

**HH Grace** | 華虹宏力

**HUA HONG SEMICONDUCTOR LIMITED**  
**華虹半導體有限公司**

*(Incorporated in Hong Kong with limited liability)*

*(於香港註冊成立之有限公司)*

*(Stock Code: 1347)*

*(股份代號：1347)*

**誠**  
**芯**  
**鑄**  
**華**  
**章**

A True North  
Bold Journey



**2018**

ANNUAL REPORT  
年度報告

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# DEFINITIONS

In this annual report, unless the context otherwise requires, the following terms shall have the meanings set out below.

“Annual General Meeting” or “AGM”	an annual general meeting of the Company to be held on 9 May 2019 at 2:00 p.m. at the Kowloon Shangri-La Hong Kong, 64 Mody Road, Kowloon, Hong Kong;
“Board”	the board of Directors of the Company;
“China Integrated Circuit”	China Integrated Circuit Industry Investment Fund Co., Ltd., a company incorporated in the PRC on 26 September 2014; its shareholders include the Ministry of Finance, the enterprises in the Integrated Circuit Industry Cluster, large-scale state-owned enterprises, certain financial institutions and private enterprises. It mainly focuses on the manufacturing of semiconductor wafers and takes into account the upstream and downstream links covering wafer and IC design, package test, equipment and materials et alia;
“China” or “the PRC”	the People’s Republic of China, but for the purpose of this annual report and for geographical reference only and except where the context otherwise requires, references in this annual report to “China” and the “PRC” do not include Taiwan, the Macau Special Administrative Region and Hong Kong;
“Company” or “our Company”	Hua Hong Semiconductor Limited, a company incorporated in Hong Kong with limited liability on 21 January 2005 and, except where the context otherwise requires, all of its subsidiaries, or where the context refers to the time before it became the holding company of its present subsidiaries, its present subsidiaries;
“Company Secretary”	the company secretary of the Company;
“Director(s)”	the director(s) of the Company;
“EPS”	earnings per share;
“Executive Director(s)”	the executive director(s) of our Company;
“Grace Cayman”	Grace Semiconductor Manufacturing Corporation, an exempted company with limited liability incorporated in the Cayman Islands on 5 October 1999 and a wholly-owned subsidiary of our Company;
“Grace Shanghai”	Shanghai Grace Semiconductor Manufacturing Corporation (上海宏力半導體製造有限公司), a company incorporated in the PRC on 20 December 2000 and a wholly-owned subsidiary of our Company. It was deregistered on 3 August 2018;

## DEFINITIONS

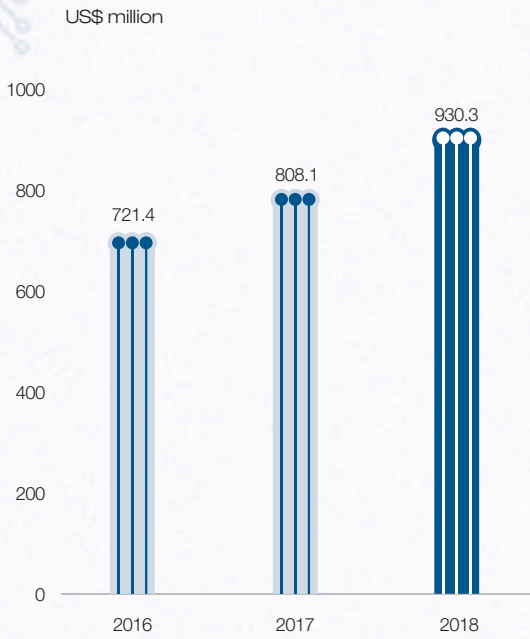
“Group”	our Company and our subsidiaries or, where the context so requires, in respect of the period before our Company became the holding company of our present subsidiaries (or became such associated companies of our Company), the business operated by such subsidiaries or their predecessors (as the case may be);
“HHGrace”	Shanghai Huahong Grace Semiconductor Manufacturing Corporation (上海華虹宏力半導體製造有限公司), a company incorporated in the PRC on 24 January 2013 and a wholly-owned subsidiary of our Company;
“HHNEC”	Shanghai Hua Hong NEC Electronics Co., Ltd. (上海華虹NEC電子有限公司), a company incorporated in the PRC on 17 July 1997 and a wholly-owned subsidiary of our Company. It was deregistered on 3 August 2018;
“HK\$”	Hong Kong dollars, the lawful currency of Hong Kong;
“Hong Kong”	the Hong Kong Special Administrative Region of the PRC;
“Huahong Group”	Shanghai Huahong (Group) Co., Ltd. (上海華虹(集團)有限公司), a company incorporated in the PRC on 9 April 1996 as Shanghai Hua Hong Microelectronics Co., Ltd. and renamed as Shanghai Huahong (Group) Co., Ltd. in 1998, and a controlling shareholder of our Company;
“Huahong Real Estate”	Shanghai Huahong Real Estate Co., Ltd. (上海華虹置業有限公司), a company incorporated in the PRC on 28 October 2011 and a wholly-owned subsidiary of Huahong Technology Development;
“Huahong Technology Development”	Shanghai Huahong Technology Development Co., Limited (上海華虹科技發展有限公司), a connected person, a company incorporated in the PRC on 10 May 2010, and a company 50% held by and consolidated with Huahong Group and 50% held by HHGrace;
“HH-Wuxi”	Hua Hong Semiconductor (Wuxi) Limited, a company incorporated in the PRC on 10 October 2017. Upon such incorporation, HH-Wuxi was held as to 100% by HHGrace, a wholly-owned subsidiary of the Company, and will continue to be held as to 51.0% by the Group following the completion of the transactions under the JV Agreement and the Capital Increase Agreement, of which 22.2% will be held directly by the Company and 28.8% will be held indirectly by the Company through HHGrace; China Integrated Circuit and Wuxi Xi Hong Lian Xin will hold 29.0% and 20.0% of HH-Wuxi, respectively;
“Independent Non-Executive Director(s)”	the independent non-executive director(s) of our Company;

## DEFINITIONS

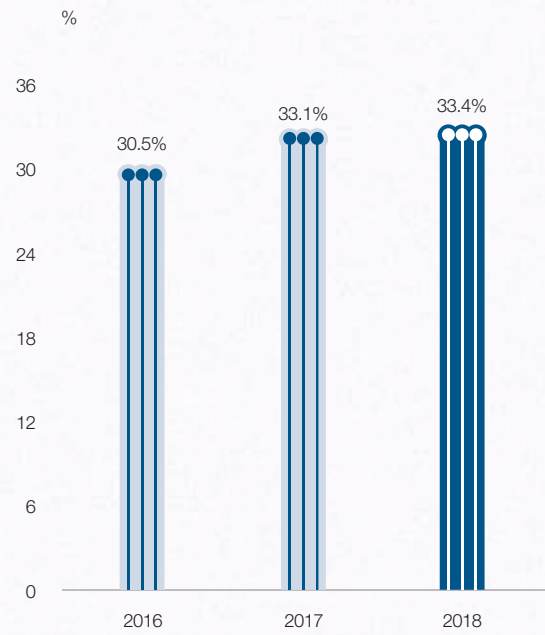
“INESA”	INESA (Group) Co., Ltd. (上海儀電(集團)有限公司), formerly known as INESA Holding Group (上海儀電控股(集團)有限公司), a state-owned company incorporated in the PRC in December 1993, and a controlling shareholder of our Company;
“JV Agreement”	the JV Agreement dated 3 January 2018 entered into by the Company, HHGrace, HH-Wuxi, China Integrated Circuit and Wuxi Xi Hong Lian Xin;
“Listing Rules”	the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, as amended or supplemented from time to time;
“Merger”	the merger of Grace Cayman and Hua Hong Semiconductor (Cayman) Inc., an exempted company established by the Company in the Cayman Islands;
“NEC”	NEC Corporation, a company incorporated in Japan and founded in 1899 as Nippon Electric Company, Limited;
“Non-Executive Director(s)”	the non-executive director(s) of our Company;
“QST”	QST Corporation (上海矽睿科技有限公司), a company incorporated in the PRC on 13 September 2012 and a connected person;
“RMB”	Renminbi, the lawful currency of the PRC;
“SAIL”	Shanghai Alliance Investment Ltd (上海聯和投資有限公司), a company incorporated in the PRC on 26 September 1994, a controlling shareholder of our Company and a major shareholder of Huahong Group;
“SFC”	the Securities and Futures Commission of Hong Kong;
“SFO”	the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong), as amended or supplemented from time to time;
“Shanghai Huali”	Shanghai Huali Microelectronics Co., Ltd (上海華力微電子有限公司), a company incorporated in the PRC on 18 January 2010 and a connected person;
“Shareholders”	holders of ordinary shares in the capital of the Company;
“Stock Exchange”	The Stock Exchange of Hong Kong Limited; and
“Wuxi Xi Hong Lian Xin”	Wuxi Xi Hong Lian Xin Investment Co., Ltd., a professional investment company incorporated in the PRC on 19 December 2017, jointly established by municipal and district-level state-owned enterprises.

# KEY FINANCIALS

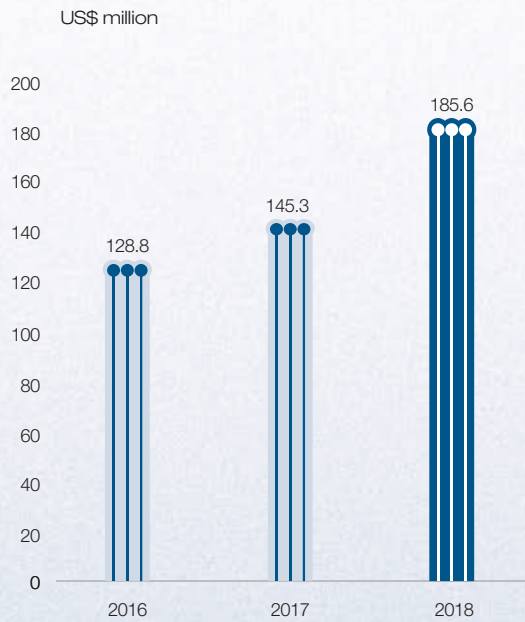
## Revenue



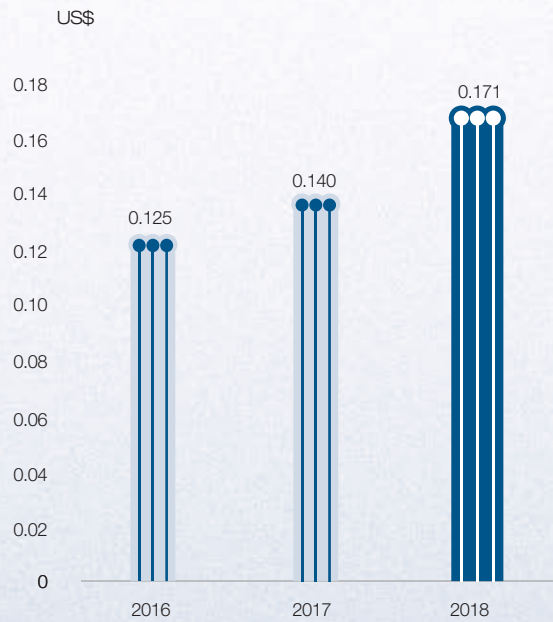
## Gross Profit Margin



## Net Profit



## EPS



# LETTER TO SHAREHOLDERS

Dear Shareholders,

Performance of the Company in 2018 was phenomenal, our best year ever thanks to the efforts of all employees and shareholders as well as the support from our suppliers and customers. Leveraging our differentiated technologies, we took full advantage of opportunities made possible by the explosive demand for semiconductors, especially in China. We used our innovative manufacturing technologies to benefit from and support the global semiconductor supply chain. All members of the Group worked in tandem to make the year a success.

Revenue, gross margin and net profit for the year all hit new highs: Revenue grew to US\$930 million, an increase of 15.1%; gross margin came in at 33.4%, an increase of 0.3 percentage point; net profit amounted to US\$186 million, or 20% of revenue, an increase of 27.8%; return on equity was 10.2%, an increase of 1.1 percentage points. Hua Hong was once again one of the best performers in the pure-play semiconductor foundry market.

As of the end of 2018, the Company had been profitable for 32 consecutive quarters, and our annual wafer shipments surged to over two million for the first time – a CAGR of 9.5% from 1.4 million wafers when we listed the Company in Hong Kong in 2014. We attained a monthly production capacity of 174,000 wafers in 2018, with an annual utilization of 99.2%.

We stayed true to our originality and remained subtlety in all fronts. Based on our corporate strategy of *specialty technology, rapid growth and high margin*, the Company continued to improve the competitiveness of its technology platforms, such as embedded non-volatile memory (eNVM), discrete, analog and power management (PM), logic and radio frequency SOI (RF SOI).

Our highly reliable and cost-effective 90nm embedded memory technology is key to the Company's success for new-generation smart card ICs. In 2018, shipments of bank-card ICs achieved a yearly increase of more than 100% – a record new high.

Power discrete technology was implemented more intensively by various end-market segments in 2018, which drove our discrete revenue to increase by 41% year-on-year. As the world's first 200mm pure-play foundry with FS (Field-Stop) - IGBT mass production technology, we took the lead in promoting the development of green energy, new energy vehicles, industrial automation and other industries.

Power management, as applied to motor drivers, fast chargers and DC-DC converters in the consumer, computer and industrial markets, can be extended into the automotive market. We launched the second-generation process platform for 0.18 $\mu$ m BCD with considerable pride as in terms of performance and technology it is at least on par with the leading provider in the industry.

Going forward the Company will focus on the Internet of Things (IoT), automotive electronics, 5G and other emerging markets where our unique processes have been well regarded and in significant demand. We will relentlessly build on these opportunities in order to continue to excel in the years to come. In 2019, the Company will increase Capex in research and development to further optimize existing eNVM platforms, introduce more cost-efficient IGBT, improve 0.13 $\mu$ m RF-SOI, and continue to develop 90nm BCD technologies.



## LETTER TO SHAREHOLDERS

In parallel with successfully growing our 200mm wafer business in 2018, we have moved Hua Hong Semiconductor (Wuxi) Limited (“HH-Wuxi”) forward smoothly according to plan. The construction of the building and clean room is expected to be completed by the end of the second quarter 2019, with commencement of equipment move-in during the second half of the year, and risk production of 300mm-wafers in the fourth quarter 2019. As the Wuxi fab comes on-line, it will provide relief for our constrained capacity and offer enhanced means to meet the ever-increasing demand of our customers for sophisticated, high-tech technological solutions based on our platforms, paving the way for the Company’s next strategic level.

The Company attaches great importance to technological innovation. In 2018, this was recognized in our ranking fourth in “China’s Top 100 Enterprises in Innovation Capabilities”. We apply this innovation and excellence with determination and readiness in a bold journey to prosperity together with you, our shareholders, who place full trust and unquestioning faith in us. With continuous efforts to optimize our offerings, technology portfolios and production capacities, we justifiably believe that the Company will brave through all challenges and achieve more remarkable results in the future.

In the years to come, all of our extraordinary employees, of whom we are so proud, will stick to mission, fulfill responsibilities, celebrate our achievements and set a course mastering the challenges ahead, ever watching the compass through the storms and resolutely embarking with you on a continuing journey of discovery to even higher ground.

**Mr. Suxin Zhang**

*Chairman and Executive Director*

**Mr. Yu Wang**

*President and Executive Director*

Hong Kong  
28 March 2019



# CORPORATE INFORMATION

## Corporate Culture



## Vision

We empower our customers through continuous innovation



## Mission

Creating value for shareholders, customers and employees through collaboration, innovation and being a good corporate citizen



## Spirit

Disruptive Innovation, Confidence, Initiative and Teamwork

# CORPORATE INFORMATION

## Board of Directors

### Executive Directors

Suxin Zhang (*Chairman*)

Yu Wang (*President*)

### Non-Executive Directors

Jianbo Chen

Yuchuan Ma (*resigned on 26 September 2018*)

Takayuki Morita

Jun Ye

Yang Du (*appointed on 7 November 2018*)

### Independent Non-Executive Directors

Stephen Tso Tung Chang

Kwai Huen Wong, JP

Long Fei Ye

### Company Secretary

Xiaojun Wang (*Solicitor*)

### Authorized Representatives

Yu Wang

Xiaojun Wang (*Solicitor*)

### Audit Committee

Stephen Tso Tung Chang (*Chairman*)

Long Fei Ye

Jun Ye

### Remuneration Committee

Kwai Huen Wong, JP (*Chairman*)

Long Fei Ye

Jianbo Chen

### Nomination Committee

Suxin Zhang (*Chairman*)

Kwai Huen Wong, JP

Long Fei Ye

## Website

[www.huahonggrace.com](http://www.huahonggrace.com)

## Auditor

Ernst & Young

*Certified Public Accountants*

22nd Floor, CITIC Tower

1 Tim Mei Avenue, Central

Hong Kong

## Legal Advisor

Herbert Smith Freehills

23/F, Gloucester Tower

15 Queen's Road Central

Hong Kong

## Principal Banks

Shanghai Pudong Development Bank Shanghai Branch

No. 12, Zhongshan East 1st Road

Shanghai, PRC

Industrial and Commercial Bank of China Shanghai Branch

No. 9, Pudong Avenue

Pudong New Area

Shanghai, PRC

China Construction Bank Shanghai Branch

No. 900, Lujiazui Ring Road

Pudong New Area

Shanghai, PRC

Bank of Communications Shanghai Branch

No. 188, Yincheng Middle Road

Shanghai, PRC

China Development Bank Shanghai Branch

No. 68, Puming Road

Shanghai, PRC

China Construction Bank Corporation Hong Kong Branch

28/F, CCB Tower, 3 Connaught Road, Central

Hong Kong

Bank of Communications Co., Ltd. Hong Kong Branch

20 Pedder Street, Central

Hong Kong

China Development Bank Jiangsu Branch

No. 232, Middle Jiangdong Road

Nanjing, Jiangsu, PRC

Agricultural Bank of China Wuxi Xinwu Subbranch

No. 26, Hefeng Road

Xinwu District

Wuxi, Jiangsu, PRC

# CORPORATE INFORMATION



## **Share Registrar**

Tricor Investor Services Limited  
Level 22, Hopewell Centre  
183 Queen's Road East  
Hong Kong

## **Registered Office**

Room 2212, Bank of America Tower  
12 Harcourt Road, Central  
Hong Kong

## **Principal Place of Business and Head Office**

288 Halei Road  
Zhangjiang Hi-Tech Park  
Shanghai 201203, PRC

## **Stock Code**

1347

# DIRECTORS AND SENIOR MANAGEMENT TEAM

**Mr. Suxin Zhang**, aged 55, was appointed on 11 March 2016 as an Executive Director and chairman of our Company and a member of and chairman of the nomination committee of the Company. He is currently chairman and secretary of the communist party of Huahong Group, chairman of Shanghai Huali Microelectronics Co., Ltd. (上海華力微電子有限公司), chairman of Shanghai Huali Semiconductor Manufacturing Co., Ltd. (上海華力集成電路製造有限公司), legal representative and chairman of Hua Hong Semiconductor (Wuxi) Limited. Mr. Zhang has extensive experience in hi-tech strategic development, energy strategy research and the power equipment industry. Mr. Zhang held various positions, including president of Shanghai Turbine Co., Ltd., executive vice president of Shanghai Electric Power Generation Group, chairman of Siemens Gas Turbine Parts Co., Ltd., executive director of Shanghai Electric Group Company Limited, vice president of Shanghai Electric (Group) Corporation, secretary of the communist party and general manager of Shanghai Jinqiao (Holdings) Limited, chairman and secretary of the communist party of Shanghai Jinqiao Export Processing Zone Development Co., Ltd. and deputy director of both the Shanghai Municipal Development and Reform Commission and the Administration Commission of Shanghai Zhangjiang Hi-Tech Industrial Development Zone. Mr. Zhang graduated from Tsinghua University with a bachelor's degree in engineering, and is a professor-level senior engineer.

**Mr. Yu Wang**, aged 46, has been an Executive Director and president of our Company since February 2012. He is currently director and general manager of Hua Hong Semiconductor (Wuxi) Limited. He started his career at Shanghai Hua Hong Microelectronics Co., Ltd. in 1997. From January 1998 to October 2003, he served as the financial department manager and director of HHNEC. From October 2003 to March 2010, Mr. Wang served as vice president and chief financial officer of HHNEC, during which period he contributed to the setup from construction to production of the first 200mm wafer semiconductor production line in Mainland China. In March 2010, Mr. Wang joined Grace Shanghai first as vice president and was subsequently appointed president in September 2010. As president, he was instrumental in the successful consummation of the Merger and restructuring of HHNEC and Grace Shanghai. Mr. Wang holds a bachelor's degree in international trade and a master's degree in international finance from Shanghai University of Finance and Economics.

**Mr. Jianbo Chen**, aged 54, has been a Non-Executive Director of our Company since February 2012. Mr. Chen is also vice president of Huahong Group, vice chairman of Shanghai Huahong Technology Development Co., Ltd., a director of Shanghai Huali Microelectronics Co., Ltd., a director of Shanghai Huali Semiconductor Manufacturing Co., Ltd. and a director of Hua Hong Semiconductor (Wuxi) Limited. Mr. Chen joined Huahong Group in 2005, and successively held various positions, including deputy general manager of Shanghai Science and Technology Investment, the general manager of Shanghai Zhangjiang (Group) Co., Ltd., the deputy director of the Leaders' Office of Shanghai Zhangjiang Hi-Tech Park, president of the Shanghai Integrated Circuit Research & Development Center Limited and chairman of Shanghai Huahong Jitong Smart System Co., Ltd. (Stock Code: 300330.SZ). Mr. Chen obtained a bachelor's degree in electronics engineering, a master's degree in electromagnetics and microwave technology, a doctorate degree in communications and electronics systems from Shanghai Jiao Tong University, and a master's degree in business administration from China Europe International Business School.

## DIRECTORS AND SENIOR MANAGEMENT TEAM

**Mr. Yang Du**, aged 41, has served as a Non-Executive Director of the Company since November 2018. Mr. Du joined China Development Bank on August 2005. From 2005 to 2014, Mr. Du held various positions in China Development Bank, including manager of the large corporate client department in the head office, deputy head of the customer division in Henan Branch, and head of the project development and business innovation division in the business development department of the head office. Mr. Du has served as chief operating director of Sino IC Capital Co., Ltd. (華芯投資管理有限責任公司) since December 2014 and general manager of Shanghai Branch of Sino IC Capital since October 2015. Mr. Du is also director of Shanghai Integrated Circuit Industry Investment Fund Co., Ltd. (上海集成電路產業投資基金股份有限公司), Shanghai Integrated Circuit Industry Investment Fund Management Co., Ltd. (上海集成電路產業投資基金管理有限責任公司), Shanghai Huali Semiconductor Manufacturing Co., Ltd. (上海華力集成電路製造有限公司) and Shanghai Xinshuo Investment Management Co., Ltd. (上海芯鑠投資管理有限責任公司). In addition, Mr. Du serves as legal representative, Chairman and general manager of Sino IC Leasing Co., Ltd. (芯鑫融資租賃有限責任公司).

Mr. Du successively obtained a degree of Bachelor of Arts in Chinese Language, Literature, an MBA degree and a degree of Master of Financial Management respectively from Fudan University, Nagoya University of Commerce & Business and University of Salford in Manchester of England, and obtained the Senior Economist qualification in 2015.

**Mr. Yuchuan Ma**, aged 53, acted as a Non-Executive Director of the Company from September 2014 to September 2018.

**Mr. Takayuki Morita**, aged 59, has been a Non-Executive Director of our Company since July 2009. Mr. Morita joined NEC in April 1983. From 1983 to 2011, he held various positions in NEC, including manager of the international planning division, and senior vice president and executive general manager of the corporate business development unit. Mr. Morita is currently the senior executive vice president and the Chief Financial Officer at NEC and has held this position since June 2018. He also served as an auditor at Japan Aviation Electronics Industry Ltd from 24 June 2008 to 26 June 2012. He currently has board representation in NEC as well as in Japan Aviation Electronics. Mr. Morita graduated with a bachelor's degree in law from the University of Tokyo.

**Mr. Jun Ye**, aged 46, has been a Non-Executive Director of our Company since February 2012. Mr. Ye has more than 20 years of experience in finance and investment. Mr. Ye has successively held various positions in Shanghai Alliance Investment Ltd., including manager of the investment banking division and the business development division, general manager assistant and deputy general manager since 1996 and general manager since May 2018. Mr. Ye is also a director at Huahong Group, Shanghai Huali, Bank of Shanghai and Sino-US United MetLife Insurance Company Limited. Mr. Ye also serves as the chairman of Shanghai Zhaoxin Semiconductor Co., Ltd. and Sino Therapeutics Inc. Mr. Ye obtained a bachelor's degree in industrial and international trade and a master's degree in business administration from Shanghai Jiao Tong University.

## DIRECTORS AND SENIOR MANAGEMENT TEAM

**Mr. Stephen Tso Tung Chang**, aged 70, is an Independent Non-Executive Director of our Company. Mr. Chang has extensive experience in accounting, auditing and financial management. He was a certified public accountant in Hong Kong and a member of the Hong Kong Society of Accountants from 1978 to the end of 2003. Mr. Chang was also a fellow member of the Institute of Chartered Accountants in England and Wales since January 1983, and he held various positions at Ernst & Young starting in 1976. He became a management committee member of Ernst & Young in 1989 and was actively involved in establishing and monitoring the firm's internal control and risk management policy and procedures. Prior to his promotion to managing partner of the professional services department, he was chairman of Ernst and Young's audit and advisory business services for four years. He was a partner of Ernst and Young and the chairman of Ernst and Young China and Hong Kong prior to his retirement in 2003. He is a member of the Investment Committee of Shanghai Fudan University Education Development Foundation and Fudan University Education Development Foundation (overseas). He is also an independent non-executive director of three Hong Kong listed companies, China Cinda Asset Management Co., Ltd. (stock code: 1359.HK), Kerry Properties Limited (stock code: 683.HK), and China Life Insurance Company Ltd. (stock code: 2628.HK). He was formerly an independent non-executive director of China Pacific Insurance (Group) Co., Ltd. (stock codes: 601601.SH and 2601.HK). Mr. Chang obtained a bachelor's of science degree in food science and chemistry from the University of London.

**Mr. Kwai Huen Wong**, BBS, JP, aged 67, is an Independent Non-Executive Director of our Company. Mr. Wong had served as the PRC managing partner of two international law firms for 15 years. Prior to that, he had worked for the Lands Department, Department of Justice and Legislative Council of the Hong Kong SAR Government for a total of 10 years. He was appointed as member of Airport Authority Hong Kong, Hospital Authority and the Competition Commission from 2011 to 2018. He was the chairman of the Hong Kong International Arbitration Centre, the president of the Law Society of Hong Kong and the chairman of the Hong Kong Institute of Directors. He is presently one of the deputy chairmen of Hong Kong Inland Revenue Board of Review, the chairman of Hong Kong Copyright Tribunal, the director of the Hong Kong Mortgage Corporation Limited, the Independent Non-executive Director of China International Marine Containers (Group) Co., Ltd. (stock codes: 000039.SZ and 2039.HK), Vinda International Holdings Limited (stock code: 3331.HK), China Oilfield Services Limited (stock codes: 2883.HK and 601808.SZ), NWS Holdings Limited (stock code: 659.HK). In addition, he is the honorary lecturer, external examiner and professor at The University of Hong Kong, The Chinese University of Hong Kong, City University of Hong Kong and Hong Kong Shue Yan University. Mr. Wong holds a Bachelor of Arts degree from The Chinese University of Hong Kong and a Bachelor of Law degree from the University of London.

**Mr. Long Fei Ye**, aged 77, is an Independent Non-Executive Director of our Company. Mr. Ye held various positions in the Shanghai Municipal Government. Mr. Ye was relocated to Hong Kong in 1991, and served until 1995 as the chief executive of the "Shanghai Desk", which was a cooperation arrangement for promoting Shanghai between the Shanghai government and Arthur Andersen & Co. He then joined Kerry Holdings Limited in 1995, and served as the chairman and deputy chairman of Shangri-La Asia Limited from October 2000 to August 2003 and August 2003 to March 2007, respectively. He was an advisor to Shangri-La Asia Limited from March 2007 to February 2018. Mr. Ye obtained a bachelor's and master's degree, both in physics from Fudan University.

# DIRECTORS AND SENIOR MANAGEMENT TEAM

## Senior Management

As of the date of this report, the Company's senior management includes:

**Mr. Suxin Zhang**, aged 55, was appointed as an Executive Director and Chairman of our Company on 11 March 2016. For more information about Mr. Zhang's past experience and academic background, see the section headed "Directors and Senior Management Team – Board of Directors".

**Mr. Yu Wang**, aged 46, is an Executive Director and the president of our Company. For more information about Mr. Wang's past experience and academic background, see the section headed "Directors and Senior Management Team – Board of Directors".

**Mr. Wei Xu**, aged 61, is an executive vice president of our Company and is responsible for manufacturing and engineering, human resources, administrative, and security management of our Group. Mr. Xu participated in the startup of HHNEC in July 1997 and made significant contributions to the set-up of the first 200mm wafer semiconductor production line in Mainland China. He has since held various positions at HHNEC in manufacturing, technology and quality control. From June 2012 to October 2013, Mr. Xu was the acting president of HHNEC. Prior to joining HHNEC, Mr. Xu worked with Wuxi Huajing Electronics Group. Mr. Xu graduated from Xi'an Jiaotong University majoring in semiconductor physics and devices with a bachelor's degree in engineering. He further enrolled in post-graduate studies at Tsinghua University, and he is a professor-level senior engineer.

**Mr. Heng Fan**, aged 57, is an executive vice president of our Company and is responsible for Sales and Marketing. Prior to joining our Group at the end of 2014, Mr. Fan was director and president of Shanghai Huahong Jitong Smart System Co. Ltd from 2003 to 2014. Before this, he held various positions including research analyst/deputy director of Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Science, and vice president of Shanghai Huahong Integrated Circuit Co. Ltd. Mr. Fan received his bachelor's degree in microelectronics from the Electronic Engineering Department of Fudan University and his master's degree in Semiconductor Physics and Semiconductor Device Physics from Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Science.

**Mr. Daniel Yu-Cheng Wang**, aged 56, is an executive vice president of our Company and oversees finance, information technology, listed company affairs, and international human resources for our Group. He joined Grace Shanghai in April 2001 and played a central leadership role in each stage of Grace Shanghai's development and in the preparation for and implementation of the Merger and the successful initial public offering of the Company. Mr. Wang has been secretary of the Board of the Company since February 2012. Prior to joining Grace Shanghai, Mr. Wang worked at LSI Logic Corporation in San Jose, Silicon Valley, California from August 1995 to March 2001 as the division controller in the broadband entertainment division. Before joining LSI Logic Corporation, Mr. Wang was employed by Franklin Templeton Investments in the U.S. Mr. Wang obtained a bachelor's of science degree in industrial engineering and operations research from the College of Engineering, University of California, Berkeley, and a master's of business administration in finance and banking from the University of San Francisco.

## DIRECTORS AND SENIOR MANAGEMENT TEAM

**Dr. Weiran Kong**, aged 55, is an executive vice president of our Company and is in charge of technology development. He joined Grace Shanghai in March 2003 and has 20 years' experience in the semiconductor industry, with a proven track record of driving innovations in the area of NOR Flash, Logic and embedded Flash. Before joining Grace Shanghai, Dr. Kong was based in the U.S. and has worked for Sun Microsystems, Inc., LSI Logic Corporation and ISSI. He obtained a bachelor's degree in physics from Nankai University in Tianjin and graduated with a master's of science degree in electrical engineering and a doctorate degree in applied physics from Oregon Graduate Institute of Science & Technology in the U.S.. Dr. Kong holds 13 U.S. patents, 54 PRC patents and co-authored over 20 technical papers.

**Mr. Weiping Zhou**, age 52, joined the Company at the beginning of 2018 as an executive vice president and is responsible for manufacturing and security management. Prior to joining the Company, Mr. Zhou was the executive vice president of Shanghai Belling Corporation Limited, the general manager of Ningbo Shanshan Ulica Solar Technology Developing Company Limited, the general manager of Shanghai Belling Microelectronics Manufacturing Company Limited, the deputy secretary to the communist party committee, president, chief executive officer, secretary to the communist party committee and vice president of Advanced Semiconductor Manufacturing Corporation Limited. Mr. Zhou graduated from East China Normal University with a bachelor's degree in solid state electronic technology, and subsequently obtained a master's degree in business administration from Fudan University.

**Dr. Qi Li**, aged 56, is a vice president of our Company and is currently responsible for purchasing, logistics, testing, quality assurance, and planning. Dr. Li has over 20 years of professional working experience and joined Grace Shanghai in January 2003. Prior to that, he was the senior engineering manager at Applied Materials, Inc., in the U.S. from 1995 to 2002. Dr. Li received a bachelor's degree in physics from Peking University and his master's and doctorate degrees in physics from the University of Maryland.

**Dr. Steven Lin**, aged 57, is a vice president of our Company and currently leads regional sales for North America and Japan. He worked in various non-volatile memory technology development roles at several leading semiconductor companies in the U.S. and joined Grace Shanghai in August 2006. Dr. Lin received his doctorate degree in electrical engineering from the California Institute of Technology.

**Mr. Bill Lin**, aged 50, is a vice president of our Company and is currently responsible for our Fab 3 operations. He has over 20 years of working experience in the semiconductor industry and joined Grace Shanghai in August 2000. Before joining Grace Shanghai, he worked for Texas Instruments-Acer Inc. (later merged with Taiwan Semiconductor Manufacturing Company Limited) from 1995 to August 2000. Mr. Lin received his master's degree in chemical engineering from the National Taiwan University of Science and Technology (previous known as National Taiwan Institute of Technology).



## DIRECTORS AND SENIOR MANAGEMENT TEAM

**Mr. Mirko Sonntag**, aged 42, is a vice president of our Company and is currently responsible for the Company's sales operations and customer service in Europe. His expertise encompasses demand and supply chain planning and business operations, with a strong foundation in business development. Mr. Sonntag joined Grace Shanghai in October 2008. Prior to that, he worked at Infineon Technologies AG in Germany. Mr. Sonntag obtained a diploma in process engineering and economics from the University of Applied Sciences Berlin and School of Economics Berlin, Germany.

**Ms. Ying Chen**, aged 46, is a vice president of our Company and currently responsible for general administration, corporate image communication, compliance and listed company affairs. Ms. Chen joined Grace Shanghai in April 2001 and has 20 years of administrative experience. Prior to this, Ms. Chen worked at Shanghai Fudan Forward Science and Technology Co., Ltd.. Ms Chen graduated from Fudan University with a bachelor's degree in law, and subsequently obtained a master's degree in business administration from Renmin University of China and is a senior economist.

**Mr. Guangping Hua**, aged 52, is a vice president of our Company and is currently responsible for our Fab 1 operations. He has over 20 years of working experience in the semiconductor industry and joined HHNEC in July 2007. Before joining HHNEC, Mr. Hua has worked for Chartered Semiconductor Manufacturing Limited (Singapore) and Advanced Semiconductor Manufacturing Corporation Limited. Mr. Hua graduated from Tsinghua University with a master's degree in microelectronics engineering.

**Mr. Liang Yao**, aged 54, is a vice president of our Company and is currently responsible for our Fab 2 operations. He has nearly 30 years of working experience in the semiconductor industry and joined HHNEC in August 1997. Before joining HHNEC, he worked for China Huajing Electronics Group Co., Ltd. from 1987 to October 1996. Mr. Yao received his bachelor's degree in metal materials studies from Nanjing Institute of Technology.

**Mr. Lihua Ni**, aged 50, is a vice president of the Company and Factory Director of HH Fab 7. He joined HHGrace in May 2018. Prior to joining the Company, Mr. Lihua Ni successively worked for Wuxi Huajing Group Co., Ltd. (無錫華晶集團公司), Shanghai Hua Hong Microelectronics Co., Ltd., Shanghai Hua Hong NEC Electronics Co., Ltd., and acted as a department manager at Shanghai Xinjin Semiconductor Fabrication Co., Ltd., department head at Shanghai Hua Hong NEC Electronics Co., Ltd. and deputy factory director at Shanghai Huali Microelectronics Co., Ltd. He graduated from Xidian University, with a Bachelor of Engineering degree, and obtained a Master of Engineering degree from Shanghai Jiao Tong University.

# DIRECTORS AND SENIOR MANAGEMENT TEAM

## Company Secretary

**Mr. Xiaojun Wang**, aged 64, was our joint Company Secretary from June 2014, and has been appointed as our Company Secretary since June 2016. He is a practicing solicitor admitted in the PRC, Hong Kong and England and Wales. He joined The Stock Exchange of Hong Kong Limited in 1992 and worked at Richards Butler, Peregrine Capital Limited and ING Barings Securities (Hong Kong) Limited. In 2001, he established X. J. Wang & Co. that was merged with Jun He Law Offices in 2009. He is currently a partner of Jun He Law Offices. From 2011 to 2012, Mr. Wang was a managing director of CCB International (Holdings) Limited. He was an independent non-executive director of Guangzhou Shipyard International Company Limited (stock codes: 317.HK and 600685.SH) from 2005 to 2011. From 2008 to 2014, Mr. Wang served as an independent non-executive director of NORINCO International Company Limited (stock code: 000065.SZ). He was an independent non-executive director of Yanzhou Coal Mining Company Limited (stock codes: 1171.HK, 600188.SH and YZC) from 2011 to 2017. Mr. Wang also serves as an independent non-executive director of OP Financial Investments Limited (stock code: 1140.HK), China Aerospace International Holdings Limited (stock code: 31.HK), and Livzon Pharmaceutical Group Inc. (stock codes: 1513.HK and 000513.SZ). Mr. Wang obtained a bachelor's degree in laws from the Renmin University of China and a master of laws degree from the Chinese Academy of Social Sciences.

# CORPORATE GOVERNANCE REPORT



# CORPORATE GOVERNANCE REPORT

The Board is pleased to present this corporate governance report for the year ended 31 December 2018.

## Corporate Governance Practices

The Company diligently practices good corporate governance and has established corporate governance procedures that comply with the principles in the Corporate Governance Code (the “Code”) as set out in Appendix 14 to the Listing Rules.

## Compliance with the Code Provisions

During the year ended 31 December 2018, the Company complied with the Code.

## Securities Transactions by Directors

The Company has adopted the Model Code for Securities Transactions by Directors of Listed Issuers (the “Model Code”) as set out in Appendix 10 to the Listing Rules as its own code of conduct regarding securities transactions by Directors. The Company has made specific enquiries with all of the Directors, each of whom has confirmed that he has, throughout the year ended 31 December 2018, complied with the required standards set out therein.

## Board of Directors

The Board is entrusted with the overall responsibility of managing the business and affairs of the Company. It has the ultimate responsibility for the day-to-day management of the Company, which is delegated to the chairman and the management.

The nine-member Board currently comprises two Executive Directors, Mr. Suxin Zhang (chairman) and Mr. Yu Wang (president); four Non-Executive Directors, Mr. Jianbo Chen, Mr. Takayuki Morita, Mr. Jun Ye and Mr. Yang Du (appointed on 07 November 2018); and three Independent Non-Executive Directors, Mr. Stephen Tso Tung Chang, Mr. Kwai Huen Wong, JP and Mr. Long Fei Ye. More details of the Directors are disclosed on pages 11 to 13 of this annual report. The Company publishes and maintains on its website and on the Stock Exchange website an updated list of the Directors identifying their roles and functions.

Each of the Non-Executive Directors of the Company is appointed for a specific term of three years and is subject to re-nomination and re-election by the Company in general meetings unless previously terminated in accordance with the terms and conditions of the relevant letter of appointment or director’s service contract.

# CORPORATE GOVERNANCE REPORT

The Board meets regularly throughout the year. All Directors are given the opportunity to put items on the agenda for regular Board meetings. All Directors have access to the Company Secretary to ensure that all Board procedures and rules and regulations are followed. Full minutes of Board meetings are kept by the Company Secretary and are available for inspection on reasonable notice. Any Director may, in furtherance of his duties, take independent professional advice where necessary at the expense of the Company.

The Board is responsible for setting the strategic direction and policies of the Group and supervising management. Some functions are reserved by the Board, including, inter alia, the monitoring and approval of material transactions; matters involving a conflict of interest with a substantial shareholder or a Director of the Company; the approval of the quarterly, interim and final results; other disclosures to the public or regulators; and the internal control system. Decisions relating to such matters shall be subject to formal decisions of the Board. Matters not specifically reserved to the Board and necessary for the daily operations of the Company are delegated to management under the supervision of the respective Director(s) and the leadership of the chairman.

The roles of the chairman and the president are separate. The chairman is responsible for the overall management and operations of the Company and for proposing and reviewing the corporate directions and strategies of the Company. The chairman is responsible for formulating business strategies and provides leadership to the Board, ensuring effective running of the Board, including that all appropriate issues are discussed by the Board in a timely manner. The chairman ensures that all Directors are properly briefed on issues arising at Board meetings and all Directors receive adequate, complete and reliable information.

The president is responsible for the day-to-day management of the Company's business and operations as well as the implementation of the Company's business strategies.

During the year ended 31 December 2018, the Board at all times complied with Rules 3.10(1), (2) and 3.10A of the Listing Rules relating to the appointment of at least three Independent Non-Executive Directors representing at least one-third of the Board; one of the Independent Non-Executive Directors is required to possess appropriate professional qualifications or accounting or related financial management expertise. Each of the Independent Non-Executive Directors has made an annual confirmation of independence pursuant to Rule 3.13 of the Listing Rules. The Company is of the view that all Independent Non-Executive Directors meet the independence guidelines set out in Rule 3.13 of the Listing Rules and are independent in accordance with the terms of the guidelines.

## **Directors' and Officers' Liabilities Insurance**

Appropriate insurance cover has been arranged by the Company to cover potential liabilities of Directors and officers of the Company regarding legal actions against said Directors and officers of the Company and its subsidiaries, arising out of corporate activities of the Company.

# CORPORATE GOVERNANCE REPORT

## Board Operation

During the year ended 31 December 2018, the Board held five Board meetings. The attendance record of each Board member at Board meetings as well as meetings of the audit committee, the nomination committee and the remuneration committee is set out below:

	Board meetings	Audit committee meetings	Nomination committee meetings	Remuneration committee meetings
<b>Executive Directors</b>				
Suxin Zhang	5	N/A	1	N/A
Yu Wang	5	N/A	N/A	N/A
<b>Non-Executive Directors</b>				
Jianbo Chen	5	N/A	N/A	1
Yuchuan Ma (Note 1)	4	N/A	N/A	N/A
Takayuki Morita	5	N/A	N/A	N/A
Jun Ye	3	3	N/A	N/A
Yang Du (Note 2)	1	N/A	N/A	N/A
<b>Independent Non-Executive Directors</b>				
Stephen Tso Tung Chang	5	5	N/A	N/A
Kwai Huen Wong, JP	5	N/A	1	1
Long Fei Ye	5	5	1	1

Note 1: Mr. Yuchuan Ma resigned as a Non-Executive Director of the Company on 26 September 2018.

Note 2: Mr. Yang Du was appointed as a Non-Executive Director of the Company on 7 November 2018. Mr. Yang Du attended the Board meeting held on 8 November 2018.

During the year ended 31 December 2018, the Company held one extraordinary general meeting on 14 February 2018 to approve and adopt the investment and construction plan of the Company for HH-Wuxi.

In place of physical meetings, the Board may circulate written resolutions for approval by the relevant members of the Board except for matters where a substantial shareholder or a Director has a conflict of interest that the Board has determined to be material, in which case, the matter shall be dealt with by a physical Board meeting (rather than a written resolution) to comply with Article A.1.7 of the Code.

The Board, having considered the attendance records of the Directors, is satisfied that each Director spends sufficient time performing his responsibilities.

# CORPORATE GOVERNANCE REPORT

## Continuous Professional Development

Directors shall keep abreast of their responsibilities as Directors and of the conduct, business activities and development of the Company.

Under Code Provision A.6.5, the Directors should participate in appropriate continuous professional development programs to develop and refresh their knowledge and skills to ensure that their contribution to the Board remains informed and relevant. During the year ended 31 December 2018, all Directors were provided with timely updates on the Company's performance, financial position, prospects, and materials on new or salient changes to laws and regulations applicable to the Group, to enable the Board as a whole and each Director to discharge their duties. Internally-facilitated briefings for the Directors will be arranged in the next financial year and reading material on relevant topics will be issued to the Directors where appropriate. All Directors are encouraged to attend relevant training courses at the Company's expense.

The participation by each Director in continuous professional development for the year ended 31 December 2018 is set out below:

<b>Name of Director</b>	<b>Reading materials relating to rules and/or attending trainings</b>
Suxin Zhang ( <i>Chairman</i> )	✓
Yu Wang ( <i>President</i> )	✓
Jianbo Chen	✓
Yang Du	✓
Takayuki Morita	✓
Jun Ye	✓
Stephen Tso Tung Chang	✓
Kwai Huen Wong, JP	✓
Long Fei Ye	✓

## Remuneration Committee

The remuneration committee of the Company (the "Remuneration Committee") currently comprises one Non-Executive Director, Mr. Jianbo Chen, and two Independent Non-Executive Directors, Mr. Kwai Huen Wong, JP and Mr. Long Fei Ye. The chairman of the Remuneration Committee is Mr. Kwai Huen Wong, JP. The roles and functions of the Remuneration Committee include the determination of the specific remuneration packages of all Executive Directors and senior management, including benefits in kind, pension rights and compensation payments, and making recommendations to the Board in connection with the remuneration of the Non-Executive Directors. The Remuneration Committee should consider factors such as the salaries paid by comparable companies, employment conditions elsewhere in the Group and the desirability of performance-based remuneration. A copy of the terms of reference of the Remuneration Committee is available from the Company's website and the Stock Exchange's website. The Remuneration Committee shall meet at least once a year.

During the year ended 31 December 2018, one meeting of the Remuneration Committee was held to review the share option scheme of the Company which was approved by an extraordinary general meeting of the Company held on 1 September 2015.

Details of the emoluments of the Directors are set out in note 8 to the Financial Statements.

# CORPORATE GOVERNANCE REPORT

## Nomination Committee

The nomination committee of the Company (the “Nomination Committee”) currently comprises one Executive Director, Mr. Suxin Zhang, and two Independent Non-Executive Directors, Mr. Kwai Huen Wong, JP and Mr. Long Fei Ye. The chairman of the Nomination Committee is Mr. Suxin Zhang. The role and function of the Nomination Committee are to review the structure, size and composition of the Board, make recommendations on any proposed changes to the Board to complement the Company’s corporate strategy, with due regard to the board diversity policy, identify individuals suitably qualified to become Board members, select or make recommendations to the Board on the selection of individuals nominated for directorships, assess the independence of Independent Non-Executive Directors and make recommendations to the Board on the appointment or re-appointment of Directors and succession planning for Directors, in particular the chairman and the president, and monitor the implementation of the board diversity policy and review such policy, as appropriate, to ensure its effectiveness. The Nomination Committee has established a specific written committee charter which deals clearly with its authority and duties. A copy of the terms of reference of the Nomination Committee is available from the Company’s website and the Stock Exchange’s website. The Nomination Committee shall meet at least once a year.

During the year ended 31 December 2018, one meeting of the Nomination Committee was held.

Pursuant to the articles of association of the Company (the “Articles”), any person appointed as a Director to fill a casual vacancy of the Board shall hold office only until the next following annual general meeting of the Company and shall then be eligible for re-election at the relevant general meeting and any Director appointed as an addition to the existing Board shall hold office only until the next annual general meeting of the Company and shall then be eligible for re-election at the relevant general meeting. Every Director shall be subject to retirement by rotation at least once every three years and shall be eligible for re-election in accordance with the Articles. The Articles also allow for removal of a Director by an ordinary resolution.

## Auditor’s Remuneration

During the year ended 31 December 2018, the remuneration paid and payable to the auditors of the Company, Ernst & Young, for the provision of audit services and non-audit related services to the Company was US\$0.50 million and US\$0.11 million, respectively. Details of significant non-audit related services include tax and risk management advisory services.



# CORPORATE GOVERNANCE REPORT

## Audit Committee

At least one of the members of the audit committee of the Company (the “Audit Committee”) has appropriate professional qualifications or accounting or related financial management expertise as required under the Listing Rules. None of the members of the Audit Committee was a former partner of the Company’s existing external auditors within one year immediately prior to the dates of their respective appointments. All members have appropriate skills and experience in reviewing financial statements as well as addressing significant control and financial issues of the Company. The Board expects the members of the Audit Committee to exercise independent judgement and delegates the responsibilities of the corporate governance functions to the Audit Committee in order to comply with the requirement of the Code.

The Audit Committee of the Company currently comprises one Non-Executive Director, Mr. Jun Ye, and two Independent Non-Executive Directors, Mr. Stephen Tso Tung Chang and Mr. Long Fei Ye. The chairman of the Audit Committee is Mr. Stephen Tso Tung Chang. The primary duties of the Audit Committee include the reviewing of the Company’s financial reporting system, the nature and scope of audit review as well as the effectiveness of the system of internal control procedures and risk management. The Audit Committee is also responsible for making recommendations in relation to the appointment, reappointment and removal of the external auditors, and the reviewing and monitoring of the independence and objectivity of the external auditors. In addition, the Audit Committee discusses matters raised by the external auditors and regulatory bodies to ensure that appropriate recommendations are implemented. A copy of the terms of reference of the Audit Committee is available from the Company’s website and the Stock Exchange’s website. The Audit Committee shall meet at least twice a year. Reference is also made to the revised terms of reference of the Audit Committee dated 29 December 2015, which came into effect on 1 January 2016.

During the year ended 31 December 2018, the Audit Committee held five meetings and a majority of the committee members were present at the meetings. In these meetings, the Audit Committee reviewed and approved the Company’s financial statements for each of the four quarters of 2018, the six months ended 30 June 2018 and for the year ended 31 December 2018.

## Summary of the Board Diversity Policy

The Board adopted a board diversity policy (the “Policy”) in compliance with Code provision A.5.6 on 1 January 2019.

The Policy aims to set out the approach to achieve diversity on the Board and does not apply to diversity in relation to the employees of the Company, nor the board and the employees of any subsidiary of the Company. The Company sees increasing diversity at the Board level as an essential element in maintaining the Company’s competitive advantage. In designing the Board’s composition, Board diversity will be considered from several aspects, including without limitation, differences in the talents, skills, regional and industry experience, background, gender, age and other qualities of the members of the Board, in order to maintain an appropriate range and balance of talents, skills, experience and background on the Board. In recommending candidates for appointment to the Board, the Nomination Committee will consider candidates on merit against objective criteria and with due regard for the benefits of diversity on the Board. In 2019 the Nomination Committee will discuss and agree on the measurable objectives for achieving diversity on the Board and recommend them to the Board for adoption. At any given time, the Board may seek to improve one or more aspects of its diversity and measure progress accordingly. The Company aims to maintain an appropriate balance of diversity perspectives of the Board that are relevant to the Company’s business growth.

# CORPORATE GOVERNANCE REPORT

## Corporate Governance Functions

The Board is responsible for performing the functions set out in provision D.3.1 of the Code.

The Board reviewed the Company's corporate governance policies and practices, the training and continuous professional development of Directors and senior management, the Company's policies and practices on compliance with legal and regulatory requirements, the compliance with the Model Code, and the Company's compliance with the Code and disclosure in this Corporate Governance Report.

## Investor Relations

The Company maintains a website at [www.huahonggrace.com](http://www.huahonggrace.com) with information and updates on the Company's business developments and operations, list of Directors and their role and function, constitutional documents, terms of reference of the Board and its committees, procedures for nomination of Directors for election, Shareholder rights and communication policy, corporate governance practices, announcements, circulars and reports released to the Stock Exchange and other information. Information on the Company's website will be updated from time to time.

## Company Secretary

The Company Secretary, Mr. Xiaojun Wang, is responsible to the Board for ensuring that the Board procedures are followed and that the Board activities are efficiently and effectively conducted. He is also responsible for ensuring that the Board is fully apprised of the relevant legislative, regulatory and corporate governance developments relating to the Company and facilitating the induction and professional development of Directors.

The Company Secretary reports to the chairman and the president, plays an essential role in the relationship between the Company and its Shareholders, and assists the Board in discharging its obligations to Shareholders pursuant to the Listing Rules.

During the year ended 31 December 2018, Mr. Xiaojun Wang attended relevant professional seminars to update his skills and knowledge and has complied with Rule 3.29 of the Listing Rules to take no less than 15 hours of relevant professional training.

## Shareholder Rights

The Company uses several formal channels to ensure fair disclosure and comprehensive and transparent reporting of its performance and activities. These include quarterly, interim and annual reports, announcements and circulars.

The general meetings of the Company are a primary forum for communication between the Shareholders and the Board. The Company encourages its Shareholders to attend and participate in general meetings to ensure a high level of accountability and to keep Shareholders informed of the Company's strategy and goals. The chairman of the Board, other Board members and the chairmen of all the Board committees, or in their absence, other members of the respective committees, are available to answer any questions from the Shareholders.

# CORPORATE GOVERNANCE REPORT

## Procedures for Shareholders to Convene an Extraordinary General Meeting

Extraordinary general meetings may be convened by the Directors on requisition of Shareholder(s) holding not less than one-twentieth of the paid-up capital of the Company or by such Shareholder(s) who made the requisition (the “Requisitionist(s)”) (as the case may be) pursuant to sections 566 to 568 of the Companies Ordinance (Chapter 622 of the laws of Hong Kong) (the “Companies Ordinance”). The objects of the meeting must be stated in the requisition which must be signed by the Requisitionist(s) and deposited at the registered office of the Company. Shareholders should follow the requirements and procedures as set out in sections 580 to 583 of the Companies Ordinance for convening an extraordinary general meeting.

## Procedures for Putting Forward Proposals at Shareholders’ Meetings and Directing Enquiries from Shareholders to the Board

Shareholders may at any time send their written requests, proposals, enquiries and concerns to the Company for the attention of chairman of the Board or the Company Secretary whose contact details are as follows:

288 Halei Road, Zhangjiang Hi-Tech Park, Shanghai 201203, China  
Tel: (86) 21 38829909  
Fax: (86) 21 50809999  
Email: IR@hhgrace.com

## Voting by Poll

Pursuant to Rule 13.39(4) of the Listing Rules, any vote of Shareholders at a general meeting must be taken by poll.

## Risk Management and Internal Monitoring

### Risk Management and Internal Monitoring Objectives

#### *Risk Management Objective*

From a compliance perspective, the Company has implemented the provisions of the Corporate Governance Code issued by the Hong Kong Stock Exchange to ensure the compliance with relevant requirements in a timely manner.

From the perspective of operations, the management team well understands the risks that may be confronted by the Company as it undertakes future development. Therefore, risk management objective of the Company is to identify and assess risks and take appropriate countermeasures to evade a risk entirely if possible, otherwise to manage these risks to reduce their impact and keep them under control. The Company has constructed a robust risk control system working on a continuous basis, established a risk management platform, clarified risk management mechanisms, improved UP a risk map and carried out an annual risk evaluation. We have developed a concise, scientific, practical and efficient risk management and control model in line with the Company’s specific, evolving circumstances.

# CORPORATE GOVERNANCE REPORT

## *Internal Control System Objective*

The Company's internal control system has fully implemented the requirements for a risk management framework as set out by COSO (Committee of Sponsoring Organizations of the Treadway Commission) as well as the guidelines of Hong Kong Institute of Certified Public Accountants for risk management. We refined the three tiers of risk map in the processes and formed risk-oriented internal control evaluation by considering the Company's ongoing operational circumstances and business characteristics. The objective is to evaluate the effectiveness and applicability of our internal monitoring system and provide reasonable guarantees for the effectiveness of the Company's operating activities, the reliability of financial reports, and compliance with laws and regulations.

## **Risk Management and Internal Monitoring System**

To ensure our risk management work develops efficiently and forms a long-term mechanism, the Company has established a risk management monitoring system comprising "three lines of defense". It covers the roles and duties of many different aspects as follows:

<b>1<sup>st</sup> Line of Defense</b>	<b>Business Departments</b> <ul style="list-style-type: none"><li>• Establish and maintain various departmental risk management mechanisms;</li><li>• Ongoing collection of risk data while performing day-to-day department tasks;</li><li>• Assist Risk Management Level in carrying out risk management work, including providing necessary documents and samples, identify major risks related to the department, and determine major risk countermeasures;</li></ul>
<b>2<sup>nd</sup> Line of Defense</b>	<b>Risk Management Level</b> <ul style="list-style-type: none"><li>• Formulate/revise the Company's risk management systems and provisions, and submit them to the Company's business management team and the Audit Committee for deliberation;</li><li>• Set/update standardized risk management language terms to assure common understanding of the risk management process, with timely acceptance and implementation among relevant risk management departments;</li><li>• Based on annual risk assessment results, define the major risk factors and relevant response responsibilities, organize and guide each department in making and implementing response plans for major risks in its area, and follow up on the implementation;</li></ul>
<b>3<sup>rd</sup> Line of Defense</b>	<b>Internal Audit Level</b> <ul style="list-style-type: none"><li>• Independently inspect and supervise risk management activities conducted by the Business Departments and the Risk Management Level, and evaluate whether the Company's risk management mechanism is implemented effectively and efficiently;</li><li>• Urge departments or agencies to rectify problems discovered during the auditing process, and monitor the ongoing status of the rectification work;</li><li>• Report the auditing results to the Company's Audit Committee.</li></ul>

# CORPORATE GOVERNANCE REPORT

## **Risk Management and Internal Monitoring Statement**

The Board designated the Internal Auditing Department to perform the internal auditing function and granted it full independent responsibility and authority. The internal auditors audited the effectiveness of the Company's risk management and internal monitoring system every half year according to the approved auditing scope and in accordance with the provisions in C.2 of the Corporate Governance Code, and no material deficiency was found.

Based on audits by the Internal Auditing Department, the Board believes that the Company's risk management and internal monitoring system is trustworthy and operates effectively. However, one must recognize that the Company's risk management and internal monitoring framework can only manage rather than completely eliminate risks that may affect the Company's ability to accomplish its business objectives. Therefore, it provides a reasonable but not an absolute guarantee for the avoidance of serious risk-related impact.

## **General**

The Directors acknowledge their responsibility in preparing the Company's financial statements for each financial period to give a true and fair view of the state of affairs of the Company and in accordance with statutory requirements and applicable accounting standards. In preparing the financial statements for the year ended 31 December 2018, the Directors have selected suitable accounting policies and applied them consistently, made judgments and estimates that are prudent, fair and reasonable and prepared the financial statements on a going concern basis.

The responsibilities of the auditors with respect to the financial reporting are set out in the Independent Auditors' Report on pages 167 and 174 of this annual report.

On behalf of the Board

**Mr. Suxin Zhang**

*Chairman*

# DIRECTORS' REPORT

The Directors present herewith the 2018 annual report and the audited financial statements of the Company for the period from 1 January 2018 to 31 December 2018 (the "Financial Statements").

## Principal Activities

The Company remained a pure-play 200mm-wafer foundry throughout 2018. As mentioned in the *Letter to Shareholders* above, and further elucidated in this *Directors' Report* below, the Company expects to begin delivering products on 300mm wafers from the 4th quarter of 2019. We focus on providing wafer manufacturing services to our customers based on our own differentiated semiconductor technologies. The activities of our principal subsidiaries are set out in note 1 to the Financial Statements (Page 183-184).

## Business Review

### Revenue Analysis

Revenue of the Company in 2018 was US\$930.3 million (a new record high), an increase of 15.1% over 2017. 2018 was also the seventh consecutive year of increasing gross profit and the fourth consecutive year of keeping gross margin above 30%. According to the forecast of IHS, a renowned American market research organization, among the top ten pure-play foundries, the Company is the only one that has maintained a high revenue growth rate of more than 10% for three consecutive years, from 2016 to 2018.

The Company's achievements in 2018 were driven by an increasing demand for consumer, industrial and automotive electronics, enabled by our technological innovations, continuous optimization of product mix and expansion of our production capacity.

	Revenue by service					
	2018 US\$'000	2018 %	2017 US\$'000	2017 %	YoY Change US\$'000	YoY Change %
Semiconductor wafers	911,435	98.0%	790,680	97.8%	120,755	15.3%
Others	18,833	2.0%	17,468	2.2%	1,365	7.8%
Total	930,268	100.0%	808,148	100.0%	122,120	15.1%

- In 2018, 98.0% of our revenue was from the sale of semiconductor wafers.

	Revenue by customer					
	2018 US\$'000	2018 %	2017 US\$'000	2017 %	YoY Change US\$'000	YoY Change %
Systems and Fabless companies	721,334	77.5%	622,027	77.0%	99,307	16.0%
IDMs	208,934	22.5%	186,121	23.0%	22,813	12.3%
Total	930,268	100.0%	808,148	100.0%	122,120	15.1%

- Revenue from systems and fabless companies accounted for 77.5% in 2018, an increase of 16.0% over 2017. Our revenue growth is mainly from the fabless customer base in China.
- Revenue from IDMs accounted for 22.5%, an increase of 12.3% over 2017.

# DIRECTORS' REPORT

## Revenue by geography

	2018 US\$'000	2018 %	2017 US\$'000	2017 %	YoY Change US\$'000	YoY Change %
China	525,795	56.4%	446,699	55.2%	79,096	17.7%
United States	161,428	17.4%	141,356	17.5%	20,072	14.2%
Other Asia	117,963	12.7%	95,853	11.9%	22,110	23.1%
Europe	70,660	7.6%	64,792	8.0%	5,868	9.1%
Japan	54,422	5.9%	59,448	7.4%	(5,026)	(8.5)%
Total	930,268	100.0%	808,148	100.0%	122,120	15.1%

- In 2018, China remained our largest market, with 17.7% increased revenue over 2017.

The growth was primarily from discrete, smart card chips and MCU.

- Revenue from United States increased by 14.2% over 2017, mainly from super-junction MOSFET, general MOSFET and MCU.
- Revenue from Other Asia increased most rapidly, an increase of 23.1% from 2017, chiefly from MCU, general MOSFET and super-junction MOSFET.
- Revenue from Europe increased by 9.1% over 2017, principally from general MOSFET.
- Revenue from Japan decreased by 8.5%, mainly due to the decrease in MCU business.

## Revenue by technology type

	2018 US\$'000	2018 %	2017 US\$'000	2017 %	YoY Change US\$'000	YoY Change %
eNVM	361,341	38.7%	312,040	38.6%	49,301	15.8%
Discrete	310,488	33.4%	220,923	27.3%	89,565	40.5%
Analog & PM	142,131	15.3%	150,791	18.7%	(8,660)	(5.7)%
Logic & RF	94,549	10.2%	95,905	11.9%	(1,356)	(1.4)%
Standalone NVM	21,261	2.3%	26,515	3.3%	(5,254)	(19.8)%
Others	498	0.1%	1,974	0.2%	(1,476)	(74.8)%
Total	930,268	100.0%	808,148	100.0%	122,120	15.1%

- In 2018, eNVM was our largest source of revenue, with an increase of 15.8% compared to 2017, mainly from financial card chips and MCU.
- Revenue from discrete increased dramatically by 40.5% driven by general MOSFET, super-junction MOSFET and IGBT.
- Revenue from Analog & PM declined slightly, mostly due to capacity adjustments.

## DIRECTORS' REPORT

### Revenue by technology node

	2018 US\$'000	2018 %	2017 US\$'000	2017 %	YoY Change US\$'000	YoY Change %
≤0.13μm	<b>331,521</b>	<b>35.6%</b>	270,650	33.5%	60,871	22.5%
0.15μm & 0.18μm	<b>131,300</b>	<b>14.1%</b>	139,226	17.2%	(7,926)	(5.7)%
0.25μm	<b>15,482</b>	<b>1.7%</b>	16,802	2.1%	(1,320)	(7.9)%
≥0.35μm	<b>451,965</b>	<b>48.6%</b>	381,470	47.2%	70,495	18.5%
Total	<b>930,268</b>	<b>100.0%</b>	808,148	100.0%	122,120	15.1%

- Revenue from 0.13μm and below technology nodes increased rapidly by 22.5%, accounting for 35.6% of our revenue in 2018, mainly from smart card chips and MCU.
- Revenue from the 0.35μm and above technology nodes ranked second in growth rate by 18.5%, pushing revenue contribution to 48.6%, mainly from discrete.
- Revenue from 0.15μm & 0.18μm declined, mainly due to the Company's capacity tunings and supply chain inventory adjustments.

### Revenue by end market

	2018 US\$'000	2018 %	2017 US\$'000	2017 %	YoY Change US\$'000	YoY Change %
Consumer Electronics	<b>598,031</b>	<b>64.3%</b>	558,168	69.0%	39,863	7.1%
Industrial & Automotive Electronics	<b>187,930</b>	<b>20.2%</b>	105,164	13.0%	82,766	78.7%
Communications	<b>99,777</b>	<b>10.7%</b>	105,586	13.1%	(5,809)	(5.5)%
Computing	<b>44,530</b>	<b>4.8%</b>	39,230	4.9%	5,300	13.5%
Total	<b>930,268</b>	<b>100.0%</b>	808,148	100.0%	122,120	15.1%

- Consumer Electronics accounted for the largest share of the Company's revenue in 2018, an increase of 7.1% compared to 2017, driven mainly by increases in discrete and MCU.
- Revenue from Industrial & Automotive increased dramatically by 78.7%, mainly driven by increase of smart card chips, discrete and MCU.
- Revenue from Computing increased by 13.5%, accounting for 4.8% of our revenue.
- Communications accounted for 10.7% of revenue, mainly from smartphone-related chips.



# DIRECTORS' REPORT

## Capacity and Capacity Utilization

Fab (In thousands of wafers per month)	2018	2017	YoY Change
Fab1	65	63	2
Fab2	59	57	2
Fab3	50	48	2
Total monthly wafer fabrication capacity	174	168	6
Capacity Utilization	99.2%	98.1%	1.1%

- Strong market demand significantly enabled the higher capacity utilization rate of 99.2%.

## Wafer shipments

In thousands of wafers	2018	2017	YoY Change
Wafer shipments	2,016	1,869	7.9%

- In 2018, the Company's wafer shipments increased by 7.9%, an important source of revenue growth.

## Revenue from Research and Development

To provide cost-effective technologies and services to our customers, we are committed to research, development, innovation and optimization of differentiated technologies, primarily focused on eNVM, discrete, analog & power management as well as logic & RF solutions. In 2018, we achieved remarkable results from our investment in research, development and constant innovation.

The eNVM-related technology platform was our largest revenue source in 2018, predominantly smart card chips and MCUs. Our 90nm eNVM new-generation technology for bank card ICs, with significant reduction in IP size, greatly enhances the competitiveness of the products of our customers and is also a major growth point for our eNVM platform and a key source of revenue over the next few years. The Company's MCU solution lucratively covers mainstream Non-Volatile Memory technologies such as eFlash, OTP, MTP and EEPROM.

In 2018, more than 100 new products of MCU were launched on our 0.11 $\mu$ m eNVM technology platform, leading to another major growth point. Our 95nm 5V MCU technology platform was also further improved, and we optimized EEPROM, eFlash, OTP and other IPs, which are expected to increase our revenue in coming years.

Mainstream discrete technologies such as general MOSFET, Deep-Trench super-junction MOSFET (DT-SJNFET) and IGBT, achieved the most rapid revenue growth in 2018, increasing our revenue by 41% and shipments by 16%. Among them, medium- and high-voltage discrete technologies accounted for more than 50% of our discrete revenue, with revenue growth of more than 100% compared to 2016, and so shall be a major focus of the Company's research and development for revenue optimization.

## DIRECTORS' REPORT

Additionally, in 2018, our discrete technologies achieved remarkable success in the automotive electronics market. Our general MOSFETs are employed in automotive body stabilization systems (Electronic Stability Program, ESP), and IGBTs are utilized in inverters for electric vehicles and as a reliable platform for automotive electronic power devices. We developed new-generation discrete technologies such as super-junction (SJ) MOSFET Generation III, RC-IGBT and SJ-IGBT, which will continue to contribute to our future revenue growth well beyond 2018.

As the third largest revenue source of the Company, Analog and Power Management technology platforms covers voltages range from 5V to 700V and technology nodes from 0.5 $\mu$ m to 90nm. Capturing the high integration and intelligence trend of power management, and based on our own 0.35 $\mu$ m BCD technology, the Company planned for and invested substantial research and development resources in 0.18 $\mu$ m, 0.11 $\mu$ m and 90nm BCD technologies.

In 2018, the Company successfully launched its second generation 0.18 $\mu$ m BCD technology, verified and put into mass-production various chips used in motor drivers, fast chargers and DC-DC converters. Regarding the automotive electronics market, the Company completed verification of the 0.18 $\mu$ m BCD process and some selected automotive-level IPs. We will conduct full verification on a variety of IPs that have the potential to contribute high-quality revenue in the future.

The Company initiated research and development of a 55nm logic technology and related IPs in 2018 in order to accelerate the operation, risk production and substantial sales revenue at HH-Wuxi and is expected to introduce customers in the second half of 2019. In the meantime, the Company launched research and development of a flash cell for 55nm embedded flash memory technology and completed functional verification, laying a solid foundation for mass production. HH-Wuxi is not only an upgrade of the Company's capacity, but a new stage and new milestone in our development history that can enrich our technology portfolios to better serve domestic and foreign semiconductor IC design companies. HH-Wuxi will inherit the success of the Company in differentiated technologies.

### **New Technologies**

In addition to the major platforms above, the Company continued to expand into new differentiated technologies. The intrinsic value of the entire RF market continues to increase as the industry expands with growing demand for smartphone protocols, including 2G to 5G mobile communications, WLAN, Bluetooth, GPS and the Beidou global navigation satellite system.

In 2018, the Company developed a domestic-leading 0.13 $\mu$ m Radio Frequency (RF) SOI technology targeting the radio frequency front-end module (RF FEM), including the RF switch, the antenna tuner, the low noise amplifier and the integrated module. Currently undergoing customer verification, it is expected to be put into mass production in 2019.

# DIRECTORS' REPORT

## Outlook for 2019

### Economy

The semiconductor industry fundamentally develops in line with the trend of the global economy. According to the forecast from “World Economic Outlook” issued by the IMF in January 2019, the global economy will remain stable this year despite various uncertainties, with a growth rate of around 3.5%, while China will retain growth rates above 6%. According to forecasts from a number of market research institutions, the global semiconductor industry will realize a CAGR of more than 6% during the period from 2017 to 2022, and its growth rate will exceed that of the global economy in 2019.

The global wafer foundry industry is expected to hold steady a growth rate higher than that of the overall semiconductor industry, driven by increasing demand for more end-use application derivatives, the boom of integrated circuit design companies and the trend that IDMs will continue to entrust manufacturing to wafer foundries.

### Core Competitiveness

As the core competitiveness of the Company, differentiated technologies will remain our long-term research and development direction. In 2019, regarding research and development of 200mm differentiated technologies, we will further optimize existing 95nm and 90nm embedded nonvolatile memory technologies, so as to provide smaller memory cells, IP macros and more streamlined technology for high-density smart card and high-end MCU markets. We will enhance high voltage discrete technologies such as the next-generation IGBT and super-junction MOSFET. In addition to the higher power density and lower losses required for power devices, we will refine developing intelligent IGBT technology for integrated on-chip sensors and new thermal dissipation IGBT technology with higher reliability.

We will improve power management technology, optimize 0.18 $\mu$ m BCD technology to meet automotive electronics specifications, integrate 0.11 $\mu$ m embedded flash memory with BCD technology to provide solutions on intelligent power management chips, and develop 90nm BCD into a world-class technology. We will further optimize 0.13 $\mu$ m RF-SOI to meet the global market demand for mobile RF Front End Modules. In addition to improving existing 200mm technology as described above, considering the strong demand from global discrete markets, the Company plans to ramp up its monthly production capacity for 200mm wafers by approximately 20,000 wafers, mainly for power discrete, in the next two years, so as to further meet customer and market demand.

### Looking forward to 2019

We will maintain our dreams as opportunities arise and keep compass orientation on the horizon in the face of challenges. The Group will build on its record success to achieve even more remarkable results. We will constantly strive for excellence and complete the HH-Wuxi project on schedule, possibly early, in a nearly perfect and satisfactory manner, so as to radiate into and drive the development of local industries and create economic synergies.

We will continue to concentrate on scientific and technological research and development and take an example in differentiated innovation. We will deepen strategic cooperation, fully support industrial ecological construction, and promote synergy and win-win cooperation along the global IC manufacturing supply chain.

## Management Discussion and Analysis

### Financial Performance

	2018 US\$'000	2017 US\$'000	Change
Revenue	930,268	808,148	15.1 %
Cost of sales	(619,114)	(540,971)	14.4 %
<b>Gross profit</b>	<b>311,154</b>	267,177	16.5 %
Other income and gains	43,613	24,394	78.8 %
Fair value gain on an investment property	247	89	177.5 %
Selling and distribution expenses	(7,771)	(7,232)	7.5 %
Administrative expenses	(122,323)	(108,673)	12.6 %
Other expenses	(11,106)	(10,712)	3.7 %
Finance costs	(2,203)	(2,178)	1.1 %
Share of profit of an associate	9,444	9,622	(1.8)%
<b>Profit before tax</b>	<b>221,055</b>	172,487	28.2 %
Income tax expense	(35,447)	(27,225)	30.2 %
<b>Profit for the year</b>	<b>185,608</b>	145,262	27.8 %
<b>Attributable to:</b>			
Owners of the parent	183,158	145,262	26.1 %
Non-controlling interests	2,450	-	100.0 %

#### Explanation of items with fluctuation over 5% in 2018

##### Revenue

Revenue rose to an all-time high of US\$930.3 million, an increase of 15.1% over 2017, primarily due to higher demand for general MOSFET, bank card ICs, MCU, super-junction MOSFET and IGBT products.

##### Cost of sales

Cost of sales was US\$619.1 million, 14.4% higher than 2017, primarily due to increased wafer shipments and increased depreciation and labor costs.

##### Gross profit

Gross profit was US\$311.2 million, 16.5% higher than 2017, primarily due to increased average selling prices, partially offset by increased depreciation and labor costs.

##### Other income and gains

Other income and gains were US\$43.6 million, 78.8% higher than 2017, primarily due to fair value gains on financial assets at fair value through profit or loss and increased interest income.

##### Fair value gain on an investment property

Fair value gain on an investment property reflect a gain in valuation on the investment property. As the appraised value in 2018 remained stable compared to 2017 the fair value gain was relatively small.

##### Selling and distribution expenses

Selling and distribution expenses were US\$7.8 million, 7.5% higher than 2017, primarily due to increased labor expenses.

# DIRECTORS' REPORT

## Administrative expenses

Administrative expenses were US\$122.3 million, 12.6% higher than 2017, chiefly due to increased labor, professional expenses, and impairment provisions.

