

REALTEK SEMICONDUCTOR CORP.

2018 Annual Report

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- I. Taiwan Stock Exchange Market Observation Post System: <http://mops.twse.com.tw>
- II. Realtek website for annual report: <http://www.realtek.com>

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Notice to Readers:

The reader is advised that the annual report has been prepared originally in Chinese. The English version is directly translated from the Chinese version.

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Letter to Shareholders

1. 2018 Operating Results

Realtek reported another record year in 2018. The full-year consolidated revenues were NTD45.8 billion, a 9.9% growth from the previous year. Gross profit was NTD20.5 billion, up 14.3% from the year before. Net profit after tax was NTD4.35 billion, a 28.3% year-over-year increase. Earnings per share (EPS) was NTD8.57. According to IC Insights, 2018 global semiconductor market revenue exceeded US\$500 (US\$514) billion, a 16% growth over 2017. In that, memory was the largest segment by product type and grew the strongest. Excluding memory, the 2018 semiconductor market grew a modest 8%. In spite of the uncertainty in the semiconductor industry due to ever-changing international relations and trade disputes, Realtek, with all hands working closely together, delivered a 10.9% year-over-year revenue growth in US dollars in 2018, which was above the 8% growth average of non-memory companies, and above the 7.4% growth average of global fabless IC design companies. Realtek ranks 12th in 2018 among global fabless IC design companies, moving up one place compared with 2017.

Realtek always strives for innovation momentum and technology leadership. Among the top 100 domestic corporate patent applications released by the Taiwan Intellectual Property Office in 2018, Realtek ranks 8th with 195 invention patent applications. In terms of product roadmap, Realtek proffers continual updates to current product specifications, and develops products with differentiating features that add value for our customers. The ubiquitous needs of connectivity in a wide spectrum of applications match perfectly the vision of Realtek to enable a connected world. Such synergy feeds the growth momentum of Realtek IC solutions. Throughout 2018 we introduced several highly competitive products that received accolades from the market and press. For example, the Realtek multi-mic far-field speech recognition enhanced single-chip solution (ALC5520) first received the Best Choice Golden Award at Computex Taipei 2018, and then won the Innovative Product Award from the Taiwan Hsinchu Science Park Administration. Additionally, the Bluetooth 5.0 Low Energy System-on-a-Chip (RTL8762C) and the Highly Integrated, Ultra-Low-Power Wi-Fi IP Camera SOC (RTL8715A) received respectively, the IC & Component Category Award and the IoT Applications Category Award at Computex Taipei 2018.

Besides providing the most competitive products to the market, Realtek cares about social issues, contributes corporate technological expertise, and undertakes corporate social responsibility missions. Building on the collaborative work on the AirBox Project with Taipei City Government involving the industry, government, academia, and city's residents in 2016, Realtek continued to focus on air quality issues and actively pushed forward the Taipei Lungshan Temple Incense Reduction Program. The Program was a success after Realtek joined forces with the Lungshan Temple, Taiwan Lung Foundation, and Institute of Occupational Medicine and Industrial Hygiene at the National Taiwan University College of Public Health. The result was a very impressive contribution to the protection of the environment that was recognized by the Asia Responsible Enterprise Award (AREA) organization, and given the 2018 Health Promotion Award.

2. 2019 Business Plan

After two years of impressive growth, many analysts expect 2019 to be flat for the global semiconductor industry, excluding memory. The forecast appears to be predicated on both the trade dispute between China and US as well as the slowdown of hitherto high growth segments such as smartphones and crypto mining. Nonetheless, the ramping up of 5G deployment and the proliferation of artificial intelligence applications seem to be breathing new life into the semiconductor industry and demanding even more and faster connectivity. To this end, Realtek plans to introduce a series of highly competitive connectivity solutions for connecting machines, as well as connecting machines and humans. In the automotive market, an increasing number of automotive OEMs in Europe, America, Japan, Korea, and China are choosing automotive Ethernet to be the in-vehicle network backbone for their new models of cars. Shipments by Realtek are expected to pick up gradually in 2019 with the expansion of our customer base. At the same

time, we are developing a new generation of 100/1000BASE-T1 dual-mode PHY and multiport automotive Ethernet switches. To meet the demands for increasing LAN (Local Area Network) speed for commercial and gaming PC needs, Realtek introduced the world's first 2.5GBASE-T Ethernet single-chip controller in 2018. In wireless LAN (WLAN), while enjoying revenue growth from the ongoing migration of 802.11n to 802.11ac, Realtek is developing a new generation of 802.11ax products to provide customers with a complete portfolio of WLAN solutions. In IoT, Realtek leads the market with the announcement of a highly-Integrated, ultra-low-power Wi-Fi IP camera SoC ideal for various portable camera market opportunities.

In Bluetooth, Realtek strives to satisfy various Bluetooth applications with different solutions, including Bluetooth transceivers, low-power Bluetooth single chip, and Bluetooth codec single chip. The latter is becoming the solution of choice for True Wireless Stereo earphones, which have been picking up market momentum since the second half of 2018. Optical networks are enjoying growth in many emerging markets, led by China. Realtek is expanding her optical network solutions in all markets with good results. In response to the market need for greater bandwidth, Realtek is developing a new generation of single-chip 10G PON gateway controllers, which may start contributing to business in 2019. In computer peripherals, Realtek, in addition to deepening its roots in the PC markets, is entering the earphone market and winning projects at several commercial and gaming earphone brands. To address the needs of mobile phone users to have USB Type-C audio earphones and converters, Realtek is rolling out a series of high-performance, low-power USB2.0 audio codec products. With respect to IP camera SoCs, Realtek is bringing into the market a new generation of highly-integrated IP camera SoCs in 2019 to meet the needs of the surveillance and security industry. In multimedia, the overall market for TVs and monitors remains flat, however new opportunities will come with the demand for higher resolution, higher refresh rate, better picture quality, and richer display connectivity. Realtek will introduce a new generation of high-end 4K smart networked LCD TV SoCs, as well as a new generation of integrated high resolution 4K2K/QHD monitor controllers with USB Type-C interface, thereby fueling business growth.

3. Strategy for Future Development and Impact by Competitive, Regulatory, and Macro Conditions

Looking to the future, Realtek will continue to cultivate our core competency, strengthen our competitiveness, and energize our product strategy. Through our strength in high-integration and low-power design, we position ourselves to be the best partner to our customers, provide the best solutions to the market, and deliver the most user-friendly, best price-performance connectivity products to end users in tomorrow's world of Internet of Things, Internet of Vehicles, and Artificial Intelligence. Despite the general conservative view of the semiconductor market in 2019, coupled with uncertainty in the macro economy, Realtek remains cautiously optimistic that it can capture growth opportunities in this highly challenging and competitive environment to continue reaching new heights and creating greater value for our shareholders.

Thank you for your ongoing care and support. We hope that you will continue to stay with us on this exciting journey to a better future.

Chairman Yeh, Nan-Horng

President Chiu, Sun-Chien

Controller Chang, Jr-Neng

Company Introduction

I. Date of Establishment

Realtek Semiconductor Corporation (“the Company”) was incorporated on October 21, 1987, and debuted on the Taiwan Stock Exchange in October 1998. It is headquartered in Taiwan and it has sales or R&D teams in China, Singapore, the United States, Japan, and South Korea.

II. Company Milestones

1987/10	The Company is incorporated.
1988/04	The Company’s Taipei office is established.
1991/12	The Pocket Ethernet Controller receives an Innovative Technology Award from the Hsinchu Science Park Administration.
1993/12	The High-Performance Window Accelerator Chip receives an Innovative Product Award from the Hsinchu Science Park Administration.
1995/02	The Full Duplex Plug-and-Play Ethernet Controller receives a Product Innovation Award from EDN Asia.
1996/12	For its extensive R&D initiatives and achievements, the Company receives an R&D Participation Award from the Hsinchu Science Park Administration.
1997/06	The Single-Chip Fast Ethernet Controller receives a Best Component Award and a Best Product Award at Computex Taipei 1997.
1997/09	The Company is listed in Gre Tai Securities Market (Taipei Exchange).
1997/11	The Single-Chip Fast Ethernet Controller receives a New Product Development Award from the Industrial Development Bureau, Ministry of Economic Affairs.
1998/10	The Company debuts on the Taiwan Stock Exchange.
1998/12	For the fourth consecutive year, the Company receives an R&D Participation Award from the Hsinchu Science Park Administration.
1999/12	The 4-Port Fast Ethernet Transceiver receives an innovative technology R&D grant from the Hsinchu Science Park Administration.
2000/05	For the first time, the Company issues unsecured convertible bonds; the total value is NT\$1.4 billion.
2000/08	For its outstanding R&D achievements, the Company receives a Most Outstanding Award at the Ministry of Economic Affairs’ 8 th Industrial Technology Development Awards.
2001/12	The Multi-mode Single-Chip 10/100M Fast Ethernet Controller SoC receives a Component Design Award from <i>EDA Asia Magazine</i> .
2002/01	For the first time, the Company issues Overseas Depository Receipts; the total value is US\$240,180,375.
2002/06	The ALC650 6-Channel Audio Codec receives a Best Choice Award at Computex Taipei 2002.
2002/11	The Company ranks among the Global Top 10 Electronic Component Providers by Taiwan’s <i>Micro-Electronics Magazine</i> .
2003/10	For the second consecutive year, the Company ranks among the Forbes Global 200 Best Small Companies.

- 2003/10 The RTL8169S/RTL8110 Single-Chip Gigabit Ethernet Controller receives an Innovative Product award from the Hsinchu Science Park Administration.
- 2004/03 The PCI Express Single-Chip Gigabit Ethernet Controller receives an innovation R&D grant for NT\$3 million from the Hsinchu Science Park Administration.
- 2004/06 The Dual-Band Triple-Mode WLAN Chipsets RTL8185L and RTL8255 receive a Best Choice Award at Computex Taipei 2004.
- 2004/09 The reference designs of the IEEE802.11a/b/g WLAN Chipsets RTL8185L and RTL8255 pass the Wi-Fi Alliance's WPA2 (Wi-Fi Protected Access 2) testing and become the golden test bed.
- 2004/10 The Dual-Band Triple-Mode WLAN Chipset receives an Outstanding IT Application/Product Award from the committee for Taiwan Information Technology Month.
- 2004/12 The WLAN Chipsets RTL8187L and RTL8255 receive an Innovative Product Award from the Hsinchu Science Park Administration.
- 2004/12 The Company receives an R&D Accomplishment Award from the Hsinchu Science Park Administration.
- 2005/03 The Company unveils the ALC882 7.1+2 Channel High Definition Audio Codec.
- 2005/06 The Company celebrates the grand opening of its new building on Innovation Rd. II in Hsinchu Science Park.
- 2005/08 The Company releases the RTS5111, the world's first USB 2.0 All-in-One Card Reader Controller with Integrated 5V/3.3V Regulator and Power MOSFET.
- 2005/11 For its substantive R&D achievements, the Company receives another R&D Accomplishment Award from the Hsinchu Science Park Administration.
- 2006/03 The Company releases a new generation of High Definition Audio codecs, the ALC885 and ALC888 Telecom.
- 2006/03 The ALC888 Telecom receives a Technology Innovation Accelerated Award for the "Digital Office" platform at the 2006 Intel Developer Forum.
- 2006/08 The Company passes ISO 14001 Environmental Management Systems certification.
- 2006/10 The Company celebrates its 20th anniversary.
- 2006/12 The ALC888 Telecom receives an Innovative Product Award from the Hsinchu Science Park Administration.
- 2006/12 For the third consecutive year, the Company receives an R&D Accomplishment Award from the Hsinchu Science Park Administration.
- 2007/01 At an extraordinary shareholders' meeting, shareholders approved a capital reduction of NT\$4,180,701,000 (each share qualified for a rebate of approximately NT\$5); the reduction ratio is 50%.
- 2007/06 The RTL8111C PCI Express Single-Chip Gigabit Ethernet Controller receives a Best Choice Award at Computex Taipei 2007.
- 2007/07 The Company releases the RTL8366S and RTL8366SR low power, highly integrated 6-Port Gigabit Ethernet Switch Controller Single-Chip solutions featuring patented Green Ethernet technology.
- 2007/10 The Company releases the RTS5161/68/69, the world's first multi-function card reader controller to integrate a NAND flash card reader, a smart card reader, a fingerprint reader, and an IR receiver.

- 2007/10 The Company releases the ALC269, which is the first HD Audio Codec to integrate a 2W Class D Amplifier and the latest low power specifications. The device represents a breakthrough in reducing the power consumption of laptop computers.
- 2007/11 The Company releases the ALC889 HD Audio Codec, which features a Signal-to-Noise Ratio (SNR) of 108dB and is the only HD Audio Codec to have full rate Blu-Ray DVD playback.
- 2007/12 The RTL8111C-GR PCI Express Gigabit Ethernet Controller receives an Innovative Product Award from the Hsinchu Science Park Administration.
- 2007/12 For the fourth consecutive year, the Company receives an R&D Accomplishment Award from the Hsinchu Science Park Administration.
- 2008/05 The Company demonstrates a series of Networked Multimedia SoC solutions at Computex Taipei 2008.
- 2008/06 The RTD2485D All-in-One LCD Monitor Controller receives a Best Choice Award at Computex Taipei 2008.
- 2008/09 The Company releases the RTL8191S and RTL8192S, the world's smallest, most energy efficient 802.11n WLAN IC Single-Chip solutions. They are the first controllers to integrate MAC/BB/RF with an embedded power amplifier, EEPROM, and switching regulators.
- 2008/10 The RTL8366SR 5+1-Port Gigabit Ethernet Switch Controller Single-Chip receives a 2008 EDN China Innovation Award.
- 2008/12 The RTD2485D All-in-One LCD Monitor Controller receives an Innovative Product Award from the Hsinchu Science Park Administration.
- 2009/08 The Company receives a 2009 National Invention and Creation Award.
- 2009/10 The Company releases the RTL8111E, the first Gigabit Ethernet Controller SoC to use the IEEE 802.3az standard.
- 2009/10 The RTD1073 Full-HD Digital Media Processor receives a 2009 EDN China Innovation Award.
- 2009/11 The RTD1073/1283 Full-HD Digital Media Processor receives a 2009 Outstanding IT Application/Product Award.
- 2009/11 The RTL8111DP-GR PCI Express Gigabit Ethernet Management Controller receives a 2009 Innovative Product Award from the Hsinchu Science Park Administration.
- 2009/11 The Company receives the International Exchange and Cooperation Award from the Hsinchu Science Park Administration.
- 2009/11 The Company receives the 2009 R&D Accomplishment Award from the Hsinchu Science Park Administration.
- 2010/01 At the 2010 CES, the Company demonstrates industry-leading Green Ethernet power-savings technology, including the IEEE 802.3az Ethernet Single-Chip and Switch Controller, as well as the world's most energy efficient power-over-USB 2x2 802.11n Wireless Router using the Company's Green WLAN technology.
- 2010/06 The ALC899-GR High Fidelity PC Audio Codec receives a Best Choice Award at Computex Taipei 2010.
- 2010/06 The RTL8111E Single-Chip Gigabit Ethernet Controller receives a Best Choice Award at Computex Taipei 2010.

2010/12 The RTL8111E Single-Chip Gigabit Ethernet Controller receives a 2010 Outstanding IT Application and Products Award.

2010/12 The RTL8367M 7-Port Gigabit Ethernet Switch Controller receives a 2010 Innovative Product Award from the Hsinchu Science Park Administration.

2010/12 The Company receives a 2010 Science Park R&D Accomplishment Award.

2011/10 The Company receives the 1st Taiwan Green Classics Award, hosted by the Bureau of Foreign Trade, Ministry of Economic Affairs.

2011/12 The Company receives an Industrial Sustainable Excellence Award from the Industrial Development Bureau, Ministry of Economic Affairs.

2011/12 The Company receives a National Industrial Innovation Award – Outstanding Enterprise Innovation Award from the Department of Industrial Technology, Ministry of Economic Affairs.

2011/12 The Company receives a 2011 Science Park R&D Accomplishment Award.

2012/12 The ALC5642 Hi-Fi Audio Integrated with Voice/Sound DSP and Codec Single-Chip receives a 2012 Innovative Product Award from the Hsinchu Science Park Administration.

2012/12 The Company receives a 2012 Science Park R&D Accomplishment Award.

2013/06 The RTD2995 4K2K UHD Smart TV SoC receives a Best Choice Golden Award at Computex Taipei 2013.

2013/11 The RTL8153 Low Power USB 3.0-to-Gigabit Ethernet Controller receives a 2013 EDN China Innovation Award.

2013/12 The RTD2995 4K2K UHD Smart TV SoC receives a 2013 Innovative Product Award from the Hsinchu Science Park Administration.

2014/06 The RTL8118AS Ultra Low Power Gaming NIC receives a Best Choice Green ICT Award at Computex Taipei 2014.

2014/06 The RTL8881A AP/Router Network Processor SoC (with 11ac Wi-Fi) receives a Best Choice Award (in Communication) at Computex Taipei 2014.

2015/04 The Company's subsidiary Realtek Singapore Pte Ltd. acquires 100% equity interest of Cortina Access, Inc. and its subsidiaries.

2015/06 The RTL8195AM Low Power Wi-Fi IoT SoC receives a Best Choice Golden Award at Computex Taipei 2015.

2015/12 The RTD2999 4K Ultra-High Picture Quality Smart TV SoC receives a 2015 Innovative Product Award from the Hsinchu Science Park Administration.

2016/06 The RTL8762A Bluetooth Low Energy SoC receives a Best Choice Golden Award at Computex Taipei 2016.

2016/06 The RTS5421 USB 3.1 Type-C Hub receives a Best Choice Golden Award at Computex Taipei 2016.

2016/12 The Company receives a 2016 Science Park R&D Accomplishment Award.

2016/12 The RTL9020AA Automotive Camera SoC Integrated with Audio/Video Processor and Ethernet receives a 2016 Innovative Product Award from the Hsinchu Science Park Administration.

2017/06 The RTL9047A Automotive Ethernet Switch Controller receives a Best Choice Award in the Car Electronics category at Computex Taipei 2017.

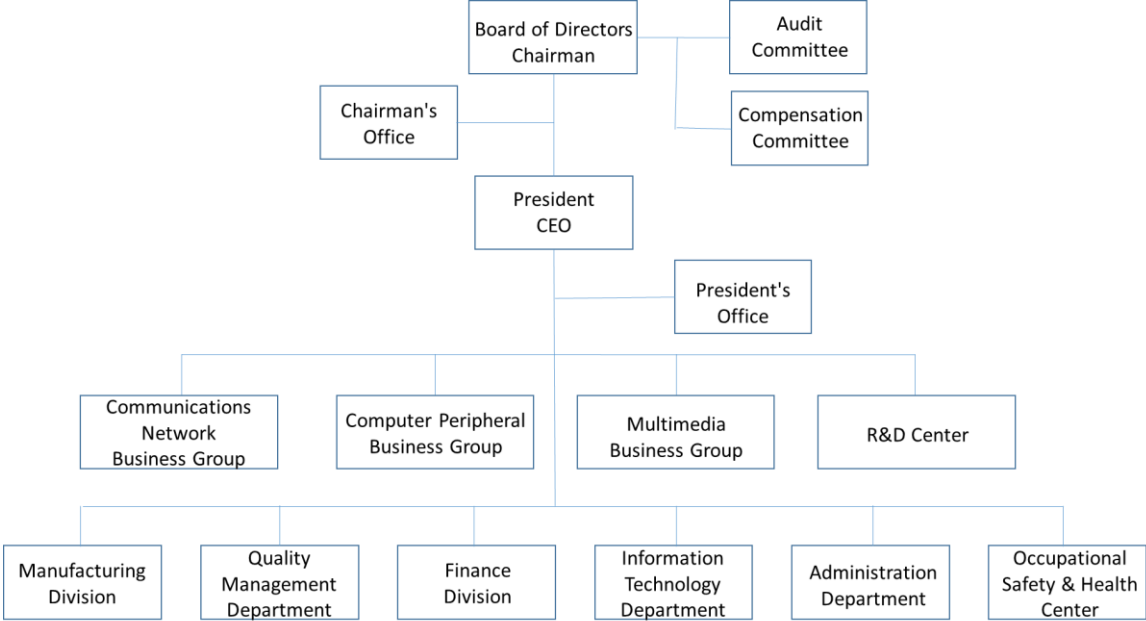
2017/06 The RTL8771B Low Power Wearable GNSS Receiver receives a Best Choice Award in the Mobile & Wearables category at Computex Taipei 2017.

- 2017/06 The world's most energy efficient Bluetooth 5 Dual Mode Audio SoC, the RTL8763B, receives a Best Choice Award in the IC & Components category at Computex Taipei 2017.
- 2017/06 The RTL8117 Personal Cloud IC Solution receives a Best Choice Award: the Jury's Special at Computex Taipei 2017.
- 2017/11 The Communications Network Group's CN3 Wi-Fi R&D team receives a 2017 Outstanding Technology Management Award.
- 2018/05 The Company releases the world's first 2.5G Ethernet Controller SoC for multiple applications, including gaming.
- 2018/06 The RTL8715A Highly Integrated, Ultra-Low-Power Wi-Fi IP Camera SoC receives a Best Choice Award in the IoT Applications category at Computex Taipei 2018.
- 2018/06 The RTL8762C Bluetooth 5 Low Energy SoC receives a Best Choice Award in the IC & Components category at Computex Taipei 2018.
- 2018/06 The ALC5520 Multi-Mic Far-Field Speech Recognition Enhanced SoC solution receives a Best Choice Golden Award at Computex Taipei 2018.
- 2018/06 The Company receives an Asia Responsible Entrepreneurship Award.
- 2018/12 The ALC5520 Multi-Mic Far-Field Speech Recognition Enhanced SoC solution receives a 2018 Innovative Product Award from the Hsinchu Science Park Administration.

Corporate Governance Report

I. Organization

1. Organizational Structure



2. Responsibilities of Main Departments

Department	Key Responsibilities
Chairman's Office	Reviews the Company's operations and implementation of resolutions made by shareholders' meetings and the Board of Directors; Company audits.
President's Office	Plans and executes the Company's operational strategies and analysis; carries out Board of Directors' resolutions, investment assessments, PR statements, legal and patent affairs, and international marketing.
Communications Network Business Group	Manages communications network product R&D, planning and marketing.
Computer Peripheral Business Group	Manages computer peripheral product R&D, planning and marketing.
Multimedia Business Group	Manages multimedia product R&D, planning and marketing.
R&D Center	Plans new products, develops and designs relevant core technologies, and manages circuit layouts.
Manufacturing Division	Oversees raw materials, warehousing, materials control, procurement, IC manufacturing and testing, and testing equipment maintenance.
Quality Management Department	Oversees product quality control and reliability engineering.
Finance Division	Oversees finance, accounting, and stock affairs.
Information Technology Department	Oversees information management and computer systems integration and applications.
Administration Department	Oversees general affairs, factory administration, and human resources.
Occupational Safety & Health Center	Oversees occupational safety and health.

II. Information of Directors and Officers

I. Information of Directors

Title	Nationality /Country of Origin	Name	Gender	Date Elected	Terms of Office	Date First Elected	Shareholding When Elected		Current Shareholding		Spouse & Minor Shareholding		Shareholding by Nominee Arrangement		Education & Experience	Other Selected Current Positions	Managers or Directors who are spouse or within second-degree relatives to each other	
							Share	%	Share	%	Share	%	Share	%			Title	Name	Relation
Director	ROC	Code Pharmaceutical Industry Co., Ltd.	-	2018.06.05	3 years	2015.06.09	221,146,604	4.38%	221,146,604	4.36%	-	-	-	-	NA			
Chairman	ROC	Code Pharmaceutical Industry Co., Ltd. Representative: Yeh, Nan-Hong	Male	2018.06.05	3 years	1994.04.02 (Note 1)	-	-	-	-	-	-	-	-	Chairman of Realtek Microelectronics Corp. (Note 2) Director of Enable Educational Technology Co., Ltd.	Director	Yeh, Nan-Hong	Brother
Director	BVI	Forehead International Co., Ltd.	-	2018.06.05	3 years	2009.06.10	6,184,359	1.22%	6,184,359	1.22%	-	-	-	-	NA			
Vice Chairman	ROC	Forehead International Co., Ltd. Representative: Chen, Shu-Cheng	Male	2018.06.05	3 years	2000.06.09	1,388,831	0.27%	1,388,831	0.27%	2,384	0.00%	-	-	President of Realtek Semiconductor Corp. Director of Realtek Investment Limited (Note 2) Director of Hungwei Venture Capital Co., Ltd. (Note 2) Director of Realtek Semiconductor (Japan) Corp. (Note 2)			
Director	ROC	Forehead International Co., Ltd. Representative: Chen, Kuo-Jung	Male	2018.06.05	3 years	2006.06.12	40,686	0.01%	40,686	0.01%	-	-	-	-	Chief Financial Officer of Realtek Semiconductor Corp. Director of Realtek Investments Co., Ltd. (Note 2) Director of Realtek Semiconductor (Shen Zhen) Corp. (Note 2)			
Director	BVI	Somon Limited	-	2018.06.05	3 years	2015.06.09	66,000	0.01%	66,000	0.01%	-	-	-	-	NA			
Director	ROC	Somon Limited Representative: Yeh, Po-Yen	Male	2018.06.05	3 years	1991.06.26	2,323,899	0.46%	2,323,899	0.46%	208,298	0.04%	-	-	Director of Realtek Technology Corporation (Note 2) Director of Realtek Investments Limited (Note 2) Director of Hungwei Venture Capital Co., Ltd. (Note 2) Director of Realtek Semiconductor (HK) Ltd. (Note 2) Director of Hungwei Venture Capital Co., Ltd. (Note 2) Director of Realtek Investments Co., Ltd. (Note 2) Director of Realtek Semiconductor Corporation (Note 2) Chairman of Realtek Semiconductor Private Limited (Note 2) Director of Corinna Access, Inc. (Note 2) Chairman of Corinna Systems Taiwan Limited (Note 2)	Chairman	Yeh, Nan-Hong	Brother
Director	ROC	Somon Limited Representative: Huang, Ying-Fang	Male	2018.06.05	3 years	2018.06.05	42,205	0.01%	42,205	0.01%	79,625	0.02%	-	-	None			
Director	ROC	Ni, Shu-Chung	Female	2018.06.05	3 years	1991.06.26	6,308,389	1.24%	6,308,389	1.24%	6,569,949	1.29%	-	-	None			
Independent Director	ROC	Chen, Fu-Yen	Male	2018.06.05	3 years	2015.06.09	-	-	-	-	-	-	-	-	CEO of Creative Education and Management Foundation Chairman of EZ Travel Travel Service Co., Ltd. Chairman of You Han Creative Co., Ltd. Chairman of Eland Technologies Co., Ltd.			
Independent Director	ROC	Wang, Chun-Huang	Male	2018.06.05	3 years	2018.06.05	-	-	-	-	-	-	-	-	President of Justin Technology Co., Ltd.			
Independent Director	ROC	Oh, Yang, Wen-Han	Male	2018.06.05	3 years	2018.06.05	578,688	0.11%	563,688	0.11%	152,024	0.03%	-	-	None			

Note 1: Chairman Yeh, Nan-Hong did not serve as a director of the Company from 2005.05.20 to 2009.06.09.

Note 2: The representative of Realtek Semiconductor Corp. or its affiliated company.

Table I: The major shareholders of institutional shareholders

April 14, 2019

Institutional Shareholders	Major Shareholders of Institutional Shareholders
Cotek Pharmaceutical Industry Co., Ltd.	Leicester Worldwide Corporation (shareholding: 48.24%) De Tao Venture Capital Corp. (shareholding: 20%)
Sonnen Limited	Chang, Tseng Sui Gin (shareholding: 100%)
Forehead International Co., Ltd.	Time Wealth Co., Ltd (shareholding: 100%)

Table II: The major shareholders of the major shareholders of institutional shareholders in Table I

April 14, 2019

Shareholder	Major Shareholders Holding
Leicester Worldwide Corporation	Top Best Development Limited (shareholding: 33%)
	New Essential Holdings Limited (shareholding: 33%)
	Perfectech INT'L Ltd (shareholding: 33%)
Time Wealth Co., Ltd	H.S. Lee Hsia (shareholding: 100%)

Professional Background and Independence of Directors

Name	Criteria	Possess five or more years of experience and the following professional qualifications		Independence Status (Note)										Number of other public companies concurrently serving as an independent director	
		Lecturer or above of business, law, finance, accounting or other profession related to company activity in a junior college or above	Judge, prosecutor, lawyer, accountant, or specialist passing national exams with certification in other profession related to company activity	Work experience in business, law, finance, accounting or other profession related to company activity	1	2	3	4	5	6	7	8	9		10
Cotek Pharmaceutical Industry Co., Ltd. Representative: Yeh, Nan-Hong				✓	✓		✓	✓	✓	✓	✓		✓		0
Forehead International Co., Ltd. Representative: Chiu, Sun-Chien				✓			✓	✓	✓	✓	✓	✓	✓		0
Forehead International Co., Ltd. Representative: Chern, Kuo-Jong				✓			✓	✓	✓	✓	✓	✓	✓		0
Sonnen Limited Representative: Yeh, Po-Len				✓			✓	✓	✓	✓			✓		0
Sonnen Limited Representative: Huang, Yung-Fang				✓			✓	✓	✓	✓	✓	✓	✓		0
Ni, Shu-Ching				✓	✓	✓			✓	✓	✓	✓	✓	✓	0
Chen, Fu-Yen				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0
Wang, Chun-Hsiung				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0
Ou Yang, Wen-Han				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0

Note: "V" indicates the conditions listed met during the director's terms and two years prior.

- (1) Not an employee of REALTEK or its affiliates.
- (2) Not a Director or Supervisor of REALTEK or its affiliates. (Excluding an independent director of REALTEK or its subsidiaries.)
- (3) Not a natural-person shareholder who holds shares, together with those held by the person's spouse, minor children, or held by the person under others' names, more than 1% of the Company's outstanding shares, nor one of the Company's top ten natural-person shareholders.
- (4) Not a spouse, relative within the second degree of kinship, or lineal relative within the fifth degree of kinship, of any person in the preceding three criteria.
- (5) Not a director, supervisor or employee of a juridical shareholder that directly holds more than 5% of REALTEK's outstanding shares or that ranks in the top five shareholders of REALTEK.
- (6) Not a director, supervisor, manager or shareholder holding more than 5% of the outstanding shares of certain companies or institutions that have financial or business relationship with the Company.
- (7) Not an owner, partner, director, supervisor, manager of any sole proprietor, partnership, company or institution and his/her spouse, nor the specialist and his/her spouse, that provides finance, commerce, legal consultation and services to REALTEK or its affiliates
- (8) Not a spouse or relative within the second degree of kinship to any of other directors.
- (9) Not under any condition pursuant to Article 30 of the Company Act.
- (10) Not a juridical person or its representative as defined in Article 27 of Company Act.

2. Information of President and Vice Presidents

April 14, 2019

Title	Nationality	Name	Gender	Date Appointed	Shareholding		Spouse & Minor Shareholding		Shareholding by Nominee Arrangement		Education & Experience	Other Selected Current Positions	Managers who are spouse or second-degree relative		
					Total	%	Total	%	Total	%			Title	Name	Relation
President	ROC	Chiu, Sun-Chien	Male	1999.07.01	1,388,831	0.27%	2,384	0.00%	-	-	M.S. in Electrical Engineering, National Taiwan University	Director of RealSun Technology Corporation (Note) Director of Realtek Investments Limited (Note) Director of Hungwei Venture Capital Co., Ltd (Note) Director of Realtek Semiconductor (Japan) Corp. (Note)	-	-	-
Chief Operating Officer	ROC	Huang, Yung-Fang	Male	2015.04.27	42,205	0.01%	79,625	0.02%	-	-	M.S. in Electrical Engineering, State University of New York, USA	Director of Realtek Venture Capital Co., Ltd (Note) Director of RealSun Investments Co., Ltd (Note) Director of Realtek Investments Limited (Note) Director of RealSun Technology Corporation (Note) Chairman of Realtek Singapore Pte Ltd. (Note) Chairman of Realtek Investment Singapore Private Limited. (Note)	-	-	-
Chief Financial Officer	ROC	Chern, Kuo-Jong	Male	2002.03.28	40,686	0.01%	0	0.00%	-	-	MBA(Master of Business Administration), The City University of New York, USA	Director of RealSun Investments Co., Ltd (Note) Director of Realtek Semiconductor(Shen Zhen)Corp.	-	-	-
Vice President	ROC	Huang, Yee-Wei	Male	2014.03.24	188,560	0.04%	0	0.00%	-	-	Ph.D. in Chemical Engineering, Kansas State University, USA	Chairman of RealSun Investments Co., Ltd (Note)	-	-	-
Vice President	ROC	Lin, Ying-Hsi	Male	2018.03.13	50,000	0.01%	0	0.00%	-	-	M.S. in Electrical Engineering, National Taiwan University	Director of Realtek Semiconductor (HK) Inc. (Note)	-	-	-
Vice President	ROC	Lin, Lung-Wei	Male	2018.03.13	112,118	0.02%	17,989	0.00%	-	-	MBA(Master of Business Administration), National Chengchi University	Director of C-Media Electronics Inc. (Note)	-	-	-
Vice President	ROC	Chang, King-Hsiung	Male	2018.03.13	120,267	0.02%	0	0.00%	-	-	B.S. in Electronics Engineering, National Chiao Tung University	None	-	-	-
Vice President	ROC	Tsai, Jon-Jinn	Male	2018.10.30	74	0.00%	0	0.00%	-	-	M.S. in Electrical Engineering, National Taiwan University	Director of Compal Broadband Networks Inc. (Note)	-	-	-
Vice President	ROC	Yen, Kuang-Yu	Male	2018.10.30	23,948	0.00%	4,000	0.00%	-	-	M.S. in Communications Engineering, National Chiao Tung University	Director of Realtek Singapore Pte. Ltd(Note) Director of Realtek Investment Singapore Private Limited. (Note) Director of Cortina Access, Inc. (Note) Chairman of Cortina Systems Taiwan Limited. (Note)	-	-	-
Controller	ROC	Chang, Jr-Neng	Male	2007.03.16	35,045	0.01%	0	0.00%	-	-	M.A. in Accounting, National Taiwan University	Director of Realtek Investment Singapore Private Limited. Supervisor of Greatek Electronics Inc. (Note)	-	-	-

Note: The representative of Realtek Semiconductor Corp. or its affiliated company.

3. Remuneration for Directors and Officers
3.1 Directors' Remuneration

2018 / Unit: NT\$K

Title	Name	Director remuneration				Remuneration from concurrent position as employee				A + B + C + D + E + F + G as percentage of net income after taxes	Remuneration received from investment business other than subsidiaries	
		Remuneration (A)	Pension (B)	Remuneration from profit distribution (C) (Note 1)	Business expenses (D)	A + B + C + D as percentage of net income after taxes	Salaries, bonuses and special expenses (E) (Note 2)	Pension (F)	Profit distribution for employee compensation (G)			
		Consolidated Entities REALTEK	Consolidated Entities REALTEK	Consolidated Entities REALTEK	Consolidated Entities REALTEK	Consolidated Entities REALTEK	Consolidated Entities REALTEK	Consolidated Entities REALTEK	Consolidated Entities REALTEK	Consolidated Entities REALTEK	Consolidated Entities REALTEK	Consolidated Entities REALTEK
Chairman	Cotek Pharmaceutical Industry Co., Ltd. Representative: Yeh, Nan-Hong											
Vice Chairman	Forehead International Co., Ltd. Representative: Chiu, Sun-Chien											
Director	Forehead International Co., Ltd. Representative: Chern, Kuo-Jong											
Director	Sonnen Limited Representative: Yeh, Po-Len			76,778	1,920	1.81%	32,639	903	16,768	0	2.97%	None
Director	Sonnen Limited Representative: Huang, Yung-Fang			76,778	1,920	1.81%	32,639	903	16,768	0	2.97%	None
Director	Ni, Shu-Ching											
Independent Director	Chen, Fu-Yen											
Independent Director	Wang, Chun-Hsiung											
Independent Director	Ou Yang, Wen-Han											

Note 1: The relevant compensation of 2,562 thousand dollar for the drivers is not included.

Note 2: In addition to the above table, in recent year, the directors of the Company provided services for all companies in the financial reports (such as consultants who are non-employees): 0

Remuneration Range

Remuneration Range	Name of Directors			
	Total remuneration (A+B+C+D)		Total remuneration (A+B+C+D+E+F+G)	
	REALTEK	Consolidated Entities	REALTEK	Consolidated Entities
Less than \$2,000,000	Yeh, Nan-Horng, Chiu, Sun-Chien, Chern, Kuo-Jong, Yeh, Po-Len, Huang, Yung-Fang, Ni, Shu-Ching, Chen, Fu-Yen, Wang, Chun-Hsiung, Ou Yang, Wen-Han	Yeh, Nan-Horng, Chiu, Sun-Chien, Chern, Kuo-Jong, Yeh, Po-Len, Huang, Yung-Fang, Ni, Shu-Ching, Chen, Fu-Yen, Wang, Chun-Hsiung, Ou Yang, Wen-Han	Ni, Shu-Ching, Chen, Fu-Yen, Wang, Chun-Hsiung, Ou Yang, Wen-Han	Ni, Shu-Ching, Chen, Fu-Yen, Wang, Chun-Hsiung, Ou Yang, Wen-Han
\$2,000,000 (incl.) - \$5,000,000(excl.)				
\$5,000,000 (incl.) - \$10,000,000(excl.)			Yeh, Po-Len, Chern, Kuo-Jong, Huang, Yung-Fang,	Yeh, Po-Len, Chern, Kuo-Jong, Huang, Yung-Fang
\$10,000,000 (incl.) - \$15,000,000(excl.)	Cotek Pharmaceutical Industry Co.,	Cotek Pharmaceutical Industry Co.,	Yeh, Nan-Horng, Chiu, Sun-Chien, Cotek Pharmaceutical Industry Co	Yeh, Nan-Horng, Chiu, Sun-Chien, Cotek Pharmaceutical Industry Co
\$15,000,000 (incl.) - \$30,000,000(excl.)	Sonnen Limited, Forehead International Co., Ltd.	Sonnen Limited, Forehead International Co., Ltd.	Sonnen Limited, Forehead International Co., Ltd.	Sonnen Limited, Forehead International Co., Ltd.
\$30,000,000 (incl.) - \$50,000,000(excl.)				
\$50,000,000 (incl.) - \$100,000,000(excl.)				
\$100,000,000 and above				
Total	12	12	12	12

3.2 Officer's Compensation

2018 / Unit: NT\$K

Title	Name	Salary (A)		Pension (B)		Bonuses and special expenses (C) (Note)		Employee compensation (D)				A + B + C + D as percentage of net income after taxes		Compensation received from investment business other than subsidiaries	
		REALTEK	Consolidated Entities	REALTEK	Consolidated Entities	REALTEK	Consolidated Entities	Cash	Stock	Cash	Stock	REALTEK	Consolidated Entities		
President	Chiu, Sun-Chien														
Chief Operating Officer	Huang, Yung-Fang														
Chief Financial Officer	Chern, Kuo-Jong														
Vice President	Huang, Yee-Wei														
Vice President	Lin, Ying-Hsi	34,952	34,952	2,097	2,097	28,175	28,175	24,243	0	24,243	0	2.06%	2.06%		None
Vice President	Lin, Lung-Wei														
Vice President	Chang, King-Hsiung														
Vice President	Tsai, Jon-Jinn														
Vice President	Yen, Kuang-Yu														
Controller	Chang, Jr-Neng														

Note: The relevant compensation of 866 thousand dollar for the driver is not included.

Compensation Range

Compensation Range	Name of Presidents and Vice Presidents	
	REALTEK	Consolidated Entities
Less than \$2,000,000		
\$2,000,000 (incl.) - \$5,000,000 (excl.)	Chang, Jr-Neng	Chang, Jr-Neng
\$5,000,000 (incl.) - \$10,000,000 (excl.)	Chern, Kuo-Jong, Huang, Yee-Wei, Huang, Yung-Fang, Lin, Ying-Hsi, Chang, King-Hsiung, Lin, Lung-Wei, Yen, Kuang- Yu, Tsai, Jon-Jinn	Chern, Kuo-Jong, Huang, Yee-Wei, Huang, Yung-Fang, Lin, Ying-Hsi, Chang, King-Hsiung, Lin, Lung-Wei, Yen, Kuang-Yu, Tsai, Jon-Jinn
\$10,000,000 (incl.) - \$15,000,000 (excl.)	Chiu, Sun-Chien	Chiu, Sun-Chien
\$15,000,000 (incl.) - \$30,000,000 (excl.)		
\$30,000,000 (incl.) - \$50,000,000 (excl.)		
\$50,000,000 (incl.) - \$100,000,000 (excl.)		
\$100,000,000 and above		
Total	10	10

3.3 Employee's Compensation for Officers

2018 / Unit: NT\$K

Title	Name	Stock	Cash	Total	Percentage of net income after taxes (%)
President	Chiu, Sun-Chien	0	24,243	24,243	0.56%
Chief Operating Officer	Huang, Yung-Fang				
Chief Financial Officer	Chern, Kuo-Jong				
Vice President	Huang, Yee-Wei				
Vice President	Lin, Ying-Hsi				
Vice President	Lin, Lung-Wei				
Vice President	Chang, King-Hsiung				
Vice President	Tsai, Jon-Jinn				
Vice President	Yen, Kuang-Yu				
Controller	Chang, Jr-Neng				

4. Percentage of remuneration and compensation paid to Directors, Supervisors and Officers by the Company and all companies of the consolidated statements accounts for net income after taxes for the recent two years.

Percentage of remuneration and compensation paid to Directors, Supervisors and Officers by the Company and all companies of the consolidated statements accounts for net income after taxes for 2017.	Percentage of remuneration and compensation paid to Directors, Supervisors and Officers by the Company and all companies of the consolidated statements accounts for net income after taxes for 2018.
4.64%	4.23%

The 2018 annual directors' remuneration and employee's compensation were decided in accordance with the Company's articles of incorporation. The officers' compensation payment policy considers factors such as working years, operating performance and company's profit. The remuneration of directors and officers shall be proposed to the board of directors after evaluation by the Remuneration Committee, processed after approved by the board of directors, and reported at the shareholders' meeting.

III. Corporate Governance

1. Operation of Board of Directors

Operation of Board of Directors:

Previous term of office: 2015/06/09 to 2018/06/08

Current term of office: 2018/06/05 to 2021/06/04

The Board of Directors held meetings 5 times in 2018. Attendance status of Directors and Supervisors is as follows:

Title	Name	Attendance in Person	Attendance by Proxy	Attendance Rate (%)	Remarks
Chairman	Cotek Pharmaceutical Industry Co., Ltd. Representative: Yeh, Nan-Hong	5	0	100%	
Vice Chairman	Forehead International Co., Ltd. Representative: Chiu, Sun-Chien	5	0	100%	
Director	Sonnen Limited Representative: Yeh, Po-Len	5	0	100%	
Director	Sonnen Limited Representative: Huang, Yung-Fang	3	0	100%	Date elected: 2018/06/05
Director	Forehead International Co., Ltd. Representative: Chern, Kuo-Jong	5	0	100%	
Director	Ni, Shu-Ching	4	0	80%	
Independent Director	Chen, Jr-Chuan	1	1	50%	Expiration date : 2018/06/05
Independent Director	Chen, Fu-Yen	5	0	100%	
Independent Director	Ou Yang, Wen-Han	3	0	100%	Date elected: 2018/06/05
Independent Director	Wang, Chun-Hsiung	3	0	100%	Date elected: 2018/06/05
Supervisor	Fan, Mu-Kung	2	0	100%	Expiration date : 2018/06/05
Supervisor	United Glory Ltd Representative: Tsai, Tyau-Chang	2	0	100%	Expiration date : 2018/06/05
Supervisor	United Glory Ltd. Representative: Lin, Tsai-Mei	2	0	100%	Expiration date : 2018/06/05

Other disclosures:

1. (1) Securities and Exchange Act §14-3 resolutions:

Date	Resolutions	The Opinions of All Independent Directors and the Company's Actions to the Opinions
Mar. 9, 2018	<ol style="list-style-type: none"> 1. 2017 annual financial statements and Consolidated financial statements 2. Revise the Company's Articles of Incorporation 3. Establish the Company's Audit Committee Charter 4. The Company's auditor of financial statements and Audit Fee for 2018 5. 2017 Statement of Internal Control System 6. Increase investment in a subsidiary by US\$42,000,000 	All independent directors approved
Apr. 25, 2018	<ol style="list-style-type: none"> 1. The Company intends to loan funds to subsidiaries 2. Revise the Procedures for Financial Derivatives Transactions 3. Revise the Procedures for Loaning of Company Funds 4. Revise the Procedures for Endorsements and Guarantees 5. Revise the Procedures for Acquisition or Disposal of Assets 	
Jul. 27, 2018	<ol style="list-style-type: none"> 1. The Company's 2018 Q2 consolidated financial statements 2. Company's invested companies intend to establish a Mainland China subsidiary 3. The Company intends to sell intangible assets and related masks 4. A Company's invested company intends to loan a fund to a Mainland China subsidiary 5. Revise the Company's internal audit implementation rules 6. Revise the Company's internal control self-assessment operation methods 	
Oct. 26, 2018	<ol style="list-style-type: none"> 1. The Company intends to extend the period of the endorsement and guarantee for a subsidiary 2. Adjust the matters of investment in Mainland China subsidiaries 3. Increase the capital of a Mainland China subsidiary 4. The Company intends to endorse the guarantee for a Mainland China subsidiary 5. A Company's invested company intends to endorse the guarantee for a Mainland China subsidiary 6. Company's invested companies intend to loan funds to Mainland China subsidiaries 7. The Company intends to loan a fund to a subsidiary 8. 2019 Annual Audit Plans 9. The status that the Company regularly evaluates the independence of auditor 	

(2) Resolutions of the board of directors with objected or reserved opinions by independent directors and with records or written statements: None.

2. Execution of the directors' interests evasion: The directors have avoided the proposal with personal stake.
3. Strengthening the objectives and performance of the board of directors: The company is committed to strengthening the board mechanism, has selected independent directors and set up a compensation committee, and set up an audit committee to replace the supervisors in 2018. When the resolution was submitted to the board of directors for discussion, the opinions of the independent directors were fully considered. The important resolutions of the board of directors were posted in accordance with relevant laws and regulations to protect shareholders' rights and interests.

2. Operation of Audit Committee

Operation of Audit Committee:

1. There are 3 members of the Audit Committee.
2. Current term of office: 2018/06/05 to 2021/06/04. The Audit Committee held meeting 2 times in 2018. Attendance status of Independent Directors is as follows:

Title	Name	Attendance in Person	Attendance Rate (%)	Remarks
Independent Director	Ou Yang, Wen-Han	2	100%	Newly-elected on 2018/06/05
Independent Director	Chen, Fu-Yen	2	100%	Newly-elected on 2018/06/05
Independent Director	Wang, Chun-Hsiung	2	100%	Newly-elected on 2018/06/05

Other disclosures:

1. (1) Securities and Exchange Act §14-5 resolutions

Date	Resolutions	The Opinions of All Independent Directors and the Company's Actions to the Opinions
Jul. 25, 2018	<ol style="list-style-type: none"> 1. The Company's 2018 Q2 consolidated financial statements 2. Company's invested companies intend to establish a Mainland China subsidiary 3. The Company intends to sell intangible assets and related masks 4. A Company's invested company intends to loan a fund to a Mainland China subsidiary 5. Revise the Company's internal audit implementation rules 6. Revise the Company's internal control self-assessment operation methods 	All independent directors approved
Oct. 24, 2018	<ol style="list-style-type: none"> 1. The Company intends to extend the period of the endorsement and guarantee for a subsidiary 2. Adjust the matters of investment in Mainland China subsidiaries 3. Increase the capital of a Mainland China subsidiary 4. The Company intends to endorse the guarantee for a Mainland China subsidiary 5. A Company's invested company intends to endorse the guarantee for a Mainland China subsidiary 6. Company's invested companies intend to loan funds to Mainland China subsidiaries 7. The Company intends to loan a fund to a subsidiary 8. 2019 Annual Audit Plans 9. The status that the Company regularly evaluates the independence of auditor 	

- (2) There was no resolution which was not approved by the Audit Committee but was approved by two thirds or more of all Directors.
2. Execution of the independent directors' interests evasion. The independent directors' names, content of proposals, reason for interests evasion, and participation in voting should be disclosed: None
3. The communication between the independent directors and internal audit manager and auditors: The internal audit manager attends the meeting of Board of Directors to present audit report. The independent directors are able to communicate the internal control status and financial status with internal audit manager and auditors as demanded.

3. Supervisors' Attendance of Meeting of Board of Directors

Supervisors' Attendance of Meeting of Board of Directors

1. There were 3 Supervisors of the Company.
2. Previous term of office: 2015/06/09 to 2018/06/08.
3. The Board of Directors held meeting 2 times until June 5, 2018. Attendance status of supervisors is as follows:

Title	Name	Attendance in Person	Attendance Rate (%)	Remarks
Supervisor	Fan, Mu-Kung	2	100%	Expiration date :2018/06/05
Supervisor	United Glory Ltd. Representative: Tsai, Tyau-Chang	2	100%	Expiration date :2018/06/05
Supervisor	United Glory Ltd. Representative: Lin, Tsai-Mei	2	100%	Expiration date :2018/06/05

Note: The Company set up an Audit Committee in 2018 to replace Supervisors.

Other items to be recorded:

1. The composition and responsibilities of the supervisor:
 - (1) Communication between the supervisor and the company's employees and shareholders: The supervisor may directly communicate with employees or shareholders as demanded, or ask the manager to provide business and financial reports.
 - (2) Communication between the supervisor and the internal audit manager and auditors: The internal audit manager attends the meeting of Board of Directors to present audit report. The supervisors are able to communicate the internal control status and financial status with internal audit manager and auditors as demanded.
2. If a supervisor attending meetings of the board of directors has opinions, the meeting date, period, content of proposals, resolution of the meeting, and the company's actions to the supervisor's opinions should be disclosed: None.

4. The state of the company's implementation of corporate governance, and deviation of such implementation from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and the reason for deviation.

Evaluation Item	Implementation Status		Deviation from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and the reason for deviation.
	Yes	No	
1. Does the Company establish and disclose the Corporate Governance Best-Practice Principles based on "Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies"?	V	V	The Company has not established the Corporate Governance Best-Practice Principles, but in practice, it conducts corporate governance in accordance with the essence of the Corporate Governance Best-Practice Principles. The Company has not established the Corporate Governance Best-Practice Principles, but in practice, it conducts corporate governance in accordance with the essence of the Corporate Governance Best-Practice Principles.
2. Shareholding Structure and Shareholders' Rights (1) Does the Company establish an internal operating procedure to deal with shareholders' suggestions, doubts, disputes and litigations, and implement based on the procedure?	V		The Company has set up an investor relations team and appointed a professional stock transfer agency to handle matters such as shareholder suggestions or doubts.
(2) Does the Company possess the list of its major shareholders as well as the ultimate owners of those shares?	V		The Company regularly collects the shareholdings of directors and managers.
(3) Does the Company establish and implement the risk management and firewall system between related companies?	V		The Company and its related companies are all in compliance with the relevant internal control system. The Company also supervises the management strategy, financial and business, and audit management of the subsidiaries in accordance with the management practices of the subsidiaries.
(4) Does the Company establish internal rules against insiders trading with undisclosed information?	V		The Company regularly educates and advises directors, managers and all employees that the disclosure of material internal information and the actions that may involve insiders trading are prohibited.
3. Composition and Responsibilities of the Board of Directors (1) Does the Board develop and implement a diversified policy for the composition of its members?	V		The Company considers the diversity of professional and leadership skills for the composition of the board of directors, and has established independent directors in 2015.

Evaluation Item	Implementation Status		Deviation from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and the reason for deviation.
	Yes	No		Summary Description
(2) Does the Company voluntarily establish other functional committees in addition to the Remuneration Committee and the Audit Committee?	V	V	The Company's corporate governance operations are implemented based on the responsibilities of the board members and all departments. Other functional committees have not yet been established.
(3) Does the Company establish a standard to measure the performance of the Board, and implement it annually?	V		The Company regularly evaluates the performance of the board of directors by the Remuneration Committee on an annual basis, which is used as a basis for recommending directors' remuneration.
(4) Does the Company regularly evaluate the independence of accountants?	V		The Company regularly evaluates the performance and independence of the accountants every year and reports the results to the board of directors for approval. The Company's self-assessment of the independence of the accountants mainly includes: 1. The accountants have no significant financial interest in the company; 2. The accountants have no kinship relationship with the senior managers of the company; 3. The accountants shall not hold shares of the company; 4. The accountants shall not concurrently hold the position of the company; 5. The accountants provide independence statement The result of 2018 evaluation is that the independence of the accountants is in line with the Company's standards.
4. Does the Company establish exclusively (or concurrently) dedicated units or personnel to be in charge of corporate governance related business (including but not limited to data providing for directors and supervisors, holding meetings of the Board of Directors and the shareholders in accordance with the laws, applying for company registration and amendment, and preparing meeting agenda of the meetings of the Board of Directors and the shareholders)?	V		The Company assigns personnel based on work specialization to be in charge of corporate governance related business, including data providing required by the directors for implementing business, holding meetings of the board of directors and the shareholders in accordance with the laws, applying for company registration and amendment, and preparing meeting agenda of the meetings of the board of directors and the shareholders.

Evaluation Item	Implementation Status		Deviation from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and the reason for deviation.
	Yes	No		Summary Description
5. Does the Company establish a communication channel and build a designated section on its website for stakeholders (including but not limited to shareholders, employee and suppliers), as well as handle all the issues they care for in terms of corporate social responsibilities?	V		The Company has built a designated section on the website for stakeholders, and assigned personnel to be in charge of handling related issues.
6. Does the Company appoint a professional shareholder transfer agency to deal with shareholder affairs?	V		The Company appoints Chinatrust Commercial Bank Transfer Agency to deal with shareholder affairs.
7. Information Disclosure			
(1) Does the Company have a corporate website to disclose the financial, business, and corporate governance information?	V		The financial, business and corporate governance information has been disclosed on the company's website. Investors can also access the company's material information through the market observation post system.
(2) Does the Company have other information disclosure channels (e.g. building an English website, appointing designated people to handle information collection and disclosure, implementing a spokesman system, webcasting investor conferences)?	V		The Company has set up an English website, and has a spokesman for external communication and designated personnel to disclose information about the company and the institutional investor conferences at market observation post system in accordance with the statutory requirements.
8. Is there any other important information to facilitate a better understanding of the Company's corporate governance practices (including but not limited to employee rights, employee wellness, investor relations, supplier relations, rights of stakeholders, directors' and supervisors' training records, the implementation of risk management policies and risk evaluation measures, the implementation of customer relations policies, and purchasing liability insurance for directors and supervisors)?	V		<ol style="list-style-type: none"> 1. The Company provides information on relevant regulations that directors should pay attention to at any time. 2. The directors of the Company attended the board of directors in good condition and all met the requirements of the laws. 3. If the proposal has a stake in the directors, the director is required to evade. 4. The Company has purchased the liability insurance for directors which was approved by the board of directors. 5. The Company protects the legitimate rights and interests of employees in accordance with the provisions of Labor Standards Act, and establishes a good relationship of mutual trust with employees through the welfare system enhancing the stability of employees' lives, and completed educational trainings.

Evaluation Item	Implementation Status		Deviation from the Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies and the reason for deviation.
	Yes	No		Summary Description
<p>9. Please describe the improvement status according to the result of cooperate governance evaluation announced by cooperate governance center of TWSE, and the first priority improving items and measures on non-improving items.</p> <p>In 2018, the Company has improved the followings: 1. Disclosing the implementation of the resolutions of the annual shareholders meeting on the Company's annual report; 2. Adopting internationally widely recognized guidelines to produce corporate social responsibility reports; 3. Setting up an audit committee to implement corporate governance practices and information disclosure for enhancing shareholders' rights.</p>			

5. Members Background and Operation of Remuneration Committee:

5.1. Members Background of the Remuneration Committee

Title	Criteria	Possess five or more years of experience and the following professional qualifications			Independence Status (Note 2)							Number of other public companies concurrently serving as an independent director	Remarks
		Lecturer or above of business, law, finance, accounting or other profession related to company activity in a junior college or above	Judges, prosecutors, lawyers, accountants, and specialists passing national exams with certification in other profession related to company activity	Work experience in business, law, finance, accounting or other profession related to company activity	1	2	3	4	5	6	7			8
Other				v	v	v	v	v	v	v	v	0	
Independent Director				v	v	v	v	v	v	v	v	0	
Other				v	v	v	v	v	v	v	v	0	Expiration date: 2018/07/24
Independent Director				v	v	v	v	v	v	v	v	0	appointment Date: 2018/7/25

Note 1: Title should be directors, independent directors, or others.

Note 2: "V" indicates the conditions listed met during the member's terms and two years prior.

- (1) Not an employee of Realtek or its affiliates.
- (2) Not a Director or Supervisor of Realtek or its affiliates. (Excluding an independent director of Realtek or its subsidiaries.)
- (3) Not a natural-person shareholder who holds shares, together with those held by the person's spouse, minor children, or held by the person under others' names, more than 1% of the Company's outstanding shares, nor one of the Company's top ten natural-person shareholders.
- (4) Not a spouse, relative within the second degree of kinship, or lineal relative within the fifth degree of kinship, of any person in the preceding three criteria.
- (5) Not a director, supervisor or employee of a juridical shareholder that directly holds more than 5% of Realtek's outstanding shares or that ranks in the top five shareholders of Realtek.
- (6) Not a director, supervisor, manager or shareholder holding more than 5% of the outstanding shares of certain companies or institutions that have financial or business relationship with the Company.
- (7) Not an owner, partner, director, supervisor, manager of any sole proprietor, partnership, company or institution and his/her spouse, nor the specialist and his/her spouse, that provides finance, commerce, legal consultation and services to Realtek or its affiliates
- (8) Not under any condition pursuant to Article 30 of the Company Act.

5.2. Operation of Remuneration Committee status

1. There are 3 members of the Remuneration Committee.
2. Previous members' term of office: July 31, 2015 to July 24, 2018.

