Stock Code:8150
Annual Report Website:
https://mops.twse.com.tw
ChipMOS annual report is available at
https://www.chipmos.com/english/ir/year.aspx

南茂科技股份有限公司
ChipMOS TECHNOLOGIES INC.

2019 Annual Report

Notice to readers

This English version annual report is a summary translation of the Chinese version and is not an official document of the shareholders' meeting. If there is any discrepancy between the English and Chinese versions, the Chinese version shall prevail.

Printed on April 23, 2020

2019 Annual Report
Printed on April 23, 2020

Company Spokesperson
Name: Jesse Huang
Title: Vice President, Strategy and Investor Relations
Tel: (03)577-0055
E-MAIL: jesse_huang@chipmos.com

Deputy Spokesperson
Name: Silvia Su
Title:Vice President, Finance & Accounting Management Center
Tel: (03)577-0055
E-MAIL: silvia_su@chipmos.com

Headquarter and Fabs
Hsinchu Headquarter (Hsinchu fab.)
Address: No. 1, R&D Rd. 1, Hsinchu Science Park, Hsinchu City, Taiwan, R.O.C.
Tel: (03)577-0055
Fax: (03)566-8989

Tainan fab.
Address: No. 5, Nanke 7th Rd., Southern Taiwan Science Park, Tainan City, Taiwan, R.O.C.
Tel: (06)505-2388
Fax: (06)505-2345

Tainan fab. 2
Address: No. 3, Nanke 7th Rd., Southern Taiwan Science Park, Tainan City, Taiwan, R.O.C.
Tel: (06)505-2388
Fax: (06)505-2345

Zhubei fab.
Address: No. 37, Xintai Rd., Zhubei City, Hsinchu County, Taiwan, R.O.C.
Tel: (03)656-2078
Fax: (03)553-2715

Zhubei fab. 2
Address: No. 112, Zhonghe St., Zhubei City, Hsinchu County, Taiwan, R.O.C.
Tel: (03)598-5959
Fax: (03)553-2530

Hukou fab.
Address: No. 4, Rende Rd., Feng Shan Vil., Hukou Township, Hsinchu County, Taiwan, R.O.C.
Tel: (03)598-5959
Fax: (03)598-3012

U.S. subsidiary
Address: 2890 North First Street, San Jose, CA 95134, U.S.A.
Tel: 002-1-408-922-2777
Fax: 002-1-408-922-7275

Shanghai subsidiary
Address: Room 309-C, 6 Building, 990 Shenchang Road, Minhang District, Shanghai
Tel: 002-86-21-3328-5177

Stock Transfer Agent
Company: KGI Securities Co., Ltd., Transfer Agency Department
Address: 5F., No. 2, Sec. 1, Chongqing S. Rd., Zhongzheng Dist., Taipei City, Taiwan, R.O.C.
Website: http://www.kgieworld.com.tw
Tel: (02)2389-2999

The Certified Public Accountants for the Latest Annual Financial Statements
Company: PricewaterhouseCoopers,Taiwan
Auditors: Chun-Yuan Hsiao, Chih-Cheng Hsieh
Address: 27F., No. 333, Sec. 1, Keelung Rd., Xinyi Dist., Taipei City, Taiwan, R.O.C.
Website: https://www.pwc.tw
Tel: (02)2729-6666

Foreign Securities Trade & Exchange
ADS exchange:
NASDAQ Stock Market
Disclosed information can be found at:
https://www.nasdaq.com
ADS code: IMOS

Corporate Website
https://www.chipmos.com

Table of Contents

I. Letter to Shareholders

Dear Shareholders,

2019 was a challengeable and opportunities year for ChipMOS. Although there are more business and operating challenge caused by the political and economic uncertainties from US/China tariffs and trade disputes. However, ChipMOS was benefitted from the high penetration rate of large-size flat panel display driver ICs in 4KTV and the strong demand for TDDI products driven by ever-increasing penetration ratio of new smartphone in 2019, and memory products were de-inventorying since the second half of 2019. Revenue of 2019 was the record high of last 5 years, and the gross margin rate was also grew compared to 2018. By cautiously stable operating strategy, in line with industry trend and customer requirements, ChipMOS will keep moving forward expanding the core technologies and product developments to maintain growth momentum and improve profitability. The followings are the major operating results of 2019:

Operating Result

Consolidated revenue for the fiscal year ended December 31, 2019 was NT$20.34 billion, which reflects 10.1% growth from 2018. The consolidated gross margin for the year increased to 19.3%. Regarding to the products, with the increasing of high ASP products, TDDI, the revenue of flat panel display driver IC (DDIC) related products, including gold bump represented 49.4% of 2019 total revenue. Regarding to the memory product, driven by automotive and other new applications & business, Flash product revenue represented 19.7% of 2019 total revenue.

Financial Performance

ChipMOS' financial situation has been improved over years through the adjustment of the product mix, customer base and business segment served. The net profit to the equity holders and the net earnings per common share were NT$2.58 billion and NT$3.55. Net profit to the equity holders grew 134.3% from the 2018 level of NT$1.1 billion and EPS increased NT$2.18 from NT$1.37 of 2018. Both included a disposal gain, NT$980 million, of sale the partial shares of JMC in April 2019.

Till the end of 2019, the aggregated amount of ChipMOS’ consolidated assets was NT$34.31 billion and the cash and cash equivalents was NT$4.70 billion. The consolidated liabilities was NT$14.65 billion with the consolidated liabilities to assets ratio of 42.7%. The equity attributable to equity holders of the Company was NT$19.65 billion with the Return on Equity (ROE) was 13.7% for 2019.

Technological Developments

Single integrated device, and the thinning & small foot print requirements are driving the packaging technology development with the raising of emerging applications such as AI and 5G, and the popularity of mobile devices. We completed the following technologies development results in 2019:

(1). Bumping & Flip chip technologies: 3P/3M Cu pillar bumping for memory and mixed-signal high pin count products, and flip chip assembly technologies.

(2). Wafer level packaging: Sputter technology for high depth/width ratio and W/S: 5um/5um and RDL line thickness 3-21um. And multi-PI (Polymer) layers for 3P2M RDL technologies.
(3). Multi-chip stack and wire technologies: 3P2M RDL 8 dice stacked packaging technologies.
(4). COF module: reel to reel COF SMT technologies for COF module requirement.

Honors and Awards

ChipMOS is committed to improving the quality of corporate governance and perform corporate social responsibility. In the meantime, we integrated our core business and sustainability vision of ChipMOS to support the UN's sustainable development goals (SDGs) by specific solid actions. ChipMOS received recognition for achievements in sustainability, environmental protection and corporate social responsibility (CSR) from CommonWealth Magazine, TCSA and EPA of Executive Yuan Taiwan in 2019. ChipMOS awarded from 「Top 50 Taiwan Corporate Sustainability Awards」 of 2019 Taiwan Corporate Sustainability Awards (TCSA), the Honorary Environmental Protection Enterprise Award & Gold grade Award of the 1st National Enterprise Environmental Protection Award and 2019 CommonWealth's CSR Corporate Citizens Award.

Outlook

Keep moving forward to deliver high technology, outstanding quality with reliable packaging and testing solutions are the unwavering principles of ChipMOS since its inception. By catching up the industry trend, grasping the opportunity of product growth and continuously consolidating the company's product line, ChipMOS could continue to keep moving forward and growing in the intensified market competition under the influence of down cycle and other external issues. In face of more and more severe industrial environments and challenges, ChipMOS will continuously focus on the core technology development and innovation, to cooperate with customers for reducing operating costs. According to our global business strategies, we remain alongside our strategic customers for supporting their product development roadmap to make progress and grow with them. To maximize value for our shareholders is our endeavor goal.

Looking ahead to 2020 and beyond, although the outlook of Macroeconomics at this stage is uncertain. As a result, ChipMOS will continue to focus on the niche market about automotive electronics and industrial electronics, as well as high-growth markets about smart mobile devices which are driven by the automation in industrial and intellectualized home environments. By offering leading edge and reliable semi-conductor back end turnkey solutions that integrated wafer bumping and assembly, to meet the industry demand and customers' requirements. Moreover, ChipMOS will actively grasp the growth opportunities of new products such as TDDI and OLED for new specifications of new smart phone demand. ChipMOS is also driving higher efficiency and profit through increased AI and automation to further reduce the operating cost to be able to drive growth in revenue and profitability. We thank you for your continuous support.

Chairman: Shih-Jye Cheng President: Shih-Jye Cheng Accounting Officer: Silvia Su

II. Company Profile

I. Date of Incorporation: July 28, 1997

II. Company History

Time	Milestones
July 1997	Incorporated with paid-in capital of NT$5,000,000,000 and with the name "ChipMOS TECHNOLOGIES INC."
September 1997	Acquired ISO 9002 certification. (Hsinchu fab.)
October 1997	Became public company.
November 1997	Acquired ISO 14001 certification. (Hsinchu fab.)
August 1998	Completed construction of Tainan fab.
October 1998	Acquired QS 9000 certification. (Hsinchu fab.)
November 1998	Tainan fab. was approved to start the operation and began the commercial launch of memory IC TSOP/QFP package.
December 1998	Acquired ISO 9002 certification. (Tainan fab.)
June 1999	Established Japanese subsidiary.
July 1999	Acquired Kaohsiung fab. of Microchip Technology Inc. which provided EEPROM, OTPROM memory IC and logic IC testing services.
July 1999	Became the first professional assembly house in the world to develop Cross-flow Modeling Technique and began mixed-signal product testing and Ball Grid Array (BGA) package.
October 1999	Acquired QS 9000 certification (Tainan fab. and Kaohsiung fab.) and established U.S. subsidiary of the Company.
April 2000	Started TCP assembly for LCD driver IC semiconductor.
July 2000	Acquired ISO 14001 certification. (Tainan fab.)
October 2000	Acquired CNLA Accreditation(the quality laboratory of the Tainan fab).
November 2000	Started 12" wafer assembly and testing.
January 2001	For the plan of ChipMOS TECHNOLOGIES (Bermuda) LTD. (hereinafter be referred to as "ChipMOS Bermuda") to list in the United States of America, the Company's major shareholder, Mosel Vitelic Inc. and other shareholders, sold 70.25% of the Company's common share to ChipMOS Bermuda, and at the same time purchased ChipMOS Bermuda's shares by using the full proceeds obtained from the sale. As of the end of 2001, ChipMOS Bermuda held 69.7% of the Company's total outstanding shares.
September 2002	Invested into CHANTEK ELECTRONIC CO., LTD. which was mainly engaged in business of IC assembly.

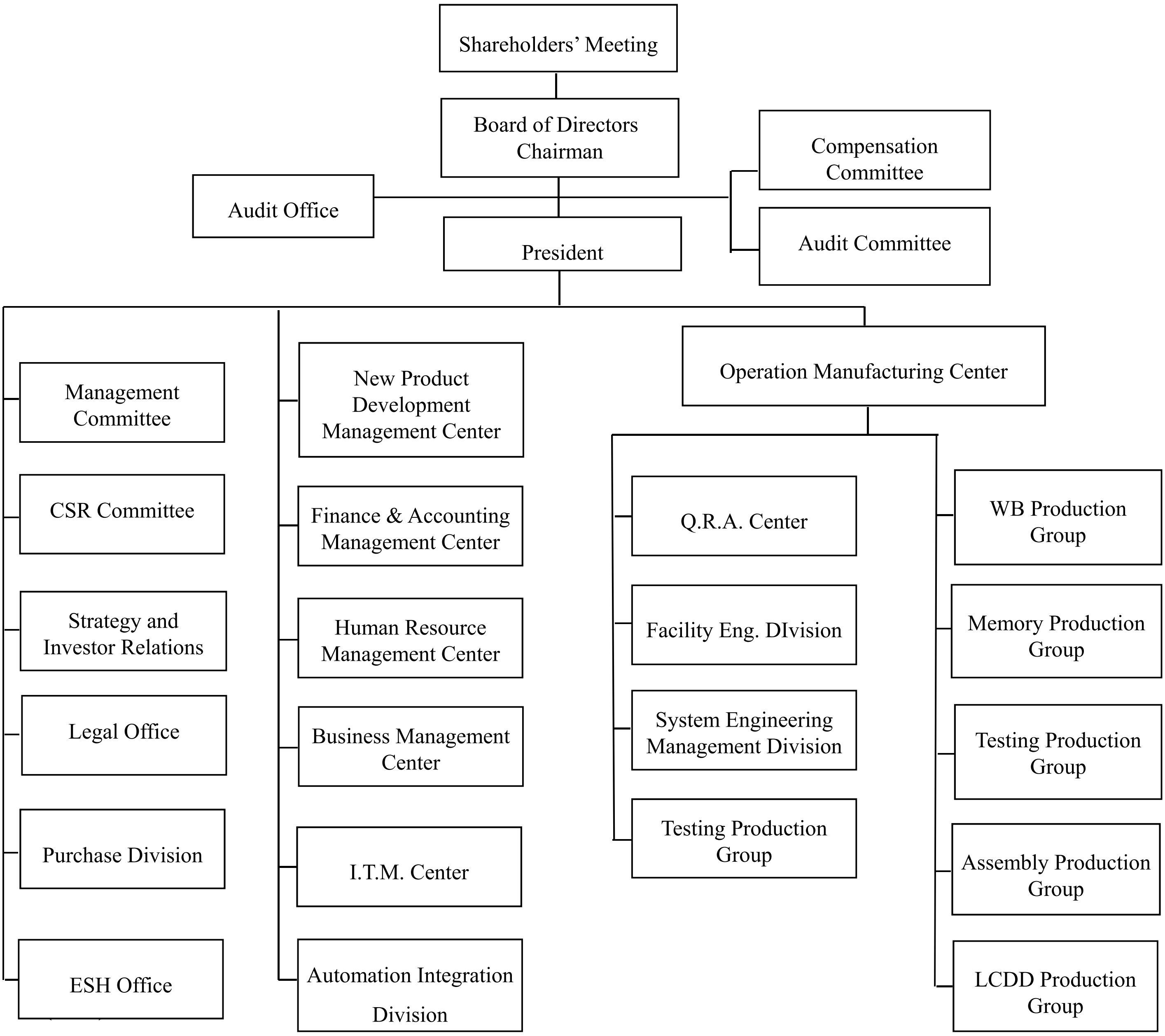
Time	Milestones
December 2002	Invested into ThaiLin Semiconductor Corp.
January 2003	Launched successfully high-tech level Chip On Film assembly and testing technology.
February 2003	Invested into Advanced Micro Chip Technology Co., Ltd. which was mainly engaged in business of gold bumping production.
August 2003	Completed the preparation of commercial launch of DDR II SDRAM assembly and testing solution.
December 2003	Acquired ISO 9001:2000 and ISO/TS 16949:2002 certification. (Hsinchu and Tainan fab.)
December 2003	Started commercial launch of Chip On Glass (COG) for LCD driver IC.
January 2004	Founded ChipMOS Logic TECHNOLOGIES INC. as the joint venture with ThaiLin Semiconductor Corp. to engage in logic/mixed-signal IC testing business.
November 2005	The Company merged with CHANTEK ELECTRONIC CO., LTD., with the Comapny being the surviving company and the capital increased to NT$8,934,422,910.
January 2006	Acquired ISO/TS 16949:2002 certification (Zhubei fab.)
April 2006	The Company, Oracle and Institute for Information Industry form R&D alliance to develop a real time information system.
September 2006	Received 14th "Excellent Enterprise Innovation Award" from the MOEA.
February 2007	Cancelled 5,611,797 treasury shares which the Company bought back from the dissenting shareholders regarding the merger with CHANTEK ELECTRONIC CO., LTD. and the capital became NT$8,878,304,940 after the cancellation.
May 2007	Completed construction of the second assembly fab. in Tainan.
August 2007	Awarded for 2006 International Trade.
September 2007	The Company and ChipMOS Bermuda consummated share exchange transaction and the Company became a wholly owned subsidiary of ChipMOS Bermuda.
October 2009	The Company's Japanese subsidiary was dissolved.
April 2013	Registered at the Emerging Stock Market.
April 2014	Listed for trading on the Taiwan Stock Exchange.
June 2015	Merged with ThaiLin Semiconductor Corp. with the Company being the surviving company and increased the capital in an amount of NT$359,322,850. Company's capital became NT$9,005,516,430 after the merger.

Time	Milestones
October 2016	The Company merged with its parent company, ChipMOS Bermuda, with the Company being the surviving company. The total outstanding shares of the Company after the merger were 887,121,261 shares. And issued ADS of ChipMOS Taiwan trading on NASDAQ Stock Market (Ticker: IMOS)
November 2016	Awarded Bronze grade Award of the 25th Enterprise Environmental Protection Award.
March 2017	Completed the joint venture with Tsinghua Unigroup in ChipMOS TECHNOLOGIES (Shanghai) LTD. (renamed Unimos Microelectronics (Shanghai) Co., Ltd. in July 2018). The Company sold 54.98% of ChipMOS TECHNOLOGIES (Shanghai) LTD. shares to strategic investors lead by Tsinghua Unigroup.
November 2017	Awarded Silver grade Award of the 26th Enterprise Environmental Protection Award.
March 2018	Completed whole investment tranche of Shanghai facility in Q1
August 2018	Honored Top100 and Top 50 larger enterprise of the 2018 CommonWealth's CSR Corporate Citizens Award.
November 2018	Awarded Top 50 Taiwan Corporate Sustainability Awards of 2018 Taiwan Corporate Sustainability Awards.
December 2018	Awarded Gold grade Award of the 27th Enterprise Environmental Protection Award.
September 2019	Honored Top 50 larger enterprise of the 2019 CommonWealth's CSR Corporate Citizens Award.
November 2019	Awarded the Honorary Environmental Protection Enterprise Award & Gold grade Award of the 1st National Enterprise Environmental Protection Award. Awarded Top 50 Taiwan Corporate Sustainability Awards of 2019 Taiwan Corporate Sustainability Awards (TCSA).
March 2020	Established Shanghai subsidiary.

III. Corporate Governance Report

I. Organization System

(I) Organization Structure



(II) Business of Major Departments

President
The Company's overall operational targets and performance management.

Audit Office
Internal audit and operation process management.

Compensation Committee
Enact and periodically review the performance evaluation and policies, systems, standards and structure of compensation.

Audit Committee
Supervise the Company's accounting and financial reports, and audit the Company's accounting statements.

Management Committee
Draft and plan operation strategies of the Company.

CSR Committee
Implement and promote Corporate Social Responsibility (CSR) and sustainable management of the Company.

Strategy and Investor Relations
Plan and implementation regarding matters relating to the strategy and investor relations.

Legal Office
Handle with issues related to corporate legal affairs.

Purchase Division
Plan and implement the procurement of raw materials, equipment and general matters.

ESH Office
Responsible for planning and implementing policies related to labors' safety and health and environmental protection.

Finance & Accounting Management Center
Financial and accounting services: including capital management, tax management, asset management and other accounting operations.

Human Resource Management Center
Human resource management and organizational development.

Business Management Center
Responsible for market trend analysis, plans and implementation of matters related to business development and customer service.

Automation Integration Division
Promote Intelligent Manufacturing to enhance quality and productivity.

Q.R.A. Center
Responsible for the enactment related to the quality development schedule, and plans and implementation related to relevant quality activities.

Facility Eng. Division
Maintain and implement power, water, chemical gas and other relevant matters of facilities.

I.T.M. Center
Responsible for the structure of information system, management and development of automated system.

New Product Development Management Center
Responsible for the management of new production development.

System Engineering Management Division
Provide rationalization and optimization plans regarding resources in facilities to high-level managements as policy decision reference.

Operation Manufacturing Center
Responsible for production plans and implementation of WB Production Group, Memory Production Group, Testing Production Group, Assembling Production Group, LCDD Production Group and Testing PMC Division.

II. Information of Directors, Supervisors, President, Vice Presidents, Assistant Presidents, Officers of Departments and Branches

(I) Information Regarding Directors and Supervisors

1. Directors and supervisors

March 31, 2020(Unit: shares; %)

Title	Nationality	Name	Sex	Date elected	Term	Date first elected	Shareholding when elected		Shareholding at present		Shareholding at present by spouse and minor children		Shareholding in the name of others		Major education/work experience	Current positions at the Company or other companies	Other officers, directors or supervisors who is the spouse or a relative within second degree of kinship			Remark
							Shares	Shareholding Ratio	Shares	Shareholding Ratio	Shares	Shareholding Ratio	Shares	Shareholding Ratio			Title	Name	Relation	
Chairman	R.O.C. (Taiwan)	Shih-Jye Cheng	M	2019.06.10	3 years	1997.07.17	12,150,161	1.64%	6,150,161	0.85%	–	–	6,244,777	0.86%	MBA, Saginaw Valley State University Director of Mosel Vitelic Inc. Director of Ultima Electronics Corp. Chairman of Advanced Micro Chip Technology Co., Ltd. Chairman of ChipMOS TECHNOLOGIES (Shanghai) LTD. Chairman of CHANTEK ELECTRONICS CO., LTD. Chairman of ChipMOS Logic TECHNOLOGIES INC. Director of Syntax-Brillian Corp. Chairman of ThaiLin Semiconductor Corp.	President of ChipMOS TECHNOLOGIES INC. Director of ChipMOS U.S.A., Inc. Vice Chairman of Unimos Microelectronics (Shanghai) Co., Ltd. Representative & Director of Hao Hsiang Investment Co., Ltd. Representative & Director of Chin Hsiang Investment Co., Ltd. Representative & Director of Hao Yen Investment Co., Ltd..	–	–	–	Note 2
Director	R.O.C. (Taiwan)	Siliconware Precision Industries Co., Ltd.	N/A	2019.06.10	3 years	1997.07.17	148,910,390	20.12%	148,910,390	20.48%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	–
	R.O.C. (Taiwan)	Teresa Wang (representative)	F	2019.06.10	3 years	2019.06.10	–	–	–	–	–	–	–	–	Bachelor, Accounting and Statistics, Ming Chuang College Chief Financial Officer of Camel Precision Co., Ltd. Director of Unimicron Technology Corp.	Director / Senior Special Assistant of Siliconware Precision Industries Co., Ltd. Director of Radio Flux Co., Ltd.	–	–	–	–
Director	R.O.C. (Taiwan)	Siliconware Precision Industries Co., Ltd.	N/A	2019.06.10	3 years	1997.07.17	148,910,390	20.12%	148,910,390	20.48%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	–

Title	Nationality	Name	Sex	Date elected	Term	Date first elected	Shareholding when elected		Shareholding at present		Shareholding at present by spouse and minor children		Shareholding in the name of others		Major education/work experience	Current positions at the Company or other companies	Other officers, directors or supervisors who is the spouse or a relative within second degree of kinship			Remark
							Shares	Shareholding Ratio	Shares	Shareholding Ratio	Shares	Shareholding Ratio	Shares	Shareholding Ratio			Title	Name	Relation	
	R.O.C. (Taiwan)	Bright Yeh (representative)	M	2019.06.10	3 years	2019.06.10	—	—	—	—	—	—	—	—	Master, Industrial Engineering, National Tsing Hua University Enterprise Operation Planning Division Director of United Microelectronics Corp.	Vice President of Siliconware Precision Industries Co., Ltd. Director of Siliconware Technology (SuZhou) Ltd.	—	—	—	—
Director	R.O.C. (Taiwan)	Lafair Cho	M	2019.06.10	3 years	2003.10.01	101,990	0.01%	101,990	0.01%	—	—	—	—	Master, Industrial Management, National Cheng Kung University Manager of Mosel Vitelic Inc. Chairman & President of ThaiLin Semiconductor Corp. Vice President of the memory production group from ChipMOS TECHNOLOGIES INC.	Senior Executive Vice President & Chief Operating Officer of ChipMOS TECHNOLOGIES INC. Chairman of ChipMOS TECHNOLOGIES (BVI) LTD. Chairman of ChipMOS U.S.A., Inc.	—	—	—	—

Title	Nationality	Name	Sex	Date elected	Term	Date first elected	Shareholding when elected		Shareholding at present		Shareholding at present by spouse and minor children		Shareholding in the name of others		Major education/work experience	Current positions at the Company or other companies	Other officers, directors or supervisors who is the spouse or a relative within second degree of kinship			Remark
							Shares	Shareholding Ratio	Shares	Shareholding Ratio	Shares	Shareholding Ratio	Shares	Shareholding Ratio			Title	Name	Relation	
Independent Director	R.O.C. (Taiwan)	Chin-Shyh Ou	M	2019.06.10	3 years	2007.06.28	—	—	—	—	—	—	—	—	Ph.D., Business Administration (Accounting), University of Minnesota, USA Accounting Professor & Chairman of the Department of Accounting at National Chung Cheng University Director of ChipMOS TECHNOLOGIES (Bermuda) LTD.	Chair Professor of Department of Accounting and Information Systems at Asia University Honorary Professorof Department of Accounting and Information Technology at National Chung Cheng University Independent Director / Compensation Committee member of Chi Hua Fitness Co.Independent Director / Audit Committee member / Compensation Committee member of Tsang Yow Industrial Co., Ltd. Independent Director / Audit Committee member / Compensation Committee member of Yong Chang International Co., Ltd. (Cayman)	—	—	—	—
Independent Director	R.O.C. (Taiwan)	Yuh-Fong Tang	M	2019.06.10	3 years	2013.06.17	—	—	—	—	—	—	—	—	Ph.D., Electrical Engineering, University of Illinois, USA Vice Chairman of Pack-Link Management Corp. Supervisor of TrueLight Corp. Independent Director of Zhengyuan Technology Co., Ltd. Chairman of Compensation Committee of Carnival Industrial Corp. Chairman & CEO of Myson Century, Inc. Chairman of ZAVIO Inc.	Compensation Committee member of OPNET Technologies Co., Ltd. Consultant of Intelligent Silicon Solution Corp.	—	—	—	—

Title	Nationality	Name	Sex	Date elected	Term	Date first elected	Shareholding when elected		Shareholding at present		Shareholding at present by spouse and minor children		Shareholding in the name of others		Major education/work experience	Current positions at the Company or other companies	Other officers, directors or supervisors who is the spouse or a relative within second degree of kinship			Remark
							Shares	Shareholding Ratio	Shares	Shareholding Ratio	Shares	Shareholding Ratio	Shares	Shareholding Ratio			Title	Name	Relation	
Independent Director	R.O.C. (Taiwan)	Tai-Haur Kuo	M	2019. 06.10	3 years	2013. 06.17	–	–	–	–	–	–	–	–	Ph.D., Electrical Engineering, University of Maryland, USA Director of Zilltek Technology Corp.	Professor of Department of Electrical Engineering at National Cheng Kung University Independent Director / Audit Committee member / Compensation Committee member of Holtek Semiconductor Inc.	–	–	–	–
Independent Director	R.O.C. (Taiwan)	Kuei-Ann Wen	F	2019. 06.10	3 years	2015. 06.03	–	–	–	–	–	–	–	–	Ph.D., Institute of Electrical Engineering, National Cheng Kung University Associate Dean of College of Electrical and Computer Engineering at National Chiao Tung University Associate Dean of Office of Research and Development at National Chiao Tung University	Professor of Department of Electronic Engineering and Institute of Electronics at National Chiao Tung University Chief Executive Officer of Strategic Development Office at National Chiao Tung University Independent Director / Audit Committee member / Compensation Committee member of Xintec Inc Vice Dean of International College of Semiconductor Technology at National Chiao Tung University	–	–	–	–
Independent Director	R.O.C. (Taiwan)	Jing-Shan Aur	M	2019. 06.10	3 years	2013. 06.17	261,123	0.04%	261,123	0.04%	–	–	–	–	Bachelor, Marine Engineering, National Taiwan Ocean University President of Unimicron Technology Corp. Supervisior of Unimicron Technology Corp. Chairman of APTOS (Taiwan) Corp. Managing Director of United Microelectronics Corp. Director of Siliconware Precision Industries Co., Ltd.	Director of RSEA Engineering Corp. Compensation Committee member of Siliconware Precision Industries Co., Ltd.	–	–	–	–

Note 1: The authority of the Company’s supervisors shall be exercised by Audit Committee composed of Independent Directors.

Note 2: The reasonableness, necessity thereof, and the measures adopted in response thereto of the President and chairperson of the board of directors of the Company are the same person:

The Board of Directors is the Company's highest governance unit and the center for making business decisions. It supervises the management, exercise its powers in accordance with laws and regulations, and is being responsible to the company and its shareholders.

The person whe serves the Chairman and President, in order to maximize the Company's value, he must fully grasp the operation information and status, so that the operating efficiency is increased and the decision-making is executed more smoothly.

The Company has long been committed to deepening corporate governance and corporate social responsibility. By increasing the number of independent directors to 5 and setting up functional committees, independent directors are appointed as members of the committee. With its independence and professionalism, it provides board decision-making suggestions and strengthens director supervision and decision quality. More than half of the Company’s directors neither employee nor officer of the Company.