## Income tax expense

Income tax expense was US\$35.4 million, 30.2% higher than 2017, primarily due to increased taxable profit.

## Profit for the year

As a result of the cumulative effect of the above factors, profit for the year increased to US\$185.6 million from US\$145.3 million, 27.8% higher than 2017. Net profit margin increased from 18.0% to 20.0%.

## Financial Status

	<b>31 December 2018 US\$'000</b>	31 December 2017 US\$'000	Change
<b>Non-current assets</b>			
Property, plant and equipment	<b>773,180</b>	733,462	5.4 %
Investment property	<b>171,225</b>	179,586	(4.7)%
Investment in an associate	<b>64,005</b>	57,577	11.2 %
Available-for-sale investments	–	215,864	(100.0)%
Equity investments designated at fair value through other comprehensive income	<b>208,357</b>	–	100.0 %
Other non-current assets	<b>87,432</b>	38,385	127.8 %
<b>Total non-current assets</b>	<b>1,304,199</b>	1,224,874	6.5 %
<b>Current assets</b>			
Inventories	<b>129,629</b>	115,578	12.2 %
Trade and notes receivables	<b>176,797</b>	112,372	57.3 %
Due from related parties	<b>10,800</b>	46,988	(77.0)%
Prepayments, other receivables and other assets	<b>12,479</b>	10,074	23.9 %
Financial assets at fair value through profit or loss	<b>667,033</b>	–	100.0 %
Restricted and time deposits	<b>337</b>	193,530	(99.8)%
Cash and cash equivalents	<b>777,000</b>	374,890	107.3 %
<b>Total current assets</b>	<b>1,774,075</b>	853,432	107.9 %
<b>Current liabilities</b>			
Trade payables	<b>79,470</b>	68,124	16.7 %
Due to related parties	<b>5,838</b>	10,885	(46.4)%
Other current liabilities	<b>239,890</b>	197,079	21.7 %
Interest-bearing bank borrowings	<b>4,371</b>	60,751	(92.8)%
<b>Total current liabilities</b>	<b>329,569</b>	336,839	(2.2)%
<b>Net current assets</b>	<b>1,444,506</b>	516,593	179.6 %
<b>Non-current liabilities</b>			
Interest-bearing bank borrowings	<b>26,227</b>	32,139	(18.4)%
Deferred tax liabilities	<b>18,146</b>	14,123	28.5 %
<b>Total non-current liabilities</b>	<b>44,373</b>	46,262	(4.1)%
<b>Net assets</b>	<b>2,704,332</b>	1,695,205	59.5 %

## Explanation of items with fluctuation over 5% from 31 December 2017 to 31 December 2018

### Property, plant and equipment

Property, plant and equipment increased from US\$733.5 million to US\$773.2 million, mainly as a result of the construction of the 300mm project.

### Investment in an associate

Investment in an associate increased from US\$57.6 million to US\$64.0 million, primarily due to profit shared from the associate in 2018.

### Available-for-sale investments

Available-for-sale investments under HKAS 39 were transferred to equity investments designated at fair value through other comprehensive income under HKFRS 9 after 1 January 2018.

### Other non-current assets

Other non-current assets increased from US\$38.4 million to US\$87.4 million, primarily due to increased prepaid land lease payments and advanced payments for technology development agreements.

### Inventories

Inventories increased from US\$115.6 million to US\$129.6 million, primarily due to increased wafer demand from customers.

### Trade and notes receivables

Trade and notes receivables increased from US\$112.4 million to US\$176.8 million, primarily due to higher revenue and re-classes from due from related parties.

### Due from related parties

Due from related parties decreased from US\$47.0 million to US\$10.8 million, primarily due to re-classes to trade and notes receivables.

### Prepayments, other receivables and other assets

Prepayments, other receivables and other assets increased from US\$10.1 million to US\$12.5 million, primarily due to increased VAT deductible tax.

### Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss representing financial products including principal guaranteed structured deposits and wealth management products purchased from banks, amounting to approximately US\$667.0 million. No such classification was made in 2017.

### Restricted and time deposits

Restricted and time deposits decreased from US\$193.5 million to US\$0.3 million, due to payout from investment in time deposits.

# DIRECTORS' REPORT

## **Cash and cash equivalents**

Cash and cash equivalents increased from US\$374.9 million to US\$777.0 million, mainly due to (i) proceeds of US\$1,279.4 million from disposals of financial assets at fair value through profit or loss, (ii) US\$565.0 million of equity injection to HH-Wuxi, (iii) US\$404.0 million proceeds from issue of shares, (iv) US\$274.4 million generated from operating activities, (v) US\$191.3 million from investment in time deposits, and (vi) US\$10.3 million of interest income. This was offset by (i) investment in financial assets at fair value through profit or loss of US\$1,959.6 million, (ii) capital investments of US\$238.6 million, (iii) repayments of bank borrowings of US\$60.6 million, (iv) dividend payments of US\$41.1 million, and (v) interest payments of US\$2.3 million. Additionally, there was a negative adjustment of US\$20.1 million due to RMB depreciation.

## **Trade payables**

Trade payables increased from US\$68.1 million to US\$79.5 million, primarily due to re-classes from due to related parties.

## **Due to related parties**

Due to related parties decreased from US\$10.9 million to US\$5.8 million, primarily due to re-classes to trade payables.

## **Other current liabilities**

Other current liabilities increased from US\$197.1 million to US\$239.9 million, primarily due to increased payables for capital expenditures.

## **Interest-bearing bank borrowings**

Total interest-bearing bank borrowings decreased from US\$92.9 million to US\$30.6 million, due to repayments of bank borrowings.

## **Deferred tax liabilities**

Deferred tax liabilities, largely comprising withholding tax accrued for dividend distribution, increased from US\$14.1 million to US\$18.1 million, primarily due to the accrual of dividend withholding tax in 2018, partially offset by (i) a reversal of dividend withholding tax accrued for prior years and (ii) the tax paid for 2017 dividends.

## Cash Flow

	<b>2018</b>	2017	Change
	<b>US\$'000</b>	US\$'000	
Net cash flows generated from operating activities	<b>274,400</b>	258,300	6.2 %
Net cash flows used in investing activities	<b>(717,239)</b>	(197,003)	264.1 %
Net cash flows generated from/(used in) financing activities	<b>865,010</b>	(41,096)	(2,204.9)%
<b>Net increase in cash and cash equivalents</b>	<b>422,171</b>	20,201	1,989.9 %
Cash and cash equivalents at beginning of the year	<b>374,890</b>	341,255	9.9 %
Effect of foreign exchange rate changes, net	<b>(20,061)</b>	13,434	(249.3)%
<b>Cash and cash equivalents at end of the year</b>	<b>777,000</b>	374,890	107.3 %

### Net cash flows generated from operating activities

Net cash flows generated from operating activities reached new high of US\$274.4 million, an increase of 6.2% from 2017, mainly due to higher revenue.

### Net cash flows used in investing activities

Net cash flows used in investing activities were US\$717.2 million, primarily attributed to (i) US\$1,959.6 million for investment in financial assets at fair value through profit or loss, and (ii) US\$238.6 million for capital investments, offset by (i) proceeds of US\$1,279.4 million from disposals of financial assets at fair value through profit or loss, (ii) US\$191.3 million from investment in time deposits, and (iii) US\$10.3 million of interest income.

### Net cash flows generated from financing activities

Net cash flows generated from financing activities were US\$865.0 million, including (i) US\$565.0 million of equity injection to HH-Wuxi, (ii) US\$404.0 million proceeds from issue of shares, offset by (i) repayments of bank borrowings of US\$60.6 million, (ii) dividend payments of US\$41.1 million, and (iii) interest payments of US\$2.3 million.

### Net increase in cash and cash equivalents

As a result of the cumulative effect of the above factors, cash and cash equivalents increased from US\$374.9 million as of 31 December 2017 to US\$777.0 million as of 31 December 2018.



# DIRECTORS' REPORT

## Financial Risks

### Foreign currency risk

We are exposed to foreign exchange risks, arising primarily from sales or purchases by HHGrace in US\$ rather than in the subsidiary's functional currency, which is RMB. As of 31 December 2018, if the US dollar had strengthened or weakened against the RMB by five percent, with all other variables held constant, our profit before tax for the year would have been approximately US\$26.8 million higher or lower.

### Credit risk

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

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

### Liquidity risk

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

### Capital management

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

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

# DIRECTORS' REPORT

## Gearing Ratio

Details of the gearing ratio are set out in note 36 to the Financial Statements.

## Results

The results of the Group for the year ended 31 December 2018 and the state of affairs at that date are set out in the Financial Statements on pages 175 to 295 of this report.

## Final Dividends

The Directors recommend the payment of a final dividend of HK\$31 cents per share for the year ended 31 December 2018. Subject to shareholders' approval at the forthcoming AGM, the proposed final dividend will be payable on Wednesday, 26 June 2019 to the shareholders whose names appear on the register of members of the Company on Friday, 17 May, 2019.

## Dividend Policy

Subject to the approval of the Shareholders and the requirements of law, it has been decided that the Company will pay dividends to the Shareholders for the year of 2015 and onwards if the Group is profitable, the operations environment is stable and there is no significant investment made by the Group. It is intended that the average of dividends paid in three consecutive years will be no less than 30% of the average distributable net profit of these three years. The remaining net profit will be used for the development and operations of the Group.

This dividend policy will continue to be reviewed from time to time and there can be no assurance that dividends will be paid in any amount for any given period. In the event that the Board recommends a dividend, the form and amount will depend on the assessment by the Directors of the factors affecting the Group from time to time.

## Bank Loans and Other Borrowings

The particulars of bank loans and other borrowings of the Group as at 31 December 2018 are set out in note 25 to the Financial Statements.

## Financial Summary

A summary of the published results and of the assets and liabilities of the Group for the past five financial years is set out on page 296. This summary does not form part of the audited financial statements.

# DIRECTORS' REPORT

## Property, Plant and Equipment

Details of additions and other movements during the year ended 31 December 2018 in the property, plant and equipment and investment property of the Group are set out in notes 13 and 14 to the Financial Statements.

In addition, details of the investment property are set out below:

Location	Type of Use	Term of Lease	Group' s Interest	Gross Floor Area (sq.m.)
Portions of 9 buildings No.818 Guo Shou Jing Road Zhangjiang Hi-Tech Park Pudong New Area Shanghai, PRC	Industrial use	Held under a land use right for a term expiring on 8 March 2051	100%	91,563.11

## Share Capital and Share Option Scheme

Details of movement in the share capital of the Company during the year ended 31 December 2018 are set out in note 28 to the Financial Statements. The movements include the automatic inclusion of the amount standing to the share premium account into the share capital as from 3 March 2014 in accordance with section 37 of Schedule 11 to the new Hong Kong Companies Ordinance (Cap. 622), as part of the transition to the no-par value regime.

A share option scheme (the "Share Option Scheme") was approved by an extraordinary general meeting of the Company held on 1 September 2015. A summary of the Share Option Scheme is as follows:

Purpose of the Share Option Scheme:

The purpose of the Share Option Scheme is to attract, retain and provide incentives to the Participants (defined below), to provide them with the opportunity to obtain Shares of the Company and to link their interests closely to the operating results and share performance of the Company with the view to increasing the value of the Company.

Participants:

The participants of the Share Option Scheme ("Participants") include (1) existing Executive and Non-Executive Directors of any member of the Group; or (2) senior management and key managerial and technical personnel having a direct impact on the results of operations and sustainable development of any member of the Group, subject always to any limits and restrictions specified in the Share Option Scheme, but shall not include any Independent Non-Executive Directors.

## DIRECTORS' REPORT

Maximum entitlement of each participant:	If the total number of Shares allotted and which may fall to be allotted upon exercise of all the share options ("Share Options") granted and to be granted (including exercised, cancelled and outstanding Share Options) to a Participant in any 12-month period in aggregate exceeds 1% of the issued share capital of the Company at the time, no further grant of Share Options shall be given to such Participant. Share Options may be granted to a Participant in excess of the individual limit of 1% in any 12-month period only with the approval of the Shareholders in general meeting. No Share Option shall be granted to any person who holds over 5% of Shares which carry voting rights on the Grant Date (as defined in the Share Option Scheme) unless such grant is approved by shareholders in general meeting.
Minimum period, if any, for which an option must be held before it can be exercised:	Two years unless otherwise stated in the grant notice of the Share Option.
The amount payable on application or acceptance of the Share Option and the period within which payments or calls must be made or loans for such purposes must be paid:	HK\$1.00 is to be paid by each grantee as consideration for the grant of Share Option within 28 days from the date of offer.
Remaining life of the Share Option Scheme:	The Share Option Scheme shall be valid and effective for a period of seven (7) years commencing on the date of adoption and will expire on 1 September 2022.

As at the date of this report, the total number of shares available for issue under the Share Option Scheme is 52,419,361 shares, representing approximately 4.1% of the total number of shares in issue.

### Share Options Granted under the Share Option Scheme

On 4 September 2015, the Company granted 30,250,000 share options (the "2015 Options") to subscribe for up to a total of 30,250,000 ordinary shares of the Company to certain individuals under the Share Option Scheme. Details of the 2015 Options are as follows:

Date of grant:	4 September 2015
Exercise price of options granted:	HK\$6.912
Number of options granted:	30,250,000 (representing 2.36% of the issued shares of the Company as at 31 December 2018).
Validity period of the options:	From 4 September 2015 to 3 September 2022 (seven (7) years), both dates inclusive.
Vesting period of the options:	One third of the options shall vest on each of 4 September 2017, 4 September 2018 and 4 September 2019.

## DIRECTORS' REPORT

The exercise price of HK\$6.912 per Share represents a premium of 0% over the higher of (i) the closing price of HK\$6.87 per Share as stated in the daily quotation sheets issued by the Stock Exchange on the date of the grant; and (ii) the average closing price of HK\$6.912 per Share as stated in the daily quotation sheets issued by Stock Exchange for the five trading days immediately preceding the date of grant.

On 24 December 2018, the Company granted 34,500,000 share options (the "2018 Options") to subscribe for up to a total of 34,500,000 ordinary shares of the Company to certain individuals under the Share Option Scheme. Details of the 2018 Options are as follows:

Date of Grant:	24 December 2018
Exercise price of options granted:	HK\$15.056
Number of options granted:	34,500,000
Validity period of the options:	From 24 December 2018 to 23 December 2025 (seven (7) years), both dates inclusive
Vesting period of the options:	For employees at or above the level of the vice president of the Company (together with Directors), one fourth of the 2018 Options shall vest on each of 24 December 2020, 24 December 2021, 24 December 2022 and 24 December 2023; for the other employees of the Company, one third of the 2018 Options shall vest on each of 24 December 2020, 24 December 2021 and 24 December 2022

The exercise price of HK\$15.056 per share represents the higher of (i) the closing price of HK\$14.440 per share as stated in the daily quotation sheets issued by the Stock Exchange on the date of the grant; (ii) the average closing price of HK\$15.056 per share as stated in the daily quotation sheets issued by the Stock Exchange for the five business days immediately preceding the date of grant; and (iii) the face value of the share.

Among the 2015 Options and 2018 Options, 988,000 and 680,000 share options were granted to the Directors of the Company, respectively, subject to their acceptance.

## DIRECTORS' REPORT

Details of the movements in the share options during the year ended 31 December 2018 are as follows:

Name or category of participants	Number of share options									Exercise price of share options	
	Granted at 04.09.2015	Granted at 24.12.2018	Cancelled during the year 2015	Cancelled during the year 2016	Cancelled during the year 2017	Exercised during the period	Cancelled during the period	Lapsed during the period	At 31.12.2018		Exercise period of share options
<b>Directors</b>											
Mr. Yu Wang	869,000		-	-	-	200,000	-	-	669,000	04.09.2017-03.09.2022	HK\$6.912
		600,000							600,000	24.12.2018-23.12.2025	HK\$15.056
Mr. Takayuki Morita	119,000		-	-	-	-	-	-	119,000	04.09.2017-03.09.2022	HK\$6.912
		80,000							80,000	24.12.2018-23.12.2025	HK\$15.056
<b>Other employees</b>	29,262,000		(130,000)	(1,458,000)	(1,188,399)	3,782,639	(753,995)	(600)	18,084,362	04.09.2017-03.09.2022	HK\$6.912
		33,820,000							33,820,000	24.12.2018-23.12.2025	HK\$15.056
<b>In aggregate</b>	30,250,000	34,500,000	(130,000)	(1,458,000)	(1,188,399)	3,982,639	(753,995)	(600)	53,372,362		

\* The fair value of equity-settled share options granted during the year were US\$21,681,000, which was estimated as at the date of grant, using a binomial model. The value of the options is subject to the limitation of the binomial model and a number of assumptions which are subjective and uncertain. Changes in such assumptions could materially affect the value of the options.

Save as disclosed above, the Company has not adopted any other share option scheme during the year ended 31 December 2018.

### Reserves

Details of movements in the reserves of the Group during the year ended 31 December 2018 are set out in the consolidated statement of changes in equity on page 179 and 180 of this report.

# DIRECTORS' REPORT

## Continuing Connected Transactions and Connected Transactions

### Continuing Connected Transactions

The Group disclosed in the prospectus of the Company dated 3 October 2014 a series of continuing connected transactions relating to Huahong Zealcore, QST, INESA, Shanghai Huali, Huahong Real Estate and Shanghai Huajin Property Management Co., Ltd. (Huajin Property Management). Certain details of such transactions are summarized in the table below. In respect of such transactions the Company had applied for and the Stock Exchange had granted a waiver from, among others, strict compliance with the announcement and independent shareholders' approval requirement (as the case may be). Details of such continuing connected transactions of the Group together with certain other continuing connected transactions of the Group conducted during 2018 are as follows:

Unit: US\$'000

Transaction	Transaction Date	Parties to the Transaction	Connected Relationship	Transaction	Actual Transaction Amount 2018	Proposed Annual Caps 2018
(1)	1 January 2018	Huahong Zealcore (as purchaser) The Company (as seller)	Huahong Zealcore is 90.66% held by and a subsidiary of Huahong Group, the Company's controlling shareholder.	Sales agreement between the Company as seller and Huahong Zealcore as purchaser in relation to the sales of IC and other semiconductor products to Huahong Zealcore.	4,996	12,600
(2)	1 January 2018	QST (as purchaser) The Company (as seller)	QST was 36.36% held by SAIL, the Company's controlling shareholder, of which 27.27% interest was held directly by SAIL and 9.09% interest was held directly by the Company.	Sales agreement between the Company as seller and QST as purchaser in relation to the sales of IC and other semiconductor products to QST.	1,607	7,200
(3)	1 January 2018	Huahong Zealcore (as seller) The Company (as purchaser)	Huahong Zealcore is 90.66% held by and a subsidiary of Huahong Group, the Company's controlling shareholder.	Purchase agreement between Huahong Zealcore as seller and the Company as purchaser in relation to the purchase of materials used in the manufacturing process of the Group's semiconductor products.	651	725
(4)	1 January 2018	INESA (on behalf of itself and its subsidiaries) (as seller) The Company (as purchaser)	INESA is the Company's controlling shareholder.	Purchase agreement between INESA as seller (on behalf of itself and its subsidiaries) and the Company as purchaser in relation to the purchase of goods and services.	2,391	2,800

## DIRECTORS' REPORT

Transaction	Transaction Date	Parties to the Transaction	Connected Relationship	Transaction	Actual Transaction Amount 2018	Proposed Annual Caps 2018
(5)	25 February 2010 (together with supplemental agreements dated 10 June 2011 and 25 July 2014)	Shanghai Huali (as lessee) The Company (as lessor)	Shanghai Huali is 50.23% owned by SAIL, the Company's controlling shareholder.	Lease agreement between Shanghai Huali as lessee and the Company as lessor in relation to the factory premise situated at Hill 2, 13th street, Zhangjiang Hi-Tech park, Pudong New Area, Shanghai, PRC leased by the Company to Shanghai Huali for their 300mm wafer production line. The total gross floor area leased was 96,099.2 square meters.	12,686	13,137
(6)	15 February 2017	Shanghai Huali (as lessee) HHGrace (as lessor)	Shanghai Huali is 50.23% owned by SAIL, the Company's controlling shareholder.	Lease agreement between Shanghai Huali as lessee and HHGrace as lessor in relation to certain clean rooms with total gross floor area of 820 square meters and related utility services and materials to be provided by HHGrace to Shanghai Huali.	762	5,076
(7)	10 January 2013	Huahong Real Estate (as lessor) The Company (as lessee)	Huahong Real Estate is a wholly-owned subsidiary of Hua Hong Technology Development, a company 50% held by and consolidated with Huahong Group, our controlling shareholder, and 50% held by HHNEC.	Lease agreement between Huahong Real Estate as lessor and the Company as lessee in relation to the dormitory premises situated at Hua Hong Innovation Park, Nong 2777, Jinxiu Road East, Pudong New Area, Shanghai, PRC (Dormitory Premises) rented by the Company from Huahong Real Estate for use as staff quarters for the Company's employees. The total gross floor area rented was 17,412.87 square meters.	1,670	1,941
(8)	1 January 8	Huajin Property Management (as property manager) The Company (as purchaser)	Huajin Property Management is a wholly-owned subsidiary of Hua Hong Technology Development, a company 50% held by and consolidated with Huahong Group, our controlling shareholder, and 50% held by HHNEC.	Property management agreement between Huajin Property Management as property manager and the Company as contractor in relation to the engagement of Huajin Property Management by the Group to provide property management service for the Dormitory Premises.	227	299



## DIRECTORS' REPORT

The Board (including the Independent Non-Executive Directors) has reviewed the continuing connected transactions as described above and confirmed that such transactions did in fact continue in 2018:

- (i) in the ordinary and usual course of business of the Company;
- (ii) either on normal commercial terms or, if there are no sufficient comparable transactions to judge whether they are on normal commercial terms, on terms no less favourable to the Company than terms available to or from (as appropriate) independent third parties; and
- (iii) in accordance with the relevant agreements on terms that are fair and reasonable and in the interests of the Shareholders of the Company as a whole.

The auditors of the Company have confirmed in a letter to the Board that, with respect to the aforesaid continuing connected transactions of 2018:

- (i) nothing has come to their attention that causes the auditors to believe that the disclosed continuing connected transactions have not been approved by the Company's Board;
- (ii) for transactions involving the provision of goods or services by the Group, nothing has come to their attention that causes the auditors to believe that the transactions were not, in all material respects, in accordance with the pricing policies of the Company;
- (iii) nothing has come to their attention that causes the auditors to believe that the transactions were not entered into, in all material respects, in accordance with the relevant agreements governing such transactions; and
- (iv) with respect to the aggregate amount of each of the continuing connected transactions, nothing has come to their attention that causes the auditors to believe that the disclosed continuing connected transactions have exceeded the maximum aggregate annual value disclosed in the Prospectus in respect of each of the disclosed continuing connected transactions.

### Related Party Transactions

During the year ended 31 December 2018, the Group entered into certain transactions with parties regarded as "related parties" under the applicable accounting standards. Details of the related party transactions entered into by the Group during the year ended 31 December 2018 are disclosed in note 33 to the financial statements. Save as disclosed in the paragraph headed "Connected Transactions" in this annual report, the other related party transactions disclosed in note 33 were not regarded as connected transactions or were exempt from reporting, announcement and shareholder approval requirements under the Listing Rules.

# DIRECTORS' REPORT

## Annual General Meeting

The AGM will be held on Thursday, 9 May 2019.

## Closure of Register of Members

### For determining eligibility of Shareholders to attend and vote at the 2018 AGM

Latest time to lodge transfer documents for registration	4:30 p.m. on 3 May 2019
Closure of Register of members	06 to 09 May 2019 (both dates inclusive)
Record date	09 May 2019

### For determining entitlement of Shareholders to the proposed final dividend

Latest time to lodge transfer documents for registration	4:30 p.m. on 15 May 2019
Closure of Register of members	16 to 17 May 2019 (both dates inclusive)
Record date	17 May 2019
Payable date	26 June 2019

In order to be eligible to attend and vote at the Annual General Meeting, and the entitlement of the aforementioned proposed final dividend, unregistered holders of shares of the Company should ensure all share transfer forms accompanied by the relevant share certificates must be lodged with the Company's branch share registrar in Tricor Investor Services Limited, at Level 22, Hopewell Centre, 183 Queen's Road East, Hong Kong for registration no later than the aforementioned latest time.

## Directors and Directors' Service Contracts

The Directors of the Company during the year and up to the date of this report were:

### Executive Directors:

Mr. Suxin Zhang (*Chairman*)  
Mr. Yu Wang (*President*)

### Non-Executive Directors:

Mr. Jianbo Chen  
Mr. Yang Du  
Mr. Takayuki Morita  
Mr. Jun Ye

### Independent Non-Executive Directors:

Mr. Stephen Tso Tung Chang  
Mr. Kwai Huen Wong, JP  
Mr. Long Fei Ye

# DIRECTORS' REPORT

Each of the Directors of the Company is appointed for a specific term of three years and is subject to re-nomination and re-election by the Company in general meeting unless previously terminated in accordance with the terms and conditions of the relevant letter of appointment or director's service contract.

Mr. Jianbo Chen, Mr. Stephen Tso Tung Chang and Mr. Long Fei Ye will retire by rotation from office as Directors at the Annual General Meeting, and Mr. Jianbo Chen, Mr. Stephen Tso Tung Chang and Mr. Long Fei Ye, being eligible, will offer themselves for re-election pursuant to the articles of association of the Company.

None of the Directors proposed for re-election at the Annual General Meeting has a service contract which is not terminable by the Group within one year without payment of compensation, other than statutory compensation.

The Company has received annual confirmation of independence from each of the existing Independent Non-Executive Directors in accordance with Rule 3.13 of the Listing Rules. The Company considers that all the Independent Non-Executive Directors are independent in accordance with the Listing Rules.

## Profiles of Directors and Senior Management

Profiles of Directors and senior management of the Group are set out on pages 11 to 17 to this report.

## Highest Paid Individuals and the Remuneration of the Directors and Senior Management

Details of the Directors' remuneration and the five individuals with highest emoluments are set out in notes 8 and 9 respectively of the consolidated financial statements in this annual report.

## Interests of the Directors and the Chief Executive in Shares and Underlying Shares of the Company

As at 31 December 2018, save as disclosed below, none of the Directors nor the chief executive of the Company had any interests and short positions in the shares, underlying shares or debentures of the Company or any associated corporation (within the meaning of Part XV of SFO), as recorded in the register kept under section 352 of the SFO, or as otherwise notified to the Company and the Stock Exchange pursuant to the Model Code contained in the Listing Rules.

Name of Director	Capacity	Number of underlying shares held in long position <sup>(1)</sup>	Approximate percentage of interests
Mr. Yu Wang	Beneficial owner	1,269,000	0.10%
Mr. Takayuki Morita	Beneficial owner	199,000	0.02%

Notes:

(1) Long position in the underlying shares of the Company under share options granted pursuant to the Share Option Scheme.

# DIRECTORS' REPORT

## Interests of Directors in Competing Business

During the year, none of the Directors of the Group had any interests in a business which competes, either directly, or indirectly, with the business of the Company or the Group.

## Interests of Directors in Transactions, Arrangements or Contracts of Significance

No transactions, arrangements or contract of significance to which the Company or any of its subsidiaries or associates was a party and in which a Director had a material interest, whether directly or indirectly, subsisted at the end of the year ended 31 December 2018 or at any time during the year.

## Directors' Securities Transactions

The Company has devised its own code of conduct regarding Directors dealing in the Company's securities (the Company Code) on terms no less exacting than the Model Code. Specific enquiry has been made of all the Directors, and the Directors have confirmed that they have complied with the Company Code and the Model Code throughout 2018.

## Use of Proceeds

The proceeds from subscription shares approximately US\$400,000,000 as disclosed in note 28 of the financial statements were invested into HH-Wuxi for the setup of 300mm production line.

## Indemnity and insurance

The Company provides director and officers liabilities (D&O) insurance for the Directors and Officers. The D&O insurance covers day-to-day management liability and is renewed every year.

## Director(s) of the Subsidiaries

The names of Directors who have served on the boards on the Company's subsidiaries during the year ended 31 December 2018, or during the period from the end of the year 2018 to the date of this Report, were as follows:

Name of the Subsidiary	Place of Incorporation	Name of the Director(s)
Grace Semiconductor Manufacturing Corporation ("Grace Cayman")	Cayman Islands	Mr. Suxin Zhang Mr. Jun Ye
Shanghai Huahong Grace Semiconductor Manufacturing Corporation ("HHGrace")	Shanghai, PRC	Mr. Suxin Zhang Mr. Yu Wang Mr. Jianbo Chen Mr. Yuchuan Ma Mr. Takayuki Morita Mr. Jun Ye Mr. Stephen Tso Tung Chang Mr. Kwai Huen Wong, JP Mr. Long Fei Ye

# DIRECTORS' REPORT

<b>Name of the Subsidiary</b>	<b>Place of Incorporation</b>	<b>Name of the Director(s)</b>
Global Synergy Technology Limited ("GST")	Hong Kong, PRC	Mr. Daniel Wang Mr. Cheng Fu
HHGrace Semiconductor USA, Inc. ("HHGrace USA")	CA, USA	Mr. Daniel Wang Mr. Cheng Fu
HHGrace Semiconductor Japan Co., Ltd. ("HHGrace Japan")	Tokyo, Japan	Ms. Maki Nakamura Mr. Daniel Wang Mr. Cheng Fu
Shanghai Huajie IC Technology Service Co., Ltd. ("Shanghai Huajie")	Shanghai, PRC	Mr. Heng Fan
Hua Hong Semiconductor (Wuxi) Limited. ("HH-Wuxi")	Wuxi, PRC	Mr. Suxin Zhang Mr. Jun Wei (韋俊) Mr. Yu Wang Mr. Linyi Wei (魏麟懿) Mr. Jianbo Chen Mr. Xingliang Tang (湯興良) Ms. Hongxia Yuan (袁紅霞)

## DIRECTORS' REPORT

### Interests of Substantial Shareholders and Other Persons in the Shares and Underlying Shares of the Company

As at 31 December 2018, persons other than a Director or chief executive of the Company, having interests of 5% or more or short positions in the shares and underlying shares of the Group, were as follows:

Substantial shareholders	Capacity and nature of interest	Number of shares held	percentage of aggregate interests in issued share capital*
Shanghai Hua Hong International, Inc. (Hua Hong International) <sup>(2)</sup>	Legal and beneficial owner	350,401,100 <sup>(1)</sup>	27.29%
Shanghai Huahong (Group) Co., Ltd. (Huahong Group) <sup>(2)</sup>	Interest in a controlled corporation	350,401,100 <sup>(1)</sup>	27.29%
INESA (Group) Co., Ltd. (INESA) <sup>(2)</sup>	Interest in a controlled corporation	350,401,100 <sup>(1)</sup>	27.29%
Sino-Alliance International, Ltd. (Sino-Alliance International)	Legal and beneficial owner	160,545,541 <sup>(1)(3)</sup>	12.50%
Sino-Alliance International, Ltd. (Sino-Alliance International)	Interest in a controlled corporation	34,919,354 <sup>(1)</sup>	2.72%
Shanghai Alliance Investment Ltd. (SAIL)	Interest in a controlled corporation	545,865,995 <sup>(1)(4)</sup>	42.51%
Xinxin (Hongkong) Capital Co., Limited	Legal and beneficial owner	242,398,925	18.88%
China Integrated Circuit Industry Investment Fund Co., Ltd.	Interest in a controlled corporation	242,398,925	18.88%
NEC Corporation	Legal and beneficial owner	99,038,800 <sup>(1)</sup>	7.71%

*Notes:*

- (1) Long positions in the shares of the Company.
- (2) Hua Hong International is a wholly-owned subsidiary of Huahong Group. As at 31 December 2018, Huahong Group was 47.08% owned by SAIL. In addition, SAIL controlled 51.83% of the voting rights of Huahong Group by virtue of its 47.08% equity interest in Huahong Group and an additional 4.75% voting rights pursuant to a voting bloc from INESA to SAIL. Therefore SAIL and INESA were deemed to be interested in all the Shares in which Huahong Group is interested in by virtue of Part XV of the SFO.
- (3) Including 3,084 shares held in escrow by Sino-Alliance International pursuant to an escrow arrangement.
- (4) In addition to the 350,401,100 Shares 27.29% it indirectly held through Hua Hong International, SAIL indirectly held interests in the Company through four wholly-owned subsidiaries, including Sino-Alliance International.

\* The percentages are calculated based on the total number of shares of the Company in issue as at 31 December 2018, i.e., 1,283,952,225 shares.

Save as disclosed above, so far as is known to any of the Directors and chief executive of the Company, as at 31 December 2018, no other person or corporation other than a Director or chief executive of the Company had any interests or short positions in any shares or underlying shares of the Company which were recorded in the register required to be kept by the Company pursuant to section 336 of the SFO.

# DIRECTORS' REPORT

## Arrangement to Purchase Shares or Debentures

At no time during the year ended 31 December 2018 were rights to acquire benefits by means of acquisition of shares in or debentures of the Company granted to any of the Directors or their respective spouses or minor children, or were any such rights exercised by them, or was the Company or any of its holding companies, subsidiaries or fellow subsidiaries, a party to any arrangements to enable the Directors or their respective spouses or minor children to acquire such rights in any other body corporate.

## Major Customers and Suppliers

For the year ended 31 December 2018, the total purchases attributable to the Group's five largest suppliers were less than 30%, and the total turnover attributable to the Group's five largest customers was less than 30%.

## Emolument Policy

As at 31 December 2018, the Group had a total of 4,512 employees. The Group recruits and promotes individuals based on merit and their development potentials. The emolument policy for the employees of the Group is set up by the Remuneration Committee on the basis of their merit, qualifications and competence.

The emoluments of the Directors are decided by the Remuneration Committee, having regard to the Group's operating results and individual performance. The emoluments of the Directors on a named basis are set out in note 8 to the financial statements for the year ended 31 December 2018.

## Purchase, Sale or Redemption of Securities

For the year ended 31 December 2018, neither the Company nor any of its subsidiaries had purchased, sold or redeemed any of the Company's listed securities.

## Pre-Emptive Rights

There are no provisions for pre-emptive rights under the Company's articles of association, or the laws of Hong Kong, which would oblige the Company to offer new shares on a pro-rata basis to existing shareholders.

## Corporate Governance

The Company is committed to maintaining a high standard of corporate governance standards to safeguard the interests of shareholders and to enhance corporate value and accountability.

Information on the corporate governance practices adopted by the Company is set out in the Corporate Governance Report in this annual report.

## Compliance with the Relevant Laws and Regulations

As far as the Board is aware, the Company has complied in material respects with the relevant laws and regulations that have a significant impact on the business and operation of the Company.

## Environmental and Social Responsibilities

Environment, social and governance factors are three critical benchmarks to evaluate an enterprise. The Company believes that environment, social and governance initiatives are very important to bring success of our business and to create a long-term value for the Company. Detail information on the environment and social responsibility practices adopted by the Company in 2018 is set out in the 2018 Environment, Social and Governance Report.

## Compliance with Deed of Non-Competition and the Deed of Right of First Refusal

Huahong Group, SAIL and INESA, being controlling shareholders of the Company, entered into a deed of non-competition (the "Deed of Non-Competition") dated 23 September 2014, details of which have been set out in the paragraph headed "Deed of Non-competition" in the section headed "Relationship with Controlling Shareholders" of the Company's prospectus dated 3 October 2014 (the "Prospectus"). In addition, Huahong Group and SAIL also entered into a deed of right of first refusal (the "Deed of Right of First Refusal") dated 10 June 2014, details of which have been set out in the paragraph headed "Deed of Right of First Refusal" in the section headed "Relationship with Controlling Shareholders" of the Prospectus. The Company has reviewed the written declaration from each of the controlling shareholders mentioned above on their compliance with their undertaking under the Deed of Non-competition and the Deed of Right of First Refusal (as the case may be) for the year ended 31 December 2018. The Independent Non-Executive Directors have reviewed the status of compliance and confirmed that all the undertakings under the Deed of Non-Competition and the Deed of Right of First Refusal (as the case may be) have been complied with by the relevant parties.

## Sufficiency of Public Float

Based on the information that is publicly available to the Company and within the knowledge of the Directors as at the date of this report, the Directors are satisfied that the Company has maintained the prescribed minimum public float under the Listing Rules.

## Auditors

A resolution will be submitted to the AGM to re-appoint Ernst & Young as auditors of the Company.

On behalf of the Board

**Mr. Suxin Zhang**

*Chairman*

28 March 2019



# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## Introduction

Our concept of sustainable development and the pursuit of long-term performance is to achieve these under consideration of economic, environmental and social aspects, as these aspects interact with and support each other, enabling long-term, sustainable performance. We strictly comply with all local applicable laws and meet social expectations in our operations, and we align our standards for environmental protection to those of the leaders in international industry. We devote ourselves to sustainable cities and communities. In following our corporate vision of *Continuous Innovation and Empowering the Future for Global Customers*, we promptly respond to Stakeholders, including customers, employees, investors, communities and countries where we operate, toward the goal of the sustainable development of enterprises and society.

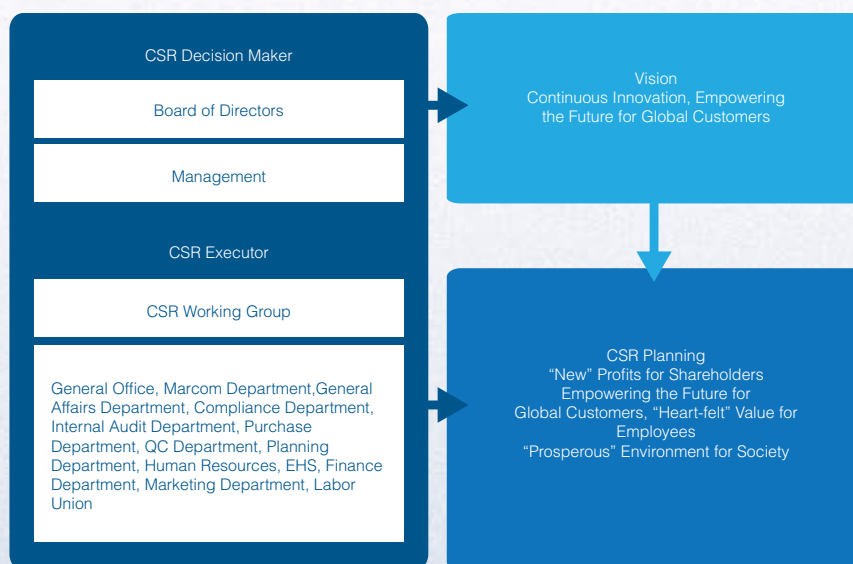
## 1 Social Responsibility Management System

### 1.1 Social Responsibility Policy

We believe the fulfillment of corporate social responsibility first requires pro-active adherence to and implementation of the highest international standards of business and social ethics while creating value for and sharing value with all Stakeholders. To this end, in addition to compliance with all laws, regulations and rules of the state in terms of operation, we also incorporate environmental and social responsibilities directly into our business strategies and operations. We take a prudent approach to manage our environmental and social risks by perfecting our management system, improving supply chain performance and reducing resource consumption and environmental emissions. We encourage innovation-driven development and foster innovative talents, thereby promoting social harmony.

### 1.2 Social Responsibility Management Mechanism

Effective social responsibility management also requires the ongoing attention of senior management and the involvement of all employees. We established a Corporate Social Responsibility (“CSR”) working group to set up a CSR organization system that enables management to participate in and coordinate with the functional departments horizontally and member companies vertically. The working group comprises responsible officers from diverse functional departments.



Structure for CSR Management

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Provided by the Board of Directors as the CSR Decision Maker, the following four aspects summarize the social responsibility of the corporate vision *Continuous Innovation and Empowering the Future for Global Customers*.

## Empowering the Future for Global Customers

Providing Quality Products Guaranteeing Rights & Interests of Customers  
Booming Industrial Economy

## Expanded "New" Profits for Shareholders

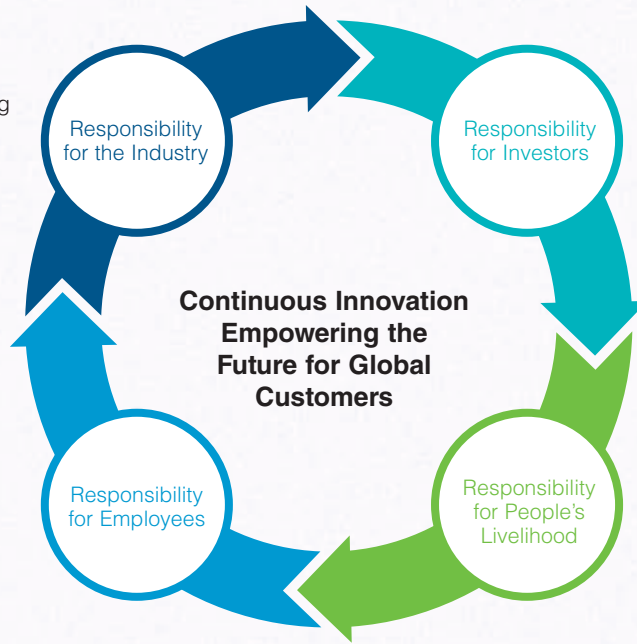
Development through Innovation  
Consolidate Operations with Integrity  
Sharing the Benefits of China's growth

## "Heart-felt" Respect for the Value of Employees

Caring about Career Development  
Protecting Occupational Health

## "Prosperous" Environment for Society

Promoting Green Development  
Utilizing Resources Jointly Promoting Social Harmony



### Implementation Points of Focus of CSR Planning of Hua Hong Semiconductor Limited

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## 1.2 Involvement of Stakeholders

Based on the business and operational characteristics of our Company and leveraging the experience and practices in the industry at home and abroad, we have determined the following to be our Stakeholders: our shareholders, customers, employees; government agencies and regulators; partners, communities and the public. Our Company actively communicates with all of these Stakeholders via various channels and methods, including websites, media, meetings, reports and other business and social activities.

### Expectations and Responses of Stakeholders

Key Stakeholders	Description	Issues concerned	Communications and responses
Shareholders and senior management	Domestic and foreign investors holding equity and debt investments in our Company, and senior management members of the Company	Risk management, economic performance, industrial development, customer communication and satisfaction	Shareholders' meetings, financial reports, performance reports, results road shows, etc.
Customers	IDMs, systems and fabless semiconductor companies	Protection of customer rights and information, product and service quality, customer communication and satisfaction	Product exhibitions, customer research, technical seminars, B2B (such as E-tapeout systems, WIP report and WAT report, etc.), customer service hotlines and complaints, customer satisfaction surveys, etc.
Employees	Our employees and contract personnel who serve our Company on a continuous basis	Employee interests and welfares, employee health and safety, employee development and training	Employee activities, Employee Representatives Congress, Intranet, trainings, self-service systems and employee manuals, internal publications, etc.
Government and regulators	Industry, tax, environmental protection, security and other departments, local governments, SFC and other governmental or regulatory authorities	Compliant operation, green products, emissions management and energy utilization	On-site visit, official correspondences, policy enforcement, information disclosure, etc.
Partners	Suppliers, research institutions, industry associations, etc.	Industrial development, compliant operation, product and service quality, customer satisfaction and communication	Public tender conferences, strategic cooperation negotiations, exchanges and visits, etc.
Communities and the public	Communities in which we operate, the public and media, etc.	Green products, emissions management, community and public benefit	Community activities, employee volunteer activities, public welfare activities, social cause campaigns, etc.



# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## **1.3 Risk Management and Identification and Analysis of Substantive Issues**

### *Risk Management*

We continuously improve our risk management system by upgrading relevant processes and policies, thereby effectively enhancing our risk management abilities. Since 2016, the Company has established procedures for risk management through Internal Audit department, which issued the guideline “Rules about Comprehensive Control of Risks” and launched related projects. In 2018, based on the three lines of defense for risk management and in consideration of both inclusiveness and importance, the Company continuously optimized the risk map, identifying a total of 86 main risk factors, and systematically prevented or supervised internal and external risks to the Company.

The Company developed a risk management platform, which fully realizes informatization of processes from uploading risk map amendments, collecting risk information and sending down risk questionnaires to forming a risk evaluation report, thus improving the digitization level and the management efficiency of risk information. We also conducted the annual comprehensive risk evaluation, designed a questionnaire about risks, carried out interviews with management, identified key areas of risk, and formed an annual risk management report. We adopted a quarterly risk communication and reporting mechanism under which each business department collects and reports risk events in the department, quarterly or from time to time. We held risk department management meetings from time to time and carried out two risk trainings in 2018, in which a total of 22 managers at all levels in the Company communicated risk problems in all business lines.

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## Key Operational Risks and Countermeasures

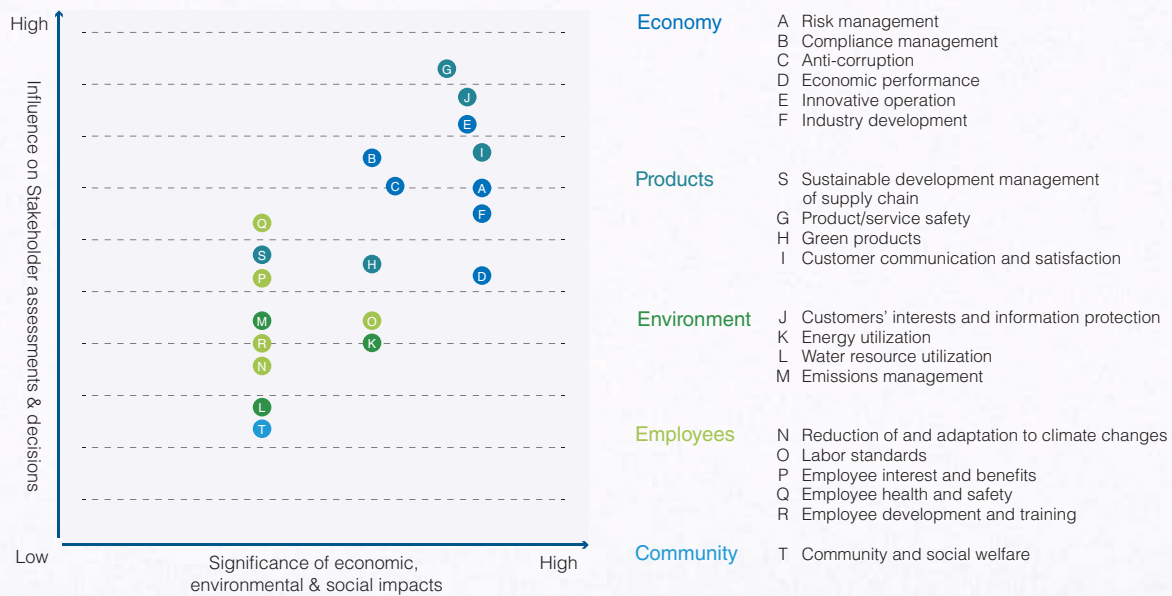
Risk Category	Content	Countermeasures
Strategy	Strategic planning	The Company formulated strategic objectives from top to bottom, appropriately deconstructed and implemented such objectives in specific business models of corporate operation, to ensure the accomplishment of strategic objectives
	Investment Decision	We conduct prudent pre-investment analysis, continuous process supervision, and effective post-investment evaluation to control the investment risk to an acceptable range in a multi-pronged manner
	Supervising and management system	Our well-organized systems and processes, taken together with the Company's risk management system with its three lines of defense, can efficiently assure accomplishment of strategic objectives
Operation	Reserve of Talents	We set up the talent resume database, carried out the talent inventory, continuously explored the recruitment channels, optimized the salary structure, and comprehensively enhanced the company's attraction and employee satisfaction by combining the synergies of brand building and cultural promotion.
	Information security	Based on our <i>Management Rules about Information Security</i> , the Company established its information security framework and management policy. We implement the risk evaluation procedure for information security every year to maintain the optimal interests of all Stakeholders
	Research and development	The structured R&D closed-loop mechanism conducts comprehensive monitoring on R&D initiation, implementation and post-evaluation, and helps develop new products with commercial value continuously and in a timely fashion
	Intellectual property	The comprehensive intellectual property protection awareness and management procedures protect the intellectual property rights of the Company and customers
Finance	Cash flow	Monthly cash flow statements record cash flows and dispatch the same to relevant departments for follow-up actions
	Exchange fluctuations	Transactions denominated in foreign currencies are settled in the same foreign currency whenever possible to reduce the need for foreign currency exchange, thus reducing risks arising from exchange rate fluctuations
Environment and Safety	Environment	We design management procedures based on our observation, assessment and control of environmental factors, and list major environmental factors
	Safety check	Safety checks focusing on troubleshooting and fault diagnosis are carried out continuously
	Occupational health	We have developed the goals, indicators and program management forms of our environmental and occupational health and safety programs in accordance with the Company's established goals, indicators and program management procedures for health, safety and environment ("HSE")

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## Identification and Analysis of Substantive Issues

We check social responsibility issues on a regular basis, and identify the more substantive ones on which to focus our operations, reporting and disclosures through periodic identification, evaluation and screening. We consider both internal and external factors such as our strategic and operational direction, Stakeholders' concerns and expectations, as well as national and international standards and policies.

In 2018, we followed "2016 Sustainability Reporting Standards" of Global Reporting Initiative (GRI), thus raising the importance of anti-corruption, innovative operation, product and service quality, protection of customer rights and interests, and information.



# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

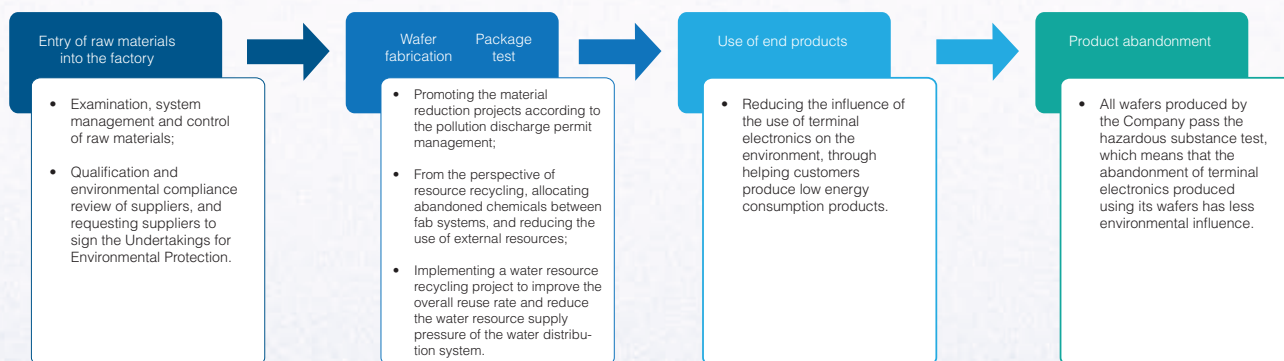
## 2 Environmental Responsibilities

We take “Zero Accidents” and sustainable operation as our goal, and devote ourselves to clean production and continuous improvement. In 2018, we continued to carry out the projects related to environmental protection and technological upgrading, in an effort to pursue better performance in energy conservation and emission reduction, waste management, etc. As of the end of 2018, the Company was not subject to any environmental complaints or punishments or involved in any environmental pollution events.

### 2.1 Environmental Management System

The Company gradually shifted its focus from production management to control of product life cycles and risks, and was committed to improving environmental performance at every step of the process, including procurement of raw materials, production and waste management; and passed the new ISO 14001:2015 environmental management system certification in 2018. In terms of supervision and management, we added a review and follow-up system to the security management system in the Company’s intranet, so as to collect and list matters violating environmental protection regulations which are identified in daily management, and follow up and record subsequent collections, through regular system reminders.

In 2018, the Company signed the “*Responsibility Statement of Enterprises in Key Industries in Pudong New Area for Soil Pollution Prevention*”. Throughout the year, it completed 26 energy saving and emission reduction projects with an electricity saving of 9,907 MWh, water saving of 4.279 million m<sup>3</sup>, a CO<sub>2</sub> reduction of 2,835.9 tons and the generation of economic benefit of RMB17.459 million in total.

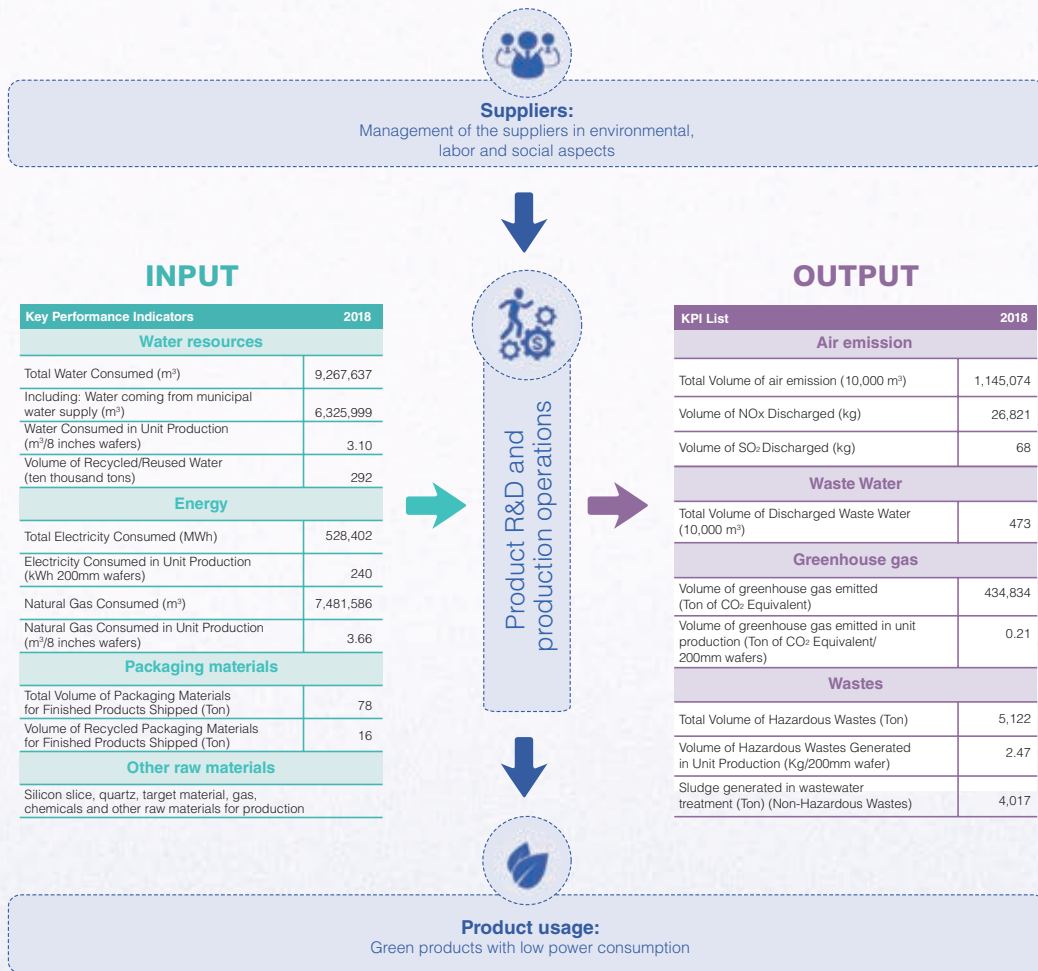


**Environmental Management Throughout Product Life Cycle**

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## Overview on Environmental Management Performance

The Company took full consideration of the environmental impacts arising from our own business operations: As the “inputs”, the Company’s production and operation requires the use of such resources as energy, water and other raw materials; as the “outputs”, emissions such as air emission, water and solids are generated. In addition, we have been considering promoting supplier environmental management and providing low-power green products in an effort to achieve better environmental management performance throughout the value chain.





# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## 2.2 Action and Achievements in Environmental Management

### Energy Management

The Company's energy consumption mainly includes electricity, heat and natural gas (and a small amount of gasoline and diesel). The "Procedure of Resource and Energy Management" document specifies applicable principles of resource and energy management. This enables source-control continuous improvement while satisfying and enhancing production efficiency based on the principle of saving energy, reducing consumption and wastes. It reduces environmental impact while lowering production cost so as to achieve sustainable and environmentally harmonious development. Additionally, the Company established energy saving goals during the "13th Five-Year Plan" period by referring to the control objectives for the total amount of energy and the energy utilization efficiency improvement objectives of the Shanghai government in 2020: As of 2020, the Company's comprehensive energy consumption of RMB10,000 output value will decrease by 12% as compared to that in 2015, and the unit production consumption of 200mm IC wafers will decrease by 13% as compared to that in 2015; and the Company will entrust a third-party agency to conduct energy auditing and propose technological upgrading solutions for energy savings.

### Energy Saving Work and Achievements in 2018

Project Name	Achievements
Change of BDWGOJ01/BDWGOS03 drain method	Monthly electricity saving of approximately 1,000 kWh and monthly water saving of approximately 24 tons
Installation of DAS scrubber backup system	Average electricity saving by the equipment more than 20%
Installation of a power-saving valve at the exhaust end of a dry pump (new in 2017)	Average electricity saving by the equipment more than 20%
FAB1A OAC dew-point temperature adjustment	Annual electricity saving of 5.921 million kWh and annual reduction of 1,204 tons of standard coal consumption
Energy-saving transformation of air conditioning equipment at the second floor	Annual electricity saving of 0.835 million kWh and annual reduction of 415 tons of standard coal consumption
Reduction in the thickness of polycrystalline silicon to reduce energy consumption, consumption and emission of relevant chemical gas	Annual electricity saving of 0.635 million kWh and annual reduction of 286.3 tons of standard coal consumption
Simplification and combination of 0.18CE inter-metal deposition steps	Annual electricity saving of 0.339 million kWh and annual reduction of 136.8 tons of standard coal consumption
Reduction in the test time of Cypress S8 WAT	Annual electricity saving of 0.308 million kWh and annual reduction of 124.4 tons of standard coal consumption
Transformation of 10kV power transformation and distribution system at the north area of Fab 3	Annual electricity saving of 0.268 million kWh and annual reduction of 106.2 tons of standard coal consumption

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## Water Resource Management

The Company mainly uses water supplied by Shanghai Municipal Administration. In addition, some of our water comes from recycled water from our production facilities and condensate water from air-conditioning. Through technological reform and recycling, we actively seek ways of improving efficiency in saving water and utilizing water resources. The Company carried out water recycling and recycled pure water for process manufacturing purposes and used other water (air-conditioning condensate water) to replenish water for the cooling tower. The Company totally recycled 2,920,000 cubic meters of water a year, accounting for 32%<sup>1</sup> of the total water consumed.

### Water Resource Saving Work and Achievements in 2018

Project Name	Achievements
FAB1A OAC dew-point temperature adjustment	Annual water saving of 4.245 million m <sup>3</sup>
Reduction in the thickness of polycrystalline silicon to reduce energy consumption, consumption and emission of relevant chemical gas	Annual water saving of 23.1 thousand m <sup>3</sup>
Reduction in the process time of BEWAAD02 OF	Annual water saving of 4.7 thousand m <sup>3</sup>

## Prevention and Control of Pollutants

In prevention and control of pollutants, we follow the rules and regulations related to environmental protection and relevant matters. The waste discharged during production includes sulfuric acid mist, hydrogen chloride, nitric oxide, ammonia and volatile organic compounds. We established a system for processing air emission that meets new requirements for controlling emissions. This system can eliminate over 90% of the VOCs generated. In terms of waste water discharge, the Company began adoption of the Grade B Standard of the GB 31962-2015 (Waste Water Quality Standards for Discharge to Municipal Sewers) in 2017, and reduced the discharge through recycling washing water used for production and manufacturing in the factory.

In terms of pollution discharge and information disclosure, the Company carried out online monitoring of waste water, with relevant data disclosed on the Environmental Information Disclosure Platform for Shanghai Enterprises and Public Institutions, thus improving the transparency of the environmental information of the Company.

### Pollutant Discharge Management

Type	Treatment Method
Air emission	Acid air emission
	Up-to-standard discharge after removing most of the components through a washing tower
	Alkaline air emission (mainly ammonia gas)
	Purification through a washing tower
	Organic air emission
	Purification through activated carbon adsorption, or combustion after concentration
	Dusty air emission (mainly small particulate matters of silicon dioxide)
	Removal through a dust-extraction unit
Waste water	pH, COD, ammonia nitrogen, fluorine, etc.
	After treatment, up-to-standard discharge through a pipeline into a designated urban sewage pipe network

<sup>1</sup> The calculation method is as follows: the total annual water recycled/(water consumption from municipal water supply + wastewater reuse) \* 100%.

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## Discharge Reduction Work and Achievements in 2018

Project Name	Effect
Replacement of valves of the catch-basin of Fab 1 Optimization of the drainage system around Fab 1	Ensuring the compliance of discharge management Additionally, providing hardware support for management of emergent discharge
0.18um Product DSTI CMP optimized	Expected monthly reduction of 700 litres of grinding fluid consumption
Transformation of RO and No.2 UV zones for noise reduction	Reduction in the risk of emission of factory boundary noise
Sewage collection transformation of garbage chambers	Avoiding the possible risk of discharging the combination of rain and contaminate
Transformation of the No.2 acid exhaust washing tower	Improving the ability to manage and control up-to-standard discharge
Installation of a digital flow meter on the scrubber	Improving the ability to manage and control up-to-standard discharge

### Wastes Management

Wafer production generates hazardous wastes, such as waste acid and isopropanol. We authorized a qualified third-party company for treatment of these wastes, mainly by means of incineration, physical-chemical treatment and recycling. The Company has formulated a Waste Management Procedure, standardized waste management operations, recorded and managed waste treatment through the unified environmental protection management system of the government to ensure that all transportation records are traceable and controllable. The non-hazardous wastes such as sludge generated in wastewater treatment were treated by the wastes disposal agency by landfill.

Moreover, the Company entrusted the Wastes Management Center of Shanghai Pudong New Area to uniformly clear and transport the domestic wastes and kitchen garbage on a regular basis.

### Treatment Methods for Hazardous Wastes

Treatment Method	Type of Hazardous Wastes
Recycling	Such as waste acid, waste isopropanol and waste phosphoric acid
Physical-chemical treatment	Such as waste glass bottle, 200L chemical barrels, and waste liquid from laboratory
Incineration	Such as cleaning cloth, plastic bottles, organic waste liquid, waste activated carbon, waste resin, and arsenic-containing wastes

### Greenhouse Gas Management

The emission of large amounts of greenhouse gases such as CO<sub>2</sub> is the main contributor to global warming. We realize that climate change mitigation is of great importance to enterprises and the globe. We actively took part in relevant work of carbon emission trading by Shanghai Municipal Development and Reform Commission to cut greenhouse gas emission and slow down climate change. In 2018, the Company completed settlement of carbon credits of approximately 434,834 tons.

The Company also set an emission target according to the carbon trading management measure of Shanghai Municipal Development & Reform Commission and reduced the greenhouse gas emission through energy saving and emission reduction projects; in 2018, it invested a total of approximately RMB2.36 million in the transformation of energy saving and emission reduction technologies.

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## *Reduction in Production Material Consumption*

Production materials used by the Company mainly include chemicals and special gas. The Company reduced consumption of production materials mainly through technology improvements. In 2018, it replaced the original RRC Pump with a new MINI Pump, thus achieving a 47% reduction in consumption per wafer of P117 photoresist, an annual consumption reduction in P117 photoresist of 627 liters, generating an economic benefit of RMB1.241 million.

## **2.3 Green Products**

### *Control of Hazardous Substances*

In accordance with the regulation *Restriction of Hazardous Substances* (RoHS) and the *Registration, Evaluation, Authorization and Restriction of Chemicals* (REACH) as formulated by the EU, as well as customer requirements, we worked out standards for control of hazardous substances, established an implementation system and carried out risk evaluation for raw materials in production, thus guaranteeing that products are in compliance with requirements of customers regarding control of hazardous substances. The Company entrusted Société Générale de Surveillance S.A. (SGS) to conduct tests for hazardous substances, and realized 100% compliance in investigation of hazardous substances in 2018. All manufacturing devices of the Company are verified to comply with the standards and requirements of QC 080000 reduction of reducing hazardous substances in electronic elements and apparatus and products.

### *Energy Saving of Electronic Products*

With risks resulting from the global climate change and increasing demands for energy saving and emission reduction in the society, a reduction in the high energy consumption of electronic products becomes one of the current focuses in the industry. In the field of professional integrated circuit manufacturing service, the Company has been committed to producing more advanced, energy-saving and environmentally friendly products, creating competitive advantages of power consumption, efficiency and chip size optimization for customers and reducing the influence of the scientific and technological progress on the environment. Through our wafer fabrication technologies, designs of customers are able to be extensively used in computer, communication, consumer, automotive and other electronics, thus supporting the creation of a low-carbon and environmentally-friendly society.

## **2.4 Green Culture**

We persist in promoting environmentally friendly business concepts and undertake external and internal environmental protection measures. In terms of routine operation and administration, the Company implements a sustainable development concept using science and technology and by adopting good practices. For example, we adopt web-connected printing and use office automation equipment intensively to control paper consumption, and we also encourage the use of recycled paper to support recycling. *The Office Application System for General Affairs and Food Management System* was developed for online use which makes it convenient to handle relevant work, improves work efficiency and saves consumption of paper. At the same time, the Company strongly supports the use of electric vehicles, and uses new energy vehicles in its own vehicle fleet. The Company took part in electronic wastes recycling activities organized by alahb.com to prevent secondary contamination of the environment while recycling wastes. The Company classified domestic garbage in factory zones by four categories of dry, wet, recyclable and hazardous garbage according to the requirements of the *Environmental Protection, City Appearance and Health Administration of Pudong New Area* for obligatory classification of domestic garbage generated by enterprises and public institutions, and we also advocated garbage classification among employees and cleaning personnel.

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## 3 Employee-Related Responsibilities

The Company always strives to provide our employees with an environment that is equal, healthy, safe and comfortable. We endeavor to protect all legitimate rights and interests of employees in accordance with related laws and regulations. We established a safe working environment and organized regular trainings and emergency drills for employees. We created a comfortable working and living atmosphere, and improved employee satisfaction. As of the end of 2018, no infringement of the rights and interests of employees occurred, and we were not subject to any employee-related complaints or penalties by the regulatory authority.

### 3.1 Rights and Benefits

#### *Overview of Employee Rights and Benefits*

We insist on fair, equal and open recruitment and employment, and are committed to providing equal opportunity in all our human resources activities such as employee selection, recruitment, promotion, transfer, and remuneration. We do not implement or engage in discriminatory policies or injurious actions for any reason, in particular nationality, region, color of skin, ethnicity, religion, age, family conditions or other factors. We have formulated and follow the guidelines described in "Employment Procedures and the Management Procedures for Trainees". We strictly check the identity information of our employees, and do not employ children or adolescents under the age of 16 years. We strictly followed related laws and regulations such as the Labor Law of the People's Republic of China and the Special Rules on Labor Protection of Female Employees, and resolutely prevented all compulsory labor practices.

#### Overview of Employee Rights and Interests and Benefit System

##### Recruitment and Resignation

**Recruitment:** Adhering to the principle of fairness, equity and openness.

**Resignation:** The Company and employees go through the resignation procedure according to relevant laws, regulations and the Resignation Management Procedure.

##### Working Hours and Vacation

**Working hours:** The standard working hours system specified by the state is adopted. The comprehensive working hours system or flexible working hours system is adopted for relevant positions due to the nature of the work and requirements of production and operations, with the approval by the labor and personnel authority of the government.

**Vacation:** Based on holidays and festivals specified by the state, supplementary annual leaves are provided for employees.



##### Democratic Participation:

**Collective negotiation:** Labor union, employee congress, etc.

##### Remuneration and Benefit

**Remuneration:** For attracting and retaining talents, the Company provides employees with competitive remuneration and a comprehensive benefit assurance plan.

**Social insurance:** We purchase legal insurance coverages as required by law and provide accident insurance, outpatient and emergency medical insurance and other supplementary commercial insurances.

**Other benefits:** Employee recuperation, holiday gifts, and assistance to non-local employees in household registration.

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## *Harmonious Relation*

An unblocked communication channel and sincere care are vital for the establishment of a harmonious labor relation. The Company has formulated the *Employee Communication Rule* and encouraged the fair, straight-out and multi-way communication between the Company and employees, between officers and subordinate officers, and among employees through the creation of multiple communication channels.

In addition, we established the *Employee Assistance Mechanism*, under which we provide assistance for needy employees at special festivals such as Spring Festival, May Day and Mid-Autumn Festival, in addition to routine expression of sympathy and solicitude to injured or families of diseased employees; and we give timely care and support to employees who suffer a significant misfortune and help them overcome their plight as soon as possible through multiple forms of assistance including donation, support, care and nursing. We care for the demand and development of female employees, annually organizing a special physical examination, continuously improving human-based management of lactating employees, and providing relevant service facilities to ensure convenience for pregnant employees and lactating employees at work.

## **3.2 Health and Safety**

### *Occupational Health and Safety Management*

To guarantee the health and safety of our employees, we established mechanisms for occupational health and safety in compliance with requirements of OHSAS 18001. We clearly stipulate the guidelines about professional health and safety, and strictly follow laws and regulations on safety, health and environmental protection, advocating clean production and continuous improvement. We create a safe, healthy and comfortable working environment, strenuously pursuing the highest goal of “zero accidents” and sustainable operation, and work hard to become a model of corporate citizenship.

The Company mainly eliminated or controlled safety risks in production activities of employee from four major aspects, namely fire-fighting equipment, alarm monitoring system, personal protection and emergency measure. The Company annually engaged external institutions to test the production environment, and analyzed and corrected items below standard, so as to ensure that the production environment met the occupational exposure limits for hazardous agents in the workplace, and notified the test results to all employees.

### **Measures for Prevention of Employee Safety Risks**



#### **Fire-fighting Equipment**

Establishing a perfect a fire-fighting system and an automatic alarm system.



#### **Alarm Monitoring System**

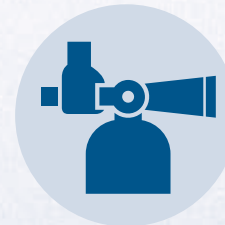
There are toxic, harmful and inflammable gas warning systems, liquid leakage detectors and ultra-high-sensitivity smoke detectors in the clean workshop.



#### **Personal Protection**

Providing necessary personal protective equipment and emergency protective equipment;

Regularly checking whether there is a complete set of equipment and whether the equipment is effective.



#### **Emergency Measure**

Establishing an emergency rescue team and formulating emergency plans for different disasters;

Annually organizing special disaster prevention drills, and in a timely manner, correcting problems identified in the drill.

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## Progress in Protecting Health and Safety of Employees in 2018

Level	Main Content
Improving Safety and Responsibility System	<ul style="list-style-type: none"> <li>Internally, the <i>Safety Responsibility Statement</i> for the President, Executive Vice President, Vice President, Factory Director (Director), Department Chief and Section Chief and the <i>Commitment Statement of Guaranteeing Safety</i> shall be signed level by level, thus improving and perfecting the safety responsibility system that covers all departments and employees;</li> <li>Externally, we signed <i>Safety Management Agreement</i> and <i>Commitment Statement for Contractors on Safety Education</i> with all units and contractors that handle field operation which provide on-site service in the Company;</li> <li>The Company advanced the safety management information construction, promoted the warehousing in and out registration of chemicals, management of chemical substances, thermal imaging detection &amp; management of special equipment personnel, as well as integrated and information-based management of employee training materials and job position-related test library systems.</li> </ul>
Upgrading System for Identification of Hidden Risks	<ul style="list-style-type: none"> <li>Dangers and Emergency Plan 119 projects for safety reform and investment of RMB29,510,000;</li> <li>Establish the Company's safety contingency plan system of "1+12+1702" (namely, 1 comprehensive plan + 12 special plans + 1702 on-site treatment plans);</li> <li>Establish the response disposal mechanism to cope with the extreme weather, strengthen safety inspection, implement emergency plan drilling, pay attention to warning information, intensify emergency on-duty shift, and respond to actions timely;</li> <li>Establish mini fire stations in the three fabs, equipped with the firefighting equipment and materials, and give special fireman qualification trainings to ERC part-time personnel of the fabs;</li> <li>More than 4,300 employees were organized to receive fire- fighting trainings in 2018.</li> </ul>
Safety training is standardized and examination for performance is done	<ul style="list-style-type: none"> <li>Carry out propaganda and training about "three knows and three cans" fire control principle, prepare the examination database, and organize online computer examination, and promote the standardization of safety training from the perspective of systems and mechanisms;</li> <li>In 2018, we organized 144 safety trainings, with 13,496 attendances;</li> <li>In 2018, we organized safety education for 7,215 contractor workers.</li> </ul>
We organize competitions to activate awareness of safe production	<ul style="list-style-type: none"> <li>We activated awareness of safe production and capability of safety and protection of employees by awarding them "ANKANG" labor competitions and special contribution awards.</li> </ul>

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

*“Diet, Accommodation, Travel and Medical Treatment”, Comprehensive Assurance*

The Company is committed to the creation of a better life and service facilities for employees and the improvement in their life quality from four aspects of employees’ lives, namely “diet, accommodation, travel and medical treatment”.



Diet	Accommodation	Travel	Medical Treatment
<p>There are staff canteens and coffee shops in factory zones;</p> <p>Establishing a food safety supervision team and the mode of centralized purchasing of food materials and qualified supply chain management, and inviting employees and department representatives to carry out supervision;</p> <p>Publishing the canteen food operation guideline to manage balanced nutrition, oil and salt control for the employees’ diet in the canteens.</p>	<p>Constructing a dormitory with private bathrooms, 24-hour supply of hot water and WIFI network, etc.;</p> <p>The dormitory area, has a library, computer room, snooker room, laundry, TV room, HIVE BOX and other facilities.</p>	<p>Providing all employees with travel allowance;</p> <p>Providing free commuter bus services between the park, subway stations and the dormitory;</p> <p>Creating a commuting route for employees living in the transit-challenged areas and arranging commuter bus services for departments which need to such services at weekends.</p>	<p>Provide all employees with annual physical examination, including multiple cancer screening;</p> <p>Providing employees holding special positions with pre-job, on-the-job and off-the-job occupational health examination;</p> <p>Establishing an employee health archive for systematically tracking the change in the physical condition of employees.</p>

### 3.3 Training and Career Development

The Company has impeccable training facilities (special training rooms and equipment) and learning and sharing platforms (including online training registration management platform, training material and position-specific question bank), and where necessary, uses external resources for ensuring their learning and development.

In addition, the Company has established a complete employee education and training system, and formulated the *Operating Procedure of Internal Training System Review*, the *Education and Training Procedure* and department-level training procedures, and continuously enhanced the training effect according to the training cycle, and continuously carried out improvement according to strategic development and employees’ needs.