The previous Remuneration Committee held meetings 1 times in 2018. Attendance status of members is as follows:

Title	Name	Attendance in Person	Attendance by Proxy	Attendance Rate (%)	Remarks
Convener	Liu, Sheng-Chung	1	0	100%	Expiration date: 2018/07/30
Member	Kao, Chih-Chun	1	0	100%	
Member	Chen, Fu-Yen	1	0	100%	

Other disclosures:

1. If advice of the Compensation Committee was not adopted or modified by the Board of Directors, the meeting date, period, content of proposals, meeting resolution, and the Company's action to the advices of the Compensation Committee should be disclosed: None
2. If resolutions of the Compensation Committee were objected or reserved with records or written statements by any member, the meeting date, period, content of proposals, opinions of all members, and action to the member's opinions should be disclosed: None

3. Current members term of office: July 25, 2018 to July 24, 2021.

The current Remuneration Committee held meetings 1 times in 2018. Attendance status of members is as follows:

Title	Name	Attendance in Person	Attendance by Proxy	Attendance Rate (%)	Remarks
Convener	Wang, Chun-Hsiung	1	0	100%	Newly-appointment Date: 2018/7/25
Member	Kao, Chih-Chun	1	0	100%	
Member	Chen, Fu-Yen	1	0	100%	

Other disclosures:

1. If advice of the Compensation Committee was not adopted or modified by the Board of Directors, the meeting date, period, content of proposals, meeting resolution, and the Company's action to the advices of the Compensation Committee should be disclosed: None
2. If resolutions of the Compensation Committee were objected or reserved with records or written statements by any member, the meeting date, period, content of proposals, opinions of all members, and action to the member's opinions should be disclosed: None

6. Implementing Corporate Social Responsibility

Assessment Items	Implementation Status		Deviation from the “Corporate Social Responsibility Best Practice Principles for TWSE/GTSM-Listed Companies” and Reason
	Yes	No	
<p>1. Execute Corporate Governance</p> <p>(1) Does the Company set up a corporate social responsibility (CSR) policy and review the results of execution?</p> <p>(2) Does the Company regularly hold CSR education and training?</p> <p>(3) Does the Company appoint full-time (or part-time) executive-level positions for CSR and report the results to the Board of Directors?</p> <p>(4) Does the Company set a reasonable salary remuneration policy and combine it with the employee performance review to establish an effective reward and disciplinary system?</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p>The Company has set up a CSR policy.</p> <p>The Company regularly holds CSR education and training.</p> <p>The Administration Department is responsible for CSR.</p> <p>The Company has set a reasonable salary remuneration policy, a clear and effective employee performance review process, and a reward and disciplinary system.</p>	<p>-</p> <p>-</p> <p>-</p> <p>-</p>
<p>2. Foster a Sustainable Environment</p> <p>(1) Does the Company endeavor to utilize all resources efficiently and use renewable materials that have a low negative impact on the environment?</p> <p>(2) Does the Company establish proper environmental management systems based on the characteristics of its industry?</p> <p>(3) Does the Company monitor the impact of climate change on its operations? Does it conduct greenhouse gas inventory of its operation and establish strategies for energy conservation and carbon and greenhouse gas reduction?</p>	<p>✓</p> <p>✓</p> <p>✓</p>	<p>The Company endeavors to protect the environment and increase the recycling of materials.</p> <p>The Company has established proper environmental management systems and passed ISO 14001 certification.</p> <p>The Company endeavors to protect the environment and establishes measures for energy conservation and carbon and greenhouse gas reduction. Initiatives include replacing old equipment with power-saving, efficient machines.</p>	<p>-</p> <p>-</p> <p>-</p>
<p>3. Preserve Public Welfare</p> <p>(1) Does the Company set relevant management policies and processes in accordance with the International Bill of Human Rights and relevant laws and regulations?</p>	<p>✓</p>	<p>The Company sets management policies and processes in accordance with relevant laws and regulations.</p>	<p>-</p>

Assessment Items	Implementation Status		Deviation from the “Corporate Social Responsibility Best Practice Principles for TWSE/GTSM-Listed Companies” and Reason
	Yes	No	
5. If the Company uses the “Corporate Social Responsibility Best Practice Principles for TWSE/GTSM-Listed Companies” as a model for establishing its CSR practices, describe implementation status and discrepancies in relation to the aforementioned best practice principles: Not applicable			
6. Other information that aids in understanding CSR implementation: The Company proactively participates in social welfare initiatives, such as sponsoring charitable activities, donating to educational foundations to cultivate talents, and hiring people with disabilities.			
7. If the Company’s CSR reports obtain a third-party certification or verification, describe results: None			

7. The state of the company's performance in the area of ethical corporate management and the adoption of related measures
The Ethical Corporate Management Implementation Status

Evaluation Item	Implementation Status		Deviation from the Ethical Corporate Management Best-Practice Principles for TWSE/TPEX Listed Companies and the reason for deviation.
	Yes	No	
1. Establishment of ethical corporate management policies and programs (1) Does the company declare its ethical corporate management policies and procedures in its guidelines and external documents, as well as the commitment from its board to implement the policies? (2) Does the company establish policies to prevent unethical conduct with clear statements regarding relevant procedures, guidelines of conduct, punishment for violation, rules of appeal, and implement the policies? (3) Does the company establish appropriate precautions against high-potential unethical conducts or listed activities stated in Article 7, Paragraph 2 of the Ethical Corporate Management Best-Practice Principles for TWSE/TPEX Listed Companies?	V		-
	V		-
	V		-
2. Implement ethical corporate management (1) Does the company evaluate business partners' ethical records and include ethics-related clauses in business contracts? (2) Does the company establish an exclusively (or concurrently) dedicated unit supervised by the Board to be in charge of ethical corporate management? (3) Does the company establish policies to prevent conflicts of interest and provide appropriate communication channels, and implement the policies?	V		-
	V		-
	V		-

Evaluation Item	Implementation Status		Deviation from the Ethical Corporate Management Best-Practice Principles for TWSE/TPEx Listed Companies and the reason for deviation.
	Yes	No	
(4) Has the company established effective systems for both accounting and internal control to facilitate ethical corporate management, and are they audited by either internal auditors or accountants on a regular basis?	V		-
(5) Does the company regularly hold internal and external educational trainings of ethical corporate management?	V		-
3. Implementation status of the whistle-blowing system	V		-
(1) Does the company establish a concrete whistle-blowing system and incentive measures, create a convenient way for reporting, and appoint appropriate designated personnel for reported cases?	V		-
(2) Does the company establish standard operating procedures and related confidentiality measures for reported cases?	V		-
(3) Does the company adopt measures for protecting whistle-blowers from inappropriate disciplinary actions due to their whistle-blowing?	V		-
4. Strengthening information disclosure	V		-
(1) Does the company disclose its ethical corporate management principles and the results of performance on the company's website and MOPS?	V		The company will process based on actual needs, and laws and regulations.
5. If the Company has established Principles of Ethical Corporate Management based on Ethical Corporate Management Best Practice Principles for TWSE/GTSM Listed Companies, please describe any deviation between the implementation and the principles. N/A			
6. Other important information to facilitate a better understanding of the company's ethical corporate management implementation: (e.g., review and amend the company's principles) The company complies with related laws and regulations including Company Act, Securities and Exchange Act, Business Entity Accounting Act, etc. to implement ethical corporate management.			

- 8. If the company has established corporate governance best-practice principles or related regulations, disclose the method of searching: The company has not established Corporate Governance Best-Practice Principles, but in practice, it conducts corporate governance in accordance with the essence of the Corporate Governance Best-Practice Principles.**
- 9. Other important information to facilitate a better understanding of the state of the company's implementation of corporate governance may also be disclosed: The company in time discloses material information in accordance with regulations, and regularly holds institutional investor conference to present financial and business related information.**

10. Internal Control Status

10.1. Statement of internal control

Realtek Semiconductor Corporation Statement of Internal Control System

Date: March 21, 2019

Based on the findings of a self-assessment, Realtek Semiconductor Corporation (Realtek) states the following with regard to its internal control system during the year 2018:

1. Realtek'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, timeliness, transparency of our reporting, and compliance with applicable rulings, 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 Realtek takes immediate remedial actions in response to any identified deficiencies.
3. Realtek 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 activities.
4. Realtek 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, Realtek believes that, on December 31, 2018, it has 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, timeliness, transparency of reporting, and compliance with applicable rulings, laws and regulations.
6. This Statement is an integral part of Realtek'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 was passed by the board of directors in their meeting held on March 21, 2019, with none of the nine attending directors expressing dissenting opinions, and the remainder all affirming the content of this Statement.

Realtek Semiconductor Corporation

Chairman: Yeh, Nan-Horng
President: Chiu, Sun-Chien

10.2. The Company was not required to commission an independent auditor to audit its internal control system.

11. Reprimand of the Company and its employees according to the laws; reprimand of the Company's employees for violating regulations of the internal control system, and major shortcomings and status of correction from last year to the date of the annual report printed: None

12. Major resolutions of the shareholders' meeting and the board meetings from last year

to the date of the annual report printed:

12.1. Major resolutions of 2018 shareholders' meeting:

Date	Proposals	Resolution Results And Implementation
June 5, 2018	<p>Ratification Items</p> <p>1. 2017 business report and financial statements</p> <p>2. Distribution of 2017 retained earnings</p> <p>Discussion Item</p> <p>1. Cash distribution from capital surplus</p> <p>2. To revise the Articles of Incorporation</p> <p>Election of Directors (including Independent Directors)</p>	<p>Approved</p> <p>Approved</p> <p>Book closure ending date: 2018/09/12 Distribution date: 2018/10/05 Amount: NT\$2,286,429,588</p> <p>Approved</p> <p>Book closure ending date: 2018/09/12 Distribution date: 2018/10/05 Amount: NT\$508,095,464</p> <p>Approved</p> <p>Obtained the approval letter for registration change: 2018/06/19</p> <p>Elected List Directors: Cotek Pharmaceutical Industry Co., Ltd. Representative: Yeh, Nan-Horng Sonnen Limited Representative: Yeh, Po-Len Forehead International Co., Ltd. Representative: Chiu, Sun-Chien Sonnen Limited Representative: Huang, Yung-Fang Forehead International Co., Ltd. Representative: Chern, Kuo-Jong Ni, Shu-Ching Independent Directors: Chen, Fu-Yen Wang, Chun-Hsiung Ou Yang, Wen-Han</p>

12.2. Major Resolutions of Board Meetings

Date	Summary of Major Resolutions	Resolution Results
Mar. 9, 2018	<ol style="list-style-type: none"> 1. 2017 financial statements and consolidated financial statements 2. Matter of 2018 shareholders' meeting's date, time, location, and agenda 3. Election of Directors (including Independent Directors) 4. Nominate list of candidates for Board Directors (including Independent Directors) and review candidate qualifications 5. Adoption of the shareholders' proposals for 2018 shareholders' meeting and the nomination of candidates for Board of Directors (including Independent Directors) 6. Directors remuneration and employee bonus of 2017 7. Revise the Articles of Incorporation 8. Establish the Company's Audit Committee Charter 9. Revise the Rules of Meeting of Board of Directors 10. The Company's Auditor of financial statements and Audit Fee for 2018 11. 2017 Statement of Internal Control System 12. Increase investment in a subsidiary by US\$42,000,000 	Approved by all attending directors
Apr. 25, 2018	<ol style="list-style-type: none"> 1. Review the list of candidates and qualifications for directors (including independent directors) of the 2018 shareholders' meeting. 2. Revise matter of 2018 shareholders' meeting's agenda 3. Distribution of 2017 Retained Earnings 4. Cash distribution from capital surplus 5. 2017 business report and 2018 business plan 6. The Company intends to loan funds to subsidiaries 7. Revise the Procedures for Financial Derivatives Transaction 8. Revise the Procedures for Loaning of Company Funds 9. Revise the Procedures for Endorsements and Guarantees 10. Revise the Procedures for Acquisition or Disposal of Assets 11. Revise Compensation Committee Charter 	Approved by all attending directors
Jun. 5, 2018	<ol style="list-style-type: none"> 1. Election of the chairman of the eleventh board of directors 2. Election of the vice chairman of the eleventh board of directors 	Approved by all attending directors
Jul. 27, 2018	<ol style="list-style-type: none"> 1. Appointed members of the fourth Compensation Committee 2. Company's invested companies intend to establish a Mainland China subsidiary 3. The Company intends to sell intangible assets and related masks 4. A Company's invested company intends to loan a fund to a Mainland China subsidiary 5. Revise the Company's internal audit implementation rules 6. Revise the Company's internal control self-assessment operation methods 	Approved by all attending directors
Oct. 26, 2018	<ol style="list-style-type: none"> 1. The Company intends to extend the period of the endorsement and guarantee for a subsidiary 2. Adjust the matters of investment in Mainland China subsidiaries 3. Increase the capital of a Mainland China subsidiary 	Approved by all attending directors

Date	Summary of Major Resolutions	Resolution Results
	<ol style="list-style-type: none"> 4. The Company intends to endorse the guarantee for a Mainland China subsidiary 5. A Company's invested company intends to endorse the guarantee for a Mainland China subsidiary 6. Company's invested companies intend to loan funds to Mainland China subsidiaries 7. The Company intends to loan a fund to a subsidiary 8. The Remuneration Committee reviews the year-end bonus rules for officers 9. 2019 Annual Audit Plans 10. The Status that the Company regularly evaluates the independence of auditor 	
Mar. 21,2019	<ol style="list-style-type: none"> 1. 2018 financial statements and consolidated financial statements. 2. Matter of 2019 shareholders' meeting's date, time, location, and agenda 3. Adoption of the shareholders' proposals for 2018 shareholders' meeting 4. Employees' compensation and Directors' remuneration of 2018 5. Ratify the employees' compensation for officers of 2017 6. The Company intends to loan a fund to a subsidiary 7. Intercompany loans between Company's subsidiaries 8. The Company's Auditor of financial statements and Audit Fee for 2019 9. 2018 Statement of Internal Control System 	Approved by all attending directors
Apr. 26,2019	<ol style="list-style-type: none"> 1. Distribution of 2018 Retained Earnings 2. Cash distribution from capital surplus 3. Release the Director from non-competition restrictions 4. Revise matter of 2018 shareholders' meeting's agenda 5. 2018 business report and 2019 business plan 6. Revise the Company's Article of Incorporation 7. Revise the Procedures for Financial Derivatives Transactions 8. Revise the Procedures for Acquisition or Disposal of Assets 9. The Company intends to loan funds to subsidiaries 	Approved by all attending directors

13. Directors' or supervisors' objections against the important resolution of board meetings from last year to the date of the annual report printed: None

14. Information of resignation or dismissal of the persons related to the financial reports (including chairman, president, accounting officers, finance officers, internal audit manager, and R&D officers) from last year to the date of the annual report printed: None

IV. Information Regarding Audit Fees

Accounting Firm	Name of CPA		Period Covered by CPA's Audit	Remarks
PricewaterhouseCoopers Taiwan	Hsueh, Seou-Hung	Li, Tien-Yi	01/01/2018-12/31/2018	-

Unit: NT\$K

Range	Items	Audit Fee	Non-audit Fee	Total
1	Less than \$2,000,000			
2	\$2,000,000 (incl.) - \$4,000,000			
3	\$4,000,000 (incl.) - \$6,000,000	✓		✓
4	\$6,000,000 (incl.) - \$8,000,000			
5	\$8,000,000 (incl.) - \$10,000,000			
6	\$100,000,000 and above			

1. Non-audit fee paid to the auditors, the audit firm and its affiliates accounted for not less than one-fourth of total audit fee: Not applicable.
2. Replaced the audit firm and the audit fee paid to the new audit firm was less than the payment of previous year: Not applicable.
3. Audit fee reduced not less than 15% previous year: Not applicable.

V. Replacement of Independent Auditors

1. Regarding the former CPA

Replacement Date	Resolved by the Board of Directors on March 21, 2019		
Replacement reasons and explanations	The internal regular rotation of PricewaterhouseCoopers Taiwan		
Describe whether the Company terminated or the CPA rejected the appointment	Parties	CPA	The Company
	Status		
	Appointment terminated automatically	Not applicable	Not applicable
	Appointment rejected (continued)	Not applicable	Not applicable
The Opinions other than Unmodified Opinion Issued in the Last Two Years and the Reasons for the Said Opinions (Note)	None		
Is there any disagreement in opinion with the Company	YES		Accounting principles or practices
			Disclosure of Financial Statements
			Audit scope or steps
			Others
	No	✓	
	Explanation		
Supplementary Disclosure	None		

2. Regarding the Successor CPA

Name of accounting firm	PricewaterhouseCoopers Taiwan
Name of CPA	Lin, Yu-Kuan; Tsang, Kwok-Wah
Date of appointment	Resolved by the Board of Directors on March 21, 2019
Prior to the Formal Engagement, Any Inquiry or Consultation on the Accounting Treatment or Accounting Principles for Specific Transactions, and the Type of Audit Opinion that the CPA might issue on the Financial Report.	None
Written Opinions from the Successor CPA are different from the Former CPA's opinions.	None

VI. If the Company's Chairman, President, Managers in charge of finance or accounting operations held positions within the auditor's firm or its affiliates during last year, the name, title, and period of holding positions should be disclosed: None

VII. Share transfer or share pledge of Directors, Supervisors, Officers and major shareholders holding more than 10% shares from last year to the date of the annual report printed.

1. Changes in shareholding of Directors, Supervisors, Officers and major shareholders

Title	Name	2018		As of April 14, 2019	
		Shares increased (decreased)	Pledge shares increased (decreased)	Shares increased (decreased)	Pledge shares increased (decreased)
Chairman	Cotek Pharmaceutical Industry Co., Ltd. Representative: Yeh, Nan-Hong	-	(800,000)	-	-
Vice Chairman	Forehead International Co., Ltd. Representative: Chiu, Sun-Chien	-	-	-	-
Director	Forehead International Co., Ltd. Representative: Chern, Kuo-Jong	-	-	-	-
Director	Sonnen Limited Representative: Yeh, Po-Len	-	-	-	-
Director	Sonnen Limited Representative: Huang, Yung-Fang (Note 1)	-	-	-	-
Director	Ni, Shu-Ching	-	-	-	-
Independent Director	Chen, Fu-Yen	-	-	-	-
Independent Director	Wang, Chun-Hsiung (Note 1)	-	-	-	-
Independent Director	Ou Yang, Wen-Han (Note 1)	-	-	-	-
Independent Director	Chen, Chih-Chuan (Note 2)	-	-	-	-
Supervisor	Fan, Mu-Kung (Note 2)	1,000	-	-	-
Supervisor	United Glory Ltd. Representative: Tsai, Tyau-Chang (Note 2)	-	-	-	-
Supervisor	United Glory Ltd. Representative: Lin, Tsai-Mei (Note 2)	-	-	-	-
President	Chiu, Sun-Chien	-	-	-	-
Chief Operating Officer	Huang, Yung-Fang	-	-	-	-
Chief Financial Officer	Chern, Kuo-Jong	-	-	-	-
Vice President	Huang, Yee-Wei	-	-	-	-
Vice President	Lin, Ying-Hsi	-	-	-	-
Vice President	Lin, Lung-Wei	-	-	-	-
Vice President	Chang, King-Hsiung	-	-	-	-
Vice President	Tsai, Jon-Jinn	-	-	-	-
Vice President	Yen, Kuang-Yu	-	-	-	-
Controller	Chang, Jr-Neng	-	-	-	-

Note1: Director Sonnen Limited Representative: Huang, Yung-Fang, independent director, Wang, Chun-Hsiung, Ou Yang, Wen-Han were newly elected on June 5, 2018. Their shareholdings were declared since the date.

Note2: Independent Director, Chen, Chih-Chuan, Supervisor Fan, Mu-Kung, United Glory Ltd. Representative: Tsai, Tyau-Chang, and United Glory Ltd. Representative: Lin, Tsai-Mei left office on June 5, 2018.

2. Information on stock transfer to related parties: None.

3. Information on pledge of shares to related parties: None.

VIII. The relationship between any of the Company's top ten shareholders:

April 14, 2019

Name	Shareholding		Spouse & Minor Shareholding		Shareholding by Nominee Arrangement		Top Ten Shareholders who are Related Parties, Spouse, or Second-Degree Relatives	
	Shares	%	Shares	%	Shares	%	Name	Relationship
Cotek Pharmaceutical Industry Co., Ltd. Representative: Yeh, Chia-Wen	22,146,604	4.36%	-	-	-	-	-	-
	0	-	-	-	-	-	-	-
Cathay Life Insurance Company, Ltd. Representative: Huang, Tiao-Kuei	12,920,000	2.54%	-	-	-	-	-	-
	0	-	-	-	-	-	-	-
Leicester Worldwide Corporation	12,616,184	2.48%	-	-	-	-	-	-
Uniglobe Securities (Malaysia) Limited	8,744,641	1.72%	-	-	-	-	-	-
Morgan Stanley & Co. International Plc	8,480,365	1.67%	-	-	-	-	-	-
Government of Singapore	8,012,090	1.58%	-	-	-	-	-	-
Chunghwa Post Co., Ltd. Representative: Wei, Jian-Hong	7,886,856	1.55%	-	-	-	-	-	-
	0	-	-	-	-	-	-	-
Labor Pension Fund Supervisory Committee-Labor Retirement Fund	7,777,000	1.53%	-	-	-	-	-	-
Norges Bank	7,521,121	1.48%	-	-	-	-	-	-
JPMorgan Chase Bank N.A. Taipei Branch in custody for Vanguard Total International Stock Index Fund, a series of Vanguard Star Funds	7,420,215	1.46%	-	-	-	-	-	-

IX. The consolidated shareholdings and percentage of investments held by the Company, Directors, Supervisors, Officers, and the companies controlled directly or indirectly by the Company.

December 31, 2018 / Unit: shares: %

Investments	Investments of the Company		Investments directly or indirectly held by Directors, Supervisors, Officers, and the companies controlled directly or indirectly by the Company		Consolidated Investments	
	Shares	%	Shares	%	Shares	%
Leading Enterprises Limited	39,130	100%	—	—	39,130	100%
Amber Universal Inc.	41,432	100%	—	—	41,432	100%
Realtek Singapore Private Limited	80,000,000	89.03%	9,856,425	10.97%	89,856,425	100%
Realtek Investment Singapore Private Limited	200,000,000	100%	—	—	200,000,000	100%
Talent Eagle Enterprise Inc.	114,100,000	100%	—	—	114,100,000	100%
Bluocean Inc.	110,050,000	100%	—	—	110,050,000	100%
Realsun Investments Co., Ltd	28,000,000	100%	—	—	28,000,000	100%
Hung-wei Venture Capital Co., Ltd	25,000,000	100%	—	—	25,000,000	100%
Realking Investments Limited	29,392,985	100%	—	—	29,392,985	100%
Realsun Technology Corporation	500,000	100%	—	—	500,000	100%
Bobitag Inc.	1,918,910	66.67%	—	—	1,918,910	66.67%
Technology Partner V Venture Capital Corp.	5,969,298	32.43%	—	—	5,969,298	32.43%
5V Technologies, Taiwan Ltd.	4,669,917	24.42%	—	—	4,669,917	24.42%
EstiNet Technologies Inc.	4,000,000	20.15%	—	—	4,000,000	20.15%

Note: The aforementioned are long-term investments under the equity method.

Capital Raising

I. Source of Capital

Year & Month	Issuing Price	Authorized		Paid-in		Remarks		
		Shares (K)	Amount (\$K)	Shares (K)	Amount (\$K)	Source of Equity	Capital increase by assets other than cash	Other
09/2017	10	890,000	8,900,000	506,506	5,065,062	Employees' compensation	-	Note 1
04/2018	10	890,000	8,900,000	508,095	5,080,955	Employees' compensation	-	Note 2

Note 1: The capitalization was approved by the Hsinchu Science Park Administration on Sep. 25, 2017 with an approval letter of No. 1060026285.

Note 2: The capitalization was approved by the Hsinchu Science Park Administration on Apr 11, 2018 with an approval letter of No. 1070010727.

Type of share	Authorized Capital			Remarks
	Outstanding Shares	Un-issued Shares	Total	
Common stock	508,095,464	381,904,536	890,000,000	Note

Note: The authorized capital retains 80,000,000 shares for the issue of employee warrant shares.

Shelf Registration: Not Applicable.

II. Structure of Shareholders

April 14, 2019

Structure of Shareholders	Government Institutions	Financial Institutions	Other Institutional Investors	Foreign Institutional & Individual Investors	Individual Investors	Total
Number of Shareholders	0	34	354	911	41,223	42,522
Shareholdings	0	39,203,129	60,797,795	329,694,062	78,400,478	508,095,464
Shareholding Percentage	0.00%	7.72%	11.97%	64.88%	15.43%	100.00%

III. Distribution of Shareholding

April 14, 2019

Category	Number of Shareholders	Shareholdings	Shareholding Percentage
1 to 999	32,056	2,489,145	0.49%
1,000 to 5,000	7,874	14,523,226	2.86%
5,001 to 10,000	983	6,971,058	1.37%
10,001 to 15,000	329	3,911,230	0.77%
15,001 to 20,000	151	2,655,121	0.52%
20,001 to 30,000	197	4,885,389	0.96%
30,001 to 40,000	119	4,095,195	0.81%
40,001 to 50,000	90	4,073,297	0.80%
50,001 to 100,000	208	14,397,753	2.83%
100,001 to 200,000	170	24,252,516	4.77%
200,001 to 400,000	122	34,067,227	6.70%
400,001 to 600,000	76	38,131,769	7.51%
600,001 to 800,000	39	26,785,693	5.27%
800,001 to 1,000,000	26	23,080,440	4.54%
1,000,001 and above	82	303,776,405	59.80%
Total	42,522	508,095,464	100.00%

IV. List of Major Shareholders

April 14, 2019

Shareholder	Shareholdings	Percentage of Shareholding
Cotek Pharmaceutical Industry Co., Ltd.	22,146,604	4.36%
Cathay Life Insurance Company, Ltd.	12,920,000	2.54%
Leicester Worldwide Corporation	12,616,184	2.48%
Uniglobe Securities (Malaysia) Limited	8,744,641	1.72%
Morgan Stanley & Co. International Plc	8,480,365	1.67%
Government of Singapore	8,012,090	1.58%
Chunghwa Post Co., Ltd.	7,886,856	1.55%
Labor Pension Fund Supervisory Committee-Labor Retirement Fund	7,777,000	1.53%
Norges Bank	7,521,121	1.48%
JPMorgan Chase Bank N.A. Taipei Branch in custody for Vanguard Total International Stock Index Fund, a series of Vanguard Star Funds	7,420,215	1.46%

V. Market price, net worth, earning, and dividends per common share and related information over the last two years

Item		Year	2017	2018	March 31, 2019
Market price per share	Highest		124.5	151	183.5
	Lowest		99.5	101	136
	Average		109.36	123.94	164.87
Net worth per share	Before distribution		43.14	48.49	-
	After distribution(Note5)		43.00	(Note5)	-
Earnings per share	Weighted average shares		505,412 (thousand shares)	507,712 (thousand shares)	508,096 (thousand shares)
	Earnings per share		6.71	8.57	-
Dividends per share (Note4)	Cash dividends		4.5	6	-
	Stock dividends	-	-	-	-
		-	-	-	-
	Accumulated unappropriated dividends		-	-	-
Return on investment	Price/earnings ratio (Note1)		16.30	14.46	-
	Price/dividend ratio (Note2)		21.87	20.66	-
	Cash dividends yield (Note3)		4.57%	4.84%	-

Note 1: Price/Earnings Ratio = Average Market Price / Earnings Per Share

Note 2: Price/Dividend Ratio = Average Market Price / Cash Dividends Per Share

Note 3: Cash Dividend Yield = Cash Dividends / Average Market Price Per Share

Note 4: Cash dividends filled in 2018 and 2017 represent the distribution of 2017 and 2016 retained earnings, respectively and exclude cash dividends from capital surplus.

Note 5: the distribution of 2018 retained earnings not yet approved by Shareholders' Meeting.

VI. Dividend Policy and Status of Execution

1. Dividend Policy under the Articles of Incorporation

The Company belongs to the integrated circuit design industry and is in the growth phase of the enterprise life cycle. After considering the long-term business development of the Company, matching future investment fund requirements, and the long-term financial planning of the Company, if there are profits at the end of fiscal year, the Company shall first offset the accumulated losses with profits after tax, and then shall contribute 10% of profit as legal reserve, unless the accumulated legal reserve has reached the amount of the Company's total capital, and contribute or reverse special reserve in accordance with relevant laws or regulation by the competent authority. If there are net profits remained, the remaining net profits and the retained earnings from previous years shall be distributed as shareholders' dividend after the distribution proposal prepared by the board of directors is approved at a shareholders meeting. After considering financial, business and operational factors, the Company may distribute the whole of distributable earnings of the current year, and may also distribute whole or part of the reserves in accordance with the law or the regulation by the competent authority. When distributing dividends, the main consideration is the Company's future expansion of operating scale and requirement of cash flow. The cash dividends shall not be less than 10% of the total dividends distributed to shareholders in the current year.

2. Proposal to distribute 2018 profits which is resolved at the Board of directors, not approved by the shareholders' meeting: The cash dividends to common shareholders for 2018 profit distribution resolved at the Board of directors is NT\$6 per share.

VII. Impact to business performance and EPS resulting from stock dividend distribution:
None.

VIII. Employees' Compensation and Remuneration to Directors

1. Profit distribution set aside as employee compensation and remuneration to directors:

Employees' Compensation and Remuneration to Directors as Stated in the Articles of Incorporation:

If gained profits within a fiscal year, the Company shall allocate at a maximum of 3% of the profits as directors' remuneration, and allocate no less than 1% of the profits as employees' compensation. However, in case of the accumulated losses, certain profits shall first be reserved to cover the accumulated losses, and then allocate employees' compensation and directors' remuneration according to the proportion in the preceding paragraph.

The distribution of employees' compensation in the preceding paragraph shall be in cash or in stock, and shall be resolved with a consent of a majority of the directors present at a meeting attended by over two-thirds of the total directors. The distribution of director's remuneration and employee' compensation shall be reported to the shareholders meeting.

The employees entitled to receive employees' compensation may include the employees of subsidiaries of the Company meeting certain specific requirements. The requirements are determined by the board of directors or its authorized person.

2. Accounting for Employee Compensation and Remuneration to Directors

The Company accrued employees' compensation and remuneration to directors based on a percentage of profit as stated in the Articles of Incorporation Article. If the accrued amounts differ from the actual amounts approved by stockholders' meeting, the Company will recognize the change as an adjustment to income of next year.

3. Employee compensation and Remuneration to Directors resolved by the Board of Directors

3.1. The Proposal of 2018 Employees' Compensation and Remuneration to Directors resolved at the Board of Directors held on March 21, 2019:

Unit: New Taiwan Dollars; shares

Employees' Compensation				Remuneration to Directors	Difference	
Cash compensation	Stock compensation	Common Shares	total	cash	Difference Amount	Effect of financial statements
1,151,674,037	0	0	1,151,674,037	76,778,269	none	No applicable

Note: the 2018 Employees' compensation and directors' remuneration resolved at the Board of Directors are the same as the accrued amounts. The employees' compensation and remuneration to directors are in cash.

3.2. The ratio of employees' stock compensation divided by the total of income after tax and employees' compensation: The 2018 employees' compensation is in cash so that it not applicable.

4. The 2017 Employees' Compensation and Remuneration to Directors and Supervisors approved by the stockholders' meeting (including common shares to employees, amount of employees' stock compensation and share price) and the effect in financial statements if the actual amounts approved by stockholders' meeting differ the accrued amounts

Unit: New Taiwan Dollars; share

Employees' Compensation				Remuneration to Directors	Difference	
Cash compensation	Stock compensation	Common Shares	total	cash	Difference Amount	Effect of financial statements
718,338,470	179,584,572	1,589,244	897,923,042	59,861,536	none	No applicable

Note 1: the common shares to employees based on amount of employees' stock compensation are calculated in the closing price of \$113 at the previous day of the board of directors meeting.

Note 2: the 2017 Employees' compensation and directors' remuneration approved by the shareholders' meeting are the same as accrued amounts.

IX. Status of Treasury Stocks: None

X. Status of Corporate Bonds: None

XI. Status of Preferred Stocks: None

XII. Status of GDR

March 31, 2019

Item		Issuing Date	
		Jan 24, 2002	
Issuing Date		Jan 24, 2002	
Issuance & Listing		Luxembourg Stock Exchange.	
Total Amount (US\$)		240,180,375	
Offering Price per Unit (US\$)		17.25	
Issued Units		13,923,500 units	
Underlying Securities		New shares issued for capital increase of cash and issued common shares held by shareholders of the Company	
Common Shares Represented		55,694,400 Common Shares	
Rights and Obligations of GDR holders		According to the relevant instructions of the published manual	
Trustee		N/A	
Depository Bank		Bank of New York Mellon	
Custodian Bank		Mega International Commercial Bank	
GDRs Outstanding		330,761 units	
Apportionment of the expenses for the issuance and maintenance		In accordance with the contract of the underwriting syndicate and depository bank	
Terms and Conditions in the Deposit Agreement and Custody Agreement		The company will provide necessary public information in accordance with the contract for the depository bank to notify the depository certificate holder	
Closing price per GDRs (US\$)	2018	Highest	20.01
		Lowest	13.38
		Average	16.42
	Ended of March 31, 2019	Highest	23.80
		Lowest	17.64
		Average	21.39

XIII. Status of Employee Stock Warrants: None

XIV. Status of Employee Restricted Stocks: None

XV. Status of Mergers or Acquisitions, or as assignee of new shares issued by other companies: None

XVI. Status of Implementation of Fund Utilization Plan: Not Applicable

Operations Overview

I. Business Overview

1. Business Scope

(1) Realtek's Main Business Areas

- i. Research, development, production, manufacturing, and the sale of various types of integrated circuits
- ii. Software and hardware application design, testing, repairs, and technical consultations for various types of integrated circuits
- iii. Research, development, and the sale of various types of silicon intellectual property
- iv. Adjunct trade and sales that relate to Realtek's core businesses

(2) Percentage of Operating Revenue

Unit: NT\$1,000

2018	IC Products	Other	Total
Net Operating Revenue	45,735,868	69,878	45,805,746
Percentage of Operating Revenue	99.85%	0.15%	100%

(3) Current Products

Communications Network Products:

- USB3.0 2.5GBASE-T Ethernet Single Chip Controller for Gaming
- PCI Express 2.5GBASE-T Ethernet Single Chip Controller for Gaming
- 2.5GBASE-T Ethernet PHY
- PCI Express 1000Base-X Ethernet Fiber Controller
- USB3.0 1000BASE-T Ethernet Single Chip Controller for Gaming
- Programmable PCI Express 1000BASE-T Ethernet Single Chip Controller
- PCI Express 1GBASE-T Ethernet Single Chip Controller for Gaming
- Automotive Ethernet 100BASE-T1 PHY
- Automotive Ethernet 1GBASE-T1 PHY
- Automotive Ethernet 100BASE-T1 Switch Single Chip
- Automotive Ethernet 1GBASE-T1 Switch Single Chip
- UHD HDR Multimedia SoC
- 802.11b/g/n 1T1R Low Power Wi-Fi Single Chip Controller with PCI Express/USB 2.0/SDIO 2.0 Interface
- 802.11b/g/n 2T2R Low Power Wi-Fi Single Chip Controller with PCI Express/USB 2.0/SDIO 3.0 Interface
- 802.11b/g/n 1T1R Wi-Fi and Bluetooth 2.1+EDR/3.0+HS/4.0LE Single Chip Controller with PCI Express/USB 2.0/SDIO 3.0 Interface

- 802.11a/b/g/n 1T1R Wi-Fi and Bluetooth 2.1+EDR/3.0+HS/4.0/4.1/4.2LE Single Chip Controller with PCI Express/USB 2.0/SDIO 2.0 Interface
- 802.11a/b/g/n/ac 1T1R Wi-Fi and Bluetooth 2.1+EDR/3.0+HS/4.0/4.1/4.2 LE Single Chip Controller with PCI Express/USB 2.0/SDIO 3.0 Interface
- 802.11a/b/g/n/ac 2T2R Wi-Fi and Bluetooth 2.1+EDR/3.0+HS/ 4.1LE Single Chip Controller with PCI Express/USB 2.0/SDIO 3.0 Interface
- 802.11a/b/g/n/ac 2T2R Wi-Fi Single Chip Controller with PCI Express/USB 3.0 Interface
- 802.11a/b/g/n/ac 3T4R Wi-Fi Single Chip Controller with PCI Express/USB 3.0 Interface
- Integrated Wi-Fi with MCU SoC
- Integrated Wi-Fi, Bluetooth with MCU Multi-Functional SoC
- 802.11ac Dual Band Wireless Access Point/Router SoC
- Bluetooth 5 Dual Mode Transceiver Controller
- Bluetooth Low Energy 5 Single Chip
- Bluetooth 5 Stereo Audio Single Chip
- GNSS Multi-Satellite Dual Mode Single Chip Receiver
- Octal-Port Fast Ethernet Transceiver
- 5/8/16/24-Port Single Chip 10GBASE-T Fast Ethernet Switch Controller
- 5/8-Port Single Chip 1GBASE-T Ethernet Switch Controller
- 16/24-Port 1GBASE-T Ethernet Switch Controller
- 24-Port 1GBASE-T + 2-Port 10GBASE-T Ethernet Managed Switch Controller
- 48-Port 1GBASE-T + 4-Port 10GBASE-T Ethernet Managed Switch Controller
- 24-Port 1GBASE-T + 4-Port 10GBASE-T Ethernet Managed Switch Controller
- 48-Port 1GBASE-T + 6-Port 10GBASE-T Ethernet Managed Switch Controller
- Single Chip GPON Gateway Controller
- Single Port GPON Bridge Controller
- Dual-Port GPON Bridge Controller
- Laser Driver Chip

Computer Peripheral Products:

- HD-A 4-Channel Audio Codec
- HD-A 4-Channel Audio Codec with Embedded Class-D Amplifier and I2S In & Out
- HD-A 4-Channel Audio Codec with High Voltage Class-D Amplifier Supporting Speaker Protection
- HD-A Low Power Stereo Audio Codec
- HD-A Multi-Channel Audio Codec (7.1 and 10 Channels)
- SoundWire 4-Channel Audio Codec with Embedded Class-D Amplifier and I2S In & Out
- USB 2.0 Low Power Audio Codec with Hardware Equalizer
- Mobile Device Audio CODEC with Power Amplifier
- USB 2.0 to I2S Bridge Controller
- Audio CODEC with Programmable DSP for Mobile Device

- High Definition, High Efficiency Class-D Amplifier with built-in Adaptive Boost, Equalizer and Speaker Protection for Handheld or Mobile Device
- High Definition, High Efficiency Class-D Amplifier with Multiple Equalizer and Dynamic Range Control for TV, Soundbar, and Sound System
- Embedded USB2.0 & USB3.0 High Definition Image Signal Processor Chip
- Embedded USB2.0 Image Signal Processor Chip Supporting Windows Hello Face Recognition
- USB3.0 /USB3.1 Gen 2 4-Port Hub Controller
- Highly integrated USB Type-C Controller
- Highly Integrated IP Camera SoC

Multimedia Products:

- Integrated LCD Controller with VGA Analog Interface
- Integrated LCD Controller with DVI Interface
- Integrated LCD Controller with HDMI Interface
- Integrated LCD Controller with DisplayPort Interface
- DisplayPort to LVDS Video Translator
- DisplayPort to VGA Video Translator
- DisplayPort to HDMI 2.0 Video Translator
- USB Type-C to VGA Video Translator
- USB Type-C to HDMI 2.0 Video Translator
- DisplayPort MST Hub Controller
- Integrated High Resolution 5K3K/ 4K2K/QHD LCD Controller with HDR, DP 1.4, HDMI 2.0, and HDCP 2.2
- Integrated High Resolution QHD/FHD LCD Controller with USB Type-C Interface
- High-end Integrated LCD TV Controller Chip
- High-end Multimedia Digital/Analog LCD TV Controller Chip
- High-end 3D Smart LCD TV Controller Chip
- High-end Connected Digital/Analog LCD TV Controller Chip
- High-end UHD Smart Connected Digital/Analog LCD TV Controller Chip
- High-end UHD HDR Smart Connected Digital/Analog LCD TV Controller Chip
- High-end UHD HDR 60Hz/120Hz FRC Full-Function HDR Smart Connected LCD TV Controller Chip
- High-end UHD Full-Function HDR and New Generation 3D Surround Sound Multi-Core Smart Connected LCD TV Controller Chip

(4) Products Under Development

Communications Network Products:

- Next Generation USB 3.0 2.5GBASE-T Ethernet Single-Chip Controller for Gaming
- Next Generation PCI Express 2.5GBASE-T Ethernet Single-Chip Controller for Gaming
- Next Generation 2.5GBASE-T Ethernet PHY

- USB 3.1 to PCIE 3.0 Bridge Single-Chip Controller for Storage
- Long Distance 10/100BASE-T/100BASE-T1 Ethernet PHY
- Automotive Ethernet Dual Mode 100/1000BASE-T1 PHY
- Multiport Automotive Ethernet 100/1000BASE-T1 Switch
- 2.5G/5G/10GBASE-T Multi-Gb Ethernet Controller
- Multiport 100/1000/2.5GBASE-T Transceiver
- Multiport 2.5/5G/10GBASE-T Transceiver
- PoE Power Sourcing Equipment Chip
- New Generation High-Port-Count 1GBASE-T Ethernet Managed Switch Controller
- New Generation Integrated PON Gateway Controller
- New Generation 10GPON Gateway Controller
- 802.11b/g/n Wi-Fi, Bluetooth, and MCU SoC
- 802.11b/g/n Wi-Fi and Bluetooth 2.1+EDR/3.0+HS/4.2/5.0LE Single-Chip Controller
- 802.11a/b/g/n/ac WLAN and Bluetooth 2.1+EDR/3.0+HS/4.2/5.0LE Single-Chip Controller
- 802.11a/b/g/n/ac/ax WLAN and Bluetooth 2.1+EDR/3.0+HS/4.2/5.0LE Single-Chip Controller
- Next Generation Dual Band Wireless Access Point/Router SoC
- Next Generation UHD HDR Multimedia SoC

Computer Peripheral Products:

- HD-A 4-Channel Audio Codec with High Voltage Class-D Amplifier Supporting Speaker Protection
- SoundWire Audio Codec
- Low Power USB 2.0 Audio Codec
- USB Audio CODEC with DSP
- Voice Audio DSP
- Mobile Device Audio CODEC with Power Amplifier
- High Performance Programmable Audio DSP for Mobile Device
- SoundWire Interface High Definition Class-D Amplifier for Mobile Device and PC
- High Definition, High Efficiency Class-D Smart Amplifier with Built-in Boost for Mobile Device
- Card Reader Controller with PCI-E Gen I interface, Supporting SD 7.0)
- USB 3.2 4-Port Hub Controller)
- Highly Integrated USB Type-C Controller
- Next Generation Highly Integrated IP Camera SoC

Multimedia Products:

- New Generation Integrated High Resolution UHD/QHD LCD Controller with USB Type-C Interface
- New Generation DisplayPort MST Hub Controller
- New Generation High-end Integrated LCD TV Controller Chip

- New Generation High-end Ultra-High Definition Multimedia Digital/Analog LCD TV Controller Chip
- New Generation High-end Ultra-High-Definition Connected Digital/Analog LCD TV Controller Chip
- New Generation High-end UHD Smart Connected Digital/Analog LCD TV Controller Chip
- New Generation LCD High-end UHD HDR Smart Connected Digital/Analog LCD TV Controller Chip
- New Generation LCD High-end UHD Full-Function HDR Multicore Intelligent Connected Digital/Analog LCD TV Controller Chip
- New Generation LCD High-end UHD Full-Function HDR and New Generation 3D Surround Sound Multicore Smart Connected LCD TV Controller Chip
- New Generation High-end 8K LCD TV Decoder Chip

2. Industry Overview

(1) Industry Status & Trends and Product Development & Competition

According to the market research firm IC Insights, the global semiconductor industry rose 16% in 2018 to surpass US\$500 billion for the first time. The main growth contributor was a strong rise in memory prices, boosting a 30% increase in the annual output value of memory products. Excluding memory, the output value of the remaining IC products grew by a modest 8%. Realtek's 2018 sales growth in US dollars was 11%, which exceeded the average growth of the peer non-memory IC design houses. A close look at the 2018 ranking of IC design companies revealed that those ranked higher than Realtek tended to be targeting smartphone or high-performance computing markets. Realtek continues to focus on connectivity solutions for the mass market. In 2019, more products are expected to connect online anytime and anywhere. This expectation manifests itself in people's keen anticipation of 5G. Though not a 5G component supplier per se, Realtek's connected solutions will strongly complement 5G. As the 5G era approaches, Realtek will continue to innovate. The final winners in the market will be those with the greatest innovations, technical skills, and products.

Communications Network Products:

In Ethernet, the market is primed for a new generation of solutions. Case in point: Wi-Fi standards have advanced to 11ax with speeds surpassing 1Gbps. Telecommunications operators are upgrading their infrastructure to offer home broadband landline service that exceeds 1Gbps. Both commercial and gaming PCs are expecting network speed to exceed 1Gbps. To this end, IEEE announced new IEEE 802.3bz standards (2.5Gbps/5Gbps) at the end of 2017. In 2018, Realtek released the world's first 2.5Gbps Ethernet Single Chip, designed it, with ultra-low power and compact size advantages, into PC 2.5Gbps products in the second half of 2018, and continued the R&D of a second generation product. In communications network market, the demand for Low Power Ethernet PHYceiver for IP CAM/PON continued to reach record highs. New applications, such as LED public display, also contributed to 2018 revenues. Furthermore, as solid-state drive (SSD) prices continued to fall, people were replacing their traditional hard drives with SSDs. In time for this transition, Realtek developed a USB 3.1 to PCIE 3.0 Bridge for external SSD storage.

The Ethernet Switch market can be categorized into three main areas: Dumb Switches, Smart Switches, and High-end Managed Switches. Over many years of development, Realtek became a leading supplier of Dumb Switches. Smart Switches were originally dominated by a handful of foreign brands, but in recent years Realtek quickly made inroads both domestically and internationally by introducing low power, high-efficiency, high-quality products. Realtek currently is a mainstream supplier of Smart Switches. Now that the ultra-high-speed High-end Managed Switch market is maturing, Realtek is turning its attention towards the next stage of expanded product coverage by releasing the mG+4*10G Managed Switch to fulfill 5-speed mG/10G needs as part of a push for new products to expand market share.

China is home to the world's largest market for optical fiber, and growth in other regions is well in sight. Over the past two years, Realtek has endeavored with success to build a strong market share in China while expanding in other areas. The most sought-after new market specifications are xGPON products with greater bandwidth. For example, towards the end of 2018 Chinese telecom operators began to prepare tenders and conduct field tests for 10G PON HGU. Cortina Access, a Realtek affiliate, is in an excellent position to fulfill these market needs.

Increasing numbers of car makers in Europe, the United States, China, Japan, South Korea and other countries are turning to Automotive Ethernet for in-vehicle networking. Many automobile manufacturers and their tier one suppliers are using Automotive Ethernet PHY and switches to connect in-vehicle safety sensors, 360-degree camera systems, infotainment head units, and dashboard panels. Realtek released the IEEE 802.3bw 100BASE-T1 Single Port Transceiver (PHY) RTL9000 and the Multi Port Switch RTL9047A. Both not only met AEC Q100 Grade 1 (-40C~125C) specifications, but also led the market in supporting the Open Alliance's TC10 Sleep & Wake Up protocol – a must-have feature in this age of energy-efficient automobiles with its support of remote ECU wake-up at a power consumption of mere 35uA. This set of products has been certified by many car makers, adopted by tier one suppliers, and starting shipment. Looking ahead to 2022/2023 automobile needs, Realtek will release second-generation Automotive Ethernet products, including a Dual Mode 100/1000BASE-T1 PHY and Switch.

UHD and HDR contents on streaming media like Netflix and YouTube are gaining popularity. This and the constant promotion by Amazon, Google, and Roku of inexpensive Over the Top (OTT) boxes are fueling demand for affordable OTT boxes. Google is pushing its Android TV platform to major telecom operators as a way of steering the closed telecom market to an open IP ecosystem. It enables telecom operators to offer hybrid STB and IPTV boxes that play online video. As the market quickly matures and products offer more capabilities at lower prices, Realtek is responding with a new generation of UHD Multimedia Controllers. Besides the new generation of HDR technologies, they support the latest Codecs such as AV1 and AVS2, and the enhanced content protection required by telecom operators. Improved SoC and system security, including software and hardware reference designs that are cost competitive and low power consumption, further help customers to develop high efficiency OTT boxes to take advantage of this key market. Realtek Multimedia Controllers that combine in-house multimedia and network solutions will have an advantage that is difficult to emulate.

For Wi-Fi controllers, in 2018 PC OEM customers significantly increased usage of 11ac, thereby resulting in high market penetration. Realtek observed the same strength in its 11ac shipment in 2018 in both 11ac 1T1R and 2T2R, making them the bestselling PC Wi-Fi modules. With the arrival of the new generation of 11ax standards, major manufacturers one by one are expected to release new products in 2019. In addition to the traditional PC market, Realtek's Wi-Fi solutions are advancing into many other products, such as printers and smart TVs. Along with Wi-Fi, another wireless transmission gaining popularity is Bluetooth. The latest Bluetooth standards have found their way into printing, positioning, and voice remote control. This added option gives end users greater convenience and capabilities when using copiers, smart TVs, and other devices. Meanwhile, as the tablet computer market matures and the screen size of smart phones increases, the high growth of Wi-Fi in tablets is not expected to return. Nevertheless, Realtek continues to cooperate with SoC makers to offer high value Wi-Fi solutions for white label goods.

For Wireless Access Point and Router products, 11ac continued to replace 11n. In 2018, more global brands and telecom operators adopted Realtek's highly integrated, high performance 802.11ac solutions for Dual Band Router. Deliveries continued to rise. Realtek's Dual Band Mesh Router solutions have been creating new market demand and growth opportunities due to their superb cost-performance value proposition. For high-end markets, Realtek is well positioned to offer a full portfolio of solutions with mass production readiness of the highly integrated 4-antenna 802.11ac Dual Band products and the development of a new generation of 802.11ax routers.

The Internet of Things (IoT) market continued to grow in 2018 as visibility and acceptance of IoT products heightened. According to an IDC market report, by 2020 there will be 28 billion IoT products worldwide. It is the next big business opportunity post smartphones. Realtek benefits from having the industry's most comprehensive IoT silicon solutions with high integration, low energy, and multifunction microchips. Each year, Realtek pours tremendous resources into developing new IoT chips that fulfill customers' pricing and specification needs. Realtek directly cooperates with the organizations and companies that are leading the IoT revolution, including the makers of Apple HomeKit, Google Home, and Amazon Alexa, as well as the Open Connectivity Foundation (OCF) and ARM Mbed, to provide customers with a complete development tool kit. Control over IoT products is advancing from smartphone apps to combining artificial intelligence (AI) with voice and image recognition. Realtek is the world leader in releasing the first Ultra Low Energy Wireless IoT Single Chip to feature image and voice functions in anticipation of the explosive potential of the market.

Bluetooth has become a standard component in virtually all mobile phones, and its market penetration into television OTT boxes is expanding. This gives rise to the use of Bluetooth in peripheral products, including earphones, wearable devices, and voice-controlled remote controls. Bluetooth Low Energy 5 (BLE5) combined with Mesh networks may be the final piece of the IoT puzzle. Bluetooth peripheral products, whether for mobile phones, TV boxes, or IoT products, have excellent development potential. For over 10 years, Realtek has developed Bluetooth applications that fulfill various market needs, including Transceiver Controllers, Bluetooth Low Energy SoC, and Bluetooth Voice SoC. Among them, the BLE series uses Bluetooth voice to conduct cloud-

based searches required by TVs and OTT remote controllers. This solution is widely praised by popular domestic and foreign brands for the improved user experience. In the future, Realtek will continue to develop remote control technology that aids the transition from infrared remote controller to the more convenient Bluetooth remote controller. Cloud-based music streaming services continue to gain popularity while mobile phone makers are removing the 3.5 mm headphone jacks, creating the need for a Bluetooth-based True Wireless Stereo Headset. In 2018, Realtek entered into this emerging market with a low energy, wide coverage, high compatibility Bluetooth 5.0 Voice single chip that was adopted by leading international brands. As Bluetooth headphones replace wired headphones, Realtek is helping manufacturers accelerate the transition as part of an ongoing commitment to release new products that fit market needs. The ambition is to become the leading solutions provider in the Bluetooth audio industry. Working with other supply chain members and brands, Realtek will expand the influence of this market and empower market growth.

Computer Peripheral Products:

In 2018, Realtek continued to deepen her development of the PC market by offering a High-Definition Audio Codec and a High-Definition, High-Efficiency, Class-D Smart Amplifier that turns PCs into a complete media center. It cooperated with electronic gaming manufacturers to finish new systems and peripheral products that provide an immersive sound experience for gamers. For voice assistants, Realtek released a third-generation microphone algorithm that led in obtaining Skype for Business 3.0 and Microsoft Cortana 3.1 certification, and was selected by customers as a solution for Amazon Alexa, whereby a user may enjoy convenient voice controls at work or in daily life. Meanwhile, as some phones eliminate the 3.5 mm headphone jack, the market for USB Type-C to analog converter emerges. Realtek released USB chips to take advantage of this opportunity. They have already become the audio solutions of choice for several gaming and commercial headphone manufacturers.

In the consumer electronics audio chip market, Realtek uses low power design technology to improve system efficiency and extend battery life. It developed a highly integrated Audio Codec with Class-D Amplifier with Built-in Adaptive Boost, Equalizer and Speaker Protection, which help customers reduce external components, thus reducing the motherboard area. Recently, in the consumer electronics product and video game console market, the comprehensive audio solutions by Realtek have provided not only a new high capacity low power Audio Codec and Audio Amplifier, but also a Programmable Audio DSP. These received excellent ratings from major domestic and international manufacturers. In 2018, Realtek released pre- and post-processing solutions for microphones to provide end users with a higher quality voice and sound experience. For USB-C audio headphones and adaptors, in 2018 and 2019 Realtek continued to release a series of high-efficiency, low power USB Audio Codecs. Our goal is to cooperate with leading mobile phone makers.

For laptop and desktop computers, Realtek released integrated card readers with PCI Express and USB 3.0 Interfaces to read both memory cards and smart cards. It is a pioneer in devices that support the latest high-speed UHS-II memory cards and Intel's newest energy-saving products.

Besides keeping the leadership position in market share, Realtek wants to create new product applications and value for customers.

Demand for USB 3.0 is growing as more products that support it are released. Numerous manufacturers use Realtek's 4-Port USB 3.0 hubs. Shipments increase month by month. Realtek is leading the industry in the release of USB 3.1 hubs, many of which are already being used by manufacturers on new platforms. USB 3.1 hubs offer faster transmission with lower power consumption. They integrate USB Type-C functions to provide customers with the option of designing higher-spec, more refined products. In the future, Realtek will integrate existing technologies and product lines and release updated hubs with greater functionality in order to expand market share and provide more diverse product lines.

With the introduction of USB Type-C, Realtek simultaneously released a series of compatible controllers that were the first highly integrated devices for Type-C. These reduce overall design costs and refine product features. Manufacturers have already begun using them in a wide range of applications. Realtek will continue to develop products with improved specifications to provide customers with a wider range of product designs.

Embedded USB Camera Controllers benefit from more people looking to biometrics as a replacement for traditional password input methods. Since 2015, the Windows 10 operating system has included Windows Hello Face Authentication. This application requires a front-facing camera that supports near-infrared and records image quality that meets the ever-evolving standards of Microsoft's facial recognition algorithms. In 2018, Microsoft released V4.0 of its facial recognition software, which requires support for face detection auto exposure algorithms. Realtek's camera controllers support RGB and IR sensors as well as a complete series of HD/FHD ISP products with RGB/IR hybrid sensors and 2x2/4x4 Color Filter Array. Over the past four years, Realtek has been at the forefront in obtaining Microsoft certification. Support from PC OEMs has helped it achieve a high market share in the camera controller field.

In response to security and video surveillance industry needs, since 2016 Realtek has released a series of Highly Integrated IP Camera single chips. These chips, with multi-function image signal processors, can support the CMOS sensors of major manufacturers and satisfy customers' broad range of video needs. The integrated audio and network functions offer a network camera single chip solution with a high cost-performance ratio. Currently Realtek has successfully penetrated into many consumer and smart home IP camera brand makers in Taiwan and China, making it a major supplier of IP Camera single chips.

Multimedia Products:

The market for LCD monitors remains steady. New opportunities are concentrated on devices offering high resolution, high refresh rates, superb video color, and the latest external display interfaces. Professional displays with ultra high resolution and image quality, such as WFHD, QHD, WQHD, and UHD, high-quality displays that support HDR or WCG, and specialized displays that use high refresh rates to improve the gaming experience are focal points of this competitive market.

Realtek continues to offer related solutions, and the response from customers has been highly positive. For Notebook and Desktop applications, Realtek offers a DisplayPort to VGA Video Translator that has been widely adopted by tier-one and tier-two brands. Many devices such as notebook computers, mobile phones, and the Apple iPad Pro now use USB Type-C for transferring video, data, and power. This raises demand for Type-C peripheral products. Realtek led the release of Integrated LCD Monitor Controllers with the USB Type-C Interface, and various video interface translators such as USB Type-C to VGA and USB Type-C to HDMI, as well as highly integrated DisplayPort video hub ICs. Customers have responded positively to these products.

Fierce competition among suppliers of LCD TV Controllers in recent years has led key suppliers to gradually downsize, merge, or leave the market. Realtek, however, continues to develop new products, including Smart Connected LCD TV Controller Chips that support UHD (resolution of 3,840 x 2,160), LCD TV Controller Chips that support UHD 60 Hz/120 Hz Frame Rate Conversion, as well as a new generation of Integrated 4K Smart LCD TV Controllers that support HDR. With the Tokyo Olympics to be broadcast in 8K, Realtek will provide customers with competitive 8K television solutions.

(2) Industrial Upstream, Midstream and Downstream Relationships

The IC manufacturing industry can be divided into upstream IC design and design services companies, midstream IC chip manufacturers, and downstream IC packaging and testing suppliers. IC design firms typically engage in design and sale of their own products or commissioned designs for other firms. Within the supply chain, they are knowledge intensive. Before the final product is completed, however, photo mask tooling, wafer fabrication, and product packaging and testing are needed. Generally, design firms contract external manufacturers to support these production and manufacturing processes.

3. R&D Development

(1) R&D Expenditures in the Past Two Years

Unit: NT\$1,000

Year	Revenues	R&D Expenditure	Ratio (%)
2017	41,688,021	11,444,977	27.45
2018	45,805,746	12,969,972	28.32

(2) Products Successfully Developing In the Past Year

Communications Network Products:

- USB3.0 2.5GBASE-T Ethernet Single Chip Controller for Gaming
- PCI Express 2.5GBASE-T Ethernet Single Chip Controller for Gaming
- 2.5GBASE-T Ethernet Phyceiver
- PCI Express Ultra High Speed 1GBase-X Ethernet Fiber Controller

- USB3.0 1GBASE-T Ethernet Single Chip Controller for Gaming
- PCI Express 1GBASE-T Programmable Ethernet Single Chip Controller
- PCI Express 1GBASE-T Ethernet Single Chip Controller for Gaming
- Automotive Ethernet 100BASE-T1 PHY
- Automotive Ethernet 100BASE-T1 Switch
- Automotive Ethernet 1000BASE-T1 PHY
- Automotive Ethernet 1000BASE-T1 Switch
- UHD HDR Multimedia SoC
- 802.11b/g/n 2T2R low power Wi-Fi Single-Chip Controller with PCI Express/USB 2.0/SDIO 3.0 Interface
- 802.11a/b/g/n/ac 1T1R Wi-Fi and Bluetooth 2.1+EDR/3.0+HS/ 4.1/4.2 LE Single-Chip Controller with PCI Express/USB 2.0/SDIO 2.0 Interface
- 802.11a/b/g/n/ac 1T1R Wi-Fi and Bluetooth 2.1+EDR/3.0+HS/ 4.1 LE Single-Chip Controller with PCI Express/USB 2.0/SDIO 3.0 Interface
- 802.11a/b/g/n/ac 2T2R Wi-Fi and Bluetooth 2.1+EDR/3.0+HS/ 4.2/5.0 LE Single-Chip Controller with PCI Express/USB 2.0/SDIO 3.0 Interface
- 802.11a/b/g/n/ac 2T2R Wi-Fi Single-Chip Controller with PCI Express/USB 2.0 Interface
- 802.11a/b/g/n/ac 4T4R Wi-Fi Single-Chip Controller with PCI Express/USB 3.0 Interface
- Integrated Wi-Fi with MCU SoC
- Integrated Wi-Fi, Bluetooth with MCU Multi-Functional SoC
- 802.11ac Dual Band Access Point/Router SoC
- Bluetooth 5 Dual Mode Transceiver Controller
- Bluetooth Low Energy 5 SoC
- Bluetooth 5 Stereo Audio SoC
- GNSS Multi-Satellite Dual Mode Receiver
- Octal-Port 1CBASE-T Ethernet Transceiver
- 24-Port 1GBASE-T + 4-Port 10GBASE-T Ethernet Managed Switch Controller
- 48-Port 1GBASE-T + 6-Port 10GBASE-T Ethernet Managed Switch Controller
- Single Chip GPON Gateway Controller
- Single Chip 10GPON Gateway Controller
- Laser Driver Chip

Computer Peripheral Products:

- HD-A 4-Channel Audio Codec with High Voltage Class-D Amplifier Supporting Speaker Protection
- USB 2.0 Low Power Audio Codec with Hardware Equalizer
- Mini DSP (Digital Signal Processor) for Voice Input Processing
- Mobile Device Single Chip with Audio CODEC and Power Amplifier
- Mobile Device Audio CODEC with DSP
- Low power USB Audio CODEC
- High Definition, High Efficiency Class-D Audio Amplifier with Equalizer and Speaker

Protection for Handheld or Mobile Device

- High Definition, High Efficiency Class-D Audio Amplifier with Multiple Equalizer and Dynamic Range Control for TV, Soundbar, and Sound System
- SoundWire Interface High Definition Class-D Audio Amplifier with Built-in Audio Digital Signal Processing and Multi-coil Speaker Driving Capability for Mobile Device and PC
- Card Reader Controller with USB 2.0 Interface, Supporting SD 3.0
- Card Reader Controller with USB 3.0 Interface, Supporting Intel NB Power Saving Specification
- Card Reader Controller with PCI-E Interface, Supporting SD 4.0)
- 4-Port USB 3.0 Hub Controller
- 4-Port USB 3.1 Gen 2 Hub Controller
- Type C Controller
- Embedded USB2.0 & USB3.0 High Definition Image Signal Process Chip
- Embedded USB2.0 Enabling Windows Hello Face Authentication Image Signal Process Chip
- Highly integrated IP Camera SoC

Multimedia Products:

- Full Series of Ultra-low Power Consumption Integrated High Resolution 5K3K/ 4K2K/QHD LCD Controllers with HDR, DP 1.4, HDMI 2.0, and HDCP 2.2
- DisplayPort to LVDS Video Translator
- DisplayPort to VGA Video Translator
- DisplayPort to HDMI 2.0 Video Translator
- USB Type-C to HDMI 2.0/VGA Video Translator
- DisplayPort MST Hub Controller
- High-end Integrated LCD TV Controller Chip
- High-end Multimedia Digital/Analog LCD TV Controller Chip
- High-end 3D Smart LCD TV Controller Chip
- High-end Connected Digital/Analog LCD TV Controller Chip
- High-end UHD Smart Connected Digital/Analog LCD TV controller Chip
- High-end UHD HDR Smart Connected Digital/Analog LCD TV Controller Chip
- High-end UHD HDR 60Hz/120Hz FRC Smart Connected Digital/Analog LCD TV Controller Chip
- High-end UHD HDR 60Hz/120Hz FRC and New Generation 3D Surround Sound Smart Connected LCD TV controller Chip

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

(1) Short-Term Business Development Plan

- i. Continue to use the Company's innovation framework to lower chip capital costs, in order to ensure competitive prices and raise profit margins.
- ii. Maintain existing market share while expanding the overall market by releasing new products and offering diverse sales combinations and distribution strategies.
- iii. Take the needs of key customers into account when assisting them in the integration of product logistical support systems and providing best sales and marketing services to win customers' trust and meet customer's needs.
- iv. Participate in international exhibitions and product evaluation conferences to raise the exposure of new products and demonstrate product quality.

