**TSE Code: 2379** 

# 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

Printed Date: April 30, 2019

#### **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.

### I. Spokesperson:

Name: Huang, Yee-Wei Title: Vice President Deputy Spokesperson: Name: Lin, Han-Chen

Title: Special Assistant to President

Tel: (03) 578-0211

Email: investors@realtek.com

### II. Headquarters

Address: No. 2, Innovation Road II, Hsinchu Science Park, Hsinchu 300, Taiwan

Tel: (03) 578-0211

### III. Transfer Agent:

Company: CTBC BANK CO., LTD. Transfer Agency Department

Address: 5F., No. 83, Sec. 1, Chongqing S. Rd., Taipei City 100, Taiwan.

Website: www.ctbcbank.com

Tel: (02) 6636-5566

### IV. Auditor of the latest financial report:

Auditors: Hsueh, Seou-Hung & Li, Tien-Yi Company: PricewaterhouseCoopers'

Address: 5F., No. 2, Gongye E. 3rd Rd., Hsinchu Science Park, Hsinchu 300, Taiwan

Website: www.pwc.com.tw

Tel: (03) 578-0205

### V. GDR listed stock exchange and the way to search for information:

Name: Luxembourg Stock Exchange

Please refer to Luxembourg Stock Exchange official website for Realtek GDR Price.

Website: www.bourse.lu

### VI. Company website: www.realtek.com

# **Table of Contents**

Letter to Shareholders	1
Company Introduction	3
Date of Establishment	
Company Milestones	
Corporate Governance Report	8
Organization	8
Information of Directors and Officers	10
Corporate Governance	19
Information Regarding Audit Fees	42
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.	
Capital Raising	48
Source of Capital	48
Structure of Shareholders	48
Distribution of Shareholding	49
List of Major Shareholders	49
Market price, net worth, earning, and dividends per common share and related information over the last two years	
Dividend Policy and Status of Execution	51
Status of GDR	53
Operations Overview	54
Business Overview	54
Marketplace and Production Overview	67
Employees	74
Environmental Expenses	74
Labor Relations	74
Significant Agreements	77
Financial Status, Operating Results and Status of Risk Management	78
Financial Status	78
Operational Results.	79
Cash Flow	80
Risk Management	81
Special Items	83

Financial Information	92
Condensed balance sheet and Statement of Comprehensive Income, independent auditor's ropinion in the recent five years	
Financial Analysis in the Recent Five Years	96
Audit Committee's Review Report	99
Consolidated Financial Statements	100
Parent Company Only Financial Statements	192

### **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, lowpower 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
1000/10	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	
1999/12	The 4-Port Fast Ethernet Transceiver receives an innovative technology R&D grant from the Hsinchu Science Park Administration.
2000/05	
2000/03	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
2000/08	Outstanding Award at the Ministry of Economic Affairs' 8 <sup>th</sup> Industrial
	Technology Development Awards.
2001/12	The Multi-mode Single-Chip 10/100M Fast Ethernet Controller SoC receives a
2001/12	Component Design Award from EDA Asia Magazine.
2002/01	For the first time, the Company issues Overseas Depositary 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 Micro-Electronics Magazine.
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. The PCI Express Single-Chip Gigabit Ethernet Controller receives an innovation 2004/03 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. The reference designs of the IEEE802.11a/b/g WLAN Chipsets RTL8185L and 2004/09 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. The WLAN Chipsets RTL8187L and RTL8255 receive an Innovative Product 2004/12 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. The Company celebrates the grand opening of its new building on Innovation Rd. 2005/06 II in Hsinchu Science Park. The Company releases the RTS5111, the world's first USB 2.0 All-in-One Card 2005/08 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. The ALC888 Telecom receives a Technology Innovation Accelerated Award for 2006/03 the "Digital Office" platform at the 2006 Intel Developer Forum. The Company passes ISO 14001 Environmental Management Systems 2006/08 certification. The Company celebrates its 20<sup>th</sup> anniversary. 2006/10 2006/12 The ALC888 Telecom receives an Innovative Product Award from the Hsinchu Science Park Administration. For the third consecutive year, the Company receives an R&D Accomplishment 2006/12 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 Signalto-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. For the fourth consecutive year, the Company receives an R&D Accomplishment 2007/12 Award from the Hsinchu Science Park Administration. 2008/05 The Company demonstrates a series of Networked Multimedia SoC solutions at Computex Taipei 2008. The RTD2485D All-in-One LCD Monitor Controller receives a Best Choice 2008/06 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. The Company releases the RTL8111E, the first Gigabit Ethernet Controller SoC 2009/10 to use the IEEE 802.3az standard. The RTD1073 Full-HD Digital Media Processor receives a 2009 EDN China 2009/10 Innovation Award. The RTD1073/1283 Full-HD Digital Media Processor receives a 2009 2009/11 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. The Company receives the 2009 R&D Accomplishment Award from the Hsinchu 2009/11 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. The ALC899-GR High Fidelity PC Audio Codec receives a Best Choice Award 2010/06 at Computex Taipei 2010. The RTL8111E Single-Chip Gigabit Ethernet Controller receives a Best Choice 2010/06 Award at Computex Taipei 2010.

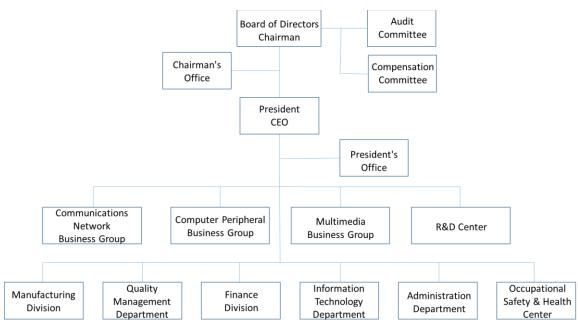
2010/12	The RTL8111E Single-Chip Gigabit Ethernet Controller receives a 2010
0010/10	Outstanding IT Application and Products Award.
2010/12	The RTL8367M 7-Port Gigabit Ethernet Switch Controller receives a 2010
2010/12	Innovative Product Award from the Hsinchu Science Park Administration.
2010/12	The Company receives a 2010 Science Park R&D Accomplishment Award.
2011/10	The Company receives the 1 <sup>st</sup> Taiwan Green Classics Award, hosted by the
0011/10	Bureau of Foreign Trade, Ministry of Economic Affairs.
2011/12	The Company receives an Industrial Sustainable Excellence Award from the
2011/12	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,
2011/12	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
2012/12	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
2012/11	at Computex Taipei 2013.  The PTL 8153 Law Power USB 2.0 to Circle to Ethernet Controller receives a
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
2013/12	Award from the Hsinchu Science Park Administration.
2014/06	The RTL8118AS Ultra Low Power Gaming NIC receives a Best Choice Green
2014/00	ICT Award at Computex Taipei 2014.
2014/06	The RTL8881A AP/Router Network Processor SoC (with 11ac Wi-Fi) receives a
2014/00	Best Choice Award (in Communication) at Computex Taipei 2014.
2015/04	The Company's subsidiary Realtek Singapore Pte Ltd. acquires 100% equity
2013/01	interest of Cortina Access, Inc. and its subsidiaries.
2015/06	The RTL8195AM Low Power Wi-Fi IoT SoC receives a Best Choice Golden
2010/00	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	Manages communications network product R&D, planning and marketing.
Network Business	
Group	
Computer Peripheral	Manages computer peripheral product R&D, planning and marketing.
Business Group	
Multimedia Business	Manages multimedia product R&D, planning and marketing.
Group	
R&D Center	Plans new products, develops and designs relevant core technologies, and manages circuit
	layouts.
Manufacturing	Oversees raw materials, warehousing, materials control, procurement, IC manufacturing and
Division	testing, and testing equipment maintenance.
Quality Management	Oversees product quality control and reliability engineering.
Department	
Finance Division	Oversees finance, accounting, and stock affairs.
Information	Oversees information management and computer systems integration and applications.
Technology	
Department	
Administration	Oversees general affairs, factory administration, and human resources.
Department	
Occupational Safety	Oversees occupational safety and health.
& Health Center	

II. Information of Directors and Officers

1. Information of Directors

April 14, 2019

							Shareholding When	g When	Curr	Current	Spouse &	Shareholding			Managers	Managers or Directors who are	who are
Title	/ Country of Origin	Name	Gender	Date Elected	Term of Office	Date First Elected	Bected	tod	Shareholding	kling	Shareholding	by Nominee Arrangement	Education & Experience	Other Selected Current Positions	spouse or relatives to	spouse or within second-degree relatives to each other	aalfan-ni
							Share	%	Share	%	Share %	Share %			Title	Name	Relation
Director	ROC	Cotek Pharmaceutical Industry Co., Ltd		2018.06.05	3 years	2015.06.09	22,146,604	4.36%	22,146,604	4.36%			NA	NA			
Chairman	ROC	Cotek Pharmaceutical Industry Co., Ltd. Representative: Yeh, Nan-Homg	Male	2018.06.05	3 years	1994,04.02 (Notel)	. —						MBA(Master of Business Administration) , Washington University in St. Louis, USA.	Chairman of Realsil Microelectronics Corp. (Note 2) Director of Enable Educational Technology Co., Ltd.	Director	Yeh, Po-Len	Brother
Director	BM	Forehead International Co., Ltd.		2018.06.05	3 years	2009.06.10	6,184,359	1.22%	6,184,359	1.22%	•		NA	NA			
Vice Chairman	ROC	Forehead International Co., Ltd. Representative: Chiu, Sun-Chien	Male	2018.06.05	3 years	2000.06.09	1,388,831	0.27%	1,388,831	0.27%	2,384 0.00%		M.S. in Electrical Engineering, National Taiwan University	President of Realist-Semiconductor Corp.  Director of Realist Technology Corporation (Note 2)  Director of Realisting Investments Limited (Note 2)  Director of Industria Corporation (Info Note 2)  Director of Industria Venue Cerpital Co., Lid (Note 2)  Director of Realist Semiconductor (Japan) Corp. (Note 2)			
Director	ROC	Forehead International Co., Ltd. Representative: Chern, Kuo-Jong	Male	2018.06.05	3 years	2006.06.12	40,686	%10.0	40,686	0.01%			$\label{eq:master} MBA(Master of Business Administration), The City University of New York, USA.$	Chief Financial Officer of Realtek Semiconductor Corp. Director of Realsun Investments Co., Ltd (Note2) Director of Realtek Semiconductor (Shen Zhen) Corp. (Note 2)			
Director	BM	Sonnen Limited		2018.06.05	3 years	2015.06.09	000'99	%10'0	000'99	%10'0			NA	NA			
Director	ROC	Sonnen Limited Representative: Yeh, Po-Len	Male	2018.06.05	3 years	1991.06.26	2,323,899	0.46%	2,323,899	0.46%	208,398 0.04%	.0	MSc. & Ph.D. in Material Engineering. Loughbourough University of Technology, United Kingdom	Director of Realsun Technology Corporation (Note 2) Director of Realking Investments Limted (Note 2) Director of Hungwei Venture Capital Co., Ltd (Note 2) Director of Hungwei Sention Capital Co., Ltd (Note 2) Director of Realtek Semiconductor (HK) Ltd (Note 2)	Chairman	Yeh, Nan- Horng	Brother
Director	ROC	Somen Limited Representative Huang, Yung-Fang	Male	2018.06.05	3 years	2018.06.05	42,205	%10.0	42,205	%10.0	79,625 0.02%	10	M.S. in Electrical Engineering, State University of New York, USA	Director of Hungwet Venture Captall Co., Ltd. (Note 2) Director of Hungwet Venture Captall Co., Ltd. (Note 2) Director of Realking in westments Limited (Note 2) Director of Realking in westments Limited (Note 2) Director of Patalling in Westments Limited (Note 2) Chairman of Realted Singapore Pie Ltd. (Note 2) Director of Realted Investment Singapore Pie rate Limited (Note 2) Director of Contina Access, Inc. (Note 2) Chairman of Contina Systems Tinwant Limited (Note 2)			
Director	ROC.	Ni, Shu-Ching	Femal	2018.06.05	3 years	1991.06.26	6,308,389	1.24%	6,308,389	1.24%	6,569,949 1.29%	-0	Open Jurior College	None			
Independent Director	ROC	Chen, Fu-Yen	Male	2018.06.05	3 years	2015.06.09							M.A. in Journalism, National Chengeli University	CEO of Creative Education and Management Foundation Chainman of Egravel Times Fines Bervice Co., Ltd. Chairman of You Hsin Creative Co., Ltd. Chairman of Eland Technologies Co., Ltd.			
Independent Director	ROC	Wang, Chun-Hsiung	Male	2018.06.05	3 years	2018.06.05	,	i	,				MBA(Master of Business Administration), Tulane University, USA	President of Jasslin Technology Co., Ltd.			
Independent Director	ROC	Ou Yang, Wen-Ean	Male	2018.06.05	3 years	2018.06.05	578,688	0.11%	889'898	0.11%	152,024 0.03%		Bachelor of Electrical Engineering National Taiwan University	None			

Note 1: Chairman Yeh, Nan-Horng 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%)
Cotek Filaimaceutical industry Co., Ltd.	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
	Top Best Development Limited (shareholding: 33%)
Leicester Worldwide Corporation	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

	experie	s five or more ye	owing			Indep	ende	ence	Statu	ıs (N	ote)			Number of other public co concurrently serving as an independent director
Name Criteria	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	1 0	Number of other public companies concurrently serving as an independent director
Cotek Pharmaceutical Industry Co., Ltd. Representative: Yeh, Nan-Horng			<b>√</b>	✓		✓	✓	✓	<b>√</b>	✓		✓		0
Forehead International Co., Ltd. Representative: Chiu, Sun-Chien			<b>√</b>			✓	✓	✓	✓	✓	✓	✓		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

								l	Shareholdi	ibi			,	iidv	April 14, 2019
Shareholding Spouse & Shareholding Spouse & Minor Appointed Appointed Shareholding Shareholding	Sharehol ding Date Appointed	Sharehol ding Date Appointed	Shareholding			Spouse & Minor Shareholding	s & or Iding		ng by Nominee Arrangeme	ee ee	Education & Experience	Other Selected Current Positions	Manag sec	Managers who are spouse or second-degree relative	s spouse or relative
Total % Total %	% Total	% Total	% Total	% Total	Total		%		Total	%			Title	Name	Relation
ROC Chiu, Sun- Male 1999.07.01 1,388,831 0.27% 2,384 0.00%	Sun- Male 1999.07.01 1,388,831 0.27% 2,384	1999.07.01 1,388,831 0.27% 2,384	1,388,831 0.27% 2,384	0.27% 2,384	2,384		0.0	%0		1	M.S. in Electrical Engineering, National Taiwan University	Director of Realsun Technology Corporation (Note) Director of Realsun Technology Corporation (Note) Director of Hungwei Venture Capital Co., Ltd (Note) Director of Realtek Semiconductor (Japan) Corp. (Note)	ı	i	,
ROC Huang, Yung- Male 2015.04.27 42,205 0.01% 79,625 0.0	Male 2015.04.27 42,205 0.01% 79,625	2015.04.27 42,205 0.01% 79,625	42,205 0.01% 79,625	0.01% 79,625	0.01% 79,625		0.0	0.02%	1	1	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 Realsun Investments Limited (Note) Director of Realsun Technology Corporation (Note) Chairman of Realtek Singapore Pte Ltd. (Note) Chairman of Realtek Investment Singapore Private Limited. (Note) Invector of Cortina Access, Inc. (Note) Chairman of Cortina Systems Taiwan Limited. (Note)	1	1	
ROC Chern, Kuo- Male 2002.03.28 40,686 0.01% 0 (	, Kuo- Male 2002.03.28 40,686 0.01% 0	2002.03.28 40,686 0.01% 0	40,686 0.01% 0	0.01% 0	0			0.00%		1	MBA(Master of Business Administration), The City University of New York, USA	Director of Realsun Investments Co., Ltd (Note) Director of Realtek Semicomductor(Shen Zhen)Corp.	ı	ı	
ROC         Huang, Yee-         Male         2014.03.24         188,560         0.04%         0	Male 2014.03.24 188,560 0.04% 0	2014.03.24 188,560 0.04% 0	188,560 0.04% 0	0.04%	0			0.00%	1		Ph.D. in Chemical Engineering, Kansas State University, USA	Chairman of Reakun Investments Co., Ltd (Note)	1	1	
ROC Lin, Ying-Hsi Male 2018.03.13 50,000 0.01% 0	Male 2018.03.13 50,000 0.01% 0	2018.03.13 50,000 0.01% 0	50,000 0.01% 0	0.01% 0	0			0.00%		1	M.S. in Electrical Engineering, National Taiwan University	Director of Realtek Semiconductor (HK) Inc.(Note)	1	1	
ROC Lin, Lung-Wei Male 2018.03.13 112,118 0.02% 17,989	Male 2018.03.13 112,118 0.02% 17,989	2018.03.13 112,118 0.02% 17,989	112,118 0.02% 17,989	0.02% 17,989	17,989			0.00%	,	1	MBA(Master of Business Administration), National Chengchi University	Director of C-Media Electronics Inc. (Note)			
ROC Chang, King- Male 2018.03.13 120,267 0.02% 0	King- Male 2018.03.13 120,267 0.02%	2018.03.13 120,267 0.02%	120,267 0.02%	0.02%		0		0.00%		ı	B.S in Electronics Engineering. National Chiao Tung University	None	Ī	i	
ROC Tsai, Jon-Jinn Male 2018.10.30 74 0.00% 0	Male 2018.10.30 74 0.00%	2018.10.30 74 0.00%	74 0.00%	0.00%		0		0.00%	-		M.S. in Electrical Engineering, National Taiwan University	Director of Compal Broadband Networks Inc. (Note)	-	-	
ROC Yen, Kuang- Male 2018.10.30 23,948 0.00% 4,000	Male 2018.10.30 23,948 0.00%	2018.10.30 23,948 0.00%	23,948 0.00%	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)	,	,	
ROC Chang, Jr- Male 2007.03.16 35,045 0.01%	Male 2007.03.16 35,045	2007.03.16 35,045	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)	ı	1	,
Note: The representative of Realtek Semiconductor Corp. or its affiliated company.	ive of Realtek Semiconductor Corp. or its affiliated company.	niconductor Corp. or its affiliated company.	ctor Corp. or its affiliated company.	its affiliated company.	company.		1								

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

3. Remuneration for Directors and Officers

3.1 Directors' Remuneration

2018 / Unit: NT\$K

Remuneration received from investment business other than subsidiaries					None							
\ <u> </u>					2.97%							
Consolidated  H + C + B + C + C + C + C + C + C + C + C												
REALTEK						2.97%						
0	(g)	Stock					0					
employe	Profit distribution for employee compensation (G)	Consolidated Entities	Cash				16,768					
osition as	Profit distribution for employee compensati		Stock				0					
Remuneration from concurrent position as employee and pension (F)  (F)  (B)  (C)  (B)  (C)  (B)  (C)  (B)  (C)  (C				16,768								
on from co	Pension (F)	Conso Entitie	olidated es	60								
neratio	Per (F)	REAL	TEK	903								
Rem	в );	Consc Entitie	olidated es	92639								
	Salaries, bonuses a special expenses (Note 2)	REAL	TEK	32,639								
-	A + B + C+D as percentage of net income after taxes	Consc Entitie	olidated es	98-1								
_	A+B C+D as percen of no incor	REAL	TEK				1.81%					
	Business expenses (D)	Conso Entitie	olidated es				1,920					
	Bus expe (D)	REAL	TEK				1,920					
eration	Remuneration from profit distribution (C) (Note 1)	Consc Entitie	olidated es				76,778					
remun	Remu from j distrik (C) (Å	REAL	TEK				76,778					
Director remuneration	Pension (B)	Consc	olidated es									
		REAL	TEK									
	Remunerati on (A)	Consc Entitie	olidated es									
	Remun on (A)	REAL	TEK		r					1	1	T
	Name			Cotek Pharmaceutical Industry Co., Ltd. Representative: Yeh, Nan-Horng	Forehead International Co., Ltd. Representative: Chiu, Sun-Chien	Forehead International Co., Ltd. Representative: Chern, Kuo-Jong	Somen Limited Representative: Yeh, Po-Len	Somen Limited Representative: Huang, Yung- Fang	Ni, Shu-Ching	Chen, Fu-Yen	Wang, Chun- Hsiung	Ou Yang, Wen- Han
	Title			Chairman	Vice Chairman	Director	Director					Independ ent Director

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

		Name of	Directors	
Remuneration Range	Total remunerat	ion (A+B+C+D)		remuneration 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 Pharmac eutical Industry Co	Yeh, Nan-Horng, Chiu, Sun-Chien, Cotek Pharmac eutical 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

	pensanon												2018/	2018 / Unit: NT\$K
		Salary (A)	, (A)	Pensi	Pension (B)	Bonuses and special expenses (C) (Note)	d special	Н	mployee con	Employee compensation (D)	(	A + B + C + D as	C + D as	
			(		(		(	RE	REALTEK	Consolidated Entities	idated ties	income after taxes	ter taxes	Compenatio n received
Title	Name	REALTEK	Consolidated Entities	REALTEK	Consolidated Entities	REALTEK	Consolidated Entities	Cash	Stock	Cash	Stock	REALTEK	Consolidated Entities	no minvestin ent bus iness other than subsidiaries
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

Commonation Domos	Name of Presidents and Vice Presidents			
Compensation Range	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-His, Chang, King-Hsiung, Lin, Lung-Wei, Yen, Kuang- Yu, Tsai, Jon-Jinn	Chern, Kuo-Jong, Huang, Yee-Wei, Huang, Yung-Fang, Lin, Ying-His, 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

Title	Name	Stock	Cash	Total	Percentage of net income after taxes (%)	
President	Chiu, Sun-Chien					
Chief Operating Officer	Huang, Yung-Fang					
Chief Financial Officer	Chern, Kuo-Jong					
Vice President	Huang, Yee-Wei	0	24,243	24,243	0.56%	
Vice President	Lin, Ying-Hsi	- V	24,243	24,243	0.5070	
Vice President	Lin, Lung-Wei					
Vice President	Chang, King-Hsiung					
Vice President	Tsai, Jon-Jinn					
Vice President	Yen, Kuang-Yu					
Controller	Chang, Jr-Neng					

2018 / Unit: NT\$K

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.

1 7	statements accounts for net income after taxes for 2018.
to Directors, Supervisors and Officers by the	Percentage of remuneration and compensation paid to Directors, Supervisors and Officers by the Company and all companies of the consolidated

The 2018 annual remuneration of directors and compensation of employees were decided in accordance with the Company's 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. The decision for directors' remuneration was based on the performance evaluation results of such aspects as the participation in the operation, the quality of the board of directors' decision-making, alignment of the goals and missions of the Company, awareness of the duties of a director, management of internal relationship and communication, the director's professionalism and continuing education, internal control, etc. The decision for officers' compensation was based on the indicators such as the length of service and position, performance, contribution to the Company's operation, industry benchmark, the Company's profitability, etc. The directors' remuneration and officers' compensation were proposed to the board of directors after the resolution based on the performance evaluation results approved by the remuneration committee, and processed after the approval of the board of directors. The directors' remuneration and employees' compensation will also be reported at the shareholders' meeting.

- 5. The planning and operation of the succession of board members and senior management:
  - 5.1 Succession planning for board members
    - There are currently 9 directors (including 3 independent directors) for the Company. The nomination and selection of directors take into account the overall capacity and diversity of the board of directors, and adjust the composition of members according to the results of performance evaluation and the need for substantive operations. The succession planning of the board of directors includes the succession of the senior management of the group, and the recruitment of external professionals with background of business management, law, accounting, industry, technology, or marketing.
  - 5.2 Succession planning for senior management
    - The succession planning for senior management of the Company is mainly constructed as follows:
    - (1) Based on the future development strategy, define the positions and talent needs of the company, and review the succession planning regularly in response to changes in operations and strategies.
    - (2) Develop competent talents with potential and capacities to enter the succession planning talent pool, and establish a comprehensive training mechanism and talent development plan for the talent pool.
    - (3) Timely promote the mid-level managers as deputies for the high-level managers, and understand the development of the middle-level management through performance appraisal and as a reference for succession planning.