#### Employee training programs

Trainees	Training Contents
Medium and senior level managers	Create excellent leadership, and enhance management capability of medium and senior level managers
Grass-roots managers	Role recognition, self-management, management of others, and working management
Tier-one managers	Develop management skills of tier one shift and team leaders, cultivate a tier-one management team with high quality and high business ability, and lay a solid foundation for the Company’s management
Newly-employed university students	Career quality, corporate culture, introduction to special skills and other courses
Tier-one employees	Courses about theory and practical training of the semiconductor manufacturing module



# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## 4 Products and Customers

The Company keeps track of international treaties, local and foreign laws and regulations that are relevant to our products and customers in places where our business operates, regularly updates our management policies governing products and services in terms of health, safety, labels, privacy, and other areas, and establishes quality assurance systems and customer service systems. As of the end of 2018, the Company had not been involved in any litigation regarding infringement of the interests of customers, nor did the Company receive any litigation from customers regarding product quality.

### 4.1 Product Liability

#### *Quality Control*

According to the philosophy of “the quality is vital for the existence of an enterprise”, the Company has formulated the Quality Management Policy, and successively passed the ISO 9001 quality management system and IECQ QC 080000 hazardous substance process management system certification, and successfully completed the upgrade from ISO/TS 16949 automotive quality management system certification to IATF 16949 in 2018. The new 16949 system focuses more on the risk management concept, while various risk control audit, management and review conducted by the Company since 2016 meet such requirement.

The Company implemented an inclusive quality management model in accordance with the Quality Management Policy covering the five far-reaching departments and sections of: quality system and customer satisfaction; supplier management and raw materials analysis; quality engineering; reliability assurance and failure analysis. To reduce human error, we established multiple management systems such as personnel management, equipment management, supply chain management, environment management, systems management, process management and customer quality control. With these reliable management systems, we are able to achieve real-time monitoring and testing over our entire product cycles from product R&D to production and after-sales feedback, carry out failure analysis on anomalies that may arise during the production and application processes, dig out the nature of problems, and work out corresponding corrective and preventive measures. The Company has established an optimal product recall system, and for the products whose functions or hazardous substances fail to reach the standard, our customers may return such non-conforming products to us within the warranty period. As of 2018, failure rate of the Company's products on the end-user side was lower than one in a billion.

#### Product Quality Management System Certification

<b>Certification</b>	<b>Date of initial passing the certification</b>
ISO 9001 Quality Management System	November 6, 2001
IATF 16949 Quality Management Systems for Automotive Industry	August 2, 2005
IECQ QC 080000 Hazardous Substance Process Management System	November 18, 2009



## 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

### *Technological Innovation*

The Company has always focused on transparent technological innovation and a willingness to cooperate in the creation of ICs under independent innovation. It established the first Expert Workstation and the first Enterprise Association for Science and Technology in the integrated circuit industry in Shanghai, and endeavors to establish fully an industry-university-research technology innovation system through introduction of experts, project cooperation, talent cultivation, academic exchange, etc., thus promoting the transformation of scientific and technological achievements into actual productive forces.

In 2018, the expert workstation innovated an activity forum, holding a “chip vision” salon, while the enterprise association for science and technology maintained the wave of the technological salon by inviting industry experts to establish a communication bridge together with internal engineers of the Company, with focus on semiconductor hotspots, for scientific and technical workers. In 2018, the workstation again won the title of the “Excellent Expert Workstation in Shanghai”, and the enterprise association for science and technology was awarded the title of the “Excellent Enterprise Association for Science and Technology in Pudong New Area”.

### *Intellectual Property Protection*

As a science-oriented enterprise, we advocate independent innovation and respect intellectual property rights in our research and development of application-specific integrated circuits, including intelligent chips and information security chips. According to the Company's *System for the Management of Intellectual Property*, we actively filed applications for patents and investigated responsibility of any potential breaches of intellectual property rights. At the same time, we promise that we will never infringe upon the intellectual property rights of any enterprise or individuals, and will keep confidential all technological information regarding products of upstream and downstream partners.

To reduce the risk of claims of infringement of third-party intellectual property rights against our manufacturing of semiconductor devices or end products, we only accept orders from reputable customers with no known potential risk of infringement. We have entered into several technology licensing agreements with major technology companies.

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## 4.2 Customer Service and Protection of Customers' Interests

### *Customer Service System*

According to the philosophy of “providing customers with more convenient and safer services”, the Company has established an impeccable customer service system, including three main aspects, namely customer communication and feedback, customer complaint treatment and customer satisfaction.

In 2018, the Company integrated and optimized customer service management of all factory zones, enhanced the response to product technology demands of customers, reduced the error probability and improved the technical support service to customers.

### Customer Service System

#### Customer Communication and Feedback

Making efforts to improve the customer service level, through multiple communication methods, including a customer service hotline, customer survey, regular quarterly/semi-annual business reviews with major customers, technical seminar and trainings.

#### Customer Satisfaction

The Customer Satisfaction Measurement Procedures require us to carry out a customer satisfaction survey once every six months and to develop an improvement scheme based on the scores given and any dissatisfaction expressed by customers.



#### Customer Complaint Treatment

The Customer Complaints Handling Procedures sets out the processes for handling customer complaints, the responsible department(s) and key points for handling, and specifies that preliminary survey results and responses should be given within 48 hours upon receipt of a general customer complaint, and a final report should be complete and a reply shall be made within fourteen calendar days;

Through periodic collation and analysis of relevant information provided as to customer complaints, relevant departments are required to formulate an improvement plan, and the improvement effect is supervised and evaluated.

### *Protection of Customer Information*

The company attaches great importance to maintaining customer information security. We have established an ISMS information security management system, which controls information security risks from information asset management, personnel security, physical control, logic control and other aspects to ensure information security, and is ISO 27001 certified. An Information Security Committee was established within the Company to clarify the responsibility of information security.

Meanwhile, we audited our photomask partners to ensure the security of their data management and storage. As for waste masks generated during the production process, we return them to customers or destroy them, thus preventing to the utmost the disclosure of customer information on such waste masks. No incidents of infringement against laws or regulations concerning customer privacy occurred within the Company during the year.

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## 5 Compliance in Business Operation

The Company keeps track of international treaties, laws and regulations relevant to compliance in places where our businesses operate, and regularly updates management policies governing supply chain management, risk control, corruption and bribery prevention, business fraud, and other aspects. In addition, the Company is in strict compliance with such laws and regulations with respect to compliance in business operation as the *Criminal Law of the People's Republic of China*, the *Contract Law of the People's Republic of China*, and the *Anti Unfair Competition Law of the People's Republic of China*, thereby deepening the implementation of supplier review work and proactively engaging in the promotion of clean and honest industrial practices and anti-corruption governance. As of the end of 2018, the Company had not been involved in any litigation with respect to any commercial bribery or corruption.

### 5.1 Responsible Value Chain

Creating the CSR value chain is an important strategy of long-term development of the Company. It has established a perfect value chain management system, conducted comprehensive assessment, management and control of the environment and social risks of suppliers. It is committed to supporting the growth of suppliers to promote the development of the chip industry in China.

#### CSR Value Chain Management System

##### Risk Assessment

We mainly identify and assess risks of the supply chain end in terms of price, delivery period, corporate social responsibility, technical response, quality management, etc..



##### Industry Growth

We actively help Chinese suppliers in improving the management ability and the production level, so as to promote the development of the chip industry in China.

##### Management Policy

We have established a CSC Procurement Review Committee and formulated a management policy in terms of environment, safety, health, ethics of suppliers, etc..

##### Continuous Improvement

We regularly audit suppliers in terms of environment, labor, ethics, etc., to promote continuous improvement of suppliers.

The Company established a *CSC Procurement Review Committee* and implemented an open bidding process as our main procurement approach to guarantee an equitable, open and fair procurement process. As a member of ECOVadis in France, we monitored the environmental and social risks of suppliers. By entering into the *Undertakings Against Commercial Bribery* with suppliers, we move to eradicate all unfair competition activities. In terms management of conflict minerals, the Company undertakes to refuse the purchase of conflict minerals, while proactively eliminating the metals derived from the supply chain that uses illegal mining areas, conflict minerals, or poor mining environment. We continuously update our investigation report about the production of conflicted mines.

The Company continued raising requirements on our suppliers with respect to labor, health and safety, environment, ethics and management system in accordance with the *Code of Conduct of the Responsible Business Alliance* (formerly known as EICC) and offering relevant trainings. Through the annual supplier assessment system, the Company requires those unqualified suppliers to make rectifications, thereby further promoting the development of our green supply chain.

We proactively support the growth and development of our suppliers in China, and constantly assist suppliers in improving their management capacities and production levels. In addition, we proactively encourage small and medium-sized enterprises to participate in the localization of key raw materials, including gases, chemicals and silicon wafers. Therefore, we've cultivated a growing batch of local raw materials and equipment suppliers, thereby powerfully promoting the development of chip design industry in China.

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## 5.2 Anti-corruption

The Company has a long-term commitment to the development of an integrity and credibility culture, whether for the management of external customers and manufacturers or for the management of internal cadres. The Company continuously provides training and education on clean and honest practices for employees in major positions; actively promotes the execution of the *Undertakings Against Commercial Bribery* and the *Undertakings to Refuse Commercial Bribery*, and carries out regular visits and random checks. We constantly promote clean and honest practices and organize training programs with respect to anti-corruption and clean and honest initiatives, and publish clean and honest practice publicity documents through the intranet; the Company's "Measures about Complaints and Reports Management by Employees" has provided the channels of reporting through emails, telephones and mailbox, to encourage employees to report any suspicious breach of regulations with the Company.

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### Achievements in Anti-corruption and Integrity Promotion in 2018

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- Through special supervision, the discipline inspection commission of the Company promoted the standardization of business operations and process formulation, developed the business personnel's awareness of rules and formed a pressure on them, properly maintained the clean and honest practices in the Company and completed four special inspections including inspection of performance and remuneration of leading cadres.
  - Enhancing publicity, education and self-discipline consciousness. Cases for warning are monthly published in the "Keep Ringing the Alarm Bell" column in the intranet, with a total of 24 articles uploaded in 2018. In June 2018, it organized employees to learn 80 Prohibitions Under Eight-point Decision and other relevant clean and honest practice requirements. On the eve of an important festival, it reminded employees of honesty at the festival and supervised employees to self-consciously comply with clean and honest practices.
  - Holding discipline inspection work meetings on 11 June and 18 September, providing business and quality training for discipline inspection workers, and organizing them to study the Regulations of the Communist Party of China on Internal Oversight and new amendments to the Regulation of the Communist Party of China on Disciplinary Actions.
-

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## 6 Social Welfare Causes and Public Communities

The Company insists on continual concern about and deep integration with the community. The Company focuses on the needs of the community and regards mutual development with the community as an important part of our social responsibility, and feedback to society in collaboration with all walks of life. With regard to community investment, we focus on targeted poverty alleviation, joint construction of the community and volunteer services.

### **Targeted Poverty Alleviation**

Since Huahong Group started to provide partner assistance for Youqiao Village, Shuxin Town, the Company has aligned with efforts as it views such work as essential. It organized employees to visit the people in impoverished circumstances, expressing sympathy and solicitude, hear the thinking of villagers of Youqiao Village, and expressing sympathy and solicitude for and send greetings to the elderly in rural areas at a festival. In consideration of existing needy conditions of Youqiao Village, we heightened partner assistance for co-construction and supported targeted poverty alleviation, thus making contribution to maintaining and promoting the harmony and stability of Youqiao Village.

### **Joint Construction of Communities**

In order to enhance the safety awareness of community residents, the Company has provided a First Aid Course for Children's Accidents in the community where the headquarters operates, including first aid common sense for children and cardiopulmonary resuscitation for children, for two successively years. As a science-oriented enterprise, the Company cooperated with the enterprise association for science and technology in launching a pilot project of the community STEM science workshop, for providing children with programming enlightenment activities.

### **Volunteer Service**

We encourage our employees to serve the local community and express their solicitude. To this end, we established a Volunteer Association consisting of 176 volunteers who have provided volunteer services for 352 hours. In 2018, the Company continued to visit Meixin Nursing Home and Zhangjing Town Nursing Home, for delivering care and offering flowers and plants, fruits and snacks to the elderly; and worked with parents and children in Tangchen Residential Quarter to write and direct cultural programs, for sharing happiness with the elderly. In addition, the Company organized employees to carry out public benefit activities for environmental protection, including picking up rubbish from the sidewalk, lawns, tree pits and other areas around the Company, and treating the problem of indiscriminate parking of shared bicycles in the city, thus influencing the surrounding residents with practical actions and advocating the environmental beautification.

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## 7 2018 Social Recognitions

No.	Awards
<b>Awards of State and Industry Level</b>	
1	4th ranking in 2018 China's Top 100 Enterprises in Innovation
2	Top 10 Enterprises in Power Semiconductors of New-energy Vehicles
3	2018 CITE Innovative Product and Application Gold Award
4	Top 50 Enterprises in Social Contribution to China's Electronic Information Industry in 2018
5	China's Patent Excellence Award granted for "Method for Obtaining the Vertical-type High-voltage Super-junction Semiconductor Apparatuses"
6	Top 10 Enterprises in Power Semiconductors of New-energy Vehicles
7	Informatization Exploration Award in National Golden Card Project (twenty-five years)/Golden Ant Award in National Golden Card Project – Best Product Matching Award
8	Enterprise Award for Power Device Innovation in China in 2017
9	"China's Twelfth (2017) Innovative Semiconductor Product and Technology" Award granted for "0.11 $\mu$ m Ultra-Low-Leakage (ULL) Embedded Storage Process Platform"
<b>Provincial Awards</b>	
10	2018 "Shanghai Worker Pioneer"
11	2018 "Excellent Expert Workstation in Shanghai"
12	First Prize for Scientific and Technological Progress in Pudong New Area in 2017
13	Top 10 Enterprises with Best Economic Benefit in the Integrated Circuit Industry in Shanghai in 2017
14	Economic Contribution Award for Excellent Enterprises in Zhangjiang Science City in 2018

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## 8 Performance Data

### Environment

Performance Indicators	Unit	2016	2017	2018
<b>Emissions</b>				
Total Volume of Air Emission Emitted	10,000 m <sup>3</sup>	1,060,281	1,121,958	1,145,074
Volume of NO <sub>x</sub> Discharged	Kg	26,260	26,374	26,821
Volume of SO <sub>2</sub> Discharged	Kg	50	62	68
Total Volume of Waste Water Discharged	10,000 m <sup>3</sup>	454	436	473
Volume of greenhouse gas emitted	Ton of CO <sub>2</sub> equivalent	/	424,151	434,834
Volume of greenhouse gas emitted in unit production	Ton of CO <sub>2</sub> equivalent/ 8 inches wafers	/	0.22	0.21
Total Volume of Hazardous Wastes	Ton	4,324	4,641	5,122
Volume of Hazardous Wastes Generated in Unit Production <sup>1</sup>	Kg/8 inches wafers	2.44	2.43	2.47
Total Volume of Non-hazardous wastes <sup>2</sup>	Ton	2,746	3,982	4,017
<b>Resource Utilization</b>				
Total Electricity Consumed	MWh	481,830	509,877	528,402
Electricity Consumed in Unit Production <sup>3</sup>	kWh/8 inches wafers	271	268	240
Natural Gas Consumed	m <sup>3</sup>	6,580,000	7,155,253	7,481,586
Natural Gas Consumed in Unit Production	m <sup>3</sup> /8 inches wafers	3.70	3.75	3.66
Total Water Consumed	m <sup>3</sup>	5,045,000	4,898,783	9,267,637
Including: Water coming from municipal water supply	m <sup>3</sup>	5,045,000	4,898,783	6,325,999
Water Consumed in Unit Production <sup>4</sup>	m <sup>3</sup> /8 inches wafers	2.8	2.57	3.10
Volume of Recycled/Reused Water	10,000 m <sup>3</sup>	258	282	292
Total Volume of Packaging Materials for Finished Products Shipped	Ton	71	75	78
Volume of Recycled Packaging Materials for Finished Products Shipped	Ton	13	15	16

#### Notes:

- There is a change in the unit for calculating the per unit production for 2016 and 2017 which is disclosed in 2017 Environmental, Social and Governance Report of Hua Hong Semiconductor Limited, and the volumes of hazardous wastes generated have been determined to be 2.44kg per 8-inch wafer and 2.43kg per 8-inch wafer in this report.
- The volume of non-hazardous wastes is the volume of sludge generated in wastewater treatment.
- The electricity consumed in unit production which is disclosed in 2017 Environmental, Social and Governance Report of Hua Hong Semiconductor Limited has been revised to 268 kWh per 8-inch wafer in this report.
- The base for calculating the water consumed in unit production only include municipal water supply.



# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## Employment and Labour Practice

Performance Indicators	Unit	2016	2017	2018
<b>Employment</b>				
Total number of employees	Individual	3,938	4,138	4,512
Number of male employees	Individual	2,772	2,914	3,227
Number of female employees	Individual	1,166	1,224	1,285
Number of employees subject to labor contract system	Individual	3,938	4,138	4,512
Number of employees subject to non-labor contract system <sup>1</sup>	Individual	225	215	209
Number of employees aged < 30	Individual	1,922	2,001	2,129
Number of employees aged 30-50	Individual	1,936	2,054	2,284
Number of employees aged > 50	Individual	80	83	99
Number of Mainland China employees	Individual	3,928	4,128	4,503
Number of overseas employees	Individual	10	10	9
<b>Health and Safety</b>				
Occupational disease occurrence rate of employees	%	0	0	0
Occupational mortality	Individual	0	0	0
Number of days absent from work due to injury	Day	201.0	193.0	206.0
<b>Development and Training</b>				
Per-capita Time Length of Training Attendance of Employees <sup>2</sup>	Hour	101.8	72.3	77.0
Including: Per-capita Time Length of Training Attendance of Junior Employees	Hour	103.7	72.6	78.0
Per-capita Time Length of Training Attendance of Managers	Hour	9.3	11.6	13.0
Per-capita Time Length of Training of Attendance of Female Employees	Hour	126.2	69.9	66.0
Per-capita Time Length of Training of Attendance of Male Employees	Hour	91.4	74.3	82.0
<b>Rate of Employees Receiving Training</b>				
Including: Rate of Junior Employees Receiving Training	%	100	100	100
Rate of Managers Receiving Training	%	100	100	100
Rate of Female Employees Receiving Training	%	100	100	100
Rate of Male Employees Receiving Training	%	100	100	100

Notes:

<sup>1</sup> Stated as "Number of employees subject to labor dispatching system" in the CSR Report of 2016 and 2017.

<sup>2</sup> Apart from junior employees and managers, the number of employees also includes the interns and employees dispatched.

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## Product Liability

Performance Indicators	Unit	2016	2017	2018
<b>Product Liability</b>				
Product return rate	%	<0.1	0.3	0.104
Percentage of sold products recalled due to safety and health issues	%	0	0	0
Customer complaint cases	Case	11	10	8
Percentage of customer complaints addressed	%	100	100	100

## Supply Chain Management

Performance Indicators	Unit	2016	2017	2018
<b>Supply Chain Management</b>				
Total number of suppliers	Supplier	495	508	520
Number of local suppliers	Supplier	375	385	393
Number of overseas suppliers	Supplier	120	123	127
Number of suppliers receiving evaluation <sup>1</sup>	Supplier	31	115	112
Number of suppliers requiring rectification	Supplier	0	0	0
The Percentage of suppliers of raw and auxiliary materials signing the Undertakings for Environmental Protection	%	100	100	100
Proportion of raw materials spending on local suppliers <sup>2</sup>	%	22	23	26

Notes:

<sup>1</sup> It means the number of suppliers on which the Company conducts evaluation with respect to labor, health and safety, environment and ethics.

<sup>2</sup> Raw materials purchased include: silicon slice, quartz, target material, gas, chemicals and other raw materials for production.

# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## Anti-corruption

Performance Indicators	Unit	2016	2017	2018
<b>Anti-corruption</b>				
Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period	Case	0	0	0

## Community Investment

Performance Indicators	Unit	2016	2017	2018
<b>Community investment</b>				
Number of employees participating in volunteer services	Individual	310	178	176
Accumulated time length of volunteer activities	Hour	560	356	352

## Compliance

Fields	Name of Major Laws and Regulations
EHS	Environmental Protection Law of the People's Republic of China, Law of the People's Republic of China on Prevention and Control of Atmospheric Pollution, Production Safety Law of the People's Republic of China, Law of the People's Republic of China on Prevention and Control of Occupational Diseases, Law of the People's Republic of China on Employment Contracts, Law of the People's Republic of China on Protection of Women's Rights and Interests, Registration, Evaluation, Authorization, and Restriction of Chemicals ("REACH"), Waste Electrical and Electronic Equipment (WEEE) and Restriction of Hazardous Substances ("RoHS") etc.
Information security	Patent Law of the People's Republic of China, Copyright Law of the People's Republic of China, Trademark Law of the People's Republic of China, Cyber security Law of the People's Republic of China, The Regulation of Commercial Encryption Codes etc.
Quality	Constitution of the PRC, Law of the People's Republic of China on Product Quality, Customs Law of the PRC, The Foreign Trade Law of the PRC etc.
RBA	Anti Unfair Competition Law of the People's Republic of China, Employment Promotion Law of the People's Republic of China, Social Insurance Law of the People's Republic of China, Contract Law of the People's Republic of China, Labor Law of the People's Republic of China, Criminal Law of the People's Republic of China, etc.



# 2018 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

## 9 Preparation

### Report Overview

This 2018 ESG Report of Hua Hong Semiconductor Limited (hereinafter referred to as “this Report”) discloses its principles in fulfilling CSR and the work carried out in 2018. It mainly addresses our Stakeholders about the sustainable development regarding the relevant economic, environmental, and social issues.

### Reference Basis

This Report adopts the “Environmental, Social and Governance Reporting Guide” issued by the Stock Exchange of Hong Kong Limited and the “Sustainability Reporting Standards (2016)” of the Global Reporting Initiative (GRI) as its reference basis.

### Scope of Report

Organizational scope: The Company as defined. This Report by the Company, Hua Hong Semiconductor Limited, includes all subsidiaries of the Company.

Reporting period: From 01 January 2018 to 31 December 2018

Release cycle: This is an annual report

### Data Descriptions

Data and cases in this Report originate from the Company’s original records in day-to-day operation or financial reports. In case of discrepancies, the financial reports data shall prevail.

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# 釋義

於本年報內，除非文義另有所指，否則下列詞彙具有下文所載涵義。

「股東週年大會」	本公司將於二零一九年五月九日下午二時正在香港九龍麼地道64號九龍香格里拉大酒店舉行的股東週年大會；
「董事會」	本公司董事會；
「國家集成電路」	國家集成電路產業投資基金股份有限公司，一家於二零一四年九月二十六日在中國註冊成立的公司。公司股東包括中央財政、集成電路產業聚集區企業、大型國有企業、部份金融機構及民營企業，公司重點投向半導體晶圓製造業，兼顧芯片設計、封裝測試、設備及材料等上下游環節；
「中國」	中華人民共和國，但僅就本年報及作地理參考而言，除文義另有所指，否則，本年報（「中國」）的提述不包括台灣、澳門特別行政區及香港；
「本公司」	華虹半導體有限公司，一家於二零零五年一月二十一日在香港註冊成立的有限公司，除非文義另有所指，否則包括其所有子公司，或如文義指其成為其現有子公司的控股公司之前期間，則指其現有子公司；
「公司秘書」	本公司公司秘書；
「董事」	本公司董事；
「EPS」	每股盈利；
「執行董事」	本公司執行董事；
「Grace Cayman」	Grace Semiconductor Manufacturing Corporation，一家於一九九九年十月五日在開曼群島註冊成立的獲豁免有限公司，為本公司的全資子公司；
「上海宏力」	上海宏力半導體製造有限公司，一家於二零零零年十二月二十日在中國註冊成立的公司，為本公司的全資子公司。已經於二零一八年八月三日註銷；

## 釋義

「本集團」	本公司及我們的子公司，或如文義所指為本公司成為我們現有子公司的控股公司之前期間（或成為本公司的該等聯營公司），則指由該等子公司或其前身公司（視乎情況而定）所經營的業務；
「華虹宏力」	上海華虹宏力半導體製造有限公司，一家於二零一三年一月二十四日在中國註冊成立的公司，為本公司的全資子公司；
「華虹NEC」	上海華虹NEC電子有限公司，一家於一九九七年七月十七日在中國註冊成立的公司，為本公司的全資子公司。已經於二零一八年八月三日註銷；
「港元」	香港法定貨幣港元；
「香港」	中華人民共和國香港特別行政區；
「華虹集團」	上海華虹（集團）有限公司，一家於一九九六年四月九日在中國註冊成立為上海華虹微電子有限公司的公司，並於一九九八年更名為上海華虹（集團）有限公司，為本公司控股股東；
「華虹置業」	上海華虹置業有限公司，一家於二零一一年十月二十八日在中國註冊成立的公司，為華虹科技發展的全資子公司；
「華虹科技發展」	上海華虹科技發展有限公司，一家於二零一零年五月十日在中國註冊成立的公司，一家由華虹集團持有50%並與其合併報表及由華虹宏力持有50%的公司，為關連人士；
「華虹無錫」	華虹半導體（無錫）有限公司，一家於二零一七年十月十日在中國註冊成立的公司。華虹無錫於註冊成立時由本公司的全資子公司華虹宏力擁有100%的權益。於合營協議及增資協議項下進行的交易完成後將繼續由本集團持有51.0%的權益，其中22.2%將由本公司直接持有及28.8%將由本公司透過華虹宏力間接持有，而國家集成電路及無錫錫虹聯芯將分別持有華虹無錫29%權益和20%權益；
「獨立非執行董事」	本公司獨立非執行董事；

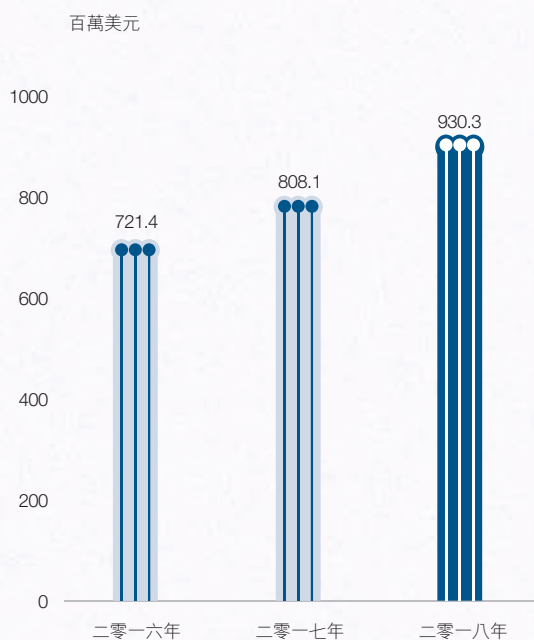
## 釋義

「儀電集團」	上海儀電(集團)有限公司，前身為上海儀電控股(集團)有限公司，一家於一九九三年十二月在中國註冊成立的國有公司，為本公司控股股東；
「合營協議」	本公司、華虹宏力、華虹無錫、國家集成電路及無錫錫虹聯芯訂立的日期為二零一八年一月三日的合營協議；
「上市規則」	《香港聯合交易所有限公司證券上市規則》(經不時修訂或補充)；
「合併」	Grace Cayman與本公司在開曼群島組建的Hua Hong Semiconductor (Cayman) Inc.進行的合併；
「NEC」	NEC Corporation，一家於一八九九年在日本註冊成立及創立名為Nippon Electric Company, Limited的公司；
「非執行董事」	本公司非執行董事；
「矽睿科技」	上海矽睿科技有限公司，一家於二零一二年九月十三日在中國註冊成立的公司，為關連人士；
「人民幣」	中國法定貨幣人民幣；
「上海聯和」	上海聯和投資有限公司，一家於一九九四年九月二十六日在中國註冊成立的公司，為本公司控股股東，華虹集團的主要股東；
「證監會」	香港證券及期貨事務監察委員會；
「證券及期貨條例」	香港法例第571章《證券及期貨條例》(經不時修訂或補充)；
「上海華力」	上海華力微電子有限公司，一家於二零一零年一月十八日在中國註冊成立的公司，為關連人士；
「股東」	本公司股本中普通股持有人；
「聯交所」	香港聯合交易所有限公司；及
「無錫錫虹聯芯」	無錫錫虹聯芯投資有限公司，一家於二零一七年十二月十九日在中國註冊成立的公司，系由市屬及區級國企聯和設立的專業投資公司。

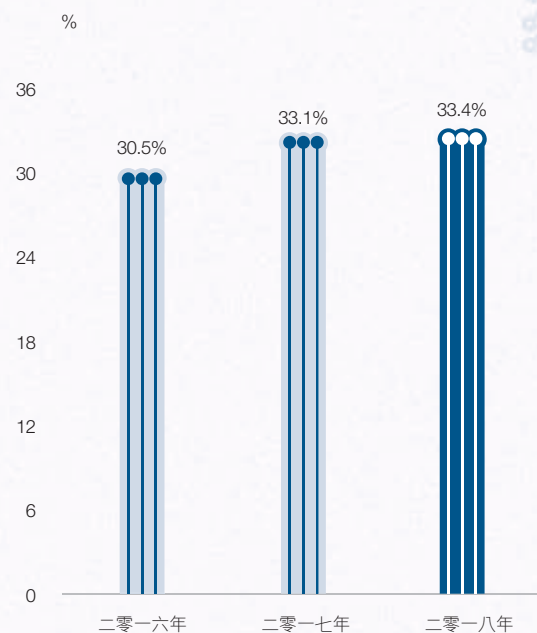


# 主要財務指標

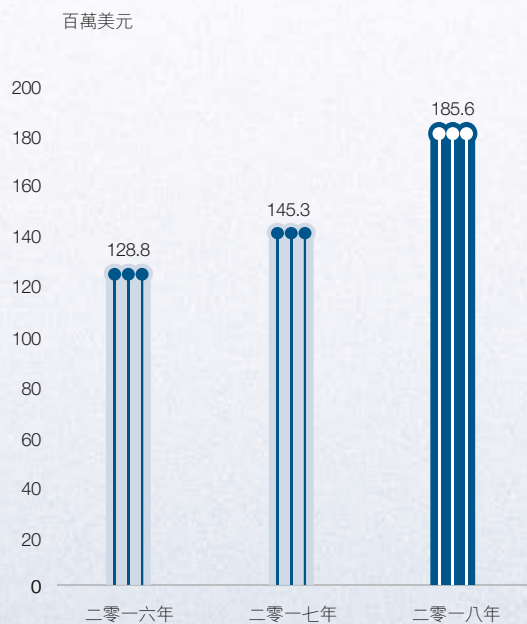
## 銷售收入



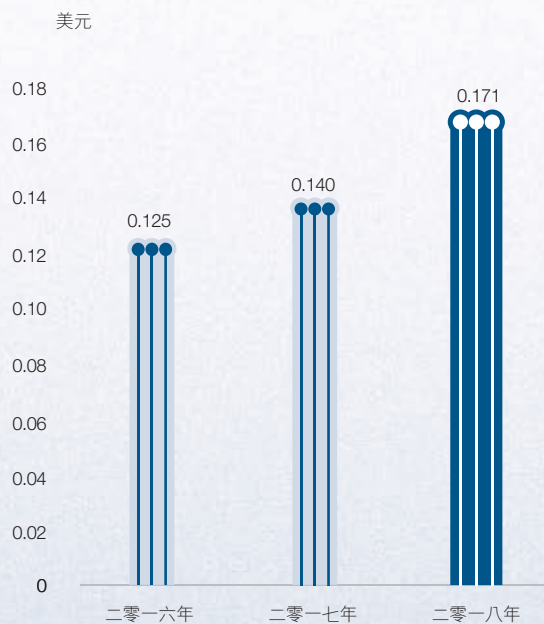
## 毛利率



## 淨利潤



## 每股盈利



# 致股東的信

尊敬的各位股東：

在領導團隊和全體員工的通力合作、各位股東、廣大客戶及第三方的關心支持下，二零一八年，華虹半導體表現優異，取得了創紀錄的業績。這一年，全球市場，尤其是中國市場對我們的特色工藝平台以及創新性製造技術高度認可、需求旺盛，結合不斷優化的產品和技術組合以及持續提升的產能，我們有理由相信，未來華虹半導體必定能抓住機遇，乘風破浪，追夢前行。

二零一八年，華虹半導體銷售收入、毛利率、年內溢利和淨資產收益率再創歷史新高，銷售收入達9.3億美元，同比增長15.1%；毛利率達33.4%，同比增長0.3個百分點；實現年內溢利1.86億美元，佔銷售收入的20%，同比增長27.8%；淨資產收益率上升至10.2%，同比增加1.1個百分點。華虹半導體再次在純晶圓代工市場取得卓越的業績。

截至二零一八年底，我們已連續32個季度實現盈利。二零一八年度晶圓出貨量首次突破200萬片，實現了自2014年上市以來出貨量140萬片至今9.5%的年複合增長率；月總產能增至17.4萬片，以99.2%的高產能利用率居於行業領先地位。

初心守方寸，咫尺顯匠心。這一年，我們繼續深耕細分領域，依託完善的全球化佈局，以「高技術、高成長、高利潤」作為發展定位，砥志研思、踔厲奮發。我們的嵌入式非易失性存儲器、功率器件、模擬及電源管理和邏輯及射頻等特色工藝平台的競爭力持續提升。

90納米嵌入式非易失性存儲器技術作為新一代智能卡芯片技術，憑藉其高可靠性和成本優勢成為我們的制勝法寶；本年度銀行卡芯片出貨量同比增長超100%，創歷史新高。

二零一八年，功率器件在各終端市場的應用場景更加多樣，公司功率器件營收同比增長41%。作為全球首家提供場截止型FS-IGBT量產技術的200mm純晶圓代工廠，我們擁有領先技術，支持並推動綠色能源、新能源汽車、工業自動化等產業的發展。

針對電源管理市場，我們發佈了第二代0.18微米BCD工藝平台，達到該節點領先工藝水平，可應用於消費電子、計算機電子及工業電子市場中電機驅動、快充、DC-DC轉換器等芯片產品，並可應用在汽車電子市場中。

二零一九年，我們將繼續投入差異化技術研發，聚焦物聯網、汽車電子、5G以及其他新興市場，進一步優化現有嵌入式非易失性存儲器平台，追求更高效低耗的新型IGBT技術，完善0.13微米RF-SOI射頻技術，並致力研發90納米BCD技術，追求卓越、奮勇前行。

## 致股東的信

二零一八年底，華虹半導體（無錫）有限公司的主體結構全面封頂，該項目高質、高強、高效推進，記錄了滬錫雙城奮斗者的足跡，成為「華虹精神」的完美註腳。預計將在二零一九年第二季度末完成廠房和潔淨室的建設，在下半年開始搬入設備，並在二零一九年第四季度開始300mm晶圓的量產，以滿足新興領域日益增長的產品需求，為客戶提供更優質多元的產品解決方案，為公司的中長期戰略發展奠定堅實的基礎。

華虹半導體始終將技術創新視為「生命線」，打造更優的「華虹芯」，不斷地拓展其應用領域。優質的客戶資源、完善的市場佈局、高效的研發團隊以及持續提升的產能全方位體現了我們的綜合實力。二零一八年，我們的科研實力再獲廣泛認可：在「中國企業創新能力百強排行榜」中位列第四，榮膺「國家金卡工程（廿五年）信息化開拓獎」，還憑借「95納米SONOS嵌入式非易失性存儲器工藝」項目當選本年度「國家金卡工程金螞蟻獎—最佳產品配套獎」，並蟬聯「上海市優秀院士專家工作站」的殊榮。

機遇和挑戰並存，夢想與情懷不變。展望2019年，華虹半導體必能繼往開來，踵事增華。我們將盡早、盡快、盡善、盡美地完成華虹無錫項目，輻射帶動地區產業發展，創造經濟協同效應；我們將繼續潛心於科技研發，走好差異化創新之路；我們將深化戰略合作，全面支持產業生態建設，推動全球集成電路製造供應鏈協同共贏；我們還將持續改進企業社會責任管理體系，全面真實地展現一個負責任的企業公民的形象。生於慮，成於務。在新的一年里，我們必定披荊斬棘，以更優的產品、更佳的業績、更高的回報答謝股東和客戶的信任。

二零一八，感謝支持；二零一九，攜手共進！新時代、新擔當、新作為，全體華虹人將不忘初心、牢記使命、知難而進、奮發圖強，以時不我待的決心與各位共赴新徵程、同鑄芯華章！

張素心先生  
主席兼執行董事

王煜先生  
總裁兼執行董事

香港  
二零一九年三月二十八日

# 公司資料

企業文化



## 願景

持續創新，為全球客戶製造  
「芯」夢想



## 使命

通過協作、創新和優秀的  
企業公民性，為股東、客戶  
和員工創造價值



## 企業精神

革新，自信  
進取，團結

# 公司資料

## 董事會

### 執行董事

張素心 (主席)  
王煜 (總裁)

### 非執行董事

陳劍波  
馬玉川 (於二零一八年九月二十六日辭任)  
森田隆之  
葉峻  
杜洋 (於二零一八年十一月七日獲委任)

### 獨立非執行董事

張祖同  
王桂壘, 太平紳士  
葉龍蜚

### 公司秘書

王小軍 (律師)

### 授權代表

王煜  
王小軍 (律師)

### 審核委員會

張祖同 (主席)  
葉龍蜚  
葉峻

### 薪酬委員會

王桂壘, 太平紳士 (主席)  
葉龍蜚  
陳劍波

### 提名委員會

張素心 (主席)  
王桂壘, 太平紳士  
葉龍蜚

## 網址

[www.huahonggrace.com](http://www.huahonggrace.com)

## 核數師

安永會計師事務所  
執業會計師  
香港中環  
添美道1號  
中信大廈22樓

## 法律顧問

史密夫•斐爾律師事務所  
香港  
皇后大道中15號  
告羅士打大廈23樓

## 主要往來銀行

上海浦東發展銀行上海分行  
中國上海市  
中山東一路12號

中國工商銀行上海分行  
中國上海市  
浦東新區  
浦東大道9號

中國建設銀行上海市分行  
中國上海市  
浦東新區  
陸家嘴環路900號

交通銀行上海市分行  
中國上海市  
銀城中路188號

國家開發銀行上海分行  
中國上海市  
浦明路68號

中國建設銀行股份有限公司香港分行  
香港中環  
干諾道中3號中國建設銀行大廈28樓

交通銀行股份有限公司香港分行  
香港中環  
畢打街20號

國家開發銀行江蘇分行  
中國江蘇省南京市  
江東中路232號

中國農業銀行股份有限公司無錫新吳支行  
中國江蘇省無錫市  
新吳區和風路26號

### 股份過戶登記處

卓佳證券登記有限公司  
香港  
皇后大道東183號  
合和中心22樓

### 註冊辦事處

香港中環  
夏慤道12號  
美國銀行中心2212室

### 主要營業地點及總部

中國上海  
張江高科技園區  
哈雷路288號  
郵編：201203

### 股份代號

1347

## 董事及高級管理層

**張素心先生**，55歲，於二零一六年三月十一日獲委任為本公司董事會主席兼執行董事及本公司提名委員會成員兼主席。現擔任華虹集團董事長及黨委書記、上海華力微電子有限公司董事長、上海華力集成電路製造有限公司董事長、華虹半導體（無錫）有限公司法定代表人及董事長。張先生擁有豐富的高新技術產業戰略發展、能源戰略研究及發電設備製造業經驗，曾歷任上海汽輪機有限公司總裁、上海電氣電站集團執行副總裁、上海西門子燃氣輪機部件有限公司董事長、上海電氣集團股份有限公司執行董事、上海電氣（集團）總公司副總裁、上海金橋（集團）有限公司黨委書記、總經理、上海金橋出口加工區開發股份有限公司董事長及黨委書記、上海市發展改革委副主任、上海市張江高新技術產業開發區管委會副主任等職務。張先生畢業於清華大學，擁有工學學士學位，為教授級高級工程師。

**王煜先生**，46歲，自二零一二年二月起為本公司總裁兼執行董事。現擔任華虹半導體（無錫）有限公司董事、總經理。王先生一九九七年在上海華虹微電子有限公司開始職業生涯；一九九八年一月至二零零三年十月擔任上海華虹NEC電子有限公司財務部部長及總監；二零零三年十月至二零一零年三月擔任上海華虹NEC電子有限公司副總裁兼財務長，並於任職期間參與中國大陸第一條200mm晶圓半導體生產線從建設到投產的全過程。二零一零年三月，王先生加入上海宏力半導體製造有限公司擔任副總裁，其後於二零一零年九月獲委任為總裁。王先生作為總裁對華虹NEC與上海宏力的合併及重組的圓滿完成發揮了重要作用。王先生畢業於上海財經大學，獲國際貿易學士及國際金融碩士學位。

**陳劍波先生**，54歲，自二零一二年二月起為本公司非執行董事，現擔任華虹集團副總裁並兼任上海華虹科技發展有限公司副董事長、上海華力微電子有限公司董事、上海華力集成電路製造有限公司董事、華虹半導體（無錫）有限公司董事。陳先生於2005年加入華虹集團，曾歷任上海科技投資公司副總經理、上海張江（集團）有限公司總經理、上海市張江高科技園區領導小組辦公室副主任、上海集成電路研發中心有限公司總裁、上海華虹計通智慧系統股份有限公司（股票代碼：300330.SZ）董事長等職務。陳先生畢業於上海交通大學，獲電子工程學學士、電磁學與微波技術碩士及通訊與電子系統博士學位，後於中歐國際工商學院獲工商管理碩士學位。

## 董事及高級管理層

**杜洋先生**，41歲，自二零一八年十一月起為本公司非執行董事。杜先生於二零零五年八月加入國家開發銀行。二零零五年至二零一四年，杜先生在國家開發銀行擔任多項職務，包括總行企業局客戶處客戶經理、河南分行客戶處副處長、總行業務發展局項目開發與業務創新處處長等。二零一四年十二月起至今，杜先生擔任華芯投資管理有限責任公司總監，並於二零一五年十月起兼任華芯投資上海分公司總經理。杜先生亦為上海集成電路產業投資基金股份有限公司、上海集成電路產業投資基金管理有限公司、上海華力集成電路製造有限公司、上海芯鑠投資管理有限公司的董事。杜先生亦擔任芯鑫融資租賃有限責任公司的法人代表、董事長兼總裁。

杜先生先後分別獲得復旦大學、名古屋商業大學及英國曼徹斯特索爾福德大學的中文系學士、工商管理碩士和金融管理碩士，並於二零一五年獲得高級經濟師專業技術資格。

**馬玉川先生**，53歲，自二零一四年九月至二零一八年九月為本公司非執行董事。

**森田隆之先生**，59歲，自二零零九年七月起為本公司非執行董事。森田先生於一九八三年四月加入NEC。一九八三年至二零一一年，森田先生在NEC擔任多項職務，包括國際規劃部經理、企業業務發展部高級副總裁兼執行總經理。現任NEC資深執行副總裁，並於二零一八年六月起兼任首席財務官(Chief Financial Officer)。二零零八年六月二十四日至二零一二年六月二十六日，森田先生出任日本航空電子工業株式會社的核數師。森田先生在NEC以及日本航空電子擁有一席董事席位。森田先生畢業於東京大學，獲法律學士學位。

**葉峻先生**，46歲，自二零一二年二月起為本公司非執行董事。葉先生於金融投資領域擁有二十多年經驗。自一九九六年起，葉先生歷任上海聯和投資有限公司投資銀行部經理，業務發展部經理，總經理助理，副總經理等職位，並於二零一八年五月起任上海聯和投資有限公司總經理。葉先生亦為華虹集團、上海華力、上海銀行及中美聯泰大都會人壽保險有限公司的董事。葉先生亦任上海兆芯集成電路有限公司及上海宣泰醫藥科技有限公司的主席。葉先生畢業於上海交通大學，獲工業外貿學士及工商管理碩士學位。



## 董事及高級管理層

**張祖同先生**，70歲，為本公司獨立非執行董事。張先生曾為香港執業會計師，並自一九七八年至二零零三年底為香港會計師公會會員，自一九八三年一月起為英格蘭及威爾士特許會計師公會資深會員，在會計、核數及財務管理方面具有豐富經驗。張先生自一九七六年起於安永會計師事務所擔任多個職位，並於一九八九年成為安永會計師事務所管理委員會成員。他積極參與制定和監督公司內部控制和風險管理政策和程序。他亦曾擔任安永審計和諮詢業務服務的主席四年。之後，他被晉升為專業服務部門的管理合夥人。於二零零三年退休前，張先生為安永會計師事務所合夥人暨中國及香港區主席。張先生為上海復旦大學教育發展基金會及復旦大學教育發展基金會（海外）投資委員會成員。張先生亦為中國信達資產管理股份有限公司（股票代碼：1359.HK）及嘉里建設有限公司（股票代碼：683.HK）、中國人壽保險股份有限公司（股票代碼：2628.HK）的獨立非執行董事。張先生曾任中國太平洋保險（集團）股份有限公司（股票代碼：601601.SH及2601.HK）的獨立非執行董事。張先生畢業於倫敦大學，獲食品科學及化學理學學士學位。

**王桂壠先生**，67歲，銅紫荊星章獲得者，太平紳士，為本公司獨立非執行董事。王先生曾於兩所國際律師事務所擔任中國主理合夥人達十五年。在此之前，王先生曾任職於香港特區政府的地政總署、律政司及立法會共達十年。王先生於二零一一年至一八年間分別獲委任為香港機場管理局、醫院管理局及競爭事務委員會的成員。王先生為前任香港國際仲裁中心主席，以及香港律師會及香港董事學會前任會長。王先生現時為香港稅務上訴委員會其中一名副主席，香港版權審裁處主席，香港按揭證券有限公司董事，中國國際海運集裝箱（集團）股份有限公司（股票代碼：000039.SZ及2039.HK）、維達國際控股有限公司（股票代碼：3331.HK）、中海油田服務股份有限公司（股票代碼：2883.HK及601808.SZ）及新創建集團有限公司（股票代碼：659.HK）的獨立非執行董事；並於香港大學、香港中文大學、香港城市大學及香港樹仁大學擔任名譽講師、校外評核委員及教授。王先生持有香港中文大學文學學士學位及倫敦大學法律學士學位。

**葉龍蜚先生**，77歲，為本公司獨立非執行董事。葉先生曾於上海市政府擔任多個職位；於一九九一年獲調派往香港，擔任「Shanghai Desk」（上海市政府與安達信公司為推廣上海而達成的一項合作安排）行政總裁至一九九五年；於一九九五年加入嘉里控股有限公司，並分別於二零零零年十月至二零零三年八月及二零零三年八月至二零零七年三月出任香格里拉（亞洲）有限公司的董事會主席及副主席；於二零零七年三月至二零一八年二月，擔任香格里拉（亞洲）有限公司顧問一職。葉先生畢業於上海復旦大學，獲物理學學士及碩士學位。

### 高級管理層

截至本報告日期的高級管理層成員列示如下：

**張素心先生**，55歲，於二零一六年三月十一日獲委任為本公司董事會主席兼執行董事。有關張先生履歷及學術背景的更多資料，請參閱「董事及高級管理層－董事會」一節。

**王煜先生**，46歲，為本公司總裁兼執行董事。有關王先生履歷及學術背景的更多資料，請參閱「董事及高級管理層－董事會」一節。

**徐偉先生**，61歲，為本公司製造工程、人事、行政及安全管理執行副總裁。徐先生於一九九七年七月加入華虹NEC，為中國大陸第一條200mm晶圓半導體生產線的建立作出了巨大貢獻，歷任製造、技術及質量控制方面的多個職位。二零一二年六月至二零一三年十月，徐先生擔任華虹NEC的代理總裁。加入華虹NEC之前，徐先生任職於無錫（中國）華晶電子集團公司。徐先生畢業於西安交通大學半導體物理與器件專業，獲工學學士學位，並曾於清華大學研究生班深造。為教授級高級工程師。

**范恒先生**，57歲，為本公司銷售與市場執行副總裁。范先生於二零一四年底加入本公司，此前，范先生於二零零三年至二零一四年擔任上海華虹計通智能系統股份有限公司董事及總經理。在加入華虹計通之前，范先生歷任中科院上海微系統與信息技術研究所研究員／副室主任、上海華虹集成電路有限責任公司副總經理等多項職務。范先生畢業於上海復旦大學，獲電子工程系微電子專業學士學位；後於中科院上海微系統與信息技術研究所獲半導體物理與半導體器件物理專業碩士學位。

**王鼎先生**，56歲，為本公司財務、信息科技、上市公司工作與外籍人事執行副總裁。王先生於二零零一年四月加入上海宏力，在公司的各個發展階段、合併的籌備與實施及本公司成功上市中起到核心領導作用，並自二零一二年二月起擔任公司董事會秘書。加入上海宏力之前，王先生於一九九五年八月至二零零一年三月在加利福尼亞硅谷聖何塞的LSI Logic Corporation擔任寬帶娛樂部部門主管。於加入LSI Logic Corporation之前，王先生任職於美國Franklin Templeton Investments。王先生畢業於美國加州大學伯克利分校工程學院，獲工業工程及營運研究學士學位；後於舊金山大學獲財務及銀行專業工商管理碩士學位。

## 董事及高級管理層

**孔蔚然博士**，55歲，為本公司技術研發與設計服務執行副總裁。孔博士於半導體領域擁有逾20年經驗，於二零零三年三月加入上海宏力，在推動NOR閃存、邏輯及嵌入式閃存領域的創新方面有良好往績。在加入上海宏力之前，孔博士在美國工作，先後任職於Sun Microsystems, Inc., LSI Logic Corporation及ISSI。孔博士畢業於天津南開大學，獲物理學士學位；後於美國俄勒岡科學理工研究學院獲電機工程學碩士及應用物理博士學位。孔博士擁有13項美國專利、54項中國專利，共同發表逾20篇技術論文。

**周衛平先生**，52歲，為本公司制造工程與安全管理執行副總裁。周先生於二零一八年初加入本公司。此前，周先生曾任上海貝嶺股份有限公司執行副總裁；寧波杉杉尤利卡太陽能科技發展有限公司總經理；上海貝嶺微電子製造有限公司總經理；上海先進半導體製造股份有限公司黨委副書記、總裁、首席執行官，黨委書記、副總裁等職務。周先生畢業於華東師範大學，獲固態電子技術專業學士學位；後於復旦大學獲工商管理碩士學位。

**李琦博士**，56歲，為本公司採購物流、測試、質量、計劃副總裁。李博士擁有逾20年專業工作經驗，於二零零三年一月加入上海宏力。此前，李博士自一九九五年至二零零二年於美國應用材料公司擔任高級工程經理。李博士畢業於北京大學，獲物理學學士學位；後於美國馬里蘭大學獲物理學碩士學位及博士學位。

**林宏哲博士**，57歲，為本公司北美及日本銷售副總裁。林博士曾於美國幾家領先的半導體公司擔任多個非易失性內存技術開發職務，於二零零六年八月加入上海宏力。林博士於加州理工學院獲電機工程學博士學位。

**林俊毅先生**，50歲，為本公司三廠運營副總裁。林先生於半導體行業擁有逾20年工作經驗，於二零零零年八月加入上海宏力。此前，林先生自一九九五年至二零零零年八月效力於台灣德基半導體製造有限公司（後與台灣集成電路製造股份有限公司合併）。林先生畢業於國立台灣科技大學（前稱國立台灣工業技術學院），獲化學工程學碩士學位。

## 董事及高級管理層

**Mirko Sonntag**先生，42歲，為本公司歐洲銷售營運與服務副總裁。Sonntag先生擁有需求及供應鏈規劃及業務營運等方面的專業知識，在業務發展方面具備紮實基礎，於二零零八年十月加入上海宏力。此前，Sonntag先生任職於德國英飛凌科技公司。Sonntag先生畢業於德國柏林應用技術大學和柏林經濟學院，獲程序工程及經濟學文憑。

**陳瑛女士**，46歲，為本公司行政副總裁，負責綜合行政事務、企業形象傳播、合規和上市公司工作。陳女士於二零零一年四月加入上海宏力，擁有逾20年行政管理經驗。此前，陳女士任職於上海復華實業股份有限公司。陳女士畢業於復旦大學，獲法學士學位；後於中國人民大學獲管理學碩士學位；高級經濟師。

**華光平先生**，52歲，為本公司一廠運營副總裁。華先生於半導體行業擁有逾20年工作經驗，於二零零七年七月加入華虹NEC。此前，華先生先後效力於新加坡特許半導體製造有限公司和上海先進半導體製造股份有限公司。華先生畢業於清華大學，獲微電子工學碩士學位。

**姚亮先生**，54歲，為本公司二廠運營副總裁。姚先生於半導體行業擁有近30年工作經驗，於一九九七年八月加入華虹NEC。此前，姚先生自一九八七年至一九九六年十月效力於中國華晶電子集團公司。姚先生畢業於南京工學院，獲金屬材料工學學士學位。

**倪立華先生**，50歲，為本公司副總裁兼華虹七廠廠長，於二零一八年五月加入華虹宏力。在加入公司之前，倪立華先生曾先後任職於無錫華晶集團公司，上海華虹微電子有限公司，上海華虹NEC電子有限公司，上海新進半導體製造有限公司部經理，上海華虹NEC電子有限公司部長，上海華力微電子有限公司副廠長。倪立華先生畢業於西安電子科技大學，獲工學學士學位；後於上海交通大學獲工程碩士學位。

## 董事及高級管理層

### 公司秘書

王小軍先生，64歲，自二零一四年六月起擔任本公司聯席公司秘書，並於二零一六年六月起擔任本公司公司秘書。王先生為中國、香港及英格蘭和威爾士執業律師。王先生於一九九二年加入香港聯合交易所有限公司，之後歷任於齊伯禮律師行、百富勤融資有限公司、霸菱證券（香港）有限公司；二零零一年，成立王小軍律師行，並於二零零九年與君合律師事務所合併，目前為君合律師事務所合夥人。二零一一年至二零一二年，王先生擔任建銀國際（控股）有限公司董事總經理。二零零五年至二零一一年，曾任廣州廣船國際股份有限公司（股票代碼：317.HK及600685.SH）獨立非執行董事。二零零八年至二零一四年，曾任北方國際合作股份有限公司（股票代碼：000065.SZ）獨立非執行董事。二零一一年至二零一七年，曾任兗州煤業股份有限公司（股票代碼：1171.HK及600188.SH及YZC）獨立非執行董事。目前，王先生亦為以下公司的獨立非執行董事：東英金融投資有限公司（股票代碼：1140.HK）、中國航天國際控股有限公司（股票代碼：31.HK）及麗珠醫藥集團股份有限公司（股票代碼：1513.HK及000513.SZ）。王先生畢業於中國人民大學，獲法學學士學位；後於中國社會科學院獲法律碩士學位。

# 企業管治報告



# 企業管治報告

董事會欣然匯報截至二零一八年十二月三十一日止年度的企業管治報告。

## 企業管治常規

本公司致力於提倡良好企業管治，並已就企業管治制定程序，該等程序符合上市規則附錄十四所載的企業管治守則（「該守則」）。

## 遵守守則條文

截至二零一八年十二月三十一日止年度，本公司一直遵守該守則。

## 董事的證券交易

本公司已採納上市規則附錄十所載的上市發行人董事進行證券交易的標準守則（「標準守則」）作為本公司關於董事進行證券交易的守則。本公司已向所有董事作特定查詢，每位董事均已確認其於截至二零一八年十二月三十一日止年度全年遵守當中所載的必守標準。

## 董事會

董事會總體上負責本公司的業務及事務管理，並對轉授予主席及管理層負責的本公司日常管理承擔最終責任。

董事會現時共有九名董事，當中包括兩名執行董事張素心先生（主席）及王煜先生（總裁），四名非執行董事陳劍波先生、森田隆之先生、葉峻先生及杜洋先生（二零一八年十一月七日獲委任），以及三名獨立非執行董事張祖同先生、王桂壩先生、太平紳士及葉龍蜚先生。有關各董事的更多詳情在本年度報告第94至96頁披露。本公司已於本公司網頁及香港聯交所網頁刊載經更新的董事名單，列明其角色和職能。

本公司各非執行董事皆以三年的特定任期委任，除非根據相關委任書或董事服務合約上的條款及條件被終止委任，彼等須於股東大會上接受本公司重新提名及重選。

於本年度，董事會定期舉行會議。全體董事皆有機會提出商討事項列入董事會定期會議議程。全體董事皆可直接接觸公司秘書，確保董事會議事程序及規則及規例均獲得遵守。董事會會議的完整會議紀錄由公司秘書保管，並應在獲得合理通知時，公開有關會議紀錄以供查閱。如有需要，各董事可尋求獨立專業意見以履行其責任，費用由本公司支付。

董事會負責制定本集團的策略性方向及政策，並監督管理層。董事會保留的部份職能包括（但不限於）監察及批准重大交易、涉及本公司主要股東或董事利益衝突的事宜、批准季度、中期及全年業績、向公眾或監管機構進行其他披露及內部監控系統，另與前述事項相關的決定亦須由董事會決定。董事會並無具體保留、本公司日常運作所需的事宜則轉授予管理層，管理層由相應董事監督並由主席領導。

主席負責制定商業策略，領導董事會，確保董事會有效地運作，包括董事會及時就所有適当事項進行討論。主席確保董事會會議所審議的事項均已向所有董事妥善簡報，而全體董事所收到的資訊亦充分、完備及可靠。

主席與總裁的角色已予區分。主席負責本公司整體管理及運營，並建議及檢討本公司的企業方向及策略。總裁負責本公司的業務與營運的日常管理並實施本公司的業務策略。

截至二零一八年十二月三十一日止年度，董事會無論何時均遵守上市規則第3.10(1)、(2)條及第3.10A條的規定，委任最少三名獨立非執行董事，獨立非執行董事佔董事會成員人數至少三分之一；其中至少一名獨立非執行董事必須具備適當的專業資格，或具備適當的會計或相關的財務管理專長。各獨立非執行董事已根據上市規則第3.13條作出年度獨立性確認書。本公司認為，全體獨立非執行董事符合上市規則第3.13條所載的獨立性指引，根據指引條款均屬於獨立人士。

### 董事和高級人員的責任保險

本公司已為本公司及其子公司的全體董事和高級人員安排適當的保險，以就因本公司的企業行動而可能面對的法律訴訟給予保障。



# 企業管治報告

## 董事會的運作

截至二零一八年十二月三十一日止年度，董事會曾舉行五次董事會會議。董事會各成員出席董事會會議、審核委員會會議、提名委員會會議及薪酬委員會會議的記錄如下：

	董事會會議	審核委員會會議	提名委員會會議	薪酬委員會會議
<b>執行董事</b>				
張素心	5	不適用	1	不適用
王煜	5	不適用	不適用	不適用
<b>非執行董事</b>				
陳劍波	5	不適用	不適用	1
馬玉川(附註1)	4	不適用	不適用	不適用
森田隆之	5	不適用	不適用	不適用
葉峻	3	3	不適用	不適用
杜洋(附註2)	1	不適用	不適用	不適用
<b>獨立非執行董事</b>				
張祖同	5	5	不適用	不適用
王桂燦，太平紳士	5	不適用	1	1
葉龍蜚	5	5	1	1

附註1：馬玉川先生，於二零一八年九月二十六日辭任本公司的非執行董事。

附註2：杜洋先生，於二零一八年十一月七日獲委任，成為本公司的非執行董事。杜洋先生出席了二零一八年十一月八日的董事會會議。

截至二零一八年十二月三十一日止年度，本公司於二零一八年二月十四日舉行一次股東特別大會，以批准採納本公司針對華虹無錫的投資建設計劃。

董事會亦傳閱書面決議案，取得董事會相關成員批准，以代替有形的會議。惟若有主要股東或董事在事項中存有董事會認為重大的利益衝突，有關事項則以舉行董事會會議（而非書面決議案）方式處理，以遵守該守則第A.1.7條。

董事會認為各董事的出席紀錄令人滿意，每位董事皆付出足夠時間來履行其董事職責。

## 持續專業發展

董事應跟進其作為本公司董事的責任，並跟進本公司的行為、業務活動及發展。

根據守則條文第A.6.5條，董事應參與適當的持續專業發展計劃，以建立並更新其知識及技能，確保其對董事會的貢獻是有根據及相關。截至二零一八年十二月三十一日止年度，全體董事獲及時提供有關本公司表現、財務狀況、前景的最新資料以及適用於本集團的法律及法規新的或顯著變化的材料，以便董事會整體及各董事履行職責。各董事將於下一個財政年度獲安排參與內部舉辦的簡報會，以及在適當時間獲發放相關議題的閱讀資料。本公司鼓勵所有董事參與相關培訓課程，課程費用由本公司負責。

截至二零一八年十二月三十一日止年度，各董事所參與之持續專業發展載列如下：

董事姓名	閱讀有關規則及相關材料及／或出席培訓
張素心 (主席)	✓
王煜 (總裁)	✓
陳劍波	✓
杜洋	✓
森田隆之	✓
葉峻	✓
張祖同	✓
王桂壘，太平紳士	✓
葉龍蜚	✓

## 薪酬委員會

本公司的薪酬委員會（「薪酬委員會」）現時成員包括一名非執行董事陳劍波先生及兩名獨立非執行董事王桂壘先生，太平紳士及葉龍蜚先生。薪酬委員會主席為王桂壘先生，太平紳士。薪酬委員會的角色及功能包括為所有執行董事及高級人員制定特定薪酬待遇，包括非金錢利益、退休金權利及報酬，並就非執行董事的薪酬待遇，向董事會提出建議。薪酬委員會應考慮同類公司支付的薪酬及集團內其他職位的僱用條件等因素，以及與工作表現掛鈎的薪酬安排的可取性。薪酬委員會已在本公司網站及聯交所網站上公開其職權範圍。薪酬委員會每年最少須舉行一次會議。

截至二零一八年十二月三十一日止年度，薪酬委員會舉行一次會議以檢討及建議本公司購股權計劃，該計劃由本公司於二零一五年九月一日舉行的股東特別大會批准。

各董事的薪酬詳情已列於財務報表附註8。

# 企業管治報告

## 提名委員會

本公司的提名委員會（「提名委員會」）現時成員包括一名執行董事張素心先生及兩名獨立非執行董事王桂壘先生、太平紳士及葉龍蜚先生。提名委員會主席為張素心先生。提名委員會的角色及功能包括檢討董事會的架構、人數及組成，並就任何為補足本公司的公司策略而擬對董事會作出的任何建議變動提出建議；並遵從董事會成員多元化政策，物色具備合適資格可擔任董事的人士，並挑選提名董事人選或就此向董事會提供意見；評估獨立非執行董事的獨立性；就董事委任或重新委任以及董事（尤其是主席及總裁）繼任計劃向董事會提出建議，並監察落實董事會成員多元化政策的情況及適當檢討有關政策，以確保政策有效。提名委員會已書面訂明提名委員會的具體職權範圍，清楚說明其職權和責任。提名委員會已在本公司網站及聯交所網站上公開其職權範圍。提名委員會每年最少須舉行一次會議。

截至二零一八年十二月三十一日止年度，提名委員會已舉行一次會議。

根據本公司的組織章程細則（「細則」），任何獲委任為董事以填補董事會臨時空缺的人士應留任至本公司下次股東週年大會為止，屆時將符合資格於相關股東大會上膺選連任，而任何獲委任為現有董事會新增成員的董事則應留任至本公司下屆股東週年大會為止，屆時將符合資格於相關股東大會上膺選連任。各董事最少每三年輪席退任一次，屆時應按細則規定膺選連任。細則亦允許以普通決議案罷免董事。

## 核數師的薪酬

截至二零一八年十二月三十一日止年度，就向本公司提供的核數服務及與核數無關的服務已付或應付本公司核數師安永會計師事務所的薪酬分別為50萬美元及11萬美元。與核數無關的服務主要包括稅務諮詢和風險管理諮詢服務。

## 審核委員會

本公司的審核委員會（「審核委員會」）中，最少一名成員具備上市規則所要求的適當專業資格，或具備適當的會計或相關的財務管理專長。審核委員會並無成員於緊接各自委任日期前一年內擔任本公司現任外聘核數師的前任合夥人。所有成員皆具備適當的能力和經驗去審閱財務報表，以及解決本公司的重大監控及財務問題。董事會期望審核委員會成員能作出獨立判斷，並將企業管治功能的責任轉授予審核委員會，以遵守該守則的要求。

本公司審核委員會現時成員包括一名非執行董事葉峻先生及兩名獨立非執行董事張祖同先生及葉龍蜚先生。審核委員會主席為張祖同先生。審核委員會的主要職責包括檢討本公司的財務報告系統、審計的性質及範疇，以及內部監控與風險管理系統是否有效。審核委員會同時負責就外聘核數師的委任、重新委任及罷免提供建議，以及檢討及監察外聘核數師是否獨立客觀。另外，審核委員會會就任何因外聘核數師及監管機構所引起的事宜進行討論，以確保適當的建議已予落實。審核委員會已在本公司網站及聯交所網站上公開其職權範圍。審核委員會每年最少須舉行兩次會議。亦請參閱審核委員會日期為二零一五年十二月二十九日的經修訂職權範圍（於二零一六年一月一日生效）。

截至二零一八年十二月三十一日止年度，審核委員會已舉行五次會議，大多數成員均出席。在該會議中，審核委員會已檢討及批准本公司二零一八年四個季度的各季度、截至二零一八年六月三十日止六個月及截至二零一八年十二月三十一日止年度的財務報表。

## 董事會成員多元化政策概要

於二零一九年一月一日，董事會採納董事會成員多元化政策（該「政策」），以遵守守則條文第A.5.6條。

該政策旨在列載本公司董事會為達致成員多元化而採取的方針，並不適用於本公司僱員，或本公司的子公司的董事會或僱員的多元化。本公司視董事會層面日益多元化為維持其競爭優勢的關鍵元素。本公司在設定董事會成員組合時，將從多個方面考慮董事會成員多元化，包括但不限於天賦、技能、地區及行業經驗、背景、性別、年齡及董事會成員的其他素質，令董事會上各種天賦、技能、經驗及背景維持適當的範疇及平衡。向董事會建議選擇董事候選人時，提名委員會將按照客觀標準考慮候選人的功績，並充分顧及董事會成員在多元化方面的益處。於二零一九年，提名委員會將就達致董事會成員多元化的可計量目標，作出討論及達成一致，並向董事會作出建議，由董事會採用。在任何特定時間，董事會可在一個或多個方面改善其多元化，並相應檢討其進展。本公司致力在與業務增長有關的董事會多元化範疇，維持適當平衡。

# 企業管治報告

## 企業管治職能

董事會負責執行該守則內第D.3.1條所列明的職能。

董事會已檢討本公司的企業管治政策及常規、董事及高級管理人員的培訓及持續專業發展、本公司在遵守法律和監管規定方面的政策及常規、遵守標準守則、以及本公司遵守該守則的情況及在企業管治報告內的披露。

## 投資者關係

本公司提供網站[www.huahonggrace.com](http://www.huahonggrace.com)，以刊登本公司業務發展及營運的最新資訊、董事名單及其角色與職能、組織章程文件、董事會及其轄下委員會的職權範圍、提名董事候選人的程序、股東權益及通訊政策、企業管治常規、向香港聯交所發放的公告、通函及報告，以及其他資訊。本公司網站上的資訊將不時更新。

## 公司秘書

公司秘書王小軍先生向董事會負責，以確保董事會程序獲得遵守，董事會活動亦獲有效率地進行。他亦負責確保董事會已全面評估與本公司有關的相應法律、法規及企業管治發展，協助董事的入職及專業發展。

公司秘書向董事會主席及總裁匯報，在本公司與其股東的關係中擔當重要角色，協助董事會向股東履行其責任，以遵守上市規則。

截至二零一八年十二月三十一日止年度期間，王小軍先生已出席相關專業講座以更新其技能及知識，並遵守上市規則第3.29條的規定，接受不少於15小時的相關專業培訓。

## 股東的權利

本公司以多種正式渠道，確保其業績及活動獲公平及全面而透明的披露。該等渠道包括季度報告、中期報告、年度報告、公告及通函。

本公司的股東大會是董事會與股東之間的主要溝通渠道。本公司鼓勵其股東出席及參與股東大會，以確保高問責水平，以及使股東保持對本公司的政策及目標的了解。董事會主席、其他董事會成員及各董事會委員會主席（若主席未能出席，則由委員會其他成員出席）將在場為股東解答任何問題。

## 股東召開股東特別大會的程序

一名或多名持有本公司繳足股本不少於二十分之一的股東可請求董事，或根據香港法例第622章公司條例（「公司條例」）第566至568條提出請求的股東（「請求方」）（視情況而定）可提出召開股東特別大會的請求。請求書須列明召開大會的目的，由請求方簽署，並送至本公司的註冊辦事處。股東召開股東特別大會時須遵守公司條例第580至583條所列明的要求及程序。

## 於股東大會上提出要求及將股東查詢轉達董事會的程序

股東可於任何時間以書面形式向本公司提出其要求、計劃、查詢及想法，信件抬頭請註明董事會主席或公司秘書，其聯絡地址為：

中國上海張江高科技園區哈雷路288號，郵編：201203  
電話：(86) 21 38829909  
傳真：(86) 21 50809999  
電子郵件：IR@hhgrace.com

## 以投票方式表決

根據上市規則第13.39(4)條，股東於股東大會上的任何表決均須以投票方式進行。

## 風險管理和內部監控

### 風險管理及內部監控目標

#### 風險管理目標

在合規層面上，本公司依據香港聯交所的《公司管治守則》執行，確保適時符合有關規定。

在營運層面上，本公司管理層深知公司未來發展過程中所面臨的風險。因此，本公司的風險管理目標是要識別、評估這些風險，並採取降低、轉移、規避或接受等風險應對策略管理這些風險。本公司持續開展風險監控體系建設，搭建風險管理險監平台，明確風險管理機制，完善風險地圖，實行年度風險評估，形成滿足該守則監管要求的，符合公司實際情況的簡潔、科學、務實、高效的風險管控模式。

# 企業管治報告

## 內部控制體系目標

本公司內部控制體系充分吸收COSO（反虛假財務報告委員會的發起人組織委員會）的風險管理框架要求和香港會計師公會關於風險管理的指南，兼顧本公司實際情況和業務特點，將公司風險地圖的三級風險細化下沉到流程層面，形成風險導向的內部控制評價體系，目標是評價內部監控系統的有效性和適用性，為確保本公司經營活動的有效性、其財務報告的可靠性和法律法規的遵循性提供合理保證。

## 風險管理及內部監控體系

為保障風險管理工作有效開展並形成長效機制，本公司已建立風險管理「三道防線」的監控體系。它包含下列多個不同層面的角色和責任：

<b>第一道防線</b>	<b>業務部門</b>
	<ul style="list-style-type: none"><li>• 建立與維護本部門風險管理的各項機制；</li><li>• 於日常工作中持續收集風險原始信息；</li><li>• 協助風險管理條線開展風險管理工作，包括提供必要的資料與樣本，確定與本部門相關的重大風險，並確定重大風險應對措施；</li></ul>
<b>第二道防線</b>	<b>風險管理條線</b>
	<ul style="list-style-type: none"><li>• 制定／修訂公司風險管理各項制度和規定，提交公司經營管理層與審核委員會審議；</li><li>• 設定／更新通用的風險管理語言，包括風險管理過程中的各項名詞、術語，並向風險管理相關部門及時宣導和貫徹；</li><li>• 每年基於風險評估結果，界定重大風險應對責任主體，組織並指導相關部門制定重大風險應對方案，並對方案的實施進行跟踪；</li></ul>
<b>第三道防線</b>	<b>內部審計條線</b>
	<ul style="list-style-type: none"><li>• 對各業務部門和風險管理條線的風險管理工作開展情況進行獨立的監督檢查，評價公司風險管理機制是否有效落實；</li><li>• 對於審計過程中的發現點，督促相關部門或機構進行整改，並持續跟踪整改情況；</li><li>• 向公司審核委員會匯報各項審計結果。</li></ul>

## 風險管理及內部監控聲明

董事會已指派內部審計部門執行內部審計職能，並充分保證其權威性及獨立性。內部審計師已根據經批准的檢查範圍及按企業管制守則內守則條文C.2條款規定，每半年對本公司風險管理及內部監控制度的有效程度進行檢查，並無出現重大缺失。

根據內部審計部門的工作成果，本公司董事會認為，本公司的風險管理及內部監控系統令人信任且有效地運作。但我們也必須承認，公司的風險管理和內部監控架構旨在管理、而非完全消除影響本公司達致業務目標能力的風險，僅可對重大錯誤的陳述或損失提供合理而非絕對的保證。

## 一般資料

董事負責編製本公司每個財政期間的財務報表，使這些財務報表能真實和公平地反映本公司的業務狀況，並符合法定要求及適用會計準則。在編製截至二零一八年十二月三十一日止年度的財務報表時，董事已挑選並貫徹地應用適當的會計政策、作出審慎、公平及合理的判斷及估計，並按持續經營基準編製財務報表。

核數師的財政申報責任聲明載於本年度報告中第167及174頁的獨立核數師報告內。

代表董事會  
張素心先生  
主席



# 董事會報告

董事會謹提呈本集團二零一八年度報告（二零一八年一月一日至二零一八年十二月三十一日），及經審核的財務報表（「財務報表」）。

## 主要業務

截至二零一八年底，華虹半導體仍然是一家200mm純晶圓代工企業。正如前文「致股東的信」所提到的，並將在「董事會報告」中詳細說明，本公司預期在二零一九年第四季度開始交付300mm晶圓給客戶。華虹半導體主要基於自有的半導體差異化技術為客戶提供晶圓製造服務。其主要子公司的業務說明請參考財務報表附註1（第183和184頁）。

## 業務回顧

### 營收分析

華虹半導體二零一八年度的營業收入為9.303億美元，再創公司歷史營收新高。與二零一七年相比，二零一八年本公司營收同比增長15.1%。二零一八年度是本公司毛利保持增長的第七年，且毛利率連續四年保持在30%以上。據美國著名市場研究機構IHS公司預測，在全球純晶圓代工行業前十大企業中，本公司是唯一一家從二零一六年至二零一八年連續三年保持10%以上增速的公司。

本公司二零一八年度優秀的業績來源於全球消費電子、工業電子和汽車電子等半導體市場對本公司差異化技術需求的持續增長、技術的創新、技術組合的持續優化以及公司產能的擴充。

	按服務劃分營業收入					
	二零一八年 千美元	二零一八年 %	二零一七年 千美元	二零一七年 %	同比變化 千美元	同比變化 %
半導體晶圓	911,435	98.0%	790,680	97.8%	120,755	15.3%
其他	18,833	2.0%	17,468	2.2%	1,365	7.8%
合計	930,268	100.0%	808,148	100.0%	122,120	15.1%