(2) Long-Term Business Development Plan

- i. Participate in formulating and promoting international standards to acquire related product and technical information in advance, thus accelerating Time-to-Market. Participating in the evaluation and selection of the test platforms for the standard organizations to make Realtek an industry benchmark in interoperability testing.
- ii. For products with a high market share, stabilize the market share and quality of products while building a global service and technology network. For products with relatively low market share, actively develop new customers and expand new markets and sales channels to meet the goal of increasing the overall market share.
- iii. Regularly hold product release events and technical conferences in response to regional market needs. Directly speak with brand owners and discuss their future product needs, thus strengthening client relations.

II. Marketplace and Production Overview

1. Market Analysis

(1) Major Product Sales Regions

Unit: NT\$1,000

Sales Region	2017		2018	
	Sales Amount	Percentage	Sales Amount	Percentage
Taiwan	20,082,180	48.17%	23,741,926	51.83%
Asia	21,352,444	51.22%	21,762,224	47.51%
Other	253,397	0.61%	301,596	0.66%
Total	41,688,021	100.00%	45,805,746	100.00%

(2) Market Share

Realtek is one of the world's leading IC suppliers. It designs and develops wired and wireless communications network as well as various computer peripheral IC products and multimedia applications. According to IC Insights, among IC design companies it ranked 12th worldwide in terms of revenue in 2018.

(3) Future Market Supply and Demand and Growth Characteristics

Boosted by IoT and cloud services, many electronic goods, home electronics products, and even transportation now have built-in Wi-Fi or Bluetooth. Examples include broadband devices like IP-STB, cable modems, and DSL, as well as consumer electronics products such as video game consoles, Blu-ray players, smart TVs, printers, refrigerators, air conditioners, voice-controlled smart speakers, cloud-based IP cameras, vacuum robots, drones, projectors, consumer and industrial robots, industrial controls, and even automotive with built-in Wi-Fi or Bluetooth. As more equipment is wirelessly connected, and as smart phones and cloud services become more widespread, the next wave of Wi-Fi and Bluetooth growth will come from hybrid applications involving IoT and AI. Furthermore, the increase in wireless connectivity speed will incite the need of heightened landline connectivity speed. AP router, switch, PON, cable modem, NAS, gaming PC, commercial PC will all see gradual upgrades to 2.5Gbps Ethernet.

The IPTV and OTT television box markets will continue to grow and shift towards high end smart products as new trends take shape; a growing market for UHD televisions, wide spread UHD HDR video content, fast-growing demand for high-end 802.11ac 2T2R and 4T4R Wi-Fi, and increased demand for smart home products that integrate voice controls. Demand for OTT television boxes is steering the closed telecom market towards a more open IP ecosystem and boosting demand for IP OTT chips. Realtek will develop highly integrated multimedia controllers with new features and a high cost-performance ratio. By combining with network communication chips, the controllers will offer a total solution that helps customers take advantage of opportunities in this market.

The IP camera is an important IoT element that offers diverse functions by combining remote and mobile access, AI and AI edge computing tools like facial recognition, gesture recognition, and voice recognition, as well as a new generation of H.265 Codec, and 360-degree camera and 3D video techniques. Besides traditional security surveillance, emerging applications with strong potential include AI optical recognition, unmanned stores, delivery and storage systems, and other essential industry 4.0 tools.

The strong development of the gaming industry in recent years has breathed new life into the PC market. Gaming and high-end PCs maintain their growth where high-end audio experience and sense of worth have become the selling points. To this end, Realtek has developed a new generation of audio codec with high voltage (+9V) class-D amplifiers with speaker protection. These integrate embedded adaptive boost circuits with low power designs and cut the size of the motherboard via a reduced rBOM. To satisfy the high audio quality requirements of gaming PCs, e.g., to meet the Hi-Fi audio spec (32bits/384KHz sample rate), Realtek will combine her strength in software and hardware integration in the development of audio technology to provide the best balance between a slim PC and a Hi-Fi audio application. In addition, voice applications are becoming common on the new generation of platforms among global PC brands. It is expected that the demand for intelligent voice wake-up and voice input for PC products will continue to rise. Acting in concert with the certification and promotion of voice technology by Microsoft Cortana and Amazon, Realtek will continue to work on voice recognition and voice wake-up technology to create a good user experience in voice applications, allowing users to enjoy their work or daily life. Realtek will be the best integrated solution provider in voice and audio for the next-generation computer products.

Computer peripheral storage devices are also in a transition stage as the price of SSDs continues to decline, narrowing the price gap with traditional HDDs. Many new NBs in the market now have built-in SSDs, while external hard drives are beginning to convert. To respond to the upcoming market needs, Realtek has introduced a USB 3.1-to-PCIE 3.0 bridge controller specially designed for external SSDs with a PCI Express interface.

New specs and interface technologies, such as 4K2K, USB Type-C, HDMI 2.1, DP 1.4, HDR, WCG, and high-frame-rate gaming, are ushering in growth in the LCD monitor market. Lower overall costs are another key trend. As more notebooks and mobile phones adopt USB Type-C and Thunderbolt 3 interfaces, demand for Realtek's external USB Type-C image translators is expected to increase dramatically.

Sales of LCD televisions are expected to continue to increase in 2019. Key growth comes from Central and South America, North America, China, and Southeast Asia. UHD/HDR TVs and Smart TVs will become mainstream products this year, and 8K televisions will arrive to market in time for the 2020 Tokyo Olympics. Over the long-term, growth in the global LCD television market will continue. Realtek will promote its products in key markets while providing customers with comprehensive solutions.

(4) Competitive Strengths

- i. **Advanced Core Technologies:** Realtek has excellent complementary radio frequency (RF), analog and mixed signal circuit design capacity, IC manufacturing knowledge, systems technology, and intellectual property. These factors contribute to higher product effectiveness and production yield, thus lowering costs.
- ii. **Strong Customer Base:** Realtek's customer base includes leading manufacturers of PCs, motherboards, network hardware, consumer electronics, and multimedia products. By offering high-value, high-capacity products with excellent economic benefits, Realtek endeavors to build long-term partnerships with customers.
- iii. **Excellent Cost-Benefit Returns and Customer-Oriented Products:** Realtek is adept at developing products with high cost-benefit returns. By combining chip and system design, it provides customers with high-value system integration and helps them quickly release new products.
- iv. **Experienced R&D and Management Teams:** Realtek's R&D and management teams have extensive experience in the semiconductor industry. An excellent workplace environment and strong corporate culture attract talented technical and management staff.

(5) Future Advantageous and Disadvantageous Factors

- i. **Advantageous Factors:**
 - (a) Ahead of domestic peers in the release of many communications network, computer peripheral, and multimedia IC products. Competitive prices. Realtek will continue to develop advanced core technologies to help increase product yield and decrease production costs.
 - (b) Realtek maintains good relations with wafer foundries, which promotes a stable supply of raw materials and steady raw material costs.
 - (c) Active client support, including the best sales and marketing services. These factors support a strong customer base.
 - (d) Experienced R&D and management teams with decision-making authority combined with a corporate culture of mutual support attract talented technical staff.
- ii. **Disadvantageous Factors**

Fierce competition in a short product life-cycle market. Failure to quickly release new products would lead to a loss of market share, thereby impacting profits.
- iii. **Countermeasures:**
 - (a) Proactively invest in new product development to timely release new products and gain market share.
 - (b) Proactively improve existing products. Reduce costs or increase product added value by yield improvement and performance enhancement.
 - (c) Offer comprehensive product services or jointly develop new products with customers to foster win-win situations.

2. Main Applications for Major Products and Production Process

(1) Main Applications

- i. Communications Network Products: routers, switches, home gateways, OTT boxes, Wi-Fi applications, smart home appliances, game consoles, security cameras, etc.
- ii. Computer Peripheral Products: Desktop computers, notebook computers, card readers, etc.
- iii. Consumer Electronics Products: GPS, mobile electronic devices, mobile phones, tablet computers, etc.
- iv. Multimedia Products: LCD monitors, multimedia video translators, smart HD TVs, etc.

(2) Production Process

Realtek primarily engages in product design; it commissions wafer foundries to do wafer manufacturing. Finished wafers are tested then sent to an assembly house for packaging. Packaged products then go through final testing.

3. Supply Status of Key Raw Materials

Wafers are Realtek's primary raw materials. Since Realtek always maintains good partnerships with wafer manufacturers, it expects a steady supply of wafers in 2019.

4. Suppliers' Name of purchase equal to or over 10% of the total purchase in any of the last two years

Major suppliers in the last two years

Unit: NT\$ thousands

Item	2017				2018				2019 first Quarter			
	Name	Amount	% of Total Purchase	Relation to the Company	Name	Amount	% of Total Purchase	Relation to the Company	Name	Amount	% of Total Purchase	Relation to the Company
1	A	8,021,381	34		A	10,187,430	42		A	2,805,419	36	
2	B	3,462,385	15		B	1,996,534	8		B	1,039,667	13	
3	C	3,088,160	13		C	1,764,782	7		C	605,872	8	
4	D	3,922,457	17		D	3,929,930	16		D	1,131,296	15	
	Other	5,252,628	21		Other	6,639,162	27		Other	2,219,504	28	
	Total	23,747,011	100		Total	24,517,838	100		Total	7,801,758	100	

There have been few changes in the Company's major suppliers in the last two years.

Major customers in the last two years

Unit: NT\$ thousands

Item	2017				2018				2019 first Quarter			
	Name	Amount	% of Total Operating revenue	Relation to the Company	Name	Amount	% of Total Operating revenue	Relation to the Company	Name	Amount	% of Total Operating revenue	Relation to the Company
1	A	9,817,120	24		A	10,575,725	23		B	3,035,909	24	
2	B	9,171,261	22		B	10,505,983	23		A	2,398,190	19	
3	D	7,196,408	17	(note)	D	8,373,071	18	(note)	D	2,391,935	19	(note)
	Other	15,503,232	37		Other	16,350,967	36		Other	5,008,607	38	
	Total Operating revenue	41,688,021	100		Total Operating revenue	45,805,746	100		Total Operating revenue	12,834,641	100	

There have been few changes in the Company's major customers in the last two years.

Note: The chairmen of both companies are second-degree relatives.

5. Production Volume and Value in the Past Two Years

Unit: NT\$ thousands

Quantity & Value Major Product	2017			2018		
	Capacity	Output	Value	Capacity	Output	Value
IC (thousand pieces)	—	1,867,839	23,661,412	—	1,882,786	24,347,438
Total	—	1,867,839	23,661,412	—	1,882,786	24,347,438

6. Sales Volume and Value in the Past Two Years

Unit: NT\$ thousands

Quantity & Value Major Product	2017				2018			
	Domestic		Export		Domestic		Export	
	Quantity	Sales	Quantity	Sales	Quantity	Sales	Quantity	Sales
IC (thousand pieces)	739,832	19,651,557	1,055,677	25,161,248	854,381	23,322,421	1,051,363	26,349,948
Others	—	61,324	—	33,810	—	35,137	—	34,741
Total	739,832	19,712,881	1,055,677	25,195,058	854,381	23,357,558	1,051,363	26,384,689

Note: Sales volume and value as shown above has not deducted sales returns and allowances.

III. Employees

Employee breakdown over the past two calendar years and up until the date of the Report's publication

Year		2017	2018	As of March 31, 2019
Num ber	Research and Development	3,891	4,183	4,207
	Administration and Sales	412	421	428
	Production and Testing	145	156	156
	Total	4,448	4,760	4,791
Average Age		33.52	34.1	34.34
Average Years of Service		6.00	6.28	6.40
Educ ation	Ph.D./Master's	71.04%	71.36%	71.34%
	University/College Degree	26.35%	26.16%	26.22%
	High School/Vocational High School Degree	2.61%	2.48%	2.44%

Note: Data are based on the Company's consolidated statements, including employees of the Company and its subsidiaries.

IV. Environmental Expenses

1. The Company did not incur any losses, penalties or liabilities due to environmental pollution during the previous calendar year or up until the date of the Report's publication.
2. The Company passed ISO 14001 Environmental Management Systems certification on September 22, 2006. It was recertified on December 25, 2014, and passed the latest version of ISO 14001 on August 16, 2017.

V. Labor Relations

1. Summary of the Company's employee benefits, education, training, pension plan and implementation results, as well as labor agreements and measures to uphold employee rights.

(1) Wages and Benefits

- i. Highly competitive wages.
- ii. The Company offers annual raises, year-end bonuses, and Company-wide dividends to reward all employees for operational performance.
- iii. Five-day workweek and flexible office hours.
- iv. The Company's people-oriented management system places a high value on employees while

- providing excellent communication channels and opportunities for promotion.
- v. The Company sets up and subsidizes cafeterias, cafes, and convenience stores to provide diverse food and beverage services at discounted prices.
 - vi. Besides labor and health insurance, the Company offers an employee group insurance plan to bolster employee protections.
 - vii. Free annual health examinations help employees to manage their health. Doctors and nurses offer consultations at the Company's nursing station, and a Company-designed health care card further supports employees' wellbeing.
 - viii. The Company provides well-equipped breastfeeding rooms to support female employees who need to pump milk or breastfeed.
 - ix. The Company offers New Year's bonuses as well as wedding and funeral subsidies.
 - x. The Company offers leisure and recreational facilities based on 10 major themes. Employees use the facilities on weekdays and weekends for fitness, reading, study, games, health management, and other activities.
 - xi. The Reading Room has an abundant collection of books and recorded media that employees can use free of charge.
 - xii. The Employee Assistance Program offers psychological and legal counseling. Professional massage therapists offer stress relieving full-body, neck and shoulder, and foot massages.
 - xiii. The Employee Welfare Committee regularly offers diverse, professional lectures. Various group activities and sporting competitions as well as a wide selection of Realtek special contract stores further enrich workers' lifestyles.
 - xiv. The Employee Welfare Committee provides New Year's and birthday gift vouchers, travel subsidies, and a handsome flexible benefit fund.
 - xv. The Company holds family day events, year-end parties, and other activities.
 - xvi. Employees can conveniently park free-of-charge in the Company parking lots.

(2) Education, Training, and Development

Talent is a key requirement for building intellectual power, blazing competitive new trails, and fostering sustainable operations. The Company's greatest assets in these pursuits are the professionals of various fields who compose its workforce. In order to sustain competitiveness and develop new talent, the Company founded the Realtek Corporate University, which offers classes covering topics such as professional R&D, leadership development, organizational operations, and spontaneous learning. This initiative is part of the comprehensive education and training plans the Company offers to help all employees raise their capabilities to new heights.

i. New Employee Training Camps

Leadership training and camps for new employees focus on teamwork, innovation and vitality to help new team members quickly adapt to the Company's corporate lifestyle and culture.

ii. Professional R&D Training

Each year the Company holds more than 100 education and training courses for new R&D staff to quickly raise their professional capabilities. It invites R&D experts from Taiwan and overseas to share their knowledge and techniques. Employees can also join fully subsidized external training courses.

iii. Management and Leadership Training

Besides providing management training to employees based on their rank and role, the Company fully subsidizes training classes for employees at external institutions.

iv. Self-Study and Development

The Company offers open, diverse study environments and contents. It maintains awareness of employees' learning and development while taking into account their professional needs and lifestyle aspirations. Diversity, timeliness, and convenience are distinguishing features of our planning.

v. Tailored Professional Development Plans

A combination of traditional and on-line classes offers flexible professional development plans tailored to the specific needs of every employee. Raising the R&D capabilities of each individual and team gives the Company a workforce with diverse professional knowledge.

(3) Pension System

The Company established pension plans and created a Supervisory Committee of Labor Retirement Reserve to manage pension payments for regular employees in accordance with the "Labor Standards Act." From 1995, it appropriated labor pension reserve funds each month based on pension actuarial evaluations. From July 1, 2005, it utilized a defined contribution system for employees who are ROC nationals in accordance with the "Labor Pension Act." At least 6% of the worker's monthly wages are paid into his or her Individual Account of Labor Pension at the Bureau of Labor Insurance. Employees receive monthly retirement payments calculated based upon their individual account balance and other factors or claim their pension in a lump-sum payment.

(4) Labor Agreements and Upholding Worker Rights

- i. The Company's intranet offers a forum that gives employees immediate access to management.
- ii. The Company holds worker-employer meetings as a positive mechanism for communication.
- iii. At regular departmental/unit meetings, employees can voice their opinions on problems.
- iv. The Company has a sexual harassment prevention hotline to provide a safe work environment that puts employees' minds at ease.
- v. The Company has an Employee Care and Consultation Center.

2. The Company did not incur any losses due to labor disputes during the past calendar year and up until the date of publication of this Report.

VI. Significant Agreements

Agreement Type	Signatory	Contract Validity	Summary	Limitations
Rental Agreements 2 Items	Hsinchu Science Park Bureau	Sep, 2010~Dec, 2022 Mar, 2014~Dec, 2027	The lessee shall build a factory, warehouse, or laboratory or use the site for storage and delivery, loading and unloading, packaging, or repairs and maintenance.	The site must be used to build a factory, warehouse, or laboratory, or to conduct business-related tasks such as storage and delivery, loading and unloading, packaging, or repairs and maintenance.

Financial Status, Operating Results and Status of Risk Management

I. Financial Status

Unit: NT\$ thousands

Item \ Year	2018	2017	Changes	% of Changes
Current Assets	51,153,278	45,092,540	6,060,738	13.44%
Non-current assets	7,099,036	7,218,373	(119,337)	(1.65)%
Total assets	58,252,314	52,310,913	5,941,401	11.36%
Current liabilities	32,502,254	29,520,661	2,981,593	10.10%
Non-current liabilities	1,103,161	931,140	172,021	18.47%
Total Liabilities	33,605,415	30,451,801	3,153,614	10.36%
Share capital	5,080,955	5,065,062	15,893	0.31%
Capital surplus	3,236,659	3,558,856	(322,197)	(9.05)%
Retained earnings	15,917,714	13,826,043	2,091,671	15.13%
Other equity	401,964	(600,443)	1,002,407	N/A
Non-controlling interest	9,607	9,594	13	0.14%
Total Equity	24,646,899	21,859,112	2,787,787	12.75%

Analysis of Changes equal to or over 20%

Increase in Other equity: Mainly due to increase in Financial statements translation differences of foreign operations.

II. Operational Results

Unit: NT\$ thousands

Item \ Year	2018	2017	Changes	% of Changes
Operating revenue	45,805,746	41,688,021	4,117,725	9.88%
Operating costs	(25,344,876)	(23,784,599)	(1,560,277)	6.56%
Gross profit	20,460,870	17,903,422	2,557,448	14.28%
Operating expenses	(16,696,410)	(14,705,409)	(1,991,001)	13.54%
Other income and expenses-Net	6,298	6,224	74	1.19%
Operating income	3,770,758	3,204,237	566,521	17.68%
Non-operating income and expenses	886,443	422,116	464,327	110.00%
Profit before income tax, net	4,657,201	3,626,353	1,030,848	28.43%
Income tax expense	(306,420)	(234,193)	(72,227)	30.84%
Net income for the year	4,350,781	3,392,160	958,621	28.26%

Analysis of Changes equal to or over 20%

1. Increase in non-operating income and expenses: Mainly due to increase in interest income and decrease in the net currency exchange loss.
2. Increase in profit before income tax, net: Mainly due to increase in operating income and non-operating income.

III. Cash Flow

1. Analysis of the Change in Cash Flow in 2018

Unit: NT\$ thousands

The beginning of Cash Balance (1)	Net Cash Provided by Operating Activities (2)	Net Cash Used in Investing and Financing Activities (3)	The end of Cash Balance (1)+(2)-(3)	Remedy for Cash Shortage	
				Investment plan	Financial leverage plan
9,594,356	8,193,750	13,478,455	4,309,651	—	—

Analysis of the Change in Cash Flow:

- (1) Operating activities: Net cash inflow is mainly due to operating profits.
- (2) Investing activities: Net cash outflow is mainly due to increase in financial assets at amortized cost.
- (3) Financing activities: Net cash outflow is mainly due to distribution of cash dividend and decrease in short-term borrowings.

2. Cash Flow Projection for Next Year: Not applicable.

IV. Impact on Financial and Business associated with Major Capital Expenditures in recent years: None.

V. Investment Policies in recent years, the reasons for losses and plans to improve for next year:

Our investment policies are based on strategic investments. The investment losses from equity method in 2018 was approximately NT\$43,307 thousand. We will continuously focus on strategic investment and prudently evaluate investment plans in the future.

VI. Risk Management

1. The effect upon the profits (or losses) of interest and exchange rate fluctuations and changes in the inflation rate, and response measures to be taken in the future.

Our exposure to interest rate risks arises from time deposits or short-term loans with floating rates, which is not significant and normally incurred to support our operating activities. The Realtek Group is a multinational group in the Electronics industry. Currently, the majority of our revenues are denominated in USD. Our operating expenses are incurred in several currencies, primarily in USD, NTD, and RMB. After offsetting assets and liabilities between the same currency, the natural hedge is used to reduce the foreign exchange risk. Inflation risk does not have a significant impact on the results of our operating activities.

2. The policy regarding high-risk investments, highly leveraged investments, loans to other parties, endorsements and guarantees, and derivatives transactions, the main reasons for the profits/losses generated thereby, and response measures to be taken in the future:

The Realtek Group adopts a conservative investment policy and doesn't engage in high-risk investments or highly leveraged investments.

The Realtek Group has formulated its procedures for Loaning Funds to Others, Procedures for Endorsements and Guarantees, and Procedures for Financial Derivatives Transactions in compliance with these Regulations. These procedures are aimed at improving operational performance and reducing financial risk.

3. Future R&D plans and expected R&D spending:

We will continuously research in chips regarding the area of communication networks, computer peripherals and multimedia. In addition, we will actively recruit outstanding R&D talents and invest in the best R&D resources and develop key technologies or obtain necessary licensed technology. The expected R&D spending for next year will be approximately NT\$14.6 billion.

4. Impact on finance and business associated with changes in domestic and foreign regulations and laws, and corresponding reactions: None.

5. Impact on finance and business associated with new technology and industry changes, and corresponding reactions:

We pay attention to the trend of future technology at all times. At present, we not only devote to timely launch new products but also continuously enhance product functions and technical specifications in line with market trends and customer needs in order to strength our competitiveness and increase our market shares .

6. Impact on Company's crisis management associated with changes in corporate image, and corresponding reactions:

Our corporate culture is “self-confidence and trust in people”. Integrity is the central core of our corporate culture. We will keep in a good standing of image according to our corporate culture.

7. Risks and expected benefits associated with mergers and acquisitions, and corresponding reactions: None.
8. Risks and expected benefits associated with facility expansion, and corresponding reactions: None.
9. Risks associated with Purchase and sales Concentration and corresponding reactions:
The Company’s raw material is wafer. We have maintained a good cooperated-relationship with foundries. As for the purchase, we have not concentrated on a single foundry. The wafer supply is sufficient and stable. Moreover, we also have not concentrated on a single customer and the collection period is implemented in accordance with company policies and there is no abnormal situation.
10. Impact and risks to the Company associated with significant transfer of shares by the Company’s Directors, Supervisors, and major Shareholders who own 10% or more of the Company’s outstanding shares, and corresponding reactions: None.
11. Impact to the Company associated with change in management, and corresponding reactions: None.
12. Litigious and non-litigious matters:
The Company, Directors, Supervisors, President, responsible Person, major Shareholders who own 10% or more of the Company’s total outstanding shares, and affiliated companies are not involved in final and un-appealable judgments or significant litigious and non-litigious proceedings or administrative disputes.
13. Disclosure of Information Security Risks
In order to ensure stable operations, the Company built a series of security systems for its internet and data center servers and implemented corresponding operating procedures. Regular inspections ensure effectiveness. Despite these measures, ongoing expansion and evolution of security threats combined with more advanced cyberattacks make it impossible to guarantee that all online attack or hacks can be thwarted. When the Company’s internal systems or data center servers are attacked or infected with a virus, malware, or ransomware, cybercriminals can destroy important data, steal information, disrupt networks and applications, hijack computers, or encrypt data to hold it for ransom. Consequences can be severe. Delayed or disrupted orders can lead to compensation claims from customers. Expensive repairs or system upgrades may be necessary. The Company could even face major legal responsibility or fines for failing to protect the information of its customers or third parties. In 2018, the Company did not detect any major attack on its networks and did not have any information security incidents that could affect operations, nor has it been implicated in any information security related legal case.

VII. Other Material Events: None.

1.2. Basic information of the Affiliated Companies

Unit: dollars / Dec. 31, 2018

Company Name	Date of Incorporation	Place of Registration	Paid-in Capital	Main Business Activities
Leading Enterprises Limited	1998.04	British Virgin Islands	US\$498,430,000	Investment holdings
Amber Universal Inc.	1998.10	British Virgin Islands	US\$154,412,000	Investment holdings
Circon Universal Inc.	2002.01	Mauritius	US\$64,800,000	Investment holdings
Empsonic Enterprises Inc.	2002.06	Mauritius	US\$28,250,000	Investment holdings
Bluoccean Inc.	2016.02	Cayman Islands	US\$110,050,000	Investment holdings
Talent Eagle Enterprise Inc.	2016.02	Cayman Islands	US\$114,100,000	Investment holdings
Realsun Investments Co., Ltd	1998.06	Taiwan	NT\$280,000,000	Investment holdings
Hung-wei Venture Capital Co., Ltd	1999.12	Taiwan	NT\$250,000,000	Investment holdings
Realking Investments Limited	2000.04	Taiwan	NT\$293,929,850	Investment holdings
Realsun Technology Corporation	2004.12	Taiwan	NT\$5,000,000	ICs, manufacturing, design, research, development, sales, and marketing
Bobitag Inc.	2012.12	Taiwan	NT\$28,783,650	Manufacture and installation of computer equipment and wholesale, retail and related service of electronic materials and information/software
Cortina Systems Taiwan Limited.	2015.04	Taiwan	NT\$211,300,000	R&D and technical support
Realtek Semiconductor (Japan) Corp.	2001.12	Japan	JY¥20,000,000	ICs design, sales and consultancy
Realtek Semiconductor (HK) Limited	1999.09	Hong Kong	HK\$1,500,000	Information services and technical support
Realtek Semiconductor (ShenZhen) Co., Ltd.	2004.07	China	US\$5,000,000	R&D and technical support
Cortina Network Systems (Shanghai) Co., Ltd.	2015.04	China	US\$1,650,000	R&D and technical support
Reasil Microelectronics Corporation	2001.12	China	US\$28,000,000	R&D and technical support
Ray/MX Microelectronics Corporation	2018.12	China	RMB26,250,000	ICs manufacturing, design, research, development, sales, and marketing
Realtek Investment Singapore Private Limited	2016.08	Singapore	US\$200,000,000	Investment holdings
Realtek Singapore Private Limited	2013.10	Singapore	US\$89,856,425	ICs manufacturing, design, research, development, sales, and marketing
Cortina Access, Inc.	2015.04	United States	US\$13,148,179.73	R&D and information services
Ubilinx Technology Inc.	2016.08	United States	US\$26,000,000	R&D and information services
Realtek Viet Nam Co., Ltd	2018.09	Vietnam	USD1,000,000	R&D and technical support

1.3. The shareholders in common of the Affiliates presumed to have a relationship of control and subordination: None.

1.4. The industries covered by the business operated by the affiliates overall

Company Name	Main Business Activities	Division of Work Among the Affiliates
Leading Enterprises Limited	Investment holdings	Not applicable
Amber Universal Inc.	Investment holdings	Not applicable
Circon Universal Inc.	Investment holdings	Not applicable
Empsonic Enterprises Inc.	Investment holdings	Not applicable
Bluocean Inc.	Investment holdings	Not applicable
Talent Eagle Enterprise Inc.	Investment holdings	Not applicable
Realsun Investments Co., Ltd	Investment holdings	Not applicable
Hung-wei Venture Capital Co., Ltd	Investment holdings	Not applicable
Realking Investments Limited	Investment holdings	Not applicable
Realsun Technology Corporation	ICs manufacturing, design, research, development, sales, and marketing	Not applicable
Bobitag Inc.	Manufacture and installation of computer equipment and wholesale, retail and related service of electronic materials and information/software	Not applicable
Cortina Systems Taiwan Limited.	R&D and technical support	Provide research and development and technical services
Realtek Semiconductor (Japan) Corp.	ICs design, sales and consultancy	Provide sales and technical services
Realtek Semiconductor (HK) Limited	Information services and technical support	Not applicable
Realtek Semiconductor (Shen Zhen) Co., Ltd	R&D and technical support	Provide research and development and technical services
Cortina Network Systems(Shanghai) Co., Ltd.	R&D and technical support	Provide research and development and technical services
Reasil Microelectronics Corporation	R&D and technical support	Provide research and development and technical services
RayMX Microelectronics Corporation	ICs manufacturing, design, research, development, sales, and marketing	Not applicable
Realtek Investment Singapore Private Limited	Investment holdings	Not applicable
Realtek Singapore Private Limited	ICs manufacturing, design, research, development, sales, and marketing	Not applicable
Cortina Access, Inc.	R&D and information services	Provide consultancy and services
Ubilinx Technology Inc.	R&D and information services	Provide consultancy and services
Realtek Viet Nam Co., Ltd.	R&D and technical support	Provide research and development and technical services

1.5. Directors, Supervisors, and Presidents of the Affiliates

Unit: shares/NT\$ thousands, %

Company Name	Title (note 1)	Name	Shareholding (note 2)	
			Shares/ Investment Amount	% of Investment Holding
Leading Enterprises Limited	Director	Realtek Semiconductor Corp. (Representative: Yeh, Po-Len)	39,130	100%
Amber Universal Inc.	Director	Realtek Semiconductor Corp. (Representative: Yeh, Po-Len)	41,432	100%
Bluocean Inc.	Director	Realtek Semiconductor Corp. (Representative: Yeh, Nan-Horng)	110,050,000	100%
Talent Eagle Enterprise Inc.	Director	Realtek Semiconductor Corp. (Representative: Yeh, Nan-Horng)	114,100,000	100%
Realsun Investments Co., Ltd	Chairman and President	Realtek Semiconductor Corp. (Representative: Huang, Yee-Wei)	28,000,000	100%
	Director	Realtek Semiconductor Corp. (Representative: Huang, Yung-Fang)	28,000,000	100%
	Director	Realtek Semiconductor Corp. (Representative: Chern, Kuo-Jong)	28,000,000	100%
	Supervisor	Realtek Semiconductor Corp. (Representative: Ching, Ting-Chi)	28,000,000	100%
	Chairman	Realtek Semiconductor Corp. (Representative: Yeh, Po-Len)	25,000,000	100%
	Director and President	Realtek Semiconductor Corp. (Representative: Chiu, Sun-Chien)	25,000,000	100%
	Director	Realtek Semiconductor Corp. (Representative: Huang, Yung-Fang)	25,000,000	100%
	Supervisor	Realtek Semiconductor Corp. (Representative: Ching, Ting-Chi)	25,000,000	100%
Realking Investments Limited	Chairman	Realtek Semiconductor Corp. (Representative: Yeh, Po-Len)	29,392,985	100%
	Director and President	Realtek Semiconductor Corp. (Representative: Chiu, Sun-Chien)	29,392,985	100%
	Director	Realtek Semiconductor Corp. (Representative: Huang, Yung-Fang)	29,392,985	100%
	Supervisor	Realtek Semiconductor Corp. (Representative: Ching, Ting-Chi)	29,392,985	100%

Company Name	Title (note 1)	Name	Shareholding (note 2)	
			Shares/ Investment Amount	% of Investment Holding
Realsun Technology Corporation	Chairman	Realtek Semiconductor Corp. (Representative: Yeh, Po-Len)	500,000	100%
	Director	Realtek Semiconductor Corp. (Representative: Chiu, Sun-Chien)	500,000	100%
	Director	Realtek Semiconductor Corp. (Representative: Huang, Yung-Fang)	500,000	100%
	Supervisor	Realtek Semiconductor Corp. (Representative: Chern, Kuo-Jong)	500,000	100%
Cirron Universal Inc.	Director	Leading Enterprises Limited (Representative: Yeh, Po-Len)	64,800,000	100%
Realtek Semiconductor (Japan) Corp.	Director and President	Cheng, Shu-Chien	-	-
	Director	Chiu, Sun-Chien	-	-
	Director	Tung Nien-Tsu	-	-
	Supervisor	Ching, Ting-Chi	-	-
Empsonic Enterprises Inc.	Chairman	Realtek Singapore Private Limited (Representative: Huang, Yung-Fang)	2,825,000	100%
	Director	Realtek Singapore Private Limited (Representative: Yen, Kuang-Yu)	2,825,000	100%
	Director	Realtek Singapore Private Limited (Representative: Lin, Tsung-Ming)	2,825,000	100%
Realtek Semiconductor (HK) Limited	Director	Amber Universal Inc. (Representative: Yeh, Po-Len)	HK\$1,500,000	100%
	Director	Lin, Ying-Hsi	-	-
Realtek Semiconductor (ShenZhen) Co., Ltd	Director and President	Chern, Kuo-Jong	-	-
	Director	Ching, Ting-Chi	-	-
Ubilinx Technology Inc.	Director	Chen, Chin	-	-
	Director	Lin, Yung-Chieh	-	-
Reasil Microelectronics Corporation	Chairman	Yeh, Nan-Horng	-	-
	Director and President	Yeh, Ta-Hsun	-	-
	Director	Chiou, Mhu-Hsiu	-	-
	Supervisor	Chern, Kuo-Jong	-	-

Company Name	Title (note 1)	Name	Shareholding (note 2)	
			Shares/ Investment Amount	% of Investment Holding
Bobitag Inc.	Chairman and President	Realtek Semiconductor Corp. (Representative: Ching, Ting-Chi)	1,918,910	66.67%
	Director	Realtek Semiconductor Corp. (Representative: Lin, Yung-Chieh)	1,918,910	66.67%
	Director	Realtek Semiconductor Corp. (Representative: Chan, Te-Chuan)	1,918,910	66.67%
	Supervisor	Guo, Yu-zhi	0	0
Realtek Singapore Private Limited	Chairman	Huang, Yung-Fang	-	-
	Director and President	Yen, Kuang-Yu	-	-
	Director	Lin, Tsung-Ming	-	-
	Chairman	Huang, Yung-Fang	-	-
Realtek Investment Singapore Private Limited	Director and President	Yen, Kuang-Yu	-	-
	Director	Chang, Jr-Neng	-	-
	Director	Huang, Yung-Fang	-	-
	Director	Yen, Kuang-Yu	-	-
Cortina Access, Inc.	Director	ZEINEDDINE CHAIR	-	-
	Director	ZEINEDDINE CHAIR	-	-
	Supervisor	Ke, Chieh-Yuan	-	-
	Chairman	Realtek Singapore Private Limited (Representative: Huang, Yung-Fang)	21,130,000	100%
Cortina Network Systems (Shanghai) Co., Ltd.	Director	Realtek Singapore Private Limited (Representative: Yen, Kuang-Yu)	21,130,000	100%
	Director	Realtek Singapore Private Limited (Representative: Hsiao, Wang-Mien)	21,130,000	100%
	Supervisor	Realtek Singapore Private Limited (Representative: Lin, Yung-Chieh)	21,130,000	100%
	Supervisor	Realtek Singapore Private Limited (Representative: Lin, Yung-Chieh)	21,130,000	100%

Company Name	Title (note 1)	Name	Shareholding (note 2)	
			Shares/ Investment Amount	% of Investment Holding
Realtek Viet Nam Co., Ltd.	Director	SOH WEI KWEK	-	-
	Director	NGUYEN PHUOC VINH THANG	-	-
RayMX Microelectronics Corporation	Chairman	Tsai, Jon-Jinn	-	-
	Director and President	Zhu, Ying-hui	-	-
	Director	Su, Chu-Ting	-	-
	Director	Chen, Chih-tung	-	-
	Director	Chien, Chih-Ching	-	-
	Supervisor	Wu, Wen-Bin	-	-
	Supervisor	Lin, Yung-Chieh	-	-
	Supervisor	Liu, Shuan-Ta	-	-

Note 1: If the affiliates are foreign companies, list the same positions as domestic.

Note 2: The shares are the total of shareholdings directly or indirectly held; if the affiliates do not issue shares, the shareholdings are presented by the investment amount.

Note 3: The above information up to March 31, 2019

1.6. Operation Highlights of the Affiliates

Unit: NT\$ thousands

Company	Paid in Capital	Assets	Liabilities	Equity	Operating revenue	Operation Income	Net Income for the year (After Taxes)	EPS (After Taxes)
Leading Enterprises Limited	15,318,249	11,750,512	847,009	10,903,503	0	(89,752)	564,881	-
Amber Universal Inc.	4,837,812	3,195,092	0	3,195,092	0	(12,234)	80,419	-
Bluocean Inc.	3,382,167	6,500,226	3,059,594	3,440,632	0	(14,329)	88,525	-
Talent Eagle Enterprise Inc.	3,506,635	4,565,521	1,649,158	2,916,363	0	(5,336)	(299,912)	-
Hung-wei Venture Capital Co., Ltd	250,000	375,097	919	374,178	0	(3,095)	6,315	0.25
Realsun Investments Co., Ltd	280,000	438,051	141	437,910	0	(101)	6,793	0.24
Realking Investments Limited	293,930	348,767	46	348,721	0	(60)	(11,775)	(0.4)
Realsun Technology Corporation	5,000	5,563	0	5,563	0	(0)	46	0.09
Realtek Semiconductor (Japan) Corp.	5,568	10,912	8,537	2,375	57,354	(377)	281	-
Circon Universal Inc.	1,991,498	8,315	0	8,315	0	0	58	-
Empsonic Enterprises Inc.	868,207	1,407,954	0	1,407,954	0	0	145,372	-
Reasil Microelectronics Corporation	860,524	1,674,626	271,589	1,403,037	1,399,038	79,917	151,804	-
Ubilinx Technology, Inc	799,058	53,321	29,783	23,538	0	(382,565)	(382,396)	-
Realtek Semiconductor (HK) Limited	5,886	1,201	0	1,201	0	(24)	(24)	-
Realtek Semiconductor (ShenZhen) Co., Ltd.	153,665	282,280	41,381	240,899	273,093	4,264	18,565	-
Bobitag Inc.	28,784	28,921	100	28,821	0	(3)	37	0.01
Realtek Singapore Private Limited	3,742,409	12,932,338	4,171,226	8,761,112	11,513,911	2,586,618	3,392,035	-
Realtek Investment Singapore Private Limited	6,146,600	6,427,012	0	6,427,012	0	(206)	166,254	-
Cortina Access, Inc.	1,255,320	750,968	28,957	722,011	216,550	13,967	23,566	-
Cortina Network Systems (Shanghai) Co., Ltd.	56,051	171,482	10,011	161,471	107,944	4,152	9,073	-
Cortina Systems Taiwan Limited.	211,300	77,712	6,564	71,148	71,878	4,069	7,005	0.33
Realtek Viet Nam Co., Ltd	30,733	29,164	23	29,141	0	(1,930)	(1,000)	-
RayMX Microelectronics Corporation	117,501	216,478	100,086	116,392	0	(1,130)	(1,130)	(0.098)

2. Affiliated Entities Consolidated Financial Statements:

The entities included in the consolidated financial statements are the same as the entities pursuant to the financial accounting standards to be included in the consolidated financial statements of the Parent Company. Therefore, please refer to consolidated financial reports for consolidated financial statement of affiliated entities.

II. Significant events with impact on shareholders' rights or stock price regulated in Article 36-3-2 of the Securities and Exchange Act happened during last year to the date of the annual report printed: None

III. Acquisition or disposal of Realtek shares by subsidiaries during last year to the date of the annual report printed: None

IV. Issuance of private placement securities: None

V. Other Necessary Supplements: None

Financial Information

I. Condensed balance sheet and Statement of Comprehensive Income, independent auditor's name and audit opinion in the recent five years

1. Condensed Balance Sheet

1.1. Condensed Consolidated Balance Sheet

Unit: NT\$ thousands

Item	Year	2014	2015	2016	2017	2018
	Current assets		33,397,151	37,556,687	47,956,677	45,092,540	51,153,278
Property, plant and equipment		3,368,689	3,380,051	3,192,717	3,162,949	3,316,578
Intangible assets		1,470,394	2,819,814	2,244,532	2,078,355	1,686,249
other non-current assets		86,686	83,591	41,074	41,021	50,169
Total assets		41,074,578	46,947,448	55,519,808	52,310,913	58,252,314
Current liabilities	Before distribution	17,801,035	23,748,641	31,816,328	29,520,661	32,502,254
	After distribution	20,830,743	25,768,446	34,180,149	32,135,601	—
Non-current liabilities		1,167,387	908,926	878,708	931,140	1,103,161
Total liabilities	Before distribution	18,968,422	24,657,567	32,695,036	30,451,801	33,605,415
	After distribution	21,998,130	26,677,372	35,058,857	33,066,741	—
Equity attributable to owners of the parent company		22,096,405	22,280,256	22,815,185	21,849,518	24,637,292
Share capital		5,049,513	5,049,513	5,049,513	5,065,062	5,080,955
Capital surplus		4,405,169	4,405,169	3,910,428	3,558,856	3,236,659
Retained earnings	Before distribution	11,549,571	10,947,862	12,453,695	13,826,043	15,917,714
	After distribution	8,519,863	9,433,008	10,433,890	11,211,304	—
Other equity interest		1,092,152	1,877,712	1,401,549	(600,443)	401,964
Treasury shares		—	—	—	—	—
Non-controlling interest		9,751	9,625	9,587	9,594	9,607
Total Equity	Before distribution	22,106,156	22,289,881	22,824,772	21,859,112	24,646,899
	After distribution	19,076,448	20,270,076	20,460,951	19,244,373	—

Note: 1. The above annual financial statements are audited by independent auditors.

2. The financial statements since 2013 are prepared in accordance with IFRSs (International Financial Reporting Standards).

3. 2018 Distribution is not approved by the Shareholders' Meeting.

1.2. Condensed Balance Sheet – Parent Company

Unit: NT\$ thousands

Item	Year	2014	2015	2016	2017	2018
	Current assets		8,983,086	20,627,261	16,506,277	12,587,447	13,962,708
Property, plant and equipment		2,736,934	2,753,834	2,700,331	2,679,455	2,863,756
Intangible assets		1,357,450	1,733,839	1,604,684	1,495,547	1,160,549
Other non-current assets		13,708	25,082	6,356	6,456	14,444
Total assets		37,297,250	43,968,669	47,739,038	50,512,739	53,992,856
Current liabilities	Before distribution	15,054,847	21,616,457	24,550,306	28,199,217	28,733,410
	After distribution	18,084,555	23,636,262	26,914,127	30,814,157	—
Non-current liabilities		145,998	71,956	373,547	464,004	622,154
Total liabilities	Before distribution	15,200,845	21,688,413	24,923,853	28,663,221	29,355,564
	After distribution	18,230,553	23,708,218	27,287,674	31,278,161	—
Share capital		5,049,513	5,049,513	5,049,513	5,065,062	5,080,955
Capital surplus		4,405,169	4,405,169	3,910,428	3,558,856	3,236,659
Retained earnings	Before distribution	11,549,571	10,947,862	12,453,695	13,826,043	15,917,714
	After distribution	8,519,863	9,433,008	10,433,890	11,211,304	—
Other equity interest		1,092,152	1,877,712	1,401,549	(600,443)	401,964
Treasury shares		—	—	—	—	—
Total Equity	Before distribution	22,096,405	22,280,256	22,815,185	21,849,518	24,637,292
	After distribution	19,066,697	20,260,451	20,451,364	19,234,779	—

Note: 1. The above annual financial statements are audited by independent auditors.

2. The financial statements since 2013 are prepared in accordance with IFRSs (International Financial Reporting Standards).

3. 2018 Distribution is not approved by the Shareholders' Meeting.

2. Condensed Statement of Comprehensive Income

2.1. Condensed Consolidated Statement of Comprehensive Income

Unit: NT\$ thousands

Item	Year				
	2014	2015	2016	2017	2018
Operating revenue	31,263,298	31,745,809	38,914,031	41,688,021	45,805,746
Gross Profit (Loss)	13,651,861	13,590,365	16,896,737	17,903,422	20,460,870
Operating income	2,817,465	1,820,105	3,342,764	3,204,237	3,770,758
Non-operating income and expenses	1,468,677	802,629	(7,378)	422,116	886,443
Net income before income tax, net	4,286,142	2,622,734	3,335,386	3,626,353	4,657,201
Income From Operations of Continued Segments	3,892,351	2,427,873	3,039,837	3,392,160	4,350,781
Income (Loss) From Operations of Discontinued Segments	—	—	—	—	—
Net income for the year	3,892,351	2,427,873	3,039,837	3,392,160	4,350,781
Total Comprehensive income for the year	5,108,841	3,213,433	2,563,674	1,390,168	5,054,264
Net Profit Attributable to: Owner of the Company	3,892,502	2,427,999	3,039,875	3,392,153	4,350,768
Net Profit Attributable to: Non-controlling interests	(151)	(126)	(38)	7	13
Total Comprehensive Income Attributable to: Owner of the Company	5,108,992	3,213,559	2,563,712	1,390,161	5,054,251
Total Comprehensive Income (Loss) Attributable to: Non-controlling interests	(151)	(126)	(38)	7	13
Earnings per share	7.71	4.81	6.02	6.71	8.57

Note: 1. The above annual financial statements are audited by independent auditors.

2. The financial statements since 2013 are prepared in accordance with IFRSs (International Financial Reporting Standards).

3. 2018 Distribution is not approved by the Shareholders' Meeting.

2.2. Condensed Statement of Comprehensive Income – Parent Company

Unit: NT\$ thousands

Item	Year				
	2014	2015	2016	2017	2018
Operating revenue	25,349,422	23,610,259	29,705,075	30,043,540	32,194,291
Gross Profit (Loss)	10,533,237	9,566,255	12,395,345	12,168,244	13,288,095
Operating income	2,213,310	677,151	1,599,195	898,802	699,986
Non-operating income and expenses	2,020,011	1,960,848	1,720,680	2,703,351	3,938,782
Net income before income tax	4,233,321	2,637,999	3,319,875	3,602,153	4,638,768
Income From Operations of Continued Segments	3,892,502	2,427,999	3,039,875	3,392,153	4,350,768
Net Income for the year	3,892,502	2,427,999	3,039,875	3,392,153	4,350,768
Other comprehensive income (Loss), net	1,216,490	785,560	(476,163)	(2,001,992)	703,483
Total Comprehensive income for the year	5,108,992	3,213,559	2,563,712	1,390,161	5,054,251
Earnings per share	7.71	4.81	6.02	6.71	8.57

Note: 1. The above annual financial statements are audited by independent auditors.

2. The financial statements since 2013 are prepared in accordance with IFRSs (International Financial Reporting Standards).

3. 2018 Distribution is not approved by the Shareholders' Meeting.

3. Name of Auditors and Issued Opinions in the recent five years

Year	Name of Auditors (CPA)	Auditors Opinion
2014	Li, Tien-Yi & Tsang, Kwok-Wah	Modified Unqualified Opinion
2015	Li, Tien-Yi & Tsang, Kwok-Wah	Modified Unqualified Opinion
2016	Li, Tien-Yi & Tsang, Kwok-Wah	Unqualified Opinions
2017	Hsueh, Seou-Hung & Li, Tien-Yi	Unqualified Opinions
2018	Hsueh, Seou-Hung & Li, Tien-Yi	Unqualified Opinions

II. Financial Analysis in the Recent Five Years

1. Consolidated Financial Analysis

Item		Year	2014	2015	2016	2017	2018
Capital Structure	Debt ratio (%)		46.18	52.52	58.88	58.21	57.68
	Long-term fund to Property, plant and equipment (%)		656.22	659.45	714.90	691.09	743.14
Liquidity	Current ratio (%)		187.61	158.14	150.72	152.74	157.38
	Quick ratio (%)		151.63	137.67	133.65	132.98	138.43
	Times interest earned (Times)		49.64	23.43	23.01	24.77	34.63
Operating Performance	Average collection turnover (Times)		5.95	5.71	6.49	6.35	6.32
	Average collection days		62	64	56	57	58
	Inventory turnover (times)		4.54	4.37	5.05	4.29	3.98
	Payment turnover (times)		4.29	3.98	4.93	4.83	4.64
	Average inventory turnover days		81	84	72	85	92
	Fixed assets turnover (times)		9.76	9.4	11.84	13.11	14.13
	Property, plant and equipment turnover (times)		0.83	0.72	0.75	0.77	0.82
Profitability	Return on total assets (%)		10.56	5.77	6.2	6.56	8.1
	Return on stockholders' equity (%)		18.69	10.93	13.47	15.18	18.71
	Profit before tax to paid-in capital (%)		84.88	51.94	66.05	71.59	91.65
	Profit after tax to net sales (%)		12.45	7.64	7.81	8.13	9.49
	Earnings per share (NT\$)		7.71	4.81	6.02	6.71	8.57
Cash Flow	Cash flow ratio (%)		33.09	13.58	16.42	12.73	25.20
	Cash flow adequacy ratio (%)		126.34	133.08	121.3	100	111.55
	Cash flow reinvestment ratio (%)		12.62	0.76	11.78	4.58	17.53
Leverage	Operating leverage		4.74	7.55	4.93	5.51	5.31
	Financial leverage		1.03	1.07	1.04	1.05	1.03
Analysis of Changes equal to or over 20% in the recent two years:							
Increase in Times interest earned: Mainly due to increase in net income.							
Increase in profitability: Mainly due to increase in net income.							
Increase in cash flow ratio and reinvestment ratio: Mainly due to increase in cash flow provided by operating activities.							

Note: The financial statements since 2013 are prepared in accordance with IFRSs (International Financial Reporting Standards).

2. Financial Analysis-Parent Company

Item		Year				
		2014	2015	2016	2017	2018
Capital Structure	Debt ratio (%)	40.75	49.32	52.2	56.74	54.36
	Long-term fund to Property, plant and equipment (%)	807.34	809.06	844.9	815.44	860.31
Liquidity	Current ratio (%)	59.66	95.42	67.23	44.63	48.59
	Quick ratio (%)	37.08	81.6	53.11	28.10	33.81
	Times interest earned (Times)	86.3	28.35	27.96	25.72	34.55
Operating Performance	Average collection turnover (Times)	6.01	5.59	6.94	6.00	5.66
	Average collection days	61	66	52	60	64
	Inventory turnover (times)	4.46	3.95	5.15	4.22	3.92
	Payment turnover (times)	4.25	3.71	5.11	4.67	4.60
	Average inventory turnover days	82	93	70	86	93
	Fixed assets turnover (times)	9.92	8.59	10.89	11.16	11.61
	Property, plant and equipment turnover (times)	0.75	0.58	0.64	0.61	0.61
Profitability	Return on total assets (%)	11.70	6.2	6.87	7.18	8.57
	Return on stockholders' equity (%)	18.70	10.94	13.48	15.18	18.71
	Profit before tax to paid-in capital (%)	83.83	52.24	65.74	71.11	91.29
	Profit after tax to net sales (%)	15.35	10.28	10.23	11.29	13.51
	Earnings per share (NT\$) 7.71	7.71	4.81	6.02	6.71	8.57
Cash Flow	Cash flow ratio (%)	38.43	1.62	15.64	6.99	16.13
	Cash flow adequacy ratio (%)	151.09	129.80	103.78	71.41	74.81
	Cash flow reinvestment ratio (%)	12.84	-10.44	6.79	-2.09	6.10
Leverage	Operating leverage	4.75	14.68	10.52	13.72	19.19
	Financial leverage	1.02	1.17	1.08	1.19	1.25
Analysis of Changes equal to or over 20% in the recent two years: Increase in quick ratio: Mainly due to increase in the Current assets. Increase in Times interest earned: Mainly due to increase in net income. Increase in profitability: Mainly due to increase in net income. Increase in cash flow ratio and reinvestment ratio: Mainly due to increase in cash flow provided by operating activities. Increase in Operating leverage: Mainly due to increase in operating revenue.						

Glossary:

1. Capital Structure Analysis:

(1). Debt ratio = Total liabilities / Total assets

(2). Long-term fund to property, plant and equipment ratio = (Shareholders' equity + non-current liabilities) / Net property, plant and equipment

2. Liquidity Analysis:

(1). Current ratio = Current assets / Current liabilities

(2). Quick ratio = (Current assets – inventories – prepaid expenses) / Current liabilities

(3). Times interest earned = Earnings before interest and taxes / Interest expenses

3. Operating Performance Analysis:

- (1). Average collection turnover = Net sales / Average trade receivables
- (2). Days sales outstanding = 365 / Average collection turnover
- (3). Average inventory turnover = Operating costs / Average inventory
- (4). Average payment turnover = operating costs / Average trade payables
- (5). Average inventory turnover days = 365 / Average inventory turnover
- (6). Property, plant and equipment turnover = Net sales / Average property, plant and equipment
- (7). Total assets turnover = Net sales / total assets

4. Profitability Analysis:

- (1). Return on total assets = [Net income + Interest expenses x (1 – tax rate)] / Average total assets
- (2). Return on equity attributable to shareholders of the parent = Net income attributable to shareholders of the parent / Average equity attributable to shareholders of the parent
- (3). Net margin = Net income / Net sales
- (4). Earnings per share = (Net income attributable to shareholders of the parent – preferred stock dividend) / Weighted average number of shares outstanding

5. Cash Flow:

- (1). Cash flow ratio = Net cash provided by operating activities / Current Liabilities
- (2). Cash flow adequacy ratio = Five-year sum of cash from operations / Five-year sum of capital expenditures, inventory additions, and cash dividend
- (3). Cash flow reinvestment ratio = (Cash provided by operating activities – cash dividends) / (Gross property, plant and equipment + long-term investments + other noncurrent assets + working capital)

6. Leverage:

- (1). Operating leverage = (Net sales – variable cost) / Operating income
- (2). Financial leverage = Operating income / (Operating income – interest expenses)

III. Has the company or its affiliates experienced financial difficulties in the most recent years up to the date of publication of the 2018 annual report: None.

IV. Audit Committee's Review Report

Audit Committee's Review Report

The Company's 2018 business report, financial statements and distribution of retained earnings have been prepared by the Board of Directors. The financial statements also have been audited by Pricewaterhouse Coopers' with the opinion that they present fairly the Company's financial position, operating performance, and cash flows. The Audit Committee has reviewed the business report, financial statements, and distribution of retained earnings, and found no irregularities. We hereby according to Securities and Exchange Act and Company Act submit this report.

To 2019 Annual Shareholders' Meeting.

Realtek Semiconductor Corp.

Chairman of the Audit Committee: Ou Yang, Wen-Han

March 21, 2019

V. Consolidated Financial Statements

REPORT OF INDEPENDENT ACCOUNTANTS TRANSLATED FROM CHINESE

PWCR18000297

To the Board of Directors and Shareholders of Realtek Semiconductor Corporation

Opinion

We have audited the accompanying consolidated balance sheets of Realtek Semiconductor Corporation and its subsidiaries (the “Group”) as at December 31, 2018 and 2017, and the related consolidated statements of comprehensive income, of changes in equity and of cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, based on our audits and the reports of other independent accountants (please refer to the *Other matters* section of our report), the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 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, International Accounting Standards, IFRIC Interpretations, and SIC Interpretations as endorsed by the Financial Supervisory Commission.

Basis for opinion

We conducted our audits in accordance with the “Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants” and generally accepted auditing standards in the Republic of China (“ROC GAAS”). Our responsibilities under those standards are further described in the Independent Accountant’s Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the Code of Professional Ethics for Certified Public Accountants in the Republic of China (the “Code”), and we have fulfilled our other ethical responsibilities in accordance with the Code. Based on our audits and the report of the other independent accountants, we believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

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

Evaluation of inventories

Description

Refer to Note 4(14) of the consolidated financial statements for inventory evaluation policies, Note 5(2) for uncertainty of accounting estimates and assumptions of inventory evaluation and Note 6(6) for the details of inventories.

The Group is primarily engaged in researching, developing, manufacturing, selling of various integrated circuits and related application software. Inventories are stated at the lower of cost and net realizable value. Due to the balances of inventories are significant to the financial statements and the rapid technological changes in the industry, there is a higher risk of decline in market value and obsolescence of inventories. Thus, we considered the evaluation of inventories as one of the key audit matters.

How our audit addressed the matter

We performed the following key audit procedures in respect of the above key audit matter:

1. Obtained an understanding of accounting policies on the provision of allowance for inventory valuation losses and assessed the reasonableness and the consistency with comparative period(s).
2. Validated the accuracy of inventory aging report, as well as sampled and confirmed the consistency of quantities and amounts with detailed inventory listing, verified dates of movements with supporting documents and ensured the proper categorization of inventory aging report.
3. Evaluated and confirmed the reasonableness of net realizable value for inventories through validating respective supporting documents.

Audit of cash in banks

Description

Refer to Note 4(6) of the consolidated financial statements for accounting policies and Note 6(1) for the details of cash and cash equivalents.

The amount of the Group's cash and cash equivalents is significant to the consolidated financial statements, and the nature and usage of those cash and cash equivalents varies. The cash in banks are deposited with various domestic and foreign financial institutions and have high inherent risk. It is also subject to judgement as to whether certain deposits fulfill the criteria of short-term, highly liquid investments which are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. Thus, audit of cash in bank was considered as one of the key audit matters.

How our audit addressed the matter

We performed the following key audit procedures in respect of the above key audit matter:

1. Obtained detailed listings of cash in banks. Sent confirmation letters to all financial institutions and reviewed special terms and agreements in order to ensure the existence and rights and obligations of cash in banks.
2. Obtained an understanding of procedures for preparation and review of bank reconciliations, including validating unusual reconciling items.
3. Performed physical count of petty cash and time deposits, including validating whether time deposits fulfill the criteria of short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.
4. Sampled and validated significant cash transactions from bank accounts frequently used, including obtaining an understanding of the purposes of those bank accounts and vouching related supporting documents.

Other matter – Reference to audits of other independent accountants

We did not audit the financial statements of certain consolidated subsidiaries and investments accounted for using the equity method. Those financial statements were audited by other independent accountants, whose reports thereon have been furnished to us, and our opinion expressed herein, insofar as it relates to the amounts included in the financial statements and the information on the consolidated subsidiaries and investments accounted for using the equity method were based solely on the reports of other independent accountants. Total assets of those consolidated subsidiaries amounted to NT\$6,207,867 thousand and NT\$6,689,960 thousand, constituting 10.66% and 12.79% of the consolidated total assets as of December 31, 2018 and 2017, respectively, and total operating revenues of NT\$0 thousand and NT\$0 thousand, both constituting 0% of the consolidated total operating

revenues for the years then ended. Furthermore, according to the reports of other independent accountants, comprehensive losses of those investments accounted for under the equity method amounted to NT\$41,330 thousand and NT\$41,729 thousand, respectively, and balances of these investments as of December 31, 2018 and 2017 amounted to NT\$261,628 thousand and NT\$281,002 thousand, respectively.

Other matter – Parent company only financial reports

We have audited and expressed an unqualified opinion on the parent company only financial statements of Realtek Semiconductor Corporation as at and for the years ended December 31, 2018 and 2017.

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 International Financial Reporting Standards, International Accounting Standards, IFRIC Interpretations, and SIC Interpretations as endorsed by the Financial Supervisory Commission, 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 Group’s ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance, including the Audit Committee, are responsible for overseeing the Group’s financial reporting process.

Independent accountant’s responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements

as a whole are free from material misstatement, whether due to fraud or error, and to issue a 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 ROC GAAS 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 ROC GAAS, we exercise professional judgement 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 Group'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 Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our 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 report. However, future events or conditions may cause the Group 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 appropriate audit evidence regarding the financial information of the entities or

business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our 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.

Hsueh, Seou-Hung

Li, Tien-Yi

For and on behalf PricewaterhouseCoopers, Taiwan

March 21, 2019

The accompanying consolidated financial statements are not intended to present the financial position and results of operations and cash flows in accordance with accounting principles generally accepted in countries and jurisdictions other than the Republic of China. The standards, procedures and practices in the Republic of China governing the audit of such financial statements may differ from those generally accepted in countries and jurisdictions other than the Republic of China. Accordingly, the accompanying consolidated financial statements and report of independent accountants are not intended for use by those who are not informed about the accounting principles or auditing standards generally accepted in the Republic of China, and their applications in practice.

As the financial statements are the responsibility of the management, PricewaterhouseCoopers cannot accept any liability for the use of, or reliance on, the English translation or for any errors or misunderstandings that may derive from the translation.