2. Major Shareholders of ChipMOS’s Institutional Shareholders

March 31, 2020

Name of Institutional Shareholders	Major Shareholders	
	Name	Shareholding Ratio(%)
Siliconware Precision Industries Co., Ltd.	ASE Technology Holding, Co., Ltd	100%

3. Major Shareholders of Institutional Shareholders Whom Are Major Shareholders of ChipMOS's Institutional Shareholders

Feburary 29, 2020

Name of Institutional Shareholders	Major Shareholders	
	Name	Shareholding Ratio(%)
ASE Technology Holding, Co., Ltd	A.S.E Enterprises Limited	15.80%
	HSBC: entrusted with the Company’s investment account	6.01%
	Citibank Taiwan: custody of ASE Depository Certificates	5.81%
	Cathay Life Insurance Co.,Ltd.	3.87%
	Citibank Taiwan: custody of the Singapore government investment account	3.44%
	Fubon Life Insurance Co.,Ltd.	3.05%
	Trust account of Brilliant Capital Profits Limited, with HSBC Bank as the custodian trustee	2.79%
	New Labor Pension Fund	1.90%
	Nanshan Life Insurance Co.,Ltd.	1.67%
	The investment account of Ma Shi Investment Fund Corporation under custody of bank of Taiwan	1.66%

4. Information regarding the independence of directors and supervisors

March 31, 2020

Criteria / Name	Has at least 5 years of work experience and meet one of the following professional qualifications			Qualification regarding the independence criteria (Note)												Number of other public companies concurrently serving as an independent director
	An instructor or higher in a department of commerce, law, finance, accounting, or other academic department related to the business needs of the company in a public or private junior college, college, or university	A judge, public prosecutor, attorney, certified public accountant, or other professional or technical specialist who has passed a national examination and been awarded a certificate in a profession necessary for the business of the company	Have work experience in the area of commerce, law, finance, or accounting, or otherwise necessary for the business of the company.	1	2	3	4	5	6	7	8	9	10	11	12	
Shih-Jye Cheng			V				V	V				V	V	V	V	—
Teresa Wang			V	V	V	V	V		V	V	V	V	V	V		—
Bright Yeh			V	V	V	V	V		V	V	V	V	V	V		—
Lafair Cho			V			V	V	V				V	V	V	V	—
Chin-Shyh Ou	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	2
Yuh-Fong Tang			V	V	V	V	V	V	V	V	V	V	V	V	V	—
Tai-Haur Kuo	V		V	V	V	V	V	V	V	V	V	V	V	V	V	1
Kuei-Ann Wen	V		V	V	V	V	V	V	V	V	V	V	V	V	V	1
Jing-Shan Aur			V	V	V	V	V	V	V	V	V	V	V	V	V	—

Note: If the director or supervisor meets any of the following criteria in the two years before being elected or during the term of office, please check "V" the corresponding boxes:

1. Not an employee of the company or any of its affiliates.
2. Not a director or supervisor of the company or any of its affiliates.
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, in an aggregate amount of one percent or more of the total number of issued shares of the company or ranks as one of its top ten shareholders.
4. Not a spouse, relative within the second degree of kinship, or lineal relative within the third degree of kinship, of any of the officer in the preceding 1 subparagraph, or of any of the above persons in the preceding subparagraphs 2 and 3.
5. Not a director, supervisor, or employee of a corporate/institutional shareholder that directly holds five percent or more of the total number of issued shares of the company, ranks as of its top five shareholders, or has representative director(s) serving on the company's board based on Article 27 of the Company Law.

6. Not a director, supervisor, or employee of a company of which the majority of board seats or voting shares is controlled by a company that also controls the same of the company.
7. Not a director, supervisor, or employee of a company of which the chairman or CEO (or equivalent) themselves or their spouse also serve as the company's chairman or CEO (or equivalent).
8. Not a director, supervisor, officer, or shareholder holding five percent or more of the shares of a specified company or institution that has a financial or business relationship with the company.
9. Other than serving as a compensation committee member of the company, not a professional individual who, or an owner, partner, director, supervisor, or officer of a sole proprietorship, partnership, company, or institution that, provides commercial, legal, financial, accounting services or consultation to the company or to any affiliate of the company, or a spouse thereof, and the service provided is an "audit service" or a "non-audit service which total compensation within the recent two years exceeds NTD500,000".
10. Not having a marital relationship, or a relative within the second degree of kinship to any other director of the company.
11. Not been a person of any conditions defined in Article 30 of the Company Law.
12. Not a governmental, juridical person or its representative as defined in Aticle 27 of the Company Law.

(II) Profile of President, Vice Presidents,Assistant Vice Presidents and Officers of Departments and Branches

March 31, 2020 (Unit: shares; %)

Title	Nationality	Name	Sex	Date appointed	Shareholding		Shareholding by spouse and minor children		Shareholding in the name of others		Major education/work experience	Current positions at other companies	Other manager who is the spouse or a relative within second degree of kinship			Remarks
					Shares	Shareholding Ratio	Shares	Shareholding Ratio	Shares	Shareholding Ratio			Title	Name	Relation	
President	R.O.C (Taiwan)	Shih-Jye Cheng	M	1998. 07.17	6,150,161	0.85%	—	—	6,244,777	0.86%	MBA, Saginaw Valley State University Director, Mosel Vitelic Inc. Director of Ultima Electronics Corp. Chairman of Advanced Micro Chip Technology Co., Ltd. Chairman of ChipMOS TECHNOLOGIES (Shanghai) LTD. Chairman of CHANTEK ELECTRONICS CO., LTD. Chairman of ChipMOS Logic TECHNOLOGIES INC. Director of Syntax-Brillian Corp. Chairman of ThaiLin Semiconductor Corp.	Note 1	—	—	—	Note 6
Senior Executive Vice President & Chief Operating Officer	R.O.C (Taiwan)	Lafair Cho	M	2015. 06.17	101,990	0.01%	—	—	—	—	Master, Industrial Management, National Cheng Kung University Manager of Mosel Vitelic Inc. Chairman & President, ThaiLin Semiconductor Corp. Vice President of the memory production group from ChipMOS TECHNOLOGIES INC.	Note 2	—	—	—	—
Vice President, Memory Production Group	R.O.C (Taiwan)	Wu-Hung Hsu	M	2004. 11.01	233,728	0.03%	—	—	—	—	Bachelor, Automatic Control Engineering, Feng Chia University Deputy Manager, Equipment Division, Mosel Vitelic Inc. Director, Memory Engineering Division, ChipMOS TECHNOLOGIES INC.	None	—	—	—	—
Vice President, Strategy and Investor Relations & Spokesperson	R.O.C (Taiwan)	Jesse Huang	M	2007. 04.17	293,223	0.04%	—	—	—	—	Bachelor, Physics, Soochow University Vice President, Assembly Production Group, ChipMOS TECHNOLOGIES INC.	Note 3	—	—	—	—
Vice President, Assembly Production Group	R.O.C (Taiwan)	Jin-Long Fang	M	2018. 07.01	12,197	—	—	—	—	—	Master, Electrical Engineering, National Sun Yat-sen University Bachelor, Department of Electrical Engineering, National Taiwan Ocean University Process Engineer, Philips Electronic Building Elements(Taiwan) Ltd.	None	—	—	—	—

Title	Nationality	Name	Sex	Date appointed	Shareholding		Shareholding by spouse and minor children		Shareholding in the name of others		Major education/work experience	Current positions at other companies	Other manager who is the spouse or a relative within second degree of kinship			Remarks
					Shares	Shareholding Ratio	Shares	Shareholding Ratio	Shares	Shareholding Ratio			Title	Name	Relation	
Vice President, LCDD Production Group	R.O.C (Taiwan)	Yuan-Feng Hsu	M	2012. 03.06	220,130	0.03%	–	–	–	–	Master, Electrical Engineering, National Sun Yat-sen University Assistant, National Cheng Kung University Senior Project Leader Engineer, Philips Electronic Building Elements(Taiwan) Ltd.	Note 3	–	–	–	–
Vice President, Finance & Accounting Management Center	R.O.C (Taiwan)	Silvia Su	F	2017. 10.01	96,041	0.01%	–	–	–	–	Master, University of Leeds Senior Director, ChipMOS TECHNOLOGIES INC. Director, Thailin Semiconductor Corp.	Note 4	–	–	–	–
Vice President, Business Management Center	R.O.C (Taiwan)	Ming-Cheng Lin	M	2014. 06.01	84,992	0.01%	–	–	–	–	Bachelor, Industrial Engineering and Engineering Management, National Tsing Hua University Master, Industrial Engineering and Management, Yuan Ze University Manager, Production Management Department, Walton Advanced Engineering Inc. Vice President, Marketing, ChipMOS TECHNOLOGIES INC.	None	–	–	–	–
Vice President, Human Resource Management Center	R.O.C (Taiwan)	Yu-Ying Chen	F	2012. 06.15	217,580	0.03%	–	–	–	–	Bachelor, Business Administration, Soochow University Mosel Vitelic Inc.	None	–	–	–	–
Vice President, Q.R.A. Center	R.O.C (Taiwan)	Teng-Yueh Tsai	M	2012. 03.06	262,572	0.04%	–	–	–	–	Master, Resources Engineering, National Cheng Kung University Gloria Material Technology Corp. Philips Electronic Building Elements (Taiwan) Ltd. Assistant Vice President, Q.R.A. Center, ChipMOS TECHNOLOGIES INC.	Note 5	–	–	–	–
Vice President, Testing Production Group	R.O.C (Taiwan)	Chen-Fang Huang	M	2013. 07.01	153,483	0.02%	–	–	–	–	Master, Technology Management, National Tsing Hua University Deputy Manager, Wafer Testing Department, Mosel Vitelic Inc. Director, Wafer Testing Engineering Division, ChipMOS TECHNOLOGIES INC.	None	–	–	–	–
Vice President, I.T.M. Center	R.O.C (Taiwan)	Chang-Lung Li	M	2014. 08.18	101,990	0.01%	–	–	–	–	Master, Transportation Management Science, National Cheng Kung University Vice President, AVerMedia Technologies, Inc. Vice President, Oracle Vice President, Picoway Technology Inc.	None	–	–	–	–

Title	Nationality	Name	Sex	Date appointed	Shareholding		Shareholding by spouse and minor children		Shareholding in the name of others		Major education/work experience	Current positions at other companies	Other manager who is the spouse or a relative within second degree of kinship			Remarks
					Shares	Shareholding Ratio	Shares	Shareholding Ratio	Shares	Shareholding Ratio			Title	Name	Relation	
Senior Director, WB Production Group	R.O.C (Taiwan)	Chao-Tung So	M	2016. 11.01	—	—	—	—	—	—	Master, Physics, Fu Jen University Deputy Director, Engineering Center, Siliconware Precision Industries Co., Ltd. Director, International Marketing Office, Merck Taiwan	None	—	—	—	—
Senior Director, New Product Development Management Center	R.O.C (Taiwan)	JB Chyi	M	2019. 04.25	11,049	—	—	—	—	—	Bachelor, Mathematis, Tamkang University Director, ADL Engineering Inc. Vice President, Union Semiconductor Co., Ltd. Senior Manager Director, ChipMOS TECHNOLOGIES INC.	None	—	—	—	—
Manager, Audit Office	R.O.C (Taiwan)	Ling Cheng	F	2019. 07.12	21,099	—	—	—	—	—	Bachelor, Finance, Chung Hua University Deputy Manager, ProMOS TECHNOLOGIES INC. Internal Audit Officer, ThaiLin Semiconductor Corp.	None	—	—	—	—

Note 1： Director of ChipMOS U.S.A., Inc.; Deputy Chairman of Unimos Microelectronics (Shanghai) Co., Ltd.; Representative & Director of Hao Hsiang Investment Co., Ltd.; Representative & Director of Chin Hsiang Investment Co., Ltd.; Representative & Director of Hao Yen Investment Co., Ltd.

Note 2： Chairman of ChipMOS TECHNOLOGIES (BVI) LTD.; Chairman of ChipMOS U.S.A., Inc.

Note 3： Director of JMC Electronics Co., Ltd.

Note 4： Director of ChipMOS U.S.A., Inc.; Supervisor of Unimos Microelectronics (Shanghai) Co., Ltd.; Director of ChipMOS TECHNOLOGIES (BVI) LTD.; Supervisor of ChipMOS SEMICONDUCTORS (Shanghai) LTD.; Representative & Director of Tsai Fu Investment Co., Ltd.

Note 5： Chairman & President of ChipMOS SEMICONDUCTORS (Shanghai) LTD.; Representative & Director of Yung Hsiang Investment Co., Ltd.

Note 6： The reasonableness, necessity thereof, and the measures adopted in response thereto of the President and Chairman of the board of directors of the Company are the same person:

The Board of Directors is the Company's highest governance unit and the center for making business decisions. It supervises the management, exercise its powers in accordance with laws and regulations, and is being responsible to the company and its shareholders.

The person whe serves the Chairman and President, in order to maximize the Company's value, he must fully grasp the operation information and status, so that the operating efficiency is increased and the decision-making is executed more smoothly.

The Company has long been committed to deepening corporate governance and corporate social responsibility. By increasing the number of independent directors to 5 and setting up functional committees, independent directors are appointed as members of the committee. With its independence and professionalism, it provides board decision-making suggestions and strengthens director supervision and decision quality. More than half of the Company’s directors neither employee nor officer of the Company.

III. Remuneration to Directors (Including Independent Directors), Supervisors, President, and Vice Presidents

(I) Remuneration to Directors, Supervisors, President, and Vice Presidents in the Most Recent Year

1. Remuneration to directors (including independent directors)

Year 2019 (Unit: NT$ thousands; %)

<table>
<tr><th rowspan="4">Title</th><th rowspan="4">Name</th><th colspan="8">Director's Remuneration</th><th colspan="2" rowspan="2">Ratio of the sum of (A), (B), (C), and (D) to net profit after tax (%)</th><th colspan="8">Compensation received as an employee</th><th colspan="2" rowspan="2">Ratio of the sum of (A), (B), (C), (D), (E), (F) and (G) to net profit after tax (%)</th><th rowspan="4">Remuneration received from Investees other than subsidiaries or parent company</th></tr>
<tr><th colspan="2">Base compensation (A)</th><th colspan="2">Pension (B)</th><th colspan="2">Director compensation (C)</th><th colspan="2">Business expense (D)</th><th colspan="2">Salary, bonus and special allowance (E)</th><th colspan="2">Pension (F)</th><th colspan="4">Employee compensation (G)</th></tr>
<tr><th rowspan="2">Company</th><th rowspan="2">Consolidated Entities</th><th rowspan="2">Company</th><th rowspan="2">Consolidated Entities</th><th rowspan="2">Company</th><th rowspan="2">Consolidated Entities</th><th rowspan="2">Company</th><th rowspan="2">Consolidated Entities</th><th rowspan="2">Company</th><th rowspan="2">Consolidated Entities</th><th rowspan="2">Company</th><th rowspan="2">Consolidated Entities</th><th rowspan="2">Company</th><th rowspan="2">Consolidated Entities</th><th colspan="2">Company</th><th colspan="2">Consolidated Entities</th><th rowspan="2">Company</th><th rowspan="2">Consolidated Entities</th></tr>
<tr><th>Cash</th><th>Share</th><th>Cash</th><th>Share</th></tr>
<tr><td>Chairman</td><td>Shih-Jye Cheng</td><td rowspan="6">—</td><td rowspan="6">—</td><td rowspan="6">—</td><td rowspan="6">—</td><td rowspan="6">7,005</td><td rowspan="6">7,005</td><td rowspan="6">3,551</td><td rowspan="6">3,551</td><td rowspan="6">0.41%</td><td rowspan="6">0.41%</td><td rowspan="6">48,904</td><td rowspan="6">48,904</td><td rowspan="6">196</td><td rowspan="6">196</td><td rowspan="6">11,798</td><td rowspan="6">—</td><td rowspan="6">11,798</td><td rowspan="6">—</td><td rowspan="6">2.76%</td><td rowspan="6">2.76%</td><td rowspan="6">None</td></tr>
<tr><td>Director</td><td>Yu-Hu Liu</td></tr>
<tr><td>Director</td><td>Wen-Ching Lin</td></tr>
<tr><td>Director</td><td>Bright Yeh (representative, Siliconware Precision Industries Co., Ltd.)</td></tr>
<tr><td>Director</td><td>Teresa Wang (representative, Siliconware Precision Industries Co., Ltd.)</td></tr>
<tr><td>Director</td><td>Lafair Cho</td></tr>
<tr><td>Independent Director</td><td>Chin-Shyh Ou</td><td rowspan="6">—</td><td rowspan="6">—</td><td rowspan="6">—</td><td rowspan="6">—</td><td rowspan="6">9,913</td><td rowspan="6">9,913</td><td rowspan="6">5,797</td><td rowspan="6">5,797</td><td rowspan="6">0.61%</td><td rowspan="6">0.61%</td><td rowspan="6">—</td><td rowspan="6">—</td><td rowspan="6">—</td><td rowspan="6">—</td><td rowspan="6">—</td><td rowspan="6">—</td><td rowspan="6">—</td><td rowspan="6">—</td><td rowspan="6">0.61%</td><td rowspan="6">0.61%</td><td rowspan="6">None</td></tr>
<tr><td>Independent Director</td><td>Yuh-Fong Tang</td></tr>
<tr><td>Independent Director</td><td>Tai-Haur Kuo</td></tr>
<tr><td>Independent Director</td><td>Cho-Lien Chang</td></tr>
<tr><td>Independent Director</td><td>Kuei-Ann Wen</td></tr>
<tr><td>Independent Director</td><td>Jing-Shan Aur</td></tr>
</table>

Note1 : The disclosed compensation content is different from the concept of income defined in Income Tax Act. Therefore, this table shall merely be used for the purpose of information disclosure and shall not be used for taxation.

Note2 : Yu-Hu Liu, Cho-Lien Chang and Wen-Ching Lin : Term expired on June 10,2019.
Bright Yeh (representative Siliconware Precision Industries Co., Ltd.), Teresa Wang (representative Siliconware Precision Industries Co., Ltd.), Lafair Cho and Jing-Shan Aur : Newly elected on June 10,2019.

Note3 : Except the above-mentioned figures, the directors of the Company receive remuneration for providing services to all companies in the financial report (such as serving as a consultant for non-employees) : None.

Directors' Remuneration Scale

Intervals of Compensation Paid to Directors	Directors' Name			
	Total Remuneration (A+B+C+D)		Total Compensations (A+B+C+D+E+F+G)	
	The Company	Consolidated Entities (H)	The Company	Consolidated Entities (I)
Less than NT$1,000,000	Bright Yeh (representative, Siliconware Precision Industries Co., Ltd.), Teresa Wang (representative, Siliconware Precision Industries Co., Ltd.),	Bright Yeh (representative, Siliconware Precision Industries Co., Ltd.), Teresa Wang (representative, Siliconware Precision Industries Co., Ltd.),	Bright Yeh (representative, Siliconware Precision Industries Co., Ltd.), Teresa Wang (representative, Siliconware Precision Industries Co., Ltd.),	Bright Yeh (representative, Siliconware Precision Industries Co., Ltd.), Teresa Wang (representative, Siliconware Precision Industries Co., Ltd.),
NT$1,000,000 (included) ~ NT$2,000,000 (not included)	Yu-Hu Liu, Wen-Ching Lin, Lafair Cho, Cho-Lien Chang, Jing-Shan Aur	Yu-Hu Liu, Wen-Ching Lin, Lafair Cho, Cho-Lien Chang, Jing-Shan Aur	Yu-Hu Liu, Wen-Ching Lin, Cho-Lien Chang, Jing-Shan Aur	Yu-Hu Liu, Wen-Ching Lin, Cho-Lien Chang, Jing-Shan Aur
NT$2,000,000 (included) ~ NT$3,500,000 (not included)	Shih-Jye Cheng, Chin-Shyh Ou, Yuh-Fong Tang, Tai-Haur Kuo, Kuei-Ann Wen	Shih-Jye Cheng, Chin-Shyh Ou, Yuh-Fong Tang, Tai-Haur Kuo, Kuei-Ann Wen	Chin-Shyh Ou, Yuh-Fong Tang, Tai-Haur Kuo, Kuei-Ann Wen	Chin-Shyh Ou, Yuh-Fong Tang, Tai-Haur Kuo, Kuei-Ann Wen
NT$3,500,000 (included) ~ NT$5,000,000 (not included)	—	—	—	—
NT$5,000,000 (included) ~ NT$10,000,000 (not included)	—	—	—	—
NT$10,000,000 (included) ~ NT$15,000,000 (not included)	—	—	—	—
NT$15,000,000 (included) ~ NT$30,000,000 (not included)	—	—	Lafair Cho	Lafair Cho
NT$30,000,000 (included) ~ NT$50,000,000 (not included)	—	—	Shih-Jye Cheng	Shih-Jye Cheng
NT$50,000,000 (included) ~ NT$100,000,000 (not included)	—	—	—	—
More than NT$100,000,000	—	—	—	—
Total	12 persons	12 persons	12 persons	12 persons

Note1 : The disclosed compensation content is different from the concept of income defined in Income Tax Act. Therefore, this table shall merely be used for the purpose of information disclosure and shall not be used for taxation.

Note 2 : Yu-Hu Liu, Cho-Lien Chang and Wen-Ching Lin : Term expired on June 10,2019.
Bright Yeh (representative Siliconware Precision Industries Co., Ltd.), Teresa Wang (representative Siliconware Precision Industries Co., Ltd.), Lafair Cho and Jing-Shan Aur : Newly elected on June 10,2019.

2. Remuneration to supervisors: Not applicable.

3. Remuneration to President and vice presidents

Year 2019 (Unit: NT$ thousands; %)

Title	Name	Salary (A)		Pension (B)		Bonus and special allowance (C)		Employee Compensation (D)				Ratio of the sum of (A), (B), (C), (D) to net profit after tax (%)		Remuneration received from Investees other than subsidiaries or Parent Company
		Company	Consolidated Entities	Company	Consolidated Entities	Company	Consolidated Entities	Company		Consolidated Entities		Company	Consolidated Entities	
								Cash	Share	Cash	Share			
President	Shih-Jye Cheng	48,113	48,113	1,740	1,740	55,331	55,331	31,354	—	31,354	—	5.28%	5.28%	None
Senior Executive Vice President & Chief Operating Officer	Lafair Cho													
Vice President	Wu-Hung Hsu													
Vice President	Yuan-Feng Hsu													
Vice President & Spokesperson	Jesse Huang													
Vice President	Jin-Long Fang													
Vice President	Chen-Fang Huang													
Vice President	Teng-Yueh Tsai													
Vice President	Ming-Cheng Lin													
Vice President	Chang-Lung Li													
Vice President	Yu-Ying Chen													
Vice President	Silvia Su													

* Company's President's and Vice Presidents' salary is based on the position and the standard salary of the industry. The bonus is determined in accordance with the Company's profit, individual contribution and performance.

* The aforementioned pensions are deposited in the amount in accordance with labor-related laws and regulations.

* The distribution amount of employee compensation of this year is calculated based on the actual distribution ratio of the preceding year

Remuneration Brackets Table for President and Vice Presidents

Interval of Compensation Paid to President and Vice Presidents			Name of President/Vice President	
			The Company	All Companies Included in the Consolidated Financial Statements
Less than NT$1,000,000			—	—
NT$1,000,000 (included)	~	NT$2,000,000 (not included)	—	—
NT$2,000,000 (included)	~	NT$3,500,000 (not included)	—	—
NT$3,500,000 (included)	~	NT$5,000,000 (not included)	—	—
NT$5,000,000 (included)	~	NT$10,000,000 (not included)	Wu-Hung Hsu, Yuan-Feng Hsu, Jesse Huang, Jin-Long Fang, Chen-Fang Huang, Teng-Yueh Tsai, Ming-Cheng Lin, Chang-Lung Li, Yu-Ying Chen , Silvia Su	Wu-Hung Hsu, Yuan-Feng Hsu, Jesse Huang, Jin-Long Fang, Chen-Fang Huang, Teng-Yueh Tsai, Ming-Cheng Lin, Chang-Lung Li, Yu-Ying Chen , Silvia Su
NT$10,000,000 (included)	~	NT$15,000,000 (not included)	Lafair Cho	Lafair Cho
NT$15,000,000 (included)	~	NT$30,000,000 (not included)	—	—
NT$30,000,000 (included)	~	NT$50,000,000 (not included)	Shih-Jye Cheng	Shih-Jye Cheng
NT$50,000,000 (included)	~	NT$100,000,000 (not included)	—	—
More than NT$100,000,000			—	—
Total			12 persons	12 persons

Note: The disclosed compensation content is different from the concept of income defined in Income Tax Act. Therefore, this table shall merely be used for the purpose of information disclosure and shall not be used for taxation.

4. Names of managers distributed employee compensation and the status of distribution

Year 2019 (Unit: NT$ thousands; %)

	Title	Name	Share	Cash	Total	Ratio of the total amount to net profit after tax (%)
Manager	President	Shih-Jye Cheng	—	33,836	33,836	1.31%
	Senior Executive Vice President & Chief Operating Officer	Lafair Cho				
	Vice President	Wu-Hung Hsu				
	Vice President	Yuan-Feng Hsu				
	Vice President & Spokesperson	Jesse Huang				
	Vice President	Jin-Long Fang				
	Vice President	Chen-Fang Huang				
	Vice President	Teng-Yueh Tsai				
	Vice President	Ming-Cheng Lin				
	Vice President	Chang-Lung Li				
	Vice President	Yu-Ying Chen				
	Vice President	Silvia Su				
	Senior Director	Chao-Tung So				
	Senior Director	JB Chyi				
	Manager	Ling Cheng				
	Senior Manager	Chi-Pei Cho				

(II) Analysis Regarding the Ratio of the Total Remuneration to Net Profit After Tax

1. Analysis regarding the ratio of total remuneration paid to Company's directors, supervisors, President and vice presidents in the most recent 2 years to net profit after tax, and the relationship between such ratio and operational performance:

Item	Ratio of the Total Remuneration to Net Profit After Tax			
	2019		2018	
	The Company	Consolidated Entities	The Company	Consolidated Entities
Director(including Independent Directors)	1.02%	1.02%	1.67%	1.67%
Supervisor	—	—	—	—
President and Vice President	5.28%	5.28%	12.06%	12.06%

Note 1: The difference in the ratio of President's and Vice Presidents' remuneration is due to the Company's net profit after tax of NT$2,584,161 thousand in 2019 and NT$1,103,075 thousand in 2018.

Note 2: The Company has established Audit Committee on June 28, 2007 and thus supervisor remuneration does not apply.

2. Relationship among remuneration policies, standards and combination, procedure of determining remuneration and operational performance:

Company's "Regulations Governing the Payment of Directors' and Supervisors' Remuneration" provided as follows:

(1) The Company enacted Remuneration Committee Charter based on the resolution adopted by the Board of Directors on March 29, 2012 and established Remuneration Committee.

(2) The purpose of Remuneration Committee:

A. Enact and periodically review directors' and managers' performance objective and the policies, regulations, standards and structures of remuneration.

B. Supervise the Company's management regarding directors and managers' remuneration.

IV. Implementation of Corporate Governance

(I) Board of Directors Meeting Status

The Board of Directors held 8 meetings (A) in the most recent year. The attendance of directors was as follows:

Title	Name	Attendance in Person (B)	By Proxy	Attendance Rate (%) (B/A)	Remarks
Chairman	Shih-Jye Cheng	8	—	100.00%	Re-election
Director	Teresa Wang (representative, Siliconware Precision Industries Co., Ltd.)	3	1	75.00%	Newly elected on June 10, 2019.
Director	Bright Yeh (representative, Siliconware Precision Industries Co., Ltd.)	4	—	100.00%	Newly elected on June 10, 2019.
Director	Lafair Cho	4	—	100.00%	Newly elected on June 10, 2019.
Ex-Director	Wen-Ching Lin	4	—	100.00%	Term expired on June 10, 2019.
Ex-Director	Yu-Hu Liu	4	—	100.00%	Term expired on June 10, 2019.
Independent Director	Chin-Shyh Ou	8	—	100.00%	Re-election
Independent Director	Yuh-Fong Tang	7	1	87.50%	Re-election
Independent Director	Tai-Haur Kuo	8	—	100.00%	Re-election
Independent Director	Kuei-Ann Wen	8	—	100.00%	Re-election
Independent Director	Jing-Shan Aur	4	—	100.00%	Newly elected on June 10, 2019.
Ex-Independent Director	Cho-Lien Chang	3	1	75.00%	Term expired on June 10, 2019.

Other mentionable items:

I. If there are circumstances occurred during the operation of the Board of Directors, the date of meetings, sessions and contents of motion of the Board of Directors, all independent directors' opinions and the Company's responses to such opinions should be specified:

(I) Circumstances referred to in Article 14-3 of the Securities and Exchange Act:
The Company has established an Audit Committee, and Article 14-3 of the Securities and Exchange Act is not applicable to the Company. Please refer to Page 24-26 of the Annual Report for related information of the operation status of the Audit Committee.