- 二零一八年，公司98.0%的營業收入來自半導體晶圓的銷售收入。

	按客戶類型劃分營業收入					
	二零一八年 千美元	二零一八年 %	二零一七年 千美元	二零一七年 %	同比變化 千美元	同比變化 %
系統公司和無廠芯片設計公司	721,334	77.5%	622,027	77.0%	99,307	16.0%
整合器件製造商	208,934	22.5%	186,121	23.0%	22,813	12.3%
合計	930,268	100.0%	808,148	100.0%	122,120	15.1%

- 二零一八年來自無廠芯片設計公司和系統公司的營業收入佔比為77.5%，與二零一七年相比，同比增長16.0%。營收增長主要來自中國區的無廠芯片設計公司客戶群。
- 來自整合器件製造商的營業收入佔比為22.5%，與二零一七年相比，同比增長12.3%。

## 按區域劃分營業收入

	二零一八年 千美元	二零一八年 %	二零一七年 千美元	二零一七年 %	同比變化 千美元	同比變化 %
中國區	<b>525,795</b>	<b>56.4%</b>	446,699	55.2%	79,096	17.7%
美國區	<b>161,428</b>	<b>17.4%</b>	141,356	17.5%	20,072	14.2%
亞洲其他區域	<b>117,963</b>	<b>12.7%</b>	95,853	11.9%	22,110	23.1%
歐洲區	<b>70,660</b>	<b>7.6%</b>	64,792	8.0%	5,868	9.1%
日本區	<b>54,422</b>	<b>5.9%</b>	59,448	7.4%	(5,026)	(8.5)%
合計	<b>930,268</b>	<b>100.0%</b>	808,148	100.0%	122,120	15.1%

- 二零一八年中國區仍然是公司營收最大的市場，與二零一七年相比，營收同比增加17.7%。  
營收增長主要來自分立器件、智能卡芯片和MCU等。
- 來自美國區的營收與二零一七年相比，同比增長14.2%，營收增長主要來自超級結MOSFET、通用型MOSFET和MCU等。
- 亞洲其他區域的營收增長最快，與二零一七年相比，同比增長23.1%，營收增長主要來自MCU、通用型MOSFET和超級結MOSFET等。
- 歐洲區營收與二零一七年相比同比增長9.1%，營收增長主要來自通用型MOSFET等。
- 日本區營收下滑8.5%，主要是因為MCU業務減少所致。

## 按技術類型劃分營業收入

	二零一八年 千美元	二零一八年 %	二零一七年 千美元	二零一七年 %	同比變化 千美元	同比變化 %
嵌入式非易失性存儲器	<b>361,341</b>	<b>38.7%</b>	312,040	38.6%	49,301	15.8%
分立器件	<b>310,488</b>	<b>33.4%</b>	220,923	27.3%	89,565	40.5%
模擬與電源管理	<b>142,131</b>	<b>15.3%</b>	150,791	18.7%	(8,660)	(5.7)%
邏輯與射頻	<b>94,549</b>	<b>10.2%</b>	95,905	11.9%	(1,356)	(1.4)%
獨立式非易失性存儲器	<b>21,261</b>	<b>2.3%</b>	26,515	3.3%	(5,254)	(19.8)%
其他	<b>498</b>	<b>0.1%</b>	1,974	0.2%	(1,476)	(74.8)%
合計	<b>930,268</b>	<b>100.0%</b>	808,148	100.0%	122,120	15.1%

- 二零一八年嵌入式非易失性存儲器技術是公司的第一大營收來源，與二零一七年相比，營收同比增長15.8%，營收增長主要來自金融卡芯片和MCU等。
- 分立器件營收迅猛增長40.5%，營收增長主要來自通用型MOSFET、超級結MOSFET和IGBT等。
- 模擬和電源管理營收略微下滑，主要是產能調整所致。

## 董事會報告

### 按工藝節點劃分營業收入

	二零一八年 千美元	二零一八年 %	二零一七年 千美元	二零一七年 %	同比變化 千美元	同比變化 %
≤0.13μm	<b>331,521</b>	<b>35.6%</b>	270,650	33.5%	60,871	22.5%
0.15μm & 0.18μm	<b>131,300</b>	<b>14.1%</b>	139,226	17.2%	(7,926)	(5.7)%
0.25μm	<b>15,482</b>	<b>1.7%</b>	16,802	2.1%	(1,320)	(7.9)%
≥0.35μm	<b>451,965</b>	<b>48.6%</b>	381,470	47.2%	70,495	18.5%
合計	<b>930,268</b>	<b>100.0%</b>	808,148	100.0%	122,120	15.1%

- 二零一八年來自0.13微米及以下工藝節點的營收高速增長22.5%，營收佔比增長到35.6%。營收增長主要來自智能卡芯片和MCU等。
- 來自0.35微米及以上節點的營收增速位居第二，為18.5%，營收佔比增長到48.6%。營收增長主要來自分立器件等。
- 0.15微米與0.18微米節點營收下降主要因為公司產能調整以及供應鏈庫存調節所致。

### 按終端市場劃分營業收入

	二零一八年 千美元	二零一八年 %	二零一七年 千美元	二零一七年 %	同比變化 千美元	同比變化 %
消費電子	<b>598,031</b>	<b>64.3%</b>	558,168	69.0%	39,863	7.1%
工業和汽車電子	<b>187,930</b>	<b>20.2%</b>	105,164	13.0%	82,766	78.7%
通信	<b>99,777</b>	<b>10.7%</b>	105,586	13.1%	(5,809)	(5.5)%
計算機	<b>44,530</b>	<b>4.8%</b>	39,230	4.9%	5,300	13.5%
合計	<b>930,268</b>	<b>100.0%</b>	808,148	100.0%	122,120	15.1%

- 二零一八年公司的營業收入中最大的是消費電子市場，與二零一七年相比，同比增長7.1%，其營收主要來自分立器件和MCU等的業務增長。
- 來自工業和汽車電子市場的營收增長迅猛，增長78.7%，其營收主要來自智能卡芯片、分立器件和MCU等的業務增長。
- 計算機市場營收同比增長13.5%，營收佔比4.8%。
- 通信市場營收佔比為10.7%，主要來自智能手機相關的芯片。

晶圓廠 (千片晶圓每月)	產能及產能利用率		
	二零一八年	二零一七年	同比變化
華虹一廠	65	63	2
華虹二廠	59	57	2
華虹三廠	50	48	2
晶圓製造月產能合計	174	168	6
產能利用率	99.2%	98.1%	1.1%

- 高達99.2%的產能利用率來源於旺盛的市場需求。

千片晶圓	付運晶圓		
	二零一八年	二零一七年	同比變化
付運晶圓	2,016	1,869	7.9%

- 二零一八年公司付運晶圓同比增長7.9%，是公司營收增長的重要原因。

## 研發收入

華虹半導體致力於差異化技術的研發、創新和優化，主要聚焦於嵌入式非易失性存儲器(Embedded non-volatile memory)、分立器件(Discrete)、模擬和電源管理(Analog and power management)、邏輯(Logic)和射頻(Radio Frequency, RF)解決方案等差異化技術，持續為客戶提供成本效益高的工藝技術和服務。二零一八年，華虹半導體在不斷創新及研發方面的投入成果顯著。

嵌入式非易失性存儲器相關的技術平台是華虹半導體二零一八年第一大營收來源，主要包括智能卡芯片和微控制器兩大類應用。在智能卡芯片方面，90納米嵌入式非易失性存儲器技術是國內新一代銀行IC卡技術，IP尺寸大幅縮小，極大地提高了客戶產品的競爭力，是嵌入式非易失性存儲器平台營收的主要增長點，也是未來幾年營收的主力點。本公司來自微控制器業務的利潤豐厚，涵蓋了eFlash、OTP、MTP和EEPROM等主流非易失性存儲器技術。

二零一八年，0.11微米嵌入式閃存平台的MCU新產品導入超過100個，是嵌入式非易失性存儲器平台營收的另一個主要增長點。另外我們也進一步完善了95納米5V MCU工藝平台，優化了EEPROM、eFlash和OTP等IP，預期將成為未來營收的增長點。

華虹半導體分立器件平台主要包括通用型MOSFET、深溝槽型超級結MOSFET(DT-SJNFET)和IGBT等主流技術，是二零一八年營收增幅最大的技術類型，營收同比增長41%，出貨量同比增長16%。其中，中高壓分立器件技術營收佔比超過50%，與2016年相比，營收增長超過100%，是公司營收和研發的重點。

## 董事會報告

二零一八年，華虹半導體分立器件技術在汽車電子市場屢有斬獲，通用MOSFET進入汽車車身穩定系統(Electronic Stability Program, ESP)，IGBT已進入電動汽車的逆變器，已成為汽車電子功率器件可靠的平台。二零一八年繼續研發超級結MOSFET 3代、逆導型IGBT、超級結IGBT等新一代分立器件技術，這些將成為未來營收優化的增長點。

模擬和電源管理是華虹半導體營收貢獻第三大的技術類型，電壓範圍從5伏特至700伏特，工藝節點覆蓋0.5微米至90納米。緊貼電源管理技術高集成度和智能化的趨勢，並依託於自有0.35微米BCD技術的基礎上，華虹半導體規劃了0.18微米、0.11微米和90納米BCD技術，並投入了大量的研發資源。

二零一八年成功發佈了第二代0.18微米BCD技術，目前該平台已完成電機驅動、快充、DC-DC轉換器等多種芯片的驗證，並已量產。針對汽車電子市場，完成了0.18微米BCD工藝和部份經過甄選的IP的汽車級驗證。未來我們將全面驗證多種IP，預期為公司貢獻高質量的營收。

為加快實現華虹無錫公司的順利投產、風險量產和規模量產，華虹半導體在二零一八年就啟動了55納米邏輯工藝及相關IP的研發，預計二零一九年下半年開始導入客戶。同時開始研發嵌入式閃存工藝的存儲單元，功能驗證已通過，為未來55納米嵌入式閃存技術量產打下堅實的基礎。華虹無錫既是本公司產能的升級，亦豐富了現有技術組合，延續了華虹半導體在差異化技術的成功，從而更好地服務國內外半導體芯片設計公司，成為本公司發展的新階段和新的里程碑。

### 新技術

在上述主要平台技術之外，華虹半導體仍不斷拓展新的差異化技術領域。隨着智能手機需要支持的協議（移動通信：2G到5G；無線通信：WLAN、藍牙(Bluetooth)；全球導航衛星系統：GPS、北斗等等）越來越多，整個射頻市場價值不斷增加，產業持續增長。

二零一八年研發了0.13微米射頻SOI技術，面向射頻開關、天線調諧器、低噪聲放大器與整合模塊等射頻前端(RF FEM)，達到國內領先水平，已導入客戶驗證，預計二零一九年量產。

## 展望二零一九年

### 經濟

半導體產業發展趨勢基本符合世界經濟發展的脈絡。國際貨幣基金組織於二零一九年一月發佈的《世界經濟展望》預測，雖然全球經濟面臨諸多不確定性，但本年度全球經濟基本平穩，增速為3.5%左右，其中中國經濟增速將保持在6%以上。據多家市場研究機構預測，全球半導體產業二零一七年至二零二二年年複合增長率超過6%，二零一九年全球半導體產業增速高於同期世界經濟的增速。

由於更多終端應用衍生的需求、更多集成電路設計公司的蓬勃發展與IDM公司持續委託晶圓代工的趨勢，全球晶圓代工產業預期將持續健康的增長，增速高於同期全球半導體產業的增速。

### 核心競爭力

差異化技術是華虹半導體的核心競爭力，也是華虹半導體長期和堅定不移的研發方向。二零一九年華虹半導體繼續聚焦200mm差異化技術的研發和優化，將進一步優化現有95納米和90納米等嵌入式非易失性存儲器技術，提供更小的存儲器單元、IP模塊與更精簡的工藝，面向高密度智能卡與高端微控制器市場；研發新一代IGBT和超級結MOSFET等高電壓分立器件技術，除了追求功率器件所需的更高功率密度和更低損耗，更精益求精地開發片上集成傳感器的智能化IGBT工藝技術與更高可靠性的新型散熱IGBT技術。

完善電源管理技術，優化0.18微米BCD技術滿足汽車電子規格要求，整合0.11微米嵌入式閃存與BCD技術，以提供智能化電源管理芯片解決方案，並開發90納米BCD技術，達成世界一流技術水平；進一步優化0.13微米RF-SOI射頻技術，滿足全球手機射頻前端(RF Front End Module, RF FEM)市場需求等等。在做精做強現有的200mm技術之外，由於全球分立器件需求旺盛，公司計劃未來兩年擴充每月約2萬片200mm晶圓產能，進一步滿足客戶和市場需求。

### 展望二零一九年

我們將在機遇出現時保持夢想，並在挑戰面前堅持方針。本集團將以其創紀錄的成功為基礎，取得更顯著的成果。我們將不斷追求卓越，盡快並盡可能提前，以近乎完美和滿意的方式完成華虹無錫項目，以輻射和推動當地產業的發展，創造經濟協同效應。

我們將繼續專注於科技研發，並在差異化創新中樹立榜樣。深化戰略合作、全力支持產業生態建設、促進全球集成電路製造供應鏈的協同共贏。

# 董事會報告

## 管理層討論及分析

### 財務表現

	二零一八年 千美元	二零一七年 千美元	變動
銷售收入	<b>930,268</b>	808,148	15.1%
銷售成本	<b>(619,114)</b>	(540,971)	14.4%
毛利	<b>311,154</b>	267,177	16.5%
其他收入及收益	<b>43,613</b>	24,394	78.8%
投資物業的公允價值收益	<b>247</b>	89	177.5%
銷售及分銷費用	<b>(7,771)</b>	(7,232)	7.5%
管理費用	<b>(122,323)</b>	(108,673)	12.6%
其他費用	<b>(11,106)</b>	(10,712)	3.7%
財務費用	<b>(2,203)</b>	(2,178)	1.1%
分佔一家聯營公司溢利	<b>9,444</b>	9,622	(1.8)%
稅前溢利	<b>221,055</b>	172,487	28.2%
所得稅開支	<b>(35,447)</b>	(27,225)	30.2%
年內溢利	<b>185,608</b>	145,262	27.8%
以下各項應佔：			
母公司擁有人	<b>183,158</b>	145,262	26.1%
非控股權益	<b>2,450</b>	–	100.0%

#### 就二零一八年同比變動超過5%的項目的闡釋

##### 銷售收入

銷售收入達9.303億美元，再創歷史新高，較二零一七年增長15.1%，主要由於通用MOSFET、銀行卡芯片、MCU、超級結MOSFET及IGBT產品的需求增加。

##### 銷售成本

銷售成本為6.191億美元，較二零一七年上升14.4%，主要由於晶圓銷售量上升以及折舊成本及人員成本增加所致。

##### 毛利

毛利為3.112億美元，較二零一七年上升16.5%，主要得益於產能利用率持續維持在高水平及平均售價提升，部份被折舊成本及人員成本增加所抵銷。

##### 其他收入及收益

其他收入及收益為4,360萬美元，較二零一七年上升78.8%，主要由於按公允價值計入損益的金融資產取得公允價值變動收益及利息收入增加。

##### 投資物業的公允價值收益

投資物業的公允價值收益指投資物業估值的收益。與二零一七年相比，我們的投資物業在二零一八年的評估價值較為穩定，其公允價值收益相對較小。

##### 銷售及分銷費用

銷售及分銷費用為780萬美元，較二零一七年上升7.5%，主要由於人工費用增加所致。

## 管理費用

管理費用為1.223億美元，較二零一七年上升12.6%，主要由於人工費用、專業服務費及設備減值準備增加所致。

## 所得稅開支

所得稅開支為3,540萬美元，較二零一七年上升30.2%，主要由於應課稅溢利增加所致。

## 年內溢利

在上述因素的累計影響下，年內溢利由二零一七年的1.453億美元上升27.8%至1.856億美元。淨利率由18.0%上升至20.0%。

## 財務狀況

	二零一八年 十二月三十一日 千美元	二零一七年 十二月三十一日 千美元	變動
<b>非流動資產</b>			
物業、廠房及設備	773,180	733,462	5.4%
投資物業	171,225	179,586	(4.7)%
於聯營公司的投資	64,005	57,577	11.2%
可供出售投資	—	215,864	(100.0)%
指定按公允價值計入其他全面收益的股權投資	208,357	—	100.0%
其他非流動資產	87,432	38,385	127.8%
<b>非流動資產總額</b>	<b>1,304,199</b>	1,224,874	6.5%
<b>流動資產</b>			
存貨	129,629	115,578	12.2%
貿易應收款項及應收票據	176,797	112,372	57.3%
應收關聯方款項	10,800	46,988	(77.0)%
預付款項、其他應收款項及其他資產	12,479	10,074	23.9%
按公允價值計入損益的金融資產	667,033	—	100.0%
已凍結及定期存款	337	193,530	(99.8)%
現金及現金等價物	777,000	374,890	107.3%
<b>流動資產總額</b>	<b>1,774,075</b>	853,432	107.9%
<b>流動負債</b>			
貿易應付款項	79,470	68,124	16.7%
應付關聯方款項	5,838	10,885	(46.4)%
其他流動負債	239,890	197,079	21.7%
計息銀行借款	4,371	60,751	(92.8)%
<b>流動負債總額</b>	<b>329,569</b>	336,839	(2.2)%
<b>流動資產淨額</b>	<b>1,444,506</b>	516,593	179.6%
<b>非流動負債</b>			
計息銀行借款	26,227	32,139	(18.4)%
遞延稅項負債	18,146	14,123	28.5%
<b>非流動負債總額</b>	<b>44,373</b>	46,262	(4.1)%
<b>淨資產</b>	<b>2,704,332</b>	1,695,205	59.5%



# 董事會報告

就二零一七年十二月三十一日至二零一八年十二月三十一日同比變動超過5%的項目的闡釋

## 物業、廠房及設備

物業、廠房及設備由7.335億美元增至7.732億美元，主要由於建設300mm項目所致。

## 於聯營公司的投資

於聯營公司的投資由5,760萬美元增至6,400萬美元，主要由於分佔該聯營公司於二零一八年的溢利所致。

## 可供出售投資

香港會計準則第39號項下的可供出售投資已於二零一八年一月一日後轉為香港財務報告準則第9號項下指定為按公允價值計入其他全面收益的股權投資。

## 其他非流動資產

其他非流動資產由3,840萬美元增至8,740萬美元，主要由於預付土地租賃款項及技術開發協議的預付款項增加所致。

## 存貨

存貨由1.156億美元增至1.296億美元，主要由於客戶對晶圓的需求增加所致。

## 貿易應收款項及應收票據

貿易應收款項及應收票據由1.124億美元增加至1.768億美元，主要由於銷售收入增加及來自於應收關聯方款項的重分類。

## 應收關聯方款項

應收關聯方款項由4,700萬美元減少至1,080萬美元，主要由於向貿易應收款項及應收票據所作的重分類。

## 預付款項、其他應收款項及其他資產

預付款項、其他應收款項及其他資產由1,010萬美元上升至1,250萬美元，主要由於待抵扣進項稅的增加。

## 按公允價值計入損益的金融資產

按公允價值計入損益的金融資產系從銀行購買的理財產品，包含保本的結構性存款和理財產品，金額為6.67億美元，2017年無此項分類。

## 已凍結及定期存款

已凍結及定期存款由1.935億美元下降至30萬美元，主要由於收回定期存款投資。

### 現金及現金等價物

現金及現金等價物由3.749億美元增加至7.770億美元，主要由於(i)出售按公允價值計入損益的金融資產12.794億美元；(ii)華虹無錫收到資本金5.650億美元；(iii)發行股份收到的投資款4.040億美元；(iv)經營活動所得2.744億美元；(v)收回定期存款投資1.913億美元；及(vi)利息收入1,030萬美元。該款項被(i)按公允價值計入損益的金融資產投資支出19.596億美元；(ii)資本投資2.386億美元；(iii)償還銀行借款6,060萬美元；(iv)支付股息4,110萬美元；及(v)利息開支230萬美元所抵銷。此外，由於人民幣貶值所致的調減為2,010萬美元。

### 貿易應付款項

貿易應付款項由6,810萬美元增加至7,950萬美元，主要由於來自於應付關聯方款項的重分類。

### 應付關聯方款項

應付關聯方款項由1,090萬美元下降至580萬美元，主要由於向貿易應付款項所作的重分類。

### 其他流動負債

其他流動負債由1.971億美元增加至2.399億美元，主要由於資本開支應付款項增加所致。

### 計息銀行借款

計息銀行借款總額由9,290萬美元減少至3,060萬美元，主要由於償還銀行借款所致。

### 遞延稅項負債

遞延稅項負債主要包含預估分派股息之代扣代繳稅金，其金額由1,410萬美元上升至1,810萬美元，主要由於二零一八年計提代扣代繳稅金所致，部份被(i)轉回以前年度計提的代扣代繳稅金及(ii)二零一七年股息所繳納之稅項抵銷。

# 董事會報告

## 現金流量

	二零一八年 千美元	二零一七年 千美元	變動
經營活動所得現金流量淨額	<b>274,400</b>	258,300	6.2%
投資活動所用現金流量淨額	<b>(717,239)</b>	(197,003)	264.1%
融資活動所得／(所用) 現金流量淨額	<b>865,010</b>	(41,096)	(2,204.9)%
<b>現金及現金等價物增加淨額</b>	<b>422,171</b>	20,201	1,989.9%
年初現金及現金等價物	<b>374,890</b>	341,255	9.9%
外匯匯率變動影響，淨額	<b>(20,061)</b>	13,434	(249.3)%
<b>年末現金及現金等價物</b>	<b>777,000</b>	374,890	107.3%

### 經營活動所得現金流量淨額

經營活動所得現金流量淨額再創新高，由二零一七年增加6.2%至2.744億美元，主要由於銷售收入增加所致。

### 投資活動所用現金流量淨額

投資活動所用現金流量淨額為7.172億美元，主要用於(i)按公允價值計入損益的金融資產投資19.596億美元；及(ii)資本投資2.386億美元，部份被(i)出售按公允價值計入損益的金融資產12.794億美元；(ii)收回定期存款投資1.913億美元；及(iii)利息收入1,030萬美元所抵銷。

### 融資活動所得現金流量淨額

融資活動所得現金流量淨額為8.650億美元，包括(i)華虹無錫收到資本金5.650億美元；(ii)發行股份收到的投資款4.040億美元，部份被(i)償還銀行借款6,060萬美元；(ii)支付股息4,110萬美元；及(iii)利息開支230萬美元所抵銷。

### 現金及現金等價物增加淨額

在上述因素的累計影響下，現金及現金等價物由截至二零一七年十二月三十一日的3.749億美元增加至截至二零一八年十二月三十一日的7.770億美元。

## 財務風險

### 外幣風險

我們面臨外匯風險。該等風險主要產生自華虹宏力以美元而非以其功能貨幣－人民幣進行的買賣。截至二零一八年十二月三十一日，倘美元對人民幣升值或貶值5%，而其他變量維持不變，我們的年內稅前溢利將分別增加或減少約2,680萬美元。

### 信用風險

我們僅與獲認可及信譽良好的第三方及關聯方交易。根據我們的政策，所有擬按信用方式交易的客戶均須通過信用核實程序。此外，由於持續對應收款項結餘進行監控，故我們的壞賬風險並不重大。

我們的金融資產中面臨最大信用風險的項目為：綜合財務狀況表內現金及現金等價物、貿易應收款項及應收票據及計入預付款項、按金及其他應收款項、應收關聯方款項以及已凍結及定期存款等金融資產的賬面值。我們並無其他存在重大信用風險的金融資產。

### 流動資金風險

我們的政策為定期監控現時及預期流動資金需要，以確保維持充裕的現金儲備及從主要金融機構獲得足夠的融資承擔額度，以應對短期及長期流動資金需要。

### 資本管理

我們資本管理的首要目標為維護持續經營能力及維持良好的資本比率，以支持我們的業務及實現股東價值最大化。

我們根據經濟狀況的變動管理及調整資本架構。為此，我們或會調整派付予股東的股息、向股東返還資本或發行新股。我們不受任何外部施加的資本要求規限。於年內，本集團管理資本的目標、政策或程序概無任何變動。

# 董事會報告

## 資本負債比率

資本負債比率的詳情見財務報表附註36。

## 業績

本集團截至二零一八年十二月三十一日止年度的業績及於該日的事務狀況載於本報告第175至295頁的財務報表。

## 末期股息

董事建議派付截至二零一八年十二月三十一日止年度的末期股息每股31港仙。待股東於應屆股東週年大會上批准後，擬派末期股息將於二零一九年六月二十六日（星期三）派付予於二零一九年五月十七日（星期五）名列本公司股東名冊的股東。

## 股息政策

本公司決定自二零一五年度起，在本集團實現利潤、經營環境趨勢穩定且無重大投資行為的情況下，於本公司股東同意及合乎法例要求下，將對股東派發股息。計劃連續三年所派股息的平均額將不低於該三年平均可分配淨利潤的30%；其餘部份將用於本集團發展與經營。

有關股息政策仍會不時檢討，不保證會在任何指定期間派付任何特定金額的股息。如董事會建議派付股息，股息形式及金額將視乎董事評估不時影響本集團的因素而定。

## 銀行貸款及其他借貸

本集團的銀行貸款及其他借貸於二零一八年十二月三十一日的詳情載於財務報表附註25。

## 財務摘要

本集團於過往五個財政年度的已公佈業績及資產以及負債摘要載於第296頁。本摘要並不構成經審核財務報表之一部份。

## 物業、廠房及設備

本集團旗下物業、廠房及設備和投資物業於截至二零一八年十二月三十一日止年度的添置及其他變動詳情載於財務報表附註13及14。

此外，投資物業詳情如下：

位置	用途類別	租期	本集團權益	建築樓面面積 (平方米)
中國 上海 浦東新區 張江高科技園區 郭守敬路818號 9幢樓宇的一部份	工業用途	按於二零一五年三月八日屆滿的土地使用權持有	100%	91,563.11

## 股本及購股權計劃

本公司截至二零一八年十二月三十一日止年度的股本變動詳情載於財務報表附註28。由二零一四年三月三日起按新公司條例（第622章）附表11第37條，這些變動包括自動將股份溢價之金額列入股本中，為過渡至無面值股份制度的一部份。

購股權計劃（「購股權計劃」）已經於二零一五年九月一日舉行的本公司股東特別大會批准。購股權計劃的概要如下：

- 購股權計劃的目的：
- 購股權計劃的目的是吸引、挽留參與者（定義見下文）及對其提供獎勵，以讓其有機會獲得本公司股份及將其利益與本公司的經營業績及股價表現密切相連，旨在提升本公司價值。
- 參與者：
- 購股權計劃參與者（「參與者」）包括(1)本集團任何成員公司的現時執行及非執行董事；或(2)對本集團任何成員公司的經營業績及可持續發展有直接影響的高級管理層以及主要管理及技術人員之人士（視乎購股權計劃列明的任何限制及約束而定），惟不包括任何獨立非執行董事。

## 董事會報告

各參與者的最高配額：	倘在任何12個月期間內所配發及因授出及將予授出的全部購股權（「購股權」，包括已行權、已註銷及尚未行權的購股權）獲行使而向參與者配發的股份總數超過本公司當時已發行股本的1%，則不得向該參與者進一步授出購股權。經股東於股東大會上批准，可在任何12個月期間內向任何參與者授予超出1%個人限額的期權。在股票授予日（定義見購股權計劃），任何持有本公司5%以上附有表決權股份的人員，未經股東於股東大會上批准，不得被授予購股權。
購股權可予行使前須持有的最短期間（如有）：	2年（除非購股權授予通知另有規定）。
申請或接納購股權所應付的款項及須予付款或催繳或就此須支付貸款的期間：	1.00港元乃由各被授予人自建議授出日期起計28日內支付，作為購股權授出的代價。
購股權計劃的餘下期限：	購股權計劃有效期間為採納日期起至二零二二年九月一日止的七(7)年。

於本報告日期，購股權計劃項下可供發行的股份總數為52,419,361股，占已發行股份總數的約4.1%。

### 根據購股權計劃授出的購股權

於二零一五年九月四日，本公司根據購股權計劃向若干個人授出30,250,000份購股權（「二零一五年購股權」），以認購合共30,250,000股本公司普通股。二零一五年購股權的詳情如下：

授出日期：	二零一五年九月四日
所授出購股權的行使價：	6.912港元
所授出購股權的數目：	30,250,000份（佔本公司截至二零一八年十二月三十一日止已發行股份的2.36%）。
購股權的有效期間：	自二零一五年九月四日起至二零二二年九月三日（七(7)年）止（包括首尾兩日）。
購股權的歸屬期間：	期權的三分之一應分別於二零一七年九月四日、二零一八年九月四日及二零一九年九月四日歸屬。

每股行使價6.912港元較以下較高者溢價0%：(i)於購股權授予日期聯交所每日報價表所報每股收市價6.87港元；及(ii)於緊接授予日期前五個交易日聯交所每日報價表所報本公司普通股的平均每股收市價6.912港元。

於二零一八年十二月二十四日，本公司根據購股權計劃向若干個人授出34,500,000份購股權（「二零一八年購股權」），以認購合共34,500,000股本公司普通股。二零一八年購股權的詳情如下：

授出日期：	二零一八年十二月二十四日
所授出購股權的行使價：	15.056港元
所授出購股權的數目：	34,500,000份
購股權的有效期間：	自二零一八年十二月二十四日起至二零二五年十二月二十三日（七(7)年）止（包括首尾兩日）
購股權的歸屬期間：	就本公司副總裁（及董事）及以上級別的僱員而言，二零一八年購股權的四分之一應分別於二零二零年十二月二十四日、二零二一年十二月二十四日、二零二二年十二月二十四日及二零二三年十二月二十四日歸屬；就本公司其他僱員而言，二零一八年購股權的三分之一應分別於二零二零年十二月二十四日、二零二一年十二月二十四日及二零二二年十二月二十四日歸屬

每股行使價15.056港元為以下各項的較高者：(i)於購股權授予日期聯交所每日報價表所報每股收市價14.440港元；及(ii)於緊接授予日期前五個交易日聯交所每日報價表所報平均每股收市價15.056港元；及(iii)股份的面值。

於二零一五年購股權及二零一八年購股權中，分別988,000份及680,000份購股權已授予本公司董事，惟須待彼等接納。



# 董事會報告

購股權於截至二零一八年十二月三十一日止年度的變動詳情如下：

參與者之 姓名或類別	購股權數目									購股權之 行使期	購股權之 行使價	
	於二零一五年 九月四日授出	於二零一八年 十二月二十四日 授出	於二零一五年 註銷	於二零一六年 註銷	於二零一七年 註銷	期內行使	期內註銷	期內失效	於二零一八年 十二月三十一日			
<b>董事</b>												
王煜先生	869,000		-	-	-	200,000	-	-	-	669,000	二零一七年九月四日至 二零一八年九月三日	6.912港元
		600,000					-	-	-	600,000	二零一八年十二月二十 四日至二零一五年十 二月二十三日	15.056港元
森田隆之先生	119,000		-	-	-					119,000	二零一七年九月四日至 二零一八年九月三日	6.912港元
		80,000								80,000	二零一八年十二月二十 四日至二零一五年十 二月二十三日	15.056港元
<b>其他僱員</b>												
	29,262,000		(130,000)	(1,458,000)	(1,188,399)	3,782,639	(753,995)	(600)		18,084,362	二零一七年九月四日至 二零一八年九月三日	6.912港元
		33,820,000								33,820,000	二零一八年十二月二十 四日至二零一五年十 二月二十三日	15.056港元
<b>總數</b>	<b>30,250,000</b>	<b>34,500,000</b>	<b>(130,000)</b>	<b>(1,458,000)</b>	<b>(1,188,399)</b>	<b>3,982,639</b>	<b>(753,995)</b>	<b>(600)</b>		<b>53,372,362</b>		

\* 授出的以權益結算購股權之公平值為21,681,000美元，乃於授出日期採用二項式模式估計。購股權的價值受二項式模式及多項主觀及不確定假設的限制。有關假設變動可對購股權的價值產生重大影響。

除上文披露者外，本公司於截至二零一八年十二月三十一日止年度並未採納任何其他購股權計劃。

## 儲備

本集團截至二零一八年十二月三十一日止年度的儲備變動詳情載於本報告第179至180頁之綜合權益變動表。

## 持續關連交易及關連交易

### 持續關連交易

本集團已於二零一四年十月三日發佈的招股書中披露有關與華虹摯芯、矽睿科技、儀電集團、上海華力、華虹置業及上海華錦物業管理有限公司（華錦物業管理）之間的持續關連交易。具體交易詳情概要載於下表。本公司已申請並獲聯交所豁免（其中包括）就有關持續關連交易嚴格遵守公告及獨立股東批准之規定（視情況而定）。本集團持續關連交易以及二零一八年期間執行的其他一些持續性的關聯交易詳情如下：

單位：千美元

交易	交易日期	交易雙方	關連關係	交易	二零一八年 實際交易金額	二零一八年 建議年度上限
(1)	二零一八年 一月一日	華虹摯芯（買方） 本公司（賣方）	華虹摯芯為本公司控股股東華虹集團持有90.66%權益的子公司。	本公司（賣方）與華虹摯芯（買方）簽署的銷售協議，有關向華虹摯芯銷售集成電路及其他半導體產品。	4,996	12,600
(2)	二零一八年 一月一日	矽睿科技（買方） 本公司（賣方）	矽睿科技由本公司控股股東上海聯和持有36.36%權益，其中27.27%權益由上海聯和直接持有，9.09%權益則由本公司直接持有。	本公司（賣方）與矽睿科技（買方）簽署的銷售協議，有關向矽睿科技銷售集成電路及其他半導體產品。	1,607	7,200
(3)	二零一八年 一月一日	華虹摯芯（賣方） 本公司（買方）	華虹摯芯為本公司控股股東華虹集團持有90.66%權益的子公司。	華虹摯芯（賣方）與本公司（買方）簽署的採購協議，有關採購用於生產本集團半導體產品的原料。	651	725
(4)	二零一八年 一月一日	儀電集團 （代表其本身及其子公司）（賣方） 本公司（買方）	儀電集團為本公司控股股東。	儀電集團（賣方）（代表其本身及其子公司）與本公司（買方）簽署的採購協議，有關採購物品和服務。	2,391	2,800

## 董事會報告

交易	交易日期	交易雙方	關連關係	交易	二零一八年 實際交易金額	二零一八年 建議年度上限
(5)	二零一零年 二月二十五日 (連同日期為 二零一一年 六月十日及 二零一四年 七月二十五日的 補充協議)	上海華力(承租方)  本公司(出租方)	上海華力50.23%權益為本公司控股股東上海聯和持有。	上海華力(承租方)與本公司(出租方)簽署的租賃協議，有關本公司將位於中國上海浦東新區張江高科技園區13街坊2丘晶圓廠的物業出租予上海華力，供其設置300mm晶圓生產線。總出租建築面積為96,099.2平方米。	12,686	13,137
(6)	二零一七年 二月十五日	上海華力(承租方)  華虹宏力(出租方)	上海華力50.23%權益為本公司控股股東上海聯和持有。	上海華力(承租方)與華虹宏力(出租方)簽署的租賃協議，有關華虹宏力將總建築面積為820平方米的若干潔淨室租予上海華力及向其提供相關能源服務及材料。	762	5,076
(7)	二零一三年 一月十日	華虹置業(作為出租方)  本公司(作為承租方)	華虹置業為華虹科技發展的全資子公司，華虹科技發展由我們控股股東華虹集團持有50%並與其合併報表及由華虹NEC持有50%的公司。	華虹置業(作為出租人)與本公司(作為承租人)訂立的租賃協議，內容有關本公司向華虹置業租賃位於中國上海浦東新區錦綉路2777弄華虹創新園的宿舍物業(宿舍物業)以用作本公司僱員的員工宿舍。租賃總建築面積為17,412.87平方米。	1,670	1,941
(8)	二零一八年 一月一日	華錦物業管理 (作為物業管理公司)  本公司(作為承包商)	華錦物業管理為華虹科技發展的全資子公司，華虹科技發展由我們控股股東華虹集團持有50%並與其合併報表及由華虹NEC持有50%的公司。	華錦物業管理(作為物業管理公司)與本公司(作為承包商)訂立的物業管理協議，內容有關本集團委聘華錦物業管理就宿舍物業提供物業管理服務。	227	299

董事會（包括獨立非執行董事）已審閱以上持續關連交易，並確認所訂立之該等交易實則上於二零一八年持續進行：

- (i) 於本公司日常業務過程中進行；
- (ii) 按照一般商務條款進行，或如可供比較的交易不足以判斷該等交易的條款是否為一般商務條款，對本公司而言，該等交易的條款不遜於獨立第三方可取得或提供（視屬何情況而定）的條款；及
- (iii) 根據有關的協議條款進行，而交易條款公平合理，並且符合本公司股東的整體利益。

本公司核數師已致函董事會，認為就上文所述於二零一八年訂立之持續關連交易：

- (i) 核數師並不知悉任何事項使核數師相信，已披露的持續關連交易尚未得到本公司董事會的批准；
- (ii) 就涉及本集團提供商品或服務的交易而言，核數師並不知悉任何事項使核數師相信，這些交易未能在所有重大方面符合本公司的定價政策；
- (iii) 核數師並不知悉任何事項使核數師相信，這些交易的訂立未能在所有重大方面符合關於這些交易的相關協議的規定；及
- (iv) 就各持續關連交易之總額而言，核數師並不知悉任何事項使核數師相信，對於已披露的持續關連交易，其交易金額已超過招股章程所披露的相應年度交易總額上限。

### 關聯方交易

於截至二零一八年十二月三十一日止年度，本集團根據適用會計準則與被視為「關聯方」的人士進行若干交易。本集團於截至二零一八年十二月三十一日止年度訂立的關聯方交易的詳情於財務報表附註33披露。除本年報「持續關連交易」一段所披露者外，於附註33披露的其他關聯方交易並不被視為關連交易，或根據上市規則獲豁免申報、公佈及獲股東批准之規定。

# 董事會報告

## 股東週年大會

股東週年大會將於二零一九年五月九日（星期四）舉行。

## 暫停辦理股份過戶登記手續

**為確保股東出席二零一八年股東週年大會並於會上投票的資格**

交回股份過戶文件以作登記的最後時限

暫停辦理股份過戶登記手續

記錄日期

二零一九年五月三日下午四時三十分

二零一九年五月六日至九日（包括首尾兩日）

二零一九年五月九日

**釐定股東獲擬派末期股息資格**

遞交過戶文件以供登記的截止時間

暫停股份過戶登記

記錄日期

派付日期

二零一九年五月十五日下午四時三十分

二零一九年五月十六日至十七日（包括首尾兩日）

二零一九年五月十七日

二零一九年六月二十六日

為確保符合資格出席股東週年大會並於會上投票以及獲得上述建議末期股息，尚未登記的股份持有人要確保將全部股份過戶文件連同有關股票於上述最後時限前送達本公司的股份過戶登記分處卓佳證券登記有限公司辦理股份過戶登記手續，地址為香港皇后大道東183號合和中心22樓。

## 董事及董事服務合約

年內及截至本報告日期，本公司的董事如下：

### 執行董事：

張素心先生（主席）

王煜先生（總裁）

### 非執行董事：

陳劍波先生

杜洋先生

森田隆之先生

葉峻先生

### 獨立非執行董事：

張祖同先生

王桂壘先生，太平紳士

葉龍蜚先生

本公司各董事以三年特定任期獲委任，並須於股東大會上由本公司再次提名及重選，除非按照相關委任函或董事服務合約的條款及條件提早終止。

陳劍波先生、張祖同先生、葉龍蜚先生將於股東週年大會上輪席退任董事職務，陳劍波先生、張祖同先生、葉龍蜚先生符合資格並願按照本公司的組織章程膺選連任。

概無擬於股東大會上膺選連任的董事已訂立本集團可於一年內終止而無須補償（法定補償除外）的服務合約。

本公司已接獲現任各獨立非執行董事按照上市規則第3.13條發出的年度獨立性確認書。本公司認為根據上市規則，所有獨立非執行董事均為獨立人士。

## 董事及高級管理層履歷

本公司董事及高級管理層的履歷載於本報告第94至100頁。

## 最高薪人士及董事及高級管理層的薪酬

董事及5名最高薪人士的薪酬詳情分別載於本年報綜合財務報表附註8及9。

## 董事及最高行政人員於本公司股份及相關股份的權益

於二零一八年十二月三十一日，除下文披露者外，概無本公司董事及最高行政人員於本公司或任何相聯法團（定義見證券及期貨條例第XV部）的股份、相關股份或債權證中擁有載入根據證券及期貨條例第352條須予存置的登記冊內的任何權益及淡倉，或須按照上市規則所載上市發行人董事進行證券交易的標準守則須就上市公司董事進行的證券交易須知會本公司及聯交所的任何權益及淡倉。

董事姓名	身份	以好倉持有的 相關股份數目 <sup>(1)</sup>	概約權益百分比
王煜先生	實益擁有人	1,269,000	0.10%
森田隆之先生	實益擁有人	199,000	0.02%

附註：

(1) 按購股權計劃授出的購股權項下於本公司相關股份的好倉。

# 董事會報告

## 董事於競爭業務的權益

於本年度，概無本集團董事於與本公司或本集團業務直接或間接競爭的業務中擁有任何權益。

## 董事於重大交易、安排或合約的權益

本公司或其任何子公司或聯營公司並無訂立於截至二零一八年十二月三十一日止年度完結時或年內任何時間仍然生效，且有董事直接或間接擁有重大權益的重大交易、安排或合約。

## 股份認購所得款項用途

載於財務報告附註28約400,000,000美元之新股份認購所得款項已全數投入華虹無錫用於新建300mm生產線。

## 董事的證券交易

本公司已自行頒佈董事買賣本公司證券的行為守則（公司守則），條款不比標準守則寬鬆。經向全體董事進行具體查詢，董事確認他們於二零一八年整個年度一直遵守公司守則及標準守則。

## 彌償保證及保險

本公司為董事及高級職員提供D&O保險。D&O保險承保日常管理責任及每年續保。

## 子公司的董事

於截至二零一八年十二月三十一日止年度或於二零一八年末起至本報告日期期間，在本公司子公司董事會任職的董事姓名如下：

子公司名稱	註冊成立地點	董事姓名
Grace Semiconductor Manufacturing Corporation (「Grace Cayman」)	開曼群島	張素心先生 葉峻先生
上海華虹宏力半導體製造有限公司 (「華虹宏力」)	中國上海	張素心先生 王煜先生 陳劍波先生 馬玉川先生 森田隆之先生 葉峻先生 張祖同先生 王桂壩先生，太平紳士 葉龍蜚先生

## 董事會報告

子公司名稱	註冊成立地點	董事姓名
力鴻科技有限公司 (「力鴻科技」)	中國香港	王鼎先生 傅城先生
HHGrace Semiconductor USA, Inc. (「HHGrace USA」)	美國加州	王鼎先生 傅城先生
HHGrace Semiconductor Japan Co., Ltd. (「HHGrace Japan」)	日本東京	中村真紀女士 王鼎先生 傅城先生
上海華傑芯片技術服務有限公司 (「上海華傑」)	中國上海	范恒先生
華虹半導體 (無錫) 有限公司 (「華虹無錫」)	中國無錫	張素心先生 韋俊先生 王煜先生 魏麟懿先生 陳劍波先生 湯興良先生 袁紅霞女士



# 董事會報告

## 主要股東及其他人士於本公司股份和相關股份的權益

於二零一八年十二月三十一日，除本公司董事或最高行政人員外，於本集團股份及相關股份中擁有5%或以上權益或淡倉的人士如下：

主要股東	身份及權益性質	持有股份數目	佔已發行股本權益總額的概約百分比*
上海華虹國際有限公司(華虹國際) <sup>(2)</sup>	法定及實益擁有人	350,401,100 <sup>(1)</sup>	27.29%
上海華虹(集團)有限公司(華虹集團) <sup>(2)</sup>	受控制法團權益	350,401,100 <sup>(1)</sup>	27.29%
上海儀電(集團)有限公司(儀電集團) <sup>(2)</sup>	受控制法團權益	350,401,100 <sup>(1)</sup>	27.29%
Sino-Alliance International, Ltd. (Sino-Alliance International)	法定及實益擁有人	160,545,541 <sup>(1)(3)</sup>	12.50%
Sino-Alliance International, Ltd. (Sino-Alliance International)	受控制法團權益	34,919,354 <sup>(1)</sup>	2.72%
上海聯和投資有限公司(上海聯和)	受控制法團權益	545,865,995 <sup>(1)(4)</sup>	42.51%
鑫芯(香港)投資有限公司	法定及實益擁有人	242,398,925	18.88%
國家集成電路產業投資基金股份有限公司	受控制法團權益	242,398,925	18.88%
NEC Corporation	法定及實益擁有人	99,038,800 <sup>(1)</sup>	7.71%

附註：

- (1) 於本公司股份中的好倉。
  - (2) 華虹國際為華虹集團的全資子公司。於二零一八年十二月三十一日，華虹集團由上海聯和擁有47.08%股權。此外，上海聯和因其擁有華虹集團的47.08%股權及根據儀電集團與上海聯和的投票集團取得4.75%投票權而控制華虹集團51.83%的投票權。根據證券及期貨條例第XV部，上海聯和及儀電集團被視為於有關股份中擁有權益。
  - (3) Sino-Alliance International股數包含因託管安排而代為持有3,084股股份。
  - (4) 除透過華虹國際間接持有350,401,100股股份(27.29%)外，上海聯和透過四家全資子公司包括Sino-Alliance International間接持有本公司權益。
- \* 百分比乃按本公司於二零一八年十二月三十一日已發行的股份總數(即1,283,952,225股股份)計算。

除上文披露者外，就本公司董事及最高行政人員所知，於二零一八年十二月三十一日，概無本公司董事或最高行政人員以外的其他人士或法團於本公司任何股份或相關股份中有任何權益或淡倉並已記入根據證券及期貨條例第336條本公司須予存置的記錄冊內。

## 購買股份或債權證的安排

於截至二零一八年十二月三十一日止年度任何時間，概無向任何董事或彼等各自之配偶或未成年子女授出任何權利以收購本公司股份或債權證方式得到利益，亦無上述人士曾行使上述權益；再者，本公司或其任何控股公司、子公司或同系子公司亦無訂立任何安排，使董事或彼等各自之配偶或未成年子女可購買任何其他法人團體之上述權利。

## 主要客戶及供應商

於截至二零一八年十二月三十一日止年度，本集團五大供應商所應佔的總採購額低於30%，本集團五大客戶所應佔的總營業額低於30%。

## 薪酬政策

截至二零一八年十二月三十一日，本集團僱用合共4,512名員工。本集團按其優點及發展潛能招聘及擢升人員。本集團僱員的薪酬政策由薪酬委員會按其優點、資質及勝任程度設立。

董事薪酬由薪酬委員會決定，並會考慮到本集團的經營業績及個人表現。董事薪酬按姓名載列於截至二零一八年十二月三十一日止年度的財務報表附註8。

## 買賣、銷售或贖回證券

截至二零一八年十二月三十一日止年度，本公司或其任何子公司概無買賣或贖回本公司任何上市證券。

## 優先購買權

本公司的組織章程或香港法律概無優先購買權條文，規定本公司須按比例向現有股東提呈新股份發售。

## 企業管治

本公司致力保持企業管治在高水平，以保障股東權益及提升企業價值及問責性。

本公司所採納的企業管治常規資料載於本年報企業管治報告內。

## 遵守相關法律法規

據董事會所知，本公司在各重大方面均已遵守對本公司業務及營運具有重大影響的相關法律法規。

# 董事會報告

## 環境及社會責任

環境、社會及管治因素是評估一間企業的三大關鍵指標。本公司相信環境、社會及管治措施至關重要，可為我們的業務帶來成功並為本公司創造長久的價值。有關本公司2018年度所採納的環境、社會及管治常規的詳細資料，載於2018年度環境、社會及管治報告。

## 遵守不競爭契據及優先購買權契據

本公司的控股股東華虹集團、上海聯和及儀電集團訂立日期為二零一四年九月二十三日的不競爭契據（「不競爭契據」），詳情載於日期為二零一四年十月三日的本公司招股章程（「招股章程」）「與控股股東的關係」一節中「不競爭承諾」一段。另外，華虹集團和上海聯和亦訂立日期為二零一四年六月十日的優先購買權契據（「優先購買權契據」），詳情載於招股章程「與控股股東的關係」一節中「優先購買權」一段。本公司於截至二零一八年十二月三十一日止年度已覆核上述各控股股東有關他們遵守不競爭契據及優先購買權契據（視情況而定）內承諾的書面聲明。獨立非執行董事已覆核遵守情況，並確認不競爭契據及優先購買權契據（視情況而定）下的全部承諾均獲有關訂約方遵守。

## 足夠公眾持股量

按本公司可公開取閱的資料，就董事於本報告日期所知，董事信納本公司已維持上市規則下的指定最低公眾持股量。

## 核數師

股東週年大會上將提呈一項決議案，續聘安永會計師事務所為本公司的核數師。

代表董事會

張素心先生

主席

二零一九年三月二十八日

# 2018年環境、社會及管治報告

## 緒論

我們的可持續發展理念是在經濟、環境及社會三個方面同時取得成就，它們彼此互相影響、互相支持，以發揮永續而長遠的績效。我們在公司運營中嚴格遵守當地所有適用法律及社會期望，在環境準則上與國際領先行業標準一致，並致力於推動可持續城市與社區建設。我們秉承公司願景：持續創新，為全球客戶製造「芯」夢想，及時呼應客戶、員工、投資人、所處國家和社區之人群等利益相關方，實現企業與社會的共同可持續發展。

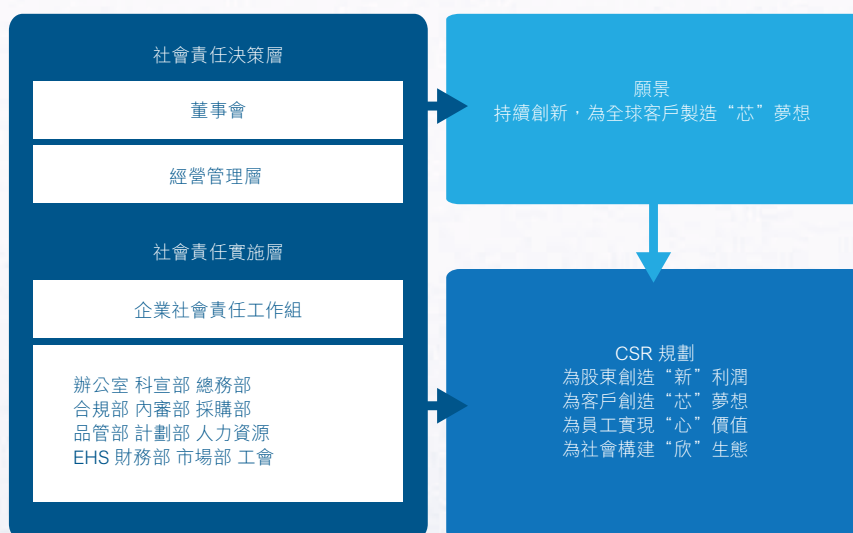
## 1 社會責任管理體系

### 1.1 社會責任政策

我們認為企業履行社會責任的重點在於堅持高標準的國際商業及社會道德準則，為所有的利益相關方創造和分享價值。為此，除了在運營上遵守國家所有的法律法規和規章制度以外，我們亦將環境與社會責任融入企業的戰略經營活動中，審慎地管理我們的環境和社會風險，完善管理體系，改善供應鏈表現，降低資源消耗及環境排放，創新驅動發展，培養創新人才，共促社會和諧。

### 1.2 社會責任管理機制

有效的社會責任管理離不開高層重視與全員參與。我們成立企業社會責任工作組，形成管理層參與，橫向協調各職能部門，縱向覆蓋各下屬公司的企業社會責任組織體系，工作組人員來自各職能部門的負責人。



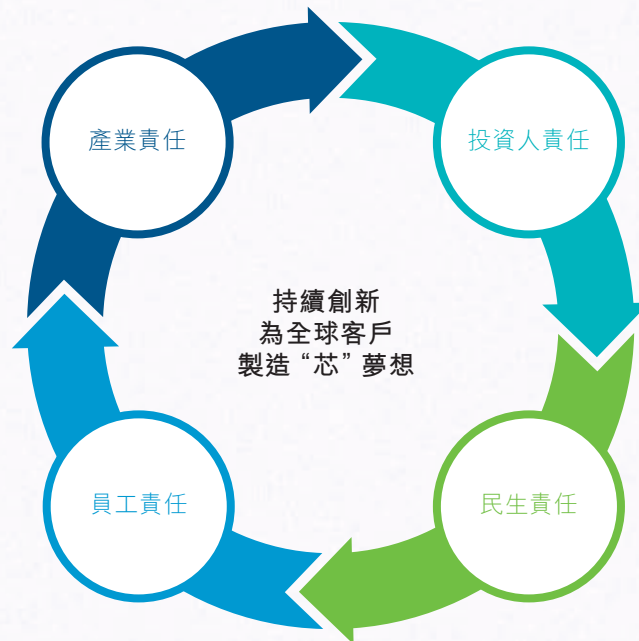
責任管理架構

# 2018年環境、社會及管治報告

在社會責任決策層董事會制定的公司願景－持續創新，為全球客戶製造「芯」夢想的規劃下，我們將社會責任劃分為以下四個方面：

**為客戶**  
創造“芯”夢想  
品質產品服務  
客戶權益保障  
繁榮產業經濟

**為股東**  
創造“新”利潤  
創新驅動發展  
夯實誠信經營  
共享中國發展



**為員工**  
實現“心”價值  
尊重員工價值  
關愛員工成長  
保障職業健康

**為社會**  
構建“欣”生態  
推動綠色發展  
資源高效利用  
共促社會和諧

華虹半導體社會責任規劃實施重點

# 2018年環境、社會及管治報告

## 1.2 利益相關方參與

根據公司自身業務和運營特點，並對標國內外行業的經驗和實踐，我們將主要利益相關方確定為股東、客戶、員工、政府及監管機構、合作夥伴、社區及公眾，並通過網站、媒體、會議、報告、活動等渠道和方式積極與之溝通。

### 利益相關方的期望與回應

關鍵利益相關方	相關方說明	關注的議題	溝通與回應
股東及高級管理層	對公司進行股權、債權投資的國內外投資人及公司高級管理層員工	風險管理、經濟績效、產業發展、客戶溝通及滿意度	股東會、財務報告、業績報告、路演等
客戶	集成器件製造商、系統及無長半導體公司	客戶權益與信息保護、產品與服務品質、客戶溝通及滿意度	產品展覽、客戶調研、技術研討會、B2B(例如E-tapeout系統、WIP報告、WAT報告等)、客服熱線、客戶滿意度調查等
員工	公司員工、以及常年服務於公司業務的人員	員工權益及福利、員工健康與安全、員工發展及培訓	員工活動、職代會活動、企業內網、員工培訓、員工自助系統、員工手冊、企業內部刊物等
政府及監管機構	工業、稅務、環保、安全等部門、地方政府、證監會等政府或監管機構	合規經營、綠色產品、排放物管理、能源利用	機構考察、公文往來、政策執行、信息披露等
合作夥伴	供應商、研究院校、行業協會等	產業發展、合規經營、產品與服務品質、客戶滿意度與溝通，	公開招投標會議、戰略合作談判、交流互訪等
社區及公眾	運營所在地社區、社會公眾、媒體等	綠色產品、排放物管理、社區和公益	社區活動、員工志願者活動、公益活動、社會事業支持項目等

# 2018年環境、社會及管治報告

## 1.3 風險管理及實質性議題識別與分析

### 風險管理

我們不斷完善風險管理的組織體系，改進流程與制度，切實提升全面風險管理能力。自二零一六年，公司增設內部審計部風險管理條線，發佈公司《全面風險管理制度》並啟動全面風險管理項目。二零一八年在風險管理三道防線的基礎上，兼顧全面性和重要性的原則，持續優化公司風險地圖，共辨析出公司86個主要風險因素，全面防範並監督公司內外風險。

公司開發風險管理平台，從風險地圖修訂上傳、風險信息搜集、風險調查問卷下發、到形成風險評估報告，全部實現流程信息化，提高風險信息數據化水平和管理效率；開展年度全面風險評估，設計風險調查問卷，開展管理層風險訪談，識別重大風險領域，形成年度風險管理報告；實行季度風險溝通上報機制，各業務條線每季度或不定期就條線內風險事件搜集上報備案；不定期召開風險條線管理會議，開展兩次風險培訓，公司各級管理人員共22人，溝通各業務條線及公司層面風險問題。

## 2018年環境、社會及管治報告

### 公司的主要運營風險及管理方法

風險類別	風險內容	策略
戰略	戰略規劃	公司自上而下擬定戰略目標，並進行適當的分解，落實到企業經營的具體業務模塊中，確保戰略目標的達成
	投資決定	我們進行審慎的投前分析、持續的流程監督和有效的投後評估，以多管齊下的方式將投資風險控制在可接受的範圍內
	監督與管理體系	完善的制度及流程，三道防線風險管理體系，有效保障戰略的實現
運營	人才儲備	建立人才簡歷數據庫、開展人才庫存、不斷探索招聘渠道、優化薪酬結構、結合品牌建設與文化推廣的協同作用，全面提升企業的吸引力和員工滿意度
	信息安全	公司根據信息安全管理規則，建立信息安全框架和管理方針，每年度執行信息安全風險評估程序，確保公司、股東、客戶、供貨商及公司員工的最佳利益得以保障
	研究與開發	完善的研發機閉環制，對研發的立項、執行、後評估全方位監控，持續、及時地開發有商業價值的新產品
	知識產權	完善的知識產權保護意識及管理流程，合理保護公司自身及客戶的知識產權
財務	資金流動	每月現金流動表，記錄現金流動，併發送相關部門作跟進
	匯率波動	涉及外幣的交易盡量使用現有外幣結算，減少兌換外幣的需要，減少匯率波動風險
環境及安全	環境	公司根據環境因素識別、評價和控制策劃管理程序，列出重大環境因素清單
	安全檢查	持續並定期開展以隱患排查和設備故障診斷為主的安全檢查
	職業健康	公司根據安全健康環境管理體系的目標、指標及方案管理程序，制定環境職業健康安全目標、指標及方案管理表

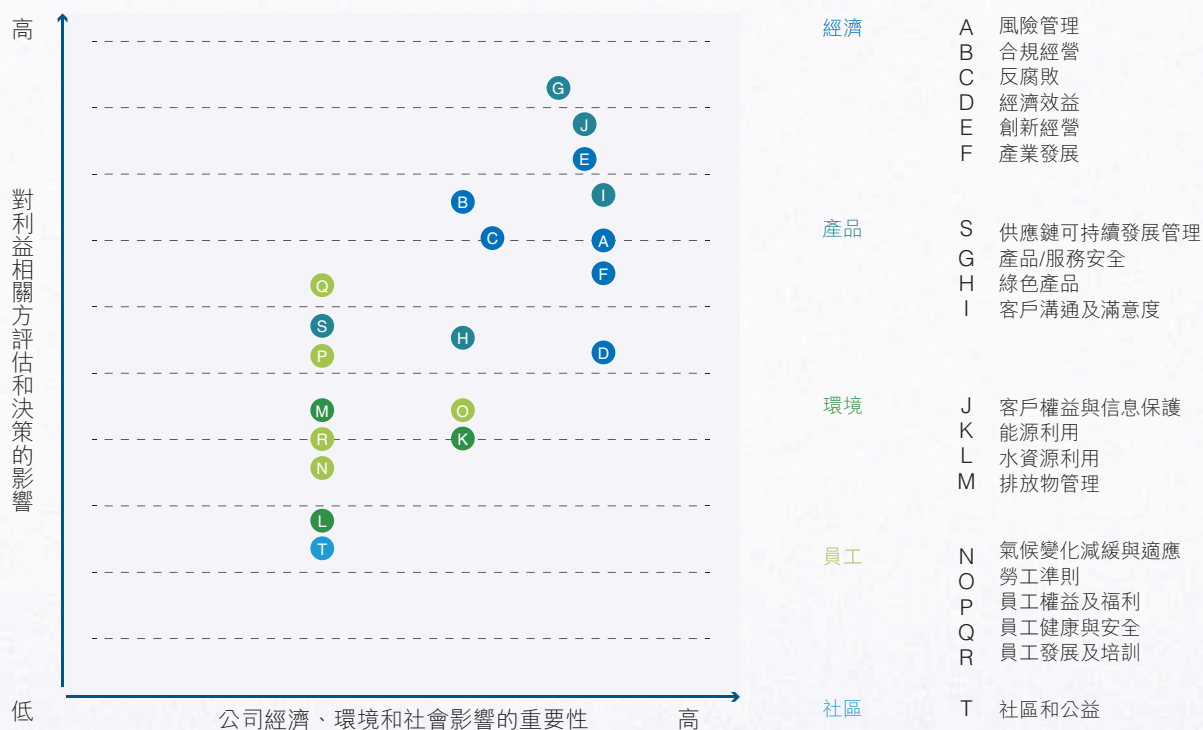


# 2018年環境、社會及管治報告

## 實質性議題識別與分析

我們定期進行社會責任議題檢查工作，通過定期分析，綜合考慮公司戰略和運營方向，利益相關方關注的重點和期望，以及應當遵循的國內、國際標準和政策等內外部因素，按照識別、評估和篩選的程序，界定具有較強實質性的社會責任議題作為我們的行動及報告披露重點。

二零一八年，我們對標全球報告倡議組織(GRI)《可持續發展報告標準》(2016)，反腐敗、創新經營、產品與服務品質、客戶權益與信息保護的重要性有所提升。



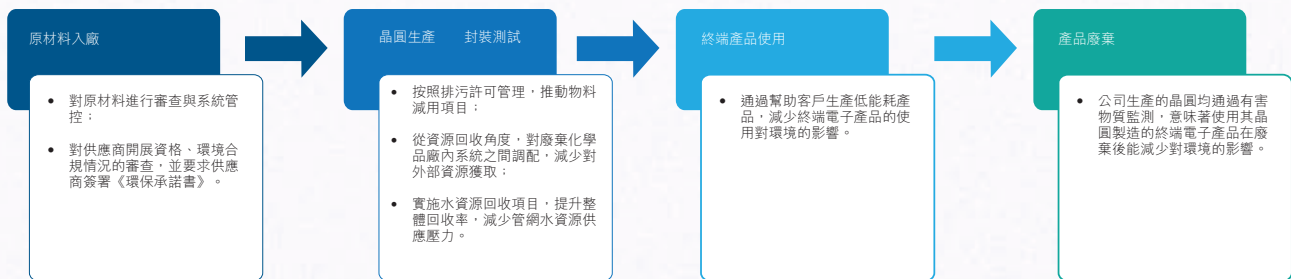
## 2 環境責任

我們將「零災害」和永續經營作為企業追求的目標，致力於清潔生產、持續改善。二零一八年，我們持續開展環保技能改善項目，努力在節能減排、廢棄物管理等方面追求更好的表現。截至二零一八年末，公司未受到有關環境方面的投訴或處罰，亦未發生任何環境污染事件。

### 2.1 環境管理體系

公司以生產管理為主逐漸向產品全生命周期管控、風險管控過渡，致力於提升從原材料入廠、生產製造到廢棄物管理全過程中每一環節的環境表現，並於二零一八年通過了新版環境管理體系ISO 14001:2015認證。在監督管理上，我們在公司內網的安全管理系統中增設審核追蹤系統，對在日常管理中發現的不符合環保規定的事項進行整理、列出清單，並通過系統定時提醒的方式，進行後續整改的跟蹤記錄。

二零一八年，公司完成了「浦東新區重點行業企業土壤污染防治責任書」的簽訂工作。全年完成了26項節能減排項目，累計節電9,907兆瓦時、節水427.9萬立方米、減少CO<sub>2</sub>排放2,835.9噸、產生經濟效益1,745.9萬元人民幣。

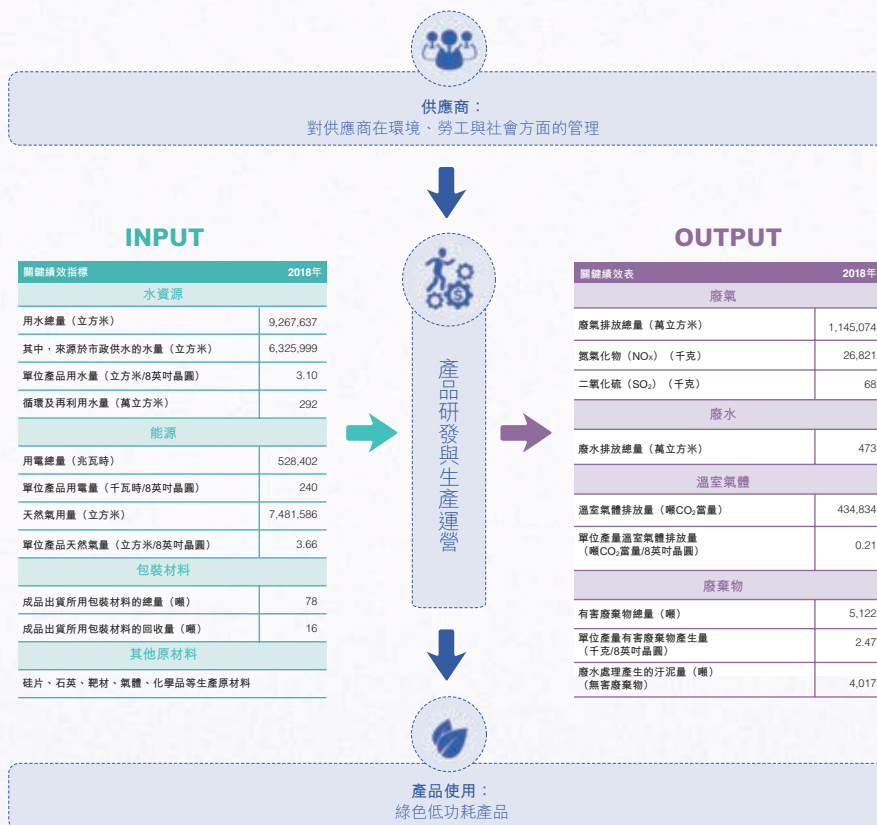


產品全生命周期環境管理

# 2018年環境、社會及管治報告

## 環境管理績效概覽

公司充分考慮自身運營活動的環境影響：作為「輸入」，公司的生產運營要使用能源、水及其他原材料等資源；作為「輸出」，會產生廢氣、廢水、廢棄物等排放。此外，我們也考慮促進供應商的環境管理，並提供低功耗綠色產品，努力在價值鏈上下游都有更好的環境管理績效。



# 2018年環境、社會及管治報告

## 2.2 環境管理行動與績效

### 能源管理

公司能源消費主要是電力、熱力、天然氣（及少量汽油、柴油），制定了《資源、能源管理程序》，明確了資源、能源管理的原則，即本着節能降耗減廢的原則，在滿足和提高生產率的同時進行源頭控制、持續改善，在降低生產成本的同時減少對環境的影響，以達到與環境相和諧的持續發展。此外，公司響應上海市政府二零二零年能源總量控制和能源利用效率提升目標，制定了公司在「十三五」期間的節能目標，即到二零二零年，公司萬元產值綜合能耗將較二零一五年下降12%，8英寸集成電路晶圓生產單耗較二零一五年下降13%，並委託第三方機構對公司進行能源審計，提出節能技改方案。

### 二零一八年能源節約工作及成果

項目名稱	成果
BDWGOJ01/BDWGOS03 drain方式改造	每月約可節省1,000度電，24噸水
DAS scrubber backup system增設	設備平均節電能耗大於20%
Dry pump（2017新）尾氣端節電閥門安裝	設備平均節電能耗大於20%
FAB1A OAC露點溫度調整	每年節約用電592.1萬kWh，減少能耗合1,204噸標煤
2#樓空調節能改造	每年節約用電83.5萬kWh，減少能耗合415噸標煤
降低多晶硅厚度以減少能耗及相化學氣體消耗與排放	每年節約用電63.5萬kWh，減少能耗合286.3噸標煤
0.18CE inter-metal金屬沉積步驟簡並	每年節約用電33.9萬kWh，減少能耗合136.8噸標煤
Cypress S8 WAT測試時間削減	每年節約用電30.8萬kWh，減少能耗合124.4噸標煤
三廠北部10kV變配電系統改造	每年節約用電26.8萬kWh，減少能耗合106.2噸標煤

# 2018年環境、社會及管治報告

## 水資源管理

公司的用水主要來源是上海市政供水，此外還有少部份來源於純水製造過程中的回收用水和空調冷凝水。我們通過技術改進、循環利用等方式，積極尋求企業自身節水和水資源利用效率的提高。公司開展水循環利用，將純水回收用於工藝制程、其他（空調冷凝水）用於冷卻塔補水，全廠年回收水總量292萬立方米，佔全廠總耗水量的32%<sup>1</sup>。

### 二零一八年水資源節約工作及成果

項目名稱	成果
FAB1A OAC露點溫度調整	每年節水424.5萬m <sup>3</sup>
降低多晶硅厚度以減少能耗及相化學氣體消耗與排放	每年節水2.31萬m <sup>3</sup>
BEWAAD02 OF槽工藝時間縮短	每年節水0.47萬m <sup>3</sup>

## 污染物防治

在污染物防治方面，我們貫徹落實環保法規及相關要求，針對生產過程中包括硫酸霧、氯化氫(HCl)、氮氧化物(NOx)、氨(NH<sub>3</sub>)、揮發性有機物(VOCs)等廢氣排放，我們已建立廢氣處理系統，全部滿足達標排放的管理要求，其中VOCs的設計去除效率達到90%以上。在廢水排放方面，公司於二零一七年開始執行GBT 31962-2015（污水排入城鎮下水道水質標準）B級標準，並通過廠內生產製造清洗水的回收，減少排放。

在排污監控和信息公示方面，公司執行廢水在線監控，相關數據在上海企事業單位環境信息公開平台上公示，增加公司環境信息的透明性。

### 污染物排放管理

類型	處理方式	
廢氣	酸性廢氣 鹼性廢氣（主要為氨氣） 有機廢氣 粉塵廢氣（主要為二氧化矽的細小顆粒物）	通過洗滌塔去除絕大部份成分後，達標排放 通過洗滌塔進行淨化 通過活性炭吸附或濃縮後燃燒處理進行淨化 通過除塵裝置去除
廢水	pH，COD，氨氮，氟離子等	經處理達標後通過管道排入指定城市污水管網

1 計算方法為：年回收水總量 / (來源於市政供水的用水量 + 廢水回用量) \* 100%。

# 2018年環境、社會及管治報告

## 二零一八年減少排放工作及成果

項目名稱	效果
一廠雨水井閘門更換	確保排放管理的合規性
一廠外圍排水系統優化	增加了應急排放管理的硬件保障
0.18um Product DSTI CMP optimized	預計每月減少使用700升研磨液
RO及No.2 UV區域降噪改造	降低的廠界噪聲排放風險
垃圾房污水收集改造	完善可能存在的雨污混排風險
2#酸排氣洗滌塔改造	提升達標排放管控能力
Scrubber增加數字式流量計	提升達標排放管控能力

### 廢棄物管理

晶圓的生產過程會產生廢酸、廢異丙醇等危險廢棄物，我們已委託有處理資質的第三方公司進行處理，處理方式主要包括焚燒、物化，以及再利用。公司制定了《廢棄物管理程序》，對廢棄物管理操作進行了規範，並通過政府統一的環保管理系統對廢棄物處理進行登記和管理，確保每一筆運輸記錄都可追溯、受控。對於在廢水處理中產生的污泥等無害廢棄物，由廢棄物處理廠商採取填埋的方式處理。

此外，公司委託上海市浦東新區廢棄物管理中心定期對生活垃圾、廚餘垃圾進行統一清運。

### 有害廢棄物處理方式

處理方式	有害廢棄物類型
利用	如，廢酸液、異丙醇、廢磷酸
物化	如，廢玻璃瓶、200L化學桶、實驗室廢液
焚燒	如，抹布、塑料瓶、有機廢液、廢活性炭、廢樹脂、含砷廢物

### 溫室氣體管理

CO<sub>2</sub>等溫室氣體的大量排放是造成全球氣候變化的重要原因。我們認識到減緩氣候變化對於企業自身和全球都具有重要意義。我們積極參與到上海市發改委碳排放交易相關工作中，以促進溫室氣體減排、減緩氣候變化。二零一八年公司已完成碳額度履約量約為434,834噸。

公司亦依照上海市發改委碳交易管理辦法制定了減排目標，通過開展節能減排項目減少溫室氣體排放，二零一八年在節能減排技術改造上共投入約236萬元人民幣。

# 2018年環境、社會及管治報告

## 生產材料節約

公司使用的生產材料主要包含化學品和特殊氣體。公司主要通過開展工藝改進等減少生產材料消耗，二零一八年通過使用新型MINI Pump代替原來的RRC Pump，實現了每片晶元P117光阻使用量降低47%的效果，每年減少使用P117光阻627升，產生經濟效益124.1萬元（人民幣）。

## 2.3 綠色產品

### 有害物質管控

我們根據歐盟制定的《關於限制在電子電器設備中使用某些有害成分的指令》(RoHS, Restriction of Hazardous Substances)、《化學品的註冊、評估、授權和限制》(REACH, Registration, Evaluation, Authorisation and Restriction of Chemicals)以及客戶要求等，建立了有害物質管理體系，制定了有害物質管理標準，對生產過程中使用的原輔材料進行風險評估，確保產品符合法規和客戶對有害物質管理的要求。公司每年委託認證服務機構SGS(Société Générale de Surveillance S.A.)對生產的產品進行有害物質的檢測，二零一八年客戶有害物質調查符合率達100%。公司的所有製造設施均被認定為符合QC 080000電子電器組件和產品危害物質減免標準和要求。

### 電子產品節能

面對全球氣候變化帶來的風險以及社會日益旺盛的節能減排需求，降低電子電器產品的高能耗成為當前業界關注的焦點之一。在專業集成電路製造服務領域，公司一直致力於生產更先進、更節能及更環保的產品，為客戶創造功耗、效能以及芯片尺寸優化的競爭優勢，降低科技進步對環境所造成的衝擊。通過我們的晶圓製造技術，客戶的設計得以被廣泛地運用在計算機、通訊、消費性、汽車等各式電子產品之中，助力構造低碳環保社會。

## 2.4 綠色文化

我們持續在公司內外推廣環保觀念，實行環保措施。在日常營運及行政方面，公司善用科技來踐行可持續發展的理念，例如使用聯網打印，集中使用辦公自動化設備，以管理紙張耗用量，公司鼓勵使用再生紙張以支持循環再造。我們還開發了總務辦公應用系統、食材管理系統，極大地便利了相關工作的開展，提升了工作效率並節省了紙張的消耗。公司同時也非常支持使用電動車，公司班車均使用新能源汽車。公司還參加阿拉環保的電子廢棄物回收活動，對廢棄物再生利用的同時杜絕對環境造成二次污染。公司依照浦東新區環境保護和市容衛生管理局對企事業單位生活垃圾強制分類的要求，對各廠區的生活垃圾進行干、濕、可回收、有害垃圾等4類分類，並對員工和保潔人員進行垃圾分類的宣導。

