

**GUC**  
Global Unichip Corporation



2018  
ANNUAL  
REPORT

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## V. Company Website

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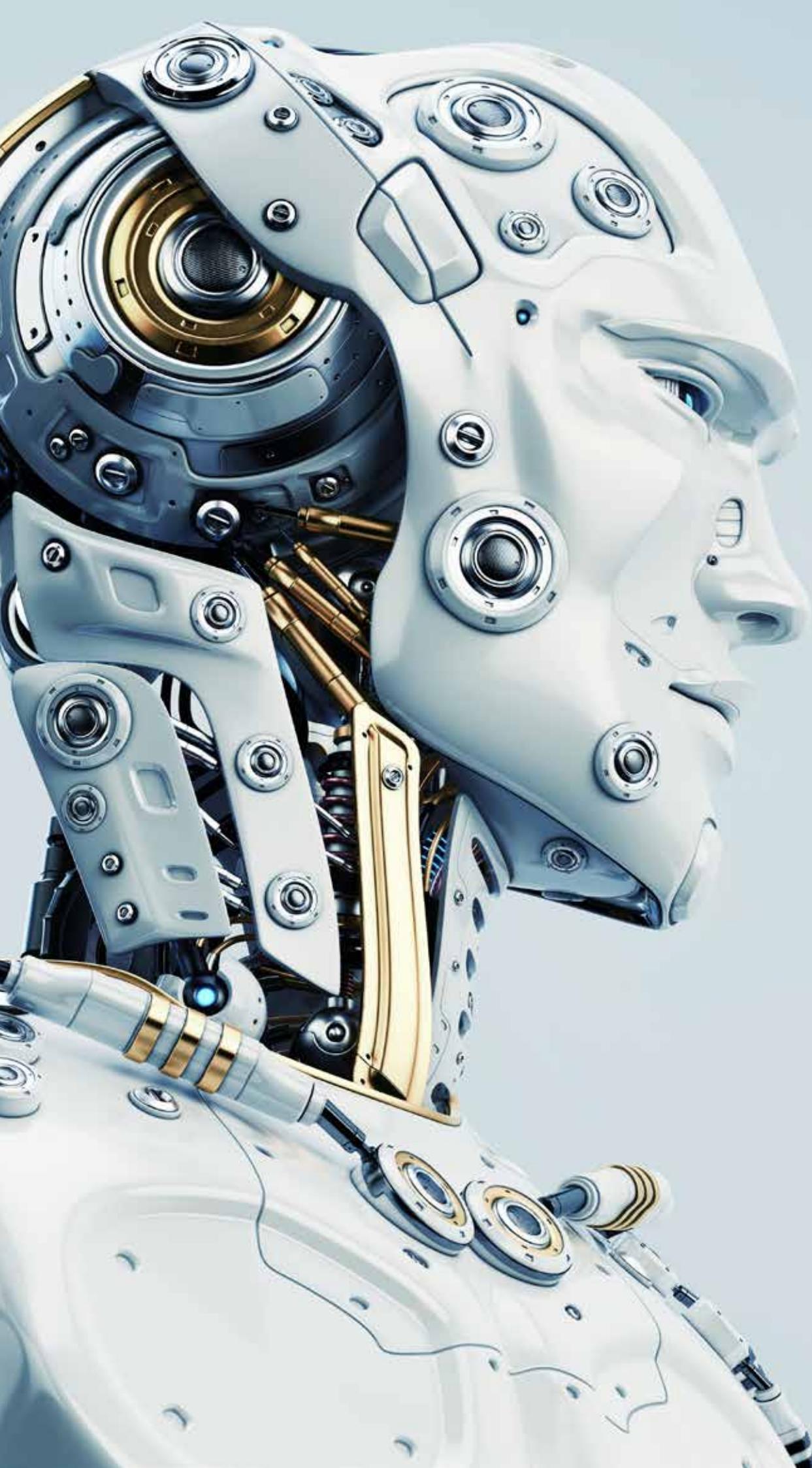
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# 1

## Chapter 1

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## Letter to Shareholders



# Letter to Shareholders

Dear Shareholders,

In 2018, GUC celebrated its 20th corporate anniversary which is the symbol of milestones and successes and continued its profitable growth path with a record year, driven by surging demand of ASIC development from system companies.

Since GUC was established 20 years ago, we have been striving to become the leader of ASIC design services. Not only focus on key IPs development 、 projects of Spec-in, N7/N7+, N5 and advanced packaging technology, GUC is continuously investing in the most advanced process nodes partnering with our important partners and customers. In terms of business results, revenue and profit continued to grow for five consecutive years since 2014. And our accomplishment on leading technology is obvious. In 2018, 7nm revenue increased sharply and revenue contribution rapidly improved to 19%.

GUC's main achievements in 2018 are:

- Revenue and profit continued to create a new record high.
- GUC was awarded “the Top 5% companies” For four consecutive years in the Information Disclosure Assessment and Evaluation of Listed Companies by Taiwan Stock Exchange and GreTai Securities Market.
- GUC was awarded “Sustainable Excellence Award” by BSI.

## 2018 Business Overview

Driven by the growth of demand from Drone 、 Game Console 、 BMC 、 SSD, and also benefited from AI 、 Machine Learning 、 HPC and 5G, GUC achieved a new record of highest revenue and enjoyed double-digit growth in 2018. With close alliance with important partners, complete IC manufacturing process management capability and key IPs development, core competitiveness of GUC was enhanced effectively.

In 2018, NRE revenue enjoyed a pickup in growth which mainly benefited from AI 、 cryptocurrency and HPC, and Turnkey revenue was nearly flat affected by the global trade war. In general, GUC's performance in 2018 is still satisfying, while revenue and profitability kept growing and continued to create a new record high despite the trade war.

## 2018 Financial Performance

Total revenues for 2018 was NT\$13,460 million, up by 10.7% compared to NT\$12,160 million in 2017. Net income was NT\$988 million, up by 15.6% compared to the previous year. 2018 EPS was NT\$7.37, up by 15.6% compared to 2017 EPS of NT\$6.38. Gross margin for 2018 was 30%, operating margin was 8.1%, and net profit margin was 7.3%.

## 2018 Technological Development

In order to maintain our technology leading position, GUC continued investment in research and development; hence R&D expense increased 40% in 2018 compared to the previous year. Design capability for the most advanced process nodes is the key factor in ensuring revenue and profit growth for ASIC design service companies. GUC is the first one to provide 7nm design and production service and we completed a number of 7nm projects in 2018. About 31% revenue of GUC is for 7nm & 16/12nm process nodes in 2018. In addition, our patent portfolio consists of 279 patents at the end of 2018 to demonstrate GUC's continued ability to innovate.

GUC's remarkable technology breakthrough and innovative achievement in 2018 are as follows:

- GUC 5nm design flow has been successfully developed and 1st GUC 5nm testchip was taped out in Mar'19.
- GUC 7nm design flow has been successfully developed and some customer designs have been taped out smoothly.
- The total solution of 7nm HBM2–2.4G PHY+Controller/TSMC CoWoS Packaging has been in silicon–proven and some customer designs were taped out in early 2019.
- GUC 7nm TCAM with 2 options (LVT 1.5GHz and ULVT 1.9GHz) has been in silicon–proven.
- GUC 12nm LPDDR4/4x PHY and ONFi 4.0 IPs have

been in silicon–proven and some customers' designs have been taped out smoothly.

- GUC 12nm 28G SerDes has been in silicon–proven.
- GUC has got the SAS–3/4 certification thru 12nm/16nm EMS–PHY IP.
- The total solution of 16nm HBM2–2.4G PHY+Controller/TSMC CoWoS Packaging has been in silicon–proven and 1st leading customer has been taped out.
- GUC 28nm 2.4G high speed ADC has been in silicon–proven, which is a key technique in 5G wireless communication technology.
- GUC has passed the PCI–SIG PCIe–4 Compliance Test thru 28HPC+ PCIe4 PHY IP with PLDA EP Controller.

## 2019 Outlook

2019 will be a year full of challenges and opportunities for GUC, because economic growth around the world may slow down due to trade war between China and the U.S. But even under uncertainty, interest and activities for semiconductors have increased in some markets, including 5G, IoT, AI, Cloud, Smart Home and Automotive and demand for AI applications starts showing significant growth, which also become the focus of system companies and is expected to derive considerable business opportunities for ASIC design services. To grab this opportunity of growth, GUC will actively enhance our technology and professional design ability and continue to expand our market share in ASIC design services.

### Expected Sales

Benefit from the system customers who want to differentiate from competitors, global ASIC design demand keeps increasing, especially when both cost of design on advanced process nodes and time to market are taken into consideration, so it is expected that more system customers will rely on design service companies and GUC will benefit from this trend to win more ASIC projects.

### Production and Marketing Policy

Looking into 2019, GUC will choose projects with a more cautious attitude to improve hit rate and increase profitability. At the same time, we will continue to implement core competition strategies, actively improve the quality of design service, and engage in more front-end system design service projects to enhance stickiness of current customers and secure long-term profitability.

In addition, GUC will keep investment in key IPs for advanced technology, to strengthen competitiveness by those IPs' development and production experience we had. And GUC will diversify our products to reduce impacts on revenue and profit from single customer and economic recession, to continuously increase market share.

### The Impact of External Competitiveness, Regulatory, Environment, and Macroeconomics

In addition to focusing on technology development, GUC values corporate governance and has always sought to fulfill our corporate social responsibility. Not only independently but also through close cooperation with our upstream and downstream suppliers. GUC was also awarded "the Top 5% companies" in the Information Disclosure Assessment and Evaluation of Listed Companies by Taiwan Stock Exchange for 4 consecutive years, and is the only IC design company to have earned this honor. At the same, GUC was awarded "Sustainable Excellence Award" by BSI, in recognition of GUC's outstanding performance in implementing environmental sustainability and corporate social responsibility. Furthermore, GUC has compiled a Corporate Social Responsibility (CSR) report every year since 2011, specifically exposing how we can effectively improve our information transparency in response to important issues such as economic, environmental, social, and corporate governance that stakeholders are concerned about.

Looking into the future, economic uncertainty resulted from China-US trade war and new challenge from tier-one fabless in ASIC market are challenges that GUC must pay attention to. GUC will continue to invest resources and development on key IPs, and collaborate with world-class partners and customers to enable advanced technology development in response to the harsh market environment and competition in the future.

Finally, thank once again with sincerity for all shareholders、customers、vendors、employees and the society for your continuing support. Please continue to work with us to create value for our customers, shareholders, employees and society. We wish you all the best of health and prosperity in the year ahead.

Global Unichip Corporation

F. C. Tseng  
Chairman

Ken Chen  
President

Handwritten signatures of F.C. Tseng and Ken Chen. The signature of F.C. Tseng is in blue ink, and the signature of Ken Chen is in black ink.



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Chapter 2

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## Company Profile



# Company Profile

## Company Overview

GUC is the Flexible ASIC Leader™ whose customers target IC devices to leading edge computing, communications and consumer applications. Based in Hsin-chu, GUC has developed a global reputation with a presence in China, Europe, Japan, Korea, and North America. GUC is publicly traded on the Taiwan Stock Exchange under the symbol 3443.

1. Date of establishment: January 22, 1998

2. Corporate history

Jan. 1998	The Company was founded under the company name Chuangyi Electronics Corporation with a paid-up capital of NT\$4.06 million.
Oct. 1998	Approved for construction inside the Hsinchu Science Park. The Company officially changed its name to Global Unichip Corporation (GUC).
Jul. 1999	The first DSP Core taped out.
Dec. 2000	Completed validation process down to 0.18um.
Jan. 2001	Passed ISO9001 certification.
Oct. 2001	Received the 8th "Taiwan Small and Medium Enterprise Creativity and Research Award/JPEG Codec Image Compression/Decompression Silicon IP" from the Ministry of Economic Affairs.
Jan. 2003	The merger with Asian Technology Corporation became official, with Dr. F.C. Tseng elected as the company chairman.
May 2004	Moved to the current self-built location. The address is: No. 10, Li-Hsin 6th Rd., Hsinchu Science Park.
Jun. 2004	Accomplished the first successful tape-out on 0.13um process.
Dec. 2004	Accomplished the first successful tape-out on 90nm process.
Mar. 2006	Accomplished the first successful tape-out of a 65nm test chip.
Jun. 2006	The high speed USB2.0 OTG solution UINF-0041 has successfully passed the USB-IF certification tests, GUC is the first-ever high-speed solutions provider in Taiwan as well as the world without member registrations.
Sep. 2006	Received the "Industrial Technology Advancement Award – Excellent Enterprise Innovation Award" hosted by the Department of Industrial Technology, Ministry of Economic Affairs.
Nov. 2006	The Company's common shares are listed on the Taiwan Stock Exchange.
Jan. 2007	Completed the first successful 65nm tape-out in Taiwan; the product was used for digital cameras. Successfully tape out Taiwan first 65nm chip; the product was used for digital cameras.
May 2007	Successfully taped out its first 45nm test chip.

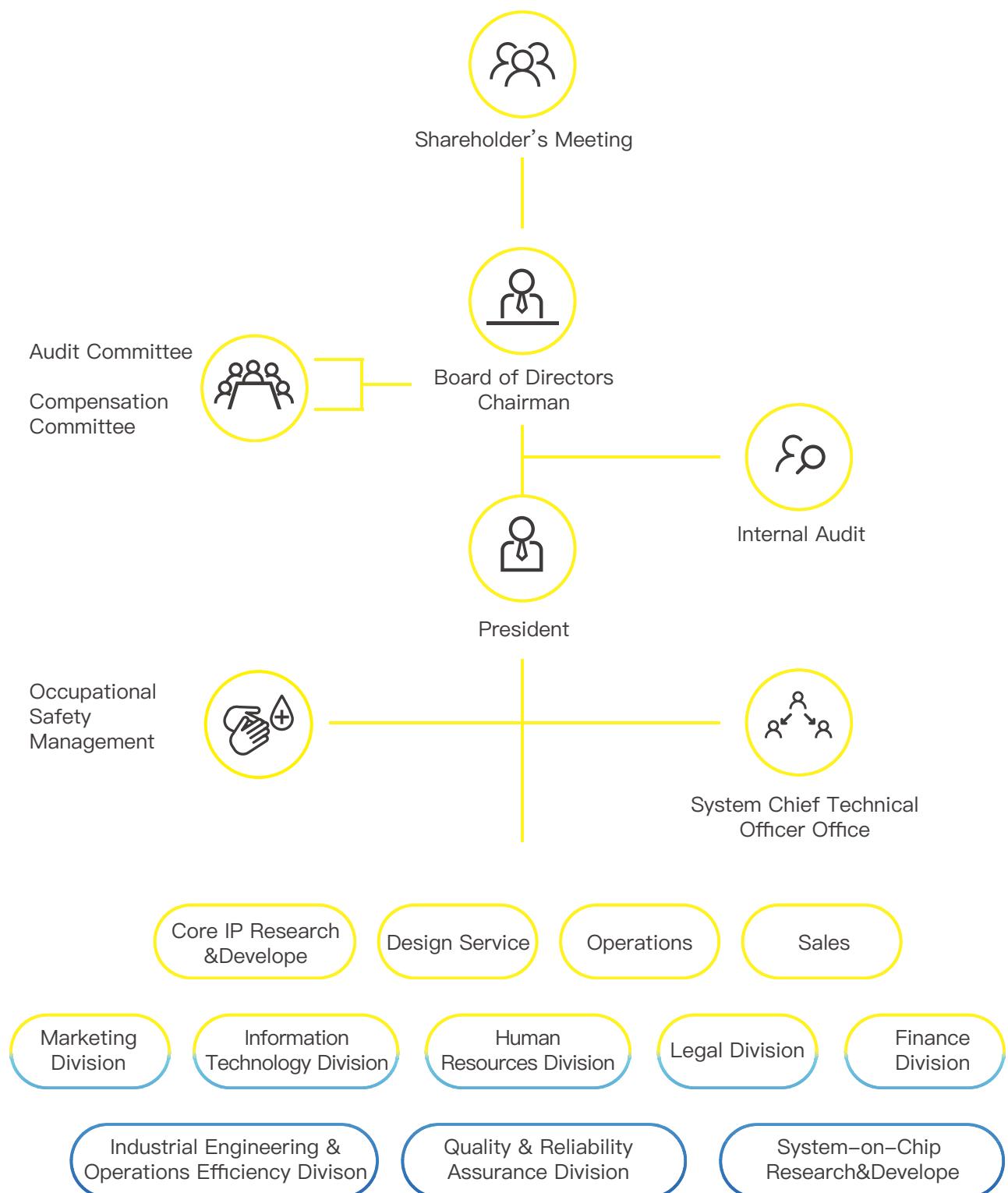
Jul. 2007	Received the Deloitte Taiwan 2007 Technology Fast 50 Award.
Dec. 2007	Commenced mass production of the first 65nm IC used for portable TVs.
Apr. 2008	Launched the first ever industry-wide SiP production flow to help customers shorten the time to market.
May 2008	Ranked No.3 in the "50 Best Operating Performance Companies in 2007" published by Common Wealth Magazine.
Jun. 2008	Harvard Business School published a business case study on GUC.
Jul. 2008	Received the Deloitte Taiwan 2008 Technology Fast 50 Award.
Nov. 2008	Awarded the Technology Fast 500 Asia Pacific 2008 by Deloitte.
Nov. 2008	Awarded the "2008 Amiable Workplace" prize from the Council of Labor Affairs, Executive Yuan.
Nov. 2008	Recognized as an "Excellent Healthy Workplace" by the Bureau of Health Promotion, Department of Health.
Dec. 2008	GUC and Andes Technology jointly launched the 90nm-based 660MHz N1213 hard core processor designed to provide a competitive option for customers.
Dec. 2008	Obtained the Sony Green Partner certification.
Jan. 2009	Successfully taped out the 40nm PCIe GenII PHY test-chip.
Feb. 2009	Successfully completed the design and tape-out of an ultra large (50 million logic gates over 15 mm X 15 mm) IC design project and verified on the first pilot run.
Mar. 2009	Successfully developed the design flow of dynamic voltage frequency scaling and verified the flow on an ARM1176 dual-core test chip; the product was implemented for a customer's design project with a successful pilot run.
Sep. 2009	TSMC 40nm high-speed interface 1G/10G/XAUI Serdes IP design was verified upon first tape-out.
Sep. 2009	Awarded the "HRD InnoPrize" from the Council of Labor Affairs, Executive Yuan.
Oct. 2009	Received "the Best Environmental Protection Award" awarded by the Science Park.
Oct. 2009	Developed the industry first high-end DFT design processes; successfully developed production tests with over 1GHz operating frequencies, and have AC-JTAG1149.6 and IO-AC testing procedures developed and verified for customers' design projects.
Nov. 2009	President Jim Lai was awarded with the "National Manager Excellence Award" from the Chinese Professional Management Association.
Nov. 2009	Awarded the Technology Fast 500 Asia Pacific 2009 by Deloitte.
Feb. 2010	Successfully developed the DDR 40G 1.6Gbps physical layer.
Mar. 2010	GUC passed the "Certificate of Corporation Governance System CG6005 General Assessment" by Taiwan Corporate Governance Association.
May 2010	Successfully completed the design and tape-out of a 40nm IC design project and verified on the first pilot run.
May 2010	Successfully developed a customized 40nm 10G EPON chipset during a successful the pilot run.
Jun. 2010	Received an "A+" rating in the 7th Information Disclosure Assessment and Evaluation of Listed Companies.

Aug. 2010	Received the "10th Cultural Benefactor Bronze Award" from the Council for Cultural Affairs, Executive Yuan.
Aug. 2010	GUC successfully helped customers develop a 40nm 4G LTE mobile phone baseband chip by 3D SiP technology.
Nov. 2010	Received the "Benchmark of Taiwan TrainQuali System (TTQS)" award from the Bureau of Employment and Vocational Training, Council of Labor Affairs
Dec. 2010	Successfully developed the USB3.0 device end controller
Jun. 2011	Received an "A+" rating and was ranked as one of the top 10 companies in the 8th Information Disclosure Assessment and Evaluation of Listed Companies
Aug. 2011	Received the "First Annual Innovation Award of Monte Jade in Taiwan" from Monte Jade Science and Technology Association of Taiwan.
Oct. 2011	GUC Refines its business and technology model, providing The Flexible ASIC ServicesTM , including SoC integration, implementation methodologies, and integrated manufacturing.
Nov. 2011	GUC's USB 3.0 Device Controller IP Passes USB-IF Test Procedure for SuperSpeed Products,
Dec. 2011	GUC Named GSA 2011 Outstanding Asia-Pacific Semiconductor Company
Dec. 2011	GUC Achieves Gigahertz+ Frequency on ARM Cortex-A9 Processor with Synopsys IC Compiler
Jun. 2012	Received an "A++" rating and was ranked as one of the top 10 companies in the 9th Information Disclosure Assessment and Evaluation of Listed Companies.
Dec. 2012	GUC Delivers 28nm DDR3-2133/LPDDR2 Combo IP
Dec. 2012	PLDA and GUC Announce industry's First Successful PCIe Gen 3 Controller and PHY Combination on TSMC's 28nm HPM Process Technology
Dec. 2012	Received the "2012 Most Outstanding Landscape Award" from the Hsinchu Science Park Administration.
Jan. 2013	GUC Unveils The First IPD ASIC Service
Jan. 2013	GUC Successfully Validates a 28nm GPU/CPU Platform
Mar. 2013	GUC Unveils New 28nm Data Converter IP Family, Covers DAC, ADC and thermal sensor macros
Jul. 2013	Received an "A++" rating in the 10th Information Disclosure Assessment and Evaluation of Listed Companies.
Jul. 2013	GUC Utilized Cadence Solutions Enable Successful Tape Out of 20-Nanometer SoC Test Chip
Dec. 2013	GUC and M31 Technology Bundle USB 3.0 Peripheral Device Controller and PHY IP

Dec. 2013	GUC Chairman Dr. F.C. Tseng was awarded with the 7th Pan-Wen Yuan Prize.
Apr. 2014	GUC Licenses Arteris FlexNoC Fabric IP for 16nm System-on-Chip (SoC) IP Verification Platform
Apr. 2014	GUC and Verisense Announce Strategic Alliance, Providing Israeli ASIC Customers Access to Best-in-Class Spec to Production Solutions
May 2014	GUC has successfully silicon proved 16nm DDR4 IP at TSMC, making it one of GUC's first IP available for TSMC's 16nm FinFET (16FF) process
Aug. 2014	Received an "A++" rating in the 11th Information Disclosure Assessment and Evaluation of Listed Companies.
Oct. 2014	Global Unichip Corporation Uses Cadence Encounter Digital Implementation System to Complete Its First Production Design on TSMC 16FF+ Process
Nov. 2014	GUC Opens New Japan Design Center
Jan. 2015	GUC and Credo Semiconductor Collaborate to Enable the development of high-performance networking solutions that manufactured using TSMC's 16-nm FinFET+ process technology.
Feb. 2015	GUC Unveils Industry's Most Complete Data Converter IP Product Line
Mar. 2015	GUC Utilizes Cadence Analog IP to Implement WiGig-Enabled SoC on 28nm Process. GUC Achieved First Silicon Success with Industry's First Tri-Band Analog Front-End IP
Mar. 2015	GUC Relocates North America office to Junction Ave., Suite 101, 2851
Apr. 2015	PLDA and GUC Delivers Fully Integrated PCI Express Gen 4 Solution for TSMC's 16nm FinFET Plus Process
Apr. 2015	GUC Demonstrates TSMC 16nm Low Leakage USB 3.1 PHY IP
Dec. 2015	Assisted bitcoin clients to accomplish their first 16nm chip tape-out.
Feb. 2016	GUC/Partner Jointly Develop USB3.1 PHY/Controller IP
Mar. 2016	GUC Announces Progress in LPDDR4 IP and Reaffirms Commitment to DIMM Application of DDR3/4
Mar. 2016	GUC Delivers 28G Multi-Standard SerDes IP
Aug. 2016	GUC President Jim Lai Announces Retirement on August 4th. Dr. Ken Che is appointed as new President
Oct. 2016	Design team and Marketing talent had been certified for ISO26262 automotive personal qualification AFSP (Automotive Functional Safety Professional) by SGS-TUV Germany
Dec. 2016	GUC Opens New Netherlands Office

Feb. 2017	GUC Unveils Solid State Drive ASIC Capabilities. SSD solution covers application-specific front end design capabilities, advanced node design flow experience, robust manufacturing management, and a production-proven IP set targeting TSMC 28HPC+ process technologies.
Mar. 2017	GUC PCIe 3 PHY IP & PLDA EP Controller Combo Passes Compliance Test
Apr. 2017	GUC appointed semiconductor industry veteran Igor Elkanovich as its System Chief Technical Officer (CTO). Mr. Elkanovich will drive the company's effort to upgrade system capabilities
Jun. 2017	GUC successfully taped out a 16nm, second-generation High Bandwidth Memory (HBM) PHY and controller with verified interposer design and CoWoS Package. The innovative ultra-high capacity memory ASIC solution will meet the demanding requirements of artificial intelligence (AI), deep learning (DL), and a variety of high performance computing (HPC) applications
Jul. 2017	GUC Opens New Korea Office
Aug. 2017	GUC Achieves SGS-TUV ISO26262 Certification
Oct. 2017	GUC Achieves Critical ISO 13485:2016 Certification for Medical Device Components
Oct. 2017	GUC Announces the 1st Customer ASIC Taped Out in 12nm Process
Nov. 2017	GUC Successfully Tapes Out 16nm TCAM Compiler
Nov. 2017	GUC Announces Tainan Office Opening
Nov. 2017	GUC Announces Nanjing Office Opening. The office will provide a broad range of ASIC services to the fast-growing China market
Dec. 2017	GUC Announces the 1st Customer ASIC Taped Out in 7nm Process
Jan. 2018	GUC Announces 20th Anniversary
Sep. 2018	GUC Announces the total solution of 7nm HBM2-2.4G PHY+Controller/TSMC CoWoS Packaging has been in silicon-proven
Nov. 2018	GUC Announces ShenZhen Office Opening
Dec. 2018	GUC president received Award of Best General Manager in Hsinchu
Dec. 2018	GUC Announces the total solution of 16nm HBM2-2.4G PHY+Controller/TSMC CoWoS Packaging has been in silicon-proven and 1st leading customer has been taped out

## Organization



## Board Member

### Dr. F.C. Tseng

Chairman; Vice Chairman of TSMC



Dr. F.C. Tseng is the Chairman of GUC, Vice Chairman of TSMC, and Chairman of TSMC education and culture foundation. Prior to this post, Dr. Tseng served as Deputy Chief Executive Officer, President, and Senior Vice President of Operations of TSMC. Dr. Tseng spent two years as President of Vanguard International Semiconductor Corporation (VIS), which was derived from the Industrial Technology Research Institute's (ITRI) Sub-micron Process Technology Development Project and was Taiwan's first eight-inch IC facility.

Dr. Tseng led 110 specialists to spin off from ITRI's Electronics Research & Service Organization (ERSO), and in 1987 he co-founded TSMC as a pioneer specializing in the "foundry only" semiconductor manufacturing business. Dr. Tseng established a solid technical base for TSMC's six-inch and eight-inch fabs.

From 1973 to 1986, Dr. Tseng served at ITRI-ERSO, where in 1976 he was one of the pioneers in setting up the IC project in Taiwan. He was responsible for installing the 7.5 mm metal-gate CMOS process into the 3-inch line, which later was converted smoothly to 4-inch under his management. In 1978, Dr. Tseng was promoted to plant manager of the IC demonstration plant, where he was responsible for the production and development of silicon-gate CMOS from 5 mm to 1.2. Under his supervision, he established the capability to develop an advanced CMOS process.

He holds a Ph.D. in Electrical Engineering from National Cheng Kung University in Taiwan. Dr. Tseng was named as one of the "Outstanding Alumni" by National Cheng Kung University in 2000, and one of the "Ten Outstand-

ing Engineers" in 1991 and "The Excellent Engineers" in 1982 respectively by the Chinese Institute of Engineers and by Electronic Buyer's News as one of the Hot 25-Industry Executives who made a difference in 1999.

### Dr. Ken Chen

President



Dr. Ken Chen joined GUC as President in September 2016. He brings to the company a broad range of global semiconductor experiences that span nearly a quarter of a century and covers assignments in three different countries.

Dr. Chen came to GUC from TSMC where he served as a Senior Director for Business Development at the company's headquarters in Hsin-Chu, Taiwan. In this role, he was responsible for the company's strategic direction in the networking and consumer electronics segments. He also served as Director for the Mainstream technology platform and for IDM programs, Networking and HDD business development.

Prior to his headquarters assignments, Dr. Chen served in TSMC Japan as the Vice President of Marketing and Sales. He assumed that role after working for five years in TSMC as an account manager and 2 years in North America as a Field Applications Engineer. He joined TSMC from Intel Corporation where he worked as a Senior Process Engineer.

Dr. Chen earned his Ph.D. in Materials Science & Engineering from Stanford University.

### Mr. Wendell Huang

#### Deputy Chief Financial Officer of TSMC



Wendell Huang is the Deputy Chief Financial Officer of TSMC. Mr. Huang was Senior Director of Finance Division at TSMC prior to this post.

Prior to joining TSMC in 1999, Mr. Huang served various positions in the commercial and investment banking fields.

Mr. Huang received his MBA degree from Cornell University and B.B.A degree from National Chengchi University.

### Dr. Cliff Hou

#### Vice President, Research & Development of TSMC



Dr. Cliff Hou is Vice President and Head of Design and Technology Platform of TSMC. Prior to this post, he was the Senior Director of Design Technology Division and Director of Design Methodology Division at TSMC. Dr. Hou established TSMC's Technology Design Kits Development Teams and Reference Flow Development Teams. He also leads Design-for-Manufacturability (DFM) task force at TSMC.

Dr. Hou received his B. S. degree in 1983 from National Chiao-Tung University, and his Ph.D. degree in Electrical and Computer Engineering from Syracuse University in 1992.

Prior to joining TSMC in 1997, Dr. Hou was an Associate Professor at Kaohsiung Polytechnic Institute in 1992, and prior to that, he worked at ITRI/CCL for front-end design environment development and integration from 1993 to 1995 and at a local consulting company for 0.5µm and 0.35µm physical verification methodology and flow development from 1995 to 1997.

Dr. Hou has 15 U.S. patents and also serves as Technical Committee Member of VLSI Symposium.

### Mr. Benson W. C. Liu

#### Independent Director; Former Chairman and CEO of Bristol-Myers Squibb (Taiwan) Ltd



Mr. Benson W.C. Liu, Independent Director, was the Chairman and General Manager of Bristol-Myers Squibb Taiwan (BMST) from January 1999 through March 2005. Mr. Liu joined BMST in 1978 as Accounting Manager and he progressed within the Company through Finance Manager, Controller, Finance Director, VP Finance and Administration and finally Chairman and General Manager.

Mr. Liu retired from BMST in March 2005 after 28 years of dedicated services to this leading global Pharmaceutical and Health Care Company. Prior to joining BMST, Mr. Liu was an auditor of Deloitte, Taiwan for 5 years. He holds a bachelor degree in Accounting from Soochow University, a master degree in International Business Administration from Northrop University, USA.

Mr. Liu is active in participating public services through NPO organizations like Chinese Corporate Governance Association and Chinese Professional Manager Association. In August 2011, He was appointed by the Board of Vanguard International Semiconductor Corporation as a board member of Compensation Committee during the period from September 2011 to June 2012. He was awarded Financial Manager of the Year by the Chinese Professional Manager Association in 1985, Outstanding Alumni of the Accounting Department of Soochow University in 1986 and Financial Manager of The Year of Bristol-Myers Squibb Company International Group in 1989.

**Dr. Chein-Wei Jen**

Independent Director; Former Dean of Institute of Electronics at National Chiao Tung University, Taiwan



Dr. Chein-Wei Jen has retired from the Department of Electronics Engineering, National Chiao Tung University, Taiwan since 2004. During his academic career he also served as the Chairman of the Department of Electronics Engineering, from 1989 to 1991 and the Director of the Institute of Electronics from 1991 to 1994 at the same university.

He has supervised over 25 PhD students and many Master students in the area of System-on-Chip (SoC) design, processor architecture, and multimedia signal processing. Most of his students are now working in the academic and IC Design industry in Taiwan. He holds seven patents and published over 50 journal papers and 100 conference papers in these areas. He has also received numerous research paper awards and service awards from technical societies.

From 2004 to 2007 he was invited to join ITRI which is a government-sponsored R&D organization in Taiwan and served as the Director of SoC Technology Center in ITRI. From 2002 to 2007 he also served as one of the Coordinators of the National SoC Program in Taiwan.

Dr. Jen received his B.S. degree from National Chiao Tung University in 1970, his M.S. degree from Stanford University in 1977, and his Ph. D. degree from National Chiao Tung University in 1983.

**Dr. Wen-Yeu Wang**

Independent Director; Ph. D., Stanford Law School, Professor of College of Law at National Taiwan University



Dr. Wang is professor of law and director, Center for Corporate and Financial Law, College of Law, National Taiwan University. He received law degrees from NTU, Columbia (LL.M.) and Stanford (J.S.D.), respectively. During his tenure, he visited and taught at well known law schools, including National University of Singapore and PRC's Peking University. In addition, he was a visiting professor of law at Stanford from 1995–96, teaching a seminar on financial transactions; in fall 2007 he taught "Corporate Governance in Greater China" seminar at Columbia. Principal research subjects include business associations, financial regulations, and law and economics.

Before pursuing an academic career, professor Wang had practiced commercial law at the international law firms of Lee and Li, Taipei (1985–1989), and Sullivan & Cromwell, a Wall Street firm in New York City (1989–1991), respectively. Areas of specialty include corporate law and business transactions.

From 2004 to 2006, professor Wang served as a commissioner at the Fair Trade Commission. In addition, he has served in many important public and private functions, i.e., as director or supervisor of the Taiwan Stock Exchange, Taiwan Futures Exchange, and Taiwan Cooperative Bank. He also served as independent director or reorganization supervisor for Taiwanese public companies; as arbitrators or mediators in various commercial disputes. He has also participated in the drafting or amendment of major economic and financial legislation, such as the Company Law and the Securities and Exchange Law.

**Dr. Chung-Yu Wu**

Independent Director; Former President of National Chiao Tung University, Taiwan



Dr. Chung-Yu Wu is Professor of Electronics Engineering Department of National Chiao Tung University. He has served different roles at National Chiao Tung University, including President of National Chiao Tung University, Dean of College of Electric Engineering and Computer Science, Dean and Vice for Research and Development, Funding Director of Division of Engineering and Applied Science, Director of Institute of Electronics and Department of Electronics Engineering, Chairman of Department of Electronics Engineering.

Dr. Wu received his B.S. degree from National Chiao Tung University in 1972, his M.S. degree from National Chiao Tung University in 1976, and his Ph. D. degree from National Chiao Tung University in 1980. He did his post-doctor research at EECS from the University of California, Berkeley in 2002.

**Dr. Kenneth Kin**

Independent Director; Former Senior VP, Worldwide Sales & Services of TSMC



Dr. Kenneth Kin joined IBM Corporation in 1996, and developed Asia Pacific Regional Operation Center in Singapore for its Microelectronics Department. In 2000, Dr. Kenneth Kin was promoted to the position of Vice President of Global Business and Services of IBM Microelectronics, responsible for IBM Microelectronics Americas, Europe, Asia and Japan business and service, and the average annual revenue of nearly 7 billion US dollars. He was the first Chinese executive in charge of global operations at IBM and was named one of the Senior Leadership Group of the IBM head office.

Dr. Kenneth Kin joined TSMC in 2001 as Senior Vice President of Global Business & Marketing, and was in charge of the Americas, Japan and Asia Pacific, as well as marketing organization and customer service. He established a professional business and marketing organization for TSMC, strengthen and expand the leading position of TSMC foundry, and expand to new markets in mainland China and South Korea which made TSMC revenue growth nearly doubled from 2001 to 2005 with market share more than 50%.

Since 2001, Dr. King has also served as an adjunct professor teaching “Technology Marketing” for eight years in the MBA of technology management, National Tsing Hua University. Areas of expertise are marketing, global operations, brand management and more.

## Management Team

### Mr. CJ Liang Senior Vice President

CJ currently serves as Senior Vice President in Research and Development.

Prior to joining GUC in 2013, Mr. Liang served as President of Grain-Media and Executive Vice President of Socle Technology.

Mr. Liang received his Master degree in Department of Electronics Engineering from National Chiao Tung University.

### Mr. Daniel Chien Senior Vice President & CFO

Daniel currently serves as Senior Vice President and CFO in GUC.

Prior to joining GUC in 2006, Mr. Chien served as CFO in ALi Corp.

Mr. Chien received his MBA degree from the University of Texas at Arlington, USA.

### Mr. Chiang Fu Senior Vice President

C. Fu currently serves as Operations Vice President in GUC.

Prior to joining GUC in 2008, Mr. Fu has over 15 years of experience in TSMC 12 inch Fab Product and Process Engineering.

Mr. Fu received his master degree in Electronics Engineering from National Tsing Hua University in 1993 and EMBA degree from National Taiwan University in 2008.

### Dr. Louis Lin Senior Vice President

Louis currently serves as Vice President in Design Service.

Louis joined GUC in 1998 and has over 15 years of experience in various ASIC design fields including design methodology development, low power design, SoC chip implementation, program management, etc.

Dr. Lin received his Ph.D. degree in Electronics Engineering from National Chiao Tung University in 1998.

### Dr. Yawlin Hwang Vice President

Yawlin currently serves as Sales and Marketing Vice President in GUC. Prior to joining GUC in 2009, he worked for TSMC Marketing and Business Development Division as Senior Manager.