(II) Besides the foregoing items, other resolutions objected by independent directors or subject to a qualified opinion and recorded or declared in writing: None.

II. Implementation of resolutions of which directors refrained from participating due to conflict of interest:

(I) Resolution of the 26th meeting of the 8th Board of Directors regarding the adjustment of managers' compensation and position in 2019 involves personal interest of Chairman Shih-Jye Cheng, and thus he did not participate in discussion or voting in accordance with the Company Act. Director Tai-Haur Kuo served as the acting chairman and made inquiries with other directors present at the meeting. Such resolution was unanimously approved.

(II) Resolution of the 26th meeting of the 8 th Board of Directors regarding the discussion of managers' 2018 performance bonus involves personal interest of Chairman Shih-Jye Cheng, and thus he did not participate in discussion or voting in accordance with the Company Act. Director Tai-Haur Kuo served as the acting chairman and made inquiries with other directors present at the meeting. Such resolution was unanimously approved.

(III) Resolution of the 26th meeting of the 8th Board of Directors regarding managers' 2019 annual performance bonus plan involves personal interest of Chairman Shih-Jye Cheng , and thus he did not participate in discussion or voting in accordance with the Company Act. Director Tai-Haur Kuo served as the acting chairman and made inquiries with other directors present at the meeting. Such resolution was unanimously approved.

(IV) Resolution of the 2nd meeting of the 9th Board of Directors regarding distribution of cash employee bonus to managers of 2018 involves personal interest of Chairman Shih-Jye Cheng, and Director Lafair Cho, and thus they did not participate in discussion or voting in accordance with the Company Act. Director Tai-Haur Kuo served as the acting chairman and made inquiries with other directors present at the meeting. Such resolution was unanimously approved.

III. Measures taken to strengthen the functionality of the Board of Directors within current and the most recent year: To implement corporate governance and enhance the Company's board functions, and to set forth performance objectives to improve the operation efficiency of the board of directors, "The Rules for Performance Assessment of the Board of Directors" was established in 2020, and the Company shall conduct an internal board performance assessment once a year.

Note: The authority of the Company's supervisors shall be exercised by Audit Committee composed of Independent Directors.

(II) Audit Committee Meeting Status

1. The Company established Audit Committee on June 28, 2007 to exercise the power of supervisors provided in relevant laws and regulations.
2. Audit Committee held 8 meetings (A) in the most recent year. The attendance of the members was as follows:

Title	Name	Attendance in Person (B)	By Proxy	Attendance Rate (%) (B/A)	Remarks
Independent Director	Chin-Shyh Ou	8	—	100.00%	Audit Committee convener Re-elected
Independent Director	Yuh-Fong Tang	7	1	87.50%	Re-elected
Independent Director	Tai-Haur Kuo	8	—	100.00%	Re-elected
Independent Director	Kuei-Ann Wen	8	—	100.00%	Re-elected
Independent Director	Jing-Shan Aur	4	—	100.00%	Newly elected
Ex-Independent Director	Cho-Lien Chang	3	1	75.00%	Term expired on June 10, 2019.

Other mentionable items:

I. If any of the following circumstances occurred during the operation of the Audit Committee, the dates of meetings, sessions, contents of motion of the Board of Directors, resolutions of the Audit Committee and the Company's response to the Audit Committee's opinions should be specified:

(I) Circumstances stipulated in Article 14-5 of the Securities and Exchange Act

1. The resolutions of the 24th meeting of the 8th Board of Directors (March 7, 2019)

Sessions and contents of motion of the Board of Directors	Resolutions of the Audit Committee	The Company's responses to the Audit Committee's opinions should be specified
1. The Company's 2018 Statement of Internal Control.	Approved by all members present in the meeting.	No further processing due to no directors 'comments
2. The Company's 2018 business report and financial statements.		
3. Amendments to the Operational Procedures for the Acquisition or Disposal of Assets.		
4. The amendments to the Company's "Internal Control System" and "Internal Audit Implementation Rules".		
5. Resolution regarding the evaluation of the independence of Company's CPA and the engagement of CPA of 2019.		

2. The resolutions of the 25th meeting of the 8th Board of Directors (April 2, 2019)

Sessions and contents of motion of the Board of Directors	Resolutions of the Audit Committee	The Company's responses to the Audit Committee's opinions should be specified
1. Amendments to the Operational Procedures for Lending Funds to Other Parties.	Approved by all members present in the meeting.	No further processing due to no directors 'comments
2. Amendments to the Operational Procedures for Endorsements and Guarantees.		
3. Announcement of intending of disposal of the common shares of JMC ELECTRONICS CO., LTD.		

3. The resolutions of the 26th meeting of the 8th Board of Directors (April 25, 2019)

Sessions and contents of motion of the Board of Directors	Resolutions of the Audit Committee	The Company's responses to the Audit Committee's opinions should be specified
1. The Company's 2018 Internal Audit Report on Internal Control Over Financial Reporting (ICFR).	Approved by all members present in the meeting.	No further processing due to no directors 'comments
2. Adoption of Company's 2018 Annual Report Form 20-F (including the English consolidated financial statements of 2018 prepared by the Company in accordance with the International Financial Reporting Standards).		

4. The resolutions of the 2nd meeting of the 9th Board of Directors (June 27, 2019)

Sessions and contents of motion of the Board of Directors	Resolutions of the Audit Committee	The Company's responses to the Audit Committee's opinions should be specified
1. Senior manager Chi-Pei Cho, the internal audit officer of the Company, apply for resignation. 2. Ling Cheng take over the internal audit officer of the Company.	Approved by all members present in the meeting.	No further processing due to no directors 'comments

5. The resolutions of the 3rd meeting of the 9th Board of Directors (August 6, 2019)

Sessions and contents of motion of the Board of Directors	Resolutions of the Audit Committee	The Company's responses to the Audit Committee's opinions should be specified
1. The Company's consolidated financial statement of Q2, 2019. 2.The letter of guarantee made for importing duty.	Approved by all members present in the meeting.	No further processing due to no directors 'comments

(II) Besides the foregoing items, other resolutions which failed to be approved by the Audit Committee but otherwise approved by a two-third majority of all the directors: None.

II. Implementation of resolutions of which independent directors refrained from participating due to conflict of interest:

(I) There was no such situation in the Audit Committee in 2019.

(II) Resolution of the 24th meeting of the 8th Board of Directors regarding the independent director candidate nomination of re-election of Board of Directors at 2019 Annual Shareholders' Meeting involves personal interest of Independent Director Chin-Shyh Ou, Yuh-Fong Tang, Tai-Haur Kuo and Kuei-Ann Wen, and thus they did not participate in discussion or voting in accordance with the Company Act. The chairman made inquiries with other directors present at the meeting. Such resolution was unanimously approved.

(III) (III) Resolution of the 1st meeting of the 9th Board of Directors regarding the Appointment of members of the 4th Remuneration Committee involves personal interest of Independent Director Tai-Haur Kuo, Yuh-Fong Tang, and Chin-Shyh Ou, and thus they did not participate in discussion or voting in accordance with the Company Act. The chairman made inquiries with other directors present at the meeting. Such resolution was unanimously approved.

III. Communications between independent directors and the Company's internal audit supervisor and CPA (e.g. items, methods and results of the audits of corporate finance or operations, etc.):

(I) The internal audit supervisors shall attend the meeting of the Board of Directors, periodically provide internal auditing report to Audit Committee to make communication on the implementing status of internal auditing, and make timely report to Audit Committee in special occasions. No foregoing special occasions occurred in 2019. The communication between the Audit Committee and the internal auditing supervisors are fine.

(II) The CPAs engaged by the Company shall attend the meeting of Audit Committee, periodically report on the review result of financial statements and other items as required by laws and regulations, and make timely report to the Audit Committee in special occasions. No foregoing special occasions occurred in 2019. The communication between Audit Committee and CPAs are fine.

(III) The internal audit head, the independent auditors and independent directors can contact each other as needed. The communication channels are seamless.

(III) Corporate Governance Implementation Status and Deviations from the "Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies" and Reasons:

Evaluation Item	Implementation Status			Deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and Reasons
	Yes	No	Abstract Illustration	
1. Does the company establish and disclose the Corporate Governance Best Practice Principles based on "Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies"?	V		The Company has established and disclosed corporate governance principles including Procedures for Ethical Management and Guidelines for Conduct, Code of Ethics and Business Conduct, Corporate Social Responsibility Best Practice Principles, Rules Governing the Scope of Powers of Independent Directors, Rules Governing the Exercise of Rights and Participation in Resolutions by Juristic Person Shareholders With Controlling Power, and Operational Procedures for Transaction with Group Enterprises, Specific Company and Related Party in accordance with "Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies."	None
2. Shareholding structure and shareholders' rights (1) Does the company establish internal operating procedures to deal with shareholder suggestions, doubts, disputes and litigation and implement based on the procedure?	V		(1) The Company has established Corporate Social Responsibility Best Practice Principles based on the respect to the stakeholders, and to identify the stakeholders of the Company as well as established a designated section on its website for the stakeholders. The Company, through proper communication, understands the reasonable expectations and demands of the stakeholders and properly responds to critical corporate social responsibility issues of concern to the stakeholders.	None

Evaluation Item	Implementation Status			Deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and Reasons
	Yes	No	Abstract Illustration	
(2) Does the company possess the list of its major shareholders as well as the ultimate owners of those shares?	V		(2) The Company possesses the list of its major shareholders as well as the ultimate owners of those shares, and has regularly disclosed information of major shareholders and ultimate owners of those in accordance with relevant laws and regulations.	None
(3) Does the company establish and execute the risk management and firewall system within its conglomerate structure?	V		(3) The Company has established regulations regarding supervision and management of subsidiaries in accordance with relevant regulations of Securities and Futures Bureau and regularly reviews their management reports and conducts due diligence.	None
(4) Does the company establish internal rules against insiders trading with undisclosed information?	V		(4) The Company has established Procedures for Ethical Management and Guidelines for Conduct. and Operating Procedures for Preventing Insider Trading. The Company's personnel shall comply with the provisions of the Securities Exchange Act and shall not use the undisclosed information to engage in insider trading or disclose it to others in order to prevent others from using the undisclosed information to engage in insider trading.	None
3. Composition and Responsibilities of the board of directors (1) Does the board of directors develop and implement a diversified policy for the composition of its members?	V		(1) The members of the Board of Directors have different professional backgrounds and work fields such as accounting and industry. The	None

Evaluation Item	Implementation Status			Deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and Reasons
	Yes	No	Abstract Illustration	
			members of the Board of Directors include two female directors towards gender diversification to implement Taiwan's Gender Equality Policy Guidelines and to improve female decision-making participation.	
(2) Does the company voluntarily establish other functional committees in addition to remuneration committee and audit committee?		V	(2) The Company has established Remuneration Committee and Audit Committee pursuant to the laws and will establish other functional committees in consideration of the scale and operation of the Company.	Under discussion and preparation
(3) Has the Company established methodology for evaluating the performance of its Board of Directors, on an annual basis, reported the results of performance to the Board of Directors, and use the results as reference for directors' remuneration and renewal?	V		(3) The Company established evaluation methods and methods for evaluating the performance of its Board of Directors, and conducts performance evaluation annually and regularly. The company's board of directors performance evaluation method is disclosure on Market Observation Post System and the Company's website.The Company has established Remuneration Committee to regularly review the structure of remuneration as well as regularly evaluate the remuneration of the directors.	None
(4) Does the company regularly evaluate the independence of CPAs?	V		(4) The Company annually evaluate the independence of CPAs. The engagement of the Company's CPAs has been approved by more than half of all the Audit Committee members, and then submitted to and adopted by the Board of Directors. The CPAs	None

Evaluation Item	Implementation Status			Deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and Reasons
	Yes	No	Abstract Illustration	
			are not stakeholders of the Company and strictly adheres to independence. The guidance to evaluate the independence of the CPA as follows: 1. Whether Certified Public Accountant has direct or significant indirect financial interests with the Company. 2. Whether or not Certified Public Accountant has any financing or guarantees of conduct with the Company or the directors of the Company. 3. Whether Certified Public Accountant has a close business relationship and potential employment relationship with the Company. 4. Whether Certified Public Accountant or members of their audit team had any positions in the Company as directors, managers or significant influence on the audit during the audit period. 5. Whether Certified Public Accountant has any non-audit services to the Company which may directly affect the audit work. 6. Whether Certified Public Accountant has an intermediary to issue shares or other securities of the Company. 7. Whether Certified Public Accountant has acted as the Company's defender or on behalf of the	

Evaluation Item	Implementation Status			Deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and Reasons
	Yes	No	Abstract Illustration	
			Company to coordinate conflicts with other third parties. 8. Whether Certified Public Accountant has a kinship with the directors, managers of the Company or persons who have a significant influence on the audit work. 9. Whether Certified Public Accountant does not assume the Company's external auditor for 7 consecutive years. 10. Has anyone in the Company worked with the external auditor and within the last year of disassociating from the firm joined pcsc as a director, manager, or officer or another key position that can exert significant influence over the subject matter of the engagement. 11. Whether Certified Public Accountant violates the regulations of The Bulletin of Norm of Professional Ethics for Certified Public Accountant of the Republic of China No.10 Integrity, Objectivity and Independence.	
4. Does the Company appoint competent and appropriate corporate governance personnel and corporate governance officer to be in charge of corporate governance affairs (including but not limited to furnishing information required for business execution by directors, assisting		V	The Company cooperates with the regulations of the competent authority and will appoint the establishment of corporate governance officer before June 30, 2021.	The Company cooperates with the regulations of the competent authority and will appoint the establishment of corporate governance officer before June 30, 2021.

Evaluation Item	Implementation Status			Deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and Reasons
	Yes	No	Abstract Illustration	
directors' compliance of law, handling matters related to board meetings and shareholders' meetings according to law, and recording minutes of board meetings and shareholders' meetings)?				
5. Does the company establish a communication channel and establish a designated section on its website for stakeholders (including but not limited to shareholders, employees, clients and suppliers), and properly respond to critical corporate social responsibility issues of concern to stakeholders?	V		The Company has established functions of various departments, and maintained smooth communication channels with the stakeholders such as shareholders, employees, clients, suppliers, government and community. The Company establish a designated section on its website for stakeholders and properly respond to critical corporate social responsibility issues of concern to stakeholders.	None
6. Does the company appoint a professional shareholder service agency to deal with shareholder affairs?	V		The Company has designated KGI Securities Co. Ltd. to deal with shareholder affairs.	None
7. Information disclosure (1) Does the company have a website to disclose both the information relating to finance, business and corporate governance?	V		(1) The Company has established the Chinese/English website (www.chipmos.com) to actively disclose information regarding the Company's finance, business and corporate governance, and relevant information can be also found on Market Observation Post System.	None
(2) Does the company have other information	V		(2) The Company has established the Chinese/English	None

Evaluation Item	Implementation Status			Deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and Reasons
	Yes	No	Abstract Illustration	
disclosure channels (e.g., building an English website, appointing designated people to handle information collection and disclosure, creating a spokesperson system, webcasting investor conferences)?			website to webcast investor conferences. The Company has one spokesperson and one deputy spokesperson. The Company’s Finance & Accounting Management Center and Strategy and Investor Relations office responsible for corporate information disclosure on Market Observation Post System and the Company's website.	
(3) Does the Company announce and report the annual financial statements within two months after the end of the fiscal year, and announce and report the first, second, and third quarter financial statements as well as the operating status of each month before the prescribed deadline?		V	(3) The Company announce and report the annual financial statements, and the first, second, and third quarter financial statements as well as the operating status of each month before the prescribed deadline	The Company announce and report the annual financial statements within three months after the end of the fiscal year before the prescribed deadline
8. Is there any other important information to facilitate a better understanding of the company’s corporate governance practices (e.g., including but not limited to employee rights, employee wellness, investor relations, supplier relations, rights of stakeholders, directors’ and supervisors’ training records, the implementation status of risk management policies and risk evaluation measures, the implementation of customer relations policies, and purchasing insurance for directors and supervisors)?	V V		(1) Employee rights as well as employee wellness: the Company has implemented the Labor Standards Act and relevant regulations, regularly conducted education and training, and established the Employee Welfare Committee to protect employees' rights and interests. (2) Investor relations: the Company has one spokesperson and one deputy spokesperson, and investor relations office responsible for dealing with recommendations and doubts raised by investors.	None None

Evaluation Item	Implementation Status			Deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and Reasons
	Yes	No	Abstract Illustration	
	V		(3) Supplier relations: the Company has upheld the principle of good faith to maintain the relationship with its suppliers, conducted operations and financial status assessment for the major purchasers to ensure the stability of the purchase, established good relationship with suppliers, and simultaneously developed other possible alternative materials and vendors to increase the flexibility of the source of the purchase.	None
	V		(4) Rights of stakeholders: the Company has established functions of various departments, and maintained smooth communication channels with the stakeholders such as shareholders, employees, clients, suppliers, government and community.	None
	V		(5) Continuing education of directors and supervisors: the directors and independent directors of the Company have continued attending training courses in accordance with relevant regulations.	None
	V		(6) The implementation status of risk management policies and risk evaluation standards: Under the policy of stable operation, the Company follows government regulations and devotes in reducing possible risks through audit actions conducted by internal audit department.	None
	V		(7) The implementation status of customer relations policies: Before engaging in business with others,	None

Evaluation Item	Implementation Status			Deviations from the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and Reasons
	Yes	No	Abstract Illustration	
	V		the Company has taken into account the legality of the clients or other business dealings parties and whether there is any record of dishonesty and avoided transactions with creditors of dishonesty. The Company has produced high-quality products to meet clients' demand for quality and quantity, and maintains good long-term relationship with clients. (8) The status of purchasing liability insurance for directors and supervisors:The Company has purchased Directors and Officers Liability Insurance and such information has been disclosed on Market Observation Post System.	None
9. Please indicate improvement status of the results of the corporate governance evaluation issued by TWSE Corporate Governance Center for the most recent year and propose matters which should be given priority and measures as for which have not yet improved: The company has amended the Company's Articles of Incorporation in the 2019 Annual Shareholders' Meeting to stipulate the nomination system for the selection of directors (including independent directors) and established the board performance evaluation method in 2020. It is planned to complete the establishment of corporate governance supervisor before June 30, 2021. In the future, we will strengthen the efficiency of corporate governance to provide information to the stakeholders.				

(IV) Composition, Responsibilities and Operations of the Remuneration Committee

1. The 4th Remuneration Committee

Title	Criteria / Name	Meets One of the Following Professional Qualification Requirements, Together with at Least Five Years' Work Experience			Independence criteria (Note)										Number of Other Public Companies in Which the Individual is Concurrently Serving as an Remuneration Committee Member	Remarks
		An instructor or higher position in a department of commerce, law, finance, accounting, or other academic department related to the business needs of the company in a public or private junior college, college or university	A judge, public prosecutor, attorney, certified public accountant, or other professional or technical specialists who has passed a national examination and been awarded a certificate in a profession necessary for the business of the company	Have work experience in the area of commerce, law, finance, or accounting, or otherwise necessary for the business of the company	1	2	3	4	5	6	7	8	9	10		
Independent Director	Tai-Haur Kuo	V		V	V	V	V	V	V	V	V	V	V	V	1	
Independent Director	Yuh-Fong Tang			V	V	V	V	V	V	V	V	V	V	V	1	
Independent Director	Chin-Shyh Ou	V	V	V	V	V	V	V	V	V	V	V	V	V	2	

Note: Within the scope of execution of business, a remuneration committee member of a public company shall maintain independence, and may not have any direct or indirect interest relationship with the company. During the 2 years before being appointed or during the term of office, a remuneration committee member shall not have been or be any of the following:

1. An employee of the company or any of its affiliates.
2. A director or supervisor of the company or any of its affiliates.
3. A natural-person shareholder who holds shares, together with those held by the person's spouse, minor children, or held by the person under any other's name, in an aggregate amount of 1 percent or more of the total number of issued shares of the company or ranking in the top 10 in shareholding.
4. A spouse, relative within the second degree of kinship, or lineal relative within the third degree of kinship, of a managerial officer under subparagraph 1 or any of the persons in the preceding two subparagraphs.
5. A director, supervisor, or employee of a corporate shareholder that directly holds 5 percent or more of the total number of issued shares of the company, or that ranks in the top 5 in shareholding, or that designates its representative to serve as a director or supervisor of the company under Article 27, paragraph 1 or 2 of the Company Act.
6. If a majority of the company's director seats or voting shares and those of any other company are controlled by the same person: a director, supervisor, or employee of that other company.
7. If the chairperson, general manager, or person holding an equivalent position of the company and a person in any of those positions at another company or institution are the same person or are spouses: a director (or governor), supervisor, or employee of that other company or institution.
8. A director, supervisor, managerial officer, or shareholder holding 5 percent or more of the shares, of a specified company or institution that has a financial or business relationship with the company.
9. A professional individual who, or an owner, partner, director, supervisor, or managerial officer of a sole proprietorship, partnership, company, or institution that, provides auditing services to the company or any affiliate of the company, or that provides commercial, legal, financial, accounting or related services to the company or any affiliate of the company for which the provider in the past 2 years has received cumulative compensation exceeding NT$500,000, or a spouse thereof; provided that this restriction does not apply to a member of the remuneration committee, public tender offer review committee, or special committee for merger/consolidation and acquisition, who exercises powers pursuant to the Act or to the Business Mergers and Acquisitions Act or related laws or regulations.
10. Not having any of the situations set forth in Article 30 of the Company Act.

2. Operation of the Remuneration Committee

(1) The time of establishment: The Company established Remuneration Committee Charter as well as the Remuneration Committee on March 29, 2012.

(2) The purpose of the Remuneration Committee:

A. Establish and regularly review the performance targets of the directors and managers as well as policies, systems, standards and structure of remuneration.

B. Supervise the management of the Company's remuneration of directors and managers.

(3) Members: The Remuneration Committee includes three members who are all independent directors .

(4) The tenure of the 4th Remuneration Committee starts from June 10, 2019 to June 09, 2022. The Remuneration Committee has held 5 meetings (A) in 2019. The attendance of the directors was as follows:

Title	Name	Attendance in person(B)	Attendance by proxy	Attendance rate (%) (B/A)	Remarks
Convener	Tai-Haur Kuo	5	0	100%	
Member	Yuh-Fong Tang	4	1	80%	
Member	Chin-Shyh Ou	5	0	100%	

Other mentionable items:

I. If the Board of Directors declines to adopt or modifies a recommendation of the Remuneration Committee's proposals, it should specify the date of meeting, sessions, content of the motion, resolution by the Board of Directors and the Company’s response to the Remuneration Committee’s opinion (e.g., the remuneration passed by the board of directors exceeds the recommendation committee, the circumstance and cause for the difference shall be specified): None.

II. Resolutions of the Remuneration Committee objected by members or subject to a qualified opinion and recorded or declared in writing, the date of the meeting, session, content of the motion of the Remuneration Committee, all members' opinions and the response to members' opinion should be specified: None.

(V) Performance of social responsibilities, any variance from the Corporate Social Responsibility Best Practice Principles for TWSE/TPEx Listed Companies, and the reason for any such variance

Evaluation Item	Implementation Status			Deviations from Corporate Social Responsibility Best Practice Principles for TWSE/TPEx listed Companies and Reasons
	Yes	No	Abstract Illustration	
1. Does the Company follow materiality principle to conduct risk assessment for environmental, social and corporate governance topics related to company operation, and establish risk management related policy or strategy?	V		The company has conducted risk assessments and formulated relevant risk management policies for supply chain risks, climate change risks, operational risks, information security risks, financial risks, and legal risks.	None of significant deviation
2. Does the company establish exclusively (or concurrently) dedicated first-line managers authorized by the board to be in charge of proposing the corporate social responsibility policies and reporting to the board?	V		The company established ChipMOS CSR committee, and set up Corporate Social Responsibility Practice Guidline by the board; ChipMOS chairman acted as the Chair and be the top of management excutives of CSR committee, and the key members are composed of the vice president of each business unit; CSR committee is responsible for setting up sustainable strategies and organizing corporate sustainable activities, and regularly reviewed CSR performance; the company compiled annual CSR report to expand the current year of performance and provide the reports to the board.	None of significant deviation
III. Environmental Topic (1) Does the company establish a proper environmental management system based on the characteristics of their industries?	V		(1) To enhance the level of environmental management and fulfill the responsibility of corporate citizenship, the Company passed the examination of ISO 140001 environmental management system since 1997,and promoted	None of significant deviation

Evaluation Item	Implementation Status			Deviations from Corporate Social Responsibility Best Practice Principles for TWSE/TPEx listed Companies and Reasons
	Yes	No	Abstract Illustration	
	.		QC-080000 productshazardous substances process management system certification in 2012. Since 2013, we have comprehensively promoted environmental protection related system verification in environmental friendliness, including ISO14067 carbon footprint, ISO14046 water footprint, ISO50001 energy management system, ISO14051 material flow cost accounting, in line with international trends and customer requirements, derived from the production process. Air pollution, water pollution, and waste, in addition to obtaining relevant licenses to operate according to their requirements, are actively taking many measures to pursue sustainable environmental protection. 1. Promote environmental policy: Continuing to educate employees and communicate through the company's official website, committing to the intention of exhaust, wastewater and waste pollution prevention and water power reduction control. 2. Reduction of air pollution emissions: In terms of air quality, the goal of reducing the air pollution emissions by improving the treatment efficiency of the control equipment, such as the addition of zeolite runners and RTO high-efficiency air pollution control.	

