shareholders as a whole, and are beneficial to the sustainable development of the Company.

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 the Equity Transfer Agreement, the First Amended Joint Venture Agreement, the Capital Increase Agreement and the Second Amended Joint Venture Agreement and the transactions contemplated thereunder; the terms of the Equity Transfer Agreement, the First Amended Joint Venture Agreement, the Capital Increase Agreement and the Second Amended Joint Venture Agreement are fair and reasonable; and the entering into of the Equity Transfer Agreement, the First Amended Joint Venture Agreement, the Capital Increase Agreement and the Second Amended Joint Venture Agreement and 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.

**Subscription of Shares and Perpetual Subordinated Convertible Securities by China IC Fund and Datang**

*Background*

On November 29, 2017, the Company entered into a placing agreement (the "Placing Agreement") with J.P. Morgan Securities plc and Deutsche Bank AG, Hong Kong Branch (the "Joint Placing Agents") pursuant to which the Company conditionally agreed to place, through the Joint Placing Agents, 241,418,625 Shares (the "Placing Shares") to not less than six independent placees at a price of HK\$10.65 per Placing Share. The Placing Shares will be allotted and issued pursuant to the general and unconditional mandate granted to the Directors by passing a resolution of the Shareholders at the annual general meeting of the Company held on June 23, 2017 to exercise the power of the Company to allot and issue up to 20% of the issued share capital of the Company as at the date of passing such resolution. The issue of the Placing Shares is not subject to the approval of the Shareholders. The placing shares will rank pari passu in all aspects with the ordinary shares of the Company.

On November 29, 2017, the Company and the Barclays Bank PLC, Deutsche Bank AG, Hong Kong Branch and J.P. Morgan Securities Plc (the "Joint Managers") entered into a subscription agreement (the "Placed PSCS Subscription Agreement"), pursuant to which each of the Joint Managers has agreed to subscribe and pay for, or to procure subscribers to subscribe and pay for the perpetual subordinated convertible securities of an aggregate principal amount of US\$65 million issued by the Company (the "Placed PSCS").

On December 6, 2017, all the conditions set out in the Placing Agreement had been fulfilled and completion of the Placing took place. Pursuant to the terms and conditions of the Placing Agreement, 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.

On December 14, 2017, all the conditions set out in the Placed PSCS Subscription Agreement had been fulfilled and completion of the issue of the Placed PSCS in the principal amount of US\$65 million took place.

On December 14, 2017, pursuant to the share purchase agreement dated November 6, 2008 between the Company and Datang Telecom Technology & Industry Holdings Co., Ltd., a company established under PRC laws ("Datang") (the "Datang Purchase Agreement"), Datang has delivered a notice to the Company that it will exercise its pre-emptive right in relation to the issue of the Placing Shares, the Placed PSCS, the potential subscription of securities by China IC Fund pursuant to the exercise of its pre-emptive right under the share purchase agreement dated February 12, 2015 between the Company and China IC Fund (the "China IC Fund Agreement") and the potential subscription of perpetual subordinated convertible securities by China IC Fund. Details can be found on the announcement of the Company dated December 14, 2017.

On December 14, 2017, pursuant to the China IC Fund Agreement, China IC Fund has delivered a notice to the Company that it will exercise its pre-emptive right in relation to the issue of the Placing Shares, the Placed PSCS, the potential subscription of securities by Datang pursuant to the exercise of its pre-emptive right under the Datang Purchase Agreement and the potential subscription of perpetual subordinated convertible securities by Datang. Details can be found on the announcement of the Company dated December 14, 2017.

As each of Datang and China IC Fund is a substantial shareholder of the Company and thus a connected person of the Company, the potential subscription by Datang as indicated above and the potential subscription by China IC Fund as indicated above will constitute connected transactions of the Company and will be subject to independent shareholders' approval under the Listing Rules. The Company will make such further announcement(s) as necessary if any agreement(s) is/are entered into by the Company with Datang or China IC Fund regarding the above matters.

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*The Datang Pre-emptive Share Subscription Agreement*

On April 23, 2018, the Company entered into the Datang Pre-emptive Share Subscription Agreement with Datang and 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 Datang Pre-emptive Shares. The subscription by Datang through Datang HK of the Datang Pre-emptive Shares will be at a price equivalent to the Placing Price, and conditional upon the obtaining of the necessary governmental approvals and the approval of the Independent Shareholders.

*The Datang PSCS Subscription Agreement*

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 in an aggregate principal amount of US\$200,000,000 for a total cash consideration of US\$200,000,000 which is 100% of the aggregate principal amount of the Placed PSCS, based on terms and conditions that are substantially the same as the issue of the Placed PSCS, and conditional upon the obtaining of the necessary governmental approvals and the approval of the Independent Shareholders.

The Conversion Price would initially be HK\$12.78 per Share, but would be subject to adjustment. Based on the initial Conversion Price of HK\$12.78 per Share and assuming full conversion of the Datang PSCS at the initial Conversion Price, the Datang PSCS will be convertible into 122,118,935 Shares, representing approximately 2.48% of the issued share capital of the Company on the last full Trading Day immediately before execution of the Datang PSCS Subscription Agreement and approximately 2.42% of the issued share capital of the Company as enlarged by and assuming full conversion of the Datang PSCS.

*The China IC Fund Pre-emptive share Subscription Agreement*

On April 23, 2018, the Company entered into the China IC Fund Pre-emptive Share Subscription Agreement with China IC Fund and Xinxin HK, 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 China IC Fund Pre-emptive Shares. The subscription by China IC Fund through Xinxin HK of the China IC Fund Pre-emptive Shares will be at a price equivalent to the Placing Price, and conditional upon the obtaining of the necessary governmental approvals and the approval of the Independent Shareholders.

*The China IC Fund PSCS Subscription Agreement*

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 in an aggregate principal amount of US\$300,000,000 for a total cash consideration of US\$300,000,000 which is 100% of the aggregate principal amount of the Placed PSCS, based on terms and conditions that are substantially the same as the issue of the Placed PSCS, and conditional upon the obtaining of the necessary governmental approvals and the approval of the Independent Shareholders.

The Conversion Price would initially be HK\$12.78 per Share, but would be subject to adjustment. Based on the initial Conversion Price of HK\$12.78 per Share and assuming full conversion of the China IC Fund PSCS at the initial Conversion Price, the China IC Fund PSCS will be convertible into 183,178,403 Shares, representing approximately 3.71% of the issued share capital of the Company on the last full Trading Day immediately before execution of the China IC Fund PSCS Subscription Agreement and approximately 3.58% of the issued share capital of the Company as enlarged by and assuming full conversion of the China IC Fund PSCS.

*Reasons for and Benefits of the Datang Subscription and the China IC Fund Subscription*

The Company is of the view that the Datang Subscription and the China IC Fund Subscription will strengthen the relationship between Datang, China IC Fund and the Company and provide an additional source of funding for the Company's needs beyond the capital raised through the Placing and the issued of the Placed PSCS.



**Entering into Partnership Agreement for the Establishment of IPV Capital Global Technology Fund (“the Fund”)**

On May 2, 2018, IPV Global Technology Management Limited (“IPV Global”) as the General Partner and China IC Fund, China IC Capital Co., Ltd (“China IC Capital”) and L&L Capital as the Limited Partners entered into the Partnership Agreement in relation to the establishment and management of the Fund. The Fund would be established in the PRC as a limited partnership for the purpose of equity investments, investment management and other activities, in order to maximize the profit of all Partners. Pursuant to the Partnership Agreement, the total capital commitment to the Fund is RMB1,616,160,000, of which RMB16.16 million is to be contributed by IPV Global, RMB800 million is to be contributed by China IC Fund, RMB165 million is to be contributed by China IC Capital and RMB635 million is to be contributed by L&L Capital. The Fund will be managed by Infotech Venture Investment Company Ltd. (“Infotech Venture Investment”).

The purpose of the fund is to carry out equity investments, investment management and other activities within the business scope of the Fund, in order to maximize the profit of all Partners.

***Reasons for and Benefits of the Partnership Agreement***

The Partnership will invest in selected companies operating in the semiconductor and semiconductor-related industries. Such investments are intended to help accelerate the development of the integrated circuit industry eco-system in the PRC and to excavate the potential opportunities for the exploitation and integration of resources in the industry. As a result, the Company’s customers and partners will benefit from such development, while the Company may also enjoy the financial benefits from such investments. Therefore, there are advantageous reasons from both strategic and financial perspectives for China IC Capital to enter into the Partnership Agreement for the establishment of the Fund.

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 China IC Capital to enter into the Partnership Agreement and the transactions contemplated thereunder; the terms of the Partnership Agreement are fair and reasonable; and the entering into of the Partnership Agreement and 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.

**RSUs Grant to Dr. Chen, Mr. Tan and Mr. Brown**

At the meeting of the Board held on February 7, 2018, the Board resolved to grant 337,500 RSUs (the “RSU Grants”) under the 2014 Equity Incentive Plan. Among the 337,500 RSUs, 125,000 RSUs were granted to Dr. Chen, 125,000 RSUs were granted to Mr. Lip-Bu Tan (independent non-executive director expired on June 22, 2018) and 87,500 RSUs were granted to Mr. Brown. Each of the RSUs granted to Dr. Chen, Mr. Tan and Mr. Brown represents the right to receive an Ordinary Share on the date it vests. It is intended that 62,500, 62,500, and 25,000 RSUs granted to Dr. Chen, Mr. Tan and Mr. Brown respectively will vest immediately upon their grant. It is intended that 62,500, 62,500, and 62,500 RSUs granted to Dr. Chen, Mr. Tan and Mr. Brown respectively will vest on January 1, 2019.

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 337,500 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 November 7, 2018.

## **The Subscription of the Oriented Debt Financing Instrument**

On May 18, 2018, Semiconductor Manufacturing International (Beijing) Corporation ("SMIC Beijing"), Shanghai Guotai Junan Securities Asset Management Co., Ltd. (the "Subscriber") (as manager) and China Merchants Bank Co., Ltd. (Shanghai Branch) (the "Custodian Bank") (as custodian trustee) entered into the Asset Management Agreement, pursuant to which, among others, the Subscriber shall provide SMIC Beijing with asset management and investment services in respect of the Entrusted Assets in accordance with the terms under the Asset Management Agreement, which include investment in Oriented Debt Financing Instrument.

On July 6, 2018, pursuant to the terms of the Asset Management Agreement, Sino IC Leasing Co., Ltd. (the "Issuer") had issued and the Subscriber had subscribed for, an amount of RMB200 million out of the total issue of an aggregate principal amount of RMB500 million of Oriented Debt Financing Instrument, using funds from the Entrusted Assets (the assets of SMIC Beijing deposited in designated custodian accounts, which are managed by the Subscriber and under the custody of the Custodian Bank pursuant to the terms of the Asset Management Agreement).

On August 10, 2018, pursuant to the terms of the Asset Management Agreement, the Issuer had issued and the Subscriber had subscribed for, an amount of RMB100 million out of the total issue of an aggregate principal amount of RMB500 million of Oriented Debt Financing Instrument, using funds from the Entrusted Assets.

### ***Reasons for and Benefits of the Subscription***

The Group had not participated in the negotiation of the subscription amount of the Subscription or the terms of the Oriented Debt Financing Instrument. To the best knowledge of the Company, the terms of the Oriented Debt Financing Instrument are the same as those generally applicable to other Oriented Debt Financing Instrument issued by the Issuer.

The subscription of the Oriented Debt Financing Instrument is considered to be beneficial to the Company through the interest earnings to the Entrusted Assets under the Asset Management Agreement, of which SMIC Beijing is the ultimate beneficiary.

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 the Subscriber to enter into the Subscription pursuant to the terms of the Asset Management Agreement and the Subscription are fair and reasonable; and the Subscription is 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.

## **Capital Contribution and Deemed Disposal of Equity Interest in Semiconductor Global Solutions Co., Ltd. ("SGS")**

On March 1, 2018, SMIC Holdings Corporation ("SMIC Holdings"), Triplecores Korea Co., Ltd. ("Triplecores") and IC SPACES Holdings Co., Ltd ("IC SPACES") entered into a joint venture agreement in relation to the establishment of SGS in the PRC, pursuant to which the registered capital of SGS is US\$10 million. SMIC Holdings and Triplecores agreed to make cash contributions in US Dollars and IC SPACES agreed to make cash contribution in Renminbi to the registered capital of SGS in the sum of US\$6 million, US\$3 million and US\$1 million, respectively. As a result, the Company holds, through SMIC Holdings, 60.00% of the equity interest of SGS.

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On August 10, 2018, SMIC Holdings, Triplecores, IC SPACES and Sino IC Leasing Co., Ltd. ("Sino IC Leasing") had agreed to amend the joint venture agreement dated March 1, 2018 through the Amended JV Agreements, pursuant to which: (i) SMIC Holdings will not make additional capital contribution in the registered capital of SGS and Triplecores, IC SPACES and Sino IC Leasing will make additional capital contributions in the registered capital of SGS in the sum of US\$2 million, US\$3 million and US\$5 million, respectively; (ii) the registered capital of SGS will increase from US\$10 million to US\$20 million; (iii) the Company's equity interest in SGS, through SMIC Holdings, will decrease from 60.00% to 30.00%; and (iv) SGS will be owned by China IC Fund, though Sino IC Leasing, as to approximately 8.08%.

As China IC Fund mainly invests in the value chain of integrated circuit industry via various approaches, primarily in IC chip manufacturing as well as chip designing, packaging test and equipment and materials, the Company believes that such joint venture will build up SGS at a faster pace and capture more business opportunities.

The Company believes that such joint venture with Triplecores, IC SPACES and Sino IC Leasing through the Amended JV Agreement and transactions contemplated thereunder are in the interests of the Company and the Shareholders as a whole and beneficial to the sustainable development of the Company. The Directors (including the independent non-executive Directors) consider that it is in the best interests of the Company and the Shareholders as a whole to enter into the Amended JV Agreement and the transactions contemplated thereunder; the terms of the Amended JV Agreement are fair and reasonable; and the entering into of the Amended JV 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.

**Restrictive Share Units ("RSU") Grant to Professor Lau and Mr. Fan**

At the meeting of the Board held on June 22, 2018, the Board resolved to grant 375,000 RSUs (the "Proposed RSU Grants") under the 2014 Equity Incentive Plan. Among the 375,000 RSUs, 187,500 RSUs were granted to Professor Lau and 187,500 RSUs were granted to Mr. Fan. Each of the RSUs granted to Professor Lau and Mr. Fan represents the right to receive an Ordinary Share on the date it vests. It is intended that such Restricted Share Units will vest 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 the relevant Director 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 375,000 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 January 11, 2019.

**Financial Services Agreement with Datang Finance — 2016 to 2018**

On December 18, 2015, the Company and Datang Telecom Group Finance Co., Ltd. ("Datang Finance") entered into the financial services agreement with a three year term commencing on January 1, 2016 and ending on December 31, 2018 ("Financial Services Agreement"), pursuant to which Datang Finance has agreed to provide the Company and its subsidiaries, including its associated companies and companies under its management ("Group") with a range of financial services (including deposit services, loan services, foreign exchange services and other financial services) subject to the terms and conditions provided therein.

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Datang Finance will provide to the Group a range of financial services as the Group may request from time to time. Such financial services include deposit services, loan services, foreign exchange services and other financial services.

The financial services of Datang Finance are provided based on the following pricing principles:

1. Deposit services  
The terms (including interest rates) in respect of deposit services offered to the Group by Datang Finance shall be no less favourable than those offered to the Group by third parties in respect of comparable services, subject to the relevant provisions of Chinese laws and regulations.
2. Loan services  
The terms (including interest rates) in respect of loans services offered to the Group by Datang Finance shall be no less favourable than those offered to the Group by third parties in respect of comparable services, subject to the relevant provisions of Chinese laws and regulations.
3. Foreign exchange services  
The terms (including exchange rates) in respect of foreign exchange services offered to the Group by Datang Finance shall be no less favourable than those offered to the Group by third parties in respect of comparable services, subject to the relevant provisions of Chinese laws and regulations.
4. Other financial services  
The terms (including fees charged by Datang Finance) for the provision of financial services other than deposits services, loan services and foreign exchange services shall be no less favourable than the terms (including fees charged to the Group) applicable to third parties in respect of comparable services, subject to the relevant provisions of Chinese laws and regulations.

The Annual Caps under the Financial Services Agreement are set out below:

Annual Caps	For the year ended December 31,		
	2016	2017	2018
	US\$ million	US\$ million	US\$ million
Deposit Cap (the maximum daily outstanding balances including accrued interests which is not cumulative in nature and inclusive of foreign currency and RMB deposits)	100	100	100
Spot FX Trading Cap (the maximum daily transaction amount for foreign exchange settlement and sales)	50	50	50
Other Financial Services Cap (the maximum annual fee for other financial services)	5	5	5

There are no historical caps for the deposit services, the foreign exchange services and other financial services with Datang Finance. The Annual Caps are determined based on the Group's actual financial needs and reasonable forecast.

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The actual transaction amounts for the range of financial services which Datang Finance has provided to the Company pursuant to the Financial Services Agreement during the year ended December 31, 2018 are set out below.

Transactions	For the year ended December 31,		
	2018	2017	2016
	US\$ million	US\$ million	US\$ million
Deposit Services	2.21	11.8	12.3
Spot FX Trading Services	—	—	—
Other Financial Services	—	—	0.01

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2018.

The reasons for the Company to enter into the Financial Services Agreement are as follows:

- (1) The entering into of the Financial Services Agreement does not preclude the Group from using the financial services of other PRC commercial banks. The Group has the discretion in selecting other PRC commercial banks as its financial services provider as it thinks fit and appropriate for the benefits of the Group;
- (2) The entering into of the Financial Services Agreement enables the Group to broaden its existing financing channels; and
- (3) The terms in respect of the deposit services, the loan services and the foreign exchange services offered by Datang Finance to the Group will be no less favourable than those offered to the Group by third parties and the commercial banks in the PRC in respect of comparable services, which enables the Group to lower its finance costs.

Each of Datang Finance and Datang Telecom Technology & Industry Holdings Co., Ltd. (LDatang Holdings Technology & Industry Holdings Co., Ltd. (LDemy of Telecommunications Technology and Datang Holdings in turn wholly owns Datang Holdings (Hongkong) Investment Company Limited (Datang Hongkong) turn wholly owns Datang Holdings (Hongkong) Investment Company Limited 18.30% of the total issued share capital of the Company as of the date of entering into the Financial Services Agreement. Datang Finance is a fellow subsidiary of Datang Holdings and an associate of Datang Hongkong, and thus a connected person of the Company under Chapter 14A of the Listing Rules. The Financial Services Agreement and the transactions contemplated thereunder are exempt from the independent shareholders Agreement and the transactions contemplated by the Listing Rules.

Other than Dr. Gao Yonggang and Dr. Chen Shanzhi, both of whom are nominated as Directors by Datang Hongkong and its associates, none of the Directors has a material interest in the Financial Services Agreement or the transactions contemplated thereunder. Dr. Gao and Dr. Chen abstained from voting at the meeting of the Board on the resolutions approving the Financial Services Agreement and the transactions contemplated thereunder.

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 Financial Services Agreement that took place between Datang Finance and the Group during the period ended December 31, 2018 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 Financial Services 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 Financial Services Agreement and had provided to the Board an unqualified letter containing findings and conclusions in respect of the aforesaid continuing connected transactions.

## **Renewed Framework Agreement with Datang Holdings – 2016 to 2018**

On December 28, 2015, the Company entered into a renewed framework agreement with Datang Telecom Technology & Industry Holding Co., Ltd. ("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, 2016. 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 the price based 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 favorable 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 expected caps, being the maximum revenue on an aggregated basis expected to be generated by the Group from the transactions contemplated under the Renewed Framework Agreement ("Non-Exempt Continuing Connected Transactions"), are :

- US\$50 million for the year ended December 31, 2016;
- US\$66 million for the year ended December 31, 2017; and
- US\$82 million for the year ended December 31, 2018.

In arriving at the expected caps, the Company has considered the potential level of Non-Exempt Continuing Connected Transactions it may potentially 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 and the historical revenues generated by the Company from the transactions under the framework agreement dated February 18, 2014 (the "2014 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 aggregate revenues generated by the Group from the transactions entered into pursuant to the Renewed Framework Agreement were US\$17.9 million, US\$20.2 million and US\$11.9 million for the year ended December 31, 2016, 2017 and 2018 respectively.

As Datang Holdings is the holding company of Datang Holdings (Hongkong) Investment Company Limited, a substantial shareholder of the Company holding approximately 18.30% of the total issued share capital of the Company as of 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 subject to the reporting and announcement requirements and exempt from the independent shareholders' approval requirement under Chapter 14A of the Listing Rules.

The Company confirms that Dr. Chen Shanzhi and Dr. Gao Yonggang, both being Directors nominated by Datang Holdings, have abstained from voting on all relevant board resolutions relating to the Framework Agreement and the Non-Exempt Continuing Connected Transactions.

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2018.

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, 2018 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.

#### **Continuing Connected Transactions in relations to Centralised Fund Management Agreement — 2016 to 2018**

On March 21, 2016, the Company, SMIC Beijing and SJ Semiconductor (Jiangyin) Corporation ("SJ Jiangyin"), entered into centralised fund management agreement ("Centralised Fund Management Agreement") 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 Jiangyin participating in the Group's centralised 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 SJ Jiangyin pursuant to the Centralised Fund Management Agreement, ending on December 31, 2018.

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

The price of the services provided by SMIC Beijing to SJ Jiangyin contemplated under the Centralised Fund Management Agreement will be fair and reasonable under the Listing Rules, determined according to the market principle on an arm's length basis, subject to compliance with requirements for connected transactions of the Stock Exchange:

1. Internal Deposit Services

The terms (including interest rates) in respect of the internal deposit services provided by SMIC Beijing to SJ Jiangyin 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 SJ Jiangyin's deposits with SMIC Beijing will be determined based on arm's length negotiations by the parties. The Company will make reference to the interest rate (if any) prescribed by the PBOC applicable to RMB deposits from time to time and published on the PBOC's website for the same type of deposits.

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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 Jiangyin 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 Jiangyin for providing such services will be determined based on arm's length negotiations by the parties.
3. **Internal Loan Services**  
The terms (including interest rates) in respect of the internal loan services provided by SMIC Beijing to SJ Jiangyin 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 Jiangyin by SMIC Beijing will be based on arm's length negotiation 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 Jiangyin 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



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relevant provisions of PRC laws and regulations. The fees charged by the Company to SJ Jiangyin for providing such services will be determined based on arm's length negotiations by the parties.

5. Other Financial Services

The terms (including fees charged by SMIC Beijing) in respect of other financial services provided by SJ Beijing to SJ Jiangyin 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 Jiangyin for providing such services will be determined based on arm's length negotiations by the parties. The Annual Caps under the Centralised Fund Management Agreement are set out below. The annual caps under the Centralized Fund Management Agreement are set out below.

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

Annual Caps	For the year ended December 31,		
	2016	2017	2018
	US\$ million	US\$ million	US\$ million
Internal Deposit Cap (the maximum daily outstanding balances including accrued interests)	500	500	500
Collection and Payment and Foreign Exchange Cap (the maximum daily transaction amount for collection and payment services and foreign exchange services)	500	500	500
Internal Loan Cap (the maximum borrowing limit per calendar year)	500	500	500
Letter of Credit Cap (the maximum aggregate amount under the letter(s) of credit issued on SJ Jiangyin's behalf per calendar year)	500	500	500
Other Financial Services Cap (the maximum fees charged for provision of other financial services per calendar year)	50	50	50

The Company considers that the entry into of the Agreement 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 17.55% equity interest in the Company through its wholly-owned subsidiary at the time of entering into the Centralised Fund Management Agreement, 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 25.0% equity interest at the date of entering into the Centralised Fund Management Agreement in SJ Semiconductor Corporation ("SJ Cayman"), a majority owned subsidiary of the Company, through its wholly-owned subsidiary, Xun Xin (Shanghai) Investment Co. Ltd. ("Xun Xin"). SJ Cayman and its wholly-owned subsidiary SJ Jiangyin are therefore connected subsidiaries of the Company as defined under Rule 14A.16 of the Listing Rules. SJ Jiangyin is thus a connected person of the Company under the Listing Rules. The transactions contemplated under the Centralised Fund Management Agreement are subject to reporting, announcement and independent shareholders' approval under Chapter 14A of 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., 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 and the position of legal representative in Xun Xin. Both Mr. Lu Jun and Mr. Ren Kai have abstained from voting on the relevant board resolution in respect of the Centralised Fund Management Agreement.

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The Centralised Fund Management Agreement and all transactions contemplated thereunder and the annual caps were approved by the independent shareholders of the Company at the extraordinary general meeting ("EGM") of the Company held on June 24, 2016 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 Centralised Fund Management Agreement during the year ended December 31, 2018 are set out below.

Transactions	Actual Transaction Amounts for the year ended December 31,		
	2018	2017	2016
	US\$ million	US\$ million	US\$ million
Internal Deposit Services	137.9	147.2	93.2
Collection and Payment Services and Foreign Exchange Services	—	—	—
Internal Loan Services	—	—	—
Letter of Credit Services	19.5	4.7	—
Other Financial Services	—	—	—

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2018.

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 Centralised Fund Management Agreement that took place between the Company and SJ Jiangyin for the year ended December 31, 2017 had been entered into 1) in the ordinary and usual course of business of the Group; 2) in normal commercial terms or better; and 3) in accordance with the Centralised Fund Management Agreement on terms that were fair and reasonable and in the interests of the shareholders of the Company as a whole.

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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 Centralised Fund Management Agreement and had provided to the Board an unqualified letter containing findings and conclusions in respect of the aforesaid continuing connected transactions.

On September 20, 2017 that the Company, SMIC Beijing, SJ Jiangyin and SJ Cayman (on behalf of itself and SJ Hong Kong) entered into the Supplemental Agreement to amend the Centralised Fund Management Agreement. Pursuant to the Supplemental Agreement, the parties agreed that (1) the Centralised Fund Management Agreement should apply not only to SJ Jiangyin but also to its indirect 100% holding company SJ Cayman and its direct 100% holding company SJ Hong Kong; and (2) references in the Centralised Fund Management Agreement to SJ Jiangyin should include references to SJ Cayman and SJ Hong Kong.

**Centralised Fund Management Agreement with Semiconductor Manufacturing North China (Beijing) Corporation — 2016 to 2018**

On March 31, 2016, the Company and its subsidiaries, SMIC Beijing and SMNC entered into a centralised fund management contract ("Centralised Fund Management Contract") providing the terms under which: (i) the Company would procure its wholly-owned subsidiary SMIC Beijing to carry out centralised management of the Group's RMB fund and foreign exchange in accordance with the relevant PRC laws and regulations; and (ii) SMNC would participate in the Group's centralised fund management system. SMIC Beijing provides 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 within the scope permitted by the relevant PRC policies ending on December 31, 2018.

The Centralised Fund Management Contract was entered into by the parties on March 31, 2016, at the time when SMNC was not a connected person. Due to the completion of the investment by China IC Fund (which indirectly held approximately 17.54% equity interest in the Company at the relevant time and is therefore a connected person of the Company at the issuer level) in approximately 26.5% equity interest in SMNC on June 30, 2016, SMNC became a connected subsidiary of the Company as defined under Rule 14A.16 of the Listing Rules, and thus a connected person of the Company. The Centralised Fund Management Contract and the transactions contemplated thereunder constitute continuing transactions subsequently became continuing connected transactions.

The expected Annual Caps were:

1. The Internal Deposit Cap (representing the proposed maximum daily outstanding balances including accrued interests placed by SMNC with SMIC Beijing) is US\$2 billion for each of the three years ending December 31, 2016, 2017 and 2018 respectively.
2. The Collection and Payment and Foreign Exchange Cap (representing the proposed maximum daily transaction amount for collection and payment services and foreign exchange services provided by SMIC Beijing to SMNC) is US\$2 billion for each of the three years ending December 31, 2016, 2017 and 2018 respectively.
3. The Internal Loan Cap (representing the proposed maximum daily outstanding balance of loans including accrued interest provided by SMIC Beijing to SMNC) is US\$2 billion for each of the three years ending December 31, 2016, 2017 and 2018 respectively.
4. The Letter of Credit Cap (representing the proposed maximum aggregate principal amount of the letter(s) of credit issued on SMNC by SMIC Beijing to SMNC) is US\$2 billion for each of the three years ending in December 31, 2016, 2017 and 2018 respectively.

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5. The Other Financial Services Cap (representing the proposed maximum fees charged by SMIC Beijing for providing other financial services to SMNC per calendar year) is US\$50 million for each of the three years ending December 31, 2016, 2017 and 2018 respectively.

The price of the services provided by SMIC Beijing to SMNC contemplated under the Agreement would be fair and reasonable under the Listing Rules, determined according to the market principle on an arm's length basis subject to compliance with requirements of the Stock Exchange and relevant requirements in the PRC.

The Company considers that the entry into of the Centralised 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.

The actual transaction amounts generated by the Company from the fund management services entered into pursuant to the Centralised Fund Management Agreement during the year ended December 31, 2018 are set out below.

Transactions	Actual Transaction Amounts for the year ended December 31,		
	2018	2017	2016
	US\$ million	US\$ million	US\$ million
Internal Deposit Services	1,962.6	1,182.3	719.7
Collection and Payment Services and Foreign Exchange Services	—	—	—
Internal Loan Services	—	—	120.5
Letter of Credit Services	—	—	—
Other Financial Services	—	—	—

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2018.

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 Centralised Fund Management Agreement that took place between the Company and its subsidiaries, SMIC Beijing and SMNC for the year ended December 31, 2017 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 Centralised Fund Management 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 Centralised Fund Management Agreement and had provided to the Board an unqualified letter containing findings and conclusions in respect of the aforesaid continuing connected transactions.

# **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 the Framework Agreement, 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).

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
2. 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.
3. Other related Services
4. 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 are set out below.

<b>Annual Caps</b>	<b>For the year ending December 31,</b>				
	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	<b>US\$ billion</b>	<b>US\$ billion</b>	<b>US\$ billion</b>	<b>US\$ billion</b>	<b>US\$ billion</b>
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 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 Stock Exchange.

The reasons for the Company to enter into the Framework Agreement 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.

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As China IC Fund holds approximately 17.55% ownership interest in the Company at the time of entering into the Framework Agreement 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% ownership interest in Sino IC Leasing at the time of entering into the Framework Agreement, 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 and the transactions contemplated thereunder constitute non-exempt continuing connected transactions subject to the reporting, announcement and shareholders' approval requirements of Chapter 14A of the Listing Rules. As the term of the Framework Agreement 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.

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 ("EGM") 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 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 during the year ended December 31, 2018 are set out below.

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

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2018.

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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 that took place between the Company and Sino IC Leasing Co., Ltd. for the year ended December 31, 2018 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 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 and had provided to the Board an unqualified letter containing findings and conclusions in respect of the aforesaid continuing connected transactions.

**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;

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- (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 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 proposed 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 the Amendment Agreement to revise the Existing Annual Caps.