### 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-Horng	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:

1. (1) Securities and I	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> <li>2017 annual financial statements and Consolidated financial statements</li> <li>Revise the Company's Articles of Incorporation</li> <li>Establish the Company's Audit Committee Charter</li> <li>The Company's auditor of financial statements and Audit Fee for 2018</li> <li>2017 Statement of Internal Control System</li> <li>Increase investment in a subsidiary by US\$42,000,000</li> </ol>	All independent directors approved
Apr. 25, 2018	<ol> <li>The Company intends to loan funds to subsidiaries</li> <li>Revise the Procedures for Financial Derivatives Transactions</li> <li>Revise the Procedures for Loaning of Company Funds</li> <li>Revise the Procedures for Endorsements and Guarantees</li> <li>Revise the Procedures for Acquisition or Disposal of Assets</li> </ol>	
Jul. 27, 2018	<ol> <li>The Company's 2018 Q2 consolidated financial statements</li> <li>Company's invested companies intend to establish a Mainland China subsidiary</li> <li>The Company intends to sell intangible assets and related masks</li> <li>A Company's invested company intends to loan a fund to a Mainland China subsidiary</li> <li>Revise the Company's internal audit implementation rules</li> <li>Revise the Company's internal control self-assessment operation methods</li> </ol>	
Oct. 26, 2018	<ol> <li>The Company intends to extend the period of the endorsement and guarantee for a subsidiary</li> <li>Adjust the matters of investment in Mainland China subsidiaries</li> <li>Increase the capital of a Mainland China subsidiary</li> <li>The Company intends to endorse the guarantee for a Mainland China subsidiary</li> <li>A Company's invested company intends to endorse the guarantee for a Mainland China subsidiary</li> <li>Company's invested companies intend to loan funds to Mainland China subsidiaries</li> <li>The Company intends to loan a fund to a subsidiary</li> <li>2019 Annual Audit Plans</li> <li>The status that the Company regularly evaluates</li> </ol>	
	the independence of auditor	

<sup>(2)</sup> 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
		III I CISOII	(70)	
Independent	Ou Yang, Wen-	2	100%	Newly-elected on
Director	Han	2	10076	2018/06/05
Independent	Chan Eu Van	2	100%	Newly-elected on
Director	Chen, Fu-Yen	2	10076	2018/06/05
Independent	Wang, Chun-	2	100%	Newly-elected on
Director	Hsiung	2	10076	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> <li>The Company's 2018 Q2 consolidated financial statements</li> <li>Company's invested companies intend to establish a Mainland China subsidiary</li> <li>The Company intends to sell intangible assets and related masks</li> <li>A Company's invested company intends to loan a fund to a Mainland China subsidiary</li> <li>Revise the Company's internal audit implementation rules</li> <li>Revise the Company's internal control self-assessment operation methods</li> </ol>	All independent directors approved
Oct. 24, 2018	<ol> <li>The Company intends to extend the period of the endorsement and guarantee for a subsidiary</li> <li>Adjust the matters of investment in Mainland China subsidiaries</li> <li>Increase the capital of a Mainland China subsidiary</li> <li>The Company intends to endorse the guarantee for a Mainland China subsidiary</li> <li>A Company's invested company intends to endorse the guarantee for a Mainland China subsidiary</li> <li>Company's invested companies intend to loan funds to Mainland China subsidiaries</li> <li>The Company intends to loan a fund to a subsidiary</li> <li>2019 Annual Audit Plans</li> <li>The status that the Company regularly evaluates the independence of auditor</li> </ol>	

- (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.

Status Governance Best-Practice Principles for TWSE/TPEx Listed Companies and the reason for deviation.	Summary Description	on is and small stands of the small stands of	The Company's corporate governance operations are implemented based on the responsibilities of the board establishing various functional committees committees based on have not yet been established.	luates the performance of the
Implementation Status	Summary	directors shall be determined by taking diversity into consideration. An appropriate policy on diversity based the company's business operations, operating dynamics, and long-term development needs shall be formulated ar include, without being limited to, the following two gene standards:  1. Basic requirements and values: gender, age, nationality and culture.  2. Professional knowledge and skills: a professional background (e.g., law, accounting, industry, finance, marketing, or technology), professional skills, and indus experience.  All members of the board shall have the knowledge, skil and experience necessary to perform their duties. To achieve the ideal goal of corporate governance, the board directors shall possess the following abilities:  1. Ability to make operational judgments.  2. Ability to perform accounting and financial analysis.  3. Ability to conduct management administration.  4. Ability to make operational judgments.  5. Knowledge of the industry.  6. International market perspective.  7. Ability to make policy decisions.  8. Ability to make policy decisions.  7. Ability to make policy decisions.  8. Ability to make policy decisions.  There are nine directors, three of them are independent directors, for the Company. Each director has his or her own professional background, including business management, leadership decision, industry knowledge, financial accounting, international marketing, etc., whiclin line with the Company's board diversity policy.  The professional background of the directors of the Company is as note.	The Company's corporate governance operations are implemented based on the responsibilities of the board members and all departments. Other functional commit have not yet been established.	The Company regularly evaluates the performance of the
	No	,	>	
	Yes			>
Evaluation Item			(2) Does the Company voluntarily establish other functional committees in addition to the Remuneration Committee and the Audit Committee?	(3) Does the Company establish a standard to measure the

Evaluation Item			Implementation Status	Deviation from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and the
	Yes	No	Summary Description	
			information through the market observation post system.	
(2) Does the Company have other information disclosure	>		The Company has set up an English website, and has a	ı
channels (e.g. building an English website, appointing		_	spokesman for external communication and designated	
designated people to handle information collection		_	personnel to disclose information about the company and	
and disclosure, implementing a spokesman system,			the institutional investor conferences at market observation	
webcasting investor conferences)?			post system in accordance with the statutory requirements.	
8. Is there any other important information to facilitate a	Λ		1. The Company provides information on relevant	-
better understanding of the Company's corporate			regulations that directors should pay attention to at any	
governance practices (including but not limited to			time.	
employee rights, employee wellness, investor relations,		_	2. The directors of the Company attended the board of	
supplier relations, rights of stakeholders, directors' and			directors in good condition and all met the requirements	
supervisors' training records, the implementation of risk			of the laws.	
management policies and risk evaluation measures, the		_	3. If the proposal has a stake in the directors, the director is	
implementation of customer relations policies, and			required to evade.	
purchasing liability insurance for directors and		_	4. The Company has purchased the liability insurance for	
supervisors)?			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.	
				, , , , , , , , , , , , , , , , , , , ,

priority improving items and measures on non-improving items.

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. 9. Please describe the improvement status according to the result of cooperate governance evaluation announced by cooperate governance center of TWSE, and the first

International marketing > > > > > > > accounting Financial > > Industry knowledge > > > **^** > > > > Leadership decision **^** > Λ > > > > > Note: The professional background of the directors of the Company management Business **^** > > > **^** > > > Female Gender Male Male Male Male Male Male Male Wang, Chun-Hsiung Ou Yang, Wen-Han Huang, Yung-Fang Chern, Kuo-Jong Chiu, Sun-Chien Yeh, Nan-Horng Ni, Shu-Ching Chen, Fu-Yen Yeh, Po-Len

5. Members Background and Operation of Remuneration Committee:

5.1. Members Background of the Remuneration Committee

	Criteria	Possess five or more years of experience and the following qualifications	e or more years of and the following professional ions	sional		Inc	lepenc	lence	Independence Status (Note 2)	s (Not	e 2)		Number of other public companies concurrently serving as an independent director	Remarks	
Title	Name	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	9	7				
Other	Kao, Chih-Chun			Λ	>	Λ	>	>	Λ	>	Λ	>	0		
Independent Director	Chen, Fu-Yen			Λ	Λ	Λ	Λ	Λ	Λ	^	Λ	Λ	0		
Other	Liu, Sheng-Chung			Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	0	Expiration date : 2018/07/24	
Independent Director	Wang, Chun-Hsiung			Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	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.

(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 (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.

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%	

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 Remuneration 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 Remuneration Committee should be disclosed: None
- 2. If resolutions of the Remuneration 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. The discussion item and resolution results of the Remuneration Committee, and the Company's action to the advices of the Remuneration Committee:

Date	Content of proposals	Resolution results	The Company's action
			to the advices of the
			Remuneration
			Committee:
3 <sup>rd</sup> Committee	1. Approve the distribution of	Approved by all	Processed as the
6 <sup>th</sup> Meeting	2017 directors' remuneration	members of the	resolution results of the
2018/03/01	and officers' compensation.	committee.	remuneration
	2. Approve 2018 officers'		committee.
	salary adjustments.		
4 <sup>th</sup> Committee	1. Approve the election of 4 <sup>th</sup>	Approved by all	Processed as the
1 <sup>st</sup> Meeting	committee's convener and	members of the	resolution results of the
2018/10/24	chairman.	committee.	remuneration
	2. Approve 2018 year-end		committee.
	bonus principle for officers.		

6. Implementing Corporate Social Responsibility

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

		totuc mol mm]		Division from the " Commont of the
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1		Implementation Status		Deviation from the Corporate Social
Assessment Items	Yes	No	Summary	Responsibility Best Practice Principles for TWSE/GTSM-Listed Companies" and Reason
(2) Does the Company provide a grievance mechanism for employees and respond to employee's grievances in an appropriate manner?	<i>&gt;</i>	The Company provides a employees and appoints r in an appropriate manner	The Company provides a grievance mechanism for employees and appoints managers or departments to respond in an appropriate manner	1
(3) Does the Company provide a safe and healthy work	>	To provide a safe and hea	To provide a safe and healthy work environment for	ı
environment for its employees, and does it regularly advise employees on safety and health?		employees, the Company p information on its intranet.	employees, the Company provides safety and health information on its intranet.	
(4) Does the Company establish a platform to facilitate regular	>	The Company holds work	The Company holds worker-employer meetings, maintains	ı
two-way communication between the management and the employees and does the Company by reasonable means, inform		an intranet, and issues wr	an intranet, and issues written announcements to facilitate regular two-way communication between the management	
employees of operational changes that might have material impacts?		and the employees.		
(5) Does the Company create an environment conducive to the	>	The Company has a syste	The Company has a systematic education and training	1
development of its employees' careers and establish effective		program that includes pro	program that includes professional classes and projects to	
training programs to toster career skins?		ennance employees skills. A combination of physon-line classes rapidly raises the R&D abilities of individuals as well as the entire team.	ennance employees skills. A computation of physical and on-line classes rapidly raises the R&D abilities of individuals as well as the entire team.	
(6) Does the Company have policies to ensure the rights and	>	The Company has establi	The Company has established after-sales service channels.	
interests of its consumers, and does it provide a mechanism for filing complaints in her processes for R&D procurement.				
production, operations and services?				
(7) Does the Company follow relevant laws, regulations, and international outdelines when marketing or labeling its products	>	The Company follows rel	The Company follows relevant laws, regulations, and international outdelines when marketing or labeling its	
and services?		products and services.	The management of the control of the	
(8) Prior to engaging in commercial dealings, does the	>	The Company assesses w	The Company assesses whether there is any record of a	1
Company assess whether there is any record of a supplier's impact on the environment and society?		supplier's impact on the environment and society.	environment and society.	
(9) When the Company enters into a contract with any of its	>	The Company's contract	The Company's contract with its major suppliers always	1
major suppliers, does the contract include terms stipulating		includes terms stipulat	includes terms stipulating that the contract may be	
compliance with CSR policy, and that the contract may be terminated or rescinded if the sumplier violates such policy and		terminated or rescinded if the suppli	terminated or rescinded if the supplier causes significant impact on the environment and society	
causes significant impact on the environment and society?				
4. Enhanced Disclosure of Information				
(1) Does the Company disclose on its website, Market Observation Post System and other places relevant and reliable	>	The Company discloses o	The Company discloses on its website relevant and reliable information relating to its CSR initiatives. It also regularly	ı
information relating to its CSR initiatives?		publishes CSR reports.		

			Implementation Status	Deviation from the "Corporate Social
Assessment Items	Yes	No	Summary R	Responsibility Best Practice Principles for TWSE/GTSM-Listed Companies" and Reason
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	sest Pra	ctice	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	ıtıoned	best p	ractice principles: Not applicable	
	Ē	7		
6. Other information that aids in understanding CSK implementation: The Coneducational foundations to cultivate talents, and hiring people with disabilities	on: The disabil	Com ities.	Company proactively participates in social welfare initiatives, such as sponsoring charitable activities, donating to ties.	is sponsoring charitable activities, donating to
7. If the Company's CSR reports obtain a third-party certification or verification, describe results: None	or verifi	catior	, 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				FL 17
Evaluation Item				Deviation from the Ethical Corporate Management Best-
			Implementation Status	Practice Principles for
				TWSE/TPEx Listed Companies
Ye	es	No	Summary Description	and the reason for deviation.
1. Establishment of ethical corporate management				
	,			
	>	-	The relevant measures and systems of the company	ı
management policies and procedures in its guidelines			have covered the program of preventing unethical	
and external documents, as well as the commitment			conduct, and have established an effective accounting	
from its board to implement the policies?		-	system and internal control system for the	
(7) Done the commone of prince and injury to marrow	^		Implementation of ethical corporate management.	
	>		THE TELEVALLE HISTORIES AND SYSTEMS OF THE COMPANY	1
uneincal conduct with clear statements regarding			nave covered the programs of preventing unernical	
relevant procedures, guidelines of conduct, punishment			conduct.	
for violation, rules of appeal, and implement the				
policies?				
(3) Does the company establish appropriate precautions	>		For business activities with high fisk of unethical	1
against high-potential unethical conducts or listed			conducts in the business scope, the company adopts	
activities stated in Article 7, Paragraph 2 of the Ethical		_	control measures of rotation of the job, multi-person	
Corporate Management Best-Practice Principles for		_	review, and regular implementation of audit, to	
TWSE/TPEx Listed Companies?			prevent bribery or other illegal drawbacks.	
	>		The company regularly conducts quality and credit	ı
records and include ethics-related clauses in business		_	evaluations for suppliers and customers. For those	
contracts?		_	who have not passed the rating, they will be removed	
			from the cooperation list.	
(2) Does the company establish an exclusively (or	>		The internal auditing units of the Company regularly	1
concurrently) dedicated unit supervised by the Board		-	submit audit reports to the Board of Directors.	
to be in charge of ethical corporate management?				
ent	>		The relevant measures and systems of the company	1
conflicts of interest and provide appropriate		_	have covered policies to prevent conflicts of interest.	
communication channels, and implement the policies?				

				D 6 41. : P41. :1
Evaluation Item			Implementation Status	Corporate Management Best- Practice Principles for TWSE/TPEx Listed Companies
	Yes	No	Summary Description	and the reason for deviation.
(4) Has the company established effective systems for both accounting and internal control to facilitate	>		The company has established accounting systems, internal control systems and internal auditing systems	-1
ethical corporate management, and are they audited by either internal auditors or accountants on a regular basis?			in accordance with various regulations. The auditors check the operations according to the results of the risk assessment and report to the board of directors on	
CACOLO .			a regular basis.	
(5) Does the company regularly hold internal and external educational trainings of ethical corporate	>		The company's personnel regularly participate in external educational trainings of ethical corporate	
management?			management.	
3. Implementation status of the whistle-blowing system	11		The contraction of the contracti	
blowing system and incentive measures, create a	>		the internal website, which serves as a way for two-	
convenient way for reporting, and appoint appropriate			way communication, and assigns designated	
designated personnel for reported cases?			personnel to handle the contents of the letter in the mailbox.	
(2) Does the company establish standard operating	>		The company takes appropriate investigations and	1
procedures and related confidentiality measures for reported cases?			necessary confidentiality measures for reported cases.	
(3) Does the company adopt measures for protecting	>		The company will take the necessary protective	1
whistle-blowers from inappropriate disciplinary actions due to their whistle-blowing?			measures for the whistle-blowers.	
4. Strengthening information disclosure				
(1) Does the company disclose its ethical corporate	>		The company has not disclosed the contents of the	The company will process
management principles and the results of performance			ethical corporate management principles and the	based on actual needs, and laws
on the company's website and MOPS!			results of performance on the company's website and market observation post system.	and regulations.
5. If the Company has established Principles of Ethical Corporate Management based on Ethical Corporate Management Best Practice Principles for	Corpora	te Ma	agement based on Ethical Corporate Management	<b>Best Practice Principles for</b>
TWSE/GTSM Listed Companies, please describe any deviation between the implementation and the principles.	deviatio	n betv	een the implementation and the principles.	•
IVA				
6. Other important information to facilitate a better understanding of the company's ethical corporate management implementation: (e.g., review and	lerstand	ling of	the company's ethical corporate management imple:	nentation: (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.

- The company has not established Corporate Governance Best-Practice Principles, but in practice, it conducts corporate governance in accordance 8. If the company has established corporate governance best-practice principles or related regulations, disclose the method of searching: 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
	Ratification Items	Transfer Transfer I ma Imprementation
5, 2010	1. 2017 business report and financial statements	Approved
	2. Distribution of 2017 retained earnings	Approved Book closure ending date: 2018/09/12 Distribution date: 2018/10/05 Amount: NT\$2,286,429,588
	Discussion Item	
	1. Cash distribution from capital surplus	Approved Book closure ending date: 2018/09/12 Distribution date: 2018/10/05 Amount: NT\$508,095,464
	2. To revise the Articles of Incorporation	Approved Obtained the approval letter for registration change: 2018/06/19
	Election of Directors (including Independent Directors)	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

12.2. Major Resolutions of Board Meetings

1 <u>2.2. Major Re</u>	solutions of Board Meetings	
Date	Summary of Major Resolutions	Resolution Results
Mar. 9, 2018	<ol> <li>2017 financial statements and consolidated financial statements</li> <li>Matter of 2018 shareholders' meeting's date, time, location,</li> </ol>	Approved by all attending directors
	and agenda 3. Election of Directors (including Independent Directors)	
	<ul><li>4. Nominate list of candidates for Board Directors (including Independent Directors) and review candidate qualifications</li><li>5. Adoption of the shareholders' proposals for 2018 shareholders'</li></ul>	
	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	
A 25 2019	11. 2017 Statement of Internal Control System 12. Increase investment in a subsidiary by US\$42,000,000	A 11 11
Apr. 23, 2018	1. Review the list of candidates and qualifications for directors (including independent directors) of the 2018 shareholders' meeting.	Approved by all attending directors
	<ul> <li>2. Revise matter of 2018 shareholders' meeting's agenda</li> <li>3. Distribution of 2017 Retained Earnings</li> <li>4. Coch distribution from agrital garralys</li> </ul>	
	<ul><li>4. Cash distribution from capital surplus</li><li>5. 2017 business report and 2018 business plan</li><li>6. The Company intends to loan funds to subsidiaries</li></ul>	
	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	
Jun. 5, 2018	1. Election of the chairman of the eleventh board of directors	Approved by all attending directors
Jul. 27, 2018	<ol> <li>Appointed members of the fourth Compensation Committee</li> <li>Company's invested companies intend to establish a Mainland China subsidiary</li> <li>The Company intends to sell intangible assets and related</li> </ol>	Approved by all attending directors
	masks 4. A Company's invested company intends to loan a fund to a Mainland China subsidiary	
	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	The Company intends to extend the period of the endorsement and guarantee for a subsidiary     Adjust the matters of investment in Mainland China subsidiaries	Approved by all attending directors
	3. Increase the capital of a Mainland China subsidiary	

Date	Summary of Major Resolutions	Resolution Results
	<ul> <li>4. The Company intends to endorse the guarantee for a Mainland China subsidiary</li> <li>5. A Company's invested company intends to endorse the guarantee for a Mainland China subsidiary</li> <li>6. Company's invested companies intend to loan funds to Mainland China subsidiaries</li> <li>7. The Company intends to loan a fund to a subsidiary</li> <li>8. The Remuneration Committee reviews the year-end bonus rules for officers</li> <li>9. 2019 Annual Audit Plans</li> <li>10. The Status that the Company regularly evaluates the independence of auditor</li> </ul>	resuns
	<ol> <li>2018 financial statements and consolidated financial statements.</li> <li>Matter of 2019 shareholders' meeting's date, time, location, and agenda</li> <li>Adoption of the shareholders' proposals for 2018 shareholders' meeting</li> <li>Employees' compensation and Directors' remuneration of 2018</li> <li>Ratify the employees' compensation for officers of 2017</li> <li>The Company intends to loan a fund to a subsidiary</li> <li>Intercompany loans between Company's subsidiaries</li> <li>The Company's Auditor of financial statements and Audit Fee for 2019</li> <li>2018 Statement of Internal Control System</li> </ol>	Approved by all attending directors
	<ol> <li>Distribution of 2018 Retained Earnings</li> <li>Cash distribution from capital surplus</li> <li>Release the Director from non-competition restrictions</li> <li>Revise matter of 2018 shareholders' meeting's agenda</li> <li>2018 business report and 2019 business plan</li> <li>Revise the Company's Article of Incorporation</li> <li>Revise the Procedures for Financial Derivatives Transactions</li> <li>Revise the Procedures for Acquisition or Disposal of Assets</li> <li>The Company intends to loan funds to subsidiaries</li> </ol>	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

Ra	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: For 2018, the non-audit fee paid to the auditors, the audit firm and its affiliates was 0.
- 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

	I					
Replacement Date	Resolve	d by the B	oard o	f Directors on March	21, 2019	
Replacement reasons	T1 : .	1 1		· · · · · · · · · · · · · · · · · · ·	C T :	
and explanations	I he inte	rnal regul	ar rota	tion of Pricewaterhou	iseCoopers Taiwan	
		I	Parties			
Describe whether the	Status		_	CPA	The Company	
Company terminated or	Appoint	ment		Not	Not	
the CPA rejected	terminat	ted				
the appointment	automat	ically		applicable	applicable	
			.4.1	NI - 4	NI-4	
	Appoint	ment rejec	ziea	Not	Not	
	(continu	ied)		applicable	applicable	
The Opinions other than Unmodified Opinion Issued in the Last Two Years and the Reasons for the Said Opinions (Note)	None					
			Accou	inting principles or p	ractices	
Is there any			Disclo	osure of Financial Sta	itements	
disagreement in	YES		Audit	scope or steps		
opinion with the			Other	S		
Company	No	✓	•			
	Explana	tion				
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,	None
and the Type of Audit Opinion that	
the CPA might issue on the Financial	
Report.	
Written Opinions from the Successor	
CPA are different from the Former	None
CPA's opinions.	

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

		201	18	As of April 14, 2019		
Title	Name	Shares increased (decreased)	Pledge shares increased (decreased)	Shares increased (decreased)	Pledge shares increased (decreased)	
Chairman	Cotek Pharmaceutical Industry Co., Ltd.Representative: Yeh, Nan-Horng	-	(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-Fan, 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.	22,146,604	4.36%	-	-	-	-	-	-
Representative: Yeh, Chia-Wen	0	-	-	-	-	-	-	-
Cathay Life Insurance Company, Ltd.	12,920,000	2.54%	-	-	-	-	-	-
Representative: Huang, Tiao-Kuei	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.	7,886,856	1.55%	-	-	-	-	-	-
Representative: Wei, Jian-Hong	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		companies con	rectly or	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

		Autl	norized	Pa	id-in	Rema	rks	
Year & Month	Issuing Price	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				
Type of share	Outstanding Shares	Un-issued Shares	Total	Remarks	
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	Ohter 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

Cat	egory	7	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	1,000,001 and above		82	303,776,405	59.80%
Т	`otal		42,522	508,095,464	100.00%

# IV. List of Major Shareholders

April 14, 2019

	F	111 1 1, 2017
Shareholding 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	Highest		124.5	151	183.5
per share	Lowest		99.5	101	136
	Average		109.36	123.94	164.87
Net worth per share	Before dist	ribution	43.14	48.49	-
per snare	After distri	bution(Note5)	43.00	(Note5)	-
Earnings per share	<u> </u>		505,412 (thousand shares)	507,712 (thousand shares)	508,096 (thousand shares)
	Earnings per share		6.71	8.57	-
	Cash divid	ends	4.5	6	-
Dividends	Stock	-	-	-	-
per share	dividends	-	-	-	-
(Note4)	Accumulated unappropriated dividends		-	-	-
Datum an	Price/earni	ngs ratio (Note1)	16.30	14.46	-
Return on investment	Price/divid	end ratio (Note2)	21.87	20.66	-
	Cash divid	ends 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	D	rifference
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' Cor	npensation	Remuneration to Directors	Di	fference	
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

		suing Data	Widten 31, 2017		
Issuing Date		Jan 24, 2002			
		Jan 24, 2002			
Issuance &			Luxembourg Stock Exchange.		
	ount (US\$)		240,180,375		
	Price per Unit (US\$)		17.25		
Issued Un					
Issued Un	its		13,923,500 units		
المراء ما ديا م	~ Commities		New shares issued for capital increase of		
Underlyin	g Securities		cash and issued common shares held by		
C	Cl D		shareholders of the Company		
Common	Shares Represented		55,694,400 Common Shares		
Rights and	d Obligations of GDR holde	ers	According to the relevant instructions of the published manual		
Trustee			N/A		
Depositar	y Bank		Bank of New York Mellon		
Custodian			Mega International Commercial Bank		
GDRs Ou	tstanding		330,761 units		
Apportion	ment of the expenses for the	e issuance	In accordance with the contract of the		
and maint	enance		underwriting syndicate and depositary bank		
			The company will provide necessary public		
Terms and	d Conditions in the Deposit	Agreement	information in accordance with the contract		
and Custo	dy Agreement		for the depositary bank to notify the		
			depositary certificate holder		
		Highest	20.01		
Closing	2018	Lowest	13.38		
price per		Average	16.42		
GDRs		Highest	23.80		
(US\$)	Ended of March 31, 2019	Lowest	17.64		
, ,	Ended of March 31, 2017	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	99.85%	0.15%	100%
Revenue			

#### (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 100BASE-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/10GGBASE-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

 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

	2017		2018		
Sales Region	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 12<sup>th</sup> 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

15	3 162 385
13 17 21 100	3,462,383       13         3,088,160       13         3,922,457       17         5,252,628       21         23,747,011       100

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

Major customers in the last two years

qs		0	>								
Unit: NT\$ thousands		% of Relation to Total the	Operating Company				(note)				
Unit: N	Quarter	% of Total	Operating	revenue	24	19	19	38	100	100	
	2019 first Quarter	Amount			3,035,909	2,398,190	2,391,935	5,008,607	17 07 4 641	Operating 12,834,641	
		Name			В	Y	Q	Other	Total	Operating	revenue
		Relation to the	Company				(note)				
	8	% of Total Relation Operating to the	revenue		23	23	18	36	100	100	
	2018	Amount			10,575,725	10,505,983	8,373,071	16,350,967	3VL 300 3V	Operating   45,805,740	
		Name			A	В	D	Other	Total	Operating	revenue
		% of Relation to Total the	Operating Company				(note)				
	7	% of Total	Operating	revenue	24	22	17	28		100	
	2017	Amount			9,817,120	9,171,261	7,196,408	15,503,232	100 007 17	Jperating 41,088,021	
		Name			$\mathbf{A}$	В	D	Other	Total	Operating	revenue
		Item			1	2	3				

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

# 6. Sales Volume and Value in the Past Two Years

Unit: NT\$ thousands

							Omi. ivi	\$ tilousulus
Quantity Year		20	017			20	018	
& Value	Domestic		Ex	port	Doi	mestic	Ex	port
Major Product	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

2200	publication			
	Year	2017	2018	As of March 31, 2019
	Research and Development	3,891	4,183	4,207
Num ber	Administration and Sales	412	421	428
	Production and Testing	145	156	156
	Total	4,448	4,760	4,791
Avera	ige Age	33.52	34.1	34.34
Avera	age Years of Service	6.00	6.28	6.40
	Ph.D./Master's	71.04%	71.36%	71.34%
Educ ation	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.