Evaluation Item	Implementation Status			Deviations from Corporate Social Responsibility Best Practice Principles for TWSE/TPEx listed Companies and Reasons
	Yes	No	Abstract Illustration	
			3. Water/wastewater reduction and recovery: Continuously improve the recovery rate of process wastewater in the plant, and recycle condensate and rainwater to the cooling tower and public water. 4. Waste reuse: Promote the process source to optimize the use of raw materials and waste from incineration / landfill to reuse.	
(2) Does the company endeavor to utilize all resources more efficiently and use renewable materials which have low impact on the environment?	V		(2) The Company established a management mechanism for using re-use and recycling of electricity, water resources and materials, and has continued to improve the source management and energy conservation and waste reduction. In the manufacturing process, the requirements for efficiency improvement and specification adjustment of supply facilities are targeted at "energy saving" and "decrease", such as air conditioning energy saving, installation of energy saving lighting (LED), increasing the efficiency of clean room circulation fans (FFU), promoting the process of improving energy saving and waste reduction process, solar green power generation, process wastewater and rainwater recovery and through the energy management, material flow cost accounting verification and green building, green	None of significant deviation

Evaluation Item	Implementation Status			Deviations from Corporate Social Responsibility Best Practice Principles for TWSE/TPEx listed Companies and Reasons
	Yes	No	Abstract Illustration	
			factory mark, in order to reduce the load of environmental impact, towards circular economy and zero pollution.	
(3) Does the company assess the potential risks and opportunities of climate changement now and in the future, and adopt climate-related cascading measures?	V		(3) The company is committed to reducing greenhouse gas emissions. About 97% of carbon emissions are from electricity. Therefore, it introduced the ISO50001 energy management system and is committed to reducing carbon emissions. The 1st solar power system was established in 2011 and merged into the factory's power system; the second one will be installed in 2018.	None of significant deviation
(4) Does the company count greenhouse gas emissions, water consumption and total weight of waste in the past two years and formulate policies for energy saving and carbon reduction, greenhouse gas reduction, water use reduction or other waste management?	V		(4) The Company pay attention to the impact of climate change on operational activities. In addition to the implementation of ISO 14064 greenhouse gas inventory annually since 2013, the Company promoted the energy-saving measures, introduced the energy management system, and passed the examination of ISO 50001. In response to clients and meet their expectations of low-carbon products, the Company implement product carbon footprint and water footprint inventory to reduce the emission of product carbon. Another, we push the “Materials Flow Cost Accounting management (ISO 14051)” in 2016 and 2017 to meet the trend of recycle economics.	None of significant deviation

Evaluation Item	Implementation Status			Deviations from Corporate Social Responsibility Best Practice Principles for TWSE/TPEx listed Companies and Reasons
	Yes	No	Abstract Illustration	
4. Social Topic (1) Does the company formulate appropriate management policies and procedures according to relevant regulations and the International Bill of Human Rights?	V		(1) The Company complied with local labor laws and , according to the international labor and human rights standards of " Responsible Business Alliance " (RBA), incorporated humanized management, developed written employee policies and published it in the company's employee bulletin board so that employees may query and understand. Human resources management center also kept abreast of the amendment to labor laws, timely adjusted management system, so that all the employees' labor rights and interests would be protected.	None of significant deviation
(2) Has the Company established appropriately managed employee welfare measures (include salary and compensation, leave and others), and link operational performance or achievements with employee salary and compensation?	V		(2) The Company has established a reasonable employee welfare policy (including compensation, vacation and other benefits) and prescribed related details in personnel regulations. In addition, the Company stipulated the profits policy of employees in the Company's Articles of Incorporation and regularly implement salary adjustments based on the Company's operating conditions and employee performance to return operating results to employees.	None of significant deviation
(3) Does the company provide a healthy and safe working environment and organize training on	V		(3) In addition to that the Company established policies to protect employees' safety and health, the	None of significant deviation

Evaluation Item	Implementation Status			Deviations from Corporate Social Responsibility Best Practice Principles for TWSE/TPEx listed Companies and Reasons
	Yes	No	Abstract Illustration	
health and safety for its employees on a regular basis?			Company promoted the OHSAS 18001 occupational safety and health management system to enhance employees' safety. In the area of occupational safety and health management, we focus on "workplace safety" and "labor health" and actively promote the division of electrical explosion-proof areas and risk reduction, risk assessment and classification management of chemical exposure hazards, human factors engineering, etc. through appropriate design, engineering and administrative control, protective maintenance and safe operating procedures and safety knowledge training to reduce, eliminate and prevent workplace hazards, and implement training drills through emergency procedures to minimize the impact of property and injury, set occupational safety and health plans every year, and implement education and training according to the plan and the monitoring of the working environment, and the free health check of the employees, the health promotion activities, the Ministry of Science and Technology Science Park Administration and the National Health Bereau awarded the "Operational Safety and Health Excellent Unit" and "Healthy Workplace Self-certification" mark And weight loss performance groups and individual awards,	

Evaluation Item	Implementation Status			Deviations from Corporate Social Responsibility Best Practice Principles for TWSE/TPEx listed Companies and Reasons
	Yes	No	Abstract Illustration	
			successfully creating a safe and healthy professional environment..	
(4) Does the company provide its employees with career development and training sessions?	V		(4) The Company offered a complete six category of courses, so that each employee at all stages has comprehensive training opportunities, and provided employees with subsidies to participate in external training courses. The Company provided employees with rich and diverse internal and external resources so that employees' careers have opportunities to grow. 1. New employee orientation: to enhance the understanding of the Company's product organization, business direction and core values of understanding and recognition. 2. Engineering technology: in line with the strategic direction of to establish engineering and technical courses in order to lay a professional cornerstone and enhance the knowledge; to establish ChipMOS's professional training program for engineers (BU training program) with the concept of development of engineer's professional ability and to establish systematic training courses, and to promote the effective inheritance of knowledge and experience.	None of significant deviation

Evaluation Item	Implementation Status			Deviations from Corporate Social Responsibility Best Practice Principles for TWSE/TPEx listed Companies and Reasons
	Yes	No	Abstract Illustration	
			3. Quality management: to promote the Company's quality system. 4. Environmental safety and work health: to make employee acquire qualified license and have related knowledge of right working environmental safety. 5. Leadership management: to enhance management skills of the leadership pipeline based on the company's annual operational strategies and the required competence at all levels of management. 6. Work performance: to provide employee with the training of relevant skills required for work in order to enable them to work fully by using what they learned. The Company rewarded the silver of certification in Taiwan Train Quality System by Workforce Development Agency, Ministry of Labor in November, 2019.	
(5) Does the Company's product and service comply with related regulations and international rules for customers' health and safety, privacy, sales, labelling and set polices to protect consumers' rights and consumer appeal procedures?	V		(5) The Company passed many international standards, including IATF 16949, ISO 9001, QC 080000, ISO 14001, ISO 50001, ISO 17025, ISO 27001, OHSAS 18001, ANS/ESD S20.20 and ISO 26262.	None of significant deviation

Evaluation Item	Implementation Status			Deviations from Corporate Social Responsibility Best Practice Principles for TWSE/TPEx listed Companies and Reasons
	Yes	No	Abstract Illustration	
(6) Does the Company set supplier management policy and request suppliers to comply with related standards on the topics of environmental, occupational safety and health or labor right, and their implementation status?	V		(6) When evaluating new suppliers, the Company follows the purpose of the RBA and the relevant guidelines to investigate whether it has the concept of environmental protection and corporate responsibility, occupational safety and health, good corporate citizenship, and whether there is any record of environmental, occupational safety and health, and social impact. The supplier would be asked to report and improve the results, and confirm the current actual implementation if the supplier has related records.	None of significant deviation
5. Does the Company refer to international reporting rules or guidelines to publish CSR Report to disclose non-financial information of the Company? Has the said Report acquire 3rd certification party verification or statement of assurance?	V		2018 ChipMOS Corporate Social Responsibility Report followed the quality principles required by GRI Standards. To ensure quality of information disclosure, the report has been verified by the BSI Taiwan and was in accordance with GRI Standards core options and with type I moderate level of AA1000AS(2008).	None of significant deviation
6. If the company has established the corporate social responsibility principles based on "Corporate Social Responsibility Best Practice Principles for TWSE/TPEx Listed Companies", please describe any deviation between the Principles and their implementation: The Company has established Corporate Social Responsibility Practice Guidline on August 13, 2013 and revised it on March 12, 2015. The relevant operations were in accordance with the purpose of corporate social responsibility.				

Evaluation Item	Implementation Status			Deviations from Corporate Social Responsibility Best Practice Principles for TWSE/TPEx listed Companies and Reasons
	Yes	No	Abstract Illustration	

7. Other important information to facilitate better understanding of the company's corporate social responsibility practices:
The Company actively participated in social environmental welfare activities, took the initiative to participate in the fire and environmental protection activities organized by the competent authorities, such as assisting 119 to expand fire prevention, public toilets and beach adoption, participate in environmental protection and beach cleansing, encouraging employees to enter the community to clean the street, helping charity clean the environment, Environmental Education to the partial township Elementary School, donation of materials, blood donation, long-term adoption of Tainan Science Park Greenland and Hsinchu Science Park sports park and air quality purification area to demonstrate the determination of working safety and environmental protection, and won the awards from relevant authorities.
1. Six consecutive years from 2014 to 2019 the Company was awarded "Excellent Organization of Adoption of Air Quality Ourification Area" by the Environmental Protection Agency.
2. Four consecutive years from 2016 to 2019 the Company passed the examination of Environmental Protection Administration and was rewarded 25th to 27th ROC Enterprise Environmental Protection Award and the 1th National Enterprise Environmental Protection Award..
3. In 2016 and 2018~2019, the Company was awarded the "Workplace Safety and Health Excellent Unit Safety Model" by the Southern Tainan Science Park Bereau.
4. In 2017-2019, the Company was awarded the "Environmental Protection Excellence Project" by the Southern Tainan Science Park Bereau.
5. In 2017-2019, the Company was awarded the “Excellent Green Purchasing Enterprise” by Tainan City and Hsinchu County Environmental Protection Bureau.
6. In 2017-2019, the Company was awarded the "High-Quality Unit for Road Recognition" by the Hsinchu County Environmental Protection Bureau.

(VI) Implementation of Ethical Corporate Management and Deviations from "Ethical Corporate Management Best Practice Principles for TWSE/GTSM Listed Companies" and Reasons:

Evaluation Item	Implementation Status			Deviations from the Ethical Corporate Management Best-Practice Principles for TWSE/TPEx Listed Companies and Reasons
	Yes	No	Abstract Illustration	
1. Establishment of ethical corporate management policies and programs				
(1) Does the company establish an ethical corporate management policy approved by the board of directors, and declare its ethical corporate management policies and procedures in its guidelines and external documents, as well as the commitment from its board and senior management to implement the policies?	V		(1) The Company has established "Procedures for Ethical Management and Guidelines for Conduct" and asked the Board of Directors, the management, and all the employees to comply with it. The Company also disclosed aforementioned on the Company's website.	None of deviation
(2) Does the company establish mechanisms for assessing the risk of unethical conduct, periodically analyze and assess operating activities within the scope of business with relatively high rish of unethical conduct, and formulate an unethical conduct prevention plan on this basis, which at least includes preventive measures for conduct specified in Article 7, Paragrahp 2 of the Ethical Corporate Management Best Practice Principles for TWSE/GTSM Listed Companies?	V		(2) The Company has taken appropriate precautionary measures against the business activities with the risk of bad faith.	None of deviation
(3) Does the company specify operating procedures, guidelines for conduct, punishments for violation, rules of appeal in the unethical conduct prevention	V		(3) The Company has established "Procedures for Ethical Management and Guidelines for Conduct", "Whistle Blower Policy" and	None of deviation

Evaluation Item	Implementation Status			Deviations from the Ethical Corporate Management Best-Practice Principles for TWSE/TPEx Listed Companies and Reasons
	Yes	No	Abstract Illustration	
plan, and does it implement and periodically review and revise the plan?			"Regulations Governing Professional Moral Condut" and asked the Board of Directors, the management, and all the employees to comply with the foregoing regulations.	
2. Implementation of ethical corporate management (1) Does the company evaluate business partners' ethical records and include ethics-related clauses in business contracts?	V		(1) The Company has assessed the integrity records of counterparties and included the terms of integrity conduct in the contracts with them.	None of deviation
(2) Does the company establish a dedicated unit under the board of directors to promote ethical corporate management, and periodically (at least once a year) report to the board of directors and supervise the implementation of the ethical management policy and unethical conduct prevention plan?	V		(2) The Company's Audit Office was responsible for promoting corporate integrity and regularly reported its implementation status to the Audit Committee and the Board of Directors.	None of deviation
(3) Does the company establish policies to prevent conflicts of interest and provide appropriate communication channels, and implement it?	V		(3) The Company has established "Procedures for Ethical Management and Guidelines for Conduct" and "Regulations Governing Professional Moral Conduct" and asked that if in the course of conducting company business, any personnel of this Corporation discovers that a potential conflict of interest exists involving themselves or the juristic person that they represent, or that they or their spouse, parents, children, or a person with whom they have a	None of deviation

Evaluation Item	Implementation Status			Deviations from the Ethical Corporate Management Best-Practice Principles for TWSE/TPEx Listed Companies and Reasons
	Yes	No	Abstract Illustration	
			relationship of interest is likely to obtain improper benefits, the personnel shall report the relevant matters to both his or her immediate supervisor and the Legal Office, and the immediate supervisor shall provide the personnel with proper instructions.	
(4) Does the company have effective accounting system and internal control systems set up to facilitate ethical corporate management, does the internal auditing unit formulate audit plans based on unethical conduct risk assessment results, and does it audit compliance with the unethical conduct prevention plan or commission a CPA to perform the audit?	V		(4) The Company has established an effective accounting system and internal control system, and was regularly checked by Audit Office. And the CPA conducts an audit of internal control in accordance with the “SOX404 Act”, which includes the five elements of COSO.	None of deviation
(5) Does the company regularly hold internal and external educational trainings on ethical corporate management?	V		(5) In 2019, the company to colleagues 3 times awareness sessions of ethics code via company email and held internal trainings of ethical conduct, including the unethical conduct prevention, insider trading, and internal control etc. and the number of participants and total hours there were 3,633 person and 2,422 hours, respectively.	None of deviation

<table>
<tr><th rowspan="2">Evaluation Item</th><th colspan="3">Implementation Status</th><th rowspan="2">Deviations from the Ethical Corporate Management Best-Practice Principles for TWSE/TPEx Listed Companies and Reasons</th></tr>
<tr><th>Yes</th><th>No</th><th>Abstract Illustration</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><th>Course Title</th><th>Method</th><th>Number of attendees</th><th>Training Hours</th></tr>
<tr><td rowspan="2">Quality section in Newcomer orientation (RBA)</td><td>classroom</td><td>59</td><td>59</td></tr>
<tr><td>e-learning</td><td>167</td><td>167</td></tr>
<tr><td>RBA Training Course</td><td>classroom</td><td>46</td><td>276</td></tr>
<tr><td>Internal Control Presentation and Company Internal Regulaitons</td><td>e-learning</td><td>3,633</td><td>726.6</td></tr>
<tr><td>Regulations Governing Professional Moral Conduct and related Regulations</td><td>e-learning</td><td>3,633</td><td>1,816.5</td></tr>
</table>
</td><td></td></tr>
<tr><td>3. Operation of integrity channel
(1) Does the company establish both a reward/punishment system and an integrity hotline? Can the accused be reached by an appropriate person for follow-up?</td><td>V</td><td></td><td>(1) The company has established the “Whistle Blower Policy” and stipulates that if any employee of the company is found to have unethical behaviors or misconducts, they can report it via independent mailbox at any time. (Audit_Committee@chipmos.com) The company's audit office conducted an investigation.</td><td>None of deviation</td></tr>
</table>

Evaluation Item	Implementation Status			Deviations from the Ethical Corporate Management Best-Practice Principles for TWSE/TPEx Listed Companies and Reasons
	Yes	No	Abstract Illustration	
(2) Does the company establish standard operating procedures for confidential reporting on investigating accusation cases?	V		(2) The company has established the “Whistle Blower Policy” and when the company receives reports on unethical behaviors or misconducts and subsequent investigations, the regards them as non-disclosure and confidentiality.	None of deviation
(3) Does the company provide proper whistleblower protection?	V		(3) The company has established the "Whistle Blower Policy" and stipulates that no adverse punishment or any form of retaliation may be taken against the reporter.	None of deviation
4. Strengthening information disclosure Does the company disclose its ethical corporate management policies and the results of its implementation on the company’s website and the Market Observation Post System?	V		The company has placed relevant regulations on integrity management on the company's internal website for colleagues to inquire at any time; the company's external website and Market Observation Post System disclose the its ethical corporate management policies and its implementation results.	None of deviation
5. If the company has established the ethical corporate management policies based on the "Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies," please describe any discrepancy between the policies and their implementation： The Company has established the ethical corporate management policies and disclosed relevant information on the Market Observation Post System.				
6. Other important information to facilitate a better understanding of the company's ethical corporate management policies: (e.g., review and amend its policies) The Company has established ethical corporate management policies and regularly reviewed it.				

(VII) If the Company has established Corporate Governance Principles and Related Guidelines, Disclose the Means of Accessing this Information: The Company disclosed relevant information on Market Observation Post System.

(VIII) The Company shall disclose other significant information which may improve the understanding of corporate governance and operation: None.

(IX) Internal Control System Execution Status

1. Statement on Internal Control

ChipMOS TECHNOLOGIES INC.
Internal Control System Statement

Date: March 10, 2020

Based on the findings of a self-assessment, ChipMOS TECHNOLOGIES INC. states the following with regard to its internal control system during the year 2019:

I. The Company acknowledges and understands that the establishment, enforcement and maintenance of the internal control system are the responsibility of the Board of Directors and management, and that the Company has already established such a system. The purpose is to provide reasonable assurance to the effectiveness and efficiency of business operations (including profitability, performance and security of assets), the reliability, timeliness, transparency, and regulatory compliance of reporting, and compliance with applicable laws, regulations, and bylaws .

II. Internal control regulations possess inherent shortcomings. Regardless of its design, an effective internal control system can only provide reasonable assurance of the three objectives as mentioned above. Furthermore, its effectiveness may change due to changes in the Company's environment and circumstances. However, self-supervision measures were implemented within the Company's internal control policies to facilitate immediate rectification once procedural flaws have been identified.

III. The Company 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. Each of the elements in turn contains several items. Please refer to " Regulations" for details.

IV. The Company has evaluated the design and operating effectiveness of its internal control system according to the aforesaid Regulations.

V. Based on the findings of such evaluation, the Company believes that, on December 31, 2019, it has maintained, in all material respects, an effective internal control systemit (that includes the supervision and management of our subsidiaries), to provide reasonable assurance on our operational effectiveness and efficiency, reliability, timeliness, transparency, and regulatory compliance of reporting, and compliance with applicable laws, regulations, and bylaws.

VI. This statement shall be an integral part of the annual report and prospectus of the Company and will be made public. If any fraudulent information, concealment or unlawful practices are discovered in the content of the aforementioned information, the Company shall be held liable under Article 20, 32, 171 and 174 of the Securities and Exchange Act.

VII. This statement was approved by the Board of Directors on March 10, 2020 in the presence of 9 directors, who concurred unanimously.

ChipMOS TECHNOLOGIES INC.

Chairman and President: Shih-Jye Cheng

2. If the Company engages CPAs to examine its internal control system, it shall disclose the CPA examination report: Not applicable.

(X) If there has been any legal penalty against the company or its internal personnel, or any disciplinary penalty by the company against its internal personnel for violation of the internal control system, during the most recent fiscal year or during the current fiscal year up to the publication date of the annual report, where the result of such penalty could have a material effect on shareholder equity or securities prices, the annual report shall disclose the penalty, the main shortcomings, and condition of improvement.: None.

(XI) Important Resolutions Adopted in Shareholders Meeting and Board of Directors' Meeting in the Most Recent Year and Up to the Date of Publication of the Annual Report

1. The major resolutions approved by the 24th meeting of the 8th Board of Directors (March 7, 2019) are as follows:
   (1) The Company's business report and financial statements of fiscal year 2018
   (2) Earnings distribution plan for fiscal year 2018.
   (3) Capital reduction in connection with the cancellation of redeemed issued restricted employee shares.
   (4) Capital reduction in connection with the cancellation of treasury shares.
   (5) Amendments to Procedures for Acquisition or Disposal of Assets
   (6) Amendments to Articles of Incorporation
   (7) Amendments to Procedure for Election of Director and Independent Director
   (8) Election of the 9th Board of Directors (including independent directors) at the 2019 annual shareholders' meeting.
   (9) Nomination of independent director candidates for election at the 2019 annual shareholders' meeting
   (10) Release the Prohibition on New Directors from Participation in Competitive Business under Article 209 of the Company Act.
   (11) Matters related to the 2019 annual shareholders' meeting
   (12) The time and place to submit shareholder's proposals and to nominate independent director candidates for the 2019 annual shareholders' meeting

2. The major resolutions approved by the 25th meeting of the 8th Board of Directors (April 2, 2019) are as follows:
   (1) Amendments to Company's Operational Procedures for Lending Funds to Other Parties
   (2) Amendments to Company's Operational Procedures for Endorsements and Guarantees
   (3) Matters for Discussion related to the 2019 annual shareholders' meeting. Additional items
   (4) Disposal of shares of JMC to reduce the shareholding of equity investment

3. The major resolutions approved by the 26th meeting of the 8th Board of Directors (April 25, 2019) are as follows:
   (1) The Company's 2018 Annual Report Form 20-F (including the English 2018 consolidated financial statements prepared by the Company in accordance with the International Financial Reporting Standards).
   (2) Appointment and discharge of R&D Officer
4. The major resolutions approved by the 27th meeting of the 8th Board of Directors (May 7, 2019) are as follows:
   (1) The Company's consolidated financial statements of Q1, 2019.
5. The major resolutions approved by the 1st meeting of the 9th Board of Directors (June 10, 2019) are as follows:
   (1) Election of Chairman
   (2) Appointment of the 4th Remuneration committee
6. The major resolutions approved by the 2nd meeting of the 9th Board of Directors (June 27, 2019) are as follows:
   (1) Determination of the record date for ex-dividend
   (2) Appointment and discharge of Internal Audit Officer
7. The major resolutions approved by the 3rd meeting of the 9th Board of Directors (August 6, 2019) are as follows:
   (1) The Company's consolidated financial statements of Q2, 2019
   (2) Capital reduction in connection with the cancellation of redeemed issued restricted employee shares
   (3) Capital reduction in connection with the cancellation of treasury shares
   (4) Capital reduction in connection with the cancellation of dissenting shareholders shares
8. The major resolutions approved by the 4th meeting of the 9th Board of Directors (November 6, 2019) are as follows:
   (1) The Company's consolidated financial statements of Q3, 2019
   (2) Financing plan for Action Plan for Welcoming Overseas Taiwanese Businesses to Return to Invest in Taiwan
9. The major resolutions approved by the 5th meeting of the 9th Board of Directors (March 10, 2020) are as follows:
   (1) The Company’s business report and financial statements of fiscal year 2019.
   (2) Earnings distribution plan for fiscal year 2019
   (3) Amendments to Articles of Incorporation
   (4) Amendments to Rules of Procedure for Shareholders Meetings
   (5) Amendments to Procedure for Election of Directors and Independent Directors
   (6) Release the Prohibition on Directors from Participation in Competitive Business under Article 209 of the Company Act..

(7) Matters related to the 2020 annual shareholders' meeting

(8) The time and place to submit shareholder's proposals and to nominate independent director candidates for the 2020 annual shareholders' meeting.

10. The major resolutions approved by the 6th meeting of the 9th Board of Directors (April 23, 2020) are as follows:

(1) The Company's 2019 Annual Report Form 20-F (including the English 2019 consolidated financial statements prepared by the Company in accordance with the International Financial Reporting Standards).

(2) Matters related to the 2020 annual shareholders' meeting (additional item)

(3) To authorize the chairman to change the venue of 2020 annual shareholders' meeting

11. The major resolutions adopted by the 2019 annual shareholders' meeting (June 10, 2019):

(I) Matters for Ratification

(1) Adoption of the financial statements for fiscal year 2018.

(2) Adoption of the earnings distribution plan for fiscal year 2018.

The Company has completed the distribution of earnings on August 30, 2019.

(II) Matters for Discussion

(1) Amendments to Articles of Incorporation

(2) Amendments to the Rules for Election of Directors and Independent Directors.

(3) Amendments to the Operational Procedures for the Acquisition or Disposal of Assets

(4) Amendments to the Operational Procedures for Lending Funds to Other Parties

(5) Amendments to the Operational Procedures for Endorsements and Guarantees.

(III) Elections

(1) To elect nine directors(including independent directors) of the 9th Board of Directors.

(VI) Other Proposals

(1) Release the Prohibition on the 9th Board of Directors from Participation in Competitive Business under Article 209 of the Company Act.

(XII) Major Issues of Record or Written Statements Made by Any Director or Supervisor Dissenting to Important Resolutions Passed by the Board of Directors: None.

(XIII) Resignation or Dismissal of the Company’ s Key Individuals, Including the Chairman, President, and Officers of Accounting, Finance, Internal Audit and R&D:

Officer	Name	Date appointed	Date Resignation or Dismissal	Reason
R&D officer	Jesse Huang	January 1,2018	April 25, 2019	Change in duties
Internal Audit officer	Chi-Pei Cho	July 1,2013	July 12, 2019	Resignation

V. Information Regarding Audit Fee

(I) Audit Fee

Accounting Firm	Name of CPA		Period Covered by CPA's Audit	Remarks
PricewaterhouseCoopers, Taiwan	Chun-Yuan Hsiao	Chih-Cheng Hsieh	January 1, 2019 ~ December 31, 2019	

Unit: NT$ thousands

	Scale \ Fee category	Audit Fee	Non-audit Fee	Total
1	Under 2,000		V	1,500
2	2,000(included) ~ 4,000(not included)			
3	4,000(included) ~ 6,000(not included)			
4	6,000(included) ~ 8,000(not included)			
5	8,000(included) ~ 10,000(not included)			
6	10,000 or above	V		18,000

Unit: NT$ thousands

Accounting Firm	Name of CPA	Audit fee	Non-audit fee					Period Covered by CPA's Audit	Remarks
			System Design	Company Registration	Human Resource	Others	Subtotal		
Pricewaterhouse Coopers, Taiwan	Chun-Yuan Hsiao Chih-Cheng Hsieh	18,000	—	—	—	1,500 (Note 1)	1,500	January 1, 2019 ~ December 31, 2019	

Note 1:The non-audit fee is for the service: application for tax credits for research and development expenditure, costed for NT$1,500 thousand.

(II) When the company changes its accounting firm and the audit fees paid for the year in which such change took place are lower than those for the preceding year, the amounts of the audit fees before and after the change and the reasons shall be disclosed: None.

(III) When the audit fees paid for the current fiscal year are lower than those for the preceding fiscal year by 10% or more, the reduction in the amount of audit fees, reduction percentage, and reason(s) therefor shall be disclosed: None.

VI. Replacement of CPA: Not applicable.

VII. Where the Company's Chairman, President, or any manager in charge of finance or accounting matters has held a position at the accounting firm of its CPA or at an affiliated enterprise of such accounting firm in the most recent year, the name and position of the person, and the period during which the position was held, shall be disclosed. The term "affiliated enterprise of a CPA's accounting firm" means one in which the CPA at the accounting firm holds more than 50% of the shares, or of which such CPA holds more than half of the directorships, or a company or institution listed as an affiliated enterprise in the external publications or printed materials of the accounting firm of the CPA: None.

VIII.Changes in Shareholding of Directors, Supervisors, Managers and Major Shareholders in the Most Recent Year and Up to the Date of Publication of the Annual Report

(I) Changes of the Shareholdings and Pledge of Shares of Directors, Supervisors or Shareholders Holding More than 10% of Company's Total Outstanding Shares

Unit:shares

Title	Name	2019		2020 till March 31	
		Holding Shares Increase (Decrease)	Pledged Shares Increase (Decrease)	Holding Shares Increase (Decrease)	Pledged Shares Increase (Decrease)
Major shareholder	Siliconware Precision Industries Co., Ltd.	—	—	—	—
Chairman/President	Shih-Jye Cheng	(6,000,000)	—	—	—
Director, representative, Siliconware Precision Industries Co., Ltd.	Teresa Wang (2019/06/10 new replacement)	—	—	—	—
Director, representative, Siliconware Precision Industries Co., Ltd.	Bright Yeh (2019/06/10 new replacement)	—	—	—	—
Director	Wen-Ching Lin (2019/06/10 dismissal)	—	—	—	—
Director	Yu-Hu Liu (2019/06/10 dismissal)	—	—	—	—
Independent director	Chin-Shyh Ou	—	—	—	—
Independent director	Yuh-Fong Tang	—	—	—	—
Independent director	Tai-Haur Kuo	—	—	—	—
Independent director	Cho-Lien Chang (2019/06/10 dismissal)	—	—	—	—
Independent director	Kuei-Ann Wen	—	—	—	—

Title	Name	2019		2020 till March 31	
		Holding Shares Increase (Decrease)	Pledged Shares Increase (Decrease)	Holding Shares Increase (Decrease)	Pledged Shares Increase (Decrease)
Independent director	Jing-Shan Aur (2019/06/10 new replacement)	—	—	—	—
Director, Senior Executive Vice President & Chief Operating Officer	Lafair Cho (2019/06/10 new replacement Director)	—	—	—	—
Vice President	Wu-Hung Hsu	—	—	—	—
Vice President	Yuan-Feng Hsu	—	—	—	—
Vice President	Jesse Huang	—	—	—	—
Vice President	Silvia Su	—	—	—	—
Vice President	Yu-Ying Chen	—	—	—	—
Vice President	Teng-Yueh Tsai	(32,000)	—	—	—
Vice President	Chen-Fang Huang	(25,000)	—	—	—
Vice President	Ming-Cheng Lin	—	—	—	—
Vice President	Chang-Lung Li	—	—	—	—
Vice President	Jin-Long Fang	(15,000)	—	—	—
Senior Director	Chao-Tung So	—	—	—	—
Senior Director	JB Chyi (2019/04/25 new replacement)	—	—	—	—
Senior Manager	Chi-Pei Cho (2019/07/12 resignation)	—	—	—	—
Manager	Ling Cheng (2019/07/12 new replacement)	—	—	2,000	—

(II) Shares Trading with Related Parties:

Title	Name	Shares(Increase)	Shares(Decrease)
Chairman/President	Shih-Jye Cheng		6,000,000
Chairman/President Shareholding by Nominee Arrangement	Hao Hsiang Investment Co. Ltd.	6,000,000	

(III) Shares Pledge with Related Parties: None.

IX. Information on Top 10 Shareholders of the Company Who are Spouses or Relatives Within Two Degrees of Kinship to Each Other

April 11, 2020(Unit: shares; %)

Name	Shareholding		Spouse's / Minor Children's Shareholding		Shareholding by Nominee Arrangement		Name and Relationship Between the Company's Top Ten Shareholders		Remarks
	Shares	%	Shares	%	Shares	%	Name	Relationship	
Siliconware Precision Industries Co., Ltd.	148,910,390	20.48%	—	—	—	—	None	None	—
First Bank in Its Capacity as Master Custodian for Custodial Account of ChipMOS' American Depositary Shares	94,534,754	13.00%	—	—	—	—	None	None	—
Citibank (Taiwan) in its capacity as Master Custodian for Investment Account of GIC Pte Ltd. (Singapore)	20,400,313	2.81%	—	—	—	—	None	None	—
Fubon Life Insurance Co., Ltd.	13,683,762	1.88%	—	—	—	—	None	None	—
Norges Bank.	12,955,840	1.78%	—	—	—	—	None	None	—
JPMorgan Chase Bank N.A., Taipei Branch in custody for Vanguard Total International Stock Index Fund, a series of Vanguard Star Funds	11,102,348	1.53%	—	—	—	—	None	None	—
Morgan Stanley & Co. International Plc	9,144,979	1.26%	—	—	—	—	None	None	—
VANGUARD EMERGING MARKETS STOCK INDEX FUND, A SERIES OF VANGUARD INTERNATIONAL EQUITY INDEX FUNDS	8,330,568	1.15%	—	—	—	—	None	None	—

Name	Shareholding		Spouse's / Minor Children's Shareholding		Shareholding by Nominee Arrangement		Name and Relationship Between the Company's Top Ten Shareholders		Remarks
	Shares	%	Shares	%	Shares	%	Name	Relationship	
Goldman Sachs Funds - Goldman Sachs Emerging Markets CORE(R) Equity Portfolio	6,493,000	0.89%	—	—	—	—	None	None	—
Hao Hsiang Investment Co. Ltd.(Note 4)	6,244,777	0.86%	—	—	—	—	None	None	—

Note1: The Company shall list all the top ten shareholders as well as shall list the name of legal person shareholders and the name of their representatives respectively.