## 3 員工責任

為員工提供平等、健康、安全、舒適的工作環境是我們持續關注的重點。我們遵照相關法律法規，保障員工的一切合法權益；構建安全的工作環境，定期進行員工安全培訓和應急演練；營造舒適的工作與生活氛圍，提升員工滿意度。截至二零一八年末，公司未發生任何侵犯員工權益行為，也未受到監管部門的投訴或處罰。

### 3.1 權益與福利

#### 員工權益與福利概覽

我們在員工招聘和僱傭中堅持公平、公正、公開的原則，承諾在招聘、錄用、晉升、調動、薪資等方面提供平等機會，不因國籍、地域、膚色、民族、宗教、年齡、家庭狀況或其他因素而存在歧視政策或行為。我們制定了《僱傭規程》和《實習生管理規程》，嚴格核查員工身份信息，不招聘未滿16周歲的員工；我們嚴格遵循《中華人民共和國勞動法》、《女職工勞動保護特別規定》等法律法規，杜絕一切強制勞動行為的發生。

#### 員工權益與福利制度概覽

##### 招聘與離職

**招聘：**堅持公平、公正、公開的原則。

**離職：**公司與員工依照相關法律法規及《離職管理規程》辦理離職手續。

##### 工時與休假

**工時：**實行國家規定的標準工時制度。部份崗位因工作性質和生產需要，經政府勞動人事部門批准，實行綜合工時制或不定時工時制。

**休假：**在國家規定節假日的基礎上，為員工提供補充年假。



##### 民主參與

**集體協商：**公會、職工代表大會等。

##### 薪酬與福利

**薪酬：**為吸引與留任公司的人才，公司為員工提供有競爭力的薪酬和全面的福利保障計劃。

**社會保險：**依法繳納法定保險項目，提供意外險、門急診等商業補充保險。

**其他福利：**員工療養、節日慰問禮品、幫助外地員工落戶等。



# 2018年環境、社會及管治報告

## 和諧關係

暢通的溝通渠道和真誠的關懷對打造和諧的勞動關係至關重要。公司制定了《員工溝通規程》，通過創建多樣的溝通渠道，鼓勵公司與員工之間、主管與下屬之間、員工相互之間的公平坦誠的多向溝通。

我們亦建立員工幫扶機制，除了日常傷病慰問外，在特殊節日如春節、五一、中秋等，為困難職工提供慰問扶持；對遭遇重大變故的同事，第一時間送去關心和支持，通過愛心捐款、愛心幫困、愛心關懷、愛心護理等多種形式幫助員工盡早等走出困境。我們關注女性員工的需求和發展，每年組織女員工進行專項體檢，並持續健全哺乳期員工的人性化管理並提供相關服務設施，保證懷孕女員工和哺乳女員工享受到工作中的便利。

## 3.2 健康與安全

### 職業健康與安全管理

為保障員工的健康和安全，我們已建立了符合OHSAS 18001要求的職業健康安全體系，明確了職業健康安全方針，即嚴格遵循安全健康環保法規，致力於清潔生產，持續改善，為員工營造出安全健康舒適的工作環境，不懈追求「零災害」和永續經營的最高目標，成為模範企業公民。

公司主要從消防設施、報警監控系統、個人防護、應急措施這4大方面消除或控制員工生產活動中的安全風險。公司每年委託外部機構對生產環境進行檢測，對超標項目進行分析、整改，確保生產環境符合工作場所有害因素職業接觸限值標準，並將檢查結果通報給全體員工。

### 員工安全風險防範措施



消防設施

建立完備的消防系統、自動報警系統。



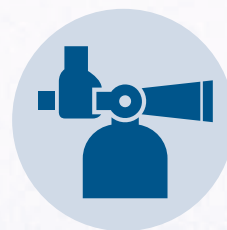
報警監控系統

潔淨廠房內設有有毒、有害、易燃氣體報警系統、液體洩漏檢測器以及超高感度煙霧檢測器。



個人防護

配備必要的個人防護用具和應急防護用品；  
定期巡檢器材是否配備齊全、是否在有效期內。



應急措施

成立應急搶險隊，制定了針對發生不同災害的緊急處理預案；  
每年定期組織專題防災演練，對演練中發現的問題及時整改。

# 2018年環境、社會及管治報告

## 二零一八年員工健康與安全保障工作進展

層面	主要內容
健全安全責任體系	<ul style="list-style-type: none"><li>對內，逐級簽署從總裁、執行副總裁、副總裁、廠長（總監）、部長、科長的《安全責任書》和全體員工的《安全承諾書》，健全按職能覆蓋至所有部門、員工的安全責任體系；</li><li>對外，與在公司有駐廠服務作業的單位、施工作業承包商100%簽訂《安全管理協議》和《承包商安全教育承諾書》；</li><li>推進公司安全管理信息化建設，促進化學品出入庫登記、化學物質管理、熱成像檢測與特種設備人員管理、員工培訓教材與崗位題庫等系統的一體化、信息化管理。</li></ul>
隱患排查，應急預案體系升級	<ul style="list-style-type: none"><li>安全技改項目119項，投入2,951萬元；</li><li>建立「1+12+1702」公司安全應急預案體系（即綜合預案1份+專項預案12份+1702份現場處置方案）；</li><li>建立應對極端天氣的響應處置機制，加強安全檢查，做好預案演練，關注預警信息，強化應急值守，及時響應行動；</li><li>在一、二、三廠建立微型消防站，配備消防裝備物資，對各廠ERC兼職人員進行消防員專門資格培訓；</li><li>二零一八年組織4,100多名員工進行消防滅火訓練。</li></ul>
安全培訓標準化，強化效果考核	<ul style="list-style-type: none"><li>針對消防「三懂三會」的宣傳、培訓，製作考試題庫，組織網上計算機考試，從制度上、系統上推動了安全培訓的標準化；</li><li>二零一八年開展安全培訓144次，參加安全培訓13,496人次；</li><li>二零一八年開展承包商作業人員安全教育7,215人次。</li></ul>
競賽活動，激發安全意識	<ul style="list-style-type: none"><li>以「安康杯」勞動競賽系列活動和評選安全特別貢獻獎為載體，提高員工安全意識和安全防護能力。</li></ul>

# 2018年環境、社會及管治報告

## 「食住行醫」，全面保障

公司從員工「食住行醫」四個方面着手，致力於為員工創造更好的生活與服務設施，提高員工的生活品質。



### 伙食

各廠區設立員工餐廳、咖啡廳；

成立食品安全監督小組，建立食材集中採購及合格供應鏈管理模式，並邀請員工、部門代表等進行監督；

推出食堂菜餚操作指導書，對員工食堂飲食進行營養均衡搭配和控油控鹽管理。



### 住宿

建立員工宿舍，內含獨立衛生間、24小時熱水和WIFI網絡等；

住宿區內設有圖書室、電腦室、桌球室、洗衣房、電視房、豐巢快遞櫃等設施。



### 出行

為全體員工發放交通補貼；

在園區、地鐵站、員工宿舍區之間提供免費班車服務；

對交通不便區域的員工開行通勤班線，以及對有周末需求的部門安排加班車。



### 醫療

為全體員工提供一年一次的健康體檢，包含多發性癌症項目篩查等；

為特殊崗位員工提供崗前、崗中、離崗職業健康體檢；

建立員工健康檔案用於系統性的追蹤員工健康狀況的變化。

### 3.3 培訓與職業發展

公司擁有完善的培訓設施（專用的培訓教室與設備）和學習分享平台（包括在線培訓報名管理、培訓教材與崗位題庫，多媒體學習課件等），必要時利用外部的資源，為員工的學習與發展提供了基本保障。

公司亦建立了完善的員工教育培訓體系，制定了《內部培訓體系審核操作規程》、《教育培訓規程》和部門級培訓規程，按照培訓循環，不斷提高培訓效果，並根據戰略發展和員工需求不斷進行完善。

#### 員工培訓方案

培訓對象	培訓內容
中高層管理人員	打造卓越領導力，提升中高層管理者的管理水平
基層管理者	角色認知、自我管理、管理他人、工作管理
一線主管	一線班組長管理技能，培養高素質、高業務能力的一線管理隊伍，夯實公司管理基礎
新進大學生	職業素養、企業文化、專業入門等課程
一線員工	半導體製造工藝模塊的理論與實訓課程

## 4 產品與客戶

我們持續追蹤產品與客戶相關的國際公約及經營地法律法規，定期對產品和服務的健康與安全、標籤及隱私等方面的管理制度進行更新，建立質量保證體系和客戶服務體系。截至二零一八年末，公司未發生過侵犯客戶權益的訴訟，也未發生因客戶對產品質量問題而引發的訴訟。

### 4.1 產品責任

#### 質量控制

秉承「質量是企業生命」的理念，公司制定了《質量管理方針》，先後通過了ISO 9001質量管理體系和IECQ QC 080000有害物質過程管理體系認證，並於二零一八年順利完成ISO/TS 16949汽車質量管理體系的認證升級到IATF 16949。新版16949體系更加注重風險管理概念，而公司自二零一六年以來開展的各類風控審計、管理、評審工作很好的符合了這一要求。

公司致力推行涵蓋質量系統及客戶滿意、供應商管理及原材料分析、質量工程、可靠性保證、故障分析等5個綜合科室的全方位質量管理模式。通過人員管理、設備管理、供應鏈管理、環境管理、體系管理、過程管理、客戶質量管理等多重管理制度，減少人為失誤；借助可靠性管理系統，從產品研發與生產到售後反饋對產品全周期進行實時監控測試，並對整個生產與應用過程中可能出現的異常情況進行失效分析的處理，挖掘問題的本質，針對性的制定糾正及預防措施。公司已建立健全的產品召回制度，對於規定功能不達標或有害物質不達標的產品，客戶可於質保期內退還不合格產品。截至二零一八年，公司產品在終端客戶端的失效率低於十億分之一。

#### 產品質量體系認證情況

認證名稱	初次通過認證時間
ISO 9001質量管理體系	2001/11/6
IATF 16949汽車行業質量管理體系	2005/8/2
IECQ QC 080000有害物質過程管理體系	2009/11/18

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### 科技創新

公司歷來重視科研創新和開放合作，自主創新下走出創「芯」之路。公司成立了上海市集成電路行業第一家院士專家工作站、第一家企業科協，通過專家引進、項目合作、人才培養、學術交流等多種形式努力建設產學研技術創新體系，促進科技成果向生產力轉化。

二零一八年，院士專家工作站創新活動形式，舉辦「芯」視野沙龍活動，企業科協持續技術沙龍熱潮，邀請業界專家與公司內部工程師們圍繞半導體熱點繼續為廣大科技工作者搭建溝通橋梁。二零一八年，工作站蟬聯「上海市優秀院士專家工作站」，企業科協新晉「浦東新區優秀企業科協」。

### 知識產權保護

作為科技型企業，公司在從事智能卡芯片、信息安全芯片等專用集成電路的研究和開發中重視自主創新，尊重知識產權。根據公司的《知識產權管理制度》，積極進行專利申報，對侵犯知識產權行為進行責任追究，同時我們也承諾不侵犯任何單位或個人的知識產權，對上下游合作夥伴的產品技術信息進行嚴格保密。

為避免因製造涉及侵犯他人知識產權的半導體器件或終端產品而遭到申訴的風險，我們接受來自聲譽良好的客戶及未發現潛在風險的產品訂單，並與主要技術公司訂立多項技術授權協議。

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## 4.2 客戶服務與權益保護

### 客戶服務體系

秉承「為客戶提供更加便捷安全的服務」的理念，公司建立了完善的客戶服務體系，包括客戶交流與反饋、客戶投訴處理與客戶滿意度三大層面。

二零一八年，公司對各廠區的客戶服務管理進行了整合與優化，加強應對客戶產品技術需求，降低出錯概率，提升客戶技術支持服務。

### 客戶服務體系

#### 客戶交流與反饋

通過客服熱線、客戶調研、與主要客戶開展定期季度/半年度業務回顧、技術研討會、培訓等多種交流方式，著力提升客戶服務水平。

#### 客戶滿意度

根據《顧客滿意度測評規程》，每半年抽樣實施一次滿意度調查，針對顧客的評分和不滿項目制定改善計畫。

#### 客戶投訴處理

借助《客戶投訴處理規程》，規定顧客投訴的處理流程、責任部門和處理要領，要求在正常投訴發生48小時內給出初步調查結果反饋，14個自然日完成最終報告並回覆；

通過定期對顧客投訴反饋的相關信息進行整理和分析，要求相關部門制訂改進計畫，並對整改效果進行監管、評價。



### 客戶信息保護

公司非常重視維護客戶信息安全，我們已建立了ISMS信息安全管理體系，從信息資產管理、人員安全、物理管控、邏輯管控等方面層層把控信息安全風險，保障信息安全，並通過了ISO 27001認證。公司內部設立信息安全委員會，明確信息安全責任；對合作光罩廠進行審核，確保光罩廠數據管理和存儲的安全性；對於晶片生產過程中產生的廢棄掩膜板，我們採取寄回客戶或者進行銷毀的處理方式，從而最大程度地防止廢棄掩膜板內客戶信息的外洩。公司全年未發生侵犯客戶隱私的違反法律法規事件。

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## 5 合規運營

我們持續追蹤合規運營相關的國際公約及經營地法律法規，定期更新供應鏈管理、風險管控、防止貪污賄賂與商業欺詐等方面的管理制度，嚴格遵守《中華人民共和國刑法》、《中華人民共和國合同法》、《中華人民共和國反不正當競爭法》等合規運營相關法律法規，深入落實供應商審核，積極進行廉潔從業宣傳和反腐治理。截至二零一八年末，公司未發生商業賄賂或貪污訴訟相關案件。

### 5.1 責任價值鏈

打造責任價值鏈，是公司長遠發展的重要戰略。公司已建立了完善的價值鏈管理體系，對供應商的環境、社會風險進行全面的評估與管控，並致力於扶持供應商的成長，推動國內芯片行業發展。

#### 責任價值鏈管理體系



公司已成立CSC採購審查委員會，主要採購均採取公開招標的形式進行，保證採購過程公正、公開、公平；作為法國ECOVadis組織的成員以監察供應商的環境社會風險；並與供應商簽訂《反商業賄賂書》，嚴格杜絕不正當競爭行為。在衝突礦產管理方面，公司承諾拒絕採購衝突礦產，積極推進消除供應鏈中使用非法礦區生產、有關衝突礦產、低劣工作環境採礦而來的金屬，持續更新衝突礦產調查相關報告。

公司根據Responsible Business Alliance (原EICC) 行為準則持續對供應商提出勞動、健康與安全、環境、倫理、管理系統等方面的要求並進行相關的培訓。通過每年一次的供應商考核制度，公司對不合格的供應商要求整改，進一步推動綠色供應鏈的發展。

我們積極支持中國供應商的成長和發展，持續幫助供應商提升管理能力和生產水平，積極推動中小企業參與包括氣體、化學品、硅片等關鍵原材料本土化，培養了一大批本土原材料供應商和設備供應商，有力地推動了中國芯片設計業的發展。

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### 5.2 反貪污

公司長期致力於黨風廉政和誠信文化建設，無論是對外部的客戶廠商還是對內部的幹部管理。公司持續開展重要崗位人員在廉潔從業方面的培訓與教育；積極推進《反商業賄賂承諾書》、《拒絕商業賄賂承諾書》簽署工作，定期進行訪問和抽查；堅持廉潔從業宣傳，組織開展反腐倡廉培訓，並通過內網發佈廉政宣傳文章；公司的《員工投訴與舉報管理辦法》提供郵件、電話、信箱等清晰的舉報渠道，鼓勵員工舉報可疑的內部違規行為。

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#### 二零一八年度反腐及誠信建設工作成果

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- 公司紀委以專項督察為抓手，促進業務執行的規範化、流程制定的標準化，對業務人員形成規矩意識和壓力，維護好公司內廉潔從業的良好氛圍，完成領導幹部履職待遇檢查等4項專項檢查。
  - 強化宣傳教育，增強自律意識。公司內網「警鐘長鳴」欄目每月上傳警示案例，二零一八年度共上傳24篇。二零一八年六月，組織學習《違反八項規定清單80條》等相關廉潔從業要求。在重要節慶前夕，提前發廉潔過節的提醒，督促員工自覺廉潔從業。
  - 六月十一日和九月十八日分別召開公司紀檢工作會議，對紀檢工作者進行業務和素質培訓，學習《中國共產黨黨內監督條例》和新修訂《中國共產黨紀律處分條例》的內容。
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# 2018年環境、社會及管治報告

## 6 公益與社區

我們堅持對社區持續關注和深度融合，將關注社區需求、尋求與社區的共同發展作為企業社會責任的重要方面，與社會各界協力回饋社會。在社區投資上，我們主要專注於精準扶貧、社區共建和志願服務。

### 精準扶貧

自華虹集團與暨新鎮油橋村結對幫扶以來，公司始終如一地重視這項工作。走訪困難群眾，傾聽油橋村村民心聲；為農村老年人送上了節日的慰問與祝福。結合油橋村實際情況，增強結對共建，助力精準扶貧，為維護和促進油橋村和諧穩定作出了積極的貢獻。

### 社區共建

為了增加社區居民安全意識，公司連續兩年在總部運營所在地社區開展《兒童意外急救課程》，包括兒童急救常識及兒童心肺復蘇術應用等。作為科技型企業，聯合公司科協開啟社區STEM科學工作坊試點項目，為社區兒童提供編程啟蒙活動。

### 志願者服務

我們鼓勵員工服務當地社區、傳遞關懷，成立了志願者協會，目前志願者達176人、共提供志願服務352小時。二零一八年，公司繼續開展美馨敬老院和張江鎮養老院慰問活動，為老人送關懷，送上花卉、水果和點心，並聯合周圍湯臣小區家長與孩子自編自導文藝節目，與老人們同樂。此外，公司組織員工開展環保公益活動，通過撿拾公司周圍外人行道、草坪、樹坑等地方的各類垃圾，並對城市共享單車亂擺放現象進行整治，用實際行動影響周圍群眾、倡導美化環境。

# 2018年環境、社會及管治報告

## 7 二零一八年所獲社會認可

序號	獲獎名稱
<b>全國及行業獎項</b>	
1	2018中國企業創新能力100強TOP 4
2	新能源汽車功率半導體十佳企業
3	2018 CITE創新產品與應用金獎
4	2018中國電子信息行業社會貢獻50強
5	「獲得垂直型溝道高壓超結半導體器件的方法」榮獲中國專利優秀獎
6	新能源汽車功率半導體十佳企業
7	國家金卡工程(廿五年)信息化開拓獎/國家金卡工程金螞蟻獎-最佳產品配套獎
8	二零一七年度中國功率器件創新企業獎
9	「0.11微米超低漏電(ULL)嵌入式存儲工藝平台」摘得「第十二屆(二零一七年度)中國半導體創新產品和技術」獎
<b>省部級獎項</b>	
10	二零一八年度「上海市工人先鋒號」
11	二零一八年度上海市優秀院士專家工作站
12	二零一七年度浦東新區科技進步一等獎
13	二零一七年度上海市集成電路行業最佳經濟效益前十名
14	二零一八年度張江科學城優秀企業經濟貢獻獎

# 2018年環境、社會及管治報告

## 8 績效數據

### 環境

績效指標	單位	二零一六年	二零一七年	二零一八年
<b>排放物</b>				
廢氣排放總量	萬立方米	1,060,281	1,121,958	1,145,074
氮氧化物(NO <sub>x</sub> )排放量	千克	26,260	26,374	26,821
二氧化硫(SO <sub>2</sub> )排放量	千克	50	62	68
廢水排放總量	萬立方米	454	436	473
溫室氣體排放量	噸CO <sub>2</sub> 當量	/	424,151	434,834
單位產量溫室氣體排放量	噸CO <sub>2</sub> 當量/8英寸晶圓	/	0.22	0.21
有害廢棄物總量	噸	4,324	4,641	5,122
單位產量有害廢棄物產生量 <sup>1</sup>	千克/8英寸晶圓	2.44	2.43	2.47
無害廢棄物總量 <sup>2</sup>	噸	2,746	3,982	4,017
<b>資源使用</b>				
用電總量	兆瓦時	481,830	509,877	528,402
單位產品用電量 <sup>3</sup>	千瓦時/8英寸晶圓	271	268	240
天然氣用量	立方米	6,580,000	7,155,253	7,481,586
單位產品用天然氣量	立方米/8英寸晶圓	3.70	3.75	3.66
用水總量	立方米	5,045,000	4,898,783	9,267,637
其中，來源於市政供水的水量	立方米	5,045,000	4,898,783	6,325,999
單位產品用水量 <sup>4</sup>	立方米/8英寸晶圓	2.8	2.57	3.10
循環再利用水量	萬立方米	258	282	292
成品出貨所用包裝材料的總量	噸	71	75	78
成品出貨所用包裝材料的回收量	噸	13	15	16

註：

- <sup>1</sup> 《華虹半導體有限公司二零一七年度環境、社會及管治報告》中披露的2016、二零一七年單位產量計算單位變更，有害廢棄物產生量數字已在本報告中統一為2.44千克/8英寸晶圓、2.43千克/8英寸晶圓。
- <sup>2</sup> 無害廢棄物為廢水處理產生的污泥量。
- <sup>3</sup> 《華虹半導體有限公司二零一七年度環境、社會及管治報告》中披露的二零一七年單位產品用電量數字已在本報告中更正為268千瓦時/8英寸晶圓。
- <sup>4</sup> 單位產品用水量的統計口徑只包含市政供水。

## 2018年環境、社會及管治報告

### 僱用與勞工實踐

績效指標	單位	二零一六年	二零一七年	二零一八年
<b>僱用</b>				
員工總數	人	3,938	4,138	4,512
男性員工數	人	2,772	2,914	3,227
女性員工數	人	1,166	1,224	1,285
勞動合同制員工數	人	3,938	4,138	4,512
非勞務合同制員工數 <sup>1</sup>	人	225	215	209
小於30歲員工數	人	1,922	2,001	2,129
30-50歲員工數	人	1,936	2,054	2,284
大於50歲員工數	人	80	83	99
大陸員工數	人	3,928	4,128	4,503
海外員工數	人	10	10	9
<b>健康與安全</b>				
員工職業病發病率	%	0	0	0
因工作關係而死亡的人數	人	0	0	0
因工傷損失工作天數	天	201.0	193.0	206.0
<b>發展與培訓</b>				
全體員工人均接受培訓時長 <sup>2</sup>	小時	101.8	72.3	77.0
其中：普通員工人均培訓時長	小時	103.7	72.6	78.0
管理層員工人均培訓時長	小時	9.3	11.6	13.0
女性員工人均培訓時長	小時	126.2	69.9	66.0
男性員工人均培訓時長	小時	91.4	74.3	82.0
<b>全體員工受訓覆蓋率</b>	%	100	100	100
其中：普通員工受訓覆蓋率	%	100	100	100
管理層員工受訓覆蓋率	%	100	100	100
女性員工受訓覆蓋率	%	100	100	100
男性員工受訓覆蓋率	%	100	100	100

註：

<sup>1</sup> 2016、2017表述為「勞務派遣制員工數」。

<sup>2</sup> 員工人均數除普通員工及管理層員工外，還涉及實習生和勞務派遣。

## 2018年環境、社會及管治報告

### 產品責任

績效指標	單位	二零一六年	二零一七年	二零一八年
<b>產品責任</b>				
產品退貨率	%	<0.1	0.3	0.104
已售產品因安全與健康問題回收的比例	%	0	0	0
客戶投訴事件	件	11	10	8
客戶投訴辦結率	%	100	100	100

### 供應鏈管理

績效指標	單位	二零一六年	二零一七年	二零一八年
<b>供應鏈管理</b>				
供應商總數	家	495	508	520
本土供應商數	家	375	385	393
海外供應商數	家	120	123	127
接受評估的供應商數目 <sup>1</sup>	家	31	115	112
要求整改的供應商數目	家	0	0	0
原輔料供應商簽訂《環保承諾書》的百分比	%	100	100	100
原材料採購本土化比例 <sup>2</sup>	%	22	23	26

註：

<sup>1</sup> 指公司對其實施了勞工、健康安全、環境、道德方面的評估的供應商數目。

<sup>2</sup> 原材料採購包括：硅片、石英、靶材、氣體、化學品等生產原材料。

## 2018年環境、社會及管治報告

### 反貪污

績效指標	單位	二零一六年	二零一七年	二零一八年
<b>反貪污</b>				
於匯報期內對發行人或其僱員提出並已審結的貪污訴訟案件的數目	件	0	0	0

### 社區投資

績效指標	單位	二零一六年	二零一七年	二零一八年
<b>社區投資</b>				
員工參與志願服務的人數	人	310	178	176
志願者活動累計時長	小時	560	356	352

### 合規

領域	主要法律法規名稱
EHS	《中華人民共和國環境保護法》、《中華人民共和國大氣污染防治法》、《中華人民共和國安全生產法》、《中華人民共和國職業病防治法》、《中華人民共和國勞動合同法》、《中華人民共和國婦女權益保障法》、《關於化學品註冊、評估、許可和限制的法規》(簡稱「REACH」)、Waste Electrical and Electronic Equipment(WEEE)、《關於限制在電子電器設備中使用某些有害成分的指令》(簡稱「RoHS」)等
信息安全	《中華人民共和國專利法》、《中華人民共和國著作權法》、《中華人民共和國商標法》、《中華人民共和國網絡安全法》、《商用密碼管理條例》等
質量	《中華人民共和國憲法》、《中華人民共和國產品質量法》、《中華人民共和國海關法》、《中華人民共和國對外貿易法》等
RBA	《中華人民共和國反不正當競爭法》、《中華人民共和國就業促進法》、《中華人民共和國社會保險法》、《中華人民共和國合同法》、《中華人民共和國勞動法》、《中華人民共和國刑法》等

# 2018年環境、社會及管治報告

## 9 編製說明

### 報告簡介

《華虹半導體有限公司二零一八年度環境、社會及管治報告》(以下簡稱「本報告」)披露了公司二零一八年履行企業社會責任所秉持的原則及推行的工作績效，包括重要利益相關方所關注的有關經濟、環境及社會的可持續發展議題。

### 編寫依據

本報告依據香港聯合交易所有限公司刊發的《環境、社會及管治報告指引》，並參考全球報告倡議組織(GRI)《可持續發展報告標準(2016)》編寫。

### 報告範圍

組織範圍： 本報告以華虹半導體有限公司為主體，涵蓋旗下全部子公司

時間範圍： 二零一八年一月一日至二零一八年十二月三十一日

發佈周期： 本報告為年度報告

### 數據說明

報告中數據和案例來自公司實際運行的原始記錄或財務報告。如有不一致之處，以財務報告數據為準。

# INDEPENDENT AUDITORS' REPORT

## 獨立核數師報告



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### To the members of Hua Hong Semiconductor Limited

(Incorporated in Hong Kong with limited liability)

### Opinion

We have audited the consolidated financial statements of Hua Hong Semiconductor Limited (the “Company”) and its subsidiaries (the “Group”) set out on pages 175 to 295, which comprise the consolidated statement of financial position as at 31 December 2018, and the consolidated statement of profit or loss, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2018, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards (“HKFRSs”) issued by the Hong Kong Institute of Certified Public Accountants (“HKICPA”) and have been properly prepared in compliance with the Hong Kong Companies Ordinance.

### 致華虹半導體有限公司列位股東

(於香港註冊成立之有限公司)

### 意見

吾等已審核華虹半導體有限公司(「貴公司」)及其子公司(「貴集團」)載於第175至295頁的綜合財務報表，當中包括於二零一八年十二月三十一日的綜合財務狀況表，以及截至該日止年度的綜合損益表、綜合全面收益表、綜合權益變動表及綜合現金流量表，以及綜合財務報表附註，包括主要會計政策概要。

吾等認為，該等綜合財務報表已根據香港會計師公會(「香港會計師公會」)頒佈的香港財務報告準則(「香港財務報告準則」)真實而公平地反映貴集團於二零一八年十二月三十一日的綜合財務狀況，及其截至該日止年度的綜合財務表現及綜合現金流量，並已按照香港公司條例妥為編製。



# INDEPENDENT AUDITORS' REPORT

## 獨立核數師報告

### Basis for opinion

We conducted our audit in accordance with Hong Kong Standards on Auditing (“HKSA”) issued by the HKICPA. Our responsibilities under those standards are further described in the *Auditor’s responsibilities for the audit of the consolidated financial statements* section of our report. We are independent of the Group in accordance with the HKICPA’s *Code of Ethics for Professional Accountants* (the “Code”), and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the *Auditor’s responsibilities for the audit of the consolidated financial statements* section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

### 意見的基礎

吾等已根據香港會計師公會頒佈的香港審計準則（「香港審計準則」）進行審計。根據該等準則，吾等的責任於本報告核數師就審計綜合財務報表承擔的責任一節進一步闡述。根據香港會計師公會專業會計師道德守則（「守則」），吾等獨立於貴集團，並已遵循守則履行其他道德責任。吾等相信，吾等所獲得的審計憑證能充足和適當地為吾等的意見提供基礎。

### 關鍵審計事項

關鍵審計事項是根據吾等的專業判斷，認為對本期綜合財務報表的審計最為重要的事項。這些事項是在對綜合財務報表整體進行審計並形成意見的背景下進行處理的，吾等不對這些事項提供單獨的意見。吾等對下述每一事項在審計中是如何應對的描述也以此為背景。

吾等已經履行本報告核數師就審計綜合財務報表承擔的責任一節所述的責任，包括有關該等事項的責任。因此，吾等的審計包括執行為應對綜合財務報表重大錯誤陳述風險的評估而設計的程序。吾等執行審計程序的結果，包括應對以下事項所執行的程序，為吾等就隨附的綜合財務報表的審計意見提供基礎。

# INDEPENDENT AUDITORS' REPORT

## 獨立核數師報告

### Key audit matters (continued)

Key audit matter	How our audit addressed the key audit matter
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#### *Fair value of an unlisted equity investment*

The Group's equity investment designated at fair value through other comprehensive income as at 31 December 2018 included an unlisted equity investment amounting to US\$206 million. The Group measured it at fair value at the end of each reporting period and engaged external experts to assess the fair value. This matter was significant to our audit because the carrying amount of the unlisted equity investment was material to the consolidated financial statements and the valuation process was complex and involved significant judgements.

The Group's disclosures about valuation of the unlisted equity investment are included in notes 3, 18 and 35 to the financial statements, which specifically explain the key assumptions the management used in the valuation.

Our audit procedures included, amongst others, assessing the competency and objectivity of the independent external valuer engaged by the Group and involving our internal specialists to assist our work to evaluate the methodology of the valuation and the key assumptions used in the valuation such as determination of comparable public companies (peers), selection of price multiple and discount for illiquidity.

### 關鍵審計事項 (續)

關鍵審計事項	關鍵審計事項在審計中是如何應對的
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#### *未上市股權投資之公平值*

於二零一八年十二月三十一日，貴集團指定按公平值計入其他全面收益的股權投資包括未上市股權投資2.06億美元。本集團於各報告期末按公平值對其進行計量並聘請外部專家評估公平值。該事項對吾等的審計而言屬重大，乃由於未上市股權投資的賬面值對綜合財務報表而言屬重要，且估值過程複雜，並涉及重大判斷。

貴集團關於評估未上市股權投資的披露載於財務報表附註3、18及35，其中特別說明管理層於評估時使用的主要假設。

吾等的審計程序包括(其中包括)評估貴集團所委聘的獨立外部估值師的能力及客觀性及在內部專家的協助下，評價於評估時使用的估值方法及主要假設(如確定比較上市公司(同行)、選擇價格倍數及缺乏流通性的折讓價)。

# INDEPENDENT AUDITORS' REPORT

## 獨立核數師報告

### Key audit matters (continued)

Key audit matter	How our audit addressed the key audit matter
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#### *Fair value of investment property*

The Group recorded an investment property amounting to US\$171 million as at 31 December 2018. The Group measured its investment property at fair value at the end of each reporting period and engaged external experts to assess the fair value. This matter was significant to our audit because the carrying amount of the investment property was material to the consolidated financial statements and the valuation process was complex and involved significant judgements.

The Group's disclosures about valuation of the investment property are included in notes 3 and 14 to the financial statements, which specifically explain the key assumptions the management used in the valuation.

Our audit procedures, included amongst others, assessing the competency and objectivity of the independent external valuer engaged by the Group, comparing property-related data used for the valuation with the underlying documentation and involving our internal specialists to assist out work to evaluate the methodology of the valuation and the key assumptions used in the valuation such as the estimated rental value, term yield, reversionary yield and long term vacancy rate.

### 關鍵審計事項 (續)

關鍵審計事項	關鍵審計事項在審計中是如何應對的
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#### *投資物業公平值*

於二零一八年十二月三十一日，貴集團錄得投資物業1.71億美元。貴集團於各報告期末按公平值計量投資物業，並委聘外部專家對公平值進行評估。該事項對吾等的審計而言屬重大，乃由於投資物業的賬面值對綜合財務報表而言屬重要，且估值過程複雜，並涉及重大判斷。

貴集團關於投資物業估值的披露載於財務報表附註3及附註14，其中特別說明管理層於估值中所用的主要假設。

吾等的審計程序包括(其中包括)評估貴集團所委聘的獨立外部估值師的能力及客觀性、將用於評估的物業相關數據與相關文件比較，以及在內部專家協助下，評價評估時使用的估值方法及主要假設(如估計租賃價值，年期回報率，復歸及長期空置率)。

# INDEPENDENT AUDITORS' REPORT

## 獨立核數師報告

### Other information included in the Annual Report

The directors of the Company are responsible for the other information. The other information comprises the information included in the Annual Report, other than the consolidated financial statements and our auditor's report thereon. The Annual Report is expected to be made available to us after the date of this auditor's report.

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

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

### Responsibilities of the directors for the consolidated financial statements

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

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

The directors of the Company are assisted by the Audit Committee in discharging their responsibilities for overseeing the Group's financial reporting process.

### 年報所載的其他資料

貴公司董事須對其他資料負責。其他資料包括年報所載資料（綜合財務報表及吾等就此發出的核數師報告除外）。預期年報將於本核數師報告日期後提供予我們。

吾等對綜合財務報表的意見並不涵蓋其他資料，吾等亦將不會就其發表任何形式的鑒證結論。

就審計綜合財務報表而言，吾等的責任是當取得其他資料後閱讀其他資料，及在此過程中，考慮其他資料是否與綜合財務報表或吾等在審計過程中所了解的情況有重大不符，或者似乎有重大錯誤陳述。

### 董事對綜合財務報表須承擔的責任

貴公司董事須負責根據香港會計師公會頒佈的香港財務報告準則和香港公司條例編製綜合財務報表以作出真實而公平的反映，並落實董事認為必須之內部控制，以使綜合財務報表不存在由於欺詐或錯誤而導致的重大失實陳述。

在編製綜合財務報表時，貴公司董事負責評估貴集團持續經營的能力，並在適用情況下披露與持續經營有關的事項，以及使用持續經營為會計基礎，除非貴公司董事有意將貴集團清盤或停止經營，或別無其他實際的替代方案。

審核委員會協助貴公司董事履行監督貴集團財務報告過程的責任。

# INDEPENDENT AUDITORS' REPORT

## 獨立核數師報告

### Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Our report is made solely to you, as a body, in accordance with section 405 of the Hong Kong Companies Ordinance, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with HKSA's will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with HKSA's, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

### 核數師就審計綜合財務報表承擔的責任

吾等的目標，是對綜合財務報表整體是否存在由於欺詐或錯誤而導致的重大錯誤陳述取得合理保證，並出具包括吾等意見的核數師報告。吾等按照香港公司條例第405條僅向整體股東報告，除此之外本報告別無其他目的。吾等不會就本報告的內容向任何其他人士負上或承擔任何責任。

合理保證是高水平的保證，但不能保證按照香港審計準則進行的審計，在某一重大錯誤陳述存在時總能發現。錯誤陳述可以由欺詐或錯誤引起，如果合理預期它們單獨或匯總起來可能影響綜合財務報表使用者依賴綜合財務報表所作出的經濟決定，則有關的錯誤陳述可被視作重大。

我們根據香港審計準則進行審計的工作之一，是運用專業判斷，在整個審計過程中保持專業懷疑態度。我們亦：

- 識別及評估綜合財務報表由於欺詐或錯誤而導致的重大錯誤陳述風險，因應該等風險設計及執行審計程序，以及獲得充足及適當的審計憑證為我們的意見提供基礎。由於欺詐涉及合謀串通、偽造、故意遺漏、誤導性陳述或凌駕於內部控制之上，因此未能發現由此造成的重大錯誤陳述風險比未能發現由於錯誤而導致的重大錯誤陳述風險更高。
- 了解與審計有關的內部控制，以設計恰當的審計程序，但並非旨在對貴集團內部控制的有效性發表意見。
- 評估所用會計政策的恰當性，以及董事所作出的會計估算和相關披露的合理性。

# INDEPENDENT AUDITORS' REPORT

## 獨立核數師報告

### Auditor's responsibilities for the audit of the consolidated financial statements (continued)

- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

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

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

### 核數師就審計綜合財務報表承擔的責任 (續)

- 總結董事採用以持續經營為基礎的會計法的恰當性，並根據已獲取的審計憑證，總結是否有可能對貴集團持續經營能力構成重大疑問的事件或情況等重大不確定因素。倘若我們總結認為有重大不確定因素，我們需要在核數師報告中提請注意綜合財務報表內的相關披露，或如果相關披露不足，則修訂我們的意見。我們的結論是基於截至核數師報告日期所獲得的審計憑證。然而，未來事件或情況可能導致貴集團不再具有持續經營的能力。
- 評估綜合財務報表（包括披露）的整體列報、架構和內容，以及綜合財務報表是否中肯反映相關交易及事項。
- 就貴集團內各實體或業務活動的財務資料獲得充足適當的審計憑證，以便就綜合財務報表發表意見。我們須負責指導、監督和執行貴集團的審計工作。我們須為我們的審計意見承擔全部責任。

我們就（其中包括）審計工作的計劃範圍和時間以及重大審計發現（包括我們在審計過程中發現的任何內部控制的重大缺失）與審核委員會進行溝通。

我們亦向審核委員會提交聲明，確認我們已遵守有關獨立性的道德要求，並就所有被合理認為可能影響我們獨立性的關係和其他事宜以及相關保障措施（如適用），與審核委員會進行溝通。

我們通過與審核委員會溝通，確定哪些是本期綜合財務報表審計工作的最重要事項，即關鍵審計事項。除非法律或法規不容許公開披露此等事項或在極罕有的情況下，我們認為披露此等事項可合理預期的不良後果將超過公眾知悉此等事項的利益而不應在報告中予以披露，否則我們會在核數師報告中描述此等事項。

# INDEPENDENT AUDITORS' REPORT

## 獨立核數師報告

### Auditor's responsibilities for the audit of the consolidated financial statements (continued)

The engagement partner on the audit resulting in this independent auditor's report is Shun Lung Wai.

**Ernst & Young**  
*Certified Public Accountants*  
Hong Kong  
28 March 2019

### 核數師就審計綜合財務報表承擔的責任（續）

出具本獨立核數師報告的審計項目合夥人為孫龍偉。

安永會計師事務所  
執業會計師  
香港  
二零一九年三月二十八日

# CONSOLIDATED STATEMENT OF PROFIT OR LOSS

Year ended 31 December 2018  
截至二零一八年十二月三十一日止年度

## 綜合損益表

		Notes 附註	2018 二零一八年 (US\$'000) 千美元	2017 二零一七年 (US\$'000) 千美元
Revenue	銷售收入	5	930,268	808,148
Cost of sales	銷售成本		(619,114)	(540,971)
Gross profit	毛利		311,154	267,177
Other income and gains	其他收入及收益	5	43,613	24,394
Fair value gain on an investment property	投資物業的公平值收益		247	89
Selling and distribution expenses	銷售及分銷費用		(7,771)	(7,232)
Administrative expenses	管理費用		(122,323)	(108,673)
Other expenses	其他費用	5	(11,106)	(10,712)
Finance costs	財務費用	7	(2,203)	(2,178)
Share of profit of an associate	分佔一家聯營公司溢利		9,444	9,622
<b>PROFIT BEFORE TAX</b>	<b>稅前溢利</b>	6	<b>221,055</b>	172,487
Income tax expense	所得稅開支	10	(35,447)	(27,225)
<b>PROFIT FOR THE YEAR</b>	<b>年內溢利</b>		<b>185,608</b>	145,262
Attributable to:	下列人士應佔：			
Owners of the parent	母公司擁有人		183,158	145,262
Non-controlling interests	非控股權益		2,450	–
			<b>185,608</b>	145,262
<b>EARNINGS PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE PARENT:</b>	<b>母公司普通股權持有人應佔每股盈利：</b>			
Basic	基本	12		
– For profit for the year	– 年內溢利		<b>US\$0.171</b> <b>0.171美元</b>	US\$0.140 0.140美元
Diluted	攤薄			
– For profit for the year	– 年內溢利		<b>US\$0.169</b> <b>0.169美元</b>	US\$0.139 0.139美元



# CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

## 綜合全面收益表

Year ended 31 December 2018  
截至二零一八年十二月三十一日止年度

		2018 二零一八年 (US\$'000) 千美元	2017 二零一七年 (US\$'000) 千美元
<b>PROFIT FOR THE YEAR</b>	年內溢利	<b>185,608</b>	145,262
<b>OTHER COMPREHENSIVE (LOSS)/INCOME</b>	其他全面(虧損)/收益		
Other comprehensive (loss)/income that may be reclassified to profit or loss in subsequent periods:	於其後期間可能重新分類至損益的其他全面(虧損)/收益		
Exchange differences on translation of foreign operations	換算海外業務產生的外匯差額	<b>(107,744)</b>	94,477
Net other comprehensive (loss)/income that may be reclassified to profit or loss in subsequent periods	於其後期間可能重新分類至損益的其他全面(虧損)/收益淨額	<b>(107,744)</b>	94,477
Other comprehensive income that will not be reclassified to profit or loss in subsequent periods:	於其後期間不會重新分類至損益的其他全面收益		
Equity investments designated at fair value through other comprehensive income:	指定按公平值計入其他全面收益的股權投資：		
Changes in fair value	公平值變動	<b>1,764</b>	-
Income tax effect	所得稅影響	<b>(265)</b>	-
Net other comprehensive income that will not be reclassified to profit or loss in subsequent periods	於其後期間不會重新分類至虧損的其他全面收益淨額	<b>1,499</b>	-
<b>OTHER COMPREHENSIVE (LOSS)/INCOME FOR THE YEAR, NET OF TAX</b>	年內其他全面(虧損)/收益，扣除稅項	<b>(106,245)</b>	94,477
<b>TOTAL COMPREHENSIVE INCOME FOR THE YEAR</b>	年內全面收益總額	<b>79,363</b>	239,739
Attributable to:	下列人士應佔：		
Owners of the parent	母公司擁有人	<b>105,794</b>	239,739
Non-controlling interests	非控股權益	<b>(26,431)</b>	-
		<b>79,363</b>	239,739

# CONSOLIDATED STATEMENT OF FINANCIAL POSITION

## 綜合財務狀況表

31 December 2018  
截至二零一八年十二月三十一日止年度

			31 December 2018 二零一八年 十二月三十一日 (US\$'000) 千美元	31 December 2017 二零一七年 十二月三十一日 (US\$'000) 千美元
	Notes 附註			
<b>NON-CURRENT ASSETS</b>		<b>非流動資產</b>		
Property, plant and equipment	13	物業、廠房及設備	773,180	733,462
Investment property	14	投資物業	171,225	179,586
Prepaid land lease payments	15	預付土地租賃款項	58,989	20,634
Intangible assets	16	無形資產	9,571	7,411
Investment in an associate	17	於聯營公司的投資	64,005	57,577
Available-for-sale investments	18	可供出售投資	–	215,864
Equity investments designated at fair value through other comprehensive income	18	指定按公平值計入其他 全面收益的股權投資	208,357	–
Long term prepayments		長期預付款項	3,762	3,266
Long term prepayments to related parties	33(c)	向關聯方長期預付款項	8,747	–
Deferred tax assets	27	遞延稅項資產	6,363	7,074
Total non-current assets		非流動資產總額	1,304,199	1,224,874
<b>CURRENT ASSETS</b>		<b>流動資產</b>		
Inventories	19	存貨	129,629	115,578
Trade and notes receivables	20	貿易應收款項及應收票據	176,797	112,372
Prepayments, other receivables and other assets	21	預付款項、其他應收款項 及其他資產	12,479	10,074
Due from related parties	33(c)	應收關聯方款項	10,800	46,988
Financial assets at fair value through profit or loss	18	按公平值計入損益的 金融資產	667,033	–
Restricted and time deposits	22	已凍結及定期存款	337	193,530
Cash and cash equivalents	22	現金及現金等價物	777,000	374,890
Total current assets		流動資產總額	1,774,075	853,432
<b>CURRENT LIABILITIES</b>		<b>流動負債</b>		
Trade payables	23	貿易應付款項	79,470	68,124
Other payables and accruals	24	其他應付款項及暫估費用	165,370	129,908
Interest-bearing bank borrowings	25	計息銀行借款	4,371	60,751
Government grants	26	政府補助	44,406	40,523
Due to related parties	33(c)	應付關聯方款項	5,838	10,885
Income tax payable		應付所得稅	30,114	26,648
Total current liabilities		流動負債總額	329,569	336,839
<b>NET CURRENT ASSETS</b>		<b>流動資產淨額</b>	<b>1,444,506</b>	516,593
<b>TOTAL ASSETS LESS CURRENT LIABILITIES</b>		<b>資產總值減 流動負債</b>	<b>2,748,705</b>	1,741,467

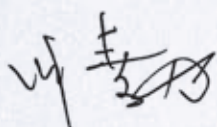
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# CONSOLIDATED STATEMENT OF FINANCIAL POSITION

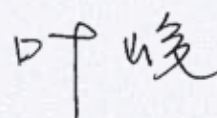
## 綜合財務狀況表

31 December 2018  
截至二零一八年十二月三十一日止年度

			<b>31 December 2018</b> 二零一八年 十二月三十一日 <b>(US\$'000)</b> 千美元	31 December 2017 二零一七年 十二月三十一日 (US\$'000) 千美元
<b>NON-CURRENT LIABILITIES</b>	<b>非流動負債</b>			
Interest-bearing bank borrowings	計息銀行借款	25	<b>26,227</b>	32,139
Deferred tax liabilities	遞延稅項負債	27	<b>18,146</b>	14,123
Total non-current liabilities	非流動負債總額		<b>44,373</b>	46,262
<b>Net assets</b>	<b>淨資產</b>		<b>2,704,332</b>	1,695,205
<b>EQUITY</b>	<b>權益</b>			
Share capital	股本	28	<b>1,960,159</b>	1,554,870
Reserves	儲備	30	<b>195,097</b>	140,335
Total equity attributable to owners of the parent	母公司擁有人應佔權益總額		<b>2,155,256</b>	1,695,205
Non-controlling interests	非控股權益	38	<b>549,076</b>	-
<b>Total equity</b>	<b>權益總額</b>		<b>2,704,332</b>	1,695,205



**Suxin Zhang**  
張素心  
Director  
董事



**Jun Ye**  
葉峻  
Director  
董事

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

## 綜合權益變動表

Year ended 31 December 2018  
截至二零一八年十二月三十一日止年度

		Attributable to owners of the parent 母公司擁有人應佔											
		Share capital	Merger reserve	Share option reserve	Other reserve and contributed surplus 其他儲備	Fair value reserve	Revaluation surplus#	Statutory reserve funds	Exchange fluctuation reserve	Accumulated losses	Total	Non-controlling interests	Total equity
		股本	合併儲備	購股權儲備	及供款盈餘	公平值儲備	重估盈餘*	儲備基金	波動儲備	累計虧損	總計	非控股權益	權益總額
Notes 附註		US\$'000 千美元	US\$'000 千美元	US\$'000 千美元	US\$'000 千美元	US\$'000 千美元	US\$'000 千美元	US\$'000 千美元	US\$'000 千美元	US\$'000 千美元	US\$'000 千美元	US\$'000 千美元	US\$'000 千美元
		(note 28) (附註28)		(note 29) (附註29)				(note 30) (附註30)					
At 1 January 2018 as previously reported	於二零一八年一月一日 (如先前呈列)	1,554,870	645,494	7,083	45,097	-	99,257	52,173	113,518	(822,287)	1,695,205	-	1,695,205
Effect of adoption of HKFRS 9	採用香港財務報告準則 第9號的影響	-	-	-	-	1,046	-	-	-	-	1,046	-	1,046
	2.2												
At 1 January 2018 (restated)	於二零一八年一月一日 (重列)	1,554,870	645,494	7,083	45,097	1,046	99,257	52,173	113,518	(822,287)	1,696,251	-	1,696,251
Profit for the year	年內溢利	-	-	-	-	-	-	-	-	183,158	183,158	2,450	185,608
Other comprehensive loss for the year:	年內其他全面虧損												
Exchange differences related to foreign operations	有關海外業務的 外匯差額	-	-	-	-	-	-	-	(78,863)	-	(78,863)	(28,881)	(107,744)
Net gain on equity investments designated at fair value through other comprehensive income, net of tax	指定按公平值計入其他 全面收益的股權投資 收益淨額，扣除稅項	-	-	-	-	1,499	-	-	-	-	1,499	-	1,499
Total comprehensive income for the year	年內全面收益總額	-	-	-	-	1,499	-	-	(78,863)	183,158	105,794	(26,431)	79,363
Final 2017 dividend declared	最終宣派二零一七年股息	-	-	-	-	-	-	-	-	(41,095)	(41,095)	-	(41,095)
Issue of shares	發行股份	28	405,289	-	(1,774)	-	-	-	-	-	403,515	-	403,515
Equity-settled share option arrangements	以權益結算的購股權安排	29	-	-	1,298	-	-	-	-	-	1,298	-	1,298
Capital contribution from non-controlling interests	非控股權益注資	-	-	-	(10,507)	-	-	-	-	-	(10,507)	575,507	565,000
Transfer from retained profits generated by a subsidiary	轉撥自一間子公司 產生的留存溢利	-	-	-	-	-	-	19,422	-	(19,422)	-	-	-
At 31 December 2018	於二零一八年 十二月三十一日	1,960,159	645,494*	6,607*	34,590*	2,545*	99,257*	71,595*	34,655*	(699,646)*	2,155,256	549,076	2,704,332

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

## 綜合權益變動表

Year ended 31 December 2018  
截至二零一八年十二月三十一日止年度

		Attributable to owners of the parent 母公司擁有人應佔											
		Share capital	Merger reserve	Share option reserve	Other reserve and contributed surplus 其他儲備	Fair value reserve	Revaluation surplus#	Statutory reserve funds	Exchange fluctuation reserve	Accumulated losses	Total	Non-controlling interests	Total equity
		股本	合併儲備	購股權儲備	及供款盈餘	公平值儲備	重估盈餘#	儲備基金	波動儲備	累計虧損	總計	非控股權益	權益總額
Notes		US\$'000	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000
附註		千美元	千美元	千美元	千美元	千美元	千美元	千美元	千美元	千美元	千美元	千美元	千美元
		(note 28)		(note 29)				(note 30)					
		(附註28)		(附註29)				(附註30)					
At 1 January 2017	於二零一七年一月一日	1,550,164	645,494*	5,203*	45,097*	-	99,257*	37,010	19,041	(912,580)	1,488,686	-	1,488,686
Profit for the year	年內溢利	-	-	-	-	-	-	-	-	145,262	145,262	-	145,262
Other comprehensive income for the year:	年內其他全面虧損												
Exchange differences related to foreign operations	有關海外業務的外匯差額	-	-	-	-	-	-	-	94,477	-	94,477	-	94,477
Total comprehensive income for the year	年內全面收益總額	-	-	-	-	-	-	-	94,477	145,262	239,739	-	239,739
Final 2016 dividend declared	最終宣派二零一六年股息	-	-	-	-	-	-	-	-	(39,806)	(39,806)	-	(39,806)
Issue of shares	發行股份	29	4,706	-	(1,432)	-	-	-	-	-	3,274	-	3,274
Equity-settled share option arrangements	以權益結算的購股權安排	29	-	-	3,312	-	-	-	-	-	3,312	-	3,312
Transfer from retained profits generated by a subsidiary	轉撥自一間子公司產生的留存溢利	-	-	-	-	-	-	15,163	-	(15,163)	-	-	-
At 31 December 2017	於二零一七年十二月三十一日	1,554,870	645,494*	7,083*	45,097*	-	99,257*	52,173*	113,518*	(822,287)*	1,695,205	-	1,695,205

# Revaluation surplus arose from a change in use from an owner-occupied property to an investment property carried at fair value.

# 重估盈餘源於按公平值列賬之一項自用物業的用途更改為投資物業。

\* These reserve accounts comprise the consolidated reserves of US\$195,097,000 (2017: US\$140,335,000) in the consolidated statement of financial position.

\* 該等儲備賬合計為綜合財務狀況表中的綜合儲備195,097,000美元(二零一七年: 140,335,000美元)。

# CONSOLIDATED STATEMENT OF CASH FLOWS

## 綜合現金流量表

Year ended 31 December 2018  
截至二零一八年十二月三十一日止年度

	Notes 附註	2018 二零一八年 (US\$'000) 千美元	2017 二零一七年 (US\$'000) 千美元
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>	<b>經營活動所得現金流量</b>		
Profit before tax	稅前溢利	<b>221,055</b>	172,487
Adjustments for:	就以下各項作出的調整		
Finance costs	財務費用	<b>2,203</b>	2,178
Share of profit of an associate	分佔一家聯營公司溢利	<b>(9,444)</b>	(9,622)
Interest income	利息收入	<b>(9,489)</b>	(6,838)
Other interest income from financial assets at fair value through profit or loss	按公平值計入損益的金融資產所產生之其他利息收入	<b>(11,412)</b>	–
Fair value gains on financial assets at fair value through profit or loss	按公平值計入損益的金融資產公平值收益	<b>(4,200)</b>	–
Loss on disposal of items of property, plant and equipment	出售物業、廠房及設備項目所得虧損	<b>96</b>	67
Depreciation	折舊	<b>116,187</b>	100,736
Amortisation of intangible assets	無形資產攤銷	<b>3,006</b>	3,240
Recognition of prepaid land lease payments	預付土地租賃款項確認	<b>666</b>	652
Changes in fair value of an investment property	投資物業公平值變動	<b>(247)</b>	(89)
Write-down/(reversal of write-down) of inventories to net realisable value	存貨撇減/(撇減撥回)至可變現淨值	<b>646</b>	(204)
Impairment of trade receivables	貿易應收款項減值	<b>25</b>	–
Impairment of items of property, plant and equipment	物業、廠房及設備項目減值	<b>6,151</b>	2,581
Equity-settled share option expense	以權益結算的購股權開支	<b>1,298</b>	3,312
		<b>316,541</b>	268,500
Increase in inventories	存貨增加	<b>(14,199)</b>	(20,807)
Increase in trade and notes receivables	貿易應收款項及應收票據增加	<b>(64,382)</b>	(6,374)
(Increase)/decrease in prepayments, other receivables and other assets	預付款項、其他應收款項及其他資產(增加)/減少	<b>(3,657)</b>	415
Decrease/(increase) in amounts due from related parties	應收關聯方款項減少/(增加)	<b>36,188</b>	(9,236)
Decrease in pledged deposits	已抵押存款減少	<b>19</b>	189
Increase in trade payables	貿易應付款項增加	<b>11,346</b>	3,334
Increase in other payables and accruals	其他應付款項及暫估費用增加	<b>18,955</b>	38,461
Increase in government grants	政府補貼增加	<b>6,011</b>	2,331
(Decrease)/increase in amounts due to related parties	應付關聯方款項(減少)/增加	<b>(5,047)</b>	1,196
<b>Cash generated from operations</b>	<b>經營活動產生的現金</b>	<b>301,775</b>	278,009
Income tax paid	已付所得稅	<b>(27,375)</b>	(19,709)
<b>Net cash flows generated from operating activities</b>	<b>經營活動所得現金流量淨額</b>	<b>274,400</b>	258,300

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# CONSOLIDATED STATEMENT OF CASH FLOWS

## 綜合現金流量表

Year ended 31 December 2018  
截至二零一八年十二月三十一日止年度

	Notes 附註	2018 二零一八年 (US\$'000) 千美元	2017 二零一七年 (US\$'000) 千美元
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>	<b>投資活動所得現金流量</b>		
Interest received	已收利息	10,300	5,831
Purchases of items of property, plant and equipment, prepaid lease payments and intangible assets	購買物業、廠房及設備項目、預付租賃款項及無形資產	(229,837)	(138,087)
Increase in long-term prepayments to related parties	向關聯方支付的長期預付款項增加	(8,747)	–
Proceeds from disposal of items of property, plant and equipment	出售物業、廠房及設備項目所得款項	4	10
Receipt of government grants of property, plant and equipment	收到政府對物業、廠房及設備的補助	–	2,279
Purchases of financial assets at fair value through profit or loss	購買按公平值計入損益的金融資產	(1,959,653)	–
Proceeds from disposal of financial assets at fair value through profit or loss	出售按公平值計入損益的金融資產所得款項	1,279,352	–
Decrease/(increase) in time deposits	定期存款減少/(增加)	191,342	(67,036)
<b>Net cash flows used in investing activities</b>	<b>投資活動所用現金流量淨額</b>	<b>(717,239)</b>	<b>(197,003)</b>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>	<b>融資活動所得現金流量</b>		
Proceeds from issue of shares	發行股份所得款項	403,956	2,759
Capital contribution from non-controlling interests	非控股權益出資	565,000	–
Dividends paid to shareholders	向股東支付股息	(41,066)	(39,693)
Interest paid	已付利息	(2,259)	(2,167)
Increase in pledged deposits	已抵押存款增加	(8)	(5)
Repayment of bank loans	償還銀行貸款	(60,613)	(1,990)
<b>Net cash flows from/(used in) financing activities</b>	<b>融資活動所得/(所用)現金流量淨額</b>	<b>865,010</b>	<b>(41,096)</b>
<b>NET INCREASE IN CASH AND CASH EQUIVALENTS</b>	<b>現金及現金等價物增加淨額</b>	<b>422,171</b>	<b>20,201</b>
Cash and cash equivalents at beginning of year	年初現金及現金等價物	374,890	341,255
Effect of foreign exchange rate changes, net	外匯匯率變動影響，淨額	(20,061)	13,434
<b>CASH AND CASH EQUIVALENTS AT END OF YEAR</b>	<b>年末現金及現金等價物</b>	<b>777,000</b>	<b>374,890</b>
<b>ANALYSIS OF BALANCES OF CASH AND CASH EQUIVALENTS</b>	<b>現金及現金等價物結餘分析</b>		
Cash and bank balances	現金及銀行結餘	171,781	203,971
Non-pledged time deposits with original maturity of less than three months when acquired	於獲得時原到期日少於三個月的非抵押定期存款	605,219	170,919
Cash and cash equivalents as stated in the statement of financial position and in the statement of cash flows	財務狀況表及現金流量表中 所列現金及現金等價物	777,000	374,890

# NOTES TO FINANCIAL STATEMENTS

31 December 2018  
二零一八年十二月三十一日

## 財務報表附註

### 1. Corporate and Group information

Hua Hong Semiconductor Limited (the “Company”) is a limited liability company incorporated in Hong Kong on 21 January 2005. The registered office of the Company is located at Room 2212, Bank of America Tower, 12 Harcourt Road, Central, Hong Kong.

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

In the opinion of the directors, the parent and the ultimate parent of the Company are Shanghai Alliance Investment Ltd. (“SAIL”) and INESA (Group) Co., Ltd. (“INESA”), which are state-owned companies established in the People’s Republic of China (“PRC”), supervised by the State-owned Assets Supervision and Administration Commission.

#### Information about subsidiaries

Particulars of the Company’s principal subsidiaries are as follows:

### 1. 公司及集團資料

華虹半導體有限公司「本公司」為一家於二零零五年一月二十一日在香港註冊成立的有限公司。本公司的註冊辦事處為香港中環夏慤道12號美國銀行中心2212室。

本公司的主要活動為投資控股。於年內，本公司的子公司主要從事半導體產品的生產及銷售。

董事認為，本公司的母公司及最終控股公司為上海聯和投資有限公司（「上海聯和」）及上海儀電（集團）有限公司（「儀電集團」），上海聯和及儀電集團均為於中華人民共和國（「中國」）成立並由國有資產監督管理委員會（「國資委」）監管的國有公司。

#### 有關子公司的資料

本公司旗下主要子公司的詳情如下：

Name 名稱	Place of incorporation/ registration and business 註冊成立/ 登記地點及業務	Issued ordinary/ registered share capital('000) 已發行普通/ 註冊股本(千元)	Percentage of equity attributable to the Company 本公司應佔權益百分比		Principal activities 主要業務活動
			Direct 直接	Indirect 間接	
Grace Semiconductor Manufacturing Corporation ("Grace Cayman")*	Cayman Islands 開曼群島	US\$0.001 0.001美元	100%	–	Investment holding 投資控股
Shanghai Huahong Grace Semiconductor Manufacturing Corporation ("HHGrace") 上海華虹宏力半導體製造有限公司（「華虹宏力」）	PRC/Mainland China 中國／中國內地	RMB5,865,538 人民幣5,865,538元	100%	–	Manufacture and sale of semiconductor products 生產及銷售半導體產品
Huahong Semiconductor (Wuxi) Co., Ltd. ("HH - Wuxi")** 華虹半導體（無錫）有限公司（「華虹無錫」）**	PRC/Mainland China 中國／中國內地	US\$1,800,000 1,800,000美元	30.7%	25.8%	Manufacture and sale of semiconductor products 生產及銷售半導體產品
Shanghai Huajie IC Technology Service Co., Ltd. ("Shanghai Huajie")*** 上海華傑芯片技術服務有限公司（「上海華傑」）***	PRC/Mainland China 中國／中國內地	RMB41,385 人民幣41,385元	–	100%	Inactive 停業
Global Synergy Technology Limited ("GST")**** 力鴻科技有限公司（「力鴻科技」）****	Hong Kong 香港	HK\$10 10港元	100%	–	Trading 貿易



# NOTES TO FINANCIAL STATEMENTS

## 財務報表附註

31 December 2018  
二零一八年十二月三十一日

### 1. Corporate and Group information (continued)

### 1. 公司及集團資料 (續)

#### Information about subsidiaries (continued)

#### 有關子公司的資料 (續)

Name 名稱	Place of incorporation/ registration and business 註冊成立/ 登記地點及業務	Issued ordinary/ registered share capital('000) 已發行普通/ 註冊股本(千元)	Percentage of equity attributable to the Company 本公司應佔權益百分比		Principal activities 主要業務活動
			Direct 直接	Indirect 間接	
HHGrace Semiconductor USA, Inc.*	USA 美國	-	100%	-	Sales office 銷售辦事處
HHGrace Semiconductor Japan Co., Ltd.*	Japan 日本	JPY10,000 10,000日元	100%	-	Sales office 銷售辦事處

\* No audited financial statements have been prepared for these entities for the year ended 31 December 2018, as these entities were not subject to any statutory audit requirement under the relevant rules and regulations in their jurisdictions of incorporation.

\* 於截至二零一八年十二月三十一日止年度，概無編製該等實體的經審核財務報表，因為根據其註冊成立的司法權區的相關法律及法規，該等實體毋須進行任何法定審核。

\*\* HH – Wuxi is a Sino-foreign joint company established under PRC law by the Group. On 3 January 2018, the Company, HHGrace, China Integrated Circuit Industry Investment Fund Co., Ltd. and Wuxi Xi Hong Lian Xin Investment Fund Co., Ltd. entered into an agreement (the "Investment Agreement"), pursuant to which capital injection has been scheduled into four instalments and the Company and HHGrace together subscribed 51% of the registered share capital of HH – Wuxi. As at 31 December 2018, the Group's proportion of injected capital was 56.5%. With the completion of the last instalment of capital injection scheduled in the first quarter of 2019, the Group's proportion will decrease to 51%.

\*\* 華虹無錫乃是本集團根據中國法律成立的一家中外合資企業。於二零一八年一月三日，本公司、華虹宏力、國家集成電路產業投資基金股份有限公司及無錫錫虹聯芯投資有限公司訂立一份協議（「投資協議」），據此，注資已分四期進行且本公司及華虹宏力合共認購華虹無錫51%的註冊股本。於二零一八年十二月三十一日，本集團的注資比例為56.5%。於二零一九年第一季度最後一期注資完成後，本集團的注資比例減少至51%。

\*\*\* Shanghai Huajie is a domestic company established under PRC law.

\*\*\* 上海華傑是根據中國法律成立的境內公司。

\*\*\*\* GST is a company incorporated in Hong Kong.

\*\*\*\* GST乃於香港註冊成立的公司。

# NOTES TO FINANCIAL STATEMENTS

31 December 2018  
二零一八年十二月三十一日

## 財務報表附註

### 2.1 Basis of Preparation

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

#### Basis of consolidation

The consolidated financial statements include the financial statements of the Company and its subsidiaries (collectively referred to as the “Group”) for the year ended 31 December 2018. A subsidiary is an entity (including a structured entity), directly or indirectly, controlled by the Company. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee (i.e., existing rights that give the Group the current ability to direct the relevant activities of the investee).

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

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

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

### 2.1 編製基準

該等財務報表乃根據由香港會計師公會（「香港會計師公會」）頒佈的香港財務報告準則（「香港財務報告準則」，包括所有香港財務報告準則、香港會計準則（「香港會計準則」）及詮釋）、香港公認會計準則以及香港公司條例編製。財務報表乃根據歷史成本慣例編製，惟已按公平值計量的投資物業、指定按公平值計入其他全面收益的股權投資及按公平值計入損益的金融資產除外。該等財務報表以美元（「美元」）呈列，而除另有指明外，所有數值已約整至最接近的千位數。

#### 綜合基準

綜合財務報表包括本公司及其子公司（統稱為「本集團」）截至二零一八年十二月三十一日止年度的財務報表。子公司指受本公司直接或間接控制的實體（包括結構性實體）。倘本集團透過參與被投資方業務而享有或有權取得被投資方的可變回報，且有能力行使在被投資方的權力影響有關回報，則本集團擁有該實體的控制權（即現時賦予本集團指導被投資方相關活動的能力）。

倘本公司直接或間接擁有的被投資方投票權或類似權利不及大半，則評估本公司對被投資方是否擁有權力時，本集團會考慮所有相關事實及情況，包括：

- (a) 與該被投資方其他投票權擁有人的合約安排；
- (b) 根據其他合約安排所享有的權利；及
- (c) 本集團的投票權及潛在投票權。

子公司與本公司的財務報表的報告期間相同，並採用一致會計政策編製。子公司的業績由本集團取得控制權之日起計綜合入賬，並繼續綜合入賬至該等控制權終止時為止。

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## 財務報表附註

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### 2.1 Basis of Preparation (continued)

#### Basis of consolidation (continued)

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

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

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

### 2.1 編製基準 (續)

#### 綜合基準 (續)

損益及其他全面收益的各部份乃歸屬於本集團母公司擁有人及非控股權益，即使導致非控股權益產生虧絀結餘。本集團成員公司之間交易所產生的集團內部資產及負債、權益、收入、支出及現金流量均在綜合入賬時全數對銷。

倘事實及情況顯示上述三項控制因素之一項或多項出現變動，本集團會重新評估其是否控制被投資公司。子公司的所有權權益變動（沒有失去控制權），按權益交易入賬。

倘本集團失去對一間子公司的控制權，則其取消確認(i)該子公司的資產（包括商譽）及負債、(ii)任何非控制權益的賬面值及(iii)於權益內記錄的累計交易差額；及確認(i)所收代價的公平值、(ii)所保留任何投資的公平值及(iii)損益賬中任何因此產生的盈餘或虧損。先前於其他全面收益內確認的本集團應佔部份重新分類為損益或留存溢利（如適用），倘本集團已直接出售相關資產或負債則須以同一基準確認。

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## 財務報表附註

### 2.2 Changes in Accounting Policies and Disclosures

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

Amendments to HKFRS 2	<i>Classification and Measurement of Share-based Payment Transactions</i>
Amendments to HKFRS 4	<i>Applying HKFRS 9 Financial Instruments with HKFRS 4 Insurance Contracts</i>
HKFRS 9 HKFRS 15	<i>Financial Instruments Revenue from Contracts with Customers</i>
Amendments to HKFRS 15	<i>Clarifications to HKFRS 15 Revenue from Contracts with Customers</i>
Amendments to HKAS 40 HK(IFRIC)-Int 22	<i>Transfers of Investment Property Foreign Currency Transactions and Advance Consideration</i>
<i>Annual Improvements 2014-2016 Cycle</i>	Amendments to HKFRS 1 and HKAS 28

Except for HKFRS 15 Revenue from *Contracts with Customers* and HKFRS 9 *Financial Instruments*, the rest of the new and revised HKFRSs had no significant impact on the Group's financial statements. The nature and the impact of HKFRS 15 and HKFRS 9 are described below:

#### HKFRS 15 Revenue from Contracts with Customers

HKFRS 15 supersedes HKAS 11 *Construction Contracts*, HKAS 18 *Revenue* and related interpretations and it applies to all revenue arising from contracts with customers, unless those contracts are in the scope of other standards. The new standard establishes a five-step model to account for revenue arising from contracts with customers. Under HKFRS 15, revenue is recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer.

### 2.2 會計政策的變動及披露

本集團於本年度財務報表內首次採納下列新訂及經修訂香港財務報告準則。

香港財務報告準則第2號 (修訂本)	以股份付款的交易的分類及計量
香港財務報告準則第4號 (修訂本)	採用香港財務報告準則第4號保險合約時一併應用香港財務報告準則第9號金融工具
香港財務報告準則第9號 香港財務報告準則第15號	金融工具 客戶合約收益
香港財務報告準則第15號 (修訂本)	客戶合約收益(香港財務報告準則第15號澄清)
香港會計準則第40號(修訂本) 香港(國際財務報告詮釋委員會)-詮釋第22號 二零一四年至二零一六年 週期年度改進	投資物業轉讓 外幣交易及預付代價
	香港財務報告準則第1號及香港會計準則第28號(修訂本)

除香港財務報告準則第15號客戶合約收益及香港財務報告準則第9號金融工具外，其餘新訂及經修訂香港財務報告準則對本集團財務報表並無任何重大影響。香港財務報告準則第15號及香港財務報告準則第9號的性質及影響如下：

#### 香港財務報告準則第15號客戶合約收益

香港財務報告準則第15號取代香港會計準則第11號建築合約、香港會計準則第18號收益及相關詮釋，且其應用客戶合約產生之所有收益，除非該等合約屬於其他準則範圍。新準則確立一個五步模式，以來自客戶合約的收益入賬。根據香港財務報告準則第15號，收益按能反映實體預期就向客戶轉讓貨物或服務而有權在交換中獲取的代價金額進行確認。

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### 2.2 Changes in Accounting Policies and Disclosures (continued)

#### HKFRS 15 Revenue from Contracts with Customers (continued)

The standard requires entities to exercise judgement, taking into consideration all of the relevant facts and circumstances when applying each step of the model to contracts with their customers. The standard also specifies the accounting for the incremental costs of obtaining a contract and the costs directly related to fulfilling a contract.

The Group adopted HKFRS 15 using the modified retrospective method. There was no substantive effect of adopting HKFRS 15 except for the followings:

- The comparative information for each of the primary financial statements would be presented based on the requirements of HKAS 11, HKAS 18 and related interpretations;
- The Group has disclosed additional information regarding performance obligations (“Revenue recognition (applicable from 1 January 2018)” in note 2.4), disaggregation of revenue (note 5) and contract liabilities (note 24) for the year ended 31 December 2018 without any comparative information, which would follow the requirements of HKAS 11, HKAS 18 and related interpretations; and
- Before the adoption of HKFRS 15, the Group recognised consideration received from customers in advance as advances from customers included in other payables and accruals. Under HKFRS 15, the amount is classified as contract liabilities which are included in other payables and accruals. Therefore, upon adoption of HKFRS 15, the Group reclassified US\$21,344,000 from advances from customers to contract liabilities as at 1 January 2018 in relation to the consideration received from customers in advance as at 1 January 2018. As at 31 December 2018, under HKFRS 15, US\$27,261,000 was reclassified from advances from customers to contract liabilities in relation to the consideration received from customers in advance for the sale of semiconductor products.

### 2.2 會計政策的變動及披露 (續)

#### 香港財務報告準則第15號客戶合約收益 (續)

該準則要求實體作出判斷，並計及於將該模式之各步應用於其客戶合約時的所有相關事實及情況。該準則亦訂明將獲得合約的額外成本及與履行合約直接相關的成本入賬。

本集團透過採用經修訂的追溯法採納香港財務報告準則第15號。採納香港財務報告準則第15號並無實質影響，惟以下各項除外：

- 每份主要財務報表的比較資料將根據香港會計準則第11號、香港會計準則第18號及相關詮釋的要求呈列；
- 本集團已就截至二零一八年十二月三十一日止年度的履約責任(附註2.4「收益確認」(自二零一八年一月一日起適用))、分拆收益(附註5)及合約負債(附註24)披露額外資料，並無任何比較資料，該披露符合香港會計準則第11號、香港會計準則第18號及相關詮釋的規定；及
- 於採用香港財務報告準則第15號前，本集團確認預收客戶代價為計入其他應付款項及暫估費用之預收賬款。根據香港財務報告準則第15號，該款項分類為合約負債，計入其他應付款項及暫估費用。因此，於採用香港財務報告準則第15號後，於二零一八年一月一日，本集團將21,344,000美元的預收賬款重新分類至於二零一八年一月一日預收客戶代價有關的合約負債。於二零一八年十二月三十一日，根據香港財務報告準則第15號，27,261,000美元預收賬款重新分類至與就銷售半導體產品預收客戶代價有關的合約負債。

## 2.2 Changes in Accounting Policies and Disclosures (continued)

### HKFRS 9 *Financial Instruments*

HKFRS 9 *Financial Instruments* replaces HKAS 39 *Financial Instruments: Recognition and Measurement* for annual periods beginning on or after 1 January 2018, bringing together all three aspects of the accounting for financial instruments: classification and measurement; impairment; and hedge accounting.

The Group has recognised the transition adjustments against the applicable opening balances in equity at 1 January 2018. Therefore, the comparative information was not restated and continued to be reported under HKAS 39.