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 2018 AND 2017
(Expressed in thousands of New Taiwan dollars)

Assets	Notes	December 31, 2018		December 31, 2017		
		AMOUNT	%	AMOUNT	%	
Current assets						
1100	Cash and cash equivalents	6(1)	\$ 4,309,651	7	\$ 9,594,356	18
1110	Financial assets at fair value	6(2)				
	through profit or loss - current		1,321,103	2	675,891	1
1136	Financial assets at amortised cost -	6(4) and 8				
	current		31,286,209	54	-	-
1147	Investment in debt instruments	12(4)				
	without active market - current		-	-	24,370,143	47
1170	Accounts receivable, net	6(5)	5,647,722	10	3,087,958	6
1180	Accounts receivable, net - related	6(5) and 7				
	parties		1,772,071	3	1,094,853	2
1200	Other receivables		657,190	1	435,109	1
130X	Inventories, net	6(6)	5,862,005	10	5,468,167	10
1410	Prepayments		297,327	1	269,909	1
1470	Other current assets		-	-	96,154	-
11XX	Total current assets		<u>51,153,278</u>	<u>88</u>	<u>45,092,540</u>	<u>86</u>
Non-current assets						
1517	Financial assets at fair value	6(3)				
	through other comprehensive					
	income - non-current		1,651,072	3	-	-
1523	Available-for-sale financial assets	12(4)				
	- non-current		-	-	717,745	1
1543	Financial assets carried at cost -	12(4)				
	non-current		-	-	811,496	2
1550	Investments accounted for under	6(7)				
	the equity method		261,628	-	281,002	1
1600	Property, plant and equipment, net	6(8)	3,316,578	6	3,162,949	6
1760	Real estate investment, net	6(9)	54,868	-	60,254	-
1780	Intangible assets	6(10)	1,686,249	3	2,078,355	4
1840	Deferred income tax assets	6(26)	78,472	-	65,551	-
1900	Other non-current assets	6(11)	50,169	-	41,021	-
15XX	Total non-current assets		<u>7,099,036</u>	<u>12</u>	<u>7,218,373</u>	<u>14</u>
1XXX	Total assets		<u>\$ 58,252,314</u>	<u>100</u>	<u>\$ 52,310,913</u>	<u>100</u>

(Continued)

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 2018 AND 2017
(Expressed in thousands of New Taiwan dollars)

Liabilities and Equity	Notes	December 31, 2018		December 31, 2017		
		AMOUNT	%	AMOUNT	%	
Current liabilities						
2100	Short-term borrowings	6(12)	\$ 14,526,311	25	\$ 18,052,624	34
2130	Contract liabilities - current	6(20)	148,696	-	-	-
2150	Notes payable		8,657	-	8,631	-
2170	Accounts payable		5,635,986	10	4,577,341	9
2180	Accounts payable - related parties	7	249,869	1	291,755	-
2200	Other payables	6(13)	7,542,208	13	6,094,786	12
2220	Other payables - related parties	7	69,047	-	39,924	-
2230	Current income tax liabilities		601,614	1	342,557	1
2300	Other current liabilities	6(20)	3,719,866	6	113,043	-
21XX	Total current liabilities		<u>32,502,254</u>	<u>56</u>	<u>29,520,661</u>	<u>56</u>
Non-current liabilities						
2550	Provisions - non-current	6(15)	999,868	2	901,430	2
2570	Deferred income tax liabilities		22,310	-	21,749	-
2600	Other non-current liabilities	6(14)	80,983	-	7,961	-
25XX	Total non-current liabilities		<u>1,103,161</u>	<u>2</u>	<u>931,140</u>	<u>2</u>
2XXX	Total liabilities		<u>33,605,415</u>	<u>58</u>	<u>30,451,801</u>	<u>58</u>
Equity						
Share capital						
3110	Common shares	6(16)	5,080,955	9	5,065,062	10
Capital surplus						
3200	Capital surplus	6(17)	3,236,659	5	3,558,856	7
Retained earnings						
3310	Legal reserve	6(18)	4,467,099	8	4,127,884	8
3320	Special reserve		600,443	1	-	-
3350	Undistributed earnings		10,850,172	19	9,698,159	19
Other equity						
3400	Other equity interest	6(19)	401,964	-	(600,443)	(2)
31XX	Equity attributable to owners					
	of the parent company		<u>24,637,292</u>	<u>42</u>	<u>21,849,518</u>	<u>42</u>
36XX	Non-controlling interest		<u>9,607</u>	<u>-</u>	<u>9,594</u>	<u>-</u>
3XXX	Total equity		<u>24,646,899</u>	<u>42</u>	<u>21,859,112</u>	<u>42</u>
3X2X	Total liabilities and equity		<u>\$ 58,252,314</u>	<u>100</u>	<u>\$ 52,310,913</u>	<u>100</u>

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

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(Expressed in thousands of New Taiwan dollars, except earnings per share amounts)

Items	Notes	2018		2017		
		AMOUNT	%	AMOUNT	%	
4000	Operating revenue	6(20) and 7	\$ 45,805,746	100	\$ 41,688,021	100
5000	Operating costs	6(6) and 7	(25,344,876)	(55)	(23,784,599)	(57)
5950	Gross profit		20,460,870	45	17,903,422	43
	Operating expenses	6(24)(25) and 7				
6100	Selling expenses		(2,464,470)	(6)	(2,142,029)	(5)
6200	General and administrative expenses		(1,263,689)	(3)	(1,118,403)	(3)
6300	Research and development expenses		(12,969,972)	(28)	(11,444,977)	(27)
6450	Expected credit gains	12(2)	1,721	-	-	-
6000	Total operating expenses		(16,696,410)	(37)	(14,705,409)	(35)
6500	Other income and expenses - net	6(9)	6,298	-	6,224	-
6900	Operating income		3,770,758	8	3,204,237	8
	Non-operating income and expenses					
7010	Other income	6(21)	1,128,673	2	869,141	2
7020	Other gains and losses	6(22)	(58,536)	-	(251,337)	(1)
7050	Finance costs	6(23)	(140,387)	-	(154,769)	-
7060	Share of profit of associates and joint ventures accounted for under equity method	6(7)	(43,307)	-	(40,919)	-
7000	Total non-operating income and expenses		886,443	2	422,116	1
7900	Profit before income tax, net		4,657,201	10	3,626,353	9
7950	Income tax expense	6(26)	(306,420)	(1)	(234,193)	(1)
8200	Net income for the year		\$ 4,350,781	9	\$ 3,392,160	8

(Continued)

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(Expressed in thousands of New Taiwan dollars, except earnings per share amounts)

Items	Notes	2018		2017	
		AMOUNT	%	AMOUNT	%
Other comprehensive income, net	6(19)				
Components of other comprehensive income that will not be reclassified to profit or loss					
8311 Losses on remeasurements of defined benefit plans		(\$ 75,809)	-	\$ -	-
8316 Unrealised losses from investments in equity instruments measured at fair value through other comprehensive income		(165,659)	-	-	-
8320 Share of other comprehensive income of associates and joint ventures accounted for using equity method, components of other comprehensive income that will not be reclassified to profit or loss		1,977	-	-	-
8310 Components of other comprehensive income that will not be reclassified to profit or loss		(239,491)	-	-	-
Components of other comprehensive income that will be reclassified to profit or loss					
8361 Cumulative translation differences of foreign operation		942,974	2	(2,111,302)	(5)
8362 Unrealised gain on valuation of available-for-sale financial assets		-	-	110,120	-
8370 Share of other comprehensive income of associates and joint ventures accounted for using equity method, components of other comprehensive income that will be reclassified to profit or loss		-	-	(810)	-
8360 Total components of other comprehensive income that will be reclassified to profit or loss		942,974	2	(2,001,992)	(5)
8300 Other comprehensive income (loss), net		\$ 703,483	2	(\$ 2,001,992)	(5)
8500 Total comprehensive income for the year		\$ 5,054,264	11	\$ 1,390,168	3
Profit attributable to:					
8610 Equity holders of the parent company		\$ 4,350,768	9	\$ 3,392,153	8
8620 Non-controlling interest		13	-	7	-
Profit for the year		\$ 4,350,781	9	\$ 3,392,160	8
Total comprehensive income:					
8710 Equity holders of the parent company		\$ 5,054,251	11	\$ 1,390,161	3
8720 Non-controlling interest		13	-	7	-
Total comprehensive income for the year		\$ 5,054,264	11	\$ 1,390,168	3
Earnings per share (in dollars)					
9750 Basic earnings per share	6(27)	\$ 8.57		\$ 6.71	
9850 Diluted earnings per share	6(27)	\$ 8.40		\$ 6.57	

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

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(Expressed in thousands of New Taiwan dollars, except as otherwise indicated)

Notes	Share capital - common stock	Capital surplus	Equity attributable to owners of the parent				Other equity interest			Non-controlling interest	Total equity	
			Legal reserve	Special reserve	Undistributed earnings	Financial statements translation differences of foreign operations	Unrealised gains (losses) from financial assets measured at fair value through other comprehensive income	Unrealised gain or loss on available-for-sale financial assets	Total			
2017												
Balance at January 1, 2017	\$ 5,049,513	\$ 3,910,428	\$ 3,823,896	\$ -	\$ 8,629,799	\$ 1,298,139	\$ -	\$ 103,410	\$ 22,815,185	\$ 9,587	\$ 22,824,772	
Net income for the year	-	-	-	-	3,392,153	(2,111,302)	-	-	3,392,153	7	3,392,160	
Other comprehensive income (loss)	-	-	-	-	-	(2,111,302)	-	109,310	(2,001,992)	-	(2,001,992)	
Total comprehensive income	-	-	-	-	3,392,153	(2,111,302)	-	109,310	1,390,161	7	1,390,168	
Distribution of 2016 earnings	-	-	-	-	-	-	-	-	-	-	-	
Legal reserve	-	-	303,988	-	(303,988)	-	-	-	(2,019,805)	-	(2,019,805)	
Cash dividends	-	-	-	-	(2,019,805)	-	-	-	-	-	-	
Employees' compensation transferred to common stock	15,549	145,386	-	-	-	-	-	-	160,935	-	160,935	
Cash dividends from capital surplus	-	(504,951)	-	-	-	-	-	-	(504,951)	-	(504,951)	
Changes in equity of associates accounted for using equity method	-	7,993	-	-	-	-	-	-	7,993	-	7,993	
Balance at December 31, 2017	\$ 5,065,062	\$ 3,538,856	\$ 4,127,884	\$ -	\$ 9,698,159	\$ (813,163)	\$ -	\$ 212,720	\$ 21,849,518	\$ 9,594	\$ 21,859,112	
2018												
Balance at January 1, 2018	\$ 5,065,062	\$ 3,538,856	\$ 4,127,884	\$ -	\$ 9,698,159	\$ (813,163)	\$ -	\$ 212,720	\$ 21,849,518	\$ 9,594	\$ 21,859,112	
Modified retrospective approach adjustment	-	-	-	-	103,142	(813,163)	-	(212,720)	326,257	-	326,257	
Balance at January 1, after adjustments	5,065,062	3,538,856	4,127,884	-	9,801,301	(813,163)	-	-	22,175,775	9,594	22,185,369	
Net income for the year	-	-	-	-	4,350,768	-	-	-	4,350,768	13	4,350,781	
Other comprehensive income (loss)	-	-	-	-	(75,809)	942,974	-	-	(163,682)	-	(163,682)	
Total comprehensive income	-	-	-	-	4,274,959	942,974	-	-	4,211,286	13	4,211,300	
Distribution of 2017 earnings	-	-	-	-	-	-	-	-	-	-	-	
Legal reserve	-	-	339,215	-	(339,215)	-	-	-	-	-	-	
Special reserve	-	-	600,443	-	(600,443)	-	-	-	(2,286,430)	-	(2,286,430)	
Cash dividends	-	-	-	-	(2,286,430)	-	-	-	-	-	-	
Employees' compensation transferred to common stock	15,893	163,692	-	-	-	-	-	-	179,585	-	179,585	
Cash dividends from capital surplus	-	(508,095)	-	-	-	-	-	-	(508,095)	-	(508,095)	
Changes in equity of associates accounted for using equity method	-	22,005	-	-	-	-	-	-	22,005	-	22,005	
Cash dividends returned	-	201	-	-	-	-	-	-	201	-	201	
Balance at December 31, 2018	\$ 5,080,955	\$ 3,236,659	\$ 4,467,099	\$ 600,443	\$ 10,850,172	\$ 129,811	\$ 272,153	\$ -	\$ 24,637,292	\$ 9,607	\$ 24,646,899	

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

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(Expressed in thousands of New Taiwan dollars)

	Notes	2018	2017
<u>CASH FLOWS FROM OPERATING ACTIVITIES</u>			
Profit before tax		\$ 4,657,201	\$ 3,626,353
Adjustments			
Adjustments to reconcile profit (loss)			
Depreciation	6(24)	544,084	493,822
Amortization	6(24)	994,852	1,060,853
Expected credit gains	12(2)	(1,721)	-
Provision for doubtful accounts		-	19,424
Interest expense	6(23)	140,387	154,769
Interest income	6(21)	(989,290)	(722,436)
Dividend income	6(21)	(32,942)	(20,571)
Loss (gain) on financial assets at fair value through profit or loss	6(22)	19,240	(18,142)
Share of loss of associates and joint ventures accounted for using equity method	6(7)	43,307	40,919
Gain on disposal of property, plant and equipment	6(22)	(133)	(12,633)
Gain on disposal of available-for-sale financial assets	6(22)	-	(15,879)
Other intangible assets transferred expenses		7,698	18,203
Changes in operating assets and liabilities			
Changes in operating assets			
Financial assets at fair value through profit or loss - current		(583,466)	(141,600)
Accounts receivable, net		23,602	(41,266)
Accounts receivable, net - related parties		(495,111)	(466,189)
Other receivables, net		(25,846)	(28,412)
Inventories		(349,516)	(1,015,543)
Prepayments		(27,418)	(171,634)
Changes in operating liabilities			
Notes payable		26	3,862
Accounts payable		1,058,645	1,397
Accounts payable - related parties		(41,886)	22,381
Other payables		1,514,253	511,416
Other payables - related parties		29,123	(7,622)
Contract liabilities-current		45,527	-
Provisions-non-current	6(15)	98,438	56,025
Advance receipts		6,203	29,833
Other current liabilities		939,774	(653)
Accrued pension obligations		(2,507)	(3,427)

(Continued)

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(Expressed in thousands of New Taiwan dollars)

	<u>Notes</u>	<u>2018</u>	<u>2017</u>
Cash inflow generated from operations		\$ 7,572,524	\$ 3,373,250
Receipt of interest		793,055	725,848
Interest paid		(138,521)	(152,595)
Income taxes paid		(66,250)	(208,619)
Receipt of dividend		32,942	20,571
Net cash flows from operating activities		<u>8,193,750</u>	<u>3,758,455</u>
<u>CASH FLOWS FROM INVESTING ACTIVITIES</u>			
Proceeds from disposal of available-for-sale financial assets		-	27,188
Acquisition of investments in debt instrument without active market		-	(24,348,243)
Acquisition of amortised cost of a financial asset		(6,946,509)	-
Proceeds from disposal of amortised cost of a financial asset		30,254	-
Proceeds from disposal of held-to-maturity financial assets		-	261,301
Acquisition of financial assets at fair value through comprehensive income		(28,000)	(221,000)
Acquisition of investments accounted for using equity method		-	(6,699)
Proceeds from capital reduction of financial assets at cost		-	6,622
Proceeds from capital reduction of investee accounted for using the equity method	6(7)	-	14,923
Acquisition of property, plant and equipment	6(28)	(629,854)	(476,144)
Proceeds from disposal of property, plant and equipment		276	14,440
Acquisition of intangible assets	6(28)	(592,220)	(937,494)
Increase in refundable deposits		(11,072)	(281)
Decrease in other current assets		-	687,435
Decrease in other non-current assets		1,924	-
Net cash flows used in investing activities		<u>(8,175,201)</u>	<u>(24,977,952)</u>
<u>CASH FLOWS FROM FINANCING ACTIVITIES</u>			
Decrease in short-term borrowings	6(29)	(3,526,313)	(2,398,609)
Guarantee deposits received	6(29)	(278)	(851)
Cash dividends paid		(2,794,525)	(2,524,756)
Cash dividends returned		201	-
Net cash flows used in financing activities		<u>(6,320,915)</u>	<u>(4,924,216)</u>
Effect of exchange rate		1,017,661	(2,136,176)
Net decrease in cash and cash equivalents		(5,284,705)	(28,279,889)
Cash and cash equivalents at beginning of year		9,594,356	37,874,245
Cash and cash equivalents at end of year		<u>\$ 4,309,651</u>	<u>\$ 9,594,356</u>

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

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2018 AND 2017

(EXPRESSED IN THOUSANDS OF NEW TAIWAN DOLLARS, EXCEPT AS OTHERWISE INDICATED)

1. HISTORY AND ORGANISATION

Realtek Semiconductor Corporation (the “Company”) was incorporated as a company limited by shares on October 21, 1987 and commenced commercial operations in March 1988. The Company was based in Hsinchu Science-Based Industrial Park since October 28, 1989. The Company and its subsidiaries (collectively referred herein as the “Group”) are engaged in the research, development, design, testing, and sales of ICs and application softwares for these products.

2. THE DATE OF AUTHORISATION FOR ISSUANCE OF THE CONSOLIDATED FINANCIAL STATEMENTS AND PROCEDURES FOR AUTHORISATION

These consolidated financial statements were authorised for issuance by the Board of Directors on March 21, 2019.

3. APPLICATION OF NEW STANDARDS, AMENDMENTS AND INTERPRETATIONS

(1) Effect of the adoption of new issuances of or amendments to International Financial Reporting Standards (“IFRSs”) as endorsed by the Financial Supervisory Commission (“FSC”)

New standards, interpretations and amendments endorsed by the FSC effective from 2018 are as follows:

<u>New Standards, Interpretations and Amendments</u>	<u>Effective date by International Accounting Standards Board</u>
Amendments to IFRS 2, ‘Classification and measurement of share-based payment transactions’	January 1, 2018
Amendments to IFRS 4, ‘Applying IFRS 9, Financial instruments with IFRS 4, Insurance contracts’	January 1, 2018
IFRS 9, ‘Financial instruments’	January 1, 2018
IFRS 15, ‘Revenue from contracts with customers’	January 1, 2018
Amendments to IFRS 15, ‘Clarifications to IFRS 15, Revenue from contracts with customers’	January 1, 2018
Amendments to IAS 7, ‘Disclosure initiative’	January 1, 2017
Amendments to IAS 12, ‘Recognition of deferred tax assets for unrealised	January 1, 2017
Amendments to IAS 40, ‘Transfers of investment property’	January 1, 2018
IFRIC 22, ‘Foreign currency transactions and advance consideration’	January 1, 2018

New Standards, Interpretations and Amendments	Effective date by International Accounting Standards Board
Annual improvements to IFRSs 2014-2016 cycle - Amendments to IFRS 1, 'First-time adoption of International Financial Reporting Standards'	January 1, 2018
Annual improvements to IFRSs 2014-2016 cycle - Amendments to IFRS 12, 'Disclosure of interests in other entities'	January 1, 2017
Annual improvements to IFRSs 2014-2016 cycle - Amendments to IAS 28, 'Investments in associates and joint ventures'	January 1, 2018

Except for the following, the above standards and interpretations have no significant impact to the Group's financial condition and financial performance based on the Group's assessment.

A. IFRS 9, 'Financial instruments'

- (a) Classification of debt instruments is driven by the entity's business model and the contractual cash flow characteristics of the financial assets, which would be classified as financial asset at fair value through profit or loss, financial asset measured at fair value through other comprehensive income or financial asset at amortised cost. Equity instruments would be classified as financial asset at fair value through profit or loss, unless an entity makes an irrevocable election at inception to present subsequent changes in the fair value of an investment in an equity instrument that is not held for trading in other comprehensive income.
- (b) The impairment losses of debt instruments are assessed using an 'expected credit loss' approach. An entity assesses at each balance sheet date whether there has been a significant increase in credit risk on that instrument since initial recognition to recognise 12-month expected credit losses or lifetime expected credit losses (interest revenue would be calculated on the gross carrying amount of the asset before impairment losses occurred); or if the instrument has objective evidence of impairment, interest revenue after the impairment would be calculated on the book value of net carrying amount (i.e. net of credit allowance). The Group shall always measure the loss allowance at an amount equal to lifetime expected credit losses for trade receivables that do not contain a significant financing component.
- (c) The Group has elected not to restate prior period financial statements using the modified retrospective approach under IFRS 9. For details of the significant effect as at January 1, 2018, please refer to Note 12(4)B.

B. IFRS 15, 'Revenue from contracts with customers'

- (a) IFRS 15, 'Revenue from contracts with customers' replaces IAS 11, 'Construction contracts', IAS 18, 'Revenue' and relevant interpretations. According to IFRS 15, revenue is recognised when a customer obtains control of promised goods or services. A customer obtains control of goods or services when a customer has the ability to direct the use of, and obtain substantially all of the remaining benefits from, the asset.

The core principle of IFRS 15 is that an entity recognises revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. An entity recognises revenue in accordance with that core principle by applying the following steps:

Step 1: Identify contracts with customer.

Step 2: Identify separate performance obligations in the contract(s).

Step 3: Determine the transaction price.

Step 4: Allocate the transaction price.

Step 5: Recognise revenue when the performance obligation is satisfied.

Further, IFRS 15 includes a set of comprehensive disclosure requirements that requires an entity to disclose sufficient information to enable users of financial statements to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers.

- (b) The Group has elected not to restate prior period financial statements and recognised the cumulative effect of initial application as retained earnings at January 1, 2018, using the modified retrospective approach under IFRS 15. The Group applied retrospectively IFRS 15 only to incomplete contracts as of January 1, 2018, by adopting an optional transition expedient. The significant effects of adopting the modified transition as of January 1, 2018 are summarised below:

Consolidated balance sheet

<u>Affected items</u>	<u>2017 version</u>	<u>Effect of</u>	<u>2018 version</u>	<u>Remark</u>
	<u>IFRSs amount</u>	<u>adoption of</u>	<u>IFRSs amount</u>	
		<u>new standards</u>		
<u>January 1, 2018</u>				
Accounts receivable-allowance for sales returns and discounts	(\$ 2,763,852)	\$ 2,763,852	\$ -	i(i)
Total affected assets	<u>(\$ 2,763,852)</u>	<u>\$ 2,763,852</u>	<u>\$ -</u>	
Contract liabilities	\$ -	(\$ 103,169)	(\$ 103,169)	i(ii)
Advance sales receipts	(103,169)	103,169	-	i(ii)
Refund liabilities - current	-	(2,763,852)	(2,763,852)	i(i)
Total affected liabilities	<u>(\$ 103,169)</u>	<u>(\$ 2,763,852)</u>	<u>(\$ 2,867,021)</u>	

i. Presentation of assets and liabilities in relation to contracts with customers

In line with IFRS 15 requirements, the Group changed the presentation of certain accounts in the balance sheet as follows:

- (i) Under IFRS 15, liabilities in relation to expected volume discounts and refunds to customers are recognised as refund liabilities (shown as other current liabilities), but were previously presented as accounts receivable - allowance for sales returns and discounts in the balance sheet. As of January 1, 2018, the balance amounted to \$2,763,852.

(ii) Under IFRS 15, liabilities in relation to sales contracts are recognised as contract liabilities, but were previously presented as advance sales receipts in the balance sheet. As of January 1, 2018, the balance amounted to \$103,169.

ii. Please refer to Note 12(5) for other disclosures in relation to the first application of IFRS 15.

C. Amendments to IAS 7, ‘Disclosure initiative’

This amendment requires that an entity shall provide more disclosures related to changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes.

The Group has provided additional disclosure to explain the changes in liabilities arising from financing activities, as described in Note 6(29).

(2) Effect of new issuances of or amendments to IFRSs as endorsed by the FSC but not yet adopted by the Group

New standards, interpretations and amendments endorsed by the FSC effective from 2019 are as follows:

New Standards, Interpretations and Amendments	Effective date by International Accounting Standards Board
Amendments to IFRS 9, ‘Prepayment features with negative compensation’	January 1, 2019
IFRS 16, ‘Leases’	January 1, 2019
Amendments to IAS 19, ‘Plan amendment, curtailment or settlement’	January 1, 2019
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
Annual improvements to IFRSs 2015-2017 cycle	January 1, 2019

Except for the following, the above standards and interpretations have no significant impact to the Group’s financial condition and financial performance based on the Group’s assessment. The quantitative impact will be disclosed when the assessment is complete.

IFRS 16, ‘Leases’

IFRS 16, ‘Leases’, replaces IAS 17, ‘Leases’ and related interpretations and SICs. The standard requires lessees to recognise a ‘right-of-use asset’ and a lease liability (except for those leases with terms of 12 months or less and leases of low-value assets). The accounting stays the same for lessors, which is to classify their leases as either finance leases or operating leases and account for those two types of leases differently. IFRS 16 only requires enhanced disclosures to be provided by lessors.

The Group expects to recognise the lease contract of lessees in line with IFRS 16. However, the Group does not intend to restate the financial statements of prior period (referred herein as the “modified retrospective approach”). On January 1, 2019, it is expected that ‘right-of-use asset’

and lease liability will be increased by \$1,048,256 and \$1,048,256, respectively.

(3) IFRSs issued by IASB but not yet endorsed by the FSC

New standards, interpretations and amendments issued by IASB but not yet included in the IFRSs as endorsed by the FSC are as follows:

New Standards, Interpretations and Amendments	Effective date by International Accounting Standards Board
Amendments to IAS 1 and IAS 8, ‘Disclosure Initiative-Definition of Material’	January 1, 2020
Amendments to IFRS 3, ‘Definition of a business’	January 1, 2020
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 International Accounting Standards Board
IFRS 17, ‘Insurance contracts’	January 1, 2021

The above standards and interpretations have no significant impact to the Group’s financial condition and financial performance based on the Group’s assessment.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the periods presented, unless otherwise stated.

(1) Compliance statement

The consolidated financial statements of the Group have been prepared in accordance with the “Regulations Governing the Preparation of Financial Reports by Securities Issuers”, International Financial Reporting Standards, International Accounting Standards, IFRIC Interpretations, and SIC Interpretations as endorsed by the FSC (collectively referred herein as the “IFRSs”)

(2) Basis of preparation

A. Except for the following items, the consolidated financial statements have been prepared under the historical cost convention:

- (a) Financial assets (including derivative instruments) at fair value through profit or loss.
- (b) Financial assets and liabilities at fair value through other comprehensive income/Available-for-sale financial assets measured at fair value.
- (c) Defined benefit liabilities recognised based on the net amount of pension fund assets less present value of defined benefit obligation.

B. The preparation of financial statements in conformity with IFRSs requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group’s accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 5.

C. In adopting IFRS 9 and IFRS 15 effective January 1, 2018, the Group has elected to apply modified retrospective approach whereby the cumulative impact of the adoption was recognised as retained earnings or other equity as of January 1, 2018 and the financial statements for the year ended December 31, 2017 were not restated. The financial statements for the year ended December 31, 2017 were prepared in compliance with International Accounting Standard 39 ('IAS 39'), International Accounting Standard 18 ('IAS 18') and related financial reporting interpretations. Please refer to Notes 12(4) and (5) for details of significant accounting policies and details of significant accounts.

(3) Basis of consolidation

A. Basis for preparation of consolidated financial statements:

- (a) All subsidiaries are included in the Group's consolidated financial statements. Subsidiaries are all entities (including structured entities) controlled by the Group. The Group controls an entity when the Group is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Consolidation of subsidiaries begins from the date the Group obtains control of the subsidiaries and ceases when the Group loses control of the subsidiaries.
- (b) Inter-company transactions, balances and unrealised gains or losses on transactions between companies within the Group are eliminated. Accounting policies of subsidiaries have been adjusted where necessary to ensure consistency with the policies adopted by the Group.
- (c) Profit or loss and each component of other comprehensive income are attributed to the owners of the parent and to the non-controlling interests. Total comprehensive income is attributed to the owners of the parent and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.
- (d) Changes in a parent's ownership interest in a subsidiary that do not result in the parent losing control of the subsidiary (transactions with non-controlling interests) are accounted for as equity transactions, i.e. transactions with owners in their capacity as owners. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognised directly in equity.
- (e) When the Group loses control of a subsidiary, the Group remeasures any investment retained in the former subsidiary at its fair value. That fair value is regarded as the fair value on initial recognition of a financial asset or the cost on initial recognition of the associate or joint venture. Any difference between fair value and carrying amount is recognised in profit or loss. All amounts previously recognised in other comprehensive income in relation to the subsidiary are reclassified to profit or loss on the same basis as would be required if the related assets or liabilities were disposed of. That is, when the Group loses control of a subsidiary, all gains or losses previously recognised in other comprehensive income in relation to the subsidiary should be reclassified from equity to profit or loss, if such gains or losses would be reclassified to profit or loss when the related assets or liabilities are disposed of.

B. Subsidiaries included in the consolidated financial statements:

Name of investor	Name of subsidiary	Main business activities	Ownership (%)		Description
			December 31, 2018	December 31, 2017	
Realtek Semiconductor Corporation	Leading Enterprises Limited	Investment holdings	100%	100%	
Realtek Semiconductor Corporation	Amber Universal Inc.	"	100%	100%	
Realtek Semiconductor Corporation	Realtek Singapore Private Limited	ICs manufacturing, design, research, development, sales, and marketing	89%	89%	Note 1
Realtek Semiconductor Corporation	Bluocean Inc.	Investment holdings	100%	100%	
Realtek Semiconductor Corporation	Talent Eagle Enterprise Inc.	"	100%	100%	
Realtek Semiconductor Corporation	Realtek Investment Singapore Private Limited	"	100%	100%	
Realtek Semiconductor Corporation	Realsun Investment Co., Ltd.	"	100%	100%	
Realtek Semiconductor Corporation	Hung-wei Venture Capital Co., Ltd.	"	100%	100%	
Realtek Semiconductor Corporation	Realking Investments Limited	"	100%	100%	
Realtek Semiconductor Corporation	Realsun Technology Corporation	ICs manufacturing, design, research, development, sales, and marketing	100%	100%	

Name of investor	Name of subsidiary	Main business activities	Ownership (%)		Description
			December 31, 2018	December 31, 2017	
Realtek Semiconductor Corporation	Bobitag Inc.	Manufacture and installation of computer equipment and wholesale, retail and related service of electronic materials and information / software	67%	67%	
Leading Enterprises Limited	Realtek Semiconductor (Japan) Corp.	ICs design,sales and consultancy	100%	100%	
Leading Enterprises Limited	Circon Universal Inc.	Investment holdings	100%	100%	
Leading Enterprises Limited	Realtek Singapore Private Limited	ICs manufacturing, design, research, development, sales, and marketing	11%	11%	Note 1
Amber Universal Inc.	Realtek Semiconductor (HK) Limited	Information services and technical support	100%	100%	
Amber Universal Inc.	Realtek Semiconductor (Shen Zhen) Corp.	R&D and technical support	100%	100%	
Empsonic Enterprises Inc.	Realsil Microelectronics Corp.	"	100%	100%	
Realtek Singapore Private Limited	Cortina Access Inc.	R&D and information services	100%	100%	
Realtek Singapore Private Limited	Cortina Systems Taiwan Limited	R&D and technical support	100%	100%	
Realtek Singapore Private Limited	Cortina Network Systems Shanghai Co., Ltd.	"	100%	100%	
Talent Eagle Enterprise Inc.	Ubilinx Technology Inc.	R&D and information services	100%	100%	
Realtek Singapore Private Limited	Empsonic Enterprises Inc.	Investment holdings	100%	100%	Note 1

Name of investor	Name of subsidiary	Main business activities	Ownership (%)		Description
			December 31, 2018	December 31, 2017	
Realtek Singapore Private Limited	Realtek Viet Nam Co., Ltd.	R&D and technical support	100%	-	Note 2
Realtek Singapore Private Limited	RayMX Microelectronics Corp.	ICs manufacturing, design, research, development, sales, and marketing	29%	-	Note 3
Realsil Microelectronics Corp.	RayMX Microelectronics Corp.	ICs manufacturing, design, research, development, sales, and marketing	71%	-	Note 3

Note 1: Realtek Singapore Private Limited acquired 100% of the share capital of Empsonic Enterprises Inc. by issuing new shares to Leading Enterprises Limited. After Realtek Singapore Private Limited issued new shares, the shareholding of Realtek Semiconductor Corporation changed to 89%, while the remaining 11% of the company's equity was held by Leading Enterprises Limited.

Note 2: Realtek Viet Nam Co., Ltd. was newly established on August 9, 2018.

Note 3: RayMX Microelectronics Corp. was newly established on December 7, 2018.

C. Subsidiaries not included in the consolidated financial statements: None.

D. Adjustments for subsidiaries with different balance sheet dates: None.

E. Nature and extent of the restrictions on fund remittance from subsidiaries to the parent company: None.

(4) Foreign currency translation

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). The consolidated financial statements are presented in New Taiwan dollars, which is the Company's functional and presentation currency.

A. Foreign currency transactions and balances

(a) Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are remeasured. Foreign exchange gains and losses resulting from the settlement of such transactions are recognised in profit or loss in the period in which they arise.

(b) Monetary assets and liabilities denominated in foreign currencies at the period end are re-translated at the exchange rates prevailing at the balance sheet date. Exchange differences arising upon re-translation at the balance sheet date are recognised in profit or loss.

- (c) Non-monetary assets and liabilities denominated in foreign currencies held at fair value through profit or loss are re-translated at the exchange rates prevailing at the balance sheet date; their translation differences are recognised in profit or loss. Non-monetary assets and liabilities denominated in foreign currencies held at fair value through other comprehensive income are re-translated at the exchange rates prevailing at the balance sheet date; their translation differences are recognised in other comprehensive income. However, non-monetary assets and liabilities denominated in foreign currencies that are not measured at fair value are translated using the historical exchange rates at the dates of the initial transactions.
- (d) All other foreign exchange gains and losses based on the nature of those transactions are presented in the statement of comprehensive income within 'other gains and losses'.

B. Translation of foreign operations

- (a) The operating results and financial position of all the group entities, associates and joint arrangements that have a functional currency different from the presentation currency are translated into the presentation currency as follows:
 - i. Assets and liabilities for each balance sheet presented are translated at the closing exchange rate at the date of that balance sheet;
 - ii. Income and expenses for each statement of comprehensive income are translated at average exchange rates of that period; and
 - iii. All resulting exchange differences are recognised in other comprehensive income.
- (b) When the foreign operation partially disposed of or sold is an associate, exchange differences that were recorded in other comprehensive income are proportionately reclassified to profit or loss as part of the gain or loss on sale. In addition, even when the Group retains partial interest in the former foreign associate after losing significant influence over the former foreign associate, such transactions should be accounted for as disposal of all interest in these foreign operations.
- (c) Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing exchange rates at the balance sheet date.

(5) Classification of current and non-current items

- A. Assets that meet one of the following criteria are classified as current assets; otherwise they are classified as non-current assets:
 - (a) Assets arising from operating activities that are expected to be realised, or are intended to be sold or consumed within the normal operating cycle;
 - (b) Assets held mainly for trading purposes;
 - (c) Assets that are expected to be realised within twelve months from the balance sheet date;
 - (d) Cash and cash equivalents, excluding restricted cash and cash equivalents and those that are to be exchanged or used to settle liabilities more than twelve months after the balance sheet date.

B. Liabilities that meet one of the following criteria are classified as current liabilities; otherwise they are classified as non-current liabilities:

- (a) Liabilities that are expected to be settled within the normal operating cycle;
- (b) Liabilities arising mainly from trading activities;
- (c) Liabilities that are to be settled within twelve months from the balance sheet date;
- (d) Liabilities for which the repayment date cannot be extended unconditionally to more than twelve months after the balance sheet date. 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.

(6) Cash equivalents

Cash equivalents refer to short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. Time deposits that meet the definition above and are held for the purpose of meeting short-term cash commitments in operations are classified as cash equivalents.

(7) Financial assets at fair value through profit or loss

Effective 2018

- A. Financial assets at fair value through profit or loss are financial assets that are not measured at amortised cost or fair value through other comprehensive income. Financial assets at amortised cost or fair value through other comprehensive income are designated as at fair value through profit or loss at initial recognition when they eliminate or significantly reduce a measurement or recognition inconsistency.
- B. On a regular way purchase or sale basis, financial assets at fair value through profit or loss are recognised and derecognised using trade date accounting.
- C. At initial recognition, the Group measures the financial assets at fair value and recognises the transaction costs in profit or loss. The Group subsequently measures the financial assets at fair value, and recognises the gain or loss in profit or loss.
- D. The Group recognises the dividend income when the right to receive payment is established, future economic benefits associated with the dividend will flow to the Group and the amount of the dividend can be measured reliably.

(8) Financial assets at fair value through other comprehensive income

Effective 2018

- A. Financial assets at fair value through other comprehensive income comprise equity securities which are not held for trading, and for which the Group has made an irrevocable election at initial recognition to recognise changes in fair value in other comprehensive income and debt instruments which meet all of the following criteria:
 - (a) The objective of the Group's business model is achieved both by collecting contractual cash flows and selling financial assets; and
 - (b) The assets' contractual cash flows represent solely payments of principal and interest.

- B. On a regular way purchase or sale basis, financial assets at fair value through other comprehensive income are recognised and derecognised using trade date accounting.
- C. At initial recognition, the Group measures the financial assets at fair value plus transaction costs. The Group subsequently measures the financial assets at fair value:
The changes in fair value of equity investments that were recognised in other comprehensive income are reclassified to retained earnings and are not reclassified to profit or loss following the derecognition of the investment. Dividends are recognised as revenue when the right to receive payment is established, future economic benefits associated with the dividend will flow to the Group and the amount of the dividend can be measured reliably.

(9) Financial assets at amortised cost

Effective 2018

- A. Financial assets at amortised cost are those that meet all of the following criteria:
 - (a) The objective of the Group's business model is achieved by collecting contractual cash flows.
 - (b) The assets' contractual cash flows represent solely payments of principal and interest.
- B. On a regular way purchase or sale basis, financial assets at amortised cost are recognised and derecognised using trade date accounting.
- C. At initial recognition, the Group measures the financial assets at fair value plus transaction costs. Interest income from these financial assets is included in finance income using the effective interest method. A gain or loss is recognised in profit or loss when the asset is derecognised or impaired.
- D. The Group's time deposits which do not fall under cash equivalents are those with a short maturity period and are measured at initial investment amount as the effect of discounting is immaterial.

(10) Accounts receivable

- A. Accounts receivable entitle the Group a legal right to receive consideration in exchange for transferred goods or rendered services.
- B. The short-term accounts and notes receivable without bearing interest are subsequently measured at initial invoice amount as the effect of discounting is immaterial.

(11) Impairment of financial assets

For debt instruments measured at fair value through other comprehensive income and financial assets at amortised cost, at each reporting date, the Group recognises the impairment provision for 12 months expected credit losses if there has not been a significant increase in credit risk since initial recognition or recognizes the impairment provision for the lifetime expected credit losses (ECLs) if such credit risk has increased since initial recognition after taking into consideration all reasonable and verifiable information that includes forecasts. On the other hand, for accounts receivable that do not contain a significant financing component, the Group recognises the impairment provision for lifetime ECLs.

(12) Derecognition of financial assets

The Group derecognises a financial asset when the contractual rights to receive the cash flows from the financial asset expire.

(13) Operating leases (lessor)

Lease income from an operating lease (net of any incentives given to the lessee) is recognised in profit or loss and collects the rental over the lease term.

(14) Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined using the weighted-average method. The cost of finished goods and work in progress comprises raw materials, direct labour, other direct costs and related production overheads (allocated based on normal operating capacity). It excludes borrowing costs. The item by item approach is used in applying the lower of cost and net realisable value. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated cost of completion and applicable variable selling expenses.

(15) Investments accounted for using equity method / associates

- A. Associates are all entities over which the Group has significant influence but not control. In general, it is presumed that the investor has significant influence, if an investor holds, directly or indirectly 20 percent or more of the voting power of the investee. Investments in associates are accounted for using the equity method and are initially recognised at cost.
- B. The Group's share of its associates' post-acquisition profits or losses is recognised in profit or loss, and its share of post-acquisition movements in other comprehensive income is recognised in other comprehensive income. When the Group's share of losses in an associate equals or exceeds its interest in the associate, including any other unsecured receivables, the Group does not recognise further losses, unless it has incurred legal or constructive obligations or made payments on behalf of the associate.
- C. When changes in an associate's equity do not arise from profit or loss or other comprehensive income of the associate and such changes do not affect the Group's ownership percentage of the associate, the Group recognises change in ownership interests in the associate in 'capital surplus' in proportion to its ownership.
- D. Unrealised gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest in the associates. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates have been adjusted where necessary to ensure consistency with the policies adopted by the Group.
- E. In the case that an associate issues new shares and the Group does not subscribe or acquire new shares proportionately, which results in a change in the Group's ownership percentage of the associate but maintains significant influence on the associate, then 'capital surplus' and 'investments accounted for under the equity method' shall be adjusted for the increase or

decrease of its share of equity interest. If the above condition causes a decrease in the Group's ownership percentage of the associate, in addition to the above adjustment, the amounts previously recognised in other comprehensive income in relation to the associate are reclassified to profit or loss proportionately on the same basis as would be required if the relevant assets or liabilities were disposed of.

- F. Upon loss of significant influence over an associate, the Group remeasures any investment retained in the former associate at its fair value. Any difference between fair value and carrying amount is recognised in profit or loss.
- G. When the Group disposes its investment in an associate and loses significant influence over this associate, the amounts previously recognised in other comprehensive income in relation to the associate, are reclassified to profit or loss, on the same basis as would be required if the relevant assets or liabilities were disposed of. If it retains significant influence over this associate, the amounts previously recognised in other comprehensive income in relation to the associate are reclassified to profit or loss proportionately in accordance with the aforementioned approach.

(16) Property, plant and equipment

- A. Property, plant and equipment are initially recorded at cost. Borrowing costs incurred during the construction period are capitalised.
- B. Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to profit or loss during the financial period in which they are incurred.
- C. Other property, plant and equipment apply cost model and are depreciated using the straight-line method to allocate their cost over their estimated useful lives. Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item must be depreciated separately. The assets' residual values, useful lives and depreciation methods are reviewed, and adjusted if appropriate, at each financial year-end. If expectations for the assets' residual values and useful lives differ from previous estimates or the patterns of consumption of the assets' future economic benefits embodied in the assets have changed significantly, any change is accounted for as a change in estimate under IAS 8, 'Accounting Policies, Changes in Accounting Estimates and Errors', from the date of the change. The estimated useful lives of the fixed assets are as follows: buildings - 10~55 years and other fixed assets - 3~5 years.

(17) Operating leases (lessee)

Payments made under an operating lease (net of any incentives received from the lessor) are recognised in profit or loss and pay the rental over the lease term.

(18) Investment property

An investment property is stated initially at its cost and measured subsequently using the cost model. Except for land, investment property is depreciated on a straight-line basis over its estimated useful life of 20 years.

(19) Intangible assets

A. Goodwill arises in a business combination accounted for by applying the acquisition method.

B. Other intangible assets

Separately acquired intangible assets with a finite useful life are stated at cost, net of accumulated amortisation and accumulated impairment. Intangible assets acquired in a business combination are recognised at fair value at acquisition date. The amortisation amounts of separately and consolidated acquired intangible assets were amortised on a straight-line basis over their estimated useful lives of 2-5 years.

(20) Impairment of non-financial assets

A. The Group assesses at each balance sheet date the recoverable amounts of those assets where there is an indication that they are impaired. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell or value in use. When the circumstances or reasons for recognizing impairment loss for an asset in prior years no longer exist or diminish, the impairment loss is reversed. The increased carrying amount due to reversal should not be more than what the depreciated or amortised historical cost would have been if the impairment had not been recognised.

B. The recoverable amounts of goodwill is evaluated periodically. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. Impairment loss of goodwill previously recognised in profit or loss shall not be reversed in the following years.

(21) Borrowings

Borrowings comprise long-term and short-term bank borrowings. Borrowings are recognised initially at fair value, net of transaction costs incurred.

(22) Notes and accounts payable

A. Accounts payable are liabilities for purchases of raw materials, goods or services and notes payable are those resulting from operating and non-operating activities.

B. The short-term notes and accounts payable without bearing interest are subsequently measured at initial invoice amount as the effect of discounting is immaterial.

(23) Derecognition of financial liabilities

A financial liability is derecognised when the obligation under the liability specified in the contract is discharged or cancelled or expires.

(24) Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, and it is probable that an outflow of economic resources will be required to settle the obligation and the amount of the obligation can be reliably estimated. Provisions are measured at the present value of the expenditures expected to be required to settle the obligation on the balance sheet date, which is discounted using a pre-tax discount rate that reflects the current market assessments of the time value of money and the risks specific to the obligation.

(25) Employee benefits

A. Short-term employee benefits

Short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in respect of service rendered by employees in a period and should be recognised as expense in that period when the employees render service.

B. Pensions

(a) Defined contribution plans

For defined contribution plans, the contributions are recognised as pension expense when they are due on an accrual basis. Prepaid contributions are recognised as an asset to the extent of a cash refund or a reduction in the future payments.

(b) Defined benefit plans

i. Net obligation under a defined benefit plan is defined as the present value of an amount of pension benefits that employees will receive on retirement for their services with the Company in current period or prior periods. The liability recognised in the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the balance sheet date less the fair value of plan assets. The net defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The rate used to discount is determined by using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension liability; when there is no deep market in high-quality corporate bonds, the Company uses interest rates of government bonds (at the balance sheet date) instead.

ii. Remeasurements arising on defined benefit plans are recognised in other comprehensive income in the period in which they arise and are recorded as retained earnings.

C. Employees' compensation and directors' and supervisors' remuneration

Employees' compensation and directors' and supervisors' remuneration are recognised as expense and liability, provided that such recognition is required under legal or constructive obligation and those amounts can be reliably estimated. Any difference between the resolved amounts and the subsequently actual distributed amounts is accounted for as changes in estimates. If employee compensation is distributed by shares, the Group calculates the number

of shares based on the closing price at the previous day of the Board meeting resolution.

(26) Income tax

- A. The tax expense for the period comprises current and deferred tax. Tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or items recognised directly in equity, in which cases the tax is recognised in other comprehensive income or equity.
- B. The current income tax expense is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the Company and its subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in accordance with applicable tax regulations. It establishes provisions where appropriate based on the amounts expected to be paid to the tax authorities. An additional tax is levied on the unappropriated retained earnings and is recorded as income tax expense in the year the stockholders resolve to retain the earnings.
- C. Deferred tax is recognised, using the balance sheet liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated balance sheet. However, the deferred tax is not accounted for if it arises from initial recognition of goodwill or of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit nor loss. Deferred tax is provided on temporary differences arising on investments in subsidiaries and associates, except where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the balance sheet date and are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled.
- D. Deferred tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised. At each balance sheet date, unrecognised and recognised deferred tax assets are reassessed.
- E. A deferred tax asset shall be recognised for the carryforward of unused tax credits resulting from research and development expenditures to the extent that it is possible that future taxable profit will be available against which the unused tax credits can be utilised.
- F. If a change in tax rate is enacted or substantively enacted, the Group recognises the effect of the change immediately in the interim period in which the change occurs. The effect of the change on items recognised outside profit or loss is recognised in other comprehensive income or equity while the effect of the change on items recognised in profit or loss is recognised in profit or loss.

(27) Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction, net of tax, from the proceeds.

(28) Dividends

Dividends are recorded in the Company's financial statements in the period in which they are resolved by the Company's shareholders. Cash dividends are recorded as liabilities; stock dividends are recorded as stock dividends to be distributed and are reclassified to ordinary shares on the effective date of new shares issuance.

(29) Revenue recognition

A. Sales of goods

- (a) The Group manufactures and sells various integrated circuit related products. Sales are recognised when control of the products has transferred, being when the products are delivered to the customers, and there is no unfulfilled obligation that could affect the customer's acceptance of the products. Delivery occurs when the products have been shipped to the specific location, the risks of obsolescence and loss have been transferred to the wholesaler, and either the wholesaler has accepted the products in accordance with the sales contract, or the Group has objective evidence that all criteria for acceptance have been satisfied.
- (b) Revenue from these sales is recognised based on the price specified in the contract. A refund liability is recognised for expected sales discounts and allowances payable to customers in relation to sales made until the end of the reporting period. As the time interval between the transfer of committed goods or service and the payment of customer does not exceed one year, the Group does not adjust the transaction price to reflect the time value of money.
- (c) A receivable is recognised when the goods are delivered as this is the point in time that the consideration is unconditional because only the passage of time is required before the payment is due.

B. Services revenue

Revenue from design, royalty and technical services is recognised after completing the services in which the services are rendered.

(30) Operating segments

Operating segments are reported in a manner consistent with the internal reporting provided to the Chief Operating Decision-Maker. The Group's Chief Operating Decision-Maker is responsible for allocating resources and assessing performance of the operating segments.

5. CRITICAL ACCOUNTING JUDGEMENTS, ESTIMATES AND KEY SOURCES OF ASSUMPTION UNCERTAINTY

The preparation of these consolidated financial statements requires management to make critical judgements in applying the Group's accounting policies and make critical assumptions and estimates concerning future events. Assumptions and estimates may differ from the actual results and are continually evaluated and adjusted based on historical experience and other factors. Such assumptions and estimates have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year; and the related information is addressed below:

(1) Critical judgements in applying the Group's accounting policies

None.

(2) Critical accounting estimates and assumptions

Evaluation of inventories

As inventories are stated at the lower of cost and net realisable value, the Group must determine the net realisable value of inventories on balance sheet date using judgements and estimates. Due to the rapid technology innovation, the Group evaluates the amounts of normal inventory consumption, obsolete inventories or inventories without market selling value on balance sheet date, and writes down the cost of inventories to the net realisable value. Such an evaluation of inventories is principally based on the demand for the products within the specified period in the future. Therefore, there might be material changes to the evaluation.

As of December 31, 2018, the carrying amount of inventories was \$5,862,005.

6. DETAILS OF SIGNIFICANT ACCOUNTS

(1) Cash and cash equivalents

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Cash on hand and revolving funds	\$ 1,819	\$ 1,727
Checking accounts and demand deposits	3,248,619	2,555,769
Time deposits	1,059,213	6,204,339
Cash equivalents-bonds sold under repurchase agreement	-	832,521
Total	<u>\$ 4,309,651</u>	<u>\$ 9,594,356</u>

The Group transacts with a variety of financial institutions all with high credit quality to disperse credit risk, so it expects that the probability of counterparty default is remote.

(2) Financial assets at fair value through profit or loss

Effective 2018

<u>Items</u>	<u>December 31, 2018</u>
Current items:	
Financial assets mandatorily measured at fair value through profit or loss	
Listed stocks	\$ 69,781
Beneficiary certificates	1,251,322
	<u>\$ 1,321,103</u>

A. Amounts recognised in profit or loss in relation to financial assets at fair value through profit or loss are listed below:

	Year ended December 31, 2018
Financial assets mandatorily measured at fair value through profit or loss	
Equity instruments	(\$ 27,094)
Beneficiary certificates	7,854
	<u>(\$ 19,240)</u>

B. The Group has no financial assets at fair value through profit or loss pledged to others.

C. Information relating to credit risk of financial assets at fair value through profit or loss is provided in Note 12(2).

D. Information on financial assets at fair value through profit or loss as of December 31, 2017 is provided in Note 12(4).

(3) Financial assets at fair value through other comprehensive income

Effective 2018

Items	December 31, 2018
Non-current items:	
Equity instruments	
Listed stocks	\$ 253,908
Emerging stocks	339,027
Unlisted stocks	1,058,137
	<u>\$ 1,651,072</u>

A. The Group has elected to classify equity instruments investments that are considered to be strategic investments as financial assets at fair value through other comprehensive income. The fair value of such investments amounted to \$1,651,072 as at December 31, 2018.

B. Amounts recognised in profit or loss and other comprehensive income in relation to the financial assets at fair value through other comprehensive income are listed below:

	Year ended December 31, 2018
<u>Equity instruments at fair value through other comprehensive income</u>	
Fair value change recognised in other comprehensive income	<u>\$ 165,659</u>

C. The Group has no financial assets at fair value through other comprehensive income pledged to others.

D. Information relating to credit risk of financial assets at fair value through other comprehensive income is provided in Note 12(2).

E. Information on available-for-sale financial assets and financial assets at cost as of December 31, 2017 is provided in Note 12(4).

(4) Financial assets at amortised cost

Effective 2018

<u>Items</u>	<u>December 31, 2018</u>
Current items:	
Time deposits	\$ <u>31,286,209</u>

A. Details of the Group's financial assets at amortised cost pledged to others as collateral are provided in Note 8.

B. Information relating to credit risk of financial assets at amortised cost is provided in Note 12(2).

(5) Accounts receivable

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Accounts receivable	\$ 5,693,973	\$ 5,717,574
Accounts receivable – related parties	1,783,992	1,288,881
Less: allowance for sales returns and discounts	-	(2,763,852)
Less: allowance for bad debts	(58,172)	(59,792)
	<u>\$ 7,419,793</u>	<u>\$ 4,182,811</u>

A. The aging analysis of accounts receivable is as follows:

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
	<u>Accounts receivable</u>	<u>Accounts receivable</u>
Not past due	\$ 7,460,264	\$ 7,006,137
Up to 30 days	17,665	281
91 to 180 days	-	1
Over 180 days	36	36
	<u>\$ 7,477,965</u>	<u>\$ 7,006,455</u>

The above aging analysis is based on past due date.

B. The Group has no accounts receivable pledged to others.

C. Information relating to credit risk of accounts receivable is provided in Note 12(2).

(6) Inventories

	<u>December 31, 2018</u>		
	<u>Cost</u>	<u>Allowance for obsolescence and market value decline</u>	<u>Book value</u>
Raw materials	\$ 399,009	(\$ 23,147)	\$ 375,862
Work in process	3,614,676	(218,774)	3,395,902
Finished goods	2,524,712	(434,471)	2,090,241
Total	<u>\$ 6,538,397</u>	<u>(\$ 676,392)</u>	<u>\$ 5,862,005</u>

December 31, 2017			
	Cost	Allowance for obsolescence and market value decline	Book value
Raw materials	\$ 390,835	(\$ 31,644)	\$ 359,191
Work in process	2,825,615	(210,859)	2,614,756
Finished goods	2,787,259	(293,039)	2,494,220
Total	\$ 6,003,709	(\$ 535,542)	\$ 5,468,167

Operating costs incurred on inventories for the years ended December 31, 2018 and 2017 were as follows:

	Years ended December 31,	
	2018	2017
Cost of inventories sold and others	\$ 25,003,275	\$ 23,483,201
Loss on market value decline and obsolete and slow-moving inventories	138,066	168,272
Loss on scrap inventory	203,535	133,126
	\$ 25,344,876	\$ 23,784,599

(7) Investments accounted for using the equity method

	December 31, 2018	December 31, 2017
Technology Partner V Venture Capital Corporation	\$ 36,917	\$ 44,705
5V Technologies, Taiwan Ltd.	16,106	17,081
Estinet Technologies Incorporation	40,682	33,002
Innorich Venture Capital Corp.	167,923	186,214
	\$ 261,628	\$ 281,002

A. The loss on investments accounted for using equity method amounted to \$43,307 and \$40,919 for the years ended December 31, 2018 and 2017, respectively.

B. The Group's held stocks in Technology Partner V Venture Capital Corporation decreased due to the return of capital in September of 2017 and the proceeds from capital returned was \$14,923.

(8) Property, plant and equipment

	<u>Buildings</u>	<u>Machinery</u>	<u>Test equipment</u>	<u>Office equipment</u>	<u>Others</u>	<u>Total</u>
<u>At January 1, 2018</u>						
Cost	\$ 3,205,530	\$ 3,611,076	\$ 1,783,425	\$ 204,663	\$ 722,408	\$ 9,527,102
Accumulated depreciation and impairment	(1,074,899)	(3,377,730)	(1,276,016)	(137,072)	(498,436)	(6,364,153)
	<u>\$ 2,130,631</u>	<u>\$ 233,346</u>	<u>\$ 507,409</u>	<u>\$ 67,591</u>	<u>\$ 223,972</u>	<u>\$ 3,162,949</u>
<u>2018</u>						
Opening net book amount	\$ 2,130,631	\$ 233,346	\$ 507,409	\$ 67,591	\$ 223,972	\$ 3,162,949
Additions	6,238	124,429	455,980	35,609	84,858	707,114
Disposals	(9)	-	(37)	(97)	-	(143)
Reclassifications	50,407	-	-	(567)	(50,826)	(986)
Depreciation	(130,452)	(88,176)	(251,035)	(21,630)	(48,744)	(540,037)
Net exchange difference	(8,594)	262	(660)	(446)	(2,881)	(12,319)
Closing net book amount	<u>\$ 2,048,221</u>	<u>\$ 269,861</u>	<u>\$ 711,657</u>	<u>\$ 80,460</u>	<u>\$ 206,379</u>	<u>\$ 3,316,578</u>
<u>At December 31, 2018</u>						
Cost	\$ 3,246,163	\$ 3,726,816	\$ 2,225,944	\$ 232,162	\$ 754,293	\$ 10,185,378
Accumulated depreciation and impairment	(1,197,942)	(3,456,955)	(1,514,287)	(151,702)	(547,914)	(6,868,800)
	<u>\$ 2,048,221</u>	<u>\$ 269,861</u>	<u>\$ 711,657</u>	<u>\$ 80,460</u>	<u>\$ 206,379</u>	<u>\$ 3,316,578</u>
<u>At January 1, 2017</u>						
Cost	\$ 3,214,833	\$ 3,577,280	\$ 1,558,624	\$ 192,166	\$ 626,953	\$ 9,169,856
Accumulated depreciation and impairment	(951,288)	(3,374,204)	(1,062,395)	(128,162)	(461,090)	(5,977,139)
	<u>\$ 2,263,545</u>	<u>\$ 203,076</u>	<u>\$ 496,229</u>	<u>\$ 64,004</u>	<u>\$ 165,863</u>	<u>\$ 3,192,717</u>
<u>2017</u>						
Opening net book amount	\$ 2,263,545	\$ 203,076	\$ 496,229	\$ 64,004	\$ 165,863	\$ 3,192,717
Additions	-	106,402	232,730	21,398	110,627	471,157
Disposals	-	-	(24)	(1,092)	(691)	(1,807)
Reclassifications	-	5,057	885	-	(6,093)	(151)
Depreciation	(126,766)	(82,094)	(220,150)	(19,189)	(41,623)	(489,822)
Net exchange difference	(6,148)	905	(2,261)	2,470	(4,111)	(9,145)
Closing net book amount	<u>\$ 2,130,631</u>	<u>\$ 233,346</u>	<u>\$ 507,409</u>	<u>\$ 67,591</u>	<u>\$ 223,972</u>	<u>\$ 3,162,949</u>
<u>At December 31, 2017</u>						
Cost	\$ 3,205,530	\$ 3,611,076	\$ 1,783,425	\$ 204,663	\$ 722,408	\$ 9,527,102
Accumulated depreciation and impairment	(1,074,899)	(3,377,730)	(1,276,016)	(137,072)	(498,436)	(6,364,153)
	<u>\$ 2,130,631</u>	<u>\$ 233,346</u>	<u>\$ 507,409</u>	<u>\$ 67,591</u>	<u>\$ 223,972</u>	<u>\$ 3,162,949</u>

Amount of borrowing costs capitalised as part of property, plant and equipment: None.

(9) Investment property

	<u>Buildings</u>		<u>Buildings</u>
<u>At January 1, 2018</u>		<u>At January 1, 2017</u>	
Cost	\$ 85,694	Cost	\$ 86,839
Accumulated depreciation and impairment	(25,440)	Accumulated depreciation and impairment	(21,655)
	<u>\$ 60,254</u>		<u>\$ 65,184</u>
<u>2018</u>		<u>2017</u>	
Opening net book value	\$ 60,254	Opening net book value	\$ 65,184
Depreciation	(4,047)	Depreciation	(4,000)
Net exchange difference	(1,339)	Net exchange difference	(930)
Closing net book amount	<u>\$ 54,868</u>	Closing net book amount	<u>\$ 60,254</u>
<u>At December 31, 2018</u>		<u>At December 31, 2017</u>	
Cost	\$ 83,688	Cost	\$ 85,694
Accumulated depreciation and impairment	(28,820)	Accumulated depreciation and impairment	(25,440)
	<u>\$ 54,868</u>		<u>\$ 60,254</u>

A. Rental income from the lease of the investment property and direct operating expenses arising from the investment property are shown below:

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Rental income from the lease of the investment property	<u>\$ 6,298</u>	<u>\$ 6,224</u>
Operating expenses arising from the investment property that generated rental income during the year	<u>\$ 4,047</u>	<u>\$ 4,000</u>

B. The Group's investment property is located in Mainland China. The fair value is based on valuation information from Information Centre of Real Estate in local governments in Mainland China and is adjusted accordingly. As of December 31, 2018 and 2017, the fair value was \$136,949 and \$135,348 and classified as level 3, respectively.