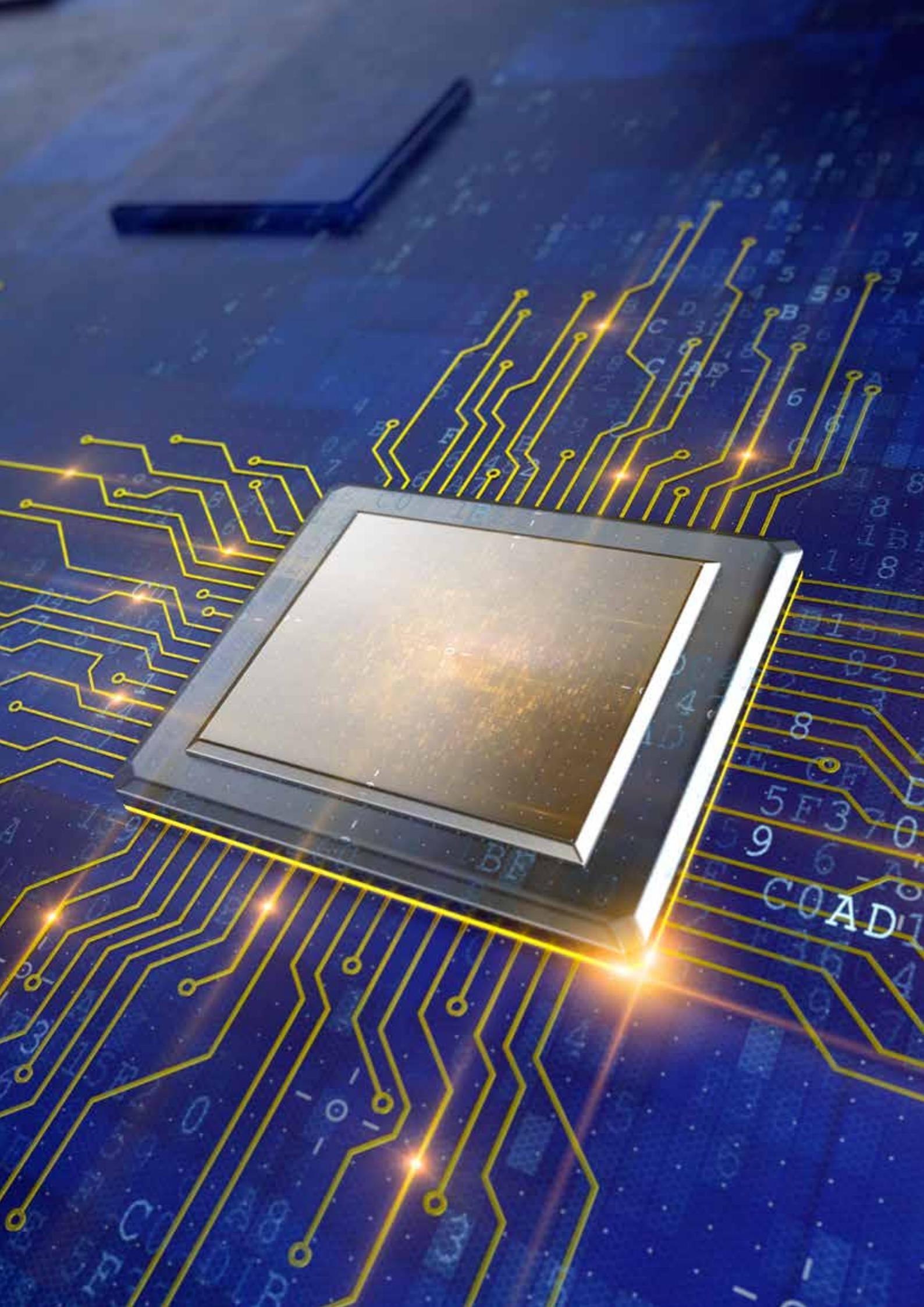
Dr. Hwang received his doctor degree of Material Science and Engineering from North Carolina State University, Raleigh, North Carolina, USA, in 1992, majoring in III-V Compound and solid state devices. Since then, he has been working in semiconductor related field for more than 20 years. During the period, he worked for LSI, Logic, MXIC, and TSMC, mainly in the process technology, manufacturing, sales, and marketing field.



# 3

Chapter 3

## Corporate Governance



# Corporate Governance

## Global Unichip Corporation Statement of Internal Control System

Date: January 31, 2019

Based on the finding of a self-assessment, GUC states the following with regard to its internal control system during the year of 2018:

1. GUC's Board of Directors and Management are responsible for establishing, implementing, and maintaining an adequate internal control system. Our internal control is a process designed to provide reasonable assurance over the effectiveness and efficiency of our operations (including profitability, performance, and safeguarding of assets), reliability of our financial reporting, and compliance with applicable laws and regulations.
2. An internal control system has inherent limitations. No matter how perfectly designed, an effective internal control system can provide only reasonable assurance of accomplishing its stated objectives. Moreover, the effectiveness of an internal control system may be subject to changes due to extenuating circumstances beyond our control. Nevertheless, our internal control system contains self-monitoring mechanisms, and GUC takes immediate remedial actions in response to any identified deficiencies. ; It should be noted that any internal control system has its limits, no matter how well designed. An effective internal control system serves to provide reasonable assurance of the above-mentioned three objectives, yet the effectiveness may be subject to changes of environment or circumstances. To counter such limits, GUC has adopted an internal control system with self-surveillance mechanism. Thus GUC is able to rectify as soon as a deficiency is identified.

3. GUC evaluates the design and operating effectiveness of its internal control system based on the criteria provided in the Regulations Governing the Establishment of Internal Control Systems by Public Companies (herein below, the "Regulations"). The criteria adopted by the Regulations identify five key components of managerial internal control: (1) control environment, (2) risk assessment, (3) control activities, (4) information and communication, and (5) monitoring.
4. GUC has evaluated the design and operating effectiveness of its internal control system according to the aforesaid Regulations.
5. Based on the findings of such evaluation, GUC believes that, on December 31, 2017, we have maintained, in all material respects, an effective internal control system (that includes the supervision and management of our subsidiaries), to provide reasonable assurance over our operational effectiveness and efficiency, reliability of financial reporting, and compliance with applicable laws and regulations.
6. This Statement will be an integral part of GUC's Annual Report for the year 2018 and Prospectus, and will be made public. Any falsehood, concealment, or other illegality in the content made public will entail legal liability under Articles 20, 32, 171, and 174 of the Securities and Exchange Law.
7. This Statement has been passed by the Board of Directors in their meeting held on January 31, 2019, with none of the nine attending directors expressing dissenting opinions, and the remainder all affirming the content of this Statement.

Global Unichip Corporation

F. C. Tseng  
Chairman

Ken Chen  
President



## Board and Audit Committee Meeting Status

Six regular board meetings were convened in 2018. The status of attendance by board members was as following:

Title	Name	Attendance in person	By proxy	Attendance rate (%)
Chairman	Dr. F.C. Tseng Representative of TSMC	6	0	100%
Director	Ken Chen Representative of TSMC	6	0	100%
Director	Lora Ho Representative of TSMC(1)	3	2	60%
Director	Dr. Cliff Hou Representative of TSMC	3	3	50%
Director	Wendell Huang Representative of TSMC(1)	1	0	100%
Independent Director	Benson Liu	6	0	100%
Independent Director	Dr. Chien-Wei Jen	6	0	100%
Independent Director	Dr. Wen-Yeu Wang	6	0	100%
Independent Director	Dr. Chung-Yu Wu	6	0	100%
Independent Director	Dr. Kenneth Kin	6	0	100%

(1) TSMC changes the representative of juristic-person director on 2018/11/15

Four regular audit committee meetings were convened in 2018. The status of attendance by committee members was as follows:

Title	Name	Attendance in person	By proxy	Attendance rate (%)
Independent Director	Benson Liu	4	0	100%
Independent Director	Dr. Chein-Wei Jen	4	0	100%
Independent Director	Dr. Wen-Yeu Wang	3	1	75%
Independent Director	Dr. Chung-Yu Wu	4	0	100%
Independent Director	Dr. Kenneth Kin	4	0	100%

Four regular compensation committee meetings were convened in 2018. The status of attendance by committee members was as follows:

Title	Name	Attendance in person	By proxy	Attendance rate (%)
Independent Director	Benson Liu	4	0	100%
Independent Director	Dr. Chein-Wei Jen	4	0	100%
Independent Director	Dr. Wen-Yeu Wang	3	1	75%
Independent Director	Dr. Chung-Yu Wu	4	0	100%
Independent Director	Dr. Kenneth Kin(1)	4	0	100%

## Corporate Social Responsibility

As a world-class design and turnkey services company and a good corporate citizen, GUC has always sought to fulfill its corporate social responsibilities (CSR). In this period of volatility for the global economy and environment, fulfilling corporate social responsibility not only supports the fundamentals of our operations and reduces or eliminates risk; it also builds sustainable value for GUC and its stakeholders. This is the right thing to do because we believe our success is deeply entwined with our stewardship of the natural environment, efficient use of resources and meeting the expectations of our shareholders. GUC pledges itself to not only become an indispensable influence in the semiconductor industry, but also to serve as a force for sustainability that pushes society forward, to become a corporate citizen with a positive influence to society, and to build a better future for the next generation.

Moreover, GUC has established the 'Global Unichip Corporate Social Responsibility Best Practice Principles'. This commission is composed of cross-department representatives in order to implement corporate social responsibility initiatives. The Chief Financial Officer is appointed as the Chairman in full charge. The executive performance shall be submitted to the Board of Directors.



## Social Commitment

By sharing love and participating in charity activities, we have deepened our ties with local governments, NGOs, charity associations and communities establishing trust and reputation. This friendship can help GUC to develop a positive corporate environment.

- Helped the blind of Hsinchu Blind Welfare Association. In 2018 they offered their professional massage therapy to GUC's employees with the total 365 persons, 169 hours, and the amount of NT\$153,400.
- GUC supported “Accton Cultural & Educational Foundation”, contributed to outreach Christmas Project. This also inspires the industry to help children from disadvantaged families and bring them the opportunity to enjoy and experience the merry atmosphere of Christmas.

## Safety and Health-related Management

GUC is devoted to achieving “zero accident” and “sustainable environmental development” and to become a world-class benchmarking company of environmental protection, safety and health. To provide a working environment that not only complies with Taiwan’s related regulations, GUC is also aggressively geared to international standards. GUC established Health, Safety and Environment Committee to carry out the formulation and execution of the following environmental safety policies:

1. Offering educational training programs to improve employees' awareness of safety, health and environmental protection issues.
2. Mapping out various health improvement plans to ensure employees' physical and psychological wellness.
3. Ensuring our operations and services meet or exceed applicable regulations and standards for environment protection, health and safety and safety.
4. Staying abreast of global issues of environment protection, health and safety evaluate risks and take effective risk management measures.
5. Establishing a green supply chain and enhancing performance of environment protection, health and safety with suppliers through experience sharing and collaboration.
6. Laying out environmental inspection procedures and regulations, such as: Management procedures for examining, measuring and testing facilities, Management plans for plant patrolling, maintenance and auto–checking. Common regulations for hazardous products and labelling of hazardous substances, Operating procedures for electrical equipment, Operating standards for warehouses, Operating standards for handling materials, Standard safeguards for physical health and safety, Operating procedures of health and safety in special areas.

## Environmental protection

GUC believes its environmental protection should not only comply with domestic legal requirements, but also implement governmental plans for resource recycling, waste disposal and garbage separation. In addition, GUC reduces the usage of paper cups and disposable plastic tableware for environmental protection and the best use of resources. GUC has been committed to prevent pollution, ensure efficient use of resources, prevent accidents, improve employee safety and health and protect property. The aim is to create a work environment that upholds the well-beings of our employees and communities.

GUC was recognized by the “Most Outstanding Landscape Award” and ‘the Best Environmental Protection Award’ by Hsinchu Science Park Administration, and was certified as “SONY Green Partner” and compliant with IECQ EV080000 Restriction of Hazardous Substances (RoHS). Our commitments and implementations are as follows:

1. Execute the standards of “Green Energy-saving Design” and provide energy saving products that comply with environmental protection regulations and customers’ requirements.
2. Use package materials that comply with environmental protection regulations for waste reduction and resource recycling.
3. Increase employees’ fundamental responsibility and awareness of environmental protection, source recycling and energy saving through educational training and propaganda.
4. Continue to execute energy-saving management and resource recycling.
5. Comply with governmental environmental protection regulations and fully assist the authorities in carrying out environmental protection affairs.

# 4

Chapter 4

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## Operation Report



# Operation Report

## 1. Business

### 1–1. Major Business

#### 1–1.1. Main business activities of GUC:

(A) Engage in research & development, production, testing and sales of:

- Embedded memory, logic, and analog components for various application ICs;
- Cell libraries for various application ICs; and
- EDA tools for various application ICs.
- Customization, design, tech support, and licensing of intellectual property (IP).

(B) Provide technological support and consulting services related to the aforementioned products.

#### 1–1.2. Revenue mix

Unit: NT\$ Thousand, except %

Sales breakdown	2017		2018	
	Amount	%	Amount	%
ASIC & Wafers	9,265,856	76%	9,167,596	68%
NRE	2,641,850	22%	4,078,719	30%
Others	252,900	2%	213,489	2%
Total	12,160,606	100%	13,459,804	100%

#### 1–1.3. Main products and services:

(A) ASIC & wafers: Provide complete services from design, wafer manufacturing to packaging and testing.

(B) NRE (Non-Recurring Engineering): Provide circuit design cell library and various IPs required in the process of product design; provide circuit layouts needed for mask making; subcontract mask making, wafer manufacturing, dicing and packaging to vendors; conduct final testing to get prototype samples for customers.

(C) MPW (Multiple–Project Wafer): MPW integrates multiple design projects of different customers on one single mask and by one wafer engineer run. It is an effective and fast time–to–market chip verification service with cost–sharing in masking and wafer engineering run. Design engineers, before the phase of mass production, are able to timely verify their prototype designs with advanced process technologies and much lower costs.

(D) IP (IP, Intellectual Property): These are silicon–verified reusable IC designs with specific functions. With the rapid advancement of semiconductor processing technologies, the design industry is trending toward multi–functional chips and SoC (System on a Chip). Reusable IP help customers avoid redundant designs and resources.

## 1-1.4. New product development plan

Besides the continuing development of advanced IP in 16nm, 12nm, and 7nm processing technologies, including high speed interfaces such as 16G/28G/32G SerDes, PCIe Gen3/4, HBM2/2EController/PHY, LVDS, DDR3/4&LPDDR3/4/4X Memory Controller/PHY. In addition, existing key components such as voltage regulators, power management solutions, ADC/DAC, and clock generators are also porting with advanced processing technologies. GUC has formed a research team to develop our own memory IP (TCAM, SRAM), and customized Standard cell to enrich our IP/Library solutions and to help our customers to provide competitive solutions. In 2H2018, 5nm Design Flow is developing. Test chip will be taped out in 2019Q1.

## 1-2. Industry Brief

### 1-2.1. Current status of the industry and future development

With respect to IC design, since the design cost continues to rise and the trend to incorporate multiple functionalities on a single chip continues to grow, chip design projects are expected to experience a downward trend each year. Despite the decreasing number of ASIC design projects, the rate of decline is slowing down thanks to the market growth of AI, datacenters, 5G, IoT, automotive electronics, and industrial/medical applications, which will help slow down the pace of decline with respect to ASIC and ASSP chip designs.

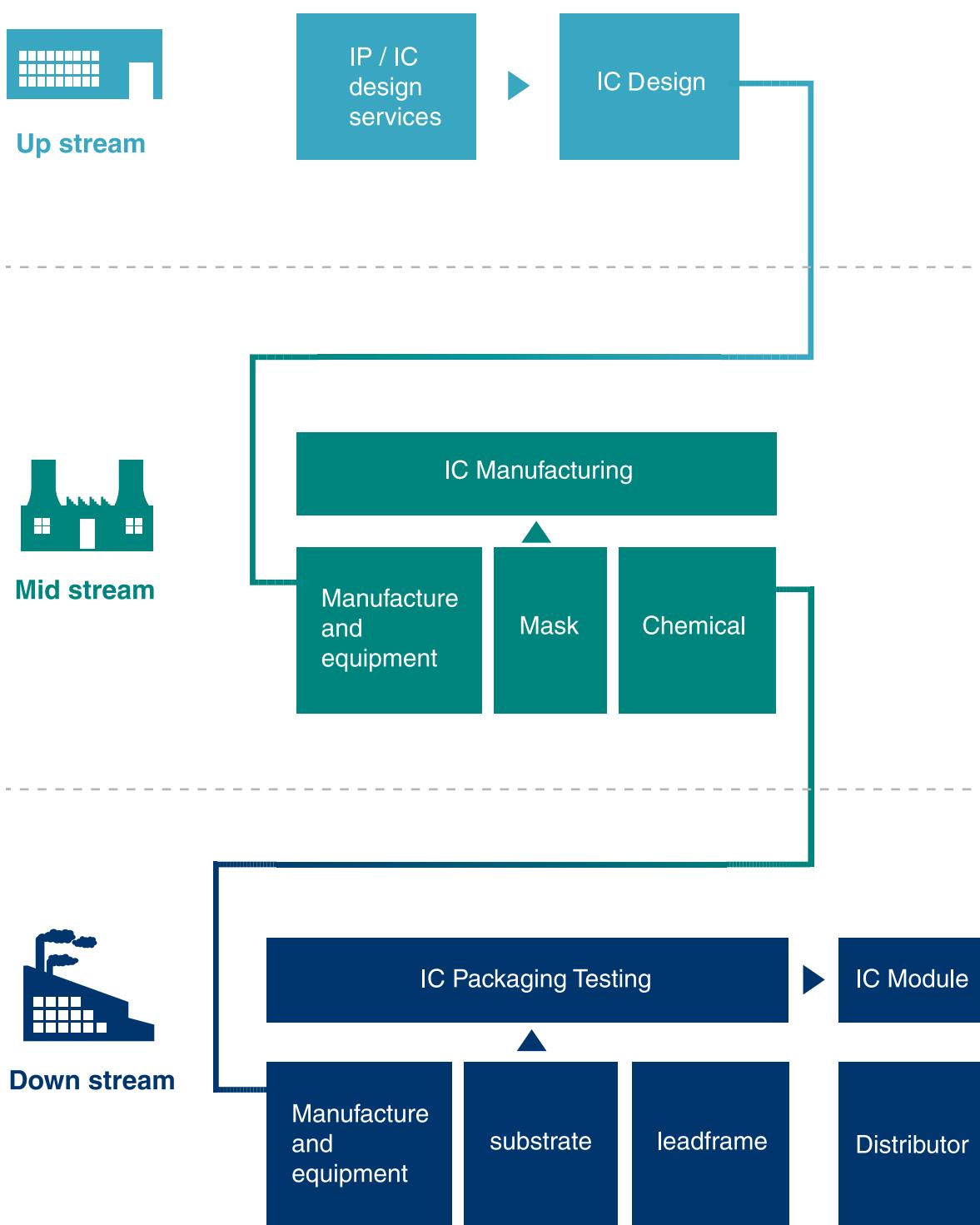
Recently, a consolidation boom is sweeping across the global semiconductor industry. We are faced with challenges from Mainland China's full support for its semiconductor industry and the poaching of top talent from Taiwanese semiconductor factories, along with endless mergers among the world's IC design companies with the aim of strengthening their product lines, minimizing costs, and expanding their economic scale in an attempt to satisfy user demands with advanced semiconductor technologies to maintain market share. Although customers may have fewer choices of vendors in the future, there is still a demand for product diversity. Standard products will no longer be able to satisfy customer needs; in order to create unique features and characteristics, a growing number of the world's leading companies are now seeking to customize their IC designs. For GUC, this means more opportunities in the future.

To keep pace with the rapid changes in the semiconductor industry as well as client requirements, GUC's "Flexible ASIC Services", include robust IP portfolio and design service is able to assist customers entering any part of a semiconductor supply chain in a flexible manner from product concepts, spec definitions, development, verification, mass production, to the creation of a final product. Flexible ASIC services can cover three core elements: IP solutions, chip implementation, and ASIC manufacturing. A precise IP solution will be able to reduce a customer's design time and costs, as well as provide satisfactory offerings of customized ICs. In terms of chip implementation, GUC has formed a close partnership with TSMC for advanced process technology which helps customers move to mass production with high yield rates and strong market competitiveness. GUC also offers ASIC manufacturing to work as the best coordinator between customers and wafer foundry/testing/packaging facilities.

## 1-2.2. The supply chain of Taiwan semiconductor industry

The top-down supply chain of Taiwan's semiconductor industry is divided into design, wafer manufacturing, packaging and testing.

The up, mid, and down stream of Taiwan semiconductor industry:



### 1-2.3. Product development trend and competition

The mobile electronics markets are experiencing a slow down during the past few years. Miniaturized tablet PCs, for example, are being replaced by smartphones with larger screens. The increasing popularity of larger tablets is also taking away the market share of notebook; these issues can limit the market for IC service providers.

In the smartphone market, in an attempt to create their unique brand personality, more and more leading smartphone manufacturers are committed to the development and production of application processor (AP) chips, which will open up new opportunities for the design service industry. Many other emerging markets such as IoT, automotive electronics, drones, virtual reality, and robotics, as well as their applications have received wide public attention. The preliminary results of product development also showed great prospects. Although these technologies are still in their early stages, they are already considered as the mainstream of the future technology industry.

Benefiting from China's large domestic demand and the government's promotion of local IC design companies and the semiconductor industry, China's semiconductor sector is growing bigger. This year, China is also investing massive resources in the establishment of its semiconductor industry. For the next ten years, China will become the fastest growing market in the global IC design and semiconductor industry. GUC continues to lead the industry with the development of 16/12/7 nm advanced technology processes; with its impressive technical achievements and mass production experience, GUC is confident in delivering low power consumption, high performance products that suit the needs of our customers to secure the leading position in the highly competitive IC design service domain.

## 1-3. Technological Research and Development

### 1-3.1. R&D expenditures

Unit: NT\$ Thousand

Year Item	2018	2019
R&D expenditures	2,273,694	–

Note: Numbers for Q119 is not available by printing date.

### 1-3.2. Latest technologies and new products

2018	<ul style="list-style-type: none"><li>GUC 5nm design flow has been successfully developed</li><li>GUC 7nm design flow has been successfully developed and some customer designs have been taped out smoothly</li><li>GUC 7nm HBM2-2.4G PHY has been in silicon-proven</li><li>GUC 7nm HBM2E-3.2G PHY has been taped out</li><li>The total solution of 7nm HBM2-2.4G PHY+Controller/ TSMC CoWoS Packaging has been in silicon-proven</li><li>GUC 7nm TCAM has been in silicon-proven</li><li>GUC 16nm TCAM has been in silicon-proven</li><li>GUC 12nm 28G SerDes has been in silicon-proven</li><li>GUC 12nm LPDDR4X and ONFi-4 PHY has been taped out</li><li>GUC 28nm 2.4G high speed ADC has been in silicon-proven, which is a key technique in 5G wireless communication technology</li><li>GUC has passed the PCI-SIG PCIe-4 Compliance Test thru 28HPC+ PCIe4 PHY IP with PLDA EP Controller.</li></ul>

## 1-4. Long Term and Short Term Business Development Plan

### 1-4.1 Short-term

- (A) Promote advanced technology based on MPW in order to lower customers' entry barriers and startup risks.
- (B) Secure the current customer base of 28nm and 16nm, and aggressively seek potential customers for the 12nm and 7nm processes.
- (C) Leverage existing customers and projects; accumulate cross-industry technical expertise with the aim to assist customers in creating a development plan.
- (D) Enhance cooperation with upstream and downstream partners to attract new customers.
- (E) Provide complete SIP solutions and SoC development based on product applications.

### 1-4.2 Long-term

- (A) Focus on cutting-edge product development to allow not only high product differentiation and low barriers to entry, but also the broad support of 16nm and 12nm and 7nm advanced technologies.
- (B) Pursue a global strategy to promote brand name and worldwide market share.
- (C) Grasp business opportunities when more and more integrated device manufacturers are going fab-lite.
- (D) Maintain close relationships with wafer foundries and develop 22nm, 7nm and 5nm design processes, as well as provide leading-edge manufacturing processes and products.
- (E) Seek technological corporation with world-wide system companies and focus on core technologies.
- (F) Establish long term strategic alliances and collaborate with silicon IP suppliers.
- (G) Increase front-end SoC design capabilities and develop all kinds of application platform structures to suit different applications, and to reduce system verification and development times.
- (H) Seek out new application markets such as: artificial intelligence, virtual reality, autonomous drive, robot, network communication and automotive electronics etc..., as well as study application-related technologies.

## 2. Market and Sales Distribution

### 2-1. Market Analysis

#### 2-1.1 Sales by region:

Revenues by geographic region are allocated to individual countries based on the location to which the products are initially billed instead of the location of end customers of our customers to which revenues are attributable.

The following table summarized information pertaining to our revenues from customers based on their headquarters' location:

Region	2018
Asia	73%
North America	21%
Europe	6%
Total	100%

## 2-1.2 Market shares

(A) Currently, there are around 8 design service firms in Taiwan, generating total revenue of NT\$22 billion in 2018. With a ASIC revenue of NT\$9.2 billion, GUC had approximately 42% of the total market share. GUC was positioned as a top 18 ASIC supplier based on Gartner's 2018 worldwide ASIC revenue statistics.

(B) Future market supply and demand

According to forecasts made by IEK in 2018, the total revenue generated by Taiwan's IC industry amounted to nearly NT\$2.6343 trillion, indicating a 6.9% growth compared to 2017. The IC design industry alone amounted to NT\$640.3 billion, showing a 3.7% declined growth rate compared to 2017. According to TrandForce's predictions, in 2018, the total sales generated by China IC design industry will reach RMB\$251.5 billion, with an annual growth rate of 23%. Looking ahead in 2019, benefiting from markets with excellent growth potential such as automotive electronics, China IC design sales are estimated to reach RMB\$296.5 billion; a growth rate of 17.9%.

### 2014~2018 Taiwan IC Industry Revenues

Unit: NT\$ 0.1billion

	2014	YoY	2015	YoY	2016	YoY	2017	YoY	2018 (e)	YoY
Industry Revenue	22,033	16.7%	22,640	2.8%	24,493	8.2%	24,623	0.5%	26,343	6.9%
IC Design	5,763	19.8%	5,927	2.8%	6,531	10.2%	6,171	-5.5%	6,403	3.7%
IC Manufacturing	11,731	17.7%	12,300	4.9%	13,324	8.3%	13,682	2.7%	15,000	9.6%
Foundry	9,140	20.4%	10,093	10.4%	11,487	13.8%	12,061	5.0%	12,894	6.9%
DRAM	2,591	9.2%	2,207	-14.8%	1,837	-16.8%	1,621	-11.8%	2,106	29.9%
IC Packaging	3,160	11.1%	3,099	-1.9%	3,238	4.5%	3,330	2.8%	3,465	4%
IC Testing	1,379	8.9%	1,314	-4.7%	1,400	6.5%	1,440	2.9%	1,475	2.4%
IC Product Revenue	8,354	16.3%	8,134	-2.6%	8,368	2.9%	7,792	-6.9%	8,509	9.2%
Global Semi Growth Rate	-	9.9%	-	-0.2%	-	1.1%	-	21.6%		10.1%

Note: (e) = estimate

Source: TSIA; IEK(2018/11)

## Worldwide ASIC 2018 sales distribution by region (calculated based on revenue)

Unit: %

	North America	Asia/China	Europe	Japan	Total
2018(f)	23.2%	43.8%	14.8%	18.2%	100%

Source: IC Insights(2018/11)

## 2017~2019 China IC Industry Revenues

Unit: RMB\$ 0.1billion

	2017	2018(E)	2019(F)
IC Design Revenue	2,006	2,515	2,965
IC Design Revenue growth rate	22%	23%	17.9%

Source: TrendForce (2019/2)

Note: (E: estimate), (F: forecast)

Looking into electronics industry in 2019, due to the fact that the 7nm process has entered mass production, it will increase the sale of products such as flagship smart phones, SSDs, image processing products, as well as tablet computers. A sales boom is expected. In addition, other applications such as servers, automotive electronics, artificial intelligence, and communication infrastructure will also boost the sales volume for global IC design companies.

What sets GUC apart from other domestic service providers is not just that we work closely with upstream wafer foundries, but that we are also actively involved in the development of advanced processes and key silicon IPs. By doing so, GUC hopes to meet market demands as well as distancing itself from the rest of the competition.

### (C) Potential growth

Advanced processing technologies cause a sharp rise in investment costs. In an effort to keep the focus on core businesses and to maximize cost-savings, some IDMs have turned to the option of outsourcing advanced manufacturing process to professional design service providers. While more IDMs are shifting to a fab-lite model and the system companies' differentiation is becoming a trend, those design service providers can find potential business opportunities in the future.

According to the industry study conducted by Gartner, global revenue generated by the semiconductor industry is expected to reach a growth rate of 14.3% in 2018. The global semiconductor industry will continue to grow for the next five years. By 2020, market scale will reach nearly US\$528 billion. The markets for mobile devices, HPC which supports deep learning and artificial intelligence, the automotive electronics market which is growing steadily each year and currently moving towards automated driving, and the IoT market that connects everything together are the four biggest markets. The HPC market covers applications such as virtual reality, augmented reality, artificial intelligence, data center, and network processors. Demands for products include more advanced technologies, better energy efficiency, and faster processing speed. Only the most advanced process technologies will make these advantages available in customers' products. The Company has been devoted to the most advanced 12nm and 7nm design processes and technologies; these technological improvements are sure to fulfill customers' design project requirements; we also hope that they will continue to grow in the future.

GUC focus on providing more complete application solutions for: automobile electronic, augmented reality(AR), virtual reality(VR), AI and 5G etc... In addition, the Company will focus on system solutions related to ultra-high-speed SIP interfaces such as SerDes, PCIe, SATA/SAS, USB, LVDS, HDMI, ADC/DAC and the development of 2.5D/3D/IPD design processes as well as packaging and testing technologies. By way of developing and introducing the above-mentioned new technologies and applications, GUC is confident that its revenue will steady growth during 2019.

### 2-1.3. Competitiveness, strength, weaknesses and counter strategies

#### (A) Competitive advantages

##### a. Rich experience in IP development and integration

GUC has already successfully developed a series of IP; not only does it license its self-developed IPs to IC design houses and system houses at home and abroad, it also provides services in integrating IPs into customer projects. GUC has used the IP over 1,000 times in more than 100 design projects.

##### b. Mature, complete design and verification processes

GUC's well-developed and comprehensive processes serve to shorten the time needed for IC verification and reducing IC design risks; they can also help customers complete product design within the shortest time frame.

##### c. Advanced manufacturing processes and design technologies

GUC works closely with TSMC to keep track of and create advanced processing technologies and information, as well as reduce the time required for customers to adopt our advanced manufacturing processes. GUC has successfully completed many 28nm and 16nm projects. During this year, we have successfully taped-out the pioneering design of 10/7nm projects by working with important clients and strategic partners. Our abundant hands-on experience will support and guarantee the realization of our customers' high level manufacturing processes.

##### d. Technology-oriented R&D team

GUC has always focused on developing its own technologies. Over the years, GUC has formed an experienced R&D team with reliable design resources and support, giving our customers' products more international competitiveness.

##### e. Complete IP partnership

In order to increase the quantity and types of IP available for customers, in addition to developing home-grown IP, GUC is also collaborating with the world's leading IP vendors such as ARM, Synopsys, Dolphin Technology, SiliconConCreation, PLDA, Semtech, eMemory, NSCore, Sidence, Ceva, Elliptic, Imagination, M31, Andes, TCI, AnalogBits, Cadence, and TSMC in order to provide our customers with comprehensive IP solutions.

##### f. Diversified service models

GUC provides one-stop shopping service to customers with complete SoC solutions, and supports customers from the design phase to the mass production phase. GUC has built up all the important service links throughout the IC manufacturing processes. Customers are free to choose different services and delivery methods based on their technology capacity and needs.

##### g. Providing IP trading service through IP Mall

GUC offers a trading platform for our IP providers and users. Customers therefore have accesses to information and services of the types of IP they need, as well as the verification information and quality assurance of these IPs through a single contact window.

## (B) Strength, weaknesses and counter strategy for long-term development

### a. Strength

#### a-1. Division of labor in the semiconductor industry

Taiwan's IC industry has a unique infrastructure of vertical disintegration, characterized by a cluster of IC designs, advanced IC foundries, and back-end packaging and testing firms. The infrastructure creates an extremely favorable environment for the development of design services. For example, newly developed SIP can be quickly verified by the two world-class IC foundries to minimize failures and risks. With the close cooperation between IC foundries and service foundries, Taiwanese design service firms are able to offer process-verified IP to foreign customers who are highly likely to become a regular client of the two IC foundries in Taiwan, helping Taiwan to become the international SIP trading center.

#### a-2. Abundant downstream system vendors

There are a huge number of Taiwanese system manufacturers engaged in information and communications applications and consumer electronics. Whether these system manufacturers are OEM vendors or own brand-name developers, large numbers of variety and quantity are available. Their systems are in line with technology trends requiring multiple features integrated into one single chip. The cooperation between system vendors and IC related operators plays a critical role in enhancing Taiwan's SoC industry.

#### a-3. The IDM Fab-lite trend

In order to focus on the core businesses and save large-scale capacity investment in advanced process nodes, IDMs throughout the world are moving toward the Fab-lite trend; they are starting to outsource various projects to design services providers.

### b. Weaknesses and counter measures

#### b-1. With respect to certain product applications, and the lack of key IP

Because we are now engaging with customers from data centers and high speed switch applications, key IPs, for example, TCAM, and multi-port memory modules are quite important. Some competitors (such as Avago) have their own solutions.

##### Countermeasures

GUC has established a memory research team in 2016 and develop customized client-specific memory IPs, such as DDR3/4, LPDDR3/4/4X PHY & Controller. In addition, we seek strategic cooperation with both domestic and foreign top-tier companies to provide key IP solutions in order to satisfy customer needs.

#### b-2 Need more relevant professional data for diversified customer applications

Because customer applications are varied, such as automotive, datacenter, storage, 5G, solar, drone etc., we need more resources to gain a better understanding of how things work and how to achieve a higher level of service quality.

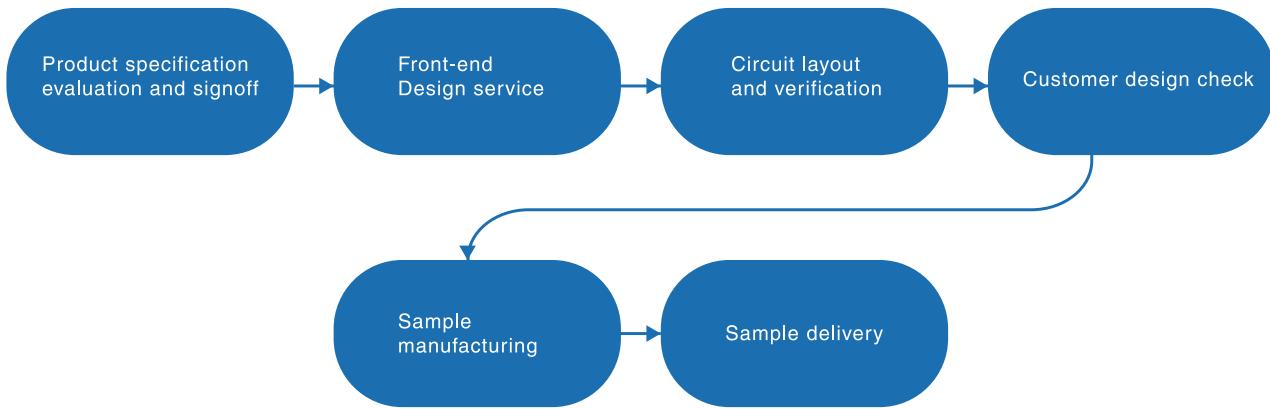
##### Countermeasures

Before entering new markets and exploring different applications, we will have to evaluate and study a number of factors that will allow the Company to offer the best service quality. In addition to inviting professionals from different domains, we are also working closely with TSMC in order to provide more complete and more professional services for customers from different domains.

## 2-2. Product Application and Production Flow

The company's production flow includes two major steps: front-end design service and mass production.

### STEP1 The process of front end design :



### STEP2 Once the sample has been verified by customer, mass production process starts :



Future R&D plans and estimated investments

In order to keep up with the growth, the Company will also keep working in the research and development of the 12nm design process, as well as evaluate and plan for the 7nm process nodes. Moreover, we will focus on the development of 16nm high-speed interface IPs such as SerDes, PCIe Gen4, LPDDR/DDR controller, and PHY technologies.

## 2-3. Raw Material Supply

GUC products are mainly based on wafer supplied mainly by TSMC, the world's leading silicon foundry as well as GUC's largest shareholder and long-term strategic partner. It goes without saying that upstream supply for GUC is solid and stable.

## 2-4. Major Customers Contributing More Than 10% of Gross Sales, Years 2017~2018

### 2-4.1. Major customers contributing more than 10% of gross sales in years 2017 and 2018

Unit: NT\$ Thousand

No.	2017				2018			
	Customer name	Sales amount	% of annual total sales	Connection with company	Customer name	Sales amount	% of annual total sales	Connection with company
1	A	1,786,206	15%	None	B	2,524,693	19%	NA
2	NA	NA	NA	NA	C	1,442,243	11%	NA

### 2-4.2. Name of suppliers taking 10% or more total purchase share in years 2017 and 2018

Unit: NT\$ Thousand

No.	2017				2018			
	Supplier name	Amount	Percentage	Connection with company	Supplier name	Amount	Percentage	Connection with company
1	TSMC	5,794,950	91%	TSMC , prior to July 2011, TSMC was a parent company. Since July 2011, TSMC has no controlling interest in GUC and accounts for its investment in GUC using the equity method.	TSMC	5,069,048	81%	TSMC , prior to July 2011, TSMC was a parent company. Since July 2011, TSMC has no controlling interest in GUC and accounts for its investment in GUC using the equity method.
2	TSMC, NA	524,558	8%	TSMC's ownership percentage to TSMC, NA is 100%.	TSMC, NA	1,141,840	18%	TSMC's ownership percentage to TSMC, NA is 100%.