#### *Classification and measurement*

As of 1 January 2018, the category of loans and receivables under HKAS 39, including cash and cash equivalents, restricted and time deposits, trade and notes receivables, financial assets included in prepayments, deposits and other receivables and amounts due from related parties, were transferred to financial assets at amortised cost under HKFRS 9. In addition, the Group has elected the option to irrevocably designate its previous available-for-sale unlisted equity investments carried at cost as equity investments at fair value through other comprehensive income. Upon the reclassification, a fair value remeasurement surplus of US\$1,230,000 was recorded as equity investments designated at fair value through other comprehensive income and the related tax impact of US\$184,000 was recorded as deferred tax liabilities, which is set out in the following reconciliation:

## 2.2 會計政策的變動及披露 (續)

### 香港財務報告準則第9號金融工具

香港財務報告準則第9號金融工具於二零一八年一月一日或以後開始的年度期間取代香港會計準則第39號金融工具：確認及計量，合併金融工具會計之所有三個方面：分類及計量；減值；及對沖會計。

本集團已於二零一八年一月一日就適用期初結餘確認過渡調整。因此，比較資料並無重列且將繼續根據香港會計準則第39號呈報。

#### *分類及計量*

截至二零一八年一月一日，香港會計準則第39號項下之貸款及應收款項類別（包括現金及現金等價物、已限制及定期存款、貿易應收款項及應收票據、計入預付款項、按金及其他應收款項的金融資產以及應收關聯方款項）已轉為香港財務報告準則第9號項下按攤銷成本列賬的金融資產。此外，本集團已選擇不可撤銷地指定其先前按成本列賬的可供出售未上市股權投資為按公平值計入損益的股權投資。重新分類後，公平值重新計量之盈餘1,230,000美元計為指定按公平值計入其他全面收益之股權投資，且有關稅務影響184,000美元計為遞延稅項負債，詳情載於以下對賬：

# NOTES TO FINANCIAL STATEMENTS

## 財務報表附註

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### 2.2 Changes in Accounting Policies and Disclosures (continued)

### 2.2 會計政策的變動及披露 (續)

#### HKFRS 9 Financial Instruments (continued)

Classification and measurement (continued)

#### 香港財務報告準則第9號金融工具 (續)

分類及計量 (續)

	HKAS 39 measurement 香港會計準則第39號計量		Re- classification 重新分類	Fair value remeasurement 公平值重新計量	HKFRS 9 measurement 香港財務報告準則第19號計量	
	Category 類別	Amount 金額 US\$'000 千美元			Amount 金額 US\$'000 千美元	Category 類別
<b>Financial assets</b>	<b>金融資產</b>					
Equity investments designated at fair value through other comprehensive income	指定按公平值計入其他全面收益的股權投資	N/A 不適用				FVOCI <sup>1</sup> (equity) (權益)
From: Available-for-sale investments	自：可供出售投資		215,864			
Available-for-sale investments	可供出售投資	AFS <sup>2</sup>	(215,864)			N/A 不適用
To: Equity investments designated at fair value through other comprehensive income	至：指定按公平值計入其他全面收益的股權投資		215,864			
<b>Other liabilities</b>	<b>其他負債</b>					
Deferred tax liabilities	遞延稅項負債	14,123		184		14,307

<sup>1</sup> FVOCI: Financial assets at fair value through other comprehensive income

<sup>2</sup> AFS: Available-for-sale investments

The classification and measurement for financial liabilities remains largely the same as it was under HKAS 39.

<sup>1</sup> FVOCI: 按公平值計入其他全面收益的金融資產

<sup>2</sup> AFS: 可供出售投資

金融負債的分類及計量很大程度上與香港會計準則第39號規定者一致。

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## 財務報表附註

### 2.2 Changes in Accounting Policies and Disclosures (continued)

#### HKFRS 9 *Financial Instruments* (continued)

##### *Impairment*

The effect of replacing HKAS 39's incurred credit loss calculations with HKFRS 9's expected credit losses ("ECLs") is insignificant.

##### *Hedging accounting*

The Group has not involved any hedge accounting and, therefore, is not affected in this regard under HKFRS 9.

##### *Impact on reserves*

The impact of transition to HKFRS 9 on reserves is as follows:

### 2.2 會計政策的變動及披露 (續)

#### 香港財務報告準則第9號金融工具 (續) 減值

以香港財務報告準則第9號的預期信貸虧損(「預期信貸虧損」)取代香港會計準則第39號的已產生信貸虧損計算的影響並不重大。

##### 對沖會計

本集團並未涉及任何對沖會計，因此，根據香港財務報告準則第9號，並無就此受到任何影響。

##### 對儲備的影響

過渡至香港財務報告準則第9號對儲備的影響如下：

		<b>Fair value reserve</b>
		公平值儲備
		US\$'000
		千美元
Balance as at 31 December 2017 under HKAS 39	根據香港會計準則第39號於 二零一七年十二月三十一日之結餘	-
Remeasurement of equity investments designated at fair value through other comprehensive income previously measured at cost under HKAS 39	以往根據香港會計準則第39號以成本計量的指定按公平值計入其他全面收益的股權投資的重新計量	1,230
Deferred tax in relation to the above	有關以上項目的遞延稅項	(184)
Balance as at 1 January 2018 under HKFRS 9	根據香港財務報告準則第9號於 二零一八年一月一日之結餘	<b>1,046</b>



# NOTES TO FINANCIAL STATEMENTS

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### 2.3 Issued But Not Yet Effective Hong Kong Financial Reporting Standards

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

Amendments to HKFRS 3	<i>Definition of a Business</i> <sup>2</sup>
Amendments to HKFRS 9	<i>Prepayment Features with Negative Compensation</i> <sup>1</sup>
Amendments to HKFRS 10 and HKAS 28 (2011)	<i>Sale or Contribution of Assets between an Investor and its Associate or Joint Venture</i> <sup>4</sup>
HKFRS 16	<i>Leases</i> <sup>1</sup>
HKFRS 17	<i>Insurance Contracts</i> <sup>3</sup>
Amendments to HKAS 1 and HKAS 8	<i>Definition of Material</i> <sup>2</sup>
Amendments to HKAS 19	<i>Plan Amendment, Curtailment or Settlement</i> <sup>1</sup>
Amendments to HKAS 28	<i>Long-term Interests in Associates and Joint Ventures</i> <sup>1</sup>
HK(IFRIC)-Int 23	<i>Uncertainty over Income Tax Treatments</i> <sup>1</sup>
<i>Annual Improvements 2015-2017 Cycle</i>	Amendments to HKFRS 3, HKFRS 11, HKAS 12 and HKAS 23 <sup>1</sup>

<sup>1</sup> Effective for annual periods beginning on or after 1 January 2019

<sup>2</sup> Effective for annual periods beginning on or after 1 January 2020

<sup>3</sup> Effective for annual periods beginning on or after 1 January 2021

<sup>4</sup> No mandatory effective date yet determined but available for adoption

### 2.3 已頒佈但尚未生效的香港財務報告準則

本集團並無於該等財務報表應用以下已頒佈但尚未生效的新訂及經修訂香港財務報告準則。

香港財務報告準則第3號 (修訂本)	<i>業務的定義</i> <sup>2</sup>
香港財務報告準則第9號 (修訂本)	<i>具有負補償之提前還款特性</i> <sup>1</sup>
香港財務報告準則第10號及香港會計準則第28號 (修訂本)(二零一一年)	<i>投資者與其聯營公司或合營公司之間的資產出售或貢獻</i> <sup>4</sup>
香港財務報告準則第16號	<i>租賃</i> <sup>1</sup>
香港財務報告準則第17號	<i>保險合約</i> <sup>3</sup>
香港會計準則第1號及香港會計準則第8號(修訂本)	<i>重大的定義</i> <sup>2</sup>
香港會計準則第19號 (修訂本)	<i>計劃修訂、縮減或結算</i> <sup>1</sup>
香港會計準則第28號 (修訂本)	<i>於聯營公司及合營企業的長期權益</i> <sup>1</sup>
香港(國際財務報告詮釋委員會)–詮釋第23號 二零一五年至二零一七年 週期年度改進	<i>所得稅處理的不確定性</i> <sup>1</sup>
	香港財務報告準則第3號、香港財務報告準則第11號、香港會計準則第12號及香港會計準則第23號(修訂本) <sup>1</sup>

<sup>1</sup> 於二零一九年一月一日或之後開始的年度期間生效

<sup>2</sup> 於二零二零年一月一日或之後開始的年度期間生效

<sup>3</sup> 於二零二一年一月一日或之後開始的年度期間生效

<sup>4</sup> 尚未釐定強制生效日期，惟可供採納

## 2.3 Issued But Not Yet Effective Hong Kong Financial Reporting Standards (continued)

While the adoption of some of the new and revised HKFRSs may result in changes in accounting policies, none of these HKFRSs is expected to have a significant impact on the Group's results of operations and financial position, except the followings:

HKFRS 16 replaces HKAS 17 *Leases*, HK(IFRIC)-Int 4 *Determining whether an Arrangement contains a Lease*, HK(SIC)-Int 15 *Operating Leases – Incentives* and HK(SIC)-Int 27 *Evaluating the Substance of Transactions Involving the Legal Form of a Lease*. The standard sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to recognise assets and liabilities for most leases. The standard includes two elective recognition exemptions for lessees – leases of low-value assets and short-term leases. At the commencement date of a lease, a lessee will recognise a liability to make lease payments (i.e., the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e., the right-of-use asset). The right-of-use asset is subsequently measured at cost less accumulated depreciation and any impairment losses unless the right-of-use asset meets the definition of investment property in HKAS 40, or relates to a class of property, plant and equipment to which the revaluation model is applied. The lease liability is subsequently increased to reflect the interest on the lease liability and reduced for the lease payments. Lessees will be required to separately recognise the interest expense on the lease liability and the depreciation expense on the right-of-use asset. Lessees will also be required to remeasure the lease liability upon the occurrence of certain events, such as change in the lease term and change in future lease payments resulting from a change in an index or rate used to determine those payments. Lessees will generally recognise the amount of the remeasurement of the lease liability as an adjustment to the right-of-use asset. Lessor accounting under HKFRS 16 is substantially unchanged from the accounting under HKAS 17. Lessors will continue to classify all leases using the same classification principle as in HKAS 17 and distinguish between operating leases and finance leases. HKFRS 16 requires lessees and lessors to make more extensive disclosures than under HKAS 17. Lessees can choose to apply the standard using either a full retrospective or a modified retrospective approach. The Group will adopt HKFRS 16 from 1 January 2019. The Group plans to adopt the transitional provisions in HKFRS 16 to recognise the cumulative effect of initial adoption as an adjustment to the opening balance of retained earnings at 1 January 2019

## 2.3 已頒佈但尚未生效的香港財務報告準則 (續)

儘管採納部份新訂及經修訂香港財務報告準則或會導致會計政策變動，惟該等香港財務報告準則預期不會對本集團的經營業績及財務狀況造成重大影響，惟以下除外：

香港財務報告準則第16號取代香港會計準則第17號租賃、香港(國際財務報告詮釋委員會)－詮釋第4號釐定安排是否包括租賃、香港(常務詮釋委員會)－詮釋第15號經營租賃－優惠及香港(常務詮釋委員會)－詮釋第27號評估涉及租賃法律形式交易的內容。該準則載列確認、計量、呈列及披露租賃的原則，並要求承租人就大多數租賃確認資產及負債。該準則包括給予承租人兩項可選擇的租賃確認豁免－低價值資產租賃及短期租賃。於租賃開始日期，承租人將確認於租賃期作出租賃付款為負債(即租賃負債)及代表可使用相關資產的權利為資產(即有使用權資產)。除非有使用權資產符合香港會計準則第40號投資物業的定義或有關應用重估模式之物業、廠房及設備類別，否則有使用權資產其後按成本減累計折舊及任何減值虧損計量。租賃負債其後會就反映租賃負債利息而增加及因租賃付款而減少。承租人將須分別確認租賃負債的利息開支及有使用權資產的折舊開支。承租人亦須於若干事件發生時重新計量租賃負債，例如由於租賃期變更或用於釐定該等付款的一項指數或比率變更而引致未來租賃付款變更。承租人一般將重新計量租賃負債的數額確認為有使用權資產的調整。香港財務報告準則第16號大致沿用香港會計準則第17號內出租人的會計處理方式。出租人將繼續使用與香港會計準則第17號相同的分類原則對所有租賃進行分類，並將之分為經營租賃及融資租賃。香港財務報告準則第16號要求承租人及出租人較根據香港會計準則第17號作出更多披露。承租人可選擇以全面追溯應用或經修訂追溯應用方式應用該準則。本集團將自二零一九年一月一日起採納香港財務報告準則第16號。本集團計劃採納香港財務報告準則第16號中的過渡條文，以確認初次採納的累積影響為對二零一九年

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### 2.3 Issued But Not Yet Effective Hong Kong Financial Reporting Standards (continued)

and will not restate the comparatives. In addition, the Group plans to apply the new requirements to contracts that were previously identified as leases applying HKAS 17 and measure the lease liability at the present value of the remaining lease payments, discounted using the Group's incremental borrowing rate at the date of initial application. The right-of-use asset will be measured at the amount of the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to the lease recognised in the statement of financial position immediately before the date of initial application. The Group plans to use the exemptions allowed by the standard on lease contracts whose lease terms end within 12 months as of the date of initial application. During 2018, the Group has performed a detailed assessment on the impact of adoption of HKFRS 16. The Group has estimated that the quantitative impact on the balance of assets, liabilities and equity as at 1 January 2019 is insignificant.

### 2.4 Summary of Significant Accounting Policies

#### Investment in an associate

An associate is an entity in which the Group has a long term interest of generally not less than 20% of the equity voting rights and over which it is in a position to exercise significant influence. 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 Group's investment in an associate is stated in the consolidated statement of financial position at the Group's share of net assets under the equity method of accounting, less any impairment losses.

The Group's share of the post-acquisition results and other comprehensive income of an associate is included in the consolidated statement of profit or loss and consolidated other comprehensive income, respectively. In addition, when there has been a change recognised directly in the equity of the associate, the Group recognises its share of any changes, when applicable, in the consolidated statement of changes in equity. Unrealised gains and losses resulting from transactions between the Group and its associate are eliminated to the extent of the Group's investment in the associate, except where unrealised losses provide evidence of an impairment of the assets transferred. Goodwill arising from the acquisition of an associate is included as part of the Group's investment in an associate.

### 2.3 已頒佈但尚未生效的香港財務報告準則 (續)

一月一日保留盈利期初結餘的調整，且本集團將不會重述比較資料。此外，本集團計劃將新規定應用於先前應用香港會計準則第17號獲識別為租賃的合約，且將按剩餘租賃付款的現值計量租賃負債，並採用本集團於首次應用日期的增量借款利率折現。有使用權資產將按租賃負債計量，並按於緊接首次應用日期前財務狀況表中確認的租賃相關的任何預付或應計租賃金額予以調整。本集團計劃於租賃合約內使用該準則准許的豁免，而該等租賃合約的租賃期限於截至首次應用日期止12個月內到期。於二零一八年，本集團已對採用香港財務報告準則第16號之影響進行詳細的評估。本集團估計對二零一九年一月一日的資產、負債及權益結餘的量化影響並不重大。

### 2.4 重大會計政策概要

#### 於聯營公司的投資

聯營公司為一間本集團對其擁有一般不少於20%股本投票權的長期權益，且本集團可對其發揮重大影響力的實體。重大影響力指有權力參與投資對象的財務及經營政策決策，但並非對該等政策擁有控制或聯合控制權。

本集團於聯營公司的投資於綜合財務狀況表內按使用權益會計法計算的本集團應佔資產淨值扣減任何減值虧損列賬。

本集團應佔其聯營公司的收購後業績及其他全面收益分別列入綜合損益表及綜合其他全面收益表。此外，倘聯營公司的權益內直接確認某一變動，則本集團會於綜合權益變動表內確認其於任何變動(如適用)的應佔部份。本集團及其聯營公司進行交易所產生的未變現收益及虧損按本集團於該等聯營公司的投資進行撇銷，惟未變現虧損有證據顯示所轉讓資產出現減值者除外。收購一間聯營公司產生的商譽計為本集團於一間聯營公司投資的一部份。

## 2.4 Summary of Significant Accounting Policies (continued)

### Investment in an associate (continued)

If an investment in an associate becomes an investment in a joint venture, the retained interest is not remeasured. Instead, the investment continues to be accounted for under the equity method. In all other cases, upon loss of significant influence over the associate, the Group measures and recognises any retained investment at its fair value. Any difference between the carrying amount of the associate upon loss of significant influence or joint control and the fair value of the retained investment and proceeds from disposal is recognised in profit or loss.

When an investment in an associate is classified as held for sale, it is accounted for in accordance with HKFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*.

### Fair value measurement

The Group measures its investment property, equity investments designated at fair value through other comprehensive income and financial assets at fair value through profit or loss at fair value at the end of each reporting period. 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. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either in the principal market for the asset or liability, or in the absence of a principal market, in the most advantageous market for the asset or liability. The principal or the most advantageous market must be accessible by the Group. The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

## 2.4 重大會計政策概要 (續)

### 於聯營公司的投資 (續)

倘於聯營公司的投資變成於合營公司的投資，保留權益不會重新計量。相反，該投資將繼續按權益法列賬。於所有其他情形下，倘本集團不再對聯營公司擁有重大影響力，本集團將按其公平值計量及確認任何保留投資。於失去重大影響力或共同控制權後聯營公司的賬面值與保留投資的公平值及出售所得款項之間的任何差額於損益內確認。

倘於聯營公司的投資被分類為持作出售，則根據香港財務報告準則第5號持作出售非流動資產及終止持續經營業務列賬。

### 公平值計量

本集團於各報告期末按公平值計量投資物業、指定按公平值計入其他全面收益的股權投資以及按公平值計入損益的金融資產。公平值指於計量日市場參與者之間的有序交易中，就出售資產所收取的價格或轉讓負債所支付的價格。計量公平值時假設出售資產或轉讓負債的交易於資產或負債的主要市場或（在未有主要市場的情況下）最有利市場進行。主要或最有利市場須為本集團能參與的市場。假設市場參與者基於最佳經濟利益行事，資產或負債的公平值使用市場參與者為資產或負債定價所用假設計量。

非金融資產的公平值計量會計及市場參與者將資產用於最高增值及最佳用途或售予會將資產用於最高增值及最佳用途的另一名市場參與者而創造經濟利益的能力。

本集團針對不同情況使用不同估值技術，確保有足夠數據計量公平值，並盡量利用相關可觀察輸入數據，減少使用不可觀察輸入數據。

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### 2.4 Summary of Significant Accounting Policies (continued)

#### Fair value measurement (continued)

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 – based on quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2 – based on valuation techniques for which the lowest level input that is significant to the fair value measurement is observable, either directly or indirectly
- Level 3 – based on valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by reassessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

#### Impairment of non-financial assets

Where an indication of impairment exists, or when annual impairment testing for an asset is required (other than inventories, financial assets, investment property and deferred tax assets), the asset's recoverable amount is estimated. An asset's recoverable amount is the higher of the asset's or cash-generating unit's value in use and its fair value less costs of disposal, and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets, in which case the recoverable amount is determined for the cash-generating unit to which the asset belongs.

An impairment loss is recognised only if the carrying amount of an asset exceeds its recoverable amount. 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. An impairment loss is charged to the statement of profit or loss in the period in which it arises in those expense categories consistent with the function of the impaired asset.

### 2.4 重大會計政策概要 (續)

#### 公平值計量 (續)

公平值於財務報表確認或披露的所有資產及負債，均基於對計量公平值整體而言屬重大的最低層級輸入數據按下述公平值層級分類：

- 第1級 – 相同資產或負債於活躍市場的市場報價 (未經調整)
- 第2級 – 採用對公平值計量而言屬重大的直接或間接可觀察最低層級輸入數據的估值技術
- 第3級 – 採用對公平值計量而言屬重大的不可觀察最低層級輸入數據的估值技術

對於按經常性基準於財務報表確認的資產及負債，本集團於各報告期末重新評估分類 (基於對公平值計量整體而言屬重大的最低層級輸入數據)，確定有否在不同層級之間轉移。

#### 非金融資產減值

倘一項資產 (存貨、金融資產、投資物業及遞延稅項資產除外) 存在減值跡象，或需要進行年度減值測試，則會估計資產的可收回金額。資產可收回金額按該資產或現金產生單位的使用價值及其公平值減出售成本兩者中的較高金額計算，並按個別資產釐定，除非該資產所產生的現金流入基本上不能獨立於其他資產或資產組別所產生的現金流入，在此情況下，可收回金額將按該資產所屬現金產生單位釐定。

減值虧損僅於資產賬面值超逾其可收回金額時確認。於評估使用價值時，估計未來現金流量乃按稅前貼現率貼現至其現值。稅前貼現率反映當時市場對貨幣時間值的評估及該資產的特有風險。減值虧損於其產生期間的損益表內在與減值資產的功能一致的相關開支類別中扣除。

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### 2.4 Summary of Significant Accounting Policies (continued)

#### Impairment of non-financial assets (continued)

An assessment is made at the end of each reporting period as to whether there is an indication that previously recognised impairment losses may no longer exist or may have decreased. If such an indication exists, the recoverable amount is estimated. A previously recognised impairment loss of an asset other than goodwill is reversed only if there has been a change in the estimates used to determine the recoverable amount of that asset, but not to an amount higher than the carrying amount that would have been determined (net of any depreciation/amortisation) had no impairment loss been recognised for the asset in prior years. A reversal of such an impairment loss is credited to the statement of profit or loss in the period in which it arises, unless the asset is carried at a revalued amount, in which case the reversal of the impairment loss is accounted for in accordance with the relevant accounting policy for that revalued asset.

#### Related parties

A party is considered to be related to the Group if:

- (a) the party is a person or a close member of that person's family and that person
  - (i) has control or joint control over the Group;
  - (ii) has significant influence over the Group; or
  - (iii) is a member of the key management personnel of the Group or of a parent of the Group;

or

### 2.4 重大會計政策概要 (續)

#### 非金融資產減值 (續)

於各報告期末，會評估是否有跡象顯示先前確認的減值虧損不再存在或可能已減少。倘有該等跡象存在，便會估計可收回金額。先前就資產（商譽除外）確認的減值虧損，僅於用以釐定該資產的可收回金額的估計有變時予以撥回，但撥回金額不得高於倘過往年度並無就該資產確認減值虧損情況下原應釐定的賬面值（扣除任何折舊／攤銷）。撥回的減值虧損於其產生期間計入損益表，惟倘該項資產以重估價值列賬，則減值虧損撥回會按該項重估資產適用的有關會計政策入賬。

#### 關聯方

以下人士將被視為與本集團有關聯：

- (a) 倘為以下人士或其近親
  - (i) 控制或共同控制本集團；
  - (ii) 對本集團有重大影響力；或
  - (iii) 為本集團或本集團母公司的主要管理層成員；

或

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### 2.4 Summary of Significant Accounting Policies (continued)

#### Related parties (continued)

A party is considered to be related to the Group if: (continued)

- (b) the party is an entity where any of the following conditions applies:
  - (i) the entity and the Group are members of the same group;
  - (ii) one entity is an associate or joint venture of the other entity (or of a parent, subsidiary or fellow subsidiary of the other entity);
  - (iii) the entity and the Group are joint ventures of the same third party;
  - (iv) one entity is a joint venture of a third entity and the other entity is an associate of the third entity;
  - (v) the entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group;
  - (vi) the entity is controlled or jointly controlled by a person identified in (a);
  - (vii) a person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity); and
  - (viii) the entity, or any member of a group of which it is a part, provides key management personnel services to the Group or to the parent of the Group.

### 2.4 重大會計政策概要 (續)

#### 關聯方 (續)

以下人士將被視為與本集團有關聯：  
(續)

- (b) 該人士為符合下列任何條件的實體：
  - (i) 該實體與本集團屬同一集團的成員公司；
  - (ii) 實體為另一實體（或另一實體的母公司、子公司或同系子公司）的聯營公司或合營企業；
  - (iii) 該實體與本集團為同一第三方的合營企業；
  - (iv) 實體為一名第三方實體的合營企業，而另一實體為該第三方實體的聯營公司；
  - (v) 該實體為本集團或與本集團有關聯的實體就僱員利益設立的離職後福利計劃；
  - (vi) 該實體由(a)項所列人士控制或共同控制；
  - (vii) (a)(i)項所列人士對該實體具有重大影響力或為該實體（或該實體的母公司）的主要管理層成員；及
  - (viii) 該實體或該實體所屬集團的任何成員公司為本集團或本集團的母公司提供主要管理人員服務。

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## 財務報表附註

### 2.4 Summary of Significant Accounting Policies (continued)

#### Property, plant and equipment and depreciation

Property, plant and equipment, other than construction in progress, are stated at cost less accumulated depreciation and any impairment losses. When an item of property, plant and equipment is classified as held for sale or when it is part of a disposal group classified as held for sale, it is not depreciated and is accounted for in accordance with HKFRS 5. The cost of an item of property, plant and equipment comprises its purchase price and any directly attributable costs of bringing the asset to its working condition and location for its intended use.

Expenditure incurred after items of property, plant and equipment have been put into operation, such as repairs and maintenance, is normally charged to the statement of profit or loss in the period in which it is incurred. In situations where the recognition criteria are satisfied, the expenditure for a major inspection is capitalised in the carrying amount of the asset as a replacement. Where significant parts of property, plant and equipment are required to be replaced at intervals, the Group recognises such parts as individual assets with specific useful lives and depreciates them accordingly.

Depreciation is calculated on the straight-line basis to write off the cost of each item of property, plant and equipment to its residual value over its estimated useful life. The principal annual rates used for this purpose are as follows:

Buildings	3.8%
Plant and machinery	9.5%-19.0%
Office equipment	19.0%
Motor vehicles	19.0%
Leasehold improvements	20.0%

Where parts of an item of property, plant and equipment have different useful lives, the cost of that item is allocated on a reasonable basis among the parts and each part is depreciated separately. Residual values, useful lives and the depreciation method are reviewed, and adjusted if appropriate, at least at each financial year end.

### 2.4 重大會計政策概要 (續)

#### 物業、廠房及設備以及折舊

物業、廠房及設備(在建工程除外)乃按成本減累計折舊及任何減值虧損列賬。倘物業、廠房及設備項目被分類為持作出售或倘其為分類為持作出售的出售組別的一部份,則不會對此進行折舊,而根據香港財務報告準則第5號列賬。物業、廠房及設備項目的成本包括其購買價及任何使資產達致操作狀況及地點作擬定用途的直接應佔成本。

物業、廠房及設備項目投入運作後所產生維修保養等支出,一般於其產生期間自損益表內扣除。倘達到確認標準,重大檢修的開支於該資產的賬面值中資本化為重置資產。倘物業、廠房及設備須定期替換的重大部份,則本集團將該等部份確認為具有特定可使用年期的獨立資產,並相應對此進行折舊。

折舊的計算是按直線法,在其估計可使用年期內將物業、廠房及設備各項目的成本撇銷至剩餘價值。就此所用的主要年率如下:

樓宇	3.8%
廠房及機器	9.5%-19.0%
辦公設備	19.0%
汽車	19.0%
租賃物業裝修	20.0%

倘物業、廠房及設備項目其中部份的可使用年期不同,該項目的成本會按合理基準分配至有關部份,而各部份均分開計提折舊。剩餘價值、可使用年期及折舊方法至少於各財政年度末檢討及按需要作出調整。



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### 2.4 Summary of Significant Accounting Policies (continued)

#### Property, plant and equipment and depreciation (continued)

An item of property, plant and equipment including any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on disposal or retirement recognised in the statement of profit or loss in the year the asset is derecognised is the difference between the net sales proceeds and the carrying amount of the relevant asset.

Construction in progress is stated at cost less any impairment losses, and is not depreciated. Cost comprises the direct costs of construction during the period of construction. Construction in progress is reclassified to the appropriate category of property, plant and equipment when completed and ready for use.

#### Investment property

Investment property is interest in land and buildings (including the leasehold interest under an operating lease for a property which would otherwise meet the definition of an investment property) held to earn rental income and/or for capital appreciation, rather than for use in the production or supply of goods or services or for administrative purposes; or for sale in the ordinary course of business. Such property is measured initially at cost, including transaction costs. Subsequent to initial recognition, the investment property is stated at fair value, which reflects market conditions at the end of the reporting period.

Gains or losses arising from changes in the fair value of the investment property are included in the statement of profit or loss in the year in which they arise.

Any gains or losses on the retirement or disposal of an investment property are recognised in the statement of profit or loss in the year of the retirement or disposal.

### 2.4 重大會計政策概要 (續)

#### 物業、廠房及設備以及折舊 (續)

物業、廠房及設備項目(包括任何初始確認的重大部份)於出售或預期使用或出售有關項目不會產生未來經濟利益時終止確認。於終止確認資產年度在損益表內確認的出售或報廢資產的任何收益或虧損，為出售有關資產所得款項淨額與其賬面值兩者間的差額。

在建工程乃按成本減任何減值虧損列賬，但不會計提折舊。成本包括建造期間的直接建設成本。在建工程於完工且可供使用時將重新分類為物業、廠房及設備的適當類別。

#### 投資物業

投資物業乃為賺取租金收入及／或資本增值而持有的土地及樓宇權益(包括符合投資物業定義的物業於經營租賃下的租賃權益)，而非用於生產或供應貨物或服務或用作行政用途；或用作在日常業務過程中銷售。該物業初步以成本(包括交易費用)計量。於初始確認後，投資物業以反映報告期末市況的公平值列賬。

投資物業公平值變動產生的收益或虧損計入其產生年度的損益表內。

因投資物業報廢或出售而產生的任何收益或虧損於報廢或出售年度的損益表內確認。

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## 財務報表附註

### 2.4 Summary of Significant Accounting Policies (continued)

#### Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is the fair value as at the date of acquisition. The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are subsequently amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at each financial year end.

#### *Process technology licence and software*

Process technology licence and software are stated at cost less any impairment losses and are amortised on the straight-line basis over their estimated useful lives of 5 to 10 years of the underlying products, commencing from the date when the products are put into commercial production.

#### *Research and development costs*

All research costs are charged to the statement of profit or loss as incurred.

Expenditure incurred on projects to develop new products is capitalised and deferred only when the Group can demonstrate the technical feasibility of completing the intangible asset so that it will be available for use or sale, its intention to complete and its ability to use or sell the asset, how the asset will generate future economic benefits, the availability of resources to complete the project and the ability to measure reliably the expenditure during the development. Product development expenditure which does not meet these criteria is expensed when incurred.

### 2.4 重大會計政策概要 (續)

#### 無形資產

單獨取得的無形資產於初始確認時按成本計量。通過業務合併取得的無形資產的成本為收購日期的公平值。無形資產的可使用年期評定為有限期或無限期。有限期的無形資產隨後按可使用經濟年期攤銷，並於有跡象顯示無形資產可能出現減值時評估減值。有限可使用年期的無形資產的攤銷期及攤銷方法至少於各財政年度末檢討。

#### *工藝技術許可及軟件*

工藝技術許可及軟件按成本減任何減值虧損列賬，並自相關產品投入商業生產日期起計在其五至十年估計可使用年限內以直線法攤銷。

#### *研發成本*

所有研究成本於產生時列支於損益表。

研發新產品項目所產生的開支僅會在本集團能夠顯示其在技術上能夠完成無形資產能供使用或出售、打算完成資產並能夠加以使用或將之出售、資產在未來如何帶來經濟利益、有足夠資源以完成項目並且有能力可靠地計量開發期間的開支的情況下，才會被資本化及遞延。倘未能符合以上標準，產品研發開支會在產生時費用化。

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## 財務報表附註

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### 2.4 Summary of Significant Accounting Policies (continued)

#### Operating leases

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 lessor, assets leased by the Group under operating leases are included in non-current assets, and rentals receivable under the operating leases are credited to the statement of profit or loss on the straight-line basis over the lease terms. 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 on the straight-line basis over the lease terms.

Prepaid land lease payments under operating leases are initially stated at cost and subsequently recognised on the straight-line basis over the lease terms.

#### Investments and other financial assets (policies under HKFRS 9 applicable from 1 January 2018)

##### Initial recognition and measurement

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income, and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient of not adjusting the effect of a significant financing component, the Group initially measures a financial asset at its fair value, plus in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under HKFRS 15 in accordance with the policies set out for "Revenue recognition (applicable from 1 January 2018)" below.

In order for a financial asset to be classified and measured at amortised cost or fair value through other comprehensive income, it needs to give rise to cash flows that are solely payments of principal and interest ("SPPI") on the principal amount outstanding.

### 2.4 重大會計政策概要 (續)

#### 經營租賃

出租人仍保留資產所有權的絕大部份回報及風險的租賃均入賬列為經營租賃。倘本集團為出租人，本集團根據經營租賃出租的資產列入非流動資產，而經營租賃項下應收租金按租賃年期以直線法計入損益表。倘本集團為承租人，經營租賃項下應付租金扣除從出租人收取的任何優惠後按租賃年期以直線法於損益表內扣除。

經營租賃項下的預付土地租賃款項初始按成本列賬，其後於租賃年期內按直線法確認。

#### 投資及其他金融資產 (根據香港財務報告準則第9號自二零一八年一月一日起適用的政策)

##### 初始確認及計量

金融資產於初始確認時分類為其後按攤銷成本、按公平值計入其他全面收益及按公平值計入損益計量。

於初始確認時，金融資產分類取決於金融資產的合約現金流量特點及本集團管理該等金融資產的業務模式。除並無重大融資成分或本集團已應用並未就重大融資成分的影響作出調整的可行權宜方法的貿易應收款項外，本集團初步按公平值加上（倘金融資產並非按公平值計入損益）交易成本計量金融資產。並無重大融資成分或本集團已應用可行權宜方法的貿易應收款項乃根據下文「銷售收入確認（自二零一八年一月一日起適用）」所載政策按香港財務報告準則第15號釐定的交易價格計量。

為使金融資產按攤銷成本或按公平值計入其他全面收益進行分類及計量，需產生純粹為支付本金及未償還本金利息（「純粹支付本金及利息」）的現金流量。

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## 財務報表附註

### 2.4 Summary of Significant Accounting Policies (continued)

#### Investments and other financial assets (policies under HKFRS 9 applicable from 1 January 2018) (continued)

##### *Initial recognition and measurement (continued)*

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

All regular way purchases and sales of financial assets are recognised on the trade date, that is, the date that the Group commits to purchase or sell the asset. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the period generally established by regulation or convention in the marketplace.

##### *Subsequent measurement*

The subsequent measurement of financial assets depends on their classification as follows:

##### *Financial assets at amortised cost (debt instruments)*

The Group measures financial assets at amortised cost if both of the following conditions are met:

- the financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the effective interest method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

### 2.4 重大會計政策概要 (續)

投資及其他金融資產 (根據香港財務報告準則第9號自二零一八年一月一日起適用的政策) (續)

##### *初始確認及計量 (續)*

本集團管理金融資產的業務模式指其如何管理其金融資產以產生現金流量。業務模式確定現金流量是否來自收集合約現金流量、出售金融資產，或兩者兼有。

所有按常規方式購買及出售的金融資產於交易日 (即本集團承諾購買或出售該項資產的日期) 確認。常規方式購買或出售乃指購買或出售須在一般按規例或市場慣例確定的期間內交付資產的金融資產。

##### *後續計量*

金融資產其後視乎以下分類作出計量：

##### *按攤銷成本計量的金融資產 (債務工具)*

倘滿足以下兩個條件，本集團將按攤銷成本計量金融資產：

- 於旨在持有金融資產以收取合約現金流量的業務模式中持有金融資產；及
- 金融資產的合約條款於特定日期產生純粹為支付本金及未償還本金利息的現金流量。

按攤銷成本計量的金融資產其後使用實際利率法計量，並受減值影響。當資產終止確認、修訂或減值時，收益及虧損於損益中確認。

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### 2.4 Summary of Significant Accounting Policies (continued)

#### Investments and other financial assets (policies under HKFRS 9 applicable from 1 January 2018) (continued)

##### *Subsequent measurement (continued)*

##### *Financial assets at fair value through other comprehensive income (debt instruments)*

The Group measures debt investments at fair value through other comprehensive income if both of the following conditions are met:

- The financial asset is held within a business model with the objective of both holding to collect contractual cash flows and selling.
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

For debt investments at fair value through other comprehensive income, interest income, foreign exchange revaluation and impairment losses or reversals are recognised in the statement of profit or loss and computed in the same manner as for financial assets measured at amortised cost. The remaining fair value changes are recognised in other comprehensive income. Upon derecognition, the cumulative fair value change recognised in other comprehensive income is recycled to the statement of profit or loss.

##### *Financial assets designated at fair value through other comprehensive income (equity investments)*

Upon initial recognition, the Group can elect to classify irrevocably its equity investments as equity investments designated at fair value through other comprehensive income when they meet the definition of equity under HKAS 32 *Financial Instruments: Presentation* and are not held for trading. The classification is determined on an instrument-by-instrument basis.

Gains and losses on these financial assets are never recycled to the statement of profit or loss. Dividends are recognised as other income in the statement of profit or loss when the right of payment has been established, it is probable that the economic benefits associated with the dividend will flow to the Group and the amount of the dividend can be measured reliably, except when the Group benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in other comprehensive income. Equity investments designated at fair value through other comprehensive income are not subject to impairment assessment.

### 2.4 重大會計政策概要 (續)

投資及其他金融資產 (根據香港財務報告準則第9號自二零一八年一月一日起適用的政策) (續)

##### 後續計量 (續)

##### 按公平值計入其他全面收益的金融資產 (債務工具)

倘滿足以下兩個條件，本集團將按公平值計入其他全面收益計量債務工具：

- 於旨在持有金融資產以收取合約現金流量及出售金融資產的業務模式中持有金融資產。
- 金融資產的合約條款於特定日期產生純粹為支付本金及未償還本金利息的現金流量。

就按公平值計入其他全面收益的債務工具而言，利息收入、外匯重估及減值虧損或撥回於損益表中確認，並按與按攤銷成本計量的金融資產相同的方式計量。其餘公平值變動於其他全面收益中確認。終止確認時，於其他全面收益中確認的累計公平值變動將重新計入損益表。

##### 指定按公平值計入其他全面收益的金融資產 (股本投資)

於初始確認時，本集團可選擇於股本投資符合香港會計準則第32號金融工具：呈報項下的股本定義且並非持作買賣時，將其股本投資不可撤回地分類為指定按公平值計入其他全面收益的股本投資。分類乃按個別工具基準釐定。

該等金融資產的收益及虧損概不會被重新計入損益表。當確立支付權及與股息相關的經濟利益可能流入本集團且股息金額能可靠計量時，股息於損益表中確認為其他收入，惟當本集團於作為收回金融資產一部份成本的所得款項中獲益時則除外，於此等情況下，該等收益於其他全面收益入賬。指定按公平值計入其他全面收益的股本投資不受減值評估影響。

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## 財務報表附註

### 2.4 Summary of Significant Accounting Policies (continued)

#### Investments and other financial assets (policies under HKFRS 9 applicable from 1 January 2018) (continued)

##### *Financial assets at fair value through profit or loss*

Financial assets at fair value through profit or loss include financial assets held for trading, financial assets designated upon initial recognition at fair value through profit or loss, or financial assets mandatorily required to be measured at fair value. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. Derivatives, including separated embedded derivatives, are also classified as held for trading unless they are designated as effective hedging instruments. Financial assets with cash flows that are not solely payments of principal and interest are classified and measured at fair value through profit or loss, irrespective of the business model. Notwithstanding the criteria for debt instruments to be classified at amortised cost or at fair value through other comprehensive income, as described above, debt instruments may be designated at fair value through profit or loss on initial recognition if doing so eliminates, or significantly reduces, an accounting mismatch.

Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with net changes in fair value recognised in the statement of profit or loss.

### 2.4 重大會計政策概要 (續)

投資及其他金融資產 (根據香港財務報告準則第9號自二零一八年一月一日起適用的政策) (續)

##### *按公平值計入損益的金融資產*

按公平值計入損益的金融資產包括持作買賣的金融資產，於初始確認時指定按公平值計入損益的金融資產，或強制要求按公平值計量的金融資產。倘為於近期出售或購回而收購金融資產，則該等金融資產分類為持作買賣。衍生工具 (包括獨立嵌入式衍生工具) 亦分類為持作買賣，惟該等衍生工具被指定為有效對沖工具則除外。現金流量並非純粹為支付本金及利息的金融資產，不論其業務模式如何，均按公平值計入損益分類及計量。儘管如以上標準所述，債務工具可按攤銷成本或按公平值計入其他全面收益分類，但於初始確認時，倘能夠消除或顯著減少會計錯配，則債務工具可指定為按公平值計入損益。

按公平值計入損益的金融資產按公平值於財務狀況表列賬，而公平值變動淨額於損益表中確認。

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### 2.4 Summary of Significant Accounting Policies (continued)

#### Investments and other financial assets (policies under HKAS 39 applicable before 1 January 2018)

##### *Initial recognition and measurement*

Financial assets are classified, at initial recognition, as financial assets at fair value through profit or loss, loans and receivables and available-for-sale financial investments, or as derivatives designated as hedging instruments in an effective hedge, as appropriate. When financial assets are recognised initially, they are measured at fair value plus transaction costs that are attributable to the acquisition of the financial assets, except in the case of financial assets recorded at fair value through profit or loss.

All regular way purchases and sales of financial assets are recognised on the trade date, that is, the date that the Group commits to purchase or sell the asset. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the period generally established by regulation or convention in the marketplace.

The subsequent measurement of financial assets depends on their classification as follows:

##### *Loans and receivables*

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial measurement, such assets are subsequently measured at amortised cost using the effective interest rate method less any allowance for impairment. Amortised cost is calculated by taking into account any discount or premium on acquisition and includes fees or costs that are an integral part of the effective interest rate. The effective interest rate amortisation is included in other income and gains in the statement of profit or loss. The loss arising from impairment is recognised in the statement of profit or loss in finance costs for loans and in administrative expenses for receivables.

### 2.4 重大會計政策概要 (續)

#### 投資及其他金融資產 (根據香港會計準則第39號於二零一八年一月一日前適用的政策)

##### *初始確認及計量*

金融資產於初始確認時分類為按公平值計入損益的金融資產、貸款及應收款項以及可供出售金融投資，或指定為有效對沖中的對沖工具的衍生工具（倘適用）。金融資產初始確認時按公平值加收購金融資產應佔交易成本計量，惟按公平值計入損益的金融資產除外。

所有按常規方式購買及出售的金融資產於交易日（即本集團承諾購買或出售該項資產的日期）確認。常規方式購買或出售乃指購買或出售須在一般按規例或市場慣例確定的期間內交付資產的金融資產。

金融資產其後視乎以下分類作出計量：

##### *貸款及應收款項*

有固定或可確定付款但並無在活躍市場報價的貸款及應收款項為非衍生金融資產。於初始計量後，該等資產其後用實際利率方法以攤銷成本減任何減值撥備計量。計算攤銷成本時，將考慮任何收購折讓或溢價，並計入屬於實際利率不可分割部份的費用或成本。實際利率攤銷乃計入損益表的其他收入及收益。減值產生的虧損乃於損益表內確認為貸款的融資成本及應收款項的管理費用。

## 2.4 Summary of Significant Accounting Policies (continued)

### Investments and other financial assets (policies under HKAS 39 applicable before 1 January 2018) (continued)

#### *Available-for-sale financial investments*

Available-for-sale financial investments are non-derivative financial assets in listed and unlisted equity investments and debt securities. Equity investments classified as available for sale are those which are neither classified as held for trading nor designated as at fair value through profit or loss. Debt securities in this category are those which are intended to be held for an indefinite period of time and which may be sold in response to needs for liquidity or in response to changes in market conditions.

After initial recognition, available-for-sale financial investments are subsequently measured at fair value, with unrealised gains or losses recognised as other comprehensive income in the available-for-sale investment revaluation reserve until the investment is derecognised, at which time the cumulative gain or loss is recognised in the statement of profit or loss in other income and gains, or until the investment is determined to be impaired, when the cumulative gain or loss is reclassified from the available-for-sale investment revaluation reserve to the statement of profit or loss in other gains or losses. Interest and dividends earned whilst holding the available-for-sale financial investments are reported as interest income and dividend income, respectively and are recognised in the statement of profit or loss as other income and gains in accordance with the policies set out for “Revenue recognition (applicable before 1 January 2018)” below.

When the fair value of unlisted equity investments cannot be reliably measured because (a) the variability in the range of reasonable fair value estimates is significant for that investment or (b) the probabilities of the various estimates within the range cannot be reasonably assessed and used in estimating fair value, such investments are stated at cost less any impairment losses.

The Group evaluates whether the ability and intention to sell its available-for-sale financial assets in the near term are still appropriate. When, in rare circumstances, the Group is unable to trade these financial assets due to inactive markets, the Group may elect to reclassify these financial assets if management has the ability and intention to hold the assets for the foreseeable future or until maturity.

## 2.4 重大會計政策概要 (續)

投資及其他金融資產 (根據香港會計準則第39號於二零一八年一月一日前適用的政策) (續)

#### *可供出售金融投資*

可供出售金融投資指上市及非上市股本投資及債務證券中的非衍生金融資產。分類為可供出售的股本投資乃指既非分類為持作買賣又非指定為按公平值計入損益的股本投資。此類別項下的債務證券乃指擬將無限期待有且可能因流動資金需求或市況改變而出售的債務證券。

於初始確認後，可供出售金融投資其後以公平值計量，未變現收益或虧損於可供出售投資重估儲備確認為其他全面收益，直至終止確認投資 (累計收益或虧損於損益表內確認為其他收入及收益) 或投資被釐定為已減值 (累計收益或虧損自可供出售投資重估儲備重新分類至損益表的其他收益或虧損) 為止。持有可供出售金融投資所賺取的利息及股息分別呈報為利息收入及股息收入，並根據下文「銷售收入確認 (於二零一八年一月一日前適用)」所載政策於損益表內確認為其他收入及收益。

當非上市股本投資的公平值由於(a)公平值合理估計範圍的變化對該投資而言屬重大或(b)上述範圍內各種估計的機率難以合理評估並用於估計公平值而無法可靠計量時，該等投資以成本減任何減值虧損列賬。

本集團評估在短期內出售其可供出售金融資產的能力及意向是否仍然適宜。在特殊情況下，當本集團因缺乏活躍市場而無法買賣該等金融資產時，如管理層有能力及意向在可預見將來持有該等資產或持有至到期，本集團可選擇重新分類該等金融資產。



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### 2.4 Summary of Significant Accounting Policies (continued)

#### Investments and other financial assets (policies under HKAS 39 applicable before 1 January 2018) (continued)

##### Available-for-sale financial investments (continued)

For a financial asset reclassified from the available-for-sale category, the fair value carrying amount at the date of reclassification becomes its new amortised cost and any previous gain or loss on that asset that has been recognised in equity is amortised to profit or loss over the remaining life of the investment using the effective interest rate. Any difference between the new amortised cost and the maturity amount is also amortised over the remaining life of the asset using the effective interest rate. If the asset is subsequently determined to be impaired, then the amount recorded in equity is reclassified to the statement of profit or loss.

#### Derecognition of financial assets (policies under HKFRS 9 applicable from 1 January 2018 and policies under HKAS 39 applicable before 1 January 2018)

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e., removed from the Group's consolidated statement of financial position) when:

- the rights to receive cash flows from the asset have expired; or
- the Group has transferred its rights to receive cash flows from the asset, or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a "pass-through" arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

### 2.4 重大會計政策概要 (續)

#### 投資及其他金融資產 (根據香港會計準則第39號於二零一八年一月一日前適用的政策) (續)

##### 可供出售金融投資 (續)

就從可供出售類別重新分類的金融資產而言，重新分類當日的公平賬面值成為其新攤銷成本，而先前已於權益確認的該資產任何收益或虧損採用實際利率法於剩餘投資年期內在損益攤銷。新攤銷成本與到期金額之間的任何差額亦採用實際利率法於資產剩餘年期內攤銷。如資產其後被釐定為已減值，則計入權益的金額重新分類至損益表。

#### 終止確認金融資產 (根據香港財務報告準則第9號自二零一八年一月一日起適用的政策及根據香港會計準則第39號於二零一八年一月一日前適用的政策)

出現以下情形時，金融資產 (或 (如適用) 部份金融資產或一組同類金融資產的一部份) 一般會終止確認 (即自本集團綜合財務狀況表移除)：

- 從資產收取現金流量的權利已屆滿；或
- 本集團已根據「轉手」安排轉讓從資產收取現金流量的權利，或已承擔向第三方無重大延誤全額支付所收現金流量的責任；及(a)本集團已轉讓資產的絕大部份風險及回報，或(b)本集團雖未轉讓或保留資產的絕大部份風險及回報，但已轉讓資產的控制權。

# NOTES TO FINANCIAL STATEMENTS

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## 財務報表附註

### 2.4 Summary of Significant Accounting Policies (continued)

#### **Derecognition of financial assets (policies under HKFRS 9 applicable from 1 January 2018 and policies under HKAS 39 applicable before 1 January 2018) (continued)**

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if and to what extent it has retained the risk and rewards of ownership of the asset. When it has neither transferred nor retained substantially all the risks and rewards of the asset nor transferred control of the asset, the Group continues to recognise the transferred asset to the extent of the Group's continuing involvement. In that case, the Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

#### **Impairment of financial assets (policies under HKFRS 9 applicable from 1 January 2018)**

The Group recognises an allowance for ECLs for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

### 2.4 重大會計政策概要 (續)

終止確認金融資產 (根據香港財務報告準則第9號自二零一八年一月一日起適用的政策及根據香港會計準則第39號於二零一八年一月一日前適用的政策) (續)

倘本集團已轉讓從資產收取現金流量的權利或訂立轉手安排，則評估有否保留資產所有權的風險及回報及保留程度。倘本集團並無轉讓或保留資產的絕大部份風險及回報，亦無轉讓資產控制權，則本集團將以本集團持續參與程度為限繼續確認所轉讓資產。在該情況下，本集團亦確認相關負債。已轉讓資產及相關負債根據反映本集團所保留權利及責任的基準計量。

通過對已轉讓資產作出擔保的形式持續參與的計量，按資產原賬面值與本集團或須償還的最高代價兩者較低者計算。

金融資產減值 (根據香港財務報告準則第9號自二零一八年一月一日起適用的政策)

本集團確認對並非按公平值計入損益的所有債務工具預期信貸虧損的撥備。預期信貸虧損乃基於根據合約到期的合約現金流量與本集團預期收取的所有現金流量之間的差額而釐定，以原實際利率的近似值貼現。預期現金流量將包括出售所持抵押的現金流量或組成合約條款的其他信貸提升措施。

# NOTES TO FINANCIAL STATEMENTS

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### 2.4 Summary of Significant Accounting Policies (continued)

#### Impairment of financial assets (policies under HKFRS 9 applicable from 1 January 2018) (continued)

##### General approach

ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12 months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

At each reporting date, the Group assesses whether the credit risk on a financial instrument has increased significantly since initial recognition. When making the assessment, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition and considers reasonable and supportable information that is available without undue cost or effort, including historical and forward-looking information.

For debt investments at fair value through other comprehensive income, the Group applies the low credit risk simplification. At each reporting date, the Group evaluates whether the debt investments are considered to have low credit risk using all reasonable and supportable information that is available without undue cost or effort. In making that evaluation, the Group reassesses the external credit ratings of the debt investments. In addition, the Group considers that there has been a significant increase in credit risk when contractual payments are more than 30 days past due.

The Group considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

### 2.4 重大會計政策概要 (續)

#### 金融資產減值 (根據香港財務報告準則第9號自二零一八年一月一日起適用的政策) (續)

##### 普通法

預期信貸虧損分兩個階段進行確認。就自初始確認起信貸風險並無大幅增加的信貸敞口而言，會就未來12個月內可能發生違約事件而導致的信貸虧損（12個月預期信貸虧損）計提預期信貸虧損。就自初始確認起信貸風險大幅增加的該等信貸敞口而言，不論何時發生違約，於敞口的餘下年期內的預期信貸虧損均須計提虧損撥備（全期預期信貸虧損）。

於各報告日期，本集團評估金融工具信貸風險是否自初始確認起大幅增加。於進行評估時，本集團比較金融工具於報告日期發生違約的風險及金融工具於初始確認日期發生違約的風險，認為在無需付出過多成本或努力的情況下即可獲得合理可靠的資料（包括歷史及前瞻性資料）。

就按公平值計入其他全面收益的債務投資而言，本集團採用低信貸風險簡化法。於各報告日期，本集團毋須花費不必要之成本或努力，即可使用所有合理可靠資料評估債務投資是否被視為低信貸風險。在進行評估時，本集團會重新評估債務投資的外部信用評級。此外，本集團認為合約付款逾期超過30日時，信貸風險會大幅增加。

本集團會在合約付款逾期90日時考慮金融資產違約。然而，在若干情況下，當內部或外部資料顯示，在並無計及本集團持有的任何信貸提升措施情況時，本集團不大可能悉數收到未償還合約款項，則本集團亦可認為金融資產違約。倘無法合理預期收回合約現金流量，則撇銷金融資產。

### 2.4 Summary of Significant Accounting Policies (continued)

#### Impairment of financial assets (policies under HKFRS 9 applicable from 1 January 2018) (continued)

##### General approach (continued)

Debt investments at fair value through other comprehensive income and financial assets at amortised cost are subject to impairment under the general approach and they are classified within the following stages for measurement of ECLs except for trade receivables which apply the simplified approach as detailed below.

- Stage 1 – Financial instruments for which credit risk has not increased significantly since initial recognition and for which the loss allowance is measured at an amount equal to 12-month ECLs
- Stage 2 – Financial instruments for which credit risk has increased significantly since initial recognition but that are not credit-impaired financial assets and for which the loss allowance is measured at an amount equal to lifetime ECLs
- Stage 3 – Financial assets that are credit-impaired at the reporting date (but that are not purchased or originated credit-impaired) and for which the loss allowance is measured at an amount equal to lifetime ECLs

##### Simplified approach

For trade receivables that do not contain a significant financing component or when the Group applies the practical expedient of not adjusting the effect of a significant financing component, the Group applies the simplified approach in calculating ECLs. Under the simplified approach, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

### 2.4 重大會計政策概要 (續)

#### 金融資產減值 (根據香港財務報告準則第9號自二零一八年一月一日起適用的政策) (續)

##### 普通法 (續)

按公平值計入其他全面收益之債務投資及按攤銷成本計量的金融資產乃根據普通法減值，且於以下階段就預期信貸虧損計量予以分類，惟採用下文所述簡化法的貿易應收款項除外。

- 第一階段 – 信貸風險自初始確認起並未大幅增加且其虧損撥備按等於12個月預期信貸虧損的數額計量的金融工具
- 第二階段 – 信貸風險自初始確認起大幅增加但並非信貸減值金融資產且其虧損撥備按等於全期預期信貸虧損的數額計量的金融工具
- 第三階段 – 於報告日期出現信貸減值 (但並非購入或源生信貸減值) 且其虧損撥備按等於全期預期信貸虧損的數額計量的金融資產

##### 簡化法

就並無重大融資成分的貿易應收款項或本集團就任何重大融資成分應用不調整交易價格的可行權宜方法而言，本集團採用簡化法計算預期信貸虧損。根據簡化法，本集團並未追蹤信貸風險變動，轉而於各報告日期根據全期預期信貸虧損確認虧損撥備。本集團已根據其歷史信貸虧損經驗建立撥備矩陣，並就債務人及經濟環境特定的前瞻性因素作出調整。

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## 財務報表附註

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### 2.4 Summary of Significant Accounting Policies (continued)

#### Impairment of financial assets (policies under HKAS 39 applicable before 1 January 2018)

The Group assesses at the end of each reporting period whether there is objective evidence that a financial asset or a group of financial assets is impaired. An impairment exists if one or more events that occurred after the initial recognition of the asset have an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated. Evidence of impairment may include indications that a debtor or a group of debtors is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganisation and observable data indicating that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

#### *Financial assets carried at amortised cost*

For financial assets carried at amortised cost, the Group first assesses whether impairment exists individually for financial assets that are individually significant, or collectively for financial assets that are not individually significant. If the Group determines that no objective evidence of impairment exists for an individually assessed financial asset, whether significant or not, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for impairment. Assets that are individually assessed for impairment and for which an impairment loss is, or continues to be, recognised are not included in a collective assessment of impairment.

The amount of any impairment loss identified is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred). The present value of the estimated future cash flows is discounted at the financial asset's original effective interest rate (i.e., the effective interest rate computed at initial recognition).

### 2.4 重大會計政策概要 (續)

#### 金融資產減值 (根據香港會計準則第39號於二零一八年一月一日前適用的政策)

本集團於各報告期末評估是否有客觀跡象顯示一項金融資產或一組金融資產出現減值。倘資產首次確認後出現一項或多項事件而對能可靠估計的金融資產或一組金融資產的估計未來現金流量有影響，則說明已發生減值。減值跡象可能包括單個債務人或一組債務人有重大財務困難、拖欠利息或本金付款、可能破產或進行其他財務重組以及可觀察數據顯示估計未來現金流量減少且可計量，例如與拖欠有關的欠款或經濟狀況變動。

#### *按攤銷成本入賬的金融資產*

對於按攤銷成本入賬的金融資產，本集團首先單獨評估個別重大的金融資產有否客觀減值跡象，或共同評估非個別重大的金融資產有否客觀減值跡象。倘本集團釐定個別已評估金融資產無客觀減值跡象，則有關資產不論是否重大，會計入一組信用風險特徵相若的金融資產，共同作減值評估。對於個別作減值評估的資產，倘其減值虧損會確認或繼續會確認，則不會計入共同減值評估。

已識別減值虧損金額以資產的賬面值與估計未來現金流量現值 (不包括尚未發生的未來信用損失) 的差額計量。估計未來現金流量的現值按金融資產的原實際利率 (即初始確認時計算採用的實際利率) 貼現。

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## 財務報表附註

### 2.4 Summary of Significant Accounting Policies (continued)

#### Impairment of financial assets (policies under HKAS 39 applicable before 1 January 2018) (continued)

##### *Financial assets carried at amortised cost (continued)*

The carrying amount of the asset is reduced through the use of an allowance account and the loss is recognised in the statement of profit or loss. Interest income continues to be accrued on the reduced carrying amount using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss. Loans and receivables together with any associated allowance are written off when there is no realistic prospect of future recovery and all collateral has been realised or has been transferred to the Group.

If, in a subsequent period, the amount of the estimated impairment loss increases or decreases because of an event occurring after the impairment was recognised, the previously recognised impairment loss is increased or reduced by adjusting the allowance account. If a write-off is later recovered, the recovery is credited to administrative expenses in the statement of profit or loss.

##### *Assets carried at cost*

If there is objective evidence that an impairment loss has been incurred on an unquoted equity instrument that is not carried at fair value because its fair value cannot be reliably measured, or on a derivative asset that is linked to and must be settled by delivery of such an unquoted equity instrument, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at the current market rate of return for a similar financial asset. Impairment losses on these assets are not reversed.

### 2.4 重大會計政策概要 (續)

#### 金融資產減值 (根據香港會計準則第39號於二零一八年一月一日前適用的政策) (續)

##### *按攤銷成本入賬的金融資產 (續)*

資產賬面價值通過使用撥備賬扣減，虧損金額於損益表內確認。利息收入持續按已扣減賬面值累計，利率為計量減值虧損時貼現未來現金流量所使用的貼現率。倘不可能於未來實現回收且所有抵押品已變現或轉至本集團，則貸款及應收款項連同任何相關撥備可撇銷。

倘後續期間於減值確認後發生的事項導致估計減值虧損增加或減少，則以往確認的減值虧損通過調整撥備賬增加或減少。倘撇賬於日後收回，則轉回的減值虧損計入損益表的管理費用。

##### *按成本入賬的資產*

倘有客觀跡象顯示因未能可靠計量公平值而不按公平值入賬的未報價股本工具，或與該等未報價股本工具掛鉤且須以交付該未報價股本工具結算的衍生資產已產生減值虧損，則該虧損金額按該資產的賬面值與按同類金融資產的當前市場回報率折讓的估計未來現金流量現值的差額計量。該等資產的減值虧損不會撥回。

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## 財務報表附註

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### 2.4 Summary of Significant Accounting Policies (continued)

#### Financial liabilities (policies under HKFRS 9 applicable from 1 January 2018 and policies under HKAS 39 applicable before 1 January 2018)

##### Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings and payables.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The Group's financial liabilities include trade payables, financial liabilities included in other payables and accruals, amounts due to related parties and interest-bearing bank borrowings.

##### Subsequent measurement

The subsequent measurement of financial liabilities depends on their classification as follows:

##### Financial liabilities at fair value through profit or loss (policies under HKFRS 9 applicable from 1 January 2018)

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by HKFRS 9. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments. Gains or losses on liabilities held for trading are recognised in the statement of profit or loss. The net fair value gain or loss recognised in the statement of profit or loss does not include any interest charged on these financial liabilities.

### 2.4 重大會計政策概要 (續)

金融負債 (根據香港財務報告準則第9號自二零一八年一月一日起適用的政策及根據香港會計準則第39號於二零一八年一月一日前適用的政策)

##### 初始確認及計量

金融負債初始確認時歸類為按公平值計入損益的金融負債、貸款及借貸以及應付款項。

所有金融負債初始按公平值確認，貸款及借貸以及應付款項則須扣除直接應佔交易成本。

本集團的金融負債包括貿易應付款項及計入其他應付款項及應計費用的金融負債、應付關聯方款項以及計息銀行借款。

##### 後續計量

金融負債其後按類別以下列方法計量：

##### 按公平值計入損益的金融負債 (根據香港財務報告準則第9號自二零一八年一月一日起適用的政策)

按公平值計入損益的金融負債包括持作買賣的金融負債及於初始確認時指定為按公平值計入損益的金融負債。

倘金融負債是為近期回購而產生，則歸類為持作買賣。該類別亦包括本集團訂立的衍生金融工具，其並未於香港財務報告準則第9號界定的對沖關係中指定為對沖工具。獨立嵌入式衍生工具亦分類為持作買賣，除非其被指定為有效的對沖工具則另作別論。分開的嵌入式衍生工具亦被分類為持作買賣，惟非其被指定為有效對沖工具。持作買賣的負債的損益於損益表確認。於損益表確認的公平值淨收益或虧損不包括就該等金融負債收取的任何利息。

**2.4 Summary of Significant Accounting Policies  
(continued)****Financial liabilities (policies under HKFRS 9 applicable from 1 January 2018 and policies under HKAS 39 applicable before 1 January 2018) (continued)***Subsequent measurement (continued)**Financial liabilities at fair value through profit or loss (policies under HKFRS 9 applicable from 1 January 2018) (continued)*

Financial liabilities designated upon initial recognition as at fair value through profit or loss are designated at the initial date of recognition, and only if the criteria in HKFRS 9 are satisfied. Gains or losses on liabilities designated at fair value through profit or loss are recognised in the statement of profit or loss, except for the gains or losses arising from the Group's own credit risk which are presented in other comprehensive income with no subsequent reclassification to the statement of profit or loss. The net fair value gain or loss recognised in the statement of profit or loss does not include any interest charged on these financial liabilities.

*Loans and borrowings*

After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost, using the effective interest rate method unless the effect of discounting would be immaterial, in which case they are stated at cost. Gains and losses are recognised in the statement of profit or loss when the liabilities are derecognised as well as through the effective interest rate amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate. The effective interest rate amortisation is included in finance costs in the statement of profit or loss.

**2.4 重大會計政策概要 (續)**

金融負債 (根據香港財務報告準則第9號自二零一八年一月一日起適用的政策及根據香港會計準則第39號於二零一八年一月一日前適用的政策) (續)

*後續計量 (續)*

按公平值計入損益的金融負債 (根據香港財務報告準則第9號自二零一八年一月一日起適用的政策) (續)

於初始確認時指定為按公平值計入損益的金融負債於初始確認日期指定，及僅於符合國際財務報告準則第9號所規定的標準情況下方會進行。指定按公平值計入損益的負債的收益或虧損於損益表中確認，惟於其他全面收益呈列的本集團自身信貸風險所產生的收益或虧損除外，其後續未重新分類至損益表。於損益表確認的公平值淨損益不包括就該等金融負債收取的任何利息。

*貸款及借貸*

初始確認後，計息貸款及借貸其後以實際利率法按攤銷成本計量，若貼現影響不大，則按成本列賬。收益及虧損於負債終止確認時透過實際利率攤銷程序於損益表確認。

計算攤銷成本時已計及任何收購折讓或溢價及屬實際利率不可分割部份的費用或成本。實際利率攤銷則計入損益表的財務費用。



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### 2.4 Summary of Significant Accounting Policies (continued)

#### **Derecognition of financial liabilities (policies under HKFRS 9 applicable from 1 January 2018 and policies under HKAS 39 applicable before 1 January 2018)**

A financial liability is derecognised when the obligation under the liability is discharged or cancelled, or expires.

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and a recognition of a new liability, and the difference between the respective carrying amounts is recognised in the statement of profit or loss.

#### **Offsetting of financial instruments (policies under HKFRS 9 applicable from 1 January 2018 and policies under HKAS 39 applicable before 1 January 2018)**

Financial assets and financial liabilities are offset and the net amount is reported in the statement of financial position if, and only if, there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, or to realise the assets and settle the liabilities simultaneously.

#### **Inventories**

Inventories are stated at the lower of cost and net realisable value. Cost is determined on the weighted average basis, and in the case of work in progress and finished goods, comprises direct materials, direct labour and an appropriate proportion of overheads. Net realisable value is based on estimated selling prices less any estimated costs to be incurred to completion and disposal.

#### **Cash and cash equivalents**

For the purpose of the consolidated statement of cash flows, cash and cash equivalents comprise cash on hand and demand deposits, and short term highly liquid investments that are readily convertible into known amounts of cash, are subject to an insignificant risk of changes in value, and have a short maturity of generally within three months when acquired.

For the purpose of the consolidated statement of financial position, cash and cash equivalents comprise cash on hand and at banks, including term deposits and assets similar in nature to cash, which are not restricted as to use.

### 2.4 重大會計政策概要 (續)

終止確認金融負債 (根據香港財務報告準則第9號自二零一八年一月一日起適用的政策及根據香港會計準則第39號於二零一八年一月一日前適用的政策)

金融負債於負債的責任解除、註銷或屆滿時終止確認。

當現有金融負債被同一貸款人以條款明顯不同的負債取代時，或現有負債的條款有重大修改時，有關替換或修改則視為終止確認原有負債並確認一項新負債，而相關賬面值的差額於損益表確認。

抵銷金融工具 (根據香港財務報告準則第9號自二零一八年一月一日起適用的政策及根據香港會計準則第39號於二零一八年一月一日前適用的政策)

倘 (且僅當) 有現行可強制執行的法律權利抵銷已確認金額，並且擬以淨額基準進行結算或同時將資產變現及清償負債，方可將金融資產及金融負債抵銷，淨額於財務狀況表呈報。

#### **存貨**

存貨按成本及可變現淨值兩者中的較低者列賬。成本按加權平均基準釐定，而就在製品及製成品而言，成本包括直接材料、直接勞工及適當比例的生產費用。可變現淨值為估計售價減去任何在完成及出售過程中產生的估計費用。

#### **現金及現金等價物**

就綜合現金流量表而言，現金及現金等價物包括手頭現金及活期存款，以及一般期限為自購入起計三個月內及可隨時轉換為已知數額現金且價值變動風險較低的短期高流動性投資。

就綜合財務狀況表而言，現金及現金等價物包括手頭及銀行現金 (包括定期存款以及與現金性質類似的資產) (使用不受限制)。

### 2.4 Summary of Significant Accounting Policies (continued)

#### Provisions

A provision is recognised when there is a present obligation (legal or constructive) has arisen as a result of a past event and it is probable that a future outflow of resources will be required to settle the obligation, provided that a reliable estimate can be made of the amount of the obligation.

When the effect of discounting is material, the amount recognised for a provision is the present value at the end of the reporting period of the future expenditures expected to be required to settle the obligation. The increase in the discounted present value amount arising from the passage of time is included in finance costs in the statement of profit or loss.

#### Income tax

Income tax comprises current and deferred tax. Income tax relating to items recognised outside profit or loss is recognised outside profit or loss, either in other comprehensive income or directly in equity.

Current tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period, taking into consideration interpretations and practices prevailing in the countries in which the Group operates.

Deferred tax is provided, using the liability method, on all temporary differences at the end of the reporting period between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- when the deferred tax liability arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- in respect of taxable temporary differences associated with investments in subsidiaries when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

### 2.4 重大會計政策概要 (續)

#### 撥備

倘因過往事件而須承擔法定或推定責任，而履行該責任可能導致未來資源外流，且該責任所涉金額能夠可靠估計，則確認撥備。

倘貼現影響重大，則確認撥備的數額為預期日後履行有關責任所需開支於報告期末的現值。倘已貼現的現值隨時間而有所增加，則該等增幅將於損益表列作財務費用。

#### 所得稅

所得稅包括即期及遞延稅項。與於損益外確認的項目有關的所得稅於損益外確認為其他全面收入或直接於權益中確認。

即期稅項資產及負債，根據於報告期末已頒佈或實質上已頒佈的稅率（及稅法），按預期獲稅務機關退回或向稅務機關支付的款項，並計及本集團經營所在國家現行法律詮釋及慣例計量。

遞延稅項於報告期末採用負債法就資產及負債稅基與財務報告所示賬面值的所有暫時差額撥備。

除下列情況外，遞延稅項負債會就所有應課稅暫時差額確認：

- 倘遞延稅項負債因非業務合併交易中初始確認資產或負債而產生，且於交易時遞延稅項負債不會影響會計溢利或應課稅溢利或虧損；及
- 就於子公司投資相關的應課稅暫時差額而言，倘可控制暫時差額的撥回時間，且於可見未來不會撥回暫時差額。

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### 2.4 Summary of Significant Accounting Policies (continued)

#### Income tax (continued)

Deferred tax assets are recognised for all deductible temporary differences, carryforward of unused tax credits and any unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carryforward of unused tax credits and unused tax losses can be utilised, except:

- when the deferred tax asset relating to the deductible temporary differences arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- in respect of deductible temporary differences associated with investments in subsidiaries, deferred tax assets are only recognised to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

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 profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are reassessed at the end of each reporting period and are recognised to the extent that it has become probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax assets and deferred tax liabilities are offset if and only if the Group has a legally enforceable right to set off current tax assets and current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

### 2.4 重大會計政策概要 (續)

#### 所得稅 (續)

遞延稅項資產於有可能動用應課稅溢利以抵銷可扣減暫時差額的情況下，就所有可扣稅暫時差額、未動用稅項抵免及未動用稅項虧損結轉確認，而未動用稅項抵免及未動用稅項虧損結轉可以動用，惟下列情況除外：

- 倘涉及可扣減暫時差額的遞延稅項資產乃因初始確認非業務合併、且於交易時不影響會計溢利或應課稅損益的交易的資產或負債而產生；及
- 就於子公司投資相關的可扣減暫時差額而言，遞延稅項資產僅於可見未來可能撥回暫時差額，且可動用應課稅溢利以抵銷暫時差額的情況下確認。

遞延稅項資產賬面值於各報告期末檢討，並於不再可能有足夠應課稅溢利可容許動用全部或部份遞延稅項資產的情況下予以扣減。未確認遞延稅項資產於各報告期末重新評估，並在具備足夠應課稅溢利以容許收回全部或部份遞延稅項資產的情況下予以確認。

遞延稅項資產及負債按預期適用於變現資產或清償負債期間的稅率，依據於報告期末已頒佈或實質上已頒佈的稅率（及稅法）計量。

僅當本集團有可合法執行權利可將即期稅項資產與即期稅項負債抵銷，且遞延稅項資產與遞延稅項負債與同一稅務機關對同一應課稅實體或於各未來期間預期有大額遞延稅項負債或資產需要結算或清償時，擬按淨額基準結算即期稅項負債及資產或同時變現資產及結算負債之不同稅務實體徵收之所得稅相關，則遞延稅項資產與遞延稅項負債可予抵銷。

## 2.4 Summary of Significant Accounting Policies (continued)

### Government grants

Government grants are recognised at their fair value where there is reasonable assurance that the grant will be received and all attaching conditions will be complied with. When the grant relates to an expense item, it is recognised as income on a systematic basis over the periods that the costs, which it is intended to compensate, are expensed.

Where the grant relates to an asset, the fair value is deducted from the carrying amount of the asset and released to the statement of profit or loss by way of a reduced depreciation charge.

Where the Group receives government loans granted with no or at a below-market rate of interest for the construction of a qualifying asset, the initial carrying amount of the government loans is determined using the effective interest rate method, as further explained in the accounting policy for “Financial liabilities” above. The benefit of the government loans granted with no or at a below-market rate of interest, which is the difference between the initial carrying value of the loans and the proceeds received, is treated as a government grant and released to the statement of profit or loss over the expected useful life of the relevant asset by equal annual instalments.

### Revenue recognition (applicable from 1 January 2018)

#### *Revenue from contracts with customers*

Revenue from contracts with customers is recognised when control of goods or services is transferred to the customers at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services.

When the consideration in a contract includes a variable amount, the amount of consideration is estimated to which the Group will be entitled in exchange for transferring the goods or services to the customer. The variable consideration is estimated at contract inception and constrained until it is highly probable that a significant revenue reversal in the amount of cumulative revenue recognised will not occur when the associated uncertainty with the variable consideration is subsequently resolved.

## 2.4 重大會計政策概要 (續)

### 政府補助

政府補助在合理確定將會收取補助及將會符合一切所附條件時，按其公平值確認。如補助與開支項目有關，則於有關期間內確認為收入，以按系統基準將補助與擬補償的相關成本抵銷。

倘補助與資產有關，則公平值於該項資產賬面值中扣除，並通過減少折舊開支方式撥回損益表。

倘本集團就建造合資格資產而收取的政府貸款不付息或按低於市場利率計息，則政府貸款的初始賬面值使用實際利率法釐定，進一步詳情載述於上文「金融負債」的會計政策。授出的政府貸款福利不付息或按低於市場利率計息（為貸款的初始賬面值與所收取的所得款項的差額）視作政府補貼及於有關資產的預期可使用年內逐年按等額分期撥回損益表。

### 銷售收入確認（自二零一八年一月一日起適用）

#### *客戶合約收益*

於貨品或服務的控制權按反映本集團預期就交換該等貨品或服務有權收取的代價的金額轉移予客戶時確認客戶合約收益。

當合約代價包含可變金額時，代價金額估計為本集團就向客戶轉讓貨品或服務而有權在交換中獲取的數額。可變代價於合約開始時估計並受到約束，直至其後關乎可變代價的不確定因素獲得解決時確認累計收益金額不大可能發生重大收益撥回。

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### 2.4 Summary of Significant Accounting Policies (continued)

#### Revenue recognition (applicable from 1 January 2018) (continued)

##### *Revenue from contracts with customers (continued)*

When the contract contains a financing component which provides the customer a significant benefit of financing the transfer of goods or services to the customer for more than one year, revenue is measured at the present value of the amount receivable, discounted using the discount rate that would be reflected in a separate financing transaction between the Group and the customer at contract inception. When the contract contains a financing component which provides the Group a significant financial benefit for more than one year, revenue recognised under the contract includes the interest expense accreted on the contract liability under the effective interest method. For a contract where the period between the payment by the customer and the transfer of the promised goods or services is one year or less, the transaction price is not adjusted for the effects of a significant financing component, using the practical expedient in HKFRS 15.