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

# Financial Status, Operating Results and Status of Risk Management

# I. Financial Status

Unit: NT\$ thousands

Year Item	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

Year Item	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

TT 1 : : c	Net Cash Provided by	Net Cash Used in		Remedy for C	Cash Shortage
The beginning of Cash Balance (1)	Operating Activities	Investing and Financing Activities (3)	The end of Cash Balance (1)+(2)-(3)	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

- 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
  - 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.

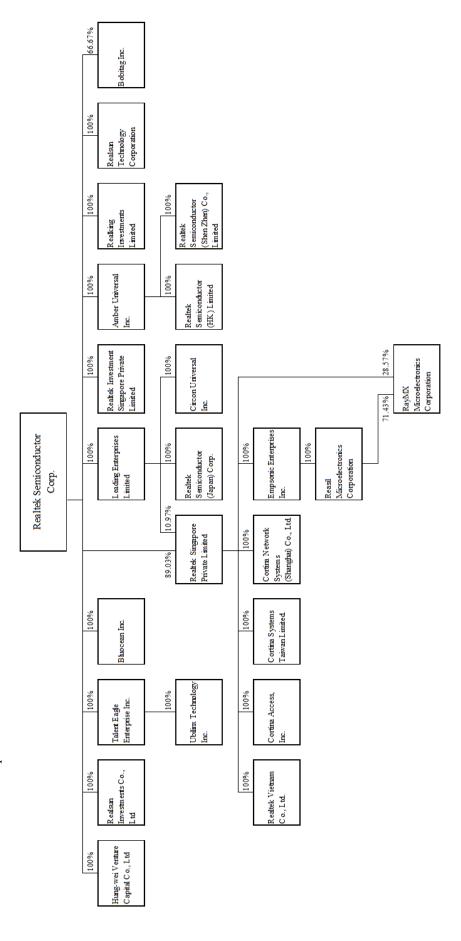
#### 13. Disclosure of Information Security Risks

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.

# Special Items

- I. Information of Affiliated Companies
- 1. Consolidated Business Report of the Affiliated Companies
  - 1.1. Chart of the Affiliated Companies



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	investment holdings
Amber Universal Inc.	1998.10	British Virgin Islands	US\$154,412,000 Investment holdings	investment holdings
Circon Universal Inc.	2002.01	Mauritius	US\$64,800,000 Investment holdings	Investment holdings
Empsonic Enterprises Inc.	2002.06	Mauritius	US\$28,250,000 Investment holdings	Investment holdings
Bluocean Inc.	2016.02	Cayman Islands	US\$110,050,000 Investment holdings	investment holdings
Talent Eagle Enterprise Inc.	2016.02	Cayman Islands	US\$114,100,000 Investment holdings	investment holdings
Realsun Investments Co., Ltd	1998.06	Taiwan	NT\$280,000,000 Investment holdings	investment holdings
Hung-wei Venture Capital Co., Ltd	1999.12	Taiwan	NT\$250,000,000 Investment holdings	investment holdings
Realking Investments Limited	2000.04	Taiwan	NT\$293,929,850 Investment holdings	investment holdings
Realsun Technology Corporation	2004.12	Taiwan	NT\$5,000,000	NT\$5,000,000 ICs manufacturing, design, research, development, sales, and marketing
Bobitag Inc.	2012.12	Taiwan	NT\$28,783,650	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	NT\$211,300,000 R&D and technical support
Realtek Semiconductor (Japan) Corp.	2001.12	Japan	JY #20,000,000	JY\\$20,000,000 ICs design, sales and consultancy
Realtek Semiconductor (HK) Limited	1999.09	Hong Kong	HK\$1,500,000	HK\$1,500,000 Information services and technical support
Realtek Semiconductor (ShenZhen) Co., Ltd.	2004.07	China	US\$5,000,000	US\$5,000,000 R&D and technical support
Cortina Network Systems (Shanghai) Co., Ltd.	2015.04	China	US\$1,650,000	US\$1,650,000 R&D and technical support
Reasil Microelectronics Corporation	2001.12	China	US\$28,000,000	US\$28,000,000 R&D and technical support
RayMX Microelectronics Corporation	2018.12	China	RMB26,250,000	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	investment holdings
Realtek Singapore Private Limited	2013.10	Singapore	US\$89,856,425	US\$89,856,425 ICs manufacturing, design, research, development, sales, and marketing
Cortina Access, Inc.	2015.04	United States	US\$13,148,179.73	US\$13,148,179.73 R&D and information services
Ubilinx Technology Inc.	2016.08	United States	US\$26,000,000	US\$26,000,000 R&D and information services
Realtek Viet Nam Co., Ltd	2018.09	Vietnam	USD1,000,000	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
lon	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;%

			Shareholdi	Shareholding (note 2)
,	-			(2 COUNTY )
Company Name	Title (note 1)	Name	Shares/ Investment	% of Investment
			Amount	Holding
Leading Enterprises Limited	Director	Realtek Semiconductor Corp. (Representative: Yeh, Po-Len)	39,130	100%
Amber Universal Inc.	Director	Realtek Semiconductor Corp. (Remesentative: Yeh Po-Len)	41,432	100%
Bluocean Inc.	Director	Realtek Semiconductor Corp. (Representative: Yeh. Nan-Homg)	110,050,000	100%
Talent Eagle Enterprise Inc.	Director	Realtek Semiconductor Corp. (Representative: Yeh, Nan-Homg)	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%
Hung-wei Venture Capital Co., Ltd	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%

			Shareholdi	Shareholding (note 2)
Company Name	Title (note 1)	Name	Shares/ Investment	% of Investment
Pastern Tachnology Corneration		Postal Camiconductor Com	JIIDOIIIV	giiibini
reasun recimology corporation	Chairman	(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%
Circon Universal Inc.	Director	Leading Enterprises Limited (Representative: Yeh, Po- Len)	64,800,000	100%
Realtek Semiconductor (Japan) Corp.	Director and President   Cheng, Shu-Chien	Cheng, Shu-Chien	-	-
	Director	Chiu, Sun-Chien	•	
	Director	Tung Nien-Tsu	1	•
	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	1	ı
Realtek Semiconductor (ShenZhen) Co., Ltd	Director and President   Chern, Kuo-Jong	Chem, Kuo-Jong	1	-
Ubilinx Technology Inc.	Director	Ching, Ting-Chi	1	1
	Director	Chen, Chin	-	-
	Director	Lin, Yung-Chieh	1	
Reasil Microelectronics Corporation	Chairman	Yeh, Nan-Horng	1	
	Director and President Yeh, Ta-Hsun	Yeh, Ta-Hsun	1	1
	Director	Chiou, Mhu-Hsiu	1	1
	Supervisor	Chern, Kuo-Jong	1	

			Shareholdi	Shareholding (note 2)
Company Name	Title (note 1)	Name	Shares/ Investment Amount	% of Investment Holding
Bobitag Inc.	Chairman and President	Realtek Semiconductor Corp. (Representative: Ching, Ting-Chi)	1,918,910	%19.99
	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	Yen, Kuang-Yu	1	
	Director	Lin, Tsung-Ming	1	
Realtek Investment Singapore Private Limited	Chairman	Huang, Yung-Fang	-	
	Director and President Yen, Kuang-Yu	Yen, Kuang-Yu	1	ı
	Director	Chang, Jr-Neng	1	1
Cortina Access, Inc.	Director	Huang, Yung-Fang	1	ı
	Director	Yen, Kuang-Yu	1	ı
	Director	ZEINEDDINE CHAIR	1	ı
Cortina Network Systems (Shanghai) Co., Ltd.	Director	ZEINEDDINE CHAIR	-	
	Supervisor	Ke, Chieh-Yuan	1	1
Cortina Systems Taiwan Limited.	Chairman	Realtek Singapore Private Limited (Representative: Huang, Yung-Fang)	21,130,000	100%
	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%

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

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

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	616	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	(09)	(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 Universial 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	716,917	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

					Unit: NT\$ t	Housanus
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 eq	uipment	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 asse	ets	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 company	owners of the parent	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 intere	est	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.

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

<sup>3. 2018</sup> Distribution is not approved by the Shareholders' Meeting.

# 1.2. Condensed Balance Sheet – Parent Company

Unit: NT\$ thousand	S thousand	NT\$	Unit:	
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18
62,708
63,756
60,549
14,444
92,856
33,410
_
22,154
55,564
_
80,955
36,659
17,714
_
01,964
_
37,292
2 2 3 1 1

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

				Omt. Ni	5 mousanus
Item	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

Year Item	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

# 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		

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.

# II. Financial Analysis in the Recent Five Years

1. Consolidated Financial Analysis

Item	Year	2014	2015	2016	2017	2018
Capital	Debt ratio (%)	46.18	52.52	58.88	58.21	57.68
Structure	Long-term fund to Property, plant and equipment (%)	656.22	659.45	714.90	691.09	743.14
	Current ratio (%)	187.61	158.14	150.72	152.74	157.38
Liquidity	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
	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
Operating	Payment turnover (times)	4.29	3.98	4.93	4.83	4.64
Performance	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
	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
Profitability	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 ratio (%)	33.09	13.58	16.42	12.73	25.20
Cash Flow	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
Leverage	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

tem	Year	2014	2015	2016	2017	2018
Capital	Debt ratio (%)	40.75	49.32	52.2	56.74	54.36
Structure	Long-term fund to Property, plant and equipment (%)	807.34	809.06	844.9	815.44	860.31
T : : 1'4	Current ratio (%)	59.66	95.42	67.23	44.63	48.59
Liquidity	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
	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
Operating Performance	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
	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
Profitability	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 ratio (%)	38.43	1.62	15.64	6.99	16.13
Cash Flow	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
Levelage	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:

- 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)

			December 31, 2018			December 31, 2017				
	Assets	Notes	 AMOUNT	%		AMOUNT	<u>%</u>			
	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		 <u> </u>			96,154				
11XX	<b>Total current assets</b>		 51,153,278	88		45,092,540	86			
	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		 7,099,036	12		7,218,373	14			
1XXX	Total assets		\$ 58,252,314	100	\$	52,310,913	100			

(Continued)

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

				3	December 31, 2017			
	Liabilities and Equity	Notes		AMOUNT	%	_	AMOUNT	<u>%</u>
2100	Current liabilities	((12)	ф	14 506 211	25	ф	10, 052, 624	2.4
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			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			32,502,254	56		29,520,661	56
	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			1,103,161	2		931,140	2
2XXX	<b>Total liabilities</b>			33,605,415	58		30,451,801	58
	Equity							
	Share capital	6(16)						
3110	Common shares			5,080,955	9		5,065,062	10
	Capital surplus	6(17)						
3200	Capital surplus			3,236,659	5		3,558,856	7
	Retained earnings	6(18)						
3310	Legal reserve			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	6(19)						
3400	Other equity interest			401,964	_	(	600,443) (	2)
31XX	Equity attributable to owners	;		<u> </u>	-	`		
	of the parent company			24,637,292	42		21,849,518	42
36XX	Non-controlling interest			9,607			9,594	
3XXX	Total equity			24,646,899	42		21,859,112	42
3X2X	Total liabilities and equity		<u> </u>			<u></u>		
3Λ2Λ	rotai naomics and equity		\$	58,252,314	100	\$	52,310,913	100

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)

				2018		2017	
	Items	Notes		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 expense	es	(	1,263,689) (	3) (	1,118,403) (	3)
6300	Research and development expense	es	(	12,969,972) (	28) (	11,444,977) (	27)
6450	Expected credit gains	12(2)		1,721	<u>-</u>		
6000	Total operating expenses		(	16,696,410) (	37) (	14,705,409) (	35)
6500	Other income and expenses - net	6(9)		6,298	<u>-</u> _	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 joi	nt 6(7)					
	ventures accounted for under equity	/					
	method		(	43,307)	- (	40,919)	<u>-</u>
7000	Total non-operating income and	d					
	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)

				2018			2017	
	Items	Notes		AMOUNT	%		AMOUNT	%
	Other comprehensive income, net Components of other comprehensive income that will not be reclassified to profit or loss	6(19)						
8311	Losses on remeasurements of defined		(\$	75,809)		\$		
8316	benefit plans Unrealised losses from investments in equity instruments measured at fair value through other comprehensive income				-	Ф	-	-
8320	Share of other comprehensive income of associates and joint ventures accounted for using equity method, components of other comprehensive income that will not		(	165,659)	-		-	-
8310	be reclassified to profit or loss  Components of other  comprehensive income that will  not be reclassified to profit or			1,977			<del></del>	
	loss Components of other comprehensive income that will be reclassified to		(	239,491)				
8361	profit or loss  Cumulative translation differences of foreign operation			942,974	2	(	2,111,302)	( 5)
8362 8370	Unrealised gain on valuation of available-for-sale financial assets Share of other comprehensive income of associates and joint ventures accounted for using equity			-	-		110,120	-
	method, components of other comprehensive income that will be reclassified to profit or loss			<u>-</u>		(	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)	( <u> </u>
8500	Total comprehensive income for the year		\$	5,054,264	11	\$	1,390,168	3
8610	Profit attributable to: Equity holders of the parent company		\$	4,350,768	9	\$	3,392,153	8
8620	Non-controlling interest  Profit for the year		\$	4,350,781	9	\$	7 3,392,160	8
8710 8720	Total comprehensive income: Equity holders of the parent company Non-controlling interest		\$	5,054,251 13	11	\$	1,390,161	3
	Total comprehensive income for the year		\$	5,054,264	11	\$	1,390,168	3
9750	Earnings per share (in dollars) Basic earnings per share	6(27)	\$		8.57	\$		6.71
9850	Diluted earnings per share	6(27)	\$		8.40	<u>\$</u> \$		6.57
, , , ,	- marca can mings per siture	-()	Ψ		5.70	Ψ		0.51

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

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

Not income for the year Other comprehensive income (loss) Cash dividends from capital surplus Using equity of associates accounted for (17) Cand dividends from capital surplus Using equity of associates accounted for (17) Changes in equity of associates accounted for (18) Employees' compensation transferred to (19) Special reserve Cash dividends Cash dividends Employees' compensation transferred to (17) Cash dividends from capital surplus Cash dividends from Cash dividends Cash dividends from Cash d	Notes	Share capital - common stock 5,049,513 15,549 15,549 5,065,062 5,065,062 15,893	S 3,910,428  \$ 3,910,428    145,386   704,951   704,951   704,951   704,951   704,951   704,951   704,951   704,951   705,856	\$ 3.823.896 \$ 4,127.884 \$ 4,127.884 \$ 339.215	Special reserve  \$	Equity attributable to owners of the parent etained earnings    Undistributed earnings   3,392,153   3,392,153   3,392,153   3,392,153   3,392,153   3,392,153   3,392,153   3,392,153   3,392,153   3,392,163   3	Financial statements translation differences of foreign operations  \$ 1,298.139 ( 2,111,302 ) ( 2,111,302 ) ( 813,163 ) ( 813,163 ) ( 813,163 ) ( 813,163 )	Other equity interest (losses) from financial assets measured at fair value through other comprehensive income \$ \$ 435.835	Unrealised gain or loss on available-for-sale financial assets  \$ 103.410	\$ 22.815.185 3.392.133 ( 2.001.992 ) 1.390.161 1.390.161 160.935 ( 5.019,805 ) 160,935 ( 5.019,805 ) \$ 21.849.518 \$ 21.849.518 \$ 22.175.775 4.350.768 703.483 5.054.251 73.483 703.483 703.483 703.483 5.054.251	Non-controlling interest   \$ 9.587   7   7   7   7   7   7   7   7   7	Total \$ 22, 3, 3, 21, 5 21, 6 2, 7 21, 7 2	824,772 824,772 930,166 930,166 930,168 1160,935 550,135 859,112 859,113 859,1
Cash dividends returned Balance at December 31, 2018	I↔	5.080.955	22,003 201 \$ 3,236,659	4.467.099	\$ 600,443	\$ 10.850.172	. 129.811	- 272 153	4	201 201	209 6	\$ 24.6	201 899

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
CASH FLOWS FROM OPERATING ACTIVITIES					
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	6(22)				
profit or loss			19,240	(	18,142)
Share of loss of associates and joint ventures accounted	6(7)				
for using equity method			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)

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### 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
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		-	8,193,750		3,758,455
CASH FLOWS FROM INVESTING ACTIVITIES					
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	6(7)				
using the equity method			-		14,923
Acquisition of property, plant and equipment	6(28)	(	629,854)	(	476,144)
Proceeds from disposal of property, plant and equipment	< ( <b>2.0</b> )		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		(	8,175,201)	(	24,977,952)
CASH FLOWS FROM FINANCING ACTIVITIES	< ( <b>2.0</b> )				
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		(	6,320,915)	(	4,924,216)
Effect of exchange rate		<del>,</del>	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		Φ.	9,594,356	Φ.	37,874,245
Cash and cash equivalents at end of year		\$	4,309,651	\$	9,594,356

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. <u>HISTORY AND ORGANISATION</u>

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

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

	Effective date by
	International
	Accounting
New Standards, Interpretations and Amendments	Standards Board
Amendments to IFRS 2, 'Classification and measurement of share-based	January 1, 2018
payment transactions'	
Amendments to IFRS 4, 'Applying IFRS 9, Financial instruments with IFRS 4,	January 1, 2018
Insurance contracts'	
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	January 1, 2018
with customers'	
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

	Effective date by
	International
	Accounting
New Standards, Interpretations and Amendments	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

in the balance sheet as follows:

				Effect of			
	20	2017 version		doption of	20	18 version	
Affected items	IF.	RSs amount	ne	w standards	IFI	RSs amount	Remark
<u>January 1, 2018</u>							
Accounts receivable-allowance							:(:)
for sales returns and discounts	( <u>\$</u>	2,763,852)	\$	2,763,852	\$		i(i)
Total affected assets	(\$	2,763,852)	\$	2,763,852	\$		
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>\$</u>	103,169)	( <u>\$</u>	2,763,852)	( <u>\$</u>	2,867,021)	

- 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
  - (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:

Effective data by

	Effective date by
	International Accounting
New Standards, Interpretations and Amendments	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:

	Effective date by
	International Accounting
New Standards, Interpretations and Amendments	Standards Board
Amendments to IAS 1 and IAS 8, 'Disclosure Initiative-Definition of	January 1, 2020
Material'	
Amendments to IFRS 3, 'Definition of a business'	January 1, 2020
Amendments to IFRS 10 and IAS 28, 'Sale or contribution of assets	To be determined by
between an investor and its associate or joint venture'	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:

			Ownership (%)		
Name of	Name of	Main business	December	December	
investor	subsidiary	activities	31, 2018	31, 2017	Description
Realtek	Leading	Investment holdings	100%	100%	
Semiconductor	Enterprises				
Corporation	Limited				
Realtek	Amber Universal	//	100%	100%	
Semiconductor	Inc.				
Corporation					
Realtek	Realtek	ICs manufacturing,	89%	89%	Note 1
Semiconductor	Singapore	design, research,			
Corporation	Private Limited	development, sales, and marketing			
Realtek	Bluocean Inc.	Investment holdings	100%	100%	
Semiconductor					
Corporation					
Realtek	Talent Eagle	//	100%	100%	
Semiconductor	Enterprise Inc.				
Corporation					
Realtek	Realtek	//	100%	100%	
Semiconductor	Investment				
Corporation	Singapore				
	Private Limited				
Realtek	Realsun	//	100%	100%	
Semiconductor	Investment Co.,				
Corporation	Ltd.				
Realtek	Hung-wei	//	100%	100%	
Semiconductor	Venture Capital				
Corporation	Co., Ltd.				
Realtek	Realking	//	100%	100%	
Semiconductor	Investments				
Corporation	Limited		1000/	1000/	
Realtek	Realsun	ICs manufacturing,	100%	100%	
Semiconductor	Technology	design, research,			
Corporation	Corporation	development, sales, and marketing			

			Ownersh	nip (%)	
Name of	Name of	Main business	December	December	Description
investor	subsidiary	activities	31, 2018	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	Realtek Semiconductor	ICs design,sales and consultancy	100%	100%	
Limited	(Japan) Corp.				
Leading Enterprises Limited	Circon Universal Inc.	Investment holdings	100%	100%	
Leading Enterprises	Realtek Singapore	ICs manufacturing, design, research,	11%	11%	Note 1
Limited	Private Limited	development, sales, and marketing			
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

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

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) <u>Derecognition of financial assets</u>

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) <u>Inventories</u>

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) <u>Investments accounted for using equity method</u> / <u>associates</u>

- 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) <u>Investment property</u>

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. <u>CRITICAL ACCOUNTING JUDGEMENTS</u>, <u>ESTIMATES AND KEY SOURCES OF</u>

#### 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

	 December 31, 2018	 December 31, 2017
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	\$ 4,309,651	\$ 9,594,356

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

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

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

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

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

- 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:

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

- 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

Items		December 31, 20	018
Current items:			
Time deposits	9	\$ 31,2	86,209

- 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

	Dece	mber 31, 2018	December 31, 2017	
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)
	\$	7,419,793	\$	4,182,811

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

	December 31, 2018		December 31, 2017	
	Accounts receivable		Accounts receivable	
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
	\$	7,477,965	\$	7,006,455

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) <u>Inventories</u>

	December 31, 2018						
		Allowance for					
		obsolescence and					
		Cost market value decline				Book value	
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	\$	6,538,397	(\$	676,392)	\$	5,862,005	

		Decen	nber 31, 2017	
		All	owance for	
	 Cost	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	Deceml	ber 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) <u>Investments accounted for using the equity method</u>				
	Dec	ember 31, 2018	Dece	ember 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