Explanation: GUC buys silicon wafers and mainly from IC foundries.

## 2-5. Production Output in 2017 and 2018

Units: Chip/Piece and NT\$ Thousand

Major Products	2017		2018	
	Quantity	Amount	Quantity	Amount
ASIC & Wafers	51,071,914	2,745,030	91,570,223	4,976,496
NRE	0	1,650,030	0	2,628,078
Others	480	42,518	41,761	4,218
Total	N/A	4,437,578	N/A	7,608,792

## 2-6. Sales Amount in 2017 and 2018

Units: Chip/piece and NT\$ Thousand

Year	2017				2018			
	Domestic Sales		Export Sales		Domestic Sales		Export Sales	
	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
ASIC & Wafers	7,209,570	1,861,317	42,254,073	7,404,539	12,589,695	2,393,260	70,908,013	6,774,336
NRE	0	320,744	0	2,321,106	0	394,398	0	3,684,321
Others	0	12,488	480	240,412	0	5,018	0	208,471
Total	7,209,570	2,194,549	42,254,553	9,966,057	12,589,695	2,792,676	70,908,013	10,667,128

### 3. Future R&D plans and estimated investments

In order to keep up with the growth, the Company will also keep working in the research and development of the 7nm design process, as well as evaluate and plan for the 5nm process node. Moreover, we will focus on the development of high-speed interface IPs such as SerDes, PCIe Gen4, LPDDR/DDR controller, HBM Controller & PHY, TCAM, and High speed ADC technologies.

#### An estimated R&D cost for the next 2 years

Plans in the next 2 year	Progress	R&D Cost (NT\$ million)	System Validation Schedule	Target Applications
Development of 12nm 7.2G/12G ADC	Test chip tape out in 2019/Q2	100	2019/Q4	5G/ Networking
Development of 12nm LPD-DR3/4-4.2G	Test chip tape out in 2019/Q2	100	2019/Q4	AI/ML, Networking, HPC
Development of 12nm ONFi 4.1 PHY	Test chip tape out in 2019/Q2	100	2019/Q4	AI/ML, Networking, HPC
Development of 12nm GDDR6 PHY	Test chip tape out in 2019/Q4	300	2019/Q3	AI/ML, Networking, HPC
Development of 7nm 28G SerDes	Silicon-proven	300	2019/Q2	AI/ML, Networking, HPC
Development of 7nm 32G SerDes	Test chip taped out in 2019/Q1	100	2019/Q4	AI/ML, Networking, HPC
Development of 7nm PCIe-4 PHY	Silicon-proven	200	2019/Q2	AI/ML, Networking, HPC, Storage
Development of 7nm HBM2-2.4G PHY	Silicon-proven	400	2019/Q1	AI/ML, Networking, HPC
Development of 7nm HBM2E-3.2G controller & PHY	Test chip taped out	200	2019/Q4	AI/ML, Networking, HPC
Development of 7nm 16G ADC	Test chip tape-out in 2019/Q3	200	2020/Q2	5G/ Networking
Development of 7nm Pipelined TCAM	Test chip tape-out in 2019/Q3	200	2019/Q4	AI/ML, Networking, HPC
Development of 5nm Design Flow	Test chip taped out	1000	2019/Q4	AI/ML, Networking, HPC
Development of 5nm HBM2E-3.2G controller & PHY	Test chip tape-out in 2019/Q3	600	2020/Q3	AI/ML, Networking, HPC
Development of 5nm PCIe-4 PHY	Test chip tape-out in 2019/Q4	400	2020/Q4	AI/ML, Networking, HPC
Development of 5nm Pipelined TCAM	Test chip tape-out in 2019/Q4	300	2020/Q3	AI/ML, Networking, HPC

#### 4.GUC Worldwide Employees

Period		2017	2018	As of 03/18/2019
Function	Managers	7	7	7
	Professionals	607	734	739
Total employees		614	741	746
Average age		38.9	38.8	38.4
Average years of seniority		5.27	4.9	5.09
Education level	Ph. D	3%	3%	3%
	Master	64%	65%	65%
	Bachelor	33%	31%	32%
	High School	0%	1%	0%

Note: Consolidated basis

# 5

## Chapter 5

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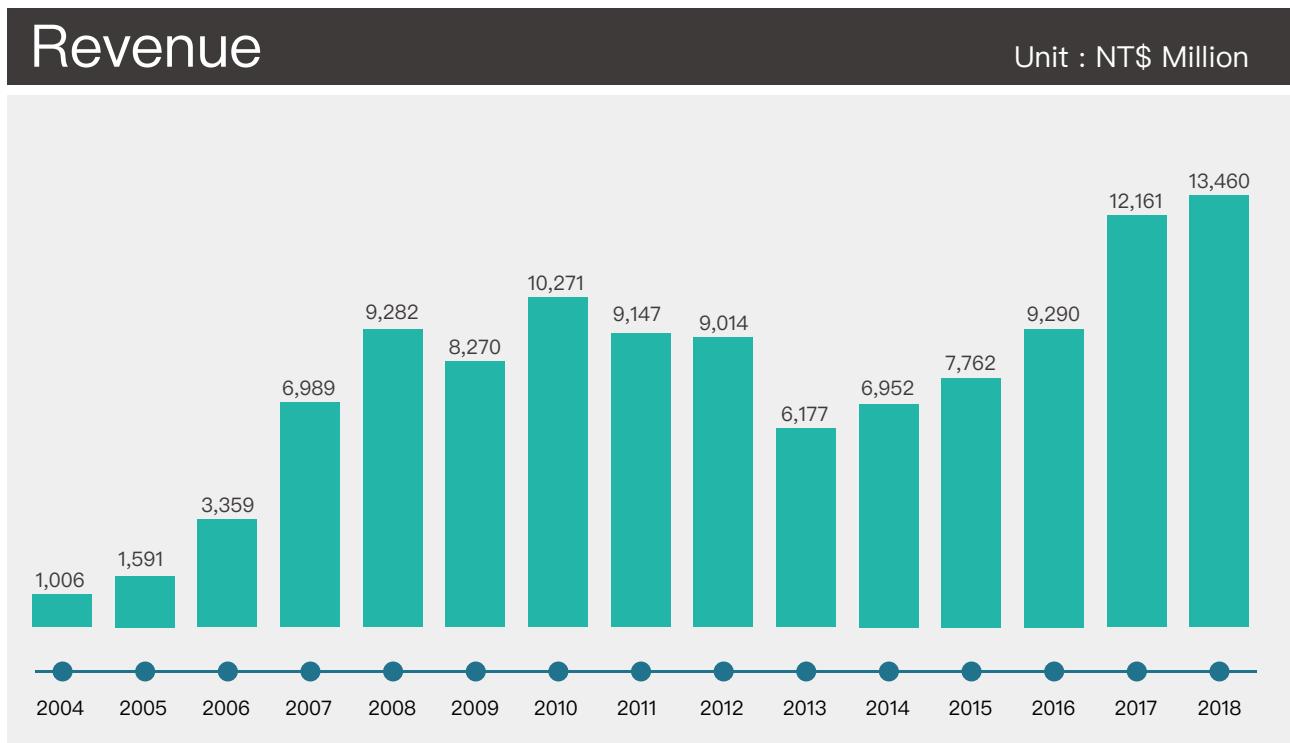
### Consolidated Financial Highlights



## Consolidated Financial Highlights

### Revenue

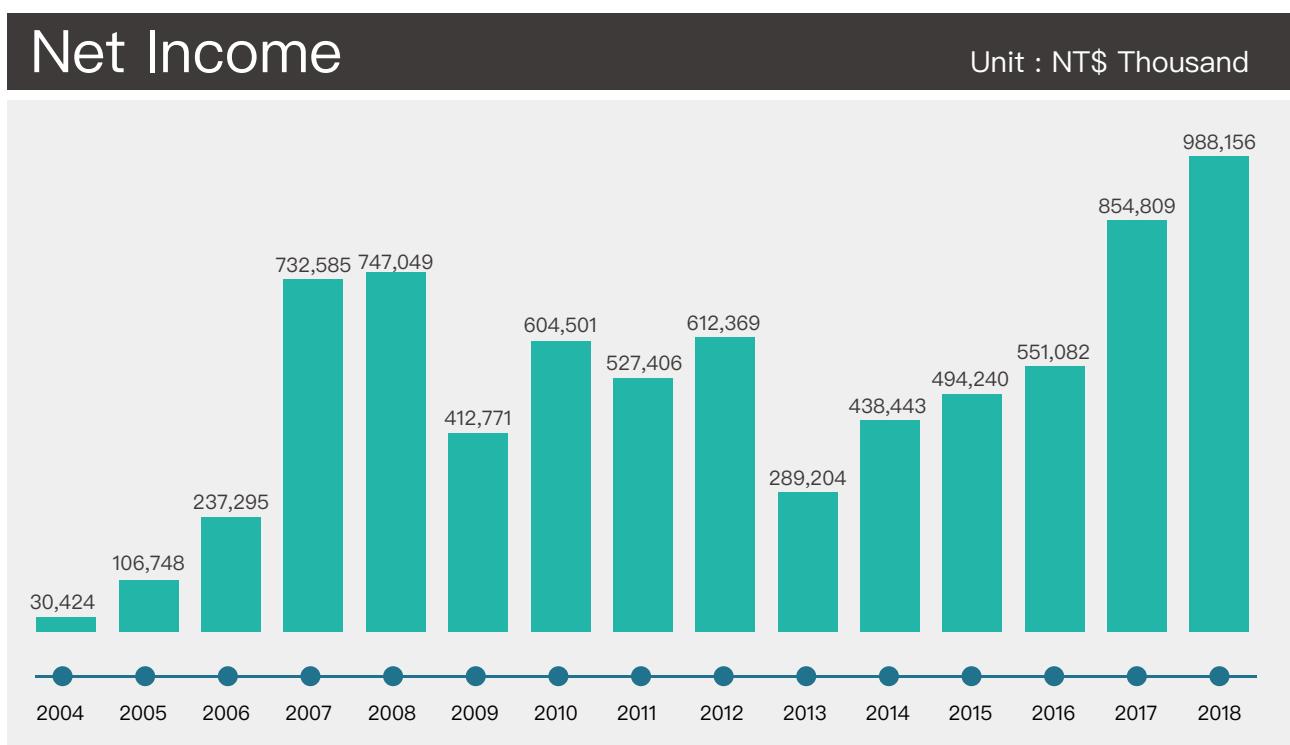
Unit : NT\$ Million



Note: R.O.C. GAAP (2011 and before); TIFRS (2012 and after).

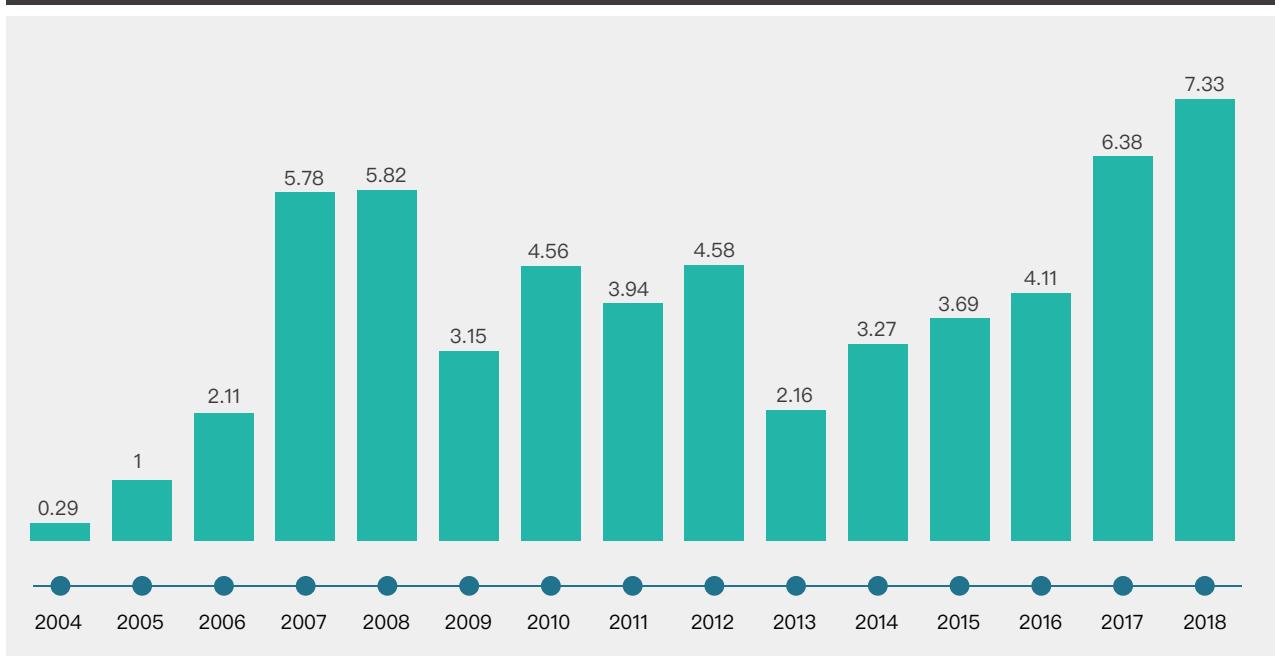
### Net Income

Unit : NT\$ Thousand



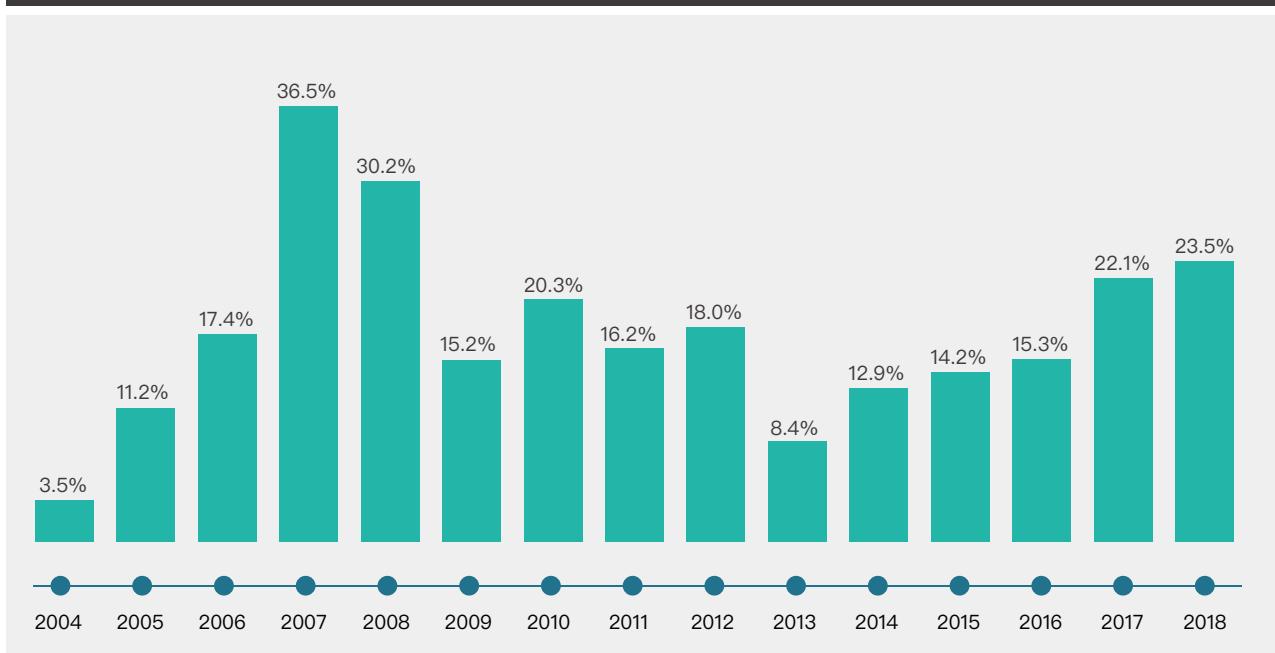
Note: R.O.C. GAAP (2011 and before); TIFRS (2012 and after).

## Earning Per Share



Note: R.O.C. GAAP (2011 and before); TIFRS (2012 and after).

## Return On Equity



Note: R.O.C. GAAP (2011 and before); TIFRS (2012 and after).

# 6

Chapter 6

## Consolidated Financial Statements



## **Global Unichip Corp. and Subsidiaries**

**Consolidated Financial Statements for the  
Years Ended December 31, 2018 and 2017 and  
Independent Auditors' Report**

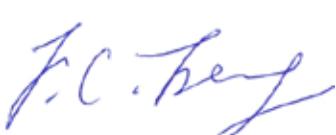
## REPRESENTATION LETTER

The companies required to be included in the consolidated financial statements of affiliates in accordance with the “Criteria Governing Preparation of Affiliation Reports, Consolidated Business Reports and Consolidated Financial Statements of Affiliated Enterprises” for the year ended December 31, 2018 are the same as the companies required to be included in the consolidated financial statements of parent and subsidiary companies as provided in International Financial Reporting Standard 10 “Consolidated Financial Statements.” Relevant information that should be disclosed in the consolidated financial statements of affiliates has all been disclosed in the consolidated financial statements of parent and subsidiary companies. Consequently, Global Unichip Corp. and Subsidiaries do not prepare a separate set of consolidated financial statements.

Very truly yours,

GLOBAL UNICHIP CORP.

By



DR. F. C. TSENG  
Chairman

January 31, 2019

### INDEPENDENT AUDITORS' REPORT

The Board of Directors and Shareholders  
Global Unichip Corp.

#### Opinion

We have audited the accompanying consolidated financial statements of Global Unichip Corp. and its subsidiaries (the “Company”), which comprise the consolidated balance sheets as of December 31, 2018 and 2017, and the consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for the years then ended, and the notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2018 and 2017, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), IFRIC Interpretations (IFRIC), and SIC Interpretations (SIC) endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China.

#### Basis for Opinion

We conducted our audit in accordance with the Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants and auditing standards generally accepted in the Republic of China. Our responsibilities under those standards are further described in the section Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Company in accordance with The Norm of Professional Ethics for Certified Public Accountant of the Republic of China, and we have fulfilled our other ethical responsibilities in accordance with these requirements. 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 judgment, were of most significance in our audit of the consolidated financial statements for the year ended December 31, 2018. 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.

### Valuation of inventory

Due to the current rapidly changes in technology and the highly competitive business environment, the price of products fluctuating quickly, evaluating the changes in the net realizable value of inventory could have a material impact on the financial statements. As of December 31, 2018 the carrying amount of inventory was NT\$1,274,954 thousand and accounted for 16% of the total assets in the consolidated balance sheet. Please refer to Notes 4, 5 and 7 to the consolidated financial statements for the details of the information and accounting policy about inventory. As the Company's primary business model is composed of rendering services and the sales of goods and the Company requires that inventories be stated at the lower of cost or net realizable value in accordance with IAS 2, when determining net realizable value of inventory for obsolescent and unmarketable items, the Company should consider the inventory accounting policy and the production schedule at the same time. As uncertainty exists in management's judgment when the determining the loss on inventory, the valuation of inventory has been identified as a key audit matter.

Our key audit procedures performed in respect of this area included the following:

1. Understood and tested the design of the key controls over the valuation of inventory.
2. Verified the reasonableness of the net realizable value of inventory by sampling from the year-end schedule of the raw materials, work in process, and finished goods, respectively, and matching the recent sales information.
3. Understood the process of the Company's warehouse management; reviewed the Company's annual inventory physical count plan; and observed its annual inventory physical count to assess the adequacy of the methods used by management to identify and monitor its obsolescent inventory.
4. Performed a retrospective review to analyze the historical reasonableness of judgments with reference to actual amounts of inventory loss.

### **Other Matter**

We have also audited the parent company only financial statements of Global Unichip Corp. as of and for the years ended December 31, 2018 and 2017 on which we have issued an unmodified opinion.

### **Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements**

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRS, IAS, IFRIC, and SIC endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China, and for such internal control as management determines 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, management is responsible for assessing the Company'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 management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance (including members of the Audit Committee) are responsible for overseeing the Company's financial reporting process.

## Auditors' 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 auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the auditing standards generally accepted in the Republic of China 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 the auditing standards generally accepted in the Republic of China, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

1. 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.
2. 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 Company's internal control.
3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
4. Conclude on the appropriateness of management's 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 Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' 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 auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.
5. 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.
6. Obtain sufficient and appropriate audit evidence on the financial information of components constituting the Company to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the 2018 consolidated financial statements and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partners on the audit resulting in this independent auditors' report are Yih-Shin Kao and Yu Feng Huang.

Deloitte & Touche  
Taipei, Taiwan  
The Republic of China

January 31, 2019

Notice to Readers

*The accompanying consolidated financial statements are intended only to present the consolidated financial position, financial performance and cash flows in accordance with accounting principles and practices generally accepted in the Republic of China and not those of any other jurisdictions. The standards, procedures and practices to audit such consolidated financial statements are those generally accepted and applied in the Republic of China.*

*For the convenience of readers, the independent auditors' report and the accompanying consolidated financial statements have been translated into English from the original Chinese version prepared and used in the Republic of China. If there is any conflict between the English version and the original Chinese version or any difference in the interpretation of the two versions, the Chinese-language independent auditors' report and consolidated financial statements shall prevail.*

## GLOBAL UNICHP CORP. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS  
(In Thousands of New Taiwan Dollars)

ASSETS	December 31, 2018		December 31, 2017		LIABILITIES AND EQUITY	December 31, 2018		December 31, 2017	
	Amount	%	Amount	%		Amount	%	Amount	%
CURRENT ASSETS					CURRENT LIABILITIES				
Cash and cash equivalents	\$ 3,906,191	48	\$ 5,090,202	62	Contract liabilities (Note 15)	\$ 869,174	11	\$ -	-
Contract assets (Note 15)	56,976	1	-	-	Accounts payable	732,365	9	590,192	7
Accounts receivable, net (Notes 6 and 15)	903,168	11	907,709	11	Payables to related parties (Note 25)	495,380	6	1,036,014	12
Receivables from related parties (Note 25)	7,038	-	9,550	-	Accrued employees' compensation and remuneration to directors (Note 21)	167,433	2	145,707	2
Inventories (Note 7)	1,274,954	16	1,152,514	14	Payables on machinery and equipment	364,475	4	88,334	1
Other financial assets	845	-	1,198	-	Current tax liabilities (Note 19)	130,395	2	77,948	1
Other current assets (Notes 10 and 25)	479,487	6	263,928	3	Provisions (Note 11)	-	-	485	-
Total current assets	<u>6,628,659</u>	<u>82</u>	<u>7,425,101</u>	<u>90</u>	Customer advances (Note 25)	-	-	1,630,281	20
NONCURRENT ASSETS					Accrued expenses and other current liabilities (Notes 12 and 25)	<u>875,634</u>	<u>11</u>	<u>577,145</u>	<u>7</u>
Property, plant and equipment (Note 8)	1,088,524	13	473,250	6	Total current liabilities	<u>3,634,856</u>	<u>45</u>	<u>4,146,106</u>	<u>50</u>
Intangible assets (Note 9)	288,195	4	323,533	4	NONCURRENT LIABILITIES				
Deferred income tax assets (Note 19)	60,741	1	36,625	-	Deferred income tax liabilities (Note 19)	23,862	-	8,031	-
Refundable deposits (Note 25)	20,921	-	14,787	-	Other long-term payables (Note 12)	53,239	1	64,186	1
Pledged time deposits (Note 26)	22,200	-	22,200	-	Net defined benefit liabilities (Note 13)	28,233	-	26,941	-
Total noncurrent assets	<u>1,480,581</u>	<u>18</u>	<u>870,395</u>	<u>10</u>	Guarantee deposits (Note 22)	<u>3,146</u>	<u>-</u>	<u>2,976</u>	<u>-</u>
TOTAL	<u>\$ 8,109,240</u>	<u>100</u>	<u>\$ 8,295,496</u>	<u>100</u>	Total noncurrent liabilities	<u>108,480</u>	<u>1</u>	<u>102,134</u>	<u>1</u>
					Total liabilities	<u>3,743,336</u>	<u>46</u>	<u>4,248,240</u>	<u>51</u>
					EQUITY (Note 14)				
					Share capital	1,340,119	17	1,340,119	16
					Capital surplus	32,543	-	32,513	1
					Retained earnings				
					Appropriated as legal reserve	663,892	8	578,411	7
					Appropriated as special reserve	10,940	-	1,514	-
					Unappropriated earnings	2,327,046	29	2,105,639	25
					Others	(8,636)	-	(10,940)	-
					Total equity	<u>4,365,904</u>	<u>54</u>	<u>4,047,256</u>	<u>49</u>
					TOTAL	<u>\$ 8,109,240</u>	<u>100</u>	<u>\$ 8,295,496</u>	<u>100</u>

The accompanying notes are an integral part of the consolidated financial statements.

# GLOBAL UNICHIP CORP. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017	
	Amount	%	Amount	%
NET REVENUE (Notes 15 and 25)	\$ 13,459,804	100	\$ 12,160,606	100
COST OF REVENUE (Notes 21 and 25)	9,442,762	70	8,995,509	74
GROSS PROFIT	4,017,042	30	3,165,097	26
OPERATING EXPENSES (Notes 21 and 25)				
Sales and marketing	309,076	2	323,785	3
General and administrative	337,899	3	282,307	2
Research and development	2,273,694	17	1,628,373	13
Total operating expenses	2,920,669	22	2,234,465	18
INCOME FROM OPERATIONS	1,096,373	8	930,632	8
NON-OPERATING INCOME AND EXPENSES				
Other income (Notes 16 and 25)	37,046	-	22,509	-
Other gains and losses (Note 17)	2,065	-	35,531	-
Finance costs (Note 18)	-	-	(60)	-
Total non-operating income and expenses	39,111	-	57,980	-
INCOME BEFORE INCOME TAX	1,135,484	8	988,612	8
INCOME TAX EXPENSE (Note 19)	147,328	1	133,803	1
NET INCOME	988,156	7	854,809	7
OTHER COMPREHENSIVE INCOME (LOSS)				
Items that will not be reclassified subsequently to profit or loss				
Remeasurement of defined benefit plans (Note 13)	(1,782)	-	(4,243)	-
Items that may be reclassified subsequently to profit or loss				
Exchange differences on translation of foreign operations (Note 14)	2,304	-	(9,426)	-
Other comprehensive income (loss) for the year, net of income tax	522	-	(13,669)	-
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	\$ 988,678	7	\$ 841,140	7
EARNINGS PER SHARE (Note 20)				
Basic earnings per share	\$ 7.37		\$ 6.38	
Diluted earnings per share	\$ 7.33		\$ 6.35	

The accompanying notes are an integral part of the consolidated financial statements.

## GLOBAL UNICHIP CORP. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY  
(In Thousands of New Taiwan Dollars, Unless Specified Otherwise)

	Share Capital - Common Stock			Retained Earnings				Others		Total Equity
	Share (In Thousands)	Amount	Capital Surplus	Legal Reserve	Special Reserve	Unappropriated Earnings	Total	Foreign Currency Translation Reserve		
BALANCE, JANUARY 1, 2017	134,011	\$ 1,340,119	\$ 29,853	\$ 523,303	\$ -	\$ 1,780,737	\$ 2,304,040	\$ (1,514)	\$ 3,672,498	
Appropriation and distribution of prior year's earnings										
Legal reserve	-	-	-	55,108	-	(55,108)	-	-	-	-
Special reserve	-	-	-	-	1,514	(1,514)	-	-	-	-
Cash dividends to shareholders - NT\$3.50 per share	-	-	-	-	-	(469,042)	(469,042)	-	-	(469,042)
Total	-	-	-	55,108	1,514	(525,664)	(469,042)	-	-	(469,042)
Donations from shareholders	-	-	2,660	-	-	-	-	-	-	2,660
Net income in 2017	-	-	-	-	-	854,809	854,809	-	-	854,809
Other comprehensive loss in 2017, net of income tax	-	-	-	-	-	(4,243)	(4,243)	(9,426)	(13,669)	
Total comprehensive income (loss) in 2017	-	-	-	-	-	850,566	850,566	(9,426)	841,140	
BALANCE, DECEMBER 31, 2017	134,011	1,340,119	32,513	578,411	1,514	2,105,639	2,685,564	(10,940)	4,047,256	
Appropriation and distribution of prior year's earnings										
Legal reserve	-	-	-	85,481	-	(85,481)	-	-	-	-
Special reserve	-	-	-	-	9,426	(9,426)	-	-	-	-
Cash dividends to shareholders - NT\$5.00 per share	-	-	-	-	-	(670,060)	(670,060)	-	-	(670,060)
Total	-	-	-	85,481	9,426	(764,967)	(670,060)	-	-	(670,060)
Dividends from claims extinguished by prescription	-	-	30	-	-	-	-	-	-	30
Net income in 2018	-	-	-	-	-	988,156	988,156	-	-	988,156
Other comprehensive income (loss) in 2018, net of income tax	-	-	-	-	-	(1,782)	(1,782)	2,304	522	
Total comprehensive income in 2018	-	-	-	-	-	986,374	986,374	2,304	988,678	
BALANCE, DECEMBER 31, 2018	134,011	\$ 1,340,119	\$ 32,543	\$ 663,892	\$ 10,940	\$ 2,327,046	\$ 3,001,878	\$ (8,636)	\$ 4,365,904	

The accompanying notes are an integral part of the consolidated financial statements.

# GLOBAL UNICHIP CORP. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CASH FLOWS (In Thousands of New Taiwan Dollars)

	2018	2017
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Income before income tax	\$ 1,135,484	\$ 988,612
Adjustments for:		
Depreciation	186,767	89,877
Amortization	226,428	166,409
Gain on financial assets at fair value through profit or loss	(1,278)	-
Finance costs	-	60
Interest income	(26,557)	(16,857)
Loss (gain) on disposal of property, plant and equipment, net	4	(4,403)
Gain on disposal of financial assets	-	(1,445)
Loss (gain) on foreign exchange, net	13,581	(9,378)
Changes in operating assets and liabilities:		
Contract assets	(43,584)	-
Accounts receivable	(11,090)	(174,653)
Receivables from related parties	2,512	34,760
Inventories	(122,440)	(425,014)
Other financial assets	(166)	-
Other current assets	(21,193)	69,022
Contract liabilities	(761,107)	-
Accounts payable	(49,755)	192,725
Payables to related parties	(540,634)	60,041
Accrued employees' compensation and remuneration to directors	21,726	81,685
Provisions	-	(2,019)
Customer advances	-	778,278
Accrued expenses and other current liabilities	322,266	186,252
Net defined benefit liabilities	(490)	(337)
Cash generated from operations	<u>330,474</u>	<u>2,013,615</u>
Income tax paid	<u>(103,416)</u>	<u>(86,084)</u>
Net cash generated from operating activities	<u>227,058</u>	<u>1,927,531</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Acquisitions of:		
Financial assets at fair value through profit or loss	(2,310,000)	-
Available-for-sale financial assets	-	(2,780,000)
Property, plant and equipment	(528,911)	(143,081)
Intangible assets	(240,117)	(188,467)
Proceeds from disposal of:		
Financial assets at fair value through profit or loss	2,311,278	-
Available-for-sale financial assets	-	2,781,445
Property, plant and equipment	3,305	4,495
Refundable deposits paid	(7,349)	(4,447)
Refundable deposits refunded	1,522	2,936
Increase in pledged time deposits	-	(2,200)
Interest received	<u>27,076</u>	<u>16,472</u>
Net cash used in investing activities	<u>(743,196)</u>	<u>(312,847)</u>

(Continued)

# GLOBAL UNICHIP CORP. AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CASH FLOWS (In Thousands of New Taiwan Dollars)

	2018	2017
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Guarantee deposits received	\$ 83	\$ -
Guarantee deposits refunded	(7)	-
Cash dividends paid	(670,060)	(469,040)
Interest paid	-	(60)
Dividends from claims extinguished by prescription reclassified to capital surplus	30	-
Donations from shareholders	<u>-</u>	<u>2,660</u>
Net cash used in financing activities	<u>(669,954)</u>	<u>(466,440)</u>
<b>EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS</b>		
	<u>2,081</u>	<u>(8,582)</u>
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	<b>(1,184,011)</b>	<b>1,139,662</b>
<b>CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR</b>	<b><u>5,090,202</u></b>	<b><u>3,950,540</u></b>
<b>CASH AND CASH EQUIVALENTS, END OF YEAR</b>	<b><u>\$ 3,906,191</u></b>	<b><u>\$ 5,090,202</u></b>

The accompanying notes are an integral part of the consolidated financial statements.

(Concluded)

# GLOBAL UNICHIP CORP. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017 (Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

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### 1. GENERAL

Global Unichip Corp. (GUC), a Republic of China (R.O.C.) corporation, was incorporated on January 22, 1998. GUC is engaged mainly in researching, developing, producing, testing and selling of embedded memory and logic components for various application ICs, cell libraries for various application ICs, and EDA tools for various application ICs. On November 3, 2006, GUC's shares were listed on the Taiwan Stock Exchange (TWSE). The address of its registered office and principal place of business is No. 10 Li-Hsin 6<sup>th</sup> Rd., Hsinchu Science Park, Taiwan. GUC together with its consolidated subsidiaries are hereinafter referred to collectively as the "Company".

### 2. APPROVAL OF CONSOLIDATED FINANCIAL STATEMENTS

The consolidated financial statements were approved by the Audit Committee and authorized by the Board of Directors for issue on January 31, 2019.

### 3. APPLICATION OF NEW, AMENDED AND REVISED STANDARDS AND INTERPRETATIONS

- a. Initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC), and Interpretations of IAS (SIC) (collectively, the "IFRSs") endorsed and issued into effect by the Financial Supervisory Commission (FSC).

Except for the following, whenever applied, the initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRSs endorsed and issued into effect by the FSC would not have any material impact on the Company's accounting policies:

- 1) IFRS 9 "Financial Instruments" and related amendment

IFRS 9 supersedes IAS 39 "Financial Instruments: Recognition and Measurement", with consequential amendments to IFRS 7 "Financial Instruments: Disclosures" and other standards. IFRS 9 sets out the requirements for classification, measurement and impairment of financial assets and hedge accounting. Please refer to Note 4 for information relating to the relevant accounting policies.

#### Classification, measurement and impairment of financial assets

On the basis of the facts and circumstances that exist as at January 1, 2018, the Company has performed an assessment of the classification of recognized financial assets and has elected not to restate comparative figures.

The following table shows the original measurement categories and carrying amount under IAS 39 and the new measurement categories and carrying amount under IFRS 9 for each class of the Company's financial assets as at January 1, 2018.

	Measurement Category		Carrying Amount		Note
	IAS 39	IFRS 9	IAS 39	IFRS 9	
<u>Financial Assets</u>					
Cash and cash equivalents	Loans and receivables	Amortized cost	\$ 5,090,202	\$ 5,090,202	(1)
Accounts receivable (including related parties), other financial assets, refundable deposits and pledged time deposits	Loans and receivables	Amortized cost	941,376	941,376	(1)
<u>Financial Liabilities</u>					
Accounts payable (including related parties), payables on machinery and equipment, accrued expenses and other current liabilities, other long-term payables and guarantee deposits	Amortized cost	Amortized cost	2,184,268	2,184,268	

- (1) Cash and cash equivalents, accounts receivable (including related parties), other financial assets, refundable deposits and pledged time deposits which were classified as loans and receivables under IAS 39 are now classified at amortized cost per the assessment of future 12-month or lifetime expected credit losses under IFRS 9.
- (2) Mutual funds previously classified as available-for-sale were classified as at fair value through profit or loss because the contractual cash flows are not solely payments of principal and interest on the principal outstanding and they are not equity instruments. The Company's mutual funds were sold in full on January 1, 2018.
- (3) Unlisted shares previously measured at cost under IAS 39 were classified as at fair value through profit or loss under IFRS 9 and will be measured at fair value. The Company's assessed fair value of financial assets at fair value through profit or loss was zero on January 1, 2018.

2) IFRS 15 "Revenue from Contracts with Customers" and related amendment

IFRS 15 establishes principles for recognizing revenue that apply to all contracts with customers, and supersedes IAS 18, "Revenue," IAS 11, "Construction Contracts," and a number of revenue-related interpretations. Please refer to Note 4 for information related to the relevant accounting policies.

After application of IFRS 15, NRE service is recognized when the NRE service is completed according to the contract which signed with customers. If each performance obligation can be measured reasonably by completion stages, the contract is restricted for another use, and the customer would compensate the company to recover the costs incurred plus a reasonable profit margin whenever the contract is terminated by the customer, revenues of the contract service will be recognized over time. Before application of IFRS 15, the company recognized revenue by the stage of completion of the contract.

Under IFRS 15, the net effect of revenue recognized and consideration received and receivable is recognized as a contract asset or a contract liability. Before application of IFRS 15, accounts receivable was recognized or customer advances received was reduced when revenue was recognized for the contract under IAS 18.

Before application of IFRS 15, the company recognize sales discount and return as sales discount and return provisions. After application of IFRS 15, the company recognize sales discount and return as refund liabilities (accrued expenses and other current liabilities).

The Company elects to retrospectively apply IFRS 15 to the contracts that are not complete on January 1, 2018 and recognize the cumulative effect of the change in the retained earnings on January 1, 2018.