The Group is involved in the business of the manufacture and sale of semiconductor products. Revenue from the sale of semiconductor products is recognised at the point in time when control of the asset is transferred to the customer, generally on delivery of the semiconductor products. The normal credit term is 30 to 45 days upon delivery, extending up to 150 days for major customers. Payment in advance is required for some contracts.

##### *Revenue from other sources*

Rental income is recognised on a time proportion basis over the lease terms.

##### *Other income*

Interest income is recognised on an accrual basis using the effective interest method by applying the rate that exactly discounts the estimated future cash receipts over the expected life of the financial instrument or a shorter period, when appropriate, to the net carrying amount of the financial asset.

Dividend income is recognised when the shareholders' right to receive payment has been established, it is probable that the economic benefits associated with the dividend will flow to the Group and the amount of the dividend can be measured reliably.

### 2.4 重大會計政策概要 (續)

#### 銷售收入確認 (自二零一八年一月一日起適用) (續)

##### *客戶合約收益 (續)*

倘合約包含就向客戶轉讓貨品或服務為客戶提供超過一年的重大融資利益的融資部份，則收益按應收金額的現值計量，並使用本集團與客戶於合約開始時單獨融資交易中反映的貼現率貼現。倘合約包含為本集團提供超過一年的重大融資利益的融資部份，則根據該合約確認的收益包括按實際利率法計算的合約負債所產生的利息開支。就客戶付款與承諾貨品或服務轉移期間為一年或一年以下的合約而言，交易價格無須因重大融資成分的影響而調整，採納香港財務報告準則第15號中實用的權宜之策。

本集團從事製造及銷售半導體產品業務。來自銷售半導體產品的收益於資產的控制權轉移予客戶時（一般於交付半導體產品時）確認。一般信貸期限為交付後30至45天，對主要客戶的信貸期延長至150天。若干合約須提前付款。

##### *由其他來源產生之收入*

租金收入於租賃期按時間比例確認。

##### *其他收入*

利息收入按應計基準使用實際利率法，透過採用將金融工具在預期可使用年期或較短期間（如適用）內的估計未來現金收入準確貼現至金融資產之賬面淨值的比率予以確認。

股息收入於股東收取款項之權利被確立時確認，與股利相關的經濟利益很可能流入本集團，且股利的金額能夠可靠計量。

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### 2.4 Summary of Significant Accounting Policies (continued)

#### Revenue recognition (applicable before 1 January 2018)

Revenue is recognised when it is probable that the economic benefits will flow to the Group and when the revenue can be measured reliably, on the following bases:

- (a) from the sale of goods, when the significant risks and rewards of ownership and title have been transferred to the buyer, provided that the Group maintains neither managerial involvement to the degree usually associated with ownership, nor effective control over the goods sold;
- (b) rental income, on a time proportion basis over the lease terms; and
- (c) interest income, on an accrual basis using the effective interest method by applying the rate that exactly discounts the estimated future cash receipts over the expected life of the financial instrument or a shorter period, when appropriate, to the net carrying amount of the financial asset.

#### Contract liabilities (applicable from 1 January 2018)

A contract liability is the obligation to transfer goods to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before the Group transfers goods to the customer, a contract liability is recognised when the payment is made or the payment is due (whichever is earlier). Contract liabilities are recognised as revenue when the Group performs under the contract.

#### Share-based payments

The Company operates a share option scheme for the purpose of providing incentives and rewards to eligible participants who contribute to the success of the Group's operations. Employees (including directors) of the Group receive remuneration in the form of share-based payments, whereby employees render services as consideration for equity instruments ("equity-settled transactions").

The cost of equity-settled transactions with employees for grants is measured by reference to the fair value at the date at which they are granted. The fair value is determined by an external valuer using a binomial model, further details of which are given in note 29 to the financial statements.

### 2.4 重大會計政策概要 (續)

#### 銷售收入確認 (自二零一八年一月一日起適用)

當經濟利益很可能流入本集團且收入能可靠計量時，銷售收入按下列基準確認：

- (a) 銷售貨品的銷售收入於所有權及業權上的重大風險及回報已轉移至買方，且本集團不再對已售出商品保持通常與所有權有關的管理參與和有效控制權時確認；
- (b) 就租金收入而言，於租期內按時間比例基準確認；及
- (c) 就利息收入而言，按應計基準以實際利率法採用將金融工具預計可使用年期或較短期間（如適用）內的估計未來現金收入準確貼現至金融資產賬面淨值的利率確認。

#### 合約負債 (自二零一八年一月一日起適用)

合約負債指本集團因已向客戶收取代價（或代價款項已到期），而須向客戶轉讓貨品的責任。倘客戶於本集團將貨品轉讓予客戶前支付代價，則於作出付款或付款到期時（以較早者為準）確認合約負債。合約負債於本集團履行合約時確認為收益。

#### 以股份付款

本公司實施一項購股權計劃，旨在激勵與獎勵對本集團業務成功作出貢獻的合資格參與者。本集團僱員（包括董事）以股份付款的方式收取報酬，僱員提供服務作為收取股本工具的代價（「股權結算交易」）。

於授出相關與僱員進行股權結算交易的成本，乃參照授出日期的公平值而計量。公平值由外聘估值師採用二項式模型釐定，進一步詳情載於財務報表附註 29。

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### 2.4 Summary of Significant Accounting Policies (continued)

#### Share-based payments (continued)

The cost of equity-settled transactions is recognised in employee benefit expense, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled. The cumulative expense recognised for equity-settled transactions at the end of each reporting period until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The charge or credit to the statement of profit or loss for a period represents the movement in the cumulative expense recognised as at the beginning and end of that period.

Service and non-market performance conditions are not taken into account when determining the grant date fair value of awards, but the likelihood of the conditions being met is assessed as part of the Group's best estimate of the number of equity instruments that will ultimately vest. Market performance conditions are reflected within the grant date fair value. Any other conditions attached to an award, but without an associated service requirement, are considered to be non-vesting conditions. Non-vesting conditions are reflected in the fair value of an award and lead to an immediate expensing of an award unless there are also service and/or performance conditions.

For awards that do not ultimately vest because non-market performance and/or service conditions have not been met, no expense is recognised. Where awards include a market or non-vesting condition, the transactions are treated as vesting irrespective of whether the market or non-vesting condition is satisfied, provided that all other performance and/or service conditions are satisfied.

Where the terms of an equity-settled award are modified, as a minimum an expense is recognised as if the terms had not been modified, if the original terms of the award are met. In addition, an expense is recognised for any modification that increases the total fair value of the share-based payments, or is otherwise beneficial to the employee as measured at the date of modification.

### 2.4 重大會計政策概要 (續)

#### 以股份付款 (續)

股權結算交易成本連同權益相應增加部份，在績效及／或服務條件達成時於期內在僱員福利開支確認。截至歸屬日期前於報告期末確認的股權結算交易的累計開支，反映歸屬期已到期部份及本集團對最終將會歸屬的股本工具數目的最佳估計。期內在損益表扣除或進賬，乃指期初與期終已確認的累計開支的變動。

釐定獎勵的授出日公平值並不考慮服務及非市場表現條件，惟能達成條件的可能性則被評定為將最終歸屬為本集團股本工具數目的最佳估計的一部份。市場表現條件將反映在授出日的公平值。附帶於獎勵中但並無相關聯服務要求的其他任何條件皆視為非歸屬條件。反映非歸屬條件的獎勵公平值若當中不包含服務及／或表現條件乃即時予以支銷。

因未能達至非市場表現及／或服務條件，而導致最終並無歸屬的獎勵並不會確認支銷，惟包括一項市場或非歸屬條件之獎勵，無論市場或非歸屬條件是否達成，其均會被視為已歸屬，前提是所有其他表現及／或服務條件須已達成。

倘股權結算獎勵的條款有變更，假設符合獎勵原條款，則所確認之開支最少須達到猶如條款並無任何變更的水平。此外，倘按變更日期之計量，任何變更導致以股份付款的公平值總額增加，或為僱員帶來其他利益，則就該等變更確認開支。

## 2.4 Summary of Significant Accounting Policies (continued)

### Share-based payments (continued)

Where an equity-settled award is cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognised for the award is recognised immediately. This includes any award where non-vesting conditions within the control of either the Group or the employee are not met. However, if a new award is substituted for the cancelled award, and is designated as a replacement award on the date that it is granted, the cancelled and new awards are treated as if they were a modification of the original award, as described in the previous paragraph.

The dilutive effect of outstanding options is reflected as additional share dilution in the computation of earnings per share.

### Other employee benefits

#### *Pension scheme*

The employees of the Group's subsidiary which operates in Mainland China are required to participate in a central pension scheme operated by the local municipal government. This subsidiary is required to contribute a certain percentage of its payroll costs to the central pension scheme. The contributions are charged to the statement of profit or loss as they become payable in accordance with the rules of the central pension scheme.

#### *Termination benefits*

Termination benefits are recognised at the earlier of when the Group can no longer withdraw the offer of those benefits and when the Group recognises restructuring costs involving the payment of termination benefits.

### Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, i.e., assets that necessarily take a substantial period of time to get ready for their intended use or sale, are capitalised as part of the cost of those assets. The capitalisation of such borrowing costs ceases when 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 capitalised. All other borrowing costs are expensed in the period in which they are incurred. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

## 2.4 重大會計政策概要 (續)

### 以股份付款 (續)

倘股權結算獎勵註銷，則視為已於註銷日期歸屬，任何尚未確認之獎勵（包括未能符合本集團或僱員可控制的非歸屬條件的任何獎勵）開支，均即時確認。然而，若已授出新獎勵代替已註銷的獎勵，並於授出日期指定為替代獎勵，則如前段所述，已註銷獎勵及新獎勵均視為原有獎勵的變更。

計算每股盈利時，未行使購股權的攤薄效應，反映為額外股份攤薄。

### 其他僱員福利

#### *退休金計劃*

本集團於中國內地營運的子公司屬下的僱員須參與由有關地方市政府營運的中央退休金計劃。該子公司須按僱員薪金若干百分比對中央退休金計劃供款。供款於按中央退休金計劃規則應付時在損益表內支銷。

#### *離職福利*

離職福利於本集團不再能取消提供該等福利時及本集團確認涉及支付離職福利之重組成本時之較早者確認。

### 借款成本

收購、建設或生產合資格資產（即需要一段較長時間方可達致擬定用途或出售的資產）直接應佔的借款成本會撥充資本，作為該等資產的部份成本。當資產已大致可作擬定用途或出售時，則不會再將該等借款成本撥充資本。在特定借款用作合資格資產支出前暫作投資所賺取的投資收入須自撥充資本的借款成本扣除。所有其他借款成本於產生期間支銷。借款成本包括一間實體借款時產生的利息及其他成本。



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### 2.4 Summary of Significant Accounting Policies (continued)

#### Dividends

Final dividends are recognised as a liability when they are approved by the shareholders in a general meeting. Proposed final dividends are disclosed in the notes to the financial statements.

Interim dividends are simultaneously proposed and declared, because the Company's memorandum and articles of association grant the directors the authority to declare interim dividends. Consequently, interim dividends are recognised immediately as a liability when they are proposed and declared.

#### Foreign currencies

These financial statements are presented in US\$, which is the Company's functional currency. Each entity in the Group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency. Foreign currency transactions recorded by the entities in the Group are initially recorded using their respective functional currency rates prevailing at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency rates of exchange ruling at the end of the reporting period. All differences arising on settlement of translation of monetary items are recognised in the statement of profit or loss.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was measured. The gain or loss arising on translation of a non-monetary item measured at fair value is treated in line with the recognition of the gain or loss on change in fair value of the item (i.e., translation difference on the item whose fair value gain or loss is recognised in other comprehensive income or profit or loss is also recognised in other comprehensive income or profit or loss, respectively).

### 2.4 重大會計政策概要 (續)

#### 股息

末期股息於股東在股東大會上批准時確認作負債。擬派末期股息乃於財務報表附註披露。

由於本公司的組織章程大綱及細則授權董事宣派中期股息，故中期股息乃同時予以擬派及宣派。因此，中期股息於擬派及宣派後隨即確認為負債。

#### 外幣

該等財務報表以本公司的功能貨幣美元呈列。本集團各實體自行決定其功能貨幣，而各實體財務報表所載項目均採用該功能貨幣計量。本集團實體記錄的外幣交易初步採用其各自於交易日期的功能貨幣匯率入賬。以外幣計值的貨幣資產及負債按各報告期末的功能貨幣匯率換算。結算或換算貨幣項目產生的所有差額於損益表確認。

根據以外幣計值的歷史成本計量的非貨幣項目採用首次交易日期的匯率換算。按外幣公平值計量的非貨幣項目採用計量公平值當日的匯率換算。換算以公平值計量的非貨幣項目產生的收益或虧損按與確認項目公平值變動的收益或虧損一致的方式處理（即公平值收益或虧損於其他全面收入或損益確認的項目的換算差額亦分別於其他全面收入或損益確認）。

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## 財務報表附註

### 2.4 Summary of Significant Accounting Policies (continued)

#### Foreign currencies (continued)

In determining the exchange rate on initial recognition of the related asset, expense or income on the derecognition of a non-monetary asset or non-monetary liability relating to an advance consideration, the date of initial transaction is the date on which the Group initially recognises the non-monetary asset or non-monetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, the Group determines the transaction date for each payment or receipt of the advance consideration.

The functional currencies of certain Mainland China and overseas subsidiaries and associate are currencies other than the US\$. As at the end of the reporting period, the assets and liabilities of these entities are translated into US\$ at the exchange rates prevailing at the end of the reporting period and their statements of profit or loss are translated into US\$ at the weighted average exchange rates for the year.

The resulting exchange differences are recognised in other comprehensive income and accumulated in the exchange fluctuation reserve. On disposal of a foreign operation, the component of other comprehensive income relating to that particular foreign operation is recognised in the statement of profit or loss.

For the purpose of the consolidated statement of cash flows, the cash flows of Mainland China and overseas subsidiaries are translated into US\$ at the weighted average exchange rates for the year of the cash flows. Frequently recurring cash flows of Mainland China and overseas subsidiaries which arise throughout the year are translated into US\$ at the weighted average exchange rates for the year.

### 2.4 重大會計政策概要 (續)

#### 外幣 (續)

就釐定於初步確認有關資產、開支或收入就非貨幣性資產或與墊支代價相關的非貨幣性負債的終止確認所用的匯率時，首次交易日期為本集團最初確認非貨幣性資產或墊支代價產生的非貨幣性負債的日期。倘存在多筆預付款或預收款，本集團須就每筆支付墊支代價或收取墊支代價釐定交易日期。

若干中國內地及海外子公司及聯營公司的功能貨幣為美元以外的貨幣。於報告期末，該等實體的資產及負債按各報告期末的通行匯率換算為美元，而其損益表按年內加權平均匯率換算為美元。

由此產生的匯兌差額於其他全面收入確認，並於匯率波動儲備中累計。出售國外業務時，有關特定國外業務的其他全面收入的組成部份於損益表確認。

就綜合現金流量表而言，中國內地及海外子公司的現金流量乃按年內現金流量的加權平均匯率換算為美元。中國內地及海外子公司年內重複產生的現金流量乃按年內的加權平均匯率換算為美元。

# NOTES TO FINANCIAL STATEMENTS

## 財務報表附註

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### 3. Significant Accounting Estimates and Assumptions

The preparation of the Group's financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and their accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that could require a material adjustment to the carrying amounts of the assets or liabilities affected in the future.

#### Judgements

In the process of applying the Group's accounting policies, management has made the following judgements, apart from those involving estimations, which have the most significant effect on the amounts recognised in the financial statements:

#### *Lease classification – Group as lessor*

The Group has entered into commercial property leases on its investment property portfolio. The Group has determined, based on an evaluation of the terms and conditions of the arrangements, that it retains all the significant risks and rewards of ownership of these properties which are leased out on operating leases.

#### *Classification between investment property and owner-occupied property*

The Group determines whether a property qualifies as an investment property, and has developed criteria in making that judgement. Investment property is a property held to earn rentals or for capital appreciation or both. Therefore, the Group considers whether a property generates cash flows largely independently of the other assets held by the Group. Some property comprises a portion that is held to earn rentals or for capital appreciation and another portion that is held for use in the production or supply of goods or services or for administrative purposes. If these portions could be sold separately or leased out separately under a finance lease, the Group accounts for the portions separately. If the portions could not be sold separately, the property is an investment property only if an insignificant portion is held for use in the production or supply of goods or services or for administrative purposes. Judgement is made on an individual property basis to determine whether ancillary services are so significant that a property does not qualify as an investment property.

### 3. 重要會計估計及假設

管理層在編製本集團財務報表時須作出判斷、估計及假設，而有關判斷、估計及假設會對收入、開支、資產及負債的呈報金額及其隨附披露，以及或然負債披露造成影響。該等假設及估計的不確定性或會導致須對在未來遭受影響的資產或負債的賬面值進行重大調整。

#### 判斷

於採納本集團會計政策的過程中，除涉及估計的會計政策外，管理層已作出對財務報表已確認金額構成最重大影響的判斷如下：

#### *租賃分類 – 本集團作為出租人*

本集團訂立有關投資物業組合的商務物業租賃。本集團基於對該等安排的條款及條件的評估確定本集團保留有關按經營租賃租出的該等物業所有權的所有重大風險及回報。

#### *投資物業與自用物業的分類*

本集團釐定物業是否符合投資物業的資格，並已制訂作出此判斷的準則。投資物業是為賺取租金或資本增值或同時為此兩項目的而持有的物業。因此，本集團會考慮一項物業產生現金流量時是否基本上與本集團所持有的其他資產無關。某些物業的部份是為賺取租金或資本增值而持有，而物業內另一些部份是為用於生產或供應貨品或服務或作行政用途而持有。倘若此等部份可以分開出售或根據融資租賃分開出租，本集團會將有關部份分開入賬。倘若該等部份無法分開出售，則只會用於生產或供應貨品或服務或作行政用途而持有的部份並不重要時，有關物業才會列作投資物業。本集團對各項物業作出判斷，以決定配套服務是否重要以使物業並不符合投資物業的資格。

# NOTES TO FINANCIAL STATEMENTS

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## 財務報表附註

### 3. Significant Accounting Estimates and Assumptions (continued)

#### Estimation uncertainty

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 are described below.

#### *Impairment of non-financial assets*

The Group assesses whether there are any indicators of impairment for all non-financial assets at the end of each reporting period. Other non-financial assets are tested for impairment when there are indicators that the carrying amounts may not be recoverable. An impairment exists when the carrying value of an asset or a cash-generating unit exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. The calculation of the fair value less costs of disposal is based on available data from binding sales transactions in an arm's length transaction of similar assets or observable market prices less incremental costs for disposing of the asset. When value in use calculations are undertaken, management must estimate the expected future cash flows from the asset or cash-generating unit and choose a suitable discount rate in order to calculate the present value of those cash flows.

#### *Fair value of an unlisted equity investment*

With the adoption of HKFRS 9 from 1 January 2018, the Group has elected the option to irrevocably designate its previous available-for-sale unlisted equity investments carried at cost as equity investments at fair value through other comprehensive income. From then on, the Group assesses their fair values based on a market-based valuation technique. For an unlisted equity investments of US\$205,973,000 as at 31 December 2018 without recent deal price to be referenced, the Group determines the comparable public companies (peers) and select the price multiple. In addition, the Group makes estimates about the discount for illiquidity. Further details are included in notes 18 and 35 to the financial statements.

### 3. 重要會計估計及假設（續）

#### 估計不確定性

於報告期末，有關未來的主要假設及估計不確定的其他主要來源（存在導致於下一財政年度內對資產及負債的賬面值作出重大調整的重大風險）論述如下。

#### *非金融資產減值*

本集團於各報告期末評估所有非金融資產是否出現任何減值跡象。其他非金融資產於有跡象顯示賬面值可能無法收回時測試減值。資產或現金產生單位賬面值超逾其可收回金額（即其公平值減出售成本與使用價值的較高者）時，則存在減值。計量公平值減出售成本時，按以公平基準就類似資產進行具有約束力的銷售交易可得數據，或可得市價減出售資產的已增加成本得出。當計算使用價值時，管理層必須估計來自資產或現金產生單位的預期未來現金流量，並選擇合適的貼現率，以計算該等現金流量的現值。

#### *非上市股本投資的公平值*

於二零一八年一月一日採納香港財務報告準則第9號後，本集團選擇不可撤銷地將其先前按成本列賬的可供出售非上市股本投資指定為按公平值計入其他全面收益的股本投資。自此，本集團根據基於市場的估值技術評估其公平值。就於二零一八年十二月三十一日未參照近期交易價格的非上市股本投資205,973,000美元而言，本集團釐定可資比較公眾公司（同業）並選擇價格倍數。此外，本集團作出流通性的拆讓價估計。進一步詳情載於財務報表附註18及附註35。

# NOTES TO FINANCIAL STATEMENTS

## 財務報表附註

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### 3. Significant Accounting Estimates and Assumptions (continued)

#### Estimation uncertainty (continued)

##### *Fair value of investment property*

In the absence of current prices in an active market for similar properties, the Group considers information from a variety of sources, including:

- (a) current prices in an active market for properties of a different nature, condition or location, adjusted to reflect those differences;
- (b) recent prices of similar properties on less active markets, with adjustments to reflect any changes in economic conditions since the date of the transactions that occurred at those prices; and
- (c) discounted cash flow projections based on reliable estimates of future cash flows, supported by the terms of any existing lease and other contracts and (when possible) by external evidence such as current market rents for similar properties in the same location and condition, and using discount rates that reflect current market assessments of the uncertainty in the amount and timing of the cash flows.

The carrying amount of the investment property as at 31 December 2018 was US\$171,225,000 (2017: US\$179,586,000). Further details, including the key assumptions used for fair value measurement and a sensitivity analysis, are given in note 14 to the financial statements.

### 3. 重要會計估計及假設（續）

#### 估計不確定性（續）

##### *投資物業公平值*

倘類似物業於活躍市場中並無現行市價，則本集團會考慮各項資料來源，包括：

- (a) 於活躍市場中，不同性質、狀況或地點的物業的現行價格，並就有關差別作出調整；
- (b) 於較非活躍的市場中，同類物業的近期價格，並就自按該等價格進行交易日期以來經濟環境變動作出調整；及
- (c) 根據可靠的未來現金流量估算、任何現有租約及其他合約的年期及（如可能）外在證據（如於同一地點及狀況下，類似物業的現行市值租金），以及使用可反映現金流量金額及出現時間不明朗因素的現時市場評估的貼現率計算而得出的貼現現金流量預測。

於二零一八年十二月三十一日，投資物業的賬面值為171,225,000美元（二零一七年：179,586,000美元）。進一步詳情（包括公平值計量及敏感度分析所採用的主要假設）載於財務報表附註14。

# NOTES TO FINANCIAL STATEMENTS

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## 財務報表附註

### 4. Operating Segment information

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

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

Revenues are attributed to geographic areas based on the locations of customers. Revenues regarding geographical segments based on the locations of customers for the year are presented as follows:

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
China (including Hong Kong)	中國(包括香港)	525,795	446,699
United States of America	美利堅合眾國	161,428	141,356
Asia (excluding China and Japan)	亞洲(不包括中國及日本)	117,963	95,853
Europe	歐洲	70,660	64,792
Japan	日本	54,422	59,448
		<b>930,268</b>	808,148

#### Information about major customers

No revenue amounting to 10% or more of the Group's revenue was derived from sales to a single customer for the year ended 31 December 2018 (2017: Nil).

### 4. 經營分部資料

出於管理需要，本集團僅構組一個業務單元，主要包括製造及銷售半導體產品。管理層在作出分配資源的相關決策及評估本集團表現時審核綜合業績。因此，並無呈列分部分分析。

本集團使用的主要資產位於中國上海，故並無按資產的地理位置於年內呈列分部分資料。

地理區域應佔收入乃按客戶所在地劃分。年內按客戶所在地劃分的地區分部有關收入呈列如下：

#### 有關主要客戶的資料

截至二零一八年十二月三十一日止年度並無對單一客戶的銷售所得收益金額達本集團收入的10%或以上(二零一七年：無)。

# NOTES TO FINANCIAL STATEMENTS

## 財務報表附註

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### 5. Revenue, other income and Gains and other Expenses

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

### 5. 收入、其他收入及收益及其他費用

對收入、其他收入及收益的分析如下：

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
<b>Revenue from contracts with customers</b>	<b>客戶合約收益</b>		
Sale of goods	銷售貨品	<b>930,268</b>	808,148
<b>Other income</b>	<b>其他收入</b>		
Rental income	租金收入	<b>13,063</b>	12,392
Interest income	利息收入	<b>9,489</b>	6,838
Other interest income from financial assets at fair value through profit or loss	來自按公平值計入損益的金融資產的其他利息收入	<b>11,412</b>	-
Government subsidies	政府補貼	<b>4,277</b>	4,542
Sale of scrap materials	銷售廢料	<b>299</b>	224
Rendering of services	提供服務	<b>-</b>	109
Others	其他	<b>873</b>	289
		<b>39,413</b>	24,394
<b>Gains</b>	<b>收益</b>		
Fair value gains on financial assets at fair value through profit or loss	按公平值計入損益的金融資產之公平值收益	<b>4,200</b>	-
		<b>43,613</b>	24,394
<b>Other expenses</b>	<b>其他費用</b>		
Foreign exchange loss, net	外匯匯兌虧損淨額	<b>11,010</b>	10,269
Net loss on disposal of items of property, plant and equipment	出售物業、廠房及設備的虧損淨額	<b>96</b>	67
Others	其他	<b>-</b>	376
		<b>11,106</b>	10,712

# NOTES TO FINANCIAL STATEMENTS

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## 財務報表附註

### 5. Revenue, other income and Gains and other Expenses (continued)

With the adoption of HKFRS 15 from 1 January 2018, the disaggregation of the Group's revenue from contracts with customers, including the sale of goods above, for the year ended 31 December 2018 is as follows:

### 5. 收入、其他收入及收益及其他費用（續）

自二零一八年一月一日起採納香港財務報告準則第15號，截至二零一八年十二月三十一日止年度，本集團來自客戶合約的收入（包括上述貨品銷售）分類如下：

		2018 二零一八年 (US\$'000) 千美元
<b>Type of goods</b>	<b>貨品類型</b>	
Sales of semiconductor products and total revenue from contracts with customers	半導體產品的銷售和來自客戶合約的總收入	930,268
<b>Timing of revenue recognition</b>	<b>收益確認時間</b>	
Goods transferred at a point in time and total revenue from contracts with customers	在某一時點轉讓的貨品及來自客戶合約的總收入	930,268

The disaggregation of the Group's revenue based on the geographical region for the year ended 31 December 2018 is given in note 4.

截至二零一八年十二月三十一日止年度，本集團基於地區的收入分類載列於附註4。



# NOTES TO FINANCIAL STATEMENTS

## 財務報表附註

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### 6. Profit before Tax

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

### 6. 稅前溢利

本集團的稅前溢利乃於扣除／(計入)  
下列各項後達致：

			2018 二零一八年 (US\$'000) 千美元	2017 二零一七年 (US\$'000) 千美元
Cost of inventories sold	已售存貨成本		<b>619,114</b>	540,971
Depreciation	折舊	13	<b>116,187</b>	100,736
Recognition of prepaid land lease payments	確認預付土地租賃款項	15	<b>666</b>	652
Amortisation of intangible assets	無形資產攤銷	16	<b>3,006</b>	3,240
Research and development costs	研發成本		<b>44,732</b>	49,589
Minimum lease payments under operating leases	經營租賃最低租賃款項		<b>3,933</b>	3,385
Auditor's remuneration	核數師薪酬		<b>497</b>	488
Employee benefit expense (including directors' and chief executive's remuneration (note 8)):	僱員福利開支(包括董事及最高行政人員的薪酬(附註8)):			
Wages, salaries and other benefits	工資、薪金及其他福利		<b>168,646</b>	150,993
Equity-settled share option expense	以權益結算的購股權開支	29	<b>1,298</b>	3,312
Pension scheme contributions	退休金計劃供款		<b>18,692</b>	16,974
			<b>188,636</b>	171,279
Rental income on an investment property, net	投資物業的租金收入淨額	5	<b>(13,063)</b>	(12,392)
Government subsidies	政府補貼	5	<b>(4,277)</b>	(4,542)
Foreign exchange loss, net	外匯匯兌虧損淨額	5	<b>11,010</b>	10,269
Impairment of items of property, plant and equipment	物業、廠房及設備項目減值	13	<b>6,151</b>	2,581
Impairment of trade receivables	貿易應收款項減值	20	<b>25</b>	-
Write-down/(reversal of write-down) of inventories to net realisable value	存貨撇減／(撥回撇減)至可變現淨值		<b>646</b>	(204)
Other interest income from financial assets at fair value through profit or loss	來自按公平值計入損益的金融資產之其他利息收入	5	<b>(11,412)</b>	-
Fair value gains on financial assets at fair value through profit or loss	按公平值計入損益的金融資產之公平值收益	5	<b>(4,200)</b>	-
Changes in fair value of an investment property	投資物業公平值變動	14	<b>(247)</b>	(89)

# NOTES TO FINANCIAL STATEMENTS

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## 財務報表附註

### 7. Finance Costs

	2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Interest on bank borrowings 銀行借款利息	2,203	2,178

### 7. 財務費用

### 8. Directors' and Chief Executive's Remuneration

Directors' and chief executive's remuneration for the year, disclosed pursuant to the Listing Rules, section 383(1)(a), (b), (c) and (f) of the Hong Kong Companies Ordinance and Part 2 of the Companies (Disclosure of Information about Benefits of Directors) Regulation, is as follows:

	2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Fees 袍金	231	216
Other emoluments: 其他酬金：		
Salaries, allowances and benefits in kind 薪酬、津貼及實物利益	150	155
Performance related bonuses 與表現掛鉤的花紅	196	179
Equity-settled share option expense 以權益結算的購股權開支	58	136
Pension scheme contributions 退休金計劃供款	8	7
	412	477
	643	693

### 8. 董事及最高行政人員的薪酬

根據上市規則及香港公司條例第383(1)(a)、(b)、(c)及(f)節及《公司(披露董事利益資料)規例》第2部披露的本年度董事及最高行政人員薪酬如下：

During the year and the prior year, certain directors were granted share options, in respect of their services to the Group, under the share option scheme of the Company, further details of which are set out in note 29 to the financial statements. The fair value of such options, which has been recognised in the statement of profit or loss over the vesting period, was determined as at the date of grant and the amount included in the financial statements for the current year is included in the above directors' and chief executive's remuneration disclosures.

於年內及過往年度，若干董事根據本公司的購股權計劃因其向本集團提供的服務獲授購股權，其進一步詳情載於財務報表附註29。相關購股權的公平值已按歸屬期於損益表確認，並於授出日期釐定且於本年度財務報表入賬的金額已計入前述董事及最高行政人員的薪酬披露中。

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### 8. Directors' and Chief Executive's Remuneration (continued)

#### (a) Independent non-executive directors

The fees paid to independent non-executive directors during the year were as follows:

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Stephen Tso Tung Chang	張祖同	77	72
Kwai Huen Wong, JP	王桂壘，太平紳士	77	72
Long Fei Ye	葉龍蜚	77	72
		<b>231</b>	<b>216</b>

There were no other emoluments payable to the independent non-executive directors during the year (2017: Nil).

#### (b) Executive directors, non-executive directors and the chief executive

		Salaries, allowances and benefits in kind 薪酬、津貼 及實物利益 US\$'000 千美元	Performance related bonuses 與表現掛鈎 的花紅 US\$'000 千美元	Equity- settled share option expense 以權益結算的 購股權開支 US\$'000 千美元	Pension scheme contributions 退休金 計劃供款 US\$'000 千美元	Total remuneration 薪酬總額 US\$'000 千美元
2018	二零一八年					
Non-executive director:	非執行董事：					
Mr. Takayuki Morita	森田隆之先生	-	-	7	-	7
Chief executive:	最高行政人員：					
Mr. Yu Wang	王煜先生	-	196	51	8	405
		-	196	58	8	412

### 8. 董事及最高行政人員的薪酬 (續)

#### (a) 獨立非執行董事

年內向獨立非執行董事支付的袍金如下：

年內並無應付予獨立非執行董事的其他酬金（二零一七年：無）。

#### (b) 執行董事、非執行董事及最高行政人員

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## 財務報表附註

### 8. Directors' and Chief Executive's Remuneration (continued)

#### (b) Executive directors, non-executive directors and the chief executive (continued)

		Salaries, allowances and benefits Fees	in kind 薪酬、津貼 袍金 及實物利益 US\$'000 千美元	Performance related bonuses 與表現掛鈎 的花紅 US\$'000 千美元	Equity- settled share option expense 以權益結算的 購股權開支 US\$'000 千美元	Pension scheme contributions 退休金 計劃供款 US\$'000 千美元	Total remuneration 薪酬總額 US\$'000 千美元
2017	二零一七年						
Non-executive director:	非執行董事：						
Mr. Takayuki Morita	森田隆之先生	-	-	-	17	-	17
Chief executive:	最高行政人員：						
Mr. Yu Wang	王煜先生	-	155	179	119	7	460
		-	155	179	136	7	477

Save as disclosed above, none of the directors received any emoluments during 2018 and 2017.

There was no arrangement under which a director waived or agreed to waive any remuneration during the year.

### 8. 董事及最高行政人員的薪酬 (續)

#### (b) 執行董事、非執行董事及最高行政人員 (續)

除前述披露者外，概無董事於二零一八年及二零一七年收取任何薪酬。

於年內，概無董事作出安排放棄或同意放棄任何薪酬。

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### 9. Five Highest Paid Employees

The five highest paid employees during the year included one director, who is also the chief executive (2017: one director being also the chief executive), details of whose remuneration are set out in note 8 above. Details of the remuneration for the year of the remaining four (2017: four) highest paid employees who are not directors of the Company are as follows:

	2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Salaries, allowances and benefits in kind 薪酬、津貼及實物利益	1,123	1,092
Performance related bonuses 與表現掛鈎的花紅	458	343
Equity-settled share option expense 以權益結算的購股權開支	128	299
Pension scheme contributions 退休金計劃供款	16	17
	1,725	1,751

The number of highest paid employees who are not directors of the Company and whose remuneration fell within the following bands is as follows:

	Number of employees 僱員人數	
	2018 二零一八年	2017 二零一七年
HK\$2,000,001 to HK\$2,500,000 2,000,001港元至2,500,000港元	1	1
HK\$2,500,001 to HK\$3,000,000 2,500,001港元至3,000,000港元	2	2
HK\$4,000,001 to HK\$4,500,000 4,000,001港元至4,500,000港元	1	1
	4	4

During the year and the prior year, share options were granted to four non-director and non-chief executive highest paid employees in respect of their services to the Group, further details of which are included in the disclosures in note 29 to the financial statements. The fair value of such options, which has been recognised in the statement of profit or loss over the vesting period, was determined as at the date of grant and the amount included in the financial statements for the current year is included in the above non-director and non-chief executive highest paid employees' remuneration disclosures.

### 9. 五名最高薪僱員

年內，五名最高薪僱員包括一名董事（亦為最高行政人員）（二零一七年：一名董事（亦為最高行政人員）），其薪酬詳情載於上文附註8。年內，其餘四名（二零一七年：四名）並非本公司董事的最高薪僱員的薪酬詳情如下：

薪酬屬於以下範疇的並非本公司董事的最高薪僱員人數如下：

於年內及過往年度，四名非董事及非最高行政人員的最高薪僱員因其向本集團提供服務獲授購股權，其進一步詳情於財務報表附註29披露。相關購股權的公平值已按歸屬期於損益表確認，並於授出日期釐定且於本年度財務報表入賬的金額已計入前述非董事及非最高行政人員的最高薪僱員的薪酬披露中。

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## 財務報表附註

### 10. Income Tax

Hong Kong profits were subject to profits tax at the rate of 16.5% during the year (2017:16.5%). No provision for Hong Kong profits tax has been made as the Company and a subsidiary incorporated in Hong Kong had no assessable income during the year (2017: Nil).

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

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

Pursuant to the relevant laws and regulations in the PRC and with approval from the tax authorities in charge, one of the Group's subsidiaries, HHGrace, is qualified as an enterprise producing integrated circuits of 0.25  $\mu\text{m}$  below in width and thus is entitled to a preferential tax rate of 15% from 2017 to 2020.

Pursuant to the relevant laws and regulations in the PRC and with approval from the tax authorities in charge, one of the Group's subsidiaries, HH - Wuxi, is entitled to an exemption from CIT for five years, commencing from the first year that HH - Wuxi generates taxable profit, and a deduction of 50% on the CIT rate for the following five years.

The Company's subsidiary incorporated and operating in Japan is subject to corporation tax at a rate of 25.5% (2017: 25.5%).

The Company's subsidiary incorporated and operating in the United States is subject to federal corporation income tax at a rate of 34% during the year (2017: 34%), as well as state tax at 8.84% (2017: 8.84%).

### 10. 所得稅

於年內的香港溢利須按16.5% (二零一七年：16.5%) 的稅率繳納利得稅。由於本公司及一家在香港註冊成立的子公司於年內並無取得應評稅收入，故並無就香港利得稅作出撥備 (二零一七年：無)。

由於本公司在開曼群島註冊成立的子公司在開曼群島並無擁有營業地點 (註冊辦事處除外) 或經營任何業務，故有關子公司毋須繳納企業所得稅 (「企業所得稅」)。

所有本集團在中國註冊且僅在中國內地營運的子公司，應就其根據相關中國所得稅法調整的中國法定賬目所呈報應課稅收入按25%的法定稅率繳納中國企業所得稅。

根據中國相關法律及法規及獲稅務主管機關批准，本集團一家子公司華虹宏力符合資格成為生產工藝技術節點小於0.25 $\mu\text{m}$ 集成電路的企業，故有權於二零一七年至二零二零年期間按15%的優惠稅率繳稅。

根據中國相關法律及法規及獲稅務主管機關批准，本集團一家子公司華虹無錫有權自獲得應課稅溢利第一年起五年獲豁免繳納企業所得稅，及隨後五年減免50%。

本公司在日本註冊成立及營運的子公司應按25.5% (二零一七年：25.5%) 的企業稅率繳稅。

本公司在美國註冊成立及營運的子公司應於年內按34% (二零一七年：34%) 的聯邦企業所得稅率及8.84% (二零一七年：8.84%) 的州稅稅率繳稅。

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## 財務報表附註

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### 10. Income Tax (continued)

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

		<b>2018</b> 二零一八年 <b>(US\$'000)</b> (千美元)	2017 二零一七年 (US\$'000) (千美元)
Current income tax – PRC	當期所得稅 – 中國	<b>26,887</b>	20,608
Current income tax – elsewhere	當期所得稅 – 其他地區	<b>364</b>	474
Withholding tax on the distribution dividend from a PRC subsidiary	中國子公司分派股息的預扣稅	<b>4,245</b>	2,260
Deferred tax (note 27)	遞延稅項 (附註27)	<b>3,951</b>	3,883
		<b>35,447</b>	27,225

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

		<b>2018</b> 二零一八年 <b>(US\$'000)</b> (千美元)	2017 二零一七年 (US\$'000) (千美元)
Profit before tax	稅前溢利	<b>221,055</b>	172,487
Tax at the statutory tax rate of 25%	按法定稅率25%計算的稅項	<b>55,264</b>	43,122
Lower tax rates for specific provinces or enacted by local authority	特定省份或地方當局頒佈的較低稅率	<b>(22,450)</b>	(17,049)
Adjustments in respect of current tax of previous periods	就上一期間當期稅項的調整	<b>(219)</b>	(1,315)
Profits attributable to an associate	一家聯營公司應佔溢利	<b>(1,417)</b>	(1,443)
Income not subject to tax	免繳稅收入	–	(32)
Expenses not deductible for tax	不可扣稅開支	<b>244</b>	177
Tax losses not recognised	未確認稅項虧損	<b>306</b>	129
Temporary differences not recognised	未確認暫時差額	<b>923</b>	369
Additional deduction of research and development costs	研發成本其他扣減	<b>(5,032)</b>	(3,799)
Effect of withholding tax at 10% (2017: 10%) on the distributable profits of the Group's PRC subsidiary	按本集團中國子公司可供分派溢利以10% (二零一七年: 10%) 計算預扣稅影響	<b>7,828</b>	7,066
Tax charge at the Group's effective rate	按本集團實際稅率計算的稅項開支	<b>35,447</b>	27,225

本集團所得稅開支的主要組成部份如下：

按本公司及其大部份子公司經營所在司法權區的法定稅率25%計算的稅前溢利的適用稅項開支，與按實際稅率計算的稅項開支的對賬如下：

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## 財務報表附註

### 11. Dividend

	2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Proposed final – HK\$31 cents (2017: HK\$31 cents) per ordinary share	50,741	41,074

The proposed final dividend for the year is subject to the approval of the Company's shareholders at the forthcoming annual general meeting.

The Board recommended a final 2018 dividend of HK\$31cents per share (2017: HK\$31 cents per share), amounting to HK\$398,302,640 (2017: HK\$322,271,659), which was equivalent to US\$50,741,000 (2017:US\$41,074,000).

### 12. Earnings Per Share Attributable to Ordinary Equity Holders of the Parent

The calculation of the basic earnings per share amount is based on the profit for the year attributable to ordinary equity holders of the parent, and the weighted average number of ordinary shares of 1,070,699,301 (2017: 1,034,430,282) in issue during the year.

The calculation of the diluted earnings per share amount is based on the profit for the year attributable to ordinary equity holders of the parent. The weighted average number of ordinary shares used in the calculation is the number of ordinary shares in issue during the year, as used in the basic earnings per share calculation, and the weighted average number of ordinary shares assumed to have been issued at no consideration on the deemed exercise or conversion of all dilutive potential ordinary shares into ordinary shares.

### 11. 股息

本年度建議末期股息須待本公司股東於應屆股東週年大會上批准。

董事會建議派付二零一八年末期股息每股31港仙(二零一七年：每股31港仙)，合計為398,302,640港元(二零一七年：322,271,659港元)，相當於50,741,000美元(二零一七年：41,074,000美元)。

### 12. 母公司普通股權持有人應佔每股盈利

每股基本盈利乃基於母公司普通股權持有人應佔年內溢利及於年內已發行1,070,699,301股(二零一七年：1,034,430,282股)普通股的加權平均數計算。

每股已攤薄盈利金額乃根據母公司普通股權持有人應佔年內溢利計算。計算時採用之普通股加權平均數為計算每股基本盈利時採用之年內已發行普通股數目加上假設所有潛在攤薄普通股被視為行使或兌換為普通股時以零代價發行之普通股加權平均數。



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### 12. Earnings Per Share Attributable to Ordinary Equity Holders of the Parent (continued)

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

### 12. 母公司普通股權持有人應佔每股盈利(續)

每股基本及攤薄盈利的計算乃基於：

		<b>2018</b> 二零一八年 <b>(US\$'000)</b> (千美元)	2017 二零一七年 (US\$'000) (千美元)
Earnings	盈利		
Profit attributable to ordinary equity holders of the parent	母公司普通股權持有人應佔溢利	<b>183,158</b>	145,262

		<b>Number of shares</b> 股份數目	
		<b>2018</b> 二零一八年	2017 二零一七年
Shares	股份		
Weighted average number of ordinary shares in issue during the year used in the basic earnings per share calculation	用於計算每股基本盈利的年內已發行普通股加權平均數	<b>1,070,699,301</b>	1,034,430,282
Effect of dilution-weighted average number of ordinary shares:	普通股攤薄加權平均數的影響：		
Share options	購股權	<b>11,752,000</b>	8,936,000
		<b>1,082,451,301</b>	1,043,366,282

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## 財務報表附註

### 13. Property, Plant and Equipment

### 13. 物業、廠房及設備

		Buildings 樓宇 (US\$'000) (千美元)	Plant and machinery 廠房 及機器 (US\$'000) (千美元)	Office equipment 辦公設備 (US\$'000) (千美元)	Motor vehicles 汽車 (US\$'000) (千美元)	Leasehold improvements 租賃 物業裝修 (US\$'000) (千美元)	Construction in progress 在建工程 (US\$'000) (千美元)	Total 總計 (US\$'000) (千美元)
<b>31 December 2018</b>	二零一八年 十二月三十一日							
At 31 December 2017 and at 1 January 2018:	於二零一七年十二月 三十一日及二零一八年 一月一日：							
Cost	成本	315,187	3,923,939	45,280	2,041	4,143	36,507	4,327,097
Accumulated depreciation and impairment	累計折舊及減值	(171,733)	(3,368,445)	(30,851)	(1,783)	(3,314)	(17,509)	(3,593,635)
Net carrying amount	賬面淨值	143,454	555,494	14,429	258	829	18,998	733,462
At 1 January 2018, net of accumulated depreciation and impairment	於二零一八年一月一日， 扣除累計折舊及減值	143,454	555,494	14,429	258	829	18,998	733,462
Additions	添置	-	-	-	-	-	200,220	200,220
Transfers	轉撥	468	88,820	2,482	130	-	(91,900)	-
Disposals	處置	-	(36)	(55)	(9)	-	-	(100)
Depreciation provided during the year	年內計提折舊	(10,157)	(102,292)	(2,895)	(27)	(816)	-	(116,187)
Impairment	減值	-	(5,806)	(345)	-	-	-	(6,151)
Exchange realignment	匯兌調整	(6,552)	(26,029)	(690)	(16)	(13)	(4,764)	(38,064)
At 31 December 2018, net of accumulated depreciation and impairment	於二零一八年十二月 三十一日，扣除累計 折舊及減值	127,213	510,151	12,926	336	-	122,554	773,180
At 31 December 2018:	於二零一八年 十二月三十一日：							
Cost	成本	300,531	3,821,085	44,661	1,903	3,945	139,223	4,311,348
Accumulated depreciation and impairment	累計折舊及減值	(173,318)	(3,310,934)	(31,735)	(1,567)	(3,945)	(16,669)	(3,538,168)
Net carrying amount	賬面淨值	127,213	510,151	12,926	336	-	122,554	773,180

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### 13. Property, Plant and Equipment (continued)

### 13. 物業、廠房及設備（續）

		Buildings 樓宇 (US\$'000) (千美元)	Plant and machinery 廠房及機器 (US\$'000) (千美元)	Office equipment 辦公設備 (US\$'000) (千美元)	Motor vehicles 汽車 (US\$'000) (千美元)	Leasehold improvements 租賃物業裝修 (US\$'000) (千美元)	Construction in progress 在建工程 (US\$'000) (千美元)	Total 總計 (US\$'000) (千美元)
<b>31 December 2017</b>	<b>二零一七年十二月三十一日</b>							
At 31 December 2016 and at 1 January 2017:	於二零一六年十二月三十一日及二零一七年一月一日：							
Cost	成本	296,301	3,565,396	33,510	1,913	3,903	39,821	3,940,844
Accumulated depreciation and impairment	累計折舊及減值	(152,078)	(3,083,925)	(26,253)	(1,680)	(2,342)	(18,049)	(3,284,327)
Net carrying amount	賬面淨值	144,223	481,471	7,257	233	1,561	21,772	656,517
At 1 January 2017, net of accumulated depreciation and impairment	於二零一七年一月一日，扣除累計折舊及減值	144,223	481,471	7,257	233	1,561	21,772	656,517
Additions	添置	-	-	-	-	-	140,930	140,930
Transfers	轉撥	600	134,988	10,087	44	-	(145,719)	-
Disposals	處置	-	(7)	(67)	(3)	-	-	(77)
Depreciation provided during the year	年內計提折舊	(9,953)	(86,725)	(3,226)	(31)	(801)	-	(100,736)
Impairment	減值	-	(2,581)	-	-	-	-	(2,581)
Exchange realignment	匯兌調整	8,584	28,348	378	15	69	2,015	39,409
At 31 December 2017, net of accumulated depreciation and impairment	於二零一七年十二月三十一日，扣除累計折舊及減值	143,454	555,494	14,429	258	829	18,998	733,462
At 31 December 2017:	於二零一七年十二月三十一日：							
Cost	成本	315,187	3,923,939	45,280	2,041	4,143	36,507	4,327,097
Accumulated depreciation and impairment	累計折舊及減值	(171,733)	(3,368,445)	(30,851)	(1,783)	(3,314)	(17,509)	(3,593,635)
Net carrying amount	賬面淨值	143,454	555,494	14,429	258	829	18,998	733,462

For the year ended 31 December 2018, certain items of the Group's machinery of US\$6,151,000 (2017: US\$2,581,000) were obsolete with minimal recoverable amount determined based on fair value less costs of disposal and thus fully impaired.

As at 31 December 2018, certain of the Group's property, plant and equipment with a net carrying value of US\$22,325,000 (2017: US\$636,767,000) were pledged to banks to secure the Group's banking facilities (note 25).

截至二零一八年十二月三十一日止年度，本集團機器中若干項目6,151,000美元（二零一七年：2,581,000美元）已過時，而根據公平值減出售成本確定最低可收回金額，因而完全減值。

於二零一八年十二月三十一日，本集團賬面淨值為22,325,000美元（二零一七年：636,767,000美元）的若干物業、廠房及設備已抵押予銀行以取得本集團的銀行信貸融資（附註25）。

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## 財務報表附註

### 14. Investment Property

### 14. 投資物業

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Carrying amount at 1 January	於一月一日的賬面值	179,586	169,074
Net gain from a fair value adjustment	公平值調整的收益淨額	247	89
Exchange realignment	匯兌調整	(8,608)	10,423
Carrying amount at 31 December	於十二月三十一日的賬面值	171,225	179,586

The Group's investment property is situated in Shanghai, the PRC and is held under a medium term lease. The directors have determined that the investment property is an industrial property, based on the nature, characteristics and risks of the property.

The Group's investment property was revalued on 31 December 2018 based on valuation performed by Jones Lang LaSalle Corporate Appraisal and Advisory Limited, an independent professionally qualified valuer, on an open market value basis. The valuation is based on both capitalisation of income derived from the existing tenancy with allowance for the reversionary income potential of the property.

Each year, the Group's property manager and the chief financial officer decide to appoint which external valuer to be responsible for the external valuations of the Group's properties. Selection criteria include market knowledge, reputation, independence and whether professional standards are maintained. The Group's property manager and the chief financial officer have discussions with the valuer on the valuation assumptions and valuation results annually when the valuation is performed for annual financial reporting.

The investment property is leased to a related party under an operating lease (note 31(a) and note 33(b)).

None of the Group's investment property as at 31 December 2018 (2017: US\$179,586,000) was pledged to banks to secure the Group's banking facilities (note 25).

本集團的投資物業位於中國上海，按中期租約持有。董事已基於物業的性質、特點及風險釐定投資物業為工業物業。

於二零一八年十二月三十一日，本集團的投資物業已根據一家具專業資格的獨立估值師仲量聯行企業評估及諮詢有限公司按公開市值進行了重估。該估值參考了現有租約扣除物業潛在可復歸收入後所得收入資本化確定。

每年，本集團的物業經理及財務總監決定委任外聘評估師負責本集團物業的外部估值。選聘標準包括對市場的了解、聲譽、獨立性及是否具備專業水準。本集團的物業經理及財務總監就年度財務報告進行估值時，已與估值師每年討論一次估值假設及估值結果。

投資物業根據經營租約出租予關聯方(附註31(a)和33(b))。

於二零一八年十二月三十一日(二零一七年：179,586,000美元)，本集團的投資物業均未抵押予銀行以取得本集團的銀行信貸融資(附註25)。

# NOTES TO FINANCIAL STATEMENTS

## 財務報表附註

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### 14. Investment Property (continued)

#### Fair value hierarchy

The recurring fair value measurement for the Group's investment property, which is an industrial property, was made using significant unobservable inputs (Level 3) as at 31 December 2018 and 2017. During the year, there were no transfers of fair value measurements between Level 1 and Level 2 and no transfers into or out of Level 3 (2017: Nil).

Below is a summary of the valuation techniques used and the key inputs to the valuation of the investment property:

Industrial property 工業物業	Valuation techniques 估值技術	Significant unobservable inputs 重大不可觀察輸入數據	Weighted average 加權平均
As at 31 December 2018	Term and reversion method	Estimated rental value (per sq.m. and per month)	<b>US\$12.8</b> <b>(equivalent to</b> <b>RMB88.08)</b>
於二零一八年十二月三十一日	年期及復歸法	估計租賃價值 (每平方米及每月)	<b>12.8美元</b> <b>(相當於人民幣</b> <b>88.08元)</b>
		Term yield 年期回報率	<b>7.0%</b>
		Reversionary yield 復歸回報率	<b>7.5%</b>
		Long term vacancy rate 長期空置率	<b>5.0%</b>
As at 31 December 2017	Term and reversion method	Estimated rental value (per sq.m. and per month)	US\$12.4 (equivalent to RMB81.00)
於二零一七年十二月三十一日	年期及復歸法	估計租賃價值 (每平方米及每月)	12.4美元 (相當於人民幣 81.00元)
		Term yield 年期回報率	7.0%
		Reversionary yield 復歸回報率	7.5%
		Long term vacancy rate 長期空置率	5.0%

Under the term and reversion method, fair value is measured by taking into account the rental income derived from the existing lease with due allowance for the reversionary income potential of the lease, which is then capitalised into the value at appropriate rates.

The term value was estimated based on the existing rent, tenancy period as stated in the lease agreement and the yield during the term period (tenancy period). The reversionary value was estimated based on the market rents, market yield and the reversionary periods.

### 14. 投資物業 (續)

#### 公平值層級

本集團投資物業(為工業物業)於二零一八年及二零一七年十二月三十一日的週期公平值計量乃使用重大不可觀察輸入數據(第3級)作出。於年內,第1級與第2級間並無公平值計量轉移,且第3級並無轉入或轉出(二零一七年:無)。

下文為投資物業估值所用估值技術及主要輸入數據概要:

根據年期及復歸法,公平值乃經計及現有租約產生的租金收入,並就該等租約的潛在可復歸收入計提適當撥備,其後按適用資本化比率撥充資本計算價值而達致。

定期價值乃根據租賃協議所訂明的現有租金、租期及年期內(租期)回報率估計。復歸價值乃根據市值租金、市場回報率及復歸期估計。

# NOTES TO FINANCIAL STATEMENTS

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財務報表附註

## 14. Investment Property (continued)

### Fair value hierarchy (continued)

A significant increase (decrease) in the estimated rental value and the market rent growth rate per annum in isolation would result in a significant increase (decrease) in the fair value of the investment property. A significant increase (decrease) in the long term vacancy rate and the discount rate in isolation would result in a significant decrease (increase) in the fair value of the investment property. Generally, a change in the assumption made for the estimated rental value is accompanied by a directionally similar change in the rent growth per annum and the discount rate and an opposite change in the long term vacancy rate.

## 14. 投資物業 (續)

### 公平值層級 (續)

估計租賃價值及市場租金年增長率單獨大幅上升(下降)將導致投資物業的公平值大幅增加(減少)。長期空置率及貼現率單獨大幅上升(下降)將導致投資物業的公平值大幅減少(增加)。一般而言,就估計租賃價值作出的假設變動同時,租金年增長率及貼現率出現同向變動,而長期空置率出現反向變動。

## 15. Prepaid Land Lease Payments

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Carrying amount at 1 January	於一月一日的賬面值	21,308	20,703
Additions	添置	43,342	-
Recognised during the year	年內確認	(666)	(652)
Exchange realignment	匯兌調整	(4,353)	1,257
Carrying amount at 31 December	於十二月三十一日的賬面值	59,631	21,308
Current portion included in prepayments, other receivables and other assets	預付款項、其他應收款項及其他資產的即期部份	(642)	(674)
Non-current portion	非即期部份	58,989	20,634

Certain of the Group's prepaid land lease payments with a carrying value of US\$5,750,000 as at 31 December 2018 (2017: US\$21,308,000) were pledged to banks to secure the Group's banking facilities (note 25).

於二零一八年十二月三十一日,賬面值為5,750,000美元(二零一七年:21,308,000美元)的本集團若干預付土地租賃付款已抵押予銀行以取得本集團的銀行信貸融資(附註25)。

# NOTES TO FINANCIAL STATEMENTS

## 財務報表附註

31 December 2018  
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### 16. Intangible Assets

### 16. 無形資產

		Process technology licence 工藝技術 許可 (US\$'000) (千美元)	Software 軟件 (US\$'000) (千美元)	Total 總計 (US\$'000) (千美元)
<b>31 December 2018</b>	<b>二零一八年十二月三十一日</b>			
At 31 December 2017 and at 1 January 2018: Cost	於二零一七年十二月三十一日 及二零一八年一月一日： 成本	<b>282,999</b>	<b>88,427</b>	<b>371,426</b>
Accumulated amortisation and impairment	累計攤銷及減值	<b>(282,999)</b>	<b>(81,016)</b>	<b>(364,015)</b>
Net carrying amount	賬面淨值	–	<b>7,411</b>	<b>7,411</b>
At 1 January 2018, net of accumulated amortisation and impairment	於二零一八年一月一日， 扣除累計攤銷及減值	–	<b>7,411</b>	<b>7,411</b>
Additions	添置	–	<b>5,502</b>	<b>5,502</b>
Amortisation provided during the year	年內作出攤銷	–	<b>(3,006)</b>	<b>(3,006)</b>
Exchange realignment	匯兌調整	–	<b>(336)</b>	<b>(336)</b>
At 31 December 2018, net of accumulated amortisation and impairment	於二零一八年十二月三十一日， 扣除累計攤銷及減值	–	<b>9,571</b>	<b>9,571</b>
At 31 December 2018: Cost	於二零一八年十二月三十一日： 成本	<b>282,999</b>	<b>93,929</b>	<b>376,928</b>
Accumulated amortisation and impairment	累計攤銷及減值	<b>(282,999)</b>	<b>(84,358)</b>	<b>(367,357)</b>
Net carrying amount	賬面淨值	–	<b>9,571</b>	<b>9,571</b>

# NOTES TO FINANCIAL STATEMENTS

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## 財務報表附註

### 16. Intangible Assets (continued)

### 16. 無形資產 (續)

		Process technology licence 工藝技術 許可 (US\$'000) (千美元)	Software 軟件 (US\$'000) (千美元)	Total 總計 (US\$'000) (千美元)
<b>31 December 2017</b>	<b>二零一七年十二月三十一日</b>			
At 31 December 2016 and at 1 January 2017:	於二零一六年十二月三十一日 及二零一七年一月一日：			
Cost	成本	282,999	81,312	364,311
Accumulated amortisation and impairment	累計攤銷及減值	(282,999)	(73,136)	(356,135)
Net carrying amount	賬面淨值	–	8,176	8,176
At 1 January 2017, net of accumulated amortisation and impairment	於二零一七年一月一日， 扣除累計攤銷及減值	–	8,176	8,176
Addition	添置	–	1,998	1,998
Amortisation provided during the year	年內作出攤銷	–	(3,240)	(3,240)
Exchange realignment	匯兌調整	–	477	477
At 31 December 2017, net of accumulated amortisation and impairment	於二零一七年十二月三十一日， 扣除累計攤銷及減值	–	7,411	7,411
At 31 December 2017:	於二零一七年十二月三十一日：			
Cost	成本	282,999	88,427	371,426
Accumulated amortisation and impairment	累計攤銷及減值	(282,999)	(81,016)	(364,015)
Net carrying amount	賬面淨值	–	7,411	7,411

None of the Group's intangible assets as at 31 December 2018 (2017: US\$5,285,000) were pledged to banks to secure the Group's banking facilities (note 25).

於二零一八年十二月三十一日(二零一七年：5,285,000美元)，本集團無形資產均未抵押予銀行以取得本集團的銀行信貸融資(附註25)。



# NOTES TO FINANCIAL STATEMENTS

## 財務報表附註

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### 17. Investment in An Associate

### 17. 於聯營公司的投資

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Share of net assets	分佔資產淨值	64,005	57,577

Particulars of the material associate are as follows:

主要聯營公司詳情如下：

Name of company	Place of registration and business	Paid-in capital RMB'000 實繳股本 人民幣千元	Percentage of equity interest attributable to the Group 本集團應佔 股權百分比	Principal activities
公司名稱	登記及營業地點			主要業務
Shanghai Huahong Technology Development Co., Ltd. (“Huahong Technology Development”) 上海華虹科技發展有限公司 (「華虹科技發展」)	PRC/Mainland China 中國／中國內地	548,000	50%	Technology development and investment 科技開發及投資

The financial statements of this associate were not audited by Ernst & Young, Hong Kong or another member firm of the Ernst & Young global network.

該聯營公司的財務報表並未經香港安永會計師事務所或安永會計師事務所全球網絡的其他成員公司審核。

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

本集團有關華虹科技發展持有的投票權及溢利分配安排分別為40%及50%。

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

本集團透過本公司的全資子公司持有該聯營公司的股權。

The following table illustrates the summarised financial information of the Group's associate:

下表概述本集團聯營公司的財務資料：

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## 財務報表附註

### 17. Investment in an Associate (continued)

### 17. 於聯營公司的投資（續）

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Current assets	流動資產	<b>113,440</b>	115,903
Non-current assets	非流動資產	<b>185,056</b>	152,745
Current liabilities	流動負債	<b>(66,496)</b>	(49,758)
Non-current liabilities	非流動負債	<b>(103,990)</b>	(103,736)
Net assets	資產淨值	<b>128,010</b>	115,154
Net assets, excluding goodwill	資產淨值，不包括商譽	<b>128,010</b>	115,154
Reconciliation to the Group's interest in the associate:	本集團於聯營公司的權益對賬：		
Proportion of the Group's interest in the associate	本集團於聯營公司的權益比例	<b>50%</b>	50%
Group's share of net assets of the associate, excluding goodwill	本集團分佔聯營公司資產淨值，不包括商譽	<b>64,005</b>	57,577
		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Revenue	收入	<b>17,188</b>	10,332
Profit for the year	年內溢利	<b>18,888</b>	19,244
Total comprehensive income	全面收益總額	<b>18,888</b>	19,244

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## 財務報表附註

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### 18. Financial investments

### 18. 金融投資

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Available-for-sale investments	可供出售投資	-	215,864
Equity investments designated at fair value through other comprehensive income	指定為按公平值計入其他全面收入的股本投資	<b>208,357</b>	-
Financial assets at fair value through profit or loss	按公平值計入損益的金融資產	<b>667,033</b>	-

As of 1 January 2018, available-for-sale investments under HKAS 39 were reclassified to equity investments designated at fair value through other comprehensive income under HKFRS 9 (note 2.2). These investments are unlisted equity investments in two fellow subsidiaries, Shanghai Huali Microelectronics Co., Ltd. ("Shanghai Huali") and QST Corporation ("QST"), which were irrevocably designated at fair value through other comprehensive income as the Group considers these investments to be strategic in nature.

Financial assets at fair value through profit or loss represent wealth management products issued by banks in Mainland China. They were mandatorily classified as financial assets at fair value through profit or loss as their contractual cash flows are not solely payments of principal and interest.

As at 31 December 2017, certain unlisted equity investments with a carrying amount of US\$215,864,000 were stated at cost less impairment because the range of reasonable fair value estimates is so significant that the directors are of the opinion that their fair value cannot be measured reliably. The Group does not intend to dispose of them in the near future.

截至二零一八年一月一日，香港會計準則第39號項下的可供出售投資重新分類為根據香港財務報告準則第9號（附註2.2）指定為按公平值計入其他全面收入的股本投資。該等投資為兩間同系附屬公司，即上海華力微電子股份有限公司（「上海華力」）及上海矽睿科技有限公司（「矽睿科技」）的非上市股權投資，而本集團認為該等投資不可撤回地指定為按公平值計入其他全面收益，乃由於該等投資屬策略性質。

按公平值計入損益的金融資產指由中國內地銀行發行的理財產品。其被強制歸類為以公允價值計量且其變動計入損益的金融資產，乃由於其合約現金流量不僅是本金和利息的支付。

由於合理公平值估計範圍太大，董事認為其公平值不能可靠計量，故於二零一七年十二月三十一日若干非上市股權投資賬面值為215,864,000美元乃按成本值扣除減值呈列。本集團近期無意出售該等投資。

### 19. Inventories

### 19. 存貨

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Raw materials	原材料	<b>64,818</b>	52,813
Work in progress	在製品	<b>48,621</b>	47,464
Finished goods	製成品	<b>26,725</b>	25,688
		<b>140,164</b>	125,965
Provision for inventories	存貨撥備	<b>(10,535)</b>	(10,387)
		<b>129,629</b>	115,578

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## 財務報表附註

### 20. Trade and Notes Receivables

### 20. 貿易應收款項及應收票據

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Trade receivables	貿易應收款項	123,414	72,754
Notes receivable	應收票據	54,887	41,165
		<b>178,301</b>	113,919
Impairment of trade receivables	貿易應收款項減值	<b>(1,504)</b>	(1,547)
		<b>176,797</b>	112,372

The Group's trading terms with its customers are mainly on credit and the credit period is generally 30 to 45 days, extending up to 150 days for major customers. There is no significant concentration of credit risk. The Group does not hold any collateral or other credit enhancements over its trade receivable balances. Trade receivables are non-interest-bearing.

本集團與其客戶的貿易賬期以信貸為主，信貸期一般為30至45天，對主要客戶的信貸期延長至最多150天。本集團並無重大集中信用風險。本集團並無就其貿易應收款項餘額持有任何抵押品或採取其他加強信用措施。貿易應收款項為免息。

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

按發票日期計，貿易應收款項（扣除虧損撥備）的賬齡分析如下：

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Within 3 months	3個月以內	121,910	71,113
3 to 6 months	3至6個月	-	94
		<b>121,910</b>	71,207

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

貿易應收款項減值虧損撥備的變動如下：

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
At 1 January	於一月一日	1,547	1,467
Impairment losses, net (note 6)	減值虧損淨額（附註6）	25	-
Exchange realignment	匯兌調整	(68)	80
As at 31 December	於十二月三十一日	<b>1,504</b>	1,547

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## 財務報表附註

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### 20. Trade and Notes Receivables (continued)

#### **Impairment under HKFRS 9 for the year ended 31 December 2018**

The Group applies a simplified approach in calculating ECLs prescribed by HKFRS 9, which permits the use of the lifetime expected loss for all trade receivables. To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and the days past due. The expected credit losses have also incorporated forward looking information. The expected credit loss rates for trade receivables that were not yet past due or aged within 6 months are minimal.

The Group applies a general approach in calculating ECLs for notes receivables. All of the notes receivables are not past due. The Group classified such instruments as Stage 1 and measure ECLs on a 12-month basis. However, when there has been a significant increase in credit risk since initial recognition, the allowance will be based on the lifetime ECL. For bank acceptance bills, as the relevant financial institutions have high credit rating, loss rate is expected to be minimal. For commercial acceptance bills, which were not yet past due, loss rate is expected to be minimal as well.

#### **Impairment under HKAS 39 for the year ended 31 December 2017**

Under HKAS 39 applicable before 1 January 2018, included in the above provision for impairment of trade receivables was a provision for individually impaired trade receivables of US\$1,547,000 as at 31 December 2017, with a carrying amount before provision of US\$1,547,000.

The individually impaired trade receivables relate to customers that were in financial difficulties or were in default in interest and/or principal payments and only a portion of the receivables is expected to be recovered.

### 20. 貿易應收款項及應收票據 (續)

#### **截至二零一八年十二月三十一日止年度香港財務報告準則第9號項下之減值**

本公司採用香港財務報告準則第9號訂明計算預期信貸虧損之簡化方法，該準則允許就所有貿易應收款項採用整個存續期的預期虧損。為計量預期信貸虧損，貿易應收款項已根據共同信貸風險特性及逾期天數進行分組。預期信貸虧損亦包含前瞻性資料。逾期或於六個月內到期的貿易應收款項的預期信貸損失率極低。

本集團採用一般方法計算應收票據的預期信貸虧損。所有應收票據均為未逾期。本集團將此類工具分類為第1階段，並按十二個月預期信貸虧損基準計量。然而，自發生以來信貸風險顯著增加時，撥備將以年限內預期信貸虧損為基準。就銀行承兌票據而言，由於相關金融機構的信用評級較高，預計損失率將極低。就未逾期的商業承兌票據而言，預計損失率亦將極低。

#### **截至二零一七年十二月三十一日止年度香港會計準則第39號項下之減值**

根據於二零一八年一月一日之前適用的香港會計準則第39號，上述貿易應收款項減值撥備包括於二零一七年十二月三十一日就個別出現減值的貿易應收款項1,547,000美元作出的撥備，於撥備前的賬面值為1,547,000美元。

個別出現減值的貿易應收款項乃與遭遇財政困難或拖欠利息及／或本金還款的客戶有關，而預期僅可收回部份應收款項。

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## 財務報表附註

### 20. Trade and Notes Receivables (continued)

The credit quality of the trade receivables is as follows:

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Neither past due nor impaired	既未逾期亦未減值	115,952	65,458
Less than 1 month past due	逾期少於1個月	5,958	5,654
1 to 3 months past due	逾期1至3個月	-	1
3 to 6 months past due	逾期3至6個月	-	94
Past due and impaired	已逾期及已減值	1,504	1,547
		<b>123,414</b>	72,754

### 20. 貿易應收款項及應收票據 (續)

貿易應收款項的信貨質量如下：

### 21. Prepayments, other Receivables and other Assets

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Other receivables	其他應收款項	2,417	3,358
Interest receivables	應收利息	2,218	3,029
Prepayments	預付款項	2,779	3,953
Value-added input tax	增值稅進項稅額	5,331	-
Current portion of prepaid land lease payments (note 15)	預付土地租賃款項的即期部份 (附註15)	642	674
		<b>13,387</b>	11,014
Impairment of other receivables	其他應收款項減值	(908)	(940)
		<b>12,479</b>	10,074

### 21. 預付款項、其他應收款項及 其他資產

Other receivables are repayable on demand.

其他應收款項則須按要求償還。

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### 21. Prepayments, other Receivables and other Assets (continued)

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

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
At 1 January	於一月一日	940	902
Exchange realignment	匯兌調整	(32)	38
As at 31 December	於十二月三十一日	908	940

#### Impairment under HKFRS 9 for the year ended 31 December 2018

The Group applies a general approach in calculating ECLs for other receivables. Other receivables related to debtors that are in default are classified as Stage 3 and lifetime ECL rate was estimated to be 100% based on historical credit loss experience, resulting in an impairment balance of US\$908,000. The remaining other receivables are classified as Stage 1 without any significant increase in credit risk tracked since initial recognition. Their recoverability was assessed with reference to the credit status of the debtors, and the expected credit loss as at 31 December 2018 is considered to be insignificant.

#### Impairment under HKAS 39 for the year ended 31 December 2017

Under HKAS 39 applicable before 1 January 2018, included in the above provision for impairment of other receivables was a provision for individually impaired other receivables of US\$940,000 as at 31 December 2017, with a carrying amount before provision of US\$940,000.

The individually impaired other receivables relate to debtors that were in financial difficulties or were in default in interest and/or principal payments and only a portion of the receivables is expected to be recovered.

### 21. 預付款項、其他應收款項及其他資產 (續)

其他應收款項減值撥備虧損的變動如下：

#### 截至二零一八年十二月三十一日止年度根據香港財務報告準則第9號項下之減值

本集團採用一般方法計算其他應收款項的預期信貸虧損。與違約債務人相關的其他應收款項歸類為第3階段，根據歷史信貸虧損經驗估計全期預期信貸虧損率為100%，因此減值結餘為908,000美元。其餘其他應收款項歸類為第一階段，自初步確認後追蹤的信貸風險並無任何重大增加。其可收回性參照債務人的信用狀況評定，而截至二零一八年十二月三十一日的預期信貸虧損被視為不重大。

#### 截至二零一七年十二月三十一日止年度根據香港會計準則第39號項下之減值

根據於二零一八年一月一日之前適用的香港會計準則第39號，上述其他應收款項減值撥備內包括於二零一七年十二月三十一日就個別已減值的其他應收款項940,000美元作出之撥備，其扣除撥備前的賬面值為940,000美元

個別出現減值的其他應收款項乃與遭遇財政困難或拖欠利息及／或本金還款的債務人有關，而預期僅可收回部份應收款項。

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## 財務報表附註

### 22. Cash and Cash Equivalents and Restricted and Time Deposits

### 22. 現金及現金等價物以及已凍結及定期存款

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Cash and bank balances	現金及銀行結餘	171,781	203,971
Time deposits	定期存款	605,556	364,449
		<b>777,337</b>	568,420
Restricted and time deposits:	已凍結及定期存款：		
Pledged deposits for letters of credit	就信用證抵押存款	<b>(315)</b>	(350)
Other pledged deposits for payment of dividends	就支付股息其他已抵押存款	<b>(22)</b>	(13)
Time deposits with original maturity of more than three months	原到期日為三個月以上的定期存款	-	(193,167)
Cash and cash equivalents	現金及現金等價物	<b>777,000</b>	374,890

At the end of the reporting period, the cash and bank balances and time deposits of the Group denominated in Renminbi ("RMB") amounted to US\$269,064,000 (2017: US\$269,411,000). The RMB is not freely convertible into other currencies, however, under Mainland China's Foreign Exchange Control Regulations and Administration of Settlement, Sale and Payment of Foreign Exchange Regulations, the Group is permitted to exchange RMB for other currencies through banks authorised to conduct foreign exchange business.

於報告期末，本集團的現金及銀行結餘以及定期存款乃以人民幣（「人民幣」）計值，為269,064,000美元（二零一七年：269,411,000美元）。人民幣不可自由兌換為其他貨幣。然而，根據中國內地的《外匯管理條例》及《結匯、售匯及付匯管理規定》，本集團獲准透過獲授權開展外匯業務的銀行將人民幣兌換為其他貨幣。



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## 財務報表附註

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### 22. Cash and Cash Equivalents and Restricted and Time Deposits (continued)

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

Pledged deposits with a carrying value of 315,000 as at 31 December 2018 (2017: US\$350,000) were pledged to secure the issuance of letters of credit.

Other pledged deposits with a carrying value of US\$22,000 as at 31 December 2018 (2017: US\$13,000) were pledged to secure the payment of dividends to shareholders.

There were no time deposits with original maturity of more than three months at 31 December 2018 (2017: US\$193,167,000 maturing within one year).