Note2: The shareholding ratio is calculated respectively in the name of the shareholders, their spouse, minor children or in the name of others.

Note3: The shareholders listed aforesaid, including juridical persons and natural persons, shall be disclosed regarding the relationship between them according to Regulations Governing the Preparation of Financial Reports by Securities Issuers.

Note4: The stockholder is held by chairman/president under the names of other parties.

X.The Combined Shareholding and Ratio of the Company, Directors, Supervisors, Managers and Enterprises which Directly or Indirectly Controlled by the Company in Each Investee

December 31, 2019 (Unit: shares; %)

Investee	Investment by the Company (A)		Investments by directors, supervisors, managers and directly or indirectly controlled enterprises (B)		Combined investment (A+B)	
	Shares	%	Shares	%	Shares	%
ChipMOS U.S.A., Inc.	3,550,000	100.00%	-	-	3,550,000	100.00%
ChipMOS TECHNOLOGIES (BVI) LTD.	2,407,742,975	100.00%	-	-	2,407,742,975	100.00%
Unimos Microelectronics (Shanghai) Co., Ltd.	-	-	Note1	46.14%	Note1	46.14%
JMC ELECTRONICS CO., LTD.	10,000,000	10.00%	-	-	10,000,000	10.00%
Shanghai Zuzhu Business Consulting Partnership (Limited Partnership)	-	-	Note2	9.49%	Note2	9.49%
Shanghai Zuzhan Business Consulting Partnership (Limited Partnership)	-	-	Note2	13.42%	Note2	13.42%
Shanghai Zuchen Business Consulting Partnership (Limited Partnership)	-	-	Note2	11.34%	Note2	11.34%
Shanghai Guizao Business Consulting Partnership (Limited Partnership)	-	-	Note2	11.85%	Note2	11.85%

Note1: Limited company, hence does not issue common stock.

Note2: Limited partnership, hence does not issue common stock.

IV. Capital Overview

I. Capital and Shares

(I) Sources of Capital

1. Process of Capital Formation

Unit: NT$ thousands; thousand shares

Month, Year	Issue Price (NT$)	Authorized Capital		Paid-in Capital		Remarks		
		Shares	Amount	Shares	Amount	Sources of Capital	Capital Increase by Assets Other than Cash	Others
March, 2019	10	970,000	9,700,000	752,835	7,528,347	Cancellation of redeemed restricted employee shares	None	Note 1
April, 2019	10	970,000	9,700,000	740,086	7,400,859	Cancellation of treasury shares	None	Note 2
August, 2019	10	970,000	9,700,000	727,312	7,273,124	Cancellation of treasury shares and redeemed restricted employee shares	None	Note 3
September, 2019	10	970,000	9,700,000	727,240	7,272,401	Cancellation of treasury shares	None	Note 4

Note.1:On March 21, 2019, after the Company cancelled 22,948 redeemed restricted employee shares and reduced its capital by NT$229,480, the paid-in capital was NT$7,528,347,340, approved by the letter issued by the Hsinchu Science Park Bureau, Ministry of Science and Technology (Ref. No. Zhu-Shang-Tzu-1080007952).

Note.2:On April 3, 2019, the Company cancelled 12,748,847 treasury shares and reduced its capital by NT$127,488,470. After the implementation of capital reduction, Company's paid-in capital was NT$7,400,858,870, approved by the letter issued by the Science Park Bureau (Ref. No. Zhu-Shang-Tzu-1080009251).

Note.3:On August 15, 2019, after the Company cancelled 12,748,847 shares of capital reduction and 24,671 redeemed restricted employee shares, reduced its capital by NT$127,488,470 and NT$246,710, the paid-in capital was NT$7,273,123,690, approved by the letter issued by the Hsinchu Science Park Bureau, Ministry of Science and Technology (Ref. No. Zhu-Shang-Tzu-1080023455).

Note.4:On September 23, 2019, the Company cancelled 72,243 treasury shares and reduced its capital by NT$722,430. After the implementation of capital reduction, Company's paid-in capital was NT$7,272,401,260, approved by the letter issued by the Science Park Bureau (Ref. No. Zhu-Shang-Tzu-1080027435).

2. Type of Stock

April 11, 2020 (Unit: shares)

Share Type	Authorized Capital			Remark
	Issued Shares	Un-issued Shares	Total Shares	
Common Shares	727,240,126	242,759,874	970,000,000	

Note: The shares are listed on Taiwan Stock Exchange.

(II) Status of Shareholders

April 11, 2020 (Unit: persons; shares; %)

Composition of Shareholders / Amount	Government Agencies	Financial Institutions	Other Juridical Persons	Domestic Natural Persons	Foreign Institutions & Natural Persons	Total
Number of shareholders(persons)	—	19	176	42,781	285	43,261
Shareholding(shares)	—	22,086,733	173,444,268	182,704,074	349,005,051	727,240,126
Percentage(%)	—	3.04%	23.85%	25.12%	47.99%	100.00%

(III) Distribution of Shareholding

1. Common Shares

April 11, 2020 (Unit: persons; shares; %)

Class of Shareholding (shares)	Number of Shareholders(persons)	Shareholding (shares)	Percentage (%)
1 ~ 999	17,918	5,208,154	0.72%
1,000 ~ 5,000	18,496	41,057,138	5.65%
5,001 ~ 10,000	3,522	27,720,480	3.81%
10,001 ~ 15,000	940	11,861,873	1.63%
15,001 ~ 20,000	768	14,088,198	1.94%
20,001 ~ 30,000	541	13,885,834	1.91%
30,001 ~ 40,000	240	8,621,847	1.19%
40,001 ~ 50,000	178	8,196,369	1.13%
50,001 ~ 100,000	315	21,906,169	3.01%
100,001 ~ 200,000	121	16,966,656	2.33%
200,001 ~ 400,000	85	24,372,242	3.35%
400,001 ~ 600,000	32	15,453,350	2.12%
600,001 ~ 800,000	22	15,630,835	2.15%
800,001 ~ 1,000,000	9	8,025,201	1.10%
Above 1,000,001	74	494,245,780	67.96%
Total	43,261	727,240,126	100.00%

2. Preferred Shares: None.

(IV) List of Major Shareholders

Names of shareholders with more than 5% ownership interest or top-10 shareholders, and the number of shares held and shareholding percentage represented.

April 11, 2020

Shareholder's Name	Shareholding (shares)	Shareholding Percentage (%)
Siliconware Precision Industries Co., Ltd.	148,910,390	20.48%
First Bank in Its Capacity as Master Custodian for Custodial Account of ChipMOS' American Depositary Shares	94,534,754	13.00%
Citibank (Taiwan) in its capacity as Master Custodian for Investment Account of GIC Pte Ltd. (Singapore)	20,400,313	2.81%
Fubon Life Insurance Co., Ltd.	13,683,762	1.88%
Norges Bank.	12,955,840	1.78%
JPMorgan Chase Bank N.A., Taipei Branch in custody for Vanguard Total International Stock Index Fund, a series of Vanguard Star Funds	11,102,348	1.53%
Morgan Stanley & Co. International Plc	9,144,979	1.26%
VANGUARD EMERGING MARKETS STOCK INDEX FUND, A SERIES OF VANGUARD INTERNATIONAL EQUITY INDEX FUNDS	8,330,568	1.15%
Goldman Sachs Funds - Goldman Sachs Emerging Markets CORE(R) Equity Portfolio	6,493,000	0.89%
Hao Hsiang Investment Co. Ltd.	6,244,777	0.86%

(V) Market Price, Net Worth, Earnings, and Dividends per Share

Unit: NT$; thousand shares

Item		Year	2018	2019	Current Year till March 31, 2020 (Note 6)
Market Price Per Share (Note 1)	Highest		28.85	38.80	34.85
	Lowest		19.70	22.15	22.50
	Average		23.76	28.65	30.07
Net Worth Per Share	Before Distribution		24.85	27.02	—
	After Distribution		23.65	—	—
Earnings Per Share	Weighted Average Shares		802,725	727,111	—
	Earnings Per Share(Equity Holders of the Company)		1.37	3.55	—
Dividends Per Share	Cash Dividends		1.2	Note 5	—
	Share Dividend	Earnings Distribution	—	—	—
		Capital Distribution	—	—	—
	Accumulated Undistributed Dividend		—	—	—
Analysis of Return on Investment	Price/Earnings Ratio (Note 2)		17.34	8.07	—
	Price/Dividend Ratio (Note 3)		19.8	Note 5	—
	Cash Dividend Yield Rate (Note 4)		0.0505	Note 5	—

Note 1:The source of foregoing information is the website of Taiwan Stock Exchange.

Note 2:Price/Earnings Ratio = Average Market Price / Earnings Per Share

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

Note 4:Cash Dividend Yield = Cash Dividends Per Share / Annual Average Market Price

Note 5:On March 10, 2020, the Board of Directors adopted the 2019 earnings distribution plan, stipulated that each share is distributed NT$1.8 cash dividend to shareholders. This plan has not yet been ratified by the Shareholders' Meeting

Note 6:As of the date of publication of the annual report, the most recent consolidated financial report dated March 31, 2020 has not yet been approved by the Board of Directors nor reviewed by certified public accountants. Other fields shall be filled with the information of the current year as of the date of publication of the annual report.

(VI) Dividend Policy and Implementation Status

1. Dividend Policy stated within the Company's Articles of Incorporation

Upon the final settlement of accounts, if there is net profit, the Company shall first set aside the tax payable and offset its losses before setting aside a legal reserve at 10% of the remaining profit. The Company shall then set aside or reverse the special reserve in accordance with the laws and regulations and as requested by the competent authorities. The remaining profit of that fiscal year, as well as the accumulated undistributed profit at the beginning of the same year and the adjusted undistributed profit of the given fiscal year, shall be distributable profit. If there is any surplus distributable profit after the Board of Directors sets aside a reserve based on the Company's operational needs, such surplus profit may be distributed in full or in part to shareholders as dividends, subject to the approval of the Shareholders' Meeting.

A proposal on the distribution of dividends shall be submitted by the Board of Directors annually to the Shareholders' Meeting, and be based on factors such as past years' profit, the current and future investment environment, the Company's capital needs, competition in the domestic and foreign markets, and budgets, with an aim to pursuing shareholders' interests and balancing the dividend distribution and the long-term financial plan of the Company. The distribution of profits of the Company can be made in the form of cash dividends or stock dividends, provided that the cash dividend shall account for at least 10% of the total profit distributed as dividends in the given year.

2. Proposed Distribution of Dividend

The Company's net profit after tax of 2019 is NT$2,584,161 thousand. On March 10, 2020, the Board of Directors adopted that, after setting aside NT$258,416 thousand as legal reserve, NT$19,802 thousand as special reserve, the accumulated distributable profit of 2019 is NT$4,481,292 thousand; thus, the distribution of NT$1.8 cash dividend per share and NT$1,309,032 thousand in total is proposed. The proposal will be implemented in accordance with relevant regulations after being ratified by the shareholders' meeting on June 9, 2020.

(VII) Impact on Company's Operating Performance and Earnings Per Share due to the Share Dividends Plan Proposed in this Shareholders' Meeting: None.

(VIII) Employee Bonus and Directors' and Supervisors' Remuneration:

1. The Scope and Proportion of Compensation to Employees, Directors and Supervisors Stipulated in the Articles of Incorporation:

If there is profit in any given year, the Company shall set aside 10% thereof as employee compensation. The Board of Directors may resolve to pay said compensation in the form of shares or cash. Such compensation may be paid to the employees of an affiliated company who meet the conditions set by the Board of Directors. The Board of Directors may resolve to set aside no more than 0.5% of the above-mentioned profit as the compensation of the directors. A proposal on the compensation for the employees, directors and supervisors shall be presented at the shareholders' meeting. If the Company has accumulated losses, the amount for making up said losses shall be reserved before setting aside the compensation for the employees, directors and supervisors at the rates stated above.

2. The accounting management for the estimation base of estimated amount of compensation to employees, directors and supervisors, the share calculation base of distributed shares as employees' compensation, and in the event that actual distributed amount are different from estimated figures:

   In respect of estimated employees' compensation and directors' compensation according to the Articles of Incorporation, if the actual distribution amount adopted by the Board of Directors in the next year is different from the estimated figures, it shall be handled in accordance with the management of changes in accounting estimates, the profit and loss shall be adjusted in the year resolved by the Board of Directors.

3. Information of proposed distributable compensation adopted by the Board of Directors
   (1) The amount of compensation to employee, directors and supervisors distributed in cash or shares: In 2020, the 5th meeting of the 9th Board of Directors resolved to distribute NT$338,356 thousand as compensation to employees and NT$16,918 thousand as compensation to directors. The foregoing has no difference with the estimated amount of the expense recognized for this year.
   (2) The proportion that the amount of employees' compensation distributed by shares is accounted for the sum of the profit margin after tax provided in the current individual or parent company only financial report and the total amount of employees' compensation: The Company did not distribute employees' compensation by shares.

4. The difference between actual distributed compensation to employees, directors and supervisors (including distributed shares, amount, and price of shares) of the preceding year and recognized compensation to employees, directors and supervisors, and the amount, reasons, and management regarding such difference: No difference.

(IX) Buyback of Company Shares:

1. Buyback of Company shares (executed completely)

April 23, 2020

Treasury stocks: Batch Order	First	Second	Third
Purpose of buy-back	To maintain company's credits and shareholder's equity	To transfer shares to employees	To transfer shares to employees
Timeframe of buy-back	August 11, 2015 to October 10, 2015	February 5, 2016 to April 4, 2016	May 13, 2016 to July 12, 2016
Price range	NT$21.04 to 41.34	NT$22.4 to 40.0	NT$21.88 to 40
Class, quantity of shares bought-back	20,000,000 common shares	15,000,000 common shares	15,000,000 common shares
Value of shares bought-back	NT$633,737,195	NT$510,819,237	NT$494,191,524
Quantity of cancelled shares	20,000,000 shares	15,000,000 shares	15,000,000 share
Accumulated number of company shares held	0 share	0 share	0 shares
Percentage of total company shares held (%)	0%	0%	0%

2. Buyback of Company shares (under execution): None.

II. Bonds: None.

III. Preferred Shares: None.

IV. Global Depository Receipts

March 31, 2020

Item \ Date of issuance			November 1, 2016
Date of issuance			November 1, 2016
Place of issuance and transaction			NASDAQ
Total issued amount			Not applicable
Issuance price per unit			Not applicable
Total units issued			21,775,257 units
Source of representing security			Company's common shares
Amount of representing security			4,736,737 units
Rights and obligations of depositary receipts holders			As the same as common shares
Trustee			None
Depository bank			Citibank
Custodial bank			First Bank
Unredeemed amount			4,736,737 units
Allocation of responsibility for payment of relevant fees incurred during the issue period and duration			Borne by the Company
Material covenants of depository agreement and custodial agreement			None
Market price per unit	2019	Highest	US$24.83
		Lowest	US$13.92
		Average	US$18.43
	Current year till March 31, 2020	Highest	US$23.30
		Lowest	US$15.00
		Average	US$19.99

V. Employee Stock Options and Restricted Employee Shares

(I) Issuance of Employee Stock Options: None.

(II) Issuance of Restricted Employee Shares : None.

VI. Status of New Shares Issuance in Connection with Mergers and Acquisitions:

(I) Completed new shares issuance in connection with mergers and acquisitions in the preceding year and up to the date of publication of the annual report:

1. The lead securities underwriter's evaluation opinion regarding the new shares issuance in connection with mergers in the most recent quarter: Not applicable.
2. Status of implementation in the most recent quarter: Not applicable.

(II) New shares issuance in connection with mergers and acquisitions approved by the Board of Directors in the most recent year and up to the date of publication of the annual report: None.

VII. Financing Plans and Implementations: None.

V. Operational Highlights

I. Business Contents

(I) Business Scope

1. Main Business Contents

The main business of the Company is to provide assembly and testing services for various ICs. We also provide turnkey total solution and drop shipment services for our clients.

2. Proportion of Main Products

The consolidated revenue of the Company comes from providing assembly and testing services. Products of assembly and testing can be divided into two segments: memory products and LCD driver ICs. Based on the process characteristics and the operation administration of profit center, five business groups are set up as the “Assembling Production Group,” “Memory Production Group,” “LCDD Production Group,” “WB Production Group,” and “Testing Production Group.” Such groups all report to “Operation Manufacturing Center.” Revenues, cost and gross margins of each group are calculated respectively. Therefore, we classified the products of the Company into five groups and explain the proportion of the main products as follows:

Unit: NT$ thousands; %

Year / Main Departments	2017		2018		2019	
	Amount	%	Amount	%	Amount	%
Assembly	5,425,189	30.24	4,679,676	25.32	5,148,877	25.32
Product Testing	2,896,408	16.15	2,891,281	15.65	2,604,451	12.80
Driver IC	4,792,472	26.71	5,694,720	30.82	6,922,205	34.04
Wafer Bumping	3,055,000	17.03	3,315,534	17.94	4,008,999	19.71
Wafer Testing	1,998,881	11.14	1,898,816	10.27	1,653,349	8.13
Subtract: Amounts from Discontinued Operations	(227,095)	(1.27)	—	—	—	—
Total	17,940,855	100.00	18,480,027	100.00	20,337,881	100.00

Note: Consolidated financial statements audited and certified by independent accountants.

3. Current Products (Services) of the Company

The main products of the Company is assembly and testing regarding thin small outline package (“TSOP”), Fine Pitch BGA (“FBGA”), Tape Carrier Package (“TCP”), Chip On Film (“COF”) and Chip On Glass (“COG”), and wafer bumping (“Bumping”). Clients' products can be successfully applied to information, communications, office automation, consumer electronics and other related products through the comprehensive IC assembly and testing services provided by the Company.

4. New Products (Services) Development

In the future, in addition to increase of the capacity of the assembly and testing for high-end memory, the Company and its subsidiaries will also enhance and increase the capability and capacity of the assembly and testing for the products in the following areas depending on the market applications and demands:

(1) Develop assembly technologies of 3D WLCSP (Chip on Wafer) and are implemented for MEMS (Micro-electro-mechanical -systems) products.

(2) Develop Multi-Layer (3P/3M) Wafer Bumping and assembly technologies of Cu Pillar Bump and Flip Chip, and are implemented for memory and mixed-signal products.

(3) Develop assembly technologies regarding biometrics authentication and are implemented for fingerprint sensor products.

(4) Bumping, Assembly and testing services of 3P/ 2M wafer re-distribution layer and multi-chip integration products, i.e., MCP (multi-chip packaging) for high density flash memory and integrated multi-chip product.

(5) Stacked-Die packaging services for high density flash memory products.

(6) Wafer Level CSP (Wafer Level Chip-Scale Package) packaging services for consuming and communication products.

(II) Industry Overview

1. Current Status and Development of the Industry

2018 revenue of Taiwan IC assembly and testing industry is NT$493 billion and the annual growth rate shrank 3.4%. Mainly due to the increased demand for advanced packaging from mobile communication electronic products, the penetration rate of high-end and advanced packaging technologies such as WLCSP (Fan-in and Fan-out) driven by high I/Os and high integration continued to rise. Coupled with the increase in memory prices, the market for the quality and quantity of IC packaging and testing products simultaneously improve. The production value of Taiwan IC assembly and testing industry in 2019 is NT$501 billion, which shows an increase of 1.6% as compared to 2018.

Production Value of Taiwan's Semiconductor Industry in Details

Unit: NT$0.1 billion; %

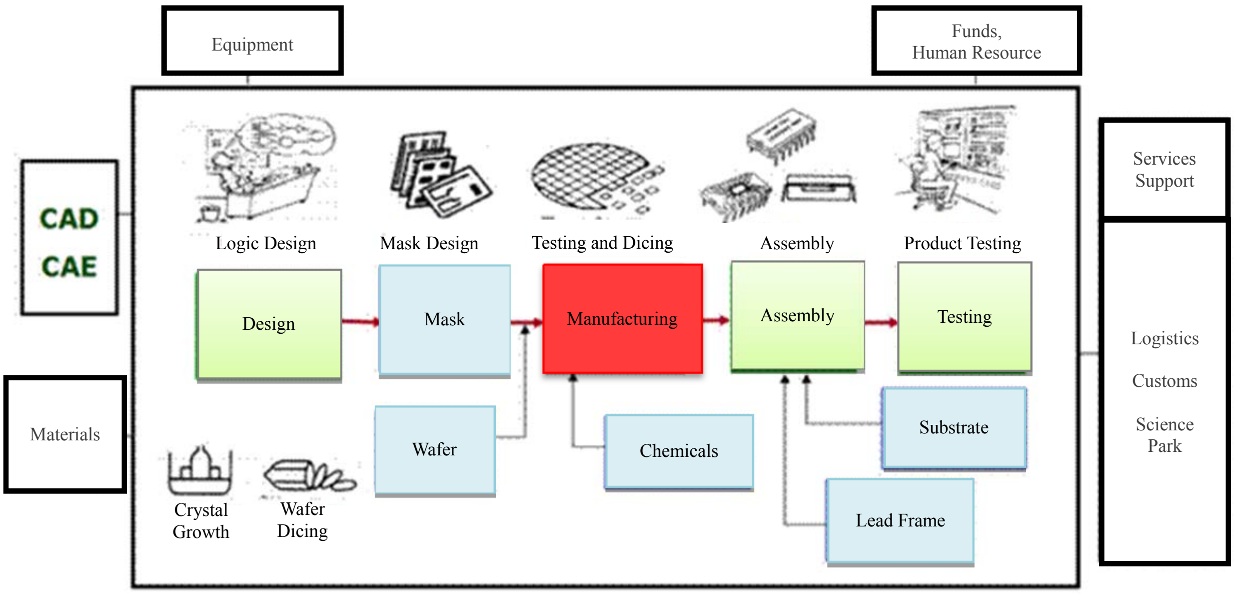
Items	2017	2018			2019		
	Amount	Amount	Proportion (%)	Annual Growth Rate (%)	Amount	Proportion (%)	Annual Growth Rate (%)
IC Design	6,171	6,413	24.48	3.9	6,928	25.99	8.0
IC Manufacturing	13,682	14,856	56.70	8.6	14,721	55.23	-0.9
Wafer Foundry	12,061	12,851	49.05	6.6	13,125	49.24	2.1
Memory and IDM	1,621	2,005	7.65	23.7	1,596	5.99	-20.4
IC Assembly and Testing	4,770	4,930	18.82	3.4	5,007	18.78	1.6
Production Value of IC Industry	24,623	26,199	100.00	6.4	26,656	100.00	1.7

Source：TSIA、IEK of Industrial Technology Research Institute.

2. Relevance Between the Upstream, Midstream, and Downstream of the Industry

Due to the trend and evaluation invoked by the overall vertical integration regarding the division of labor within the semiconductor industry, semiconductor industry in Taiwan can be divided into the upstream, IC design houses, the midstream, IC manufacturing and foundry, and the downstream, IC assembly and testing houses. In recent years, Taiwan's IC industry keeps flourishing and the disintegration therein is becoming more specialized. Each link in the supply chain engaged by various entities, which causes the vertical disintegration, becomes clear and further specialized. Therefore, the structure of the upstream, midstream and downstream of Taiwan's IC industry is more complete than before. The relevance of upstream, midstream and downstream of the industry in which the Company is engaged as shown in below. The main business of the Company is providing IC back-end services for memory IC, LCD driver IC, and logic/mixed-signal IC, which belong to the downstream of the semiconductor industry.

Structure of Taiwan's Semiconductor Industry



Source: MIC; IEK of Industrial Technology Research Institute (2013/04)

3. Trend of Development and Competition Regarding Products

(1) Trend of Development

A.IC Assembly and Testing Industry`

a. 3D IC will become a must of advanced assembly in the future.

Based on the low power consumption, high performance, multi-function integration, and package minimization of industry trend, the multi-chips assembly technologies which can integrate each IC, such as System on Chip ("SoC"), System in Package ("SiP") and 3D IC, are the trend of advanced assembly capability development.

3D IC has advantages such as shortening interconnection and scaling down the size of the chips. Therefore, 3D IC has risen as the mainstream technology in recent years. Meanwhile, the type of assembly also shows a development toward TSV. Such type of assembly differs from the traditional wire bonding. It etches holes on each wafer and fills in conductive materials to provide connecting function and therefore all the chips will be combined together. This method reduced the length of metal wires and connection resistance, and further trimmed down the area of the chips. In respect of the needs of digital electronic products in light and short sizes, high efficiency and integration, highly system integration and wireless becomes unavoidable trends and 3D IC's new structure can meet such development trend of the market. For example, smartphones have high requirements for IC's function and bandwidth. Aims as increasing the bandwidth and reducing the volume of elements can be achieved through 3D IC. Compared with 3D IC, other assembly technologies, such as SoC, SiP and TSV, have their own advantages and disadvantages respectively. SoC technology has better performance in the costs of energy savings and low capacity products, and is mainly used in products with large quantity and long life cycle. SiP has advantages in heterogeneous integration, speed of production, reuse of design resources and time of research and development, which is most applicable to products for immediate marketing and those with high level heterogeneous integration. TSV has better performance in efficiency and cost of high capacity products, and is currently applied to memories, image sensors and MEMS fields. 3D IC has advantages in small size, high efficiency and easier high level heterogeneous integration in application, and thus becomes the main technology developing by the semiconductor assembling industry at the current stage.

b. The ratio of smart handheld device in the semiconductor application market keeps increasing.

Based on the integration of logic IC and mobile DRAM, mobile phone becomes the largest application market. Along with the expanding trend of smart handheld devices all over the world, smartphone and tablet computer markets shows a trend of huge growth and becomes significant growth force of the world's semiconductor market. Further, competitive power of IC design houses regarding elements such as CPU, GPU, baseband and networking chips in the smart handheld device market also brings growth in wafer foundry and IC assembly and testing market. In addition, increase in sales of smart handheld device also accelerated the development of semiconductor elements toward high efficiency and integration, and low power consuming. By seizing the turning point of the rise of smart handheld device, there will also be a chance for growth in revenue.

c. Assembly and testing industry will show a trend of "The Big Ones Get Bigger."

Although electronic terminal device shows a trend of light and short sizes, its price keeps going down and thus indirectly depresses the prices and profit of the assembly and testing industry which depends more on the raw material costs. Entities lack of sufficient economic scale will face severe cost control in the future. Further, along with the trend that major semiconductor companies engaged in manufacture procedure in a higher level, the assembly method adopted therein will become more difficult, and the capital expenditure will also become larger and larger. Therefore, if assembly and testing services vendor with smaller scale fails to secure its niche market, its competitive power will continually be weaken under "the big ones get bigger" trend of the industry.

B. Storage Device Industry

NAND Flash is becoming the mainstream of the world's memory market. Decrease and increase can be found in the sales volume of DRAM and NAND Flash respectively in recent years. It reflects the popularization of smartphones and tablet computers. Cloud computing also brings different effects to the two major memory products. Vendors who will implement the built-in NAND Flash and mobile device processing units directly to smartphones in the future also successively provide solutions supporting application of embedded memory (Emmc / eMCP). It is well-established that the built-in NAND Flash will become the majority of smartphone storage in the future. The successful rise of Ultrabook also accelerated the implementation of solid state disk in the PC industry. Further, demand of data center servers for NAND Flash will keep increasing. Therefore, NAND Flash will exceed DRAM and become the most major memory product of the world.

C. Flat Panel Display End-Use Industry

a. Development of devices toward ultra high resolution panel.

Apple and Samsung continually released smartphones and tablet computers with high resolution which earned good reputation in the market. Vendors of other brands are also catching up with the trend. Therefore, high resolution panel is becoming the specification necessary for high-end products. After smartphones, tablet computers, notebooks, Ultrabooks and even LCD TVs are speeding up their pace regarding the implementation of high resolution panels. Further, after Apple released New iPhone and MacBook Pro which adopted fingerprint recognition modules, other brands such as Samsung, Asus, Acer and Dell are also speeding up their pace to implement fingerprint recognition modules in their cell phones, tablet computers, notebooks and slim notebook products. Based on the slow sales in LCD television market, Japanese and Taiwanese panel manufacturers are now engaged in development and massive production of 4K×2K LCD panels and will further implement products such as high-end LCD monitoring camera and LCD TV.

b. AMOLED is considered as the advanced display technology of next generation.