Impact on assets, liabilities and equity for current period

	<b>Carrying Amount as of January 1, 2018</b>	<b>Adjustments Arising from Initial Application</b>	<b>Restated Carrying Amount as of January 1, 2018</b>
Accounts receivable, net	\$ 907,709	\$ (13,392)	\$ 894,317
Contract assets	<u>                  </u> - <u>                  </u>	<u>                  </u> 13,392 <u>                  </u>	<u>                  </u> 13,392 <u>                  </u>
Total effect on assets	<u>                  </u> \$ 907,709 <u>                  </u>	<u>                  </u> \$ <u>                  </u> <u>                  </u>	<u>                  </u> \$ 907,709 <u>                  </u>
Contract liabilities	\$ <u>                  </u> - <u>                  </u>	<u>                  </u> \$ 1,630,281 <u>                  </u>	<u>                  </u> \$ 1,630,281 <u>                  </u>
Customer advances	<u>                  </u> 1,630,281 <u>                  </u>	<u>                  </u> (1,630,281) <u>                  </u>	<u>                  </u> - <u>                  </u>
Refund liabilities (accrued expenses and other current liabilities)	<u>                  </u> - <u>                  </u>	<u>                  </u> 485 <u>                  </u>	<u>                  </u> 485 <u>                  </u>
Provisions	<u>                  </u> 485 <u>                  </u>	<u>                  </u> (485) <u>                  </u>	<u>                  </u> - <u>                  </u>
Total effect on liabilities	<u>                  </u> \$ 1,630,766 <u>                  </u>	<u>                  </u> \$ <u>                  </u> <u>                  </u>	<u>                  </u> \$ 1,630,766 <u>                  </u>

The impact of continuing the application of IAS 18 instead of IFRS 15 for the year ended December 31, 2018 is detailed as follows:

Impact on assets, liabilities and equity

	<b>December 31, 2018</b>
Decrease in contract assets	\$ (56,976)
Increase in accounts receivable, net	<u>                  </u> 56,976 <u>                  </u>
Total effect on assets	<u>                  </u> \$ <u>                  </u> <u>                  </u>
Decrease in contract liabilities	\$ (869,174)
Increase in customer advances	<u>                  </u> 869,174 <u>                  </u>
Increase in provisions	<u>                  </u> 106,123 <u>                  </u>
Decrease in refund liabilities (accrued expenses and other current liabilities)	<u>                  </u> (106,123) <u>                  </u>
Total effect on liabilities	<u>                  </u> \$ <u>                  </u> <u>                  </u>

3) IFRIC 22 “Foreign Currency Transactions and Advance Consideration”

IAS 21 stipulated that a foreign currency transaction shall be recorded on initial recognition in the functional currency by applying to the foreign currency amount the spot exchange rate between the functional currency and the foreign currency at the date of the transaction. IFRIC 22 further explains that the date of the transaction is the date on which an entity recognizes a non-monetary asset or non-monetary liability from payment or receipt of advance consideration. If there are multiple payments or receipts in advance, the entity shall determine the date of the transaction for each payment or receipt of advance consideration.

The Company applies IFRIC 22 prospectively to all assets, expenses and income recognized on or after January 1, 2018 within the scope of the Interpretation.

b. Amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRSs endorsed by the FSC for application starting from 2019

<b>New IFRSs</b>	<b>Effective Date Announced by International Accounting Standards Board (IASB) (Note 1)</b>
Annual Improvements to IFRSs 2015-2017 Cycle	January 1, 2019
Amendments to IFRS 9 “Prepayment Features with Negative Compensation”	January 1, 2019 (Note 2)
IFRS 16 “Leases”	January 1, 2019
Amendments to IAS 19 “Plan Amendment, Curtailment or Settlement”	January 1, 2019 (Note 3)
Amendments to IAS 28 “Long-term Interests in Associates and Joint Ventures”	January 1, 2019
IFRIC 23 “Uncertainty Over Income Tax Treatments”	January 1, 2019

Note 1: Unless stated otherwise, the above New IFRSs are effective for annual periods beginning on or after their respective effective dates.

Note 2: The FSC permits the election for early adoption of the amendments starting from 2018.

Note 3: The Company shall apply these amendments to plan amendments, curtailments or settlements occurring on or after January 1, 2019.

The initial application of the above New IFRSs, whenever applied, would not have any material impact on the Company’s accounting policies, except for the following:

#### IFRS 16 “Leases”

IFRS 16 sets out the accounting standards for leases that will supersede IAS 17 “Leases”, IFRIC 4 “Determining whether an Arrangement contains a Lease”, and a number of related interpretations.

#### Definition of a lease

Upon initial application of IFRS 16, the Company will elect to apply IFRS 16 only to contracts entered into (or changed) on or after January 1, 2019 in order to determine whether those contracts are, or contain, a lease. Contracts identified as containing a lease under IAS 17 and IFRIC 4 will not be reassessed and will be accounted for in accordance with the transitional provisions under IFRS 16.

#### The Company as lessee

Upon initial application of IFRS 16, the Company will recognize right-of-use assets and lease liabilities for all leases on the consolidated balance sheets except for those whose payments under low-value and short-term leases will be recognized as expenses on a straight-line basis. On the consolidated statements of comprehensive income, the Company will present the depreciation expense charged on right-of-use assets separately from the interest expense accrued on lease liabilities; interest is computed using the effective interest method. On the consolidated statements of cash flows, cash payments for the principal portion of lease liabilities and cash payments for the interest portion will be classified within financing activities. Currently, payments under operating lease contracts are recognized as expenses on a straight-line basis. Cash flows for operating leases are classified within operating activities on the consolidated statements of cash flows.

The Company applying IFRS 16 retrospectively with the cumulative effect of the initial application of this standard recognized on January 1, 2019. Comparative information will not be restated.

Lease liabilities will be recognized on January 1, 2019 for leases currently classified as operating leases with the application of IAS 17. Lease liabilities will be measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate on January 1, 2019. Right-of-use assets will be measured at their carrying amount as if IFRS 16 had been applied since the commencement date, but discounted using the aforementioned incremental borrowing rate. The Company will apply IAS 36 to all right-of-use assets.

The Company expects to apply the following practical expedients:

- 1) The Company will apply a single discount rate to a portfolio of leases with reasonably similar characteristics to measure lease liabilities.
- 2) The Company will account for those leases for which the lease term ends on or before December 31, 2019 as short-term leases.
- 3) The Company will exclude initial direct costs from the measurement of right-of-use assets on January 1, 2019.
- 4) The Company will use hindsight, such as in determining lease terms, to measure lease liabilities.

#### The Company as lessor

The Company subleased its leasehold parking lot to a third party from 2016. Such sublease is classified as an operating lease under IAS 17. The Company will assess the sublease classification as an operating lease on the basis of the contractual terms and conditions of the head lease and sublease on January 1, 2019.

#### Anticipated impact on assets, liabilities and equity

	<b>Carrying Amount as of December 31, 2018</b>	<b>Adjustments Arising from Initial Application</b>	<b>Adjusted Carrying Amount as of January 1, 2019</b>
Right-of-use assets	\$ _____ -	\$ 223,331	\$ 223,331
Total effect on assets	\$ _____ -	\$ 223,331	\$ 223,331
Lease liabilities - current	\$ _____ -	\$ 51,176	\$ 51,176
Lease liabilities - non-current	\$ _____ -	172,155	172,155
Total effect on liabilities	\$ _____ -	\$ 223,331	\$ 223,331

Except for the above impacts, as of the date the consolidated financial statements were authorized for issue, the Company is continuously assessing other possible impacts that the application of the aforementioned amendments and the related amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers will have on the Company's financial position and financial performance and will disclose these other impacts when the assessment is completed.

c. The IFRSs issued by IASB but not yet endorsed and issued into effect by the FSC

New IFRSs	Effective Date Announced by IASB (Note 1)
Amendments to IFRS 3 “Definition of a Business”	January 1, 2020 (Note 2)
Amendments to IFRS 10 and IAS 28 “Sale or Contribution of Assets between an Investor and its Associate or Joint Venture”	To be determined by IASB
IFRS 17 “Insurance Contracts”	January 1, 2021
Amendments to IAS 1 and IAS 8 “Definition of Material”	January 1, 2020 (Note 3)

Note 1: Unless stated otherwise, the above New IFRSs are effective for annual periods beginning on or after their respective effective dates.

Note 2: The Company shall apply these amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020 and to asset acquisitions that occur on or after the beginning of that period.

Note 3: The Company shall apply these amendments prospectively for annual reporting periods beginning on or after January 1, 2020.

As of the date the consolidated financial statements were authorized for issue, the Company is continuously assessing the possible impact that the application of above standards and interpretations will have on the Company’s financial position and financial performance, and will disclose the relevant impact when the assessment is completed.

#### 4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

For the convenience of readers, the accompanying consolidated financial statements have been translated into English from the original Chinese version prepared and used in the R.O.C. If there is any conflict between the English version and the original Chinese version or any difference in the interpretation of the two versions, the Chinese-language consolidated financial statements shall prevail.

Significant accounting policies are summarized as follows:

##### **Statement of Compliance**

The consolidated financial statements have been prepared in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and IFRSs as endorsed and issued into effect by the FSC.

##### **Basis of Preparation**

The consolidated financial statements have been prepared on the historical cost basis except for financial instruments which are measured at fair value and net defined benefit liabilities which are measured at the present value of the defined benefit obligation less the fair value of plan assets, as explained in the accounting policies below.

Historical cost is generally based on the fair value of the consideration given in exchange for assets.

## Basis of Consolidation

### Principles for preparing consolidated financial statements

The consolidated financial statements incorporate the financial statements of GUC and entities controlled by GUC (its subsidiaries). Control is achieved where the Company has the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies accord with those used by the Company.

All intercompany transactions, balances, income and expenses are eliminated in full upon consolidation.

### The subsidiaries in the consolidated financial statements

The detail information of the subsidiaries at the end of reporting period was as follows:

Name of Investor	Name of Investee	Main Businesses and Products	Establishment and Operating Location	Percentage of Ownership		Remark
				2018	2017	
GUC	Global Unichip Corp.-NA (GUC-NA)	Products consulting, design and technical support service	U.S.A.	100%	100%	Note 1
	Global Unichip Japan Co., Ltd. (GUC-Japan)	Products consulting, design and technical support service	Japan	100%	100%	Note 1
	Global Unichip Corp. Europe B.V. (GUC-Europe)	Products consulting, design and technical support service	Netherlands	100%	100%	Note 1
	Global Unichip (BVI) Corp. (GUC-BVI)	Investing activities	British Virgin Islands	100%	100%	Note 1
	Global Unichip Corp. Korea (GUC-Korea)	Products consulting, design and technical support service	Korea	100%	100%	Note 1
	Global Unichip (Nanjing) Ltd. (GUC-Nanjing)	Products consulting, design and technical support service	Nanjing, China	100%	100%	Notes 1 & 2
GUC-BVI	Global Unichip (Shanghai) Company, Limited (GUC-Shanghai)	Products consulting, design and technical support service	Shanghai, China	100%	100%	Note 1

Note 1: The subsidiaries are not significant subsidiaries, their financial statements have not been audited except for GUC-NA.

Note 2: Upon the approval of the Board of the Directors on May 4 2017, GUC-Nanjing was established by GUC in July 2017.

## Foreign Currencies

The financial statements of each individual consolidated entity were expressed in the currency, which reflected its primary economic environment (functional currency). The functional currency of GUC and presentation currency of the consolidated financial statements are both New Taiwan Dollars (NT\$). In preparing the consolidated financial statement, the operating results and financial positions of each consolidated entity are translated into NT\$.

In preparing the financial statements of each individual consolidated entity, transactions in currencies other than the entity's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Such exchange differences are recognized in profit or loss in the period in which they arise. Non-monetary items measured at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Exchange differences on the retranslation of non-monetary items are included in profit or loss for the period except for exchange differences on the retranslation of non-monetary items in respect of which gains and losses are recognized directly in other comprehensive income, in which case, the

exchange differences are also recognized directly in other comprehensive income. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

For the purposes of presenting consolidated financial statements, the assets and liabilities of the Company's foreign operations are translated into NT\$ using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period. Exchange differences arising, if any, are recognized in other comprehensive income and accumulated in equity.

### **Classification of Current and Noncurrent Assets and Liabilities**

Current assets include:

- a. Assets held primarily for the purpose of trading;
- b. Assets expected to be realized within twelve months after the reporting period; and
- c. Cash and cash equivalents unless the asset is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

Current liabilities include:

- a. Liabilities held primarily for the purpose of trading;
- b. Liabilities due to be settled within twelve months after the reporting period; and
- c. Liabilities for which the Company does not have an unconditional right to defer settlement for at least twelve months after the reporting period. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

Assets and liabilities that are not classified as current are classified as non-current.

### **Cash Equivalents**

Cash equivalents, for the purpose of meeting short-term cash commitments, consist of highly liquid time deposits and investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

### **Financial Instruments**

Financial assets and liabilities shall be recognized when the Company becomes a party to the contractual provisions of the instruments.

Financial assets and liabilities are initially recognized at fair values. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in profit or loss.

### **Financial Assets**

All regular way purchases or sales of financial assets are recognized and derecognized on a settlement date basis.

a. Measurement category

2018

Financial assets are classified into the following categories: financial assets at fair value through profit or loss (FVTPL) and financial assets at amortized cost.

1) Financial assets at FVTPL

Financial assets at FVTPL includes the financial assets are mandatorily classified as at FVTPL, which includes investments in equity instruments which are not designated as at fair value through other comprehensive income (FVOCI) and debt instruments that do not meet the amortized cost criteria or the FVOCI criteria.

Financial assets at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any dividend or interest earned on the financial asset. Fair value is determined in the manner described in Note 24.

2) Financial assets at amortized cost

Financial assets that meet the following 2 conditions are subsequently measured at amortized cost:

- a) The financial asset is held within a business model whose objective is collecting contractual cash flows; and
- b) 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.

Subsequent to initial recognition, financial assets at amortized cost (including cash and cash equivalents, notes and accounts receivable (including related parties) and other receivables), are measured at amortized cost, which equals gross carrying amount determined by the effective interest method less any impairment loss. Exchange differences are recognized in profit or loss.

2017

Financial assets are classified as available-for-sale financial assets and loans and receivables. Thus are depended at the time of initial recognition's characteristic and purpose. Convention trading of financial assets are recognized and derecognized on a settlement date basis. Convention trading purchases or sales of financial assets require delivery of assets within the time frame established by regulation or convention in the marketplace.

1) Available-for-sale financial assets

Available-for-sale financial assets are non-derivatives financial assets that are either designated as available-for-sale or not classified as (a) loans and receivables, (b) held-to-maturity financial assets or (c) FVTPL.

Open-end mutual funds held by the Company that are traded in an active market are classified as available-for-sale financial assets and are stated at fair value at the end of each reporting period. When the investment is disposed of or is determined to be impaired, the cumulative gain or loss previously recognized in other comprehensive income is reclassified to profit or loss.

Fair value of open-end mutual funds is determined by the financial institution using the net assets value at the balance sheet date.

Available-for-sale equity investments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured, are presented at cost less any identified impairment loss at the end of each reporting period and in a separate line item as financial assets measured at cost. If, in a subsequent period, the fair value of the financial assets can be reliably measured, the financial assets are remeasured at fair value. The difference between carrying amount and fair value is recognized in other comprehensive income on financial assets. Any impairment losses are recognized in profit and loss.

2) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Loans and receivables including cash and cash equivalents, notes and accounts receivable (including related parties) and other receivables are measured at amortized cost using the effective interest method less any impairment, except for those receivables with immaterial discounted effect.

b. Impairment of financial assets and contract assets

2018

The Company recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including trade receivables) and contract assets.

The Company always recognizes lifetime Expected Credit Losses (ECLs) for trade receivables. For all other financial instruments, the Company recognizes lifetime ECLs when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on the financial instrument has not increased significantly since initial recognition, the Company measures the loss allowance for that financial instrument at an amount equal to 12-month ECLs.

Expected credit losses reflect the weighted average of credit losses with the respective risks of a default occurring as the weights. Lifetime ECLs represent the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECLs represent the portion of lifetime ECLs that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

For poor credit rating customers have accounts receivable balances past due over 90 days, the Company recognizes loss allowance at full amount.

The Company recognizes an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account.

2017

Financial assets, other than those at FVTPL, are assessed for indicators of impairment at the end of each reporting period. Financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been affected.

For financial assets carried at amortized cost, such as trade receivables, assets that are assessed not to be impaired individually are, in addition, assessed for impairment on a collective basis. The Company assesses the collectability of receivables by evaluating the current financial condition of customers, historical experience and by performing account aging analysis. In the aging analysis, poor credit rating customers have accounts receivable balances past due over 90 days should all be recognized an allowance for doubtful receivable.

For financial assets measured at cost, the amount of the impairment loss is measured as the difference between the asset's carrying amount and the present value of the estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment loss will not be reversed in subsequent periods.

The carrying amount of the financial asset is reduced by the impairment loss directly for all financial assets with the exception of trade receivables, where the carrying amount is reduced by using an allowance account. When a trade receivable is considered uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account.

c. Derecognition of financial assets

The Company derecognizes a financial asset only when the contractual rights to the cash flows from the financial asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity.

Before 2018, on derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognized in other comprehensive income is recognized in profit or loss. From 2018, on derecognition of a financial asset at amortized cost in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss.

## **Financial Liabilities and Equity Instruments**

a. Classification as debt or equity

Debt and equity instruments issued by the Company are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

b. Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognized at the proceeds received, net of direct issue costs.

c. Financial liabilities

Financial liabilities are subsequently measured at amortized cost using effective interest method.

Financial liabilities other than those held for trading purposes and designated as at FVTPL are subsequently measured at amortized cost at the end of each reporting period.

d. Derecognition of financial liabilities

The Company derecognizes financial liabilities when, and only when, the Company's obligations are discharged, cancelled or they expire. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in profit or loss.

## **Inventories**

Inventories consist of raw materials, supplies, finished goods and work-in-process. Inventories are stated at the lower of cost or net realizable value. Inventory write-downs are made on an item-by-item basis, except where it may be appropriate to group similar or related items. Net realizable value is the estimated

selling price of inventories less all estimated costs of completion and necessary selling costs. Inventories are recorded at weighted-average cost on the balance sheet date.

### **Property, Plant and Equipment and Assets Leased to Others**

Property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment. Costs include any incremental costs that are directly attributable to the construction or acquisition of the item of property, plant and equipment.

Depreciation is recognized so as to write off the cost of the assets less their residual values over their useful lives, and it is computed using the straight-line method over the following estimated useful lives:

Buildings	50 years
Machinery and equipment	4 to 7 years
Research and development equipment	3 to 5 years
Transportation equipment	5 years
Office equipment	3 to 5 years
Miscellaneous equipment	2 to 10 years

The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimates accounted for on a prospective basis.

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the assets. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognized in profit or loss.

### **Leases**

Leases are classified as finance lease whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee, other than finance leases are classified as operating lease.

Rental income from operating lease is recognized on a straight-line basis over the term of the relevant lease. Operating lease payments are recognized as an expense on a straight-line basis over the lease term.

### **Intangible Assets**

Intangible assets are limited in a certain useful life. The initial book value is recorded on the purchasing cost itself. After that the subsequent book value is measured by cost less accumulated amortization and accumulated impairment losses. Amortization is recognized using the straight-line method over the following estimated useful lives:

Software	2 to 5 years
Technology license fees	The term of the technology transfer contract
Patents	Economic lives of the patents

The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

Expenditure on research activities is recognized as an expense when incurred. An internally-generated intangible asset arising from development activities is capitalized and then amortized on a straight-line basis over its useful life if the recognition criteria for an intangible asset have been met; otherwise, the development expenditure is recognized as an expense when incurred.

## **Impairment of Tangible and Intangible Assets**

At the end of each reporting period, the Company reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs. When a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Recoverable amount is the higher of fair value less costs to sell or value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount. An impairment loss is recognized immediately in profit or loss.

When an impairment loss subsequently reverses, the carrying amount of the asset or a cash-generating unit is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized immediately in profit or loss.

## **Provision**

### 2017

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that the Company will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

## **Revenue Recognition**

### 2018

The Company identifies the contract with the customers, allocates the transaction price to the performance obligations, and recognizes revenue when performance obligations are satisfied. Revenue from sale of goods is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances.

#### Revenue from sale of goods

Recognized when a customer obtains control of promised goods, at which time the goods are delivered to the customer's specific location and performance obligation is satisfied.

### Rendering of Non-Recurring Engineering (NRE) services

Recognized the revenue when the NRE service is completed, which meet the qualifications of customer's contract. If each performance obligation can be measured reasonably by completion stages, the contract is restricted for another use, and the customer would compensate the company to recover the costs incurred plus a reasonable profit margin whenever the contract is terminated by the customer, revenues of the contract service will be recognized over time.

#### 2017

Revenue is measured at the fair value of the consideration received or receivable. Revenue is also reduced for estimated customer returns, rebates and other similar allowances.

#### Sale of goods

Revenue from the sale of goods is recognized when the goods are delivered and titles have passed, at which time all the following conditions are satisfied:

- The Company has transferred to the buyer the significant risks and rewards of ownership of the goods;
- The Company retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
- The amount of revenue can be measured reliably;
- It is probable that the economic benefits associated with the transaction will flow to the Company; and
- The costs incurred or to be incurred in respect of the transaction can be measured reliably.

### Rendering of Non-Recurring Engineering (NRE) services

Revenue from a contract to provide NRE services is recognized by reference to the stage of completion of the contract.

#### Interest Income

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable.

#### **Retirement Benefits**

Payments to defined contribution retirement benefit plans are recognized as an expense when employees have rendered service entitling them to the contributions.

Defined benefit costs under the defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost and net interest on the net defined benefit liability are recognized as employee benefits expense in the period they occur. Remeasurement is recognized in other comprehensive income in the period in which they occur, and it is reflected in retained earnings immediately and will not be reclassified to profit or loss.

Net defined benefit liability represents the actuarial deficit in the Company's defined benefit plan.

#### **Taxation**

Income tax expense represents the sum of the tax currently payable and deferred tax.

### Current tax

According to the Income Tax Law, an additional income tax of unappropriated earnings is provided for as income tax in the year the shareholders approve to retain earnings.

Adjustments of prior years' tax liabilities are added to or deducted from the current year's tax provision.

### Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences, net operating loss carryforwards and unused R&D tax credits to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences in subsidiaries, except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. The deferred tax assets which originally not recognized is also reviewed at the end of each reporting period and increased to the extent that it is probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

### Current and deferred tax for the period

Current and deferred tax are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognized in other comprehensive income or directly in equity, respectively.

## **5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION AND UNCERTAINTY**

In the application of the Company's accounting policies, which are described in Note 4, the directors are required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

The following are the critical judgments, apart from those involving estimations, that the directors have made in the process of applying the Company's accounting policies and that have the most significant effect on the amounts recognized in the consolidated financial statements.

### **Revenue Recognition**

#### 2018

The Company evaluates whether its performance obligation is satisfied over time or at a point in time in accordance with respective contract with a customer and applicable regulation when the conditions described in Note 4 are satisfied.

The Company also records a provision for estimated future allowances in the same period the related revenue is recorded. Provision for estimated sales allowances is generally made and adjusted based on management judgement, historical experience and any known factors that would significantly affect the allowance, and our management periodically reviews the adequacy of the allowance.

#### 2017

The Company recognizes revenue when the conditions described in Note 4 are satisfied. The Company also records a provision for estimated future allowances in the same period the related revenue is recorded. Provision for estimated sales allowances is generally made and adjusted based on management judgement, historical experience and any known factors that would significantly affect the allowance, and our management periodically reviews the adequacy of the allowance.

### **Impairment of Financial Assets (2018)**

The provision for impairment of trade receivables is based on assumptions about the risk of default and expected loss rates. The Company uses judgment in making these assumptions and in selecting the inputs to the impairment calculation, based on the Company's past history, existing market conditions as well as forward looking estimates at the end of each reporting period. Please refer to Note 6 for the details of the key assumptions and inputs used. Where the actual future cash flows are less than expected, a material impairment loss may arise.

### **Impairment of Accounts Receivable (2017)**

Accounts receivable are considered to be impaired when there is objective evidence of uncollectibility; the Company will consider the estimated future cash flows to determine the impairment. The Company assesses the collectability of receivables by evaluating the current financial condition of customers, historical experience and by performing account aging analysis; the amount of impairment loss is the difference between the assets carrying amount and the present value of estimated future cash flows, discounted at the financial assets original effective interest rate. It might be a critical impairment loss if the actual future cash flows are less than estimated future cash flows. In the aging analysis, poor credit rating customers have accounts receivable balances past due over 90 days should all be recognized an allowance for doubtful receivable.

### **Realization of Deferred Income Tax Assets**

Deferred tax assets are recognized to the extent that it is probable that future taxable profits will be available against which those deferred tax assets can be utilized. Assessment of the realization of the deferred tax assets requires the Company's subjective judgment and estimation, including the future revenue growth and profitability, tax holidays, the amount of tax credits that can be utilized and feasible tax planning strategies. Any changes in the global economic environment, the industry trends and relevant laws and regulations could result in significant adjustments to deferred tax assets.

## Valuation of Inventory

Inventories are stated at the lower of cost or net realizable value, and the Company has to determine and estimate to the net realizable value of inventory at the end of each reporting period.

Due to the rapid technological changes, the Company estimates the net realizable value of inventory for obsolescence and unmarketable items at the end of reporting period and then writes down the cost of inventories to net realizable value. The net realizable value of the inventory is mainly determined based on assumptions of future demand within a specific time horizon.

## 6. ACCOUNTS RECEIVABLE, NET

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
Accounts receivable	<u>\$ 903,168</u>	<u>\$ 907,709</u>

### 2018

In principle, the payment term granted to customers is due 30 days from the invoice date or 30 days from the end of the month the invoice is issued.

The Company applies the simplified approach to provisions for expected credit losses prescribed by IFRS 9, which permits the use of a lifetime expected credit losses provision for all trade receivables. The expected credit losses on trade receivables are estimated using a provision matrix by reference to past account aging records of the debtor and an analysis of the debtor's current financial position, adjusted for factors that are specific to the debtors and an assessment of all the gross domestic product growth rates, unemployment rates and industrial indicators at the reporting date. The Company estimates expected credit losses based on the number of days for which receivables are past due. As the Company's historical credit losses experience does not show significantly different loss patterns for different customer segments, the provision for losses based on past due status of receivables is not further distinguished between the Company's different customer base; and poor credit rating customers have accounts receivable balances past due over 90 days, should all be recognized an allowance for doubtful receivable.

The Company writes off a trade receivable when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery of the receivable. For trade receivables that have been written off, the Company continues to engage in enforcement activity to attempt to recover the receivables which are due. Where recoveries are made, these are recognized in profit or loss.

### Aging analysis of accounts receivable

	<b>December 31, 2018</b>
Neither past due nor impaired	\$ 779,713
Past due but not impaired	
Past due within 1-30 days	106,735
Past due within 31-60 days	6,676
Past due within 91-120 days	<u>10,044</u>
	<u>\$ 903,168</u>

Starting from 2018, the Company applies IFRS 9 to evaluate expected credit losses, the Company's loss allowance for expected credit losses was zero on December 31, 2018 and January 1, 2018.

### 2017

The Company applied the same credit policy in 2017 and 2018. The Company assesses the collectability of receivables by evaluating the current financial condition of customers, historical experience and by performing account aging analysis. In the aging analysis, poor credit rating customers have accounts receivable balances past due over 90 days, should all be recognized an allowance for doubtful receivable. As of December 31, 2017, the Company's allowance for doubtful receivables was zero.

Accounts receivable, aging analysis at the end of the reporting period is summarized in the following table. Accounts receivable include amounts that are past due but for which the Company has not recognized an allowance for doubtful receivables after the assessment since there has not been a significant change in the credit quality of its customers and the amounts are still considered recoverable.

#### Aging analysis of accounts receivable

	<b>December 31, 2017</b>
Neither past due nor impaired	\$ 796,075
Past due but not impaired	
Past due within 1-30 days	107,230
Past due within 31-60 days	<u>4,404</u>
	<u><u>\$ 907,709</u></u>

## 7. INVENTORIES

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
Finished goods	\$ 106,745	\$ 86,932
Work in process	873,531	912,267
Raw materials	<u>294,678</u>	<u>153,315</u>
	<u><u>\$ 1,274,954</u></u>	<u><u>\$ 1,152,514</u></u>

Write-down of inventories to net realizable value was included in the cost of revenue, which was as follows.

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Write-down of inventories	<u><u>\$ 70,789</u></u>	<u><u>\$ 7,569</u></u>

## 8. PROPERTY, PLANT AND EQUIPMENT

	Buildings	Machinery and Equipment	Research and Development Equipment	Transportation Equipment	Office Equipment	Miscellaneous Equipment	Total
<u>Cost</u>							
Balance at January 1, 2018	\$ 242,923	\$ 23,430	\$ 704,709	\$ 9,390	\$ 24,207	\$ 293,665	\$ 1,298,324
Additions	-	2,477	685,341	1,327	5,333	110,898	805,376
Disposals	-	-	(21,842)	(9,342)	-	(1,274)	(32,458)
Effect of exchange rate changes	-	-	186	-	20	114	320
Balance at December 31, 2018	<u>\$ 242,923</u>	<u>\$ 25,907</u>	<u>\$ 1,368,394</u>	<u>\$ 1,375</u>	<u>\$ 29,560</u>	<u>\$ 403,403</u>	<u>\$ 2,071,562</u>
<u>Accumulated depreciation</u>							
Balance at January 1, 2018	\$ 63,797	\$ 3,311	\$ 486,832	\$ 5,383	\$ 19,928	\$ 245,823	\$ 825,074
Depreciation	4,767	3,159	151,924	808	1,478	24,631	186,767
Disposals	-	-	(21,842)	(6,033)	-	(1,274)	(29,149)
Effect of exchange rate changes	-	-	42	-	19	285	346
Balance at December 31, 2018	<u>\$ 68,564</u>	<u>\$ 6,470</u>	<u>\$ 616,956</u>	<u>\$ 158</u>	<u>\$ 21,425</u>	<u>\$ 269,465</u>	<u>\$ 983,038</u>
Carrying amount at December 31, 2018	<u>\$ 174,359</u>	<u>\$ 19,437</u>	<u>\$ 751,438</u>	<u>\$ 1,217</u>	<u>\$ 8,135</u>	<u>\$ 133,938</u>	<u>\$ 1,088,524</u>
<u>Cost</u>							
Balance at January 1, 2017	\$ 242,923	\$ 4,499	\$ 609,098	\$ 4,978	\$ 21,161	\$ 273,709	\$ 1,156,368
Additions	-	19,301	126,542	4,412	3,591	24,690	178,536
Disposals	-	(370)	(30,586)	-	(415)	(3,530)	(34,901)
Effect of exchange rate changes	-	-	(345)	-	(130)	(1,204)	(1,679)
Balance at December 31, 2017	<u>\$ 242,923</u>	<u>\$ 23,430</u>	<u>\$ 704,709</u>	<u>\$ 9,390</u>	<u>\$ 24,207</u>	<u>\$ 293,665</u>	<u>\$ 1,298,324</u>
<u>Accumulated depreciation</u>							
Balance at January 1, 2017	\$ 59,031	\$ 2,418	\$ 449,514	\$ 4,506	\$ 19,963	\$ 235,634	\$ 771,066
Depreciation	4,766	1,263	68,219	877	513	14,239	89,877
Disposals	-	(370)	(30,586)	-	(415)	(3,438)	(34,809)
Effect of exchange rate changes	-	-	(315)	-	(133)	(612)	(1,060)
Balance at December 31, 2017	<u>\$ 63,797</u>	<u>\$ 3,311</u>	<u>\$ 486,832</u>	<u>\$ 5,383</u>	<u>\$ 19,928</u>	<u>\$ 245,823</u>	<u>\$ 825,074</u>
Carrying amount at December 31, 2017	<u>\$ 179,126</u>	<u>\$ 20,119</u>	<u>\$ 217,877</u>	<u>\$ 4,007</u>	<u>\$ 4,279</u>	<u>\$ 47,842</u>	<u>\$ 473,250</u>

## 9. INTANGIBLE ASSETS

	Software	Technology License Fees	Patents	Total
<u>Cost</u>				
Balance at January 1, 2018	\$ 687,166	\$ 6,000	\$ 519	\$ 693,685
Additions	191,099	-	-	191,099
Disposals	(55,465)	(6,000)	-	(61,465)
Effect of exchange rate changes	(11)	-	-	(11)
Balance at December 31, 2018	<u>\$ 822,789</u>	<u>\$ -</u>	<u>\$ 519</u>	<u>\$ 823,308</u>
<u>Accumulated amortization</u>				
Balance at January 1, 2018	\$ 363,757	\$ 6,000	\$ 395	\$ 370,152
Amortization	226,399	-	29	226,428
Disposals	(55,465)	(6,000)	-	(61,465)
Effect of exchange rate changes	(2)	-	-	(2)
Balance at December 31, 2018	<u>\$ 534,689</u>	<u>\$ -</u>	<u>\$ 424</u>	<u>\$ 535,113</u>
Carrying amount at December 31, 2018	<u>\$ 288,100</u>	<u>\$ -</u>	<u>\$ 95</u>	<u>\$ 288,195</u>

(Continued)

	Software	Technology License Fees	Patents	Total
<u>Cost</u>				
Balance at January 1, 2017	\$ 594,129	\$ 6,000	\$ 519	\$ 600,648
Additions	223,585	-	-	223,585
Disposals	(130,548)	-	-	(130,548)
Balance at December 31, 2017	<u>\$ 687,166</u>	<u>\$ 6,000</u>	<u>\$ 519</u>	<u>\$ 693,685</u>
<u>Accumulated amortization</u>				
Balance at January 1, 2017	\$ 327,924	\$ 6,000	\$ 367	\$ 334,291
Amortization	166,381	-	28	166,409
Disposals	(130,548)	-	-	(130,548)
Balance at December 31, 2017	<u>\$ 363,757</u>	<u>\$ 6,000</u>	<u>\$ 395</u>	<u>\$ 370,152</u>
Carrying amount at December 31, 2017	<u>\$ 323,409</u>	<u>\$ -</u>	<u>\$ 124</u>	<u>\$ 323,533</u> (Concluded)

## 10. OTHER CURRENT ASSETS

	December 31	
	2018	2017
Prepayment for purchases	\$ 194,173	\$ 96,602
Prepaid license fees	117,641	4,497
Tax receivable	99,618	107,070
Prepaid expenses	39,637	40,161
Temporary payments	25,859	15,478
Prepaid income tax	<u>2,559</u>	<u>120</u>
	<u>\$ 479,487</u>	<u>\$ 263,928</u>

## 11. PROVISIONS

	Year Ended December 31, 2017
Balance, beginning of year	\$ 2,504
Additional provisions recognized	485
Write off	<u>(2,504)</u>
Balance, end of year	<u>\$ 485</u>

Provisions for sales allowances are generally estimated and adjusted based on management judgement, historical experience, and any known factors that would significantly affect the allowance, and our management periodically reviews the adequacy of the allowance and are recognized as a reduction of revenue when the product are sold.

Starting from 2018, the Company recognizes the estimation of sales returns and allowance as refund liability (classified under accrued expenses and other current liabilities) upon initial application of IFRS 15.

## 12. OTHER LIABILITIES

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
<b><u>Current</u></b>		
Payable for salaries and bonuses	\$ 251,468	\$ 184,685
License fees payable	125,615	149,877
Refund liabilities	106,123	-
Payable for royalties	31,609	12,749
Others	<u>360,819</u>	<u>229,834</u>
	<u><u>\$ 875,634</u></u>	<u><u>\$ 577,145</u></u>
<b><u>Non-current</u></b>		
License fees payable	<u><u>\$ 53,239</u></u>	<u><u>\$ 64,186</u></u>

Revenue from sale of goods is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances. The Company recognizes the estimation of refund liabilities based on historical experience and the consideration of varying contractual terms.

The license fees payable are primarily attributable to several agreements that GUC entered into for certain technology license and software.

## 13. RETIREMENT BENEFIT PLANS

### a. Defined contribution plans

The pension mechanism under the Labor Pension Act is deemed a defined contribution retirement plan. Pursuant to the Act, GUC makes monthly contributions equal to 6% of each employee's monthly salary to employees' pension accounts. Furthermore, GUC-NA, GUC-Japan, GUC-Korea, GUC-Shanghai and GUC-Nanjing make monthly contributions at certain percentages of the salary of their employees. Accordingly, the Company recognized expenses of NT\$55,076 thousand and NT\$42,785 thousand in the consolidated statements of comprehensive income for the years ended December 31, 2018 and 2017, respectively.

### b. Defined benefit plans

GUC has a defined benefit plan under the Labor Standards Act, which provides benefits based on an employee's length of service and average monthly salary of the last six months prior to retirement. GUC contributes an amount equal to 2% of salaries paid each month to a pension fund (the Fund), which is administered by the Labor Pension Fund Supervisory Committee (the Committee) and deposited in the Committee's name in the Bank of Taiwan. Before the end of each year, the Company assesses the balance in the Fund. If the amount of the balance in the Fund is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Company is required to fund the difference in one appropriation that should be made before the end of

March of the next year. The Fund is managed by the Bureau of Labor Funds, Ministry of Labor (“the Bureau”); as such, GUC has no right to influence the investment policy and strategy.