### 23. Trade Payables

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

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Within 1 month	1個月以內	26,704	42,185
1 to 3 months	1至3個月	37,713	14,051
3 to 6 months	3至6個月	4,310	1,766
6 to 12 months	6至12個月	2,215	2,446
Over 12 months	12個月以上	8,528	7,676
		<b>79,470</b>	68,124

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

### 22. 現金及現金等價物以及已凍結及定期存款 (續)

銀行現金乃根據每日銀行存款利率按浮動利率計息。短期的定期存款乃視乎本集團的即時現金需求為期七天至三個月不等，按各短期定期存款的利率賺取利息。銀行結餘乃存放於信譽良好且近期並無違約記錄的銀行。

於二零一八年十二月三十一日，已抵押賬面值為315,000美元（二零一七年：350,000美元）的已抵押存款以獲發行信用證。

於二零一八年十二月三十一日的賬面值為22,000美元（二零一七年：13,000美元）的其他已抵押存款，以向股東支付股息。

於二零一八年十二月三十一日概無原到期日三個月以上的（二零一七年：193,167,000美元）定期存款將於一年內到期。

### 23. 貿易應付款項

於各報告期末按發票日期計，本集團貿易應付款項的賬齡分析如下：

貿易應付款項為無抵押、不計息及一般於30天至60天期限內結清。

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## 財務報表附註

### 24. Other Payables and Accruals

### 24. 其他應付款項及暫估費用

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Other payables and accruals	其他應付款項及暫估費用	102,247	76,534
Contract liabilities	合約負債	27,261	-
Advances from customers	預收客戶賬款	-	21,344
Payroll and bonus payables	應付薪金及花紅	35,840	32,017
Dividend payable	應付股息	22	13
		<b>165,370</b>	129,908

Other payables are unsecured, non-interest-bearing and repayable on demand.

其他應付款項無抵押、免息及須於要求時償還。

Before the adoption of HKFRS 15, the Group recognised consideration received from customers in advance as advances from customers. Under HKFRS 15, the amount is classified as contract liabilities. Therefore, upon adoption of HKFRS 15, the Group reclassified US\$21,344,000 from advances from customers to contract liabilities as at 1 January 2018 in relation to the consideration received from customers in advance as at 1 January 2018. As at 31 December 2018, the carrying amount as at 31 December 2018 was US\$27,261,000. During the year ended 31 December 2018, contract liabilities of US\$21,344,000 at the beginning of the year were recognised as revenue. The increase in contract liabilities was in line with the growth in business.

於採用香港財務報告準則第15號前，本集團提前將已收客戶代價確認為預收客戶款項。根據香港財務報告準則第15號，該款項被確認為合約負債。因此，於採用香港財務報告準則第15號後，於二零一八年一月一日，就於二零一八年一月一日已收客戶代價墊資而言，本集團將預收客戶款項21,344,000美元重新分類為合約負債。於二零一八年十二月三十一號日，賬面值為27,261,000美元。截至二零一八年十二月三十一日止年度，年初21,344,000美元的合約負債被確認為收入。合約負債的增加與業務增長一致。

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## 財務報表附註

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### 25. Interest-Bearing Bank Borrowings

### 25. 計息銀行借款

		2018 二零一八年			2017 二零一七年		
		Effective interest rate (%) 實際利率 (%)	Maturity 到期	US\$'000 千美元	Effective interest rate (%) 實際利率 (%)	Maturity 到期	US\$'000 千美元
<b>Current</b>	<b>流動</b>						
Current portion of long term bank loans – secured	長期銀行貸款 的即期部份 – 有抵押	1.20	2019	4,371	1.20-3.49	2018	60,751
<b>Non-current</b>	<b>非流動</b>						
Secured bank loans	有抵押銀行貸款	1.20	2020-2025	26,227	1.20	2019-2025	32,139
				<b>30,598</b>			<b>92,890</b>

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Analysed into:	分析為：		
Bank loans repayable:	應償還銀行貸款：		
Within one year	一年內	4,371	60,751
In the second year	第二年	4,371	4,591
Beyond the third year, inclusive	超過第三年（包括首尾兩年）	21,856	27,548
		<b>30,598</b>	<b>92,890</b>

Secured bank loans of US\$30,598,000 as at 31 December 2018 (2017: US\$36,730,000) were denominated in RMB.

於二零一八年十二月三十一日，有抵押銀行貸款為以人民幣計值的30,598,000美元（二零一七年：36,730,000美元）。

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31 December 2018  
二零一八年十二月三十一日

## 財務報表附註

### 25. Interest-Bearing Bank Borrowings (Continued)

As at 31 December 2018 and 2017, the Group's bank loans were secured by pledges of the Group's assets with carrying values as follows:

		Notes 附註	2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Property, plant and equipment	物業、廠房及設備	13	22,325	636,767
Investment property	投資物業	14	–	179,586
Prepaid land lease payments	預付土地租賃款項	15	5,750	21,308
Intangible assets	無形資產	16	–	5,285
			<b>28,075</b>	<b>842,946</b>

In addition to the assets pledged above, the Group's secured bank loans as at 31 December 2017 were secured by the Company's 36.23% of equity interest in its subsidiary, HHGrace, which has been removed from the pledge status as at 31 December 2018 with maturity and the full repayment of those bank loans during the year.

於二零一八年及二零一七年十二月三十一日，本集團的銀行貸款由抵押本集團的資產作擔保，資產的賬面值如下：

除以上已抵押資產外，本集團於二零一七年十二月三十一日的有抵押銀行貸款乃以本公司於其子公司華虹宏力的36.23%股權作抵押，且該等股權已於二零一八年十二月三十一日獲解除抵押狀態，相關銀行貸款於年內到期並獲悉數償還。

### 26. Government Grants

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
At 1 January	於一月一日	40,523	35,863
Received during the year	年內收到	8,040	4,610
Released to offsetting research and development costs	撥入以抵銷研發成本	(2,029)	–
Offset with long term assets	抵銷長期資產	–	(2,279)
Exchange realignment	匯兌調整	(2,128)	2,329
As at 31 December	於十二月三十一日	<b>44,406</b>	<b>40,523</b>

The Group received government funding for several government-sponsored projects focusing on the research and development of advanced technologies.

本集團的多個政府資助項目均獲得政府撥付資金資助，該等項目專注於開發先進技術。

# NOTES TO FINANCIAL STATEMENTS

## 財務報表附註

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### 27. Deferred Tax

The movements in deferred tax liabilities and assets during the year are as follows:

Deferred tax liabilities:

		Fair value gains on financial investments (US\$'000) (千美元)	Fair value gains on investment property (US\$'000) (千美元)	Withholding tax (US\$'000) (千美元)	Total (US\$'000) (千美元)
As at 1 January 2017	於二零一七年一月一日	–	448	8,828	9,276
Deferred tax charged to profit or loss during the year (note 10)	年內扣自損益表的遞延稅項 (附註10)	–	13	4,806	4,819
Exchange realignment	匯兌調整	–	28	–	28
As at 31 December 2017 and 1 January 2018 as previously reported	於二零一七年十二月三十一日及二零一八年一月一日過往申報	–	489	13,634	14,123
Impact of adopting HKFRS 9 (note 2.2)	採用香港財務報告準則第9號的影響 (附註2.2)	184	–	–	184
As at 1 January 2018 as restated	於二零一八年一月一日 (經重列)	184	489	13,634	14,307
Deferred tax charged to profit or loss during the year (note 10)	年內扣自損益表的遞延稅項	–	47	3,583	3,630
Deferred tax charged to other comprehensive income during the year	年內扣自其他全面收益的遞延稅項	265	–	–	265
Exchange realignment	匯兌調整	–	(56)	–	(56)
As at 31 December 2018	於二零一八年十二月三十一日	449	480	17,217	18,146

Pursuant to the PRC Corporate Income Tax Law, a 10% withholding tax is levied on dividends declared to foreign investors from the foreign investment enterprises established in Mainland China. The Group is therefore liable for withholding taxes on dividends distributed by those subsidiaries established in Mainland China in respect of earnings generated from 1 January 2008. A lower withholding tax rate may be applied if there is a tax treaty between Mainland China and the jurisdiction of the foreign investors.

### 27. 遞延稅項

年內遞延稅項負債及資產的變動如下：

遞延稅項負債：

根據《中華人民共和國企業所得稅法》，於中國內地成立的外資企業向外國投資者宣派的股息須按10%繳納預扣稅。因此，本集團須就於中國內地成立的該等子公司自二零零八年一月一日起產生的盈利所分派的股息繳納預扣稅。倘中國內地與外國投資者所屬司法權區間訂有稅務協定，可能適用較低的預扣稅率。

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### 27. Deferred Tax (continued)

There are no income tax consequences attaching to the payment of dividends by the Company to its shareholders.

Deferred tax assets:

		Write-down of inventories and impairment of receivables 存貨撇減及應收款項減值 (US\$'000) (千美元)	Accruals 暫估費用 (US\$'000) (千美元)	Share options 購股權 (US\$'000) (千美元)	Total 總計 (US\$'000) (千美元)
As at 1 January 2017	於二零一七年一月一日	1,753	3,228	739	5,720
Deferred tax (charged)/credited to profit or loss during the year (note 10)	年內(扣自)/計入損益表的遞延稅項(附註10)	(31)	470	497	936
Exchange realignment	匯兌調整	112	243	63	418
As at 31 December 2017 and 1 January 2018	於二零一七年十二月三十一日及二零一八年一月一日	1,834	3,941	1,299	7,074
Deferred tax credited/(charged) to profit or loss during the year (note 10)	年內計入/(扣自)損益表的遞延稅項(附註10)	104	(138)	(287)	(321)
Exchange realignment	匯兌調整	(93)	(245)	(52)	(390)
As at 31 December 2018	於二零一八年十二月三十一日	1,845	3,558	960	6,363

Deferred tax assets have not been recognised in respect of the following items:

本公司向其股東派付股息並無附帶任何所得稅後果。

遞延稅項資產：

以下項目並無確認遞延稅項資產：

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Unused tax losses	未動用稅項虧損	8,698	6,843
Deductible temporary differences	可扣稅暫時差額	417,338	432,104
		<b>426,036</b>	438,947

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### 27. Deferred Tax (continued)

Deferred tax assets have not been recognised in respect of these losses as they have arisen in subsidiaries that have been loss-making for some time and it is not considered probable that taxable profits will be available against which the tax losses can be utilised.

The above tax losses are from overseas countries and are available indefinitely for offsetting against future taxable profits of the companies. Deferred tax assets have not been recognised in respect of the temporary differences as it is not considered probable that taxable profits will be available against which the above items can be utilised.

### 27. 遞延稅項 (續)

由於遞延稅項資產乃源自已虧損多時的子公司，且不大可能有應課稅溢利可用以抵銷該等稅項虧損，故並無就該等虧損確認遞延稅項資產。

上述稅項虧損來自海外國家且可無限期地用以抵銷有關公司的未來應課稅溢利。由於不大可能有應課稅溢利可用以抵銷上述項目，故並無就暫時差額確認遞延稅項資產。

### 28. Share Capital

### 28. 股本

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Issued and fully paid: 1,283,952,225 (2017: 1,037,570,661) ordinary shares	已發行及繳足： 1,283,952,225股 (二零一七年： 1,037,570,661股) 普通股	<b>1,960,159</b>	1,554,870

A summary of movements in the Company's share capital is as follows:

本公司股本的變動概述如下：

		Number of shares in issue 已發行股份數目 ('000) (千股)	Amount of share capital 股本金額 (US\$'000) (千美元)
At 1 January 2017	於二零一七年一月一日	1,033,872	1,550,164
Share options exercised (Note (a))	行使購股權 (附註(a))	3,699	4,706
At 31 December 2017 and 1 January 2018	於二零一七年十二月三十一日 及二零一八年一月一日	1,037,571	1,554,870
Share options exercised (Note (a))	行使購股權 (附註(a))	3,982	5,289
New issuance to a designated subscriber (Note (b))	新發行予指定認購方 (附註(b))	242,399	400,000
At 31 December 2018	於二零一八年十二月三十一日	1,283,952	1,960,159

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## 財務報表附註

### 28. Share Capital (continued)

notes:

- (a) The subscription rights attaching to 3,982,000 (2017: 3,699,000) share options were exercised at the subscription price of HK\$6.912 per share (2017: HK\$6.912 per share), resulting in the issue of 3,982,000 (2017: 3,699,000) shares for a total cash consideration of US\$3,515,000 (2017: US\$3,274,000). An amount of US\$1,774,000 (2017: US\$1,432,000) was transferred from the share option reserve to share capital upon exercise of the share options.
- (b) On 3 January 2018, the Company and China Integrated Circuit Industry Investment Fund Co., Ltd (the "Subscriber") entered into an agreement (the "Subscription Agreement"), pursuant to which the Subscriber has conditionally agreed to subscribe for and the Company has conditionally agreed to allot and issue an aggregate of 242,398,925 shares (the "Subscription Shares") at HK\$12.90 per share (the "Subscription Price"). All the conditions set out in the Subscription Agreement have been fulfilled and the subscription took place on 7 November 2018 pursuant to the terms of the Subscription Agreement. All the 242,398,925 Subscription Shares have been allotted and issued to Xin Xin (Hong Kong) Capital Co., Limited, being the Subscriber's designated entity, at the Subscription Price, in accordance with the terms and conditions of the Subscription Agreement. The proceeds from the subscription were approximately US\$400,000,000.

### 29. Share Option Scheme

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

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

### 28. 股本 (續)

附註：

- (a) 3,982,000份(二零一七年：3,699,000份)購股權附帶之認購權已按認購價每股6.912港元(二零一七年：每股6.912港元)行使，引致發行3,982,000股(二零一七年：3,699,000股)股份，總現金代價為3,515,000美元(二零一七年：3,274,000美元)。購股權獲行使後，1,774,000美元(二零一七年：1,432,000美元)款項已由購股權儲備轉撥至股本。
- (b) 於二零一八年一月三日，本公司與國家集成電路產業投資基金股份有限公司(「認購方」)訂立一份協議(「認購協議」)，據此，認購方已有條件同意認購且本公司已有條件同意按每股股份12.90港元(「認購價格」)配發及發行合共242,398,925股股份(「認購股份」)。認購協議所載之所有條件已獲達成，且認購事項已於二零一八年十一月七日根據認購協議條款進行。所有242,398,925股認購股份已根據認購協議的條款及條件按認購價配發及發行予認購方指定的實體鑫芯(香港)投資有限公司。認購所得款項約為400,000,000美元。

### 29. 購股權計劃

本公司設有一項購股權計劃(「該計劃」)，旨在為對本集團順利發展有所貢獻之符合資格參與者提供激勵及獎勵。該計劃分為兩批，分別於二零一五年九月四日(「二零一五年購股權」)及二零一八年十二月二十四日(「二零一八年購股權」)生效。該計劃之符合資格參與者包括本公司董事(包括一名非執行董事)及本集團其他僱員。除非另被取消或修訂，該等購股權將由各生效日期起計7年內有效。

現時可根據該計劃授出之未行使購股權數目不得超過該等購股權行使後本公司不時已發行股份之10%。於任何十二個月期間，該計劃各符合資格參與者根據購股權可獲發行之股份數目不得超過本公司任何時候已發行股份之1%。進一步授予超出此限額之購股權則須股東在股東大會上批准。



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## 財務報表附註

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### 29. Share Option Scheme (continued)

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

The offer of a grant of share options may be accepted within 28 days from the date of offer, upon payment of a nominal consideration of HK\$1 in total by the grantee. The exercise period of the share options granted is determinable by the directors, and commences after a vesting period of two to four years and ends on a date which is not later than the expiry date of the Scheme.

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

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

### 29. 購股權計劃 (續)

向各董事、本公司行政總裁或主要股東或彼等之任何聯繫人士授予購股權須事先取得獨立非執行董事批准。此外，倘若於任何十二個月期間，授予本公司主要股東或獨立非執行董事或彼等各自之任何聯繫人士之購股權超出本公司任何時候已發行股份之0.1%或總值（根據授出日期本公司股份價格計算）超逾500萬港元，則須事先在股東大會上取得股東批准。

承授人須於授出日期起計28日內決定是否接納獲授之購股權，並須於接納時繳交合共1港元之名義代價。購股權之行使期由董事決定，並於二至四年歸屬期後開始以及於該計劃屆滿之日前終止。

購股權之行使價為由董事釐定，惟不得少於以下兩者之最高者：(i)本公司股份於授予購股權日期在聯交所之收市價；或(ii)本公司股份於緊接授出日期前五個交易日在聯交所之平均收市價。

購股權並非附帶可令持有人獲得股息或於股東大會投票的權利。

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## 財務報表附註

### 29. Share Option Scheme (continued)

#### 2015 Options

The following share options were outstanding under the 2015 Options during the year:

		2018 二零一八年		2017 二零一七年	
		Weighted average exercise price HK\$ per share 每股加權 平均行使價 (港元)	Number of options '000 購股權 數目 (千份)	Weighted average exercise price HK\$ per share 每股加權 平均行使價 (港元)	Number of options '000 購股權數目 (千份)
At 1 January	於一月一日	6.912	23,610	6.912	28,662
Forfeited during the year	年內沒收	6.912	(756)	6.912	(1,353)
Exercised during the year	年內行使	6.912	(3,982)	6.912	(3,699)
At 31 December	於十二月三十一日	6.912	18,872	6.912	23,610

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

#### 二零一五年購股權

於本年度以下購股權尚未根據二零一五年購股權行使：

於報告期末二零一五年購股權項下尚未行使購股權的行使價及行使期如下：

#### 2018

#### 二零一八年

Number of options 購股權數目 '000 千份	Exercise price* 行使價* HK\$ per share 每股港元	Exercise period 行使期
1,842	6,912	4 September 2017 to 3 September 2022 二零一七年九月四日至二零二二年九月三日
8,431	6,912	4 September 2018 to 3 September 2022 二零一八年九月四日至二零二二年九月三日
8,599	6,912	4 September 2019 to 3 September 2022 二零一九年九月四日至二零二二年九月三日
18,872		

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## 財務報表附註

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### 29. Share Option Scheme (continued)

#### 2015 Options (continued) 2017

Number of options 購股權數目 '000 千份	Exercise price* 行使價* HK\$ per share 每股港元	Exercise period 行使期
5,488	6.912	4 September 2017 to 3 September 2022 二零一七年九月四日至二零二二年九月三日
9,061	6.912	4 September 2018 to 3 September 2022 二零一八年九月四日至二零二二年九月三日
9,061	6.912	4 September 2019 to 3 September 2022 二零一九年九月四日至二零二二年九月三日
23,610		

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

The 3,982,000 (2017: 3,699,000) share options exercised under the 2015 Options during the year resulted in the issue of 3,982,000 (2017: 3,699,000) ordinary shares of the Company for a total cash consideration of US\$3,515,000 (2017: US\$3,274,000). An amount of US\$1,774,000 (2017: US\$1,432,000) was transferred from the share option reserve to share capital upon the exercise of the share options, as further detailed in note 28 to the financial statements.

### 29. 購股權計劃 (續)

#### 二零一五年購股權 (續) 二零一七年

\* 倘若進行供股或紅股發行，或本公司之股本有其他類似改動，則購股權之行使價可予調整。

年內二零一五年購股權項下的3,982,000份(二零一七年：3,699,000份)購股權獲行使，引致本公司發行3,982,000股(二零一七年：3,699,000股)普通股，總現金代價為3,515,000美元(二零一七年：3,274,000美元)。如財務報表附註28所進一步詳述，購股權獲行使後，1,774,000美元(二零一七年：1,432,000美元)款項已由購股權儲備轉撥至股本。

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## 財務報表附註

### 29. Share Option Scheme (continued)

#### 2015 Options (continued)

At the end of the reporting period, the Company had 18,872,000 share options outstanding under the 2015 Options. The exercise in full of the outstanding share options would, under the present capital structure of the Company, result in the issue of 18,872,000 additional ordinary shares of the Company and additional share capital of US\$23,260,000 (including US\$6,607,000 transferred from the share option reserve to share capital).

At the date of approval of these financial statements, the Company had 17,919,361 share options outstanding under the 2015 Options, which represented approximately 1.4% of the Company's shares in issue as at that date.

#### 2018 Options

The following share options were outstanding under the 2018 Options during the year:

		2018 二零一八年	
		Weighted average exercise price HK\$ per share 每股加權 平均行使價 (港元)	Number of options '000 購股權數目 (千份)
At 1 January	於一月一日	—	—
Granted during the year	年內行使	15,506	34,500
At 31 December	於十二月三十一日	15,506	34,500

During the year, 5,810,000 options were granted to directors and key management personnel (the "2018 Tranche A") (2017: Nil) and 28,690,000 options were granted to other employees (the "2018 Tranche B") (2017: Nil).

### 29. 購股權計劃 (續)

#### 二零一五年購股權 (續)

於報告期末，本公司擁有18,872,000份尚未根據二零一五年購股權行使的購股權。根據本公司現時的股本架構，悉數行使尚未行使購股權可能會導致額外發行18,872,000股本公司普通股及增加股本23,260,000美元（包括由購股權儲備轉撥至股本的6,607,000美元）。

於批准該等財務報表日期，本公司擁有17,919,361份尚未根據二零一五年購股權行使的購股權，佔該日本公司已發行股份的約1.4%。

#### 二零一八年購股權

於本年度以下購股權尚未根據二零一八年購股權行使：

於年內，5,810,000份（二零一七年：零）購股權已授予董事及主要管理人員（「二零一八年A部分」）及28,690,000份（二零一七年：零）購股權已授予其他僱員（「二零一八年B部分」）。

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### 29. Share Option Scheme (continued)

#### 2018 Options (continued)

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

2018

Number of options 購股權數目 '000 (千份)	Exercise price* 行使價* HK\$ per share 每股港元	Exercise period 行使期
11,015	15.506	24 December 2020 to 23 December 2025 二零二零年十二月二十四日至二零二五年十二月二十三日
11,015	15.506	24 December 2021 to 23 December 2025 二零二一年十二月二十四日至二零二五年十二月二十三日
11,015	15.506	24 December 2022 to 23 December 2025 二零二二年十二月二十四日至二零二五年十二月二十三日
1,455	15.506	24 December 2023 to 23 December 2025 二零二三年十二月二十四日至二零二五年十二月二十三日
34,500		

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

### 29. 購股權計劃 (續)

#### 二零一八年購股權 (續)

於報告期末二零一八年購股權項下尚未行使購股權的行使價及行使期如下：

於二零一八年

\* 倘若進行供股或紅股發行，或本公司之股本有其他類似改動，則購股權之行使價可予調整。

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## 財務報表附註

### 29. Share Option Scheme (continued)

#### 2018 Options (continued)

The fair value of the share options granted during the year were US\$3,727,000 (US\$0.64 cents each) for the 2018 Tranche A and US\$17,954,000 (US\$0.63 cents each) for the 2018 Tranche B. The Group did not recognise any share option expense under the 2018 Options during the year (2017: Nil), which was immaterial.

The fair value of equity-settled share options granted during the year was estimated as at the date of grant, using a binomial model, taking into account the terms and conditions upon which the options were granted. The following table lists the inputs to the model used:

		2018 Tranche A 二零一八年A部分	2018 Tranche B 二零一八年B部分
Dividend yield (%)	股息收益率(%)	2.15	2.15
Expected volatility (%)	波幅(%)	40.61	40.61
Risk-free interest rate (%)	無風險利率(%)	1.97	1.97
Annual post-vesting forfeit rate (%)	年度歸屬後沒收率(%)	2	5
Exercise multiple	行使倍數	2.8	2.2
Share price (US\$ per share)	行使價(每股美元)	1.84	1.84

### 29. 購股權計劃(續)

#### 二零一八年購股權(續)

於年內，根據二零一八年A部分及二零一八年B部分授出購股權的公平值分別為3,727,000美元(每股0.64美分)及17,954,000美元(每股0.63美分)。於年內，本集團並無確認二零一八年購股權項下的任何購股權開支(二零一七年：零)，原因為其數額較小。

授出的以權益結算購股權之公平值，乃於授出日期採用二項式模式估計，並考慮所授出購股權的條款及條件。下表列出所用模式的輸入資料：

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### 29. Share Option Scheme (continued)

#### 2018 Options (continued)

The annual post-vesting forfeit rate is based on the historical data and is not necessarily indicative of the exercise patterns that may occur. The expected volatility reflects the assumption that the historical volatility is indicative of future trends, which may also not necessarily be the actual outcome.

No other feature of the options granted was incorporated into the measurement of fair value.

At the end of the reporting period, the Company had 34,500,000 share options outstanding under the 2018 Options. The exercise in full of the outstanding share options would, under the present capital structure of the Company, result in the issue of 34,500,000 additional ordinary shares of the Company and additional share capital of US\$89,978,000 (including US\$21,681,000 transferred from the share option reserve to share capital).

At the date of approval of these financial statements, the Company had 34,500,000 share options outstanding under the 2018 Options, which represented approximately 2.7% of the Company's shares in issue as at that date.

### 30. Reserves

The amounts of the Group's reserves and the movements therein for the current and prior years are presented in the consolidated statement of changes in equity on page 179 to 180 of the financial statements.

According to the relevant PRC laws and regulations for wholly-foreign-owned enterprises, which are applicable to the Company's subsidiaries in the PRC, profits of the PRC subsidiaries, as determined in accordance with the applicable accounting rules and regulations in the PRC, are available for distribution in the form of cash dividends to the Company after the PRC subsidiaries have (1) satisfied all tax liabilities; (2) provided for losses in previous years; and (3) made appropriations to the statutory reserve funds. The Company's subsidiaries in the PRC are required to appropriate not less than 10% of their profit after taxation to the statutory reserve funds until the reserve balance reaches 50% of their registered capital.

### 29. 購股權計劃 (續)

#### 二零一八年購股權 (續)

年度歸屬後沒收率乃根據歷史數據計算，未必反映可能發生的行使模式。預期波幅指假設歷史波幅反映未來趨勢，且亦未必為實際結果。

並無其他已授購股權特性加入公平值計量。

於報告期末，本公司於二零一八年購股權項下尚未行使的購股權為34,500,000份。根據本公司現時的股本架構，悉數行使尚未行使購股權可能會導致額外發行34,500,000股本公司普通股及增加股本89,978,000美元（包括由購股權儲備轉撥至股本的21,681,000美元）。

於批准該等財務報表日期，本公司於二零一八年購股權項下尚未行使的購股權為34,500,000份，佔該日期本公司已發行股份的約2.7%。

### 30. 儲備

本集團於本年度及過往年度的儲備及相關變動金額於財務報表第179至180頁綜合權益變動表中呈列。

根據中國有關外商獨資企業的法律及法規（適用於本公司的中國子公司），按照適用的中國會計規則及規例釐定的中國子公司的溢利，可於中國子公司(1)償付所有稅務負債；(2)就過往年度虧損作出撥備；及(3)就法定儲備金作出撥備後以現金股息形式向本公司作出分派。本公司的中國子公司須劃撥不少於其除稅後溢利的10%作為法定儲備金，直至儲備結餘達到其註冊資本的50%。

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## 財務報表附註

### 31. Operating Lease Arrangements

#### (a) As lessor

The Group leases its investment property (note 14) to Shanghai Huali, under an operating lease arrangement, with a lease term of 20 years. The terms of the lease generally also require the tenant to provide for periodic rent adjustments according to the then prevailing market conditions.

At 31 December 2018, the Group had total future minimum lease receivables under non-cancellable operating leases with its tenant falling due as follows:

		<b>2018</b>	2017
		<b>二零一八年</b>	二零一七年
		<b>(US\$'000)</b>	(US\$'000)
		<b>(千美元)</b>	(千美元)
Within one year	一年內	<b>12,058</b>	13,276
In the second to fifth years, inclusive	第二至第五年 (包括首尾兩年)	<b>47,620</b>	50,114
More than five years	超過五年	<b>74,341</b>	90,527
		<b>134,019</b>	153,917

The Group was advanced with the future rentals from Shanghai Huali of US\$4,185,000 as at 31 December 2018 (2017: US\$4,677,000).

### 31. 經營租賃安排

#### (a) 作為出租人

本集團根據一項經營租賃安排，將其投資物業（附註14）出租予上海華力，租期為20年。該租約的條款一般亦規定承租人根據當時市況就定期租金調整作出撥備。

於二零一八年十二月三十一日，本集團根據不可撤銷經營租約於以下期間應收承租人的未來最低租賃款項總額如下：

於二零一八年十二月三十一日，本集團收到上海華力預付日後租金4,185,000美元（二零一七年：4,677,000美元）。



# NOTES TO FINANCIAL STATEMENTS

## 財務報表附註

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### 31. Operating Lease Arrangements (continued)

#### (b) As lessee

The Group leases certain of its office and dormitory properties under operating lease arrangements, negotiated for terms of one to twenty years with an option for renewal after the end of the lease terms, at which time all terms will be renegotiated.

At 31 December 2018, the Group had total future minimum lease payments under non-cancellable operating leases falling due as follows:

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Within one year	一年內	2,784	2,430
In the second to fifth years, inclusive	第二至第五年 (包括首尾兩年)	7,200	6,585
More than five years	超過五年	17,132	16,995
		<b>27,116</b>	26,010

The Group advanced the future rentals to Huahong Real Estate Co., Ltd. ("Huahong Real Estate"), a subsidiary of Huahong Technology Development, of US\$1,718,000 as at 31 December 2018 (2017: US\$24,000).

於二零一八年十二月三十一日，本集團根據不可撤銷經營租約於以下期間應付的未來最低租賃款項總額如下：

於二零一八年十二月三十一日，本集團向上海華虹置業有限公司（「華虹置業」，華虹科技發展的子公司）預付未來租金1,718,000美元（二零一七年：24,000美元）。

### 32. Commitments

In addition to the operating lease commitments detailed in note 31 (b) above, the Group had the following capital commitments at the end of the reporting period:

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Contracted, but not provided for: Property, plant and equipment	已訂約，但未撥備： 物業、廠房及設備	409,701	47,156

### 31. 經營租賃安排（續）

#### (b) 作為承租人

本集團根據經營租賃安排租入若干辦公室及宿舍物業，經協商租期為一至二十年，可於租期結束後予以續期，屆時所有條款將重新協商。

### 32. 承擔

除上文附註31(b)所述經營租賃承擔外，本集團於報告期末有以下資本承擔：

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## 財務報表附註

### 33. Related Party Transactions and Balances

#### (a) Name and relationship

Name of related party 關聯方名稱	Relationship with the Group 與本集團的關係
<b>Huahong Group and its subsidiaries</b> 華虹集團及其子公司	
– Shanghai Huahong (Group) Co., Ltd. (“Huahong Group”) – 上海華虹(集團)有限公司(「華虹集團」)	Holding company of Hua Hong International Inc. 華虹國際有限公司的控股公司
– Hua Hong International Inc. (“Huahong International”) – 華虹國際有限公司(「華虹國際」)	Shareholder of the Company 本公司股東
– Shanghai Huahong Zealcore Electronics Co., Ltd. (“Huahong Zealcore”) – 上海華虹摯芯科技有限公司(「華虹摯芯」)	Subsidiary of Huahong Group 華虹集團子公司
– Shanghai Hongri International Electronics Co., Ltd. (“Hongri”) – 上海虹日國際電子有限公司(「虹日」)	Subsidiary of Huahong Group 華虹集團子公司
– Shanghai Integrated Circuit Research and Development Center (“ICRD”) – 上海集成電路研發中心(「集成電路研發」)	Subsidiary of Huahong Group 華虹集團子公司
– Shanghai Hua Hong Jitong Smart System Co., Ltd. (“Jitong”) – 上海華虹計通智能系統股份有限公司(「計通」)	Subsidiary of Huahong Group 華虹集團子公司
<b>NEC Corporation (“NEC”)</b>	
– NEC Management Partner, Ltd. (“NEC Management”)	Shareholder of the Company 本公司股東 Subsidiary of NEC NEC子公司
<b>SAIL and its subsidiaries</b> 上海聯和及其子公司	
– Sino-Alliance International Ltd. (“SAIL International”)	Shareholder of the Company 本公司股東
– Shanghai Huali – 上海華力	Subsidiary of SAIL 上海聯和子公司
– QST – 矽睿科技	Subsidiary of SAIL 上海聯和子公司

### 33. 關聯方交易及結餘

#### (a) 名稱及關係

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## 財務報表附註

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### 33. Related Party Transactions and Balances (continued)

#### (a) Name and relationship (continued)

Name of related party 關聯方名稱	Relationship with the Group 與本集團的關係
<b>INESA and its subsidiaries</b> 儀電集團及其子公司	
– Shanghai INESA Intelligent Electronics Co., Ltd. ("Shanghai INESA") – 上海儀電智能電子有限公司 (「上海儀電」)	Subsidiary of INESA 儀電集團子公司
– Shanghai Nanyang Software System Integration Co., Ltd. ("Nanyang Software") – 上海南洋軟件系統集成有限公司 (「南洋軟件」)	Subsidiary of INESA 儀電集團子公司
<b>Huahong Technology Development</b> 華虹科技發展	
– Huahong Real Estate – 華虹置業	Associate of the Group 本集團聯營公司
– Shanghai Huajin Property Management Co., Ltd. ("Huajin") – 上海華錦物業管理有限公司 (「華錦」)	Subsidiary of Huahong Technology Development 華虹科技發展子公司
<b>CEC and its subsidiaries</b> 中國電子及其子公司	
– China Electronics Corporation ("CEC")* – 中國電子信息產業集團有限公司 (「中國電子」)*	Shareholder of Huahong Group (before 26 October 2018) 華虹集團股東 (二零一八年十月二十六日之前)
– CEC Huada Electronic Design Co., Ltd. ("Huada")* – 北京中電華大電子設計有限責任公司 (「華大」)*	Subsidiary of CEC 中國電子子公司
– Shanghai Huahong Integrated Circuit Co., Ltd. ("Shanghai Huahong IC")* – 上海華虹集成電路有限責任公司 (「上海華虹集成電路」)*	Subsidiary of CEC 中國電子子公司
– Shanghai Belling Co., Ltd. ("Shanghai Belling")* – 上海貝嶺股份有限公司 (「上海貝嶺」)*	Subsidiary of CEC 中國電子子公司
– Hylintek Limited ("Hylintek")* – 香港海華有限公司 (「香港海華」)*	Subsidiary of CEC 中國電子子公司

\* CEC disposed of all of its shareholdings in Huahong Group on 26 October 2018. From then on, CEC and its subsidiaries are no longer related parties of the Group.

\* 中國電子於二零一八年十月二十六日出售其於華虹集團的所有股權。自此，中國電子及其子公司不再為本集團的關聯方。

### 33. 關聯方交易及結餘 (續)

#### (a) 名稱及關係 (續)

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## 財務報表附註

### 33. Related Party Transactions and Balances (continued)

#### (b) Related party transactions

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

### 33. 關聯方交易及結餘 (續)

#### (b) 關聯方交易

除該等財務報表其他部份所披露交易及結餘外，本集團於年內已與關聯方進行以下重大交易：

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Sales of goods to related parties (note (i))	向關聯方出售貨品 (附註(i))		
Huada*	華大*	44,589	47,682
Shanghai Huahong IC* ICRD	上海華虹集成電路* 集成電路研發	14,536 9,076	13,174 10,674
Huahong Zealcore#	華虹摯芯#	4,996	6,402
Shanghai Belling*	上海貝嶺*	4,919	4,336
QST#	矽睿科技#	1,607	2,975
Hongri	虹日	-	35
Purchases of goods from related parties (note (ii))	自關聯方購買貨品 (附註(ii))		
Hylintek*	香港海華*	13,183	12,694
Hongri	虹日	7,567	5,649
Huahong Zealcore#	華虹摯芯#	651	659
NEC Management	NEC Management	748	519
Jitong	計通	98	79
Service fee income from a related party (note (iii))	來自關聯方的服務費收入 (附註(iii))		
QST#	矽睿科技#	-	109
Service fee charged by related parties (note (iv))	關聯方收取的服務費 (附註(iv))		
Shanghai INESA#	上海儀電#	2,183	559
Huajin#	華錦#	227	222
Huahong Real Estate	華虹置業	151	157
Nanyang Software#	南洋軟件#	208	131

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### 33. Related Party Transactions and Balances (continued)

#### (b) Related party transactions (continued)

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Rental income from a related party (note (iii))	來自關聯方的租金收入 (附註(iii))		
Shanghai Huali#	上海華力#	13,448	12,761
Rental expense charged by a related party (note (iv))	關聯方收取的租金開支 (附註(iv))		
Huahong Real Estate#	華虹置業#	1,670	1,662
Expense paid on behalf of a related party (note (v))	代關聯方支付的開支 (附註(v))		
Shanghai Huali	上海華力	31,235	28,210

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

\* These related party transactions with CEC's subsidiaries disclosed above were conducted from 1 January 2018 to 26 October 2018.

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

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

Note (iii) The rental income and service fee income received from related parties were based on the prices and terms agreed between the related parties.

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

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

### 33. 關聯方交易及結餘 (續)

#### (b) 關聯方交易 (續)

# 關聯方交易亦構成上市規則第14A章所界定的持續關連交易。

\* 上文所披露與中國電子子公司進行的關聯方交易發生於二零一八年一月一日至為二零一八年十月二十六日期間。

附註(i) 向關聯方出售的貨品乃根據與關聯方協定的價格及條款作出。

附註(ii) 自關聯方購買的貨品乃根據關聯方提供的價格及條款作出。

附註(iii) 來自關聯方的租金收入及服務費收入乃根據與關聯方協定的價格及條款收取。

附註(iv) 關聯方收取的租金開支及服務費乃根據與關聯方協定的價格及條款支付。

附註(v) 代關聯方支付的開支為不計息，及須按要求償還。

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## 財務報表附註

### 33. Related Party Transactions and Balances (continued)

### 33. 關聯方交易及結餘 (續)

#### (c) Outstanding balances with related parties

#### (c) 與關聯方之間的未結清餘額

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Long-term prepayments to related parties	應付關聯方長期預付款項		
Shanghai Huali	上海華力	6,920	–
ICRD	集成電路研發	1,827	–
		<b>8,747</b>	–
Amounts due from related parties	應收關聯方款項		
Shanghai Huali	上海華力	7,841	6,869
Huahong Real Estate	華虹置業	1,718	24
Huahong Zealcore	華虹摯芯	558	1,137
ICRD	集成電路研發	519	97
QST	矽睿科技	164	1,430
Huada*	華大*	–	28,760
Shanghai Huahong IC*	上海華虹集成電路*	–	7,565
Shanghai Belling*	上海貝嶺*	–	1,106
		<b>10,800</b>	46,988
Amounts due to related parties	應付關聯方款項		
Shanghai Huali	上海華力	4,185	4,677
ICRD	集成電路研發	576	2,220
Shanghai INESA	上海儀電	352	225
Huahong Zealcore	華虹摯芯	256	257
NEC Management	NEC Management	191	122
Huahong Real Estate	華虹置業	148	124
Hongri	虹日	101	391
QST	矽睿科技	18	120
Jitong	計通	7	19
Nanyang Software	南洋軟件	4	19
Hylintek*	香港海華*	–	2,711
		<b>5,838</b>	10,885

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### 33. Related Party Transactions and Balances (continued)

#### (c) Outstanding balances with related parties (continued)

Balances with the related parties were unsecured, non-interest-bearing and settled in accordance with the terms disclosed in notes 20, 21, 23 and 24. Except for the long-term prepayments to related parties which are classified as investing activities, all the other balances arose from operating activities.

\* The outstanding balances with CEC's subsidiaries as at 31 December 2018 did not constitute outstanding balances with related parties and, therefore, have not been disclosed above.

#### (d) Compensation of key management personnel of the Group

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Short term employee benefits	短期僱員福利	3,686	2,924
Pension scheme contributions	退休金計劃供款	60	46
Equity-settled share option expense	以權益結算的購股權開支	299	698
Total compensation paid to key management personnel	支付予主要管理人員的酬金總額	4,045	3,668

Further details of directors' remuneration are included in note 8 to the financial statements.

### 33. 關聯方交易及結餘 (續)

#### (c) 與關聯方之間的未結清餘額 (續)

與關聯方之間的結餘為無抵押、不計息及根據附註20、21、23及24所披露的條款結算。除了分類為與投資活動相關的應付關聯方長期預付款項外，所有其他結餘均產生自經營活動。

\* 中國電子子公司於二零一八年十二月三十一日的未償還結餘並不構成關聯方的未償還結餘，因此並未於上文披露。

#### (d) 本集團主要管理人員的酬金

董事薪酬之進一步詳情載於財務報表附註8。

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## 財務報表附註

### 34. Financial instruments By Category

The carrying amounts of each of the categories of financial instruments as at the end of the reporting period are as follows:

#### *Financial assets – at amortised cost*

		<b>2018</b> 二零一八年 <b>(US\$'000)</b> (千美元)	2017 二零一七年 (US\$'000) (千美元)
Trade and notes receivables	貿易應收款項及應收票據	<b>176,797</b>	112,372
Financial assets included in prepayments, other receivables and other assets (note 21)	計入預付款項、其他應收款項及其他資產的金融資產(附註21)	<b>3,727</b>	5,447
Due from related parties	應收關聯方款項	<b>10,800</b>	46,988
Restricted and time deposits	已凍結及定期存款	<b>337</b>	193,530
Cash and cash equivalents	現金及現金等價物	<b>777,000</b>	374,890
		<b>968,661</b>	733,227

#### *Financial assets – at fair value through other comprehensive income without recycling to profit or loss*

		<b>2018</b> 二零一八年 <b>(US\$'000)</b> (千美元)
Equity investments designated at fair value through other comprehensive income	指定為按公平值計入其他全面收益的股本投資	<b>208,357</b>

#### *Financial assets – at fair value through profit or loss*

		<b>2018</b> 二零一八年 <b>(US\$'000)</b> (千美元)
Financial assets at fair value through profit or loss	按公平值計入損益的金融資產	<b>667,033</b>

### 34. 按類別劃分的金融工具

各類金融工具於報告期末的賬面值如下：

#### 金融資產 – 按攤銷成本

#### 金融資產 – 按公平值計入其他全面收益(不得重新計入損益)

#### 金融資產 – 按公平值計入損益



# NOTES TO FINANCIAL STATEMENTS

## 財務報表附註

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### 34. Financial instruments By Category (continued)

*Financial assets – available-for-sale financial assets*

		2017 二零一七年 (US\$'000) (千美元)
Available-for-sale investments	可供出售投資	215,864

*Financial liabilities – at amortised cost*

金融資產 – 可供出售金融資產

金融負債 – 按攤銷成本

		<b>2018</b> <b>二零一八年</b> <b>(US\$'000)</b> <b>(千美元)</b>	2017 二零一七年 (US\$'000) (千美元)
Trade payables	貿易應付款項	<b>79,470</b>	68,124
Financial liabilities included in other payables and accruals (note 24)	計入其他應付款項及暫估費用的金融負債(附註24)	<b>102,269</b>	76,547
Interest-bearing bank borrowings	計息銀行借款	<b>30,598</b>	92,890
Due to related parties	應付關聯方款項	<b>5,838</b>	10,885
		<b>218,175</b>	248,446

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## 財務報表附註

### 35. Fair Value and Fair Value Hierarchy of Financial Instruments

The carrying amounts and fair values of the Group's financial instruments, other than those with carrying amounts that reasonably approximate to fair values, are as follows:

### 35. 金融工具的公平值及公平值層級

本集團金融工具（不包括賬面值與公平值大致相若的金融工具）的賬面值及公平值載列如下：

		Carrying amounts 賬面值		Fair values 公平值	
		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)	2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
<b>Financial assets</b>	<b>金融資產</b>				
Equity investments designated at fair value through other comprehensive income	指定為按公平值計入其他全面收益的股本投資	208,357	–	208,357	–
Financial assets at fair value through profit or loss	按公平值計入損益的金融資產	667,033	–	667,033	–
		<b>875,390</b>	–	<b>875,390</b>	–
<b>Financial liabilities</b>	<b>金融負債</b>				
Interest-bearing bank borrowings	計息銀行借款	30,598	36,729	26,246	31,431

Management has assessed that the fair values of cash and cash equivalents, restricted and time deposits, trade and notes receivables, financial assets included in prepayments, other receivables and other assets, trade payables, financial liabilities included in other payables and accruals, amounts due from/to related parties and the current portion of interest-bearing bank borrowings approximate to their carrying amounts largely due to the short term maturities of these instruments.

The Group's finance department headed by the finance manager is responsible for determining the policies and procedures for the fair value measurement of financial instruments. The finance department reports directly to the chief financial officer. At each reporting date, the finance department analyses the movements in the values of financial instruments and determines the major inputs applied in the valuation. The valuation is reviewed and approved by the chief financial officer. The valuation process and results are discussed with the board of directors annually for annual financial reporting.

管理層已評估現金及現金等價物、已凍結及定期存款、貿易應收款項及應收票據、計入預付款項、其他應收款項及其他資產的金融資產、貿易應付款項、計入其他應付款項及暫估費用的金融負債、應收／應付關聯方款項、計息銀行借款的流動部份的公平值，彼等均與其賬面值相若，主要是由於該等工具均於短期內到期。

本集團旗下以財務經理為首的財務部負責釐定金融工具公平值計量的政策及程序。財務部直接向財務總監報告。於各報告日期，財務部分析金融工具的價值變動並釐定估值中適用的主要輸入數據。估值由財務總監審核及批准。估值過程及結果由董事會每年討論一次，以進行年度財務申報。

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## 財務報表附註

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### 35. Fair Value and Fair Value Hierarchy of Financial instruments (continued)

The fair values of the financial assets and liabilities are included at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale. The following methods and assumptions were used to estimate the fair values:

The fair values of equity investments designated at fair value through other comprehensive income have been estimated using the market approach. If there is a recent deal regarding the unlisted investments, the fair values are estimated based on the dealing price. If there is no such deal to be referenced, the directors will determine comparable public companies (peers) based on industry, size, leverage and strategy, and calculates an appropriate price multiple, such as price to book value ("P/B") multiple, for each comparable company identified. The multiple is calculated by dividing the enterprise value of the comparable company by net assets. The trading multiple is then discounted for considerations such as illiquidity based on company-specific facts and circumstances. The discounted multiple is applied to the corresponding net assets of the unlisted equity investments to measure the fair value. The directors believe that the estimated fair values resulting from the valuation technique, which are recorded in the consolidated statement of financial position, and the related changes in fair values, which are recorded in other comprehensive income, are reasonable, and that they were the most appropriate values at the end of the reporting period.

Financial assets at fair value through profit or loss represent wealth management products issued by banks in Mainland China. The Group has estimated their fair value by using a discounted cash flow valuation model based on the market interest rates of instruments with similar terms and risks.

The fair values of the non-current portion of interest-bearing bank borrowings have been calculated by discounting the expected future cash flows using rates currently available for instruments with similar terms, credit risk and remaining maturities. The Group's own non-performance risk for interest-bearing bank borrowings as at 31 December 2018 was assessed to be insignificant. Management has assessed that the fair value of the non-current interest-bearing bank borrowings of the Group approximates to their fair value due to their floating interest rates, except for the loans disclosed above.

### 35. 金融工具的公平值及公平值層級 (續)

金融資產及負債的公平值是按當前與自願方交易（而非被迫或清盤出售）中可交換有關工具的金額列賬。估計公平值乃使用以下的方法及假設：

指定為按公平值計入其他全面收益的股本投資之公平值採用市場法估算。倘最近成交交易有關未上市投資，公平值乃基於交易價估算。倘並無該等交易可供參考，董事將根據行業、規模、影響力及策略釐定可比較上市公司（同行），且就已確定的各可資比較公司計算適當的價格倍數，如市賬率（「市賬率」）倍數。該倍數乃按可資比較公司之企業價值除以淨資產所得。交易倍數隨後根據公司特定情況及狀況就非流動性等因素予以貼現。貼現倍數適用於非上市股本投資的相應淨資產以計量公平值。董事認為，計入綜合財務狀況表的估值技術所產生的估計公平值以及計入其他全面收益的公平值相關變動屬合理，而於報告期末的價值最為恰當。

按公平值計入損益的金融資產指由中國內地銀行發行的理財產品。本集團根據具類似年期及風險的工具的市場利率，採用貼現現金流量估值模型估算其公平值。

計息銀行借款的非流動部份的公平值乃透過採用具有類似年期、信用風險及剩餘到期期限的工具的現有利率貼現預期未來現金流量而計算。本集團評估後認為，於二零一八年十二月三十一日其自身的計息銀行借款不履約風險並不重大。由於按浮動利率計，管理層評估後認為本集團的非流動計息銀行借款的公平值與賬面值相若，惟上述貸款除外。

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## 財務報表附註

### 35. Fair Value and Fair Value Hierarchy of Financial instruments (continued)

#### Fair value hierarchy

The following tables illustrate the fair value measurement hierarchy of the Group's financial instruments:

*Financial assets measured at fair value*  
**31 December 2018**

		Fair value measurement categorised into 分類為以下層級之公平值計量			
		Level 1 第1級 (US\$'000) (千美元)	Level 2 第2級 (US\$'000) (千美元)	Level 3 第3級 (US\$'000) (千美元)	Total 總計 (US\$'000) (千美元)
Equity investments designated at fair value through other comprehensive income	指定為按公平值計入其他全面收益的股本投資	–	2,384	205,973	208,357
Financial assets at fair value through profit or loss	按公平值計入損益的金融資產	–	–	667,033	667,033
		–	2,384	873,006	875,390

During the year, there were no transfers of fair value measurements between Level 1 and Level 2 and no transfers into or out of Level 3 for the financial assets above.

The recurring fair value measurement for the Group's financial assets at fair value through profit or loss was performed using significant unobservable inputs (Level 3) as at 31 December 2018. Below is a summary of the valuation techniques used and the key input to the valuation:

### 35. 金融工具的公平值及公平值層級 (續)

#### 公平值層級

下表顯示本集團金融工具的公平值計量層級：

*按公平值計量的金融資產*  
二零一八年十二月三十一日

於年內，上述金融資產第1級與第2級公平值計量之間並無轉移，第3級亦並無轉入或轉出。

本集團按公平值計入損益的金融資產的週期公平值計量乃使用二零一八年十二月三十一日的重大不可觀察輸入數據(第3級)作出。下文為估值所用估值技術及主要輸入數據概要：

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## 財務報表附註

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### 35. Fair Value and Fair Value Hierarchy of Financial instruments (continued)

### 35. 金融工具的公平值及公平值層級 (續)

#### Fair value hierarchy (continued)

#### 公平值層級 (續)

		Valuation technique	Significant unobservable input	Range	Sensitivity of fair value to the input
		估值技術	重大不可觀察輸入數據	範圍	公平值對輸入數據之敏感度
Equity investments designated at fair value through other comprehensive income	指定為按公平值計入其他全面收益的股本投資	Valuation multiples	Average P/B multiple of peers	0.6x-3.7x	5% increase/decrease would result in increase/decrease in fair value by 5%
		估值倍數	同業平均市賬率	0.6x-3.7x	5%的增加/減少將導致公平值增加/減少5%
			Discount for illiquidity	20%-30%	5% increase/decrease would result in decrease/increase in fair value by 5%
			缺乏流通性的折讓價	20%-30%	5%的增加/減少將導致公平值減少/增加5%
Financial assets at fair value through profit or loss	按公平值計入損益的金融資產	Discounted cash flow method	Discount rate per annum	4.10-4.30%	5% increase/decrease would result in decrease/increase in fair value by 0.02%
		貼現現金流量法	年貼現率	4.10-4.30%	5%的增加/減少將導致公平值減少/增加0.02%

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## 財務報表附註

### 35. Fair Value and Fair Value Hierarchy of Financial instruments (continued)

#### Fair value hierarchy (continued)

The movements in financial assets categorised into Level 3 during the year are as follows:

### 35. 金融工具的公平值及公平值層級 (續)

#### 公平值層級 (續)

年內分類為第3級的金融資產變動如下：

		<b>Equity investments designated at fair value through other comprehensive income</b> 指定為按公平值計入其他全面收入的股本投資 <b>(US\$'000)</b> (千美元)	<b>Financial assets at fair value through profit or loss</b> 按公平值計入損益的金融資產 <b>(US\$'000)</b> (千美元)
As at 1 January 2017, 31 December 2017 and 1 January 2018 as previously reported	於二零一七年一月一日、二零一七年十二月三十一日及二零一八年一月一日過往申報	-	-
Effect of adoption of HKFRS 9	採用香港財務報告準則第9號的影響	215,487	-
At 1 January 2018 (restated)	於二零一八年一月一日(經重列)	215,487	-
Purchases	購買	-	1,959,653
Disposals	處置	-	(1,279,352)
Total gains recognised in the statement of profit or loss included in other income and gains	於損益表確認計入其他收入及收益的收益總額	-	15,612
Total gains recognised in other comprehensive income	於其他全面收益確認的收益總額	864	-
Exchange realignment	匯兌調整	(10,378)	(28,880)
As at 31 December 2018	於二零一八年十二月三十一日	205,973	667,033

# NOTES TO FINANCIAL STATEMENTS

## 財務報表附註

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### 36. Financial Risk Management Objectives and Policies

The Group's principal financial instruments comprise bank loans, cash and short term deposits. The main purpose of these financial instruments is to raise finance for the Group's operations. The Group has various other financial assets and liabilities, such as trade and other receivables and trade and other payables, which arise directly from its operations.

The main risks arising from the Group's financial instruments are foreign currency risk, credit risk and liquidity risk. The board of directors reviews and agrees policies for managing each of these risks and they are summarised below.

### 36. 財務風險管理目標及政策

本集團的主要金融工具包括銀行貸款、現金及短期存款。該等金融工具的主要用途乃為本集團的營運籌措資金。本集團有多種直接自其營運產生的其他金融資產及負債，如貿易及其他應收款項以及貿易及其他應付款項。

本集團金融工具所產生的主要風險為外幣風險、信用風險及流動資金風險。董事會檢討及協定管理各類該等風險的政策，有關政策概述於下文。

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## 財務報表附註

### 36. Financial Risk Management Objectives and Policies (continued)

#### Foreign currency risk

The Group has transactional currency exposures. These exposures arise from sales or purchases by its significant subsidiary operating in Mainland China in US\$ other than the subsidiary's functional currency, which is RMB. During the year, approximately 43% (2017: 55%) of the Group's sales were denominated in currencies other than the functional currency of the subsidiary making the sale, whilst 59% (2017: 61%) of costs of sales were denominated in the subsidiary's functional currency.

The following table demonstrates the sensitivity at the end of the reporting period to a reasonably possible change in the RMB exchange rate, with all other variables held constant, of the Group's profit before tax (due to changes in the fair value of monetary assets and liabilities):

### 36. 財務風險管理目標及政策 (續)

#### 外幣風險

本集團面臨交易外匯風險。該等風險產生自其在中國內地經營的重要子公司以美元進行的買賣，而並非以其功能貨幣人民幣進行。於年內，本集團的銷售額中約43% (二零一七年：55%) 乃以進行銷售的子公司的功能貨幣以外的貨幣計值，與此同時，銷售成本中59% (二零一七年：61%) 乃以子公司的功能貨幣計值。

下表顯示在所有其他變量維持不變的情況下，於報告期末本集團稅前溢利 (由於貨幣資產及負債公平值變動) 對人民幣匯率的合理可能變動的敏感度：

		Increase/ (decrease) in US\$ rate 美元匯率 增加/(減少)	Increase/ (decrease) in profit before tax 稅前溢利 增加/(減少) (US\$'000) (千美元)
Year ended 31 December 2018	截至二零一八年十二月三十一日 止年度		
If US\$ weakens against RMB	倘美元兌人民幣貶值	5%	(26,809)
If US\$ strengthens against RMB	倘美元兌人民幣升值	(5%)	26,809
Year ended 31 December 2017	截至二零一七年十二月三十一日 止年度		
If US\$ weakens against RMB	倘美元兌人民幣貶值	5%	(11,469)
If US\$ strengthens against RMB	倘美元兌人民幣升值	(5%)	11,469



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## 財務報表附註

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### 36. Financial Risk Management Objectives and Policies (continued)

#### Credit risk

Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Group is exposed to credit risk from its operating activities (primarily trade receivables).

The Group trades only with recognised and creditworthy third parties and related parties. It is the Group's policy that all customers who wish to trade on credit terms are subject to credit verification procedures. In addition, receivable balances are monitored on an ongoing basis and the Group's exposure to bad debts is not significant.

The carrying amounts of cash and cash equivalents, trade and notes receivables, financial assets included in prepayments, other receivables and other assets, amounts due from related parties and restricted and time deposits included in the consolidated statement of financial position represent the Group's maximum exposure to credit risk in relation to its financial assets. The Group has no other financial assets which carry significant exposure to credit risk.

Further qualitative and quantitative information regarding trade receivables, which applying the simplified approach under HKFRS 9 applicable from 1 January 2018, is disclosed in note 20 to the financial statements.

All the carrying amounts of financial assets at amortised cost, applying the general approach under HKFRS 9 applicable from 1 January 2018, are classified in Stage 1 in terms of ECLs as at 31 December 2018 in addition to the fully impaired other receivables classified in Stage 3 as stated in note 21 to the financial statements

### 36. 財務風險管理目標及政策 (續)

#### 信用風險

信用風險指對手方無法履行金融工具或客戶合約項下責任而引致金融損失之風險。本集團面臨來自其經營活動（主要為貿易應收款項）的信用風險。

本集團僅與獲認可及信譽良好的第三方及關聯方交易。本集團的政策規定，所有擬按信用方式交易的客戶均須通過信用核實程序。此外，由於持續對應收款項結餘進行監控，故本集團的壞賬風險並不重大。

綜合財務狀況表內現金及現金等價物、貿易應收款項及應收票據及計入預付款項、其他應收款項及其他資產的金融資產、應收關聯方款項以及已凍結及定期存款的賬面值為本集團就其金融資產所面臨的最大信用風險。本集團並無其他存在重大信用風險的金融資產。

有關貿易應收款項的進一步定性及定量資料（其根據自二零一八年一月一日起適用的香港財務報告準則第9號採用簡化方法）於財務報表附註20內披露。

除財務報表附註21內所載分類為第三階段的全數已減值的其他應收款項，所有按攤銷成本計量的金融資產的賬面值（根據自二零一八年一月一日起適用的香港財務報告準則第9號採用一般方法）就二零一八年十二月三十一日的預期信貸虧損分類為第一階段。

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## 財務報表附註

### 36. Financial Risk Management Objectives and Policies (continued)

#### Liquidity risk

The Group's policy is to monitor regularly the current and expected liquidity requirements to ensure that it maintains sufficient reserves of cash and adequate committed lines of funding from major financial institutions to meet its liquidity requirements in the short and long term.

The maturity profile of the Group's financial liabilities as at the end of the reporting period, based on the contractual undiscounted payments, is as follows:

### 36. 財務風險管理目標及政策 (續)

#### 流動資金風險

本集團的政策為定期監控現時及預期流動資金需要，以確保維持充裕的現金儲備及從主要金融機構獲得足夠的融資承擔額度，以應對其短期及長期流動資金需要。

於報告期末，本集團金融負債根據合約未貼現付款的到期情況如下：

		On demand	Less than 3 months	3 to 12 months	1 to 5 years	Over 5 years	Total
		按要求	少於三個月	十二個月	一至五年	五年以上	總計
		(US\$'000)	(US\$'000)	(US\$'000)	(US\$'000)	(US\$'000)	(US\$'000)
		(千美元)	(千美元)	(千美元)	(千美元)	(千美元)	(千美元)
<b>31 December 2018</b>							
二零一八年十二月三十一日							
Interest-bearing bank borrowings	計息銀行借款	–	–	4,725	18,376	8,873	31,974
Trade payables	貿易應付款項	15,053	64,417	–	–	–	79,470
Financial liabilities included in other payables and accruals	計入其他應付款項及暫估費用的金融負債	102,269	–	–	–	–	102,269
Amounts due to related parties	應付關聯方款項	5,838	–	–	–	–	5,838
		<b>123,160</b>	<b>64,417</b>	<b>4,725</b>	<b>18,376</b>	<b>8,873</b>	<b>219,551</b>
<b>31 December 2017</b>							
二零一七年十二月三十一日							
Interest-bearing bank borrowings	計息銀行借款	–	491	62,437	19,522	14,063	96,513
Trade payables	貿易應付款項	13,001	55,123	–	–	–	68,124
Financial liabilities included in other payables and accruals	計入其他應付款項及暫估費用的金融負債	76,547	–	–	–	–	76,547
Amounts due to related parties	應付關聯方款項	10,885	–	–	–	–	10,885
		<b>100,433</b>	<b>55,614</b>	<b>62,437</b>	<b>19,522</b>	<b>14,063</b>	<b>252,069</b>

# NOTES TO FINANCIAL STATEMENTS

## 財務報表附註

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### 36. Financial Risk Management Objectives and Policies (continued)

#### Capital management

The primary objectives of the Group's capital management are to safeguard the Group's ability to continue as a going concern and to maintain healthy capital ratios to support its business and maximise shareholders' value.

The Group manages its capital structure and makes adjustments to in light of changes in economic conditions. To maintain or adjust the capital structure, the Group may adjust the dividend payment to shareholders, return capital to shareholders or issue new shares. The Group is not subject to any externally imposed capital requirements. No changes were made in the objectives, policies or processes for managing capital during the year.

The Group monitors capital using a gearing ratio, which is net debt divided by total equity plus net debt. The Group includes, within net debt, trade payables, other payables and accruals, interest-bearing bank borrowings and amounts due to related parties, less cash and cash equivalents. The gearing ratios as at the end of each of the reporting periods were as follows:

### 36. 財務風險管理目標及政策 (續)

#### 資本管理

本集團資本管理的首要目標為，維護本集團的持續經營能力及維持良好的資本比率，以支持其業務及實現股東價值最大化。

本集團根據經濟狀況的變動管理及調整其資本架構。為維持或調整資本架構，本集團或會調整派付予股東的股息、向股東返還資本或發行新股。本集團不受任何外部施加的資本要求規限。於年內，本集團管理資本的目標、政策或程序概無任何變動。

本集團以資產負債比率監控資本，資產負債比率按淨負債除以權益總額加淨負債計算。本集團將貿易應付款項、其他應付款項及暫估費用、計息銀行借款、應付關聯方款項扣除現金及現金等價物計入淨負債。各報告期末的資產負債比率如下：

		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)
Trade payables	貿易應付款項	79,470	68,124
Other payables and accruals (note 24)	其他應付款項及暫估費用(附註24)	138,109	108,564
Interest-bearing bank borrowings	計息銀行借款	30,598	92,890
Amounts due to related parties	應付關聯方款項	5,838	10,885
Less: Cash and cash equivalents	減：現金及現金等價物	(777,000)	(374,890)
Net debt	淨負債	(522,985)	(94,427)
Total equity	權益總額	2,704,332	1,695,205
Capital and net debt	資本及淨負債	2,181,347	1,600,778
Gearing ratio	資產負債比率	(23.98%)	(5.90%)

# NOTES TO FINANCIAL STATEMENTS

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## 財務報表附註

### 37. Notes to the Consolidated Statement of Cash Flows

Changes in liabilities arising from financing activities are as follows:

### 37. 綜合現金流量表附註

融資活動所產生的負債變動如下：

		<b>Interest-bearing bank borrowings</b>	<b>Interest payable included in other payables</b>	<b>Dividend payable included in other payables</b>
		計息 銀行借款 (US\$'000) (千美元)	計入其他 應付款項 的應付利息 (US\$'000) (千美元)	計入其他 應付款項 的應付股息 (US\$'000) (千美元)
As at 1 January 2017	於二零一七年一月一日	92,631	55	8
Changes from financing cash flows	融資現金流量變動	(1,990)	(2,167)	(39,693)
Interest expense	利息開支	-	2,178	-
Final 2016 dividend payable	應付二零一六年末期股息	-	-	39,806
Foreign exchange movement	外匯變動	2,249	-	(108)
As at 31 December 2017 and 1 January 2018	於二零一七年十二月三十一日 及二零一八年一月一日	92,890	66	13
Changes from financing cash flows	融資現金流量變動	(60,613)	(2,259)	(41,066)
Interest expense	利息開支	-	2,203	-
Final 2017 dividend payable	應付二零一七年末期股息	-	-	41,095
Foreign exchange movement	外匯變動	(1,679)	-	(20)
As at 31 December 2018	於二零一八年十二月三十一日	30,598	10	22

# NOTES TO FINANCIAL STATEMENTS

## 財務報表附註

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### 38. Partly-Owned Subsidiary With Material Non-Controlling interests

Details of the Group's subsidiary that has material non-controlling interests are set out below:

		2018 二零一八年
Percentage of interest held by non-controlling interests	非控股權益持有權益比率	
HH-Wuxi	華虹無錫	43.5%

Pursuant to the Investment Agreement, capital injection to HH-Wuxi has been scheduled into four instalments. As at 31 December 2018, the proportion of injected capital attributable to the non-controlling shareholders was 43.5%. With the completion of the last instalment of capital injection to HH-Wuxi scheduled in the first quarter of 2019, the proportion will increase to 49%.

The board of directors is the supreme governing body for HH-Wuxi, in which non-controlling shareholders hold three seats out of seven. Therefore, the proportion of voting rights is different from that of the ownership interest above and remains constant regardless of the instalment of capital injection.

### 38. 有重大非控股權益之非全資附屬公司

本集團具有重大非控股權益之非全資附屬公司之詳情如下：

根據投資協議，向華虹無錫注資以四次分期進行。於二零一八年十二月三十一日，非控股股東應佔注資比例為43.5%。於二零一九年第一季度最後一次向華虹無錫注資完成後，注資比例將增至49%。

董事會為華虹無錫的最高管理機構，由七名董事組成，其中三名董事為非控股股東。因此，投票權比例不同於上述所有權權益比例，且無論注資是否分期，投票權的比例均保持不變。

		2018 二零一八年 (US\$'000) (千美元)
Profit for the year allocated to non-controlling interests: HH-Wuxi	分配至非控股權益之年內溢利： 華虹無錫	2,450
Accumulated balances of non-controlling interests at the reporting date	於報告日期非控股權益累計結餘	
HH-Wuxi	華虹無錫	549,076

# NOTES TO FINANCIAL STATEMENTS

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## 財務報表附註

### 38. Partly-Owned Subsidiary With Material Non-Controlling interests (continued)

The following tables illustrate the summarised financial information of the above subsidiary. The amounts disclosed are before any inter-company eliminations:

		HH – Wuxi 華虹無錫 2018 二零一八年 (US\$'000) (千美元)
Other income	其他收入	16,328
Total expenses	開支總額	(13,315)
Profit for the year	年內溢利	3,013
Total comprehensive income for the year	年內全面收益總額	3,013
Current assets	流動資產	1,163,234
Non-current assets	非流動資產	146,210
Current liabilities	流動負債	(47,201)
Net cash flows used in operating activities	經營活動所用現金流量淨額	(2,935)
Net cash flows used in investing activities	投資活動所用現金流量淨額	(795,227)
Net cash flows from financing activities	融資活動所得現金流量淨額	1,300,000
Effect of foreign exchange rate changes, net	外匯匯率變動影響，淨額	(12,115)
Net increase in cash and cash equivalents	現金及現金等價物增加淨額	489,723

### 38. 有重大非控股權益之非全資附屬公司 (續)

下表概述附屬公司的財務資料，所披露之金額為任何公司間抵銷前之金額：

### 39. Event After the Reporting Period

On 28 March 2019, the directors proposed a final dividend of HK\$31 cents per ordinary share totalling approximately US\$50,741,000 for the year ended 31 December 2018, which is subject to the approval of the Company's shareholders at the forthcoming annual general meeting (note 11).

### 39. 報告期後事項

於二零一九年三月二十八日，本公司董事建議派付截至二零一八年十二月三十一日止年度的末期股息每股普通股31港仙，總計為約50,741,000美元，惟須待本公司股東於應屆股東週年大會上批准後方可作實（附註11）。

# NOTES TO FINANCIAL STATEMENTS

## 財務報表附註

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### 40. Statement of Financial Position of the Company

Information about the statement of financial position of the Company at the end of the reporting period is as follows:

### 40. 本公司的財務狀況表

有關本公司報告期末的財務狀況表資料載列如下：

		<b>31 December 2018 二零一八年 十二月三十一日 (US\$'000) (千美元)</b>	31 December 2017 二零一七年 十二月三十一日 (US\$'000) (千美元)
<b>NON-CURRENT ASSETS</b>	<b>非流動資產</b>		
Investments in subsidiaries	投資於子公司	<b>1,959,862</b>	1,558,563
Total non-current assets	非流動資產總額	<b>1,959,862</b>	1,558,563
<b>CURRENT ASSETS</b>	<b>流動資產</b>		
Trade and notes receivables	貿易應收款項及應收票據	<b>6,666</b>	4,262
Prepayments, other receivables and other assets	預付款項、其他應收款項及其他資產	<b>107</b>	548
Due from a subsidiary	應收子公司款項	<b>998</b>	997
Restricted and time deposits	已凍結及定期存款	<b>22</b>	7,146
Cash and cash equivalents	現金及現金等價物	<b>19,792</b>	9,508
Total current assets	流動資產總額	<b>27,585</b>	22,461
<b>CURRENT LIABILITIES</b>	<b>流動負債</b>		
Other payables and accruals	其他應付款項及暫估費用	<b>1,250</b>	431
Due to subsidiaries	應付子公司款項	<b>95,010</b>	90,327
Total current liabilities	流動負債總額	<b>96,260</b>	90,758
<b>NET CURRENT LIABILITIES</b>	<b>流動負債淨額</b>	<b>68,675</b>	68,297
<b>TOTAL ASSETS LESS CURRENT LIABILITIES</b>	<b>資產總值減流動負債</b>	<b>1,891,187</b>	1,490,266
<b>Net assets</b>	<b>淨資產</b>	<b>1,891,187</b>	1,490,266
<b>EQUITY</b>	<b>權益</b>		
Share capital	股本	<b>1,960,159</b>	1,554,870
Reserves (note)	儲備(附註)	<b>(68,972)</b>	(64,604)
<b>Total equity</b>	<b>權益總額</b>	<b>1,891,187</b>	1,490,266

**Suxin Zhang**  
張素心  
Director  
董事

**Jun Ye**  
葉峻  
Director  
董事

# NOTES TO FINANCIAL STATEMENTS

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## 財務報表附註

### 40. Statement of Financial Position of the Company (continued)

Note:

A summary of the Company's reserves is as follows:

		Other reserve 其他儲備 (US\$'000) (千美元)	Share option reserve 購股權儲備 (US\$'000) (千美元)	Accumulated losses 累計虧損 (US\$'000) (千美元)	Total 總計 (US\$'000) (千美元)
As at 1 January 2017	於二零一七年一月一日	(68,260)	5,203	(5,772)	(68,829)
Profit for the year	年內溢利	-	-	42,151	42,151
Final 2016 dividend declared	最終宣派二零一六年股息	-	-	(39,806)	(39,806)
Equity-settled share option arrangements	以權益結算的購股權安排	-	3,312	-	3,312
Issue of shares	發行股份	-	(1,432)	-	(1,432)
At 31 December 2017 and 1 January 2018	於二零一七年十二月三十一日及二零一八年一月一日	(68,260)	7,083	(3,427)	(64,604)
Profit for the year	年內溢利	-	-	37,203	37,203
Final 2017 dividend declared	最終宣派二零一七年股息	-	-	(41,095)	(41,095)
Equity-settled share option arrangements	以權益結算的購股權安排	-	1,298	-	1,298
Issue of shares	發行股份	-	(1,774)	-	(1,774)
As at 31 December 2018	於二零一八年十二月三十一日	(68,260)	6,607	(7,319)	(68,972)

### 40. 本公司的財務狀況表 (續)

附註：

本公司的儲備概述如下：

### 41. Approval of the Financial Statements

The financial statements were approved and authorised for issue by the board of directors on 28 March 2019.

### 41. 財務報表的批准

財務報表已於二零一九年三月二十八日獲董事會批准及授權刊發。



# FIVE YEAR FINANCIAL SUMMARY

## 五年財務概覽

A summary of the results and of the assets, liabilities and non-controlling interests of the Group for the last five financial years, as extracted from the published audited financial statements, is set out below.

下文載列本集團於最近五個財政年度的業績以及資產、負債及非控股權益的概要，有關資料乃摘錄自己刊發經審核財務報表。

		Year ended 31 December 截至十二月三十一日止年度				
		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)	2016 二零一六年 (US\$'000) (千美元)	2015 二零一五年 (US\$'000) (千美元)	2014 二零一四年 (US\$'000) (千美元)
<b>RESULTS</b>	<b>業績</b>					
<b>REVENUE</b>	<b>銷售收入</b>	<b>930,268</b>	808,148	721,428	650,131	664,586
Cost of sales	銷售成本	<b>(619,114)</b>	(540,971)	(501,080)	(448,705)	(466,815)
Gross profit	毛利	<b>311,154</b>	267,177	220,348	201,426	197,771
Other income and gains	其他收入及收益	<b>43,613</b>	24,394	34,761	42,717	23,886
Fair value gain on an investment property	投資物業的公平值收益	<b>247</b>	89	72	58	1,127
Selling and distribution expenses	銷售及分銷費用	<b>(7,771)</b>	(7,232)	(6,814)	(7,292)	(7,206)
Administrative expenses	管理費用	<b>(122,323)</b>	(108,673)	(97,404)	(104,855)	(85,053)
Other expenses	其他費用	<b>(11,106)</b>	(10,712)	(666)	(9)	(2,433)
Finance costs	財務費用	<b>(2,203)</b>	(2,178)	(3,873)	(7,754)	(12,136)
Share of profits of an associate	分佔一家聯營公司溢利	<b>9,444</b>	9,622	7,056	961	4,856
<b>PROFIT BEFORE TAX</b>	<b>稅前溢利</b>	<b>221,055</b>	172,487	153,480	125,252	120,812
Income tax expense	所得稅開支	<b>(35,447)</b>	(27,225)	(24,648)	(12,703)	(27,722)
<b>PROFIT FOR THE YEAR</b>	<b>年內溢利</b>	<b>185,608</b>	145,262	128,832	112,549	93,090
Attributable to:	以下各項應佔：					
Owners of the parent	母公司擁有人	<b>183,158</b>	145,262	128,832	112,549	93,090
Non-controlling interests	非控股權益	<b>2,450</b>	-	-	-	-
		<b>185,608</b>	145,262	128,832	112,549	93,090
		As at 31 December 截至十二月三十一日				
		2018 二零一八年 (US\$'000) (千美元)	2017 二零一七年 (US\$'000) (千美元)	2016 二零一六年 (US\$'000) (千美元)	2015 二零一五年 (US\$'000) (千美元)	2014 二零一四年 (US\$'000) (千美元)
Total assets	資產總值	<b>3,078,274</b>	2,078,306	1,826,664	1,911,733	1,990,069
Total liabilities	負債總額	<b>(373,942)</b>	(383,101)	(337,978)	(421,043)	(524,590)
Non-controlling interests	非控股權益	<b>(549,076)</b>	-	-	-	-
		<b>2,155,256</b>	1,695,205	1,488,686	1,490,690	1,465,479

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