Pursuant to the Amendment Agreement, the parties have agreed to revise the Existing Annual Caps 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 will not be sufficient.



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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 for the year ended December 31, 2018 are set out below.

Transactions	For the year ended December 31,	
	2018	2017
	US\$ million	US\$ million
Supply of goods and services, transfer of equipment and provision of technical authorization or licensing by the Company	6.5	0.9
Supply of goods and services and transfer of equipment by SJ Cayman	45.7	20.8

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2018.

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 17.404% equity interest in the Company 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 29.405% equity interest in SJ Cayman 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 that took place between the Company and its majority owned subsidiary SJ Cayman for the year ended December 31, 2018 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 on terms that were fair and reasonable and in the interests of the shareholders of the Company as a whole.

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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 and had provided to the Board an unqualified letter containing findings and conclusions in respect of the aforesaid continuing connected transactions.

**Framework Agreement with Semiconductor Manufacturing North China (Beijing) Corporation — 2018 to 2020**

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.

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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 Connected Transactions is set out below:

Annual Caps	For the year ending December 31,		
	2018	2019	2020
	US\$ million	US\$ million	US\$ million
Purchase and sale of goods	900	1,100	1,500
Rendering of or receiving services	100	150	200
Leasing of assets	200	200	200
Transfer of equipment	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
<b>Total</b>	<b>2.50 billion</b>	<b>2.75 billion</b>	<b>3.20 billion</b>

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.

As China IC Fund holds approximately 15.06% equity interest in the Company at the time of entering into the Framework Agreement with SMNC 2018–2020 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. As China IC Fund holds 32% equity interest in the registered capital of SMNC at the date of entering into the Framework Agreement with SMNC 2018–2020, 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 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.

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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 (“EGM”) of the Company held on February 8, 2018 as required under Chapter 14A of the Hong Kong Stock Exchange Listing Rules.

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

Transactions	Actual Transaction Amounts for the year ended December 31, 2018
	US\$ million
Purchase and sale of goods	561.8
Rendering of or receiving services	84.5
Leasing of assets	0.3
Transfer of equipment	—
Provision of technical authorization or licensing (including the sharing of research and development costs)	—
Provision of guarantee	7.4
<b>Total</b>	<b>654.0</b>

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2018.

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 that took place between the Company and its majority owned subsidiary SMNC for year ended December 31, 2017 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 on terms that were fair and reasonable and in the interests of the Company’s shareholders as a whole.

**Centralized Fund Management Agreement with Semiconductor Manufacturing South China Corporation — 2017 to 2020**

On June 1, 2017, the Company and its subsidiaries, SMIC Beijing and SMSC entered into the 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 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 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 Stock Exchange and relevant requirements for connected transactions that are applicable to the parties.

1. Internal Deposit Services

The terms in respect of the Internal Deposit 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.

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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 Centralized Fund Management Agreement are set out below.

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

The Company considers that the entry into of the 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

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.

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

The actual transaction amounts generated by the Company from the fund management services entered into pursuant to the Centralized Fund Management Agreement during the year ended December 31, 2018 are set out below.

Transactions	Actual Transaction Amounts for the year ended December 31,	
	2018	2017
	US\$ million	US\$ million
Internal Deposit Services	1,956.8	53
Collection and Payment Services and Foreign Exchange Services	—	—
Internal Loan Services	—	0
Letter of Credit Services	—	—
Other Financial Services	—	—

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

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2018.

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 SMSC that took place between the Company and its majority owned subsidiary SMNC for year ended December 31, 2018 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 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 and had provided to the Board an unqualified letter containing findings and conclusions in respect of the aforesaid continuing connected transactions.

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

On June 11, 2018, the Company and its subsidiaries, SMSC entered into the 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 equipment and provision of technical authorization or licensing:

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

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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 A") for SMSC's financing activities.

The price of the Continuing Connected Transactions 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 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 is set out below:

Annual Caps	For the year ending 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
<b>Total</b>	<b>1.273 billion</b>	<b>619 million</b>

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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 ("EGM") of the Company held on November 7, 2018 as required under Chapter 14A of the Hong Kong Stock Exchange 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, 2018 are set out below.

Transactions	For the year ended December 31,	
	2018 US\$ million	2017 US\$ million
Purchase and sale of goods	-	-
Rendering of or receiving services	2.2	5.88
Leasing of assets	-	-
Transfer of equipment	-	-
Provision of technical authorization or licensing (including the sharing of research and development costs)	-	-
Provision of guarantee	-	-
<b>Total</b>	<b>2.2</b>	<b>5.88</b>

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, 2018.

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, 2018 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.



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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.

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

On November 29, 2018, the Company, SMIC Beijing and SMNC entered into 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 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.

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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 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 Services and Foreign Exchange Services	200	200	200
Internal Loan Services	500	500	500
Letter of Credit Services	500	500	500
Other Financial Services	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.

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As China IC Fund holds approximately 15.82% 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. As at the date of this announcement, the registered capital of SMNC is held as to approximately 51% and 32% 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 ("EGM") of the Company held on January 11, 2019 as required under Chapter 14A of the Listing Rules.

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2018.

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 that took place between the Company and its majority owned subsidiary SMNC for year ended December 31, 2018 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 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 had provided to the Board an unqualified letter containing findings and conclusions in respect of the aforesaid continuing connected transactions.

**Centralized Fund Management Contract with SJ Semiconductor Corporation — 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 SMNC 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 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.

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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.

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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 Services and Foreign Exchange Services	130	130	130
Internal Loan Services	130	130	130
Letter of Credit Services	130	130	130
Other Financial Services	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, Xinxin (Hongkong) Capital Co., Limited, it is a connected person of the Company at the issuer level under the Listing Rules. As at the date of this announcement, the registered capital of SMNC is held as to approximately 51% and 32% 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.

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% and 32% 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 ("EGM") of the Company held on January 11, 2019 as required under Chapter 14A of the Listing Rules.

None of the transaction amounts exceeded the annual cap for the year ended December 31, 2018.

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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, 2018 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 Contract and had provided to the Board an unqualified letter containing findings and conclusions in respect of the aforesaid 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.

**Exercise of SilTech Shanghai's Put Option**

On December 22, 2014, we entered into a co-investment agreement through SilTech Shanghai with JCET and China IC Fund to acquire all or part of the issued and paid-up ordinary shares in the capital of STATS ChipPAC through JCET-SC (Singapore) Pte. Ltd.. On June 18, 2015, according to the co-investment agreement, we made a total capital contribution of the RMB equivalent of US\$100 million to subscribe for 19.61% ownership interest in Changjiang Xinke.

Furthermore, based on an investment exit agreement entered into by SilTech Shanghai, JCET and Jiangsu Xinchao Technology Group Co., Ltd (a substantial shareholder of JCET), JCET granted us an option ("SilTech Shanghai's put option") to sell the shares of Changjiang Xinke to JCET at exercise price equivalent to our initial investment plus an annual return rate at any time after Stats ChipPAC was acquired. We recently made a voluntary announcement of contemplating the exercise of SilTech Shanghai's put option.

On April 27, 2016, SilTech Shanghai and JCET entered into a disposal agreement, pursuant to which SilTech Shanghai agreed to sell its 19.61% ownership interest in Changjiang Xinke to JCET in consideration of RMB664 million, which will be satisfied by JCET's issue of 43,229,166 shares of JCET to SilTech Shanghai at RMB15.36 per share. On the same day, SilTech Shanghai and JCET entered into a subscription agreement, pursuant to which SilTech Shanghai agreed to subscribe for and JCET agreed to issue 150,681,044 shares of JCET in consideration of an aggregate subscription price of RMB2,655 million in cash.

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On May 10, 2017, the Company was notified by JCET that the China Securities Regulatory Commission has granted approval for this transaction, and the disposal agreement and the subscription agreement became effective accordingly. On June 19, 2017, the transactions were completed and SMIC became the single largest shareholder of JCET. The Group recorded its ownership interest of JCET as investment in associate due to its right to nominate directors of JCET's board.

**Other Related Party Transactions**

Please see Note 40 of Notes to the Consolidated Financial Statements for further information regarding the transactions between us and our related parties.

**C. Interests of Experts and Counsel.**

Not applicable.

**Item 8. Financial Information**

**A. Consolidated Statements and Other Financial Information**

Please see "Item 18 — Financial Statements" for our audited consolidated financial statements filed as a part of this annual report on Form 20-F.

See "Item 4.B — Information on the Company — Business Overview — Customers and Markets" regarding the percentage of our sales which are exported from China.

**Dividends and Dividend Policy**

As of December 31, 2018, our Company's retained earnings increased to US\$331.3 million from US\$187.0 million as of December 31, 2017. Please refer to Note 28 of the Consolidated Financial Statements for more details. We have not declared or paid any cash dividends on the ordinary shares. We intend to retain any earnings for use in our business and do not currently intend to pay cash dividends on the ordinary shares. Dividends, if any, on the outstanding shares will be declared by and subject to the discretion of the Board and must be approved at the annual general meeting of shareholders. The timing, amount and form of future dividends, if any, will also depend, among other things, on:

- our results of operations and cash flow;
- our future prospects;
- our capital requirements and surplus;
- our financial condition;
- general business conditions;
- contractual restrictions on the payment of dividends by the Company to its shareholders or by our subsidiaries to the Company; and
- other factors deemed relevant by the Board.

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Our ability to pay cash dividends will also depend upon the amount of distributions, if any, received by us from our wholly-owned Chinese operating subsidiaries. Under the applicable requirements of Chinese Company Law, our 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 our 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.

**B. Significant Changes**

Except as disclosed elsewhere in this annual report, we have not experienced any significant changes since the date of our audited consolidated financial statements included in this annual report.

**Item 9. The Offer and Listing**

**A. Offer and Listing Details.**

Our ordinary shares are principally traded on the HKSE under the stock code "981." Our ordinary shares began trading on the HKSE on March 18, 2004. Our ADSs, which began trading on the NYSE on March 17, 2004, are traded under the symbol "SMI." Each of our ADSs represents 5 ordinary shares.

**B. Plan of Distribution**

Not applicable.

**C. Markets**

Our ordinary shares are listed and traded on the HKSE under the stock code "981" and our ADSs are listed and traded on the NYSE under the symbol "SMI".

**D. Selling Shareholders**

Not applicable.

**E. Dilution**

Not applicable.

**F. Expenses of the Issue**

Please see "Item 12.D — American Depositary Shares" regarding the expense of issue.



**Item 10. Additional Information**

**A. Share Capital**

Not applicable.

**B. Memorandum and Articles of Association**

The sections entitled “Item 10 — Additional Information — Memorandum and Articles of Association” in our annual report on Form 20-F for the year ended December 31, 2004, filed with the SEC on June 26, 2005 and in our annual report on Form 20-F for the year ended December 31, 2005, filed with the SEC on June 26, 2006 are incorporated by reference into this annual report. In addition, at the annual general meeting of our shareholders held on June 2, 2008, our shareholders approved an amendment to our Articles of Association to provide that a member of our board of directors may be removed by Ordinary Resolution.

**C. Material Contracts**

**Sale and leaseback arrangements**

In July 2018, there were four arrangements in consideration of US\$306.8 million entered into by the Group with Xinhe Leasing (Tianjin) Co., Ltd. (a majority-owned subsidiary of Sino IC Leasing) in the form of a sale and leaseback transaction with a repurchase option. A batch of production equipment of the Group was sold and leased back under the arrangements. As the repurchase prices were set at the expected fair value and the Group is not reasonably certain that it will exercise the repurchase options, the above transactions were accounted for a disposal of property, plant and equipment followed with an operating lease.

In July 2017, there were seven arrangements in total consideration of US\$410.8 million entered into by the Group with Xincheng Leasing (Tianjin) Co., Ltd, Xindian Leasing (Tianjin) Co., Ltd and Xinlu Leasing (Tianjin) Co., Ltd. (the three leasing companies are wholly-owned subsidiaries of Sino IC Leasing), respectively, in the form of a sale and leaseback transaction with a repurchase option. A batch of production equipment of the Group was sold and leased back under these arrangements. 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.

In December 2016 and February 2017, there were two and three arrangements in consideration of US\$249.2 million and US\$250.6 million, respectively, entered into by the Group with Sino IC Leasing (Tianjin) Co., Ltd. (a wholly-owned subsidiary of Sino IC Leasing) in the form of a sale and leaseback transaction with a repurchase option. A batch of production equipment of the Group was sold and leased back under the arrangements. 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 transaction have been accounted for disposal of property, plant and equipment followed with an operating lease.

#### **D. Exchange Controls**

We receive government fundings and a portion of our sales in Renminbi, which is currently not a freely convertible currency. Approximately 30.7% of our sales for the year ended December 31, 2016, approximately 30.3% of our sales for the year ended December 31, 2017 and approximately 37.1% of our sales for the year ended December 31, 2018 were denominated in Renminbi. While we have used these proceeds for the payment of our Renminbi expenses, we may need to convert these sales into foreign currencies to allow us to purchase imported materials and equipment in the future, particularly as we expect the proportion of our sales to China-based companies to increase in the future. Under China's existing foreign exchange regulations, payments of current account items, including profit distributions, interest payments and expenditures from trade may be made in foreign currencies without government approval, except for certain procedural requirements. The Chinese government may, however, at its discretion, restrict access in the future to foreign currencies for current account transactions and prohibit us from converting our Renminbi sales into foreign currencies. See "Item 3.D — Key Information — Risk Factors — Risks Related to Conducting Operations in China —

Devaluation or appreciation in the value of the Renminbi or restrictions on convertibility of the Renminbi could adversely affect our business and operating results" and " — Our corporate structure may restrict our ability to receive dividends from, and transfer funds to, our Chinese operating subsidiaries, which could restrict our ability to act in response to changing market conditions and reallocate funds from one Chinese subsidiary to another in a timely manner" for details.

#### **E. Taxation**

The following discussion of the material U.S. federal income and Cayman Islands tax consequences of an investment in our ADSs or ordinary shares is based upon laws and relevant interpretations thereof in effect as of the date of this prospectus, all of which are subject to change, possibly with retroactive effect. This discussion does not deal with all possible tax consequences relating to an investment in our ADSs or ordinary shares, such as the tax consequences under state, local and non-U.S. tax laws.

##### **United States Federal Income Taxation**

Except where noted, this summary deals only with the ownership and disposition of the ADSs and ordinary shares that are held as capital assets by U.S. Holders. This summary does not represent a detailed description of the U.S. federal income tax consequences applicable to U.S. Holders that are subject to special treatment under the U.S. federal income tax laws, including:

- banks;
- dealers in securities or currencies;
- financial institutions;
- real estate investment trusts;
- insurance companies;
- tax-exempt organizations;
- persons holding ADSs or ordinary shares as part of a hedging, integrated or conversion transaction, constructive sale or straddle;
- traders in securities that have elected the mark-to-market method of accounting;
- persons liable for the alternative minimum tax;

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- persons who have ceased to be U.S. citizens or to be taxed as resident aliens;
- persons who own or are deemed to own more than 10% of our voting shares; or
- U.S. persons whose “functional currency” is not the U.S. dollar.

This summary is based in part on representations by the depositary and assumes that each obligation under the deposit agreement and any related agreement will be performed in accordance with its terms. Furthermore, the discussion below is based upon the provisions of the Internal Revenue Code of 1986, as amended, or the Code, and U.S. Treasury Regulations, Internal Revenue Service rulings and judicial decisions as of the date hereof. Such authorities may be replaced, revoked or modified, possibly on a retroactive basis, so as to result in U.S. federal income tax consequences different from those discussed below.

A U.S. Holder that holds ADSs or ordinary shares is urged to consult its own tax advisor concerning the U.S. federal income tax consequences as well as any consequences arising under the laws of any other taxing jurisdiction (including any U.S. state or locality) or any aspect of U.S. federal gift or estate law in light of the particular circumstances of the U.S. Holder.

A U.S. Holder is a beneficial owner of ADSs or ordinary shares that is a U.S. person. A U.S. person is:

- a citizen or resident of the United States;
- a corporation or other entity taxable as a corporation created or organized in or under the laws of the United States, any state thereof, or the District of Columbia;
- an estate the income of which is subject to U.S. federal income taxation, regardless of its source; or
- a trust if (i) it is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust, or (ii) it has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

If a partnership holds ADSs or ordinary shares, the tax treatment of a partner will generally depend on the status of the partner and the activities of the partnership. A U.S. Holder that is a partner of a partnership holding ADSs or ordinary shares is urged to consult its own tax advisors.

ADSs or Ordinary Shares. In general, for U.S. federal income tax purposes, a U.S. Holder of ADSs will be treated as the owner of the underlying ordinary shares that are represented by such ADSs. Deposits and withdrawals of ordinary shares in exchange for ADSs will not be subject to U.S. federal income taxation.

Distributions on ADSs or Ordinary Shares. Subject to the discussion under “-Passive Foreign Investment Company Rules” below, the gross amount of the cash distributions on the ADSs or ordinary shares will be taxable to a U.S. Holder as dividends to the extent of our current and accumulated earnings and profits, as determined under U.S. federal income tax principles. Subject to certain limitations, dividends paid to noncorporate U.S. Holders, including individuals may be eligible for a reduced rate of taxation if we are deemed to be a “qualified foreign corporation” for U.S. federal income tax purposes. A qualified foreign corporation includes:

- a foreign corporation that is eligible for the benefits of a comprehensive income tax treaty with the United States that includes an exchange of information program; or

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- a foreign corporation if its stock with respect to which a dividend is paid or its ADSs backed by such stock are readily tradable on an established securities market within the United States but does not include an otherwise qualified corporation that is a passive foreign investment company. We believe that we will be a qualified foreign corporation for so long as we are not a passive foreign investment company and the ordinary shares or ADSs are considered to be readily tradable on an established securities market within the United States. A U.S. Holder that exchanges its ADSs for ordinary shares may not be eligible for the reduced rate of taxation on dividends if the ordinary shares are not readily tradable on an established securities market within the United States. Our status as a qualified foreign corporation, however, may change.

Dividends will be includable in a U.S. Holder's gross income on the date actually or constructively received by such U.S. Holder, in the case of ordinary shares, or by the depositary, in the case of ADSs. These dividends will not be eligible for the dividends-received deduction generally allowed to U.S. corporations in respect of dividends received from other U.S. corporations.

To the extent that the amount of any cash distribution exceeds our current and accumulated earnings and profits, the distribution will first be treated as a tax-free return of capital, causing a reduction in the adjusted basis of the ADSs or ordinary shares (thereby increasing the amount of gain, or decreasing the amount of loss, a U.S. Holder would recognize on a subsequent disposition of the ADSs or ordinary shares), and the balance in excess of adjusted basis will be subject to tax as capital gain.

To the extent we pay dividends on the ADSs or the ordinary shares in Hong Kong dollars, the U.S. dollar value of such dividends should be calculated by reference to the exchange rate prevailing on the date of actual or constructive receipt of the dividend, regardless of whether the Hong Kong dollars are converted into U.S. dollars at that time. If Hong Kong dollars are converted into U.S. dollars on the date of actual or constructive receipt of such dividends, the tax basis of the U.S. holder in such Hong Kong dollars will be equal to their U.S. dollar value on that date and, as a result, the U.S. Holder generally should not be required to recognize any foreign currency exchange gain or loss. Any gain or loss recognized on a subsequent conversion or other disposition of the Hong Kong dollars generally will be treated as U.S. source ordinary income or loss.

Dividends paid on the ADSs or ordinary shares will be income from sources outside of the United States and will constitute "passive category income" or, in the case of certain U.S. Holders, "general category income" for U.S. foreign tax credit limitation purposes.

**Sale, Exchange or Other Disposition of ADSs or Ordinary Shares.** Subject to the discussion under "- Passive Foreign Investment Company Rules" below, upon the sale, exchange or other disposition of ADSs or ordinary shares, a U.S. Holder generally will recognize capital gain or loss equal to the difference between the amount realized upon the sale, exchange or other disposition and the adjusted tax basis of the U.S. Holder in the ADSs or ordinary shares. A U.S. Holder's tax basis in an ADS or an ordinary share will be, in general, the price it paid for that ADS or ordinary share. The capital gain or loss generally will be long-term capital gain or loss if, at the time of sale, exchange or other disposition, the U.S. Holder has held the ADS or ordinary share for more than one year. Net long-term capital gains of noncorporate U.S. Holders, including individuals, are eligible for reduced rates of taxation. The deductibility of capital loss is subject to limitations. Any gain or loss that a U.S. Holder recognizes generally will be treated as gain or loss from sources within the United States for U.S. foreign tax credit limitation purposes.

**Medicare Tax.** US Holders who are individuals, estates or trusts may be required to pay up to an additional 3.8% tax on, among other things, dividends and capital gains. You are urged to consult your tax advisor regarding the potential tax consequences to you from the Medicare Tax, also called the Net Investment Income Tax.

**Passive Foreign Investment Company Rules.** We believe that we were not a passive foreign investment company for 2016. Based on the projected composition of our income, the timing of our anticipated capital expenditures and valuation of our assets, we do not expect to be a passive foreign investment company for 2017 and do not expect to become one in the future, although this may change.

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In general, we will be deemed to be a passive foreign investment company for any taxable year in which either (i) at least 75% of our gross income is passive income or (ii) at least 50% of the value (determined on the basis of a quarterly average) of our assets is attributable to assets that produce or are held for the production of passive income. For this purpose, passive income generally includes dividends, interest, royalties, rents (other than rents and royalties derived in the active conduct of a trade or business and not derived from a related person), annuities and gains from assets that produce passive income.

If we are a PFIC in any taxable year, unless a mark-to-market election described below is made, U.S. Holders will generally be subject to additional taxes and interest charges on certain "excess" distribution we make and on any gain realized on the disposition or deemed disposition of ADSs or ordinary shares regardless of whether we continue to be a PFIC in the year of the "excess" distribution or disposition. Distributions in respect of a U.S. Holder's ADSs or ordinary shares during the taxable year will generally constitute "excess" distributions if, in the aggregate, they exceed 125% of the average amount of distributions in respect of the U.S. Holder's ADSs or ordinary shares over the three preceding taxable years or, if shorter, the portion of the U.S. Holder's holding period before such taxable year.

To compute the tax on "excess" distributions or any gain, (i) the "excess" distribution or the gain will be allocated ratably to each day in the holding period; (ii) the amount allocated to the current year and any tax year before we became a PFIC will be taxed as ordinary income in the current year; (iii) the amount allocated to other taxable years will be taxable at the highest applicable marginal rate in effect for that year; and (iv) an interest charge at the rate for underpayment of taxes will be imposed with respect to any portion of the "excess" distribution or gain described under (iii) above that is allocated to such other taxable years. In addition, if we are PFIC, no distribution will qualify for taxation at the preferential rate for non-corporate holders discussed in "Distributions on ADSs or Ordinary Shares" above.

If we are a PFIC in any year in which our ADSs or ordinary shares are "marketable", a U.S. Holder will be able to avoid the "excess" distribution rules described above if such U.S. Holder makes a timely "mark-to-market" election with respect to its ADSs or ordinary shares. The ADSs or ordinary shares will be "marketable" as long as they remain regularly traded on a national securities exchange, such as the New York Stock Exchange or the Hong Kong Stock Exchange. If this election is made in a timely fashion, the U.S. Holder will generally recognize as ordinary income or ordinary loss the difference between the fair market value of the ADSs or ordinary shares on the last day of any taxable year and the U.S. Holder's adjusted tax basis in the ADSs or ordinary shares. Any ordinary income resulting from this election will generally be taxed at ordinary income rates. Any ordinary losses will be deductible only to the extent of the net amount of previously included income as a result of the mark-to-market election, if any. The U.S. Holder's adjusted tax basis in the ADSs or ordinary shares will be adjusted to reflect any such income or loss.

Alternatively, the "excess" distribution rules described above may generally be avoided by electing to treat us as a "Qualified Electing Fund," or QEF, under Section 1295 of the Internal Revenue Code of 1986, as amended. A QEF election is available only if the U.S. Holder receives an annual information statement from the PFIC setting forth its ordinary earnings and net capital gains, as calculated for U.S. federal income tax purposes. We will not provide our

U.S. Holders with the information statement necessary to make a QEF election. Accordingly, U.S. Holders will not be able to make or maintain such an election.

A U.S. Holder is urged to consult its own tax advisors concerning the availability of making a mark-to-market election or a qualified electing fund election and the U.S. federal income tax consequences of holding the ADSs or ordinary shares if we are deemed to be a passive foreign investment company in any taxable year.

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Information Reporting and Backup Withholding. In general, unless a U.S. Holder belongs to a category of certain exempt recipients (such as corporations), information reporting requirements will apply to distributions on ADSs or ordinary shares made within the United States and to the proceeds of sales of ADSs or ordinary shares that are effected through the U.S. office of a broker or the non-U.S. office of a broker that has certain connections with the United States. Backup withholding currently imposed at a rate of 28% may apply to these payments if a U.S. Holder fails to provide a correct taxpayer identification number or certification of exempt status, fails to report in full dividend and interest income or, in certain circumstances, fails to comply with applicable certification requirements.

Any amounts withheld under the backup withholding rules may generally be allowed as a refund or a credit against a U.S. Holder's U.S. federal income tax, provided the U.S. Holder furnishes the required information to the Internal Revenue Service in a timely manner.

**Cayman Islands Taxation**

The following summary constitutes the opinion of Conyers Dill & Pearman (Cayman) Limited to the material Cayman Islands tax consequences of acquiring, owning, and transferring our ADSs and ordinary shares.

The Cayman Islands currently levy no taxes on individuals or corporations based upon profits, income, gains or appreciation and there is no taxation in the nature of inheritance tax or estate duty. You will not be subject to Cayman Islands taxation on payments of dividends or upon the repurchase by us of your ADSs or ordinary shares. In addition, you will not be subject to withholding tax on payments of dividends or distributions, including upon a return of capital, nor will gains derived from the disposal of ADSs or ordinary shares be subject to Cayman Islands income or corporation tax.

No Cayman Islands stamp duty will be payable by you in respect of the issue or transfer of ADSs or ordinary shares. However, an instrument transferring title to an ADS, if brought to or executed in the Cayman Islands, would be subject to Cayman Islands stamp duty. The Cayman Islands are not party to any double taxation treaties. There are no exchange control regulations or currency restrictions in the Cayman Islands.

We were incorporated under the laws of the Cayman Islands as an exempted company and, as such, obtained an undertaking in April 2000 from the Governor in Council of the Cayman Islands substantially that, for a period of twenty years from the date of such undertaking, no law which is enacted in the Cayman Islands imposing any tax to be levied on profit or income or gains or appreciation shall apply to us and no such tax and no tax in the nature of estate duty or inheritance tax will be payable, either directly or by way of withholding, on our ADSs or ordinary shares.

**F. Dividends and Paying Agents**

Not applicable.

**G. Statements by Experts**

Not applicable.

## H. Documents on Display

### Documents on Display

We are subject to the information requirements of the Exchange Act. In accordance with these requirements, we file reports and other information with the SEC. These materials, including this annual report and the exhibits thereto, may be inspected and copied at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. The public may obtain information on the operation of the SEC's Public Reference Room by calling the SEC in the United States at 1-800-SEC-0330. The SEC also maintains a website at <http://www.sec.gov> that contains reports, proxy statements and other information regarding registrants that file electronically with the SEC.

### Item 11. Quantitative and Qualitative Disclosures about Market Risk

Market risk is the risk of loss related to adverse changes in market prices, including foreign currency exchange rates and interest rates of financial instruments. We are exposed to these risks in the ordinary course of our business. Our exposure to these risks derives primarily from changes in interest rates and foreign currency exchange rates. To mitigate some of these risks, we utilize spot, forward, and derivative financial instruments.

#### Foreign Exchange Rate Fluctuation Risk

Our revenue, expense, and capital purchasing activities are primarily transacted in U.S. dollars. However, since we have operations consisting of manufacturing, sales activities and purchase outside of the U.S., we enter into transactions in other currencies. We are primarily exposed to changes in exchange rate for the Euro, Japanese Yen, and Renminbi.

To minimize the currency risk, we 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, 2018, we had outstanding cross currency swap contracts with notional amounts of RMB9,527.5 million to buy RMB and notional amounts of RMB3,028.8million to sell RMB.

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		
	12/31/16	12/31/17	12/31/18	12/31/16	12/31/17	12/31/18
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
EUR	112,827	125,171	50,601	39,619	72,181	37,800
JPY	41,976	30,422	54,166	35,237	29,245	41,589
RMB	2,714,492	2,410,284	2,757,762	1,633,433	1,765,846	2,989,434
Others	27,083	43,824	51,829	3,860	8,688	905

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		
	2018	2017	2016	2018	2017	2016	2018	2017	2016	2018	2017	2016
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
Profit or loss	(640)	(2,650)	(3,660)	(662)	(62)	(355)	12,193	(33,918)	(6,611)	(2,679)	(1,848)	(1,222)
Equity	(640)	(2,650)	(3,660)	(662)	(62)	(355)	12,193	(33,918)	(6,611)	(2,679)	(1,848)	(1,222)

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The following table details the foreign currency exchange derivatives outstanding at the end of the reporting period:

	Liabilities			Assets		
	12/31/16	12/31/17	12/31/18	12/31/16	12/31/17	12/31/18
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
Forward foreign exchange contracts	—	2	—	—	2,111	—
Cross currency swap contracts	—	—	—	—	—	1,158
Cross currency swap contracts – cash flow hedges	80,518	2,661	31,346	—	22,337	6,691
	80,518	2,663	31,346	—	24,448	7,849

We have not entered into foreign currency exchange contracts and cross currency swap contracts for speculative purposes. See "Item 3.D — Key Information — Risk Factors — Risks Related to Our Financial Condition and Business — Exchange rate fluctuations could increase our costs, which could adversely affect our operating results and the value of our ADSs" and "Item 3.D — Key Information — Risk Factors — Risks Related to Conducting Operations in China — Devaluation or appreciation in the value of the Renminbi or restrictions on convertibility of the Renminbi could adversely affect our business and operating results."

### Liquidity Risk

We manage 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.

The following table details our 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.

	Less than 3 months	3 months to 1 year	1–5 years	above 5 years	Total
	USD'000	USD'000	USD'000	USD'000	USD'000
<b>December 31, 2018</b>					
Cross currency swap contracts— cash flow hedges					
<b>Gross settled:</b>					
— inflows	—	607,595	508,984	—	1,116,579
— (outflows)	—	(613,270)	(528,383)	—	(1,141,653)
<b>Net settled:</b>					
— net inflows	(8,783)	—	(738)	—	(9,521)
Cross currency swap contracts					
<b>Gross settled:</b>					
— inflows	—	262,652	—	—	262,652
— (outflows)	—	(261,472)	—	—	(261,472)
	(8,783)	(4,495)	(20,137)	—	(33,415)



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	Less than 3 months USD'000	3 months to 1 year USD'000	1–5 years USD'000	above 5 years USD'000	Total USD'000
<b>December 31, 2017</b>					
Cross currency swap contracts— cash flow hedges					
<b>Gross settled:</b>					
— inflows	—	37,703	512,067	—	549,770
— (outflows)	—	(34,254)	(480,984)	—	(515,238)
<b>Net settled:</b>					
— net outflows	—	2,854	20,730	—	23,584
	—	6,303	51,813	—	58,116

	Less than 3 months USD'000	3 months to 1 year USD'000	1–5 years USD'000	above 5 years USD'000	Total USD'000
<b>December 31, 2016</b>					
Cross currency swap contracts— cash flow hedges					
<b>Gross settled:</b>					
— inflows	—	71,120	403,265	—	474,385
— (outflows)	—	(72,872)	(396,332)	—	(469,204)
<b>Net settled:</b>					
— net inflows	—	(1,355)	(1,475)	—	(2,830)
	—	(3,107)	5,458	—	(2,830)

### Interest Rate Risk

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 our market risks, including foreign exchange, liquidity, price fluctuations and interest rate risks are set out in Note 38 to our consolidated financial statements of this annual report for reference.