The amounts arising from the defined benefit obligation of GUC under GUC’s financial position were as follows:

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
Present value of defined benefit obligation	\$ 65,279	\$ 60,860
Fair value of plan assets	<u>(37,046)</u>	<u>(33,919)</u>
Net defined benefit liabilities	<u><u>\$ 28,233</u></u>	<u><u>\$ 26,941</u></u>

Movements in net defined benefit liabilities were as follows:

	<b>Present Value of the Defined Benefit Obligation</b>	<b>Fair Value of the Plan Assets</b>	<b>Net Defined Benefit Liabilities</b>
Balance at January 1, 2017	<u><u>\$ 55,001</u></u>	<u><u>\$ (31,966)</u></u>	<u><u>\$ 23,035</u></u>
Service cost			
Current service cost	1,021	-	1,021
Net interest expense (income)	<u>825</u>	<u>(494)</u>	<u>331</u>
Recognized in profit or loss	<u><u>1,846</u></u>	<u><u>(494)</u></u>	<u><u>1,352</u></u>
Remeasurement			
Return on plan assets	-	230	230
Actuarial loss - changes in demographic assumptions	1,209	-	1,209
Actuarial loss - changes in financial assumptions	2,214	-	2,214
Actuarial loss - experience adjustments	<u>590</u>	<u>-</u>	<u>590</u>
Recognized in other comprehensive loss	<u><u>4,013</u></u>	<u><u>230</u></u>	<u><u>4,243</u></u>
Contributions from the employer	<u>-</u>	<u>(1,689)</u>	<u>(1,689)</u>
Balance at December 31, 2017	<u><u>60,860</u></u>	<u><u>(33,919)</u></u>	<u><u>26,941</u></u>
Service cost			
Current service cost	986	-	986
Net interest expense (income)	<u>761</u>	<u>(436)</u>	<u>325</u>
Recognized in profit or loss	<u><u>1,747</u></u>	<u><u>(436)</u></u>	<u><u>1,311</u></u>
Remeasurement			
Return on plan assets	-	(890)	(890)
Actuarial gain - changes in demographic assumptions	(294)	-	(294)
Actuarial loss - changes in financial assumptions	2,284	-	2,284
Actuarial loss - experience adjustments	<u>682</u>	<u>-</u>	<u>682</u>
Recognized in other comprehensive (income) loss	<u><u>2,672</u></u>	<u><u>(890)</u></u>	<u><u>1,782</u></u>
Contributions from the employer	<u>-</u>	<u>(1,801)</u>	<u>(1,801)</u>
Balance at December 31, 2018	<u><u>\$ 65,279</u></u>	<u><u>\$ (37,046)</u></u>	<u><u>\$ 28,233</u></u>

An analysis by function of the amounts recognized in profit or loss in respect of the defined benefit plans is as follows:

	<b>Year Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
General and administrative expenses	<u>\$ 1,311</u>	<u>\$ 1,352</u>

Through the defined benefit plans under the Labor Standards Law, GUC is exposed to the following risks:

- 1) Investment risk: The plan assets are invested in domestic and foreign equity and debt securities, bank deposits, etc. The investment is conducted at the discretion of the Bureau or under the mandated management. However, in accordance with relevant regulations, the return generated by plan assets should not be below the interest rate for a 2-year time deposit with local banks.
- 2) Interest risk: A decrease in the government bond interest rate will increase the present value of the defined benefit obligation; however, this will be partially offset by an increase in the return on the plan's debt investments.
- 3) Salary risk: The present value of the defined benefit obligation is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the present value of the defined benefit obligation.

The actuarial valuations of the present value of the defined benefit obligation were carried out by qualified actuaries. The significant assumptions used for the purposes of the actuarial valuations were as follows:

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
Discount rate	1.00%	1.25%
Expected rate of salary increase	3.00%	3.00%
Turnover rate	2.99%	3.06%

If possible reasonable change in each of the significant actuarial assumptions will occur and all other assumptions will remain constant, the present value of the defined benefit obligation would increase (decrease) as follows:

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
Discount rate		
0.25% increase	<u>\$ (2,276)</u>	<u>\$ (2,267)</u>
0.25% decrease	<u>\$ 2,379</u>	<u>\$ 2,375</u>
Expected rate of salary increase		
0.25% increase	<u>\$ 2,323</u>	<u>\$ 2,325</u>
0.25% decrease	<u>\$ (2,235)</u>	<u>\$ (2,233)</u>
Turnover rate		
10% increase	<u>\$ (863)</u>	<u>\$ (943)</u>
10% decrease	<u>\$ 883</u>	<u>\$ 964</u>

The sensitivity analysis presented above may not be representative of the actual change in the present value of the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
The expected contributions to the plan for the next year	\$ 1,907	<u>\$ 1,885</u>
The average duration of the defined benefit obligation	14 years	15 years
The maturity analysis of undiscounted pension benefit is as follows:		
	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
Later than 1 year and not later than 5 years	\$ 4,310	\$ 2,493
Later than 5 years	<u>69,728</u>	<u>70,091</u>
	<u><u>\$ 74,038</u></u>	<u><u>\$ 72,584</u></u>

## 14. EQUITY

### a. Share capital

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
Authorized	\$ 1,500,000	\$ 1,500,000
Issued	<u>\$ 1,340,119</u>	<u>\$ 1,340,119</u>

As of December 31, 2018 and 2017 the authorized shares are 150,000 thousand shares, with par value of \$10 per share is entitled to the right to vote and to receive dividends; GUC's issued and paid shares were 134,011 thousand shares.

### b. Capital surplus

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
From merger	\$ 16,621	\$ 16,621
Additional paid-in capital	13,232	13,232
Donations	2,660	2,660
Dividends from claims extinguished by prescription	<u>30</u>	<u>-</u>
	<u><u>\$ 32,543</u></u>	<u><u>\$ 32,513</u></u>

Under the Company Law, the capital surplus generated from the excess of the issuance price over the par value of capital stock (including the stock issued for new capital and mergers) and donations may be used to offset a deficit; in addition, when the Company has no deficit, such capital surplus may be appropriated as cash dividends or stock dividends, which are limited to a certain percentage of GUC's paid-in capital under capital surplus. In addition, the capital surplus from dividends from claims extinguished by prescription may be used to offset a deficit.

c. Retained earnings and dividend policy

According to GUC's Articles of Incorporation when allocating the net profits for each fiscal year, GUC shall offset its losses in previous years before set aside the following items accordingly:

- 1) Legal reserve at 10% of the remaining profit;
- 2) Special reserve in accordance with the resolution in the shareholders' meeting;
- 3) Any balance remaining shall be allocated to shareholders according to the resolution in the shareholders' meeting.

The Articles of Incorporation provide the policy about employee' compensation and remuneration to directors, please refer to Note 21.

GUC's profit distribution, the proportion of cash dividends shall not be lower than 60% of the total dividends, depending on future expansion plans and cash needs.

The appropriation for legal reserve shall be made until the reserve equals GUC's paid-in capital. The reserve may be used to offset a deficit, or be distributed as dividends and bonuses to the extent that the portion exceeds 25% of the paid-in capital if GUC incurs no loss.

A special reserve equivalent to the net debit balance of other components of shareholders' equity such as exchange differences on the translation of foreign operations, shall be made from unappropriated earnings. Any special reserve appropriated may be reversed to the extent that the net debit balance reverses.

The appropriations of earnings for 2017 and 2016 had been approved in GUC's shareholders' meetings held on May 17, 2018 and May 18, 2017, respectively. The appropriations and dividends per share were as follows:

	Appropriation of Earnings		Dividends Per Share (NT\$)	
	For Fiscal Year 2017	For Fiscal Year 2016	For Fiscal Year 2017	For Fiscal Year 2016
Legal reserve	\$ 85,481	\$ 55,108		
Special reserve	9,426	1,514		
Cash dividends to shareholders	<u>670,060</u>	<u>469,042</u>	\$ 5.00	\$ 3.50
	<u><u>\$ 764,967</u></u>	<u><u>\$ 525,664</u></u>		

The appropriation of earnings for 2018 had been proposed by the GUC's board of directors on January 31, 2019. The appropriation and dividends per share were as follows:

	Appropriation of Earnings	Dividends Per Share (NT\$)
Legal reserve	\$ 98,816	
Reversal of special reserve	(2,304)	
Cash dividends to shareholders	<u>670,060</u>	\$ 5.00
	<u><u>\$ 766,572</u></u>	

The appropriations of earnings for 2018 are to be resolved in the GUC shareholders' meeting which is expected to be held on May 16, 2019.

## d. Others

Changes in foreign currency translation reserve were as follows:

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Balance, beginning of year	\$ (10,940)	\$ (1,514)
Exchange differences on translation of foreign operations	<u>2,304</u>	<u>(9,426)</u>
Balance, end of year	<u><u>\$ (8,636)</u></u>	<u><u>\$ (10,940)</u></u>

The exchange differences on translation of foreign operation's net assets from its functional currency to the GUC's presentation currency are recognized directly in other comprehensive income and also accumulated in the foreign currency translation reserve.

## 15. NET REVENUE

The analysis of the Company's net revenue was as follows:

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Revenue from customer contracts		
Net revenue from sale of goods	\$ 9,167,596	\$ 9,265,856
Net revenue from NRE service	<u>4,292,208</u>	<u>2,894,750</u>
	<u><u>\$ 13,459,804</u></u>	<u><u>\$ 12,160,606</u></u>

Revenue from sale of goods is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances. The Company recognizes the estimation of refund liabilities based on historical experience and the consideration of varying contractual terms, which is classified under accrued expenses and other current liabilities.

## a. Contract balances

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
Account receivables	\$ 903,168	\$ 907,709
Contract assets - current	<u>\$ 56,976</u>	<u>\$ -</u>
Contract liabilities - current	<u>\$ 869,174</u>	<u>\$ -</u>

The changes in the balance of contract assets and the contract liabilities primarily result from the timing difference between the satisfaction of performance obligation and the customer's payment.

For the year ended December 31, 2018, the Company recognized NT\$1,451,151 thousand in revenue from the beginning balance of contract liability.

b. Disaggregation of revenue from contracts with customers

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
<b>Production</b>		
ASIC and wafer product	\$ 9,167,596	\$ 9,265,856
NRE	4,078,719	2,641,850
Other	<u>213,489</u>	<u>252,900</u>
	<u><u>\$ 13,459,804</u></u>	<u><u>\$ 12,160,606</u></u>
<b>Region</b>		
Japan	\$ 3,609,609	\$ 926,223
United States	2,811,100	2,518,682
Taiwan	2,792,676	2,194,549
China	2,300,679	4,062,516
Korea	1,129,735	1,151,412
Europe	<u>816,005</u>	<u>1,307,224</u>
	<u><u>\$ 13,459,804</u></u>	<u><u>\$ 12,160,606</u></u>
<b>Application Type</b>		
Consumer	\$ 5,736,702	
Computer	4,585,808	
Communication	2,057,146	
Other	<u>1,080,148</u>	
	<u><u>\$ 13,459,804</u></u>	
<b>Customer Type</b>		
System House	\$ 9,706,104	
Fabless	<u>3,753,700</u>	
	<u><u>\$ 13,459,804</u></u>	
	<b>Year Ended December 31, 2018</b>	

The Company categorized the net revenue mainly based on the country in which the customer's headquartered.

<b>Resolution</b>	<b>Year Ended December 31, 2018</b>	
	<b>Net Revenue from NRE Service</b>	<b>Net Revenue from Sale of Goods</b>
7-nanometer	\$ 741,655	\$ 1,751,012
16-nanometer	1,527,987	74,632
28-nanometer	1,239,050	2,128,432
40-nanometer	270,101	1,080,987
65-nanometer and above	299,926	4,132,533
Other	213,489	-
	<u><u>\$ 4,292,208</u></u>	<u><u>\$ 9,167,596</u></u>

## 16. OTHER INCOME

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Interest income		
Bank deposits	\$ 26,557	\$ 16,857
Government grants	2,864	645
Income (expenses) of rental assets		
Rental income	397	467
Depreciation of rental assets	(2)	(4)
Other income	<u>7,230</u>	<u>4,544</u>
	<u><u>\$ 37,046</u></u>	<u><u>\$ 22,509</u></u>

## 17. OTHER GAINS AND LOSSES

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Gain on financial assets at fair value through profit or loss	\$ 1,278	\$ -
Gain on foreign exchange, net	791	29,683
Gain on disposal of financial assets available-for-sale	-	1,445
Gain (loss) on disposal of property, plant and equipment, net	<u>(4)</u>	<u>4,403</u>
	<u><u>\$ 2,065</u></u>	<u><u>\$ 35,531</u></u>

## 18. FINANCE COSTS

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Interest expense		
Bank loans	\$ _____ -	\$ 60

## 19. INCOME TAX

- a. Income tax expense recognized in profit or loss

Income tax expense consisted of the following:

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Current income tax expense		
Current tax expense recognized in the current period	\$ 154,587	\$ 126,065
Additional income tax on unappropriated earnings	8,560	2,603
Income tax adjustments on prior years	<u>(7,518)</u>	<u>7,083</u>
	<u>155,629</u>	<u>135,751</u>
Deferred income tax benefit		
Effect of tax rate changes	4,336	-
Temporary differences	<u>(12,569)</u>	<u>(57)</u>
Operating loss carryforwards	<u>(68)</u>	<u>(1,891)</u>
	<u>(8,301)</u>	<u>(1,948)</u>
Income tax expense recognized in profit or loss	<u><u>\$ 147,328</u></u>	<u><u>\$ 133,803</u></u>

A reconciliation of income before income tax and income tax expense recognized in profit or loss was as follows:

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Income before tax	<u><u>\$ 1,135,484</u></u>	<u><u>\$ 988,612</u></u>
Income tax expense at the statutory rate	\$ 239,881	\$ 178,348
Tax effect of adjusting items:		
Nondeductible items in determining taxable income	12,826	(6,028)
Tax-exempt income	<u>(94,443)</u>	<u>(34,387)</u>
Investment tax credits used	<u>(16,314)</u>	<u>(13,816)</u>
Additional income tax on unappropriated earnings	8,560	2,603
Income tax adjustments on prior years	<u>(7,518)</u>	<u>7,083</u>
Effect of tax rate changes	<u>4,336</u>	<u>-</u>
Income tax expense recognized in profit or loss	<u><u>\$ 147,328</u></u>	<u><u>\$ 133,803</u></u>

In 2017, the applicable corporate income tax rate used by the group entities in the ROC is 17%. However, the Income Tax Act in the ROC was amended in 2018, and the corporate income tax rate was adjusted from 17% to 20%, effective in 2018. In addition, the rate of the corporate surtax applicable to the 2018 unappropriated earnings will be reduced from 10% to 5%. Tax rates used by other group entities operating in other jurisdictions are based on the tax laws in those jurisdictions.

b. Deferred income tax balance

The analysis of deferred income tax assets and liabilities in the consolidated balance sheets was as follows:

	December 31	
	2018	2017
<u>Deferred income tax assets</u>		
Temporary differences		
Share of loss of subsidiaries accounted for using equity method	\$ 21,851	\$ 21,122
Write-down of inventory	14,706	2,322
Provisions	13,435	82
Others	8,728	11,111
Operating loss carryforwards	<u>2,021</u>	<u>1,988</u>
	<u><u>\$ 60,741</u></u>	<u><u>\$ 36,625</u></u>

Deferred income tax liabilities

Temporary differences			
Share of profit of subsidiaries accounted for using equity method	\$ (22,141)	\$ (8,031)	
Others	<u>(1,721)</u>	<u>—</u>	
	<u><u>\$ (23,862)</u></u>	<u><u>\$ (8,031)</u></u>	

Movements of deferred income tax assets and deferred tax liabilities were as follows:

Year ended December 31, 2018

	Balance, Beginning of Year	Recognized in Profit or Loss	Effect of Exchange Rate Changes	Balance, End of Year
<u>Deferred income tax assets</u>				
Temporary differences				
Share of loss of subsidiaries accounted for using equity method	\$ 21,122	\$ 729	\$ -	\$ 21,851
Write-down of inventory	2,322	12,384	-	14,706
Provisions	82	13,353	-	13,435
Others	11,111	(2,402)	19	8,728
Operating loss carryforwards	<u>1,988</u>	<u>68</u>	<u>(35)</u>	<u>2,021</u>
	<u><u>\$ 36,625</u></u>	<u><u>\$ 24,132</u></u>	<u><u>\$ (16)</u></u>	<u><u>\$ 60,741</u></u>

Year ended December 31, 2017

	<b>Balance, Beginning of Year</b>	<b>Recognized in Profit or Loss</b>	<b>Effect of Exchange Rate Changes</b>	<b>Balance, End of Year</b>
<u>Deferred income tax assets</u>				
Temporary differences				
Share of loss of subsidiaries accounted for using equity method	\$ 20,350	\$ 772	\$ -	\$ 21,122
Write-down of inventory	1,035	1,287	-	2,322
Provisions	426	(344)	-	82
Others	10,126	840	145	11,111
Operating loss carryforwards	<u>97</u>	<u>1,891</u>	<u>-</u>	<u>1,988</u>
	<u>\$ 32,034</u>	<u>\$ 4,446</u>	<u>\$ 145</u>	<u>\$ 36,625</u>

Year ended December 31, 2018

	<b>Balance, Beginning of Year</b>	<b>Recognized in Profit or Loss</b>	<b>Balance, End of Year</b>
<u>Deferred income tax liabilities</u>			
Temporary differences			
Share of profit of subsidiaries accounted for using equity method	\$ (8,031)	\$(14,110)	\$ (22,141)
Others	<u>-</u>	<u>(1,721)</u>	<u>(1,721)</u>
	<u>\$ (8,031)</u>	<u>\$(15,831)</u>	<u>\$ (23,862)</u>

Year ended December 31, 2017

	<b>Balance, Beginning of Year</b>	<b>Recognized in Profit or Loss</b>	<b>Balance, End of Year</b>
<u>Deferred income tax liabilities</u>			
Temporary differences			
Share of profit of subsidiaries accounted for using equity method	\$ (5,533)	\$(2,498)	\$ (8,031)

c. Deductible temporary differences for which no deferred tax assets have been recognized in the consolidated balance sheets

As of December 31, 2018 and 2017, the aggregate deductible temporary differences for which no deferred income tax assets have been recognized amounted to NT\$3,285 thousand and NT\$1,860 thousand, respectively.

d. Information about loss carryforwards and tax exemption

As of December 31, 2018, the profits generated from the following projects of GUC are exempt from income tax for a five-year period:

	<b>Tax-exemption Period</b>
Construction and expansion of 2007 and 2008	2015 to 2019
Construction and expansion of 2009	2016 to 2020

As of December 31, 2018, operating loss carryforwards of GUC-Nanjing has imputation credits that can be used until 2022.

e. Income tax examination

The tax authorities have examined income tax returns of GUC through 2016.

## 20. EARNINGS PER SHARE

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Basic EPS	\$7.37	\$6.38
Diluted EPS	<u>\$7.33</u>	<u>\$6.35</u>

EPS is computed as follows:

	<b>Number of Shares (Denominator) (Numerator)</b>	<b>EPS (NT\$)</b>
<u>Year ended December 31, 2018</u>		
Basic EPS		
Net income available to common shareholders	\$ 988,156	134,011
Effect of dilutive potential common stock	<u>—</u>	<u>776</u>
Diluted EPS		
Net income available to common shareholders (including effect of dilutive potential common stock)	<u>\$ 988,156</u>	<u>134,787</u>
		<u>\$7.33</u>
<u>Year ended December 31, 2017</u>		
Basic EPS		
Net income available to common shareholders	\$ 854,809	134,011
Effect of dilutive potential common stock	<u>—</u>	<u>603</u>
Diluted EPS		
Net income available to common shareholders (including effect of dilutive potential common stock)	<u>\$ 854,809</u>	<u>134,614</u>
		<u>\$6.35</u>

If the Company settles employees' compensation by issuing share or by cash, the Company assumes the entire amount of the compensation will be settled in shares which should be included in the weighted average number of shares outstanding in calculation of diluted EPS, if the shares have a dilutive effect. Such dilutive effect of the potential shares needs to be included in the calculation of diluted EPS until employees' compensation to be settled in the form of common stocks are approved in the following year.

## 21. ADDITIONAL INFORMATION OF EXPENSES BY NATURE

Net income included the following items:

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
a. Depreciation of property, plant and equipment		
Recognized in cost of revenue	\$ 4,856	\$ 2,814
Recognized in operating expenses	181,909	87,059
Recognized in other income - depreciation of rental assets	<u>2</u>	<u>4</u>
	<u><u>\$ 186,767</u></u>	<u><u>\$ 89,877</u></u>
b. Amortization of intangible assets		
Recognized in cost of revenue	\$ 2,183	\$ 3,090
Recognized in operating expenses	<u>224,245</u>	<u>163,319</u>
	<u><u>\$ 226,428</u></u>	<u><u>\$ 166,409</u></u>
c. Research and development costs expensed as occurred	<u><u>\$ 2,273,694</u></u>	<u><u>\$ 1,628,373</u></u>
d. Employee benefits expenses		
Post-employment benefits (Note 13)		
Defined contribution plans	\$ 55,076	\$ 42,785
Defined benefit plans	<u>1,311</u>	<u>1,352</u>
	<u><u>56,387</u></u>	<u><u>44,137</u></u>
Other employee benefits	<u>2,002,861</u>	<u>1,588,571</u>
	<u><u>\$ 2,059,248</u></u>	<u><u>\$ 1,632,708</u></u>
Employee benefits expense summarized by function		
Recognized in cost of revenue	\$ 193,515	\$ 186,979
Recognized in operating expenses	<u>1,865,733</u>	<u>1,445,729</u>
	<u><u>\$ 2,059,248</u></u>	<u><u>\$ 1,632,708</u></u>

e. Employee's compensation and remuneration to directors

GUC shall allocate employees' compensation and remuneration to directors of no less than 2% and no more than 2% of net income before tax which is not deducted from employees' compensation and remuneration to directors, respectively. Directors who also serve as executive officers of GUC are not entitled to receive the remuneration to directors. GUC shall first offset its losses in previous years then allocate employees' compensation and remuneration to directors. GUC may issue stock or cash compensation to employees of an affiliated company upon meeting the conditions set by the Board of Directors.

For 2018 and 2017, GUC accrued employees' compensation and remuneration to directors had been approved in the Board of Directors meeting held on January 31, 2019 and February 1, 2018, respectively, and were based on a certain percentage of net income before tax without deduction of the employees' compensation and remuneration to directors. The accrued amounts were as follows:

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Employees' compensation	\$ 153,240	\$ 133,501
Remuneration to directors	14,193	12,206

The aforementioned amount is the same as the amount which had been charged against expenses of 2018 and 2017, respectively.

If there is a change in the proposed amounts after the annual consolidated financial statements are authorized for issue, the differences are recorded as a change in the accounting estimate.

GUC's employees' compensation and remuneration to directors in the amounts of NT\$59,705 thousand and NT\$4,317 thousand in cash for 2016 was approved by the Board of Directors in their meetings held on February 9, 2017. The employees' compensation and remuneration to directors in cash for 2016 was reported to GUC's shareholders in its meeting held on May 18, 2017. The aforementioned approved amounts did not have any difference with the amounts recognized in the consolidated financial statements for the year ended December 31, 2016.

The information about appropriations of GUC's employees' compensation and remuneration to directors is available on the Market Observation Post System website.

## 22. CASH FLOW INFORMATION

Reconciliation of liabilities arising from financing activities:

	<b>Balance as of January 1, 2018</b>	<b>Cash Flows</b>	<b>Non-cash Changes</b>	<b>Balance as of December 31, 2018</b>
			<b>Foreign Exchange Movement</b>	
Guarantee deposits	\$ 2,976	\$ 76	\$ 94	\$ 3,146

## 23. CAPITAL MANAGEMENT

The Company manages its capital to ensure that entities in the Company are able to operate sustainability while maximizing the return to stakeholders through the optimization of the debt and equity balance. The Company engages in the semiconductor design services, which is closely tied with customer demand. Business is influenced by the cyclical nature of the semiconductor industry but not significantly. In consideration of the industry dynamics, the Company manages its capital in a manner to ensure that it has sufficient and necessary financial resources to fund its working capital needs, capital asset purchases, research and development activities, dividend payments, debt service requirements and other business requirements associated with its existing operations over the next 12 months. Through capital management, the Company is capable of coping with changes in the industry, striving for improvement, and ultimately creating shareholder value.

## 24. FINANCIAL INSTRUMENTS

### a. Categories of financial instruments

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
<u>Financial assets</u>		
Amortized cost (Note)		
Cash and cash equivalents	\$ 3,906,191	\$ 5,090,202
Accounts receivable, net (including related parties)	910,206	917,259
Other financial assets	845	1,198
Refundable deposits	2,475	719
Pledged time deposits	22,200	22,200
Contract assets	<u>56,976</u>	-
	<u>\$ 4,898,893</u>	<u>\$ 6,031,578</u>
<u>Financial liabilities</u>		
Amortized cost		
Accounts payable (including related parties)	\$ 1,227,745	\$ 1,626,206
Payables on machinery and equipment	364,475	88,334
Accrued expenses and other current liabilities	441,620	252,689
Other long-term payables	178,854	214,063
Guarantee deposits	<u>3,146</u>	<u>2,976</u>
	<u>\$ 2,215,840</u>	<u>\$ 2,184,268</u>

Note: Starting from 2018, the Company classified loans and receivables to amortized cost upon initial application of IFRS 9.

b. Financial risk management objectives and policies

The Company's objectives of financial risk management are to manage its exposure to market risk, credit risk and liquidity risk related to the operating activities. To reduce the related financial risks, the Company engages in identifying, assessing and avoiding the market uncertainties with the objective to reduce the potentially adverse effects the market uncertainties may have on its financial performance.

The plans for material treasury activities are reviewed by the Audit Committee and Board of Directors in accordance with procedures required by relevant regulations and internal controls. During the implementation of such plans, the treasury function must comply with certain treasury procedures that provide guiding principles for overall financial risk management and segregation of duties.

c. Market risk

Foreign currency risk

The Company's operating activities are mainly denominated in foreign currency and exposed to foreign exchange risk. To protect the volatility of future cash flows arising from changes in foreign exchange rates, the Company maintains a balance of net foreign currency assets and liabilities in hedge.

The Company's sensitivity analysis to foreign currency risk mainly focuses on the foreign currency monetary items at the end of the reporting period. Assuming a 10% strengthening of New Taiwan Dollars against the relevant currencies, the net income before tax for the years ended December 31, 2018 and 2017 would have decreased by NT\$94,389 thousand and NT\$43,992 thousand, respectively.

d. Credit risk management

Credit risk refers to the risk that a counter party will default on its contractual obligations resulting in financial loss to the Company. The Company is exposed to credit risk from operating activities, primarily trade receivables, and from investing activities of deposits with banks. Credit risk is managed separately for business related and financial related exposures. As of the balance sheet date, the Company's maximum credit risk exposure is mainly from the carrying amount of financial assets recognized in the consolidated balance sheet.

Business related credit risk

The Company has considerable trade receivables outstanding with its customers worldwide. A substantial majority of the Company's outstanding trade receivables are not covered by collateral or credit insurance. While the Company has procedures to monitor and limit exposure to credit risk on trade receivables, there can be no assurance such procedures will effectively limit its credit risk and avoid losses.

As of December 31, 2018 and 2017, the Company's ten largest customers accounted for 55% and 70% of accounts receivable, respectively. The Company believes the concentration of credit risk is insignificant for the remaining accounts receivable.

Financial credit risk

The Company monitors and reviews the transaction limit applied to counter parties and adjusts the concentration limit according to market conditions and the credit standing of the counter parties regularly. The Company mitigates its exposure by selecting financial institution with well credit.

e. Liquidity risk management

The objective of liquidity risk management is to ensure the Company has sufficient liquidity to fund its business requirements. The Company manages its liquidity risk by maintaining adequate cash and banking facilities.

As of December 31, 2018 and 2017, the unused financing facilities of the Company amounted to NT\$1,300,000 thousand and NT\$1,600,000 thousand, respectively.

The table below summarizes the maturity profile of the Company's financial liabilities based on contractual undiscounted payments.

Non-derivative Financial Liabilities	Less Than 1 Year	2-3 Years	4+ Years	Total
<u>December 31, 2018</u>				
Accounts payable (including related parties)	\$ 1,227,745	\$ -	\$ -	\$ 1,227,745
Payables on machinery and equipment	364,475	-	-	364,475
Accrued expenses and other current liabilities	441,620	-	-	441,620
Other long-term payables	125,615	53,239	-	178,854
Guarantee deposits	<u>-</u>	<u>-</u>	<u>3,146</u>	<u>3,146</u>
	<u><u>\$ 2,159,455</u></u>	<u><u>\$ 53,239</u></u>	<u><u>\$ 3,146</u></u>	<u><u>\$ 2,215,840</u></u>
<u>December 31, 2017</u>				
Accounts payable (including related parties)	\$ 1,626,206	\$ -	\$ -	\$ 1,626,206
Payables on machinery and equipment	88,334	-	-	88,334
Accrued expenses and other current liabilities	252,689	-	-	252,689
Other long-term payables	149,877	64,186	-	214,063
Guarantee deposits	<u>-</u>	<u>-</u>	<u>2,976</u>	<u>2,976</u>
	<u><u>\$ 2,117,106</u></u>	<u><u>\$ 64,186</u></u>	<u><u>\$ 2,976</u></u>	<u><u>\$ 2,184,268</u></u>

f. Fair value of financial instruments

The carrying amounts of the Company's financial assets and financial liabilities measured at amortized cost at the end of financial reporting period recognized in the consolidated financial statements approximate their fair values. Further, the Company did not have any financial assets and financial liabilities measured at fair values at the end of the reporting period.

## 25. RELATED PARTY TRANSACTIONS

Intercompany balances and transactions between GUC and its subsidiaries, which are related parties of GUC, have been eliminated upon consolidation; therefore those items are not disclosed in this note. The following is a summary of transactions between the Company and other related parties:

### a. Related party name and categories

Related Party Name	Related Party Categories
Taiwan Semiconductor Manufacturing Co., Ltd. (TSMC)	An investor accounted for using equity method
TSMC North America (TSMC-NA)	A subsidiary of TSMC
Vanguard International Semiconductor Corporation (VIS)	An associate of TSMC
TSMC Europe B.V. (TSMC-EU)	A subsidiary of TSMC
VisEra Technologies Co., Ltd. (VisEra)	A subsidiary of TSMC

### b. Operating transactions

Items	Related Party Name and Categories	Years Ended December 31	
		2018	2017
Net revenue from sale	Investor that have significant influence over the company Other related parties	\$ 87,392 29 \$ 87,421	\$ 74,330 - \$ 74,330
Purchases	Investor that have significant influence over the company TSMC TSMC-NA Other related parties	\$ 5,069,048 1,141,840 6,210,888 43,905 \$ 6,254,793	\$ 5,794,950 524,558 6,319,508 42,258 \$ 6,361,766
Manufacturing overhead	Investor that have significant influence over the company TSMC TSMC-NA	\$ 1,009,087 358,150 \$ 1,367,237	\$ 588,533 433,687 \$ 1,022,220
Operating expenses	Investor that have significant influence over the company	\$ 34,190	\$ 11,585
Other Income	Investor that have significant influence over the company	\$ 27	\$ -

The following balances were outstanding at the end of reporting period:

Items	Related Party Name and Categories	December 31	
		2018	2017
Receivables from related parties	Investor that have significant influence over the company TSMC	\$ 7,038	\$ 9,550
Other current assets	Investor that have significant influence over the company TSMC	\$ 1,434	\$ 96,602
Refundable deposits	Investor that have significant influence over the company VisEra Other	\$ 2,832 452 _____ \$ 3,284	\$ - 438 _____ \$ 438
Payables to related parties	Investor that have significant influence over the company TSMC TSMC-NA Other related parties	\$ 374,702 106,125 480,827 14,553 _____ \$ 495,380	\$ 779,361 245,796 1,025,157 10,857 _____ \$ 1,036,014
Customer advances	Investor that have significant influence over the company	\$ -	\$ 6,785
Accrued expenses and other current liabilities	Investor that have significant influence over the company	\$ 752	\$ 128

The terms of sales to related parties were not significantly different from those of sales to third parties. For other related party transactions, the terms of transactions were determined in accordance with mutual agreement because there were no comparable terms for third-party transactions. The payment term granted to related parties is due 30 days from the invoice date or 30 days from the end of the month of when the invoice is issued, while the payment term granted to third parties is due 30 days from the invoice date or 75 days from the end of the month of when the invoice is issued.

The Company leased server room and office from related parties. The lease terms and prices were determined in accordance with mutual agreements. The rental expense was paid monthly and the related expense was classified under manufacturing and operating expenses.

c. Compensation of key management personnel:

The remuneration to directors and other key management personnel were as follows:

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Short-term employee benefits	\$ 100,644	\$ 79,229
Post-employment benefits	<u>540</u>	<u>540</u>
	<u><u>\$ 101,184</u></u>	<u><u>\$ 79,769</u></u>

The remuneration to directors and other key management personnel were determined by the Compensation Committee of GUC in accordance with the individual performance and the market trends.

## 26. PLEDGED OR MORTGAGED ASSETS

As of December 31, 2018 and 2017 GUC provided pledged time deposits of NT\$20,000 thousand as collateral for customs clearance and also provided pledged time deposits of NT\$2,200 thousand as collateral for lease a parcel of land from the Science Park Administration (SPA).

## 27. OPERATING LEASE ARRANGEMENTS

The Company's major significant operating leases are arrangements on several parcels of land and office premises.

The Company's expenses for lease payments were as follows:

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Minimum lease payments	<u><u>\$ 55,516</u></u>	<u><u>\$ 29,618</u></u>

Future minimum lease payments under the above non-cancellable operating leases are as follows:

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
Not later than 1 year	\$ 56,996	\$ 52,637
Later than 1 year and not later than 5 years	<u>65,465</u>	<u>112,402</u>
	<u><u>\$ 122,461</u></u>	<u><u>\$ 165,039</u></u>

## 28. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

GUC has entered into license agreements with several companies that own intellectual property rights. According to the agreements, GUC shall pay specific amounts of money to obtain licenses of their intellectual property rights or shall pay royalties at specific percentages of sales amount of identified products. Under the agreements GUC shall pay at least US\$4,000 thousand and US\$9,400 thousand to the counter parties in the period from July 2017 to July 2020 and since December 2017, respectively.

## 29. EXCHANGE RATE INFORMATION OF FOREIGN-CURRENCY FINANCIAL ASSETS AND LIABILITIES

The following information was aggregated by the foreign currencies other than functional currencies of the Company entities. The significant foreign-currency financial assets and liabilities were as follows:

(Unit: Foreign Currency in Thousands)

	Foreign Currencies (In Thousands)	Exchange Rate (Note)	Carrying Amount
<u>December 31, 2018</u>			
Monetary items of financial assets			
USD	\$ 74,869	30.715	\$ 2,299,597
EUR	117	35.2	4,103
Monetary items of financial liabilities			
USD	43,490	30.715	1,335,788
JPY	61,326	0.2782	17,061
EUR	152	35.2	5,367

December 31, 2017

Monetary items of financial assets			
USD	75,036	29.76	2,233,084
Monetary items of financial liabilities			
USD	59,513	29.76	1,771,116
JPY	55,688	0.2642	14,713
RMB	912	4.5545	4,153
EUR	85	35.57	3,030

Note: Exchange rate represents the number of N.T. dollars for which one foreign currency could be exchanged.

The significant (realized and unrealized) foreign exchange gains were as follows:

Foreign Currencies	Exchange Rate	Years Ended December 31	
		2018	2017
		Net Foreign Exchange Gain (Loss)	Net Foreign Exchange Gain (Loss)
JPY	0.2730 (JPY:NTD)	\$ 781	0.2713 (JPY:NTD)
RMB	4.5666 (RMB:NTD)	228	4.4952 (RMB:NTD)
EUR	35.6055 (EUR:NTD)	137	34.3520 (EUR:NTD)
KRW	0.02761 (KRW:NTD)	3	0.02713 (KRW:NTD)
USD	30.1492 (USD:NTD)	(4,397)	30.4315 (USD:NTD)
USD	1,089.2091 (USD:KRW)	(33)	1,118.2816 (USD:KRW)
USD	6.6070 (USD:RMB)	4,072	6.7708 (USD:RMB)
		\$ 791	\$ 29,683

## 30. OPERATING SEGMENT INFORMATION

The Company operates in individual industry on the basis of how the Company's chief operating decision maker regularly reviews information in order to allocate resources and assess performance. The basis for the measurement of the operating segment profit (loss), assets and liabilities is the same as that for the preparation of financial statements. Please refer to the consolidated financial statements for the related operating segment information and Note 15 for information about disaggregation of revenue.

### a. Geographic information

	<b>Non-current Assets</b>	
	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
Taiwan	\$ 1,349,035	\$ 776,227
China	14,088	8,639
United States	9,818	6,466
Japan	2,147	2,573
Europe	855	1,152
Korea	776	1,726
	<u>\$ 1,376,719</u>	<u>\$ 796,783</u>

Non-current assets include property, plant and equipment and intangible assets, but exclude financial instrument and deferred income tax assets.

### b. Major customers representing at least 10% of net revenue

	<b>Years Ended December 31</b>			
	<b>2018</b>		<b>2017</b>	
	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>
Customer A	\$ 2,524,693	19	(Note)	-
Customer B	1,442,243	11	(Note)	-
Customer C	(Note)	-	\$ 1,786,206	15

Note: The customer did not exceed 10% of net revenue in the current year, the disclosure is not required.

## 31. ADDITIONAL DISCLOSURES

### a. Significant transactions and b. Related information of reinvestment

- 1) Financings provided: None;
- 2) Endorsements/guarantees provided: None;
- 3) Marketable securities held (excluding investments in subsidiaries, associates and jointly controlled entities): Please see Table 1 attached;
- 4) Marketable securities acquired and disposed of at costs or prices of at least NT\$300 million or 20% of the paid-in capital: Please see Table 2 attached;
- 5) Acquisition of individual real estate at costs of at least NT\$300 million or 20% of the paid-in capital: None;

- 6) Disposal of individual real estate at prices of at least NT\$300 million or 20% of the paid-in capital: None;
- 7) Total purchases from or sales to related parties of at least NT\$100 million or 20% of the paid-in capital: Please see Table 3 attached;
- 8) Receivables from related parties amounting to at least NT\$100 million or 20% of the paid-in capital: None;
- 9) Information about the derivative instruments transaction: None;
- 10) Others: Intercompany relationships and significant intercompany transactions: Please see Table 4 attached;
- 11) Names, locations, and related information of investees over which the Company exercises significant influence (excluding information on investment in Mainland China): Please see Table 5 attached;

c. Information on investment in Mainland China

- 1) The name of the investee in Mainland China, the main businesses and products, its issued capital, method of investment, information on inflow or outflow of capital, percentage of ownership, net income (losses) of the investee, investment income (losses), ending balance, amount received as dividends from the investee, and the limitation on investee: Please see Table 6 attached.
- 2) Significant direct or indirect transactions with the investee, its prices and terms of payment, unrealized gain or loss, and other related information which is helpful to understand the impact of investment in Mainland China on financial reports: Please see Table 4 attached.