AMOLED has self-luminous characteristic. Its response time is short and may have high contrast efficacy. Therefore, AMOLED can show splendid colors while effectively reduce electronic consumption. Further, products' thickness may be reduced significantly because such products can be lit up without the assistance of backlight. Also, AMOLED has bendable characteristic because it can be processed on soft substrates. The proportion of cell phone vendors in Mainland China adopting AMOLED are increasing. Apple is also negotiating with panel vendors regarding the distribution of OLED panels of iPhones and it is expected that this may lead the movement of more cell phone vendors to catch up such trend. Market share of AMOLED is expected to rise year by year.

(2) Competition Status.

A. Driver IC Back-End Services is an Oligopolistic Market and 12-inch Gold Bumping and Testing Machinery Equipment are Significant Points of Expansion:

After integrations conducted in Taiwan's LCD driver IC assembly and testing industry, small vendors are merged into other vendors. After integrations of relevant back-end services vendors (for example, Fupo, USTC, Megic, Chipbond, UOT, ISTC, ChipMOS, AMCT, Aptos and SPIL), Chipbond and ChipMOS are the only main vendors left and therefore cause the LCD driver IC back-end services to become an oligopolistic market. Capacity of the two top vendors in Taiwan, i.e., Chipbond and ChipMOS, far exceeds other competitors. They are also able to offer turnkey services and thus the order of the industry may be maintained. Currently, capacity utilization rate of each vendor in peak seasons regarding the 8-inch Gold Bumping is merely 70%. In the future, the rest of the capacity will be used in assembly and testing for power management IC, MEMS, WLSCP and other application products. Along with the rapid growing demand for smart handheld device, design for small size driver IC is becoming more complicated due to the increase of the resolution of Mobile Device panels. Testing period also becomes longer. Therefore, expansion of each vendor in 2018 & 2019 had been focused on the capacity of 12-inch Gold Bumping and testing machinery equipment.

B. DRAM Industry of the World Has Been "Carved Into Three Pieces" by Samsung, Micron and SK Hynix:

Since Micron owns memory assembly and testing facilities, orders placed by Micron are mainly for assembly of DRAM and NAND Flash while the testing are mostly performed in-house. The main vendors engaged by Micron in Taiwan regarding DRAM/NAND back-end services are PTI , ChipMOS and ASE. It is highly possible that Micron will take lead in the manufacturing process technologies of the next generation. Micron's testing platform is solely developed by itself and thus differs from most of the testing houses. If testing houses intend to continually obtain Micron's orders, they will need to increase their capital expenditures to purchase new testing platforms. The Company has been working a long time on raising production efficiency and reducing manufacturing cycle time and raw material costs to enhance price competitive power. Further, the Company has established a long-term and close cooperation relationship with Micron than other competitors and provide Micron with satisfactory professional services. Taking into consideration of the competitive ability of the technologies in the market of both ChipMOS and Micron, the parties will jointly develop next-generation products based on principles of equality and mutual benefit and financial stability. Investment regarding new products and new manufacturing procedure in the future will be made in a timely manner to raise the competitive ability of the Company.

(III) Status of Technologies and Research and Development

1. Technology Level, Research and Development of Operating Business.

(1) Technology level of operating business.

ChipMOS has committed to assembly and testing business for over 30 years which originated from MOSEL's back-end factory from 1986. 20 years has passed since ChipMOS' official independence from MOSEL on 1997. ChipMOS is now one of the top ten assembly and testing vendors in the world.

Although assembly and testing services produce no inherent products, the scope of such services includes military industry to daily consumer products. On the other hand, assembly and testing services focus on the back-end of the overall semiconductor supply chain. Any disorder of any link of such supply chain may affect the Time to Market. Further, assembly and testing services are no longer being considered as a traditional industry with low entry-barriers. Instead, such services are now facing process miniature and irregular and rapid ups and downs within the industry. In respect of the rise of new generation portable consumer electronics, such as smartphones and tablet computers, vendors shall always be ready to provide their clients with the best integration solution to establish win-win cooperation relationship.

In order to continually have a foothold in the assembly and testing industry, ChipMOS has committed to product research and development for decades. Research and development regarding assembly and testing generally refers to technical basis, including the characteristics of materials and machines, which are the core business of the Company, and the characteristics of electronics, which are becoming much more focused. In general, the cores of researches are combinations of the foregoing three main fields and other compositions. Relevant explanations are provided as follows:

A. Materials

The main mission of the package body is to protect ICs from the effects of external stress and environmental pollutants, and further ensure the stability of any internal heterojunction under long-term use. Therefore, the choices and applications of materials are extremely important. Materials placed in a package body shall have a most optimized combination. The best package body shall maintain certain characteristics after severe burn-in test (adopting JEDEC standards) and then shall it be confirmed as the most optimized combination of materials. In addition, how to select assembly materials at a low costs to meet clients' needs of reducing costs of products has always been the key point of ChipMOS' research and development.

B. Machine Characteristics

To protect internal IC chips from losing efficacy due to external stress, it is important that the surface of the products shall be firm enough and the internal stress shall be as little as possible. Especially the curve caused by periodical and instantaneous thermal stress that occurs in the application of miniature product will bring permanent damages to interface contacts. This will further cause the units to lose efficacy. Therefore, machine characteristics require prior simulation and post measurement. The characteristics and error range of such structure can be learned by conducting analysis in all aspects.

C. Electronic Characteristics

Another mission of the package body is to distribute the signals from IC chips to PCBs. This can be achieved through the design of the substrate. However, consumer electronics are changing rapidly and the trend of high-speed and high-frequency/ microwave radio frequency has been established. Therefore, electronic characteristics require prior simulation and post measurement by a different method in order to meet various needs of the clients.

Based on the foregoing three basic researches, in respect of products of various clients, the aim of improving package shall be achieved by selecting various characteristics. Improvement of the main package of each generation solely depends on advanced research and development. Current mainstream of assembly technologies and ChipMOS' unique abilities can be realized step by step through the following research and development plans.

(2) Research and Development

Research and Development Plans Regarding Assembly and Testing Technology in 2019

A. Continua1ly develop Cu Pillar Bump and Flip Chip assembly technologies and implement applications in memory and mixed-signal products.

B. Continua1ly develop fine pitch, high aspect ratio application used UBM sputtering technologies and implement applications in commercial and communication products.

C. Continually develop Cu Pillar technologies and implement next-generation products of biometrics authentication, fingerprint sensor products.

D. Wafer Level CSP (Wafer Level Chip-Scale Package) packaging services for consumer and communication.

E. Continually develop multi-Cu RDL layers (3P2M) bumping capability and Stacked-Die packaging services.

F. Continue to develop COF SMT capability to meet the requirement of sub-system module.

Research and Development Plans Regarding Assembly and Testing Technology in 2020

A. Developing 3P/3M Cu pillar and WLCSP for high pin count product.

B. Continually develop fine pitch RDL line width and space (4um/4um) for copper RDL application.

C. Developing fine pitch inner lead width and space for COF ILB assembly.

D. Evaluate thinner PI film of COF tape to increase the tape flexible property for full screen of FDP device development.

E. Developing COF FT test condition in low temperature condition -40℃ for automotive device specification.

F. Implement DBG/ SDBG for thin wafer capability.

G. 16DP BGA/SiP product development

2. Invested Research and Development Expenses of the Most Recent Year and till the Date of the Publication of the Annual Report.

Unit: NT$ thousands

Item \ Year	2019	Current year till March 31, 2020
A.Research and Development Expenses	1,007,631	---
B.Revenue	20,337,881	---
A/B	5%	---

Note: As of the publication date of the annual report, the most recent consolidated financial statements dated March 31, 2020 has not yet been approved by the Board of Directors nor reviewed by certified public accountants.

3. Successfully Developed Technologies or Products during Recent Years

Year	Results of Research and Development	Explanation of Contents
2019	Developing Cu Pillar Bump and Flip Chip Assembly technologies	1. Developing Low temp (<230°C) and high temp (<390°C) PI 2. Developing mutiple RDL options (0P1M and 1P1M) 3. Able to flip chip bond by real and dummy bumps on a same die
	Developing sputter fine line and high aspect ratio bumping process	1. Fine line width and space (5um/5um) 2. Thin to thick Cu RDL line (3-21um)
	Developing Wafer Level CSP	1. Low-temp (<230°C) and high-temp (<390°C) PI 2. Small to great form factor die size (0.8x0.8 mm^2 ~ 5x5 mm^2)
	Developing multiple Cu RDLs (3P2M) to achieve assembly die stacking technology	1. Provide 3P2M RDL solution 2. Can support 8-die assembly stacking 3. Wafer thinning till 50um 4. Gold, Silver and Copper wires are available
2020	3P3M Cu pillar and WLCSP development	1. Developing 3P/3M Cu pillar and WLCSP for high pin count product requirement.
	Developing fine pitch RDL Cu line width and space	1. Developing fine pitch Cu RDL line width and space with 4um/4um for high pin count memory product application
	Developing fine pitch inner lead width and space for COF ILB assembly	1. To intensify the ILB lead pitch to 18um (Line/Space=8/10 um) 2. Provide two metal COF turnkey process 3. To intensify the chip length more than 28mm and min chip thickness 200um 4. Consummated above technology to provide the turnkey solution for TDDI, AMOLED new application
	Developing COF with high flexible property	1. Developing COF PI film thickness 25um for full screen of FPD application 2. Provide the narrow bezel solution for display panel of smart phone.

Year	Results of Research and Development	Explanation of Contents
	Developing FT test condition of COF with -40℃ environment	1. Developing COF FT test environment from temperature range -40℃~125℃ 2. To meet automotive device specification.
	Implement DBG/ SDBG technology	1. Implement DBG/ SDBG to enhance the capability of ultra-thin wafer capability for 3D NAND Flash application
	16DP BGA/SiP product development	1. Developing more die stacking for device capacity increasing.

(IV) Long-term and Short-term Business Development Plans.

The Company and its subsidiaries have taken the initiative in approaching clients and the market for many years. Along with the growth of clients and the market, the Company and its subsidiaries have successfully established the basis of product qualities and company images and gradually gained a foothold in the market. In respect of the trend of industry developments and competitions in domestic and foreign market, it is expected that the condition of the Company can be adjusted according to the long-term and short-term development plans in order to improve its overall competitive power.

1. Short-term Business Development Plans

(1) The Services Provider of Entire Back-End Processes within the Semiconductor Market.

A. Provide services regarding the entire manufacturing process of core technology products.

B. Focus on the capacity of the semiconductor assembly and testing market, and the products and technologies jointly researched and developed with clients which a win-win situation is expected.

C. Continue to maintain good relationships with existing clients and further obtain new clients.

D. Based on customer demand to expand capacity of logic/mixed-signal IC, AMOLED, and automotive driver ICs products. MEMS products shall be also set as the targets of further expansion.

(2) Major Vendors' Acceleration of Outsourcing and Organization Integration Caused Increase in ChipMOS' Business of Technical Services.

A. Major IDMs (Integrated Device Manufacturer) continually and rapidly increase their business outsourcing related to semiconductor back-end assembly and testing services in order to correspond to the quickly shortened life cycle of products and raw material price fluctuation.

B. Based on historical data of OSATs, IDMs, wafer foundries and design houses will continue to release capacities.

C. Due to integrations within the semiconductor assembly and testing market during the recent years, the number of competitors has been reduced and thus improved the market order. For example, Gold Bumping manufacture and TCP/COF.

(3) Business Strategic of Establishing Long-term Partnership with Clients.

A. Maintain a high-level profit margin.

(A) Adopt efficient management and diversification business strategy, and further increase equipment's capacity utilization.

(B) Under horizontal competition in the industry with fewer competitors, better sale price and gross profit may be maintained.

(C) Increase the profit margin by using the funds efficiently and adjusting the product portfolio.

B. Enhance relationship with leading vendors and companies engaged in semiconductor industry within Company's core business scope. Further, based on the technical blue prints of the Company, to cooperate with clients closely, keep devoting to innovation and research, and further expand capacity.

2. Long-term Business Development Plans

(1) Focus on High-Growth End-Use Market.

A. Focus on special end-use market.

B. Develop high-growth product application market by implementing advanced technical service of entire back-end processes.

C. Focus on the research, development and innovation of core technologies to assist clients lowering their operating costs.

(2) Focus on the Capacity Expansion, Development and Establishment of Advanced Technologies; Establish Sufficient Capacity and Expand the Market Share of High-Growth Products.

A. Develop 12-inch wafer Fine Pitch Bonding technologies which shall be applied to LCD display driver IC products.

B. Establish implementation of Flip Chip technologies regarding assembly of memory and logic/mixed-signal products.

C. Apply WLCSP and RDL technologies to electronic compasses, magnetometers and other memory products.

D. Develop assembly technologies for high-profit assembly products, such as Stacked-Die package, Multi-Chip package and SiP.

(3) Taking Initiative in Establishing Global Self-Owned Intellectual Properties Database to Achieve the Aim of Protecting Specialized Technologies.

Use positive and innovative research and development power to cooperate with clients' technology development and new products development and further establish platform for patent development. Raise the value of non-core technologies by transferring and selling patent rights.

II. Market, Production, and Sales Overview

(I) Market Analysis

1. Market Analysis

(1) The Sales Territory of Main Products (Services)

Unit: NT$ thousands; %

Territory \ Year		2018		2019	
		Amount	Ratio (%)	Amount	Ratio (%)
Domestic Sales		14,751,766	79.83	15,875,027	78.06
Export Sales	Asia	3,346,664	18.11	4,151,793	20.41
	America	255,738	1.38	150,702	0.74
	Others	125,859	0.68	160,359	0.79
	Subtotal	3,728,261	20.17	4,462,854	21.94
Total		18,480,027	100.00	20,337,881	100.00

(2) Market Share

The Company is professional IC assembly and testing companies, mainly providing assembly and testing services of memory IC, LCD driver IC and logic/mixed-signal products for IC design houses, integrated devices manufacturers (IDM) and IC fabs. The aforementioned products are primarily applied in computers, storage devices for consumer electronics, and terminal application products for displays. According to statistics of IEK of Industrial Technology Research Institute, the production value of Taiwan IC assembly and testing industry in 2019 is NT$501 billion, while the consolidated revenue of Company in 2019 is about NT$20.3 billion, accounting for about 4.05% of Taiwan's production value. The Company has many years of experience in assembly and testing and professional R&D technical capabilities to provide adequate capacity scale and full service of back-end processes to meet different needs of clients. In recent years, the Company has a very good performance in terms of business scale, reflecting that the Company' products and technology have obtained a high degree of client recognition, and have already occupied a considerably competitive position in the industry.

(3) Competitive Advantages

A. Industry-Experienced Management and Technology R&D team

Since the establishment of the Company in 1997, the Company has continued to invest in the research and development of advanced technologies relating to the field of assembly. The major R&D personnel and the management team have more than 10 years of working experience in the semiconductor industry, accumulating rich experience relevant to assembly and testing, while equipped with a clear perception of the industry trends, and a comprehensive grasp of the market demand. As a result, the

Company is able to meet clients' demand, timely developing key technologies contributing to win more clients' orders.

B. Equipped with Advanced Process Technology

The competitions between domestic and foreign vendors in the IC assembly and testing industry are fierce. Each vendor would develop innovative process technology to reduce costs and lower prices to enter the market. As a result, price competition is a major factor determining competitiveness in the IC assembly and testing industry, and process technology is also an important indicator for competitiveness. The Company has advanced assembly technology, continuing to improve the technologies in the manufacturing process, and improve production efficiency, thus helping clients reduce operating costs. In addition, the Company is actively pursuing innovation and R&D, working with clients to develop new process technology and new products, while establishing a platform of patent development. So far the Company has acquired 901 patents at home and abroad, and were named Astrum Award Winner by MDB Capital Group, a US intellectual property (IP) investment bank, in 2011, revealing that the advanced process technology possessed by the Company has become one of the important competitive advantages.

C. Production Has Reached Economies of Scale and the Capacity Continues to Expand

The mass production of IC assembly and testing vendors can reduce the unit costs of R&D, equipment procurement, and operation costs. Since the establishment of the Company in 1997, the Company has focused on the R&D of technologies and productions relating to the field of assembly and testing. So far the Company has built up sufficient manpower and machinery equipment, and production capacity has reached the economies of scale. In addition, the engineers and production line workers are skilled in the manufacturing process and operation techniques, while the Company is able to effectively manage the machinery equipment and adopt the strategy of diversification, significantly increasing the production efficiency and relatively reduced the unit cost. In order to increase the Company's market competitiveness, the Company will closely observe the market and clients' needs in the future, continuously expanding production capacity in response to the clients' demand for diversification and reducing unit costs.

D. IC Assembly and Testing Turnkey Services

The Company provides clients with turnkey services including assembly and testing of memory IC, LCD driver IC, logic/mixed-signal IC, wafer bumping manufacturing and other products in order to meet the clients' demands of one purchase to solve all needs, and shorten the delivery time while saving transportation costs, indirectly saving clients' operating costs, strengthening each other's competitiveness to jointly create a win-win situation.

E. Establishing Close and Long-term Partnership with Clients

The Company provides clients with a complete package of services including the entire manufacturing process of core technology products. In the aspects of assembly and testing technology, product quality and delivery service, our services can fully meet the needs of clients and work with our clients to develop new products and new process technology. Therefore, the Company has received accreditations and recognitions from a number of domestic and foreign well-known IC manufacturers. Furthermore, given the concerns of confidentiality of technology, quality and long-term tacit understandings, unless significant deficiencies occur to the products, the IC manufacturers would not easily replace the supplier. This fact demonstrates that the Company has established close and long-term partnership with clients. In addition, except continuing to maintain good relationships with existing clients and continuing or extending existing OEM contracts or capacity reservation contracts, the Company would use our advanced process technology as a basis in the future to focus on the development of new clients of logic/mixed-signal and consumer IC products. This practice would benefit the Company' future operation developments.

F. Solid Financial Structure

"The big ones get bigger" is one of the future development trends of assembly and testing industry. The Company has sufficient cash flow and solid asset-liability structure to ensure that the Company would continue to invest and develop steadily. This is our key to maintain the stability of operations during the recession of the IC industry. Therefore, the stability of the financial structure of the Company is an important basis to long-term cooperation and mutual development with clients, and it is also one of the competitive advantages of the Company.

G. Equipped with a Complete Product Development Blueprint and the Power to Pursue Diversified Developments

The Company has an experienced R&D technical team. In addition to continuing to strengthen and improve the IC assembly and testing technology and quality, the Company is also actively developing state-of-the-art technology and services in response to the needs of the future IC mainstream market (including high profit assembly products and technologies currently under development such as the 12-inch wafer Fine Pitch technology and Flip Chip, or ones that are applied to WLCSP and RDL technologies, Stacked-Die Package, Multi-Chip, and SiP). With our own capabilities of technology integration and development, the Company relies on a wide range of assembly and testing technologies to provide a complete portfolio of product technologies in accordance with market and client demands. The practice not only reduces the impact of the IC industry recession, but also provides clients with more diversified and differentiated assembly and testing services to increase the Company's competitive advantage.

(4) Advantages and Disadvantages of Development Prospects and Countermeasures

A. Advantages

(A) The Market is Capital and Technology-Intensive, and the Barriers to Entry are Comparatively High

The semiconductor industry is a capital and technology-intensive industry. Capital expenditures in the industry are becoming more costly because the machinery equipment required for semiconductor testing is expensive, the orders for IDM OEMs are increasing and the product technologies change rapidly. In addition, as semiconductor assembly is technology-intensive, its process technology and production defect-free rate determines the level of production costs, and it is difficult to train and recruit R&D personnel while assembly and testing products would only acquire orders after the certification of clients. These factors result in a higher threshold for new competitors. The Company has an excellent technical R&D team. We devoted ourselves to the industry for many years, resulting in our rich experience in practice. Moreover, the Company fully grasps the trends and needs in the semiconductor assembly industry, and we have already reached economies of scale, while our process technology also obtained the trust and quality certifications of international industry giants. All of these successes indicate that the Company is competitive in the market.

(B) The Domestic Semiconductor Industry Has a Complete Model of Vertical Disintegration

The vertical disintegration system of Taiwan's semiconductor industry has developed for many years, and is equipped with advantages such as the integrity of upstream and downstream industry chain, work specialization with high supportiveness, significant industry cluster effect, and the comprehensiveness of surrounding support industry. In addition, the wafer foundries and assembly and testing houses of Taiwan possess professionalized manufacturing capacity along with flexible production scheduling, world-class service quality and rapid adaptability, and already reached economies of scale. The capacity of Taiwan's semiconductor industry is not only in line with industry trends and demand, but also is capable of providing high-quality and internationally competitive products. This would be a great advantage for our development in the future.

(C) The Industry and End-Use Market of Our Products Will Continue to Grow in the Future

Due to the strong growth in shipments of smartphones, tablet computers, Ultrabook and others led to the increase of relevant chips' assembly and testing orders; the continuing trend of IDM OEM outsourcing; the fact that the amount of copper wire will still has a lot room for growth as the orders of fables vendors in the United States and IDMs in Japan will keep increasing; and along with the improvement of the penetration rate of 1x nano-process technology, the demand for advanced assembly and wire bonding would elevate simultaneously. This is conducive to the increase of the added value of the industry, and the promotion of the development of industry value upgrading. In addition, from the perspective of the storage device industry, strong demand for smartphones, tablet computers and other consumer electronics products is expected to stimulate the growth of DRAM and NAND Flash; from the perspective of displays' end-use industry, although the demand for LCD monitor and personal computer continues to decline, but as the demand for LCD TV continues to increase, the annual growth rate of the production value of the global large-size panel industry will rise slightly to 5.6%, while the production value reaches US$98.1 billion. As for the small size panels, as the demand for smartphones and tablet computers continues to rise, the annual growth rate of production value of small and medium size panel industry is expected to increase significantly to 28.6%, while the production value reaches US$33.5 billion. To sum up, the growth of the Company is expected to continue sustainably since the industry and the end-use market will continue to grow in the future.

(D) The Trend of International IDM Industry Giants' Acceleration of Outsourcing is Conducive to Assembly and Testing Market

In 2009, as the financial crisis inflicted a serious defeat on the global economy and both the domestic and international IT industry, international IDMs became more cautious in inventory control. They no longer invest in the expansion of capacities and start to reduce capital expenditure while conservatively expanding the capacity of back-end IC assembly and testing. In the meantime, IDMs have begun to engage in operation modes revision (i.e. Fabless or Fab-Lite) and structural reorganization. They concentrate on market development and R&D, improving operational efficiency, while they strive to reduce the risk of self-built fabs and focus on pooling of resources and production costs reduction, resulting in the continuing of IDMs' increasing of the proportion of outsourcing. In addition, as the IC production process continues to refine, the trend of semiconductor assembly types moving towards high-end IC assembly and testing technology emerges. Under such circumstances, IDMs are highly dependent on the professional assembly and testing houses dedicated to continuous R&D of new technologies in order to master high-end assembly technologies required for the new types of IC products. As a result, the business opportunities of domestic IC assembly and testing houses to gain outsourcing orders from international IDMs will continue to increase.

The Company has industry-experienced R&D technology teams and advanced process technology (for instance, assembly and testing technologies including COF, COG/COP, Wafer Level CSP and MEMS, etc.), and is able to meet clients' needs for timely development of key technologies, while continuously improving process technologies in manufacturing processes and enhancing production efficiency. All of these advantages would help clients reduce operating costs. In addition, the Company has reached economies of scale, and are able to continuously expand production capacity in accordance with the market and clients' demand. The Company has sufficient capacity to meet major IDMs' diversified demands and reduce unit costs, thereby increasing the price competitive advantage, contributing to the winning of IDM OEM orders.

B. Disadvantages

(A) Capital expenditure gradually increases

The Company provides assembly and testing services, and all of our testing machinery equipment is costly. As IDM's OEM orders are increasing, assembly and testing vendors began to vigorously invest in the procurement of machinery and equipment. In addition, in response to the rapid changes in assembly and testing technologies, major semiconductor vendors have gradually entered a more advanced level of process, while the difficulty of relevant assembly technologies also simultaneously increases. As a result, the required capital expenditure is becoming more enormous, and therefore the increase in capital expenditure would elevate investment risks of the Company.

Countermeasures:

The Company has established a R&D center to research and develop assembly and testing technology with clients and seize the market demand at any time in order to understand new assembly and testing technology trends in the future, ensuring that the Company could introduce the products and technologies to meet market and clients' demands at an appropriate and right moment. In addition, the Company has carefully evaluated the investment plans and the management plans of personnel, machinery equipment, funds and technology, adjusting the equipment portfolio in accordance with market demands in a timely manner so as to use the minimal equipment and investment portfolio to respond to diversified client demands, reduce assembly and testing technology-related investment amount and risks, and pursue the efficient use of free cash flow while maximizing our management effectiveness.

(B) The assembly and testing technologies change rapidly and the Company has less dominance in the development of technologies

With the rapid expansion of the application of end applications, memory applications and product categories are becoming more diverse. Moreover, because the market are becoming more demanding of product functionality, performance, cost and design along with the fierce horizontal competition in the industry, semiconductor and testing technology changes rapidly; in addition, as the designers and users are the players having dominance in the field of new assembly and testing technologies, it is difficult for us to immediately grasp the market acceptance of new technologies.

Countermeasures:

The Company provides a complete package of services for the entire semiconductor back-end process, and our assembly and testing products are required to be jointly certified by the IC manufacturer and the IC assembly and testing vendors. Given the necessity of product technical confidentiality and quality stability, IC manufacturers would select an appropriate IC back-end assembly and testing vendor to engage in a close and long-term cooperation. Once the cooperation relationship of supply and demand is confirmed, it is not easy to alter the relationship. In addition, the Company and clients jointly develop new products and technologies to ensure that we can introduce the products and technologies to meet market and clients' demands at an appropriate and right moment. Furthermore, the company is committed to the R&D and innovation of core technologies. In addition to continuing to maintain good relations with existing clients, we also continue to develop assembly and testing technologies for other products such as logic/mixed-signal and consumer IC products in order to win potential new clients, dispersing the risks of our product portfolios.

(C) The shortening of IC product life cycle results in significant fluctuations in the industry's state of economy

The Company provides memory IC, LCD driver IC and logic/mixed-signal products assembly and testing services for IC design houses, IDM and IC fabs. Because IC assembly and testing is the back-end process of IC, the demand of our services comes from the IC industry. Therefore the prosperity or recession of the IC industry is closely related to the development of IC assembly and testing industry.

Countermeasures:

The Company has advanced technology services for the entire semiconductor back-end process, and we actively develop markets for high-growth end products. In addition to continuously improve the assembly and testing technology and quality for memory IC products and display driver IC products and shorten the delivery period, adjusting the product portfolio at any time in response to market demands, the Company's new process products such as Wafer Level CSP and MEMS have obtained clients' verifications. We have also actively established the application of flip chip technology in logic/mixed-signal products. Therefore, the Company could reduce the risk of business cycle by providing clients with more diversified assembly and testing services through our diversified product line. Furthermore, the Company already established long-term and stable partnerships with existing clients, while we actively develop new clients for logic/mixed-signal products, resulting in a full and stable application of our production capacity. The Company has been elastically responding to the substantial amount of orders during the IC industry boom and the reduction in orders in the industry' downturn by carefully assessing the impact of investment plans and management plans for personnel, machinery equipment, capital and technology. In addition, the Company maintains a solid financial structure and this advantage also reduces the adverse impacts on the Company's operating stability when the IC industry is experiencing a downturn.

(D) The difficulty in the training, recruitment and retention of professional IC assembly and testing personnel

Because R&D team is very important to IC assembly and testing, obtaining R&D personnel with rich experience and good quality is the key to success for IC assembly and testing companies. With the rapid development of IC industry in recent years, the demand for professional R&D personnel keeps growing. However, it is difficult to train and recruit professional R&D personnel. Therefore, the Company will also have to face the unfavorable factor of the shortage of professional R&D personnel.

Countermeasures:

In addition to establishing various internal and external education and training systems to enhance the professional skills of the staff, the Company also provides employee with benefits and distribute employee restricted shares, enabling employees to share our business results, cultivating employee's coherence to the Company. At present, the Company is also listed on the stock market, so that our stocks would have more liquidity, enabling the Company to retain the existing professional R&D talents, and become more attractive to professional R&D personnel during recruitment.

(E) The rising of raw material costs

The main key raw materials of the Company during the assembly and testing process are materials such as lead frame, substrate, gold wire, IC carrier board, and resin, claiming about 30% of the materials. As a result, the rising of raw material prices would definitely bring impacts to the IC assembly and testing industry. The Company would have to face an even greater challenge regarding the control of raw materials costs and inventory.

Countermeasures:

In addition to fully grasping the relevant information on changes in the raw materials, and keeping an eye on the changes in the industry trend any time, the Company also improve the product defect-free rate, and reduce the negative impacts of rising costs by proposing alternative raw materials, improving the existing process technologies and developing advanced process technologies and other solutions, facilitating the Company to maintain a stable competitive advantage for profits.