	_	Buildings	_1	Machinery	Tes	st equipment	Off	ice equipment		Others	_	Total
At January 1, 2018 Cost	\$	3,205,530	\$	3,611,076	\$	1,783,425	\$	204,663	\$	722,408	\$	9,527,102
Accumulated	Ψ	3,203,330	Ψ	3,011,070	Ψ	1,705,425	Ψ	204,003	Ψ	722,400	Ψ	7,327,102
depreciation and	(	1,074,899)	(	3,377,730)	(	1,276,016)	(	137,072)	(	498,436)	(	6,364,153)
impairment	\$	2,130,631	\$	233,346	\$	507,409	\$	67,591	\$	223,972	\$	3,162,949
<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 Reclassifications	(	9) 50,407		-	(	37)		97) 567)	(	50,826)	(	143) 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	\$	2,048,221	\$	269,861	\$	711,657	\$	80,460	\$	206,379	\$	3,316,578
At December 31, 2018		<del></del>	_		_		_	, , , , , , , , , , , , , , , , , , ,	_		_	, ,
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)
	\$	2,048,221	\$	269,861	\$	711,657	\$	80,460	\$	206,379	\$	3,316,578
		Buildings	1	Machinery	Tes	st equipment	Off	ice equipment		Others		Total
At January 1, 2017	_	Buildings		Machinery	Tes	st equipment	Off	ice equipment	_	Others		Total
At January 1, 2017 Cost	\$	3,214,833	<u> </u>	<u>Machinery</u> 3,577,280	<u>Tes</u>	1,558,624	<u>Off</u>	ice equipment 192,166	\$	Others 626,953	\$	Total 9,169,856
Cost Accumulated									\$		\$	
Cost		3,214,833 951,288)		3,577,280 3,374,204)		1,558,624	\$		\$ (_		,	9,169,856 5,977,139)
Cost Accumulated depreciation and impairment		3,214,833		3,577,280		1,558,624	\$	192,166	\$ ( <u></u>	626,953	,	9,169,856
Cost Accumulated depreciation and impairment	\$ (	3,214,833 951,288) 2,263,545	\$ ( <u></u>	3,577,280 3,374,204) 203,076	\$ ( <u>\$</u>	1,558,624 1,062,395) 496,229	\$ ( <u>\$</u>	192,166 128,162) 64,004	( <u>\$</u>	626,953 461,090) 165,863	<u>\$</u>	9,169,856 5,977,139) 3,192,717
Cost Accumulated depreciation and impairment  2017 Opening net book amount		3,214,833 951,288)		3,577,280 3,374,204) 203,076 203,076	\$ (	1,558,624 1,062,395) 496,229	\$	192,166 128,162) 64,004	( <u>\$</u>	626,953 461,090) 165,863	,	9,169,856 5,977,139) 3,192,717 3,192,717
Cost Accumulated depreciation and impairment  2017 Opening net book amount Additions	\$ (	3,214,833 951,288) 2,263,545	\$ ( <u></u>	3,577,280  3,374,204) 203,076  203,076 106,402	\$ (\$	1,558,624 1,062,395) 496,229 496,229 232,730	\$ ( <u>\$</u> \$	192,166 128,162) 64,004 64,004 21,398	( <u>\$</u>	626,953 461,090) 165,863 165,863 110,627	<u>\$</u>	9,169,856 5,977,139) 3,192,717 3,192,717 471,157
Cost Accumulated depreciation and impairment  2017 Opening net book amount	\$ (	3,214,833 951,288) 2,263,545 2,263,545	\$ ( <u>\$</u> \$	3,577,280 3,374,204) 203,076 203,076	\$ (\$	1,558,624 1,062,395) 496,229	\$ ( <u>\$</u> \$	192,166 128,162) 64,004	( <u>\$</u>	626,953 461,090) 165,863	<u>\$</u>	9,169,856 5,977,139) 3,192,717 3,192,717 471,157 1,807) 151)
Cost Accumulated depreciation and impairment  2017 Opening net book amount Additions Disposals Reclassifications Depreciation	\$ (	3,214,833 951,288) 2,263,545 2,263,545 	\$ ( <u>\$</u> \$	3,577,280  3,374,204) 203,076  203,076  106,402 - 5,057 82,094)	\$ ( <u>\$</u> \$	1,558,624 1,062,395) 496,229 496,229 232,730 24) 885 220,150)	\$ \$ \$ (	192,166 128,162) 64,004 64,004 21,398 1,092) - 19,189)	( <u>\$</u> \$	626,953 461,090) 165,863 165,863 110,627 691) 6,093) 41,623)	\$ ((((((((((((((((((((((((((((((((((((	9,169,856 5,977,139) 3,192,717 3,192,717 471,157 1,807) 151) 489,822)
Cost Accumulated depreciation and impairment  2017 Opening net book amount Additions Disposals Reclassifications Depreciation Net exchange difference	\$ ( <u>\$</u> \$	3,214,833 951,288) 2,263,545 2,263,545	\$ ( <u>\$</u> \$	3,577,280  3,374,204) 203,076  203,076  106,402 - 5,057	\$ ( <u>\$</u> \$	1,558,624 1,062,395) 496,229 496,229 232,730 24) 885	\$ \$ \$ (	192,166 128,162) 64,004 64,004 21,398 1,092)	( <u>\$</u> \$	626,953 461,090) 165,863 165,863 110,627 691) 6,093)	\$ ((((((((((((((((((((((((((((((((((((	9,169,856 5,977,139) 3,192,717 3,192,717 471,157 1,807) 151)
Cost Accumulated depreciation and impairment  2017 Opening net book amount Additions Disposals Reclassifications Depreciation	\$ ( <u>\$</u> \$	3,214,833 951,288) 2,263,545 2,263,545 	\$ ( <u>\$</u> \$	3,577,280  3,374,204) 203,076  203,076  106,402 - 5,057 82,094)	\$ ( <u>\$</u> \$	1,558,624 1,062,395) 496,229 496,229 232,730 24) 885 220,150)	\$ \$ \$ (	192,166 128,162) 64,004 64,004 21,398 1,092) - 19,189)	( <u>\$</u> \$	626,953 461,090) 165,863 165,863 110,627 691) 6,093) 41,623)	\$ ((((((((((((((((((((((((((((((((((((	9,169,856 5,977,139) 3,192,717 3,192,717 471,157 1,807) 151) 489,822)
Cost Accumulated depreciation and impairment  2017 Opening net book amount Additions Disposals Reclassifications Depreciation Net exchange difference Closing net book amount At December 31, 2017	\$ \$ ((	3,214,833 951,288) 2,263,545 2,263,545 	\$ \$ \$ (	3,577,280  3,374,204) 203,076  203,076  106,402 - 5,057 82,094) 905  233,346	\$ (	1,558,624 1,062,395) 496,229 496,229 232,730 24) 885 220,150) 2,261) 507,409	\$ (	192,166  128,162) 64,004  64,004  21,398 1,092) - 19,189) 2,470  67,591	( <u>\$</u>	626,953 461,090) 165,863 165,863 110,627 691) 6,093) 41,623) 4,111) 223,972	( <u>\$</u> \$ ((((	9,169,856 5,977,139) 3,192,717 3,192,717 471,157 1,807) 151) 489,822) 9,145) 3,162,949
Cost Accumulated depreciation and impairment  2017 Opening net book amount Additions Disposals Reclassifications Depreciation Net exchange difference Closing net book amount At December 31, 2017 Cost	\$ (	3,214,833 951,288) 2,263,545 2,263,545 	\$ \$ \$	3,577,280  3,374,204) 203,076  203,076  106,402 - 5,057 82,094) 905	\$ \$ ( ( (	1,558,624 1,062,395) 496,229 496,229 232,730 24) 885 220,150) 2,261)	\$ \$ \$ (	192,166 128,162) 64,004 64,004 21,398 1,092) - 19,189) 2,470	( <u>\$</u>	626,953 461,090) 165,863 165,863 110,627 691) 6,093) 41,623) 4,111)	\$ ((((((((((((((((((((((((((((((((((((	9,169,856 5,977,139) 3,192,717 3,192,717 471,157 1,807) 151) 489,822) 9,145)
Cost Accumulated depreciation and impairment  2017 Opening net book amount Additions Disposals Reclassifications Depreciation Net exchange difference Closing net book amount At December 31, 2017 Cost Accumulated depreciation and	\$ \$ ((	3,214,833 951,288) 2,263,545 2,263,545 	\$ \$ \$ (	3,577,280  3,374,204) 203,076  203,076  106,402 - 5,057 82,094) 905  233,346  3,611,076	\$ (	1,558,624  1,062,395) 496,229  496,229 232,730 24) 885 220,150) 2,261) 507,409  1,783,425	\$ (	192,166  128,162) 64,004  64,004  21,398 1,092) - 19,189) 2,470  67,591  204,663	( <u>\$</u> \$ (((( <u>\$</u> \$	626,953 461,090) 165,863 165,863 110,627 691) 6,093) 41,623) 4,111) 223,972 722,408	( <u>\$</u> \$	9,169,856 5,977,139) 3,192,717 3,192,717 471,157 1,807) 151) 489,822) 9,145) 3,162,949 9,527,102
Cost Accumulated depreciation and impairment  2017 Opening net book amount Additions Disposals Reclassifications Depreciation Net exchange difference Closing net book amount At December 31, 2017 Cost Accumulated	\$ \$ ((	3,214,833 951,288) 2,263,545 2,263,545 	\$ \$ \$ (	3,577,280  3,374,204) 203,076  203,076  106,402 - 5,057 82,094) 905  233,346	\$ (	1,558,624 1,062,395) 496,229 496,229 232,730 24) 885 220,150) 2,261) 507,409	\$ (	192,166  128,162) 64,004  64,004  21,398 1,092) - 19,189) 2,470  67,591	( <u>\$</u>	626,953 461,090) 165,863 165,863 110,627 691) 6,093) 41,623) 4,111) 223,972	( <u>\$</u> \$	9,169,856 5,977,139) 3,192,717 3,192,717 471,157 1,807) 151) 489,822) 9,145) 3,162,949

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

#### (9) Investment property

		Buildings		B	uildings
At January 1, 2018			At January 1, 2017		
Cost	\$	85,694	Cost	\$	86,839
Accumulated depreciation			Accumulated depreciation		
and impairment			and impairment		
-	(	25,440)	-	(	21,655)
	\$	60,254		\$	65,184
<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	\$	54,868	Closing net book amount	\$	60,254
<u>At December 31, 2018</u>			At December 31, 2017		
Cost	\$	83,688	Cost	\$	85,694
Accumulated depreciation			Accumulated depreciation		
and impairment	(	28,820)	and impairment	(	25,440)
	\$	54,868		\$	60,254

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

	Decem	ber 31, 2018	Decem	ber 31, 2017
Rental income from the lease of the investment				
property	\$	6,298	\$	6,224
Operating expenses arising from the investment		_		_
property that generated rental income during				
the year	\$	4,047	\$	4,000

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) <u>Intangible assets</u>

		Computer	]	Intellectual					
		software		property		Goodwill	Others		Total
At January 1, 2018									
Cost	\$	2,772,830	\$	3,751,440	\$	642,134 \$	3 298,771	\$	7,465,175
Accumulated amortisation									
and impairment	(	2,241,399)	(	2,673,224)	(	350,621) (	121,576)	(	5,386,820)
	\$	531,431	\$	1,078,216	\$	291,513	177,195	\$	2,078,355
<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	<u>_</u>	29,313)	_	8,644	4,094	(	16,551)
Closing net book amount	\$	495,714	\$	762,164	\$	300,157	3 128,214	\$	1,686,249
A4 Dagamban 21, 2010									
At December 31, 2018	\$	2 224 611	¢.	2 011 907	¢.	(50.770	200.016	¢.	0.006.113
Cost Accumulated amortisation	2	3,234,611	\$	3,911,807	\$	650,778	298,916	\$	8,096,112
and impairment	(	2,738,897)	(	3,149,643)	(	350,621) (	170,702)	(	6,409,863)
and impairment	\$	495,714	\$	762,164	\$	300,157		\$	1,686,249
	<u>Ψ</u>	175,711	Ψ	702,101	Ψ	300,137	120,211	Ψ	1,000,219
		Computer	1	Intellectual					
		software	,	property		Goodwill	Others		Total
		Boltmare		property	_	Goodwiii	CHICIS		Total
At January 1, 2017									
Cost	\$	2,341,688	\$	3,211,611	\$	665,877		\$	6,557,417
Cost Accumulated amortisation	\$	2,341,688	\$	3,211,611		665,877	338,241	\$	6,557,417
Cost	(	2,341,688 1,737,908)	· (	3,211,611 2,140,688)	\$ (	665,877 \$ 350,621) (	338,241 83,668)	(	6,557,417 4,312,885)
Cost Accumulated amortisation and impairment	\$ ( <u></u>	2,341,688	\$ ( <u></u>	3,211,611		665,877	338,241 83,668)	\$ ( <u></u>	6,557,417
Cost Accumulated amortisation and impairment	( <u> </u>	2,341,688 1,737,908) 603,780	( <u>\$</u>	3,211,611 2,140,688) 1,070,923	\$ ( <u>\$</u>	665,877 \$ 350,621) ( 315,256 \$	338,241 83,668) 5 254,573	( <u>\$</u>	6,557,417 4,312,885)
Cost Accumulated amortisation and impairment  2017 Opening net book amount	(	2,341,688 1,737,908) 603,780 603,780	· (	3,211,611 2,140,688) 1,070,923	\$ (	665,877 \$ 350,621) (	338,241 83,668) 3 254,573 5 254,573	(	6,557,417 4,312,885) 2,244,532 2,244,532
Cost Accumulated amortisation and impairment  2017 Opening net book amount Additions	( <u> </u>	2,341,688 1,737,908) 603,780 603,780 431,821	( <u>\$</u>	3,211,611 2,140,688) 1,070,923	\$ ( <u>\$</u>	665,877 \$ 350,621) ( 315,256 \$ 315,256 \$	338,241 83,668) 3 254,573 2 254,573 2,096	<u>\$</u>	6,557,417 4,312,885) 2,244,532 2,244,532 974,508
Cost Accumulated amortisation and impairment  2017 Opening net book amount Additions Transfers	( <u> </u>	2,341,688 1,737,908) 603,780 603,780 431,821 151	<u>\$</u> \$	3,211,611 2,140,688) 1,070,923 1,070,923 540,591	\$ ( <u>\$</u>	665,877 \$ 350,621) ( 315,256 \$	83,668) 83,668) 254,573 2,096 18,203)	\$ \$ (	6,557,417 4,312,885) 2,244,532 2,244,532 974,508 18,052)
Cost Accumulated amortisation and impairment  2017 Opening net book amount Additions Transfers Amortisation	( <u> </u>	2,341,688 1,737,908) 603,780 603,780 431,821 151 503,998)	<u>\$</u> \$	3,211,611 2,140,688) 1,070,923 1,070,923 540,591 511,796)	\$ ( <u>\$</u>	665,877 \$ 350,621) ( 315,256 \$ 315,256 \$ - (	83,668) 83,668) 254,573 2,096 18,203) 45,059)	\$ \$ (	6,557,417 4,312,885) 2,244,532 2,244,532 974,508 18,052) 1,060,853)
Cost Accumulated amortisation and impairment  2017 Opening net book amount Additions Transfers Amortisation Net exchange difference	\$	2,341,688 1,737,908) 603,780 603,780 431,821 151 503,998) 323)	<u>\$</u> \$	3,211,611 2,140,688) 1,070,923 1,070,923 540,591 - 511,796) 21,502)	\$ ( <u>\$</u> \$	350,621) ( 315,256 § 315,256 § - ( 23,743) (	338,241 83,668) 5 254,573 2,096 18,203) 45,059) 16,212)	\$ \$ ( (	6,557,417 4,312,885) 2,244,532 2,244,532 974,508 18,052) 1,060,853) 61,780)
Cost Accumulated amortisation and impairment  2017 Opening net book amount Additions Transfers Amortisation	( <u> </u>	2,341,688 1,737,908) 603,780 603,780 431,821 151 503,998)	<u>\$</u> \$	3,211,611 2,140,688) 1,070,923 1,070,923 540,591 511,796)	\$ ( <u>\$</u>	665,877 \$ 350,621) ( 315,256 \$ 315,256 \$ - (	338,241 83,668) 5 254,573 2,096 18,203) 45,059) 16,212)	\$ \$ (	6,557,417 4,312,885) 2,244,532 2,244,532 974,508 18,052) 1,060,853)
Cost Accumulated amortisation and impairment  2017 Opening net book amount Additions Transfers Amortisation Net exchange difference Closing net book amount	\$	2,341,688 1,737,908) 603,780 603,780 431,821 151 503,998) 323)	<u>\$</u> \$	3,211,611 2,140,688) 1,070,923 1,070,923 540,591 - 511,796) 21,502)	\$ ( <u>\$</u> \$	350,621) ( 315,256 § 315,256 § - ( 23,743) (	338,241 83,668) 5 254,573 2,096 18,203) 45,059) 16,212)	\$ \$ ( (	6,557,417 4,312,885) 2,244,532 2,244,532 974,508 18,052) 1,060,853) 61,780)
Cost Accumulated amortisation and impairment  2017 Opening net book amount Additions Transfers Amortisation Net exchange difference	\$ \$ ( (	2,341,688 1,737,908) 603,780 603,780 431,821 151 503,998) 323) 531,431	<u>\$</u> \$	3,211,611 2,140,688) 1,070,923 1,070,923 540,591 - 511,796) 21,502) 1,078,216	\$ ( <u>\$</u> \$	665,877 \$ 350,621) ( 315,256 \$ 315,256 \$ - ( 23,743) ( 291,513 \$	83,668) 83,668) 254,573 2,096 18,203) 45,059) 16,212) 177,195	\$ \$ ( (	6,557,417 4,312,885) 2,244,532 2,244,532 974,508 18,052) 1,060,853) 61,780) 2,078,355
Cost Accumulated amortisation and impairment  2017 Opening net book amount Additions Transfers Amortisation Net exchange difference Closing net book amount At December 31, 2017	\$	2,341,688 1,737,908) 603,780 603,780 431,821 151 503,998) 323)	\$ \$ (	3,211,611 2,140,688) 1,070,923 1,070,923 540,591 - 511,796) 21,502)	\$ (	665,877 \$ 350,621) ( 315,256 \$ 315,256 \$ - ( 23,743) ( 291,513 \$	83,668) 83,668) 254,573 2,096 18,203) 45,059) 16,212) 177,195	\$ ( ( ( ( <u>\$</u>	6,557,417 4,312,885) 2,244,532 2,244,532 974,508 18,052) 1,060,853) 61,780)
Cost Accumulated amortisation and impairment  2017 Opening net book amount Additions Transfers Amortisation Net exchange difference Closing net book amount  At December 31, 2017 Cost	\$ \$ ( (	2,341,688 1,737,908) 603,780 603,780 431,821 151 503,998) 323) 531,431	\$ \$ (	3,211,611 2,140,688) 1,070,923 1,070,923 540,591 - 511,796) 21,502) 1,078,216	\$ (	665,877 \$ 350,621) ( 315,256 \$ 315,256 \$ - ( 23,743) ( 291,513 \$	83,668) 83,668) 254,573 2,096 18,203) 45,059) 16,212) 177,195	\$ ( ( ( <u>\$</u>	6,557,417 4,312,885) 2,244,532 2,244,532 974,508 18,052) 1,060,853) 61,780) 2,078,355
Cost Accumulated amortisation and impairment  2017 Opening net book amount Additions Transfers Amortisation Net exchange difference Closing net book amount  At December 31, 2017 Cost Accumulated amortisation	\$ \$ ( (	2,341,688 1,737,908) 603,780 603,780 431,821 151 503,998) 323) 531,431 2,772,830	\$ \$ (	3,211,611 2,140,688) 1,070,923 1,070,923 540,591 511,796) 21,502) 1,078,216	\$ (	665,877 \$ 350,621) ( 315,256 \$ 315,256 \$ - ( 23,743) ( 291,513 \$ 642,134 \$	338,241 83,668) 5 254,573 2,096 18,203) 45,059) 16,212) 6 177,195 298,771 121,576)	\$ ( ( ( <u>\$</u>	6,557,417 4,312,885) 2,244,532 2,244,532 974,508 18,052) 1,060,853) 61,780) 2,078,355 7,465,175

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		
	\$	994,852	\$	1,060,853		

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

	Dece	mber 31, 2018	Dec	cember 31, 2017
Land-use right	\$	22,027	\$	23,047

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	Dec	ember 31, 2018	Interest rate range	Collateral
Bank borrowings Unsecured borrowings	\$	14,526,311	0.67%~4.16%	None
Type of borrowings	Dec	ember 31, 2017	Interest rate range	Collateral
Bank borrowings Unsecured borrowings	\$	18,052,624	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

	Dece	ember 31, 2018	Dece	mber 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
	\$	7,542,208	\$	6,094,786

#### (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:

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

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

	defin	ent value of ned benefit ligations	Fa	ir value of plan assets		t defined
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)
	(	545,890)		479,606	(	66,284)
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)
	(	26,002)		13,319	(	12,683)
Pension fund contribution		_		6,000		6,000
Paid pension		3,510	()	3,510)		<u>-</u>
At December 31	(\$	568,382)	\$	495,415	(\$	72,967)
	defin	ent value of ned benefit ligations	Fa	ir value of plan assets		t defined fit 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)
	(	523,357)		482,156	(	41,201)
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)
	(	25,579)	(	2,011)	(	27,590)
Pension fund contribution				6,000		6,000
Paid pension						
		12,466	(	12,466)		

(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 D	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:

	Disco	unt rate	Future salar	ry 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
	Discor	unt rate	Future salar	ry increases
	Disco			
	Increase by	Decrease by	Increase by	Decrease by
			•	
December 31, 2017 Effect on present value	Increase by	Decrease by	Increase by	Decrease by

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:

\$ 242,740
93,635
196,669
 35,519
\$ 568,563
\$ <u>\$</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

	Ye	ear ended
	Decem	ber 31, 2018
At January 1	\$	901,430
Changes in provision		98,438
At December 31	\$	999,868

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.

		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	508,095	506,506

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				
		8	assc	ociates accounted				
			fo	or using equity				
	S	hare premium		method	О	thers		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								
tranferred to common stock		163,692		-		-		163,692
Cash dividends returned	_			<u> </u>		201		201
At December 31	\$	3,196,250	\$	40,208	\$	201	\$	3,236,659
	_			2017				
				Change in assoc	iates			
				accounted for us	sing			
		Share premium		equity metho	d		T	otal
At January 1	\$	3,900,21	18	\$ 10,	210	\$		3,910,428
Change in associates accounted for		, ,						, ,
using equity method			-	7,	993			7,993
Cash dividends distribution								•
from capital surplus	(	504,95	51)		-	(		504,951)
Employees' compensation								
tranferred to common stock	_	145,38		-				145,386
At December 31	\$	3,540,65	53	\$ 18,	203	\$		3,558,856

## (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	
			Divi	dends per			Di	vidends per
		Amount	share	(in dollars)		Amount	share	e (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

			20			
			Available-for-		rency	
		ns (losses)	sale		lation	
	_	valuation	investment	diffe	erence	Total
At January 1	\$	- \$	212,720	(\$	813,163) (\$	600,443)
Modified retrospective approach adjustment: Revaluation		538,977 (	212,720	)	_	326,257
Revaluation transferred to		230,377	212,720	,		320,237
retained earnings	(	103,142)	-		- (	103,142)
Revaluation	,	165 (50)			,	1.65.650
-Subsidiaries	(	165,659)	-		- (	165,659)
-Associates		1,977	-		-	1,977
Currency translation differences:						
-Subsidiaries		<u>-</u>	-		942,974	942,974
At December 31	\$	272,153 \$	-	\$	129,811 \$	401,964
			20	17		
	Av	ailable-for-sale	Curr	ency		
	-	investment	translation	difference	<u>e</u>	Total
At January 1	\$	103,410	\$	1,298,13	9 \$	1,401,549
Revaluation —Subsidiaries		110,120	)		_	110,120
-Associates	(	810			- (	810
Currency translation differences:			,			
-Subsidiaries			- (	2,111,30	2) (	2,111,302
At December 31	\$	212,720	<u> </u>	813,16	3) (\$	600,443
) Operating revenue						
			Year end	ed	Yea	r ended
			December 31,	2018	Decemb	er 31, 2017
Revenue from contracts with	th cust	omers \$	45,	805,746	\$	41,688,021

## 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:

		Integrated		
Year ended December 31, 2018	cir	cuit 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	\$	45,735,868	\$ 69,878	\$ 45,805,746

### 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	
	Decemb	per 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	<u>\$</u>	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		106,441		126,134
Total	\$	1,128,673	\$	869,141

## (22) Other gains and losses

	Years ended December 31,			per 31,
		2018		2017
Gains on disposal of property, plant and equipment Gains on disposal of available-for-sale financial assets	\$	133	\$	12,633
	,	-	,	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	(\$	58,536)		251,337)
(23) <u>Finance costs</u>				
		Years ended	Decemb	per 31,
		2018		2017
Interest expense	\$	140, 387	\$	154, 769
(24) Expenses by nature				
		Years ended	Decemb	per 31,
		2018		2017
Employee benefit expenses	\$	10,831,592	\$	9,243,349
Depreciation charges on property, plant and equipment	\$	544,084	\$	493,822
Amortisation charges on intangible assets	\$	994,852	\$	1,060,853
(25) Employee benefit expenses				
		Years ended	Decemb	per 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	\$	10,831,592	\$	9,243,349

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		444,705		150,237	
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	(	138,285)		83,956	
Income tax expense	\$	306,420	\$	234,193	

# B. Reconciliation between income tax expense and accounting profit

		Years ended l	Decen	nber 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	\$	306,420	\$	234,193

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

	-	Year e	nded December 3	1, 2018	
		Recognised	Recognised in other		
		in profit or	comprehensive	Recognised	
	January 1	loss	income	in equity	December 31
-Deferred income tax assets: Temporary differences: Unrealised loss on market price decline and obsolete and slow-moving inventories and others -Deferred income tax liabilities:	\$ 65,551	\$ 12,921	\$ -	<u>\$</u> _	\$ 78,472
Temporary differences:					
Unrealised exchange					,
gain	( 21,749)		<u> </u>	<u> </u>	( 22,310)
	\$ 43,802	\$ 12,360	\$ -	\$ -	\$ 56,162
	-	Year er	nded December 31	1, 2017	
			Recognised in		
		Recognised	other		
		in profit or	comprehensive	Recognised	
	January 1	loss	income	in equity	December 31
-Deferred income tax assets: Temporary differences: Unrealised loss on market price decline and obsolete and					
slow-moving inventories and others -Deferred income tax liabilities: Temporary differences:	\$ 148,821	(\$ 83,270)	\$ -	<u>\$</u> _	\$ 65,551
Unrealised exchange gain	( 21,063)	( 686)			( 21,749)
Sam			<u> </u>	<u> </u>	` <del></del>
	\$ 127,758	(\$ 83,956)	\$ -	\$ -	\$ 43,802

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

	Dec	ember 31, 2018	Dec	cember 31, 2017
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.

		Y	ear ended December 31, 2018			
			Weighted average number			
			of ordinary shares	Ear	nings per	
	A	mount after	outstanding (shares in	share		
		tax	thousands)	(in	dollars)	
Basic earnings per share						
Profit attributable to ordinary shareholders of the parent	\$	4,350,768	507,712	\$	8.57	
Diluted earnings per share Profit attributable to ordinary shareholders of the parent Assumed conversion of all dilutive	\$	4,350,768	507,712			
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	
		Y	ear ended December 31, 2017			
			Weighted average number			
			of ordinary shares	Ear	nings per	
	A	mount after	outstanding (shares in		share	
		tax	thousands)	(in	dollars)	
Basic earnings per share Profit attributable to ordinary						
shareholders of the parent	\$	3,392,153	505,412	\$	6.71	
Diluted earnings per share Profit attributable to ordinary shareholders of the parent Assumed conversion of all dilutive	\$	3,392,153	505,412			
potential ordinary shares Employees' compensation Profit attributable to ordinary			11,106			
shareholders of the parent plus assumed conversion of all dilutive potential ordinary shares	\$	3,392,153	516,518	\$	6.57	
<i>y</i>	-	-,,		_		

## (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	\$	629,854	\$	476,144
	Years ended December 3			per 31,
		2018		2017
Purchase of intangible assets Add: Opening balance of payable on	\$	626,009	\$	974,508
software and intellectual property Less: Ending balance of payable on		650,649		613,635
software and intellectual property	(	684,438)	(	650,649)
Cash paid during the year	\$	592,220	\$	937,494

## (29) Changes in liabilities from financing activities

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

## 7. <u>RELATED PARTY TRANSACTIONS</u>

## (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

		per 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
	\$	8,815,747	\$	7,604,342

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  $30 \sim 60$  days after monthly billings.