TABLE 1**GLOBAL UNICHIP CORP. AND SUBSIDIARIES**

**MARKETABLE SECURITIES HELD  
DECEMBER 31, 2018**  
 (Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account	December 31, 2018			Note
				Shares	Carrying Amount	Percentage of Ownership (%)	
GUC	Preferred stock eTopus Technology Inc.	-	Financial assets at fair value through profit or loss - noncurrent	1,515,151	\$ -	3.0	\$ -

TABLE 2

## GLOBAL UNICHIP CORP. AND SUBSIDIARIES

MARKETABLE SECURITIES ACQUIRED AND DISPOSED OF AT COSTS OR PRICES OF AT LEAST NT\$300 MILLION OR 20% OF THE PAID-IN CAPITAL  
 FOR THE YEAR ENDED DECEMBER 31, 2018  
 (Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

Company Name	Type and Name of Marketable Securities	Financial Statement Account	Counter party	Relationship	Beginning Balance		Acquisition Amount	Shares	Disposal Amount	Carrying Amount	Gains on Disposal	Shares	Ending Balance Amount
					Shares	Amount							
GUC	Taishin 1699 Money Market Fund	Financial assets at fair value through profit or loss	-	-	-	\$ -	\$ 71,988,365	71,988,365	\$ 970,524	\$ 970,000	\$ 524	-	\$ -
	Jih Sun Money Market Fund	Financial assets at fair value through profit or loss	-	-	-	\$ -	\$ 28,496,038	28,496,038	420,417	420,000	417	-	\$ -
	Yuanta Wan Tai Money Market Fund	Financial assets at fair value through profit or loss	-	-	-	\$ -	\$ 18,549,468	18,549,468	280,159	280,000	159	-	\$ -
	UPAMC James Bond Money Market Fund	Financial assets at fair value through profit or loss	-	-	-	\$ -	\$ 25,841,158	25,841,158	430,000	430,131	131	-	\$ -

TABLE 3**GLOBAL UNICHIP CORP. AND SUBSIDIARIES**

**TOTAL PURCHASE FROM OR SALE TO RELATED PARTIES OF AT LEAST NT\$100 MILLION OR 20% OF THE PAID-IN CAPITAL  
FOR THE YEAR ENDED DECEMBER 31, 2018**  
(Amounts in Thousands of New Taiwan Dollars)

Company Name	Related Party	Nature of Relationship	Transaction Details			Abnormal Transaction	Accounts Payable or Receivable	Ending Balance	% to Total	Note
			Purchases/ Sales	Amount	% to Total					
GUC	TSMC	TSMC is an investor accounted for using equity method	Purchases	\$ 5,067,794	81	30 days after monthly closing	Note 25	Note 25	\$ (374,702)	(31)
	TSMC-NA	TSMC-NA is a subsidiary of TSMC	Purchases	1,141,840	18	30 days after invoice date and 30 days after monthly closing	Note 25	Note 25	(106,125)	(9)

**GLOBAL UNICHIP CORP. AND SUBSIDIARIES**  
**INTERCOMPANY RELATIONSHIPS AND SIGNIFICANT INTERCOMPANY TRANSACTIONS**  
**FOR THE YEAR ENDED DECEMBER 31, 2018**  
**(Amounts in Thousands of New Taiwan Dollars)**

**TABLE 4**

No.	Company Name	Counter Party	Nature of Relationship (Note 1)	Intercompany Transactions		Percentage to Consolidated Net Revenue or Total Assets
				Financial Statement Account	Amount	
0	GUC	GUC-NA	1	Manufacturing overhead	\$ 113,181	-
		GUC-Japan	1	Operating expenses	233,585	1%
				Accrued expenses and other current liabilities	21,329	2%
		GUC-Europe	1	Manufacturing overhead	138,258	-
				Operating expenses	66,440	1%
		GUC-Korea	1	Accrued expenses and other current liabilities	17,061	-
				Manufacturing overhead	5,024	-
		GUC-Shanghai	1	Operating expenses	29,854	-
				Accrued expenses and other current liabilities	2,551	-
		GUC-Nanjing	1	Manufacturing overhead	3,521	-
				Operating expenses	4,491	-
				Accrued expenses and other current liabilities	687	-
				Manufacturing overhead	51,058	-
				Operating expenses	29,384	-
				Accrued expenses and other current liabilities	4,337	-
				Purchases	1,409	-
				Manufacturing overhead	146,217	1%
				Operating expenses	29,558	-
				Other current liabilities	3,246	-

Note 1: No. 1 represents the transactions from parent company to subsidiary.

Note 2: The intercompany transactions, prices and terms are determined in accordance with mutual agreements and no other similar transactions could be compared with.

## GLOBAL UNICHIP CORP. AND SUBSIDIARIES

NAMES, LOCATIONS, AND RELATED INFORMATION OF INVESTEES OVER WHICH THE COMPANY EXERCISES SIGNIFICANT INFLUENCE (EXCLUDING INFORMATION ON INVESTMENT IN MAINLAND CHINA)  
 FOR THE YEAR ENDED DECEMBER 31, 2018  
 (Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

TABLE 5

Investor Company	Investee Company	Location	Main Businesses and Products	Balance as of December 31, 2018				Investment Income (Losses)	Note
				Original Investment Amount December 31, 2018 (Foreign Currencies in Thousands)	December 31, 2017 (Foreign Currencies in Thousands)	Shares	Percentage of Ownership (%)		
GUC	GUC-NA	U.S.A.	Products consulting, design and technical support service	\$ 40,268 (US\$ 1,264)	\$ 800,000 (US\$ 1,264)	100	\$ 118,849	\$ 12,290	3,861
	GUC-BVI	British Virgin Islands	Investing activities	\$ 152,603 (US\$ 5,050)	\$ 5,050,000 (US\$ 5,050)	100	36,090	3,861	
	GUC-Japan	Japan	Products consulting, design and technical support service	15,393 (YEN 55,000)	15,393 (YEN 55,000)	1,100	42,096	6,912	
	GUC-Europe	Netherlands	Products consulting, design and technical support service	8,109 (EUR 200)	8,109 (EUR 200)	-	100	9,049	1,384
	GUC-Korea	Korea	Products consulting, design and technical support service	5,974 (KRW 222,545)	44,000 (KRW 222,545)	100	6,740	346	

TABLE 6

**GLOBAL UNICHIP CORP. AND SUBSIDIARIES**

**INFORMATION ON INVESTMENT IN MAINLAND CHINA  
FOR THE YEAR ENDED DECEMBER 31, 2018**  
(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

Investee Company	Main Businesses and Products	Total Amount of Paid-in Capital (US\$ in Thousands)	Method of Investment	Accumulated Outflow of Investment from Taiwan as of January 1, 2018 (US\$ in Thousands)		Investment Flows		Net Income (Losses) of the Investee	Percentage of Ownership	Investment Income (Losses) (Note 3)	Carrying Amount as of December 31, 2018	Accumulated Inward Remittance of Earnings as of December 31, 2018
				Outflow	Inflow	Outflow	Inflow					
GUC-Nanjing	Products consulting, design and technical support service	\$ 90,138 (US\$ 3,000)	(Note 1)	\$ 45,417 (US\$ 1,500)	\$ 44,721 (US\$ 1,500)	\$ -	\$ 90,138 (US\$ 3,000)	\$ 11,128	100%	\$ 11,128	\$ 92,471	\$ -
GUC-Shanghai	Products consulting, design and technical support service	\$ 31,165 (US\$ 1,000)	(Note 2)	\$ 31,165 (US\$ 1,000)	\$ -	\$ -	\$ 31,165 (US\$ 1,000)	\$ 3,903	100%	\$ 3,903	\$ 33,030	\$ -

Accumulated Investment in Mainland China as of December 31, 2018 (US\$ in Thousands)	Investment Amounts Authorized by Investment Commission, MOEA (US\$ in Thousands)	Upper Limit on Investment (US\$ in Thousands)
\$ 121,303 (US\$ 4,000)	\$ 121,303 (US\$ 4,000)	\$ 2,619,542 (Note 4)

Note 1: The Company invested the investee directly.

Note 2: The Company's investee with a controlling financial interest; indirectly invested in GUC-Shanghai through GUC-BVI.

Note 3: Investment income (losses) was determined based on unaudited financial statements.

Note 4: Subject to 60% of net asset value of GUC according to the revised "Guidelines Governing the Approval of Investment or Technical Cooperation in Mainland China" issued by the Investment Commission.

## **Global Unichip Corp.**

**Parent Company Only Financial Statements for the  
Years Ended December 31, 2018 and 2017 and  
Independent Auditors' Report**

## INDEPENDENT AUDITORS' REPORT

The Board of Directors and Shareholders  
Global Unichip Corp.

### Opinion

We have audited the accompanying parent company only financial statements of Global Unichip Corp. (the "Company"), which comprise the parent company only balance sheets as of December 31, 2018 and 2017, and the parent company only statements of comprehensive income, statements of changes in equity and statements of cash flows for the years then ended, and the notes to the parent company only financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying parent company only financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and its financial performance and its cash flows for the years then ended in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers.

### Basis for Opinion

We conducted our audit in accordance with the Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants and auditing standards generally accepted in the Republic of China. Our responsibilities under those standards are further described in the section Auditors' Responsibilities for the Audit of the Parent Company Only Financial Statements section of our report. We are independent of the Company in accordance with The Norm of Professional Ethics for Certified Public Accountant of the Republic of China, and we have fulfilled our other ethical responsibilities in accordance with these requirements. 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 judgment, were of most significance in our audit of the parent company only financial statements for the year ended December 31, 2018. These matters were addressed in the context of our audit of the parent company only financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

#### Valuation of inventory

Due to the current rapidly changes in technology and the highly competitive business environment, the price of products fluctuating quickly, evaluating the changes in the net realizable value of inventory could have a material impact on the parent company only financial statements. As of December 31, 2018 the carrying amount of inventory was NT\$1,274,954 thousand and accounted for 16% of the total assets in the parent company only balance sheet. Please refer to Notes 4, 5 and 7 to the parent company only financial statements for the details of the information and accounting policy about inventory. As the Company's primary business model is composed of rendering services and the sales of goods and the Company requires that inventories be stated at the lower of cost or net realizable value in accordance with IAS 2, when determining net realizable value of inventory for obsolescent and unmarketable items, the Company should consider the inventory accounting policy and the production schedule at the same time. As uncertainty exists in management's judgment when the determining the loss on inventory, the valuation of inventory has been identified as a key audit matter.

Our key audit procedures performed in respect of this area included the following:

1. Understood and tested the design of the key controls over the valuation of inventory.
2. Verified the reasonableness of the net realizable value of inventory by sampling from the year-end schedule of the raw materials, work in process, and finished goods, respectively, and matching the recent sales information.
3. Understood the process of the Company's warehouse management; reviewed the Company's annual inventory physical count plan; and observed its annual inventory physical count to assess the adequacy of the methods used by management to identify and monitor its obsolescent inventory.
4. Performed a retrospective review to analyze the historical reasonableness of judgments with reference to actual amounts of inventory loss.

### **Responsibilities of Management and Those Charged with Governance for the Parent Company Only Financial Statements**

Management is responsible for the preparation and fair presentation of the parent company only financial statements in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and for such internal control as management determines is necessary to enable the preparation of parent company only financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the parent company only financial statements, management is responsible for assessing the Company'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 management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance (including members of the Audit Committee) are responsible for overseeing the Company's financial reporting process.

### **Auditors' Responsibilities for the Audit of the Parent Company Only Financial Statements**

Our objectives are to obtain reasonable assurance about whether the parent company only financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the auditing standards generally accepted in the Republic of China 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 parent company only financial statements.

As part of an audit in accordance with the auditing standards generally accepted in the Republic of China, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

1. Identify and assess the risks of material misstatement of the parent company only 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.
2. 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 Company's internal control.
3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

4. Conclude on the appropriateness of management's 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 Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the parent company only 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 auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.
5. Evaluate the overall presentation, structure and content of the parent company only financial statements, including the disclosures, and whether the parent company only financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
6. Obtain sufficient and appropriate audit evidence on the financial information of components constituting the Company to express an opinion on the parent company only financial statements. We are responsible for the direction, supervision and performance of the audit. We remain solely responsible for our audit opinion.

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the 2018 parent company only financial statements and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partners on the audit resulting in this independent auditors' report are Yih-Shin Kao and Yu Feng Huang.

Deloitte & Touche  
Taipei, Taiwan  
The Republic of China

January 31, 2019

#### Notice to Readers

*The accompanying financial statements are intended only to present the financial position, financial performance and cash flows in accordance with accounting principles and practices generally accepted in the Republic of China and not those of any other jurisdictions. The standards, procedures and practices to audit such financial statements are those generally accepted and applied in the Republic of China.*

*For the convenience of readers, the independent auditors' report and the accompanying financial statements have been translated into English from the original Chinese version prepared and used in the Republic of China. If there is any conflict between the English version and the original Chinese version or any difference in the interpretation of the two versions, the Chinese-language independent auditors' report and financial statements shall prevail.*

## GLOBAL UNICHIP CORP.

PARENT COMPANY ONLY BALANCE SHEETS  
(In Thousands of New Taiwan Dollars)

ASSETS	December 31, 2018		December 31, 2017		LIABILITIES AND EQUITY	
	Amount	%	Amount	%	Amount	%
CURRENT ASSETS					CURRENT LIABILITIES	
Cash and cash equivalents	\$ 3,697,975	46	\$ 4,948,877	59	Contract liabilities (Note 16)	\$ 869,174
Contract assets (Note 16)	56,976	1	-	-	Accounts payable	732,365
Accounts receivable, net (Notes 6 and 16)	903,168	11	907,709	11	Payables to related parties (Note 25)	505,538
Receivables from related parties (Note 25)	7,038	-	9,550	-	Accrued employees' compensation and remuneration to directors (Note 22)	167,433
Inventories (Note 7)	1,274,954	16	1,152,514	14	Payables on machinery and equipment	364,475
Other financial assets	845	-	1,198	-	Current tax liabilities (Note 20)	127,326
Other current assets (Notes 11 and 25)	440,555	5	239,765	3	Provisions (Note 12)	-
Total current assets	6,381,511	79	7,259,613	87	Customer advances (Note 25)	-
NONCURRENT ASSETS					Accrued expenses and other current liabilities (Notes 13 and 25)	1,630,281
Investments accounted for using equity method (Note 8)	305,295	4	222,349	3	Total current liabilities	20
Property, plant and equipment (Note 9)	1,061,015	13	452,694	6	NONCURRENT LIABILITIES	
Intangible assets (Note 10)	288,020	3	323,533	4	Deferred income tax liabilities (Note 20)	22,141
Deferred income tax assets (Note 20)	58,580	1	33,862	-	Other long-term payables (Note 13)	53,239
Refundable deposits (Note 25)	8,250	-	2,352	-	Net defined benefit liabilities (Note 14)	28,233
Pledged time deposits (Note 26)	22,200	-	22,200	-	Guarantee deposits	3,072
Total noncurrent assets	1,743,360	21	1,056,990	13	Total noncurrent liabilities	2,976
					Total liabilities	51
					EQUITY (Note 15)	
					Share capital	1,340,119
					Capital surplus	32,543
					Retained earnings	-
					Appropriated as legal reserve	663,892
					Appropriated as special reserve	10,940
					Unappropriated earnings	2,327,046
					Others	(8,636)
TOTAL	\$ 8,124,871	100	\$ 8,316,603	100	Total equity	4,365,904
					TOTAL	54
						4,047,256
						49
						\$ 8,316,603

The accompanying notes are an integral part of the parent company only financial statements.

## GLOBAL UNICHIP CORP.

### PARENT COMPANY ONLY STATEMENTS OF COMPREHENSIVE INCOME (In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017	
	Amount	%	Amount	%
NET REVENUE (Notes 16 and 25)	\$ 13,459,804	100	\$ 12,160,606	100
COST OF REVENUE (Notes 22 and 25)	<u>9,801,830</u>	<u>73</u>	<u>9,250,102</u>	<u>76</u>
GROSS PROFIT	<u>3,657,974</u>	<u>27</u>	<u>2,910,504</u>	<u>24</u>
OPERATING EXPENSES (Notes 22 and 25)				
Sales and marketing	325,324	2	330,965	3
General and administrative	330,573	2	279,889	2
Research and development	<u>1,948,447</u>	<u>15</u>	<u>1,391,357</u>	<u>12</u>
Total operating expenses	<u>2,604,344</u>	<u>19</u>	<u>2,002,211</u>	<u>17</u>
INCOME FROM OPERATIONS	<u>1,053,630</u>	<u>8</u>	<u>908,293</u>	<u>7</u>
NON-OPERATING INCOME AND EXPENSES				
Other income (Notes 17 and 25)	34,449	-	22,204	-
Other gains and losses (Note 18)	(1,974)	-	37,060	1
Finance costs (Note 19)	-	-	(60)	-
Share of profit of subsidiaries	<u>35,921</u>	<u>-</u>	<u>10,160</u>	<u>-</u>
Total non-operating income and expenses	<u>68,396</u>	<u>-</u>	<u>69,364</u>	<u>1</u>
INCOME BEFORE INCOME TAX	1,122,026	8	977,657	8
INCOME TAX EXPENSE (Note 20)	<u>133,870</u>	<u>1</u>	<u>122,848</u>	<u>1</u>
NET INCOME	<u>988,156</u>	<u>7</u>	<u>854,809</u>	<u>7</u>
OTHER COMPREHENSIVE INCOME (LOSS)				
Items that will not be reclassified subsequently to profit or loss				
Remeasurement of defined benefit plans (Note 14)	(1,782)	-	(4,243)	-
Items that may be reclassified subsequently to profit or loss				
Exchange differences on translation of foreign operations (Note 15)	<u>2,304</u>	<u>-</u>	<u>(9,426)</u>	<u>-</u>
Other comprehensive income (loss) for the year, net of income tax	<u>522</u>	<u>-</u>	<u>(13,669)</u>	<u>-</u>
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	<u>\$ 988,678</u>	<u>7</u>	<u>\$ 841,140</u>	<u>7</u>
EARNINGS PER SHARE (Note 21)				
Basic earnings per share	<u>\$ 7.37</u>		<u>\$ 6.38</u>	
Diluted earnings per share	<u>\$ 7.33</u>		<u>\$ 6.35</u>	

The accompanying notes are an integral part of the parent company only financial statements.

## GLOBAL UNICHIP CORP.

PARENT COMPANY ONLY STATEMENTS OF CHANGES IN EQUITY  
(In Thousands of New Taiwan Dollars, Unless Specified Otherwise)

	Share Capital - Common Stock			Retained Earnings			Others	
	Share (In Thousands)	Amount	Capital Surplus	Legal Reserve	Special Reserve	Unappropriated Earnings	Total	
BALANCE, JANUARY 1, 2017	134,011	\$ 1,340,119	\$ 29,853	\$ 523,303	\$ -	\$ 1,780,737	\$ 2,304,040	\$ (1,514)
Appropriation and distribution of prior year's earnings								-
Legal reserve	-	-	-	55,108	1,514	(55,108) (1,514) (469,042)	-	-
Special reserve	-	-	-	-	-	-	-	-
Cash dividends to shareholders - NTS\$3.50 per share	-	-	-	-	-	-	-	(469,042)
<b>Total</b>				<b>55,108</b>	<b>1,514</b>	<b>(525,664)</b>	<b>(469,042)</b>	<b>-</b>
Donations from shareholders	-	-	2,660	-	-	-	-	2,660
Net income in 2017	-	-	-	-	-	854,809	-	854,809
Other comprehensive loss in 2017, net of income tax	-	-	-	-	-	(4,243)	(4,243)	(9,426) (13,669)
Total comprehensive income (loss) in 2017	-	-	-	-	-	850,566	850,566	(9,426) 841,140
BALANCE, DECEMBER 31, 2017	134,011	1,340,119	32,513	578,411	1,514	2,105,639	2,685,564	(10,940)
Appropriation and distribution of prior year's earnings								-
Legal reserve	-	-	-	85,481	9,426	(85,481) (9,426) (670,060)	-	-
Special reserve	-	-	-	-	-	-	-	-
Cash dividends to shareholders - NTS\$5.00 per share	-	-	-	-	-	-	-	(670,060)
<b>Total</b>			<b>-</b>	<b>85,481</b>	<b>9,426</b>	<b>(764,967)</b>	<b>(670,060)</b>	<b>-</b>
Dividends from claims extinguished by prescription	-	-	30	-	-	-	-	30
Net income in 2018	-	-	-	-	-	988,156	988,156	-
Other comprehensive income (loss) in 2018, net of income tax	-	-	-	-	-	(1,782)	(1,782)	2,304 522
Total comprehensive income in 2018	-	-	-	-	-	986,374	986,374	2,304 988,678
BALANCE, DECEMBER 31, 2018	134,011	\$ 1,340,119	\$ 32,543	\$ 663,892	\$ 10,940	\$ 2,327,046	\$ 3,001,878	\$ (8,636) \$ 4,365,904

The accompanying notes are an integral part of the parent company only financial statements.

# GLOBAL UNICHIP CORP.

## PARENT COMPANY ONLY STATEMENTS OF CASH FLOWS (In Thousands of New Taiwan Dollars)

	2018	2017
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Income before income tax	\$ 1,122,026	\$ 977,657
Adjustments for:		
Depreciation	177,579	85,505
Amortization	226,368	166,409
Gain on financial assets at fair value through profit or loss	(1,278)	-
Finance costs	-	60
Interest income	(26,473)	(16,808)
Share of profit of subsidiaries	(35,921)	(10,160)
Loss (gain) on disposal of property, plant and equipment, net	4	(4,495)
Gain on disposal of financial assets	-	(1,445)
Loss (gain) on foreign exchange, net	13,581	(9,378)
Changes in operating assets and liabilities:		
Contract assets	(43,584)	-
Accounts receivable	(11,090)	(174,653)
Receivables from related parties	2,512	34,760
Inventories	(122,440)	(425,014)
Other financial assets	(166)	-
Other current assets	(8,832)	78,137
Contract liabilities	(761,107)	-
Accounts payable	(49,755)	192,725
Payables to related parties	(530,476)	60,041
Accrued employees' compensation and remuneration to directors	21,726	81,685
Provisions	-	(2,019)
Customer advances	-	778,278
Accrued expenses and other current liabilities	307,898	185,250
Net defined benefit liabilities	(490)	(337)
Cash generated from operations	<u>280,082</u>	<u>1,996,198</u>
Income tax paid	<u>(89,293)</u>	<u>(76,572)</u>
Net cash generated from operating activities	<u>190,789</u>	<u>1,919,626</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Acquisitions of:		
Financial assets at fair value through profit or loss	(2,310,000)	-
Available-for-sale financial assets	-	(2,780,000)
Investments accounted for using equity method	(44,721)	(48,427)
Property, plant and equipment	(512,744)	(130,761)
Intangible assets	(239,873)	(188,467)
Proceeds from disposal of:		
Financial assets at fair value through profit or loss	2,311,278	-
Available-for-sale financial assets	-	2,781,445
Property, plant and equipment	3,305	4,495

(Continued)

# GLOBAL UNICHIP CORP.

## PARENT COMPANY ONLY STATEMENTS OF CASH FLOWS (In Thousands of New Taiwan Dollars)

	2018	2017
Refundable deposits paid	\$ (6,993)	\$ (1,854)
Refundable deposits refunded	1,095	1,369
Increase in pledged time deposits	-	(2,200)
Interest received	<u>26,992</u>	<u>16,423</u>
Net cash used in investing activities	<u>(771,661)</u>	<u>(347,977)</u>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Cash dividends paid	(670,060)	(469,040)
Interest paid	-	(60)
Dividends from claims extinguished by prescription reclassified to capital surplus	30	-
Donations from shareholders	<u>-</u>	<u>2,660</u>
Net cash used in financing activities	<u>(670,030)</u>	<u>(466,440)</u>
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	<b>(1,250,902)</b>	<b>1,105,209</b>
<b>CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR</b>	<b><u>4,948,877</u></b>	<b><u>3,843,668</u></b>
<b>CASH AND CASH EQUIVALENTS, END OF YEAR</b>	<b><u>\$ 3,697,975</u></b>	<b><u>\$ 4,948,877</u></b>

The accompanying notes are an integral part of the parent company only financial statements. (Concluded)

# GLOBAL UNICHIP CORP.

## NOTES TO PARENT COMPANY ONLY FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017 (Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

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### 1. GENERAL

Global Unichip Corp. (the “Company”), a Republic of China (R.O.C.) corporation, was incorporated on January 22, 1998. The Company is engaged mainly in researching, developing, producing, testing and selling of embedded memory and logic components for various application ICs, cell libraries for various application ICs, and EDA tools for various application ICs. On November 3, 2006, the Company’s shares were listed on the Taiwan Stock Exchange (TWSE). The address of its registered office and principal place of business is No. 10 Li-Hsin 6<sup>th</sup> Rd., Hsinchu Science Park, Taiwan.

### 2. APPROVAL OF FINANCIAL STATEMENTS

The parent company only financial statements were approved by the Audit Committee and authorized by the Board of Directors for issue on January 31, 2019.

### 3. APPLICATION OF NEW, AMENDED AND REVISED STANDARDS AND INTERPRETATIONS

- a. Initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC), and Interpretations of IAS (SIC) (collectively, the “IFRSs”) endorsed and issued into effect by the Financial Supervisory Commission (FSC).

Except for the following, whenever applied, the initial application of the amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRSs endorsed and issued into effect by the FSC would not have any material impact on the Company’s accounting policies:

- 1) IFRS 9 “Financial Instruments” and related amendment

IFRS 9 supersedes IAS 39 “Financial Instruments: Recognition and Measurement”, with consequential amendments to IFRS 7 “Financial Instruments: Disclosures” and other standards. IFRS 9 sets out the requirements for classification, measurement and impairment of financial assets and hedge accounting. Please refer to Note 4 for information relating to the relevant accounting policies.

#### Classification, measurement and impairment of financial assets

On the basis of the facts and circumstances that exist as at January 1, 2018, the Company has performed an assessment of the classification of recognized financial assets and has elected not to restate comparative figures.

The following table shows the original measurement categories and carrying amount under IAS 39 and the new measurement categories and carrying amount under IFRS 9 for each class of the Company’s financial assets as at January 1, 2018.

	Measurement Category		Carrying Amount		Note
	IAS 39	IFRS 9	IAS 39	IFRS 9	
<u>Financial Assets</u>					
Cash and cash equivalents	Loans and receivables	Amortized cost	\$ 4,948,877	\$ 4,948,877	(1)
Accounts receivable (including related parties), other financial assets, refundable deposits and pledged time deposits	Loans and receivables	Amortized cost	941,223	941,223	(1)
<u>Financial Liabilities</u>					
Accounts payable (including related parties), payables on machinery and equipment, accrued expenses and other current liabilities, other long-term payables and guarantee deposits	Amortized cost	Amortized cost	2,216,166	2,216,166	

(1) Cash and cash equivalents, accounts receivable (including related parties), other financial assets, refundable deposits and pledged time deposits which were classified as loans and receivables under IAS 39 are now classified at amortized cost per the assessment of future 12-month or lifetime expected credit losses under IFRS 9.

(2) Mutual funds previously classified as available-for-sale were classified as at fair value through profit or loss because the contractual cash flows are not solely payments of principal and interest on the principal outstanding and they are not equity instruments. The Company's mutual funds were sold in full on January 1, 2018.

(3) Unlisted shares previously measured at cost under IAS 39 were classified as at fair value through profit or loss under IFRS 9 and will be measured at fair value. The Company's assessed fair value of financial assets at fair value through profit or loss was zero on January 1, 2018.

## 2) IFRS 15 “Revenue from Contracts with Customers” and related amendment

IFRS 15 establishes principles for recognizing revenue that apply to all contracts with customers, and supersedes IAS 18, “Revenue,” IAS 11, “Construction Contracts,” and a number of revenue-related interpretations. Please refer to Note 4 for information related to the relevant accounting policies.

After application of IFRS 15, NRE service is recognized when the NRE service is completed according to the contract which signed with customers. If each performance obligation can be measured reasonably by completion stages, the contract is restricted for another use, and the customer would compensate the company to recover the costs incurred plus a reasonable profit margin whenever the contract is terminated by the customer, revenues of the contract service will be recognized over time. Before application of IFRS 15, the company recognized revenue by the stage of completion of the contract.

Under IFRS 15, the net effect of revenue recognized and consideration received and receivable is recognized as a contract asset or a contract liability. Before application of IFRS 15, accounts receivable was recognized or customer advances received was reduced when revenue was recognized for the contract under IAS 18.

Before application of IFRS 15, the company recognize sales discount and return as sales discount and return provisions. After application of IFRS 15, the company recognize sales discount and return as refund liabilities (accrued expenses and other current liabilities).

The Company elects to retrospectively apply IFRS 15 to the contracts that are not complete on January 1, 2018 and recognize the cumulative effect of the change in the retained earnings on January 1, 2018.

Impact on assets, liabilities and equity for current period

	<b>Carrying Amount as of January 1, 2018</b>	<b>Adjustments Arising from Initial Application</b>	<b>Restated Carrying Amount as of January 1, 2018</b>
Accounts receivable, net	\$ 907,709	\$ (13,392)	\$ 894,317
Contract assets	<u>                  </u> - <u>                  </u>	<u>                  </u> 13,392 <u>                  </u>	<u>                  </u> 13,392 <u>                  </u>
Total effect on assets	<u>                  </u> \$ 907,709 <u>                  </u>	<u>                  </u> \$ <u>                  </u> <u>                  </u>	<u>                  </u> \$ 907,709 <u>                  </u>
Contract liabilities	\$ <u>                  </u> - <u>                  </u>	<u>                  </u> \$ 1,630,281 <u>                  </u>	<u>                  </u> \$ 1,630,281 <u>                  </u>
Customer advances	<u>                  </u> 1,630,281 <u>                  </u>	<u>                  </u> (1,630,281) <u>                  </u>	<u>                  </u> - <u>                  </u>
Refund liabilities (accrued expenses and other current liabilities)	<u>                  </u> - <u>                  </u>	<u>                  </u> 485 <u>                  </u>	<u>                  </u> 485 <u>                  </u>
Provisions	<u>                  </u> 485 <u>                  </u>	<u>                  </u> (485) <u>                  </u>	<u>                  </u> - <u>                  </u>
Total effect on liabilities	<u>                  </u> \$ 1,630,766 <u>                  </u>	<u>                  </u> \$ <u>                  </u> <u>                  </u>	<u>                  </u> \$ 1,630,766 <u>                  </u>

The impact of continuing the application of IAS 18 instead of IFRS 15 for the year ended December 31, 2018 is detailed as follows:

Impact on assets, liabilities and equity

	<b>December 31, 2018</b>
Decrease in contract assets	\$ (56,976)
Increase in accounts receivable, net	<u>                  </u> 56,976 <u>                  </u>
Total effect on assets	<u>                  </u> \$ <u>                  </u> <u>                  </u>
Decrease in contract liabilities	\$ (869,174)
Increase in customer advances	<u>                  </u> 869,174 <u>                  </u>
Increase in provisions	<u>                  </u> 106,123 <u>                  </u>
Decrease in refund liabilities (accrued expenses and other current liabilities)	<u>                  </u> (106,123) <u>                  </u>
Total effect on liabilities	<u>                  </u> \$ <u>                  </u> <u>                  </u>

3) IFRIC 22 “Foreign Currency Transactions and Advance Consideration”

IAS 21 stipulated that a foreign currency transaction shall be recorded on initial recognition in the functional currency by applying to the foreign currency amount the spot exchange rate between the functional currency and the foreign currency at the date of the transaction. IFRIC 22 further explains that the date of the transaction is the date on which an entity recognizes a non-monetary asset or non-monetary liability from payment or receipt of advance consideration. If there are multiple payments or receipts in advance, the entity shall determine the date of the transaction for each payment or receipt of advance consideration.

The Company applies IFRIC 22 prospectively to all assets, expenses and income recognized on or after January 1, 2018 within the scope of the Interpretation.

b. Amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the IFRSs endorsed by the FSC for application starting from 2019

<b>New IFRSs</b>	<b>Effective Date Announced by International Accounting Standards Board (IASB) (Note 1)</b>
Annual Improvements to IFRSs 2015-2017 Cycle	January 1, 2019
Amendments to IFRS 9 “Prepayment Features with Negative Compensation”	January 1, 2019 (Note 2)
IFRS 16 “Leases”	January 1, 2019
Amendments to IAS 19 “Plan Amendment, Curtailment or Settlement”	January 1, 2019 (Note 3)
Amendments to IAS 28 “Long-term Interests in Associates and Joint Ventures”	January 1, 2019
IFRIC 23 “Uncertainty Over Income Tax Treatments”	January 1, 2019

Note 1: Unless stated otherwise, the above New IFRSs are effective for annual periods beginning on or after their respective effective dates.

Note 2: The FSC permits the election for early adoption of the amendments starting from 2018.

Note 3: The Company shall apply these amendments to plan amendments, curtailments or settlements occurring on or after January 1, 2019.

The initial application of the above New IFRSs, whenever applied, would not have any material impact on the Company’s accounting policies, except for the following:

#### IFRS 16 “Leases”

IFRS 16 sets out the accounting standards for leases that will supersede IAS 17 “Leases”, IFRIC 4 “Determining whether an Arrangement contains a Lease”, and a number of related interpretations.

#### Definition of a lease

Upon initial application of IFRS 16, the Company will elect to apply IFRS 16 only to contracts entered into (or changed) on or after January 1, 2019 in order to determine whether those contracts are, or contain, a lease. Contracts identified as containing a lease under IAS 17 and IFRIC 4 will not be reassessed and will be accounted for in accordance with the transitional provisions under IFRS 16.

#### The Company as lessee

Upon initial application of IFRS 16, the Company will recognize right-of-use assets and lease liabilities for all leases on the parent company only balance sheets except for those whose payments under low-value and short-term leases will be recognized as expenses on a straight-line basis. On the parent company only statements of comprehensive income, the Company will present the depreciation expense charged on right-of-use assets separately from the interest expense accrued on lease liabilities; interest is computed using the effective interest method. On the parent company only statements of cash flows, cash payments for the principal portion of lease liabilities and cash payments for the interest portion will be classified within financing activities. Currently, payments under operating lease contracts are recognized as expenses on a straight-line basis. Cash flows for operating leases are classified within operating activities on the statements of cash flows.

The Company applying IFRS 16 retrospectively with the cumulative effect of the initial application of this standard recognized on January 1, 2019. Comparative information will not be restated.

Lease liabilities will be recognized on January 1, 2019 for leases currently classified as operating leases with the application of IAS 17. Lease liabilities will be measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate on January 1, 2019. Right-of-use assets will be measured at their carrying amount as if IFRS 16 had been applied since the commencement date, but discounted using the aforementioned incremental borrowing rate. The Company will apply IAS 36 to all right-of-use assets.

The Company expects to apply the following practical expedients:

- 1) The Company will apply a single discount rate to a portfolio of leases with reasonably similar characteristics to measure lease liabilities.
- 2) The Company will account for those leases for which the lease term ends on or before December 31, 2019 as short-term leases.
- 3) The Company will exclude initial direct costs from the measurement of right-of-use assets on January 1, 2019.
- 4) The Company will use hindsight, such as in determining lease terms, to measure lease liabilities.

#### The Company as lessor

The Company subleased its leasehold parking lot to a third party from 2016. Such sublease is classified as an operating lease under IAS 17. The Company will assess the sublease classification as an operating lease on the basis of the contractual terms and conditions of the head lease and sublease on January 1, 2019.

#### Anticipated impact on assets, liabilities and equity

	<b>Carrying Amount as of December 31, 2018</b>	<b>Adjustments Arising from Initial Application</b>	<b>Adjusted Carrying Amount as of January 1, 2019</b>
Right-of-use assets	\$ _____ -	\$ 202,346	\$ 202,346
Total effect on assets	\$ _____ -	\$ 202,346	\$ 202,346
Lease liabilities - current	\$ _____ -	\$ 33,788	\$ 33,788
Lease liabilities - non-current	\$ _____ -	168,558	168,558
Total effect on liabilities	\$ _____ -	\$ 202,346	\$ 202,346

Except for the above impacts, as of the date the parent company only financial statements were authorized for issue, the Company is continuously assessing other possible impacts that the application of the aforementioned amendments and the related amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers will have on the Company's financial position and financial performance and will disclose these other impacts when the assessment is completed.

c. The IFRSs issued by IASB but not yet endorsed and issued into effect by the FSC

New IFRSs	Effective Date Announced by IASB (Note 1)
Amendments to IFRS 3 “Definition of a Business”	January 1, 2020 (Note 2)
Amendments to IFRS 10 and IAS 28 “Sale or Contribution of Assets between an Investor and its Associate or Joint Venture”	To be determined by IASB
IFRS 17 “Insurance Contracts”	January 1, 2021
Amendments to IAS 1 and IAS 8 “Definition of Material”	January 1, 2020 (Note 3)

Note 1: Unless stated otherwise, the above New IFRSs are effective for annual periods beginning on or after their respective effective dates.

Note 2: The Company shall apply these amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020 and to asset acquisitions that occur on or after the beginning of that period.

Note 3: The Company shall apply these amendments prospectively for annual reporting periods beginning on or after January 1, 2020.

As of the date the parent company only financial statements were authorized for issue, the Company is continuously assessing the possible impact that the application of above standards and interpretations will have on the Company’s financial position and financial performance, and will disclose the relevant impact when the assessment is completed.