(10) Intangible assets

	Computer software	Intellectual property	Goodwill	Others	Total
<u>At January 1, 2018</u>					
Cost	\$ 2,772,830	\$ 3,751,440	\$ 642,134	\$ 298,771	\$ 7,465,175
Accumulated amortisation and impairment	(2,241,399)	(2,673,224)	(350,621)	(121,576)	(5,386,820)
	<u>\$ 531,431</u>	<u>\$ 1,078,216</u>	<u>\$ 291,513</u>	<u>\$ 177,195</u>	<u>\$ 2,078,355</u>
<u>2018</u>					
Opening net book amount	\$ 531,431	\$ 1,078,216	\$ 291,513	\$ 177,195	\$ 2,078,355
Additions	460,145	164,064	-	1,800	626,009
Transfers	1,353	2,096	-	(10,161)	(6,712)
Amortisation	(497,239)	(452,899)	-	(44,714)	(994,852)
Net exchange difference	24	(29,313)	8,644	4,094	(16,551)
Closing net book amount	<u>\$ 495,714</u>	<u>\$ 762,164</u>	<u>\$ 300,157</u>	<u>\$ 128,214</u>	<u>\$ 1,686,249</u>
<u>At December 31, 2018</u>					
Cost	\$ 3,234,611	\$ 3,911,807	\$ 650,778	\$ 298,916	\$ 8,096,112
Accumulated amortisation and impairment	(2,738,897)	(3,149,643)	(350,621)	(170,702)	(6,409,863)
	<u>\$ 495,714</u>	<u>\$ 762,164</u>	<u>\$ 300,157</u>	<u>\$ 128,214</u>	<u>\$ 1,686,249</u>
<u>At January 1, 2017</u>					
Cost	\$ 2,341,688	\$ 3,211,611	\$ 665,877	\$ 338,241	\$ 6,557,417
Accumulated amortisation and impairment	(1,737,908)	(2,140,688)	(350,621)	(83,668)	(4,312,885)
	<u>\$ 603,780</u>	<u>\$ 1,070,923</u>	<u>\$ 315,256</u>	<u>\$ 254,573</u>	<u>\$ 2,244,532</u>
<u>2017</u>					
Opening net book amount	\$ 603,780	\$ 1,070,923	\$ 315,256	\$ 254,573	\$ 2,244,532
Additions	431,821	540,591	-	2,096	974,508
Transfers	151	-	-	(18,203)	(18,052)
Amortisation	(503,998)	(511,796)	-	(45,059)	(1,060,853)
Net exchange difference	(323)	(21,502)	(23,743)	(16,212)	(61,780)
Closing net book amount	<u>\$ 531,431</u>	<u>\$ 1,078,216</u>	<u>\$ 291,513</u>	<u>\$ 177,195</u>	<u>\$ 2,078,355</u>
<u>At December 31, 2017</u>					
Cost	\$ 2,772,830	\$ 3,751,440	\$ 642,134	\$ 298,771	\$ 7,465,175
Accumulated amortisation and impairment	(2,241,399)	(2,673,224)	(350,621)	(121,576)	(5,386,820)
	<u>\$ 531,431</u>	<u>\$ 1,078,216</u>	<u>\$ 291,513</u>	<u>\$ 177,195</u>	<u>\$ 2,078,355</u>

Details of amortisation on intangible assets are as follows:

	Years ended December 31,	
	2018	2017
Operating costs	\$ 3,907	\$ 2,314
Operating expenses	990,945	1,058,539
	<u>\$ 994,852</u>	<u>\$ 1,060,853</u>

(11) Long-term prepaid rents (shown as 'Other non-current assets')

	December 31, 2018	December 31, 2017
Land-use right	<u>\$ 22,027</u>	<u>\$ 23,047</u>

The Group has separately signed contracts of land-use right in Chuan Xue with the Bureau of Land Resources and Housing Management of Suzhou on November 22, 2004 and March 25, 2005, respectively. The lease terms are 70 and 50 years, respectively. The rents were paid in full at the time the contracts were signed. The rental expense of \$489 and \$484 was recognised for the years ended December 31, 2018 and 2017, respectively.

(12) Short-term borrowings

Type of borrowings	December 31, 2018	Interest rate range	Collateral
Bank borrowings			
Unsecured borrowings	<u>\$ 14,526,311</u>	0.67%~4.16%	None
Type of borrowings	December 31, 2017	Interest rate range	Collateral
Bank borrowings			
Unsecured borrowings	<u>\$ 18,052,624</u>	0.75%~1.99%	None

Interest expense recognised in profit or loss amounted to \$140,387 and \$154,769 for the years ended December 31, 2018 and 2017, respectively.

(13) Other payables

	December 31, 2018	December 31, 2017
Accrued salaries	\$ 3,390,433	\$ 2,544,189
Payable for employees' compensation	1,884,203	1,802,539
Other accrued expenses	1,235,690	983,647
Payables on equipment	110,401	33,141
Payables on software and intellectual property	684,438	650,649
Others	237,043	80,621
	<u>\$ 7,542,208</u>	<u>\$ 6,094,786</u>

(14) Pension

A. (a) The Company and its domestic subsidiaries have a defined benefit pension plan in accordance with the Labor Standards Law, covering all regular employees' service years prior to the enforcement of the Labor Pension Act on July 1, 2005 and service years thereafter of employees who chose to continue to be subject to the pension mechanism under the Law. Under the defined benefit pension plan, two units are accrued for each year of service for the first 15 years and one unit for each additional year thereafter, subject to a maximum of 45 units. Pension benefits are based on the number of units accrued and the average monthly salaries and wages of the last 6 months prior to retirement. The Company and its domestic subsidiaries contribute monthly an amount equal to 2% of the employees' monthly salaries and wages to the retirement fund deposited with Bank of Taiwan, the trustee, under the name of the independent retirement fund committee. Also, the Company and its domestic subsidiaries would assess the balance in the aforementioned labor pension reserve account by December 31, every year. If the account balance is insufficient to pay the pension calculated by the aforementioned method to the employees expected to qualify for retirement in the following year, the Company and its domestic subsidiaries will make contributions for the deficit by next March.

(b) The amounts recognised in the balance sheet are determined as follows:

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Present value of defined benefit obligations	(\$ 568,382)	(\$ 536,470)
Fair value of plan assets	<u>495,415</u>	<u>473,679</u>
Net liability in the balance sheet	<u>(\$ 72,967)</u>	<u>(\$ 62,791)</u>

(c) Movement in net defined benefit liabilities are as follows:

	Present value of defined benefit obligations	Fair value of plan assets	Net defined benefit liability
Year ended December 31, 2018			
At January 1	(\$ 536,470)	\$ 473,679	(\$ 62,791)
Current service cost	(2,745)	-	(2,745)
Interest (expense) income	(6,675)	5,927	(748)
	<u>(545,890)</u>	<u>479,606</u>	<u>(66,284)</u>
Remeasurements:			
Return on plan assets (excluding amounts included in interest income or expense)	-	13,319	13,319
Change in demographic assumptions	(1,639)	-	(1,639)
Change in financial assumptions	(8,197)	-	(8,197)
Experience adjustments	(16,166)	-	(16,166)
	<u>(26,002)</u>	<u>13,319</u>	<u>(12,683)</u>
Pension fund contribution	-	6,000	6,000
Paid pension	3,510	(3,510)	-
At December 31	<u><u>(\$ 568,382)</u></u>	<u><u>\$ 495,415</u></u>	<u><u>(\$ 72,967)</u></u>
	Present value of defined benefit obligations	Fair value of plan assets	Net defined benefit liability
Year ended December 31, 2017			
At January 1	(\$ 513,556)	\$ 475,586	(\$ 37,970)
Current service cost	(2,808)	-	(2,808)
Interest (expense) income	(6,993)	6,570	(423)
	<u>(523,357)</u>	<u>482,156</u>	<u>(41,201)</u>
Remeasurements:			
Return on plan assets (excluding amounts included in interest income or expense)	-	(2,011)	(2,011)
Change in demographic assumptions	1,319	-	1,319
Change in financial assumptions	6,596	-	6,596
Experience adjustments	(33,494)	-	(33,494)
	<u>(25,579)</u>	<u>(2,011)</u>	<u>(27,590)</u>
Pension fund contribution	-	6,000	6,000
Paid pension	12,466	(12,466)	-
At December 31	<u><u>(\$ 536,470)</u></u>	<u><u>\$ 473,679</u></u>	<u><u>(\$ 62,791)</u></u>

- (d) The Bank of Taiwan was commissioned to manage the Fund of the Company's and domestic subsidiaries' defined benefit pension plan in accordance with the Fund's annual investment and utilisation plan and the "Regulations for Revenues, Expenditures, Safeguard and Utilisation of the Labor Retirement Fund" (Article 6: The scope of utilisation for the Fund includes deposit in domestic or foreign financial institutions, investment in domestic or foreign listed, over-the-counter, or private placement equity securities, investment in domestic or foreign real estate securitization products, etc.). With regard to the utilisation of the Fund, its minimum earnings in the annual distributions on the final financial statements shall be no less than the earnings attainable from the amounts accrued from two-year time deposits with the interest rates offered by local banks.

(e) The principal actuarial assumptions used were as follows:

	Years ended December 31,	
	2018	2017
Discount rate	1.125%	1.25%
Future salary increases	5.25%	5.25%

Future mortality rate was estimated based on the 5th Taiwan Standard Ordinary Experience Mortality Table for the years ended December 31, 2018 and 2017.

Because the main actuarial assumption changed, the present value of defined benefit obligation is affected. The analysis was as follows:

	Discount rate		Future salary increases	
	Increase by	Decrease by	Increase by	Decrease by
	0.25%	0.25%	0.25%	0.25%
December 31, 2018				
Effect on present value of defined benefit obligation	\$ 16,573	(\$ 17,256)	(\$ 16,206)	\$ 15,665

	Discount rate		Future salary increases	
	Increase by	Decrease by	Increase by	Decrease by
	0.25%	0.25%	0.25%	0.25%
December 31, 2017				
Effect on present value of defined benefit obligation	\$ 16,335	(\$ 17,035)	(\$ 16,020)	\$ 15,461

The sensitivity analysis above is based on one assumption which changed while the other conditions remain unchanged. In practice, more than one assumption may change all at once. The method of analysing sensitivity and the method of calculating net pension liability in the balance sheet are the same.

(f) Expected contributions to the defined benefit pension plans of the Group for the year ending December 31, 2019 amount to \$6,000.

(g) As of December 31, 2018, the weighted average duration of the retirement plan is 14 years. The analysis of timing of the future pension payment was as follows:

Within 1 year	\$	242,740
2~5 years		93,635
5~10 years		196,669
Over 10 years		35,519
	\$	<u>568,563</u>

B. (a) Effective July 1, 2005, the Company and its domestic subsidiaries have established a defined contribution pension plan (the “New Plan”) under the Labor Pension Act (the “Act”), covering all regular employees with R.O.C. nationality. Under the New Plan, the Company and its domestic subsidiaries contribute monthly an amount based on 6% of the

employees' monthly salaries and wages to the employees' individual pension accounts at the Bureau of Labor Insurance. The benefits accrued are paid monthly or in lump sum upon termination of employment.

- (b) The Company's mainland China subsidiaries, Realsil Microelectronics Corp., Realtek Semiconductor (Shen Zhen) Corp., Cortina Network Systems Shanghai Co., Ltd., and RayMX Microelectronics Corp. have a defined contribution plan. Monthly contributions to an independent fund administered by the government in accordance with the pension regulations in the People's Republic of China (PRC) are based on certain percentage of employees' monthly salaries and wages. The contribution percentage was 20%, 17%, 21%, and 19%, respectively. Monthly contributions to an independent fund are administered by the government. Other than the monthly contributions, the Group has no further obligations.
- (c) The pension costs under the defined contribution pension plans of the Group for the years ended December 31, 2018 and 2017 were \$231,441 and \$211,401, respectively.

(15) Provision

	Year ended December 31, 2018
At January 1	\$ 901,430
Changes in provision	98,438
At December 31	<u>\$ 999,868</u>

As of December 31, 2018, provisions were estimated for possible infringement litigations.

(16) Share capital

- A. As of December 31, 2018, the Company's authorised capital was \$8,900,000, consisting of 890 million thousand shares of ordinary stock (including 80 million thousand shares reserved for employee stock options), and the paid-in capital was \$5,080,955 with a par value of \$10 (in dollars) per share. All proceeds from shares issued have been collected. The beginning balance and closing balance of the number of the Company's ordinary shares outstanding of the period remain the same as in previous two periods.

	2018	Unit : Thousands of shares 2017
At January 1	506,506	504,951
Employees' compensation transferred to common stock	1,589	1,555
At December 31	<u>508,095</u>	<u>506,506</u>

- B. On January 24, 2002, the Company increased its new common stock and sold its old common stock by issuing 13,924 thousand units of GDRs for cash. Each GDR unit represents 4 common stocks, so the total common stocks issued were 55,694 thousand shares. The Company's GDRs are traded in Luxembourg stock exchange. As of December

31, 2018, the outstanding GDRs were 312 thousand units, or 1,249 thousand shares of common stock, representing 0.25% of the Company's total common stocks.

(17) Capital surplus

Pursuant to the R.O.C. Company Act, capital surplus arising from paid-in capital in excess of par value on issuance of common stocks and donations can be used to cover accumulated deficit or to issue new stocks or cash to shareholders in proportion to their share ownership, provided that the Company has no accumulated deficit. Further, the R.O.C. Securities and Exchange Act requires that the amount of capital surplus to be capitalised mentioned above should not exceed 10% of the paid-in capital each year. Capital surplus should not be used to cover accumulated deficit unless the legal reserve is insufficient.

	2018			
	Change in associates accounted for using equity			
	Share premium	method	Others	Total
At January 1	\$ 3,540,653	\$ 18,203	\$ -	\$ 3,558,856
Change in associates accounted for using equity method	-	22,005	-	22,005
Cash dividends distribution from capital surplus	(508,095)	-	-	(508,095)
Employees' compensation transferred to common stock	163,692	-	-	163,692
Cash dividends returned	-	-	201	201
At December 31	<u>\$ 3,196,250</u>	<u>\$ 40,208</u>	<u>\$ 201</u>	<u>\$ 3,236,659</u>
	2017			
	Change in associates accounted for using			
	Share premium	equity method	Total	
At January 1	\$ 3,900,218	\$ 10,210	\$	3,910,428
Change in associates accounted for using equity method	-	7,993		7,993
Cash dividends distribution from capital surplus	(504,951)	-	(	504,951)
Employees' compensation transferred to common stock	145,386	-		145,386
At December 31	<u>\$ 3,540,653</u>	<u>\$ 18,203</u>	<u>\$</u>	<u>\$ 3,558,856</u>

(18) Retained earnings

A. Under the Company's Articles of Incorporation, the current year's earnings, if any, shall first be used to pay all taxes and offset prior years' operating losses and then 10% of the

remaining amount shall be set aside as legal reserve, if legal reserve has accumulated to an amount equal to the paid-in capital, then legal reserve is not required to be set aside any more. Additionally, special reserve is set aside or reversed in accordance with related laws or Competent Authority. The Company should consider factors of finance, business and operations to appropriate distributable earnings for the period, and appropriate all or partial reserve in accordance with regulations and the Competent Authority. The Company's dividend policy takes into consideration the Company's future expansion plans and future cash flows. In accordance with the Company's dividend policy, cash dividends shall account for at least 10% of the total dividends distributed.

- B. Except for covering accumulated deficit or issuing new stocks or cash to shareholders in proportion to their share ownership, the legal reserve shall not be used for any other purpose. The use of legal reserve for the issuance of stocks or cash to shareholders in proportion to their share ownership is permitted, provided that the distribution of the reserve is limited to the portion in excess of 25% of the Company's paid-in capital.
- C. In accordance with the regulations, the Company shall set aside special reserve from the debit balance on other equity items at the balance sheet date before distributing earnings. When debit balance on other equity items is reversed subsequently, the reversed amount could be included in the distributable earnings.
- D. The appropriation of 2017 and 2016 earnings had been resolved at the stockholders' meeting on June 5, 2018 and June 8, 2017, respectively. Details are summarised below:

	2017		2016	
	Amount	Dividends per share (in dollars)	Amount	Dividends per share (in dollars)
Legal reserve	\$ 339,215	\$ -	\$ 303,988	\$ -
Special reserve	600,443	-	-	-
Cash dividends	2,286,430	4.50	2,019,805	4.00
Total	\$ 3,226,088	\$ 4.50	\$ 2,323,793	\$ 4.00

- E. On June 5, 2018 and June 8, 2017, the stockholders resolved during their meeting to distribute \$508,095 by cash (\$1.0 per share) and \$504,951 by cash (\$1.0 per share) from additional paid-in capital in excess of par, ordinary share, respectively.
- F. For the information relating to employees' compensation and directors' remuneration, please refer to Note 6(25).

(19) Other equity items

	2018			
	Unrealised gains (losses) on valuation	Available-for- sale investment	Currency translation difference	Total
At January 1	\$ -	\$ 212,720	(\$ 813,163)	(\$ 600,443)
Modified retrospective approach adjustment:				
Revaluation	538,977	(212,720)	-	326,257
Revaluation transferred to retained earnings	(103,142)	-	-	(103,142)
Revaluation				
–Subsidiaries	(165,659)	-	-	(165,659)
–Associates	1,977	-	-	1,977
Currency translation differences:				
–Subsidiaries	-	-	942,974	942,974
At December 31	<u>\$ 272,153</u>	<u>\$ -</u>	<u>\$ 129,811</u>	<u>\$ 401,964</u>
2017				
	Available-for-sale	Currency		Total
	investment	translation	difference	
At January 1	\$ 103,410	\$ 1,298,139	\$	1,401,549
Revaluation				
–Subsidiaries	110,120	-	-	110,120
–Associates	(810)	-	-	(810)
Currency translation differences:				
–Subsidiaries	-	(2,111,302)	(	2,111,302)
At December 31	<u>\$ 212,720</u>	<u>(\$ 813,163)</u>	<u>(\$</u>	<u>600,443)</u>

(20) Operating revenue

	Year ended	Year ended
	December 31, 2018	December 31, 2017
Revenue from contracts with customers	<u>\$ 45,805,746</u>	<u>\$ 41,688,021</u>

A. Disaggregation of revenue from contracts with customers

The Group derives revenue from the transfer of goods and services at a point in time in the following major product lines:

Year ended December 31, 2018	Integrated circuit products	Others	Total
Revenue from external customer contracts	\$ 45,735,868	\$ 69,878	\$ 45,805,746
Timing of revenue recognition			
At a point in time	<u>\$ 45,735,868</u>	<u>\$ 69,878</u>	<u>\$ 45,805,746</u>

B. Contract liabilities

The Group has recognised the following revenue-related contract liabilities:

	December 31, 2018
Contract liabilities – advance sales receipts	\$ 148,696
Revenue recognised that was included in the contract liability balance at the beginning of the period:	

	Year ended December 31, 2018
Contract liabilities – advance sales receipts	\$ 91,285

C. Refund liabilities

The Group estimates the discounts based on accumulated experience. The estimation is subject to an assessment at each reporting date.

The following refund liabilities:

	December 31, 2018
Refund liabilities – current	\$ 3,705,665

D. Related disclosures on operating revenue for 2017 are provided in Note 12(5) B.

(21) Other income

	Years ended December 31,	
	2018	2017
Interest income:		
Interest income from bank deposits	\$ 989,290	\$ 722,436
Dividend income	32,942	20,571
Other income	<u>106,441</u>	<u>126,134</u>
Total	<u>\$ 1,128,673</u>	<u>\$ 869,141</u>

(22) Other gains and losses

	Years ended December 31,	
	2018	2017
Gains on disposal of property, plant and equipment	\$ 133	\$ 12,633
Gains on disposal of available-for-sale financial assets	-	15,879
Net currency exchange losses	(35,720)	(296,550)
(Losses) gains on financial assets at fair value through profit or loss	(19,240)	18,142
Other losses	(3,709)	(1,441)
Total	<u>(\$ 58,536)</u>	<u>(\$ 251,337)</u>

(23) Finance costs

	Years ended December 31,	
	2018	2017
Interest expense	<u>\$ 140,387</u>	<u>\$ 154,769</u>

(24) Expenses by nature

	Years ended December 31,	
	2018	2017
Employee benefit expenses	<u>\$ 10,831,592</u>	<u>\$ 9,243,349</u>
Depreciation charges on property, plant and equipment	<u>\$ 544,084</u>	<u>\$ 493,822</u>
Amortisation charges on intangible assets	<u>\$ 994,852</u>	<u>\$ 1,060,853</u>

(25) Employee benefit expenses

	Years ended December 31,	
	2018	2017
Wages and salaries	\$ 10,048,153	\$ 8,525,629
Labor and health insurance fees	394,056	365,655
Pension costs	234,934	214,632
Other personnel expenses	154,449	137,433
Total	<u>\$ 10,831,592</u>	<u>\$ 9,243,349</u>

A. In accordance with the Company's Articles of Incorporation, the Company shall appropriate no higher than 3% for directors' remuneration and no less than 1% for employees' compensation, if the Company generates profit. If the Company has accumulated deficit, earnings should be reserved to cover losses before the appropriation of directors' remuneration and employees' compensation. Aforementioned employees' compensation could be distributed by cash or stocks. Specifics of the compensation are to be determined in a board meeting that registers two-thirds of directors in attendance, and

the resolution must receive support from half of participating members. The resolution should be reported to the shareholders during the shareholders' meeting.

- B. The shareholders' meeting resolved on June 5, 2018 the proposal of employees' stock compensation of \$179,585, employees' cash compensation of \$718,338 and directors' and supervisors' remuneration of \$59,862 for 2017. Employees' compensation and directors' and supervisors' remuneration of 2017 as resolved at the meeting of the Board of Directors were in agreement with those amounts recognised in the 2017 financial statements. The above employees' stock compensation was based on the closing price of \$113 at the previous day of the board meeting resolution on March 8, 2018, and the total new shares issued amounted to 1,589 thousand shares.
- C. The shareholders' meeting resolved on June 8, 2017 the proposal of employees' stock compensation of \$160,935, employees' cash compensation of \$643,738 and directors' and supervisors' remuneration of \$53,645 for 2016. Employees' compensation and directors' and supervisors' remuneration of 2016 as resolved at the meeting of the Board of Directors were in agreement with those amounts recognised in the 2016 financial statements. The above employees' stock compensation was based on the closing price of \$103.5 at the previous day of the board meeting resolution on April 21, 2017, and the total new shares issued amounted to 1,555 thousand shares.
- D. For the years ended December 31, 2018 and 2017, employees' compensation was accrued at \$1,151,674 and \$897,923, respectively; directors' and supervisors' remuneration was accrued at \$76,778 and \$59,862, respectively. If the estimated amounts differ from the actual distribution resolved by the Board of Directors and the shareholders' meeting, the Company will recognize the change as an adjustment to income of next year.

Information about employees' compensation and directors' remuneration of the Company as resolved by the Board of Directors and the shareholders at the shareholders' meeting will be posted in the "Market Observation Post System" at the website of the Taiwan Stock Exchange.

(26) Income tax

A. Income tax expense

	Years ended December 31,	
	2018	2017
Current income tax:		
Current income tax on profits for the year	\$ 463,769	\$ 166,986
Income tax on undistributed surplus earnings	16,607	71,608
Prior year income tax over estimation	(35,671)	(88,357)
Total current income tax	<u>444,705</u>	<u>150,237</u>
Deferred income tax:		
Origination and reversal of temporary differences	(12,360)	83,956
Impact of change in tax rate	(125,925)	-
Total deferred income tax	<u>(138,285)</u>	<u>83,956</u>
Income tax expense	<u>\$ 306,420</u>	<u>\$ 234,193</u>

B. Reconciliation between income tax expense and accounting profit

	Years ended December 31,	
	2018	2017
Income tax calculated based on income before tax and statutory tax rate	\$ 946,174	\$ 613,397
Effects from tax-exempt income	(494,765)	(362,455)
Impact of change in tax rate	(125,925)	-
Prior year income tax over estimation	(35,671)	(88,357)
Income tax on undistributed surplus earnings	16,607	71,608
Income tax expense	<u>\$ 306,420</u>	<u>\$ 234,193</u>

C. Amounts of deferred income tax assets or liabilities as a result of temporary differences are as follows:

Year ended December 31, 2018					
	January 1	Recognised in profit or loss	Recognised in other comprehensive income	Recognised in equity	December 31
-Deferred income tax assets:					
Temporary differences:					
Unrealised loss on market price decline and obsolete and slow-moving inventories and others	\$ 65,551	\$ 12,921	\$ -	\$ -	\$ 78,472
-Deferred income tax liabilities:					
Temporary differences:					
Unrealised exchange gain	(21,749)	(561)	-	-	(22,310)
	<u>\$ 43,802</u>	<u>\$ 12,360</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 56,162</u>
Year ended December 31, 2017					
	January 1	Recognised in profit or loss	Recognised in other comprehensive income	Recognised in equity	December 31
-Deferred income tax assets:					
Temporary differences:					
Unrealised loss on market price decline and obsolete and slow-moving inventories and others	\$ 148,821	(\$ 83,270)	\$ -	\$ -	\$ 65,551
-Deferred income tax liabilities:					
Temporary differences:					
Unrealised exchange gain	(21,063)	(686)	-	-	(21,749)
	<u>\$ 127,758</u>	<u>(\$ 83,956)</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 43,802</u>

D. The amounts of deductible temporary differences that are not recognised as deferred income tax assets are as follows:

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Deductible temporary differences	\$ 783,339	\$ 545,223

E. As of December 31, 2018, the Company's income tax returns through 2016 have been assessed and approved by the Tax Authority.

F. The Group's products qualify for "Regulations for Encouraging Manufacturing Enterprises and Technical Service Enterprises in the Newly Emerging, Important and Strategic Industries" and the Company is entitled to the income tax exemption for 5 consecutive years. The tax exemption period is from January 1, 2013 to December 31, 2017.

G. Under the amendments to the Income Tax Act which was promulgated by the President of the Republic of China in February 7, 2018, the Company's applicable income tax rate was raised from 17% to 20% effective from January 1, 2018. The Group has assessed the impact of the change in income tax rate.

(27) Earnings per share

Effective January 1, 2008, as employees' compensation could be distributed in the form of stock, the diluted EPS computation shall include those estimated shares that would be increased from employees' stock compensation issuance in the weighted-average number of common shares outstanding during the reporting year, which take into account the dilutive effects of stock bonus on potential common shares. Whereas, basic EPS shall be calculated based on the weighted-average number of common shares outstanding during the reporting year that include the shares of employees' stock compensation for the appropriation of prior year earnings, which have already been resolved at the stockholders' meeting held in the reporting year. Since capitalisation of employees' compensation no longer belongs to distribution of stock dividends, the calculation of basic EPS and diluted EPS for all periods presented shall not be adjusted retroactively.

	Year ended December 31, 2018		
	Amount after tax	Weighted average number of ordinary shares outstanding (shares in thousands)	Earnings per share (in dollars)
<u>Basic earnings per share</u>			
Profit attributable to ordinary shareholders of the parent	\$ 4,350,768	507,712	\$ 8.57
<u>Diluted earnings per share</u>			
Profit attributable to ordinary shareholders of the parent	\$ 4,350,768	507,712	
Assumed conversion of all dilutive potential ordinary shares			
Employees' compensation	-	10,477	
Profit attributable to ordinary shareholders of the parent plus assumed conversion of all dilutive potential ordinary shares	\$ 4,350,768	518,189	\$ 8.40
	Year ended December 31, 2017		
	Amount after tax	Weighted average number of ordinary shares outstanding (shares in thousands)	Earnings per share (in dollars)
<u>Basic earnings per share</u>			
Profit attributable to ordinary shareholders of the parent	\$ 3,392,153	505,412	\$ 6.71
<u>Diluted earnings per share</u>			
Profit attributable to ordinary shareholders of the parent	\$ 3,392,153	505,412	
Assumed conversion of all dilutive potential ordinary shares			
Employees' compensation	-	11,106	
Profit attributable to ordinary shareholders of the parent plus assumed conversion of all dilutive potential ordinary shares	\$ 3,392,153	516,518	\$ 6.57

(28) Supplemental cash flow information

Investing activities with partial cash payments

	Years ended December 31,	
	2018	2017
Purchase of property, plant and equipment	\$ 707,114	\$ 471,157
Add: Opening balance of payable on equipment	33,141	38,128
Less: Ending balance of payable on equipment	(110,401)	(33,141)
Cash paid during the year	<u>\$ 629,854</u>	<u>\$ 476,144</u>

	Years ended December 31,	
	2018	2017
Purchase of intangible assets	\$ 626,009	\$ 974,508
Add: Opening balance of payable on software and intellectual property	650,649	613,635
Less: Ending balance of payable on software and intellectual property	(684,438)	(650,649)
Cash paid during the year	<u>\$ 592,220</u>	<u>\$ 937,494</u>

(29) Changes in liabilities from financing activities

	Short-term borrowings	Guarantee deposits received	Liabilities from financing activities-gross
At January 1, 2018	\$ 18,052,624	\$ 5,165	\$ 18,057,789
Changes in cash flow from financing activities	(3,526,313)	(278)	(3,526,591)
At December 31, 2018	<u>\$ 14,526,311</u>	<u>\$ 4,887</u>	<u>\$ 14,531,198</u>

7. RELATED PARTY TRANSACTIONS

(1) Parent and ultimate controlling party

The ultimate controlling party of the Group is the Company.

(2) Names of related parties and relationship

Names of related parties	Relationship with the Company
G.M.I Technology Inc.	Other related party
Actions Semiconductor Co., Ltd.	Other related party
C-Media Electronics Inc.	Other related party
Greatek Electronics Inc.	Other related party
EmBestor Technology Inc.	Other related party

(3) Significant related party transactions and balances

A. Operating revenue

	Years ended December 31,	
	2018	2017
Sales of goods:		
Other related parties		
G.M.I Technology Inc.	\$ 8,373,071	\$ 7,196,408
Others	442,676	407,934
	<u>\$ 8,815,747</u>	<u>\$ 7,604,342</u>

Goods are sold based on the price lists in force and terms that would be available to third parties, and the general collection term was 30 ~ 60 days after monthly billings.

B. Processing cost

	Years ended December 31,	
	2018	2017
Greatek Electronics Inc.	<u>\$ 1,087,478</u>	<u>\$ 1,168,273</u>

Processing cost is paid to associates on normal commercial terms and conditions, and the general payment term was 49 ~ 69 days after monthly billings.

C. Receivables from related parties

	Years ended December 31,	
	2018	2017
Accounts receivable:		
Other related parties		
G.M.I Technology Inc.	\$ 1,718,808	\$ 1,060,501
Other	53,263	34,352
	<u>\$ 1,772,071</u>	<u>\$ 1,094,853</u>

Aforementioned receivables were 30 ~ 60 days after monthly billings. The receivables from related parties arise mainly from sale transactions. The receivables are unsecured in nature and bear no interest.

D. Payables to related parties:

	Years ended December 31,	
	2018	2017
Accounts payable:		
Greatek Electronics Inc.	<u>\$ 249,869</u>	<u>\$ 291,755</u>

The payment term above was 69 days after monthly billings. The payables to related parties arise mainly from processing cost. The payables bear no interest.

E. Other transactions and other (receivables) payables:

	Years ended December 31,			
	2018		2017	
	Amount	Ending balance	Amount	Ending balance
Other related parties-				
Sales commissions	\$ 354,542	\$ 69,047	\$ 308,518	\$ 39,924
Cash dividends income	(\$ 19,420)	\$ -	(\$ 16,989)	\$ -
Technical royalty revenue	(\$ 7,799)	\$ -	(\$ 3,086)	\$ -

The payment term above was 49 days after monthly billings; collection term was 30 ~ 60 days after monthly billings.

(4) Key management compensation

	Years ended December 31,	
	2018	2017
Salaries and other short-term employee benefits	\$ 105,676	\$ 78,105
Post-employment benefits	2,557	2,020
Total	\$ 108,233	\$ 80,125

8. PLEDGED ASSETS

The Group's assets pledged as collateral are as follows:

Pledged asset	Book value		Purposes
	December 31, 2018	December 31, 2017	
Time deposits (shown in other current assets)	\$ -	\$ 60,809	Guarantee for customs duties for the importation of materials
"	-	35,345	Guarantee for leasing land and office in Science Park
Time deposits (shown in financial assets at amortised cost - current)	30,270	-	Guarantee for customs duties for the importation of materials
"	35,789	-	Guarantee for leasing land and office in Science Park
	<u>\$ 66,059</u>	<u>\$ 96,154</u>	

9. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNISED CONTRACT COMMITMENTS

(1) Contingencies

None.

(2) Operating lease agreements

The Group leases lands and office buildings for operational needs under non-cancellable operating lease agreements. The lease terms are between 2019 and 2027. Most of the lease agreements are renewable at the market price at the end of the lease period. The Group

recognised rental expense of \$85,701 and \$80,908 for these leases in profit or loss for the years ended December 31, 2018 and 2017, respectively.

The future aggregate minimum lease payments under non-cancellable operating leases are as follows:

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
No later than one year	\$ 69,071	\$ 60,792
Later than one year but not later than five years	149,106	180,222
Later than five years	39,910	45,575
	<u>\$ 258,087</u>	<u>\$ 286,589</u>

10. SIGNIFICANT DISASTER LOSS

None.

11. SIGNIFICANT EVENTS AFTER THE BALANCE SHEET DATE

None.

12. OTHERS

(1) Capital management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and to maintain an optimal capital structure to reduce the cost of capital. In order to maintain or adjust the capital structure, the Company may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

(2) Financial instruments

A. Financial instruments by category

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
<u>Financial assets</u>		
Financial assets at fair value through profit or loss		
Financial assets mandatorily measured at fair value through profit or loss	\$ 1,321,103	\$ 675,891
Financial assets at fair value through other comprehensive income		
Designation of equity instrument	\$ 1,651,072	\$ -
Available-for-sale financial assets		
Available-for-sale financial assets	\$ -	\$ 717,745
Financial assets at cost	-	811,496
	<u>\$ -</u>	<u>\$ 1,529,241</u>
Financial assets at amortised cost/Receivables		
Cash and cash equivalents	\$ 4,309,651	\$ 9,594,356
Investments in debt instruments without active market	-	24,370,143
Financial assets at amortised cost	31,286,209	-
Accounts receivable (including related parties)	7,419,793	4,182,811
Other receivables (including related parties)	657,190	435,109
Guarantee deposits paid	28,573	17,501
Other current assets	-	96,154
	<u>\$ 43,701,416</u>	<u>\$ 38,696,074</u>
	<u>December 31, 2018</u>	<u>December 31, 2017</u>
<u>Financial liabilities</u>		
Financial liabilities at amortised cost		
Short-term borrowings	\$ 14,526,311	\$ 18,052,624
Notes payable	8,657	8,631
Accounts payable (including related parties)	5,885,855	4,869,096
Other accounts payable (including related parties)	7,611,255	6,134,710
Guarantee deposits received	4,887	5,165
	<u>\$ 28,036,965</u>	<u>\$ 29,070,226</u>

B. Financial risk management policies

- (a) The Group's activities expose it to a variety of financial risks: market risk (including foreign exchange risk, interest rate risk and price risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial position and financial performance.
- (b) Risk management is carried out by a treasury department (Group treasury) under policies approved by the Board of Directors. Group treasury identifies, evaluates and hedges financial risks in close co-operation with the Group's operating units.

C. Significant financial risks and degrees of financial risks

(a) Market risk

Foreign exchange risk

- i. The Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the USD and RMB. Foreign exchange risk arises from future commercial transactions, recognised assets and liabilities and net investments in foreign operations.
- ii. Management has set up a policy to require the Group to manage its foreign exchange risk against its functional currency. The Group is required to hedge its entire foreign exchange risk exposure with the Group treasury.
- iii. The Group's businesses involve some functional currency operations (the Company's and certain subsidiaries' functional currency: NTD; other certain subsidiaries' functional currency: USD and RMB). The information on assets and liabilities denominated in foreign currencies whose values would be materially affected by the exchange rate fluctuations is as follows:

December 31, 2018			
	Foreign currency amount (In thousands)	Exchange rate	Book value (NTD)
(Foreign currency: functional currency)			
<u>Financial assets</u>			
<u>Monetary items</u>			
USD:NTD	\$ 179,859	30.733	\$ 5,527,618
CNY:USD	71,029	0.1456	317,942
<u>Non-monetary items</u>			
USD:NTD	1,159,786	30.733	35,643,714
<u>Financial liabilities</u>			
<u>Monetary items</u>			
USD:NTD	134,264	30.733	4,126,322

December 31, 2017			
	Foreign currency amount (In thousands)	Exchange rate	Book value (NTD)
(Foreign currency: functional currency)			
<u>Financial assets</u>			
<u>Monetary items</u>			
USD:NTD	\$ 209,666	29.848	\$ 6,258,009
CNY:USD	445,107	0.1536	2,213,072
<u>Non-monetary items</u>			
USD:NTD	1,014,191	29.848	30,271,573
<u>Financial liabilities</u>			
<u>Monetary items</u>			
USD:NTD	130,771	29.848	3,903,248

The total exchange loss, including realised and unrealised arising from significant foreign exchange variation on the monetary items held by the Group for the years ended December 31, 2018 and 2017, amounted to \$35,720 and \$296,550, respectively.

Analysis of foreign currency market risk arising from significant foreign exchange variation:

		Year ended December 31, 2018		
		Sensitivity analysis		
		Degree of variation	Effect on profit or loss	Effect on other comprehensive income
(Foreign currency: functional currency)				
<u>Financial assets</u>				
<u>Monetary items</u>				
USD:NTD	1%	\$ 55,276	\$	-
CNY:USD	1%	3,179		-
<u>Non-monetary items</u>				
USD:NTD	1%	-		356,437
<u>Financial liabilities</u>				
<u>Monetary items</u>				
USD:NTD	1%	(41,263)		-
		Year ended December 31, 2017		
		Sensitivity analysis		
		Degree of variation	Effect on profit or loss	Effect on other comprehensive income
(Foreign currency: functional currency)				
<u>Financial assets</u>				
<u>Monetary items</u>				
USD:NTD	1%	\$ 62,580	\$	-
CNY:USD	1%	22,131		-
<u>Non-monetary items</u>				
USD:NTD	1%	-		302,716
<u>Financial liabilities</u>				
<u>Monetary items</u>				
USD:NTD	1%	(39,032)		-

Price risk

- i. The Group's equity securities, which are exposed to price risk, are the held financial assets at fair value through profit or loss, financial assets at fair value through other comprehensive income and available-for-sale financial assets.
- ii. The Group's investments in equity securities comprise domestic listed and unlisted stocks. The prices of equity securities would change due to the change of the future value of investee companies. If the prices of these equity securities had increased/decreased by 10% with all other variables held constant, post-tax profit for the years ended December 31, 2018 and 2017 would have decreased/increased by (\$1,924) and \$1,814, respectively, as a result of gains/losses on equity securities classified as at fair value through profit or loss. Other components of equity would have decreased/increased by (\$16,368) and \$10,931, respectively, as a result of gains/losses on equity securities classified as available-for-sale equity investment and equity investment at fair value through other comprehensive income.

Cash flow and fair value interest rate risk

The Group has no material interest rate risk.

(b) Credit risk

Effective 2018

- i. Credit risk refers to the risk of financial loss to the Group arising from default by the clients or counterparties of financial instruments on the contract obligations. The main factor is that counterparties could not repay in full the accounts receivable based on the agreed terms, and the contract cash flows of financial assets at amortised cost, at fair value through profit or loss and at fair value through other comprehensive income.
- ii. The Group manages their credit risk taking into consideration the entire group's concern. According to the Group's credit policy, each local entity in the Group is responsible for managing and analysing the credit risk for each of their new clients before standard payment and delivery terms and conditions are offered. Internal risk control assesses the credit quality of the customers, taking into account their financial position, past experience and other factors.
- iii. The Group adopts the assumption under IFRS 9, that is, the default occurs when the contract payments are past due over 90 days.
- iv. The Group adopts the following assumption under IFRS 9 to assess whether there has been a significant increase in credit risk on that instrument since initial recognition:
If the contract payments were past due over 30 days based on the terms, there has been a significant increase in credit risk on that instrument since initial recognition.

- v. The following indicators are used to determine whether the credit impairment of debt instruments has occurred:
- (i) It becomes probable that the issuer will enter bankruptcy or other financial reorganization due to their financial difficulties;
 - (ii) The disappearance of an active market for that financial asset because of financial difficulties;
 - (iii) Default or delinquency in interest or principal repayments;
 - (iv) Adverse changes in national or regional economic conditions that are expected to cause a default.
- vi. The Group classifies customers' accounts receivable in accordance with customer types. The Group applies the modified approach using provision matrix to estimate expected credit loss under the provision matrix basis.
- vii. The Group wrote-off the financial assets, which cannot be reasonably expected to be recovered, after initiating recourse procedures. However, the Group will continue executing the recourse procedures to secure their rights.
- viii. The Group used the forecastability of semiconductor industry research report to adjust historical and timely information to assess the default possibility of accounts receivable. On December 31, 2018, the provision matrix is as follows:

	Not past due	1~90 days past due	180 days past due	Total
<u>At December 31, 2018</u>				
Expected loss rate	0.2%~1%	0.2%~1%	100%	
Total book value	\$ 7,460,264	\$ 17,665	\$ 36	\$ 7,477,965
Loss allowance	\$ 58,031	\$ 105	\$ 36	\$ 58,172

- ix. Movements in relation to the Group applying the modified approach to provide loss allowance for accounts receivable are as follows:

	<u>2018</u>
	<u>Accounts receivable</u>
At January 1_IAS 39	\$ 59,792
Adjustments under new standards	-
At January 1_IFRS 9	59,792
Changes in the year	(1,620)
At December 31	<u>\$ 58,172</u>

Because of macroeconomics and credit enhancement, the impairment loss for 2018 decreased by \$1,721.

x. For financial assets at amortised cost, the credit rating levels are presented below:

	December 31, 2018			Total
	Lifetime			
	12 months	Significant	Impairment of credit	
		increase in credit risk		
Financial assets at amortised cost Group 1	\$ 31,286,209	\$ -	\$ -	\$ 31,286,209

Group 1: Financial institutions of credit rating 'A'.

xi. Credit risk information of 2017 is provided in Note 12(4)

(c) Liquidity risk

- i. Cash flow forecasting is performed in the operating entities of the Group and aggregated by Group treasury. Group treasury monitors rolling forecasts of the Group's liquidity requirements to ensure it has sufficient cash to meet operational needs while maintaining sufficient headroom on its undrawn committed borrowing facilities.
- ii. Group treasury invests surplus cash in interest bearing current accounts, time deposits, money market deposits and marketable securities, choosing instruments with appropriate maturities or sufficient liquidity to provide sufficient head-room as determined by the above-mentioned forecasts.
- iii. The table below analyses the Group's non-derivative financial liabilities into relevant maturity groupings based on the remaining period at the balance sheet date to the contractual maturity date for non-derivative financial liabilities. The amounts disclosed in the table are the contractual undiscounted cash flows.

Non-derivative financial liabilities:

December 31, 2018	Less than 1 year	Between 1 and 5 years	Over 5 years
Short-term loans	\$ 14,526,311	\$ -	\$ -
Notes payable	8,657	-	-
Accounts payable (including related parties)	5,885,855	-	-
Other payables (including related parties)	2,336,619	-	-
Guarantee deposits received	-	-	4,887

Non-derivative financial liabilities:

December 31, 2017	Less than 1 year	Between 1 and 5 years	Over 5 years
Short-term loans	\$ 18,052,624	\$ -	\$ -
Notes payable	8,631	-	-
Accounts payable (including related parties)	4,869,096	-	-
Other payables (including related parties)	1,787,982	-	-
Guarantee deposits received	-	-	5,165

- iv. The Group does not expect the timing of occurrence of the cash flows estimated through the maturity date analysis will be significantly earlier, nor expect the actual cash flow amount will be significantly different.

(3) Fair value information

- A. The different levels that the inputs to valuation techniques are used to measure fair value of financial and non-financial instruments have been defined as follows:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date. A market is regarded as active where a market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis. The fair value of the Group's investment in listed stocks and beneficiary certificates is included in Level 1.

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. The fair value of the Group's investment is included in Level 2.

Level 3: Unobservable inputs for the asset or liability. The fair value of the Group's investment in equity investment without active market is included in Level 3.

- B. Fair value information of investment property at cost is provided in Note 6(9).

- C. The related information of financial and non-financial instruments measured at fair value by level on the basis of the nature, characteristics and risks of the assets and liabilities is as follows:

- (a) The related information of nature of the assets is as follows:

December 31, 2018	Level 1	Level 2	Level 3	Total
Assets				
<u>Recurring fair value measurement</u>				
Financial assets at fair value				
through profit or loss-current	\$ 1,321,103	\$ -	\$ -	\$ 1,321,103
Financial assets at fair value				
other comprehensive income				
Equity securities	592,935	-	1,058,137	1,651,072
Total	<u>\$ 1,914,038</u>	<u>\$ -</u>	<u>\$ 1,058,137</u>	<u>\$ 2,972,175</u>
December 31, 2017	Level 1	Level 2	Level 3	Total
Assets				
<u>Recurring fair value measurement</u>				
Financial assets at fair value				
through profit or loss-current	\$ 675,891	\$ -	\$ -	\$ 675,891
Available-for-sale financial				
assets-equity securities	405,061	-	312,684	717,745
Total	<u>\$ 1,080,952</u>	<u>\$ -</u>	<u>\$ 312,684</u>	<u>\$ 1,393,636</u>

(b) The methods and assumptions the Group used to measure fair value are as follows:

- i. The instruments the Group used market quoted prices as their fair values (that is, Level 1) are listed below by characteristics:

	Listed shares	Closed-end fund	Opened-end fund	Government bond	Corporate bond	Convertible (exchangeable) bond
Market quoted price	Closing price	Closing price	Net asset value	Translation price	Weighted average quoted price	Closing price

- ii. Except for financial instruments with active markets, the fair value of other financial instruments is measured by using valuation techniques or by reference to counterparty quotes. The fair value of financial instruments measured by using valuation techniques can be referred to current fair value of instruments with similar terms and characteristics in substance, discounted cash flow method or other valuation methods, including calculated by applying model using market information available at the consolidated balance sheet date.
- iii. The output of valuation model is an estimated value and the valuation technique may not be able to capture all relevant factors of the Group's financial and non-financial instruments. Therefore, the estimated value derived using valuation model is adjusted accordingly with additional inputs.

D. For the years ended December 31, 2018 and 2017, there was no transfer between Level 1 and Level 2.

E. The following chart is the movement of Level 3 for the years ended December 31, 2018 and 2017:

	<u>2018</u>	
	<u>Non-derivative equity instrument</u>	
At January 1	\$	312,684
Modified retrospective adjustment		766,919
Losses recognised in other comprehensive income	(	49,466)
Acquired in the period		<u>28,000</u>
At December 31	\$	<u>1,058,137</u>

	<u>2017</u>	
	<u>Non-derivative equity instrument</u>	
At January 1	\$	264,536
Gains recognised in other comprehensive income		<u>48,148</u>
At December 31	\$	<u>312,684</u>

F. For the years ended December 31, 2018 and 2017, there was no transfer into or out from Level 3.

G. The treasury department is in charge of valuation procedures for fair value measurements being categorised within Level 3, which is to verify independent fair value of financial instruments. Such assessment is to ensure the valuation results are reasonable by applying independent information to make results close to current market conditions, confirming the resource of information is independent, reliable and in line with other resources and represented as the exercisable price, updating inputs used to the valuation model and making any other necessary adjustments to the fair value.

H. The following is the qualitative information of significant unobservable inputs and sensitivity analysis of changes in significant unobservable inputs to valuation model used in Level 3 fair value measurement:

	<u>Fair value at December 31, 2018</u>	<u>Valuation technique</u>	<u>Significant unobservable input</u>	<u>Range (weighted average)</u>	<u>Relationship of inputs to fair value</u>
Non-derivative equity instrument:					
Unlisted shares	\$ 117,986	Market comparable companies	Price to book ratio multiple	2.56	The higher the multiple, the higher the fair value

	Fair value at December 31, 2018	Valuation technique	Significant unobservable input	Range (weighted average)	Relationship of inputs to fair value
Unlisted shares	\$ 28,000	The last transaction price of the non-active market	Not applicable	-	Not applicable
Private equity fund investment	912,151	Net asset value	Not applicable	-	Not applicable
	Fair value at December 31, 2017	Valuation technique	Significant unobservable input	Range (weighted average)	Relationship of inputs to fair value
Non-derivative equity instrument:					
Unlisted shares	\$ 312,684	Market comparable companies	Price to book ratio multiple	3.26	The higher the multiple, the higher the fair value

I. The Group has carefully assessed the valuation models and assumptions used to measure fair value; therefore, the fair value measurement is reasonable. However, use of different valuation models or assumptions may result in different measurement. The following is the effect of profit or loss or of other comprehensive income from financial assets and liabilities categorised within Level 3 if the inputs used to valuation models have changed:

		December 31, 2018					
				Recognised in profit or loss		Recognised in other comprehensive income	
		Input	Change	Favourable Change	Unfavourable change	Favourable change	Unfavourable change
Financial assets							
Equity instrument	Price to book ratio multiple	± 1%	\$ -	\$ -	\$ 1,232	(\$ 1,232)	
		December 31, 2017					
				Recognised in profit or loss		Recognised in other comprehensive income	
		Input	Change	Favourable Change	Unfavourable change	Favourable change	Unfavourable change
Financial assets							
Equity instrument	Price to book ratio multiple	± 1%	\$ -	\$ -	\$ 1,133	(\$ 1,133)	

(4) Effects on initial application of IFRS 9 and information on application of IAS 39 in 2017

A. Summary of significant accounting policies adopted in 2017 :

(a) Financial assets at fair value through profit or loss

i. Financial assets at fair value through profit or loss are financial assets held for trading or financial assets designated as at fair value through profit or loss on initial recognition. Financial assets are classified in this category of held for trading if acquired principally for the purpose of selling in the short-term. Derivatives are also categorized as financial assets held for trading unless they are designated as hedges. Financial assets that meet one of the following criteria are designated as at fair value through profit or loss on initial recognition:

(i) Hybrid (combined) contracts; or

(ii) They eliminate or significantly reduce a measurement or recognition inconsistency; or

(iii) They are managed and their performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy.

ii. On a regular way purchase or sale basis, financial assets at fair value through profit or loss are recognised and derecognised using trade date accounting.

iii. Financial assets at fair value through profit or loss are initially recognised at fair value. Related transaction costs are expensed in profit or loss. These financial assets are subsequently remeasured and stated at fair value, and any changes in the fair value of these financial assets are recognised in profit or loss.

(b) Available-for-sale financial assets

i. Available-for-sale financial assets are non-derivatives that are either designated in this category or not classified in any of the other categories.

ii. On a regular way purchase or sale basis, available-for-sale financial assets are recognised and derecognised using trade date accounting.

iii. Available-for-sale financial assets are initially recognised at fair value plus transaction costs. These financial assets are subsequently remeasured and stated at fair value, and any changes in the fair value of these financial assets are recognised in other comprehensive income. Investments in equity instruments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured or derivatives that are linked to and must be settled by delivery of such unquoted equity instruments are presented in 'financial assets measured at cost'.

(c) Held-to-maturity financial assets

i. Held-to-maturity financial assets are non-derivative financial assets with fixed or determinable payments and fixed maturity date that the Group has the positive intention and ability to hold to maturity other than those that meet the definition of loans and receivables and those that are designated as at fair value through profit or loss or as available-for-sale on initial recognition.

- ii. On a regular way purchase or sale basis, held-to-maturity financial assets are recognised and derecognised using trade date accounting.
 - iii. Held-to-maturity financial assets are initially recognised at fair value on the trade date plus transaction costs and subsequently measured at amortised cost using the effective interest method, less provision for impairment. Amortisation of a premium or a discount on such assets is recognised in profit or loss.
- (d) Loans and receivables
- i. Accounts receivable

Accounts receivable are loans and receivables originated by the entity. They are created by the entity by selling goods or providing services to customers in the ordinary course of business. Accounts receivable are initially recognised at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment.

However, short-term accounts receivable without bearing interest are subsequently measured at initial invoice amount as the effect of discounting is immaterial.
 - ii. Investments in debt instrument without active market
 - (i) Investments in debt instrument without active market are loans and receivables not originated by the entity. They are bond investments with fixed or determinable payments that are not quoted in an active market, and also meet all of the following conditions:
 - a. Not designated on initial recognition as at fair value through profit or loss;
 - b. Not designated on initial recognition as available-for-sale;
 - c. Not for which the holder may not recover substantially all of its initial investment, other than because of credit deterioration.
 - (ii) On a regular way purchase or sale basis, investments in debt instrument without active market are recognised and derecognised using trade date accounting.
 - (iii) Investments in debt instruments without active market are initially recognised at fair value on the trade date plus transaction costs and subsequently measured at amortised cost using the effective interest method, less provision for impairment. Amortisation of a premium or a discount on such assets is recognised in profit or loss.
 - (iv) Investments in debt instruments without active market held by the Group are those time deposits with a short maturity period but do not qualify as cash equivalents, and they are measured at initial investment amount as the effect of discounting is immaterial.
- (e) Impairment of financial assets
- i. The Group assesses at each balance sheet date whether there is objective evidence that a financial asset or a group of financial assets is impaired as a result of one or more events that occurred after the initial recognition of the asset (a ‘loss event’) and that loss event

(or events) has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated.

ii. The criteria that the Group uses to determine whether there is objective evidence of an impairment loss is as follows:

- (i) Significant financial difficulty of the issuer or debtor;
- (ii) A breach of contract, such as a default or delinquency in interest or principal payments;
- (iii) The Group, for economic or legal reasons relating to the borrower's financial difficulty, granted the borrower a concession that a lender would not otherwise consider;
- (iv) It becomes probable that the borrower will enter bankruptcy or other financial reorganisation;
- (v) The disappearance of an active market for that financial asset because of financial difficulties;
- (vi) Observable data indicating that there is a measurable decrease in the estimated future cash flows from a group of financial assets since the initial recognition of those assets, although the decrease cannot yet be identified with the individual financial asset in the group, including adverse changes in the payment status of borrowers in the group or national or local economic conditions that correlate with defaults on the assets in the group;
- (vii) Information about significant changes with an adverse effect that have taken place in the technology, market, economic or legal environment in which the issuer operates, and indicates that the cost of the investment in the equity instrument may not be recovered;
- (viii) A significant or prolonged decline in the fair value of an investment in an equity instrument below its cost.

iii. When the Group assesses that there has been objective evidence of impairment and an impairment loss has occurred, accounting for impairment is made as follows according to the category of financial assets:

(i) Financial assets measured at amortised cost

The amount of the impairment loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at the financial asset's original effective interest rate, and is recognised in profit or loss. If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment loss was recognised, the previously recognised impairment loss is reversed through profit or loss to the extent that the carrying amount of the asset does not exceed its amortised cost that would have been at the date of reversal had the impairment loss not been recognised previously. Impairment loss is recognised and reversed by adjusting the carrying amount of the asset through the use of an impairment allowance account.

(ii) 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 estimated future cash flows discounted at current market return rate of similar financial asset, and is recognised in profit or loss. Impairment loss recognised for this category shall not be reversed subsequently. Impairment loss is recognised by adjusting the carrying amount of the asset through the use of an impairment allowance account.

(iii) Available-for-sale financial assets

The amount of the impairment loss is measured as the difference between the asset's acquisition cost (less any principal repayment and amortisation) and current fair value, less any impairment loss on that financial asset previously recognised in profit or loss, and is reclassified from 'other comprehensive income' to 'profit or loss'. If, in a subsequent period, the fair value of an investment in a debt instrument increases, and the increase can be related objectively to an event occurring after the impairment loss was recognised, then such impairment loss is reversed through profit or loss. Impairment loss of an investment in an equity instrument recognised in profit or loss shall not be reversed through profit or loss. Impairment loss is recognised and reversed by adjusting the carrying amount of the asset through the use of an impairment allowance account.

B. The reconciliations of carrying amount of financial assets transferred from December 31, 2017, IAS 39, to January 1, IFRS 9, were as follows:

	Note	Measured	Available-for-	Held-to-	Effects				
		at fair value through profit or loss	sale-equity Measured at fair value through other comprehensive income-equity	maturity	Measured at amortised cost	Debt instrument Measured at cost	without active market	Total	Retained earnings	Others equity
IAS 39		\$675,891	\$ 717,745	\$ -	\$811,496	\$ 24,370,143	\$26,575,275	\$ -	\$ -
Transferred into and measured at fair value through profit or loss	(c)	96,875	(96,875)	-	-	-	-	-	-
Transferred into and measured at fair value through other comprehensive income-equity	(b)	-	847,070	-	(847,070)	-	-	-	-
Transferred into and measured at amortised cost	(a)	-	-	24,370,143	-	(24,370,143)	-	-	-
Fair value adjustment	(b)(c)	-	326,257	-	-	-	326,257	(83,042)	409,299
Impairment loss adjustment	(b)	-	(35,574)	-	35,574	-	-	186,184	(186,184)
IFRS 9		<u>\$ 772,766</u>	<u>\$ 1,758,623</u>	<u>\$ 24,370,143</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 26,901,532</u>	<u>\$ 103,142</u>	<u>\$ 223,115</u>

- (a) Under IAS 39, because the cash flows of debt instruments without active market, amounting to \$24,370,143, met the condition that it is intended to settle the principal and interest on the outstanding principal balance, it was reclassified as "financial assets at amortised cost" amounting to \$24,370,143 on initial application of IFRS 9.
- (b) Under IAS 39, because the equity instruments, which were classified as available-for-sale financial assets, financial assets at cost, amounting to \$620,870 and \$811,496, respectively, were not held for the purpose of trading, they were reclassified as "financial assets at fair value through other comprehensive income (equity instruments)" amounting to \$1,758,623. Accordingly, retained earnings and other equity interest increased in the amounts of \$186,184 and \$140,073 on initial application of IFRS 9, respectively.
- (c) Under IAS 39, the equity instruments, which were classified as available-for-sale financial assets, amounting to \$96,875, was reclassified as "financial assets at fair value through profit or loss (equity instruments)" amounting to \$96,875. Accordingly, retained earnings decreased and other equity interest increased in the amounts of \$83,042 and \$83,042 under IFRS 9, respectively.

C. The significant accounts as of December 31, 2017 are as follows:

- (a) Financial assets at fair value through profit or loss

Items	December 31, 2017
Current items:	
Financial assets held for trading	
Beneficiary Certificate	\$ 581,659
Valuation adjustment of financial assets held for trading	94,232
	<u>\$ 675,891</u>

- i. The Group recognised net profit amounting to \$18,142 on financial assets held for trading for the year ended December 31, 2017.
- ii. The Group has no financial assets at fair value through profit or loss pledged to others.

- (b) Available-for-sale financial assets

Items	December 31, 2017
Non-current items:	
Listed stocks	\$ 219,364
Unlisted stocks	269,416
	488,780
Valuation adjustment	228,965
	<u>\$ 717,745</u>

- i. The Group recognised \$110,120 in other comprehensive income for fair value change for the year ended December 31, 2017.

(c) Financial assets at cost

Items	December 31, 2017
Unlisted stocks	\$ 811,496

- i. The Group's stock investments such as Dehong Venture Capital Co., Ltd., Starix Technology, Inc., Octetta Investment Holding, Inc., Xu De Technology Co., Ltd., Sinopec Technology Co., Ltd. and CyWeeMotion Group Limited, According to the intention of the investment, it should be classified as a financial asset available-for-sale. However, because the target is not openly traded in the active market, and it is unable to obtain sufficient industry information of similar companies and relevant financial information of the invested company, it cannot be reasonably and reliably measured. The fair value of the subject matter is therefore classified as "financial assets measured by cost".
- ii. As of December 31, 2017, no financial assets measured at cost held by the Group were pledged to others.

(d) Investments in debt instruments without active markets

Items	December 31, 2017
Current items:	
Structured Deposit	\$ 21,899
Time Deposit	24,348,244
	<u>\$ 24,370,143</u>

As of December 31, 2017, no investments in debt instruments without active markets held by the Group were pledged to others.

D. Credit risk information for the year ended December 2017 is as follows:

- (a) Credit risk refers to the risk of financial loss to the Group arising from default by the clients or counterparties of financial instruments on the contract obligations. According to the Group's credit policy, each local entity in the Group is responsible for managing and analysing the credit risk for each of their new clients before standard payment and delivery terms and conditions are offered. Internal risk control assesses the credit quality of the customers, taking into account their financial position, past experience and other factors.
- (b) For the year ended December 31, 2017, no credit limits were exceeded during the reporting periods, and management does not expect any significant losses from non-performance by these counterparties.
- (c) The credit quality of accounts receivable that were neither past due nor impaired was in the following categories based on the Group's Credit Quality Control Policy:

	December 31, 2017
Group 1	\$ 1,051,450
Group 2	5,894,934
	<u>\$ 6,946,384</u>

capital or more: Please refer to table 5.

Note:

Group 1: Non-distributor.

Group 2: Distributor.

(d) The aging analysis of accounts receivable that were past due but not impaired is as follows:

	<u>December 31, 2017</u>
Up to 30 days	\$ 278
91 to 180 days	<u>1</u>
	<u>\$ 279</u>

(e) Movement analysis of individual provision on financial assets that were impaired is as follows:

i. As of December 31, 2017, the Group's accounts receivable that were impaired amounted to \$59,792.

ii. Movements on the provision for impairment of accounts receivable are as follows:

	<u>2017</u>		
	<u>Individual provision</u>	<u>Group provision</u>	<u>Total</u>
At January 1	\$ 40,368	\$ -	\$ 40,368
Provision for impairment	<u>19,424</u>	<u>-</u>	<u>19,424</u>
At December 31	<u>\$ 59,792</u>	<u>\$ -</u>	<u>\$ 59,792</u>

(5) Effects of initial application of IFRS 15 and information on application of IAS 18 in 2017

A. The significant accounting policies applied on revenue recognition for the year ended December 31, 2017 are set out below.

(a) Sales of goods

The Group manufactures and sells integrated circuit products. Revenue is measured at the fair value of the consideration received or receivable taking into account of value-added tax, returns, rebates and discounts for the sale of goods to external customers in the ordinary course of the Group's activities. Revenue arising from the sales of goods is recognised when the Group has delivered the goods to the customer, the amount of sales revenue can be measured reliably and it is probable that the future economic benefits associated with the transaction will flow to the entity. The delivery of goods is completed when the significant risks and rewards of ownership have been transferred to the customer, the Group retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold, and the customer has accepted the goods based on the sales contract or there is objective evidence showing that all acceptance provisions have been satisfied.

(b) Revenue from design, royalty and technical services

Revenue from design, royalty and technical services is recognised according to the stage of completion of transactions when the following conditions are met, and the cost incurred shall be recognised as the cost in the current period:

- i. revenue can be reliably measured;
 - ii. transaction related economic benefits may flow to the entity;
 - iii. costs incurred or will be incurred relating to transactions can be reliably measured;
 - iv. the stage of completion of transactions can be reliably measured at the balance sheet date.
- B. The revenue recognised by using above accounting policies for the year ended December 31, 2017 are as follows:

	<u>Year ended December 31, 2017</u>
Sales revenue	\$ 41,592,887
Design revenue	45,946
Royalty revenue	49,188
	<u>\$ 41,688,021</u>

- C. The effects and description of current balance sheet items if the Group continues adopting above accounting policies are as follows:

		<u>December 31, 2018</u>		
		Balance by using		
Balance sheet items	Description	Balance by using IFRS 15	previous accounting policies	Effects from changes in accounting policy
Accounts receivable	(a)	\$ -	(\$ 3,705,665)	(\$ 3,705,665)
Contract liabilities	(b)	(148,696)	-	148,696
Other current liabilities	(a)	(3,705,665)	-	3,705,665
Advance sales receipts	(b)	-	(148,696)	(148,696)

Explanation:

- (a) Estimated sales discount was classified as refund liability in accordance with IFRS 15 but was classified as receivables-offset sales return and allowance under IAS 18.
- (b) Contract liabilities classified in accordance with IFRS 15 was classified as advance sales receipts under IAS 18.