### B. Processing cost

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

Processing cost is paid to associates on normal commercial terms and conditions, and the general payment term was  $49 \sim 69$  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			
	\$	1,772,071	\$	1,094,853			

Aforementioned receivables were  $30 \sim 60$  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.	\$	249,869	\$	291,755			

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				
	Ending						Ending	
		Amount		balance		Amount		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  $30 \sim 60$  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:

	Вос	ok value	
Pledged asset	December 31, 201	8 <u>December 31, 2017</u>	Purposes
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			Guarantee for customs
financial assets at amortised			duties for the importation
cost - current)	30,27	-	of materials Guarantee for leasing land
"	35,789	9	and office in Science Park
	\$ 66,05	96,154	

### 9. <u>SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNISED CONTRACT COMMITMENTS</u>

### (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:

	Dece	mber 31, 2018	Decen	nber 31, 2017
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
	\$	258,087	\$	286,589

### 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

	Dec	ember 31, 2018	Dec	ember 31, 2017
Financial assets		_		
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	\$	<u> </u>
Available-for-sale financial assets				
Available-for-sale financial assets	\$	-	\$	717,745
Financial assets at cost				811,496
	\$	<u>-</u>	\$	1,529,241
Financial assets at amortised cost/Receivables				
Cash and cash equivalents	\$	4,309,651	\$	9,594,356
Investments in debt instruments without active		-		24,370,143
market				
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
	\$	43,701,416	\$	38,696,074
	Dec	ember 31, 2018	Dec	ember 31, 2017
<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
	\$	28,036,965	\$	29,070,226

#### 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			Book value		
	(In	thousands)	Exchange rate		(NTD)		
(Foreign currency: functional currency)							
Financial assets							
Monetary items							
USD:NTD	\$	179,859	30.733	\$	5,527,618		
CNY:USD		71,029	0.1456		317,942		
Non-monetary items							
USD:NTD		1,159,786	30.733		35,643,714		
Financial liabilities							
Monetary items							
USD:NTD		134,264	30.733		4,126,322		
		-	0 1 21 20	1.7			
			December 31, 20	17			
		Foreign	December 31, 20	17			
	(	Foreign currency	December 31, 20	17	Rook value		
	(	Foreign currency amount		<u>17</u>	Book value		
(Foreign currency: functional currency)	(	Foreign currency	December 31, 20  Exchange rate	<u>17</u>	Book value (NTD)		
•	(	Foreign currency amount		17			
functional currency)	(	Foreign currency amount					
functional currency) Financial assets	(	Foreign currency amount		\$			
Financial assets  Monetary items	<u>(In</u>	Foreign currency amount thousands)	Exchange rate		(NTD)		
Financial assets  Monetary items  USD:NTD  CNY:USD  Non-monetary items	<u>(In</u>	Foreign currency amount thousands)  209,666 445,107	Exchange rate  29.848 0.1536		(NTD) 6,258,009 2,213,072		
Financial assets  Monetary items USD:NTD CNY:USD Non-monetary items USD:NTD	<u>(In</u>	Foreign currency amount thousands)	Exchange rate  29.848		(NTD) 6,258,009		
Financial assets  Monetary items USD:NTD CNY:USD Non-monetary items USD:NTD Financial liabilities	<u>(In</u>	Foreign currency amount thousands)  209,666 445,107	Exchange rate  29.848 0.1536		(NTD) 6,258,009 2,213,072		
Financial assets  Monetary items USD:NTD CNY:USD Non-monetary items USD:NTD	<u>(In</u>	Foreign currency amount thousands)  209,666 445,107	Exchange rate  29.848 0.1536		(NTD) 6,258,009 2,213,072		

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					
	Sen	sitivit	y analysis			
				Effect on other		
		Effect on		comprehensive		
	Degree of variation	prof	it or loss	income		
(Foreign currency: functional currency)						
Financial assets						
Monetary items						
USD:NTD	1%	\$	55,276	\$ -		
CNY:USD	1%		3,179	-		
Non-monetary items						
USD:NTD	1%		-	356,437		
Financial liabilities						
Monetary items						
USD:NTD	1%	(	41,263)	-		
	Year ende	ed Dec	ember 31	, 2017		
			cember 31 y analysis			
		sitivit	y analysis	Effect on other		
	Sen	sitivit Ef	y analysis	Effect on other comprehensive		
	Sen	sitivit Ef	y analysis	Effect on other		
(Foreign currency: functional currency)	Sen	sitivit Ef	y analysis	Effect on other comprehensive		
•	Sen	sitivit Ef	y analysis	Effect on other comprehensive		
functional currency)	Sen	sitivit Ef	y analysis	Effect on other comprehensive		
functional currency) Financial assets	Sen	sitivit Ef	y analysis	Effect on other comprehensive		
Financial assets  Monetary items	Degree of variation	Ef prof	y analysis fect on it or loss	Effect on other comprehensive income		
Financial assets  Monetary items  USD:NTD	Degree of variation  1%	Ef prof	y analysis  fect on it or loss  62,580	Effect on other comprehensive income		
functional currency)  Financial assets  Monetary items  USD:NTD  CNY:USD	Degree of variation  1%	Ef prof	y analysis  fect on it or loss  62,580	Effect on other comprehensive income		
Financial assets  Monetary items  USD:NTD  CNY:USD  Non-monetary items	Degree of variation  1% 1%	Ef prof	y analysis  fect on it or loss  62,580	Effect on other comprehensive income		
functional currency)  Financial assets  Monetary items  USD:NTD  CNY:USD  Non-monetary items  USD:NTD	Degree of variation  1% 1%	Ef prof	y analysis  fect on it or loss  62,580	Effect on other comprehensive income		

#### 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:

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

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

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

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:

		Decembe		
		Life		
		Significant		
		increase in	Impairment	
	12 months	credit risk	of credit	Total
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	Between 1	
December 51, 2010	year	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	Between 1	
December 31, 2017	year	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								
Recurring fair value measuremen	<u>t</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	\$	1,914,038	\$	_	\$	1,058,137	\$	2,972,175
Dagambar 21, 2017		Level 1	Level 2			Level 3		Total
December 31, 2017		LCVCI I	 LCVC1 Z	_		LCVCI 3		Total
Assets								
Recurring fair value measuremen	<u>t</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	\$	1,080,952	\$	_	\$	312,684	\$	1,393,636

- (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:

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

		2018			
	Non-derivat	Non-derivative equity instrument			
At January 1	\$	312,684			
Modified retrospective adjustment		766,919			
Losses recognised in other comprehensive income	(	49,466)			
Acquired in the period		28,000			
At December 31	\$	1,058,137			
	Non-derivat	tive equity instrument			
		2017			
At January 1	\$	264,536			
Gains recognised in other comprehensive income		48,148			
At December 31	\$	312,684			

- 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:

	Fair	value at			Significant	Range	
	Decer	mber 31,	Valuatio	n	unobservable	(weighted	Relationship of
	2	018	technique	e	input	average)	inputs to fair value
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

	F	air value a	ıt	Significant	Range	
	De	cember 3	l, Valuation	unobservable	e (weighte	d Relationship of
		2018	technique	input	average	inputs to fair value
Unlisted shares	\$	28,00	0 The last transaction price of the non-active market	Not applicab	le	Not applicable
Private equity fund investment		912,15	1 Net asset value	Not applicab	le	- Not applicable
	Fair	value at		Significant	Range	
	December 31,		ecember 31, Valuation 2017 technique		(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
T TT1 C 1		C 11	1.4 1	1.1 1	, •	1.

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		•	ed in other sive 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	
			Recognise	Recognised in profit or		ed in other
			10	oss	comprehen	sive income
			Favourable	Unfavourable	Favourable	Unfavourable
	Input	Change	Change	change	change	change
Financial assets						
Equity instrument	Price to book ratio multiple	± 1%	<u>\$</u> -	\$ -	\$ 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:

Held-to-

Available-for-

		AVC	1114016-101-	Heiu-to-						
	Measured	sa	le-equity	maturity	<u>-</u> ,				Effe	ects
	at fair	Me	easured at							
	value	fa	ir value							
	through	thro	ough other	Measured at		De	bt instrument			
	profit or	com	prehensive	amortised	Measured	W	ithout active		Retained	Others
Note	loss	inco	me-equity	cost	at cost		market	Total	earnings	equity
	\$675,891	\$	717,745	\$ -	\$811,496	\$	24,370,143	\$26,575,275	\$ -	\$ -
(c)	96,875	(	96,875)	-	-		-	-	-	-
(b)			847.070		( 847 070)		_	_		
(0)			047,070		( 047,070)					
(a)	_		_	24,370,143	_	(	24,370,143)	_	_	_
(b)(c)	-		326,257	-	-	`	-	326,257	( 83,042)	409,299
(b)		(	35,574)		35,574		<u>-</u>		186,184	(_186,184)
	\$ 772,766	\$	1,758,623	\$ 24,370,143	\$ -	\$		\$ 26,901,532	\$103,142	\$223,115
	(c) (b) (a) (b)(c)	at fair value through profit or loss	Measured at fair   Measured   Sa	At fair value through through other profit or loss income-equity   \$675,891 \$ 717,745	Measured at fair at fair value through profit or S675,891         Measured at fair value through other profit or served income-equity         Measured at amortised cost           (c)         96,875 (         96,875)         -           (b)         -         847,070         -           (a)         -         -         24,370,143 (b)(c)         -           (b)         -         (         326,257         -	Measured at fair at fair value through through other profit or \$8675,891\$         Measured at cost at cost at cost \$8675,891\$         Measured at cost at cos	Measured at fair at fair at fair value through through other profit or served.         Measured at fair value through other profit or comprehensive income-equity served.         Measured at amortised cost at cost served.         Measured wate at at cost served.         Measured wate at cost served.         Measured wate.         Measured at amortised at cost.         Measured at amortised cost.         Measured wate.         Measured at amortised amortised cost.         Measured wate.         Measured at amortised amortised cost.         Measured wate.         Measured wate.         Measured wate.         Measured wate.         Measured wate.         Measured at amortised amortised cost.         Measured at amortised amortised cost.         Measured wate.         Measured at amortised amortised cost.         Measured at amortised amortised cost.         Measured wate.         Measured wate.         West.         Measured at amortised amortised cost.         Measured wate.         Measured wate.         West.         West.         Measured wate.         Measured wate.         Mea	Measured at fair value through other profit or seff; 8675,891         Measured at mount of seff; and sef	Measured at fair value through other profit or served (c)         Measured at fair value through other profit or loss         Measured at income-equity served (c)         Measured at amortised served at served at cost at cost at cost served (c)         Debt instrument without active market served (c)         Total           (c)         96,875 ( 96,875)         - \$811,496 (\$24,370,143)         \$26,575,275           (b)         - \$847,070 (\$47,070)         - \$847,070 (\$47,070)         - \$847,070 (\$47,070)           (a)         - \$24,370,143 (\$47,070)         - \$326,257 (\$47,070)         - \$326,257 (\$47,070)           (b)         - \$326,257 (\$47,070)         - \$326,257 (\$47,070)         - \$326,257 (\$47,070)	Measured at fair value through through other profit or         Measured amortised income-equity         Measured at amortised amortised amortised amortised amortised amortised income-equity         Debt instrument without active without active at amortised without active amortised amortised amortised amortised amortised amortised without active amortised

- (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		
	\$	675,891		

- 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
	\$ 717,745

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	Dece	December 31, 2017	
Current items:			
Structured Deposit	\$	21,899	
Time Deposit		24,348,244	
	\$	24,370,143	

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:

	Dece	ecember 31, 2017	
Group 1	\$	1,051,450	
Group 2		5,894,934	
	\$	6,946,384	

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:

	Decemb	er 31, 2017
Up to 30 days	\$	278
91 to 180 days		1
	\$	279

- (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:

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

- (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:

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

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

		December 31, 2018					
		Balance by using					
		previous Effects from					Effects from
		Bal	ance by using		accounting		changes in
Balance sheet items	Description		IFRS 15		policies	a	ccounting 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 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) <u>Information on investees</u>

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. <u>Information on segment profit(loss)</u>, assets and liabilities

## Year ended December 31, 2018

	Amount		
Revenue from external customers	\$	45,805,746	
Inter-segment revenue	\$	-	
Segment income	\$	4,350,781	
Total segment assets	\$	58,252,314	
Vegr ended December 31, 2017			

## Year ended December 31, 201/

	Amount		
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:

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

# 6. Revenue information by geographic area

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

	 Year ended De	cembe	er 31, 2018	 Year ended De	cemb	er 31, 2017
	 Revenue	Non-	-current assets	Revenue	Non	-current assets
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	\$ 45,805,746	\$	5,031,400	\$ 41,688,021	\$	5,258,806

# 7. Major customer information

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

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

Loans to others

Year ended December 31, 2018

Expressed in thousands of NTD (Except as otherwise indicated)

None 9,401,026 9,401,026 9,401,026 9,401,0269,401,026 Ceiling on total loans 9, 401, 026 9,401,026 9,401,026 9,401,026 9,401,026 granted (Note 2) 2, 350, 257 2, 350, 257 2, 350, 257 2, 350, 257 9, 401, 026 9, 401, 026 9, 401, 026 9, 401, 026 9, 401, 026 9, 401, 026 Limit on loans granted to a single party ↔ Value Collateral None Item Allowance for doubtful short-term Operations Operations Operations Operations Operations Reason for Operations Operations Operations Operations Operations financial Amount of transactions with the borrower Nature of loan 2 2 3,30 3,30 3.30 3.30 3.30 Interest rate 739, 129 365, 723 602, 367 2, 327, 410 1,628,849 Actual amount drawn down 921, 990 153, 665 921, 990 921, 990 1,843,980 1,843,980 1,843,980 6, 146, 6003,073,3003, 073, 300 Balance at December 31, 2018 Maximum outstanding balance during the year ended December 31, 2018 (Note 3) 921,990 1,843,980 921,990 1,843,980 1,843,980 153,665 6, 146, 600 066 3,073,3003,073,300921, **⇔** Is a related party  $\succ$ ×  $\succ$  $\succ$  $\succ$ Other receivables-related parties Limited Other receivables-Leading Enterprises Other receivables-Limited related parties General ledger Realtek Singapore Private Limited Realtek Semiconductor (Shen Zhen) Corp. Realsil Microelectronics Corp. Realtek Singapore Private Limited Talent Eagle Enterprise Inc. Talent Eagle Enterprise Inc. Bluocean Inc. Bluocean Inc. Borrower Realtek Investment Singapore Private Limited Leading Enterprises Limited Leading Enterprises Limited Amber Universal Inc. Cortina Access, Inc. Realtek Singapore Private Limited Realtek Semiconductor Corporation Realtek Semiconductor Corporation Realtek Semiconductor Corporation Realtek Semiconductor Corporation Creditor No (Note 1) 0 0 0 2 က 4

Table 1

Loans to others

Year ended December 31, 2018

Expressed in thousands of NTD (Except as otherwise indicated)

None None 9, 401, 026 9, 401, 026 Ceiling on total loans granted (Note 2) Limit on loans 9, 401, 026 9, 401, 026 granted to Collateral None None Allowance for doubtful Reason for short-term Operations transactions with the Amount of Nature of 2 Interest rate Actual amount drawn down 358, 096 358, 096 Balance at December 31, 2018 outstanding balance during the year 358, 096 358, 096 December 31, 2018 (Note 3) Maximum ended Is a related General ledger Other receivables-Other receivables related parties related parties Microelectronics Corp. Suzhou Hongwei Microelectronic RayMX Corp. Realsil Microelectronics Corp. Realsil Microelectronics Creditor Согр.

No (Note 1)

Table 1

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

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 cocurred 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 knding amount may not exceed 40% of the borrowing company's ret assets based on its latest financial statements audited or reviewed by independent account

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, jimin or hoars is not restricted as stipulated in the above item (3). However, the eedling on total loans and limin on hoars to a single partymany or exceed 40% of the Company's not assets based on its latest financial statements audited or reviewed by

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

Provision of endorsements and guarantees to others

Year ended December 31, 2018

Table 2

Expressed in thousands of NTD

(Except as otherwise indicated) Footnote guarantees by guarantees to guarantees to endorsements/ endorsements/ endorsements/ Provision of Provision of the party in Mainland China (Note 7) subsidiary to company parent (Note 7) Provision of company to subsidiary (Note 7) parent Ceiling on total \$ 11,751,283 11, 751, 283 11, 751, 283 11, 751, 283 11, 751, 283 endorsements/ guarantees provided amount of (Note 3) 0.10 endorsement/ guarantee 0.03 0.30 0.03 0.03 Ratio of accumulated the endorser/ guarantor amount to net asset value of endorsements/ secured with Amount of gurantees Actual amont drawn down December 31, 2018 (Note 5) \$ 2,350,257 705, 077 614,6607,050,770 614,660 endorsement Outstanding amount at guarantee December 31, 2018 (Note 4) \$ 2,350,257 7,050,770 705,077 614,660outstanding endorsement/ 614,660 amount as of Maximum \$ 11, 751, 283 11, 751, 283 11, 751, 283 11, 751, 283 11, 751, 283 endorsements/ provided for a single party (Note 3) Limited on guarantees Relationship with the endorser/ guarantor (Note 2) endorsed/guaranteed Party being Leading Enterprises Realtek Singapore Microelectronics Microelectronics Microelectronics Company name Private Limited RayMX RayMX Corp. Realsil Corp.

Semiconductor Corporation

0

Semiconductor

0

Corporation Realtek

Semiconductor

0

Realtek

(Note 1)

Corporation

Realtek

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

(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.

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.

Conce endorsement/guarantee contracts or promissory notes are signed/issued by the endorser/guarantor company to the balaks, the endorser/guarantor company bears endorserent/guarantor company bears endorserent involve endorser guarantor someties should be included in the balance of outstanding endorser guarantor company to the endorser/guarantor company to the endorser guarantor company to the endorser/guarantor company to the endorser/guaranto

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

Vote 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

Microelectronics

2

Realsil Corp.

Enterprises Limited

Leading

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

	Footnote	(Note 4)																	
		Fair value	3 29,061	936	164, 093	186, 374	164, 093	99, 546	18,440	475, 242	249, 599	3,784	40,720	250,124	10,841	28,000	39, 635	4,504	4
1, 2018		Ownership (%)	2.05% \$	16.02%	5.35%	3.03%	5.35%	6.89%	ı	12.49%	6.56%	1	2.88%	1.05%	0.33%	12.17%	ı	ı	ı
As of December 31, 2018	Book value	(Note 3)	\$ 29,061	936	164, 093	186, 374	164, 093	99, 546	18, 440	475, 242	249, 599	3, 784	40, 720	250, 124	10,841	28, 000	39, 635	4, 504	4
		Number of shares	1, 623, 501	283, 791	3, 575, 000	23, 124, 000	3, 575, 000	8, 623, 301	5, 000, 000	9, 000, 000	4, 726, 836	336, 346	2, 274, 875	5, 823, 602	1, 093, 968	2, 800, 000	8, 854, 549	1, 006, 124	1,005
	General	ledger account	Financial assets at fair value through profit or loss	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through profit or loss	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through profit or loss	Financial assets at fair value through profit or loss	Financial assets at fair value through profit or loss
	Relationship with the	securities issuer(Note 2)	Other related parties	Other related parties	None	Other related parties	Other related parties	None	Other related parties	None	None	None							
	Maretable securies	(Note 1)	C-media Electronics Inc Common stock	Technology Partner Venture Capital Corporation - Common stock	Compal broadband networks Inc Common None stock	Shieh-Yong Investment Co., Ltd Common stock	Compal broadband networks Inc Common None stock	Fortemedia Inc Common stock	Starix Technology, IncPreferred stock	Octtasia Investment Holding Inc Common None stock	Octtasia Investment Holding Inc Common None stock	United Microelectronics Corporation - Common stock	C-media Electronics Inc Common stock	Greatek Electroninc Inc Common stock	Subtron technology Co., Ltd - Common stock	Embestor Technology Inc Common stock	China Universal Cash Premium Money Market Fund	China Money Fund	Harvest Money Market
		Securities held by	Realtek Semiconductor Corporation	Realtek Semiconductor Corporation	Realking Investment Limited	Realsun Investment Co., Ltd.	Realsun Investment Co., Ltd.	Leading Enterprises Limited	Leading Enterprises Limited	Leading Enterprises Limited	Amber Universal Inc.	Hung-wei Venture Capital Co., Ltd.	Hung-wei Venture Capital Co., Ltd.	Hung-wei Venture Capital Co., Ltd.	Hung-wei Venture Capital Co., Ltd.	Hung-wei Venture Capital Co., Ltd.	Realsil Microelectronics Corp.	Realsil Microelectronics Corp.	Realsil Microelectronics Corp.

Holding of marketable securities at the end of the period (not including subsidiaries, associates and joint ventures)

December 31, 2018

Table 3

(Except as otherwise indicated) Expressed in thousands of NTD

As of December 31, 2018

	Maretable securies	Relationship with the	General		Book value			Footnote
Securities held by	(Note 1)	securities issuer(Note 2)	ledger account	Number of shares	(Note 3)	Ownership (%)	Fair value	(Note 4)
Realsil Microelectronics Corp.	Tianhong Money Fund	None	Financial assets at fair value through profit or loss	38, 754, 137	\$ 173, 473	1	\$ 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	ı	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	I	6.59%	I	
		· · · · · · · · · · · · · · · · · · ·	17.	TO O DUTIES		-		

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.

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

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

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

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

(Except as otherwise indicated)

Expressed in thousands of NTD

Percentage of total Notes/accounts receivable(payable) Differences in transaction terms compared to third party transactions(Note 1)

				Percentage of					total notes/accounts	
	Relationship with the	Purchase		total purchase					receivable	
Counterparty	counterparty	(sales)	Amount	(sales)	Credit term	Unit price	Credit term	Balance	(payable)	Footnote
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%	
miconductor Co., Ltd	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%	
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%	
Greatek Electronics Inc.	Other related parties	Purchase	887,456	2%	Approximately the same with third party transactions	Approximately the same with third party transactions	Approximately ( the same with third party transactions	228,279)	4%	
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.

Receivable from related parties reaching NT\$100 million 0r 20% of paid-in capital or more

December 31, 2018

Expressed in thousands of NTD (Except as otherwise indicated)

Table 6

				ı	Overdue	Overdue receivables	Amount collected	
		Relationship with	Relationship with Balance as at December				subsequent to the	Allowance for
Creditor	Counterparty	the counterparty	31, 2018	Turnover rate	Amount	Action taken	balance sheet date doubtful accounts	doubtful accounts
Realtek Semiconductor Corporation G.M.I Technology Inc.	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.	G.M.I Technology Inc.	Other related parties	738,018	7.82	1		494,477	1,479

Significant inter-company transactions during the reporting periods

Expressed in thousands of NTD (Except as otherwise indicated)

Table 7

Year ended December 31, 2018

Significa	Significant inter-company transactions during the reporting periods:	oeriods:			Tran	(Exc) Transaction	(Except as otherwise indicated)
Number			Relationship				Percentage of consolidated total
(Note 1)	Company name	Counterparty	(Note 2)	General ledger account	Amount	Transaction terms	total assets (Note 3)
0	Realtek Semiconductor Corporation	Leading Enterprises Limited		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	n a a a a a a a a a a a a a a a a a a a	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	II.	Realtek Semiconductor (Japan) Corp.	8	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.	თ	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	J)	Realtek Semiconductor (Shen Zhen) Corp.	3	Other payables	11,236	11	0.02%
4	"	Cortina Access, Inc.	3	Technical service fees	216,550	"	0.47%

Significant inter-company transactions during the reporting periods

Year ended December 31, 2018

Significant inter-company transactions during the reporting periods:

Table 7

Expressed in thousands of NTD (Except as otherwise indicated)

Transaction

Percentage of consolidated total operating revenues or total assets (Note 3)	0.03%	0.24%	0.04%	0.16%	0.01%	%60.0	0.11%	0.02%	1.27%
Peroconso conso operatir total as									
Transaction terms	No similar transaction can be compared with. Transaction 19,128 prices and terms are determined in accordance with mutual agreement.	"	"	"	"	"	11	Fund lending is in accordance with loan agreement terms.	11
Amount	\$ 19,128	108,117	162,791	71,868	006,9	000°09	50,000	10,045	739,129
General ledger account	Other payables	Technical service fees	Other payables	Technical service fees	Other payables	Other receivables	Gain on disposal of assets	Interest revenue	Other receivables
Relationship (Note 2)	က	3	3	3	3	3	3	3	3
Counterparty	Cortina Access, Inc.	Cortina Network Systems Shanghai Co. Ltd.	Cortina Network Systems Shanghai Co. Ltd.	Cortina Systems Taiwan Limited	Cortina Systems Taiwan Limited	RayMX Microelectronics Corp.	RayMX Microelectronics Corp.	Leading Enterprises Limited	Realtek Singapore Private Limited
Сотрапу пате	Realtek Singapore Private Limited	"	"	"	"	"	11	Cortina Access, Inc.	Realtek Investment Singapore Private Limited
Number (Note 1)	4	4	4	4	4	4	4	5	9

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

<sup>(1)</sup> Parent company is '0'.