### Item 12. Description of Securities Other Than Equity Securities

#### A. Debt Securities

Not applicable.

#### B. Warrants and Rights

Not applicable.

#### C. Other Securities

Not applicable.

## D. American Depositary Shares

### Fees and Charges That An ADR Holder May Have To Pay

Category (as defined by SEC)	Depository Actions	Associated Fee
(a) Depositing or substituting the underlying shares	Each person to whom ADSs are issued against deposits of Shares, including deposits in respect of Share Distributions, Rights and Other Distributions (as such terms are defined in paragraph (10) of the Deposit Agreement as filed with the SEC on March 10, 2004 which we are referred to herein as the "Depository Agreement")	\$5.00 for each 100 ADSs (or portion thereof) evidenced by the new ADRs delivered
(b) Receiving or distributing dividends	Distribution of dividends	\$0.02 or less per ADS (or portion thereof)
(c) Selling or exercising rights	Distribution or sale of securities	Such fee being in an amount equal to the fee for the execution and delivery of ADSs referred to above which would have been charged as a result of the deposit of such securities
(d) Withdrawing an underlying security	Each person surrendering ADSs for withdrawal of Deposited Securities	\$5.00 for each 100 ADSs (or portion thereof) surrendered.
(e) Transferring, splitting or grouping receipts	Transfers, combining or grouping of depository receipts	\$1.50 per ADR
(f) General depository services, particularly those charged on an annual basis	Not applicable	Not applicable
(g) Expenses of the depository	Fees and expenses incurred by the Depository (including without limitation expenses incurred on behalf of Holders in connection with compliance with foreign exchange control regulations or any law or regulation relating to foreign investment) in delivery of Deposited Securities or otherwise in connection with the Depository's or its Custodian's compliance with applicable law, rule or regulation.	<p>The Company will pay all other charges and expenses of the Depository and any agent of the Depository (except the Custodian) pursuant to agreements from time to time between the Company and the Depository, except (i) stock transfer or other taxes and other governmental charges (which are payable by Holders or persons depositing Shares), (ii) cable, telex and facsimile transmission and delivery charges incurred at the request of persons depositing, or Holders delivering Shares, ADRs or Deposited Securities (which are payable by such persons or Holders), (iii) transfer or registration fees for the registration of transfer of</p> <p>Deposited Securities on any applicable register in connection with the deposit or withdrawal of</p> <p>Deposited Securities (which are payable by persons depositing Shares or Holders withdrawing Deposited Securities; there are no such fees in respect of the Shares as of the date of the Deposit Agreement), and (iv) expenses of the Depository in connection with the conversion of foreign currency into U.S. dollars (which are paid out of such foreign currency). These charges may be changed in the manner indicated in paragraph (16) of the Depository Agreement</p>

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**Fees and Payments Made By The Depositary To The Company**

***Direct Payments***

We did not receive any direct payment from the depositary in 2018.

***Indirect Payments***

There is no waiver of on-going ADR program maintenance in 2018 as the amended financial terms agreed with J.P. Morgan.

**Item 13. Defaults, Dividend Arrearages, and Delinquencies**

None.

**Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds**

Not applicable.

**Item 15. Controls and Procedures****Disclosure Controls and Procedures**

Our Co-Chief Executive Officers and our Chief Financial Officer have evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act) for the year ended and as of December 31, 2018. Based on that evaluation, our Co-Chief Executive Officers and our Chief Financial Officer concluded that our disclosure controls and procedures were effective and designed to ensure that the information required to be disclosed by us in reports filed under the Exchange Act is recorded, processed, summarized and reported within the time periods specified by the SEC's rules, regulations and forms and to ensure that information required to be disclosed by us in the reports we file or submit is accumulated and communicated to our management as appropriate to allow timely decisions regarding required disclosure.

**Report by Management on Internal Control over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting for our Company, pursuant to terms as defined in Rules 13a-15 (f) and 15d-15(f) under the Exchange Act. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements in accordance with IFRS and includes those policies and procedures that (a) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of a company's assets, (b) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with IFRS and that a company's receipts and expenditures are being made only in accordance with authorizations of a company's management and directors and (c) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of a company's assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, a system of internal control over financial reporting can provide only reasonable assurance with respect to consolidated financial statement preparation and presentation and may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies and procedures may deteriorate.

As required by Section 404 of the Sarbanes-Oxley Act and related rules as promulgated by the SEC, our management assessed the effectiveness of the internal control over financial reporting as of December 31, 2018 using criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on this evaluation, our management has concluded that the internal control over financial reporting was effective as of December 31, 2018.

**Attestation Report of the Registered Public Accounting Firm**

PricewaterhouseCoopers Zhong Tian LLP, our independent registered public accounting firm, audited the effectiveness of our company's internal control over financial reporting as of December 31, 2018, as stated in its report, which appears on page F-2 and F-3 of this Form 20-F.

**Changes in Internal Control Over Financial Reporting**

There were no changes in the design in our internal controls over financial reporting that occurred during the period covered by this annual report that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

**Item 16A. Audit Committee Financial Expert**

Our board has determined that Mr. Fan Ren Da Anthony is an audit committee financial expert as defined under the applicable rules of the SEC issued pursuant to Section 407 of the Sarbanes-Oxley Act of 2002. Mr. Fan is independent as such term is defined under Section 303A.02 of the New York Stock Exchange Listed Company Manual.

**Item 16B. Code of Ethics**

We have adopted a Code of Business Conduct and Ethics which is applicable to all of our employees, including our principal executive officers, Co-Chief Executive Officers, Chief Financial Officer, and any other persons performing similar functions. We did not make any amendment to, or grant waiver or implicit waiver for, a provision of our Code of Business Conduct and Ethics for the year ended December 31, 2018.

Our Code of Business Conduct and Ethics is available, free of charge, to any person who sends a request for a paper copy to us at Semiconductor Manufacturing International Corporation, 18 Zhangjiang Road, Pudong New Area, Shanghai, China 201203, Attention: Investor Relations.

**Item 16C. Principal Accountant Fees and Services**

The following table sets forth the aggregate audit fees, audit-related fees, tax fees and all other fees we paid or incurred for audit services, audit-related services, tax services and other services rendered by our principal accountants for the years ended December 31, 2017 and 2018.

	2017	2018
	(USD'000)	(USD'000)
Audit and Audit-Related Fees	1,413	1,372
Tax Fees	39	38
Other Fees	46	1,217

- (1) Audit fees consist of the standard work associated with the statutory audit as well as audit of our annual financial statements including the review of our quarterly financial results and filings with the Securities and Exchange Commission, Hong Kong Stock Exchange and other regulators. Audit fees also include services relating to our compliance with the requirements of the Sarbanes - Oxley Act and services relating to our resolution of SEC related comments. Audit-related fees represent the aggregate fees billed in each of the last two fiscal years for assurance and related services by our principal accountant that are reasonably related to the performance of the audit or review of the registrant's financial statements and are not reported under "Audit fees".
- (2) Tax Fees represent the aggregate fees incurred in each of the fiscal years listed for professional services rendered by our principal accountant for tax compliance, tax advice and tax planning.
- (3) Other Fees represent the aggregate fees incurred in each of the fiscal years listed for products and services provided by our principal accountant, other than the services reported in (1) and (2).

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PwC was the principal auditor for the year ended December 31, 2018. The audit committee has also approved and will continue to consider, on a case-by-case basis, all non-audit services. According to the charter of our audit committee, before our principal accountants are engaged by us to render audit or non-audit services, the engagement, including the nature and scope of the work to be performed and the associated fees, must be approved by our audit committee. Our audit committee has not established any pre-approval policies and procedures.

**Item 16D. Exemptions from the Listing Standards of Audit Committees**

Not applicable.

**Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers**

Not applicable.

**Item 16F. Changes in Registrant's Certifying Accountant**

Not applicable.

**Item 16G. Corporate Governance**

We were incorporated under the laws of the Cayman Islands. The principal trading market for our shares is the Hong Kong Stock Exchange. We have adopted a set of corporate governance guidelines in accordance with the applicable laws, rule and regulations, including our Corporate Governance Policy and our Code of Business Conduct and Ethics, each of which are posted on our website.

Companies listed on the New York Stock Exchange, or the NYSE, must comply with certain corporate governance standards under Section 303A of the New York Stock Exchange Listed Company Manual, or the NYSE Standards. Because our American Depositary Shares are registered with the SEC and are listed on NYSE, we are also subject to certain U.S. corporate governance requirements, including many of the provisions of the Sarbanes-Oxley Act of 2002. However, because we are a "foreign private issuer", we are permitted to follow corporate governance practices in accordance with Cayman Islands law and the Hong Kong Stock Exchange Listing Rules in lieu of certain corporate governance standards contained in the NYSE Standards.

Set forth below is a brief summary of the significant differences between our corporate governance practices and the corporate governance standards applicable to U.S. domestic companies listed on the NYSE, or U.S. domestic issuers:

**No requirement for majority of independent directors**

NYSE Section 303A.01 requires a NYSE-listed U.S. domestic company to have a majority of independent directors on the board of directors. We have elected to follow the Hong Kong Stock Exchange Listing Rules, which require a company's board to include at least one-third (but not less than three) of the members of a company's board to be independent non-executive directors. The laws of the Cayman Islands do not contain definition or requirements relating to "independent directors" nor require any member of a company's board be independent.

**Different standards to evaluate director independence**

NYSE Section 303A.02 provides detailed tests that NYSE-listed U.S. domestic issuers must use for determining independence of directors. While we may not specifically apply the NYSE tests, our Board, through its nomination committee, assesses independence in accordance with Hong Kong Stock Exchange Listing Rules, and in accordance with Rule 10A-3 under the Exchange Act in the case of audit committee members, and considers whether there are any relationships or circumstances that are likely to affect such director's independence from management.

**Executive sessions**

NYSE Section 303A.03 requires the non-executive directors of a NYSE-listed U.S. domestic company to meet in regularly scheduled executive sessions or closed-door sessions without management at least once a year. We are not required under the laws of Cayman Islands or Hong Kong Stock Exchange Listing Rules to have such regularly scheduled executive sessions. Our non-executive directors and independent directors meet with the Chairman of the Board, who is an executive director, at least once a year. Our executive directors and management are not present at these meetings.

**No nominating/corporate governance committee composed entirely of independent directors**

NYSE Section 303A.04 requires NYSE-listed U.S. domestic issuers to have a nominating/corporate governance committee composed entirely of independent directors. The nominating/corporate governance committee must have a written charter that sets out its purpose and certain minimum responsibilities required under NYSE Section 303A.04 (b)(i) and provides for an annual performance evaluation of the committee. We are not required under the laws of the Cayman Islands or the Hong Kong Stock Exchange Listing Rules to have a nominating/corporate governance committee composed entirely of independent directors.

Instead of a nominating/corporate governance committee, our Board has established a nomination committee with five members. Three members are independent non-executive directors while one member is an executive director and one is a non-executive director. The nomination committee is tasked to review the structure, size and composition (including the skills, knowledge and experience) of the Board at least annually, make recommendations on any proposed changes to the Board to complement our corporate strategy, identify individuals suitably qualified to become Board members consistent with criteria approved by the Board, assess the independence of independent non-executive Directors, make recommendations to the Board on the selection of individuals nominated for directorships, and make 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 Co-Chief Executive Officers. The Board also adopted a Board Diversity Policy on August 8, 2013 that sets out diversity criteria considered by the Board in identifying candidates. However, such nomination committee is not responsible for developing and recommending to the Board a set of corporate governance guidelines applicable to the Company and overseeing the evaluation of the Board and management.

**No compensation governance committee composed entirely of independent directors**

NYSE Section 303A.05 require NYSE-listed U.S. domestic issuers to have a compensation committee composed entirely of independent directors. The compensation committee must have a written charter that sets out its purpose and certain minimum responsibilities and provides for an annual performance evaluation of the committee.

Our Board has established a compensation committee with five members. Three members are independent non-executive directors while two members are non-executive directors. We have elected to follow the Hong Kong Stock Exchange Listing Rules, which require that a majority of the members of the compensation committee be independent non-executive directors. The laws of the Cayman Islands do not define or contain requirements

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relating to "independent directors" nor require a Cayman Islands exempted company to have a compensation committee.

We believe that the composition of our compensation committee and its duties and responsibilities, as described in our annual report for the relevant year, are generally responsive to the relevant NYSE Standards applicable to NYSE-listed U.S. domestic issuers. However, the charter of our compensation committee does not address all aspects of NYSE Section 303A.05. For example, NYSE Section 303A.05(c) and Item 407(e)(5) of Regulation S-K under the Securities Act require compensation committees of NYSE listed U.S. domestic issuers to produce a compensation committee report annually and include such report in their annual proxy statements or annual reports on Form 10-K. We have not addressed this in our compensation committee charter as we are not required under the laws of the Cayman Islands to have a compensation committee, or under the Hong Kong Stock Exchange Listing Rules to have such a compensation committee report, though we are required to disclose certain corporate governance matters in relation to the compensation committee in our annual report filed with the Hong Kong Stock Exchange. We disclose the amounts of compensation of our directors on a named basis, remuneration payable to members of the senior management by band, and remuneration payable to the five highest individuals on an aggregate basis in our annual report in accordance with the requirements of the Hong Kong Stock Exchange Listing Rules.

**No audit committee composed entirely of independent directors**

NYSE Sections 303A.07(a) requires NYSE-listed U.S. domestic issuers to have an audit committee composed entirely of independent directors. We have elected to follow the Hong Kong Stock Exchange Listing Rules, which require that a majority of the members of the audit committee be independent non-executive directors. Our Board has established an audit committee with three members. Two members are independent non-executive directors while the third is a non-executive director. The laws of the Cayman Islands do not define or contain requirements relating to "independent directors" nor require a Cayman Islands exempted company to have an audit committee

**Audit committee requirements**

NYSE Sections 303A.06 and 303A.07 require NYSE-listed U.S. domestic issuers to have an audit committee that satisfies the requirements of Rule 10A-3 under the Exchange Act, whose members meet certain requirements such as financial literacy and capacity for service in an audit committee, and have a written charter that sets out its purpose and certain minimum responsibilities. We believe that the composition of our audit committee and its duties and responsibilities, as described in our annual report for the relevant year, are generally responsive to the relevant NYSE Standards applicable to NYSE-listed U.S. domestic issuers. However, the charter for our audit and compensation committees may not address all aspects of NYSE Section 303A.06 and Rule 10A-3 under the Exchange Act. For example, NYSE Section 303A.07(a) requires the Board to evaluate the capacity of an audit committee member if he or she is simultaneously a member of the audit committee of more than three public companies. NYSE Section 303A.07(b)(iii) (G) requires an audit committee to draft clear policies for hiring external auditor's employees. Our audit committee has not drafted explicit policies regarding these matters, although our nomination committee continually evaluates the qualifications and capacity of directors and candidates for director (including audit committee members). Further, our audit committee pre-approves the hiring of any employee or former employee of the Company's independent auditor who was a member of the audit team during the three years preceding such hiring and the hiring of any employee or former employee of the independent auditor for senior positions regardless of whether that person was a member of the Company's audit team.

**Internal audit requirements**

NYSE Section 303A.07(c) requires NYSE-listed U.S. domestic issuers to have an internal audit function that provides ongoing assessments on the company's risk management processes and internal control system. Our Company has established an Internal Audit Department whose findings, as well as our Company's internal controls in general, are reviewed by our audit committee and has substantially the same functions as those contemplated by NYSE Section 303A.07(c).



**No shareholder vote on equity compensation plans**

NYSE Section 303A.08 requires that shareholders must be given the opportunity to vote on all equity compensation plans and material revisions to those plans. We have elected to follow the requirements of Cayman Islands law and the Hong Kong Stock Exchange Listing Rules in determining whether shareholder approval is required, and we do not follow the NYSE's detailed definition of what are considered "material revisions".

**No explicit internal policy regarding for Board self-evaluation and succession planning**

NYSE Section 303A.09 requires the board of directors of a NYSE-listed U.S. domestic issuer to conduct a self-evaluation at least annually to determine whether it and its committees are functioning effectively and draft succession planning policies which should include policies and principles for CEO selection and performance review, as well as policies regarding succession in the event of an emergency or the retirement of the CEO.

Neither the requirements of Cayman Islands law nor the Hong Kong Stock Exchange Listing Rules require explicit procedures for these matters, although our Board continually evaluates its performance and the performance of its committees, and reviews the professional development of directors and senior management.

**Code of Business Conduct and Ethics**

NYSE Section 303A.10 requires a NYSE-listed U.S. domestic issuer to adopt and disclose a code of business conduct and ethics for directors, officers and employees, and promptly disclose any waivers of the code for directors or executive officers. We have adopted a Code of Business Conduct and Ethics, which is available on the Company website, whose scope is similar but not identical to what is required under NYSE Section 303A.10.

**No explicit requirement for corporate governance certification**

NYSE Section 303A.12(a) requires the CEO of a NYSE-listed U.S. domestic issuer to certify to the NYSE each year that he or she is not aware of any violation by the listed company of NYSE corporate governance listing standards, qualifying the certification to the extent necessary. NYSE Section 303A.12(b) requires the CEO of a NYSE-listed U.S. domestic issuer to promptly notify the NYSE in writing after any executive officer of the listed company becomes aware of any non-compliance with any applicable provision of NYSE Section 303A.

Neither the requirements of Cayman Islands law nor the Hong Kong Stock Exchange Listing Rules require such certifications. However, our CEO is required to certify in the Company's 20-F annual report that, to his or her knowledge the information contained therein fairly represents in all material respects the financial condition and results of operation of the Company.

**Item 16H. Mine Safety Disclosure**

Not applicable.

**Item 17. Financial Statements**

We have elected to provide the financial statements and related information specified in Item 18 in lieu of Item 17.

**Item 18. Financial Statements**

See pages F-1 to F-107.

**Item 19. Exhibits**

Exhibit 1.1	<a href="#">Eleventh Amended and Restated Articles of Association, as adopted at the Registrant's annual general meeting of shareholders on June 2, 2008 (Filed as Exhibit 1.1 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2007, and incorporated herein by reference)</a>
Exhibit 4.1	<a href="#">Form of Indemnification Agreement, as adopted at the Registrant's annual general meeting of shareholders on May 6, 2005 (Filed as Exhibit 4.5 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2004, and incorporated herein by reference)</a>
Exhibit 4.2	<a href="#">Form of Service Contract between the Company and each of its executive directors (Filed as Exhibit 4.4 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2012, and incorporated herein by reference)</a>
Exhibit 4.3	<a href="#">Form of Service Contract between the Company and each of its non-executive directors and independent non-executive directors (Filed as Exhibit 4.5 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2012, and incorporated herein by reference)</a>
Exhibit 4.4	<a href="#">Subscription Agreement related to US\$200 Million Zero Coupon Convertible Bonds due 2018, dated October 24, 2013 by and between the Company as the Issuer and Deutsche Bank AG, Hong Kong Branch and J.P.Morgan Securities PLC as the Manager (Filed as Exhibit 4.11 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2013, and incorporated herein by reference)</a>
Exhibit 4.5	<a href="#">Subscription Agreement related to US\$95 Million Zero Coupon Convertible Bonds due 2018 convertible into our ordinary shares, dated as of June 4, 2014 and entered into by SMIC and J.P. Morgan Securities PLC and Deutsche Bank AG, Hong Kong Branch (Filed as Exhibit 4.12 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2014, and incorporated herein by reference)</a>
Exhibit 4.6	<a href="#">Subscription Agreement related to US\$500 Million 4.125% Bonds due 2019, dated as of September 25, 2014 and entered into by SMIC and J.P. Morgan Securities PLC and Deutsche Bank AG, Hong Kong Branch (Filed as Exhibit 4.13 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2014, and incorporated herein by reference)</a>
Exhibit 4.7	<a href="#">Placing and Subscription Agreement related to issue of 2,590,000,000 new ordinary shares, dated as of June 4, 2014 and entered into by SMIC, J.P. Morgan Securities PLC, Deutsche Bank AG, Hong Kong Branch and Datang Holdings (Hongkong) Investment Company Limited (Filed as Exhibit 4.14 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2014, and incorporated herein by reference)</a>
Exhibit 4.8	<a href="#">Share Purchase Agreement related to the proposed issuance of 4,700,000,000 new shares dated as of February 12, 2015, and entered into by the Company and China Integrated Circuit Industry Investment Fund Co., Ltd. (Filed as Exhibit 4.15 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2014, and incorporated herein by reference)</a>

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Exhibit 4.9	<a href="#">Share Purchase Agreement by and between the Company and Datang Holdings (Hongkong) Investment Company Limited dated as of June 11, 2015 (Filed as Exhibit 4.16 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2015, and incorporated herein by reference)</a>
Exhibit 4.10	<a href="#">Share Purchase Agreement by and between the Company and Country Hill Limited dated as of June 11, 2015 (Filed as Exhibit 4.17 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2015, and incorporated herein by reference)</a>
Exhibit 4.11	<a href="#">Summary of Disposal Agreement between Siltech Shanghai and JCET, Subscription Agreement between Siltech Shanghai and JCET, and Supplemental Agreement relating to Disposal Agreement between SilTech Shanghai and JCET (Filed as Exhibit 4.15 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2016, and incorporated herein by reference)</a>
Exhibit 4.12	<a href="#">Subscription Agreement relating to US\$450 Million Zero Coupon Convertible Bonds due 2022 convertible into our ordinary shares of Semiconductor Manufacturing International Corporation, dated as of June 7, 2016 and entered into by SMIC and J.P. Morgan Securities PLC (Filed as Exhibit 4.16 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2016, and incorporated herein by reference)</a>
Exhibit 4.13	<a href="#">Summary of Sale and Purchase Agreement to Acquire 70% of the Corporate Capital of LFoundry S.r.l. (Filed as Exhibit 4.17 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2016, and incorporated herein by reference)</a>
Exhibit 4.14	<a href="#">Placing Agreement related to issue of 241,418,625 new ordinary shares, dated as of June 4, 2017 and entered into by SMIC, J.P. Morgan Securities PLC and Deutsche Bank AG, Hong Kong Branch (Filed as Exhibit 4.14 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2017, and incorporated herein by reference)</a>
Exhibit 4.15	<a href="#">Subscription Agreement related to issue of US\$65 million perpetual subordinated convertible securities, dated as of June 4, 2017 and entered into by SMIC, J.P. Morgan Securities PLC, Deutsche Bank AG, Hong Kong Branch and BARCLAYS BANK PLC (Filed as Exhibit 4.15 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2017, and incorporated herein by reference)</a>
Exhibit 4.16	<a href="#">Summary of purchase of Shanghai Commercial Housing from Shanghai Zhangjiang Integrated Circuit Industry Zone Developing Co., Ltd (Filed as Exhibit 4.16 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2017, and incorporated herein by reference)</a>
Exhibit 4.17	<a href="#">Summary of sale and leaseback arrangements entered into by the Group with the subsidiaries of Sino IC Leasing Co., Ltd. (Filed as Exhibit 4.17 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2017, and incorporated herein by reference)</a>
Exhibit 4.18	<a href="#">2014 Stock Option Plan Prospectus (Filed as Exhibit 4.18 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2017, and incorporated herein by reference)</a>
Exhibit 4.19	<a href="#">2014 Equity Incentive Plan Prospectus (Filed as Exhibit 4.19 to the Registrant's Annual Report on Form 20 F for the fiscal year ended December 31, 2017, and incorporated herein by reference)</a>
Exhibit 4.20	<a href="#">Subscription Agreement related to issue of US\$300.0 million perpetual subordinated convertible securities, dated as of August 29, 2018, and entered into by SMIC and China Integrated Circuit Industry Investment Fund Co., Ltd</a>
Exhibit 4.21	<a href="#">Subscription Agreement related to issue of 57,054,901 new ordinary shares, dated as of August 29, 2018, and entered into by SMIC and China Integrated Circuit Industry Investment Fund Co., Ltd</a>

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Exhibit 4.22	<a href="#">Subscription Agreement related to issue of US\$200.0 million perpetual subordinated convertible securities, dated as of June 29, 2018, and entered into by SMIC and Datang Telecom Technology &amp; Industry Holding Co., Ltd.</a>
Exhibit 4.23	<a href="#">Subscription Agreement related to issue of 61,526,473 new ordinary shares, dated as of June 29, 2018, and entered into by SMIC and Datang Telecom Technology &amp; Industry Holding Co., Ltd.</a>
Exhibit 4.24	<a href="#">Summary of sale and leaseback arrangements entered into by the Group with the subsidiaries of Sino IC Leasing Co., Ltd.</a>
Exhibit 8.1	<a href="#">List of Significant Subsidiaries</a>
Exhibit 12.1	<a href="#">Certification of Co-Chief Executive Officer under Section 302 of the U.S. Sarbanes-Oxley Act of 2002</a>
Exhibit 12.2	<a href="#">Certification of Co-Chief Executive Officer under Section 302 of the U.S. Sarbanes-Oxley Act of 2002</a>
Exhibit 12.3	<a href="#">Certification of Chief Financial Officer under Section 302 of the U.S. Sarbanes-Oxley Act of 2002</a>
Exhibit 13.1	<a href="#">Certification of Co-Chief Executive Officer under Section 906 of the U.S. Sarbanes-Oxley Act of 2002</a>
Exhibit 13.2	<a href="#">Certification of Co-Chief Executive Officer under Section 906 of the U.S. Sarbanes-Oxley Act of 2002</a>
Exhibit 13.3	<a href="#">Certification of Chief Financial Officer under Section 906 of the U.S. Sarbanes-Oxley Act of 2002</a>
Exhibit 15.1	<a href="#">Consent of PricewaterhouseCoopers Zhong Tian LLP</a>
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

**SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

SEMICONDUCTOR MANUFACTURING INTERNATIONAL  
CORPORATION

Date: April 30, 2019

By: /s/ Gao Yonggang

Name: Gao Yonggang

Title: Chief Financial Officer, Executive Director and Joint  
Company Secretary

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**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Stockholders of Semiconductor Manufacturing International Corporation

**Opinions on the Financial Statements and Internal Control over Financial Reporting**

We have audited the accompanying consolidated statement of financial position of Semiconductor Manufacturing International Corporation and its subsidiaries (the "Company") as of December 31, 2018, 2017, and 2016, and the related consolidated statements of profit or loss and other comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2018, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018, 2017, and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the COSO.

**Basis for Opinions**

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the Report by Management on Internal Control over Financial Reporting appearing under Item 15 of Form 20-F. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

**Definition and Limitations of Internal Control over Financial Reporting**

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers Zhong Tian LLP  
Shanghai, the People's Republic of China  
April 30, 2019

We have served as the Company's auditor since 2014.



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SEMICONDUCTOR MANUFACTURING INTERNATIONAL CORPORATION AND SUBSIDIARIES  
CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME  
For the year ended December 31, 2018, 2017 and 2016

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

	Notes	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000	Year ended 12/31/16 USD'000
Revenue	5	3,359,984	3,101,175	2,914,180
Cost of sales		(2,613,307)	(2,360,431)	(2,064,499)
Gross profit		746,677	740,744	849,681
Research and development expenses, net		(558,110)	(427,111)	(318,247)
Sales and marketing expenses		(30,455)	(35,796)	(35,034)
General and administration expenses		(199,818)	(198,036)	(167,582)
Net impairment losses (recognized) reversal on financial assets	38	(937)	137	10,211
Other operating income, net	7	57,283	44,957	177
Profit from operations		14,640	124,895	339,206
Interest income		64,339	27,090	11,243
Finance costs	8	(24,278)	(18,021)	(23,037)
Foreign exchange losses		(8,499)	(12,694)	(1,640)
Other gains (losses), net	9	24,282	16,499	(2,113)
Share of gain (loss) profit of investment accounted for using equity method		21,203	(9,500)	(13,777)
Profit before tax		91,687	128,269	309,882
Income tax (expense) benefit	10	(14,476)	(1,846)	6,552
<b>Profit for the year</b>	11	<b>77,211</b>	<b>126,423</b>	<b>316,434</b>
<b>Other comprehensive income (loss)</b>				
<i>Items that may be reclassified subsequently to profit or loss</i>				
Exchange differences on translating foreign operations		(35,919)	23,213	(19,031)
Change in value of available-for-sale financial assets		—	(2,381)	807
Cash flow hedges	27	35,931	35,143	(34,627)
Share of other comprehensive income of joint ventures accounted for using equity method	27	—	17,646	—
Others		—	(131)	1
<i>Items that will not be reclassified to profit or loss</i>				
Actuarial gains or losses on defined benefit plans	27	129	(436)	1,520
<b>Total comprehensive income (loss) for the year</b>		<b>77,352</b>	<b>199,477</b>	<b>265,104</b>
Profit (loss) for the year attributable to:				
Owners of the Company		134,055	179,679	376,630
Non-controlling interests		(56,844)	(53,256)	(60,196)
		<b>77,211</b>	<b>126,423</b>	<b>316,434</b>
Total comprehensive income (loss) for the year attributable to:				
Owners of the Company		133,977	251,135	326,191
Non-controlling interests		(56,625)	(51,658)	(61,087)
		<b>77,352</b>	<b>199,477</b>	<b>265,104</b>
<b>Earnings per share*</b>				
Basic	14	<b>\$0.03</b>	<b>\$0.04</b>	<b>\$0.09</b>
Diluted	14	<b>\$0.03</b>	<b>\$0.04</b>	<b>\$0.08</b>

\* The basic and diluted earnings per share for the prior years 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 ("Share Consolidation"). Please refer to Note 14 for more details.