13. SUPPLEMENTARY DISCLOSURES

(1) Significant transactions information

- A. Loans to others: Please refer to table 1.
- B. Provision of endorsements and guarantees to others: Please refer to table 2.
- C. Holding of marketable securities at the end of the period (not including subsidiaries, associates and joint ventures): Please refer to table 3.
- D. Acquisition or sale of the same security with the accumulated cost exceeding \$300 million or 20% of the Company's paid-in capital: Please refer to table 4.
- E. Acquisition of real estate reaching \$300 million or 20% of paid-in capital or more: None.
- F. Disposal of real estate reaching \$300 million or 20% of paid-in capital or more: None.
- G. Purchases or sales of goods from or to related parties reaching \$100 million or 20% of paid-in

H. Receivables from related parties reaching \$100 million or 20% of paid-in capital or more:
Please refer to table 6.

I. Trading in derivative instruments undertaken during the reporting periods: None.

J. Significant inter-company transactions during the reporting periods: Please refer to table 7.

(2) Information on investees

Names, locations and other information of investee companies (not including investees in Mainland China): Please refer to table 8.

(3) Information on investments in Mainland China

A. Basic information: Please refer to table 9.

B. Significant transactions, either directly or indirectly through a third area, with investee companies in the Mainland Area: Please refer to table 10.

14. SEGMENT INFORMATION

1. General information

The Group operates business only in a single industry. The Chief Operating Decision-Maker, who allocates resources and assesses performance of the Group as a whole, has identified that the Group has only one reportable operating segment.

2. Measurement of segment information

The Chief Operating Decision-Maker assesses the performance of the operating segments based on the consolidated financial statements. The policy of operating segments is the same as that described in Note 4.

3. Information on segment profit(loss), assets and liabilities

Year ended December 31, 2018

	<u>Amount</u>
Revenue from external customers	\$ 45,805,746
Inter-segment revenue	\$ -
Segment income	\$ 4,350,781
Total segment assets	\$ 58,252,314

Year ended December 31, 2017

	<u>Amount</u>
Revenue from external customers	\$ 41,688,021
Inter-segment revenue	\$ -
Segment income	\$ 3,392,160
Total segment assets	\$ 52,310,913

4. Reconciliation for segment profit (loss)

None.

5. Revenue information by category

Revenue from external customers are derived from the sale of integrated circuits. Breakdown of the revenue from all sources are as follows:

	<u>2018</u>	<u>2017</u>
Revenue from ICs	\$ 45,735,868	\$ 41,592,887
Others	69,878	95,134
Total	<u>\$ 45,805,746</u>	<u>\$ 41,688,021</u>

6. Revenue information by geographic area

Geographical information for the years ended December 31, 2018 and 2017 is as follows:

	<u>Year ended December 31, 2018</u>		<u>Year ended December 31, 2017</u>	
	<u>Revenue</u>	<u>Non-current assets</u>	<u>Revenue</u>	<u>Non-current assets</u>
Taiwan	\$ 23,741,926	\$ 4,038,765	\$ 20,082,180	\$ 4,181,475
Asia	21,762,224	965,083	21,352,444	1,057,748
Others	301,596	27,552	253,397	19,583
Total	<u>\$ 45,805,746</u>	<u>\$ 5,031,400</u>	<u>\$ 41,688,021</u>	<u>\$ 5,258,806</u>

7. Major customer information

Major customer information of the Group for the years ended December 31, 2018 and 2017 is as follows:

	<u>Year ended December 31, 2018</u>		
	<u>Revenue</u>	<u>Percentage</u>	<u>Segment</u>
Customer A	\$ 10,575,725	23%	The whole group
Customer B	10,505,983	23%	"
Customer D	8,373,071	18%	"
	<u>Year ended December 31, 2017</u>		
	<u>Revenue</u>	<u>Percentage</u>	<u>Segment</u>
Customer A	\$ 9,817,120	24%	The whole group
Customer B	9,171,261	22%	"
Customer D	7,196,408	17%	"

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

Loans to others

Year ended December 31, 2018

Table 1

Expressed in thousands of NTD
(Except as otherwise indicated)

No (Note 1)	Creditor	Borrower	General ledger account	Is a related party	December 31, 2018 (Note 3)	Balance at December 31, 2018	Actual amount drawn down	Interest rate	Nature of loan	Amount of transactions with the borrower	Reason for short-term financial	Allowance for doubtful accounts	Collateral			Ceiling on total loans granted (Note 2)	Footnote
													Item	Value	Limit on loans granted to a single party		
0	Realtek Semiconductor Corporation	Realtek Singapore Private Limited	Other receivables-related parties	Y	\$ 1,843,980	\$ 1,843,980	-	-	2	\$ -	Operations	\$ -	None	-	\$ 2,350,257	9,401,026	None
0	Realtek Semiconductor Corporation	Leading Enterprises Limited	Other receivables-related parties	Y	921,990	921,990	365,723	3.30	2	-	Operations	-	None	-	2,350,257	9,401,026	None
0	Realtek Semiconductor Corporation	Talent Eagle Enterprise Inc.	Other receivables-related parties	Y	1,843,980	1,843,980	1,628,849	3.30	2	-	Operations	-	None	-	2,350,257	9,401,026	None
0	Realtek Semiconductor Corporation	Bluecean Inc.	Other receivables-related parties	Y	1,843,980	1,843,980	602,367	3.30	2	-	Operations	-	None	-	2,350,257	9,401,026	None
1	Leading Enterprises Limited	Realtek Semiconductor (Shen Zhen) Corp.	Other receivables-related parties	Y	153,665	153,665	-	-	2	-	Operations	-	None	-	9,401,026	9,401,026	None
1	Leading Enterprises Limited	Bluecean Inc.	Other receivables-related parties	Y	6,146,600	6,146,600	2,327,410	3.30	2	-	Operations	-	None	-	9,401,026	9,401,026	None
2	Amber Universal Inc.	Talent Eagle Enterprise Inc.	Other receivables-related parties	Y	3,073,300	3,073,300	-	-	2	-	Operations	-	None	-	9,401,026	9,401,026	None
3	Cortina Access, Inc.	Leading Enterprises Limited	Other receivables-related parties	Y	921,990	921,990	-	-	2	-	Operations	-	None	-	9,401,026	9,401,026	None
4	Realtek Singapore Private Limited	Realisil Microelectronics Corp.	Other receivables-related parties	Y	921,990	921,990	-	-	2	-	Operations	-	None	-	9,401,026	9,401,026	None
4	Realtek Investment Singapore Private Limited	Realtek Singapore Private Limited	Other receivables-related parties	Y	3,073,300	3,073,300	739,129	3.30	2	-	Operations	-	None	-	9,401,026	9,401,026	None

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

Loans to others

Year ended December 31, 2018

Table 1

Expressed in thousands of NTD
(Except as otherwise indicated)

No (Note 1)	Creditor	Borrower	General ledger account	Is a related party	December 31, 2018 (Note 3)	Balance at December 31, 2018	Actual amount drawn down	Interest rate	Nature of loan	Amount of transactions with the borrower	Reason for short-term financial accounts	Allowance for doubtful accounts	Collateral		Ceiling on total loans granted (Note 2)	Footnote
													Item	Value		
5	Realisl Microelectronics Corp.	RayMX Microelectronics Corp.	Other receivables- related parties	Y	\$ 358,096	\$ 358,096	\$ -	-	2	\$ -	Operations	-	None	-	\$ 9,401,026	None
5	Realisl Microelectronics Corp.	Suzhou Hongwei Microelectronic Corp.	Other receivables- related parties	Y	358,096	358,096	-	-	2	-	Operations	-	None	-	9,401,026	None

Note 1: The numbers filled in for the loans provided by the Company or subsidiaries are as follows:

(1) The Company is '0'.

(2) The subsidiaries are numbered in order starting from '1'.

Note 2: The Company's "Procedures for Provision of Loans" are as follows:

(1) Ceiling on total loans granted by the Company to all parties is 40% of the Company's net assets value as per its most recent financial statements.

(2) Limit on loans to a single party with business transactions is the business transactions occurred between the creditor and borrower in the current year. The business transaction amount is the higher of purchasing and selling during current year on the year of financing.

(3) For companies needing for short-term financing, the cumulative lending amount may not exceed 40% of the borrowing company's net assets based on its latest financial statements audited or reviewed by independent accountants.

The amount the Company or its subsidiaries lend to an individual entity may not exceed 10% of the Company's or subsidiary's net assets based on its latest financial statements audited or reviewed by independent accountants.

For the foreign companies which the Company holds 100% of the voting rights directly or indirectly, limit on loans is not restricted as stipulated in the above item (3). However, the ceiling on total loans and limit on loans to a single party may not exceed 40% of the Company's net assets based on its latest financial statements audited or reviewed by independent accountants.

Note 3: The authorized limit is approved by the Board of Directors.

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

Provision of endorsements and guarantees to others
Year ended December 31, 2018

Expressed in thousands of NTD
(Except as otherwise indicated)

Table 2

Number (Note 1)	Endorser/ guarantor	Party being endorsed/guaranteed		Maximum outstanding endorsement/ amount as of December 31, 2018 (Note 4)	Outstanding endorsement/ guarantee amount at December 31, 2018 (Note 5)	Actual amount drawn down (Note 6)	Amount of endorsements/ guarantees secured with collateral	Ratio of accumulated endorsement/guarantee amount to net asset value of the endorser/guarantor company	Ceiling on total endorsements/ guarantees provided (Note 3)	Provision of endorsements by parent company to subsidiary (Note 7)	Provision of endorsements by guaranteees to subsidiary to parent company (Note 7)	Provision of endorsements/ guarantees to the party in Mainland China (Note 7)	Footnote
		Relationship with the endorser/ guarantor (Note 2)	Limited on endorsements/ guarantees provided for a single party (Note 3)										
0	Realtek Semiconductor Corporation	Realtek Singapore Private Limited	2	\$ 2,350,257	\$ 2,350,257	\$ -	\$ -	0.10	\$ 11,751,283	Y	N	N	
0	Realtek Semiconductor Corporation	Leading Enterprises Limited	2	7,050,770	7,050,770	-	-	0.30	11,751,283	Y	N	N	
0	Realtek Semiconductor Corporation	RayMX Microelectronics Corp.	2	705,077	705,077	-	-	0.03	11,751,283	Y	N	Y	
1	Leading Enterprises Limited	RealSil Microelectronics Corp.	2	614,660	614,660	-	-	0.03	11,751,283	N	N	Y	
2	RealSil Microelectronics Corp.	RayMX Microelectronics Corp.	2	614,660	614,660	-	-	0.03	11,751,283	N	N	Y	

Note 1: The numbers filled in for the endorsements/guarantees provided by the Company or subsidiaries are as follows:

(1) The Company is '0'.

(2) The subsidiaries are numbered in order starting from '1'.

Note 2: Relationship between the endorser/guarantor and the party being endorsed/guaranteed is classified into the following six categories:

(1) Having business relationship.

(2) The endorser/guarantor parent company owns directly more than 50% voting shares of the endorsed/guaranteed subsidiary.

(3) The endorser/guarantor parent company and its subsidiaries jointly own more than 50% voting shares of the endorsed/guaranteed company.

(4) The endorsed/guaranteed parent company directly or indirectly owns more than 50% voting shares of the endorser/guarantor subsidiary.

(5) Mutual guarantee of the trade as required by the construction contract.

(6) Due to joint venture, each shareholder provides endorsements/guarantees to the endorsed/guaranteed company in proportion to its ownership.

Note 3: Ceiling on total endorsements/guarantees granted by the Company and subsidiaries is 50% of the Company's net asset based on the latest financial statements audited or reviewed by independent accountants, and limit on endorsements/guarantees to a single party is 50% of the Company's net asset based on the latest financial statements audited or reviewed by independent accountants.

Note 4: Fill in the year-to-date maximum outstanding balance of endorsements/guarantees provided as of the reporting period.

Note 5: Once endorsement/guarantee contracts or promissory notes are signed/issued by the endorser/guarantor company to the banks, the endorser/guarantor company bears endorsement/guarantee liabilities. And all other events involve endorsements and guarantees should be included in the balance of outstanding endorsements and guarantees.

Note 6: Fill in the actual amount of endorsements/guarantees used by the endorsed/guaranteed company.

Note 7: Fill in 'Y' for those cases of provision of endorsements/guarantees by listed parent company to subsidiary and provision by subsidiary to listed parent company, and provision to the party in Mainland China.

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES
Holding of marketable securities at the end of the period (not including subsidiaries, associates and joint ventures)
December 31, 2018

Expressed in thousands of NTD
(Except as otherwise indicated)

Table 3

		As of December 31, 2018							
Securities held by	Marketable securities (Note 1)	Relationship with the securities issuer(Note 2)	General ledger account	Number of shares	Book value (Note 3)		Ownership (%)	Fair value	Footnote (Note 4)
					\$	\$			
Realtek Semiconductor Corporation	C-media Electronics Inc. - Common stock	Other related parties	Financial assets at fair value through profit or loss	1,623,501	29,061	\$	2.05%	29,061	
Realtek Semiconductor Corporation	Technology Partner Venture Capital Corporation - Common stock	Other related parties	Financial assets at fair value through other comprehensive income	283,791	936		16.02%	936	
Realtek Investment Limited	Compal broadband networks Inc. - Common stock	None	Financial assets at fair value through other comprehensive income	3,575,000	164,093		5.35%	164,093	
Realsun Investment Co., Ltd.	Shieh-Yong Investment Co., Ltd. - Common stock	None	Financial assets at fair value through other comprehensive income	23,124,000	186,374		3.03%	186,374	
Realsun Investment Co., Ltd.	Compal broadband networks Inc. - Common stock	None	Financial assets at fair value through other comprehensive income	3,575,000	164,093		5.35%	164,093	
Leading Enterprises Limited	Fortimedia Inc. - Common stock	None	Financial assets at fair value through other comprehensive income	8,623,301	99,546		6.89%	99,546	
Leading Enterprises Limited	Starix Technology, Inc.-Preferred stock	None	Financial assets at fair value through other comprehensive income	5,000,000	18,440		-	18,440	
Leading Enterprises Limited	Octasia Investment Holding Inc. - Common stock	None	Financial assets at fair value through other comprehensive income	9,000,000	475,242		12.48%	475,242	
Amber Universal Inc.	Octasia Investment Holding Inc. - Common stock	None	Financial assets at fair value through other comprehensive income	4,726,836	249,599		6.56%	249,599	
Hung-wei Venture Capital Co., Ltd.	United Microelectronics Corporation - Common stock	None	Financial assets at fair value through other comprehensive income	336,346	3,784		-	3,784	
Hung-wei Venture Capital Co., Ltd.	C-media Electronics Inc.- Common stock	Other related parties	Financial assets at fair value through profit or loss	2,274,875	40,720		2.88%	40,720	
Hung-wei Venture Capital Co., Ltd.	Greattek Electronic Inc. - Common stock	Other related parties	Financial assets at fair value through other comprehensive income	5,823,602	250,124		1.05%	250,124	
Hung-wei Venture Capital Co., Ltd.	Subtron technology Co., Ltd - Common stock	None	Financial assets at fair value through other comprehensive income	1,093,968	10,841		0.33%	10,841	
Hung-wei Venture Capital Co., Ltd.	Embestor Technology Inc. - Common stock	Other related parties	Financial assets at fair value through other comprehensive income	2,800,000	28,000		12.17%	28,000	
Realist Microelectronics Corp.	China Universal Cash Premium Money Market Fund	None	Financial assets at fair value through profit or loss	8,854,549	39,635		-	39,635	
Realist Microelectronics Corp.	China Money Fund	None	Financial assets at fair value through profit or loss	1,006,124	4,504		-	4,504	
Realist Microelectronics Corp.	Harvest Money Market	None	Financial assets at fair value through profit or loss	1,005	4		-	4	

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES
Holding of marketable securities at the end of the period (not including subsidiaries, associates and joint ventures)
December 31, 2018

Expressed in thousands of NTD
(Except as otherwise indicated)

Table 3

		As of December 31, 2018					
Securities held by	Marketable securities (Note 1)	Relationship with the securities issuer (Note 2)	General ledger account	Number of shares	Book value		Footnote (Note 4)
					Book value (Note 3)	Fair value	
RealSil Microelectronics Corp.	Tianhong Money Fund	None	Financial assets at fair value through profit or loss	38,754,137	\$ 173,473	\$ 173,473	
RealSil Microelectronics Corp.	ICBC - Money Fund	None	Financial assets at fair value through profit or loss	1,003,954	4,494	4,494	
RealSil Microelectronics Corp.	Zhou Zhoufa Stable Fund	None	Financial assets at fair value through profit or loss	1,027,247	4,598	4,598	
RealSil Microelectronics Corp.	Zhou Zhoufa Balanced Fund	None	Financial assets at fair value through profit or loss	28,152,645	126,018	126,018	
RealSil Microelectronics Corp.	Tian Tianjin Aggressive Fund	None	Financial assets at fair value through profit or loss	57,544,884	257,585	257,585	
RealSil Microelectronics Corp.	China Universal Cash Premium Money Market Fund	None	Financial assets at fair value through profit or loss	20,078,823	89,878	89,878	
RealSil Microelectronics Corp.	Tian Tianjin Stable Fund	None	Financial assets at fair value through profit or loss	6,550,041	29,320	29,320	
RealSil Microelectronics Corp.	Tian Tianjin Financial Fund A	None	Financial assets at fair value through profit or loss	25,172,317	112,677	112,677	
RealSil Microelectronics Corp.	Tian Tianjin Financial Fund B	None	Financial assets at fair value through profit or loss	18,124,068	81,128	81,128	
Realtek Semiconductor (Shen Zhen) Corp.	Zhou Zhoufa Fund	None	Financial assets at fair value through profit or loss	3,352,777	17,914	17,914	
Realtek Semiconductor (Shen Zhen) Corp.	Tian Tianjin Stable Fund	None	Financial assets at fair value through profit or loss	25,814,042	140,659	140,659	
Realtek Semiconductor (Shen Zhen) Corp.	Tian Tianjin Aggressive Fund	None	Financial assets at fair value through profit or loss	8,249,551	43,999	43,999	
Cortina Network Systems Shanghai Co. Ltd.	ICBC - Money Fund	None	Financial assets at fair value through profit or loss	4,075,824	18,244	18,244	
Cortina Network Systems Shanghai Co. Ltd.	Zhou Zhoufa Stable Fund	None	Financial assets at fair value through profit or loss	7,923,120	35,466	35,466	
Cortina Network Systems Shanghai Co. Ltd.	Tian Tianjin Stable Fund	None	Financial assets at fair value through profit or loss	5,671,048	25,385	25,385	
Cortina Network Systems Shanghai Co. Ltd.	Tian Tianjin Aggressive Fund	None	Financial assets at fair value through profit or loss	10,352,637	46,341	46,341	
Bluocean Inc.	CyWeeMotion Group Limited	None	Financial assets at fair value through other comprehensive income	4,800,000	-	-	6.59%

Note 1: Marketable securities in the table refer to stocks, bonds, beneficiary certificates and other related derivative securities within the scope of IFRS 9 'Financial instrument'.

Note 2: Leave the column blank if the issuer of marketable securities is non-related party.

Note 3: Fill in the amount after adjusted at fair value and deducted by accumulated impairment for the marketable securities measured at fair value; fill in the acquisition cost or amortised cost deducted by accumulated impairment for the marketable securities not measured at fair value.

Note 4: The number of shares of securities and their amounts pledged as security or pledged for loans and their restrictions on use under some agreements should be stated in the footnote if the securities presented herein have such conditions.

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

Acquisition or sale of the same security with the accumulated cost exceeding \$300 million or 20% of the Company's paid-in capital

Year ended December 31, 2018

Expressed in thousands of NTD
(Except as otherwise indicated)

Table 4

Investor	Marketable securities	General ledger account	Counterparty	Relationship with the investor	Balance as at January 1, 2018		Addition		Disposal		Balance as at December 31, 2018		
					Number of shares	Amount	Number of shares	Amount	Number of shares	Book value	Gain (loss) on disposal	Number of shares	Amount (Note)
Talent Eagle Enterprise Inc.	Ubilinx Technology Inc.	Equity investments under the equity method	Ubilinx Technology Inc.	Investee company accounted for under the equity method	14,000,000	\$ 42,653	12,000,000	\$ 362,264	-	-	-	26,000,000	\$ 23,538

Note : Including investment loss accounted for under the equity method and cumulative translation adjustment.

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

Purchases or sales of goods from or to related parties reaching NT\$100 million or 20% of paid-in capital or more

Year ended December 31, 2018

Table 5

Expressed in thousands of NTD
(Except as otherwise indicated)

Purchase/seller	Counterparty	Relationship with the counterparty	Purchase (sales)	Amount	Percentage of total purchase (sales)	Credit term	Unit price	Differences in transaction terms compared to third party transactions(Note 1)	Notes/accounts receivable/payable	Balance	Percentage of total notes/accounts receivable (payable)	Footnote
Realtek Semiconductor Corporation	G.M.I Technology Inc.	Other related parties	(Sales)	(\$ 4,888,451)	(11%)	Approximately the same with third party transactions	Approximately the same with third party transactions	Approximately the same with third party transactions	\$ 980,790	13%		
Realtek Semiconductor Corporation	Actions Semiconductor Co., Ltd.	Other related parties	(Sales)	(358,241)	(1%)	Approximately the same with third party transactions	Approximately the same with third party transactions	Approximately the same with third party transactions	41,928	1%		
Realtek Singapore Private Limited	G.M.I Technology Inc.	Other related parties	(Sales)	(3,484,620)	(8%)	Approximately the same with third party transactions	Approximately the same with third party transactions	Approximately the same with third party transactions	738,018	10%		
Realtek Semiconductor Corporation	Greatek Electronics Inc.	Other related parties	Purchase	887,456	5%	Approximately the same with third party transactions	Approximately the same with third party transactions	Approximately the same with third party transactions	(228,279)	4%		
Realtek Singapore Private Limited	Greatek Electronics Inc.	Other related parties	Purchase	200,022	1%	Approximately the same with third party transactions	Approximately the same with third party transactions	Approximately the same with third party transactions	(21,590)	0%		

Note 1: The terms for related parties are different from third parties. Differences in transaction terms compared to third party transactions should be explained in unit price and transaction term columns.

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

Receivable from related parties reaching NT\$100 million or 20% of paid-in capital or more

December 31, 2018

Expressed in thousands of NTD
(Except as otherwise indicated)

Table 6

Creditor	Counterparty	Relationship with the counterparty	Balance as at December 31, 2018	Turnover rate	Overdue receivables			Allowance for doubtful accounts
					Amount	Action taken	Amount collected subsequent to the balance sheet date	
Realtek Semiconductor Corporation	G.M.I Technology Inc.	Other related parties	\$ 980,790	5.18	\$ -	-	\$ 512,963	\$ 9,907
Realtek Singapore Private Limited	G.M.I Technology Inc.	Other related parties	738,018	7.82	-	-	494,477	1,479

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

Significant inter-company transactions during the reporting periods

Year ended December 31, 2018

Expressed in thousands of NTD
(Except as otherwise indicated)

Table 7

Significant inter-company transactions during the reporting periods:

Number (Note 1)	Company name	Counterparty	Relationship (Note 2)	General ledger account	Amount	Transaction terms	Percentage of consolidated total operating revenues or total assets (Note 3)
0	Realtek Semiconductor Corporation	Leading Enterprises Limited	1	Other receivables	\$ 365,723	Fund lending is in accordance with loan agreement terms.	0.63%
0	"	Talent Eagle Enterprise Inc.	1	Other receivables	1,628,849	"	2.80%
0	"	Bluocean Inc.	1	Other receivables	602,367	"	1.03%
0	"	RayMX Microelectronics Corp.	1	Other receivables	50,000	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	0.09%
0	"	RayMX Microelectronics Corp.	1	Gain on disposal of assets	50,000	"	0.11%
1	Leading Enterprises Limited	Bluocean Inc.	3	Other receivables	2,327,410	Fund lending is in accordance with loan agreement terms.	4.00%
1	"	Bluocean Inc.	3	Interest revenue	72,831	"	0.16%
1	"	Realtek Semiconductor (Japan) Corp.	3	Technical service fees	57,027	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	0.12%
2	Bluocean Inc.	Realtek Semiconductor Corporation	2	Interest expense	20,889	Fund lending is in accordance with loan agreement terms.	0.05%
3	Talent Eagle Enterprise Inc.	Realtek Semiconductor Corporation	2	Interest expense	21,983	"	0.05%
4	Realtek Singapore Private Limited	Realsil Microelectronics Corp.	3	Technical service fees	1,395,502	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	3.05%
4	"	Realsil Microelectronics Corp.	3	Other payables	58,171	"	0.11%
4	"	Realtek Semiconductor (Shen Zhen) Corp.	3	Technical service fees	270,803	"	0.59%
4	"	Realtek Semiconductor (Shen Zhen) Corp.	3	Other payables	11,236	"	0.02%
4	"	Cortina Access, Inc.	3	Technical service fees	216,550	"	0.47%

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

Significant inter-company transactions during the reporting periods

Year ended December 31, 2018

Table 7

Expressed in thousands of NTD
(Except as otherwise indicated)

Significant inter-company transactions during the reporting periods:

Number (Note 1)	Company name	Counterparty	Relationship (Note 2)	Transaction			Percentage of consolidated total operating revenues or total assets (Note 3)
				General ledger account	Amount	Transaction terms	
4	Realtek Singapore Private Limited	Cortina Access, Inc.	3	Other payables	\$ 19,128	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	0.03%
4	"	Cortina Network Systems Shanghai Co. Ltd.	3	Technical service fees	108,117	"	0.24%
4	"	Cortina Network Systems Shanghai Co. Ltd.	3	Other payables	25,791	"	0.04%
4	"	Cortina Systems Taiwan Limited	3	Technical service fees	71,868	"	0.16%
4	"	Cortina Systems Taiwan Limited	3	Other payables	6,300	"	0.01%
4	"	RayMX Microelectronics Corp.	3	Other receivables	50,000	"	0.09%
4	"	RayMX Microelectronics Corp.	3	Gain on disposal of assets	50,000	"	0.11%
5	Cortina Access, Inc.	Leading Enterprises Limited	3	Interest revenue	10,045	Fund lending is in accordance with loan agreement terms.	0.02%
6	Realtek Investment Singapore Private Limited	Realtek Singapore Private Limited	3	Other receivables	739,129	"	1.27%

Note 1: The numbers filled in for the transaction company in respect of inter-company transactions are as follows:

(1) Parent company is '0'.

(2) The subsidiaries are numbered in order starting from '1'.

Note 2: Relationship between transaction company and counterparty is classified into the following three categories; fill in the number of category each case belongs to (If transactions between parent company and subsidiaries or between subsidiaries refer to same transaction, it is not required to disclose twice. For example, if the parent company has already disclosed its transaction with a subsidiary, then the subsidiary is not required to disclose the transaction; for transactions between two subsidiaries, if one of the subsidiaries has disclosed the transaction, then the other is not required to disclose the transaction.):

(1) Parent company to subsidiary.

(2) Subsidiary to parent company.

(3) Subsidiary to subsidiary

Note 3: Regarding percentage of transaction amount to consolidated total operating revenues or total assets, it is computed based on period-end balance of transaction to consolidated total assets for balance sheet accounts and based on accumulated transaction amount for the period to consolidated total operating revenues for income statement accounts.

Note 4: Only transactions above NT\$5 million are disclosed. Transactions of related parties are not further disclosed here.

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

Information on investees

Year ended December 31, 2018

Expressed in thousands of NTD
(Except as otherwise indicated)

Table 8

Investor	Investee	Location	Main business activities	Initial investment amount		Shares held as at December 31, 2018		Ownership %	Book value	Net profit (loss) of the investee for the year ended December 31, 2018	Investment income (loss) recognised by the Company for the year ended December 31, 2018	Footnote
				Balance as at December 31, 2018	Balance as at December 31, 2017	Number of shares	Investment income (loss) recognised by the Company for the year ended December 31, 2018					
				\$	\$		\$					
Realtek Semiconductor Corporation	Leading Enterprises Limited	British Virgin Islands	Investment holdings	15,318,249	14,877,139	39,130	10,903,503	100%	564,881	564,881	Subsidiary	
Realtek Semiconductor Corporation	Amber Universal Inc.	British Virgin Islands	Investment holdings	4,837,812	4,698,512	41,432	3,195,092	100%	80,419	80,419	Subsidiary	
Realtek Semiconductor Corporation	Realtek Singapore Private Limited	Singapore	ICs manufacturing, design, research, development, sales, and marketing	2,458,640	2,387,840	80,000,000	7,750,098	89.03%	3,392,035	3,392,035	Subsidiary	
Realtek Semiconductor Corporation	Bluocean Inc.	Cayman Islands	Investment holdings	3,382,167	3,284,772	110,050,000	3,440,632	100%	88,525	88,525	Subsidiary	
Realtek Semiconductor Corporation	Talent Eagle Enterprise Inc.	Cayman Islands	Investment holdings	3,506,635	3,405,657	114,100,000	2,916,363	100%	299,912	299,912	Subsidiary	
Realtek Semiconductor Corporation	Realtek Investment Singapore Private Limited	Singapore	Investment holdings	6,146,600	5,969,600	200,000,000	6,427,012	100%	166,254	166,254	Subsidiary	
Realtek Semiconductor Corporation	Realsum Investments Co., Ltd.	Taiwan	Investment holdings	280,000	280,000	28,000,000	437,910	100%	6,793	6,793	Subsidiary	
Realtek Semiconductor Corporation	Hung-wei Venture Capital Co., Ltd.	Taiwan	Investment holdings	250,000	250,000	25,000,000	374,178	100%	6,315	6,315	Subsidiary	
Realtek Semiconductor Corporation	Realking Investments Limited	Taiwan	Investment holdings	293,930	293,930	29,392,985	348,721	100%	11,775	11,775	Subsidiary	
Realtek Semiconductor Corporation	Realsum Technology Corporation	Taiwan	ICs manufacturing, design, research, development, sales, and marketing	5,000	5,000	500,000	5,563	100%	46	46	Subsidiary	
Realtek Semiconductor Corporation	Bobitag Inc.	Taiwan	Manufacturing and installation of computer equipment and wholesale, retail and related services of electronic materials and information/software	20,000	20,000	1,918,910	19,214	66.67%	37	25	Subsidiary	
Realtek Semiconductor Corporation	Technology Partner V Venture Capital Corporation	Taiwan	Investment holdings	84,565	84,565	5,969,298	36,917	32.43%	5,410	9,765	Note 1	
Realtek Semiconductor Corporation	Estinet Technologies Incorporation	Taiwan	Research and development, design, manufacturing, sales and other services of electronic components, information/Software and integrated circuits.	110,000	110,000	4,000,000	40,682	20.15%	59,883	14,823	Note 1	
Realtek Semiconductor Corporation	5V Technologies, Taiwan Ltd.	Taiwan	Research and development, design, manufacturing, sales and other services of electronic components, information/Software and integrated circuits.	46,699	46,699	4,669,917	16,106	24.42%	1,088	427	Note 1	
Realking Investments Limited	Innorich Venture Capital Corp.	Taiwan	Venture capital activities	200,000	200,000	20,000,000	167,923	37.38%	48,797	-	Note 1	
Leading Enterprises Limited	Realtek Semiconductor (Japan) Corp.	Japan	ICs design, sales, and consultancy	5,568	5,299	400	2,375	100%	281	-	Sub-Subsidiary	
Leading Enterprises Limited	Circon Universal Inc.	Mauritius	Investment holdings	1,991,498	1,934,150	64,800,000	8,315	100%	58	-	Sub-Subsidiary	

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

Information on investees
Year ended December 31, 2018

Expressed in thousands of NTD
(Except as otherwise indicated)

Table 8

Investor	Investee	Location	Main business activities	Initial investment amount		Shares held as at December 31, 2018			Net profit (loss) of the investee for the year ended December 31, 2018	Investment income (loss) recognised by the Company for the year ended December 31, 2018	Footnote
				Balance as at December 31, 2018	Balance as at December 31, 2017	Number of shares	Ownership (%)	Book value			
Leading Enterprises Limited	Realtek Singapore Private Limited	Singapore	IC's manufacturing, design, research, development, sales, and marketing support	\$ 1,283,769	\$ 1,246,801	9,856,425	10.97%	\$ 961,014	\$ 3,392,035	-	Sub-Subsidiary
Ambler Universal Inc.	Realtek Semiconductor (HK) Limited	Hong Kong	Information services and technical support	5,886	5,728	-	100%	1,201	(24)	-	Sub-Subsidiary
Realtek Singapore Private Limited	Empsonic Enterprises Inc.	Mauritius	Investment holdings	868,207	843,206	2,825,000	100%	1,407,954	145,372	-	Sub-Subsidiary
Realtek Singapore Private Limited	Cortina Access Inc.	U.S.A	R&D and information services	1,255,320	1,219,172	16,892	100%	1,127,172	23,566	-	Sub-Subsidiary
Realtek Singapore Private Limited	Cortina Systems Taiwan Limited	Taiwan	R&D and technical support	61,466	59,696	21,130,000	100%	62,379	7,005	-	Sub-Subsidiary
Realtek Singapore Private Limited	Realtek Viet Nam Co., Ltd.	Vietnam	R&D and technical support	30,733	-	1,000,000	100%	28,592	(1,000)	-	Sub-Subsidiary
Talent Eagle Enterprise Inc.	Ubilinx Technology Inc.	U.S.A	R&D and information services	799,058	417,872	26,000,000	100%	23,558	(382,396)	-	Sub-Subsidiary

Note 1 : Investee

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

Information on investments in Mainland China

Year ended December 31, 2018

Table 9

Expressed in thousands of NTD
(Except as otherwise indicated)

Investee in Mainland China	Main business activities	Paid-in Capital	Investment method (Note)	Accumulated amount of remittance from Mainland China as of January 1, 2018	Amount remitted from Taiwan to Mainland China/Amount remitted back to Taiwan for the year ended December 31, 2018		Accumulated amount of remittance from Taiwan to Mainland China as of December 31, 2018	Net income of investee for the year ended December 31, 2018	Ownership held by the Company (direct or indirect)	Investment income (loss) recognised by the Company for the year ended December 31, 2018 (Note2)(C)	Book value of investment in Mainland China as of December 31, 2018	Accumulated amount of investment income remitted back to Taiwan as of December 31, 2018	Footnote
					Remitted to Mainland China	Remitted back to Taiwan							
Cortina Network Systems Shanghai Co., Ltd.	R&D and technical support	\$ 110,639	2	\$ 110,639	\$ -	\$ -	\$ 110,639	\$ 9,073	100%	\$ 9,073	\$ 105,384	\$ -	
Realisl Microelectronics Corp.	R&D and technical support	860,524	"	860,524	-	-	860,524	151,804	100%	151,804	1,403,037	-	
Realtek Semiconductor (Shen Zhen) Corp.	R&D and technical support	153,665	"	153,665	-	-	153,665	18,565	100%	18,565	240,899	-	
RayMX Microelectronics Corp.	ICs manufacturing, design, research, development, sales, and marketing	117,501	"	-	117,501	-	117,501	(1,130)	100%	(1,130)	116,391	-	
Company name		December 31, 2018		December 31, 2018			December 31, 2018						
Cortina Network Systems Shanghai Co., Ltd.		\$ 110,639		\$ 110,639			\$ 110,639	\$ 14,788,140					
Realisl Microelectronics Corp.		860,524		860,524			860,524						
Realtek Semiconductor (Shan Zhen) Corp.		153,665		153,665			153,665						
RayMX Microelectronics Corp.		117,501		117,501			117,501						

Note 1: Investment methods are classified into the following three categories, fill in the number of category each case belongs to:

(1) Directly invest in a company in Mainland China.

(2) Through investing in an existing company in the third area, which then invested in the investee in Mainland China.

(3) Others.

Note 2: In the 'Investment income (loss) recognised by the Company for the year ended December 31, 2018' column:

(1) It should be indicated if the investee was still in the incorporation arrangements and had not yet any profit during this period.

(2) Indicate the basis for investment income (loss) recognition in the number of one of the following three categories:

A. The financial statements that are audited and attested by international accounting firm which has cooperative relationship with accounting firm in R.O.C.

B. The financial statements that are audited and attested by R.O.C. parent company's CPA.

C. Others.(Self-edit financial statements)

Note 3: The numbers in this table are expressed in New Taiwan Dollars.

REALTEK SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

Significant transactions conducted with investees in Mainland China directly or indirectly through other companies in the third areas
Year ended December 31, 2018

Table 10

Expressed in thousands of NTD
(Except as otherwise indicated)

Investee in Mainland China	Technical service fees		Property transaction		Accounts receivable (payable)		Provision of endorsements/guarantees or collaterals		Financing		Interest during the year ended December 31, 2018	Others
	Amount	\$	Amount	%	Balance at December 31, 2018	%	Balance at December 31, 2018	Purpose	Balance at December 31, 2018	Interest rate		
Realsil Microelectronics Corp.	1,395,502	\$	-	-	58,171	0.11	\$	-	\$	-	\$	-
Realtek Semiconductor (Shen Zhen) Corp.	270,803		-	-	11,236	0.02		-		-		-
Cortina Network Systems Shanghai Co., Ltd.	108,117		-	-	19,128	0.03		-		-		-
RayMX Microelectronics Corp.	-		100,000	0.22	100,000	0.18	1,319,937	Operations	-	-	-	-

VI. Parent Company Only Financial Statements

REPORT OF INDEPENDENT ACCOUNTANTS TRANSLATED FROM CHINESE

PWCR18000389

To the Board of Directors and Shareholders of Realtek Semiconductor Corporation

Opinion

We have audited the accompanying parent company only balance sheets of Realtek Semiconductor Corporation (the “Company”) as at December 31, 2018 and 2017, and the related parent company only statements of comprehensive income, of changes in equity and of cash flows for the years then ended, and notes to the parent company only financial statements, including a summary of significant accounting policies.

In our opinion, based on our audits and the reports of other independent accountants (please refer to the *Other matters* section of our report), the accompanying parent company only financial statements present fairly, in all material respects, the parent company only financial position of the Company as at December 31, 2018 and 2017, and its parent company only financial performance and its parent company only 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 audits in accordance with the “Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants” and generally accepted auditing standards in the Republic of China (“ROC GAAS”). Our responsibilities under those standards are further described in the Independent Accountant’s 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 Code of Professional Ethics for Certified Public Accountants in the Republic of China (the “Code”), and we have fulfilled our other ethical responsibilities in accordance with the Code. Based on our audits and the report of the other independent accountants, we believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the parent company only financial statements of the current period. 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, we do not provide a separate opinion on these matters.

Evaluation of inventories

Description

Refer to Note 4(13) of the parent company only financial statements for inventory evaluation policies, Note 5(2) for uncertainty of accounting estimates and assumptions of inventory evaluation and Note 6(3) for the details of inventories.

The Company is primarily engaged in researching, developing, manufacturing, selling of various integrated circuits and related application software. Inventories are stated at the lower of cost and net realizable value. Due to the balances of inventories are significant to the financial statements and the rapid technological changes in the industry, there is a higher risk of decline in market value and obsolescence of inventories. Thus, we considered the evaluation of inventories as one of the key audit matters.

How our audit addressed the matter

We performed the following key audit procedures in respect of the above key audit matter:

1. Obtained an understanding of accounting policies on the provision of allowance for inventory valuation losses and assessed the reasonableness and the consistency with comparative period(s).
2. Validated the accuracy of inventory aging report, as well as sampled and confirmed the consistency of quantities and amounts with detailed inventory listing, verified dates of movements with supporting documents and ensured the proper categorization of inventory aging report.
3. Evaluated and confirmed the reasonableness of net realizable value for inventories through validating respective supporting documents.

Audit of cash in banks

Description

Refer to Note 4(5) of the parent company only financial statements for accounting policies and Note 6(1) for the details of cash and cash equivalents.

The amount of the Company's cash and cash equivalents is significant to the parent company only financial statements, and the nature and usage of those cash and cash equivalents varies. The cash in banks are deposited with various domestic and financial institutions and have high inherent risk. It is also subject to judgement as to whether certain deposits fulfill the criteria of short-term, highly liquid investments which are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. Thus, audit of cash in bank was considered as one of the key audit matters.

How our audit addressed the matter

We performed the following key audit procedures in respect of the above key audit matter:

1. Obtained detailed listings of cash in banks. Sent confirmation letters to all financial institutions and reviewed special terms and agreements in order to ensure the existence and rights and obligations of cash in banks.
2. Obtained an understanding of procedures for preparation and review of bank reconciliations, including validating unusual reconciling items.
3. Performed physical count of petty cash and time deposits, including validating whether time deposits fulfill the criteria of short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.
4. Sampled and validated significant cash transactions from bank accounts frequently used, including obtaining an understanding of the purposes of those bank accounts and vouching related supporting documents.

Other matter – Reference to audits of other independent accountants

We did not audit the financial statements of certain investments accounted for using the equity method. Those financial statements were audited by other independent accountants whose report thereon have been furnished to us, and our opinion expressed herein is based solely on the audit reports of the other independent accountants. Investments accounted for using equity method amounted to NT\$6,900,458 thousand and NT\$6,619,491 thousand as of December 31, 2018 and 2017, constituting 12.78% and 13.10% of total assets, respectively. Comprehensive income amounted to NT\$108,408 thousand and NT\$79,436 thousand, for the years ended December 31, 2018 and 2017, respectively.

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 the Audit Committee, are responsible for overseeing the Company’s financial reporting process.

Independent accountant’s 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 a 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 ROC GAAS 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 ROC GAAS, we exercise professional judgement 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 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 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 appropriate audit evidence regarding the financial information of the entities or business activities within the Company to express an opinion on the parent company only financial statements. We are responsible for the direction, supervision and performance of the company audit. We remain solely responsible for our audit opinion.

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the parent company only financial statements of the current period and are therefore the key audit matters. We describe these matters in our 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.

Hsueh, Seou-Hung

Li, Tien-Yi

For and on behalf of PricewaterhouseCoopers, Taiwan

March 21, 2019

The accompanying parent company only financial statements are not intended to present the financial position and results of operations and cash flows in accordance with accounting principles generally accepted in countries and jurisdictions other than the Republic of China. The standards, procedures and practices in the Republic of China governing the audit of such financial statements may differ from those generally accepted in countries and jurisdictions other than the Republic of China. Accordingly, the accompanying parent company only financial statements and report of independent accountants are not intended for use by those who are not informed about the accounting principles or auditing standards generally accepted in the Republic of China, and their applications in practice.

As the financial statements are the responsibility of the management, PricewaterhouseCoopers cannot accept any liability for the use of, or reliance on, the English translation or for any errors or misunderstandings that may derive from the translation.

REALTEK SEMICONDUCTOR CORPORATION
PARENT COMPANY ONLY BALANCE SHEETS
DECEMBER 31, 2018 AND 2017

(Expressed in thousands of New Taiwan dollars)

Assets	Notes	December 31, 2018		December 31, 2017		
		AMOUNT	%	AMOUNT	%	
Current assets						
1100	Cash and cash equivalents	6(1)	\$ 1,553,365	3	\$ 735,254	1
1110	Financial assets at fair value through profit or loss - current		29,061	-	-	-
1136	Financial assets at amortised cost - current	8	61,401	-	-	-
1170	Accounts receivable, net	6(2)	4,307,547	8	2,789,923	6
1180	Accounts receivable, net - related parties	6(2) and 7(3)	1,033,782	2	941,236	2
1200	Other receivables		42,641	-	18,735	-
1210	Other receivables - related parties	7	2,688,329	5	3,439,082	7
130X	Inventories, net	6(3)	4,096,647	8	4,324,420	9
1410	Prepayments		149,935	-	247,142	-
1470	Other current assets	8	-	-	91,655	-
11XX	Total current assets		<u>13,962,708</u>	<u>26</u>	<u>12,587,447</u>	<u>25</u>
Non-current assets						
1517	Financial assets at fair value through other comprehensive income - non-current		936	-	-	-
1523	Available-for-sale financial assets - non-current		-	-	40,344	-
1543	Financial assets carried at cost - non-current		-	-	6,575	-
1550	Investments accounted for under equity method	6(4)	35,911,991	67	33,631,364	67
1600	Property, plant and equipment, net	6(5)	2,863,756	5	2,679,455	5
1780	Intangible assets	6(6)	1,160,549	2	1,495,547	3
1840	Deferred income tax assets	6(21)	78,472	-	65,551	-
1900	Other non-current assets		14,444	-	6,456	-
15XX	Total non-current assets		<u>40,030,148</u>	<u>74</u>	<u>37,925,292</u>	<u>75</u>
1XXX	Total assets		<u>\$ 53,992,856</u>	<u>100</u>	<u>\$ 50,512,739</u>	<u>100</u>

(Continued)

REALTEK SEMICONDUCTOR CORPORATION
PARENT COMPANY ONLY BALANCE SHEETS
DECEMBER 31, 2018 AND 2017
(Expressed in thousands of New Taiwan dollars)

Liabilities and Equity	Notes	December 31, 2018		December 31, 2017		
		AMOUNT	%	AMOUNT	%	
Current liabilities						
2100	Short-term borrowings	6(7)	\$ 14,526,311	27	\$ 18,052,624	36
2130	Contract liabilities - current	6(15)	110,764	-	-	-
2150	Notes payable		8,657	-	8,631	-
2170	Accounts payable		3,793,276	7	3,783,139	7
2180	Accounts payable - related parties	7	228,279	-	282,667	1
2200	Other payables	6(8)	6,867,842	13	5,624,505	11
2220	Other payables - related parties	7	38,283	-	32,156	-
2230	Current income tax liabilities		578,088	1	326,648	1
2300	Other current liabilities	6(15)	2,581,910	5	88,847	-
21XX	Total current liabilities		<u>28,733,410</u>	<u>53</u>	<u>28,199,217</u>	<u>56</u>
Non-current liabilities						
2550	Provisions - non-current	6(10)	519,016	1	434,425	1
2570	Deferred income tax liabilities	6(21)	22,310	-	21,749	-
2600	Other non-current liabilities	6(9)	80,828	-	7,830	-
25XX	Total non-current liabilities		<u>622,154</u>	<u>1</u>	<u>464,004</u>	<u>1</u>
2XXX	Total Liabilities		<u>29,355,564</u>	<u>54</u>	<u>28,663,221</u>	<u>57</u>
Equity						
Share capital						
3110	Common shares	6(11)	5,080,955	10	5,065,062	10
Capital surplus						
3200	Capital surplus	6(12)	3,236,659	6	3,558,856	7
Retained earnings						
3310	Legal reserve	6(13)	4,467,099	8	4,127,884	8
3320	Special reserve		600,443	1	-	-
3350	Undistributed earnings		10,850,172	20	9,698,159	19
Other equity						
3400	Other equity interest	6(14)	401,964	1	(600,443)	(1)
3XXX	Total equity		<u>24,637,292</u>	<u>46</u>	<u>21,849,518</u>	<u>43</u>
3X2X	Total liabilities and equity		<u>\$ 53,992,856</u>	<u>100</u>	<u>\$ 50,512,739</u>	<u>100</u>

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

REALTEK SEMICONDUCTOR CORPORATION
PARENT COMPANY ONLY STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(Expressed in thousands of New Taiwan dollars, except earnings per share amounts)

Items	Notes	2018		2017	
		AMOUNT	%	AMOUNT	%
4000					
		\$	100	\$	100
5000	6(15) and 7				
		(	59	(	59
5900	6(3)				
			41		41
6100	6(19)(20) and 7	(	5	(	5
6200		(	3	(	3
6300		(	31	(	30
6450	12(2)		-		-
6000		(	39	(	38
6900			2		3
7010	6(16) and 7		1		-
7020	6(17)	(	-	(	1
7050	6(18)	(	-	(	1
7070	6(4)				
			12		11
7000			13		9
7900			15		12
7950	6(21)	(	1	(	1
8200		\$	14	\$	11
8311		(\$	-	\$	-
8316		(-		-
8330		(	1		-
		(	1		-
8362		-	-	(-
8380					
			3	(	6
8360			3	(	6
8300		\$	2	(\$	6
8500		\$	16	\$	5
9750	6(22)	\$	8.57	\$	6.71
9850		\$	8.40	\$	6.57

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

Realtek Semiconductor Corporation
PARENT COMPANY ONLY STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(Expressed in thousands of New Taiwan dollars, except as otherwise indicated)

	Notes	Retained earnings				Other equity interest			Total equity	
		Share capital - common stock	Capital surplus	Legal reserve	Special reserve	Undistributed earnings	Financial statements translation differences of foreign operations	Unrealised gains (losses) from financial assets measured at fair value through other comprehensive income		Unrealised gain or loss on available-for-sale financial assets
2017										
Balance at January 1, 2017		\$ 5,049,513	\$ 3,910,428	\$ 3,823,896	\$ -	\$ 8,629,799	\$ 1,298,139	\$ -	\$ 103,410	\$ 22,815,185
Net income for the year		-	-	-	-	3,392,153	-	-	-	3,392,153
Other comprehensive income (loss)	6(14)	-	-	-	-	-	(2,111,302)	-	109,310	(2,001,992)
Total comprehensive income		-	-	-	-	3,392,153	(2,111,302)	-	109,310	1,390,161
Distribution of 2016 earnings		-	-	-	-	-	-	-	-	-
Legal reserve		-	-	303,988	-	(303,988)	-	-	-	-
Cash dividends	6(13)	-	-	-	-	(2,019,805)	-	-	-	(2,019,805)
Employees' compensation transferred to common stock		15,549	145,386	-	-	-	-	-	-	160,935
Cash dividends from capital surplus	6(12)	-	(504,951)	-	-	-	-	-	-	(504,951)
Changes in equity of associates accounted for using equity method	6(12)	-	7,993	-	-	-	-	-	-	7,993
Balance at December 31, 2017		\$ 5,065,062	\$ 3,558,856	\$ 4,127,884	\$ -	\$ 9,698,159	(\$ 813,163)	\$ -	\$ 212,720	\$ 21,849,518
2018										
Balance at January 1, 2018		\$ 5,065,062	\$ 3,558,856	\$ 4,127,884	\$ -	\$ 9,698,159	(\$ 813,163)	\$ -	\$ 212,720	\$ 21,849,518
Modified retrospective approach adjustment		-	-	-	-	103,142	-	-	(212,720)	326,257
Balance at January 1, after adjustments	6(14)	5,065,062	3,558,856	4,127,884	-	9,801,301	(813,163)	435,835	-	22,175,775
Net income for the year		-	-	-	-	4,350,768	-	-	-	4,350,768
Other comprehensive income (loss)	6(14)	-	-	-	-	(75,809)	942,974	(163,682)	-	703,483
Total comprehensive income		-	-	-	-	4,274,959	942,974	(163,682)	-	5,054,251
Distribution of 2017 earnings		-	-	-	-	-	-	-	-	-
Legal reserve		-	-	339,215	-	(339,215)	-	-	-	-
Special reserve		-	-	-	600,443	(600,443)	-	-	-	-
Cash dividends	6(13)	-	-	-	-	(2,286,430)	-	-	-	(2,286,430)
Employees' compensation transferred to common stock		15,893	163,692	-	-	-	-	-	-	179,585
Cash dividends from capital surplus	6(12)	-	(508,095)	-	-	-	-	-	-	(508,095)
Changes in equity of associates accounted for using equity method	6(12)	-	22,005	-	-	-	-	-	-	22,005
Cash dividends returned		-	201	-	-	-	-	-	-	201
Balance at December 31, 2018		\$ 5,080,955	\$ 3,236,659	\$ 4,467,099	\$ 600,443	\$ 10,850,172	\$ 129,811	\$ 272,153	\$ -	\$ 24,637,292

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

REALTEK SEMICONDUCTOR CORPORATION
PARENT COMPANY ONLY STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(Expressed in thousands of New Taiwan dollars)

	Notes	2018	2017
<u>CASH FLOWS FROM OPERATING ACTIVITIES</u>			
Profit before tax		\$ 4,638,768	\$ 3,602,153
Adjustments			
Adjustments to reconcile profit (loss)			
Depreciation	6(19)	470,049	422,595
Amortization	6(19)	943,734	1,007,187
Expected credit gains	12(2)	(5,803)	-
Provision for doubtful accounts		-	19,424
Interest expense	6(18)	140,170	147,941
Interest income	6(16)	(66,668)	(44,065)
Dividend income	6(16)	(812)	(406)
Loss on financial assets at fair value through profit or loss	6(17)	11,283	-
Share of loss of associates and joint ventures accounted for using equity method	6(4)	(3,968,591)	(3,174,944)
Gain on disposal of property, plant and equipment	6(17)	-	(14,269)
Other intangible assets transferred to expenses		7,698	18,203
Changes in operating assets and liabilities			
Changes in operating assets			
Accounts receivable, net		527,028	(906,911)
Accounts receivable, net - related parties		53,312	(673,854)
Other receivables, net		(23,639)	(12,170)
Other receivables, net - related parties		(67,713)	1,957,128
Inventories		227,773	(1,120,140)
Prepayments		97,207	(40,855)
Changes in operating liabilities			
Contract liabilities-current		21,541	-
Notes payable		26	3,862
Accounts payable		10,137	504,642
Accounts payable - related parties		(54,388)	109,405
Other payables		1,310,009	324,700
Other payables - related parties		6,126	11,724
Provisions-non-current	6(10)	84,591	94,060
Other current liabilities		397,579	30,688
Accrued pension obligations		(2,507)	(3,427)

(Continued)

REALTEK SEMICONDUCTOR CORPORATION
PARENT COMPANY ONLY STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(Expressed in thousands of New Taiwan dollars)

	Notes	2018	2017
Cash inflow generated from operations		\$ 4,756,910	\$ 2,262,671
Receipt of interest		66,401	47,477
Interest paid		(138,304)	(145,767)
Income taxes paid		(48,920)	(193,046)
Receipt of dividend		812	406
Net cash flows from operating activities		<u>4,636,899</u>	<u>1,971,741</u>
<u>CASH FLOWS FROM INVESTING ACTIVITIES</u>			
Proceeds from disposal of amortised cost of a financial asset		30,254	-
Acquisition of investments accounted for using equity method		-	(8,427,063)
Proceeds from capital reduction of financial assets at cost		-	6,622
Proceeds from capital reduction of investee accounted for using the equity method	6(4)	-	14,923
Acquisition of cash dividends from investments accounted for using equity method	7	5,436,741	15,165
Acquisition of property, plant and equipment	6(23)	(578,076)	(406,706)
Proceeds from disposal of property, plant and equipment		-	14,269
Acquisition of intangible assets	6(23)	(581,659)	(879,239)
(Increase) decrease in other receivables, net - related parties		(1,797,119)	3,265,621
Increase in refundable deposits		(7,988)	(100)
Increase in other current assets		-	(36,240)
Net cash flows from (used in) investing activities		<u>2,502,153</u>	<u>(6,432,748)</u>
<u>CASH FLOWS FROM FINANCING ACTIVITIES</u>			
(Decrease) increase in short-term borrowings	6(24)	(3,526,313)	2,857,624
Guarantee deposits received	6(24)	(304)	(862)
Cash dividends paid	6(13)	(2,794,525)	(2,524,756)
Cash dividends returned		201	-
Net cash flows (used in) from financing activities		<u>(6,320,941)</u>	<u>332,006</u>
Net increase (decrease) in cash and cash equivalents		818,111	(4,129,001)
Cash and cash equivalents at beginning of year		735,254	4,864,255
Cash and cash equivalents at end of year		<u>\$ 1,553,365</u>	<u>\$ 735,254</u>

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

REALTEK SEMICONDUCTOR CORPORATION
NOTES TO THE PARENT COMPANY ONLY FINANCIAL STATEMENTS
DECEMBER 31, 2018 AND 2017

(EXPRESSED IN THOUSANDS OF NEW TAIWAN DOLLARS, EXCEPT AS OTHERWISE INDICATED)

1. HISTORY AND ORGANISATION

Realtek Semiconductor Corporation (the “Company”) was incorporated as a company limited by shares on October 21, 1987 and commenced commercial operations in March 1988. The Company was based in Hsinchu Science-Based Industrial Park since October 28, 1989. The Company is engaged in the research, development, design, testing, and sales of ICs and application softwares for these products.

2. THE DATE OF AUTHORISATION FOR ISSUANCE OF THE PARENT COMPANY ONLY FINANCIAL STATEMENTS AND PROCEDURES FOR AUTHORISATION

These parent company only financial statements were authorised for issuance by the Board of Directors on March 21, 2019.

3. APPLICATION OF NEW STANDARDS, AMENDMENTS AND INTERPRETATIONS

(1) Effect of the adoption of new issuances of or amendments to International Financial Reporting Standards (“IFRSs”) as endorsed by the Financial Supervisory Commission (“FSC”)

New standards, interpretations and amendments endorsed by the FSC effective from 2018 are as follows:

<u>New Standards, Interpretations and Amendments</u>	<u>Effective date by International Accounting Standards Board</u>
Amendments to IFRS 2, ‘Classification and measurement of share-based payment transactions’	January 1, 2018
Amendments to IFRS 4, ‘Applying IFRS 9, Financial instruments with IFRS 4, Insurance contracts’	January 1, 2018
IFRS 9, ‘Financial instruments’	January 1, 2018
IFRS 15, ‘Revenue from contracts with customers’	January 1, 2018
Amendments to IFRS 15, ‘Clarifications to IFRS 15, Revenue from contracts with customers’	January 1, 2018
Amendments to IAS 7, ‘Disclosure initiative’	January 1, 2017
Amendments to IAS 12, ‘Recognition of deferred tax assets for unrealised	January 1, 2017
Amendments to IAS 40, ‘Transfers of investment property’	January 1, 2018
IFRIC 22, ‘Foreign currency transactions and advance consideration’	January 1, 2018

New Standards, Interpretations and Amendments	Effective date by International Accounting Standards Board
Annual improvements to IFRSs 2014-2016 cycle - Amendments to IFRS 1, 'First-time adoption of International Financial Reporting Standards'	January 1, 2018
Annual improvements to IFRSs 2014-2016 cycle - Amendments to IFRS 12, 'Disclosure of interests in other entities'	January 1, 2017
Annual improvements to IFRSs 2014-2016 cycle - Amendments to IAS 28, 'Investments in associates and joint ventures'	January 1, 2018

Except for the following, the above standards and interpretations have no significant impact to the Company's financial condition and financial performance based on the Company's assessment.

A. IFRS 9, 'Financial instruments'

- (a) Classification of debt instruments is driven by the entity's business model and the contractual cash flow characteristics of the financial assets, which would be classified as financial asset at fair value through profit or loss, financial asset measured at fair value through other comprehensive income or financial asset at amortised cost. Equity instruments would be classified as financial asset at fair value through profit or loss, unless an entity makes an irrevocable election at inception to present subsequent changes in the fair value of an investment in an equity instrument that is not held for trading in other comprehensive income.
- (b) The impairment losses of debt instruments are assessed using an 'expected credit loss' approach. An entity assesses at each balance sheet date whether there has been a significant increase in credit risk on that instrument since initial recognition to recognise 12-month expected credit losses or lifetime expected credit losses (interest revenue would be calculated on the gross carrying amount of the asset before impairment losses occurred); or if the instrument has objective evidence of impairment, interest revenue after the impairment would be calculated on the book value of net carrying amount (i.e. net of credit allowance). The Company shall always measure the loss allowance at an amount equal to lifetime expected credit losses for trade receivables that do not contain a significant financing component.
- (c) The Company has elected not to restate prior period financial statements using the modified retrospective approach under IFRS 9. For details of the significant effect as at January 1, 2018, please refer to Note 12(4)B.

B. IFRS 15, 'Revenue from contracts with customers'

- (a) IFRS 15, 'Revenue from contracts with customers' replaces IAS 11, 'Construction contracts', IAS 18, 'Revenue' and relevant interpretations. According to IFRS 15, revenue is recognised when a customer obtains control of promised goods or services. A customer obtains control

of goods or services when a customer has the ability to direct the use of, and obtain substantially all of the remaining benefits from, the asset.

The core principle of IFRS 15 is that an entity recognises revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. An entity recognises revenue in accordance with that core principle by applying the following steps:

Step 1: Identify contracts with customer.

Step 2: Identify separate performance obligations in the contract(s).

Step 3: Determine the transaction price.

Step 4: Allocate the transaction price.

Step 5: Recognise revenue when the performance obligation is satisfied.

Further, IFRS 15 includes a set of comprehensive disclosure requirements that requires an entity to disclose sufficient information to enable users of financial statements to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers.