<sup>(2)</sup> 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.)

<sup>(1)</sup> Parent company to subsidiary. (2) Subsidiary to parent company.

<sup>(3)</sup> 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.

Information on investees

Year ended December 31, 2018

Expressed in thousands of NTD (Except as otherwise indicated)

Sub-Subsidiar Sub-Subsidiar Subsidiary Footnote Note 1 Note 1 Note 1 ended December 31, 2018 80,419 88,525 (216,662 166,254 6,793 6,315 11,775) 25 9,765) 427) Investment income (loss) 564,881 3,392,035 Company for the year recognised by the 80,419 299,912) 6,793 6,315 11,775) 46 5,410) 59,883) 1,088 of the investee for the 564,881 88,525 281 3,392,035 166,254 December 31, 2018 Net profit (loss) year ended 3,195,092 437,910 374,178 348,721 5,563 19,214 36,917 40,682 16,106 2,375 7,750,098 3,440,632 2,916,363 6,427,012 10,903,503 Book value Shares held as at December 31, 2018 Number of shares Ownership (%) %19.99 20.15% 24.42% 100% 0001 100% 89.03% 100%100%%00 I 100%100%100% %001 32.43% 100% 39,130 41,432 500,000 1,918,910 400 64,800,000 80,000,000 110,050,000 200,000,000 28,000,000 25,000,000 29,392,985 5,969,298 4,000,000 114,100,000 4,669,91 250,000 293,930 20,000 46,699 5,299 1,934,150 2,387,840 280,000 5,000 84,565 110,000 14,877,139 4,698,512 3,284,772 3,405,657 5,969,600 December 31, Balance as at 2017 Initial investment amount 2,458,640 5,568 4,837,812 280,000 250,000 293,930 5,000 20,000 84,565 46,699 .991,498 3,382,167 110,000 15,318,249 3,506,635 6,146,600 Balance as at December 31, 2018 ICs manufacturing, design, research, development, sales, and marketing ICs manufacturing, design, research, computer equipment and wholesasle, Research and development, design, manufacturing, sales and other Research and development, design, manufacturing, sales and other development, sales, and marketing Manufacturing and installation of components, information/Software components, information/Software Venture capital activities ICs deign, sales, and consultancy retail and related services of Main business electronic materials and and integrated circuits. and integrated circuits. services of electronic services of electronic nformation/software Investment holdings nvestment holdings nvestment holdings nvestment holdings nvestment holdings nvestment holdings Investment holdings nvestment holdings British Virgin Islands 3ritish Virgin Location ingapore ngapore Sayman slands Sayman slands [aiwan Caiwan slands **Faiwan** Taiwan **Faiwan** Japan Realsun Technology Corporatioin Innorich Venture Capital Corp. Realtek Semiconductor (Japan) Realtek Investment Singapore Private Limited Realsun Investments Co., Ltd. Hung-wei Venture Capital Co., echnology Partner V Venture e Capital Corp. Realking Investments Limited 5VT echnologies, Taiwan Ltd. eading Enterprises Limited alent Eagle Enterprise Inc. ealtek Singapore Private Capital Corporation Estinet Technologies Amber Universal Inc. Circon Universal Inc. Bluocean Inc. ncorporation Bobitag Inc. imited Jorp. Ľť. Leading Enterprises Limited eading Enterprises Limited Corporation Lealtek Semiconductor ealtek Semiconductor ealtek Semiconductor Corporation Realtek Semiconductor ealtek Semiconductor Realtek Semiconductor Corporation ealtek Semiconductor cealtek Semiconductor Orporation Investor rporation orporation rporation rporation rporation rporation rporation orporation

Information on investees

Year ended December 31, 2018

Table 8

Expressed in thousands of NTD (Except as otherwise indicated)

- Sub-Subsidiary Sub-Subsidiary Sub-Subsidiary Sub-Subsidiary Sub-Subsidiary Sub-Subsidiary Sub-Subsidiary Footnote ended December 31, 2018 Investment income (loss) Company for the year recognised by the 23,566 1,000)of the investee for the December 31, 2018 24) 145,372 382,396) Net profit (loss) year ended 28,592 23,538 1,127,172 1,201 1,407,954 62,379 Book value Shares held as at December 31, 2018 Number of shares Ownership (% 10.97% 100% 100% 100% 100% 100% 100% 1,000,000 9,856,425 26,000,000 2,825,000 16,892 21,130,000 417,872 843,206 1,246,801 5,728 1,219,172 969,65 Balance as at December 31, 2017 Initial investment amount 1,283,769 1,255,320 30,733 Balance as at December 31, 5,886 61,466 850,667 868,207 2018 ICs manufacturing, design, research, development, sales, and marketing Information services and technical R&D and information services R&D and information services R&D and technical support R&D and technical support Main business activities Investment holdings upport Location Singapore Hong Kong Mauritius Vietnam Taiwan U.S.A N.S.A Cortina Systems Taiwan Limited Limited Realtek Semiconductor (HK) Limited Realtek Viet Nam Co., Ltd. Realtek Singapore Private Empsonic Enterprises Inc. Ubilinx Technology Inc. Investee Cortina Access Inc. eading Enterprises Limited Falent Eagle Enterprise Inc. imited ealtek Singapore Private ealtek Singapore Private ealtek Singapore Private ealtek Singapore Private Amber Universal Inc. Investor mited

Note 1: Investee

Information on investments in Mainland China

Year ended December 31, 2018

Table 9

Amount remitted from

Expressed in thousands of NTD (Except as otherwise indicated)

Footnote as of December Taiwan as of December 31, income remitted back to amount of investment Accumulated 2018 Mainland China Book value of 105,384 240,899 116,391 investment in 1,403,037 31,2018 1,130) 9,073 Investment income (loss) 18,565 151,804 ended December 31, Company for the year recognised by the (Note2(2)C) 2018 100% \$ 100% ( investee for Ownership held Mainland China the year ended by the Company 100% 100% (direct or indirect) 1,130) remittance from Net income of as of December December 31, 9,073 18,565 151,804 2018 - \$ 110,639 \$ 117,501 153,665 860,524 Taiwan to Accumulated amount of 31, 2018 year ended December 31, China/Amount remitted Remitted to Remitted back to back to Taiwan for the Taiwan Taiwan to Mainland 2018 Mainland 117,501 China remittance from Taiwan to 110,639 153,665 860,524 Accumulated amount of Mainland China as of January 1, 2018 Mainland China Commission of imposed by the investments in Ceiling on Investment Investment method (Note1) 860,524 Commission of the 153,665 117,501 Investment amount Economic Affairs approved by the Paid-in Capital Investment Ministry of R&D and technical support \$ of remittance from Taiwan Realsil Microelectronics R&D and technical support R&D and technical support Main business activities ICs manufacturing, design, Accumulated amount research, development, sales, and marketing China as of to Mainland Realtek Semiconductor Investee in Mainland Microelectronics Corp. Systems Shanghai Co. (Shen Zhen) Corp. Cortina Network China RayMX

153,665

153,665

860,524

860,524

Realsil Microlectronics Realtek Semiconductor

(Shan Zhen) Corp.

Systems Shanghai Co., Company name

Cortina Network

\$ 14,788,140

110,639

S

110,639

MOEA

(MOEA)

December 31, 2018

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

Сотр. Ľā.

Note 1: Investment methods are classified into the following three categories; fill in the number of category each case belongs to: 117,501 117,501 Microelectronics Corp. RayMX

<sup>(2)</sup> Through investing in an existing company in the third area, which then invested in the investee in Mainland China. (1) Directly invest in a company in Mainland China.

<sup>(3)</sup> Others.

<sup>(1)</sup> It should be indicated if the investee was still in the incorporation arrangements and had not yet any profit during this period. Note 2: In the 'Investment income (loss) recognised by the Company for the year ended December 31, 2018' column:

A. The financial statements that are audited and attested by international accounting firm which has cooperative relationship with accounting firm in R.O.C. (2) Indicate the basis for investment income (loss) recognition in the number of one of the following three categories: B. The financial statements that are audited and attested by R.O.C. parent company's CPA.

C. Others. (Seif-edit financial statements)

# Significant transactions conducted with investees in Mainland China directly or indirectly through other companies in the third areas

Year ended December 31, 2018

Expressed in thousands of NTD (Except as otherwise indicated) Others Interest during December 31, the year ended 2018 Interest rate Balance at December 31, 2018 December year ended Maximum during the balance 31, 2018 endorsements/guarantees or Purpose Provision of collaterals Balance at December 31, 2018 Accounts receivable 0.11 0.03 0.02 % (payable) 11,236 19,128 Balance at December \$ 58,171 31, 2018 Property transaction % Amount 270,803 108,117 1,395,502 Technical service fees Amount Realsil Microelectronics Corp. \$ Realtek Semicomductor (Shen Investee in Mainland China Cortina Network Systems Shanghai Co., Ltd. Zhen) Corp. Table 10

1,319,937 Operations

0.18

100,000

0.22

100,000

RayMX Microelectronics

# 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, T	Гаiwan
March 21, 2019	

The accompanying parent company only financial statements are not intended to present the financial position and results

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)

	Aggeta	Notes		December 31, 2018 AMOUNT	%		December 31, 2017 AMOUNT	%
	Assets Current assets	Notes		AMOUNT			AMOUNT	
1100	Cash and cash equivalents	6(1)	\$	1,553,365	3	\$	735,254	1
1110	Financial assets at fair value	0(1)	Ф	1,333,303	3	Ф	733,234	1
1110	through profit or loss - current			29,061				
1136	Financial assets at amortised cost -	Q		29,001	-		-	-
1130	current	. 0		61,401				
1170		6(2)			- 0		2 780 022	-
1170	Accounts receivable, net	6(2) and 7(2)		4,307,547	8		2,789,923	6
1180	Accounts receivable, net - related	6(2) and 7(3)		1 022 702	2		0.41 026	2
1200	parties			1,033,782	2		941,236	2
1200	Other receivables	7		42,641	-		18,735	-
1210	Other receivables - related parties			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		<del>-</del>			91,655	
11XX	Total current assets			13,962,708	26		12,587,447	25
	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	6(4)						
	equity method			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			40,030,148	74		37,925,292	75
1XXX	Total assets		\$	53,992,856	100	\$	50,512,739	100

(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, 201	8 %	December 31, 2017 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	-	-	-
Notes payable		8,657	-	8,631	-
2170 Accounts payable		3,793,276	7	3,783,139	7
2180 Accounts payable - related parties	s 7	228,279	-	282,667	1
Other payables	6(8)	6,867,842	13	5,624,505	11
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		 28,733,410	53	28,199,217	56
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		 622,154	1	464,004	1
2XXX Total Liabilities		 29,355,564	54	28,663,221	57
Equity					
Share capital	6(11)				
Common shares		5,080,955	10	5,065,062	10
Capital surplus	6(12)				
3200 Capital surplus		3,236,659	6	3,558,856	7
Retained earnings	6(13)				
3310 Legal reserve		4,467,099	8	4,127,884	8
3320 Special reserve		600,443	1	-	-
Undistributed earnings		10,850,172	20	9,698,159	19
Other equity	6(14)				
3400 Other equity interest		 401,964	1	(600,443)(	1)
3XXX Total equity		 24,637,292	46	21,849,518	43
3X2X Total liabilities and equity		\$ 53,992,856	100	\$ 50,512,739	100

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)

	T	NI ·		2018	0/		2017		
4000	Items Operating revenue	Notes 6(15) and 7	\$	AMOUNT 32,194,291	100	\$	AMOUNT 30,043,540		100
5000	Operating revenue Operating costs	6(3) and 7	φ.	32,194,291 18,906,196) (	59)	φ (	17,875,296)	(	59)
5900	Gross profit	0(3)	(	13,288,095		·	12,168,244		41
3700	Operating expenses	6(19)(20) and 7		13,200,073	71		12,100,244		-71
6100	Selling expenses	( )( )	(	1,646,985) (	5)	(	1,514,098)	(	5)
6200	General and administrative expenses		(	991,577) (	3)	(	866,053)	(	3)
6300	Research and development expenses		(	9,955,350) (	31)	(	8,889,291)	(	30)
6450	Expected credit gains	12(2)	,——	5,803	201	,—	11 0(0 440)	,—	- 20
6000 6900	Total operating expenses Operating income		(	12,588,109) (_ 699,986	39) 2	(	11,269,442) 898,802	(	38)
0900	Non-operating income and expenses			099,980	<u>Z</u>		090,002		
7010	Other income	6(16) and 7		112,353	1		107,449		_
7020	Other gains and losses	6(17)	(	1,992)	-	(	431,101)	(	1)
7050	Finance costs	6(18)	(	140,170)	-	(	147,941)	(	1)
7070	Share of profit of associates and joint	6(4)							
	ventures accounted for using equity			2 060 501	1.0		2 174 044		1.1
7000	method, net  Total non-operating income and			3,968,591	12	-	3,174,944		11
7000	expenses			3,938,782	13		2,703,351		Q
7900	Profit before income tax, net			4,638,768	15	-	3,602,153		12
7950	Income tax expense	6(21)	(	288,000) (	1)	(	210,000)	(	1)
8200	Net income for the year		\$	4,350,768	14	\$	3,392,153		11
	Other comprehensive income	6(14)							
	Components of other comprehensive								
	income that will not be reclassified to								
8311	profit or loss								
8311	Losses on remeasurements of defined benefit plans		(\$	75,809)		\$			
8316	Unrealised losses from investments		(φ)	73,009)	-	φ	-		-
	in equity instruments measured at fair								
	value through other comprehensive								
	income		(	138)	-		-		-
8330	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		(	163,544) (	1)		-		-
	_		(	239,491) (	1)		-		
	Components of other comprehensive								
	income that will be reclassified to								
8362	profit or loss Other comprehensive income, before								
8302	tax, available-for-sale financial assets			_	_	(	3,247)		_
8380	Share of other comprehensive					(	3,277)		
	income of associates and joint								
	ventures accounted for using equity								
	method, components of other								
	comprehensive income that will be			942.974	2	,	1.998.745)	,	۷.
8360	reclassified to profit or loss  Components of other			942,974		(	1,998,745)		<u> </u>
0500	comprehensive income that will								
	be reclassified to profit or loss			942,974	3	(	2,001,992)	(	6)
8300	Other comprehensive income (loss)				,	-			
	for the year		\$	703,483	2	(	2,001,992)	(	<u>6</u> )
8500	Total comprehensive income for the				_	_			-
	year		\$	5,054,251	16	\$	1,390,161		5
	E . D.C. C. LU.	((22)							
9750	Earnings Per Share (in dollars) Basic earnings per share	6(22)	4		Q 57	¢		_	6 71
9850	Diluted earnings per share		\$		8.57	\$			6.71
2020	Duuteu earnings per snare		Ф		8.40	Ф		(	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)

					Retained earnings			Other equity interest		
	Notes	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	Total equity
2017 Balance at January 1, 2017		\$ 5.049.513	\$ 3.910.428	\$ 3.823.896		\$ 8.629.799	\$ 1,298,139	<del>⊊</del>	\$ 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			1	1		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
<u>2018</u>										
Balance at January 1, 2018		\$ 5,065,062	\$ 3,558,856	\$ 4,127,884	· <del>\$</del>	\$ 9,698,159	(\$ 813,163)	· <del>\$</del>	\$ 212,720	\$ 21,849,518
Modified retrospective approach adjustment	6(14)	1	'	'	'	103,142	1	435,835	( 212,720 )	326,257
Balance at January 1, after adjustments		5,065,062	3,558,856	4,127,884		9,801,301	( 813,163 )	435,835		22,175,775
Net income for the year		1	1	,	1	4,350,768	1	1	•	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 eamings										
Legal reserve		•	1	339,215	1	( 339,215)		•	•	•
Special reserve		•	1	•	600,443	( 600,443)	1	•	•	•
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	'	1	'	1	'	'	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
CASH FLOWS FROM OPERATING ACTIVITIES				
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	6(17)			
loss			11,283	-
Share of loss of associates and joint ventures	6(4)			
accounted for using equity method		(	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			4,636,899		1,971,741
CASH FLOWS FROM INVESTING ACTIVITIES					
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	6(4)				
accounted for using the equity method			-		14,923
Acquisition of cash dividends from investments	7				
accounted for using equity method			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			<u>-</u>	(	36,240)
Net cash flows from (used in) investing					
activities			2,502,153	(	6,432,748)
CASH FLOWS FROM FINANCING ACTIVITIES					
(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		<u> </u>
Net cash flows (used in) from financing					
activities		(	6,320,941)		332,006
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		\$	1,553,365	\$	735,254

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. HISTORYAND 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:

New Standards, Interpretations and Amendments	Effective date by International Accounting Standards Board
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

	Effective date by
	International
	Accounting
New Standards, Interpretations and Amendments	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,	January 1, 2017
'Disclosure of interests in other entities' 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

	Effect of						
	20	17 version	ac	doption of	20	18 version	
Affected items	IFI	RSs amount	nev	w standards	IFI	RSs amount	<u>Remark</u>
<u>January 1, 2018</u>							
Accounts receivable-allowance							:(:)
for sales returns and discounts	( <u>\$</u>	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	( <u>\$</u>	89,223)	( <u>\$</u>	2,184,707)	( <u>\$</u>	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:

	Effective date by
	International Accounting
New Standards, Interpretations and Amendments	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:

	Effective date by
	International Accounting
New Standards, Interpretations and Amendments	Standards Board
Amendments to IAS 1 and IAS 8, 'Disclosure Initiative-Definition of	January 1, 2020
Material'	
Amendments to IFRS 3, 'Definition of a business'	January 1, 2020
Amendments to IFRS 10 and IAS 28, 'Sale or contribution of assets	To be determined by
between an investor and its associate or joint venture'	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. <u>SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES</u>

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 consistencywith 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 -  $10\sim55$  years and other fixed assets -  $3\sim5$  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) <u>Intangible assets</u>

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) <u>Derecognition of financial liabilities</u>

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. <u>CRITICAL ACCOUNTING JUDGEMENTS</u>, <u>ESTIMATES AND KEY SOURCES OF</u> 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) <u>Critical judgements in applying the Company's accounting policies</u> 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

	 December 31, 2018	 December 31, 2017
Cash on hand and revolving funds	\$ 1,554	\$ 1,554
Checking accounts and demand deposits	 1,551,811	 733,700
Total	\$ 1,553,365	\$ 735,254

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

	Dece	mber 31, 2018	December 31, 2017		
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)	
	\$	5,341,329	\$	3,731,159	

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

	Dece	mber 31, 2018	December 31, 201		
	Acco	unts receivable	Acco	unts receivable	
Not past due	\$	5,386,539	\$	5,915,588	
Up to 30 days		8,743	60,034		
Over 180 days		36		36	
	\$	5,395,318	\$	5,975,658	

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) <u>Inventories</u>

		Dece	ember 31, 2018	
		A	llowance for	
		obso	olescence and	
	 Cost	marke	et value decline	 Book value
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	\$ 4,679,626	( <u>\$</u>	582,979)	\$ 4,096,647
		Dece	ember 31, 2017	
		A	llowance for	
		obso	olescence and	
	 Cost	marke	et value decline	 Book value
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	\$ 4,805,073	( <u>\$</u>	480,653)	\$ 4,324,420

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

		Years ended	Dece	ember 31,
	· ·	2018		2017
Cost of inventories sold and others Loss on market value decline and obsolete	\$	18,601,009	\$	17,564,700
and slow-moving inventories		102,326		177,627
Loss on scrap inventory		202,861		132,969
	\$	18,906,196	\$	17,875,296
(4) <u>Investments accounted for using the equity method</u>				
	]	December 31, 2018	D	ecember 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 Corporatioin		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
	\$	35,911,991	\$	33,631,364