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**SEMICONDUCTOR MANUFACTURING INTERNATIONAL CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENT OF FINANCIAL POSITION**

As of December 31, 2018, 2017 and 2016

	Notes	12/31/18	12/31/17	12/31/16
		USD'000	USD'000	USD'000
<b>Assets</b>				
<i>Non-current assets</i>				
Property, plant and equipment	16	6,777,970	6,523,403	5,687,357
Land use right		105,436	97,477	99,267
Intangible assets	17	122,854	219,944	248,581
Investments in associates	19	1,135,442	758,241	240,136
Investments in joint ventures	20	15,687	31,681	14,359
Deferred tax assets	10	45,426	44,875	45,981
Financial assets at fair value through profit or loss	21	55,472	—	—
Derivative financial instruments	21	5,266	—	32,894
Other financial assets	21	—	17,598	—
Restricted cash	22	—	13,438	20,080
Other assets	21	11,176	42,810	42,870
Total non-current assets		8,274,729	7,749,467	6,431,525
<i>Current assets</i>				
Inventories	23	593,009	622,679	464,216
Prepayment and prepaid operating expenses		28,161	34,371	27,649
Trade and other receivables	24	837,828	616,308	645,822
Financial assets at fair value through profit or loss	21	41,685	—	—
Financial assets at amortized cost	21	1,996,808	—	—
Derivative financial instruments	21	2,583	—	—
Other financial assets	21	—	683,812	31,543
Restricted cash	22	592,290	336,043	337,699
Cash and cash equivalent	39	1,786,420	1,838,300	2,126,011
		5,878,784	4,131,513	3,632,940
Assets classified as held-for-sale	25	270,807	37,471	50,813
Total current assets		6,149,591	4,168,984	3,683,753
<b>Total assets</b>		<b>14,424,320</b>	<b>11,918,451</b>	<b>10,115,278</b>

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**SEMICONDUCTOR MANUFACTURING INTERNATIONAL CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENT OF FINANCIAL POSITION**

As of December 31, 2018, 2017 and 2016

	Notes	12/31/18 USD'000	12/31/17 USD'000	12/31/16 USD'000
<b>Equity and liabilities</b>				
<i>Capital and reserves</i>				
Ordinary shares, \$0.004 par value, 10,000,000,000 shares authorized, 5,039,819,199, 4,916,106,889 and 4,252,922,259 shares issued and outstanding at December 31, 2018, 2017 and 2016, respectively				
	26	20,159	19,664	17,012
Share premium	26	4,993,163	4,827,619	4,950,948
Reserves	27	109,346	134,669	93,563
Retained earnings (accumulated deficit)	28	331,298	187,008	(910,849)
Equity attributable to owners of the Company		5,453,966	5,168,960	4,150,674
Perpetual subordinated convertible securities	29	563,848	64,073	—
Non-controlling interests		2,905,766	1,488,302	1,252,553
Total equity		8,923,580	6,721,335	5,403,227
<i>Non-current liabilities</i>				
Borrowings	30	1,760,763	1,743,939	1,233,594
Convertible bonds	31	418,592	403,329	395,210
Bonds payable	32	—	496,689	494,909
Medium-term notes	33	—	228,483	214,502
Deferred tax liabilities	10	1,639	16,412	15,382
Deferred government funding	34	393,902	299,749	265,887
Derivative financial instruments	21	15,540	—	—
Other financial liabilities	21	11,948	1,919	74,170
Other liabilities	21	39,128	99,817	37,497
Total non-current liabilities		2,641,512	3,290,337	2,731,151
<i>Current liabilities</i>				
Trade and other payables	35	964,860	1,007,424	897,606
Contract liabilities	5	44,130	43,036	42,947
Borrowings	30	530,005	440,608	209,174
Convertible bonds	31	—	—	391,401
Bonds payable	32	498,551	—	—
Short-term notes		—	—	86,493
Medium-term notes	33	218,247	—	—
Deferred government funding	34	244,708	193,158	116,021
Accrued liabilities	36	164,604	180,912	230,450
Derivative financial instruments	21	15,806	—	—
Other financial liabilities	21	—	744	6,348
Current tax liabilities	10	2,607	270	460
Other liabilities	21	32,263	40,627	—
		2,715,781	1,906,779	1,980,900
Liabilities directly associated with assets classified as held-for-sale		143,447	—	—
Total current liabilities		2,859,228	1,906,779	1,980,900
<b>Total liabilities</b>		<b>5,500,740</b>	<b>5,197,116</b>	<b>4,712,051</b>
<b>Total equity and liabilities</b>		<b>14,424,320</b>	<b>11,918,451</b>	<b>10,115,278</b>

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

For the year ended December 31, 2018, 2017 and 2016

	Equity-										Change in value of available-		Share of other comprehensive income of					
	Ordinary shares	Share premium	settle employee benefits reserve	Foreign currency translation reserve	for-sale financial assets	Convertible bonds equity reserve	Defined benefit plan reserve	Cash flow hedges	joint ventures accounted for using equity method	Others	Accumulated deficit	Attributable to owner of the Company	Perpetual subordinated convertible securities	Non-controlling interest	Total equity			
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000			
	(Note 26)	(Note 26)	(Note 27)	(Note 27)	(Note 27)	(Note 27)	(Note 27)	(Note 27)	(Note 27)		(Note 28)	(Note 28)	(Note 29)					
Balance at December 31, 2015	16,830	4,903,861	70,459	(3,956)	447	29,564	—	—	—	130	(1,287,479)	3,729,856	—	460,399	4,190,255			
Profit for the year	—	—	—	—	—	—	—	—	—	—	376,630	376,630	—	(60,196)	316,434			
Other comprehensive income (losses) for the year	—	—	—	(18,131)	798	—	1,520	(34,627)	—	1	—	(50,439)	—	(891)	(51,330)			
Total comprehensive income (losses) for the year	—	—	—	(18,131)	798	—	1,520	(34,627)	—	1	376,630	326,191	—	(61,087)	265,104			
Exercise of stock options	140	36,064	(18,594)	—	—	—	—	—	—	—	—	17,610	—	—	17,610			
Share-based compensation	—	—	13,838	—	—	—	—	—	—	—	—	13,838	—	372	14,210			
Capital contribution from non-controlling interests	—	—	—	—	—	—	—	—	—	—	—	—	—	831,254	831,254			
Conversion options of convertible bonds exercised during the year	42	11,023	—	—	—	(821)	—	—	—	—	—	10,244	—	—	10,244			
Recognition of equity component of convertible bonds	—	—	—	—	—	52,935	—	—	—	—	—	52,935	—	—	52,935			
Business combination	—	—	—	—	—	—	—	—	—	—	—	—	—	21,615	21,615			
Subtotal	182	47,087	(4,756)	—	—	52,114	—	—	—	—	—	94,627	—	853,241	947,868			
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	—	1,252,553	5,403,227			
Profit for the year	—	—	—	—	—	—	—	—	—	—	179,679	179,679	—	(53,256)	126,423			
Other comprehensive income (losses) for the year	—	—	—	21,590	(2,356)	—	(436)	35,143	17,646	(131)	—	71,456	—	1,598	73,054			
Total comprehensive income (losses) for the year	—	—	—	21,590	(2,356)	—	(436)	35,143	17,646	(131)	179,679	251,135	—	(51,658)	199,477			
Issuance of ordinary shares	966	325,174	—	—	—	—	—	—	—	—	—	326,140	—	—	326,140			
Exercise of stock options	130	35,178	(18,220)	—	—	—	—	—	—	—	—	17,088	—	17	17,105			
Share-based compensation	—	—	17,495	—	—	—	—	—	—	—	—	17,495	—	719	18,214			
Capital contribution from non-controlling interests	—	—	—	—	—	—	—	—	—	—	—	—	—	294,000	294,000			
Conversion options of convertible bonds exercised during the year	1,556	427,168	—	—	—	(29,625)	—	—	—	—	—	399,099	—	—	399,099			
Perpetual subordinated convertible securities	—	—	—	—	—	—	—	—	—	—	—	—	64,073	—	64,073			
Share premium reduction	—	(910,849)	—	—	—	—	—	—	—	—	910,849	—	—	—	—			
Non-controlling interest on transfer of business operation	—	—	—	—	—	—	—	—	—	—	7,329	7,329	—	(7,329)	—			
Subtotal	2,652	(123,329)	(725)	—	—	(29,625)	—	—	—	—	918,178	767,151	64,073	287,407	1,118,631			
Balance at December 31, 2017	19,664	4,827,619	64,978	(497)	(1,111)	52,053	1,084	516	17,646	—	187,008	5,168,960	64,073	1,488,302	6,721,335			
Adoption on 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	5,168,960	64,073	1,488,302	6,721,335			
Profit for the year	—	—	—	—	—	—	—	—	—	—	134,055	134,055	—	(56,844)	77,211			
Other comprehensive income (losses) for the year	—	—	—	(36,138)	—	—	129	35,931	—	—	—	(78)	—	219	141			
Total comprehensive income (losses) for the year	—	—	—	(36,138)	—	—	129	35,931	—	—	134,055	133,977	—	(56,625)	77,352			
Issuance of ordinary shares	474	160,404	—	—	—	—	—	—	—	—	—	160,878	—	—	160,878			
Cancellation of treasury stock	(76)	(19,981)	—	—	—	—	—	—	—	—	—	(20,057)	—	—	(20,057)			
Exercise of stock options	97	25,121	(17,211)	—	—	—	—	—	—	—	—	8,007	—	69	8,076			
Share-based compensation	—	—	10,912	—	—	—	—	—	—	—	—	10,912	—	749	11,661			
Capital contribution from non-controlling interests	—	—	—	—	—	—	—	—	—	—	—	—	—	1,488,900	1,488,900			
Perpetual subordinated convertible securities	—	—	—	—	—	—	—	—	—	—	—	—	499,775	—	499,775			
Distribution to perpetual subordinated convertible securities	—	—	—	—	—	—	—	—	—	—	(6,300)	(6,300)	—	—	(6,300)			
Deconsolidation of subsidiary due to loss of control	—	—	—	(1,774)	—	—	—	—	—	—	—	(1,774)	—	(15,629)	(17,403)			
Share of other capital reserve of associates accounted for using equity method	—	—	—	—	—	—	—	—	—	(637)	—	(637)	—	—	(637)			
Subtotal	495	165,544	(6,299)	(1,774)	—	—	—	—	—	(637)	(6,300)	151,029	499,775	1,474,089	2,124,893			
Balance at December 31, 2018	20,159	4,993,163	58,679	(38,409)	—	52,053	1,213	36,447	—	(637)	331,298	5,453,966	563,848	2,905,766	8,923,580			

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**SEMICONDUCTOR MANUFACTURING INTERNATIONAL CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENT OF CASH FLOWS**

For the year ended December 31, 2018, 2017 and 2016

	Notes	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000	Year ended 12/31/16 USD'000
<b>Operating activities</b>				
Profit for the year		77,211	126,423	316,434
Adjustments for:				
Income tax expense (benefit)	10	14,476	1,846	(6,552)
Depreciation and amortization expense	11	1,048,410	971,382	729,866
Expense recognized in respect of equity-settled share-based payments	11	11,661	18,214	14,210
Interest income		(64,339)	(27,090)	(11,243)
Finance costs	8	24,278	18,021	23,037
(Gain) loss on disposal of property, plant and equipment and assets classified as held-for-sale	7	(30,838)	(17,513)	1,846
Gain on deconsolidation of subsidiaries		(3,466)	—	—
Gain on disposal of associates		—	(18,884)	—
Impairment losses on assets	11	16,567	46,720	1,024
Net (gain) loss arising on financial instruments at fair value through profit or loss	9	(9,773)	(6,890)	7,617
Net loss (gain) on foreign exchange		8,632	26,101	(26,236)
Share of (gain) loss of investment accounted for using equity method		(21,203)	9,500	13,777
Other non-cash loss		—	—	175
		1,071,616	1,147,830	1,063,955
Operating cash flows before movements in working capital:				
(Increase) decrease in trade and other receivables		(106,404)	59,084	(100,980)
Increase in inventories		(31,063)	(205,320)	(51,344)
Increase in restricted cash relating to operating activities		(325,512)	(81,795)	(147,834)
Decrease (increase) in prepaid operating expenses		2,000	(6,722)	17,615
Decrease in other operating assets		6,660	2,938	1,576
Increase in trade and other payables		56,598	109,285	72,836
Increase (decrease) in contract liabilities		1,094	89	(13,790)
Increase in deferred government funding		143,485	110,999	126,845
Increase (decrease) in other operating liabilities		17,866	(40,604)	25,031
Cash generated from operations		836,340	1,095,784	993,910
Interest paid		(47,850)	(34,086)	(27,497)
Interest received		34,840	19,425	12,464
Income taxes paid		(23,904)	(437)	(1,675)
Net cash generated from operating activities		799,426	1,080,686	977,202

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**SEMICONDUCTOR MANUFACTURING INTERNATIONAL CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENT OF CASH FLOWS**

For the year ended December 31, 2018, 2017 and 2016

	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000	Year ended 12/31/16 USD'000
<b>Investing activities</b>			
Payments to acquire financial assets at fair value through profit or loss	(447,717)	—	—
Proceeds from sale of financial assets at fair value through profit or loss	540,166	—	—
Payments to acquire financial assets at amortized cost	(4,407,790)	—	—
Proceeds from maturity of financial assets at amortized cost	2,954,346	—	—
Payments to acquire financial assets	—	(829,371)	(917,272)
Proceeds on sale of financial assets	—	186,509	1,175,768
Payments for property, plant and equipment	(1,808,253)	(2,287,205)	(2,757,202)
Proceeds from disposal of property, plant and equipment and assets classified as held-for-sale	398,162	688,192	259,799
Payments for joint ventures, associates and other financial assets	(427,197)	(467,885)	(87,645)
Proceeds from disposal of joint ventures and other financial assets	9,251	1,028	5,523
Distributions received from joint ventures and associates	12,322	255	2,027
Payments for intangible assets	(9,817)	(43,755)	(85,729)
Payments for land use rights	(14,425)	—	—
Payments for deposit of investing activities	(45,503)	—	—
Proceeds from release of restricted cash relating to investing activities	54,743	90,093	34,614
Net cash outflow from deconsolidation of subsidiaries <sup>(1)</sup>	(5,549)	—	—
Payment for business combination	—	—	(73,216)
Net cash used in investing activities	(3,197,261)	(2,662,139)	(2,443,333)
<b>Financing activities</b>			
Proceeds from borrowings	782,402	1,194,659	1,239,265
Repayment of borrowings	(536,752)	(537,016)	(228,928)
Proceeds from issuance of new shares	160,878	326,351	—
Proceeds from issuance of convertible bonds	—	—	441,155
Proceeds from issuance of short-term and medium-term notes	—	—	314,422
Repayment of short-term notes	—	(87,858)	—
Proceeds from issuance of perpetual subordinated convertible securities	499,775	64,350	—
Distribution paid to perpetual subordinated convertible securities holders	(6,300)	—	—
Proceeds from exercise of employee stock options	8,076	17,105	17,610
Payments to acquire treasury shares	(20,057)	—	—
Proceeds from non-controlling interests - capital contribution	1,488,900	294,000	831,254
Net cash from financing activities	2,376,922	1,271,591	2,614,778
Net (decrease) increase in cash and cash equivalent	(20,913)	(309,862)	1,148,647
Cash and cash equivalent at the beginning of the year	1,838,300	2,126,011	1,005,201
Effects of exchange rate changes on the balance of cash held in foreign currencies	(16,413)	22,151	(27,837)
	1,800,974	1,838,300	2,126,011
Cash and cash equivalent of disposal group as held-for-sale	(14,554)	—	—
Cash and cash equivalent at the end of the year	1,786,420	1,838,300	2,126,011

(1) The net cash outflow was from deconsolidation of subsidiaries due to the Company lost control of Ningbo Semiconductor International Corporation on April 13, 2018. Please refer to Note 19 for more details.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended December 31, 2018

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. Semiconductor Manufacturing International Corporation is an investment holding company.

Semiconductor Manufacturing International Corporation and its subsidiaries (hereinafter collectively referred to as the "Group") are mainly engaged in the computer-aided design, manufacturing, testing, packaging, and trading of integrated circuits and other semiconductor services, as well as designing and manufacturing semiconductor masks. The principal subsidiaries and their activities are set out in Note 18.

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

2. Application of new and revised International Financial Reporting Standards ("IFRSs")

**NEW AND REVISED IFRSs THAT ARE MANDATORILY EFFECTIVE FOR THE YEAR ENDED DECEMBER 31, 2018**

***IFRS 9 Financial Instruments***

IFRS 9 replaces the provisions of IAS 39 that relate to the recognition, classification and measurement of financial assets and financial liabilities, derecognition of financial instruments, impairment of financial assets and hedge accounting.

The adoption of IFRS 9 Financial Instruments from January 1, 2018 resulted in changes in accounting policies and adjustments to the amounts recognized in the financial statements. In accordance with the transitional provisions in IFRS 9, comparative figures have not been restated.

On January 1, 2018 (the date of initial application of IFRS 9), the Group's management has assessed which business models apply to the financial assets held by the Group and has classified its financial instruments into the appropriate IFRS 9 categories.

(i) Classification and measurement

(1) Reclassification from available-for-sale to fair value through profit or loss ("FVPL")

The group elected to present in profit or loss changes in the fair value of all its equity investments previously classified as available-for-sale, because these investments are held as long-term strategic investments that are not expected to be sold in the short to medium term. As a result, assets with a fair value of fair US\$24.8 million were reclassified from available-for-sale financial assets to financial assets at FVPL on January 1, 2018.

Related gains of US\$16.5 million were transferred from reserves to retained earnings on January 1, 2018. For the year ended December 31, 2018, net fair value gains of US\$2.0 million relating to these investments were recognized in profit or loss.

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- (2) Reclassification from other financial assets to FVPL  
Certain investments in financial products sold by banks were reclassified from other financial assets to financial assets at FVPL (US\$117.9 million as at January 1, 2018). They do not meet the IFRS 9 criteria for classification at amortized cost, because their cash flows do not represent solely payments of principal and interest.
- (3) Reclassification from other financial assets to amortized cost  
Certain investments in over 3 months bank deposits were reclassified from other financial assets to amortized cost (US\$559.0 million as at January 1, 2018). At the date of initial application the Group's business model is to hold these investments for collection of contractual cash flows, and the cash flows represent solely payments of principal and interest on the principal amount. There was no impact on retained earnings at January 1, 2018.
- (ii) Impairment of financial assets  
The Group has the following types of financial assets subject to IFRS 9 new expected credit loss model:
- Trade receivables; and
  - Other financial assets at amortized cost

For trade receivable, the Group applies the simplified approach for expected credit losses prescribed by IFRS 9. Based on the assessments performed by management, the changes in the loss allowance for trade receivables are insignificant.

Impairment on other financial assets at amortized cost is measured as either 12-month expected credit losses or lifetime expected credit loss, depending on whether there has been a significant increase in credit risk since the initial recognition. Based on the assessments performed by management, the changes in the loss allowance for other financial assets at amortized cost are insignificant.

**IFRS 15 Revenue from Contracts with Customers**

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 supersedes existing revenue recognition guidance including IAS 18 Revenue, IAS 11 Construction Contracts and related interpretations.

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



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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 expected changes in accounting policies will 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 balance sheet to reflect the terminology of IFRS 15, in relation to advance payment received from customers were previously included in trade and other payables (US\$43.0 million as at January 1, 2018). Based on the assessment, the timing of revenue recognition on sale of goods is nearly unchanged.

### Impact on the financial statements

The following tables show the adjustments as the impact of the adoption of IFRS 15 and IFRS 9 on the Group's financial statements and also disclose the new accounting policies that have been applied from January 1, 2018, where they are different to those applied in prior periods.

The Group has adopted IFRS 15 retrospectively with restating comparatives for the 2016 and 2017 financial years.

(In USD'000)

	12/31/16	Impact on IFRS 15	12/31/16	12/31/17	Impact on IFRS 15	12/31/17
Consolidated statement of financial position (extract)	As originally presented	Contract liabilities	Restated	As originally presented	Contract liabilities	Restated
Trade and other payables	940,553	(42,947)	897,606	1,050,460	(43,036)	1,007,424
Contract liabilities	—	42,947	42,947	—	43,036	43,036
	940,553	—	940,553	1,050,460	—	1,050,460

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The Group has adopted IFRS 9 without restating comparative information as at December 31, 2017.

(In USD'000)

	12/31/17	Impact on IFRS 9						01/01/18
	As originally presented	Cross currency swap contracts	Foreign currency forward contracts	Financial products sold by banks	3 months bank deposits	Equity securities	Contingent consideration	Restated
<b>Consolidated statement of financial position (extract)</b>								
<b>Non-current assets</b>								
Other assets	42,810	—	—	—	—	(24,844)	—	17,966
Financial assets at fair value through profit or loss	—	—	—	—	—	24,844	—	24,844
Derivative financial instruments	—	17,598	—	—	—	—	—	17,598
Other financial assets	17,598	(17,598)	—	—	—	—	—	—
<b>Current assets</b>								
Financial assets at fair value through profit or loss	—	—	—	117,928	—	—	—	117,928
Financial assets at amortized cost	—	—	—	—	559,034	—	—	559,034
Derivative financial instruments	—	4,739	2,111	—	—	—	—	6,850
Other financial assets	683,812	(4,739)	(2,111)	(117,928)	(559,034)	—	—	—
	<u>744,220</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>744,220</u>
<b>Non-current liabilities</b>								
Derivative financial instruments	—	1,919	—	—	—	—	—	1,919
Other financial liabilities	1,919	(1,919)	—	—	—	—	12,549	12,549
Other Liabilities	99,817	—	—	—	—	—	(12,549)	87,268
<b>Current liabilities</b>								
Derivative financial instruments	—	742	2	—	—	—	—	744
Other financial liabilities	744	(742)	(2)	—	—	—	—	—
	<u>102,480</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>102,480</u>
<b>Equity</b>								
Reserves	134,669	—	—	—	—	(16,535)	—	118,134
Retained earnings	187,008	—	—	—	—	16,535	—	203,543
	<u>321,677</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>321,677</u>

#### 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
IFRS 16 — Lease	On or after January 1, 2019
IFRS 17 - Insurance Contracts	On or after January 1, 2022
IFRIC 23 — Uncertainty over Income Tax Treatments	On or after January 1, 2019
Amendments to IFRS 9 — Prepayment Features with Negative Compensation	On or after January 1, 2019
Amendments to IAS 28 — Long-term Interests in Associates and Joint Ventures	On or after January 1, 2019
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
Amendments to IAS 1 and IAS 8 — Definition of material	On or after January 1, 2019
Amendments to IFRS 10 and IAS 28 — Sale or contribution of assets between an investor and its association or joint venture	Not yet determined

The new IFRS 16 standard will result in almost all leases being recognized on the balance sheet by lessees, as the distinction between operating and finance leases is removed. Under the new standard, an asset (the right to use the leased item) and a financial liability to pay rentals are recognized. The only exceptions are short-term and low-value leases.

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The Group has set up a project team which has reviewed all of the Group's leasing arrangements over the last year in light of the new lease accounting rules in IFRS 16. The standard will affect primarily the accounting for the Group's operating leases and sales and leaseback transaction.

As at the reporting date, the Group has lease expense of US\$303.5 million on non-cancellable operating lease commitments (see note 41).

The Group expects to recognize right-of-use assets and lease liabilities of approximately US\$279.7 million on January 1, 2019.

The Group will apply the standard from its mandatory adoption date of January 1, 2019. The Group intends to apply the simplified transition approach and will not restate comparative amounts for the year prior to first adoption. Right-of-use assets for property leases will be measured on transition as if the new rules had always been applied. All other right-of-use assets will be measured at the amount of the lease liability on adoption.

There are no other standards that are not yet effective and that would be expected to have a material impact on the Group in the current or future reporting periods and on foreseeable future transactions.

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 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;

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- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.

The principal accounting policies are set out below.

#### **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.

## **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.

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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.

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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.

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**

Revenue is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances.

### ***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.

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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.

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.

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 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 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 United 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).

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.

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Government funding that is receivable as compensation for expenses or losses already incurred is recorded as a liability upon receipt and recognized as reduction of expenses or losses 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.

Besides, LFoundry S.r.l. ("LFoundry", the Company's majority-owned subsidiary in Avezzano, Italy) employees are entitled to a retirement plan and a defined benefit plan. The liability recognized in the consolidated statement of financial position in respect of defined benefit plans is the present value of the defined benefit obligation at the end of the reporting period. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related defined benefit obligation.

#### **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 straight-line 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.

#### **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 statements 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.

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.

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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
Leasehold equipment under finance leases	Over the lease terms

#### **Land use right**

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.

#### **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.

#### **Business combinations**

Business combinations are accounted for using the acquisition method. The consideration transferred is measured at the acquisition date fair value which is the sum of the acquisition date fair values of assets transferred by the Group, liabilities assumed by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree that are present ownership interests and entitle their holders to a proportionate share of net assets in the event of liquidation at fair value or at the proportionate share of the acquiree's identifiable net assets. All other components of non-controlling interests are measured at fair value. Acquisition-related costs are expensed as incurred.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts of the acquiree.

Any contingent consideration to be transferred by the acquirer is recognized at fair value at the acquisition date. Contingent consideration classified as an asset or liability is measured at fair value with changes in fair value recognized in profit or loss. Contingent consideration that is classified as equity is not remeasured and subsequent settlement is accounted for within equity.

## **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.

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**

Leases that transfer substantially all the rewards and risks of ownership of assets to the Group, other than legal title, are accounted for as finance leases. At the inception of a finance lease, the cost of the leased asset is capitalized at the present value of the minimum lease payments and recorded together with the obligation, excluding the interest element, to reflect the purchase and financing. Assets held under capitalized finance leases are included in property, plant and equipment, and depreciated over the shorter of the lease terms and the estimated useful lives of the assets. The finance costs of such leases are charged to the statement of profit or loss and other comprehensive income so as to provide a constant periodic rate of charge over the lease terms.

Leases where substantially all the rewards and risks of ownership of assets remain with the lessor are accounted for as operating leases. Where the Group is the lessee, rentals payable under operating leases net of any incentives received from the lessor are charged to the statement of profit or loss and other comprehensive income on the straight-line basis over the lease terms.

## **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 pledged against letter of credit, short-term and long-term credit facilities and changes of restricted cash paid for property, plant and equipment are presented as investing activity in consolidated statements of cash flows. Changes of restricted cash of unused government funding for expensed research and development activities are presented as operating activity in consolidated statements 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.

## **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.

### **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 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.
- **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. 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. 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.

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)



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- 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.

## **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 FVTPL' or 'other financial liabilities'.

### *Financial liabilities at FVTPL*

Financial liabilities are classified as at FVTPL (including foreign currency forward contracts and cross currency swap contracts and contingent consideration) when the financial liability is held for trading.

Financial liabilities at FVTPL 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 and losses' 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.

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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.

#### *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 foreign exchange forward contracts and cross currency swap contracts. Further details of derivative financial instruments are disclosed in Note 21 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 cash flow hedges of the gain or loss on cash flow hedges.

The effective portion of the gain or loss on the 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 the statement of 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 nonfinancial 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.

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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.

***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. An 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.

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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.

**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, the estimated forfeiture rates 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 countries 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.

**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.

**Sales and lease back**

The Group entered into arrangements to sell and leaseback a batch of production equipment with a repurchase option at a pre-determined price. The Group made judgements on whether the arrangements are lease arrangements and whether they are operating lease. The Group estimates the fair value of production equipment based on the price of similar production equipment to judge whether the repurchase option was set at a significant discount to the estimated fair value when it becomes exercisable and whether the repurchase option will be almost certain to be exercised under the scope of IAS 17 Leases and SIC 27 Evaluating the Substance of Transactions in the Legal Form of a Lease.

5. Segment information

**DISAGGREGATION OF REVENUE FROM CONTRACTS WITH CUSTOMERS**

The Group is engaged principally in the computer-aided design, manufacturing and trading of integrated circuits. The Group's chief operating decision makers have been identified as the Co-Chief Executive Officers, who review consolidated results when making decisions about resources allocation and assessing performance of the Group. The Group operates in one segment. The measurement of segment profits is based on profit from operation as presented in the statements of profit or loss and other comprehensive income.

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The Group deriving revenue from the transfer of goods and services only at a point in time in the three geographical areas — United States, Europe, and Asia Pacific. The Group's operating revenue from customers, based on the location of their headquarters, is detailed below.

	Revenue from external customers		
	Year ended	Year ended	Year ended
	12/31/18	12/31/17	12/31/16
<b>At a point in time</b>	<b>USD'000</b>	<b>USD'000</b>	<b>USD'000</b>
United States <sup>(1)</sup>	1,062,134	1,240,906	858,858
Mainland China and Hong Kong	1,985,292	1,465,553	1,447,427
Eurasia <sup>(2)</sup>	312,558	394,716	607,895
	<b>3,359,984</b>	<b>3,101,175</b>	<b>2,914,180</b>

(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.

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
	12/31/18	12/31/17	12/31/16
<b>At a point in time</b>	<b>USD'000</b>	<b>USD'000</b>	<b>USD'000</b>
Sales of wafers	3,031,770	3,038,947	2,803,819
Mask making, testing and others <sup>(1)</sup>	328,214	62,228	110,361
	<b>3,359,984</b>	<b>3,101,175</b>	<b>2,914,180</b>

(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\$44.1 million as of December 31, 2018 (December 31, 2017: US\$43.0 million and December 31, 2016: US\$42.9 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\$43.0 million (2017: US\$42.9 million and 2016: US\$56.7 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, 2018, 2017 and 2016, 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		
	Year ended	Year ended	Year ended
	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
United States	15	45	69
Europe	1,603	137,778	125,339
Asia <sup>(1)</sup>	66	117	97
Hong Kong	2,415	2,618	2,839
Mainland China	6,773,871	6,382,845	5,559,013
	<u>6,777,970</u>	<u>6,523,403</u>	<u>5,687,357</u>

(1) Not including Mainland China and Hong Kong

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			Gross accounts receivable		
	Year ended December 31,			December 31,		
	2018	2017	2016	2018	2017	2016
Customer A	582,349	538,102	609,802	75,510	95,575	129,619
Customer B	527,633	636,662	382,853	67,734	133,281	78,639
Customer A	17 %	17 %	21 %	18 %	23 %	26 %
Customer B	16 %	21 %	13 %	16 %	33 %	16 %

7. Other operating income, net

	Year ended	Year ended	Year ended
	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
Gain (loss) on disposal of property, plant and equipment and assets classified as held-for-sale <sup>(1)</sup>	30,838	17,513	(1,846)
Impairment loss recognized on tangible and intangible assets (Note 11)	(9,218)	—	(7,529)
Government funding (Note 34)	32,198	27,444	9,542
Others	3,465	—	10
	<u>57,283</u>	<u>44,957</u>	<u>177</u>

(1) The gain on disposal of property, plant and equipment and assets classified as held-for-sale for the year ended December 31, 2018 was primarily from the gain arising from the disposal of equipment. The gain on disposal of property, plant and equipment and assets classified as held-for-sale for the year ended December 31, 2017 was primarily due to the gain arising from the disposal of equipment of which US\$6.9 million was related to sale and lease back transactions as disclosed in Note 40.

The loss on disposal of property, plant and equipment and assets classified as held-for-sale for the year ended December 31, 2016 was primarily due to the loss arising the disposal of equipment and the gain arising from the sales of the staff living quarters in Beijing to employees.