(F) Horizontal Competition in the Industry:

Since the IC assembly and testing industry has already matured, horizontal competition in the same industry is quite severe.

Countermeasures:

The Company would provide clients with better quality and services, continuing to strengthen the capability of technology R&D capabilities and process improvement to enhance production efficiency, product quality and reduce production costs while pursuing to maintaining client satisfaction. In addition to actively maintaining existing long-term client relationships, we would also strive to develop other new clients to consolidate and further strengthen our market position.

(II) The Important Purposes and Production Process of Our Main Products

1. The Purposes of Main Products

The main products of the Company is OEM services for the assembly and testing of products such as TSOP, FBGA, TCP, COF, COG/COP, and wafer bumping. The client's products can be successfully applied to information, communications, office automation, consumer electronics and other related products through the comprehensive IC assembly and testing services provided by the Company.

2. The Production Process

- Memory IC Products

Wafer Probe → Assembly → Burn-In → Testing

- LCD Driver IC

Gold Bumping → Wafer Probe → Assembly → Testing

(III) The Supply Status of the Main Raw Materials

The main raw materials of the Company is Gold Salt (potassium gold cyanide), Substrate, Gold Wire, Lead Frame, Molding Compound, etc. Our suppliers for the raw materials listed above are all well-known domestic and foreign vendors providing stable supply, high quality products, and accurate delivery. In addition, the Company implements a random quality inspection for the main raw materials suppliers in order to obtain a supply of better quality.

Main Raw Materials	Name of Supplier	Domestic	Foreign	Supply Status
Gold Salt	SOLAR	V		Good
	Metalor		V	Good
Substrate	Ryowa		V	Good
	Unimicron	V		Good
	Simmtech		V	Good
	Kinsus	V		Good
	ZDT		V	Good
Gold Wire	Tanaka		V	Good
	MKE		V	Good
Lead Frame	SHINKO		V	Good
	CWE	V		Good
	Fusheng Group	V		Good
	HDS		V	Good
Molding Compound	Hitachi Chemical		V	Good
	Kyocera		V	Good
	ShinEtsu		V	Good
	CWE	V		Good

(IV) The Percentage of Suppliers and Customers Accounting for More than 10% of The Total Procurement (Sales) Amount in Either of The Most Recent Two Years, The Amount and Proportion of Procurement (Sales) from Them and The Reasons for The Change

1. Major Suppliers of the Most Recent Two Years

Unit: NT$ thousands; %

	2018				2019				2020 Q1 (Note)			
Item	Name	Amount	% of Total Net Purchases	Relationship with Issuer	Name	Amount	% of Total Net Purchases	Relationship with Issuer	Name	Amount	% of Total Net Purchases	Relationship with Issuer
1	SOLAR	1,193,381	26.69	None	SOLAR	1,392,524	27.98	None	—	—	—	—
2	RYOWA	451,662	10.10	None	RYOWA	425,465	8.55	None	—	—	—	—
	Others	2,826,306	63.21		Others	3,158,394	63.47		—	—	—	—
	Total	4,471,349	100.00		Total	4,976,383	100.00		—	—	—	—

Note: As of the publication date of the annual report, the most recent consolidated financial statements dated March 31, 2020 has not yet been approved by the Board of Directors nor reviewed by certified public accountants.

Reason of Increase / Decrease in Purchases: The statistics of our suppliers are stable and there has been no significant change in major suppliers in the most recent 2 years.

2. Major Customers of the Most Recent Two Years

Unit: NT$ thousands; %

	2018				2019				2020 Q1(Note)			
Item	Name	Amount	% of Total Net Sales	Relationship with Issuer	Name	Amount	% of Total Net Sales	Relationship with Issuer	Name	Amount	% of Total Net Sales	Relationship with Issuer
1	Client A	3,794,991	20.54	None	Client A	4,756,755	23.39	None	—	—	—	—
2	Client K	2,637,053	14.27	None	Client K	2,419,612	11.90	None	—	—	—	—
3	Client C	1,957,467	10.59	None	Client C	2,048,260	10.07	None	—	—	—	—
	Others	10,090,516	54.60		Others	11,113,254	54.64		—	—	—	—
	Total	18,480,027	100.00		Total	20,337,881	100.00		—	—	—	—

Note: As of the publication date of the annual report, the most recent consolidated financial statements dated March 31, 2020 has not yet been approved by the Board of Directors nor reviewed by certified public accountants.

Reasons of Changes in Sales: The statistics of our sales are stable and there has been no significant change in major customers in the most recent 2 years.

(V) Production of the Most Recent Two Years

Unit: thousand wafers/piece；NT$ thousands

Year / Production Value / Major Product (or Departments)	2018			2019		
	Capacity	Output	Production Value	Capacity	Output	Production Value
Assembly	3,461,467	2,335,324	4,536,008	3,559,312	2,793,638	4,918,748
Product Testing	3,557,981	2,489,778	2,136,623	3,634,690	2,464,450	2,153,213
Driver IC	2,455,423	1,817,088	4,009,820	2,736,018	1,948,120	4,784,346
Wafer Bumping	1,836	1,317	3,161,796	1,718	1,300	3,508,572
Wafer Testing	881	639	1,038,096	992	605	1,068,219
Total			14,882,343			16,433,098

(VI) Sales in the Most Recent Two Years

Unit: thousand wafers/piece；NT$ thousands

Sales / Year / Major Product (or Departments)	2018				2019			
	Domestic Sales		Export Sales		Domestic Sales		Export Sales	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Assembly	856,050	2,718,005	1,477,424	1,961,671	809,343	2,830,377	1,937,456	2,318,500
Product Testing	2,377,283	2,681,481	93,747	209,800	2,321,729	2,438,925	114,491	165,526
Driver IC	1,555,670	4,919,732	130,982	774,988	1,701,842	6,069,481	165,838	852,724
Wafer Bumping	1,198	2,816,913	118	498,621	1,161	3,260,017	152	748,982
Wafer Testing	538	1,615,635	80	283,181	542	1,276,227	160	377,122
Total		14,751,766		3,728,261		15,875,027		4,462,854

III. Employees Status

The number of employees employed for the 2 most recent fiscal years, and during the current fiscal year up to the date of publication of the annual report, their average years of service, average age, and education levels (including the percentage of employees at each level)

Year		2018	2019	Current Year as of Mar. 31, 2020
Number of Employees (persons)	Direct Staff	3,502	3,243	3,158
	Engineering	2,125	2,075	2,036
	Management	374	370	351
	Total	6,001	5,688	5,545
Average Age		35.7	36.8	37.0
Average Seniority (years)		7.6	8.7	8.9
Academic Qualifications (%)	Ph.D.	0.1	0.1	0.1
	Master	7.3	7.3	7.2
	Bachelor	66.7	67.3	67.2
	High School	25.5	24.9	25.0
	Degree of Lower Levels	0.4	0.4	0.5

IV. Disbursements for environmental protection

1. Any losses suffered by the company in the most recent fiscal year and up to the annual report publication date due to environmental pollution incidents (including any compensation paid and any violations of environmental protection laws or regulations found in environmental inspection, specifying the disposition dates, disposition reference numbers, the articles of law violated, and the content of the dispositions), and disclosing an estimate of possible expenses that could be incurred currently and in the future and measures being or to be taken. If a reasonable estimate cannot be made, an explanation of the facts of why it cannot be made shall be provided: None.

V. Labor Relations

(I) List any employee benefit plans, continuing education, training, retirement systems, and the status of their implementation, and the status of labor-management agreements and measures for preserving employees' rights and interests :

The Company is responsible for handling the related welfare and benefits for the staff according to Labor Standards Act, Labor Insurance Act, the Employee Welfare Fund Act and the related laws and regulations and conducts regular health examination, on-the-job training and free group insurance services. In terms of the Employee Welfare Committee, in addition to the various subsidies granted for weddings, funerals and birth, the welfare activities will be held on a regular basis. Moreover, the Company also provides shuttle bus and dormitory to take care of staff living far, and maintain sports parks in the Science Park, carrying out various activities of club and subsidies to enhance exchanges among various departments and improve morale among colleagues, holding departmental social mixer so as to promote the harmonious relationship between labor and management. Besides, the purpose of relieving staff's body and mind is achieved by the establishment of staff leisure center.

(II) List any losses suffered by the company in the most recent 2 fiscal years and up to the annual report publication date due to labor disputes (including any violations of the Labor Standards Act found in labor inspection, specifying the disposition dates, disposition reference numbers, the articles of law violated, the substance of the legal violations, and the content of the dispositions), and disclosing an estimate of possible expenses that could be incurred currently and in the future and measures being or to be taken. If a reasonable estimate cannot be made, an explanation of the facts of why it cannot be made shall be provided.: None.

VI. Material Contracts

Categories of Contracts	Parties	Term	Main Purpose	Restrictions
Contract Assembly Agreement	Company I	Effective on 2007/11/13 and may be terminated according to the terms of the agreement.	To provide wafer assembly services.	1. Product quality and defect-free rate agreement. 2. Indemnity clauses for IP infringements.
Contract Assembly Agreement	Company I	Effective on 2004/07/01 and may be terminated according to the terms of the agreement.	To provide wafer assembly services.	1. Quality and Product defect-free rate agreement. 2. Indemnity clauses for IP infringements.
IC OEM Services Agreement	Company K	From 2015/01/01 to 2019/12/31	To provide services for assembly, reliability tests, marking/remarking, and testing.	1. Warranty against defects. 2. Indemnity clauses for IP infringements. 3. Liability limitation agreement.
Certificate of Commitment for Service	Company C	From 2016/01/01 to 2018/12/31 with automatic extension and may be terminated according to the terms of the agreement.	To provide wafer processing services.	1. Product defect-free rate agreement. 2. Indemnity clauses for IP infringements.
IC Processing and Assembly Contract	Company M	Effective on 2010/01/01 with automatic extension and may be terminated according to the terms of the agreement.	To provide IC assembly services.	1. Product defect-free rate agreement. 2. Indemnity clauses for IP infringements.

Categories of Contracts	Parties	Term	Main Purpose	Restrictions
IC Assembly and Testing Contract	Company G	From 2018/07/01 to 2020/06/30	To provide IC assembly and testing services.	1. Product defect-free rate agreement. 2. Indemnity clauses for IP infringements.
Service Agreement	Company W	Effective on 2013/07/01 and may be terminated according to the terms of the agreement.	To provide IC assembly and testing services.	1. Product quality and defect-free rate agreement. 2. Indemnity clauses for IP infringements.
Technology Transfer Agreement	Unimos Microelectronics (Shanghai) Co., Ltd.	From 2012/08/01 to 2022/07/31 (Termination on 2020/04/01)	To grant a license to use patents.	1. Royalty agreement. 2. Liability clauses.
Technology Transfer and License Agreement	Unimos Microelectronics (Shanghai) Co., Ltd.	From 2016/12/23 to 2039/12/22 (Termination on 2020/04/01)	To grant a license to use patents.	1. Royalty agreement. 2. Liability clauses.
Joint Credit Facility Agreement and Amendment	Cooperative Bank; Bank of Taiwan; Land Bank of Taiwan; Taishin International Bank; Hua Nan Bank; Chang Hwa Bank; Yuanta Bank; First Bank; Shin Kong Commercial Bank; Bank of Panshin； Mega Bank.	Effective from 2018/05/15 to the date in which the Company performed all obligations of the credit facility agreement.	The banks jointly provided a loan for the Company. The total loan amount is NT$12 billion.	1. The Company made a commitment that it shall not perform specific actions except with the consent of the banks group, and it shall comply with relevant agreements including the financial matters. 2. Collaterals are provided to secure the loan.

Categories of Contracts	Parties	Term	Main Purpose	Restrictions
Land Lease Agreement	Southern Taiwan Science Park Bureau	From 2014/07/01 to 2024/06/30	To lease lands from the Southern Taiwan Science Park Bureau.	1. Punitive damage clauses. 2. Rent agreement 3. Early termination clause.
Land Lease Agreement	Southern Taiwan Science Park Bureau	From 2012/04/03 to 2032/04/02	To lease lands from the Southern Taiwan Science Park Bureau.	1. Punitive damage clauses. 2. Rent agreement 3. Early termination clause.
Land Lease Agreement	Hsinchu Science Park Bureau	From 2008/09/18 to 2027/12/31	To lease lands from the Hsinchu Science Park Bureau.	1. Punitive damage clauses. 2. Rent and joint liability agreement 3. Early termination clause.
Land Lease Agreement	Hsinchu Science Park Bureau	From 2014/08/01 to 2034/07/31	To lease lands from the Hsinchu Science Park Bureau.	1. Punitive damage clauses. 2. Rent and joint liability agreement 3. Early termination clause.
Supply and Precious Metals Recovery Contract and Amendments	Solar Applied Materials Technology Corporation	From 2016/09/01 to 2021/12/31	To supply materials required for the gold bumping business.	Price calculation and delivery period.
Supply Agreement	Ryowa Co., Ltd.	From 2014/09/01 to 2019/08/31 with automatic extension and may be terminated according to the terms of the agreement.	To supply materials required for the IC assembly business.	1. Payment terms. 2. Warranty and liability clauses.

VI. Financial Information

I. The last five years and as of the publication data of the annual report, the most recent condensed Balance Sheets and Statements of Comprehensive Income (Based on International Financial Reporting Standards)

(I) Condensed Balance Sheets

(1) Consolidated Financial Statements

Unit: NT$ thousands

Item \ Year		Financial Summary for The Last 5 Years (Note 1)					Financial information of the current year as of March 31, 2020 (Note 2)
		2015 (adjusted)	2016	2017	2018	2019	
Current assets		18,108,392	16,895,957	14,200,980	11,888,143	11,762,346	—
Property, plant and equipment		14,211,560	13,497,218	15,265,311	16,819,621	17,979,444	—
Intangible assets		—	—	—	—	—	—
Other assets		697,915	902,785	3,793,651	4,425,954	4,564,097	—
Total assets		33,017,867	31,295,960	33,259,942	33,133,718	34,305,887	—
Current liabilities	Before distribution	6,186,136	4,664,500	6,670,608	5,190,195	4,901,701	—
	After distribution	7,978,689	5,521,254	6,927,414	6,062,913	Note 3	—
Non-current liabilities		5,596,570	10,357,946	8,195,998	9,872,712	9,752,947	—
Total liabilities	Before distribution	11,782,706	15,022,446	14,866,606	15,062,907	14,654,648	—
	After distribution	13,575,259	15,879,200	15,123,412	15,935,625	Note 3	—
Equity attributable to equity holders of the Company		19,107,629	16,273,514	18,393,336	18,070,811	19,651,239	—
Capital stock		8,962,066	8,869,663	8,862,971	7,528,577	7,272,401	—
Capital surplus		3,755,849	6,888,826	6,288,377	6,280,482	6,059,651	—
Retained earnings	Before distribution	6,773,369	1,424,638	4,237,941	5,104,542	6,338,989	—
	After distribution	4,980,816	1,167,612	3,981,135	4,231,824	Note 3	—
Other equity interest		(383,655)	98,041	11,701	119,713	(19,802)	—
Treasury stock		—	(1,007,654)	(1,007,654)	(962,503)	—	—
Non-controlling interests		—	—	—	—	—	—
Equity attributable to predecessors' interests under common control		2,127,532	—	—	—	—	—
Total equity	Before distribution	21,235,161	16,273,514	18,393,336	18,070,811	19,651,239	—
	After distribution	19,442,608	15,416,760	18,136,530	17,198,093	Note 3	—

Note1: The last 5 years financial information had been audited by certified public accountants.

Note2: As of the publication date of the annual report, the most recent consolidated financial report dated March 31, 2020 has not yet been approved by the Board of Directors nor reviewed by certified public accountants. Note 3: As of the publication date of the annual report, 2019 earnings distribution has not yet been ratified by the Shareholders' Meeting, thus the amount after distribution is unlisted.

(2) Parent Company Only Financial Statements

Unit: NT$ thousands

Item / Year		Financial Summary for The Last 5 Years				
		2015 (adjusted)	2016	2017	2018	2019
Current assets		16,990,860	13,751,990	13,157,373	11,664,359	11,508,633
Property, plant and equipment		13,558,502	13,495,686	15,264,103	16,818,613	17,978,949
Intangible assets		—	—	—	—	—
Other assets		2,230,865	3,544,936	4,775,719	4,653,056	4,814,737
Total assets		32,780,227	30,792,612	33,197,195	33,136,028	34,302,319
Current liabilities	Before distribution	6,037,162	4,079,615	6,607,861	5,192,505	4,898,133
	After distribution	7,829,715	4,936,369	6,864,667	6,065,223	Note 2
Non-current liabilities		5,507,904	10,439,483	8,195,998	9,872,712	9,752,947
Total liabilities	Before distribution	11,545,066	14,519,098	14,803,859	15,065,217	14,651,080
	After distribution	13,337,619	15,375,852	15,060,665	15,937,935	Note 2
Equity attributable to equity holders of the Company		19,107,629	16,273,514	18,393,336	18,070,811	19,651,239
Capital Stock		8,962,066	8,869,663	8,862,971	7,528,577	7,272,401
Capital surplus		3,755,849	6,888,826	6,288,377	6,280,482	6,059,651
Retained earnings	Before distribution	6,773,369	1,424,638	4,237,941	5,104,542	6,338,989
	After distribution	4,980,816	1,167,612	3,981,135	4,231,824	Note 2
Other equity interest		(383,655)	98,041	11,701	119,713	(19,802)
Treasury stock		—	(1,007,654)	(1,007,654)	(962,503)	—
Predecessors' interests under common control		2,127,532	—	—	—	—
Total equity	Before distribution	21,235,161	16,273,514	18,393,336	18,070,811	19,651,239
	After distribution	19,442,608	15,416,760	18,136,530	17,198,093	Note 2

Note1: Parent company only financial report had been audited by certified public accountants.

Note2: As of the publication date of the annual report, 2019 earnings distribution has not yet been ratified by the Shareholders' Meeting, thus the amount after distribution is unlisted.

(II) Condensed Statements of Comprehensive Income

(1) Consolidated Financial Statements

Unit: NT$ thousands, except earnings per share

Item / Year	Financial Summary for The Last 5 Years (Note 1)					Financial information of the current year as of March 31, 2020 (Note 2)
	2015 (adjusted)	2016	2017	2018	2019	
Revenue	18,837,089	18,387,593	17,940,855	18,480,027	20,337,881	—
Gross profit	4,151,575	3,642,121	3,237,126	3,429,995	3,926,139	—
Operating profit	2,648,427	1,998,575	2,239,881	2,099,721	2,457,119	—
Non-operating income (expenses)	197,629	(298,140)	(724,394)	(317,279)	573,200	—
Profit before income tax	2,846,056	1,700,435	1,515,487	1,782,442	3,030,319	—
Profit for the year from continuing operations	2,010,346	1,348,385	1,211,575	1,103,075	2,584,161	—
Profit (loss) for the year from discontinued operations	(34,233)	(122,105)	1,814,953	—	—	—
Profit for the year	1,976,113	1,226,280	3,026,528	1,103,075	2,584,161	—
Other comprehensive loss, net of income tax	(47,200)	(236,421)	(189,902)	(32,829)	(123,772)	—
Total comprehensive income for the year	1,928,913	989,859	2,836,626	1,070,246	2,460,389	—
Profit attributable to equity holders of the Company	2,230,469	1,532,292	3,026,528	1,103,075	2,584,161	—
Loss attributable to predecessors' interests under common control	(291,429)	(306,012)	—	—	—	—
Profit attributable to non-controlling interests	37,073	—	—	—	—	—
Comprehensive income attributable to equity holders of the Company	2,205,275	1,295,871	2,836,626	1,070,246	2,460,389	—
Comprehensive loss attributable to predecessors' interests under common control	(291,429)	(306,012)	—	—	—	—
Comprehensive income attributable to non-controlling interests	15,067	—	—	—	—	—
Earnings per share : equity holders of the Company	2.54	1.78	3.57	1.37	3.55	—
Earnings per share : predecessors' interests under common control	(0.33)	(0.35)	—	—	—	—

Note1: The last 5 years financial information had been audited by the certified public accountants.

Note2: As of the publication date of the annual report, the most recent consolidated financial report dated March 31, 2020 has not yet been approved by the Board of Directors nor reviewed by certified public accountants.

(2) Parent Company Only Financial Statements

Unit: NT$ thousands, except earnings per share

Item \ Year	Financial Summary for The Last 5 Years				
	2015 (adjusted)	2016	2017	2018	2019
Revenue	18,275,095	18,389,205	17,941,102	18,480,027	20,337,881
Gross profit	3,955,276	3,643,246	3,236,803	3,429,995	3,926,139
Operating income	2,546,351	2,020,291	2,343,113	2,123,300	2,455,170
Non-operating income (expenses)	206,612	(442,959)	985,503	(342,005)	573,120
Profit before income tax	2,752,963	1,577,332	3,328,616	1,781,295	3,028,290
Profit for the year from continuing operations	1,939,040	1,226,280	3,026,528	1,103,075	2,584,161
Profit (loss) for the year from discontinued operations	—	—	—	—	—
Profit for the year	1,939,040	1,226,280	3,026,528	1,103,075	2,584,161
Other comprehensive loss,net of income tax	(25,194)	(236,421)	(189,902)	(32,829)	(123,772)
Total comprehensive income for the year	1,913,846	989,859	2,836,626	1,070,246	2,460,389
Profit attributable to equity holders of the Company	2,230,469	1,532,292	3,026,528	1,103,075	2,584,161
Loss attributable to predecessors' interests under common control	(291,429)	(306,012)	—	—	—
Profit attributable to non-controlling interests	—	—	—	—	—
Comprehensive income attributable to equity holders of the Company	2,205,275	1,295,871	2,836,626	1,070,246	2,460,389
Comprehensive loss attributable to predecessors' interests under common control	(291,429)	(306,012)	—	—	—
Comprehensive income attributable to non-controlling interests	—	—	—	—	—
Earnings per share : equity holders of the Company	2.54	1.78	3.57	1.37	3.55
Earnings per share : predecessors' interests under common control	(0.33)	(0.35)	—	—	—

Note: The parent company only financial reports had been audited by the certified public accountants.

(III) Auditors' Name and Opinions

Year	Accounting firm	CPA	Audit opinion
2015	PricewaterhouseCoopers, Taiwan	Chun-Yuan Hsiao, Chih-Cheng Hsieh	Modified unqualified opinion
2016	PricewaterhouseCoopers, Taiwan	Chun-Yuan Hsiao, Chih-Cheng Hsieh	Unqualified opinion
2017	PricewaterhouseCoopers, Taiwan	Chun-Yuan Hsiao, Chih-Cheng Hsieh	Unqualified opinion
2018	PricewaterhouseCoopers, Taiwan	Chun-Yuan Hsiao, Chih-Cheng Hsieh	Unqualified opinion
2019	PricewaterhouseCoopers, Taiwan	Chun-Yuan Hsiao, Chih-Cheng Hsieh	Unqualified opinion

II. Financial Analysis for the Most Recent 5 Years

1. Consolidated Financial Statements

Year / Item		Financial Summary for The Last 5 Years					Financial information of the current year as of March 31, 2020 (Note)
		2015 (adjusted)	2016	2017	2018	2019	
Financial structure	Debt ratio (%)	38.21	48.00	44.70	45.46	42.72	—
	Long-term capital to property, plant and equipment ratio (%)	175.92	197.31	174.18	166.14	163.54	—
Solvency analysis	Current ratio (%)	270.33	362.22	212.89	229.05	239.96	—
	Quick ratio (%)	238.79	318.91	183.16	193.92	202.73	—
	Times interest earned (times)	23.54	12.76	8.96	12.69	18.71	—
Operating performance analysis	Average collection turnover (times)	4.53	4.58	4.40	4.22	4.42	—
	Average collection days	81	80	83	86	83	—
	Average inventory turnover (times)	8.89	7.77	7.32	7.93	9.00	—
	Average payment turnover (times)	17.70	19.23	19.43	22.70	22.53	—
	Average inventory turnover days	41	47	50	46	41	—
	Property, plant and equipment turnover (times)	1.43	1.33	1.25	1.15	1.17	—
	Total assets turnover (times)	0.61	0.57	0.56	0.56	0.60	—
Profitability analysis	Return on total assets (%)	7.24	4.19	9.87	3.69	8.07	—
	Return on equity (%)	11.36	6.54	17.46	6.05	13.70	—
	Profit before income tax to paid-in capital ratio (%)	31.94	19.17	17.10	23.68	41.67	—
	Net profit margin (%)	11.41	6.67	16.87	5.97	12.71	—
	Earnings per share (equity holders of the Company)（NT$）	2.54	1.78	3.57	1.37	3.55	—
	Earnings per share (predecessors' interests under common control)（NT$）	(0.33)	(0.35)	—	—	—	—
Cash flow	Cash flow ratio (%)	93.94	79.07	71.26	76.30	122.26	—
	Cash flow adequacy ratio (%)	130.13	113.79	101.68	91.84	85.76	—
	Cash reinvestment ratio (%)	4.74	2.58	5.21	4.75	6.27	—
Leverage	Operating leverage (times)	2.17	2.62	2.29	2.61	2.52	—
	Financial leverage (times)	1.05	1.08	1.09	1.08	1.07	—

Reasons for variation in financial ratios in the past 2 years (Analysis of deviation over 20%)

(1) Times interest earned and profit before income tax to paid-in capital ratio: Mainly due to the increase of profit before income tax in 2019.

(2) Return on total assets, return on equity, net profit margin and earnings per share: Mainly due to the recognized of gain on disposal of investment accounted for using equity method and the increase of profit in 2019.

(3) Cash flow ratio and cash reinvestment ratio: Mainly due to the increase of profit in 2019.

Note: As of the publication date of the annual report, the most recent consolidated financial report dated March 31, 2020 has not yet been approved by the Board of Directors nor reviewed by certified public accountants.

2. Parent Company Only Financial Statements

item \ Year		Financial Summary for The Last 5 Years				
		2015 (adjusted)	2016	2017	2018	2019
Financial structure	Debt ratio (%)	35.22	47.15	44.59	45.46	42.71
	Long-term capital to property, plant and equipment ratio(%)	197.24	197.94	174.20	166.15	163.55
Solvency analysis	Current ratio (%)	281.44	337.09	199.12	224.64	234.96
	Quick ratio (%)	253.34	288.67	169.10	189.52	197.70
	Times interest earned	22.64	11.91	18.48	12.69	18.73
Operating performance analysis	Average collection turnover (times)	5.00	4.72	4.40	4.22	4.42
	Average collection days	73	77	83	86	83
	Average inventory turnover (times)	8.83	8.07	7.32	7.93	9.00
	Average payment turnover (times)	22.52	20.19	19.43	22.70	22.53
	Average inventory turnover days	41	45	50	46	41
	Property, plant and equipment turnover (times)	1.35	1.36	1.25	1.15	1.17
	Total assets turnover (times)	0.58	0.58	0.56	0.56	0.6
Profitability analysis	Return on total assets (%)	6.44	4.24	9.95	3.69	8.07
	Return on equity (%)	9.61	6.54	17.46	6.05	13.70
	Profit before income tax to paid-in capital ratio (%)	30.72	17.78	37.56	23.66	41.64
	Net profit margin (%)	10.61	6.67	16.87	5.97	12.71
	Earnings per share (equity holders of the Company)（NT$）	2.54	1.78	3.57	1.37	3.55
	Earnings per share (predecessors' interests under common control)（NT$）	(0.33)	(0.35)	—	—	—
Cash flow	Cash flow ratio (%)	113.75	101.48	72.81	81.30	122.10
	Cash flow adequacy ratio (%)	161.00	141.40	112.17	97.18	95.16
	Cash reinvestment ratio (%)	6.65	3.19	5.29	5.09	6.26
Leverage	Operating leverage (times)	2.10	2.53	1.90	1.98	1.95
	Financial leverage (times)	1.05	1.08	1.06	1.05	1.05

Reasons for variation in financial ratios in the past two years (no analysis is required for variations below 20%)

(1) Times interest earned and profit before income tax to paid-in capital ratio: Mainly due to the increase of profit before income tax in 2019.

(2) Return on total assets, return on equity, net profit margin and earnings per share: Mainly due to the recognized of gain on disposal of investment accounted for using equity method and the increase of profit in 2019.

(3) Cash flow ratio and cash reinvestment ratio: Mainly due to the increase of profit in 2019.

Note1: The computation formulas used in financial analysis are listed as follows (the opening balance of property, plant and equipment and total assets are based on the CPA-audited IFRS numbers on December 31, 2013).