#### 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

	Buil	dings	Machinery	Tes	st equipment	Office equ	iipment		Others		Total
At January 1, 2018											
Cost	\$ 2,5	518,099	3,576,741	\$	1,487,712	\$ 1	55,991	\$	663,079	\$	8,401,622
Accumulated											
depreciation and											
impairment	(7	776,967) (	3,351,878)	(	1,032,998)	(	98,600)	(	461,724)	(	5,722,167)
	\$ 1,7	741,132	224,863	\$	454,714	\$	57,391	\$	201,355	\$	2,679,455
2018											
Opening net book	<b>6</b> 1.5	7.4.1.1.0.0	224.062	Φ.	454514	Φ	55.201	Φ	201 255	Φ	2 (70 455
amount	\$ 1,7	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	( 1	101,292) (	84,100)	(	219,983)	(	18,408)	(	46,266)	(	470,049)
Closing net book				`		`		`		`	
amount	\$ 1,6	596,485	258,128	\$	649,364	\$	71,627	\$	188,152	\$	2,863,756
At December 31, 2018											
Cost	\$ 2.5	574,744	3,694,106	\$	1,899,377	\$ 1	88,464	\$	696,142	\$	9,052,833
Accumulated	Ψ 2,5	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3,071,100	Ψ	1,077,577	Ψ 1	00,101	Ψ	070,112	Ψ	7,032,033
depreciation and											
impairment	( 8	378,259) (	3,435,978)	(	1,250,013)	( 1	16,837)	(	507,990)	(	6,189,077)
шришен	\$ 1.6	696,485	5 258,128	\$	649,364	\$	71,627	\$	188,152	\$	2,863,756
		<del></del>		_						÷	
	Buil	aings	Machinery	res	t equipment	Office equ	upment	_	Others		Total
<u>At January 1, 2017</u>	Buil	aings	Machinery	res	st equipment	Office equ	<u>iipment</u>		Others		Total
At January 1, 2017 Cost		518,099 S		\$	1,294,771		39,523		577,046	\$	8,080,018
Cost Accumulated										\$	
Cost	\$ 2,5	518,099	3,550,579	\$	1,294,771	\$ 1	39,523		577,046	•	8,080,018
Cost Accumulated	\$ 2,5	518,099 \$		\$	1,294,771 845,291)	\$ 1	39,523 83,167)	\$ (	577,046 421,266)	•	8,080,018 5,379,687)
Cost Accumulated depreciation and	\$ 2,5	518,099	3,350,895)	\$	1,294,771	\$ 1	39,523	\$ (	577,046	•	8,080,018
Cost Accumulated depreciation and	\$ 2,5	518,099 \$	3,350,895)	\$ (	1,294,771 845,291)	\$ 1	39,523 83,167)	\$ (	577,046 421,266)	· (	8,080,018 5,379,687)
Cost Accumulated depreciation and impairment	\$ 2,5 ( <u>6</u> \$ 1,8	518,099 \$ 579,068) ( 339,031 \$	3,350,895) 3,199,684	\$ ( <u>\$</u>	1,294,771 845,291) 449,480	\$ 1 (	39,523 <u>83,167</u> ) <u>56,356</u>	\$ ( <u>\$</u>	577,046 <u>421,266</u> ) <u>155,780</u>	( <u>\$</u>	8,080,018 5,379,687) 2,700,331
Cost Accumulated depreciation and impairment	\$ 2,5 ( <u>6</u> \$ 1,8	518,099 \$	3,350,895) 3,350,895) 3,99,684	\$ (	1,294,771  845,291)  449,480  449,480	\$ 1 (	39,523 <u>83,167</u> ) <u>56,356</u> 56,356	\$ ( <u>\$</u>	577,046 421,266) 155,780 155,780	· (	8,080,018 5,379,687)
Cost Accumulated depreciation and impairment  2017 Opening net book	\$ 2,5 ( <u>6</u> \$ 1,8	518,099 \$ 579,068) ( 339,031 \$	3,350,895) 3,350,895) 3 199,684 99,351	\$ ( <u>\$</u>	1,294,771  845,291)  449,480  449,480  194,819	\$ 1 (	39,523 <u>83,167</u> ) <u>56,356</u>	\$ ( <u>\$</u>	577,046 <u>421,266)</u> <u>155,780</u> 155,780 91,081	( <u>\$</u>	8,080,018 5,379,687) 2,700,331
Cost Accumulated depreciation and impairment  2017 Opening net book amount	\$ 2,5 ( <u>6</u> \$ 1,8 \$ 1,8	518,099 \$ 579,068) ( 339,031 \$ 339,031 \$	3,350,895) 3,350,895) 6 199,684 99,351 5,058	\$ ( <u>\$</u> \$	1,294,771  845,291)  449,480  449,480  194,819 10)	\$ 1 (	39,523 83,167) 56,356 56,356 16,468	\$ ( <u>\$</u> \$	577,046 421,266) 155,780 155,780 91,081 5,048)	( <u>\$</u>	8,080,018 5,379,687) 2,700,331 2,700,331 401,719
Cost Accumulated depreciation and impairment  2017 Opening net book amount Additions Reclassifications Depreciation	\$ 2,5 ( <u>6</u> \$ 1,8 \$ 1,8	518,099 \$ 579,068) ( 339,031 \$	3,350,895) 3,350,895) 3 199,684 99,351	\$ ( <u>\$</u> \$	1,294,771  845,291)  449,480  449,480  194,819	\$ 1 (	39,523 83,167) 56,356 56,356 16,468	\$ ( <u>\$</u> \$	577,046 <u>421,266)</u> <u>155,780</u> 155,780 91,081	( <u>\$</u>	8,080,018 5,379,687) 2,700,331 2,700,331
Cost Accumulated depreciation and impairment  2017 Opening net book amount Additions Reclassifications	\$ 2,5 ( <u>6</u> <u>\$ 1,8</u> \$ 1,8	518,099 \$ 579,068) ( 339,031 \$ 339,031 \$ - 97,899) (	3,350,895) 3,350,895) 6 199,684 99,351 5,058 79,230)	\$ \$ (	1,294,771  845,291)  449,480  449,480  194,819  10) 189,575)	\$ 1 (	39,523 83,167) 56,356 56,356 16,468 - 15,433)	\$ \$ (	577,046 421,266) 155,780 155,780 91,081 5,048) 40,458)	( <u>\$</u>	8,080,018 5,379,687) 2,700,331 2,700,331 401,719 - 422,595)
Cost Accumulated depreciation and impairment  2017 Opening net book amount Additions Reclassifications Depreciation	\$ 2,5 ( <u>6</u> <u>\$ 1,8</u> \$ 1,8	518,099 \$ 579,068) ( 339,031 \$ 339,031 \$	3,350,895) 3,350,895) 6 199,684 99,351 5,058 79,230)	\$ ( <u>\$</u> \$	1,294,771  845,291)  449,480  449,480  194,819 10)	\$ 1 (	39,523 83,167) 56,356 56,356 16,468	\$ \$ (	577,046 421,266) 155,780 155,780 91,081 5,048)	( <u>\$</u>	8,080,018 5,379,687) 2,700,331 2,700,331 401,719
Cost Accumulated depreciation and impairment  2017 Opening net book amount Additions Reclassifications Depreciation Closing net book	\$ 2,5 ( <u>6</u> <u>\$ 1,8</u> \$ 1,8	518,099 \$ 579,068) ( 339,031 \$ 339,031 \$ - 97,899) (	3,350,895) 3,350,895) 6 199,684 99,351 5,058 79,230)	\$ \$ (	1,294,771  845,291)  449,480  449,480  194,819  10) 189,575)	\$ 1 (	39,523 83,167) 56,356 56,356 16,468 - 15,433)	\$ \$ (	577,046 421,266) 155,780 155,780 91,081 5,048) 40,458)	( <u>\$</u>	8,080,018 5,379,687) 2,700,331 2,700,331 401,719 - 422,595)
Cost Accumulated depreciation and impairment  2017 Opening net book amount Additions Reclassifications Depreciation Closing net book amount	\$ 2,5 ( <u>6</u> \$ 1,8 \$ 1,8 ( <u>\$ 1,7</u>	518,099 \$ 579,068) ( 339,031 \$ 339,031 \$ - 97,899) (	3,350,895) 3,350,895) 5 199,684 99,351 5,058 79,230) 6 224,863	\$ \$ (	1,294,771  845,291)  449,480  449,480  194,819  10) 189,575)	\$ 1 (	39,523 83,167) 56,356 56,356 16,468 - 15,433)	\$ \$ \$ (	577,046 421,266) 155,780 155,780 91,081 5,048) 40,458)	( <u>\$</u>	8,080,018 5,379,687) 2,700,331 2,700,331 401,719 - 422,595)
Cost Accumulated depreciation and impairment  2017 Opening net book amount Additions Reclassifications Depreciation Closing net book amount At December 31, 2017	\$ 2,5 ( <u>6</u> \$ 1,8 \$ 1,8 ( <u>\$ 1,7</u>	518,099 \$ 579,068) ( 339,031 \$ 339,031 \$	3,350,895) 3,350,895) 5 199,684 99,351 5,058 79,230) 6 224,863	\$ ( <u>\$</u>	1,294,771  845,291)  449,480  449,480  194,819  10)  189,575)  454,714	\$ 1 (	39,523 83,167) 56,356 56,356 16,468 - 15,433) 57,391	\$ \$ \$ (	577,046 421,266) 155,780 155,780 91,081 5,048) 40,458) 201,355	\$ \$ \$	8,080,018 5,379,687) 2,700,331 2,700,331 401,719 422,595) 2,679,455
Cost Accumulated depreciation and impairment  2017 Opening net book amount Additions Reclassifications Depreciation Closing net book amount At December 31, 2017 Cost	\$ 2,5 ( 6 \$ 1,8 \$ 1,8 (	518,099 \$ 579,068) ( 339,031 \$ 339,031 \$	3,350,895) 3,350,895) 5 199,684 99,351 5,058 79,230) 6 224,863	\$ ( <u>\$</u>	1,294,771  845,291)  449,480  449,480  194,819  10)  189,575)  454,714  1,487,712	\$ 1 (	39,523 83,167) 56,356 56,356 16,468 - 15,433) 57,391	\$ \$ \$ (	577,046 421,266) 155,780 155,780 91,081 5,048) 40,458) 201,355	\$ \$ \$	8,080,018 5,379,687) 2,700,331 2,700,331 401,719 422,595) 2,679,455 8,401,622
Cost Accumulated depreciation and impairment  2017 Opening net book amount Additions Reclassifications Depreciation Closing net book amount At December 31, 2017 Cost Accumulated	\$ 2,5 ( 6 \$ 1,8 \$ 1,8 (	518,099 \$ 579,068) ( 339,031 \$ 339,031 \$	3,350,895) 3,350,895) 5 199,684 99,351 5,058 79,230) 6 224,863	\$ (	1,294,771  845,291)  449,480  449,480  194,819  10)  189,575)  454,714	\$ 1 (	39,523 <u>83,167</u> ) <u>56,356</u> 56,356 16,468 - 15,433) <u>57,391</u> 55,991 <u>98,600</u> )	\$ (	577,046 421,266) 155,780 155,780 91,081 5,048) 40,458) 201,355 663,079 461,724)	\$ \$ \$ (	8,080,018 5,379,687) 2,700,331 2,700,331 401,719 422,595) 2,679,455
Cost Accumulated depreciation and impairment  2017 Opening net book amount Additions Reclassifications Depreciation Closing net book amount At December 31, 2017 Cost Accumulated depreciation and	\$ 2,5 ( 6 \$ 1,8 \$ 1,8 (	518,099 \$ 579,068) ( 339,031 \$ 339,031 \$	3,350,895) 3,350,895) 3,99,684 99,351 5,058 79,230) 6 224,863 6 3,576,741 3,351,878)	\$ (	1,294,771  845,291)  449,480  449,480  194,819  10)  189,575)  454,714  1,487,712	\$ 1 (	39,523 83,167) 56,356 56,356 16,468 - 15,433) 57,391 55,991	\$ (	577,046 421,266) 155,780 155,780 91,081 5,048) 40,458) 201,355 663,079	\$ \$ \$	8,080,018 5,379,687) 2,700,331 2,700,331 401,719 422,595) 2,679,455 8,401,622

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

# (6) Intangible assets

		Computer software		Intellectual property		Others		Total
At January 1, 2018								
Cost Accumulated amortisation	\$	2,759,363	\$	3,558,380	\$	11,909	\$	6,329,652
and impairment	(	2,229,775)	(	2,604,330)		_	(	4,834,105)
	\$	529,588	\$	954,050	\$	11,909	\$	1,495,547
<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	\$	495,525	\$	661,476	\$	3,548	\$	1,160,549
<u>At December 31, 2018</u>								
Cost	\$	3,220,861	\$	3,713,979	\$	3,548	\$	6,938,388
Accumulated amortisation	(	2.725.226	,	2.052.502)			(	5 777 920)
and impairment	(	2,725,336)	<u>_</u>	3,052,503)			(	5,777,839)
	\$	495,525	\$	661,476	\$	3,548	\$	1,160,549
		Computer		Intellectual				
		Computer software		Intellectual property		Others		Total
At January 1, 2017		•				Others		Total
Cost	\$	•	\$		\$	Others 28,016	\$	Total 5,431,602
Cost Accumulated amortisation	<b>\$</b>	software 2,327,690	•	3,075,896	\$		<b>\$</b>	5,431,602
Cost	(	2,327,690 1,729,105)	· (	3,075,896 2,097,813)		28,016	(	5,431,602 3,826,918)
Cost Accumulated amortisation	\$ ( <u>\$</u>	software 2,327,690	•	3,075,896	\$		\$ ( <u>\$</u>	5,431,602
Cost Accumulated amortisation and impairment	( <u> </u>	2,327,690 1,729,105) 598,585	· (	3,075,896 2,097,813) 978,083		28,016 - 28,016	(	5,431,602 3,826,918) 1,604,684
Cost Accumulated amortisation and impairment	(	2,327,690 1,729,105) 598,585 598,585	( <u>\$</u>	3,075,896 2,097,813) 978,083	\$	28,016	( <u>\$</u>	5,431,602 3,826,918) 1,604,684
Cost Accumulated amortisation and impairment  2017 Opening net book amount	( <u> </u>	2,327,690 1,729,105) 598,585	( <u>\$</u>	3,075,896 2,097,813) 978,083 978,083 482,484	\$	28,016 - 28,016	( <u>\$</u>	5,431,602 3,826,918) 1,604,684
Cost Accumulated amortisation and impairment  2017 Opening net book amount Additions	( <u> </u>	2,327,690 1,729,105) 598,585 598,585	( <u>\$</u>	3,075,896 2,097,813) 978,083 978,083 482,484	<u>\$</u>	28,016 - 28,016 28,016 2,096	( <u>\$</u>	5,431,602 3,826,918) 1,604,684 1,604,684 916,253
Cost Accumulated amortisation and impairment  2017 Opening net book amount Additions Transfers	( <u> </u>	2,327,690 1,729,105) 598,585 598,585 431,673	( <u>\$</u>	978,083 482,484	<u>\$</u>	28,016 - 28,016 28,016 2,096 18,203)	( <u>\$</u>	5,431,602 3,826,918) 1,604,684 1,604,684 916,253 18,203)
Cost Accumulated amortisation and impairment  2017 Opening net book amount Additions Transfers Amortisation Closing net book amount	\$	2,327,690 1,729,105) 598,585 598,585 431,673 500,670)	\$ \$ (	978,083 482,484 506,517)	\$ \$ (	28,016 - 28,016 28,016 2,096 18,203)	\$ \$ (	5,431,602 3,826,918) 1,604,684 1,604,684 916,253 18,203) 1,007,187)
Cost Accumulated amortisation and impairment  2017 Opening net book amount Additions Transfers Amortisation Closing net book amount At December 31, 2017	\$ \$ (	2,327,690 1,729,105) 598,585 598,585 431,673 500,670) 529,588	\$ \$ (	978,083 482,484 506,517) 954,050	\$ \$ ( <u>\$</u>	28,016 	\$ \$ ( (	5,431,602 3,826,918) 1,604,684 1,604,684 916,253 18,203) 1,007,187) 1,495,547
Cost Accumulated amortisation and impairment  2017 Opening net book amount Additions Transfers Amortisation Closing net book amount	\$	2,327,690 1,729,105) 598,585 598,585 431,673 500,670)	\$ \$ (	978,083 482,484 506,517)	\$ \$ (	28,016 - 28,016 28,016 2,096 18,203)	\$ \$ (	5,431,602 3,826,918) 1,604,684 1,604,684 916,253 18,203) 1,007,187)
Cost Accumulated amortisation and impairment  2017 Opening net book amount Additions Transfers Amortisation Closing net book amount  At December 31, 2017 Cost	\$ \$ (	2,327,690 1,729,105) 598,585 598,585 431,673 500,670) 529,588	\$ \$ (	978,083 482,484 506,517) 954,050	\$ \$ ( <u>\$</u>	28,016 	\$ \$ ( (	5,431,602 3,826,918) 1,604,684 1,604,684 916,253 18,203) 1,007,187) 1,495,547

Details of amortisation on intangible assets are as follows:

	 Years ended	December 31,		
	 2018			
Operating costs	\$ 3,907	\$	2,314	
Operating expenses	 939,827		1,004,873	
	\$ 943,734	\$	1,007,187	

#### (7) Short-term borrowings

Type of borrowings	Dec	ember 31, 2018	Interest rate range	Collateral
Bank borrowings Unsecured borrowings	\$	14,526,311	0.67%~4.16%	None
Type of borrowings	Dec	ember 31, 2017	Interest rate range	Collateral
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

	Dece	ember 31, 2018	December 31, 20		
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	
	\$	6,867,842	\$	5,624,505	

#### (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:

	Decen	nber 31, 2018 Dec	cember 31, 2017
Present value of defined benefit obligations	(\$	568,382) (\$	536,470)
Fair value of plan assets		495,415	473,679
Net liability in the balance sheet	(\$	72,967) (\$	62,791)

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

	defin	ent value of ned benefit oligations		Fair value of plan assets		t defined efit 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)
	(	545,890)		479,606	(	66,284)
Remeasurements:						
Return on plan assets (excluding amounts		-		13,319		13,319
included in interest income or expense)						
Change in demographic assumptions	(	1,639)		-	(	1,639)
Change in financial assumptions	(	8,197)		-	(	8,197)
Experience adjustments	(	16,166)			(	16,166)
	(	26,002)		13,319	(	12,683)
Pension fund contribution		-		6,000		6,000
Paid pension		3,510	(	3,510)		_
At December 31	( <u>\$</u>	568,382)	\$	495,415	(\$	72,967)
	Prese	ent value of	1	Fair value of		
	defir	ned benefit		plan	Ne	t defined
	ob	oligations		assets	bene	efit 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)
	(	523,357)		482,156	(	41,201)
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)
1			_		-	
	(	25,579)	(	2,011)	(	27,390)
Pension fund contribution	(	25,579)	(	2,011) 6,000	(	27,590) 6,000
Pension fund contribution Paid pension	(	25,579) - 12,466	(		(	

(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:

	Y ears ended December 31,				
Discount rate	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
or <b>ac</b> occ ocg			<del></del>	
	Disco	unt rate	Future salar	ry 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 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
	\$ 568,563

- 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
	Decc	ember 31, 2018
At January 1	\$	434,425
Changes in provision		84,591
At December 31	<u>\$</u>	519,016

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.

	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	508,095	506,506

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		
	Share	accounted for		
	premium	using equity	Others	Total
At January 1	\$3,540,653	\$ 18,203	\$ -	\$ 3,558,856
Change in associates accounted for	· - 9-	, .,	•	* - , ,
using equity method	_	22,005	-	22,005
Cash dividends distribution from capital surplus	( 508,095)		-	( 508,095)
Employees' compensation				
tranferred to common stock	163,692	-	-	163,692
Cash dividends returned			201	201
At December 31	\$3,196,250	\$ 40,208	\$ 201	\$ 3,236,659
		2017		
		Change	e in	
		associates ac		
		for using e	equity	
	Share prem			Total
At January 1		0,218 \$	10,210 \$	
Change in associates accounted for	<b>\$</b>	o, <b>=</b> 10	10,210 \$	2,210,120
using equity method		_	7,993	7,993
Cash dividends distribution from capital surplus	( 504	4,951)	- (	504,951)
Employees' compensation				
tranferred to common stock	14:	5,386		145,386
At December 31	\$ 3,54	0,653 \$	18,203 \$	3,558,856

#### (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:

	_	2017			_	2016				
		Dividends per Amount share (in dollars)		Amount		dends per				
		Amount	snare (	in dollars)		Amount	snare	(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(20).

# (14) Other equity items

				201	18			
	U	nrealised	Av	ailable-for-	(	Currency		
	gai	ns (losses)		sale	tra	anslation		
	on	valuation	it	nvestment	di	fference		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	`	. ,					Ì	,
-Subsidiaries	(	165,659)		-		-	(	165,659)
-Associates		1,977		-		-		1,977
Currency translation differences:								
-Subsidiaries		_		-		942,974		942,974
At December 31	\$	272,153	\$		\$	129,811	\$	401,964
				20	17			
	Av	ailable-for-	sale	Curre	ency			
		investment		translation	differe	nce	T	otal
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,			2,111,302)
At December 31	\$	212	,720	(\$	813,	163) (\$		600,443)

## (15) Operating revenue

	Year ended		Year ended		
	Dece	ember 31, 2018	Dece	ember 31, 2017	
Revenue from contracts with customers	\$	32,194,291	\$	30,043,540	

## 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:

		miegraied		
Year ended December 31, 2018	cir	cuit products	 Others	 Total
Revenue from external customer contracts Timing of revenue recognition	\$	32,125,500	\$ 68,791	\$ 32,194,291
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:

Contract liabilities – advance sales receipts  $\frac{\text{December 31, 2018}}{\$ \quad 110,764}$ 

Revenue recognised that was included in the contract liability balance at the beginning of the period:

	Yea	r ended
	Decemb	er 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:

	De	ecember 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,			iber 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	(\$	1,992)	(\$	431,101)
(18) Finance costs				
		Years ended	Decen	ber 31,
		2018		2017
Interest expense	\$	140, 170	\$	147, 941
(19) Expenses by nature				
	Years ended December 31,			
		2018		2017
Employee benefit expenses	\$	8,731,937	\$	7,234,741
Depreciation charges on				
property, plant and equipment	\$	470,049	\$	422,595
Amortisation charges on intangible assets	\$	943,734	\$	1,007,187
(20) Employee benefit expenses				
(20) Employee beliefit expenses		Years ended	Decem	iher 31
	-	2018	200011	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	\$	8,731,937	\$	7,234,741

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	
\$	445,349	\$	142,793	
	16,607		71,608	
(	35,671)	(	88,357)	
	426,285		126,044	
(	12,360)		83,956	
(	125,925)			
(	138,285)		83,956	
\$	288,000	\$	210,000	
	\$ (	2018  \$ 445,349	\$ 445,349 \$ 16,607 ( 35,671) ( 426,285 ( 12,360) ( 125,925) ( 138,285)	

# 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	\$	288,000	\$	210,000	

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

Year ended December 31, 2018

	J	anuary 1		ognised in	D	ecember 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)
	\$	43,802	\$	12,360	\$	56,162

	J;	anuary 1		cognised in fit or loss	De	ecember 31
-Deferred income tax assets: Temporary differences: Unrealised loss on market price decline and obsolete and slow-moving						
inventories and others -Deferred income tax liabilities: Temporary differences:	\$	148,821	( <u>\$</u>	83,270)	\$	65,551
Unrealised exchange gain	( <u> </u>	21,063) 127,758	(	686) 83,956)	( <u></u>	21,749) 43,802

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

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

- 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				
			Weighted average number		
			of ordinary shares		nings per
	A	mount after	outstanding (shares in	share	
		tax	thousands)	(in	dollars)
Basic earnings per share					
Profit attributable to ordinary shareholders of the parent	\$	4,350,768	507,712	\$	8.57
Diluted earnings per share Profit attributable to ordinary shareholders of the parent	\$	4,350,768	507,712		
Assumed conversion of all dilutive potential ordinary shares			10.477		
Employees' compensation Profit attributable to ordinary			10,477		
shareholders of the parent plus assumed conversion of all dilutive potential					
ordinary shares	\$	4,350,768	518,189	\$	8.40
		Y	ear ended December 31, 2017		
			Weighted average number		
			of ordinary shares	Ear	nings per
	A	mount after	outstanding (shares in		share
		tax	thousands)	(in	dollars)
Basic earnings per share					
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		<u>-</u>	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, 2017		
		2018			
Purchase of property, plant and equipment  Add: Opening balance of payable on	\$	655,336	\$	401,719	
equipment		33,141		38,128	
Less: Ending balance of payable on equipment	(	110,401)	(	33,141)	
Cash paid during the year	\$	578,076	\$	406,706	
	Years ended December 31,				
		2018	-	2017	
Purchase of intangible assets	\$	615,448	\$	916,253	
Add: Opening balance of payable on software and intellectual property  Less: Ending balance of payable on		650,649		613,635	
software and intellectual property	(	684,438)	(	650,649)	
Cash paid during the year	\$	581,659	\$	879,239	

# (24) Changes in liabilities from financing activities

		Guarantee	Liabilities from
	Short-term	deposits	financing activities-
	borrowings	received	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	\$ 14,526,311	\$ 4,739	\$ 14,531,050

## 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		
	\$ 5,316,401	\$	5,214,439		

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  $30 \sim 60$  days after monthly billings.

## B. Processing cost

	 Years ended December 31,						
	 2018	2017					
Greatek Electronics Inc.	\$ 887,456	\$	811,657				

Processing cost is paid to associates on normal commercial terms and conditions, and the general payment term was  $49 \sim 69$  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			
	\$	1,033,782	\$	941,236			

Aforementioned receivables were  $30 \sim 60$  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.	\$	228,279	\$	282,667			

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,							
		20	18		2017			
				Ending				Ending
		Amount balance				Amount	1	balance
Other related parties-								
Sales commissions	\$	206,978	\$	38,283	\$	209,918	\$	32,156
Technical royalty revenue	(\$	7,799)	\$	-	(\$	3,086)	\$	_
Cash dividends income	(\$	19,420)	\$		(\$	406)	\$	_
Subsidiaries and sub-subsidiaries-								
Other income	( <u>\$</u>	50,000)	( <u>\$</u>	50,000	\$	_	\$	-
Cash dividends income	( <u>\$</u>	2,745,981)	\$		(\$	2,665,586)	(\$ 2	2,657,395)
Rent income	( <u>\$</u>	1,883)	(\$	241)	( <u>\$</u>	1,894)	( <u>\$</u>	246)

The payment term above was 49 days after monthly billings; collection term was  $30 \sim 60$  days after monthly billings.

## F. Loans to related parties:

- (a) Loans to related parties:
  - (i) Outstanding balance:

	December 31, 2018		December 31, 2017		
Subsidiaries					
Leading Enterprises Limited	\$	365,921	\$	-	
Bluocean Inc.		623,009		597,091	
Talent Eagle Enterprise Inc.		1,649,158		184,350	
	\$	2,638,088	\$	781,441	
(ii) Interest income					
		2018		2017	
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:

	Dece	mber 31, 2018	December 31, 2017		
Subsidiaries	\$	10,106,104	\$	10,754,575	

## (3) 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 Company's assets pledged as collateral are as follows:

		Book	value	<b>)</b>	
Pledged asset	December 31, 2018		1, 2018 December 3		Purposes
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					Guarantee for customs
financial assets at amortised					duties for the importation
cost - current )		30,270		-	of materials
					Guarantee for leasing land
"		31,131			and office in Science Park
	\$	61,401	\$	91,655	

#### 9. <u>SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNISED CONTRACT COMMITMENTS</u>

## (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:

	Decei	mber 31, 2018	December 31, 2017		
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	
	\$	148,933	\$	165,070	

#### 10. <u>SIGNIFICANT DISASTER LOSS</u>

None.