## 8. Finance costs

	Year ended 12/31/18	Year ended 12/31/17	Year ended 12/31/16
	USD'000	USD'000	USD'000
Interest on:			
Bank and other borrowings	44,668	25,543	17,793
Finance leases	190	232	62
Convertible bonds	15,263	15,818	16,352
Corporate bonds	22,487	22,405	22,327
Medium-term notes	8,335	8,185	4,625
Short-term notes	—	1,164	1,509
Less: government funding (Note 34)	(19,496)	(24,182)	(11,639)
	71,447	49,165	51,029
Less: amounts capitalized	(47,169)	(31,144)	(27,992)
	24,278	18,021	23,037

The weighted average effective interest rate on funds borrowed generally is 2.10% per annum (2017: 1.65% per annum and 2016: 2.12% per annum).

## 9. Other gains (losses), net

	Year ended 12/31/18	Year ended 12/31/17	Year ended 12/31/16
	USD'000	USD'000	USD'000
<b>Net gain (loss) arising on financial instruments at FVPL</b>			
Cross currency swap contracts — cash flow hedges	2,265	2,150	(14,989)
Cross currency swap contracts	1,158	—	—
Foreign currency forward contracts	(2,108)	2,109	—
Financial products sold by banks	6,443	1,087	4,651
Equity securities	2,015	—	—
Other derivative financial instrument <sup>(1)</sup>	—	1,544	2,721
	9,773	6,890	(7,617)
Others <sup>(2)</sup>	14,509	9,609	5,504
	24,282	16,499	(2,113)

(1) The derivative financial instrument was a put option with the right of Siltech Semiconductor (Shanghai) Corporation Limited ("SilTech Shanghai", an indirectly wholly-owned subsidiary of the Company) to sell Suzhou Changjiang Electric Xinke Investment Co., Ltd. ("Changjiang Xinke") to Jiangsu Changjiang Electronics Technology Co., Ltd. ("JCET"), pursuant to an investment exit agreement entered in December 2014 and exercised in June 2017.

(2) In 2017, others included a gain of US\$18.5 million arising from the disposal agreement and the subscription agreement (Note 19) entered by SilTech Shanghai and JCET on April 27, 2016, and a loss of potential cash compensation accrued at US \$12.5 million that may be incurred depending on the profit of Changjiang Xinke during the three years of 2017, 2018 and 2019. The potential cash compensation was deemed as the terms of the supplemental agreement entered by SilTech Shanghai and JCET on December 9, 2016.

## 10. Income taxes

**Income tax expense (benefit)**

	Year ended 12/31/18	Year ended 12/31/17	Year ended 12/31/16
	USD'000	USD'000	USD'000
Current tax — Land Appreciation Tax	(172)	179	731
Current tax — Enterprise Income Tax	15,598	(469)	1,306
Deferred tax	(950)	2,136	(8,589)
	<u>14,476</u>	<u>1,846</u>	<u>(6,552)</u>

The income tax expense (benefit) for the year can be reconciled to the accounting profit as follows:

	Year ended 12/31/18	Year ended 12/31/17	Year ended 12/31/16
	USD'000	USD'000	USD'000
Profit before tax	<u>91,687</u>	<u>128,269</u>	<u>309,882</u>
Income tax expense calculated at 15% (2017: 15% and 2016: 15%)	13,753	19,240	46,482
Effect of tax holiday	(69,581)	(50,258)	(41,484)
Additional deduction for research and development expenditures	(47,541)	(25,260)	(13,107)
Tax losses for which no deferred tax assets were recognized <sup>(1)</sup>	127,686	70,341	39,777
Reversal (utilization) of previously unrecognized tax losses of temporary differences	—	5,687	(43,440)
Effect of different tax rates of subsidiaries operating in other jurisdictions	(9,669)	(18,082)	4,517
Others	(172)	178	703
	<u>14,476</u>	<u>1,846</u>	<u>(6,552)</u>

- (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 tax rate used for the 2018, 2017 and 2016 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**

	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
Income tax payable	<u>2,607</u>	<u>270</u>	<u>460</u>

**Deferred tax balances**

The following is the analysis of deferred tax assets (liabilities) presented in the consolidated statement of financial position:

	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
<b>Deferred tax assets</b>			
Property, plant and equipment	42,613	41,271	45,981
Intangible Assets	1,688	1,844	—
Others	1,125	1,760	—
	<u>45,426</u>	<u>44,875</u>	<u>45,981</u>
<b>Deferred tax liabilities</b>			
Property, plant and equipment	(1,588)	(16,412)	(15,382)
Others	(51)	—	—
	<u>(1,639)</u>	<u>(16,412)</u>	<u>(15,382)</u>
	<u>43,787</u>	<u>28,463</u>	<u>30,599</u>

	Opening balance	Deconsolidation of subsidiary	Reclassified as held-for-sale	Recognize in profit or loss	Closing balance
	USD'000	USD'000	USD'000	USD'000	USD'000
<b>December 31, 2018</b>					
<b>Net deferred tax assets in relation to</b>					
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
	<u>28,463</u>	<u>(63)</u>	<u>14,437</u>	<u>950</u>	<u>43,787</u>

	Opening balance	Recognize in profit or loss	Closing balance
	USD'000	USD'000	USD'000
<b>December 31, 2017</b>			
<b>Net deferred tax assets in relation to</b>			
Property, plant and equipment	30,599	(5,740)	24,859
Intangible assets	—	1,844	1,844
Others	—	1,760	1,760
	<u>30,599</u>	<u>(2,136)</u>	<u>28,463</u>

	Opening balance	Business Combination	Recognize in profit or loss	Closing balance
	USD'000	USD'000	USD'000	USD'000
<b>December 31, 2016</b>				
<b>Net deferred tax assets in relation to</b>				
Property, plant and equipment	37,233	(15,639)	9,005	30,599
Capitalized interest	(3)	—	3	—
Others	419	—	(419)	—
	<u>37,649</u>	<u>(15,639)</u>	<u>8,589</u>	<u>30,599</u>

The Company is incorporated in the Cayman Islands, where it is not currently subject to taxation. According to the law of Italy on enterprise income tax, LFoundry income tax ("IRES") rate is 24%.

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The detailed tax status of SMIC's principal PRC entities with tax holidays is elaborated as follows:

- 1) *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 for was 15% in 2018. (2017: 15% and 2016: 15%).
- 2) *Semiconductor Manufacturing International (Tianjin) Corporation ("SMIT" or "SMIC Tianjin")*  
  
In accordance with Circular No. 43 and 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.
- 3) *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.
- 4) *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 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, 2018. SMIC Shenzhen, SMNC and SJ Jiangyin were in accumulative loss positions as of December 31, 2017 and the tax holiday has not begun to take effect.
- 5) *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 US\$457.3 million (December 31, 2017: US\$235.1 million and December 31, 2015: US\$444.0 million) due to the unpredictability of future profit streams, of which US\$20.5 million, US\$33.0 million, US\$90.1 million, US\$62.0 million and US\$251.7 million will expire in 2019, 2020, 2021, 2022 and 2023, respectively.

## 11. Profit for the year

Profit for the year has been arrived at after charging (crediting):

	Year ended 12/31/18	Year ended 12/31/17	Year ended 12/31/16
	USD'000	USD'000	USD'000
<b>Impairment losses on assets</b>			
Bad debt allowance on trade receivables (Note 38)	964	301	201
Reversal of bad debt allowance on doubtful trade receivables (Note 38)	(27)	(438)	(1,603)
Reversal of bad debt allowance on doubtful other receivables	—	—	(8,809)
Impairment losses on inventory (Note 23)	6,412	46,857	3,706
Impairment losses on tangible assets (Note 16)	990	—	7,529
Impairment losses on intangible assets (Note 17)	8,228	—	—
	<u>16,567</u>	<u>46,720</u>	<u>1,024</u>
<b>Depreciation and amortization expense</b>			
Depreciation of property, plant and equipment (Note 16)	994,642	906,034	673,161
Amortization of intangible assets (Note 17)	51,595	63,098	55,080
Amortization of land use right	2,173	2,250	1,625
	<u>1,048,410</u>	<u>971,382</u>	<u>729,866</u>
<b>Employee benefits expense</b>			
Wages, salaries and social security contributions	550,060	499,238	378,709
Bonus	64,130	57,289	123,313
Non-monetary benefits	48,837	47,204	31,686
Equity-settled share-based payments (Note 37)	11,661	18,214	14,210
	<u>674,688</u>	<u>621,945</u>	<u>547,918</u>
<b>Royalties expense</b>	<u>30,678</u>	<u>37,466</u>	<u>37,023</u>
<b>Government funding</b>			
For specific R&D projects (Note 34)	(105,258)	(82,245)	(52,517)
For specific intended use (Note 34)	(51,695)	(51,626)	(21,181)
	<u>(156,953)</u>	<u>(133,871)</u>	<u>(73,698)</u>
<b>Auditors' remuneration</b>			
Audit services	1,372	1,413	1,529
Non-audit services	1,255	85	587
	<u>2,627</u>	<u>1,498</u>	<u>2,116</u>

## 12. Directors' remuneration

	Year ended 12/31/18	Year ended 12/31/17	Year ended 12/31/16
	USD'000	USD'000	USD'000
Salaries, bonus and benefits	3,353	4,490	2,367
Equity-settled share-based payments	2,390	8,158	2,214
	<u>5,743</u>	<u>12,648</u>	<u>4,581</u>

The equity-settled share-based payments granted to directors include both stock options and restricted share units ("RSUs").

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During the year ended December 31, 2018, 712,500 options were granted to the directors (2017: 5,726,477 and 2016: 1,068,955\*), 6,050,202 stock options were exercised (2017: 1,949,229 and 2016: 1,800,000\*) and 4,758,542 stock options were expired (2017: no and 2016: 732,820\*)

During the year ended December 31, 2018, 712,500 RSUs were granted to the directors (2017: 5,726,477 and 2016: 1,068,955\*), 2,367,859 RSUs automatically vested (2017: 3,774,432 and 2016: 1,411,851\*) and 188,125 RSUs were forfeited (2017: nil and 2016: nil).

In 2018, 2017 and 2016, 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 and all options previously granted to Ren Kai subject to his request in 2016, no other directors waived any emoluments in 2017, 2016 and 2015.

- \* The number of share option and RSUs for 2016 have been adjusted to reflect the impact of the share consolidation, on the basis that every ten ordinary shares and preferred shares of US\$0.0004 each consolidated into one ordinary share and preferred share of US\$0.004 each, which was accounted for as a reverse stock split effective on December 7, 2016.

**Independent non-executive directors**

The fees paid or payable to independent non-executive directors of the Company during the year were as follows:

	Salaries, bonus and benefits	Equity-settled share-based payment	Total remuneration
	USD'000	USD'000	USD'000
<b>2018</b>			
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
	<u>369</u>	<u>910</u>	<u>1,279</u>
	Salaries, bonus and benefits	Equity-settled share-based payment	Total remuneration
	USD'000	USD'000	USD'000
<b>2017</b>			
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
	<u>332</u>	<u>643</u>	<u>975</u>

	Salaries, bonus and benefits	Equity-settled share-based payment	Total remuneration
	USD'000	USD'000	USD'000
<b>2016</b>			
Lip-Bu Tan*	100	156	256
William Tudor Brown	85	24	109
Sean Maloney	72	23	95
Carmen I-Hua Chang*	68	78	146
Chiang Shang-yi	—	—	—
	<u>325</u>	<u>281</u>	<u>606</u>

There were no other emoluments payable to the independent non-executive directors during the year (2017: Nil and 2016: Nil.)

**Executive directors and non-executive director**

	Salaries, bonus and benefits	Equity-settled share-based payment	Total remuneration
	USD'000	USD'000	USD'000
<b>2018</b>			
Executive directors:			
Zhou Zixue	695	129	824
Zhao Haijun**	714	824	1,538
Liang Mong Song**	478	—	478
Gao Yonggang	607	1	608
	<u>2,494</u>	<u>954</u>	<u>3,448</u>
Non-executive director:			
Chen Shanzhi	70	269	339
Zhou Jie	—	—	—
Ren Kai	65	—	65
Lu Jun	—	—	—
Tong Guohua	63	119	182
Tzu-Yin Chiu***	292	138	430
	<u>490</u>	<u>526</u>	<u>1,016</u>

	Salaries, bonus and benefits	Equity-settled share-based payment	Total remuneration
	USD'000	USD'000	USD'000
<b>2017</b>			
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
	<u>2,190</u>	<u>1,849</u>	<u>4,039</u>
Non-executive director:			
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)	—	—	—
	<u>1,968</u>	<u>5,666</u>	<u>7,634</u>
	Salaries, bonus and benefits	Equity-settled share-based payment	Total remuneration
	USD'000	USD'000	USD'000
<b>2016</b>			
Executive directors:			
Zhou Zixue	527	655	1,182
Tzu-Yin Chiu***	920	1,038	1,958
Gao Yonggang	413	82	495
	<u>1,860</u>	<u>1,775</u>	<u>3,635</u>
Non-executive director:			
Chen Shanzhi	80	136	216
Zhou Jie	—	—	—
Ren Kai	63	22	85
Lu Jun	39	—	39
Li Yonghua (Alternate to Chen Shanzhi)	—	—	—
	<u>182</u>	<u>158</u>	<u>340</u>

\* Lip-Bu Tan and Carmen I-Hua Chang did not offer themselves for re-election to independent non-executive directors and their term as independent non-executive directors expired on June 22, 2018.

\*\* Zhao HaiJun and Liang Mong Song are also the Co-Chief Executive Officers of the Company.

\*\*\* Tzu-Yin Chiu resigned as Chief Executive Officer on May 10, 2017 and remains as non-executive director.

There was no other arrangement under which a director waived or agreed to waive any remuneration in 2018.



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## 13. Five highest paid employees

The five highest paid individuals during the year included three (2017: three and 2016: two) directors, details of whose remuneration are set out in Note 12 above. Details of the remuneration of the remaining two (2017: two and 2016: three) non-directors, highest paid individuals for the year are as follows:

	Year ended 12/31/18	Year ended 12/31/17	Year ended 12/31/16
	USD'000	USD'000	USD'000
Salaries and benefits	954	630	692
Bonus	325	746	611
Equity-settled share-based payment	—	338	412
	<u>1,279</u>	<u>1,714</u>	<u>1,715</u>

The bonus is determined on the basis of the basic salary and the performance of the Group and the individual.

In 2018, 2017 and 2016, 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		
	2018	2017	2016
HK\$4,000,001 (US\$510,761) to HK\$4,500,000 (US\$574,605)	—	—	2
HK\$4,500,001 (US\$574,606) to HK\$5,000,000 (US\$630,450)	1	—	—
HK\$5,000,001 (US\$630,451) to HK\$5,500,000 (US\$702,295)	1	—	1
HK\$6,500,001 (US\$829,986) to HK\$7,000,000 (US\$893,830)	—	2	—
	<u>2</u>	<u>2</u>	<u>3</u>

## 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:

	Year ended 12/31/18	Year ended 12/31/17	Year ended * 12/31/16
	USD'000	USD'000	USD'000
Profit for the year attributable to owners of the Company	134,055	179,679	376,630
Distribution to perpetual subordinated convertible securities holders	(6,300)	—	—
Earnings used in the calculation of basic earnings per share	127,755	179,679	376,630
Weighted average number of ordinary shares for the purposes of basic earnings per share	4,976,275,431	4,628,850,686	4,221,765,945
Basic earnings per share	<u>\$0.03</u>	<u>\$0.04</u>	<u>\$0.09</u>

- \* The basic per share and weighted average number of ordinary shares for 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.

#### Diluted earnings per share

The earnings used in the calculation of diluted earnings per share are as follows:

	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000	Year ended 12/31/16 USD'000
Earnings used in the calculation of basic earnings per share	127,755	179,679	376,630
Interest expense from convertible bonds	—	905	16,352
Earnings used in the calculation of diluted earnings per share	127,755	180,584	392,982
Weighted average number of ordinary shares used in the calculation of basic earnings per share	4,976,275,431	4,628,850,686	4,221,765,945
Employee option and restricted share units	36,411,011	44,496,788	36,240,710
Convertible bonds	—	38,241,356	575,099,614
Perpetual subordinated convertible securities	—	1,848,513	—
Weighted average number of ordinary shares used in the calculation of diluted earnings per share	5,012,686,442	4,713,437,343	4,833,106,269
Diluted earnings per share	\$0.03	\$0.04	\$0.08

During the year ended December 31, 2018, the Group had 14,115,014 weighted average outstanding employee stock options (2017: 5,214,138 and 2016: 19,757,421\*) excluded from the computation of diluted earnings per share due to the exercise price higher than the average market price of the ordinary shares, 371,589,975 potential shares upon the conversion of convertible bonds (2017: 377,137,509 and 2016: nil) and 163,815,024 potential shares upon the conversion of perpetual subordinated convertible securities (2017: nil and 2016: nil) excluded from the computation of diluted earnings per share due to anti-dilutive effect.

- \* The diluted earnings per share and weighted average number of ordinary shares and options for 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.

#### 15. Dividend

The Board did not recommend the payment of any dividend for the year ended December 31, 2018 (December 31, 2017: Nil and December 31, 2016: Nil).

## 16. Property, plant and equipment

	Land	Buildings	Plant and equipment	Office equipment	Construction in progress (CIP)	Total
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
<b>Cost</b>						
Balance at December 31, 2015	—	588,820	9,404,456	134,858	1,206,831	11,334,965
Business combination	2,485	42,612	63,519	290	4,213	113,119
Transfer from (out) CIP	—	93,535	2,338,662	34,546	(2,466,743)	—
Addition	—	—	—	—	2,597,970	2,597,970
Disposals	—	—	(283,420)	(2,136)	(9,257)	(294,813)
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 (Note 25)	(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

	Land	Buildings	Plant and equipment	Office equipment	Construction in progress (CIP)	Total
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
<b>Accumulated depreciation and impairment</b>						
Balance at December 31, 2015	—	135,538	7,157,258	111,457	26,894	7,431,147
Disposal	—	(289)	(33,917)	(2,136)	(11,611)	(47,953)
Depreciation expense	—	18,133	639,986	15,042	—	673,161
Impairment loss	—	—	—	—	7,529	7,529
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 (Note 25)	—	(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

	Land	Buildings	Plant and equipment	Office equipment	Construction in progress (CIP)	Total
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
Balance at December 31, 2016	2,485	571,585	3,759,890	43,195	1,310,202	5,687,357
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

### **Construction in progress**

The construction in progress balance of approximately US\$2,325.5 million as of December 31, 2018, primarily consisted of US\$543.3 million used for the machinery and equipment of the two 300mm fabs in Beijing; US\$434.9 million, US\$563.2 million and US\$480.1 million used for the facilities construction, machinery and equipment of the fabs in Shanghai, the fabs in Shenzhen and the 200mm fab in Tianjin, respectively; US\$251.9 million used for purchasing machinery and equipment acquired for more research and development activities; in addition, US\$52.1 million was related to various ongoing capital expenditures projects of other SMIC subsidiaries, which are expected to be completed by the end of 2019.

### **Impairment losses recognized in the year**

In 2018, the Group recorded US\$1.0 million (2017: nil and 2016: US\$7.5 million) impairment loss of equipment. The whole amount of impairment loss in 2018 and 2016 was recognized as other operating expense in profit or loss.

### **Assets pledged as security**

Property, plant and equipment with carrying amount of approximately US\$207.2 million (2017: approximately US\$362.3 million and 2016: approximately US\$631.4 million) have been pledged to secure borrowings of the Group under mortgages (Note 30). The Group is not allowed to pledge these assets as security for other borrowings or to sell them to other entities.

### **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 amortized over the useful life of the assets. Capitalized interest of US\$47.2 million in 2018 (2017: US\$31.1 million and 2016: US\$28.0 million) was added to the cost of the underlying assets and was amortized over the respective useful life of the assets. In 2018, the Group recorded depreciation expenses relating to the capitalized interest of US\$27.5 million (2017: US\$22.7 million and 2016: US\$19.4 million).

## 17. Intangible assets

	Goodwill	Other intangible assets	Total
	USD'000	USD'000	USD'000
<b>Cost</b>			
Balance at December 31, 2015	—	391,177	391,177
Business combination	3,933	8,088	12,021
Additions	—	67,936	67,936
Expired and disposal	—	(21,164)	(21,164)
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
<b>Accumulated amortization and impairment</b>			
Balance at December 31, 2015	—	166,898	166,898
Amortization expense for the year	—	55,080	55,080
Expired and disposal	—	(20,589)	(20,589)
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 <sup>(1)</sup>	—	51,595	51,595
Impairment loss <sup>(2)</sup>	—	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
Balance at December 31, 2016	3,933	244,648	248,581
Balance at December 31, 2017	3,933	216,011	219,944
Balance at December 31, 2018	—	122,854	122,854

(1) Amortization expenses are mainly included in cost of sales (US\$31.0 million, 2017: US\$36.8 million and 2016: US\$37.8 million) and research and development expenses, net (US\$18.8 million, 2017: US\$20.5 million and 2016: US\$17.2 million).

(2) In 2018, the Group recorded US\$8.2 million (2017: nil and 2016: 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 2018 was recognized as other operating expense in profit or loss.

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## 18. Subsidiaries

Details of the Company's subsidiaries at the end of the reporting period are as follows:

Name of company	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
Better Way Enterprises Limited ("Better Way")#	San Jose	Ordinary	USD 1,000,000	Directly 100 %	100 %	Provision of marketing related activities
Semiconductor Manufacturing International (Shanghai) Corporation ("SMIS" or "SMIC Shanghai")#	People's Republic of China - the "PRC"	Ordinary	USD 1,770,000,000	Indirectly 100 %	100 %	Manufacturing and trading of semiconductor products
SMIC, Americas	United States of America	Ordinary	USD 500,000	Directly 100 %	100 %	Provision of marketing related activities
Semiconductor Manufacturing International (Beijing) Corporation ("SMIB" or "SMIC Beijing")#	PRC	Ordinary	USD 1,000,000,000	Indirectly 100 %	100 %	Manufacturing and trading of semiconductor products
SMIC Japan	Japan	Ordinary	JPY 10,000,000	Directly 100 %	100 %	Provision of marketing related activities
SMIC Europe S.R.L.	Italy	Ordinary	EUR 100,000	Directly 100 %	100 %	Provision of marketing related activities
Semiconductor Manufacturing International (Solar Cell) Corporation	Cayman Islands	Ordinary	USD 11,000	Directly 100 %	100 %	Investment holding
SMIC Investment (Shanghai) Corporation (formerly "SMIC Commercial (Shanghai) Limited Company")	PRC	Ordinary	USD 465,800,000	Directly 100 %	100 %	Provision of marketing related activities
Semiconductor Manufacturing International (Tianjin) Corporation ("SMIT" or "SMIC Tianjin")#	PRC	Ordinary	USD 770,000,000	Indirectly 100 %	100 %	Manufacturing and trading of semiconductor products
SMIC Development (Chengdu) Corporation ("SMICD")#	PRC	Ordinary	USD 5,000,000	Directly 100 %	100 %	Construction, operation, and management of SMICD's living quarters, schools, and supermarket
Semiconductor Manufacturing International (BVI) Corporation ("SMIC (BVI)")#	British Virgin Islands	Ordinary	USD 10	Directly 100 %	100 %	Provision of marketing related activities
Admiral Investment Holdings Limited	British Virgin Islands	Ordinary	USD 10	Directly 100 %	100 %	Investment holding
SMIC Shanghai (Cayman) Corporation	Cayman Islands	Ordinary	USD 50,000	Directly 100 %	100 %	Investment holding
SMIC Beijing (Cayman) Corporation	Cayman Islands	Ordinary	USD 50,000	Directly 100 %	100 %	Investment holding
SMIC Tianjin (Cayman) Corporation	Cayman Islands	Ordinary	USD 50,000	Directly 100 %	100 %	Investment holding
SiTech Semiconductor Corporation	Cayman Islands	Ordinary	USD 10,000	Directly 100 %	100 %	Investment holding
SMIC Shenzhen (Cayman) Corporation	Cayman Islands	Ordinary	USD 50,000	Directly 100 %	100 %	Investment holding
SMIC New Technology Research & Development (Shanghai) Corporation (formerly "SMIC Advanced Technology Research & Development (Shanghai) Corporation")	PRC	Ordinary	USD 400,000,000	Indirectly 97.450 %	97.450 %	Research and development activities
SMIC Holdings Corporation	PRC	Ordinary	USD 50,000,000	Directly 100 %	100 %	Investment holding
SJ Semiconductor Corporation	Cayman Islands	Ordinary and preferred	USD 5,668	Directly 56.045 %	56.045 %	Investment holding
Magnificent Tower Limited	British Virgin Islands	Ordinary	USD 50,000	Indirectly 100 %	100 %	Investment holding
SMIC Hong Kong International Company Limited	Hong Kong	Ordinary	HKD 1	Indirectly 100 %	100 %	Investment holding
SMIC Beijing (HK) Company Limited	Hong Kong	Ordinary	HKD 1	Indirectly 100 %	100 %	Investment holding
SMIC Tianjin (HK) Company Limited	Hong Kong	Ordinary	HKD 1	Indirectly 100 %	100 %	Investment holding
SMIC Solar Cell (HK) Company Limited	Hong Kong	Ordinary	HKD 1	Indirectly 100 %	100 %	Investment holding
SMIC Shenzhen (HK) Company Limited	Hong Kong	Ordinary	HKD 1	Indirectly 100 %	100 %	Investment holding
SiTech Semiconductor (Hong Kong) Corporation Limited	Hong Kong	Ordinary	HKD 1,000	Indirectly 100 %	100 %	Investment holding
Semiconductor Manufacturing International (Shenzhen) Corporation ("SMIZ" or "SMIC Shenzhen")#	PRC	Ordinary	USD 700,000,000	Indirectly 100 %	100 %	Manufacturing and trading of semiconductor products
SiTech Semiconductor (Shanghai) Corporation Limited ("SiTech Shanghai")#	PRC	Ordinary	USD 12,000,000	Indirectly 100 %	100 %	Manufacturing and trading of semiconductor products
Semiconductor Manufacturing North China (Beijing) Corporation ("SMNC")# (2)	PRC	Ordinary	USD 3,800,000,000	Indirectly 51 %	51 %	Manufacturing and trading of semiconductor products
China IC Capital Co., Ltd	PRC	Ordinary	RMB 1,342,500,000	Indirectly 100 %	100 %	Investment holding
China IC Capital (Ningbo) Co., Ltd	PRC	Ordinary	RMB 199,500,000	Indirectly 100 %	100 %	Investment holding
Shanghai Hexin Investment Management Limited Partnership	PRC	Ordinary	RMB 50,000,000	Indirectly 99 %	99 %	Investment holding
SJ Semiconductor (HK) Limited	Hong Kong	Ordinary	HKD 1,000	Indirectly 56.045 %	56.045 %	Investment holding
SJ Semiconductor (Jiangyin) Corporation ("SJ Jiangyin")#	PRC	Ordinary	USD 259,500,000	Indirectly 56.045 %	56.045 %	Bumping and circuit probe testing activities
LFoundry S.r.l. ("LFoundry")# (3)	Italy	Ordinary	EUR 2,000,000	Indirectly 70 %	70 %	Manufacturing and trading of semiconductor products
Semiconductor Manufacturing South China Corporation ("SMSC")# (1)	PRC	Ordinary	USD 2,152,475,706	Indirectly 51.320 %	51.320 %	Manufacturing and trading of semiconductor products
SJ Semiconductor USA Co.	United States of America	Ordinary	USD 500,000	Indirectly 56.045 %	56.045 %	Provision of marketing related activities
SMIC (Sofia) EOOD	Bulgaria	Ordinary	BGN 1,800,000	Indirectly 100 %	100 %	Designing activities
SMIC Innovation Design Center (Ningbo) Co., Ltd.	PRC	Ordinary	—	Indirectly 100 %	100 %	Designing activities
North China IC Innovation Center (Beijing) Co., Ltd	PRC	Ordinary	RMB 1,000,000	Indirectly 51 %	51 %	Designing activities

# Abbreviation for identification purposes.

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- (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 is not completed as of the date of this annual report.
- (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 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 the Joint Venture Company. Its shareholding in the Joint Venture Company will increase from 26.5% to 32%; and (iii) E-Town Capital has agreed to make cash contribution of US\$276 million into the registered capital of the Joint Venture Company representing 5.75% of the enlarged registered capital of the Joint Venture Company. The capital contribution is expected to be completed before the end of 2019.
- (3) On June 24, 2016, the Company, LFoundry Europe GmbH ("LFoundry Europe") and Marsica Innovation S.p.A ("Marsica") entered into a sale and purchase agreement pursuant to which LFoundry Europe and Marsica agreed to sell and the Company agreed to purchase 70% of the corporate capital of LFoundry for an aggregate cash consideration of EUR49.0 million (approximately US\$54.4 million), including a goodwill amounted to US\$3.9 million. The goodwill attributable to the workforce and the high profitability of the acquired business will not be deductible for tax purposes. The acquisition was completed on July 29, 2016.

**Details of non-wholly owned subsidiaries that have material non-controlling interests ("NCI")**

The table below shows details of a non-wholly owned subsidiary 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			Profit (loss) allocated to non-			Accumulated non-controlling		
		non-controlling interests			controlling interests			interests		
		12/31/18	12/31/17	12/31/16	12/31/18 USD'000	12/31/17 USD'000	12/31/16 USD'000	12/31/18 USD'000	12/31/17 USD'000	12/31/16 USD'000
SMNC and its subsidiaries	Beijing, PRC	49.0 %	49.0 %	49.0 %	(39,213)	(39,113)	(55,868)	1,726,377	1,324,590	1,069,703
	Shanghai, PRC	48.7 %	—	—	(5,349)	—	—	1,042,551	—	—
SMSC	Cayman Islands	44.0 %	44.0 %	44.0 %	(2,493)	(4,896)	(3,545)	122,505	124,180	135,669
SJ Semiconductor Corporation					(47,055)	(44,009)	(59,413)	2,891,433	1,448,770	1,205,372

According to the joint venture agreements entered into by the Group and the NCI of SMNC, additional capital injection into SMNC was completed in 2018, 2017 and 2016. The additional capital injection from NCI amounted to US\$441.0 million in 2018, US\$294.0 million in 2017 and US\$754.1 million in 2016 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 2018. The additional capital injection from NCI amounted to US\$1,047.9 million in 2018.

According to the joint venture agreements entered into by the Company and the NCI of SJ Semiconductor Corporation, additional capital injection into SJ Semiconductor Corporation was completed in 2016. The additional capital injection from NCI amounted to US\$60.0 million in 2016.

SMNC shared part of the Group's advanced technology R&D expenses in 2017 and 2016, which also caused the change in loss of year attributable to non-controlling interests.