- (b) The Company has elected not to restate prior period financial statements and recognised the cumulative effect of initial application as retained earnings at January 1, 2018, using the modified retrospective approach under IFRS 15. The Company applied retrospectively IFRS 15 only to incomplete contracts as of January 1, 2018, by adopting an optional transition expedient. The significant effects of adopting the modified transition as of January 1, 2018 are summarised below:

Consolidated balance sheet

<u>Affected items</u>	<u>2017 version</u>	<u>Effect of</u>	<u>2018 version</u>	<u>Remark</u>
	<u>IFRSs amount</u>	<u>adoption of</u>	<u>IFRSs amount</u>	
<u>January 1, 2018</u>				
Accounts receivable-allowance for sales returns and discounts	(\$ 2,184,707)	\$ 2,184,707	\$ -	i(i)
Total affected assets	(\$ 2,184,707)	\$ 2,184,707	\$ -	
Contract liabilities	\$ -	(\$ 89,223)	(\$ 89,223)	i(ii)
Advance sales receipts	(89,223)	89,223	-	i(ii)
Refund liabilities - current	-	(2,184,707)	(2,184,707)	i(i)
Total affected liabilities	(\$ 89,223)	(\$ 2,184,707)	(\$ 2,273,930)	

i. Presentation of assets and liabilities in relation to contracts with customers

In line with IFRS 15 requirements, the Company changed the presentation of certain accounts in the balance sheet as follows:

- (i) Under IFRS 15, liabilities in relation to expected volume discounts and refunds to customers are recognised as refund liabilities (shown as other current liabilities), but were previously presented as accounts receivable - allowance for sales returns and

discounts in the balance sheet. As of January 1, 2018, the balance amounted to \$2,184,707.

- (ii) Under IFRS 15, liabilities in relation to sales contracts are recognised as contract liabilities, but were previously presented as advance sales receipts in the balance sheet. As of January 1, 2018, the balance amounted to \$89,223.

ii. Please refer to Note 12(5) for other disclosures in relation to the first application of IFRS 15.

C. Amendments to IAS 7, 'Disclosure initiative'

This amendment requires that an entity shall provide more disclosures related to changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes.

The Company has provided additional disclosure to explain the changes in liabilities arising from financing activities, as described in Note 6(24).

(2) Effect of new issuances of or amendments to IFRSs as endorsed by the FSC but not yet adopted by the Company

New standards, interpretations and amendments endorsed by the FSC effective from 2019 are as follows:

New Standards, Interpretations and Amendments	Effective date by International Accounting Standards Board
Amendments to IFRS 9, 'Prepayment features with negative compensation'	January 1, 2019
IFRS 16, 'Leases'	January 1, 2019
Amendments to IAS 19, 'Plan amendment, curtailment or settlement'	January 1, 2019
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
Annual improvements to IFRSs 2015-2017 cycle	January 1, 2019

Except for the following, the above standards and interpretations have no significant impact to the Company's financial condition and financial performance based on the Company's assessment. The quantitative impact will be disclosed when the assessment is complete.

IFRS 16, 'Leases'

IFRS 16, 'Leases', replaces IAS 17, 'Leases' and related interpretations and SICs. The standard requires lessees to recognise a 'right-of-use asset' and a lease liability (except for those leases with terms of 12 months or less and leases of low-value assets). The accounting stays the same for lessors, which is to classify their leases as either finance leases or operating leases and account for those two types of leases differently. IFRS 16 only requires enhanced disclosures to be provided by lessors.

The Company expects to recognise the lease contract of lessees in line with IFRS 16. However,

the Company does not intend to restate the financial statements of prior period (referred herein as the “modified retrospective approach”). On January 1, 2019, it is expected that ‘right-of-use asset’ and lease liability will be increased by \$731,972 and \$731,972, respectively.

(3) IFRSs issued by IASB but not yet endorsed by the FSC

New standards, interpretations and amendments issued by IASB but not yet included in the IFRSs as endorsed by the FSC are as follows:

<u>New Standards, Interpretations and Amendments</u>	<u>Effective date by International Accounting Standards Board</u>
Amendments to IAS 1 and IAS 8, ‘Disclosure Initiative-Definition of Material’	January 1, 2020
Amendments to IFRS 3, ‘Definition of a business’	January 1, 2020
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 International Accounting Standards Board
IFRS 17, ‘Insurance contracts’	January 1, 2021

The above standards and interpretations have no significant impact to the Company’s financial condition and financial performance based on the Company’s assessment.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The principal accounting policies applied in the preparation of these parent company only financial statements are set out below. These policies have been consistently applied to all the periods presented, unless otherwise stated.

(1) Compliance statement

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

(2) Basis of preparation

A. Except for the following items, the parent company only financial statements have been prepared under the historical cost convention:

- (a) Financial assets (including derivative instruments) at fair value through profit or loss.
- (b) Financial assets and liabilities at fair value through other comprehensive income/Available-for-sale financial assets measured at fair value.
- (c) Defined benefit liabilities recognised based on the net amount of pension fund assets less present value of defined benefit obligation.

B. The preparation of financial statements in conformity with IFRSs requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Company’s accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the parent company only financial statements are disclosed in Note 5.

C. In adopting IFRS 9 and IFRS 15 effective January 1, 2018, the Company has elected to apply

modified retrospective approach whereby the cumulative impact of the adoption was recognised as retained earnings or other equity as of January 1, 2018 and the financial statements for the year ended December 31, 2017 were not restated. The financial statements for the year ended December 31, 2017 were prepared in compliance with International Accounting Standard 39 ('IAS 39'), International Accounting Standard 18 ('IAS 18') and related financial reporting interpretations. Please refer to Notes 12(4) and (5) for details of significant accounting policies and details of significant accounts.

(3) Foreign currency translation

Items included in the financial statements of each of the Company's entities are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). The parent company only financial statements are presented in New Taiwan dollars, which is the Company's functional and presentation currency.

A. Foreign currency transactions and balances

- (a) Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are remeasured. Foreign exchange gains and losses resulting from the settlement of such transactions are recognised in profit or loss in the period in which they arise.
- (b) Monetary assets and liabilities denominated in foreign currencies at the period end are re-translated at the exchange rates prevailing at the balance sheet date. Exchange differences arising upon re-translation at the balance sheet date are recognised in profit or loss.
- (c) Non-monetary assets and liabilities denominated in foreign currencies held at fair value through profit or loss are re-translated at the exchange rates prevailing at the balance sheet date; their translation differences are recognised in profit or loss. Non-monetary assets and liabilities denominated in foreign currencies held at fair value through other comprehensive income are re-translated at the exchange rates prevailing at the balance sheet date; their translation differences are recognised in other comprehensive income. However, non-monetary assets and liabilities denominated in foreign currencies that are not measured at fair value are translated using the historical exchange rates at the dates of the initial transactions.
- (d) All other foreign exchange gains and losses based on the nature of those transactions are presented in the statement of comprehensive income within 'other gains and losses'.

B. Translation of foreign operations

- (a) The operating results and financial position of all the Company entities, associates and joint arrangements that have a functional currency different from the presentation currency are translated into the presentation currency as follows:
 - i. Assets and liabilities for each balance sheet presented are translated at the closing exchange rate at the date of that balance sheet;

- ii. Income and expenses for each statement of comprehensive income are translated at average exchange rates of that period; and
- iii. All resulting exchange differences are recognised in other comprehensive income.

- (b) When the foreign operation partially disposed of or sold is an associate, exchange differences that were recorded in other comprehensive income are proportionately reclassified to profit or loss as part of the gain or loss on sale. In addition, even when the Company retains partial interest in the former foreign associate after losing significant influence over the former foreign associate, such transactions should be accounted for as disposal of all interest in these foreign operations.
- (c) Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing exchange rates at the balance sheet date.

(4) Classification of current and non-current items

- A. Assets that meet one of the following criteria are classified as current assets; otherwise they are classified as non-current assets:
 - (a) Assets arising from operating activities that are expected to be realised, or are intended to be sold or consumed within the normal operating cycle;
 - (b) Assets held mainly for trading purposes;
 - (c) Assets that are expected to be realised within twelve months from the balance sheet date;
 - (d) Cash and cash equivalents, excluding restricted cash and cash equivalents and those that are to be exchanged or used to settle liabilities more than twelve months after the balance sheet date.
- B. Liabilities that meet one of the following criteria are classified as current liabilities; otherwise they are classified as non-current liabilities:
 - (a) Liabilities that are expected to be settled within the normal operating cycle;
 - (b) Liabilities arising mainly from trading activities;
 - (c) Liabilities that are to be settled within twelve months from the balance sheet date;
 - (d) Liabilities for which the repayment date cannot be extended unconditionally to more than twelve months after the balance sheet date. 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.

(5) Cash equivalents

Cash equivalents refer to short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

(6) Financial assets at fair value through profit or loss

Effective 2018

- A. Financial assets at fair value through profit or loss are financial assets that are not measured at amortised cost or fair value through other comprehensive income. Financial assets at amortised cost or fair value through other comprehensive income are designated as at fair value through profit or loss at initial recognition when they eliminate or significantly reduce a measurement or recognition inconsistency.

- B. On a regular way purchase or sale basis, financial assets at fair value through profit or loss are recognised and derecognised using trade date accounting.
- C. At initial recognition, the Company measures the financial assets at fair value and recognises the transaction costs in profit or loss. The Company subsequently measures the financial assets at fair value, and recognises the gain or loss in profit or loss.
- D. The Company recognises the dividend income when the right to receive payment is established, future economic benefits associated with the dividend will flow to the Company and the amount of the dividend can be measured reliably.

(7) Financial assets at fair value through other comprehensive income

Effective 2018

- A. Financial assets at fair value through other comprehensive income comprise equity securities which are not held for trading, and for which the Company has made an irrevocable election at initial recognition to recognise changes in fair value in other comprehensive income and debt instruments which meet all of the following criteria:
 - (a) The objective of the Company's business model is achieved both by collecting contractual cash flows and selling financial assets; and
 - (b) The assets' contractual cash flows represent solely payments of principal and interest.
- B. On a regular way purchase or sale basis, financial assets at fair value through other comprehensive income are recognised and derecognised using trade date accounting.
- C. At initial recognition, the Company measures the financial assets at fair value plus transaction costs. The Company subsequently measures the financial assets at fair value:
The changes in fair value of equity investments that were recognised in other comprehensive income are reclassified to retained earnings and are not reclassified to profit or loss following the derecognition of the investment. Dividends are recognised as revenue when the right to receive payment is established, future economic benefits associated with the dividend will flow to the Company and the amount of the dividend can be measured reliably.

(8) Financial assets at amortised cost

Effective 2018

- A. Financial assets at amortised cost are those that meet all of the following criteria:
 - (a) The objective of the Company's business model is achieved by collecting contractual cash flows.
 - (b) The assets' contractual cash flows represent solely payments of principal and interest.
- B. On a regular way purchase or sale basis, financial assets at amortised cost are recognised and derecognised using trade date accounting.
- C. At initial recognition, the Company measures the financial assets at fair value plus transaction costs. Interest income from these financial assets is included in finance income using the effective interest method. A gain or loss is recognised in profit or loss when the asset is derecognised or impaired.

D. The Company's time deposits which do not fall under cash equivalents are those with a short maturity period and are measured at initial investment amount as the effect of discounting is immaterial.

(9) Accounts receivable

A. Accounts receivable entitle the Company a legal right to receive consideration in exchange for transferred goods or rendered services.

B. The short-term accounts and notes receivable without bearing interest are subsequently measured at initial invoice amount as the effect of discounting is immaterial.

(10) Impairment of financial assets

For debt instruments measured at fair value through other comprehensive income and financial assets at amortised cost, at each reporting date, the Company recognises the impairment provision for 12 months expected credit losses if there has not been a significant increase in credit risk since initial recognition or recognizes the impairment provision for the lifetime expected credit losses (ECLs) if such credit risk has increased since initial recognition after taking into consideration all reasonable and verifiable information that includes forecasts. On the other hand, for accounts receivable that do not contain a significant financing component, the Company recognises the impairment provision for lifetime ECLs.

(11) Derecognition of financial assets

The Company derecognises a financial asset when the contractual rights to receive the cash flows from the financial asset expire.

(12) Operating leases (lessor)

Lease income from an operating lease (net of any incentives given to the lessee) is recognised in profit or loss and collects the rental over the lease term.

(13) Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined using the weighted-average method. The cost of finished goods and work in progress comprises raw materials, direct labour, other direct costs and related production overheads (allocated based on normal operating capacity). It excludes borrowing costs. The item by item approach is used in applying the lower of cost and net realisable value. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated cost of completion and applicable variable selling expenses.

(14) Investments accounted for using equity method / associates

A. Subsidiaries are all entities controlled by the Company. The Company controls an entity when the Company is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

B. Unrealised profit (loss) occurred from the transactions between the Company and subsidiaries have been offset. The accounting policies of the subsidiaries have been adjusted where necessary to ensure consistency with the policies adopted by the Company.

- C. The Company's share of its subsidiaries' post-acquisition profits or losses is recognised in profit or loss, and its share of post-acquisition movements in other comprehensive income is recognised in other comprehensive income. When the Company's share of losses in a subsidiary equals or exceeds its interest in the subsidiary, the Company continues to recognize losses proportionate to its ownership.
- D. If changes in the Company's shares in subsidiaries do not result in loss in control (transactions with non-controlling interest), transactions shall be considered as equity transactions, which are transactions between owners. Difference of adjustment of non-controlling interest and fair value of consideration paid or received is recognised in equity.
- E. Upon loss of significant influence over a subsidiary, the Company remeasures any investment retained in the former subsidiary at its fair value. Any difference between fair value and carrying amount is recognised in profit or loss. The amount previously recognised in other comprehensive income in relation to the subsidiary is reclassified to profit or loss, on the same basis as would be required if the relevant assets or liabilities were disposed of. When the Company loses significant influence over the subsidiary, the profit or loss is reclassified from equity to profit or loss.
- F. Associates are all entities over which the Company has significant influence but not control. In general, it is presumed that the investor has significant influence, if an investor holds, directly or indirectly 20 percent or more of the voting power of the investee. Investments in associates are accounted for using the equity method and are initially recognised at cost.
- G. The Company's share of its associates' post-acquisition profits or losses is recognised in profit or loss, and its share of post-acquisition movements in other comprehensive income is recognised in other comprehensive income. When the Company's share of losses in an associate equals or exceeds its interest in the associate (including any other unsecured receivables), the Company does not recognise further losses, unless it has incurred statutory/constructive obligations or made payments on behalf of the associate.
- H. When changes in an associate's equity do not arise from profit or loss or other comprehensive income of the associate and such changes do not affect the Company's ownership percentage of the associate, the Company recognises the Company's share of change in equity of the associate in 'capital surplus' in proportion to its ownership.
- I. Unrealised gains on transactions between the Company and its associates are eliminated to the extent of the Company's interest in the associates. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates have been adjusted where necessary to ensure consistency with the policies adopted by the Company.
- J. In the case that an associate issues new shares and the Company does not subscribe or acquire new shares proportionately, which results in a change in the Company's ownership percentage of the associate but maintains significant influence on the associate, then 'capital surplus' and

‘investments accounted for under the equity method’ shall be adjusted for the increase or decrease of its share of equity interest. If the above condition causes a decrease in the Company’s ownership percentage of the associate, in addition to the above adjustment, the amounts previously recognised in other comprehensive income in relation to the associate are reclassified to profit or loss proportionately on the same basis as would be required if the relevant assets or liabilities were disposed of.

- K. When the Company disposes its investment in an associate and loses significant influence over this associate, the amounts previously recognised in other comprehensive income in relation to the associate, are reclassified to profit or loss, on the same basis as would be required if the relevant assets or liabilities were disposed of. If it retains significant influence over this associate, the amounts previously recognised in other comprehensive income in relation to the associate are reclassified to profit or loss proportionately in accordance with the aforementioned approach.
- L. Upon loss of significant influence over an associate, the Group remeasures any investment retained in the former associate at its fair value. Any difference between fair value and carrying amount is recognised in profit or loss.
- M. Pursuant to the “Regulations Governing the Preparation of Financial Reports by Securities Issuers,” profit (loss) of the current period and other comprehensive income in the parent company only financial statements shall equal to the amount attributable to owners of the parent in the parent company only financial statements. Owners’ equity in the parent company only financial statements shall equal to equity attributable to owners of the parent in the parent company only financial statements.

(15) Property, plant and equipment

- A. Property, plant and equipment are initially recorded at cost. Borrowing costs incurred during the construction period are capitalised.
- B. Subsequent costs are included in the asset’s carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to profit or loss during the financial period in which they are incurred.
- C. Other property, plant and equipment apply cost model and are depreciated using the straight-line method to allocate their cost over their estimated useful lives. Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item must be depreciated separately. The assets’ residual values, useful lives and depreciation methods are reviewed, and adjusted if appropriate, at each financial year-end. If expectations for the assets’ residual values and useful lives differ from previous estimates or the patterns of consumption of the assets’ future economic benefits embodied in the assets have changed significantly, any change is accounted for as a change in estimate under IAS 8, ‘Accounting

Policies, Changes in Accounting Estimates and Errors', from the date of the change. The estimated useful lives of the fixed assets are as follows: buildings - 10~55 years and other fixed assets - 3~5 years.

(16) Operating leases (lessee)

Payments made under an operating lease (net of any incentives received from the lessor) are recognised in profit or loss and pay the rental over the lease term.

(17) Intangible assets

Other intangible assets

Separately acquired intangible assets with a finite useful life are stated at cost, net of accumulated amortisation and accumulated impairment. Intangible assets acquired in a business combination are recognised at fair value at acquisition date. The amortisation amounts of separately and parent company only acquired intangible assets were amortised on a straight-line basis over their estimated useful lives of 2-5 years.

(18) Borrowings

Borrowings comprise long-term and short-term bank borrowings. Borrowings are recognised initially at fair value, net of transaction costs incurred.

(19) Notes and accounts payable

A. Accounts payable are liabilities for purchases of raw materials, goods or services and notes payable are those resulting from operating and non-operating activities.

B. The short-term notes and accounts payable without bearing interest are subsequently measured at initial invoice amount as the effect of discounting is immaterial.

(20) Derecognition of financial liabilities

A financial liability is derecognised when the obligation under the liability specified in the contract is discharged or cancelled or expires.

(21) Provisions

Provisions are recognised when the Company has a present legal or constructive obligation as a result of past events, and it is probable that an outflow of economic resources will be required to settle the obligation and the amount of the obligation can be reliably estimated. Provisions are measured at the present value of the expenditures expected to be required to settle the obligation on the balance sheet date, which is discounted using a pre-tax discount rate that reflects the current market assessments of the time value of money and the risks specific to the obligation.

(22) Employee benefits

A. Short-term employee benefits

Short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in respect of service rendered by employees in a period and should be recognised as expense in that period when the employees render service.

B. Pensions

(a) Defined contribution plans

For defined contribution plans, the contributions are recognised as pension expense when they are due on an accrual basis. Prepaid contributions are recognised as an asset to the extent of a cash refund or a reduction in the future payments.

(b) Defined benefit plans

- i. Net obligation under a defined benefit plan is defined as the present value of an amount of pension benefits that employees will receive on retirement for their services with the Company in current period or prior periods. The liability recognised in the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the balance sheet date less the fair value of plan assets. The net defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The rate used to discount is determined by using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension liability; when there is no deep market in high-quality corporate bonds, the Company uses interest rates of government bonds (at the balance sheet date) instead.
- ii. Remeasurements arising on defined benefit plans are recognised in other comprehensive income in the period in which they arise and are recorded as retained earnings.

C. Employees' compensation and directors' and supervisors' remuneration

Employees' compensation and directors' and supervisors' remuneration are recognised as expense and liability, provided that such recognition is required under legal or constructive obligation and those amounts can be reliably estimated. Any difference between the resolved amounts and the subsequently actual distributed amounts is accounted for as changes in estimates. If employee compensation is distributed by shares, the Company calculates the number of shares based on the closing price at the previous day of the Board meeting resolution.

(23) Income tax

- A. The tax expense for the period comprises current and deferred tax. Tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or items recognised directly in equity, in which cases the tax is recognised in other comprehensive income or equity.
- B. The current income tax expense is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the Company and its subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in accordance with applicable tax regulations. It establishes provisions where appropriate based on the amounts expected to be paid to the tax authorities. An additional tax is levied on the unappropriated retained earnings and is recorded as income tax expense in the year the stockholders resolve to retain the earnings.

- C. Deferred tax is recognised, using the balance sheet liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the parent company only balance sheet. However, the deferred tax is not accounted for if it arises from initial recognition of goodwill or of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit nor loss. Deferred tax is provided on temporary differences arising on investments in subsidiaries and associates, except where the timing of the reversal of the temporary difference is controlled by the Company and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the balance sheet date and are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled.
- D. Deferred tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised. At each balance sheet date, unrecognised and recognised deferred tax assets are reassessed.
- E. If a change in tax rate is enacted or substantively enacted, the Company recognises the effect of the change immediately in the interim period in which the change occurs. The effect of the change on items recognised outside profit or loss is recognised in other comprehensive income or equity while the effect of the change on items recognised in profit or loss is recognised in profit or loss.

(24) Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction, net of tax, from the proceeds.

(25) Dividends

Dividends are recorded in the Company's financial statements in the period in which they are resolved by the Company's shareholders. Cash dividends are recorded as liabilities; stock dividends are recorded as stock dividends to be distributed and are reclassified to ordinary shares on the effective date of new shares issuance.

(26) Revenue recognition

A. Sales of goods

- (a) The Company manufactures and sells various integrated circuit related products. Sales are recognised when control of the products has transferred, being when the products are delivered to the customers, and there is no unfulfilled obligation that could affect the customer's acceptance of the products. Delivery occurs when the products have been shipped to the specific location, the risks of obsolescence and loss have been transferred to the wholesaler, and either the wholesaler has accepted the products in accordance with the sales contract, or the Company has objective evidence that all criteria for acceptance have been satisfied.
- (b) Revenue from these sales is recognised based on the price specified in the contract. A refund

liability is recognised for expected sales discounts and allowances payable to customers in relation to sales made until the end of the reporting period. As the time interval between the transfer of committed goods or service and the payment of customer does not exceed one year, the Company does not adjust the transaction price to reflect the time value of money.

- (c) A receivable is recognised when the goods are delivered as this is the point in time that the consideration is unconditional because only the passage of time is required before the payment is due.

B. Services revenue

Revenue from design, royalty and technical services is recognised after completing the services in which the services are rendered.

5. CRITICAL ACCOUNTING JUDGEMENTS, ESTIMATES AND KEY SOURCES OF ASSUMPTION UNCERTAINTY

The preparation of these parent company only financial statements requires management to make critical judgements in applying the Company's accounting policies and make critical assumptions and estimates concerning future events. Assumptions and estimates may differ from the actual results and are continually evaluated and adjusted based on historical experience and other factors. Such assumptions and estimates have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year; and the related information is addressed below:

(1) Critical judgements in applying the Company's accounting policies

None.

(2) Critical accounting estimates and assumptions

Evaluation of inventories

As inventories are stated at the lower of cost and net realisable value, the Company must determine the net realisable value of inventories on balance sheet date using judgements and estimates. Due to the rapid technology innovation, the Company evaluates the amounts of normal inventory consumption, obsolete inventories or inventories without market selling value on balance sheet date, and writes down the cost of inventories to the net realisable value. Such an evaluation of inventories is principally based on the demand for the products within the specified period in the future. Therefore, there might be material changes to the evaluation.

As of December 31, 2018, the carrying amount of inventories was \$4,096,647.

6. DETAILS OF SIGNIFICANT ACCOUNTS

(1) Cash and cash equivalents

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Cash on hand and revolving funds	\$ 1,554	\$ 1,554
Checking accounts and demand deposits	<u>1,551,811</u>	<u>733,700</u>
Total	<u>\$ 1,553,365</u>	<u>\$ 735,254</u>

The Company transacts with a variety of financial institutions all with high credit quality to disperse

credit risk, so it expects that the probability of counterparty default is remote.

(2) Accounts receivable

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Accounts receivable	\$ 4,351,094	\$ 4,878,122
Accounts receivable – related parties	1,044,224	1,097,536
Less: allowance for sales returns and discounts	-	(2,184,707)
Less: allowance for bad debts	(53,989)	(59,792)
	<u>\$ 5,341,329</u>	<u>\$ 3,731,159</u>

A. The aging analysis of accounts receivable is as follows:

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
	<u>Accounts receivable</u>	<u>Accounts receivable</u>
Not past due	\$ 5,386,539	\$ 5,915,588
Up to 30 days	8,743	60,034
Over 180 days	36	36
	<u>\$ 5,395,318</u>	<u>\$ 5,975,658</u>

The above aging analysis is based on past due date.

B. The Company has no accounts receivable pledged to others.

C. Information relating to credit risk of accounts receivable is provided in Note 12(2).

(3) Inventories

	<u>December 31, 2018</u>		
	<u>Cost</u>	<u>Allowance for obsolescence and market value decline</u>	<u>Book value</u>
Raw materials	\$ 224,177	(\$ 23,147)	\$ 201,030
Work in process	2,814,518	(218,774)	2,595,744
Finished goods	1,640,931	(341,058)	1,299,873
Total	<u>\$ 4,679,626</u>	<u>(\$ 582,979)</u>	<u>\$ 4,096,647</u>
	<u>December 31, 2017</u>		
	<u>Cost</u>	<u>Allowance for obsolescence and market value decline</u>	<u>Book value</u>
Raw materials	\$ 335,223	(\$ 31,644)	\$ 303,579
Work in process	2,320,386	(210,859)	2,109,527
Finished goods	2,149,464	(238,150)	1,911,314
Total	<u>\$ 4,805,073</u>	<u>(\$ 480,653)</u>	<u>\$ 4,324,420</u>

Operating costs incurred on inventories for the years ended December 31, 2018 and 2017 were as follows:

	Years ended December 31,	
	2018	2017
Cost of inventories sold and others	\$ 18,601,009	\$ 17,564,700
Loss on market value decline and obsolete and slow-moving inventories	102,326	177,627
Loss on scrap inventory	202,861	132,969
	<u>\$ 18,906,196</u>	<u>\$ 17,875,296</u>

(4) Investments accounted for using the equity method

	December 31, 2018	December 31, 2017
Subsidiaries:		
Leading Enterprisese Limited	\$ 10,903,503	\$ 9,846,737
Amber Universal Inc.	3,195,092	2,934,556
Realtek Singapore Private Limited	7,750,098	6,962,475
Realtek Investment Singapore Private Limited	6,427,012	6,077,940
Talent Eagle Enterprise Inc.	2,916,363	3,129,056
Bluocean Inc.	3,440,632	3,397,551
Realsun Investments Co., Ltd.	437,910	409,101
Hung-wei Venture Capital Co., Ltd.	374,178	441,246
Realking Investments Limited	348,721	313,208
Realsun Technology Corporation	5,563	5,517
Bobitag Inc.	19,214	19,189
Associates:		
Technology Partner V Venture Capital Corporation	36,917	44,705
5V Technologies, Taiwan Ltd.	16,106	17,081
Estinet Technologies Incorporation	40,682	33,002
	<u>\$ 35,911,991</u>	<u>\$ 33,631,364</u>

A. Subsidiaries

Details of the Company's subsidiaries are provided in Note 4(3) in the Company's 2018 consolidated financial statements.

B. The gain on investments accounted for using equity method amounted to \$3,968,591 and \$3,174,944 for the years ended December 31, 2018 and 2017, respectively.

C. The Company's held stocks in Technology Partner V Venture Capital Corporation decreased due to the return of capital in September of 2017 and the proceeds from capital returned was \$14,923.

(5) Property, plant and equipment

	<u>Buildings</u>	<u>Machinery</u>	<u>Test equipment</u>	<u>Office equipment</u>	<u>Others</u>	<u>Total</u>
<u>At January 1, 2018</u>						
Cost	\$ 2,518,099	\$ 3,576,741	\$ 1,487,712	\$ 155,991	\$ 663,079	\$ 8,401,622
Accumulated depreciation and impairment	(776,967)	(3,351,878)	(1,032,998)	(98,600)	(461,724)	(5,722,167)
	<u>\$ 1,741,132</u>	<u>\$ 224,863</u>	<u>\$ 454,714</u>	<u>\$ 57,391</u>	<u>\$ 201,355</u>	<u>\$ 2,679,455</u>
<u>2018</u>						
Opening net book amount	\$ 1,741,132	\$ 224,863	\$ 454,714	\$ 57,391	\$ 201,355	\$ 2,679,455
Additions	6,238	117,365	414,633	33,630	83,470	655,336
Reclassifications	50,407	-	-	(986)	(50,407)	(986)
Depreciation	(101,292)	(84,100)	(219,983)	(18,408)	(46,266)	(470,049)
Closing net book amount	<u>\$ 1,696,485</u>	<u>\$ 258,128</u>	<u>\$ 649,364</u>	<u>\$ 71,627</u>	<u>\$ 188,152</u>	<u>\$ 2,863,756</u>
<u>At December 31, 2018</u>						
Cost	\$ 2,574,744	\$ 3,694,106	\$ 1,899,377	\$ 188,464	\$ 696,142	\$ 9,052,833
Accumulated depreciation and impairment	(878,259)	(3,435,978)	(1,250,013)	(116,837)	(507,990)	(6,189,077)
	<u>\$ 1,696,485</u>	<u>\$ 258,128</u>	<u>\$ 649,364</u>	<u>\$ 71,627</u>	<u>\$ 188,152</u>	<u>\$ 2,863,756</u>
	<u>Buildings</u>	<u>Machinery</u>	<u>Test equipment</u>	<u>Office equipment</u>	<u>Others</u>	<u>Total</u>
<u>At January 1, 2017</u>						
Cost	\$ 2,518,099	\$ 3,550,579	\$ 1,294,771	\$ 139,523	\$ 577,046	\$ 8,080,018
Accumulated depreciation and impairment	(679,068)	(3,350,895)	(845,291)	(83,167)	(421,266)	(5,379,687)
	<u>\$ 1,839,031</u>	<u>\$ 199,684</u>	<u>\$ 449,480</u>	<u>\$ 56,356</u>	<u>\$ 155,780</u>	<u>\$ 2,700,331</u>
<u>2017</u>						
Opening net book amount	\$ 1,839,031	\$ 199,684	\$ 449,480	\$ 56,356	\$ 155,780	\$ 2,700,331
Additions	-	99,351	194,819	16,468	91,081	401,719
Reclassifications	-	5,058	(10)	-	(5,048)	-
Depreciation	(97,899)	(79,230)	(189,575)	(15,433)	(40,458)	(422,595)
Closing net book amount	<u>\$ 1,741,132</u>	<u>\$ 224,863</u>	<u>\$ 454,714</u>	<u>\$ 57,391</u>	<u>\$ 201,355</u>	<u>\$ 2,679,455</u>
<u>At December 31, 2017</u>						
Cost	\$ 2,518,099	\$ 3,576,741	\$ 1,487,712	\$ 155,991	\$ 663,079	\$ 8,401,622
Accumulated depreciation and impairment	(776,967)	(3,351,878)	(1,032,998)	(98,600)	(461,724)	(5,722,167)
	<u>\$ 1,741,132</u>	<u>\$ 224,863</u>	<u>\$ 454,714</u>	<u>\$ 57,391</u>	<u>\$ 201,355</u>	<u>\$ 2,679,455</u>

Amount of borrowing costs capitalised as part of property, plant and equipment: None.

(6) Intangible assets

	Computer software	Intellectual property	Others	Total
<u>At January 1, 2018</u>				
Cost	\$ 2,759,363	\$ 3,558,380	\$ 11,909	\$ 6,329,652
Accumulated amortisation and impairment	(2,229,775)	(2,604,330)	-	(4,834,105)
	<u>\$ 529,588</u>	<u>\$ 954,050</u>	<u>\$ 11,909</u>	<u>\$ 1,495,547</u>
<u>2018</u>				
Opening net book amount	\$ 529,588	\$ 954,050	\$ 11,909	\$ 1,495,547
Additions	460,145	153,503	1,800	615,448
Transfers	1,353	2,096	(10,161)	(6,712)
Amortisation	(495,561)	(448,173)	-	(943,734)
Closing net book amount	<u>\$ 495,525</u>	<u>\$ 661,476</u>	<u>\$ 3,548</u>	<u>\$ 1,160,549</u>
<u>At December 31, 2018</u>				
Cost	\$ 3,220,861	\$ 3,713,979	\$ 3,548	\$ 6,938,388
Accumulated amortisation and impairment	(2,725,336)	(3,052,503)	-	(5,777,839)
	<u>\$ 495,525</u>	<u>\$ 661,476</u>	<u>\$ 3,548</u>	<u>\$ 1,160,549</u>
	Computer software	Intellectual property	Others	Total
<u>At January 1, 2017</u>				
Cost	\$ 2,327,690	\$ 3,075,896	\$ 28,016	\$ 5,431,602
Accumulated amortisation and impairment	(1,729,105)	(2,097,813)	-	(3,826,918)
	<u>\$ 598,585</u>	<u>\$ 978,083</u>	<u>\$ 28,016</u>	<u>\$ 1,604,684</u>
<u>2017</u>				
Opening net book amount	\$ 598,585	\$ 978,083	\$ 28,016	\$ 1,604,684
Additions	431,673	482,484	2,096	916,253
Transfers	-	-	(18,203)	(18,203)
Amortisation	(500,670)	(506,517)	-	(1,007,187)
Closing net book amount	<u>\$ 529,588</u>	<u>\$ 954,050</u>	<u>\$ 11,909</u>	<u>\$ 1,495,547</u>
<u>At December 31, 2017</u>				
Cost	\$ 2,759,363	\$ 3,558,380	\$ 11,909	\$ 6,329,652
Accumulated amortisation and impairment	(2,229,775)	(2,604,330)	-	(4,834,105)
	<u>\$ 529,588</u>	<u>\$ 954,050</u>	<u>\$ 11,909</u>	<u>\$ 1,495,547</u>

Details of amortisation on intangible assets are as follows:

	Years ended December 31,	
	2018	2017
Operating costs	\$ 3,907	\$ 2,314
Operating expenses	939,827	1,004,873
	<u>\$ 943,734</u>	<u>\$ 1,007,187</u>

(7) Short-term borrowings

<u>Type of borrowings</u>	<u>December 31, 2018</u>	<u>Interest rate range</u>	<u>Collateral</u>
Bank borrowings			
Unsecured borrowings	\$ 14,526,311	0.67%~4.16%	None
<u>Type of borrowings</u>	<u>December 31, 2017</u>	<u>Interest rate range</u>	<u>Collateral</u>
Bank borrowings			
Unsecured borrowings	\$ 18,052,624	0.75%~1.99%	None

Interest expense recognised in profit or loss amounted to \$140,170 and \$147,941 for the years ended December 31, 2018 and 2017, respectively.

(8) Other payables

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Accrued salaries	\$ 3,043,992	\$ 2,209,370
Payable for employees' compensation	1,881,190	1,799,529
Other accrued expenses	965,327	819,431
Payables on equipment	110,401	33,141
Payables on software and intellectual property	684,438	650,649
Others	182,494	112,385
	<u>\$ 6,867,842</u>	<u>\$ 5,624,505</u>

(9) Pension

A. (a) The Company has a defined benefit pension plan in accordance with the Labor Standards Law, covering all regular employees' service years prior to the enforcement of the Labor Pension Act on July 1, 2005 and service years thereafter of employees who chose to continue to be subject to the pension mechanism under the Law. Under the defined benefit pension plan, two units are accrued for each year of service for the first 15 years and one unit for each additional year thereafter, subject to a maximum of 45 units. Pension benefits are based on the number of units accrued and the average monthly salaries and wages of the last 6 months prior to retirement. The Company contributes monthly an amount equal to 2% of the employees' monthly salaries and wages to the retirement fund deposited with Bank of Taiwan, the trustee, under the name of the independent retirement fund committee. Also, the Company would assess the balance in the aforementioned labor pension reserve account by December 31, every year. If the account balance is insufficient to pay the pension calculated by the aforementioned method to the employees expected to qualify for retirement in the following year, the Company will make contributions for the deficit by next March.

(b) The amounts recognised in the balance sheet are determined as follows:

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Present value of defined benefit obligations	(\$ 568,382)	(\$ 536,470)
Fair value of plan assets	<u>495,415</u>	<u>473,679</u>
Net liability in the balance sheet	<u>(\$ 72,967)</u>	<u>(\$ 62,791)</u>

(c) Movement in net defined benefit liabilities are as follows:

	<u>Present value of defined benefit obligations</u>	<u>Fair value of plan assets</u>	<u>Net defined benefit liability</u>
Year ended December 31, 2018			
At January 1	(\$ 536,470)	\$ 473,679	(\$ 62,791)
Current service cost	(2,745)	-	(2,745)
Interest (expense) income	(6,675)	5,927	(748)
	<u>(545,890)</u>	<u>479,606</u>	<u>(66,284)</u>
Remeasurements:			
Return on plan assets (excluding amounts included in interest income or expense)	-	13,319	13,319
Change in demographic assumptions	(1,639)	-	(1,639)
Change in financial assumptions	(8,197)	-	(8,197)
Experience adjustments	(16,166)	-	(16,166)
	<u>(26,002)</u>	<u>13,319</u>	<u>(12,683)</u>
Pension fund contribution	-	6,000	6,000
Paid pension	3,510	(3,510)	-
At December 31	<u>(\$ 568,382)</u>	<u>\$ 495,415</u>	<u>(\$ 72,967)</u>
Year ended December 31, 2017			
At January 1	(\$ 513,556)	\$ 475,586	(\$ 37,970)
Current service cost	(2,808)	-	(2,808)
Interest (expense) income	(6,993)	6,570	(423)
	<u>(523,357)</u>	<u>482,156</u>	<u>(41,201)</u>
Remeasurements:			
Return on plan assets (excluding amounts included in interest income or expense)	-	(2,011)	(2,011)
Change in demographic assumptions	1,319	-	1,319
Change in financial assumptions	6,596	-	6,596
Experience adjustments	(33,494)	-	(33,494)
	<u>(25,579)</u>	<u>(2,011)</u>	<u>(27,590)</u>
Pension fund contribution	-	6,000	6,000
Paid pension	12,466	(12,466)	-
At December 31	<u>(\$ 536,470)</u>	<u>\$ 473,679</u>	<u>(\$ 62,791)</u>

(d) The Bank of Taiwan was commissioned to manage the Fund of the Company's defined benefit pension plan in accordance with the Fund's annual investment and utilisation plan and the "Regulations for Revenues, Expenditures, Safeguard and Utilisation of the Labor

Retirement Fund” (Article 6: The scope of utilisation for the Fund includes deposit in domestic or foreign financial institutions, investment in domestic or foreign listed, over-the-counter, or private placement equity securities, investment in domestic or foreign real estate securitization products, etc.). With regard to the utilisation of the Fund, its minimum earnings in the annual distributions on the final financial statements shall be no less than the earnings attainable from the amounts accrued from two-year time deposits with the interest rates offered by local banks.

(e) The principal actuarial assumptions used were as follows:

	Years ended December 31,	
	2018	2017
Discount rate	1.125%	1.25%
Future salary increases	5.25%	5.25%

Future mortality rate was estimated based on the 5th Taiwan Standard Ordinary Experience Mortality Table for the years ended December 31, 2018 and 2017.

Because the main actuarial assumption changed, the present value of defined benefit obligation is affected. The analysis was as follows:

	Discount rate		Future salary increases	
	Increase by 0.25%	Decrease by 0.25%	Increase by 0.25%	Decrease by 0.25%
December 31, 2018				
Effect on present value of defined benefit obligation	\$ 16,573	(\$ 17,256)	\$ 16,206	\$ 15,665
December 31, 2017				
Effect on present value of defined benefit obligation	\$ 16,335	(\$ 17,035)	\$ 16,020	\$ 15,461

The sensitivity analysis above is based on one assumption which changed while the other conditions remain unchanged. In practice, more than one assumption may change all at once. The method of analysing sensitivity and the method of calculating net pension liability in the balance sheet are the same.

(f) Expected contributions to the defined benefit pension plans of the Company for the year ending December 31, 2019 amount to \$6,000.

(g) As of December 31, 2018, the weighted average duration of the retirement plan is 14 years. The analysis of timing of the future pension payment was as follows:

Within 1 year	\$	242,740
2~5 years		93,635
5~10 years		196,669
Over 10 years		35,519
	\$	<u>568,563</u>

B. (a) Effective July 1, 2005, the Company has established a defined contribution pension plan (the “New Plan”) under the Labor Pension Act (the “Act”), covering all regular employees with R.O.C. nationality. Under the New Plan, the Company contributes monthly an amount based on 6% of the employees’ monthly salaries and wages to the employees’ individual pension accounts at the Bureau of Labor Insurance. The benefits accrued are paid monthly or in lump sum upon termination of employment.

(b) The pension costs under the defined contribution pension plans of the Company for the years ended December 31, 2018 and 2017 were \$223,627 and \$205,411, respectively.

(10) Provision

		Year ended
		December 31, 2018
At January 1	\$	434,425
Changes in provision		84,591
At December 31	\$	<u>519,016</u>

As of December 31, 2018, provisions were estimated for possible infringement litigations.

(11) Share capital

A. As of December 31, 2018, the Company’s authorised capital was \$8,900,000, consisting of 890 million thousand shares of ordinary stock (including 80 million thousand shares reserved for employee stock options), and the paid-in capital was \$5,080,955 with a par value of \$10 (in dollars) per share. All proceeds from shares issued have been collected. The beginning balance and closing balance of the number of the Company’s ordinary shares outstanding of the period remain the same as in previous two periods.

		Unit : Thousands of shares	
		2018	2017
At January 1		506,506	504,951
Employees' compensation transferred to common stock		1,589	1,555
At December 31		<u>508,095</u>	<u>506,506</u>

B. On January 24, 2002, the Company increased its new common stock and sold its old common stock by issuing 13,924 thousand units of GDRs for cash. Each GDR unit represents 4 common stocks, so the total common stocks issued were 55,694 thousand shares. The Company’s GDRs are traded in Luxembourg stock exchange. As of December 31, 2018, the outstanding GDRs were 312 thousand units, or 1,249 thousand shares of

common stock, representing 0.25% of the Company's total common stocks.

(12) Capital surplus

Pursuant to the R.O.C. Company Act, capital surplus arising from paid-in capital in excess of par value on issuance of common stocks and donations can be used to cover accumulated deficit or to issue new stocks or cash to shareholders in proportion to their share ownership, provided that the Company has no accumulated deficit. Further, the R.O.C. Securities and Exchange Act requires that the amount of capital surplus to be capitalised mentioned above should not exceed 10% of the paid-in capital each year. Capital surplus should not be used to cover accumulated deficit unless the legal reserve is insufficient.

	2018			
	Change in associates accounted for			
	Share premium	using equity	Others	Total
At January 1	\$3,540,653	\$ 18,203	\$ -	\$ 3,558,856
Change in associates accounted for using equity method	-	22,005	-	22,005
Cash dividends distribution from capital surplus	(508,095)	-	-	(508,095)
Employees' compensation transferred to common stock	163,692	-	-	163,692
Cash dividends returned	-	-	201	201
At December 31	<u>\$3,196,250</u>	<u>\$ 40,208</u>	<u>\$ 201</u>	<u>\$ 3,236,659</u>
	2017			
	Change in associates accounted for using equity			
	Share premium	method		Total
At January 1	\$ 3,900,218	\$ 10,210	\$	3,910,428
Change in associates accounted for using equity method	-	7,993	-	7,993
Cash dividends distribution from capital surplus	(504,951)	-	-	(504,951)
Employees' compensation transferred to common stock	145,386	-	-	145,386
At December 31	<u>\$ 3,540,653</u>	<u>\$ 18,203</u>	<u>\$</u>	<u>\$ 3,558,856</u>

(13) Retained earnings

- A. Under the Company's Articles of Incorporation, the current year's earnings, if any, shall first be used to pay all taxes and offset prior years' operating losses and then 10% of the remaining amount shall be set aside as legal reserve, if legal reserve has accumulated to an amount equal to the paid-in capital, then legal reserve is not required to be set aside any more. Additionally, special reserve is set aside or reversed in accordance with related laws or Competent Authority. The Company should consider factors of finance, business and operations to appropriate distributable earnings for the period, and appropriate all or partial reserve in accordance with regulations and the Competent Authority. The Company's dividend policy takes into consideration the Company's future expansion plans and future cash flows. In accordance with the Company's dividend policy, cash dividends shall account for at least 10% of the total dividends distributed.
- B. Except for covering accumulated deficit or issuing new stocks or cash to shareholders in proportion to their share ownership, the legal reserve shall not be used for any other purpose. The use of legal reserve for the issuance of stocks or cash to shareholders in proportion to their share ownership is permitted, provided that the distribution of the reserve is limited to the portion in excess of 25% of the Company's paid-in capital.
- C. In accordance with the regulations, the Company shall set aside special reserve from the debit balance on other equity items at the balance sheet date before distributing earnings. When debit balance on other equity items is reversed subsequently, the reversed amount could be included in the distributable earnings.
- D. The appropriation of 2017 and 2016 earnings had been resolved at the stockholders' meeting on June 5, 2018 and June 8, 2017, respectively. Details are summarised below:

	<u>2017</u>		<u>2016</u>	
	<u>Amount</u>	<u>Dividends per share (in dollars)</u>	<u>Amount</u>	<u>Dividends per share (in dollars)</u>
Legal reserve	\$ 339,215	\$ -	\$ 303,988	\$ -
Special reserve	600,443	-	-	-
Cash dividends	<u>2,286,430</u>	<u>4.50</u>	<u>2,019,805</u>	<u>4.00</u>
Total	<u>\$ 3,226,088</u>	<u>\$ 4.50</u>	<u>\$ 2,323,793</u>	<u>\$ 4.00</u>

- E. On June 5, 2018 and June 8, 2017, the stockholders resolved during their meeting to distribute \$508,095 by cash (\$1.0 per share) and \$504,951 by cash (\$1.0 per share) from additional paid-in capital in excess of par, ordinary share, respectively.
- F. For the information relating to employees' compensation and directors' remuneration, please refer to Note 6(20).

(14) Other equity items

	2018			
	Unrealised gains (losses) on valuation	Available-for- sale investment	Currency translation difference	Total
At January 1	\$ -	\$ 212,720	(\$ 813,163)	(\$ 600,443)
Modified retrospective approach adjustment:				
Revaluation	538,977	(212,720)	-	326,257
Revaluation transferred to retained earnings	(103,142)	-	-	(103,142)
Revaluation				
–Subsidiaries	(165,659)	-	-	(165,659)
–Associates	1,977	-	-	1,977
Currency translation differences:				
–Subsidiaries	-	-	942,974	942,974
At December 31	<u>\$ 272,153</u>	<u>\$ -</u>	<u>\$ 129,811</u>	<u>\$ 401,964</u>
2017				
	Available-for-sale investment	Currency translation difference	Total	
At January 1	\$ 103,410	\$ 1,298,139	\$	1,401,549
Revaluation				
–Subsidiaries	110,120	-	-	110,120
–Associates	(810)	-	(	810)
Currency translation differences:				
–Subsidiaries	-	(2,111,302)	(	2,111,302)
At December 31	<u>\$ 212,720</u>	<u>(\$ 813,163)</u>	<u>(\$</u>	<u>600,443)</u>

(15) Operating revenue

	Year ended	Year ended
	December 31, 2018	December 31, 2017
Revenue from contracts with customers	<u>\$ 32,194,291</u>	<u>\$ 30,043,540</u>

A. Disaggregation of revenue from contracts with customers

The Company derives revenue from the transfer of goods and services at a point in time in the following major product lines:

Year ended December 31, 2018	Integrated circuit products	Others	Total
Revenue from external customer contracts	\$ 32,125,500	\$ 68,791	\$ 32,194,291
Timing of revenue recognition			
At a point in time	\$ 32,125,500	\$ 68,791	\$ 32,194,291

B. Contract liabilities

The Company has recognised the following revenue-related contract liabilities:

	December 31, 2018
Contract liabilities – advance sales receipts	\$ 110,764
Revenue recognised that was included in the contract liability balance at the beginning of the period:	

	Year ended December 31, 2018
Contract liabilities – advance sales receipts	\$ 77,338

C. Refund liabilities

The Company estimates the discounts based on accumulated experience. The estimation is subject to an assessment at each reporting date.

The following refund liabilities:

	December 31, 2018
Refund liabilities – current	\$ 2,581,910

D. Related disclosures on operating revenue for 2017 are provided in Note 12(5) B.

(16) Other income

	Years ended December 31,	
	2018	2017
Interest income:		
Interest income from bank deposits	\$ 22,694	\$ 17,957
Other interest income	43,974	26,108
Total interest income	66,668	44,065
Rent income	20,636	26,153
Dividend income	812	406
Other income	24,237	36,825
Total	\$ 112,353	\$ 107,449

(17) Other gains and losses

	Years ended December 31,	
	2018	2017
Gains on disposal of property, plant and equipment	\$ -	\$ 14,269
Net currency exchange gains (losses)	14,331	(441,270)
Losses on financial assets		
at fair value through profit or loss	(11,283)	-
Other losses	(5,040)	(4,100)
Total	<u>(\$ 1,992)</u>	<u>(\$ 431,101)</u>

(18) Finance costs

	Years ended December 31,	
	2018	2017
Interest expense	<u>\$ 140,170</u>	<u>\$ 147,941</u>

(19) Expenses by nature

	Years ended December 31,	
	2018	2017
Employee benefit expenses	<u>\$ 8,731,937</u>	<u>\$ 7,234,741</u>
Depreciation charges on property, plant and equipment	<u>\$ 470,049</u>	<u>\$ 422,595</u>
Amortisation charges on intangible assets	<u>\$ 943,734</u>	<u>\$ 1,007,187</u>

(20) Employee benefit expenses

	Years ended December 31,	
	2018	2017
Wages and salaries	\$ 7,985,523	\$ 6,554,504
Labor and health insurance fees	364,845	334,162
Pension costs	227,120	208,642
Other personnel expenses	154,449	137,433
Total	<u>\$ 8,731,937</u>	<u>\$ 7,234,741</u>

A. In accordance with the Company's Articles of Incorporation, the Company shall appropriate no higher than 3% for directors' remuneration and no less than 1% for employees' compensation, if the Company generates profit. If the Company has accumulated deficit, earnings should be reserved to cover losses before the appropriation of directors' remuneration and employees' compensation. Aforementioned employees' compensation could be distributed by cash or stocks. Specifics of the compensation are to be determined in a board meeting that registers two-thirds of directors in attendance, and the resolution must receive support from half of participating members. The resolution should be reported to the shareholders during the shareholders' meeting.

- B. The shareholders' meeting resolved on June 5, 2018 the proposal of employees' stock compensation of \$179,585, employees' cash compensation of \$718,338 and directors' and supervisors' remuneration of \$59,862 for 2017. Employees' compensation and directors' and supervisors' remuneration of 2017 as resolved at the meeting of the Board of Directors were in agreement with those amounts recognised in the 2017 financial statements. The above employees' stock compensation was based on the closing price of \$113 at the previous day of the board meeting resolution on March 8, 2018, and the total new shares issued amounted to 1,589 thousand shares.
- C. The shareholders' meeting resolved on June 8, 2017 the proposal of employees' stock compensation of \$160,935, employees' compensation of \$643,738 and directors' and supervisors' remuneration of \$53,645 for 2016. Employees' compensation and directors' and supervisors' remuneration of 2016 as resolved at the meeting of the Board of Directors were in agreement with those amounts recognised in the 2016 financial statements. The above employees' stock compensation was based on the closing price of \$103.5 at the previous day of the board meeting resolution on April 21, 2017, and the total new shares issued amounted to 1,555 thousand shares.
- D. For the years ended December 31, 2018 and 2017, employees' compensation was accrued at \$1,151,674 and \$897,923, respectively; directors' and supervisors' remuneration was accrued at \$76,778 and \$59,862, respectively. If the estimated amounts differ from the actual distribution resolved by the Board of Directors and the shareholders' meeting, the Company will recognize the change as an adjustment to income of next year.

Information about employees' compensation and directors' remuneration of the Company as resolved by the Board of Directors and the shareholders at the shareholders' meeting will be posted in the "Market Observation Post System" at the website of the Taiwan Stock Exchange.

(21) Income tax

A. Income tax expense

	Years ended December 31,	
	2018	2017
Current income tax:		
Current income tax on profits for the year	\$ 445,349	\$ 142,793
Income tax on undistributed surplus earnings	16,607	71,608
Prior year income tax over estimation	(35,671)	(88,357)
Total current income tax	<u>426,285</u>	<u>126,044</u>
Deferred income tax:		
Origination and reversal of temporary differences	(12,360)	83,956
Impact of change in tax rate	(125,925)	-
Total deferred income tax	<u>(138,285)</u>	<u>83,956</u>
Income tax expense	<u>\$ 288,000</u>	<u>\$ 210,000</u>

B. Reconciliation between income tax expense and accounting profit

	Years ended December 31,	
	2018	2017
Income tax calculated based on income before tax and statutory tax rate	\$ 927,754	\$ 612,366
Effects from tax-exempt income	(494,765)	(385,617)
Impact of change in tax rate	(125,925)	-
Prior year income tax over estimation	(35,671)	(88,357)
Income tax on undistributed surplus earnings	16,607	71,608
Income tax expense	<u>\$ 288,000</u>	<u>\$ 210,000</u>

C. Amounts of deferred income tax assets or liabilities as a result of temporary differences are as follows:

	Year ended December 31, 2018		
	January 1	Recognised in profit or loss	December 31
-Deferred income tax assets:			
Temporary differences:			
Unrealised loss on market price decline and obsolete and slow-moving inventories and others	\$ 65,551	\$ 12,921	\$ 78,472
-Deferred income tax liabilities:			
Temporary differences:			
Unrealised exchange gain	(21,749)	(561)	(22,310)
	<u>\$ 43,802</u>	<u>\$ 12,360</u>	<u>\$ 56,162</u>

Year ended December 31, 2017

	January 1	Recognised in profit or loss	December 31
-Deferred income tax assets:			
Temporary differences:			
Unrealised loss on market price decline and obsolete and slow-moving inventories and others	\$ 148,821	(\$ 83,270)	\$ 65,551
-Deferred income tax liabilities:			
Temporary differences:			
Unrealised exchange gain	(21,063)	(686)	(21,749)
	<u>\$ 127,758</u>	<u>(\$ 83,956)</u>	<u>\$ 43,802</u>

D. The amounts of deductible temporary differences that are not recognised as deferred income tax assets are as follows:

	December 31, 2018	December 31, 2017
Deductible temporary differences	<u>\$ 783,339</u>	<u>\$ 545,223</u>

E. The Company's products qualify for "Regulations for Encouraging Manufacturing Enterprises and Technical Service Enterprises in the Newly Emerging, Important and Strategic Industries" and the Company is entitled to the income tax exemption for 5 consecutive years. The tax exemption period is from January 1, 2013 to December 31, 2017.

F. As of December 31, 2018, the Company's income tax returns through 2016 have been assessed and approved by the Tax Authority.

G. Under the amendments to the Income Tax Act which was promulgated by the President of the Republic of China in February 7, 2018, the Company's applicable income tax rate was raised from 17% to 20% effective from January 1, 2018. The Company has assessed the impact of the change in income tax rate.

(22) Earnings per share

Effective January 1, 2008, as employees' compensation could be distributed in the form of stock, the diluted EPS computation shall include those estimated shares that would be increased from employees' stock compensation issuance in the weighted-average number of common shares outstanding during the reporting year, which take into account the dilutive effects of stock bonus on potential common shares. Whereas, basic EPS shall be calculated based on the weighted-average number of common shares outstanding during the reporting year that include the shares of employees' stock compensation for the appropriation of prior year earnings, which have already been resolved at the stockholders' meeting held in the reporting year. Since capitalisation

of employees' compensation no longer belongs to distribution of stock dividends, the calculation of basic EPS and diluted EPS for all periods presented shall not be adjusted retroactively.

	Year ended December 31, 2018		
	Amount after tax	Weighted average number of ordinary shares outstanding (shares in thousands)	Earnings per share (in dollars)
<u>Basic earnings per share</u>			
Profit attributable to ordinary shareholders of the parent	\$ 4,350,768	507,712	\$ 8.57
<u>Diluted earnings per share</u>			
Profit attributable to ordinary shareholders of the parent	\$ 4,350,768	507,712	
Assumed conversion of all dilutive potential ordinary shares			
Employees' compensation	-	10,477	
Profit attributable to ordinary shareholders of the parent plus assumed conversion of all dilutive potential ordinary shares	\$ 4,350,768	518,189	\$ 8.40
	Year ended December 31, 2017		
	Amount after tax	Weighted average number of ordinary shares outstanding (shares in thousands)	Earnings per share (in dollars)
<u>Basic earnings per share</u>			
Profit attributable to ordinary shareholders of the parent	\$ 3,392,153	505,412	\$ 6.71
<u>Diluted earnings per share</u>			
Profit attributable to ordinary shareholders of the parent	\$ 3,392,153	505,412	
Assumed conversion of all dilutive potential ordinary shares			
Employees' compensation	-	11,106	
Profit attributable to ordinary shareholders of the parent plus assumed conversion of all dilutive potential ordinary shares	\$ 3,392,153	516,518	\$ 6.57

(23) Supplemental cash flow information

Investing activities with partial cash payments

	Years ended December 31,	
	2018	2017
Purchase of property, plant and equipment	\$ 655,336	\$ 401,719
Add: Opening balance of payable on equipment	33,141	38,128
Less: Ending balance of payable on equipment	(110,401)	(33,141)
Cash paid during the year	<u>\$ 578,076</u>	<u>\$ 406,706</u>

	Years ended December 31,	
	2018	2017
Purchase of intangible assets	\$ 615,448	\$ 916,253
Add: Opening balance of payable on software and intellectual property	650,649	613,635
Less: Ending balance of payable on software and intellectual property	(684,438)	(650,649)
Cash paid during the year	<u>\$ 581,659</u>	<u>\$ 879,239</u>

(24) Changes in liabilities from financing activities

	Short-term borrowings	Guarantee deposits received	Liabilities from financing activities-gross
At January 1, 2018	\$ 18,052,624	\$ 5,043	\$ 18,057,667
Changes in cash flow from financing activities	(3,526,313)	(304)	(3,526,617)
At December 31, 2018	<u>\$ 14,526,311</u>	<u>\$ 4,739</u>	<u>\$ 14,531,050</u>

7. RELATED PARTY TRANSACTIONS

(1) Names of related parties and relationship

Names of related parties	Relationship with the Company
Leading Enterprises Limited	Subsidiary
Realtek Singapore Private Limited	Subsidiary
Bluocean Inc.	Subsidiary
Talent Eagle Enterprise Inc.	Subsidiary
Cortina Systems Taiwan Limited	Subsidiary
RayMX Micro Electronics, Corp.	Subsidiary
G.M.I Technology Inc.	Other related party
Actions Semiconductor Co., Ltd.	Other related party
C-Media Electronics Inc.	Other related party
Greatek Electronics Inc.	Other related party
EmBestor Technology Inc.	Other related party

(2) Significant related party transactions and balances

A. Operating revenue

	Years ended December 31,	
	2018	2017
Sales of goods:		
Other related parties		
G.M.I Technology Inc.	\$ 4,888,451	\$ 4,835,351
Others	427,950	379,088
	<u>\$ 5,316,401</u>	<u>\$ 5,214,439</u>

Goods are sold based on the price lists in force and terms that would be available to third parties, and the general collection term was 30 ~ 60 days after monthly billings.

B. Processing cost

	Years ended December 31,	
	2018	2017
Greatek Electronics Inc.	<u>\$ 887,456</u>	<u>\$ 811,657</u>

Processing cost is paid to associates on normal commercial terms and conditions, and the general payment term was 49 ~ 69 days after monthly billings.

C. Receivables from related parties

	Years ended December 31,	
	2018	2017
Accounts receivable:		
Other related parties		
G.M.I Technology Inc.	\$ 980,790	\$ 906,884
Other	52,992	34,352
	<u>\$ 1,033,782</u>	<u>\$ 941,236</u>

Aforementioned receivables were 30 ~ 60 days after monthly billings. The receivables from related parties arise mainly from sale transactions. The receivables bear no interest.

D. Payables to related parties:

	Years ended December 31,	
	2018	2017
Accounts payable:		
Greatek Electronics Inc.	<u>\$ 228,279</u>	<u>\$ 282,667</u>

The payment term above was 69 days after monthly billings. The payables to related parties arise mainly from processing cost. The payables are unsecured in nature and bear no interest.

E. Other transactions and other (receivables) payables:

	Years ended December 31,			
	2018		2017	
	Amount	Ending balance	Amount	Ending balance
Other related parties-				
Sales commissions	<u>\$ 206,978</u>	<u>\$ 38,283</u>	<u>\$ 209,918</u>	<u>\$ 32,156</u>
Technical royalty revenue	<u>(\$ 7,799)</u>	<u>\$ -</u>	<u>(\$ 3,086)</u>	<u>\$ -</u>
Cash dividends income	<u>(\$ 19,420)</u>	<u>\$ -</u>	<u>(\$ 406)</u>	<u>\$ -</u>
Subsidiaries and sub-subsidiaries-				
Other income	<u>(\$ 50,000)</u>	<u>(\$ 50,000)</u>	<u>\$ -</u>	<u>\$ -</u>
Cash dividends income	<u>(\$ 2,745,981)</u>	<u>\$ -</u>	<u>(\$ 2,665,586)</u>	<u>(\$ 2,657,395)</u>
Rent income	<u>(\$ 1,883)</u>	<u>(\$ 241)</u>	<u>(\$ 1,894)</u>	<u>(\$ 246)</u>

The payment term above was 49 days after monthly billings; collection term was 30 ~ 60 days after monthly billings.