#### 11. <u>SIGNIFICANT EVENTS AFTER THE BALANCE SHEET DATE</u>

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

	Dece	ember 31, 2018	Dece	ember 31, 2017
<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	\$	<u>-</u>
Available-for-sale financial assets				
Available-for-sale financial assets	\$	-	\$	40,344
Financial assets at cost		-		6,575
	\$		\$	46,919
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
	\$	9,701,509	\$	8,022,341
			-	
	Dece	ember 31, 2018	Dece	ember 31, 2017
Financial liabilities				
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
	\$	25,467,387	\$	27,788,765

## 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			Book value		
	(In	thousands)	Exchange rate		(NTD)		
(Foreign currency:							
functional currency)							
Financial assets							
Monetary items							
USD:NTD	\$	234,227	30.733	\$	7,198,500		
Investments accounted for using the equity method	<u>ng</u>						
USD:NTD		1,159,786	30.733		35,643,714		
Financial liabilities							
Monetary items							
USD:NTD		134,264	30.733		4,126,322		

	December 31, 2017						
		Foreign					
	(	currency					
		amount			Book value		
	(In	thousands)	Exchange rate		(NTD)		
(Foreign currency:							
functional currency)							
Financial assets							
Monetary items							
USD:NTD	\$	322,429	29.848	\$	9,623,857		
Investments accounted for using							
the equity method							
USD:NTD		1,014,191	29.848		30,271,573		
Financial liabilities							
Monetary items							
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					
	Doggo of comistion	Effect on	Effect on other comprehensive			
(Fancian augusta)	Degree of variation	profit or loss	income			
(Foreign currency: functional currency)						
Financial assets						
Monetary items						
USD:NTD	1%	\$ 71,985	\$ -			
Investments accounted for using						
the equity method						
USD:NTD	1%	-	356,437			
Financial liabilities						
Monetary items						
USD:NTD	1%	( 41,263)	-			
		Year ended December 31, 2017				
	Sensitivity analysis  Effect on other					
		Effect on	comprehensive			
	Degree of variation	profit or loss	income			
(Foreign currency: functional currency)						
Financial assets						
Monetary items						
USD:NTD	1%	\$ 96,239	\$ -			
Investments accounted for using						
the equity method						
USD:NTD	1%	-	302,716			
Financial liabilities						
Monetary items						
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:

			J	Jp to 30		180 days	
	N	Not past due days past due		past due		 Total	
At December 31, 2018							
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:

	Accounts receivable		
At January 1_IAS 39	\$	59,792	
Adjustments under new standards		<u>-</u>	
At January 1_IFRS 9		59,792	
Changes in the year	(	5,803)	
At December 31	\$	53,989	

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:

		Life	Lifetime	
		Significant		
		increase in	Impairment	
	12 month	ns credit risk	of credit	Total
Financial assets at				
amortised cost				
Group 1	\$ 61,4	<u> 101                                  </u>	<u>\$</u>	\$ 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	Between 1	
December 51, 2010	year	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	Between 1		
December 51, 2017	year	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	Level 1	_	Level 2	2 Level 3		Total		
Assets								
Recurring fair value measurement								
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	\$ 29,061	\$		_	\$	936	\$	29,997

December 31, 2017	Level 1	Level 2	Level 3	Total
Assets				
Recurring fair value measurement				
Available-for-sale financial				
assets-equity securities	40,344	-	-	40,344

- (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:

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

		2018
	Non-derivativ	e equity instrument
At January 1	\$	6,575
Modified retrospective adjustment	(	5,501)
Losses recognised in other		
comprehensive income	(	138)
At December 31	\$	936

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 a	t	Significant	Range	
	December 3	, Valuation	unobservable	(weighted	Relationship of
	2018	technique	input	average)	inputs to fair value
Non-derivative equity instrument:					
Private equity fund	\$ 93	Net asset value	Not applicable	-	Not applicable
investment					

### (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:

			Availa	ble-for-						
		Measured	sale-e	equity					Е	Effects
		at fair	Measi	ured at						
		value	fair v	value						
		through	throug	h other						
		profit or	_	hensive	Me	asured			Retaine	d Others
	Note	loss	income	e-equity	at	cost		Total	earnings	s 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	(0)	,		.0,5 )						
through other										
comprehensive	(a)			42,149	(	42,149)				
income-equity	` ′	-	(	5,501)	(		(	5,501)	( 36,18	1) 30,680
Fair value adjustment Impairment loss	(a)(b)	-	(	3,301)		-	(	3,301)	( 30,18	1) 30,080
adjustment	(a)	<u>-</u> _	(	35,574)		35,574		<u>-</u>	35,574	4 ( 35,574)
IFRS 9		\$ 40,344	\$	1,074	\$		\$	41,418	(\$ 60'	7) (\$ 4,894)

- (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:

	Dece	ember 31, 2017
Group 1	\$	889,467
Group 2		5,026,121
	\$	5,915,588

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:

	Decemb	per 31, 2017
Up to 30 days	\$	278
31 to 90 days		-
91 to 180 days		_
	\$	278

- (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:

	2017							
	Individual provision		Group provision		Total			
At January 1	\$	40,368	\$	_	\$	40,368		
Provision for impairment		19,424				19,424		
At December 31	\$	59,792	\$		\$	59,792		

- (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 ende	d December 31, 2017
Sales revenue	\$	29,953,398
Design revenue		40,954
Royalty and technical services revenue		49,188
	\$	30,043,540

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		
		Bal	ance by using		accounting		changes in		
Balance sheet items	Description		IFRS 15		policies	ac	ecounting policy		
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:									

- 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) <u>Information on investees</u>

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

Expressed in thousands of NTD (Except as otherwise indicated)

Footnote	None	None	None	None	None	None	None	None	None	None
Ceiling on total loans granted (Note 2)	\$ 9,401,026	9, 401, 026	9, 401, 026	9, 401, 026	9, 401, 026	9, 401, 026	9, 401, 026	9, 401, 026	9, 401, 026	9, 401, 026
Limit on loans granted to a single party	\$ 2,350,257	2, 350, 257	2, 350, 257	2, 350, 257	9, 401, 026	9, 401, 026	9, 401, 026	9, 401, 026	9, 401, 026	9, 401, 026
teral Value	· ·	1	,	1	1		1	1	1	1
Collateral Item Va	None	None	None	None	None	None	None	None	None	None
Allowance for doubtful accounts	· ·	1	1	1	1	,	1	1	1	1
Reason for short-term financial	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations
Amount of transactions with the borrower	l €€	ı	ı	ı	ı	ı	ı	ı	ı	ı
Nature of loan	6/	2	2	2	2	2	2	2	83	87
Interest rate	ı	3.30	3.30	3.30	1	3.30	1	I	I	3.30
Actual amount drawn down	l .	365, 723	1, 628, 849	602, 367	1	2, 327, 410	1	I	1	739, 129
Balance at December 31, 2018	\$ 1,843,980	921, 990	1, 843, 980	1, 843, 980	153, 665	6, 146, 600	3, 073, 300	921, 990	921, 990	3, 073, 300
Maximum outstanding balance during the year ended December 31, 2018 (Note 3)	\$ 1,843,980	066 '1766	1,843,980	1, 843, 980	153, 665	6, 146, 600	3, 073, 300	921, 990	921, 990	3, 073, 300
Is a related party	<b>&gt;</b>	Y	Y	Y	Y	Y	Y	Y	Y	¥
General ledger account	Other receivables- related parties	Other receivables- related parties	Other receivables- related parties	Other receivables- related parties	Other receivables- related parties	Other receivables- related parties	Other receivables- related parties	Other receivables- related parties	Other receivables- related parties	Other receivables- related parties
Borrower	Realtek Singapore Private Limited	Leading Entreprises Other receivables- Limited related parties	Talent Eagle Enterprise Inc.	Bluocean Inc.	Realtek Semiconductor (Shen Zhen) Corp.	Bluocean Inc.	Talent Eagle Enterprise Inc.	Leading Enterprises Other receivables- Limited related parties	Realsil Microelectronics Corp.	Realtek Singapore Private Limited
Creditor	Realtek Semiconductor Corporation	Realtek Semiconductor Corporation	Realtek Semiconductor Corporation	Realtek Semiconductor Corporation	Leading Enterprises Limited	Leading Enterprises Limited	Amber Universal Inc.	Cortina Access, Inc.	Realtek Singapore Private Limited	Realtek Investment Singapore Private Limited
No (Note 1)	0	0	0	0	1	1	2	3	4	4

Loans to others

Year ended December 31, 2018

Table 1

Expressed in thousands of NTD (Except as otherwise indicated)

Allowance for doubtful Reason for short-term Operations Operations financial transactions Amount of with the Nature of loan 2 2 Interest rate Actual amount drawn down 358, 096 358, 096 Balance at December 31, 2018 Maximum outstanding balance during the year ended 358, 096 358,096 December 31, (Note 3) 2018 <del>60</del> Is a related party > > General ledger Other receivables-Other receivablesrelated parties related parties RayMX
Microelectronics
Corp. Suzhou Hongwei Microelectronic Borrower Corp. Realsil Microelectronics Corp. Realsil Microelectronics

Creditor

(Note 1)

%

None

9, 401, 026

9, 401, 026

<del>></del>>

None

Ceiling on total loans (Note 2) granted

Limit on loans a single party

Collateral

granted to

Value

Item

None

9, 401, 026

9, 401, 026

None

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

Corp.

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 purty 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 to 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 ret assets based on its latest financial statements audited or reviewed by independent accountants.

For the foreign oronpanies which the Company bolds 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 partymany to texceed 40% of the Company's ret 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)

0

0

Footnote guarantees by guarantees to endorsements/ endorsements/ Provision of the party in Mainland (Note 7) China > Provision of Provision of subsidiary to company parent (Note 7) Z endorsements/ guarantees by company to subsidiary parent (Note 7) × Z Ceiling on total 283 11, 751, 283 \$ 11,751,283 11, 751, 283 11, 751, 283 endorsements/ amount of guarantees provided (Note 3) 11, 751, Amount of endorsement/guarantee 0.10 0.03 0.03 Ratio of accumulated 0.30 0.03 the endorser/ guarantor amount to net asset value of company endorsements/ secured with gurantees collateral Actual amont drawn down (Note 6) 614,660614,660December 31, \$ 2,350,257 7,050,770 705,077 endorsement/ Outstanding amount at guarantee (Note 5) 2018 7,050,770 614,660\$ 2,350,257 705,077 614,660amount as of December 31, endorsement/ Maximum outstanding (Note 4) 2018 \$ 11, 751, 283 11, 751, 283 11, 751, 283 11, 751, 283 11, 751, 283 provided for a endorsements/ Limited on single party guarantees (Note 3) **Relationship** with the endorser/ (Note 2) guarantor 2 2 2 2 endorsed/guaranteed Party being Realtek Singapore Private Limited RayMX Microelectronics RayMX Microelectronics Corp. Realsil Microelectronics Corp. Leading Enterprises Limited Company name Corp. Realsil Microelectronics Semiconductor Semiconductor Semiconductor Corporation Corporation Leading Enterprises Limited Endorser/ guarantor Realtek Realtek Realtek Corp.

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

(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 set asset based on the latest financial statements audited or reviewed by independent accountains, 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/guarantees endorsements and guarantees endorsements and guarantees or promissory notes are signed/issued by the endorser/guarantor company to the banks, the endorser/guarantor company bears endorser/guarantor company bears endorser-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

	Footnote	(Note 4)																	
		Fair value	\$ 29,061	936	164, 093	186, 374	164, 093	99, 546	18, 440	475, 242	249, 599	3, 784	40, 720	250, 124	10, 841	28, 000	39, 635	4, 504	4
31, 2018		Ownership (%)	2.05%	16.02%	5. 35%	3.03%	5.35%	9.89%	ı	12. 49%	6.56%	ı	2. 88%	1.05%	0.33%	12.17%	ı	ı	ı
As of December 31, 2018	Book value	(Note 3)	\$ 29,061	936	164, 093	186, 374	164, 093	99, 546	18, 440	475, 242	249, 599	3, 784	40, 720	250, 124	10, 841	28, 000	39, 635	4, 504	4
		Number of shares	1, 623, 501	283, 791	3, 575, 000	23, 124, 000	3, 575, 000	8, 623, 301	5, 000, 000	9, 000, 000	4, 726, 836	336, 346	2, 274, 875	5, 823, 602	1, 093, 968	2, 800, 000	8, 854, 549	1,006,124	1,005
ı	General	ledger account	Financial assets at fair value through profit or loss	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through profit or loss	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through other comprehensive income	Financial assets at fair value through profit or loss	Financial assets at fair value through profit or loss	Financial assets at fair value through profit or loss
	Relationship with the	securities issuer(Note 2)	Other related parties	Other related parties	None	Other related parties	Other related parties	None	Other related parties	None	None	None							
	Maretable securies	(Note 1)	C-media Electronics Inc Common stock	Technology Partner Venture Capital Corporation - Common stock	Compal broadband networks Inc Common None stock	Shieh-Yong Investment Co., Ltd Common stock	Compal broadband networks Inc Common None stock	Fortemedia Inc Common stock	Starix Technology, IncPreferred stock	Octasia Investment Holding Inc Common None stock	Octasia Investment Holding Inc Common None stock	United Microelectronics Corporation - Common stock	C-media Electronics Inc Common stock	Greatek Electroninc Inc Common stock	Subtron technology Co., Ltd - Common stock	Embestor Technology Inc Common stock	China Universal Cash Premium Money Market Fund	China Money Fund	Harvest Money Market
		Securities held by	Realtek Semiconductor Corporation	Realtek Semiconductor Corporation	Realking Investment Limited	Realsun Investment Co., Ltd.	Realsun Investment Co., Ltd.	Leading Enterprises Limited	Leading Enterprises Limited	Leading Enterprises Limited s	Amber Universal Inc.	Hung-wei Venture Capital Co., Ltd.	Hung-wei Venture Capital Co., Ltd.	Hung-wei Venture Capital Co., Ltd.	Hung-wei Venture Capital Co., Ltd.	Hung-wei Venture Capital Co., Ltd.	Realsil Microelectronics Corp.	Realsil Microelectronics Corp.	Realsil Microelectronics Corp.

Holding of marketable securities at the end of the period (not including subsidiaries, associates and joint ventures)

December 31, 2018

Table 3

Expressed in thousands of NTD (Except as otherwise indicated)

					As of December 31, 2018	r 31, 2018		
	Maretable securies	Relationship with the	General		Book value			Footnote
Securities held by	(Note 1)	securities issuer(Note 2)	ledger account	Number of shares	(Note 3)	Ownership (%)	Fair value	(Note 4)
Realsil Microelectronics Corp.	Tianhong Money Fund	None	Financial assets at fair value through profit or loss	38, 754, 137	\$ 173, 473	1	\$ 173, 473	
Realsil Microelectronics Corp.	ICBC - Money Fund	None	Financial assets at fair value through profit or loss	1, 003, 954	4, 494	I	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	I	126, 018	
Realsil Microelectronics Corp.	Tian Tianjin Aggressive Fund	None	Financial assets at fair value through profit or loss	57, 544, 884	257, 585	I	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	-	%65 '9	_	

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

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. amortised cost deducted by accumulated impairment for the marketable securities not measured at fair value.

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)

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

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

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)

Differences in transaction terms

compared to third party

Notes/accounts receivable(payable) transactions(Note 1)

Transaction

Footnote notes/accounts Percentage of receivable (payable) 10% % 41,928 738,018 Balance Approximately the same with the same with third party transactions Approximately the same with third party transactions Approximately third party transactions Credit term Approximately Approximately the same with Approximately the same with the same with transactions third party transactions third party third party Unit price Approximately the same with Approximately third party transactions Approximately the same with transactions the same with Credit term transactions third party third party Percentage of total purchase (sales) (1%) (%8) ₹ = 3,484,620) 358,241) 4,888,45 Amount Purchase (Sales) (Sales) (Sales) (sales) Relationship with the Other related parties Other related parties Other related parties Actions Semiconductor Co., Ltd. Counterparty G.M.I Technology Inc. G.M.I Technology Inc. Realtek Singapore Private Limited Purchase/seller Realtek Semiconductor Realtek Semiconductor orporation Corporation

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.

%0

21,590)

Approximately

Approximately the same with

Approximately

1%

200,002

Purchase

Other related parties

Greatek Electronics Inc.

Realtek Singapore Private Limited

the same with

transactions

third party

third party transactions

the same with third party transactions

%

Approximately

Approximately

Approximately the same with

%5

887,456

Purchase

Other related parties

Greatek Electronics Inc.

tealtek Semiconductor

Corporation

transactions

the same with

third party transactions

third party transactions

the same with third party transactions

Receivable from related parties reaching NT\$100 million 0r 20% of paid-in capital or more

December 31, 2018

Table 6

Expressed in thousands of NTD (Except as otherwise indicated)

doubtful accounts Allowance for 494,477 Amount collected subsequent to the balance sheet date Action taken Overdue receivables Amount Turnover rate Relationship with Balance as at December 738,018 31, 2018 the counterparty Other related parties Other related parties Counterparty G.M.I Technology Inc. G.M.I Technology Inc. Realtek Semiconductor Corporation Realtek Singapore Private Limited

1,479

Significant inter-company transactions during the reporting periods

Year ended December 31, 2018

Table 7

Expressed in thousands of NTD (Except as otherwise indicated)

operating revenues or total assets (Note 3) consolidated total Percentage of 0.11% 2.80% 0.59% 0.02% 0.05% 0.63% 1.03% 0.09% 4.00% 0.16% 0.12% 3.05% 0.05% compared with. Transaction prices and terms are determined in accordance with mutual Fund lending is in accordance with loan agreement terms. prices and terms are determined Fund lending is in accordance prices and terms are determined No similar transaction can be Fund lending is in accordance with loan agreement terms. No similar transaction can be No similar transaction can be compared with. Transaction compared with. Transaction in accordance with mutual with loan agreement terms. in accordance with mutual Transaction terms agreement. agreement. 602,367 50,000 2,327,410 57,027 20,889 11,236 1,395,502 270,803 1,628,849 50,000 72,831 58,17 Amount Gain on disposal of assets General ledger account Technical service fees Technical service fees Fechnical service fees Fechnical service fees Other receivables Other receivables Other receivables Other receivables Other receivables Interest revenue Interest expense Other payables Interest expense Other payables Relationship (Note 2) 2 Realtek Semiconductor (Shen Zhen) Corp. Realtek Semiconductor (Shen Zhen) Corp. Realtek Semiconductor (Japan) Corp. Realtek Semiconductor Corporation RayMX Microelectronics Corp. RayMX Microelectronics Corp. Counterparty Realsil Microelectronics Corp. Realsil Microelectronics Corp. Leading Enterprises Limited Talent Eagle Enterprise Inc. Bluocean Inc. Bluocean Inc. Bluocean Inc. Significant inter-company transactions during the reporting periods: Realtek Semiconductor Corporation Realtek Singapore Private Limited Company name cading Enterprises Limited Talent Eagle Enterprise Inc Bluocean Inc. Number Note 1) 0 0

Significant inter-company transactions during the reporting periods

Expressed in thousands of NTD (Except as otherwise indicated)

Table 7

Significant inter-company transactions during the reporting periods:

Year ended December 31, 2018

0					Tran	Transaction		
Number (Note 1)	Сотрану пате	Counterparty	Relationship (Note 2)	General ledger account	Amount	Transaction terms	Percentage of consolidated total operating revenues or total assets (Note 3)	
4	Realtek Singapore Private Limited	Cortina Access, Inc.	e	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.	က	Technical service fees	108,117	ll l	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	11	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%	
9	Realtek Investment Singapore Private Limited	Realtek Singapore Private Limited	8	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:

<sup>(1)</sup> Parent company is '0'.

<sup>(2)</sup> 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.)

<sup>(1)</sup> Parent company to subsidiary.

<sup>(2)</sup> Subsidiary to parent company.

<sup>(3)</sup> 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.

Information on investees

Year ended December 31, 2018

Expressed in thousands of NTD (Except as otherwise indicated) Sub-Subsidiar Subsidiary Subsidiary Subsidiary Subsidiary Subsidiary Subsidiary Subsidiary Sub-Subsidia Subsidiary Subsidiary Subsidiary Subsidiary Note 1 Note 1 Note 1 Note 1 ended December 31, 2018 Investment income (loss) 80,419 88,525 6,793 6,315 9,765) 14,823) 427) (216,962 564,881 3,392,035 166,254 Company for the year recognised by the 80,419 299,912) 6,315 11,775) 46 5,410) 59,883) of the investee for the 88,525 1,088 564,881 166,254 48.797) 3,392,035 6,793 281 December 31, 2018 Net profit (loss) year ended 374,178 5,563 36,917 40,682 16,106 2,916,363 348,721 19,214 10,903,503 3,195,092 7,750,098 3,440,632 6,427,012 437,910 2,375 Book value Shares held as at December 31, 2018 Number of shares Ownership (%) 100% 86.03% 32.43% 20.15% 24.42% %00 I 100% 100%100% 100% 100%100%100% %19.99 100% 39,130 41,432 25,000,000 500,000 5,969,298 80,000,000 29,392,985 4,000,000 64,800,000 110,050,000 114,100,000 200,000,000 28,000,000 1,918,910 4,669,91 46,699 250,000 293,930 20,000 84,565 110,000 14,877,139 4,698,512 2,387,840 3,284,772 280,000 5,000 000.000 3,405,657 5,969,600 December 31, Balance as at Initial investment amount 250,000 293,930 3,382,167 5,000 84,565 110,000 46,699 5,568 15,318,249 4,837,812 2,458,640 3,506,635 280,000 20,000 ,991,498 6,146,600 000.000 Balance as at December 31, computer equipment and wholesasle, retail and related services of electronic materials and information/software ICs manufacturing, design, research, Cs manufacturing, design, research, development, sales, and marketing Investment holdings Research and development, design, components, information/Software and integrated circuits.
Research and development, design, levelopment, sales, and marketing components, information/Software Manufacturing and installation of ICs deign, sales, and consultancy manufacturing, sales and other nanufacturing, sales and other Main business Venture capital activities and integrated circuits. services of electronic services of electronic nvestment holdings Investment holdings Investment holdings Investment holdings nvestment holdings Investment holdings Investment holdings nvestment holdings Islands British Virgin British Virgin singapore Singapore Cayman Islands Cayman Islands Laiwan **Faiwan Taiwan** Taiwan [aiwan slands Faiwan Japan ealsun Technology Corporatioin Hung-wei Venture Capital Co., Fechnology Partner V Venture ealtek Semiconductor (Japan) Realking Investments Limited nnorich Venture Capital Corp. ealtek Investment Singapore ealsun Investments Co., Ltd. VTechnologies, Taiwan Ltd. eading Enterprises Limited alent Eagle Enterprise Inc. Realtek Singapore Private Jimited Stinet Technologies Amber Universal Inc. apital Corporation Private Limited luocean Inc. corporation obitag Inc.

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Corporation

Expressed in thousands of NTD (Except as otherwise indicated)

Year ended December 31, 2018 Information on investees

Sub-Subsidiary Sub-Subsidiary Sub-Subsidiary Sub-Subsidiary Sub-Subsidiary Sub-Subsidiary Sub-Subsidiary Footnote ended December 31, 2018 Investment income (loss) Company for the year recognised by the 145,372 23,566 7,005 1,000) of the investee for the December 31, 2018 3,392,035 Net profit (loss) year ended 961,014 62,379 28,592 1,407,954 1,127,172 Book value Shares held as at December 31, 2018 10.97% 100% Number of shares Ownership (% 100% 100% 100% 100%21,130,000 2,825,000 16,892 9,856,425 1,000,000 969'69 843,206 1,219,172 1,246,801 December 31, Balance as at 2017 Initial investment amount 1,283,769 5,886 61,466 30,733 868,207 Balance as at December 31, 1,255,320 s manufacturing, design, research, levelopment, sales, and marketing formation services and technical &D and information services &D and information services R&D and technical support R&D and technical support Main business nvestment holdings Hong Kong Singapore Mauritius Vietnam Taiwan J.S.A Cortina Systems Taiwan Limited Limited
Realtek Semiconductor (HK)
Limited
Empsonic Enterprises Inc. Realtek Viet Nam Co., Ltd. Realtek Singapore Private Jortina Access Inc. eading Enterprises Limited imited alent Eagle Enterprise Inc imited Realtek Singapore Private tealtek Singapore Private Realtek Singapore Private tealtek Singapore Private mber Universal Inc. imited imited

Note 1: Investee

Information on investments in Mainland China Year ended December 31, 2018

Amount remitted from

Expressed in thousands of NTD

(Except as otherwise indicated)

Table 9

							Footnote				
			Accumulated	amount of investment	Mainland China income remitted back to	as of December Taiwan as of December 31,	2018	∽	•	•	'
			Book value of	investment in	fainland China	s of December	31, 2018	105,384	1,403,037	240,899	116,391
		Investment income (loss)	recognised by the	investee for Ownership held Company for the year		2018 a	(Note2(2)C)	9,073	151,804	18,565	1,130)
		II.		Ownership held	by the Company	(direct or	indirect)	100% \$	100%	100%	100% (
			Vet income of	investee for	ne year ended	December 31,	2018	9,073	151,804	18,565	1,130)
	Accumulated	amount of	year ended December 31, remittance from Net income of	Taiwan to	fainland China th	as of December 31, (direct or	31, 2018	110,639 \$	860,524	153,665	117,501 (
Mainland		an for the	cember 31, re	∞	Remitted N		Taiwan	99 1	1	1	•
Taiwan to Mainland	China/Amount remitted	back to Taiwan for the	year ended De	2018	Remitted to	Mainland back to	China	· •	1	ı	117,501
				Accumulated amount of	remittance from Taiwan to Remitted to Remitted Mainland China the year ended by the Company ended December 31,	Mainland China as of	January 1, 2018	\$ 110,639	860,524	153,665	•
					Investment	method	(Note1)	7	=	=	"
							Paid-in Capital	110,639	860,524	153,665	117,501
							Main business activities	R&D and technical support \$	Realsil Microelectronics R&D and technical support Corp.	Realtek Semiconductor R&D and technical support (Shen Zhen) Corp.	ICs manufacturing, design, research, development, sales, and marketing
						Investee in Mainland	China	Cortina Network Systems Shanghai Co., Ltd.	Realsil Microelectronics Corp.	Realtek Semiconductor (Shen Zhen) Corp.	RayMX ICs manufacturing, des Microelectronics Corp. research, development, sales, and marketing

unt Ceiling on he investments in Mainland China	.≘		irs Commission of	MOEA	110,639 \$ 14,788,140		524		999			117,501
Investment amount approved by the Investment	Commission of the	Ministry of	Economic Affairs	(MOEA)	se.		860,524		153,665			117
Accumulated amount	of remittance from Taiwan	to Mainland	China as of	December 31, 2018	\$ 110,639		860,524		153,665			117,501
				Company name	Cortina Network	Systems Shanghai Co., Ltd.	Realsil Microlectronics	Corp.	Realtek Semiconductor	(Shan Zhen) Corp.	RayMX	Microelectronics Corp.

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.

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

C. Others (Seif-edit financial statements)
Note 3: The numbers in this table are expressed in New Taiwan Dollars.

<sup>(2)</sup> Through investing in an existing company in the third area, which then invested in the investee in Mainland China. (3) Others.

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

<sup>(2)</sup> 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.

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

(Except as otherwise indicated)		during ear	ed ver 31,	18 Others				
Expressed in thousands of NTD (Except as otherwise indicated)		Interest during the year	ended December 31,	Interest rate 2018	<b>S</b> >			ı
	Financing		Balance at December	31, 2018 Int	•	•		1
		Maximum balance during the	year ended December Ba	31, 2018	· ·	1		ı
	on of guarantees or erals			Purpose	1	1	1	1,319,937 Operations
	Provision of endorsements/guarantees or collaterals	·	Balance at December	31, 2018	· •	1	ı	1,319,937
	eceivable ble)			%	0.11	0.02	0.03	0.18
	Accounts receivable (payable)	ì	Balance at December	31, 2018	- \$ 58,171	- 11,236	- 19,128	100,000
	nsaction			%	·	·	•	0.22
	Property transaction			Amount	€	•	1	100,000
	Technical service fees			Amount	1,395,502	270,803	108,117	1
Table 10	T			Investee in Mainland China	Realsil Microelectronics Corp. \$	Realtek Semicomductor (Shen Zhen) Corp.	Cortina Network Systems Shanghai Co., Ltd.	RayMX Microelectronics Corp.