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**

	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
Current assets	2,582,534	1,559,016	1,103,214
Non-current assets	1,918,935	2,046,290	1,807,207
Current liabilities	(629,152)	(596,500)	(409,898)
Non-current liabilities	(358,793)	(315,718)	(327,995)
Net assets	3,513,524	2,693,088	2,172,528
Equity attributable to owners of the Company	1,787,147	1,368,498	1,102,825
Non-controlling interests	1,726,377	1,324,590	1,069,703
Net assets	3,513,524	2,693,088	2,172,528
	Year ended	Year ended	Year ended
	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
Revenue	597,257	471,174	243,715
Expense	(709,627)	(574,386)	(339,910)
Other income (expense)	32,345	23,389	(19,480)
Loss for the year	(80,025)	(79,823)	(115,675)
Loss attributable to owners of the Company	(40,812)	(40,710)	(59,807)
Loss attributable to the non-controlling interests	(39,213)	(39,113)	(55,868)
Loss for the year	(80,025)	(79,823)	(115,675)
Total comprehensive loss attributable to owners of the Company	(40,812)	(40,710)	(59,807)
Total comprehensive loss attributable to the non-controlling interests	(39,213)	(39,113)	(55,868)
Total comprehensive loss for the year	(80,025)	(79,823)	(115,675)
Dividends paid to non-controlling interests	—	—	—
Net cash inflow (outflow) from operating activities	101,384	188,115	(13,082)
Net cash outflow from investing activities	(936,942)	(820,606)	(1,627,788)
Net cash inflow from financing activities	890,109	590,091	1,655,011
Net cash inflow (outflow)	54,551	(42,400)	14,141

**SMSC**

	12/31/18
	USD'000
Current assets	2,031,682
Non-current assets	166,037
Current liabilities	(58,254)
Net assets	2,139,465
Equity attributable to owners of the associate	1,096,914
Non-controlling interests	1,042,551
Net assets	2,139,465

	Year ended 12/31/18
	USD'000
Revenue	—
Expense	(19,625)
Other income	4,336
Loss for the year	(15,289)
Loss attributable to owners of the Company	(9,940)
Loss attributable to the non-controlling interests	(5,349)
Loss for the year	(15,289)
Total comprehensive loss attributable to owners of the Company	(9,940)
Total comprehensive loss attributable to the non- controlling interests	(5,349)
Total comprehensive loss for the year	(15,289)
Dividends paid to non-controlling interests	—
Net cash outflow from operating activities	(10,775)
Net cash outflow from investing activities	(1,937,066)
Net cash inflow from financing activities	1,951,830
Net cash inflow	3,989

**SJ Semiconductor Corporation and its subsidiaries**

	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
Current assets	141,016	205,957	224,737
Non-current assets	180,061	131,041	102,790
Current liabilities	(38,280)	(46,608)	(11,656)
Non-current liabilities	(4,257)	(7,002)	(5,421)
Net assets	278,540	283,388	310,450
Equity attributable to owners of the Company	156,035	159,208	174,781
Non-controlling interests	122,505	124,180	135,669
Net assets	278,540	283,388	310,450

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	Year ended 12/31/18	Year ended 12/31/17	Year ended 12/31/16
	USD'000	USD'000	USD'000
Revenue	51,042	21,862	12,782
Expense	(68,011)	(39,504)	(27,300)
Other income	11,303	6,505	6,564
Loss for the year	(5,666)	(11,137)	(7,954)
Loss attributable to owners of the Company	(3,173)	(6,241)	(4,409)
Loss attributable to the non-controlling interests	(2,493)	(4,896)	(3,545)
Loss for the year	(5,666)	(11,137)	(7,954)
Total comprehensive loss attributable to owners of the Company	(3,173)	(6,241)	(4,409)
Total comprehensive loss attributable to the non- controlling interests	(2,493)	(4,896)	(3,545)
Total comprehensive loss for the year	(5,666)	(11,137)	(7,954)
Dividends paid to non-controlling interests	—	—	—
Net cash inflow (outflow) from operating activities	14,429	6,115	(1,194)
Net cash inflow (outflow) from investing activities	1,144	(65,993)	(147,752)
Net cash inflow (outflow) from financing activities	69	(1,983)	109,291
Net cash inflow (outflow)	15,642	(61,861)	(39,655)

19. 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:

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Name of company	Place of establishment and operation	Class of share held	Proportion of ownership interest and voting power held by the Group		
			12/31/18	12/31/17	12/31/16
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") <sup>(3)</sup>	Shanghai, PRC	Ordinary	46.6 %	46.6 %	47.3 %
Suzhou Changjiang Electric Xinke Investment Co., Ltd. ("Changjiang Xinke")	Jiangsu, PRC	Ordinary	—	—	19.6 %
Jiangsu Changjiang Electronics Technology Co., Ltd. ("JCET") <sup>(5)</sup>	Jiangsu, PRC	Ordinary	14.3 % <sup>(1)</sup>	14.3 % <sup>(1)</sup>	NA
Sino IC Leasing Co., Ltd. ("Sino IC Leasing")	Shanghai, PRC	Ordinary	7.4 % <sup>(1)</sup>	8.1 % <sup>(1)</sup>	11.4 % <sup>(1)</sup>
China Fortune-Tech Capital Co., Ltd ("China Fortune-Tech")	Shanghai, PRC	Ordinary	19.5 % <sup>(1)</sup>	30.0 %	30.0 %
Beijing Wu Jin Venture Investment Center (Limited Partnership) ("WuJin")	Beijing, PRC	Limited partner interest	32.6 %	32.6 %	32.6 %
Shanghai Fortune-Tech Qitai Invest Center (Limited Partnership) ("Fortune-Tech Qitai") <sup>(2)</sup>	Shanghai, PRC	Limited partner interest	33.0 %	33.0 %	33.0 %
Shanghai Fortune-Tech Zaixing Invest Center (Limited Partnership) ("Fortune-Tech Zaixing") <sup>(2)</sup>	Shanghai, PRC	Limited partner interest	66.2 % <sup>(1)</sup>	66.2 % <sup>(1)</sup>	66.2 % <sup>(1)</sup>
Suzhou Fortune-Tech Oriental Invest Fund Center (Limited Partnership) ("Fortune-Tech Oriental") <sup>(2)</sup>	Jiangsu, PRC	Limited partner interest	44.8 %	44.8 %	44.8 %
Juyuan Juxin Integrated Circuit Fund ("Juyuan Juxin") <sup>(2)</sup>	Shanghai, PRC	Limited partner interest	31.6 %	31.6 %	40.9 %
Ningbo Semiconductor International Corporation ("NSI") <sup>(4)</sup>	Ningbo, PRC	Ordinary	38.6 %	NA	NA
Semiconductor Manufacturing Electronics (Shaoxing) Corporation ("SMEC")	Shaoxing, PRC	Ordinary	23.5 %	NA	NA
Semiconductor Global Solutions ("SGS")	Ningbo, PRC	Ordinary	35.0 %	NA	NA
Shanghai IC Manufacturing Innovation Center Co., Ltd ("Shanghai Innovation Center")	Shanghai, PRC	Ordinary	50.0 % <sup>(1)</sup>	NA	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 through China IC Capital Co., Ltd (the "Fund"), a wholly-owned investment fund company of SMIC, as set out in Note 18. The Fund is intended to invest primarily in integrated circuits related fund products and investment projects.
- (3) Since September 30, 2017, the Group invested Brite Shanghai directly with no more investment in Brite Semiconductor Corporation, the holding company of Brite Shanghai.
- (4) On March 22, 2018, NSI, SMIC Holdings and China IC Fund entered into the equity transfer agreement, pursuant to which SMIC Holdings has agreed to sell the equity interest to China IC Fund. Upon the completion of the equity transfer, the shareholding of SMIC Holdings in NSI will decrease from approximately 66.76% to 38.59%, and NSI will cease to be a subsidiary of the Company and its financial results will cease to be consolidated with the Group's results. The equity transfer has been completed in April 2018 and the Group recorded its ownership interest of NSI as investment in associate.  
 On March 23, 2018, NSI, SMIC Holdings, China IC Fund, Ningbo Sensen Electronics Technology Co., Ltd, Beijing Integrated Circuit Design and Testing Fund, Ningbo Integrated Circuit Industry Fund and Infotech National Emerging Fund entered into the capital increase agreement, pursuant to which (i) SMIC Holdings has agreed to make further cash contribution of RMB565.0 million (approximately US\$89.4 million) into the registered capital of NSI. Its shareholding in NSI will decrease from approximately 38.59% to approximately 38.57%; (ii) China IC Fund has agreed to make further cash contribution of RMB500.0 million (approximately US\$79.2 million) into the registered capital of NSI. Its shareholding in NSI will increase from approximately 28.17% to approximately 32.97%. The all above parties' performance of the Capital Contribution obligations will lead to an increase in the registered capital from RMB355 million to RMB1.82 billion (approximately US\$56.2 million to US\$288.1 million).  
 On April 13, 2018, the Group lost control of NSI, 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.
- (5) On August 30, 2018, the Company has, through its wholly-owned subsidiary Siltech Semiconductor (Shanghai) Corporation Limited, completed a subscription for 34,696,198 shares in JCET in cash by way of private placement (the "Subscription"). The shares were subscribed at a price of RMB14.89 per share, with the total subscription price being RMB516.6 million (approximately US\$75.9 million). Immediately before and after completion of the Subscription, the shareholding interest of the Company in JCET is 14.28%. The Company understands that JCET has completed the issue and registration procedures of these shares, including listing of the shares on the Shanghai Stock Exchange. The newly subscribed shares will not be transferrable by the Company for 36 months after completion of the Subscription.

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- (6) On August 10, 2018, SMIC Holdings, Sino IC Leasing and other investors had agreed to amend the joint venture agreement dated March 1, 2018 through the Amended JV Agreements, pursuant to which: (i) SMIC Holdings will not make additional capital contribution, but Sino IC Leasing and other investors will make additional capital contributions in the registered capital of SGS in US\$5.0 million and US\$5.0 million, respectively (ii) the Company's equity interest in SGS, through SMIC Holdings, will decrease from 60.00% to 30.00%; and (iii) SGS will be owned by China IC Fund, through Sino IC Leasing, as to approximately 8.08%. The capital contribution is not completed as of the date of this annual report.
- 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.

**JCET and its subsidiaries**

The group applies the equity method accounted for its investments in JCET on one quarter lag basis since the annual financial report of JCET were not available as of December 31, 2018.

	09/30/18	09/30/17
	USD'000	USD'000
Current assets	1,803,128	1,401,575
Non-current assets	3,456,513	3,305,615
Current liabilities	(2,214,747)	(1,639,114)
Non-current liabilities	(1,081,027)	(1,661,532)
Net assets	1,963,867	1,406,544
Equity attributable to owners of the associate	1,942,894	1,385,372
Non-controlling interests	20,973	21,172
Net assets	1,963,867	1,406,544
	Twelve months ended	Three months ended
	09/30/18	09/30/17
	USD'000	USD'000
Total revenue	3,645,925	958,087
Profit attributable to owners of the associate	28,439	11,480
Profit attributable to the non-controlling interests	3,252	628
Profit for the period	31,691	12,108
Other comprehensive income (loss) for the period	47,529	(19,986)
Total comprehensive income (loss) for the period	79,220	(7,878)
Total comprehensive income (loss) attributable to owners of the associate	76,299	(8,496)
Total comprehensive income attributable to the non-controlling interests	2,921	618
Total comprehensive income (loss) for the period	79,220	(7,878)
Dividends received from the associate during the period	761	-

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Reconciliation of the above summarized financial information to the carrying amount of the interest in the associate recognized in the consolidated financial statements:

	09/30/18	09/30/17
	USD'000	USD'000
Equity attributable to owners of the associate	1,942,894	1,385,372
Proportion of the Group's ownership interest in JCET	14.3 %	14.3 %
	277,446	197,832
Valuation premium	338,967	340,561
Carrying amount of the Group's interest in JCET	616,413	538,393

As at December 31, 2018 the closing share price of JCET listed on the Shanghai Stock Exchange was RMB8.24, approximately US\$1.20.

**Sino IC Leasing and its subsidiaries**

The Group applies the equity method accounted 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, 2018.

	09/30/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
Current assets	2,423,414	1,038,538	702,570
Non-current assets	4,056,971	3,464,412	1,859,267
Current liabilities	(1,441,959)	(523,228)	(117,287)
Non-current liabilities	(3,241,264)	(2,509,732)	(1,653,206)
Net assets	1,797,162	1,469,990	791,344
Equity attributable to owners of the associate	1,682,794	1,366,367	776,959
Non-controlling interests	114,368	103,623	14,385
Net assets	1,797,162	1,469,990	791,344

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	Nine months ended 09/30/18	Twelve months ended 12/31/17	Twelve months ended 12/31/16
	USD'000	USD'000	USD'000
Total revenue	214,515	215,538	36,085
Profit attributable to owners of the associate	48,505	39,003	12,938
Profit attributable to the non-controlling interests	1,610	460	48
Profit for the period	50,115	39,463	12,986
Other comprehensive income (loss) for the period	16,253	(10,206)	3,594
Total comprehensive income for the period	66,368	29,257	16,580
Total comprehensive income attributable to owners of the associate	64,758	28,797	16,532
Total comprehensive income attributable to the non-controlling interests	1,610	460	48
Total comprehensive income the period	66,368	29,257	16,580
Dividends received from the associate during the period	—	255	—

Reconciliation of the above summarized financial information to the carrying amount of the interest in the associate recognized in the consolidated financial statements:

	09/30/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
Equity attributable to owners of the associate	1,682,794	1,366,367	776,959
Proportion of the Group's ownership interest in Sino IC Leasing	7.4 %	8.1 %	11.4 %
	125,156	110,162	88,651
Dividends received in advance	(316)	—	—
Less: unrealized profit from Sino IC Leasing	(580)	—	—
Carrying amount of the Group's interest in Sino IC Leasing	124,260	110,162	88,651

#### NSI

	12/31/18
	USD'000
Current assets	137,120
Non-current assets	146,664
Current liabilities	(18,291)
Net assets	265,493



	Nine months ended 12/31/18
	USD'000
Total revenue	4,186
Profit for the period	3,131
Total comprehensive income for the period	3,131
Dividends received from the associate during the period	—

Reconciliation of the above summarized financial information to the carrying amount of the interest in the associate recognized in the consolidated financial statements:

	12/31/18 USD'000
Net assets of the associate	265,493
Proportion of the Group's ownership interest in NSI	38.6 %
	102,405
Valuation premium	1,509
Less: unrealized profit from NSI	(816)
Carrying amount of the Group's interest in NSI	103,098

20. Investments in joint ventures

Details of the Group's joint ventures, which are all unlisted companies invested indirectly through China IC Capital (Ningbo) Co., Ltd, at the end of the reporting period are as follows:

Name of company	Place of establishment and operation	Class of share held	Proportion of ownership interest and voting power held by the Group		
			12/31/18	12/31/17	12/31/16
Shanghai Xinxin Investment Centre (Limited Partnership) ("Shanghai Xinxin")	Shanghai, PRC	Limited partner interest	49.0 %	49.0 %	49.0 %
Shanghai Chengxin Investment Center (Limited Partnership) ("Shanghai Chengxin")	Shanghai, PRC	Limited partner interest	31.5 %	31.5 %	42.0 %

Summarized financial information in respect of the Group's material joint venture is set out below.

**Shanghai Xinxin**

	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
Current assets	3,956	1,453	10,679
Non-current assets	16,462	53,782	13,283
Current liabilities	(268)	(6)	(7)
Net assets	20,150	55,229	23,955
	Year ended	Year ended	Year ended
	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
Total revenue	—	—	—
Profit (loss) for the year	4,827	(390)	4,540
Other comprehensive income for the year	—	30,441	—
Total comprehensive income for the year	4,827	30,051	4,540
Dividends received from the joint venture during the year	13,324	—	2,027

Reconciliation of the above summarized financial information to the carrying amount of the interest in the joint venture recognized in the consolidated financial statements:

	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
Net assets of the joint venture	20,150	55,229	23,955
Proportion of the Group's ownership interest in Shanghai Xinxin	49.0 %	49.0 %	49.0 %
	9,874	27,062	11,740
Distribution to general partner	3,179	—	—
Carrying amount of the Group's interest in Shanghai Xinxin	13,053	27,062	11,740

## 21. Other financial assets

	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
<b>Financial assets</b>			
<b>Non-current</b>			
Financial assets at fair value through profit or loss			
Listed equity securities	1,508	—	—
Unlisted equity securities	53,964	—	—
Derivative financial instruments			
Cross currency swap contracts – cash flow hedges	5,266	—	—
Other derivative financial instrument	—	—	32,894
Other financial assets			
Cross currency swap contracts – cash flow hedges	—	17,598	—
Other assets			
Available-for-sale financial assets	—	24,844	21,966
<b>Current</b>			
Financial assets at fair value through profit or loss			
Financial products sold by banks	41,685	—	—
Financial assets at amortized cost			
Bank deposits will mature over 3 months	1,952,106	—	—
Debentures <sup>(1)</sup>	44,702	—	—
Trade and other receivables (Note 24)	837,828	616,308	645,822
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	24,931
Bank deposits will mature over 3 months	—	559,034	6,612
	<u>2,939,642</u>	<u>1,342,562</u>	<u>732,225</u>

(1) The credit risk on bank deposits will mature over 3 months is limited because the counterparties are banks with high credit-ratings.

(2) 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.

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.

	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
<b>Financial liabilities</b>			
<b>Non-current</b>			
Liabilities at amortized cost			
Borrowings (Note 30)	1,760,763	1,743,939	1,233,594
Convertible bonds (Note 31)	418,592	403,329	395,210
Bonds payable (Note 32)	—	496,689	494,909
Medium-term notes (Note 33)	—	228,483	214,502
Derivative financial instruments			
Cross currency swap contracts – cash flow hedges	15,540	—	—
Other financial liabilities			
Contingent consideration <sup>(1)</sup>	11,948	—	—
Cross currency swap contracts – cash flow hedges	—	1,919	74,170
<b>Other liabilities</b>			
Contingent consideration <sup>(1)</sup>	—	12,549	—
Long-term payables <sup>(2)</sup>	39,128	57,593	—
<b>Current</b>			
Liabilities at amortized cost			
Trade and other payables (Note 35)	964,860	1,007,424	897,606
Borrowings (Note 30)	530,005	440,608	209,174
Convertible bonds (Note 31)	—	—	391,401
Bonds payable (Note 32)	498,551	—	—
Medium-term notes (Note 33)	218,247	—	—
Short-term notes	—	—	86,493
Derivative financial instruments			
Cross currency swap contracts – cash flow hedges	15,806	—	—
Other financial liabilities			
Cross currency swap contracts – cash flow hedges	—	742	6,348
Foreign currency forward contracts	—	2	—
<b>Other liabilities</b>			
Long-term payables <sup>(2)</sup>	32,263	40,627	—
	<b>4,505,703</b>	<b>4,433,904</b>	<b>4,003,407</b>

(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 Changjiang Xinke 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 and intangible assets were classified into the non-current and current liabilities respectively amounted to US\$39.1 million and US\$32.3 million as of December 31, 2018.

**Fair value of financial instruments**

***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, 2018, 2017 and 2016:

- 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).

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December 31, 2018	Valuation technique(s) and key input	Level 1 USD'000	Level 2 USD'000	Level 3 USD'000	Total USD'000
<b>Financial assets</b>					
<b>Financial assets at fair value through profit or loss</b>					
Listed equity securities	Using quoted market prices	1,508	—	—	1,508
Unlisted equity securities	Using discounted cash flow analysis	—	—	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
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
		<u>1,508</u>	<u>47,189</u>	<u>56,309</u>	<u>105,006</u>
<b>Financial liabilities at fair value</b>					
<b>Derivative financial instruments</b>					
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
<b>Other financial liabilities</b>					
Contingent consideration	Using discounted cash flow analysis	—	—	11,948	11,948
		<u>—</u>	<u>31,346</u>	<u>11,948</u>	<u>43,294</u>
<b>December 31, 2017</b>					
		Level 1 USD'000	Level 2 USD'000	Level 3 USD'000	Total USD'000
<b>Financial assets measured at fair value</b>					
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 in the statement of financial position — 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 in the statement of financial position	Using forward exchange rates at the balance sheet date	—	2,111	—	2,111
		<u>2,531</u>	<u>24,448</u>	<u>138,062</u>	<u>165,041</u>
<b>Financial liabilities measured at fair value</b>					
Cross currency swap contracts classified as other financial liabilities in the statement of financial position — 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 in the statement of financial position	Using forward exchange rates at the balance sheet date	—	2	—	2
Contingent consideration	Using discounted cash flow analysis	—	—	12,549	12,549
		<u>—</u>	<u>2,663</u>	<u>12,549</u>	<u>15,212</u>
<b>December 31, 2016</b>					
		Level 1 USD'000	Level 2 USD'000	Level 3 USD'000	Total USD'000
<b>Financial assets measured at fair value</b>					
Short-term investment carried at fair value through profit or loss	Using indicated return rate provided by financial institution	—	—	24,931	24,931
Available-for-sale investment	Using quoted market prices	4,713	—	—	4,713
Available-for-sale investment	Using discounted cash flow analysis	—	—	16,067	16,067
	Measured by Binomial Model with key assumptions including exercise multiple (75%), risk free rate of interest ((0.51%), expected volatility (24.5%) and rate of return (10%).	—	—	32,894	32,894
Derivative financial instrument		<u>4,713</u>	<u>—</u>	<u>73,892</u>	<u>78,605</u>
<b>Financial liabilities measured at fair value</b>					
Cross currency swap contracts classified as other financial liabilities in the statement of financial position — cash flow hedges	Using the present value of the estimated future cash flows based on observable yield curves	—	80,518	—	80,518

## 22. Restricted cash

	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
Non-current	—	13,438	20,080
Current <sup>(1)</sup>	592,290	336,043	337,699
	<u>592,290</u>	<u>349,481</u>	<u>357,779</u>

- (1) As of December 31, 2018, the current restricted cash consisted of US\$185.8 million (December 31, 2017: US\$14.9 million and December 31, 2016: US\$2.9 million) of bank time deposits, which was pledged against letters of credit and short-term borrowings.  
As of December 31, 2018, the current restricted cash consisted of US\$406.5 million (December 31, 2017: US\$235.3 million and December 31, 2016: US\$191.9 million) of government funding received, within which US\$404.2 million was mainly for the reimbursement of research and development expenses to be incurred.

## 23. Inventories

	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
Raw materials	143,990	149,574	126,526
Work in progress	331,782	321,695	280,216
Finished goods	117,237	151,410	57,474
	<u>593,009</u>	<u>622,679</u>	<u>464,216</u>

The cost of inventories recognized as an expense (income) during the year in respect of inventory provision was US\$6.4 million (2017: US\$46.9 million and 2016: US\$3.7 million).

## 24. Trade and other receivables

	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
Trade receivables	412,053	407,975	491,018
Allowance on doubtful trade receivables (Note 38)	(2,155)	(1,335)	(1,491)
	<u>409,898</u>	<u>406,640</u>	<u>489,527</u>
Other receivables <sup>(1)</sup>	364,143	203,410	146,583
Refundable deposits <sup>(2)</sup>	63,787	6,258	9,712
	<u>837,828</u>	<u>616,308</u>	<u>645,822</u>

- (1) As of December 31, 2018, the balance included the receivable from the sales of machinery and equipment to SMEC, amounted to US\$68.9 million and the charge of purchase machinery and equipment to SMEC, amounted to US\$35.6 million.  
(2) 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.

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	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
<b>Age of receivables</b>			
Within 30 days	219,813	148,131	274,087
31–60 days	141,852	187,623	179,453
Over 60 days	50,388	72,221	37,478
Total trade receivables	412,053	407,975	491,018

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.

25. Assets and liabilities classified as held-for-sale

	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
<b>Assets classified as held-for-sale</b>			
Assets of disposal group as held-for-sale	255,330	—	—
Machinery and equipment	5,846	—	—
Assets related to employee's living quarters	9,631	37,471	50,813
	270,807	37,471	50,813
<b>Liabilities directly associated with assets classified as held-for-sale</b>			
Liabilities of disposal group as held-for-sale	143,447	—	—

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 at December 31, 2018, investment in LFoundry of US\$111.9 million was classified as held-for-sale assets and liabilities as the effect to sell the subsidiary has commenced and the sales are expected by December 31, 2019 and the details are disclosed as follows:



	12/31/18
<b>Assets of disposal group as held-for-sale</b>	<b>USD'000</b>
Property, plant and equipment	123,677
Goodwill	3,933
Inventories	54,451
Restricted cash	12,960
Trade and other receivables	37,796
Cash and cash equivalent	14,554
Other assets	7,959
	<u>255,330</u>
<b>Liabilities of disposal group as held-for-sale</b>	
Borrowings	58,467
Trade and other payables	37,296
Deferred tax liabilities	14,437
Defined benefited obligation	26,475
Other liabilities	6,772
	<u>143,447</u>

Considerations to be received for the disposal will be equivalent or higher than the carrying value of the net assets and liabilities of LFoundry.

26. Shares and issued capital

**Fully paid ordinary shares**

	Number of shares	Share capital USD'000	Share Premium USD'000
Balance at December 31, 2015	42,073,748,961	16,830	4,903,861
Issuance of shares under the Company's employee share option plan	329,531,926	132	35,367
Conversion of convertible bonds during the year	105,128,132	42	11,023
Adjustment arising from the Share Consolidation	(38,257,568,118)	—	—
Issuance of shares under the Company's employee share option plan after the Share Consolidation	2,081,358	8	697
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 (Note 37)	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	<u>5,039,819,199</u>	<u>20,159</u>	<u>4,993,163</u>

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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).

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 buyback 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.

In 2016, the Company proposed to implement the Share Consolidation on the basis that every ten issued and unissued shares of US\$0.0004 each of the Company will be consolidated into one ordinary share of US\$0.004 each. The proposed share consolidation was approved by the Company's shareholders at the Extraordinary General Meeting held on December 6, 2016 and the share consolidation became effective on December 7, 2016.

**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).

27. 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.

**Change in value of available-for-sale financial assets**

The changes in the carrying amount of available-for-sale financial assets, which were initially recognized at fair value plus transaction costs and subsequently carried at fair value, recognized in other comprehensive income and accumulated under the heading of investments revaluation reserve. When the investment is disposed of or is determined to be impaired, the cumulative gain or loss previously accumulated in the investments revaluation reserve is reclassified to profit or loss.

The adoption of IFRS 9 Financial Instruments from January 1, 2018 resulted in changes in accounting policies and adjustments to the amounts recognized in the financial statements. In accordance with the transitional provisions in IFRS 9, comparative figures have not been restated. Related fair value losses of US\$1.1 million were transferred from the available-for-sale financial assets reserve to retained earnings on January 1, 2018.

**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 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.

**Defined benefit plan reserve**

Defined benefit plan reserve recorded the changes of fair value of the defined benefit obligation due to LFoundry's employees. LFoundry's employees are entitled to a defined benefit plan. Actuarial gains and losses can result from increases or decreases in the present value of a defined benefit obligation due to experience adjustments or changes in actuarial assumptions.

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Trattamento di Fine Rapporto ("TFR") relates to the amounts that employees in Italy are entitled to receive when they leave the Group and is calculated based on the period of employment and the taxable earnings of each employee. Under certain conditions, the entitlement may be partially advanced to an employee during the employee's working life.

Under the amendments of the Italian legislation in the first half of 2007, companies with at least 50 employees are obliged to transfer the TFR to the "Treasury Fund" managed by the Italian state-owned social security body ("INPS") or to supplementary pension funds. Prior to the amendments, accruing TFR for employees of all Italian companies could be managed by the Group itself.

Consequently, the Italian companies' obligation to INPS and the contributions to supplementary pension funds take the form, under IAS 19 revised, of "Defined contribution plans" whereas the amounts recorded in the TFR liability retain the nature of "Defined benefit plans". Accordingly, TFR liability consists of the residual obligation for TFR until December 31, 2006. This is an unfunded defined benefit plan as the benefits have already been almost entirely earned, with the sole exception of future revaluations. Since 2007 the scheme has been classified as a defined contribution plan, and the companies under IFRS recognize the associated cost, being the required contributions to the pension funds, over the period in which the employee renders service.

The Group operates defined benefit plans in Italy under broadly similar regulatory frameworks, which is an unfunded plan where the Group meets the benefit payment obligation as it falls due. The level of benefits provided depends on members' length of service and their salary in the final years leading up to retirement. The TFR in payment is generally updated in line with the retail price index.

he amounts recognized in the statement of financial position and the movements in the net defined benefit obligation over the year are as follows:

	USD'000
As at August 1, 2016	27,569
Interest expense recognized in profit or loss	87
Actuarial gains recognized in other comprehensive income	(1,520)
Exchange differences	(1,875)
Contribution to employees	(48)
As at December 31, 2016	24,213
Interest expense recognized in profit or loss	376
Actuarial losses recognized in other comprehensive income	436
Exchange differences	3,455
Contribution to employees	(318)
Balance at December 31, 2017	28,162
Interest expense recognized in profit or loss	314
Actuarial gains recognized in other comprehensive income	(129)
Exchange differences	(1,223)
Contribution to employees	(649)
Balance at December 31, 2018	26,475

The defined benefit obligation has been included in liabilities directly associated with assets classified as held-for-sale.

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The significant actuarial assumptions used by Lab4Value S.r.l., an Italian company operated in the consultancy of TFR actuarial valuation, were as follows:

	12/31/18	12/31/17	12/31/16
Discount rate (%)	1.38 %	1.18 %	1.37 %
Inflation rate (%)	1.50 %	1.50 %	1.50 %
Salary growth rate (%)	1.50 %	1.50 %	1.50 %
Labor turnover rate (%)	2.65 %	2.65 %	2.65 %
Probability of request of advances of TFR (%)	1.50 %	1.50 %	1.50 %
Percentage required in case of advance (%)	70.00 %	70.00 %	70.00 %

	12/31/18	12/31/17	12/31/16
Number of employees with TFR	1,390	1,485	1,421
Average age (years)	48	47	46
Average seniority (years)	22	20	20

The sensitivity analysis of the defined benefit obligation was as follows:

	12/31/18	12/31/17	12/31/16
Discount rate (+0.5%)	-5.59 %	-5.85 %	-6.05 %
Discount rate (-0.5%)	6.07 %	6.38 %	6.61 %
Rate of payments increases (+20%)	-0.33 %	-0.65 %	-0.57 %
Rate of payments decreases (-20%)	0.35 %	0.71 %	0.63 %
Rate of price inflation increases (+0.5%)	3.62 %	3.80 %	3.94 %
Rate of price inflation decreases (-0.5%)	-3.56 %	-3.72 %	-3.86 %
Rate of salary increases (+0.5%)	— %	— %	— %
Rate of salary decreases (-0.5%)	— %	— %	— %
Increase the retirement age (+1 year)	0.40 %	0.49 %	0.38 %
Decrease the retirement age (-1 year)	-0.43 %	-0.52 %	-0.40 %
Increase longevity (+1 year)	— %	— %	— %
Decrease longevity (-1 year)	— %	— %	— %

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period) has been applied as when calculating the defined benefit liability recognized in the statement of financial position.

#### **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 40. Amounts will be reclassified to profit or loss when the associated hedged transaction affects profit or loss.

#### **Share of other comprehensive income of joint ventures accounted for using the equity method**

The reserve of share of other comprehensive income of joint ventures accounted for using the equity method was recognized as the Group's share of the change in value of available-for-sale financial assets of the joint ventures.

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The adoption of IFRS 9 Financial Instruments from January 1, 2018 resulted in changes in accounting policies and adjustments to the amounts recognized in the financial statements. In accordance with the transitional provisions in IFRS 9, comparative figures have not been restated. Related fair value gains of US\$17.6 million were transferred from the reserve of share of other comprehensive income of joint ventures accounted for using the equity method to retained earnings on January 1, 2018.