#### 4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

For the convenience of readers, the accompanying parent company only financial statements have been translated into English from the original Chinese version prepared and used in the R.O.C. If there is any conflict between the English version and the original Chinese version or any difference in the interpretation of the two versions, the Chinese-language parent company only financial statements shall prevail.

Significant accounting policies are summarized as follows:

##### **Statement of Compliance**

The parent company only financial statements have been prepared in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers.

##### **Basis of Preparation**

The parent company only financial statements have been prepared on the historical cost basis except for financial instruments which are measured at fair value and net defined benefit liabilities which are measured at the present value of the defined benefit obligation less the fair value of plan assets, as explained in the accounting policies below.

Historical cost is generally based on the fair value of the consideration given in exchange for assets.

When preparing these parent company only financial statements, the Company used the equity method to account for its investments in subsidiaries. In order for the amounts of the net profit for the year, other comprehensive income for the year and total equity in the parent company only financial statements to be the same with the amounts attributable to the owners of the Company in its consolidated financial statements, adjustments arising from the differences in accounting treatments between the parent company

only basis and the consolidated basis were made to investments accounted for using equity method, the share of profit or loss of subsidiaries and the related equity items, as appropriate, in these parent company only financial statements.

### **Foreign Currencies**

In preparing the parent company only financial statements, transactions in currencies other than the entity's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Such exchange differences are recognized in profit or loss in the period in which they arise. Non-monetary items measured at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Exchange differences on the retranslation of non-monetary items are included in profit or loss for the period except for exchange differences on the retranslation of non-monetary items in respect of which gains and losses are recognized directly in other comprehensive income, in which case, the exchange differences are also recognized directly in other comprehensive income. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

For the purposes of presenting parent company only financial statements, the assets and liabilities of the Company's foreign operations are translated into NT\$ using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period. Exchange differences arising, if any, are recognized in other comprehensive income and accumulated in equity.

### **Classification of Current and Noncurrent Assets and Liabilities**

Current assets include:

- a. Assets held primarily for the purpose of trading;
- b. Assets expected to be realized within twelve months after the reporting period; and
- c. Cash and cash equivalents unless the asset is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

Current liabilities include:

- a. Liabilities held primarily for the purpose of trading;
- b. Liabilities due to be settled within twelve months after the reporting period; and
- c. Liabilities for which the Company does not have an unconditional right to defer settlement for at least twelve months after the reporting period. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

Assets and liabilities that are not classified as current are classified as non-current.

### **Cash Equivalents**

Cash equivalents, for the purpose of meeting short-term cash commitments, consist of highly liquid time deposits and investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

## Financial Instruments

Financial assets and liabilities shall be recognized when the Company becomes a party to the contractual provisions of the instruments.

Financial assets and liabilities are initially recognized at fair values. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in profit or loss.

### Financial Assets

All regular way purchases or sales of financial assets are recognized and derecognized on a settlement date basis.

#### a. Measurement category

##### 2018

Financial assets are classified into the following categories: financial assets at fair value through profit or loss (FVTPL) and financial assets at amortized cost.

###### 1) Financial assets at FVTPL

Financial assets at FVTPL includes the financial assets are mandatorily classified as at FVTPL, which includes investments in equity instruments which are not designated as at fair value through other comprehensive income (FVOCI) and debt instruments that do not meet the amortized cost criteria or the FVOCI criteria.

Financial assets at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any dividend or interest earned on the financial asset. Fair value is determined in the manner described in Note 24.

###### 2) Financial assets at amortized cost

Financial assets that meet the following 2 conditions are subsequently measured at amortized cost:

- a) The financial asset is held within a business model whose objective is collecting contractual cash flows; and
- b) 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.

Subsequent to initial recognition, financial assets at amortized cost (including cash and cash equivalents, notes and accounts receivable (including related parties) and other receivables), are measured at amortized cost, which equals gross carrying amount determined by the effective interest method less any impairment loss. Exchange differences are recognized in profit or loss.

##### 2017

Financial assets are classified as available-for-sale financial assets and loans and receivables. Thus are depended at the time of initial recognition's characteristic and purpose. Convention trading of financial assets are recognized and derecognized on a settlement date basis. Convention trading purchases or

sales of financial assets require delivery of assets within the time frame established by regulation or convention in the marketplace.

1) Available-for-sale financial assets

Available-for-sale financial assets are non-derivatives financial assets that are either designated as available-for-sale or not classified as (a) loans and receivables, (b) held-to-maturity financial assets or (c) FVTPL.

Open-end mutual funds held by the Company that are traded in an active market are classified as available-for-sale financial assets and are stated at fair value at the end of each reporting period. When the investment is disposed of or is determined to be impaired, the cumulative gain or loss previously recognized in other comprehensive income is reclassified to profit or loss.

Fair value of open-end mutual funds is determined by the financial institution using the net assets value at the balance sheet date.

Available-for-sale equity investments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured, the value are presented at cost less any identified impairment loss at the end of each reporting period and in a separate line item as financial assets measured at cost. If, in a subsequent period, the fair value of the financial assets can be reliably measured, the financial assets are remeasured at fair value. The difference between carrying amount and fair value is recognized in other comprehensive income on financial assets. Any impairment losses are recognized in profit and loss.

2) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Loans and receivables including cash and cash equivalents, notes and accounts receivable (including related parties) and other receivables are measured at amortized cost using the effective interest method less any impairment, except for those receivables with immaterial discounted effect.

b. Impairment of financial assets and contract assets

2018

The Company recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including trade receivables) and contract assets.

The Company always recognizes lifetime Expected Credit Losses (ECLs) for trade receivables. For all other financial instruments, the Company recognizes lifetime ECLs when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on the financial instrument has not increased significantly since initial recognition, the Company measures the loss allowance for that financial instrument at an amount equal to 12-month ECLs.

Expected credit losses reflect the weighted average of credit losses with the respective risks of a default occurring as the weights. Lifetime ECLs represent the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECLs represent the portion of lifetime ECLs that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

For poor credit rating customers have accounts receivable balances past due over 90 days, the Company recognizes loss allowance at full amount.

The Company recognizes an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account.

### 2017

Financial assets, other than those at FVTPL, are assessed for indicators of impairment at the end of each reporting period. Financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been affected.

For financial assets carried at amortized cost, such as trade receivables, assets that are assessed not to be impaired individually are, in addition, assessed for impairment on a collective basis. The Company assesses the collectability of receivables by evaluating the current financial condition of customers, historical experience and by performing account aging analysis. In the aging analysis, poor credit rating customers have accounts receivable balances past due over 90 days should all be recognized an allowance for doubtful receivable.

For financial assets measured at cost, the amount of the impairment loss is measured as the difference between the asset's carrying amount and the present value of the estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment loss will not be reversed in subsequent periods.

The carrying amount of the financial asset is reduced by the impairment loss directly for all financial assets with the exception of trade receivables, where the carrying amount is reduced by using an allowance account. When a trade receivable is considered uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account.

#### c. Derecognition of financial assets

The Company derecognizes a financial asset only when the contractual rights to the cash flows from the financial asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity.

Before 2018, on derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognized in other comprehensive income is recognized in profit or loss. From 2018, on derecognition of a financial asset at amortized cost in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss.

### **Financial Liabilities and Equity Instruments**

#### a. Classification as debt or equity

Debt and equity instruments issued by the Company are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

#### b. Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognized at the proceeds received, net of direct issue costs.

c. Financial liabilities

Financial liabilities are subsequently measured at amortized cost using effective interest method.

Financial liabilities other than those held for trading purposes and designated as at FVTPL are subsequently measured at amortized cost at the end of each reporting period.

d. Derecognition of financial liabilities

The Company derecognizes financial liabilities when, and only when, the Company's obligations are discharged, cancelled or they expire. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in profit or loss.

### **Inventories**

Inventories consist of raw materials, supplies, finished goods and work-in-process. Inventories are stated at the lower of cost or net realizable value. Inventory write-downs are made on an item-by-item basis, except where it may be appropriate to group similar or related items. Net realizable value is the estimated selling price of inventories less all estimated costs of completion and necessary selling costs. Inventories are recorded at weighted-average cost on the balance sheet date.

### **Investments Accounted for Using Equity Method**

The Company uses the equity method to account for its investments in subsidiaries. A subsidiary is the entity that is controlled by the Company.

Under the equity method, an investment in a subsidiary is initially recognized at cost and adjusted thereafter to recognize the Company's share of the profit or loss and other comprehensive income of the subsidiary. The Company also recognizes the changes in the Company's share of equity of subsidiaries.

Profits or losses resulting from downstream transactions with subsidiaries are eliminated in full in the parent company only financial statements. Profits and losses resulting from upstream transactions with subsidiaries and transactions between subsidiaries are recognized in the parent company only financial statements only to the extent of interests in the subsidiaries that are not related to the Company.

### **Property, Plant and Equipment and Assets Leased to Others**

Property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment. Costs include any incremental costs that are directly attributable to the construction or acquisition of the item of property, plant and equipment.

Depreciation is recognized so as to write off the cost of the assets less their residual values over their useful lives, and it is computed using the straight-line method over the following estimated useful lives:

Buildings	50 years
Machinery and equipment	4 to 7 years
Research and development equipment	3 to 5 years
Transportation equipment	5 years
Office equipment	3 to 5 years
Miscellaneous equipment	2 to 10 years

The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimates accounted for on a prospective basis.

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the assets. Any gain or loss arising on the disposal

or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognized in profit or loss.

### Leases

Leases are classified as finance lease whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee, other than finance leases are classified as operating lease.

Rental income from operating lease is recognized on a straight-line basis over the term of the relevant lease. Operating lease payments are recognized as an expense on a straight-line basis over the lease term.

### Intangible Assets

Intangible assets are limited in a certain useful life. The initial book value is recorded on the purchasing cost itself. After that the subsequent book value is measured by cost less accumulated amortization and accumulated impairment losses. Amortization is recognized using the straight-line method over the following estimated useful lives:

Software	2 to 5 years
Technology license fees	The term of the technology transfer contract
Patents	Economic lives of the patents

The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

Expenditure on research activities is recognized as an expense when incurred. An internally-generated intangible asset arising from development activities is capitalized and then amortized on a straight-line basis over its useful life if the recognition criteria for an intangible asset have been met; otherwise, the development expenditure is recognized as an expense when incurred.

### Impairment of Tangible and Intangible Assets

At the end of each reporting period, the Company reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs. When a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Recoverable amount is the higher of fair value less costs to sell or value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount. An impairment loss is recognized immediately in profit or loss.

When an impairment loss subsequently reverses, the carrying amount of the asset or a cash-generating unit is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized immediately in profit or loss.

## **Provision**

### 2017

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that the Company will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

## **Revenue Recognition**

### 2018

The Company identifies the contract with the customers, allocates the transaction price to the performance obligations, and recognizes revenue when performance obligations are satisfied. Revenue from sale of goods is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances.

#### Revenue from sale of goods

Recognized when a customer obtains control of promised goods, at which time the goods are delivered to the customer's specific location and performance obligation is satisfied.

#### Rendering of Non-Recurring Engineering (NRE) services

Recognized the revenue when the NRE service is completed, which meet the qualifications of customer's contract. If each performance obligation can be measured reasonably by completion stages, the contract is restricted for another use, and the customer would compensate the company to recover the costs incurred plus a reasonable profit margin whenever the contract is terminated by the customer, revenues of the contract service will be recognized over time.

### 2017

Revenue is measured at the fair value of the consideration received or receivable. Revenue is also reduced for estimated customer returns, rebates and other similar allowances.

#### Sale of goods

Revenue from the sale of goods is recognized when the goods are delivered and titles have passed, at which time all the following conditions are satisfied:

- The Company has transferred to the buyer the significant risks and rewards of ownership of the goods;
- The Company retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
- The amount of revenue can be measured reliably;
- It is probable that the economic benefits associated with the transaction will flow to the Company; and
- The costs incurred or to be incurred in respect of the transaction can be measured reliably.

## Rendering of Non-Recurring Engineering (NRE) services

Revenue from a contract to provide NRE services is recognized by reference to the stage of completion of the contract.

### Interest Income

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable.

### **Retirement Benefits**

Payments to defined contribution retirement benefit plans are recognized as an expense when employees have rendered service entitling them to the contributions.

Defined benefit costs under the defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost and net interest on the net defined benefit liability are recognized as employee benefits expense in the period they occur. Remeasurement is recognized in other comprehensive income in the period in which they occur, and it is reflected in retained earnings immediately and will not be reclassified to profit or loss.

Net defined benefit liability represents the actuarial deficit in the Company's defined benefit plan.

### **Taxation**

Income tax expense represents the sum of the tax currently payable and deferred tax.

#### Current tax

According to the Income Tax Law, an additional income tax of unappropriated earnings is provided for as income tax in the year the shareholders approve to retain earnings.

Adjustments of prior years' tax liabilities are added to or deducted from the current year's tax provision.

#### Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the parent company only financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences and unused R&D tax credits to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences in subsidiaries, except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. The deferred tax assets which originally not recognized is also reviewed at the end of each reporting period and increased to the extent that it is probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax liabilities and assets are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

#### Current and deferred tax for the period

Current and deferred tax are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognized in other comprehensive income or directly in equity, respectively.

### **5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION AND UNCERTAINTY**

In the application of the Company's accounting policies, which are described in Note 4, the directors are required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

The following are the critical judgments, apart from those involving estimations, that the directors have made in the process of applying the Company's accounting policies and that have the most significant effect on the amounts recognized in the parent company only financial statements.

#### **Revenue Recognition**

##### 2018

The Company evaluates whether its performance obligation is satisfied over time or at a point in time in accordance with respective contract with a customer and applicable regulation when the conditions described in Note 4 are satisfied.

The Company also records a provision for estimated future allowances in the same period the related revenue is recorded. Provision for estimated sales allowances is generally made and adjusted based on management judgement, historical experience and any known factors that would significantly affect the allowance, and our management periodically reviews the adequacy of the allowance.

##### 2017

The Company recognizes revenue when the conditions described in Note 4 are satisfied. The Company also records a provision for estimated future allowances in the same period the related revenue is recorded. Provision for estimated sales allowances is generally made and adjusted based on management judgement, historical experience and any known factors that would significantly affect the allowance, and our management periodically reviews the adequacy of the allowance.

## Impairment of Financial Assets (2018)

The provision for impairment of trade receivables is based on assumptions about the risk of default and expected loss rates. The Company uses judgment in making these assumptions and in selecting the inputs to the impairment calculation, based on the Company's past history, existing market conditions as well as forward looking estimates at the end of each reporting period. Please refer to Note 6 for the details of the key assumptions and inputs used. Where the actual future cash flows are less than expected, a material impairment loss may arise.

## Impairment of Accounts Receivable (2017)

Accounts receivable are considered to be impaired when there is objective evidence of uncollectibility; the Company will consider the estimated future cash flows to determine the impairment. The Company assesses the collectability of receivables by evaluating the current financial condition of customers, historical experience and by performing account aging analysis; the amount of impairment loss is the difference between the assets carrying amount and the present value of estimated future cash flows, discounted at the financial assets original effective interest rate. It might be a critical impairment loss if the actual future cash flows are less than estimated future cash flows. In the aging analysis, poor credit rating customers have accounts receivable balances past due over 90 days should all be recognized an allowance for doubtful receivable.

## Realization of Deferred Income Tax Assets

Deferred tax assets are recognized to the extent that it is probable that future taxable profits will be available against which those deferred tax assets can be utilized. Assessment of the realization of the deferred tax assets requires the Company's subjective judgment and estimation, including the future revenue growth and profitability, tax holidays, the amount of tax credits that can be utilized and feasible tax planning strategies. Any changes in the global economic environment, the industry trends and relevant laws and regulations could result in significant adjustments to deferred tax assets.

## Valuation of Inventory

Inventories are stated at the lower of cost or net realizable value, and the Company has to determine and estimate to the net realizable value of inventory at the end of each reporting period.

Due to the rapid technological changes, the Company estimates the net realizable value of inventory for obsolescence and unmarketable items at the end of reporting period and then writes down the cost of inventories to net realizable value. The net realizable value of the inventory is mainly determined based on assumptions of future demand within a specific time horizon.

## 6. ACCOUNTS RECEIVABLE, NET

	December 31	
	2018	2017
Accounts receivable	\$ 903,168	\$ 907,709
<u>2018</u>		

In principle, the payment term granted to customers is due 30 days from the invoice date or 30 days from the end of the month the invoice is issued.

The Company applies the simplified approach to provisions for expected credit losses prescribed by IFRS 9, which permits the use of a lifetime expected credit losses provision for all trade receivables. The expected credit losses on trade receivables are estimated using a provision matrix by reference to past account aging

records of the debtor and an analysis of the debtor's current financial position, adjusted for factors that are specific to the debtors and an assessment of all the gross domestic product growth rates, unemployment rates and industrial indicators at the reporting date. The Company estimates expected credit losses based on the number of days for which receivables are past due. As the Company's historical credit losses experience does not show significantly different loss patterns for different customer segments, the provision for losses based on past due status of receivables is not further distinguished between the Company's different customer base; and poor credit rating customers have accounts receivable balances past due over 90 days, should all be recognized an allowance for doubtful receivable.

The Company writes off a trade receivable when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery of the receivable. For trade receivables that have been written off, the Company continues to engage in enforcement activity to attempt to recover the receivables which are due. Where recoveries are made, these are recognized in profit or loss.

#### Aging analysis of accounts receivable

	<b>December 31, 2018</b>
Neither past due nor impaired	\$ 779,713
Past due but not impaired	
Past due within 1-30 days	106,735
Past due within 31-60 days	6,676
Past due within 91-120 days	<u>10,044</u>
	<u><u>\$ 903,168</u></u>

Starting from 2018, the Company applies IFRS 9 to evaluate expected credit losses, the Company's loss allowance for expected credit losses was zero on December 31, 2018 and January 1, 2018.

#### 2017

The Company applied the same credit policy in 2017 and 2018. The Company assesses the collectability of receivables by evaluating the current financial condition of customers, historical experience and by performing account aging analysis. In the aging analysis, poor credit rating customers have accounts receivable balances past due over 90 days, should all be recognized an allowance for doubtful receivable. As of December 31, 2017, the Company's allowance for doubtful receivables was zero.

Accounts receivable, aging analysis at the end of the reporting period is summarized in the following table. Accounts receivable include amounts that are past due but for which the Company has not recognized an allowance for doubtful receivables after the assessment since there has not been a significant change in the credit quality of its customers and the amounts are still considered recoverable.

#### Aging analysis of accounts receivable

	<b>December 31, 2017</b>
Neither past due nor impaired	\$ 796,075
Past due but not impaired	
Past due within 1-30 days	107,230
Past due within 31-60 days	<u>4,404</u>
	<u><u>\$ 907,709</u></u>

## 7. INVENTORIES

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
Finished goods	\$ 106,745	\$ 86,932
Work in process	873,531	912,267
Raw materials	<u>294,678</u>	<u>153,315</u>
	<u><u>\$ 1,274,954</u></u>	<u><u>\$ 1,152,514</u></u>

Write-down of inventories to net realizable value was included in the cost of revenue, which was as follows.

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Write-down of inventories	<u><u>\$ 70,789</u></u>	<u><u>\$ 7,569</u></u>

## 8. INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD

The carrying amount and percentage of ownership of subsidiaries included in the parent company only balance sheets were as follows:

<b>Name of Investee</b>	<b>Main Businesses and Products</b>	<b>Establishment and Operating Location</b>	<b>Carrying Amount</b>		<b>Percentage of Ownership</b>	
			<b>December 31</b>	<b>2018</b>	<b>2017</b>	<b>December 31</b>
Global Unichip Corp.-NA (GUC-NA)	Products consulting, design and technical support service	U.S.A.	\$ 118,849	\$ 102,974	100%	100%
Global Unichip (Nanjing) Ltd. (GUC-Nanjing)	Products consulting, design and technical support service	Nanjing, China	92,471	39,139	100%	100%
Global Unichip Japan Co., Ltd. (GUC-Japan)	Products consulting, design and technical support service	Japan	42,096	33,288	100%	100%
Global Unichip (BVI) Corp. (GUC-BVI)	Investing activities	British Virgin Islands	36,090	32,708	100%	100%
Global Unichip Corp. Europe B.V. (GUC-Europe)	Products consulting, design and technical support service	Netherlands	9,049	7,762	100%	100%
Global Unichip Corp. Korea (GUC-Korea)	Products consulting, design and technical support service	Korea	<u>6,740</u>	<u>6,478</u>	100%	100%
			<u><u>\$ 305,295</u></u>	<u><u>\$ 222,349</u></u>		

Upon the approval of the Board of the Directors on May 4 2017, GUC-Nanjing was established by the Company in July 2017.

## 9. PROPERTY, PLANT AND EQUIPMENT

	<b>Buildings</b>	<b>Machinery and Equipment</b>	<b>Research and Development Equipment</b>	<b>Transportation Equipment</b>	<b>Office Equipment</b>	<b>Miscellaneous Equipment</b>	<b>Total</b>
<u><u>Cost</u></u>							
Balance at January 1, 2018	\$ 242,923	\$ 23,430	\$ 700,589	\$ 9,390	\$ 17,781	\$ 264,887	\$ 1,259,000
Additions	-	2,477	678,675	1,327	4,883	101,847	789,209
Disposals	<u>-</u>	<u>-</u>	<u>(20,098)</u>	<u>(9,342)</u>	<u>-</u>	<u>(1,160)</u>	<u>(30,600)</u>
Balance at December 31, 2018	<u><u>\$ 242,923</u></u>	<u><u>\$ 25,907</u></u>	<u><u>\$ 1,359,166</u></u>	<u><u>\$ 1,375</u></u>	<u><u>\$ 22,664</u></u>	<u><u>\$ 365,574</u></u>	<u><u>\$ 2,017,609</u></u>
<u><u>Accumulated depreciation</u></u>							
Balance at January 1, 2018	\$ 63,797	\$ 3,311	\$ 482,838	\$ 5,383	\$ 16,887	\$ 234,090	\$ 806,306
Depreciation	4,767	3,159	150,946	808	675	17,224	177,579
Disposals	<u>-</u>	<u>-</u>	<u>(20,098)</u>	<u>(6,033)</u>	<u>-</u>	<u>(1,160)</u>	<u>(27,291)</u>
Balance at December 31, 2018	<u><u>\$ 68,564</u></u>	<u><u>\$ 6,470</u></u>	<u><u>\$ 613,686</u></u>	<u><u>\$ 158</u></u>	<u><u>\$ 17,562</u></u>	<u><u>\$ 250,154</u></u>	<u><u>\$ 956,594</u></u>
Carrying amount at December 31, 2018	<u><u>\$ 174,359</u></u>	<u><u>\$ 19,437</u></u>	<u><u>\$ 745,480</u></u>	<u><u>\$ 1,217</u></u>	<u><u>\$ 5,102</u></u>	<u><u>\$ 115,420</u></u>	<u><u>\$ 1,061,015</u></u>

(Continued)

	Buildings	Machinery and Equipment	Research and Development Equipment	Transportation Equipment	Office Equipment	Miscellaneous Equipment	Total
<u>Cost</u>							
Balance at January 1, 2017	\$ 242,923	\$ 4,499	\$ 604,633	\$ 4,978	\$ 17,271	\$ 251,377	\$ 1,125,681
Additions	-	19,301	126,542	4,412	925	15,036	166,216
Disposals	<u>—</u>	<u>(370)</u>	<u>(30,586)</u>	<u>—</u>	<u>(415)</u>	<u>(1,526)</u>	<u>(32,897)</u>
Balance at December 31, 2017	<u>\$ 242,923</u>	<u>\$ 23,430</u>	<u>\$ 700,589</u>	<u>\$ 9,390</u>	<u>\$ 17,781</u>	<u>\$ 264,887</u>	<u>\$ 1,259,000</u>
<u>Accumulated depreciation</u>							
Balance at January 1, 2017	\$ 59,031	\$ 2,418	\$ 445,557	\$ 4,506	\$ 17,155	\$ 225,031	\$ 753,698
Depreciation	4,766	1,263	67,867	877	147	10,585	85,505
Disposals	<u>—</u>	<u>(370)</u>	<u>(30,586)</u>	<u>—</u>	<u>(415)</u>	<u>(1,526)</u>	<u>(32,897)</u>
Balance at December 31, 2017	<u>\$ 63,797</u>	<u>\$ 3,311</u>	<u>\$ 482,838</u>	<u>\$ 5,383</u>	<u>\$ 16,887</u>	<u>\$ 234,090</u>	<u>\$ 806,306</u>
Carrying amount at December 31, 2017	<u>\$ 179,126</u>	<u>\$ 20,119</u>	<u>\$ 217,751</u>	<u>\$ 4,007</u>	<u>\$ 894</u>	<u>\$ 30,797</u>	<u>\$ 452,694</u>

(Concluded)

## 10. INTANGIBLE ASSETS

	Software	Technology License Fees	Patents	Total
<u>Cost</u>				
Balance at January 1, 2018	\$ 687,166	\$ 6,000	\$ 519	\$ 693,685
Additions	190,855	-	-	190,855
Disposals	<u>(55,465)</u>	<u>(6,000)</u>	<u>-</u>	<u>(61,465)</u>
Balance at December 31, 2018	<u>\$ 822,556</u>	<u>\$ —</u>	<u>\$ 519</u>	<u>\$ 823,075</u>
<u>Accumulated amortization</u>				
Balance at January 1, 2018	\$ 363,757	\$ 6,000	\$ 395	\$ 370,152
Amortization	226,339	-	29	226,368
Disposals	<u>(55,465)</u>	<u>(6,000)</u>	<u>-</u>	<u>(61,465)</u>
Balance at December 31, 2018	<u>\$ 534,631</u>	<u>\$ —</u>	<u>\$ 424</u>	<u>\$ 535,055</u>
Carrying amount at December 31, 2018	<u>\$ 287,925</u>	<u>\$ —</u>	<u>\$ 95</u>	<u>\$ 288,020</u>
<u>Cost</u>				
Balance at January 1, 2017	\$ 594,129	\$ 6,000	\$ 519	\$ 600,648
Additions	223,585	-	-	223,585
Disposals	<u>(130,548)</u>	<u>-</u>	<u>-</u>	<u>(130,548)</u>
Balance at December 31, 2017	<u>\$ 687,166</u>	<u>\$ 6,000</u>	<u>\$ 519</u>	<u>\$ 693,685</u>
<u>Accumulated amortization</u>				
Balance at January 1, 2017	\$ 327,924	\$ 6,000	\$ 367	\$ 334,291
Amortization	166,381	-	28	166,409
Disposals	<u>(130,548)</u>	<u>-</u>	<u>-</u>	<u>(130,548)</u>
Balance at December 31, 2017	<u>\$ 363,757</u>	<u>\$ 6,000</u>	<u>\$ 395</u>	<u>\$ 370,152</u>
Carrying amount at December 31, 2017	<u>\$ 323,409</u>	<u>\$ —</u>	<u>\$ 124</u>	<u>\$ 323,533</u>

## 11. OTHER CURRENT ASSETS

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
Prepayment for purchases	\$ 194,173	\$ 96,602
Prepaid license fees	117,641	4,497
Tax receivable	92,978	101,552
Prepaid expenses	35,539	35,499
Temporary payments	195	1,615
Prepaid income tax	<u>29</u>	<u>-</u>
	<u><u>\$ 440,555</u></u>	<u><u>\$ 239,765</u></u>

## 12. PROVISIONS

	<b>Year Ended December 31, 2017</b>
Balance, beginning of year	\$ 2,504
Additional provisions recognized	485
Write off	<u>(2,504)</u>
Balance, end of year	<u><u>\$ 485</u></u>

Provisions for sales allowances are generally estimated and adjusted based on management judgement, historical experience, and any known factors that would significantly affect the allowance, and our management periodically reviews the adequacy of the allowance and are recognized as a reduction of revenue when the product are sold.

Starting from 2018, the Company recognizes the estimation of sales returns and allowance as refund liability (classified under accrued expenses and other current liabilities) upon initial application of IFRS 15.

## 13. OTHER LIABILITIES

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
<u>Current</u>		
Payable for salaries and bonuses	\$ 245,115	\$ 182,068
License fees payable	125,615	149,877
Refund liabilities	106,123	-
Payable for royalties	31,609	12,749
Others	<u>377,509</u>	<u>257,156</u>
	<u><u>\$ 885,971</u></u>	<u><u>\$ 601,850</u></u>
<u>Non-current</u>		
License fees payable	<u>\$ 53,239</u>	<u>\$ 64,186</u>

Revenue from sale of goods is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances. The Company recognizes the estimation of refund liabilities based on historical experience and the consideration of varying contractual terms.

The license fees payable are primarily attributable to several agreements that the Company entered into for certain technology license and software.

#### **14. RETIREMENT BENEFIT PLANS**

##### **a. Defined contribution plans**

The pension mechanism under the Labor Pension Act is deemed a defined contribution retirement plan. Pursuant to the Act, the Company makes monthly contributions equal to 6% of each employee's monthly salary to employees' pension accounts. Accordingly, the Company recognized expenses of NT\$41,465 thousand and NT\$33,919 thousand in the parent company only statements of comprehensive income for the years ended December 31, 2018 and 2017, respectively.

##### **b. Defined benefit plans**

The Company has a defined benefit plan under the Labor Standards Act, which provides benefits based on an employee's length of service and average monthly salary of the last six months prior to retirement. The Company contributes an amount equal to 2% of salaries paid each month to a pension fund (the Fund), which is administered by the Labor Pension Fund Supervisory Committee (the Committee) and deposited in the Committee's name in the Bank of Taiwan. Before the end of each year, the Company assesses the balance in the Fund. If the amount of the balance in the Fund is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Company is required to fund the difference in one appropriation that should be made before the end of March of the next year. The Fund is managed by the Bureau of Labor Funds, Ministry of Labor ("the Bureau"); as such, the Company has no right to influence the investment policy and strategy.

The amounts arising from the defined benefit obligation of the Company under the financial position were as follows:

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
Present value of defined benefit obligation	\$ 65,279	\$ 60,860
Fair value of plan assets	<u>(37,046)</u>	<u>(33,919)</u>
Net defined benefit liabilities	<u><u>\$ 28,233</u></u>	<u><u>\$ 26,941</u></u>

Movements in net defined benefit liabilities were as follows:

	<b>Present Value of the Defined Benefit Obligation</b>	<b>Fair Value of the Plan Assets</b>	<b>Net Defined Benefit Liabilities</b>
Balance at January 1, 2017	<u>\$ 55,001</u>	<u>\$ (31,966)</u>	<u>\$ 23,035</u>
Service cost			
Current service cost	1,021	-	1,021
Net interest expense (income)	<u>825</u>	<u>(494)</u>	<u>331</u>
Recognized in profit or loss	<u>1,846</u>	<u>(494)</u>	<u>1,352</u>
Remeasurement			
Return on plan assets	-	230	230
Actuarial loss - changes in demographic assumptions	1,209	-	1,209
Actuarial loss - changes in financial assumptions	2,214	-	2,214
Actuarial loss - experience adjustments	<u>590</u>	<u>-</u>	<u>590</u>
Recognized in other comprehensive loss	<u>4,013</u>	<u>230</u>	<u>4,243</u>
Contributions from the employer	<u>-</u>	<u>(1,689)</u>	<u>(1,689)</u>
Balance at December 31, 2017	<u>60,860</u>	<u>(33,919)</u>	<u>26,941</u>
Service cost			
Current service cost	986	-	986
Net interest expense (income)	<u>761</u>	<u>(436)</u>	<u>325</u>
Recognized in profit or loss	<u>1,747</u>	<u>(436)</u>	<u>1,311</u>
Remeasurement			
Return on plan assets	-	(890)	(890)
Actuarial gain - changes in demographic assumptions	(294)	-	(294)
Actuarial loss - changes in financial assumptions	2,284	-	2,284
Actuarial loss - experience adjustments	<u>682</u>	<u>-</u>	<u>682</u>
Recognized in other comprehensive (income) loss	<u>2,672</u>	<u>(890)</u>	<u>1,782</u>
Contributions from the employer	<u>-</u>	<u>(1,801)</u>	<u>(1,801)</u>
Balance at December 31, 2018	<u>\$ 65,279</u>	<u>\$ (37,046)</u>	<u>\$ 28,233</u>

An analysis by function of the amounts recognized in profit or loss in respect of the defined benefit plans is as follows:

	<b>Year Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
General and administrative expenses	<u>\$ 1,311</u>	<u>\$ 1,352</u>

Through the defined benefit plans under the Labor Standards Law, the Company is exposed to the following risks:

- 1) Investment risk: The plan assets are invested in domestic and foreign equity and debt securities, bank deposits, etc. The investment is conducted at the discretion of the Bureau or under the mandated management. However, in accordance with relevant regulations, the return generated by plan assets should not be below the interest rate for a 2-year time deposit with local banks.

- 2) Interest risk: A decrease in the government bond interest rate will increase the present value of the defined benefit obligation; however, this will be partially offset by an increase in the return on the plan's debt investments.
- 3) Salary risk: The present value of the defined benefit obligation is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the present value of the defined benefit obligation.

The actuarial valuations of the present value of the defined benefit obligation were carried out by qualified actuaries. The significant assumptions used for the purposes of the actuarial valuations were as follows:

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
Discount rate	1.00%	1.25%
Expected rate of salary increase	3.00%	3.00%
Turnover rate	2.99%	3.06%

If possible reasonable change in each of the significant actuarial assumptions will occur and all other assumptions will remain constant, the present value of the defined benefit obligation would increase (decrease) as follows:

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
Discount rate		
0.25% increase	<u>\$ (2,276)</u>	<u>\$ (2,267)</u>
0.25% decrease	<u>\$ 2,379</u>	<u>\$ 2,375</u>
Expected rate of salary increase		
0.25% increase	<u>\$ 2,323</u>	<u>\$ 2,325</u>
0.25% decrease	<u>\$ (2,235)</u>	<u>\$ (2,233)</u>
Turnover rate		
10% increase	<u>\$ (863)</u>	<u>\$ (943)</u>
10% decrease	<u>\$ 883</u>	<u>\$ 964</u>

The sensitivity analysis presented above may not be representative of the actual change in the present value of the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
The expected contributions to the plan for the next year	<u>\$ 1,907</u>	<u>\$ 1,885</u>
The average duration of the defined benefit obligation	14 years	15 years

The maturity analysis of undiscounted pension benefit is as follows:

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
Later than 1 year and not later than 5 years	\$ 4,310	\$ 2,493
Later than 5 years	<u>69,728</u>	<u>70,091</u>
	\$ 74,038	\$ 72,584

## 15. EQUITY

### a. Share capital

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
Authorized	\$ 1,500,000	\$ 1,500,000
Issued	<u>\$ 1,340,119</u>	<u>\$ 1,340,119</u>

As of December 31, 2018 and 2017 the authorized shares are 150,000 thousand shares, with par value of \$10 per share is entitled to the right to vote and to receive dividends; the Company's issued and paid shares were 134,011 thousand shares.

### b. Capital surplus

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
From merger	\$ 16,621	\$ 16,621
Additional paid-in capital	13,232	13,232
Donations	2,660	2,660
Dividends from claims extinguished by prescription	<u>30</u>	<u>-</u>
	<u><u>\$ 32,543</u></u>	<u><u>\$ 32,513</u></u>

Under the Company Law, the capital surplus generated from the excess of the issuance price over the par value of capital stock (including the stock issued for new capital and mergers) and donations may be used to offset a deficit; in addition, when the Company has no deficit, such capital surplus may be appropriated as cash dividends or stock dividends, which are limited to a certain percentage of the Company's paid-in capital under capital surplus. In addition, the capital surplus from dividends from claims extinguished by prescription may be used to offset a deficit.

### c. Retained earnings and dividend policy

According to the Company's Articles of Incorporation when allocating the net profits for each fiscal year, the Company shall offset its losses in previous years before set aside the following items accordingly:

- 1) Legal reserve at 10% of the remaining profit;
- 2) Special reserve in accordance with the resolution in the shareholders' meeting;
- 3) Any balance remaining shall be allocated to shareholders according to the resolution in the shareholders' meeting.

The Articles of Incorporation provide the policy about employee' compensation and remuneration to directors, please refer to Note 22.

The Company's profit distribution, the proportion of cash dividends shall not be lower than 60% of the total dividends, depending on future expansion plans and cash needs.

The appropriation for legal reserve shall be made until the reserve equals the Company's paid-in capital. The reserve may be used to offset a deficit, or be distributed as dividends and bonuses to the extent that the portion exceeds 25% of the paid-in capital if the Company incurs no loss.

A special reserve equivalent to the net debit balance of other components of shareholders' equity such as exchange differences on the translation of foreign operations, shall be made from unappropriated earnings. Any special reserve appropriated may be reversed to the extent that the net debit balance reverses.

The appropriations of earnings for 2017 and 2016 had been approved in the Company's shareholders' meetings held on May 17, 2018 and May 18, 2017, respectively. The appropriations and dividends per share were as follows:

	<b>Appropriation of Earnings</b>		<b>Dividends Per Share (NT\$)</b>	
	<b>For Fiscal Year 2017</b>	<b>For Fiscal Year 2016</b>	<b>For Fiscal Year 2017</b>	<b>For Fiscal Year 2016</b>
Legal reserve	\$ 85,481	\$ 55,108		
Special reserve	9,426	1,514		
Cash dividends to shareholders	<u>670,060</u>	<u>469,042</u>	\$ 5.00	\$ 3.50
	<u><u>\$ 764,967</u></u>	<u><u>\$ 525,664</u></u>		

The appropriation of earnings for 2018 had been proposed by the Company's board of directors on January 31, 2019. The appropriation and dividends per share were as follows:

	<b>Appropriation of Earnings</b>	<b>Dividends Per Share (NT\$)</b>
Legal reserve	\$ 98,816	
Reversal of special reserve	(2,304)	
Cash dividends to shareholders	<u>670,060</u>	\$ 5.00
	<u><u>\$ 766,572</u></u>	

The appropriations of earnings for 2018 are to be resolved in the Company shareholders' meeting which is expected to be held on May 16, 2019.

d. Others

Changes in foreign currency translation reserve were as follows:

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Balance, beginning of year	\$ (10,940)	\$ (1,514)
Exchange differences on translation of foreign operations	<u>2,304</u>	<u>(9,426)</u>
Balance, end of year	<u><u>\$ (8,636)</u></u>	<u><u>\$ (10,940)</u></u>

The exchange differences on translation of foreign operation's net assets from its functional currency to the Company's presentation currency are recognized directly in other comprehensive income and also accumulated in the foreign currency translation reserve.