F. Loans to related parties:

(a) Loans to related parties:

(i) Outstanding balance:

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Subsidiaries		
Leading Enterprises Limited	\$ 365,921	\$ -
Bluocan Inc.	623,009	597,091
Talent Eagle Enterprise Inc.	1,649,158	184,350
	<u>\$ 2,638,088</u>	<u>\$ 781,441</u>

(ii) Interest income

	<u>2018</u>	<u>2017</u>
Subsidiaries	\$ 43,612	\$ 26,417

The loans to subsidiaries are repayable monthly over 1 years and carry interest are 3.3% per annum for the years ended December 31, 2018 and 2017.

G. Endorsements and guarantees provided to related parties:

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Subsidiaries	\$ 10,106,104	\$ 10,754,575

(3) Key management compensation

	<u>Years ended December 31,</u>	
	<u>2018</u>	<u>2017</u>
Salaries and other short-term employee benefits	\$ 105,676	\$ 78,105
Post-employment benefits	2,557	2,020
Total	<u>\$ 108,233</u>	<u>\$ 80,125</u>

8. PLEDGED ASSETS

The Company's assets pledged as collateral are as follows:

<u>Pledged asset</u>	<u>Book value</u>		<u>Purposes</u>
	<u>December 31, 2018</u>	<u>December 31, 2017</u>	
Time deposits (shown in other current assets)	\$ -	\$ 60,809	Guarantee for customs duties for the importation of materials
"	-	30,846	Guarantee for leasing land and office in Science Park
Time deposits (shown in financial assets at amortised cost - current)	30,270	-	Guarantee for customs duties for the importation of materials
"	31,131	-	Guarantee for leasing land and office in Science Park
	<u>\$ 61,401</u>	<u>\$ 91,655</u>	

9. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNISED CONTRACT COMMITMENTS

(1) Contingencies

None.

(2) Operating lease agreements

The Company leases lands and office buildings for operational needs under non-cancellable operating lease agreements. The lease terms are between 2022 and 2027. Most of the lease agreements are renewable at the market price at the end of the lease period. The Company recognised rental expense of \$28,434 and \$23,368 for these leases in profit or loss for the years ended December 31, 2018 and 2017, respectively.

The future aggregate minimum lease payments under non-cancellable operating leases are as follows:

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
No later than one year	\$ 24,761	\$ 23,899
Later than one year but not later than five years	84,262	95,596
Later than five years	39,910	45,575
	<u>\$ 148,933</u>	<u>\$ 165,070</u>

10. SIGNIFICANT DISASTER LOSS

None.

11. SIGNIFICANT EVENTS AFTER THE BALANCE SHEET DATE

None.

12. OTHERS

(1) Capital management

The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern in order to provide returns for shareholders and to maintain an optimal capital structure to reduce the cost of capital. In order to maintain or adjust the capital structure, the Company may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

(2) Financial instruments

A. Financial instruments by category

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
<u>Financial assets</u>		
Financial assets at fair value through profit or loss		
Financial assets mandatorily measured at fair value through profit or loss	\$ 29,061	\$ -
Financial assets at fair value through other comprehensive income		
Designation of equity instrument	\$ 936	\$ -
Available-for-sale financial assets		
Available-for-sale financial assets	\$ -	\$ 40,344
Financial assets at cost	-	6,575
	<u>\$ -</u>	<u>\$ 46,919</u>
Financial assets at amortised cost/Receivables		
Cash and cash equivalents	\$ 1,553,365	\$ 735,254
Financial assets at amortised cost	61,401	-
Accounts receivable (including related parties)	5,341,329	3,731,159
Other receivables (including related parties)	2,730,970	3,457,817
Guarantee deposits paid	14,444	6,456
Other current assets	-	91,655
	<u>\$ 9,701,509</u>	<u>\$ 8,022,341</u>
	<u>December 31, 2018</u>	<u>December 31, 2017</u>
<u>Financial liabilities</u>		
Financial liabilities at amortised cost		
Short-term borrowings	\$ 14,526,311	\$ 18,052,624
Notes payable	8,657	8,631
Accounts payable (including related parties)	4,021,555	4,065,806
Other accounts payable (including related parties)	6,906,125	5,656,661
Guarantee deposits received	4,739	5,043
	<u>\$ 25,467,387</u>	<u>\$ 27,788,765</u>

B. Financial risk management policies

- (a) The Company's activities expose it to a variety of financial risks: market risk (including foreign exchange risk, interest rate risk and price risk), credit risk and liquidity risk. The Company's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Company's financial position and financial performance.
- (b) Risk management is carried out by a treasury department (Company treasury) under policies approved by the Board of Directors. Company treasury identifies, evaluates and hedges financial risks in close co-operation with the Company's operating units.

C. Significant financial risks and degrees of financial risks

(a) Market risk

Foreign exchange risk

- i. The Company operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the USD and RMB. Foreign exchange risk arises from future commercial transactions, recognised assets and liabilities and net investments in foreign operations.
- ii. Management has set up a policy to require the Company to manage its foreign exchange risk against its functional currency. The Company is required to hedge its entire foreign exchange risk exposure with the Company treasury.
- iii. The Company's businesses involve some functional currency operations (the Company's and certain subsidiaries' functional currency: NTD; other certain subsidiaries' functional currency: USD and RMB). The information on assets and liabilities denominated in foreign currencies whose values would be materially affected by the exchange rate fluctuations is as follows:

	December 31, 2018		
	Foreign currency amount (In thousands)	Exchange rate	Book value (NTD)
(Foreign currency: functional currency)			
<u>Financial assets</u>			
<u>Monetary items</u>			
USD:NTD	\$ 234,227	30.733	\$ 7,198,500
<u>Investments accounted for using the equity method</u>			
USD:NTD	1,159,786	30.733	35,643,714
<u>Financial liabilities</u>			
<u>Monetary items</u>			
USD:NTD	134,264	30.733	4,126,322

	December 31, 2017		
	Foreign currency amount (In thousands)	Exchange rate	Book value (NTD)
(Foreign currency: functional currency)			
<u>Financial assets</u>			
<u>Monetary items</u>			
USD:NTD	\$ 322,429	29.848	\$ 9,623,857
<u>Investments accounted for using the equity method</u>			
USD:NTD	1,014,191	29.848	30,271,573
<u>Financial liabilities</u>			
<u>Monetary items</u>			
USD:NTD	130,771	29.848	3,903,248

The total exchange gain (loss), including realised and unrealised arising from significant foreign exchange variation on the monetary items held by the Company for the years ended December 31, 2018 and 2017, amounted to \$14,331 and (\$441,270), respectively.

Analysis of foreign currency market risk arising from significant foreign exchange variation:

Year ended December 31, 2018			
Sensitivity analysis			
	Degree of variation	Effect on profit or loss	Effect on other comprehensive income
(Foreign currency: functional currency)			
<u>Financial assets</u>			
<u>Monetary items</u>			
USD:NTD	1%	\$ 71,985	\$ -
<u>Investments accounted for using the equity method</u>			
USD:NTD	1%	-	356,437
<u>Financial liabilities</u>			
<u>Monetary items</u>			
USD:NTD	1%	(41,263)	-

Year ended December 31, 2017			
Sensitivity analysis			
	Degree of variation	Effect on profit or loss	Effect on other comprehensive income
(Foreign currency: functional currency)			
<u>Financial assets</u>			
<u>Monetary items</u>			
USD:NTD	1%	\$ 96,239	\$ -
<u>Investments accounted for using the equity method</u>			
USD:NTD	1%	-	302,716
<u>Financial liabilities</u>			
<u>Monetary items</u>			
USD:NTD	1%	(39,032)	-

Price risk

- i. The Company's equity securities, which are exposed to price risk, are the held financial assets at fair value through profit or loss, financial assets at fair value through other comprehensive income and available-for-sale financial assets.
- ii. The Company's investments in equity securities comprise domestic listed and unlisted stocks. The prices of equity securities would change due to the change of the future value of investee companies. If the prices of these equity securities had increased/decreased by 10% with all other variables held constant, post-tax profit for the years ended December 31, 2018 and 2017 would have decreased/increased by (\$1,128) and \$0, respectively, as a result of gains/losses on equity securities classified as at fair value through profit or loss. Other components of equity would have decreased/increased by (\$16,368) and \$10,931, respectively, as a result of gains/losses on equity securities classified as available-for-sale equity investment and equity investment at fair value through other comprehensive income.

Cash flow and fair value interest rate risk

The Company has no material interest rate risk.

(b) Credit risk

Effective 2018

- i. Credit risk refers to the risk of financial loss to the Company arising from default by the clients or counterparties of financial instruments on the contract obligations. The main factor is that counterparties could not repay in full the accounts receivable based on the agreed terms, and the contract cash flows of financial assets at amortised cost, at fair value through profit or loss and at fair value through other comprehensive income.
- ii. The Company manages their credit risk taking into consideration the entire Company's concern. According to the Company's credit policy, each local entity in the Company is responsible for managing and analysing the credit risk for each of their new clients before standard payment and delivery terms and conditions are offered. Internal risk control assesses the credit quality of the customers, taking into account their financial position, past experience and other factors.
- iii. The Company adopts the assumption under IFRS 9, that is, the default occurs when the contract payments are past due over 90 days.
- iv. The Company adopts the following assumption under IFRS 9 to assess whether there has been a significant increase in credit risk on that instrument since initial recognition:
If the contract payments were past due over 30 days based on the terms, there has been a significant increase in credit risk on that instrument since initial recognition.

- v. The following indicators are used to determine whether the credit impairment of debt instruments has occurred:
- (i) It becomes probable that the issuer will enter bankruptcy or other financial reorganization due to their financial difficulties;
 - (ii) The disappearance of an active market for that financial asset because of financial difficulties;
 - (iii) Default or delinquency in interest or principal repayments;
 - (iv) Adverse changes in national or regional economic conditions that are expected to cause a default.
- vi. The Company classifies customers' accounts receivable in accordance with customer types. The Company applies the modified approach using provision matrix to estimate expected credit loss under the provision matrix basis.
- vii. The Company wrote-off the financial assets, which cannot be reasonably expected to be recovered, after initiating recourse procedures. However, the Company will continue executing the recourse procedures to secure their rights.
- viii. The Company used the forecastability of semiconductor industry research report to adjust historical and timely information to assess the default possibility of accounts receivable. On December 31, 2018, the provision matrix is as follows:

	Not past due	Up to 30 days past due	180 days past due	Total
<u>At December 31, 2018</u>				
Expected loss rate	1%	1%	100%	
Total book value	\$ 5,386,539	\$ 8,743	\$ 36	\$ 5,395,318
Loss allowance	\$ 53,866	\$ 87	\$ 36	\$ 53,989

- ix. Movements in relation to the Company applying the modified approach to provide loss allowance for accounts receivable are as follows:

	2018
	<u>Accounts receivable</u>
At January 1_IAS 39	\$ 59,792
Adjustments under new standards	-
At January 1_IFRS 9	59,792
Changes in the year	(5,803)
At December 31	<u>\$ 53,989</u>

Because of macroeconomics and credit enhancement, the impairment loss for 2018 decreased by \$5,803.

x. For financial assets at amortised cost, the credit rating levels are presented below:

	December 31, 2018			
	12 months	Lifetime		Total
		Significant	Impairment	
		increase in credit risk	of credit	
Financial assets at amortised cost Group 1	\$ 61,401	\$ -	\$ -	\$ 61,401

Group 1: Financial institutions with credit rating 'A'.

xi. Credit risk information of 2017 is provided in Note 12(4)

(c) Liquidity risk

- i. Cash flow forecasting is performed in the operating entities of the Company and aggregated by Company treasury. Company treasury monitors rolling forecasts of the Company's liquidity requirements to ensure it has sufficient cash to meet operational needs while maintaining sufficient headroom on its undrawn committed borrowing facilities.
- ii. Company treasury invests surplus cash in interest bearing current accounts, time deposits, money market deposits and marketable securities, choosing instruments with appropriate maturities or sufficient liquidity to provide sufficient head-room as determined by the above-mentioned forecasts.
- iii. The table below analyses the Company's non-derivative financial liabilities into relevant maturity groupings based on the remaining period at the balance sheet date to the contractual maturity date for non-derivative financial liabilities. The amounts disclosed in the table are the contractual undiscounted cash flows.

Non-derivative financial liabilities:

December 31, 2018	Less than 1 year	Between 1 and 5 years	Over 5 years
Short-term loans	\$ 14,526,311	\$ -	\$ -
Notes payable	8,657	-	-
Accounts payable (including related parties)	4,021,555	-	-
Other payables (including related parties)	1,980,943	-	-
Guarantee deposits received	-	-	4,739

Non-derivative financial liabilities:

December 31, 2017	Less than 1 year	Between 1 and 5 years	Over 5 years
Short-term loans	\$ 18,052,624	\$ -	\$ -
Notes payable	8,631	-	-
Accounts payable (including related parties)	4,065,806	-	-
Other payables (including related parties)	1,647,762	-	-
Guarantee deposits received	-	-	5,043

- iv. The Company does not expect the timing of occurrence of the cash flows estimated through the maturity date analysis will be significantly earlier, nor expect the actual cash flow amount will be significantly different.

(3) Fair value information

- A. The different levels that the inputs to valuation techniques are used to measure fair value of financial and non-financial instruments have been defined as follows:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date. A market is regarded as active where a market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis. The fair value of the Company's investment in listed stocks and beneficiary certificates is included in Level 1.

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. The fair value of the Company's investment is included in Level 2.

Level 3: Unobservable inputs for the asset or liability.

- B. The related information of financial and non-financial instruments measured at fair value by level on the basis of the nature, characteristics and risks of the assets and liabilities is as follows:

- (a) The related information of nature of the assets is as follows:

December 31, 2018	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
Assets				
<u>Recurring fair value measurement</u>				
Financial assets at fair value				
through profit or loss-current	\$ 29,061	\$ -	\$ -	\$ 29,061
Financial assets at fair value				
other comprehensive income				
Equity securities	-	-	936	936
Total	<u>\$ 29,061</u>	<u>\$ -</u>	<u>\$ 936</u>	<u>\$ 29,997</u>

December 31, 2017	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
Assets				
<u>Recurring fair value measurement</u>				
Available-for-sale financial				
assets-equity securities	<u>40,344</u>	<u>-</u>	<u>-</u>	<u>40,344</u>

- (b) The methods and assumptions the Company used to measure fair value are as follows:
- i. The instruments the Company used market quoted prices as their fair values (that is, Level 1) are listed below by characteristics:

	<u>Listed shares</u>	<u>Closed- end fund</u>	<u>Opened- end fund</u>	<u>Government bond</u>	<u>Corporate bond</u>	<u>Convertible (exchangeable) bond</u>
Market quoted price	Closing price	Closing price	Net asset value	Translation price	Weighted average quoted price	Closing price

- ii. Except for financial instruments with active markets, the fair value of other financial instruments is measured by using valuation techniques or by reference to counterparty quotes. The fair value of financial instruments measured by using valuation techniques can be referred to current fair value of instruments with similar terms and characteristics in substance, discounted cash flow method or other valuation methods, including calculated by applying model using market information available at the parent company only balance sheet date.
- iii. The output of valuation model is an estimated value and the valuation technique may not be able to capture all relevant factors of the Company's financial and non-financial instruments. Therefore, the estimated value derived using valuation model is adjusted accordingly with additional inputs.

C. For the years ended December 31, 2018 and 2017, there was no transfer between Level 1 and Level 2.

D. The following chart is the movement of Level 3 for the years ended December 31, 2018:

	<u>2018</u>
	<u>Non-derivative equity instrument</u>
At January 1	\$ 6,575
Modified retrospective adjustment	(5,501)
Losses recognised in other comprehensive income	(138)
At December 31	<u>\$ 936</u>

E. For the years ended December 31, 2018 and 2017, there was no transfer into or out from Level 3.

F. The treasury department is in charge of valuation procedures for fair value measurements being categorised within Level 3, which is to verify independent fair value of financial instruments. Such assessment is to ensure the valuation results are reasonable by applying independent information to make results close to current market conditions, confirming the resource of information is independent, reliable and in line with other resources and represented as the exercisable price, updating inputs used to the valuation model and making any other necessary adjustments to the fair value.

G. The following is the qualitative information of significant unobservable inputs and sensitivity analysis of changes in significant unobservable inputs to valuation model used in Level 3 fair value measurement:

	Fair value at December 31, 2018	Valuation technique	Significant unobservable input	Range (weighted average)	Relationship of inputs to fair value
Non-derivative equity instrument:					
Private equity fund investment	\$ 936	Net asset value	Not applicable		- Not applicable

(4) Effects on initial application of IFRS 9 and information on application of IAS 39 in 2017

A. Summary of significant accounting policies adopted in 2017 :

(a) Available-for-sale financial assets

- i. Available-for-sale financial assets are non-derivatives that are either designated in this category or not classified in any of the other categories.
- ii. On a regular way purchase or sale basis, available-for-sale financial assets are recognised and derecognised using trade date accounting.
- iii. Available-for-sale financial assets are initially recognised at fair value plus transaction costs. These financial assets are subsequently remeasured and stated at fair value, and any changes in the fair value of these financial assets are recognised in other comprehensive income. Investments in equity instruments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured or derivatives that are linked to and must be settled by delivery of such unquoted equity instruments are presented in 'financial assets measured at cost'.

(b) Loans and receivables

Accounts receivable

Accounts receivable are loans and receivables originated by the entity. They are created by the entity by selling goods or providing services to customers in the ordinary course of business. Accounts receivable are initially recognised at fair value and subsequently measured at amortised cost using the effective interest method, less provision for

impairment.

However, short-term accounts receivable without bearing interest are subsequently measured at initial invoice amount as the effect of discounting is immaterial.

(c) Impairment of financial assets

- i. The Company assesses at each balance sheet date whether there is objective evidence that a financial asset or a group of financial assets is impaired as a result of one or more events that occurred after the initial recognition of the asset (a 'loss event') and that loss event (or events) has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated.
- ii. The criteria that the Company uses to determine whether there is objective evidence of an impairment loss is as follows:
 - (i) Significant financial difficulty of the issuer or debtor;
 - (ii) A breach of contract, such as a default or delinquency in interest or principal payments;
 - (iii) The Company, for economic or legal reasons relating to the borrower's financial difficulty, granted the borrower a concession that a lender would not otherwise consider;
 - (iv) It becomes probable that the borrower will enter bankruptcy or other financial reorganisation;
 - (v) The disappearance of an active market for that financial asset because of financial difficulties;
 - (vi) Observable data indicating that there is a measurable decrease in the estimated future cash flows from a group of financial assets since the initial recognition of those assets, although the decrease cannot yet be identified with the individual financial asset in the group, including adverse changes in the payment status of borrowers in the group or national or local economic conditions that correlate with defaults on the assets in the group;
 - (vii) Information about significant changes with an adverse effect that have taken place in the technology, market, economic or legal environment in which the issuer operates, and indicates that the cost of the investment in the equity instrument may not be recovered;
 - (viii) A significant or prolonged decline in the fair value of an investment in an equity instrument below its cost.
- iii. When the Company assesses that there has been objective evidence of impairment and an impairment loss has occurred, accounting for impairment is made as follows according to the category of financial assets:
 - (i) Financial assets measured at amortised cost
The amount of the impairment loss is measured as the difference between the asset's

carrying amount and the present value of estimated future cash flows discounted at the financial asset's original effective interest rate, and is recognised in profit or loss. If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment loss was recognised, the previously recognised impairment loss is reversed through profit or loss to the extent that the carrying amount of the asset does not exceed its amortised cost that would have been at the date of reversal had the impairment loss not been recognised previously. Impairment loss is recognised and reversed by adjusting the carrying amount of the asset through the use of an impairment allowance account.

(ii) 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 estimated future cash flows discounted at current market return rate of similar financial asset, and is recognised in profit or loss. Impairment loss recognised for this category shall not be reversed subsequently. Impairment loss is recognised by adjusting the carrying amount of the asset through the use of an impairment allowance account.

(iii) Available-for-sale financial assets

The amount of the impairment loss is measured as the difference between the asset's acquisition cost (less any principal repayment and amortisation) and current fair value, less any impairment loss on that financial asset previously recognised in profit or loss, and is reclassified from 'other comprehensive income' to 'profit or loss'. If, in a subsequent period, the fair value of an investment in a debt instrument increases, and the increase can be related objectively to an event occurring after the impairment loss was recognised, then such impairment loss is reversed through profit or loss. Impairment loss of an investment in an equity instrument recognised in profit or loss shall not be reversed through profit or loss. Impairment loss is recognised and reversed by adjusting the carrying amount of the asset through the use of an impairment allowance account.

B. The reconciliations of carrying amount of financial assets transferred from December 31, 2017, IAS 39, to January 1, IFRS 9, were as follows:

		Measured at fair value through profit or loss	Available-for- sale-equity Measured at fair value through other comprehensive income-equity	Measured at cost	Total	Effects	
	Note					Retained earnings	Others equity
IAS 39		\$ -	\$ 40,344	\$ 6,575	\$ 46,919	\$ -	\$ -
Transferred into and measured at fair value through profit or loss	(b)	40,344	(40,344)	-	-	-	-
Transferred into and measured at fair value through other comprehensive income-equity	(a)	-	42,149	(42,149)	-	-	-
Fair value adjustment	(a)(b)	-	(5,501)	-	(5,501)	(36,181)	30,680
Impairment loss adjustment	(a)	-	(35,574)	35,574	-	35,574	(35,574)
IFRS 9		<u>\$ 40,344</u>	<u>\$ 1,074</u>	<u>\$ -</u>	<u>\$ 41,418</u>	<u>(\$ 607)</u>	<u>(\$ 4,894)</u>

(a) Under IAS 39, because the equity instruments, which was classified as financial assets at cost, amounting to \$6,575, was not held for the purpose of trading, they were reclassified as "financial assets at fair value through other comprehensive income (equity instruments)" amounting to \$1,074. Accordingly, retained earnings and other equity interest increased in the amounts of \$35,574 and \$41,075 on initial application of IFRS 9, respectively.

(b) Under IAS 39, the equity instruments, which were classified as available-for-sale financial assets, amounting to \$40,344, was reclassified as "financial assets at fair value through profit or loss (equity instruments)" amounting to \$40,344. Accordingly, retained earnings decreased and other equity interest increased in the amounts of \$36,181 and \$36,181 under IFRS 9, respectively.

C. Credit risk information for the year ended December 2017 is as follows:

(a) Credit risk refers to the risk of financial loss to the Company arising from default by the clients or counterparties of financial instruments on the contract obligations. According to the Company's credit policy, each local entity in the Company is responsible for managing and analysing the credit risk for each of their new clients before standard payment and delivery terms and conditions are offered. Internal risk control assesses the credit quality of the customers, taking into account their financial position, past experience and other factors.

- (b) For the year ended December 31, 2017, no credit limits were exceeded during the reporting periods, and management does not expect any significant losses from non-performance by these counterparties.
- (c) The credit quality of accounts receivable that were neither past due nor impaired was in the following categories based on the Company's Credit Quality Control Policy:

	<u>December 31, 2017</u>
Group 1	\$ 889,467
Group 2	<u>5,026,121</u>
	<u>\$ 5,915,588</u>

Note:

Group 1: Non-distributor.

Group 2: Distributor.

- (d) The aging analysis of accounts receivable that were past due but not impaired is as follows:

	<u>December 31, 2017</u>
Up to 30 days	\$ 278
31 to 90 days	-
91 to 180 days	-
	<u>\$ 278</u>

- (e) Movement analysis of individual provision on financial assets that were impaired is as follows:

- i. As of December 31, 2017, the Company's accounts receivable that were impaired amounted to \$59,792.

- ii. Movements on the provision for impairment of accounts receivable are as follows:

	<u>2017</u>		
	<u>Individual provision</u>	<u>Group provision</u>	<u>Total</u>
At January 1	\$ 40,368	\$ -	\$ 40,368
Provision for impairment	<u>19,424</u>	<u>-</u>	<u>19,424</u>
At December 31	<u>\$ 59,792</u>	<u>\$ -</u>	<u>\$ 59,792</u>

(5) Effects of initial application of IFRS 15 and information on application of IAS 18 in 2017

- A. The significant accounting policies applied on revenue recognition for the year ended December 31, 2017 are set out below.

- (a) Sales of goods

The Company manufactures and sells integrated circuit products. Revenue is measured at the fair value of the consideration received or receivable taking into account of value-added tax, returns, rebates and discounts for the sale of goods to external customers in the ordinary course of the Company's activities. Revenue arising from the sales of goods is recognised when the Company has delivered the goods to the customer, the amount of sales revenue can be measured reliably and it is probable that the future economic benefits

associated with the transaction will flow to the entity. The delivery of goods is completed when the significant risks and rewards of ownership have been transferred to the customer, the Company retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold, and the customer has accepted the goods based on the sales contract or there is objective evidence showing that all acceptance provisions have been satisfied.

(b) Revenue from design, royalty and technical services

Revenue from design, royalty and technical services is recognised according to the stage of completion of transactions when the following conditions are met, and the cost incurred shall be recognised as the cost in the current period:

- i. revenue can be reliably measured;
- ii. transaction related economic benefits may flow to the entity;
- iii. costs incurred or will be incurred relating to transactions can be reliably measured;
- iv. the stage of completion of transactions can be reliably measured at the balance sheet date.

B. The revenue recognised by using above accounting policies for the year ended December 31, 2017 are as follows:

	Year ended December 31, 2017
Sales revenue	\$ 29,953,398
Design revenue	40,954
Royalty and technical services revenue	49,188
	<u>\$ 30,043,540</u>

C. The effects and description of current balance sheet items if the Company continues adopting above accounting policies are as follows:

		December 31, 2018		
		Balance by using		
		previous		Effects from
		accounting		changes in
Balance sheet items	Description	Balance by using	policies	accounting policy
		IFRS 15		
Accounts receivable	(a)	\$ -	(\$ 2,581,910)	(\$ 2,581,910)
Contract liabilities	(b)	(110,764)	-	110,764
Other current liabilities	(a)	(2,581,910)	-	2,581,910
Advance sales receipts	(b)	-	(110,764)	(110,764)

Explanation:

- (a) Estimated sales discount was classified as refund liability in accordance with IFRS 15 but was classified as receivables-offset sales return and allowance under IAS 18.
- (b) Contract liabilities classified in accordance with IFRS 15 was classified as advance sales receipts under IAS 18.

13. SUPPLEMENTARY DISCLOSURES

(1) Significant transactions information

- A. Loans to others: Please refer to table 1.
- B. Provision of endorsements and guarantees to others: Please refer to table 2.
- C. Holding of marketable securities at the end of the period (not including subsidiaries, associates and joint ventures): Please refer to table 3.
- D. Acquisition or sale of the same security with the accumulated cost exceeding \$300 million or 20% of the Company's paid-in capital: Please refer to table 4.
- E. Acquisition of real estate reaching \$300 million or 20% of paid-in capital or more: None.
- F. Disposal of real estate reaching \$300 million or 20% of paid-in capital or more: None.
- G. Purchases or sales of goods from or to related parties reaching \$100 million or 20% of paid-in capital or more: Please refer to table 5.
- H. Receivables from related parties reaching \$100 million or 20% of paid-in capital or more: Please refer to table 6.
- I. Trading in derivative instruments undertaken during the reporting periods: None.
- J. Significant inter-company transactions during the reporting periods: Please refer to table 7.

(2) Information on investees

Names, locations and other information of investee companies (not including investees in Mainland China): Please refer to table 8.

(3) Information on investments in Mainland China

- A. Basic information: Please refer to table 9.
- B. Significant transactions, either directly or indirectly through a third area, with investee companies in the Mainland Area: Please refer to table 10.

14. SEGMENT INFORMATION

None.

REALTEK SEMICONDUCTOR CORPORATION

Loans to others

Year ended December 31, 2018

Table 1

Expressed in thousands of NTD
(Except as otherwise indicated)

No (Note 1)	Creditor	Borrower	General ledger account	Is a related party	Maximum outstanding balance during the year ended December 31, 2018 (Note 3)	Balance at December 31, 2018	Actual amount drawn down	Interest rate	Nature of loan	Amount of transactions with the borrower	Reason for short-term financial	Allowance for doubtful accounts	Collateral		Limit on loans granted to a single party	Ceiling on total loans granted (Note 2)	Footnote
													Item	Value			
0	Realtek Semiconductor Corporation	Realtek Singapore Private Limited	Other receivables-related parties	Y	\$ 1,843,980	\$ 1,843,980	\$ -	-	2	\$ -	Operations	\$ -	None	\$ -	\$ 2,350,257	\$ 9,401,026	None
0	Realtek Semiconductor Corporation	Leading Enterprises Limited	Other receivables-related parties	Y	921,990	921,990	365,723	3.30	2	-	Operations	-	None	-	2,350,257	9,401,026	None
0	Realtek Semiconductor Corporation	Talent Eagle Enterprise Inc.	Other receivables-related parties	Y	1,843,980	1,843,980	1,628,849	3.30	2	-	Operations	-	None	-	2,350,257	9,401,026	None
0	Realtek Semiconductor Corporation	Bluocean Inc.	Other receivables-related parties	Y	1,843,980	1,843,980	602,367	3.30	2	-	Operations	-	None	-	2,350,257	9,401,026	None
1	Leading Enterprises Limited	Realtek Semiconductor (Shen Zhen) Corp.	Other receivables-related parties	Y	153,665	153,665	-	-	2	-	Operations	-	None	-	9,401,026	9,401,026	None
1	Leading Enterprises Limited	Bluocean Inc.	Other receivables-related parties	Y	6,146,600	6,146,600	2,327,410	3.30	2	-	Operations	-	None	-	9,401,026	9,401,026	None
2	Amber Universal Inc.	Talent Eagle Enterprise Inc.	Other receivables-related parties	Y	3,073,300	3,073,300	-	-	2	-	Operations	-	None	-	9,401,026	9,401,026	None
3	Cortina Access, Inc.	Leading Enterprises Limited	Other receivables-related parties	Y	921,990	921,990	-	-	2	-	Operations	-	None	-	9,401,026	9,401,026	None
4	Realtek Singapore Private Limited	Realsil Microelectronics Corp.	Other receivables-related parties	Y	921,990	921,990	-	-	2	-	Operations	-	None	-	9,401,026	9,401,026	None
4	Realtek Investment Singapore Private Limited	Realtek Singapore Private Limited	Other receivables-related parties	Y	3,073,300	3,073,300	739,129	3.30	2	-	Operations	-	None	-	9,401,026	9,401,026	None

REALTEK SEMICONDUCTOR CORPORATION

Loans to others

Year ended December 31, 2018

Table 1

Expressed in thousands of NTD
(Except as otherwise indicated)

No (Note 1)	Creditor	Borrower	General ledger account	Is a related party	December 31, 2018 (Note 3)	Balance at December 31, 2018	Actual amount drawn down	Interest rate	Nature of loan	Amount of transactions with the borrower	Reason for short-term financial	Allowance for doubtful accounts	Collateral		Ceiling on total loans granted (Note 2)	Footnote
													Item	Value		
5	RealSil Microelectronics Corp.	RayMX Microelectronics Corp.	Other receivables- related parties	Y	\$ 358,096	\$ 358,096	\$ -	-	2	-	Operations	-	None	-	\$ 9,401,026	None
5	RealSil Microelectronics Corp.	Suzhou Hongwei Microelectronic Corp.	Other receivables- related parties	Y	358,096	358,096	-	-	2	-	Operations	-	None	-	9,401,026	None

Note 1: The numbers filled in for the loans provided by the Company or subsidiaries are as follows:

(1) The Company is '0'.

(2) The subsidiaries are numbered in order starting from '1'.

Note 2: The Company's "Procedures for Provision of Loans" are as follows:

(1) Ceiling on total loans granted by the Company to all parties is 40% of the Company's net assets value as per its most recent financial statements.

(2) Limit on loans to a single party with business transactions is the business transactions occurred between the creditor and borrower in the current year. The business transaction amount is the higher of purchasing and selling during current year on the year of financing.

(3) For companies needing for short-term financing, the cumulative lending amount may not exceed 40% of the borrowing company's net assets based on its latest financial statements audited or reviewed by independent accountants.

The amount the Company or its subsidiaries lend to an individual entity may not exceed 10% of the Company's or subsidiary's net assets based on its latest financial statements audited or reviewed by independent accountants.

For the foreign companies which the Company holds 100% of the voting rights directly or indirectly, limit on loans is not restricted as stipulated in the above item (3). However, the ceiling on total loans and limit on loans to a single party may not exceed 40% of the Company's net assets based on its latest financial statements audited or reviewed by independent accountants.

Note 3: The authorized limit is approved by the Board of Directors.

REALTEK SEMICONDUCTOR CORPORATION
Provision of endorsements and guarantees to others
Year ended December 31, 2018

Expressed in thousands of NTD
(Except as otherwise indicated)

Table 2

Number (Note 1)	Endorser/ guarantor	Party being endorsed/guaranteed		Maximum outstanding endorsement/ guarantee/ amount as of December 31, 2018 (Note 4)	Outstanding endorsement/ guarantee/ amount at December 31, 2018 (Note 5)	Actual amount drawn down (Note 6)	Amount of endorsements/ guarantees secured with collateral	Ratio of accumulated endorsement/ guarantee amount to net asset value of the endorser/ guarantor company	Ceiling on total amount of endorsements/ guarantees provided (Note 3)	Provision of endorsements/ guarantees by parent company to subsidiary (Note 7)	Provision of endorsements/ guarantees by subsidiary to parent company (Note 7)	Provision of endorsements/ guarantees to the party in Mainland China (Note 7)	Footnote
		Relationship with the endorser/ guarantor (Note 2)	Limited on endorsements/ guarantees provided for a single party (Note 3)										
0	Realtek Semiconductor Corporation	2	Realtek Singapore Private Limited	\$ 2,350,257	\$ 2,350,257	\$ -	-	0.10	\$ 11,751,283	Y	N	N	
0	Realtek Semiconductor Corporation	2	Leading Enterprises Limited	7,050,770	7,050,770	-	-	0.30	11,751,283	Y	N	N	
0	Realtek Semiconductor Corporation	2	RayMX Microelectronics Corp.	705,077	705,077	-	-	0.03	11,751,283	Y	N	Y	
1	Leading Enterprises Limited	2	Realsil Microelectronics Corp.	614,660	614,660	-	-	0.03	11,751,283	N	N	Y	
2	Realsil Microelectronics Corp.	2	RayMX Microelectronics Corp.	614,660	614,660	-	-	0.03	11,751,283	N	N	Y	

Note 1: The numbers filled in for the endorsements/guarantees provided by the Company or subsidiaries are as follows:

(1) The Company is '0'.

(2) The subsidiaries are numbered in order starting from '1'.

Note 2: Relationship between the endorser/guarantor and the party being endorsed/guaranteed is classified into the following six categories:

(1) Having business relationship.

(2) The endorser/guarantor parent company owns directly more than 50% voting shares of the endorsed/guaranteed subsidiary.

(3) The endorser/guarantor parent company and its subsidiaries jointly own more than 50% voting shares of the endorsed/guaranteed company.

(4) The endorsed/guaranteed parent company directly or indirectly owns more than 50% voting shares of the endorser/guarantor subsidiary.

(5) Mutual guarantee of the trade as required by the construction contract.

(6) Due to joint venture, each shareholder provides endorsements/guarantees to the endorsed/guaranteed company in proportion to its ownership.

Note 3: Ceiling on total endorsements/guarantees granted by the Company and subsidiaries is 50% of the Company's net asset based on the latest financial statements audited or reviewed by independent accountants, and limit on endorsements/guarantees to a single party is 50% of the Company's net asset based on the latest financial statements audited or reviewed by independent accountants.

Note 4: Fill in the year-to-date maximum outstanding balance of endorsements/guarantees provided as of the reporting period.

Note 5: Once endorsement/guarantee contracts or promissory notes are signed/issued by the endorser/guarantor company to the banks, the endorser/guarantor company bears endorsement/guarantee liabilities/And all other events involve endorsements and guarantees should be included in the balance of outstanding endorsements and guarantees.

Note 6: Fill in the actual amount of endorsements/guarantees used by the endorsed/guaranteed company.

Note 7: Fill in 'Y' for those cases of provision of endorsements/guarantees by listed parent company to subsidiary and provision by subsidiary to listed parent company, and provision to the party in Mainland China.

REALTEK SEMICONDUCTOR CORPORATION

Holding of marketable securities at the end of the period (not including subsidiaries, associates and joint ventures)
December 31, 2018

Expressed in thousands of NTD
(Except as otherwise indicated)

Table 3

As of December 31, 2018

Securities held by:	Marketable securities (Note 1)	Relationship with the securities issuer(Note 2)	General ledger account	Number of shares	As of December 31, 2018		Footnote (Note 4)
					Book value (Note 3)	Fair value	
Realtek Semiconductor Corporation	C-media Electronics Inc. - Common stock	Other related parties	Financial assets at fair value through profit or loss	1,623,501	\$ 29,061	\$ 29,061	
Realtek Semiconductor Corporation	Technology Partner Venture Capital Corporation - Common stock	Other related parties	Financial assets at fair value through other comprehensive income	283,791	936	936	
Realtek Investment Limited	Compal broadband networks Inc. - Common stock	None	Financial assets at fair value through other comprehensive income	3,575,000	164,093	164,093	
Realsun Investment Co., Ltd.	Shieh-Yong Investment Co., Ltd. - Common stock	None	Financial assets at fair value through other comprehensive income	23,124,000	186,374	186,374	
Realsun Investment Co., Ltd.	Compal broadband networks Inc. - Common stock	None	Financial assets at fair value through other comprehensive income	3,575,000	164,093	164,093	
Leading Enterprises Limited	Fortmedia Inc. - Common stock	None	Financial assets at fair value through other comprehensive income	8,623,301	99,546	99,546	
Leading Enterprises Limited	Starix Technology, Inc.-Preferred stock	None	Financial assets at fair value through other comprehensive income	5,000,000	18,440	18,440	
Leading Enterprises Limited	Octasia Investment Holding Inc. - Common stock	None	Financial assets at fair value through other comprehensive income	9,000,000	475,242	475,242	
Amber Universal Inc.	Octasia Investment Holding Inc. - Common stock	None	Financial assets at fair value through other comprehensive income	4,726,836	249,599	249,599	
Hung-wei Venture Capital Co., Ltd.	United Microelectronics Corporation - Common stock	None	Financial assets at fair value through other comprehensive income	336,346	3,784	3,784	
Hung-wei Venture Capital Co., Ltd.	C-media Electronics Inc.- Common stock	Other related parties	Financial assets at fair value through profit or loss	2,274,875	40,720	40,720	
Hung-wei Venture Capital Co., Ltd.	Greatek Electronic Inc. - Common stock	Other related parties	Financial assets at fair value through other comprehensive income	5,823,602	250,124	250,124	
Hung-wei Venture Capital Co., Ltd.	Subtron technology Co., Ltd. - Common stock	None	Financial assets at fair value through other comprehensive income	1,093,968	10,841	10,841	
Hung-wei Venture Capital Co., Ltd.	Embestor Technology Inc. - Common stock	Other related parties	Financial assets at fair value through other comprehensive income	2,800,000	28,000	28,000	
Realsil Microelectronics Corp.	China Universal Cash Premium Money Market Fund	None	Financial assets at fair value through profit or loss	8,854,549	39,635	39,635	
Realsil Microelectronics Corp.	China Money Fund	None	Financial assets at fair value through profit or loss	1,006,124	4,504	4,504	
Realsil Microelectronics Corp.	Harvest Money Market	None	Financial assets at fair value through profit or loss	1,005	4	4	

REALTEK SEMICONDUCTOR CORPORATION

Holding of marketable securities at the end of the period (not including subsidiaries, associates and joint ventures)
December 31, 2018

Expressed in thousands of NTD
(Except as otherwise indicated)

Table 3

As of December 31, 2018

Securities held by	Marketable securities (Note 1)	Relationship with the securities issuer (Note 2)	General ledger account	Number of shares	Book value		Footnote (Note 4)
					Book value (Note 3)	Fair value	
RealSil Microelectronics Corp.	Tianhong Money Fund	None	Financial assets at fair value through profit or loss	38,754,137	\$ 173,473	\$ 173,473	
RealSil Microelectronics Corp.	ICBC - Money Fund	None	Financial assets at fair value through profit or loss	1,003,954	4,494	4,494	
RealSil Microelectronics Corp.	Zhou Zhoufa Stable Fund	None	Financial assets at fair value through profit or loss	1,027,247	4,598	4,598	
RealSil Microelectronics Corp.	Zhou Zhoufa Balanced Fund	None	Financial assets at fair value through profit or loss	28,152,645	126,018	126,018	
RealSil Microelectronics Corp.	Tian Tianjin Aggressive Fund	None	Financial assets at fair value through profit or loss	57,544,884	257,585	257,585	
RealSil Microelectronics Corp.	China Universal Cash Premium Money Market Fund	None	Financial assets at fair value through profit or loss	20,078,823	89,878	89,878	
RealSil Microelectronics Corp.	Tian Tianjin Stable Fund	None	Financial assets at fair value through profit or loss	6,550,041	29,320	29,320	
RealSil Microelectronics Corp.	Tian Tianjin Financial Fund A	None	Financial assets at fair value through profit or loss	25,172,317	112,677	112,677	
RealSil Microelectronics Corp.	Tian Tianjin Financial Fund B	None	Financial assets at fair value through profit or loss	18,124,068	81,128	81,128	
Realtek Semiconductor (Shen Zhen) Corp.	Zhou Zhoufa Fund	None	Financial assets at fair value through profit or loss	3,352,777	17,914	17,914	
Realtek Semiconductor (Shen Zhen) Corp.	Tian Tianjin Stable Fund	None	Financial assets at fair value through profit or loss	25,814,042	140,659	140,659	
Realtek Semiconductor (Shen Zhen) Corp.	Tian Tianjin Aggressive Fund	None	Financial assets at fair value through profit or loss	8,249,551	43,999	43,999	
Cortina Network Systems Shanghai Co. Ltd.	ICBC - Money Fund	None	Financial assets at fair value through profit or loss	4,075,824	18,244	18,244	
Cortina Network Systems Shanghai Co. Ltd.	Zhou Zhoufa Stable Fund	None	Financial assets at fair value through profit or loss	7,923,120	35,466	35,466	
Cortina Network Systems Shanghai Co. Ltd.	Tian Tianjin Stable Fund	None	Financial assets at fair value through profit or loss	5,671,048	25,385	25,385	
Cortina Network Systems Shanghai Co. Ltd.	Tian Tianjin Aggressive Fund	None	Financial assets at fair value through profit or loss	10,352,637	46,341	46,341	
Bluocean Inc.	CyWeeMotion Group Limited	None	Financial assets at fair value through other comprehensive income	4,800,000	-	-	6.59%

Note 1: Marketable securities in the table refer to stocks, bonds, beneficiary certificates and other related derivative securities within the scope of IFRS 9 'Financial instrument'.

Note 2: Leave the column blank if the issuer of marketable securities is non-related party.

Note 3: Fill in the amount after adjusted at fair value and deducted by accumulated impairment for the marketable securities measured at fair value; fill in the acquisition cost or amortised cost deducted by accumulated impairment for the marketable securities not measured at fair value.

Note 4: The number of shares of securities and their amounts pledged as security or pledged for loans and their restrictions on use under some agreements should be stated in the footnote if the securities presented herein have such conditions.

REALTEK SEMICONDUCTOR CORPORATION

Acquisition or sale of the same security with the accumulated cost exceeding \$300 million or 20% of the Company's paid-in capital

Year ended December 31, 2018

Table 4

Expressed in thousands of NTD
(Except as otherwise indicated)

Investor	Marketable securities	General ledger account	Counterparty	Relationship with the investor	Balance as at January 1, 2018		Addition		Disposal			Balance as at December 31, 2018		
					Number of shares	Amount	Number of shares	Amount	Number of shares	Selling price	Book value	Gain (loss) on disposal	Number of shares	Amount (Note)
Talent Eagle Enterprise Inc.	Ubilinx Technology Inc.	Equity investments under the equity method	Ubilinx Technology Inc.	Investee company accounted for under the equity method	14,000,000	\$ 42,653	12,000,000	\$ 362,264	-	-	\$ -	-	26,000,000	\$ 23,538

Note : Including investment loss accounted for under the equity method and cumulative translation adjustment.

REALTEK SEMICONDUCTOR CORPORATION

Purchases or sales of goods from or to related parties reaching NT\$100 million or 20% of paid-in capital or more
Year ended December 31, 2018

Table 5

Expressed in thousands of NTD
(Except as otherwise indicated)

Purchase/seller	Counterparty	Relationship with the counterparty	Purchase (sales)	Amount	Percentage of total purchase (sales)	Differences in transaction terms compared to third party transactions(Note 1)			Balance	Percentage of total notes/accounts receivable (payable)	Footnote
						Unit price	Credit term	Credit term			
Transaction											
Notes/accounts receivable(payable)											
Realtek Semiconductor Corporation	G.M.I Technology Inc.	Other related parties	(Sales)	(\$ 4,888,451)	(11%)	Approximately the same with third party transactions	Approximately the same with third party transactions	Approximately the same with third party transactions	\$ 980,790	13%	
Realtek Semiconductor Corporation	Actions Semiconductor Co., Ltd.	Other related parties	(Sales)	(358,241)	(1%)	Approximately the same with third party transactions	Approximately the same with third party transactions	Approximately the same with third party transactions	41,928	1%	
Realtek Singapore Private Limited	G.M.I Technology Inc.	Other related parties	(Sales)	(3,484,620)	(8%)	Approximately the same with third party transactions	Approximately the same with third party transactions	Approximately the same with third party transactions	738,018	10%	
Realtek Semiconductor Corporation	Greattek Electronics Inc.	Other related parties	Purchase	887,456	5%	Approximately the same with third party transactions	Approximately the same with third party transactions	Approximately the same with third party transactions	(228,279)	4%	
Realtek Singapore Private Limited	Greattek Electronics Inc.	Other related parties	Purchase	200,022	1%	Approximately the same with third party transactions	Approximately the same with third party transactions	Approximately the same with third party transactions	(21,590)	0%	

Note 1: The terms for related parties are different from third parties. Differences in transaction terms compared to third party transactions should be explained in unit price and transaction term columns.

REALTEK SEMICONDUCTOR CORPORATION

Receivable from related parties reaching NT\$100 million or 20% of paid-in capital or more
December 31, 2018

Expressed in thousands of NTD
(Except as otherwise indicated)

Table 6

Creditor	Counterparty	Relationship with the counterparty	Balance as at December 31, 2018		Overdue receivables		Amount collected subsequent to the balance sheet date	Allowance for doubtful accounts
			Amount	Turnover rate	Amount	Action taken		
Realtek Semiconductor Corporation	G.M.I Technology Inc.	Other related parties	\$ 980,790	5.18	\$ -	-	\$ 512,963	\$ 9,907
Realtek Singapore Private Limited	G.M.I Technology Inc.	Other related parties	738,018	7.82	-	-	494,477	1,479

REALTEK SEMICONDUCTOR CORPORATION

Significant inter-company transactions during the reporting periods
Year ended December 31, 2018

Expressed in thousands of NTD
(Except as otherwise indicated)

Table 7
Significant inter-company transactions during the reporting periods:

Number (Note 1)	Company name	Counterparty	Relationship (Note 2)	General ledger account	Amount	Transaction terms	Percentage of consolidated total operating revenues or total assets (Note 3)
0	Realtek Semiconductor Corporation	Leading Enterprises Limited	1	Other receivables	\$ 365,723	Fund lending is in accordance with loan agreement terms.	0.63%
0	"	Talent Eagle Enterprise Inc.	1	Other receivables	1,628,849	"	2.80%
0	"	Bluocean Inc.	1	Other receivables	602,367	"	1.03%
0	"	RayMX Microelectronics Corp.	1	Other receivables	50,000	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	0.09%
0	"	RayMX Microelectronics Corp.	1	Gain on disposal of assets	50,000	"	0.11%
1	Leading Enterprises Limited	Bluocean Inc.	3	Other receivables	2,327,410	Fund lending is in accordance with loan agreement terms.	4.00%
1	"	Bluocean Inc.	3	Interest revenue	72,831	"	0.16%
1	"	Realtek Semiconductor (Japan) Corp.	3	Technical service fees	57,027	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	0.12%
2	Bluocean Inc.	Realtek Semiconductor Corporation	2	Interest expense	20,889	Fund lending is in accordance with loan agreement terms.	0.05%
3	Talent Eagle Enterprise Inc.	Realtek Semiconductor Corporation	2	Interest expense	21,983	"	0.05%
4	Realtek Singapore Private Limited	Realsil Microelectronics Corp.	3	Technical service fees	1,395,502	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	3.05%
4	"	Realsil Microelectronics Corp.	3	Other payables	58,171	"	0.11%
4	"	Realtek Semiconductor (Shen Zhen) Corp.	3	Technical service fees	270,803	"	0.59%
4	"	Realtek Semiconductor (Shen Zhen) Corp.	3	Other payables	11,236	"	0.02%
4	"	Cortina Access, Inc.	3	Technical service fees	216,550	"	0.47%

REALTEK SEMICONDUCTOR CORPORATION

Significant inter-company transactions during the reporting periods

Year ended December 31, 2018

Table 7

Expressed in thousands of NTD
(Except as otherwise indicated)

Significant inter-company transactions during the reporting periods:

Number (Note 1)	Company name	Counterparty	Relationship (Note 2)	General ledger account	Amount	Transaction terms	Percentage of consolidated total operating revenues or total assets (Note 3)
4	Realttek Singapore Private Limited	Cortina Access, Inc.	3	Other payables	\$ 19,128	No similar transaction can be compared with. Transaction prices and terms are determined in accordance with mutual agreement.	0.03%
4	"	Cortina Network Systems Shanghai Co. Ltd.	3	Technical service fees	108,117	"	0.24%
4	"	Cortina Network Systems Shanghai Co. Ltd.	3	Other payables	25,791	"	0.04%
4	"	Cortina Systems Taiwan Limited	3	Technical service fees	71,868	"	0.16%
4	"	Cortina Systems Taiwan Limited	3	Other payables	6,300	"	0.01%
4	"	RayMX Microelectronics Corp.	3	Other receivables	50,000	"	0.09%
4	"	RayMX Microelectronics Corp.	3	Gain on disposal of assets	50,000	"	0.11%
5	Cortina Access, Inc.	Leading Enterprises Limited	3	Interest revenue	10,045	Fund lending is in accordance with loan agreement terms.	0.02%
6	Realttek Investment Singapore Private Limited	Realttek Singapore Private Limited	3	Other receivables	739,129	"	1.27%

Note 1: The numbers filled in for the transaction company in respect of inter-company transactions are as follows:

(1) Parent company is '0'.

(2) The subsidiaries are numbered in order starting from '1'.

Note 2: Relationship between transaction company and counterparty is classified into the following three categories; fill in the number of category each case belongs to (If transactions between parent company and subsidiaries or between subsidiaries refer to same transaction, it is not required to disclose twice. For example, if the parent company has already disclosed its transaction with a subsidiary, then the subsidiary is not required to disclose the transaction; for transactions between two subsidiaries, if one of the subsidiaries has disclosed the transaction, then the other is not required to disclose the transaction.):

(1) Parent company to subsidiary.

(2) Subsidiary to parent company.

(3) Subsidiary to subsidiary

Note 3: Regarding percentage of transaction amount to consolidated total operating revenues or total assets, it is computed based on period-end balance of transaction to consolidated total assets for balance sheet accounts and based on accumulated transaction amount for the period to consolidated total operating revenues for income statement accounts.

Note 4: Only transactions above NT\$5 million are disclosed. Transactions of related parties are not further disclosed here.

REALTEK SEMICONDUCTOR CORPORATION

Information on investees
Year ended December 31, 2018

Expressed in thousands of NTD
(Except as otherwise indicated)

Table 8

Investor	Investee	Location	Main business activities	Initial investment amount		Shares held as at December 31, 2018		Book value	Net profit (loss) of the investee for the year ended December 31, 2018	Investment income (loss) recognised by the Company for the year ended December 31, 2018	Footnote
				Balance as at December 31, 2018	Balance as at December 31, 2017	Number of shares	Ownership %				
				\$	\$						
Realtek Semiconductor Corporation	Leading Enterprises Limited	British Virgin Islands	Investment holdings	15,318,249	14,877,139	39,130	100%	10,903,503	564,881	564,881	Subsidiary
Realtek Semiconductor Corporation	Amber Universal Inc.	British Virgin Islands	Investment holdings	4,837,812	4,698,512	41,432	100%	3,195,092	80,419	80,419	Subsidiary
Realtek Semiconductor Corporation	Realtek Singapore Private Limited	Singapore	ICs manufacturing, design, research, development, sales, and marketing	2,458,640	2,387,840	80,000,000	89.03%	7,750,098	3,392,035	3,392,035	Subsidiary
Realtek Semiconductor Corporation	Bluocoon Inc.	Cayman Islands	Investment holdings	3,382,167	3,284,772	110,050,000	100%	3,440,632	88,525	88,525	Subsidiary
Realtek Semiconductor Corporation	Talent Eagle Enterprise Inc.	Cayman Islands	Investment holdings	3,506,635	3,405,657	114,100,000	100%	2,916,363	(299,912)	(299,912)	Subsidiary
Realtek Semiconductor Corporation	Realtek Investment Singapore Private Limited	Singapore	Investment holdings	6,146,600	5,969,600	200,000,000	100%	6,427,012	166,254	166,254	Subsidiary
Realtek Semiconductor Corporation	Realism Investments Co., Ltd.	Taiwan	Investment holdings	280,000	280,000	28,000,000	100%	437,910	6,793	6,793	Subsidiary
Realtek Semiconductor Corporation	Hungwei Venture Capital Co., Ltd.	Taiwan	Investment holdings	250,000	250,000	25,000,000	100%	374,178	6,315	6,315	Subsidiary
Realtek Semiconductor Corporation	Realking Investments Limited	Taiwan	Investment holdings	293,930	293,930	29,392,985	100%	348,721	(11,775)	(11,775)	Subsidiary
Realtek Semiconductor Corporation	Realism Technology Corporation	Taiwan	ICs manufacturing, design, research, development, sales, and marketing	5,000	5,000	500,000	100%	5,563	46	46	Subsidiary
Realtek Semiconductor Corporation	Bobtiag Inc.	Taiwan	Manufacturing and installation of computer equipment and wholesale, retail and related services of electronic materials and information/software	20,000	20,000	1,918,910	66.67%	19,214	37	25	Subsidiary
Realtek Semiconductor Corporation	Technology Partner V Venture Capital Corporation	Taiwan	Investment holdings	84,565	84,565	5,969,298	32.43%	36,917	(5,410)	(9,765)	Note 1
Realtek Semiconductor Corporation	Estinet Technologies Incorporation	Taiwan	Research and development, design, manufacturing, sales and other services of electronic components, information/Software and integrated circuits.	110,000	110,000	4,000,000	20.15%	40,682	(59,883)	(14,823)	Note 1
Realtek Semiconductor Corporation	SV Technologies, Taiwan Ltd.	Taiwan	Research and development, design, manufacturing, sales and other services of electronic components, information/Software and integrated circuits.	46,699	46,699	4,669,917	24.42%	16,106	1,088	(427)	Note 1
Realking Investments Limited	InnoRich Venture Capital Corp.	Taiwan	Venture capital activities	200,000	200,000	20,000,000	37.38%	167,923	(48,797)	-	Note 1
Realking Enterprises Limited	Realtek Semiconductor (Japan) Corp.	Japan	ICs design, sales, and consultancy	5,568	5,299	400	100%	2,375	281	-	Sub-Subsidiary
Leading Enterprises Limited	Circon Universal Inc.	Mauritius	Investment holdings	1,991,498	1,934,150	64,800,000	100%	8,315	58	-	Sub-Subsidiary

REALTEK SEMICONDUCTOR CORPORATION

Information on investees

Year ended December 31, 2018

Table 8

Expressed in thousands of NTD
(Except as otherwise indicated)

Investor	Investee	Location	Main business activities	Initial investment amount			Shares held as at December 31, 2018			Net profit (loss) of the investee for the year ended December 31, 2018	Investment income (loss) recognised by the Company for the year ended December 31, 2018	Footnote
				Balance as at December 31, 2018	Balance as at December 31, 2017	Balance as at December 31, 2018	Number of shares	Ownership (%)	Book value			
Leading Enterprises Limited	Realtelk Singapore Private Limited	Singapore	ICs manufacturing, design, research, development, sales, and marketing support	\$ 1,283,769	\$ 1,246,801	\$ 961,014	9,856,425	10.97%	\$ -	\$ 3,392,035	-	Sub-Subsidiary
Amber Universal Inc.	Realtelk Semiconductor (HK) Limited	Hong Kong	Information services and technical support	5,886	5,728	1,201	-	100%	(-)	(24)	-	Sub-Subsidiary
Realtelk Singapore Private Limited	Empsonic Enterprises Inc.	Mauritius	Investment holdings	868,207	843,206	1,407,954	2,825,000	100%	145,372	145,372	-	Sub-Subsidiary
Realtelk Singapore Private Limited	Cortina Access Inc.	U.S.A	R&D and information services	1,255,320	1,219,172	1,127,172	16,892	100%	23,566	23,566	-	Sub-Subsidiary
Realtelk Singapore Private Limited	Cortina Systems Taiwan Limited	Taiwan	R&D and technical support	61,466	59,696	62,379	21,130,000	100%	7,005	7,005	-	Sub-Subsidiary
Realtelk Singapore Private Limited	Realtelk Viet Nam Co., Ltd.	Vietnam	R&D and technical support	30,733	-	28,592	1,000,000	100%	(1,000)	(1,000)	-	Sub-Subsidiary
Talent Eagle Enterprise Inc.	Ubilinx Technology Inc.	U.S.A	R&D and information services	799,058	417,872	23,538	26,000,000	100%	(382,396)	(382,396)	-	Sub-Subsidiary

Note 1 : Investee

REALTEK SEMICONDUCTOR CORPORATION
Information on investments in Mainland China

Year ended December 31, 2018

Expressed in thousands of NTD
(Except as otherwise indicated)

Table 9

Investee in Mainland China	Main business activities	Paid-in Capital	Investment method (Note1)	Accumulated amount of remittance from Taiwan to Mainland China as of January 1, 2018	Amount remitted from Taiwan to Mainland China/Amount remitted back to Taiwan for the year ended December 31, 2018		Accumulated amount of remittance from Taiwan to Mainland China as of December 31, 2018	Net income of investee for the year ended December 31, 2018	Ownership held by the Company (direct or indirect)	Investment income (loss) recognised by the Company for the year ended December 31, 2018 (Note2)(C)	Book value of investment in Mainland China as of December 31, 2018	Accumulated amount of investment income remitted back to Taiwan as of December 31, 2018	Footnote
					Remitted to Mainland China	Taiwan to Mainland China as of December 31, 2018							
Corina Network Systems Shanghai Co., Ltd.	R&D and technical support	\$ 110,639	2	\$ -	\$ -	\$ -	\$ 110,639	\$ 9,073	100%	\$ 9,073	\$ 105,384	\$ -	
Realist Microelectronics Corp.	R&D and technical support	860,524	"	860,524	-	-	860,524	151,804	100%	151,804	1,403,037	-	
Realtek Semiconductor (Shen Zhen) Corp.	R&D and technical support	153,665	"	153,665	-	-	153,665	18,565	100%	18,565	240,899	-	
RayMX Microelectronics Corp.	IC's manufacturing, design, research, development, sales, and marketing	117,501	"	-	-	-	117,501	(1,130)	100%	(1,130)	116,391	-	
Company name		December 31, 2018		December 31, 2018			December 31, 2018						
Corina Network Systems Shanghai Co., Ltd.		\$ 110,639		\$ 110,639			\$ 110,639	\$ 14,788,140					
Realist Microelectronics Corp.		860,524		860,524			860,524						
Realtek Semiconductor (Shen Zhen) Corp.		153,665		153,665			153,665						
RayMX Microelectronics Corp.		117,501		-			117,501	(1,130)					

Note 1: Investment methods are classified into the following three categories; fill in the number of category each case belongs to:

(1) Directly invest in a company in Mainland China.

(2) Through investing in an existing company in the third area, which then invested in the investee in Mainland China.

(3) Others.

Note 2: In the 'Investment income (loss) recognised by the Company for the year ended December 31, 2018' column:

(1) It should be indicated if the investee was still in the incorporation arrangements and had not yet any profit during this period.

(2) Indicate the basis for investment income (loss) recognition in the number of one of the following three categories:

A. The financial statements that are audited and attested by international accounting firm which has cooperative relationship with accounting firm in R.O.C.

B. The financial statements that are audited and attested by R.O.C. parent company's CPA.

C. Others.(Self-Edit financial statements)

Note 3: The numbers in this table are expressed in New Taiwan Dollars.

REALTEK SEMICONDUCTOR CORPORATION

Significant transactions conducted with investees in Mainland China directly or indirectly through other companies in the third areas
Year ended December 31, 2018

Table 10

Expressed in thousands of NTD
(Except as otherwise indicated)

	Technical service fees		Property transaction		Accounts receivable (payable)		Provision of endorsements/guarantees or collaterals		Financing		Interest during the year ended December 31, 2018	
	Amount	\$	Amount	%	Balance at December 31, 2018	%	Balance at December 31, 2018	Purpose	Maximum balance during the year ended December 31, 2018	Balance at December 31, 2018		Interest rate
Investee in Mainland China												
Realsil Microelectronics Corp.	1,395,502	\$	-	-	58,171	0.11	\$	-	\$	-	-	\$
Realtek Semiconductor (Shen Zhen) Corp.	270,803		-	-	11,236	0.02		-		-	-	
Cortina Network Systems Shanghai Co., Ltd.	108,117		-	-	19,128	0.03		-		-	-	
Ray/MX Microelectronics Corp.	-		100,000	0.22	100,000	0.18	1,319,937	Operations	-	-	-	-