28. Retained earnings (accumulated deficit)

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.

As of December 31, 2018, 2017 and 2016, the accumulated non-distributable reserve was US\$145.5 million, US\$90.6 million and US\$34.3 million respectively.

In 2018, 2017 and 2016 the Company did not declare or pay any cash dividends on the ordinary shares.

In 2018, the Company paid the distribution to perpetual subordinated convertible securities holders amounted to US\$6.3 million.

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.

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 retained earnings of US\$7.3 million for the Company and a corresponding loss for non-controlling interests.

29. 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.

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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, 2018, 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, 2018, 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, 2018 no PSCS have been converted into ordinary shares of the Company, and the Company paid the distribution amounted to US\$6.3 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.

	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
<b>At amortized cost</b>			
Short-term commercial bank loans <sup>(1)</sup>	192,198	308,311	176,957
<b>Short-term borrowings</b>	<b>192,198</b>	<b>308,311</b>	<b>176,957</b>
2013 USD loan (SMIC Shanghai)	—	10,760	10,760
2015 USD loan (SMIC Shanghai)	—	—	39,641
2015 CDB USD loan (SJ Jiangyin)	—	—	2,000
2015 CDB RMB loan I (SMIC Shanghai) <sup>(2)</sup>	145,705	153,041	144,155
2015 CDB RMB loan II (SMIC Shanghai) <sup>(3)</sup>	64,839	72,694	68,473
2015 CDB RMB loan (SMIC Beijing) <sup>(4)</sup>	26,227	29,231	28,110
2016 CDB RMB loan (SMIC Beijing) <sup>(5)</sup>	202,529	223,440	210,466
2017 CDB RMB loan (SMIC Shenzhen) <sup>(6)</sup>	322,153	185,792	—
2015 EXIM RMB loan (SMIC Shanghai) <sup>(7)</sup>	72,852	76,520	72,077
2017 EXIM RMB loan (SMIC Shanghai) <sup>(8)</sup>	145,705	153,041	—
2018 EXIM RMB loan I (SMIC Shanghai) <sup>(9)</sup>	138,419	—	—
2016 EXIM RMB loan I (SMIC Beijing)	—	36,730	34,597
2016 EXIM RMB loan II (SMIC Beijing) <sup>(10)</sup>	58,282	61,216	57,662
2017 EXIM RMB loan (SMIC Beijing) <sup>(11)</sup>	69,938	76,520	—
2018 EXIM RMB Loan I (SMIC Beijing) <sup>(12)</sup>	29,141	—	—
2018 EXIM RMB Loan II (SMIC Beijing) <sup>(13)</sup>	34,969	—	—
2016 EXIM RMB loan (SMIC) <sup>(14)</sup>	72,852	76,520	72,077
2017 EXIM RMB loan (SMIC Tianjin) <sup>(15)</sup>	72,852	76,520	—
2017 EXIM USD loan (SMIC Tianjin)	—	25,000	—
2018 EXIM RMB loan (SMIC Tianjin) <sup>(16)</sup>	78,680	—	—
2017 EXIM RMB loan (SMIC Shenzhen) <sup>(17)</sup>	68,481	76,520	—
Loan to LFoundry	—	55,036	43,214
Others <sup>(18)</sup>	494,946	487,655	482,579
<b>Long-term borrowings</b>	<b>2,098,570</b>	<b>1,876,236</b>	<b>1,265,811</b>
	<b>2,290,768</b>	<b>2,184,547</b>	<b>1,442,768</b>
<b>Current</b>			
Short-term borrowings	192,198	308,311	176,957
Current maturities of long-term borrowings	337,807	132,297	32,217
	<b>530,005</b>	<b>440,608</b>	<b>209,174</b>
<b>Non-current</b>			
Non-current maturities of long-term borrowings	1,760,763	1,743,939	1,233,594
	<b>2,290,768</b>	<b>2,184,547</b>	<b>1,442,768</b>
Borrowing by repayment schedule:			
Within 1 year	530,005	440,608	209,174
Within 1–2 years	434,998	399,301	171,900
Within 2–5 years	895,135	877,315	698,070
Over 5 years	430,630	467,323	363,624
	<b>2,290,768</b>	<b>2,184,547</b>	<b>1,442,768</b>

#### Summary of borrowing arrangements

- (1) As of December 31, 2018, the Group had 33 short-term credit agreements that provided total credit facilities up to US\$2,710.7 million on a revolving credit basis. As of December 31, 2018, the Group had drawn down US\$192.2 million under these credit agreements. The outstanding borrowings under these credit agreements are unsecured. The interest rate on this loan facility ranged from 1.93% to 4.35% in 2018.



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- (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, 2018, SMIS had drawn down RMB1,000.0 million (approximately US\$145.7 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 2018.
- (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, 2018, SMIS had drawn down RMB475.0 million and repaid RMB30.0 million on this loan facility. The outstanding balance RMB445.0 million (approximately US\$64.8 million) is repayable from June 2019 to December 2025. The interest rate on this loan facility was 1.20% in 2018.
- (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, 2018, SMIB had drawn down RMB195.0 million and repaid RMB15.0 million on this loan facility. The outstanding balance of RMB180.0 million (approximately US\$26.2 million) is repayable from June 2019 to December 2030. The interest rate on this loan facility was 1.20% in 2018.
- (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, 2018, SMIB had drawn down RMB1,460.0 million and repaid RMB70.0 million on this loan facility. The outstanding balance of RMB1,390.0 million (approximately US\$202.5 million) is repayable from May 2019 to May 2031. The interest rate on this loan facility was 1.20% in 2018.
- (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, 2018, SMIZ had drawn down RMB2,211.0 million (approximately US\$322.2 million) on this loan facility. The outstanding balance is repayable from December 2019 to December 2024. The interest rate on this loan facility was 4.46% per annum in 2018.
- (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, 2018, SMIS had drawn down RMB500.0 million (approximately US\$72.9 million) on this loan facility. The outstanding balance is repayable in June 2020. The interest rate on this loan facility was 2.65% in 2018.
- (8) In March 2017, 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 as used for working capital purposes. As of December 31, 2018, SMIS had drawn down RMB1,000.0 million (approximately US\$145.7 million) on this loan facility. The outstanding balance is repayable in March and March 2019. The interest rate on this loan facility is 2.65% per annum in 2018.

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- (9) 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, 2018, SMIS had drawn down RMB950.0 million (approximately US\$138.4 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 2018.
- (10) In January 2016, SMIB entered into the RMB loan, a three-year working capital loan facility in the principal amount of RMB400.0 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, 2018, SMIB had drawn down RMB400.0 million (approximately US\$58.3 million) on this loan facility. The principal amount is repayable in January 2019. The interest rate on this loan facility was 2.65% in 2018.
- (11) In September 2017, SMIB entered into the new RMB loan 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, 2018, SMIB had drawn down RMB500.0 million and repaid RMB20.0 million on this loan facility. The outstanding balance RMB480.0 million (approximately US\$69.9 million) is repayable from March 2019 to September 2022. The interest rate on this loan facility was 2.92% per annum in 2018.
- (12) 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, 2018, SMIB had drawn down RMB200.0 million (approximately US\$29.1 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 2018.
- (13) 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, 2018, SMIB had drawn down RMB240.0 million (approximately US\$35.0 million) on this loan facility. The outstanding balance is repayable in December 2020. The interest rate on this loan facility was 2.92% in 2018.
- (14) In May 2016, SMIC 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. As of December 31, 2018, SMIC had drawn down RMB500.0 million (approximately US\$72.9 million) on this loan facility. The outstanding balance is repayable in May 2019. The interest rate on this loan facility was 4.04% in 2018.
- (15) In February 2017, SMIT entered into the new 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, 2018, SMIT had drawn down RMB500.0 million (approximately US\$72.9 million) on this loan facility. The outstanding balance is repayable in February 2020. The interest rate on this loan facility was 4.04% per annum in 2018.

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- (16) In December 2018, SMIT entered into a loan facility in the aggregate principal amount of RMB540.0million 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, 2018, SMIT had drawn down RMB540.0 million (approximately US\$78.7 million) on this loan facility. The outstanding balance of RMB540.0 million is repayable in December 2023. The interest rate on this loan facility is 2.92% per annum in 2018.
- (17) 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, 2018, SMIZ had drawn down RMB500.0 million and repaid RMB30.0 million on this loan facility. The outstanding balance of RMB470.0 million (approximately US\$68.5 million) is repayable from March 2019 to September 2022. The interest rate on this loan facility ranged from 3.40% in 2018.
- (18) Other borrowings represented several batches of production equipment of the Group sold and leased back under the below arrangements:
- 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\$459.7 million (December 31, 2017: US\$487.7 million and December 31, 2016: US\$482.6 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, 2018, property, plant and equipment and land use right with carrying amount of approximately US\$207.2 million (December 31, 2017: US\$362.3 million and December 31, 2016: US\$631.4 million) have been pledged to secure borrowings of the Group.

31. Convertible bonds

**Redemption of zero coupon convertible bonds**

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.

**Issue of US\$450 million zero coupon convertible bonds due 2022**

The Company issued convertible bonds at a par value of US\$250,000 each with an aggregate principal amount of US\$450,000,000 on July 7, 2016 (the "2016 Convertible Bonds").

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The 2016 Convertible Bonds issued on July 7, 2016 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, which are deemed to be clearly and closely related to the host contract and therefore, do not need to be separately accounted for. As at the date of issue, the fair value of the liability component of the 2016 Convertible Bonds was approximately US\$387.9 million and the equity component was approximately US\$52.9 million, determined by deducting the amount of the liability component from the fair value of the compound instrument as a whole.

	<b>USD'000</b>
Principal amount	450,000
Transaction cost	(9,194)
Liability component as at the date of issue	<u>(387,871)</u>
Equity component as at the date of issue	<u>52,935</u>

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 3.78% per annum. The movement of the liability component and the equity component of the 2016 Bonds for the year ended December 31, 2018 is set out below:

	<b>Liability Component</b>	<b>Equity Component</b>	<b>Total</b>
	<b>USD'000</b>	<b>USD'000</b>	<b>USD'000</b>
As at the date of issue	387,871	52,935	440,806
Interest charged	7,339	—	7,339
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	<u>418,592</u>	<u>52,053</u>	<u>470,645</u>

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, 2018, 371,589,975 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.

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.

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Bondholders may convert their bonds into ordinary shares at any time on or after August 17, 2016. 3,778,881,081 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 7.7677HK\$/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.

32. Bonds payable

On October 7, 2014, the Company issued 5-year unsecured corporate bonds for a total amount of US\$500.0 million. The corporate bonds carry a coupon interest rate of 4.125% with bond interest payable semi-annually on March 31 and September 30. As at the date of issue, the net book value of the liabilities amounted to US\$491.2 million after the deduction of (1) a discount of US\$5.2 million and (2) issue expenses of US\$3.6 million.

	<b>USD'000</b>
Principal amount	500,000
Discount of bonds payable	(5,185)
Transaction cost	(3,634)
Bonds payable as at the date of issue	<u>491,181</u>

The movement of the corporate bonds for the year ended December 31, 2018 is set out below:

	<b>USD'000</b>
Balance at December 31, 2015	493,207
Interest charged	22,327
Interest payable recognized	(20,625)
Balance at December 31, 2016	494,909
Interest charged	22,405
Interest payable recognized	(20,625)
Balance at December 31, 2017	496,689
Interest charged	22,487
Interest payable recognized	(20,625)
Balance at December 31, 2018	<u>498,551</u>

33. Medium-term notes

On June 8, 2016, the Company issued the three- year medium-term notes of RMB1,500.0 million (approximately US\$226.2 million) through National Association of Financial Market Institutional Investors ("NAFMII"). The medium-term notes carry a coupon interest rate of 3.35% per annum with interest due annually on June 8, 2017, June 8, 2018 and June 10, 2019. As at the date of issue, the net book value of the liabilities of medium-term notes amounted to RMB1,485.2 million (approximately US\$223.9 million).

	<b>USD'000</b>
Principal amount	226,162
Transaction cost	(2,226)
Notes payable as at the date of issue	<u>223,936</u>

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The movement of the medium-term notes for the period ended December 31, 2018 is set out below:

	<b>USD'000</b>
As at the date of issue	223,936
Interest charged during	4,625
Interest payable recognized	(4,225)
Foreign exchange gain	(9,834)
Balance at December 31, 2016	214,502
Interest charged during	8,185
Interest payable recognized	(7,450)
Foreign exchange loss	13,246
Balance at December 31, 2017	228,483
Interest charged during	8,335
Interest payable recognized	(7,593)
Foreign exchange gain	(10,978)
Balance at December 31, 2018	<u>218,247</u>

34. Deferred government funding

**Government funding under specific R&D projects**

The Group received government funding (including those with primary condition that the Group should purchase, construct or otherwise acquire non-current assets) of US\$265.0 million, US\$178.3 million and US\$181.1 million and recognized US\$105.3 million US\$82.2 million and US\$52.5 million as reductions of certain R&D expenses in 2018, 2017 and 2016 for several specific R&D projects respectively. The government funding is recorded as a liability upon receipt and recognized as reduction of depreciation over the useful life of R&D equipment and of R&D expenses until the milestones specified in the terms of the funding have been reached.

**Government funding for specific intended use**

The Group received government funding of US\$51.7 million, US\$51.6 million and US\$21.2 million in 2017, 2016 and 2015, respectively. The Group recognized US\$19.5 million, US\$24.2 million and US\$11.6 million as reduction of interest expense (Note 8) and recognized US\$32.2 million, US\$27.4 million and US\$9.5 million as other operating income (Note 7) in 2018, 2017 and 2016, 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

	<b>12/31/18</b>	<b>12/31/17</b>	<b>12/31/16</b>
	<b>USD'000</b>	<b>USD'000</b>	<b>USD'000</b>
Trade payables	<u>823,443</u>	837,843	781,161
Deposit received	<u>38,713</u>	54,895	41,324
Other payable	<u>102,704</u>	114,686	75,121
	<u><b>964,860</b></u>	<u>1,007,424</u>	<u>897,606</u>

Trade payables are non-interest bearing and are normally settled on 30-day to 60-day terms.

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As of December 31, 2018, 2017 and 2016, trade payables were US\$823.4 million, US\$837.8 million and US\$781.2 million, within which the payables for property, plant and equipment were US\$461.6 million, US\$506.7 million and US\$483.0 million, respectively.

The following is an aged analysis of accounts payable presented based on the invoice date at the end of the reporting period.

	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
Age of payables			
Within 30 days	657,172	658,804	630,896
31–60 days	50,815	68,358	43,984
Over 60 days	115,456	110,681	106,281
	<u>823,443</u>	<u>837,843</u>	<u>781,161</u>

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, 2018, 2017 and 2016 were US\$164.6 million, US\$180.9 million and US\$230.5 million, within which the amounts of accrued payroll expenses were US\$73.7 million, US\$116.7 million and US\$163.6 million, respectively.

37. Share-based payments

**Stock incentive plans**

The Company's stock incentive plans allow the Company to offer a variety of incentive awards to employees, consultants or external service advisors of the Group.

*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 subsidiaries ("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.

The expense recognized for employee services received during the year is shown in the following table:

	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000	Year ended 12/31/16 USD'000
Expense arising from equity-settled share-based payment transactions	11,661	18,214	14,210

### 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 subsidiaries ("Subsidiary Plan")):

	2018 Number	2018 WAEP	2017 Number	2017 WAEP	2016 Number*	2016 WAEP*
Outstanding at January 1	52,881,278	US\$ 0.83	72,482,764	US\$ 0.82	100,295,578	US\$ 0.82
Granted during the period	19,344,334	US\$ 1.33	6,071,477	US\$ 1.14	2,076,652	US\$ 0.92
Forfeited and expired during the period	(8,879,102)	US\$ 1.13	(3,842,461)	US\$ 1.33	(6,430,431)	US\$ 1.16
Exercised during the period	(11,738,316)	US\$ 0.68	(21,830,502)	US\$ 0.78	(23,459,035)	US\$ 0.75
Outstanding at December 31	51,608,194	US\$ 1.00	52,881,278	US\$ 0.83	72,482,764	US\$ 0.82
Exercisable at December 31	25,796,944	US\$ 0.79	39,511,002	US\$ 0.78	50,708,535	US\$ 0.77

As at December 31, 2018, the 25,796,944 outstanding share options were exercisable (December 31, 2017: 39,511,002 and December 31 2016: 50,708,535\*).

The weighted average remaining contractual life for the share options outstanding as at December 31, 2018 was 5.66 years (2017: 5.21 years and 2016: 5.29 years).

The range of exercise prices for options outstanding at the end of the year was from US\$0.34 to US\$1.34 (2017: from US\$0.23 to US\$1.38 and 2016: from US\$0.23\* to US\$1.48\*).

The weighted average closing price of the Company's shares immediately before the dates while the share options were exercised was US\$1.12 (2017: US\$1.44 and 2016: US\$1.24\*).

During the year ended December 31, 2018, share options were granted on May 23, 2018, September 13, 2018 and November 19, 2018. The fair values of the options determined at the dates of grant using the Black-Scholes Option Pricing model were US\$0.50, US\$0.73 and US\$0.38, respectively.



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During the year ended December 31, 2017, share options were granted on April 5, 2017, May 22, 2017 and September 7, 2017. The fair values of the options determined at the dates of grant using the Black-Scholes Option Pricing model were US\$0.56, US\$0.42 and US\$0.40, respectively.

During the year ended December 31, 2016, share options were granted on May 25, 2016, September 12, 2016 and November 18, 2016. The fair values of the options determined at the dates of grant using the Black-Scholes Option Pricing model were US\$0.36\*, US\$0.42\* and US\$0.52\*, 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, 2018, 2017 and 2016, respectively:

	2018	2017	2016
Dividend yield (%)	—	—	—
Expected volatility	40.16 %	42.80 %	44.80 %
Risk-free interest rate	2.84 %	1.84 %	1.39 %
Expected life of share options	5 years	6 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.

- \* The number, price and fair value of share options for 2016 have been adjusted to reflect the impact of the share consolidation, on the basis that every ten ordinary shares and preferred shares of US\$0.0004 each consolidated into one ordinary share and preferred share of US\$0.004 each, which was accounted for as a reverse stock split effective on December 7, 2016.

- (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):

	2018	2018	2017	2017	2016	2016
	Number	WAFV	Number	WAFV	Number*	WAFV*
Outstanding at January 1	28,701,097	US\$ 1.05	26,489,152	US\$ 0.98	30,451,268	US\$ 0.99
Granted during the period	8,068,466	US\$ 1.27	14,055,477	US\$ 1.11	8,738,247	US\$ 0.86
Forfeited during the period	(4,582,729)	US\$ 1.07	(950,412)	US\$ 1.04	(1,124,847)	US\$ 0.98
Exercised during the period	(12,333,620)	US\$ 1.03	(10,893,120)	US\$ 0.97	(11,575,516)	US\$ 0.91
Outstanding at December 31	19,853,214	US\$ 1.12	28,701,097	US\$ 1.05	26,489,152	US\$ 0.98

As at December 31, 2018, the number of outstanding RSUs granted 19,853,214 (December 31, 2017: 28,701,097 and December 31, 2016: 26,489,152\*).

The weighted average remaining contractual life for the RSUs outstanding as at December 31, 2018 was 8.29 years (2017: 8.51 years and 2016: 8.37 years).

The weighted average closing price of the Company's shares immediately before the dates on which the RSUs were exercised was US\$1.33 (2017: US\$1.29 and 2016: US\$0.83\*).

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During the year ended December 31, 2018, RSUs were granted on May 23, 2018, September 13, 2018 and November 19, 2018. The fair values of the RSUs determined at the dates of grant using the Black-Scholes Option Pricing model were US\$1.30, US\$1.09 and US\$0.87, respectively.

During the year ended December 31, 2017, RSUs were granted on April 5, 2017, May 22, 2017, September 7, 2017 and December 7, 2017. The fair values of the RSUs determined at the dates of grant using the Black-Scholes Option Pricing model were US\$1.24, US\$1.09 US\$1.01, and US\$1.31, respectively.

During the year ended December 31, 2016, RSUs were granted on May 25, 2016, September 12, 2016 and November 18, 2016. The fair values of the RSUs determined at the dates of grant using the Black-Scholes Option Pricing model were US\$0.82\*, US\$1.11\* and US\$1.39\*, respectively.

The following table list the inputs to the models used for the plans for the years ended December 31, 2018, 2017 and 2016, respectively:

	2018	2017	2016
Dividend yield (%)	—	—	—
Expected volatility	39.77 %	39.45 %	39.66 %
Risk-free interest rate	2.54 %	1.24 %	0.9 %
Expected life of share options	2 years	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.

- \* The number and fair value of RSUs for 2016 have been adjusted to reflect the impact of the share consolidation, on the basis that every ten ordinary shares and preferred shares of US\$0.0004 each consolidated into one ordinary share and preferred share of US\$0.004 each, which was accounted for as a reverse stock split effective on December 7, 2016.
- (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):

	2018	2018	2017	2017	2016	2016
	Number	WAEP	Number	WAEP	Number	WAEP
Outstanding at January 1	14,918,802	US\$ 0.20	14,598,750	US\$ 0.19	7,000,000	US\$ 0.06
Granted during the year	7,349,500	US\$ 0.36	1,598,750	US\$ 0.31	7,698,750	US\$ 0.31
Forfeited and expired during the period	(2,029,167)	US\$ 0.29	(934,948)	US\$ 0.05	(100,000)	US\$ 0.05
Exercised during the year	(192,500)	US\$ 0.36	(343,750)	US\$ 0.25	—	—
Outstanding at December 31	20,046,635	US\$ 0.25	14,918,802	US\$ 0.20	14,598,750	US\$ 0.19
Exercisable at December 31	10,333,724	US\$ 0.17	7,079,401	US\$ 0.15	3,297,135	US\$ 0.07

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The weighted average remaining contractual life for the share options outstanding as at December 31, 2018 was 7.9 years (2017: 8.3 years and 2016: 9.2 years).

The range of exercise prices for options outstanding at the end of the year was from US\$0.05 to US\$0.36 (2017: from US\$0.05 to US\$0.31 and 2016: from US\$0.05 to US\$0.31).

During the year ended December 31, 2018, share options of the Subsidiary Plan were granted on May 13, 2018. The fair values of the options of the Subsidiary Plan determined at the dates of grant using the Black-Scholes Option Pricing model was US\$0.19.

During the year ended December 31, 2017, share options of the Subsidiary Plan were granted on August 9, 2017. The fair values of the options of the Subsidiary Plan determined at the dates of grant using the Black-Scholes Option Pricing model were US\$0.11.

During the year ended December 31, 2016, share options of the Subsidiary Plan were granted on December 27, 2016. The fair values of the options of the Subsidiary Plan determined at the dates of grant using the Black-Scholes Option Pricing model were US\$0.14.

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, 2018:

	2018	2017	2016
Dividend yield (%)	—	—	—
Expected volatility	53.0 %	32.0 %	41.5 %
Risk-free interest rate	2.70 %	1.90 %	2.10 %
Expected life of share options	6 years	6 years	3 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 (debt as detailed in Note 30, Note 31, Note 32 and Note 33 offset by cash and cash equivalent) 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

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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.

	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
Debt*	3,426,158	3,313,048	3,025,283
Cash and cash equivalent	(1,786,420)	(1,838,300)	(2,126,011)
Financial assets at fair value through profit or loss - current	(41,685)	—	—
Financial assets at amortized cost	(1,996,808)	—	—
Other financial assets - current	—	(683,812)	(31,543)
Net debt	(398,755)	790,936	867,729
Equity	8,923,580	6,721,335	5,403,227
Net debt to equity ratio	-4.5 %	11.8 %	16.1 %

\* Debt is defined as long-term and short-term borrowings (excluding derivatives), convertible bonds, short-term and medium-term notes, and bonds payables as described in Note 30, Note 31, Note 32 and Note 33.

#### 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 including currency risk, interest rate risk and other price 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 debt 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, 2018, 2017 and 2016.

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There has been no change to the Group's exposure to market risks or the manner in which these risks are managed and measured.

### Foreign currency risk management

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		
	12/31/18	12/31/17	12/31/16	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
EUR	50,601	125,171	112,827	37,800	72,181	39,619
JPY	54,166	30,422	41,976	41,589	29,245	35,237
RMB	2,757,762	2,410,284	2,714,492	2,989,434	1,765,846	1,633,433
Others	51,829	43,824	27,083	905	8,688	3,860

### 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		
	2018	2017	2016	2018	2017	2016	2018	2017	2016	2018	2017	2016
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
Profit of loss	(640)	(2,650)	(3,660)	(662)	(62)	(355)	12,193	(33,918)	(6,611)	(2,679)	(1,848)	(1,222)
Equity	(640)	(2,650)	(3,660)	(662)	(62)	(355)	12,193	(33,918)	(6,611)	(2,679)	(1,848)	(1,222)

### 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.

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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)		
	12/31/18	12/31/17	12/31/16	12/31/18	12/31/17	12/31/16	12/31/18	12/31/17	12/31/16	12/31/18	12/31/17	12/31/16
				FC'000	FC'000	FC'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
<b>Buy</b>												
<b>EUR</b>												
Less												
than 3												
months	—	1.2019	—	—	2,080	—	—	2,500	—	—	(2)	—
<b>Buy</b>												
<b>RMB</b>												
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.

#### 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 2018, 2017 and 2016, 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 RMB3,321.5 million, RMB3,714.0 million and RMB5,447.0 million (approximately US\$484.0 million, US\$568.4 million and US\$782.5 million), respectively. In addition, the Group held several RMB denominated financial assets at amortized cost (the "RMB Assets") in the aggregate principal amount of RMB2,130.1 million (approximately 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 to protect against the adverse effect of exchange rate fluctuations arising from the RMB Debts. As of December 31, 2018, the Group had outstanding cross currency swap contracts with notional amounts of RMB9,527.5 million (approximately US\$1,388.2 million, as of December 31, 2017: US\$979.2 million and 2016: US\$854.4 million) to buy RMB and notional amounts of RMB3,028.8 million (approximately US\$441.3 million, as of December 31, 2017: nil and 2016: 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\$2.3 million gain of fair value change of cross currency swap as cash flow hedges was recognized in other gains or losses, net (Note 9, 2017: US\$2.2 million loss and 2016: US\$15.0 million)

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loss). The following foreign-exchange related amounts of cash flow hedges were recognized in profit or loss and other comprehensive income or loss:

	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000	Year ended 12/31/16 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)	(48,714)	95,185	(66,861)
Reclassified from other comprehensive income (loss) to offset foreign exchange gains or losses	84,645	(60,042)	32,234
	35,931	35,143	(34,627)
Balance of cash flow hedges reserve at beginning of the year	516	(34,627)	—
Balance of cash flow hedges reserve at end of the year	36,447	516	(34,627)

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)		
	12/31/18	12/31/17	12/31/16	12/31/18 FC'000	12/31/17 FC'000	12/31/16 FC'000	12/31/18 USD'000	12/31/17 USD'000	12/31/16 USD'000	12/31/18 USD'000	12/31/17 USD'000	12/31/16 USD'000
Buy RMB												
3 months												
to 1 year	6.8681	6.6369	6.6592	5,852,000	1,040,000	787,000	852,663	159,163	113,450	(11,650)	3,997	(6,348)
1 year to 5 years	6.8635	6.6356	6.5830	3,675,529	5,358,000	5,140,000	535,542	819,993	740,954	(10,274)	15,679	(74,170)
Sell RMB												
3 months												
to 1 year	6.8912	—	—	3,028,809	—	—	441,312	—	—	(1,573)	—	—
							1,829,517	979,156	854,404	(23,497)	19,676	(80,518)

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 debt 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, 2018 would increase by US\$0.9 million (2017: profit decrease by US\$0.4 million and 2016: profit decrease by US\$0.5 million). This is mainly attributable to the Group's exposure to interest rates on its variable rate borrowings.

**Price risk**

The group's exposure to equity securities price risk arises from investments held by the group and classified in the balance sheet as at fair value through profit or loss (Note 21).

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.

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 Customers A, B, C and D, 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 Customers A, B, C and D 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.



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The loss allowance as at December 31, 2018 and January 1, 2018 (on adoption of IFRS 9) was determined as follows for trade receivables:

	Current	31–60 days	61–90 days	91–120 days	Over 120 days	Total
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
<b>December 31, 2018</b>						
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
	Current	31–60 days	61–90 days	91–120 days	Over 120 days	Total
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
<b>January 1, 2018</b>						
Expected loss rate	0.1 %	2 %	4 %	15 %	42 %	
Trade receivables	394,079	9,796	1,960	732	1408	407,975
Allowance on doubtful trade receivables	343	212	79	110	591	1,335

The closing allowance on doubtful trade receivables as at December 31, 2018 reconcile to the opening balance as follows:

	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
Balance at beginning of the year	1,335	1,491	41,976
Addition in allowance on doubtful trade receivables	964	301	201
Amounts written off during the year as uncollectible	—	(19)	(39,083)
Reversal of allowance on doubtful trade receivables	(27)	(438)	(1,603)
Reclassified as held-for-sale	(117)	—	—
Balance at end of the year	2,155	1,335	1,491

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, 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\$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.

**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.

		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
<b>December 31, 2018</b>							
Interest-bearing bank and other borrowings	Fixed	2.26 %	2,192	124,797	282,735	270,316	680,040
	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	41,820	—	76,060
Contingent consideration			—	—	11,948	—	11,948
			<u>1,143,738</u>	<u>1,076,652</u>	<u>1,865,128</u>	<u>434,148</u>	<u>4,519,666</u>

		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
<b>December 31, 2017</b>							
Interest-bearing bank							
and	Fixed	3.20 %	140,338	24,757	313,497	338,632	817,224
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	64,462	—	85,123
Contingent							
consideration			—	—	12,549	—	12,549
			<u>1,038,279</u>	<u>139,971</u>	<u>2,683,641</u>	<u>648,639</u>	<u>4,510,530</u>

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		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
<b>December 31, 2016</b>							
Interest-bearing bank							
and	Fixed	2.50 %	130,728	6,729	131,474	384,382	653,313
other borrowings	Floating	2.62 %	6,039	67,347	785,059	4,781	863,226
Convertible bonds		2.78%–3.79 %	393,200	—	450,000	—	843,200
Bonds payable		4.52 %	—	—	500,000	—	500,000
Medium-term notes		3.70 %	—	—	226,162	—	226,162
Short-term notes		2.99 %	—	90,465	—	—	90,465
Finance lease payables		3.68 %	382	1,147	6,118	—	7,647
Trade and other payables			915,840	1,353	21,706	1,654	940,553
			<u>1,446,189</u>	<u>167,041</u>	<u>2,120,519</u>	<u>390,817</u>	<u>4,124,566</u>

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.