## 16. NET REVENUE

The analysis of the Company's net revenue was as follows:

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Revenue from customer contracts		
Net revenue from sale of goods	\$ 9,167,596	\$ 9,265,856
Net revenue from NRE service	<u>4,292,208</u>	<u>2,894,750</u>
	<u><u>\$ 13,459,804</u></u>	<u><u>\$ 12,160,606</u></u>

Revenue from sale of goods is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances. The Company recognizes the estimation of refund liabilities based on historical experience and the consideration of varying contractual terms, which is classified under accrued expenses and other current liabilities.

### a. Contract balances

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
Account receivables	\$ 903,168	\$ 907,709
Contract assets - current	<u>\$ 56,976</u>	<u>\$ -</u>
Contract liabilities - current	<u>\$ 869,174</u>	<u>\$ -</u>

The changes in the balance of contract assets and the contract liabilities primarily result from the timing difference between the satisfaction of performance obligation and the customer's payment.

For the year ended December 31, 2018, the Company recognized NT\$1,451,151 thousand in revenue from the beginning balance of contract liability.

### b. Disaggregation of revenue from contracts with customers

<b>Production</b>	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
ASIC and wafer product	\$ 9,167,596	\$ 9,265,856
NRE	4,078,719	2,641,850
Other	<u>213,489</u>	<u>252,900</u>
	<u><u>\$ 13,459,804</u></u>	<u><u>\$ 12,160,606</u></u>

<b>Region</b>	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Japan	\$ 3,609,609	\$ 926,223
United States	2,811,100	2,518,682
Taiwan	2,792,676	2,194,549
China	2,300,679	4,062,516
Korea	1,129,735	1,151,412
Europe	<u>816,005</u>	<u>1,307,224</u>
	<u><u>\$ 13,459,804</u></u>	<u><u>\$ 12,160,606</u></u>

The Company categorized the net revenue mainly based on the country in which the customer's headquartered.

	<b>Year Ended December 31, 2018</b>
<b>Application Type</b>	
Consumer	\$ 5,736,702
Computer	4,585,808
Communication	2,057,146
Other	<u>1,080,148</u>
	<u><u>\$ 13,459,804</u></u>
<b>Customer Type</b>	
System House	\$ 9,706,104
Fabless	<u>3,753,700</u>
	<u><u>\$ 13,459,804</u></u>
<b>Resolution</b>	<b>Year Ended December 31, 2018</b>
	<b>Net Revenue from NRE Service</b>
7-nanometer	\$ 741,655
16-nanometer	1,527,987
28-nanometer	1,239,050
40-nanometer	270,101
65-nanometer and above	299,926
Other	<u>213,489</u>
	<u><u>\$ 4,292,208</u></u>
	<b>Net Revenue from Sale of Goods</b>
7-nanometer	\$ 1,751,012
16-nanometer	74,632
28-nanometer	2,128,432
40-nanometer	1,080,987
65-nanometer and above	4,132,533
Other	<u>-</u>
	<u><u>\$ 9,167,596</u></u>

## 17. OTHER INCOME

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Interest income		
Bank deposits	\$ 26,473	\$ 16,808
Government grants	645	645
Income (expenses) of rental assets		
Rental income	397	467
Depreciation of rental assets	(2)	(4)
Other income	<u>6,936</u>	<u>4,288</u>
	<u><u>\$ 34,449</u></u>	<u><u>\$ 22,204</u></u>

## 18. OTHER GAINS AND LOSSES

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Gain on financial assets at fair value through profit or loss	\$ 1,278	\$ -
Gain on disposal of financial assets available-for-sale	- -	1,445
Gain (loss) on disposal of property, plant and equipment, net	(4) 4,495	4,495
Gain (loss) on foreign exchange, net	<u>(3,248)</u>	<u>31,120</u>
	<u><u>\$ (1,974)</u></u>	<u><u>\$ 37,060</u></u>

## 19. FINANCE COSTS

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Interest expense		
Bank loans	<u>\$ -</u>	<u>\$ 60</u>

## 20. INCOME TAX

### a. Income tax expense recognized in profit or loss

Income tax expense consisted of the following:

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Current income tax expense		
Current tax expense recognized in the current period	\$ 142,302	\$ 113,419
Additional income tax on unappropriated earnings	8,560	2,603
Income tax adjustments on prior years	<u>(6,384)</u>	<u>6,912</u>
	<u><u>144,478</u></u>	<u><u>122,934</u></u>
Deferred income tax benefit		
Effect of tax rate changes	3,947	-
Temporary differences	<u>(14,555)</u>	<u>(86)</u>
	<u><u>(10,608)</u></u>	<u><u>(86)</u></u>
Income tax expense recognized in profit or loss	<u><u>\$ 133,870</u></u>	<u><u>\$ 122,848</u></u>

A reconciliation of income before income tax and income tax expense recognized in profit or loss was as follows:

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Income before tax	<u>\$ 1,122,026</u>	<u>\$ 977,675</u>
Income tax expense at the statutory rate	\$ 224,405	\$ 166,202
Tax effect of adjusting items:		
Nondeductible items in determining taxable income	12,321	(4,666)
Tax-exempt income	(94,443)	(34,387)
Investment tax credits used	(14,536)	(13,816)
Additional income tax on unappropriated earnings	8,560	2,603
Income tax adjustments on prior years	(6,384)	6,912
Effect of tax rate changes	<u>3,947</u>	<u>-</u>
Income tax expense recognized in profit or loss	<u>\$ 133,870</u>	<u>\$ 122,848</u>

In 2017, the applicable corporate income tax rate used by the Company is 17%. However, the Income Tax Act in the ROC was amended in 2018, and the corporate income tax rate was adjusted from 17% to 20%, effective in 2018. In addition, the rate of the corporate surtax applicable to the 2018 unappropriated earnings will be reduced from 10% to 5%.

b. Deferred income tax balance

The analysis of deferred income tax assets and liabilities in the parent company only balance sheets was as follows:

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
<b><u>Deferred income tax assets</u></b>		
Temporary differences		
Share of loss of subsidiaries accounted for using equity method	\$ 21,851	\$ 21,122
Write-down of inventory	14,706	2,322
Provisions	13,435	82
Others	<u>8,588</u>	<u>10,336</u>
	<u>\$ 58,580</u>	<u>\$ 33,862</u>
<b><u>Deferred income tax liabilities</u></b>		
Temporary differences		
Share of profit of subsidiaries accounted for using equity method	<u>\$ (22,141)</u>	<u>\$ (8,031)</u>

Movements of deferred income tax assets and deferred tax liabilities were as follows:

Year ended December 31, 2018

	<b>Balance, Beginning of Year</b>	<b>Recognized in Profit or Loss</b>	<b>Balance, End of Year</b>
<u>Deferred income tax assets</u>			
Temporary differences			
Share of loss of subsidiaries accounted for using equity method	\$ 21,122	\$ 729	\$ 21,851
Write-down of inventory	2,322	12,384	14,706
Provisions	82	13,353	13,435
Others	<u>10,336</u>	<u>(1,748)</u>	<u>8,588</u>
	<u>\$ 33,862</u>	<u>\$ 24,718</u>	<u>\$ 58,580</u>

Year ended December 31, 2017

	<b>Balance, Beginning of Year</b>	<b>Recognized in Profit or Loss</b>	<b>Balance, End of Year</b>
<u>Deferred income tax assets</u>			
Temporary differences			
Share of loss of subsidiaries accounted for using equity method	\$ 20,350	\$ 772	\$ 21,122
Write-down of inventory	1,035	1,287	2,322
Provisions	426	(344)	82
Others	<u>9,467</u>	<u>869</u>	<u>10,336</u>
	<u>\$ 31,278</u>	<u>\$ 2,584</u>	<u>\$ 33,862</u>

Year ended December 31, 2018

	<b>Balance, Beginning of Year</b>	<b>Recognized in Profit or Loss</b>	<b>Balance, End of Year</b>
<u>Deferred income tax liabilities</u>			
Temporary differences			
Share of profit of subsidiaries accounted for using equity method	<u>\$ (8,031)</u>	<u>\$ (14,110)</u>	<u>\$ (22,141)</u>

Year ended December 31, 2017

	<b>Balance, Beginning of Year</b>	<b>Recognized in Profit or Loss</b>	<b>Balance, End of Year</b>
<u>Deferred income tax liabilities</u>			
Temporary differences			
Share of profit of subsidiaries accounted for using equity method	<u>\$ (5,533)</u>	<u>\$ (2,498)</u>	<u>\$ (8,031)</u>
c. Deductible temporary differences for which no deferred tax assets have been recognized in the parent company only balance sheets			

As of December 31, 2018 and 2017, the aggregate deductible temporary differences for which no deferred income tax assets have been recognized amounted to NT\$3,285 thousand and NT\$1,860 thousand, respectively.

d. Information about tax exemption

As of December 31, 2018, the profits generated from the following projects of the Company are exempt from income tax for a five-year period:

	<b>Tax-exemption Period</b>
Construction and expansion of 2007 and 2008	2015 to 2019
Construction and expansion of 2009	2016 to 2020
e. Income tax examination	
The tax authorities have examined income tax returns of the Company through 2016.	

**21. EARNINGS PER SHARE**

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Basic EPS	<u>\$7.37</u>	<u>\$6.38</u>
Diluted EPS	<u>\$7.33</u>	<u>\$6.35</u>

EPS is computed as follows:

	Amounts (Numerator)	Number of Shares (Denominator) (In Thousands)	EPS (NT\$)
<b><u>Year ended December 31, 2018</u></b>			
<b>Basic EPS</b>			
Net income available to common shareholders	\$ 988,156	134,011	<u>\$7.37</u>
Effect of dilutive potential common stock	<u>—</u>	<u>776</u>	
<b>Diluted EPS</b>			
Net income available to common shareholders (including effect of dilutive potential common stock)	<u>\$ 988,156</u>	<u>134,787</u>	<u>\$7.33</u>
<b><u>Year ended December 31, 2017</u></b>			
<b>Basic EPS</b>			
Net income available to common shareholders	\$ 854,809	134,011	<u>\$6.38</u>
Effect of dilutive potential common stock	<u>—</u>	<u>603</u>	
<b>Diluted EPS</b>			
Net income available to common shareholders (including effect of dilutive potential common stock)	<u>\$ 854,809</u>	<u>134,614</u>	<u>\$6.35</u>

If the Company settles employees' compensation by issuing share or by cash, the Company assumes the entire amount of the compensation will be settled in shares which should be included in the weighted average number of shares outstanding in calculation of diluted EPS, if the shares have a dilutive effect. Such dilutive effect of the potential shares needs to be included in the calculation of diluted EPS until employees' compensation to be settled in the form of common stocks are approved in the following year.

## 22. ADDITIONAL INFORMATION OF EXPENSES BY NATURE

Net income included the following items:

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
a. Depreciation of property, plant and equipment		
Recognized in cost of revenue	\$ 4,856	\$ 2,814
Recognized in operating expenses	172,721	82,687
Recognized in other income - depreciation of rental assets	<u>2</u>	<u>4</u>
	<u>\$ 177,579</u>	<u>\$ 85,505</u>

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
b. Amortization of intangible assets		
Recognized in cost of revenue	\$ 2,183	\$ 3,090
Recognized in operating expenses	<u>224,185</u>	<u>163,319</u>
	<u><u>\$ 226,368</u></u>	<u><u>\$ 166,409</u></u>
c. Research and development costs expensed as occurred	<u><u>\$ 1,948,447</u></u>	<u><u>\$ 1,391,357</u></u>
d. Employee benefits expenses		
Post-employment benefits (Note 14)		
Defined contribution plans	\$ 41,465	\$ 33,919
Defined benefit plans	<u>1,311</u>	<u>1,352</u>
	<u><u>42,776</u></u>	<u><u>35,271</u></u>
Other employee benefits	<u><u>1,520,639</u></u>	<u><u>1,243,127</u></u>
	<u><u><u>\$ 1,563,415</u></u></u>	<u><u><u>\$ 1,278,398</u></u></u>
Employee benefits expense summarized by function		
Recognized in cost of revenue	\$ 190,599	\$ 184,971
Recognized in operating expenses	<u>1,372,816</u>	<u>1,093,427</u>
	<u><u>\$ 1,563,415</u></u>	<u><u>\$ 1,278,398</u></u>

e. Employee's compensation and remuneration to directors

The Company shall allocate employees' compensation and remuneration to directors of no less than 2% and no more than 2% of net income before tax which is not deducted from employees' compensation and remuneration to directors, respectively. Directors who also serve as executive officers of the Company are not entitled to receive the remuneration to directors. The Company shall first offset its losses in previous years then allocate employees' compensation and remuneration to directors. The Company may issue stock or cash compensation to employees of an affiliated company upon meeting the conditions set by the Board of Directors.

For 2018 and 2017, the Company accrued employees' compensation and remuneration to directors had been approved in the Board of Directors meeting held on January 31, 2019 and February 1, 2018, respectively, and were based on a certain percentage of net income before tax without deduction of the employees' compensation and remuneration to directors. The accrued amounts were as follows:

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Employees' compensation	\$ 153,240	\$ 133,501
Remuneration to directors	14,193	12,206

The aforementioned amount is the same as the amount which had been charged against expenses of 2018 and 2017, respectively.

If there is a change in the proposed amounts after the annual parent company only financial statements are authorized for issue, the differences are recorded as a change in the accounting estimate.

The Company's employees' compensation and remuneration to directors in the amounts of NT\$59,705 thousand and NT\$4,317 thousand in cash for 2016 was approved by the Board of Directors in their meetings held on February 9, 2017. The employees' compensation and remuneration to directors in cash for 2016 was reported to the Company's shareholders in its meeting held on May 18, 2017. The aforementioned approved amounts did not have any difference with the amounts recognized in the parent company only financial statements for the year ended December 31, 2016.

The information about appropriations of the Company's employees' compensation and remuneration to directors is available on the Market Observation Post System website.

## 23. CAPITAL MANAGEMENT

The Company manages its capital to ensure that entities in the Company are able to operate sustainability while maximizing the return to stakeholders through the optimization of the debt and equity balance. The Company engages in the semiconductor design services, which is closely tied with customer demand. Business is influenced by the cyclical nature of the semiconductor industry but not significantly. In consideration of the industry dynamics, the Company manages its capital in a manner to ensure that it has sufficient and necessary financial resources to fund its working capital needs, capital asset purchases, research and development activities, dividend payments, debt service requirements and other business requirements associated with its existing operations over the next 12 months. Through capital management, the Company is capable of coping with changes in the industry, striving for improvement, and ultimately creating shareholder value.

## 24. FINANCIAL INSTRUMENTS

### a. Categories of financial instruments

	December 31	
	2018	2017
<u>Financial assets</u>		
Amortized cost (Note)		
Cash and cash equivalents	\$ 3,697,975	\$ 4,948,877
Accounts receivable, net (including related parties)	910,206	917,259
Other financial assets	845	1,198
Refundable deposits	2,266	566
Pledged time deposits	22,200	22,200
Contract assets	<u>56,976</u>	-
	<u>\$ 4,690,468</u>	<u>\$ 5,890,100</u>
<u>Financial liabilities</u>		
Amortized cost		
Accounts payable (including related parties)	\$ 1,237,903	\$ 1,626,206
Payables on machinery and equipment	364,475	88,334
Accrued expenses and other current liabilities	459,083	284,587
Other long-term payables	178,854	214,063
Guarantee deposits	<u>3,072</u>	<u>2,976</u>
	<u>\$ 2,243,387</u>	<u>\$ 2,216,166</u>

Note: Starting from 2018, the Company classified loans and receivables to amortized cost upon initial application of IFRS 9.

b. Financial risk management objectives and policies

The Company's objectives of financial risk management are to manage its exposure to market risk, credit risk and liquidity risk related to the operating activities. To reduce the related financial risks, the Company engages in identifying, assessing and avoiding the market uncertainties with the objective to reduce the potentially adverse effects the market uncertainties may have on its financial performance.

The plans for material treasury activities are reviewed by the Audit Committee and Board of Directors in accordance with procedures required by relevant regulations and internal controls. During the implementation of such plans, the treasury function must comply with certain treasury procedures that provide guiding principles for overall financial risk management and segregation of duties.

c. Market risk

Foreign currency risk

The Company's operating activities are mainly denominated in foreign currency and exposed to foreign exchange risk. To protect the volatility of future cash flows arising from changes in foreign exchange rates, the Company maintains a balance of net foreign currency assets and liabilities in hedge.

The Company's sensitivity analysis to foreign currency risk mainly focuses on the foreign currency monetary items at the end of the reporting period. Assuming a 10% strengthening of New Taiwan Dollars against the relevant currencies, the net income before tax for the years ended December 31, 2018 and 2017 would have decreased by NT\$87,870 thousand and NT\$40,638 thousand, respectively.

d. Credit risk management

Credit risk refers to the risk that a counter party will default on its contractual obligations resulting in financial loss to the Company. The Company is exposed to credit risk from operating activities, primarily trade receivables, and from investing activities of deposits with banks. Credit risk is managed separately for business related and financial related exposures. As of the balance sheet date, the Company's maximum credit risk exposure is mainly from the carrying amount of financial assets recognized in the parent company only balance sheet.

Business related credit risk

The Company has considerable trade receivables outstanding with its customers worldwide. A substantial majority of the Company's outstanding trade receivables are not covered by collateral or credit insurance. While the Company has procedures to monitor and limit exposure to credit risk on trade receivables, there can be no assurance such procedures will effectively limit its credit risk and avoid losses.

As of December 31, 2018 and 2017, the Company's ten largest customers accounted for 55% and 70% of accounts receivable, respectively. The Company believes the concentration of credit risk is insignificant for the remaining accounts receivable.

Financial credit risk

The Company monitors and reviews the transaction limit applied to counter parties and adjusts the concentration limit according to market conditions and the credit standing of the counter parties regularly. The Company mitigates its exposure by selecting financial institution with well credit.

e. Liquidity risk management

The objective of liquidity risk management is to ensure the Company has sufficient liquidity to fund its business requirements. The Company manages its liquidity risk by maintaining adequate cash and banking facilities.

As of December 31, 2018 and 2017, the unused financing facilities of the Company amounted to NT\$1,300,000 thousand and NT\$1,600,000 thousand, respectively.

The table below summarizes the maturity profile of the Company's financial liabilities based on contractual undiscounted payments.

Non-derivative Financial Liabilities	Less Than 1 Year	2-3 Years	4+ Years	Total
<u>December 31, 2018</u>				
Accounts payable (including related parties)	\$ 1,237,903	\$ -	\$ -	\$ 1,237,903
Payables on machinery and equipment	364,475	-	-	364,475
Accrued expenses and other current liabilities	459,083	-	-	459,083
Other long-term payables	125,615	53,239	-	178,854
Guarantee deposits	<u>-</u>	<u>-</u>	<u>3,072</u>	<u>3,072</u>
	<u><u>\$ 2,187,076</u></u>	<u><u>\$ 53,239</u></u>	<u><u>\$ 3,072</u></u>	<u><u>\$ 2,243,387</u></u>
<u>December 31, 2017</u>				
Accounts payable (including related parties)	\$ 1,626,206	\$ -	\$ -	\$ 1,626,206
Payables on machinery and equipment	88,334	-	-	88,334
Accrued expenses and other current liabilities	284,587	-	-	284,587
Other long-term payables	149,877	64,186	-	214,063
Guarantee deposits	<u>-</u>	<u>-</u>	<u>2,976</u>	<u>2,976</u>
	<u><u>\$ 2,149,004</u></u>	<u><u>\$ 64,186</u></u>	<u><u>\$ 2,976</u></u>	<u><u>\$ 2,216,166</u></u>

f. Fair value of financial instruments

The carrying amounts of the Company's financial assets and financial liabilities measured at amortized cost at the end of financial reporting period recognized in the parent company only financial statements approximate their fair values. Further, the Company did not have any financial assets and financial liabilities measured at fair values at the end of the reporting period.

## 25. RELATED PARTY TRANSACTIONS

Besides information disclosed elsewhere in the other notes, details of transactions between the Company and its related parties are disclosed below:

### a. Related party name and categories

<b>Related Party Name</b>	<b>Related Party Categories</b>
Taiwan Semiconductor Manufacturing Co., Ltd. (TSMC)	An investor accounted for using equity method
TSMC North America (TSMC-NA)	A subsidiary of TSMC
Vanguard International Semiconductor Corporation (VIS)	An associate of TSMC
TSMC Europe B.V. (TSMC-EU)	A subsidiary of TSMC
VisEra Technologies Co., Ltd. (VisEra)	A subsidiary of TSMC

### b. Operating transactions

Items	Related Party Name and Categories	<b>Years Ended December 31</b>	
		<b>2018</b>	<b>2017</b>
Net revenue from sale	Investor that have significant influence over the company Other related parties	\$ 87,392 29	\$ 74,330 -
		<u>\$ 87,421</u>	<u>\$ 74,330</u>
Purchases	Subsidiaries Investor that have significant influence over the company TSMC TSMC-NA Other related parties	\$ 1,409 5,067,794 1,141,840 6,209,634 43,905	\$ - 5,794,950 524,558 6,319,508 42,258
		<u>\$ 6,254,948</u>	<u>\$ 6,361,766</u>
Manufacturing overhead	Subsidiaries Investor that have significant influence over the company TSMC TSMC-NA	\$ 457,259 917,774 357,996	\$ 256,788 588,533 433,687
		<u>\$ 1,733,029</u>	<u>\$ 1,279,008</u>
Operating expenses	Subsidiaries Investor that have significant influence over the company	\$ 393,312 22,088	\$ 319,142 1,308
		<u>\$ 415,400</u>	<u>\$ 320,450</u>
Other Income	Investor that have significant influence over the company	\$ 27	\$ -

The following balances were outstanding at the end of reporting period:

Items	Related Party Name and Categories	December 31	
		2018	2017
Receivables from related parties	Investor that have significant influence over the company TSMC	\$ 7,038	\$ 9,550
Other current assets	Subsidiaries Investor that have significant influence over the company TSMC	\$ 3,246 1,434	\$ - 96,602
			\$ 4,680 \$ 96,602
Refundable deposits	Investor that have significant influence over the company VisEra	\$ 2,832	\$ -
Payables to related parties	Investor that have significant influence over the company TSMC TSMC-NA Other related parties	\$ 384,860 106,125 490,985 14,553	\$ 779,361 245,796 1,025,157 10,857
			\$ 505,538 \$ 1,036,014
Customer advances	Investor that have significant influence over the company	\$ -	\$ 6,785
Accrued expenses and other current liabilities	Subsidiaries Investor that have significant influence over the company	\$ 45,965 610	\$ 52,453 -
			\$ 46,575 \$ 52,453

The terms of sales to related parties were not significantly different from those of sales to third parties. For other related party transactions, the terms of transactions were determined in accordance with mutual agreement because there were no comparable terms for third-party transactions. The payment term granted to related parties is due 30 days from the invoice date or 30 days from the end of the month of when the invoice is issued, while the payment term granted to third parties is due 30 days from the invoice date or 75 days from the end of the month of when the invoice is issued.

The Company leased server room from related parties. The lease terms and prices were determined in accordance with mutual agreements. The rental expense was paid monthly and the related expense was classified under operating expenses.

c. Compensation of key management personnel:

The remuneration to directors and other key management personnel were as follows:

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Short-term employee benefits	\$ 100,644	\$ 79,229
Post-employment benefits	<u>540</u>	<u>540</u>
	<b><u>\$ 101,184</u></b>	<b><u>\$ 79,769</u></b>

The remuneration to directors and other key management personnel were determined by the Company's Compensation Committee in accordance with the individual performance and the market trends.

## 26. PLEDGED OR MORTGAGED ASSETS

As of December 31, 2018 and 2017 the Company provided pledged time deposits of NT\$20,000 thousand as collateral for customs clearance and also provided pledged time deposits of NT\$2,200 thousand as collateral for lease a parcel of land from the Science Park Administration (SPA).

## 27. OPERATING LEASE ARRANGEMENTS

The Company's major significant operating leases are arrangements on several parcels of land and office premises.

The Company's expenses for lease payments were as follows:

	<b>Years Ended December 31</b>	
	<b>2018</b>	<b>2017</b>
Minimum lease payments	<b><u>\$ 30,842</u></b>	<b><u>\$ 8,282</u></b>

Future minimum lease payments under the above non-cancellable operating leases are as follows:

	<b>December 31</b>	
	<b>2018</b>	<b>2017</b>
Not later than 1 year	\$ 33,690	\$ 29,252
Later than 1 year and not later than 5 years	<u>61,851</u>	<u>88,393</u>
	<b><u>\$ 95,541</u></b>	<b><u>\$ 117,645</u></b>

## 28. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

The Company has entered into license agreements with several companies that own intellectual property rights. According to the agreements, the Company shall pay specific amounts of money to obtain licenses of their intellectual property rights or shall pay royalties at specific percentages of sales amount of identified products. Under the agreements the Company shall pay at least US\$4,000 thousand and US\$9,400 thousand to the counter parties in the period from July 2017 to July 2020 and since December 2017, respectively.

## 29. EXCHANGE RATE INFORMATION OF FOREIGN-CURRENCY FINANCIAL ASSETS AND LIABILITIES

The significant foreign-currency financial assets and liabilities were as follows:

(Unit: Foreign Currency in Thousands)

	Foreign Currencies (In Thousands)	Exchange Rate (Note)	Carrying Amount
<u>December 31, 2018</u>			
Monetary items of financial assets			
USD	\$ 73,077	30.715	\$ 2,244,565
EUR	117	35.2	4,103
Non-monetary items of financial assets			
USD	5,044	30.715	154,939
RMB	20,662	4.4753	92,471
JPY	151,316	0.2782	42,096
EUR	257	35.2	9,049
KRW	242,885	0.02775	6,740
Monetary items of financial liabilities			
USD	43,820	30.715	1,345,946
JPY	61,326	0.2782	17,061
EUR	152	35.2	5,347
<u>December 31, 2017</u>			
Monetary items of financial assets			
USD	73,909	29.76	2,199,545
Non-monetary items of financial assets			
USD	4,559	29.76	135,682
RMB	8,594	4.5545	39,139
JPY	125,996	0.2642	33,288
EUR	218	35.57	7,762
KRW	230,351	0.02812	6,478
Monetary items of financial liabilities			
USD	59,513	29.76	1,771,116
JPY	55,688	0.2642	14,713
RMB	912	4.5545	4,153
EUR	85	35.57	3,030

Note: Exchange rate represents the number of N.T. dollars for which one foreign currency could be exchanged.

The significant (realized and unrealized) foreign exchange gains were as follows:

Foreign Currencies	Exchange Rate	Years Ended December 31	
		2018	2017
		Net Foreign Exchange Gain (Loss)	Net Foreign Exchange Gain (Loss)
JPY	0.2730 (JPY:NTD)	\$ 781	0.2713 (JPY:NTD) \$ 581
RMB	4.5666 (RMB:NTD)	228	4.4952 (RMB:NTD) 633
EUR	35.6055 (EUR:NTD)	137	34.3520 (EUR:NTD) (208)
KRW	0.02761 (KRW:NTD)	3	0.02713 (KRW:NTD) (11)
USD	30.1492 (USD:NTD)	<u>(4,397)</u>	<u>30,125</u>
		<u>\$ (3,248)</u>	<u>\$ 31,120</u>

### 30. OPERATING SEGMENT INFORMATION

The Company operates in individual industry on the basis of how the Company's chief operating decision maker regularly reviews information in order to allocate resources and assess performance. The basis for the measurement of the operating segment profit (loss), assets and liabilities is the same as that for the preparation of financial statements. Please refer to the consolidated financial statements for the years ended December 31, 2018 and 2017.

### 31. ADDITIONAL DISCLOSURES

- a. Significant transactions and b. Related information of reinvestment
  - 1) Financings provided: None;
  - 2) Endorsements/guarantees provided: None;
  - 3) Marketable securities held (excluding investments in subsidiaries, associates and jointly controlled entities): Please see Table 1 attached;
  - 4) Marketable securities acquired and disposed of at costs or prices of at least NT\$300 million or 20% of the paid-in capital: Please see Table 2 attached;
  - 5) Acquisition of individual real estate at costs of at least NT\$300 million or 20% of the paid-in capital: None;
  - 6) Disposal of individual real estate at prices of at least NT\$300 million or 20% of the paid-in capital: None;
  - 7) Total purchases from or sales to related parties of at least NT\$100 million or 20% of the paid-in capital: Please see Table 3 attached;
  - 8) Receivables from related parties amounting to at least NT\$100 million or 20% of the paid-in capital: None;
  - 9) Information about the derivative instruments transaction: None;
  - 10) Names, locations, and related information of investees over which the Company exercises significant influence (excluding information on investment in Mainland China): Please see Table 4 attached;

c. Information on investment in Mainland China

- 1) The name of the investee in Mainland China, the main businesses and products, its issued capital, method of investment, information on inflow or outflow of capital, percentage of ownership, net income (losses) of the investee, investment income (losses), ending balance, amount received as dividends from the investee, and the limitation on investee: Please see Table 5 attached.
- 2) Significant direct or indirect transactions with the investee, its prices and terms of payment, unrealized gain or loss, and other related information which is helpful to understand the impact of investment in Mainland China on financial reports: Please see Table 6 attached.

TABLE 1

**GLOBAL UNICHIP CORP.**

**MARKETABLE SECURITIES HELD  
DECEMBER 31, 2018**  
(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

Held Company Name	Marketable Securities Type and Name	Relationship with the Company	Financial Statement Account			Note
			Shares	Carrying Amount	Percentage of Ownership (%)	
The Company	Preferred stock eTopus Technology Inc.	-	1,515,151	\$ -	3.0	\$ -

## GLOBAL UNICHIP CORP.

**MARKETABLE SECURITIES ACQUIRED AND DISPOSED OF AT COSTS OR PRICES OF AT LEAST NT\$300 MILLION OR 20% OF THE PAID-IN CAPITAL  
FOR THE YEAR ENDED DECEMBER 31, 2018**  
(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

TABLE 2

Company Name	Type and Name of Marketable Securities	Financial Statement Account	Counter party	Relationship	Shares	Beginning Balance	Acquisition	Shares	Amount	Disposal	Carrying Amount	Gains on Disposal	Shares	Amount	Ending Balance
The Company	Taishin 1699 Money Market Fund	Financial assets at fair value through profit or loss	-	-	-	\$ -	\$ 71,988,365	71,988,365	\$ 970,000	\$ 970,524	\$ 970,000	\$ 524	-	-	\$ -
	Jih Sun Money Market Fund	Financial assets at fair value through profit or loss	-	-	-	\$ -	\$ 28,496,338	28,496,338	\$ 420,000	\$ 420,417	\$ 420,000	\$ 417	-	-	\$ -
	Yuanta Wan Tai Money Market Fund	Financial assets at fair value through profit or loss	-	-	-	\$ -	\$ 18,549,468	18,549,468	\$ 280,000	\$ 280,159	\$ 280,000	\$ 159	-	-	\$ -
	UPAMC James Bond Money Market Fund	Financial assets at fair value through profit or loss	-	-	-	\$ -	\$ 25,841,158	25,841,158	\$ 430,000	\$ 430,131	\$ 430,000	\$ 131	-	-	\$ -

TABLE 3

**GLOBAL UNICHIP CORP.**

**TOTAL PURCHASE FROM OR SALE TO RELATED PARTIES OF AT LEAST NT\$100 MILLION OR 20% OF THE PAID-IN CAPITAL  
FOR THE YEAR ENDED DECEMBER 31, 2018  
(Amounts in Thousands of New Taiwan Dollars)**

Company Name	Related Party	Nature of Relationship	Transaction Details			Abnormal Transaction		Accounts Payable or Receivable Ending Balance	Note % to Total
			Purchases/ Sales	Amount	% to Total	Payment Terms	Unit Price	Payment Terms	
The Company	TSMC	TSMC is an investor accounted for using equity method	Purchases	\$ 5,067,794	81	30 days after monthly closing	Note 25	Note 25	\$ (384,860) (31)
	TSMC-NA	TSMC-NA is a subsidiary of TSMC	Purchases	1,141,840	18	30 days after invoice date and 30 days after monthly closing	Note 25	Note 25	(106,125) (9)

TABLE 4

## GLOBAL UNICHIP CORP.

**NAMES, LOCATIONS, AND RELATED INFORMATION OF INVESTEES OVER WHICH THE COMPANY EXERCISES SIGNIFICANT INFLUENCE (EXCLUDING INFORMATION ON INVESTMENT IN MAINLAND CHINA)  
FOR THE YEAR ENDED DECEMBER 31, 2018  
(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)**

Investor Company	Investee Company	Location	Main Businesses and Products	Balance as of December 31, 2018			Investment Income (Losses)	Investment Income (Losses)	
				Original Investment Amount December 31, 2018 (Foreign Currencies in Thousands)	December 31, 2017 (Foreign Currencies in Thousands)	Shares	Percentage of Ownership (%)	Carrying Amount	
The Company	GUC-NA	U.S.A.	Products consulting, design and technical support service	\$ 40,268 (US\$ 1,264)	\$ 40,268 (US\$ 1,264)	800,000	100	\$ 118,849	\$ 12,290
	GUC-BVI	British Virgin Islands	Investing activities	(US\$ 152,603)	(US\$ 152,603)	5,050,000	100	36,090	3,861
	GUC-Japan	Japan	Products consulting, design and technical support service	(US\$ 15,393)	(US\$ 15,393)	1,100	100	42,096	6,912
	GUC-Europe	Netherlands	Products consulting, design and technical support service	(YEN 55,000)	(YEN 55,000)	8,109	-	100	9,049
	GUC-Korea	Korea	Products consulting, design and technical support service	(EUR 200)	(EUR 200)	5,974	44,000	100	1,384
				(KRW 222,545)	(KRW 222,545)				346

TABLE 5

## GLOBAL UNICHIP CORP.

INFORMATION ON INVESTMENT IN MAINLAND CHINA  
FOR THE YEAR ENDED DECEMBER 31, 2018  
(Amounts in Thousands of New Taiwan Dollars, Unless Specified Otherwise)

Investee Company	Main Businesses and Products	Total Amount of Paid-in Capital (US\$ in Thousands)	Method of Investment	Accumulated Outflow of Investment from Taiwan as of January 1, 2018 (US\$ in Thousands)	Investment Flows		Accumulated Outflow of Investment from Taiwan as of December 31, 2018 (US\$ in Thousands)	Net Income (Losses) of the Investee	Percentage of Ownership	Investment Income (Losses) (Note 3)	Carrying Amount as of December 31, 2018	Accumulated Inward Remittance of Earnings as of December 31, 2018
					Outflow	Inflow						
GUC-Nanjing	Products consulting, design and technical support service	\$ 90,138 (US\$ 3,000)	(Note 1)	\$ 45,417 (US\$ 1,500)	\$ 44,721 (US\$ 1,500)	\$ -	\$ 90,138 (US\$ 3,000)	\$ 11,128	100%	\$ 11,128	\$ 92,471	\$ -
GUC-Shanghai	Products consulting, design and technical support service	\$ 31,165 (US\$ 1,000)	(Note 2)	\$ 31,165 (US\$ 1,000)	\$ -	\$ -	\$ 31,165 (US\$ 1,000)	\$ 3,903	100%	\$ 3,903	\$ 33,030	\$ -

Accumulated Investment in Mainland China as of December 31, 2018 (US\$ in Thousands)	Investment Amounts Authorized by Investment Commission, MOEA (US\$ in Thousands)	Upper Limit on Investment (US\$ in Thousands)
\$ 121,303 (US\$ 4,000)	\$ 121,303 (US\$ 4,000)	\$ 2,619,542 (Note 4)

Note 1: The Company invested the investee directly.

Note 2: The Company's investee with a controlling financial interest, indirectly invested in GUC-Shanghai through GUC-BVI.

Note 3: Investment income (losses) was determined based on unaudited financial statements.

Note 4: Subject to 60% of net asset value of the Company according to the revised "Guidelines Governing the Approval of Investment or Technical Cooperation in Mainland China" issued by the Investment Commission.

TABLE 6**GLOBAL UNICHIP CORP.**

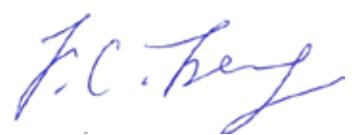
**SIGNIFICANT INTERCOMPANY TRANSACTIONS WITH INVESTEE IN MAINLAND CHINA  
FOR THE YEAR ENDED DECEMBER 31, 2018  
(Amounts in Thousands of New Taiwan Dollars)**

No.	Company Name	Counter Party	Nature of Relationship (Note 1)	Intercompany Transactions		Percentage to Net Revenue or Total Assets
				Financial Statement Account	Amount	
0	The Company	GUC-Shanghai	1	Manufacturing overhead Operating expenses Accrued expenses and other current liabilities Purchases	\$ 51,058 29,384 4,337 1,409	-
		GUC-Nanjing	1	Manufacturing overhead Operating expenses Other current liabilities	146,217 29,558 3,246	1%

Note 1: No. 1 represents the transactions from parent company to subsidiary.

Note 2: The intercompany transactions, prices and terms are determined in accordance with mutual agreements and no other similar transactions could be compared with.

F. C. Tseng  
Chairman

A handwritten signature in blue ink that reads "F. C. Tseng". The signature is fluid and cursive, with "F. C." on top and "Tseng" on the line below.

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