	Weighted average effective  interest rate	Less than 3 months		1–		Total
		3 months USD'000	to 1 year USD'000	5 years USD'000	5+ years USD'000	USD'000
December 31, 2018		837,828	—	—	—	837,828
Trade and other receivables						
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

	Weighted average effective  interest rate	Less than 3 months					Total
				1–			
		3 months	to 1 year	5 years	5+ years		
December 31, 2017		USD'000	USD'000	USD'000	USD'000	USD'000	
Trade and other receivables		616,308	—	—	—	—	616,308
Cash and cash equivalent, restricted cash* & 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	

	Weighted average effective  interest rate	Less than 3 months					Total
				1–			
		3 months	to 1 year	5 years	5+ years		
December 31, 2016		USD'000	USD'000	USD'000	USD'000	USD'000	
Trade and other receivables		645,822	—	—	—	645,822	
Cash and cash equivalent, restricted cash* & short-term investments	1.19 %	2,000,717	480,379	21,125	—	2,502,221	
Available for sale financial assets		—	—	—	21,966	21,966	
		2,646,539	480,379	21,125	21,966	3,170,009	

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 above restricted cash exclude the cash received from government funds.  
The Group has access to short-term financing facilities as described in below section, of which US\$2,518.5 million were unused at the end of the reporting period (2017: US\$1,810.2 million and 2016: US\$1,873.8 million). The Group expects to meet its other obligations from operating cash flows and proceeds of maturing financial assets.

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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.

	Less than 3 months	3 months to 1 year	1–5 years	above 5 years	Total
	USD'000	USD'000	USD'000	USD'000	USD'000
<b>December 31, 2018</b>					
Cross currency swap contracts— cash flow hedges					
<b>Gross settled:</b>					
— inflows	—	607,595	508,984	—	1,116,579
— (outflows)	—	(613,270)	(528,383)	—	(1,141,653)
<b>Net settled:</b>					
— net inflows	(8,783)	—	(738)	—	(9,521)
Cross currency swap contracts					
<b>Gross settled:</b>					
— inflows	—	262,652	—	—	262,652
— (outflows)	—	(261,472)	—	—	(261,472)
	(8,783)	(4,495)	(20,137)	—	(33,415)
	Less than 3 months	3 months to 1 year	1–5 years	above 5 years	Total
	USD'000	USD'000	USD'000	USD'000	USD'000
<b>December 31, 2017</b>					
Cross currency swap contracts— cash flow hedges					
<b>Gross settled:</b>					
— inflows	—	37,703	512,067	—	549,770
— (outflows)	—	(34,254)	(480,984)	—	(515,238)
<b>Net settled:</b>					
— net outflows	—	2,854	20,730	—	23,584
	—	6,303	51,813	—	58,116
	Less than 3 months	3 months to 1 year	1–5 years	above 5 years	Total
	USD'000	USD'000	USD'000	USD'000	USD'000
<b>December 31, 2016</b>					
Cross currency swap contracts— cash flow hedges					
<b>Gross settled:</b>					
— inflows	—	71,120	403,265	—	474,385
— (outflows)	—	(72,872)	(396,332)	—	(469,204)
<b>Net settled:</b>					
— net inflows	—	(1,355)	(1,475)	—	(2,830)
	—	(3,107)	5,458	—	(2,830)

## 39. Cash flow information

**Reconciliation of liabilities arising from financing activities**

	12/31/2017	Net cash flows in financing activities	Reclassified as held-for-sale	Foreign exchange gain	Other non-cash movement <sup>(1)</sup>	12/31/2018
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
Short-term borrowings	308,311	(108,348)	—	(7,765)	—	192,198
Long-term borrowings	1,876,236	353,998	(58,467)	(73,197)	—	2,098,570
Convertible bonds	403,329	—	—	—	15,263	418,592
Bonds payable	496,689	—	—	—	1,862	498,551
Medium-term notes	228,483	—	—	(10,978)	742	218,247
Currency swap contracts classified as derivative financial instruments as assets — cash flow hedges	(22,337)	—	—	—	15,646	(6,691)
Currency swap contracts classified as derivative financial instruments as Liabilities — cash flow hedges	2,661	—	—	—	28,685	31,346
	<u>3,293,372</u>	<u>245,650</u>	<u>(58,467)</u>	<u>(91,940)</u>	<u>62,198</u>	<u>3,450,813</u>

	12/31/2016	Net cash flows in financing activities	Conversion options exercised	Foreign exchange loss	Other non-cash movement <sup>(1)</sup>	12/31/2017
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
Short-term borrowings	176,957	127,715	—	3,639	—	308,311
Long-term borrowings	1,265,811	529,928	—	80,497	—	1,876,236
Convertible bonds	786,611	—	(399,099)	—	15,817	403,329
Bonds payable	494,909	—	—	—	1,780	496,689
Medium-term notes	214,502	—	—	13,246	735	228,483
Short-term notes	86,493	(87,858)	—	1,365	—	—
Currency swap contracts classified as other financial assets	—	—	—	—	(22,337)	(22,337)
Currency swap contracts classified as other financial liabilities	80,518	—	—	—	(77,857)	2,661
	<u>3,105,801</u>	<u>569,785</u>	<u>(399,099)</u>	<u>98,747</u>	<u>(81,862)</u>	<u>3,293,372</u>

(1) Other non-cash movements were accrued interest expenses for bonds and notes and fair value change of currency swap contracts.

**Non-cash investing activities**

The acquisition of tangible and intangible assets by means of long-term payables amounted to zero and US\$97.6 million in 2018 and 2017, respectively.

#### 40. Related party transactions

The names of the related parties which had transactions with the Group for the year ended December 31, 2018 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
Datang Telecom Group Finance Co., Ltd ("Datang Finance")	A subsidiary of Datang 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
Zhongxin Xiecheng Investment (Beijing) Co., Ltd ("Zhongxin Xiecheng")	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

#### 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		
	12/31/18 USD'000	12/31/17 USD'000	12/31/16 USD'000	12/31/18 USD'000	12/31/17 USD'000	12/31/16 USD'000
Datang Microelectronics Technology Co., Ltd <sup>(1)</sup>	9,783	15,667	14,146	—	—	—
Datang Semiconductor Co., Ltd <sup>(1)</sup>	117	535	464	—	—	—
Leadcore <sup>(1)</sup>	2,018	3,960	3,267	—	—	—
Toppan	—	—	—	4,050	3,896	3,481
Brite	33,568	44,212	31,506	—	—	—
JCET and its subsidiaries	64	17	—	89	48	—
SMEC	11,346	—	—	—	—	—
NSI	862	—	—	2,128	—	—
China Fortune-Tech	—	—	—	—	—	65



	Purchase of goods			Purchase of services		
	Year ended			Year ended		
	12/31/18	12/31/17	12/31/16	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
Datang Microelectronics Technology Co., Ltd <sup>(1)</sup>	—	—	—	106	—	—
Toppan	7,277	11,275	8,869	32	59	856
Zhongxin Xiecheng	—	—	—	—	—	4
Brite	—	—	25	96	2,016	2,887
China Fortune-Tech	—	—	—	352	959	313
Datang Finance <sup>(1)</sup>	—	—	—	—	—	15
JCET and its subsidiaries	9,923	1,778	1,097	819	620	1,189
Sino IC Leasing <sup>(1)</sup>	—	—	—	87,071	51,739	—
	Sale of equipment			Grant of licensing		
	Year ended			Year ended		
	12/31/18	12/31/17	12/31/16	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
Sino IC Leasing <sup>(2)</sup>	306,750	661,455	249,162	—	—	—
SMEC <sup>(3)</sup>	68,829	—	—	163,845	—	—

The following balances were outstanding at the end of the reporting period:

	Amounts due from related parties			Amounts due to related parties		
	12/31/18	12/31/17	12/31/16	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
Datang Microelectronics Technology Co., Ltd	3,379	4,279	6,354	—	—	—
Datang Semiconductor Co., Ltd	10	302	—	—	—	—
Leadcore	936	—	—	—	—	—
Toppan	2,365	670	615	737	888	2,414
Brite	10,775	12,951	6,507	—	—	279
JCET and its subsidiaries	47	21	—	948	3	736
SMEC	104,506	—	—	—	—	—
NSI	2,922	—	—	—	—	—
China Fortune-Tech	—	—	38	—	—	—
Sino IC Leasing <sup>(4)</sup>	44,702	—	—	—	—	—

- (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 from Page 96 to Page 132 Non-exempt Continuing Connected Transactions. The other party transactions did not constitute non-exempt continuing connected transaction under Chapter 14A of the Listing Rules.
- (2) Several batches of production equipment of the Group was sold and leased back under the below arrangements: In July 2018, there were four arrangements in consideration of US\$306.8 million entered into by the Group with Xinhe Leasing (Tianjin) Co., Ltd. (a wholly-owned subsidiary of Sino IC Leasing) in the form of a sale and leaseback transaction with a repurchase option.

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In July 2017, there were seven arrangements in total consideration of US\$410.8 million entered into by the Group with Xincheng Leasing (Tianjin) Co., Ltd, Xindian Leasing (Tianjin) Co., Ltd and Xinlu Leasing (Tianjin) Co., Ltd. (the three leasing companies are wholly-owned subsidiaries of Sino IC Leasing) respectively, in the form of a sale and leaseback transaction with a repurchase option.

In February 2017 and December 2016, there were three and two arrangements in consideration of US\$250.6 and US\$249.2 million respectively, entered into by the Group with Sino IC Leasing (Tianjin) Co., Ltd. (a wholly-owned subsidiary 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 future minimum lease payments under the lease arrangements please refer to Note 41.

- (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.

#### **Compensation of key management personnel**

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly, including directors of the Company.

The remuneration of key management personnel during the year are as follows:

	year ended 12/31/18	year ended 12/31/17	year ended 12/31/16
	USD'000	USD'000	USD'000
Salaries, bonus and benefits	3,973	4,853	4,921
Equity-settled share-based payments	2,390	8,264	2,762
	<b>6,363</b>	<b>13,117</b>	<b>7,683</b>

The remuneration of key 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 key 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 not 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 not completed as of the date of this annual report.

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In 2016, the Group entered into arrangement/contracts with one of directors of the Company for sale of self-developed living quarter unit and the amount of the consideration is approximately US\$1.0 million. The transaction was completed in March 2017.

41. Commitments for expenditure

**Purchase commitments**

As of December 31, 2018, 2017 and 2016, 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, 2019.

	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
Commitments for the facility construction	333,211	484,468	239,759
Commitments for the acquisition of property, plant and equipment	1,209,335	476,132	800,597
Commitments for the acquisition of intangible assets	5,732	5,596	5,491
	<u>1,548,278</u>	<u>966,196</u>	<u>1,045,847</u>

**Non-cancellable operating leases**

The Group leases certain of its production equipment under operating lease arrangements since 2016. Leases are negotiated for terms ranging from three to five years. Please refer to Note 40 for details.

At December 31, 2018, the Group had total future minimum lease payments under non-cancellable operating leases falling due as follows:

	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
Within one year	121,588	91,181	23,483
Later than one year but not later than five years	230,952	203,684	45,989
	<u>352,540</u>	<u>294,865</u>	<u>69,472</u>

## 42. Financial information of parent company

(i) **Statement of profit or loss**

	Year ended		
	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
Revenue	—	—	—
General and administration expenses	(48,153)	(47,354)	(50,739)
Loss from operations	(48,153)	(47,354)	(50,739)
Interest income	2,266	2,670	1,154
Finance costs	(16,992)	(14,956)	(24,194)
Foreign exchange losses	(64,020)	63,087	(15,269)
Share of profits of subsidiaries	256,750	169,880	477,510
Share of profits of associates	2,980	2,868	1,455
Other gains (losses), net	1,224	3,484	(13,287)
Profit before tax	134,055	179,679	376,630
Income tax expense	—	—	—
Profit for the year	134,055	179,679	376,630
<b>Other comprehensive income (loss)</b>			
<i>Items that may be reclassified subsequently to profit or loss</i>			
Exchange differences on translating foreign operations	(36,138)	21,590	(18,131)
Change in value of available-for-sale financial assets	—	(2,356)	798
Cash flow hedges	35,931	35,143	(34,627)
Share of other comprehensive income of joint ventures accounted for using the equity method	—	17,646	—
Other	—	(131)	1
<i>Items that will not be reclassified to profit or loss</i>			
Actuarial gains and losses on defined benefit plans	129	(436)	1,520
<b>Total comprehensive income for the year</b>	<b>133,977</b>	<b>251,135</b>	<b>326,191</b>

(ii) **Statement of financial position**

	12/31/18	12/31/17	12/31/16
	USD'000	USD'000	USD'000
<b>Assets</b>			
<i>Non-current assets</i>			
Property, plant and equipment	48,168	47,090	89,404
Intangible assets	32,437	59,138	91,225
Investment in subsidiaries	5,051,780	4,779,485	4,333,604
Derivative financial instruments	5,266	—	—
Investments in associates	145,285	132,427	114,966
Other financial assets	—	11,732	—
Other assets	141,603	372,275	530,566
Total non-current assets	5,424,539	5,402,147	5,159,765
<i>Current assets</i>			
Prepayment and prepaid operating expenses	298	428	671
Trade and other receivables	28,982	29,061	24,749
Due from subsidiaries	2,027,008	1,609,556	908,716
Financial asset at amortized cost	40,000	—	—
Derivative financial instruments	1,323	—	—
Other financial assets	—	95,440	3,000
Cash and cash equivalent	107,795	140,411	317,873
Total current assets	2,205,406	1,874,896	1,255,009
<b>Total assets</b>	<b>7,629,945</b>	<b>7,277,043</b>	<b>6,414,774</b>
<b>Equity and liabilities</b>			
<i>Capital and reserves</i>			
Ordinary shares, \$0.004 par value, 10,000,000,000 shares authorized, 5,039,819,199, 4,916,106,889 and 4,252,922,259 shares issued and outstanding at December 31, 2018, 2017 and 2016	20,159	19,664	17,012
Share premium	4,993,163	4,827,619	4,950,948
Reserves	109,346	134,669	93,563
Retained earnings (accumulated deficit)	331,298	187,008	(910,849)
	5,453,966	5,168,960	4,150,674
Perpetual subordinated convertible securities	563,848	64,073	—
<b>Total equity</b>	<b>6,017,814</b>	<b>5,233,033</b>	<b>4,150,674</b>
<i>Non-current liabilities</i>			
Borrowings	—	76,520	72,077
Convertible bonds	418,592	403,329	395,210
Bonds payable	—	496,689	494,909
Medium-term notes	—	228,483	214,502
Derivative financial instruments	8,711	—	—
Other financial liabilities	—	1,885	60,610
Other liabilities	—	520	2,560
Total non-current liabilities	427,303	1,207,426	1,239,868
<i>Current liabilities</i>			
Trade and other payables	18,033	17,489	1,683
Due to subsidiaries	351,017	804,476	522,166
Borrowings	72,852	—	—
Convertible bonds	—	—	391,401
Bonds payable	498,551	—	—
Medium-term notes	218,247	—	—
Short-term notes	—	—	86,493
Accrued liabilities	13,789	13,877	19,570
Derivative financial instruments	12,339	—	—
Other financial liabilities	—	742	2,919
Total current liabilities	1,184,828	836,584	1,024,232
<b>Total liabilities</b>	<b>1,612,131</b>	<b>2,044,010</b>	<b>2,264,100</b>
<b>Total equity and liabilities</b>	<b>7,629,945</b>	<b>7,277,043</b>	<b>6,414,774</b>

## (iii) Statement of changes in equity

	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 plan reserve	Cash flow hedges	Share of other comprehensive income of joint ventures accounted for using equity method	Others	Accumulated deficit	Perpetual subordinated convertible securities	Total equity
	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
<b>Balance at December 31, 2015</b>	16,830	4,903,861	70,459	(3,956)	447	29,564	—	—	—	130	(1,287,479)	—	3,729,856
Profit for the year	—	—	—	—	—	—	—	—	—	—	376,630	—	376,630
Other comprehensive loss for the year	—	—	—	(18,131)	798	—	1,520	(34,627)	—	1	—	—	(50,439)
Total comprehensive loss for the year	—	—	—	(18,131)	798	—	1,520	(34,627)	—	1	376,630	—	326,191
Exercise of stock options	140	36,064	(18,594)	—	—	—	—	—	—	—	—	—	17,610
Share-based compensation	—	—	13,838	—	—	—	—	—	—	—	—	—	13,838
Conversion options of convertible bonds exercised during the year	42	11,023	—	—	—	(821)	—	—	—	—	—	—	10,244
Recognition of equity component of convertible bonds	—	—	—	—	—	52,935	—	—	—	—	—	—	52,935
Subtotal	182	47,087	(4,756)	—	—	52,114	—	—	—	—	—	—	94,627
<b>Balance at December 31, 2016</b>	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
<b>Balance at December 31, 2017</b>	19,664	4,827,619	64,978	(497)	(1,111)	52,053	1,084	516	17,646	—	187,008	64,073	5,233,033
<b>Change in accounting policy</b>	—	—	—	—	1,111	—	—	—	(17,646)	—	16,535	—	—
<b>Restated total equity at January 1, 2018</b>	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
<b>Balance at December 31, 2018</b>	20,159	4,993,163	58,679	(38,409)	—	52,053	1,213	36,447	—	(637)	331,298	563,848	6,017,814

(iv) **Statement of cash flow**

	Year ended 12/31/18 USD'000	Year ended 12/31/17 USD'000	Year ended 12/31/16 USD'000
<b>Operating activities</b>			
Profit for the year	134,055	179,679	376,630
Adjustments for:			
Amortization of intangible assets and land use right	26,309	32,131	30,678
Depreciation of property, plant and equipment	13,843	10,706	8,062
Expense recognized in respect of equity-settled share-based payments	1,434	1,297	1,940
Finance costs	16,992	14,956	24,194
Interest income	(2,266)	(2,670)	(1,154)
Impairment loss recognised on property, plant and equipment	392	—	—
Net (gain) loss arising on financial liabilities at fair value through profit or loss	(749)	(3,554)	13,182
Net loss (gain) on foreign exchange	64,059	(63,087)	5,982
Share of profit of investment accounted for using equity method	(259,730)	(172,748)	(478,965)
	(5,661)	(3,290)	(19,451)
Operating cash flows before movements in working capital:			
Decrease (increase) in trade and other receivables	4,868	(2,374)	(1,727)
Decrease (increase) in prepaid operating expenses	130	243	(57)
Decrease (increase) in other operating assets	5,044	(7,710)	777
Increase in trade and other payables	543	5,168	1,354
Increase (decrease) in other operating liabilities	700	(5,534)	2,818
Cash generated from (used in) operations	5,624	(13,497)	(16,286)
Interest paid	(18,165)	(21,262)	(16,149)
Interest received	2,769	1,347	1,135
Net cash used in operating activities	(9,772)	(33,412)	(31,300)
<b>Investing activities</b>			
Payments to acquire financial assets at fair value through profit or loss	(119,200)	—	—
Proceeds on sale of financial assets at fair value through profit or loss	212,038	—	—
Payments to acquire financial assets at amortised cost	(40,000)	—	—
Payments to acquire financial assets	—	(92,000)	(6,000)
Proceeds on sale of financial assets	—	3,000	18,000
Investment in subsidiaries	(30,000)	(207,000)	(550,426)
Investment in associates	(15,790)	(15,095)	(63,796)
Payments for property, plant and equipment	—	—	(52,445)
Payments for intangible assets	(520)	(1,000)	(11,526)
Proceeds from disposal of available-for-sale investment	—	—	146
Cash paid for subsidiaries	(1,842,219)	(728,621)	(437,437)
Distributions received from associates	316	255	—
Net cash used in investing activities	(1,835,375)	(1,040,461)	(1,103,484)
<b>Financing activities</b>			
Proceeds from borrowings	—	—	76,006
Proceeds from issuance of new shares	160,878	326,351	—
Proceeds from issuance of convertible bonds	—	—	441,155
Proceeds from issuance of short-term and medium-term notes	—	—	314,422
Repayment of short-term notes	—	(87,858)	—
Proceeds from issuance of perpetual subordinated convertible securities	499,775	64,350	—
Distribution of perpetual subordinated convertible securities	(6,300)	—	—
Proceeds from exercise of employee stock options	8,007	17,088	17,610
Payments to acquire treasury shares	(20,057)	—	—
Cash received from subsidiaries	1,172,202	572,320	487,050
Net cash from financing activities	1,814,505	892,251	1,336,243
Net (decrease) increase in cash and cash equivalent	(30,642)	(181,622)	201,459
Cash and cash equivalent at the beginning of the year	140,411	317,873	115,726
Effects of exchange rate changes on the balance of cash held in foreign currencies	(1,974)	4,160	688
Cash and cash equivalent at the end of the year	107,795	140,411	317,873

43. Subsequent events

On March 29, 2019, SMIC Shanghai (Cayman) Corporation (the "Vendor", a wholly-owned subsidiary of the Company), and SMIC Hong Kong (International) Company 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% of the share capital of LFoundry. The consideration of the Target Company and its subsidiaries amounted to US\$112.8 million was considered to be fair and reasonable and in the interest of the Company and its shareholders taken as a whole. Further, the Purchaser agreed to purchase from the Target Company the creditor's rights for the outstanding balance (being the total outstanding principal and total aggregate accrued interest) under the loans from the Group.

44. Approval of financial statements

The financial statements were approved and authorized for issue by the board of directors of the Company on April 30, 2019.



**Annex A**

ASIC/ASSP	Application Specific Integrated Circuit/Application Specific Standard Parts. ASICs/ASSPs are designed to provide a very specific function for a specific application in any one of the six application markets: computing, communications, consumer, automotive and industrial. ASICs include both standard catalogue products, standard and customized/application-specific logic ICs.
Analog PDs	Analog PhotoDiodes. Using PN junction in a silicon device stack as light detector, transforming light into electrical signals. Analog PDs do not have CMOS circuitry included, thus the main functionality is the transformation of the light into electrical signal. Post processing of the signal is done in a separate semiconductor device.
BCD	Bipolar-CMOS-DMOS. CMOS technology with embedded high voltage devices - LDMOS (laterally diffused metal oxide semiconductor) - for high output power with a corresponding drain to source breakdown voltage up to 40 volts and above, applicable for power management products.
Cell	A primary unit that normally repeats many times in an integrated circuit. Cells represent individual functional design units or circuits that may be reused as blocks in designs. For example, a memory cell represents a storage unit in a memory array.
CIS	CMOS Image Sensor. CIS can be used in applications such as still and video cameras and embedded cameras in mobile telephones. It is a fast growing imaging sensor technology. The fabrication of CIS is fully compatible with the mainstream CMOS process, which enables system-on-chip capability, low power consumption and low cost of fabrication.
Clean room	Area within a fab in which the wafer fabrication takes place. The classification of a clean room relates to the maximum number of particles of contaminants per cubic foot within that room. For example, a class 100 clean room contains less than 100 particles of contaminants per cubic foot.
CMOS	Complementary Metal Oxide Silicon. A fabrication process that incorporates n-channel and p-channel CMOS transistors within the same silicon substrate. Currently, this is the most commonly used integrated circuit fabrication process technology and is one of the latest fabrication techniques to use metal oxide semiconductor transistors
CVD	Chemical Vapor Deposition. A process in which gaseous chemicals react on a heated wafer surface to form solid film.
Die	One individual chip cut from a wafer before being packaged.
DRAM	Dynamic Random Access Memory. A device that temporarily stores digital information but requires regular refreshing to ensure data is not lost.
DSP	Digital Signal Processor. A type of integrated circuit that processes and manipulates digital information after it has been converted from an analog source.
eEEPROM	Embedded Electrically Erasable Programmable Read-Only Memory is a type of embedded Non-Volatile Memory that has similar function as an EEPROM, but in generally is embedded in a system or in a controller IC or SoC
EEPROM	Electrically Erasable Programmable Read-Only Memory. An integrated circuit that can be electrically erased and electrically programmed with user-defined information.

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EPROM	Erasable Programmable Read-Only Memory. A form of PROM that is programmable electrically yet erasable using ultraviolet light.
FinFet	Fin Field Effect Transistors (FinFET) are self-aligned multi-gate devices with a conventional CMOS process. It allows extending the gate scaling beyond the planar transistor limits with 3d shape above the substrate. FinFET's conducting channel is wrapped by a thin silicon "fin", which forms the body of the device. The thickness of the "fin" will determine the effective channel length of the device. FinFET greatly reduces the leakage currents and enables the use of lower threshold voltages and results better performance and power savings.
Flash memory	A type of non-volatile memory where data is erased in blocks. The name "flash" is derived from the rapid block erase operation. Flash memory requires only one transistor per memory cell versus two transistors per memory cell for EEPROMs, making flash memory less expensive to produce. Flash memory is the most popular form of non-volatile semiconductor memory currently available.
FPGA	A field-programmable gate array (FPGA) is an integrated circuit designed to be configured by a customer or a designer after manufacturing – hence "field-programmable". The FPGA configuration is generally specified using a hardware description language, similar to that used for an application-specific integrated circuit.
Gold Bumping	The fabrication process of forming gold bump termination electrodes on a finished wafer.
High-K Metal Gate (HKMG)	High-k Metal Gate (HKMG) is referring to High-k dielectrics, used in semiconductor manufacturing process with metallic gate, generally replaces a silicon dioxide gate dielectric or another dielectric layers of a device. HKMG allows the increase of gate capacitance without the associated leakage effects.
High voltage semiconductor	High voltage semiconductors are semiconductor devices that can drive relatively high voltage potential to systems that require higher voltage of between five volts to several hundred volts.
HybridBonding	Wafer-to wafer bonding with electrical interconnect. The wafer surfaces are planarized, then aligned and bonded together at room temperature on their top surface directly connecting the metal interconnects during low temperature anneal step.
IDM	Integrated Device Manufacturer.
Integrated circuit	An electronic circuit where all the elements of the circuit are integrated together on a single semiconductor substrate.
Interconnect	Conductive materials such as aluminum doped polysilicon or copper that form the wiring circuitry to carry electrical signals to different parts of the chip.
IPD	Integrated Passive Devices. IPDs are generally fabricated using standard wafer fab technologies such as thin film and photolithography processing. IPDs can be designed as flip chip mountable or wire bondable components and the substrates for IPDs usually are thin film substrates like silicon, alumina or glass.
I/O	Inputs/Outputs.
Logic device	A device that contains digital integrated circuits that perform a function rather than store information.

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Mask	A glass plate with a pattern of transparent and opaque areas used to create patterns on wafers. "Mask" is commonly used to refer to a plate that has a pattern large enough to pattern a whole wafer at one time, as compared to a reticle, where a glass plate can contain the pattern for one or more dies but is not large enough to transfer a wafer-sized pattern all at once.
MCU	Microcontroller Unit. Includes a central processing unit, program memory, read/write data memory and some I/O capability. May include EEPROM, Flash and/or other types of memory embedded inside.
Memory	A device that can store information for later retrieval.
MEMS	Micro-Electro-Mechanical Systems.
Micro-display	A small display that is of such high resolution that it is only practically viewed or projected with lenses or mirrors. A micro-display is typically magnified by optics to enlarge the image viewed by the user. For example, a miniature display smaller than one inch in size may be magnified to provide a 12-inch to 60-inch viewing area.
Micron	A term for micrometer, which is a unit of linear measure that equals one one-millionth (1/1,000,000) of a meter. There are 25.4 microns in one one-thousandth of an inch.
Mixed-signal	The combination of analog and digital circuitry in a single semiconductor.
MPU	Microprocessors (MPUs). MPU includes an instruction decoder, ALU, registers and additional logic for fetching instructions, executing instructions and manipulating data. Computer MPU; Embedded MPU; General Purpose MPUs.
MPW	Multi-Project Wafer integrates numbers of different integrated circuit designs from various parties onto one single wafer in order for these parties to share mask and wafer resources to reduce cost and to produce in low quantities.
Nanometer	A term for micrometer, which is a unit of linear measure that equals one thousandth (1/1,000) of a micron.
NFC	Near-field communication, a set of communication protocols that enable two electronic devices to establish communication by bringing them within a short distance of each other.
Non-volatile memory	Memory products that maintain their content when the power supply is switched off
PolySiON	Polycrystalline silicon oxygen nitride (PolySiON) is referring to semiconductor manufacturing process with CMOS technology using conventional poly gate and silicon oxygen nitride gate dielectrics.
PROM	Programmable Read-Only Memory. Memory that can be reprogrammed once after manufacturing.
RAM	Random Access Memory. Memory devices where any memory cell in a large memory array may be accessed in any order at random.
Reticle	See "Mask" above.
RF	Radio Frequency. Radio frequency semiconductors are primarily used in communications devices such as cell phones.

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RFID	Radio Frequency Identification. Radio-frequency identification (RFID) is the use of a wireless non-contact system that uses radio-frequency electromagnetic fields to transfer data from a tag attached to an object. RFID's frequency bands ranges from (125kHz~135kHz) (13.56MHz), and (860MHz~960MHz).
RF-FEM	Radio Frequency Front End Module. RF-Front End Module, a generic term for all the circuitry between the antenna and the first intermediate frequency (IF) stage. It consists of all the components in the receiver that process the signal at the original incoming radio frequency (RF), before it is converted to a lower intermediate frequency (IF). RF-FEM can consist of the combination of Tuner, Switch, PA, Filter, Transceivers related devices.
RF PA	Radio Frequency Power Amplifier. Primarily referring to CMOS-based Power Amplifier which increases radio signal frequencies in radio communications.
RF Tx/Rx	Radio Frequency Transceiver. Referring to Transmitter, Receiver, or both functions in one common circuitry as a Transceiver.
ROM	Read-Only Memory. See "Mask ROM" above.
Scanner	An aligner that scans light through a slit across a mask to produce an image on a wafer.
Semiconductor	An element with an electrical resistivity within the range of an insulator and a conductor. A semiconductor can conduct or block the flow of electric current depending on the direction and magnitude of applied electrical biases.
SoC	System on Chip. A system on a chip or system on chip (SoC or SOC) is an integrated circuit (IC) that integrates all components of a computer, communication or other electronic system into a single chip. It may contain digital, analog, mixed-signal, and often radio- frequency functions—all on a single chip substrate.
Solder bumping	The fabrication processes of forming solder bump termination electrodes, which are elevated metal structures, or lead free bump termination electrodes.
SPAD	Single Photon Avalanche Diode. technology processes between 110 to 150nm specifically setup for SPAD device designs. SPAD devices produces on silicon wafers are solid-state photodetectors in which a photon-generated carrier can trigger an avalanche current due to the impact ionization mechanism. Such device is able to detect low-intensity signals (down to the single photon) and to signal the arrival times of the photons within a few tens of picoseconds
SRAM	Static Random Access Memory. A type of volatile memory product that is used in electronic systems to store data and program instructions. Unlike the more common DRAM, it does not need to be refreshed.
System-on-chip	A chip that incorporates functions usually performed by several different devices and therefore generally offers better performance and lower cost.
Systems companies	Companies that design and manufacture complete end market products or systems for sale to the market.
Transistor	An individual circuit that can amplify or switch electric current. This is the building block of all integrated circuits.
Volatile memory	Memory products that lose their content when the power supply is switched off. Wafer A thin, round, flat piece of silicon that is the base of most integrated circuits.