Note2: The following computation formulas shall be listed at the end of this statement of the annual report:

1. Financial Structure
   (1) Debt ratio = total liabilities / total assets
   (2) Ratio of long-term capital to property, plant and equipment = (total shareholders' equity + non-current liabilities) / net property, plant and equipment
2. Solvency analysis
   (1) Current ratio = current assets / current liabilities
   (2) Quick ratio = (current assets － inventories － prepaid expenses) / current liabilities
   (3) Times interest earned = profit before income tax and interest expenses / interest expenses
3. Operating performance analysis
   (1) Average collection turnover = net revenue / average accounts receivable (including accounts receivable and notes receivable arising from operations)
   (2) Average collection days= 365 / account receivables turnover
   (3) Average inventory turnover = cost of revenue / average inventory
   (4) Average payment turnover = cost of revenue / average accounts payable (including accounts payable and notes payable arising from operations)
   (5) Average inventory turnover days = 365 / inventory turnover
   (6) Property, plant and equipment turnover = net revenue / average net property, plant and equipment
   (7) Total asset turnover = net revenue / average total assets
4. Profitability analysis
   (1) Return on total assets = [net profit + interest expenses (1- effective tax rate)] / average total assets
   (2) Return on stareholders' equity = net profit / average stareholders' equity
   (3) Net profit margin = net profit / net revenue
   (4) Earnings per share = (profit attributable to equity holders of the company－preferred stock dividends) / 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 operation / (five-year sum of capital expenditures, inventory additions and cash dividend)
   (3) Cash reinvestment ratio = (Net cash flow from operating activities － cash dividend) / gross property, plant and equipment + long-term investments + other non-current assets + working capital)
6. Leverage:
   (1) Operating leverage = (net revenue － variable operating costs and expenses) / operating profit
   (2) Financial leverage = operating profit / (operating profit - interest expenses)

III. Audit Committee’ s Report of the Most Recent Year

Audit Committee's Review Report

The Board of Directors has prepared the Company's 2019 Business Report, Financial Statements, and proposal for allocation of earnings. The audit firm of PricewaterhouseCoopers, Taiwan was retained to audit the Company's Financial Statements and has issued an audit report. The Business Report, Financial Statements, and earnings allocation proposal have been reviewed and determined to be correct and accurate by the Audit Committee members of the Company. According to relevant requirements of Article 14-4 of the Securities and Exchange Act and Article 219 of the Company Act, the Audit Committee hereby submits this report.

ChipMOS TECHNOLOGIES INC.

Convener of the Audit Committee: Chin-Shyh Ou

March 10, 2020

IV. Financial Report of the Most Recent Year

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Shareholders of ChipMOS TECHNOLOGIES INC.

Opinion

We have audited the accompanying consolidated balance sheets of ChipMOS TECHNOLOGIES INC. and its subsidiaries (the "Group") as of December 31, 2019 and 2018, and the related consolidated statements of comprehensive income, of changes in equity and of cash flows for the years then ended, and the notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, based on our audits and the report of other independent accountants, as described in 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 of December 31, 2019 and 2018, and its consolidated financial performance and its consolidated cash flows for the years then ended, in accordance with the "Regulations Governing the Preparations 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 this Code. Based on our audits and the report of 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 judgment, 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.

Key audit matters for the Group's consolidated financial statements of the year ended December 31, 2019 are stated as follows:

Measuring progress towards complete satisfaction of performance obligation

Description

Please refer to Note 4(27) to the consolidated financial statements for the accounting policies on revenue recognition; Note 5(2) for uncertainty of accounting estimates and assumptions of revenue recognition; and Note 6(21) for details of the revenue.

The Group's revenue is primarily generated from the assembly and testing services of high-integration and high-precision integrated circuits based on customer's specification, and is recognized based on measuring progress towards complete satisfaction of performance obligation during the service period. For assembly services, services for Liquid Crystal Display and other Flat-Panel Display Driver Semiconductors and Bumping, the Group recognizes revenue on the basis of input costs to the satisfaction of performance obligation relative to the total expected input costs to the satisfaction of that performance obligation. Since the total expected input costs is uncertain and subject to management's significant estimation, measuring progress towards complete satisfaction of performance obligation was identified as a key audit matter.

How our audit addressed the matter

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

1. Interviewed with management to understand and evaluate the accounting policies on revenue recognition, and validated the design and operating effectiveness of respective internal controls.
2. Validated management's assessment on progress completion of performance obligation, and tested the logics applied on calculating the progress completion of performance obligation.
3. Verified the related documents provided by management, validated management reports in relation to the calculation on progress completion of performance obligation, and tested the accuracy of revenue recognition.

Provisions for deficiency compensation

Description

Please refer to Note 4(21) to the consolidated financial statements for the accounting policies on provisions; Note 5(1) for uncertainty of accounting estimates and assumptions of provisions; and Note 6(11) for the details of the provisions for deficiency compensation.

The Group is primarily engaged in assembly and testing services for high-integration and high-precision integrated circuits. In case of deficiencies in the assembly and testing services provided, the Group has to clarify the reason for such deficiencies and attribute responsibilities, and determine whether to provide related provisions. Since the timing and amount of deficiency compensation are uncertain, and subject to management's significant judgment, the provision for deficiency compensation was identified as a key audit matter.

How our audit addressed the matter

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

1. Interviewed with management and verified the internal process on estimating provisions for deficiency compensation, and the consistency of process application during the financial reporting periods.
2. Validated related documents and evidence provided by management, sampled and tested the reasonableness of providing and reversing provisions for deficiency compensation during the current period.
3. Reviewed significant payments made subsequent to the reporting period and validated the reasonableness of provisions for deficiency compensation.

Other matters

The report of the other independent accountants

We did not audit the financial statements of a certain investee company accounted for using 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 consolidated financial statements and the information on the investee disclosed in Note 13 was based solely on the reports of the other independent accountants. Investments in this investee company amounted to NT$249,793 thousand and NT$406,792 thousand, respectively, representing 0.7% and 1.2% of total consolidated assets as of December 31, 2019 and 2018, and total net comprehensive income including the share of profit and other comprehensive income of associate accounted for using equity method amounted to NT$69,570 thousand and NT$39,245 thousand, representing 2.8% and 3.7% of total consolidated comprehensive income for the years then ended, respectively.

Parent company only financial reports

We have audited and expressed an unmodified opinion on the parent company only financial statements of ChipMOS TECHNOLOGIES INC. as of and for the years ended December 31, 2019 and 2018.

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 Preparations 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 controls as management determines are 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 it 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 judgment and maintain professional skepticism throughout the audit. We also:

1. Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
2. Obtain an understanding of internal controls 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 controls.
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 footnote 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's audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding 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.

/s/ Chun-Yuan Hsiao　　　　/s/ Chih-Cheng Hsieh

Chun-Yuan Hsiao　　　　Chih-Cheng Hsieh

For and on behalf of PricewaterhouseCoopers, Taiwan

March 10, 2020

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.

ChipMOS TECHNOLOGIES INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(Expressed in thousands of New Taiwan dollars)

	Assets	Notes	December 31, 2019 Amount	%	December 31, 2018 Amount	%
	Current assets					
1100	Cash and cash equivalents	6(1)	$ 4,704,084	14	$ 4,642,522	15
1136	Current financial assets at amortized cost	6(2)	168,970	1	169,168	1
1140	Current contract assets	6(21)	377,869	1	299,835	1
1150	Notes receivable, net		765	-	1,595	-
1170	Accounts receivable, net	6(3)	4,452,904	13	4,745,693	14
1180	Accounts receivable－related parties, net		1,045	-	140	-
1200	Other receivables		89,676	-	63,037	-
1210	Other receivables－related parties		2,948	-	3,131	-
1220	Current tax assets		138,941	-	139,595	-
130X	Inventories	6(4)	1,767,642	5	1,778,835	5
1410	Prepayments		57,502	-	44,592	-
11XX	**Total current assets**		11,762,346	34	11,888,143	36
	Non-current assets					
1510	Non-current financial assets at fair value through profit or loss	6(5)	11,038	-	11,471	-
1517	Non-current financial assets at fair value through other comprehensive income	6(6)	121,808	-	174,357	1
1535	Non-current financial assets at amortized cost	6(2) and 8	68,450	-	99,103	-
1550	Investments accounted for using equity method	6(7)	3,392,910	10	3,863,741	11
1600	Property, plant and equipment	6(8) and 8	17,979,444	53	16,819,621	51
1755	Right-of-use assets	6(9)	687,068	2	-	-
1840	Deferred tax assets	6(28)	194,552	1	226,716	1
1920	Refundable deposits		21,145	-	22,006	-
1990	Other non-current assets		67,126	-	28,560	-
15XX	**Total non-current assets**		22,543,541	66	21,245,575	64
1XXX	**Total assets**		$ 34,305,887	100	$ 33,133,718	100

(Continued)

ChipMOS TECHNOLOGIES INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(Expressed in thousands of New Taiwan dollars)

	Liabilities and Equity	Notes	December 31, 2019 Amount	%	December 31, 2018 Amount	%
	Liabilities					
	Current liabilities					
2130	Current contract liabilities	6(21)	$ 1,231	-	$ 1,432	-
2170	Accounts payable	6(10)	819,548	2	637,271	2
2180	Accounts payable－related parties		-	-	347	-
2200	Other payables		2,977,036	9	3,195,217	10
2220	Other payables－related parties		-	-	218	-
2230	Current tax liabilities		269,672	1	496,704	1
2250	Current provisions	6(11)	1,998	-	29,352	-
2280	Current lease liabilities	6(32)	24,567	-	-	-
2310	Receipts in advance		988	-	1,013	-
2320	Long-term bank loans, current portion	6(13)(32) and 8	748,419	2	747,422	2
2355	Long-term lease obligations payable, current portion	6(14)	-	-	17,792	-
2365	Current refund liabilities	6(12)	26,000	-	32,627	-
2399	Other current liabilities		32,242	-	30,800	-
21XX	**Total current liabilities**		4,901,701	14	5,190,195	15
	Non-current liabilities					
2540	Long-term bank loans	6(13)(32) and 8	8,293,226	24	9,042,096	27
2570	Deferred tax liabilities	6(28)	305,635	1	308,759	1
2580	Non-current lease liabilities	6(32)	668,384	2	-	-
2640	Net defined benefit liability, non-current	6(15)	480,107	2	520,765	2
2645	Guarantee deposits	6(32)	1,095	-	1,092	-
2670	Other non-current liabilities		4,500	-	-	-
25XX	**Total non-current liabilities**		9,752,947	29	9,872,712	30
2XXX	**Total liabilities**		14,654,648	43	15,062,907	45
	Equity					
	Equity attributable to equity holders of the Company					
	Capital stock	6(17)				
3110	Capital stock－common stock		7,272,401	21	7,528,577	23
	Capital surplus	6(18)				
3200	Capital surplus		6,059,651	17	6,280,482	19
	Retained earnings	6(19)				
3310	Legal reserve		1,579,478	5	1,469,170	5
3350	Unappropriated retained earnings		4,759,511	14	3,635,372	11
	Other equity interest	6(20)				
3410	Financial statements translation differences of foreign operations		(89,682)	-	14,516	-
3420	Unrealized gain on valuation of financial assets at fair value through other comprehensive income		69,880	-	106,898	-
3490	Unearned employee awards		-	-	(1,701)	-
3500	**Treasury stock**	6(17)	-	-	(962,503)	(3)
31XX	**Equity attributable to equity holders of the Company**		19,651,239	57	18,070,811	55
3XXX	**Total equity**		19,651,239	57	18,070,811	55
	Significant contingent liabilities and unrecognized contract commitments	9				
	Significant events after the reporting period	11				
3X2X	**Total liabilities and equity**		$ 34,305,887	100	$ 33,133,718	100

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

ChipMOS TECHNOLOGIES INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Expressed in thousands of New Taiwan dollars, except earnings per share)

	Items	Notes	Years ended December 31, 2019 Amount	%	2018 Amount	%
4000	**Revenue**	6(21)	$ 20,337,881	100	$ 18,480,027	100
5000	**Cost of revenue**	6(4)(26)(27)	(16,411,742)	(81)	(15,050,032)	(81)
5900	**Gross profit**		3,926,139	19	3,429,995	19
	Operating expenses	6(26)(27)				
6100	Sales and marketing expenses		(56,076)	-	(53,451)	-
6200	General and administrative expenses		(498,241)	(3)	(485,068)	(3)
6300	Research and development expenses		(1,007,631)	(5)	(939,269)	(5)
6000	**Total operating expenses**		(1,561,948)	(8)	(1,477,788)	(8)
6500	**Other income (expenses), net**	6(22)	92,928	1	147,514	1
6900	**Operating profit**		2,457,119	12	2,099,721	12
	Non-operating income (expenses)					
7010	Other income	6(23)	75,127	1	58,361	-
7020	Other gains and losses	6(24)	833,261	4	114,709	1
7050	Finance costs	6(25)	(180,262)	(1)	(190,248)	(1)
7060	Share of loss of associates and joint ventures accounted for using equity method	6(7)	(154,926)	(1)	(300,101)	(2)
7000	**Total non-operating income (expenses)**		573,200	3	(317,279)	(2)
7900	**Profit before income tax**		3,030,319	15	1,782,442	10
7950	Income tax expense	6(28)	(446,158)	(2)	(679,367)	(4)
8200	**Profit for the year**		$ 2,584,161	13	$ 1,103,075	6
	Other comprehensive income (loss)					
8311	Profit (loss) on remeasurements of defined benefit plans	6(15)	$ 20,916	-	($ 59,961)	-
8316	Unrealized (loss) gain on valuation of equity instruments at fair value through other comprehensive income	6(6)	(52,549)	-	85,022	-
8320	Share of other comprehensive income (loss) of associates and joint ventures accounted for using equity method that will not be reclassified to profit or loss		5,732	-	(2,687)	-
8349	Income tax effect on components that will not be reclassified to profit or loss	6(28)	6,327	-	(4,126)	-
8310	**Components of other comprehensive (loss) income that will not be reclassified to profit or loss**		(19,574)	-	18,248	-
8361	Exchange differences on translation of foreign operations	6(20)	(104,198)	(1)	(51,077)	-
8360	**Components of other comprehensive loss that will be reclassified to profit or loss**		(104,198)	(1)	(51,077)	-
8300	**Other comprehensive loss, net of income tax**		($ 123,772)	(1)	($ 32,829)	-
8500	**Total comprehensive income for the year**		$ 2,460,389	12	$ 1,070,246	6
9750	**Earnings per share - basic**	6(29)	$ 3.55		$ 1.37	
9850	**Earnings per share - diluted**	6(29)	$ 3.51		$ 1.36	

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

ChipMOS TECHNOLOGIES INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(Expressed in thousands of New Taiwan dollars)

	Notes	Capital stock —common stock	Capital surplus	Retained earnings: Legal reserve	Retained earnings: Unappropriated retained earnings	Other equity interest: Financial statements translation differences of foreign operations	Other equity interest: Unrealized gain (loss) on valuation of financial assets at fair value through other comprehensive income	Other equity interest: Unrealized gain (loss) on valuation of available-for-sale financial assets	Unearned employee awards	Treasury stock	Total equity
Year 2018											
Balance at January 1, 2018		$ 8,862,971	$ 6,288,377	$ 1,166,517	$ 3,071,424	$ 65,593	$ -	$ 678	($ 54,570)	($ 1,007,654)	$ 18,393,336
Effects on initial application of IFRS 9 and IFRS 15		-	-	-	65,050	-	42,843	(678)	-	-	107,215
Adjusted balance at January 1, 2018		8,862,971	6,288,377	1,166,517	3,136,474	65,593	42,843	-	(54,570)	(1,007,654)	18,500,551
Profit for the year		-	-	-	1,103,075	-	-	-	-	-	1,103,075
Other comprehensive (loss) income	6(20)	-	-	-	(45,807)	(51,077)	64,055	-	-	-	(32,829)
Total comprehensive income (loss) for the year		-	-	-	1,057,268	(51,077)	64,055	-	-	-	1,070,246
Appropriation of prior year's earnings:	6(19)										
Legal reserve		-	-	302,653	(302,653)	-	-	-	-	-	-
Cash dividends		-	-	-	(256,806)	-	-	-	-	-	(256,806)
Restricted shares	6(16)	(4,948)	(7,967)	-	1,089	-	-	-	52,869	-	41,043
Capital reduction	6(17)	(1,329,446)	72	-	-	-	-	-	-	45,151	(1,284,223)
Balance at December 31, 2018		$ 7,528,577	$ 6,280,482	$ 1,469,170	$ 3,635,372	$ 14,516	$ 106,898	$ -	($ 1,701)	($ 962,503)	$ 18,070,811
Year 2019											
Balance at January 1, 2019		$ 7,528,577	$ 6,280,482	$ 1,469,170	$ 3,635,372	$ 14,516	$ 106,898	$ -	($ 1,701)	($ 962,503)	$ 18,070,811
Profit for the year		-	-	-	2,584,161	-	-	-	-	-	2,584,161
Other comprehensive income (loss)	6(20)	-	-	-	17,372	(104,198)	(36,946)	-	-	-	(123,772)
Total comprehensive income (loss) for the year		-	-	-	2,601,533	(104,198)	(36,946)	-	-	-	2,460,389
Appropriation of prior year's earnings:	6(19)										
Legal reserve		-	-	110,308	(110,308)	-	-	-	-	-	-
Cash dividends		-	-	-	(872,718)	-	-	-	-	-	(872,718)
Restricted shares	6(16)	(477)	(412)	-	10	-	-	-	1,701	-	822
Cancellation of treasury stock	6(17)	(255,699)	(212,354)	-	(494,450)	-	-	-	-	962,503	-
Disposal of investment accounted for using equity method	6(18)	-	(8,065)	-	72	-	(72)	-	-	-	(8,065)
Balance at December 31, 2019		$ 7,272,401	$ 6,059,651	$ 1,579,478	$ 4,759,511	($ 89,682)	$ 69,880	$ -	$ -	$ -	$ 19,651,239

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

ChipMOS TECHNOLOGIES INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Expressed in thousands of New Taiwan dollars)

	Notes	Years ended December 31, 2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES			
Profit before income tax		$ 3,030,319	$ 1,782,442
Adjustments to reconcile profit (loss)			
Depreciation expenses	6(8)(9)(26)	3,731,914	3,376,579
(Reversal of) expected credit losses		(806)	348
Interest expense	6(25)	171,075	152,416
Interest income	6(23)	(64,368)	(49,971)
Dividend income	6(23)	(585)	(571)
Share-based payments	6(16)(27)	822	41,043
Share of loss of associates and joint ventures accounted for using equity method	6(7)	154,926	300,101
Gain on valuation of financial assets at fair value through profit or loss	6(5)(24)	(1,317)	(1,485)
Gain on disposal of property, plant and equipment	6(22)	(20,271)	(14,274)
Impairment loss on property, plant and equipment	6(8)(22)	9,938	-
Gain on disposal of investment accounted for using equity method	6(7)(24)	(981,675)	-
Deferred income		(12,279)	(42,857)
Changes in operating assets and liabilities			
Changes in operating assets			
Financial assets at fair value through profit or loss		1,750	1,447
Current contract assets		(78,013)	(44,858)
Notes receivable		830	434
Accounts receivable		293,579	(734,129)
Accounts receivable－related parties		(905)	(129)
Other receivables		(8,082)	5,238
Other receivables－related parties		12,437	16,317
Inventories		11,193	(58,101)
Prepayments		(4,333)	46,781
Other non-current assets		6,914	6,914
Changes in operating liabilities			
Current contract liabilities		(201)	280
Accounts payable		182,277	(50,689)
Accounts payable－related parties		(347)	121
Other payables		331,207	(301,711)
Other payables－related parties		(218)	182
Current provisions		(27,354)	(27,803)
Current refund liabilities		(6,627)	(37,529)
Other current liabilities		1,442	(475)
Net defined benefit liability, non-current		(19,742)	(17,722)
Cash generated from operations		6,713,500	4,348,339
Interest received		67,105	48,590
Dividends received		20,585	6,184
Interest paid		(171,149)	(154,307)
Income tax paid		(637,169)	(119,473)
Net cash generated from operating activities		5,992,872	4,129,333

(Continued)

ChipMOS TECHNOLOGIES INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Expressed in thousands of New Taiwan dollars)

	Notes	Years ended December 31, 2019	2018
CASH FLOWS FROM INVESTING ACTIVITIES			
Decrease (increase) in financial assets at amortized cost		$ 30,851	($ 198,030)
Acquisition of investments accounted for using equity method	6(7) and 7	-	(794,694)
Proceeds from disposal of investment accounted for using equity method	6(7)	1,180,179	-
Acquisition of property, plant and equipment	6(31)	(5,440,621)	(4,154,198)
Proceeds from disposal of property, plant and equipment		21,434	18,160
Decrease (increase) in refundable deposits		861	(664)
Increase in other non-current assets		(45,480)	-
Increase in other non-current liabilities		4,500	-
Net cash used in investing activities		(4,248,276)	(5,129,426)
CASH FLOWS FROM FINANCING ACTIVITIES	6(32)		
Proceeds from short-term bank loans		834,955	1,053,202
Payments on short-term bank loans		(834,955)	(2,022,555)
Payments on lease liabilities		(48,161)	-
Proceeds from long-term bank loans		-	12,663,550
Payments on long-term bank loans		(756,450)	(12,553,300)
Increase (decrease) in guarantee deposits		3	(279)
Cash dividend paid	6(19)	(872,718)	(256,806)
Capital reduction		-	(1,284,223)
Net cash used in financing activities		(1,677,326)	(2,400,411)
Effect of foreign exchange rate changes		(5,708)	7,312
Net increase (decrease) in cash and cash equivalents		61,562	(3,393,192)
Cash and cash equivalents at beginning of year		4,642,522	8,035,714
Cash and cash equivalents at end of year		$ 4,704,084	$ 4,642,522

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

ChipMOS TECHNOLOGIES INC. AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2019 AND 2018
(Expressed in thousands of New Taiwan dollars, except as otherwise indicated)

1. HISTORY AND ORGANIZATION

ChipMOS TECHNOLOGIES INC. (the "Company") was incorporated on July 28, 1997. The Company and its subsidiaries (collectively referred herein as the "Group") are primarily engaged in the research, development, manufacturing and sale of high-integration and high-precision integrated circuits and related assembly and testing services. On April 11, 2014, the Company's shares were listed on the Taiwan Stock Exchange. On November 1, 2016, the Company's American Depositary Shares ("ADSs") were listed on the NASDAQ Global Select Market.

2. THE AUTHORIZATION OF THE CONSOLIDATED FINANCIAL STATEMENTS

The accompanying consolidated financial statements were authorized for issuance by the Board of Directors on March 10, 2020.

3. APPLICATION OF NEW AND AMENDED INTERNATIONAL FINANCIAL REPORTING STANDARDS AND INTERPRETATIONS

(1) Effect of the adoption of new or amended International Financial Reporting Standards ("IFRS") as endorsed by the Financial Supervisory Commission ("FSC")

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

New Standards, Interpretations and Amendments	Effective date issued by International Accounting Standards Board ("IASB")
Amendments to IFRS 9 "Prepayment Features with Negative Compensation"	January 1, 2019
IFRS 16 "Leases"	January 1, 2019
Amendments to International Accounting Standards ("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
International Financial Reporting Interpretations Committee ("IFRIC") 23 "Uncertainty Over Income Tax Treatments"	January 1, 2019
Annual Improvements to IFRSs 2015－2017 Cycle	January 1, 2019

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

IFRS 16 "Leases"

(a) IFRS 16 "Leases" ("IFRS 16"), supersedes IAS 17 "Leases" ("IAS 17") and the related interpretations issued by the Standing Interpretation Committee. The standard requires lessees to recognize 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.

(b) The Group has elected to apply IFRS 16 by not restating the comparative information (referred herein as the "modified retrospective approach") when applying IFRS, IAS, IFRIC interpretations, and SIC interpretations effective in 2019 as endorsed by FSC ("IFRSs"). Accordingly, the Group increased right-of-use assets and lease liabilities by $898,387 and $884,275, respectively, and decreased leased assets and lease obligations payable by $31,904 and $17,792, respectively.

(c) The Group has adopted the following practical expedients permitted by the standard at the date of initial application of IFRS 16:

i. Reassessment as to whether a contract is, or contains, a lease is not required, instead, the application of IFRS 16 depends on whether or not the contracts were previously identified as leases applying IAS 17 and IFRIC 4 "Determining whether an Arrangement contains a Lease".

ii. The use of a single discount rate to a portfolio of leases with reasonably similar characteristics.

iii. The accounting for operating leases whose period will end before December 31, 2019 as short-term leases and accordingly, rent expense of $28,126 was recognized for the year ended 2019.

(d) The Group calculated the present value of lease liabilities by using the incremental borrowing interest rate, ranging from 1.7895% to 3.9474%.

(e) The reconciliation between operating lease commitments for the remaining lease payments under IAS 17 and lease liabilities recognized as of January 1, 2019, measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate is as follows:

Operating lease commitments disclosed by applying IAS 17 as of December 31, 2018	$ 320,214
Add: Lease payable recognized under finance lease by applying IAS 17 as of December 31, 2018	17,792
Less: Short-term leases	(28,121)
Add: Adjustments as a result of a different treatment of extension and termination options	874,298
Total lease contracts amount recognized as lease liabilities by applying IFRS 16 on January 1, 2019	$ 1,184,183
Incremental borrowing interest rate at the date of initial application	1.7895%~3.9474%
Lease liabilities recognized as of January 1, 2019 by applying IFRS 16	$ 884,275

(2) Effect of new, revised or amended IFRSs endorsed by the FSC that has not been adopted

A. New standards, interpretations and amendments endorsed by the FSC effective from 2020 are as follows:

New Standards, Interpretations and Amendments	Effective date issued by IASB
Amendments to IAS 1 and IAS 8 "Disclosure Initiative－Definition of Material"	January 1, 2020
Amendments to IFRS 3 "Definition of a Business"	January 1, 2020
Amendments to IFRS 9, IAS 39 and IFRS 7, "Interest Rate Benchmark Reform"	January 1, 2020

B. Based on the Group's assessment, the above standards and interpretations have no significant impact on the Group's financial position and financial performance.

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

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

New Standards, Interpretations and Amendments	Effective date issued by IASB
Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets between an Investor and its Associate or Joint Venture"	To be determined by IASB
IFRS 17 "Insurance Contracts"	January 1, 2021
Amendments to IAS 1, "Classification of Liabilities as Current or Non-current"	January 1, 2022

B. Based on the Group's assessment, the above standards and interpretations have no significant impact on the Group's financial position and financial performance.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The significant accounting policies applied in the preparation of these accompanying consolidated financial statements are set out below. These policies have been consistently applied during the reported periods, unless otherwise stated.

(1) Statement of compliance

The consolidated financial statements of the Group have been prepared in accordance with "Regulations Governing the Preparation of Financial Reports by Securities Issuers" and 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 at fair value through profit or loss (including derivative instruments).

(b) Financial assets at fair value through other comprehensive income.

(c) Defined benefit liabilities were recognized based on the net amount of pension fund assets less the present value of benefit obligation.

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

(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 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) Transactions, balances and unrealized 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 a deficit balance in the non-controlling interests.

(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 recognized 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 recognized in profit or loss. All amounts previously recognized 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 recognized 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:

			Percentage of Ownership (%)	
Name of investor	Name of investee	Main business	December 31, 2019	December 31, 2018
The Company	ChipMOS U.S.A., Inc. ("ChipMOS USA")	Research, development, and marketing of semiconductors, circuits, electronic related products	100	100
The Company	ChipMOS TECHNOLOGIES (BVI) LTD. ("ChipMOS BVI")	Holding company	100	100

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

D. Adjustments for subsidiaries with different balance sheet dates: Not applicable.

E. No significant restrictions on the ability of subsidiaries to transfer funds to parent company.

F. Subsidiaries that have non-controlling interests that are material to the Group: 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 (NTD), which is the Company's functional currency and the Group's presentation currency.

A. Foreign currency transactions and balances

(a) Foreign currency transactions are translated into the functional currency using the exchange rates on the trade date or measurement date. Therefore, foreign exchange differences resulting from the settlement of such transactions are recognized 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 are recognized in profit or loss on the balance sheet date.

(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 exchange differences are recognized 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 exchange differences are recognized 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 initial dates of the transactions.

(d) All foreign exchange differences are presented in the statement of comprehensive income under "Other gains and losses" by the nature of transactions.

B. Translation of foreign operations

The operating results and financial position of all the group entities, associates that have different functional currency and presentation currency are translated into the presentation currency as follows:

(a) Assets and liabilities for each balance sheet are translated at the exchange rates prevailing at the balance sheet date;

(b) Income and expenses for each statement of comprehensive income are translated at average exchange rates of that period; and

(c) All exchange differences are recognized in other comprehensive income.

(5) Classification of current and non-current assets and liabilities

A. Assets that meet one of the following criteria are classified as current assets:

(a) Assets arising from operating activities that are expected to be realized, 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 realized within 12 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 pay off liabilities more than 12 months after the balance sheet date.

All assets that do not meet the above criteria are classified as non-current assets.

B. Liabilities that meet one of the following criteria are classified as 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 12 months from the balance sheet date;

(d) Liabilities for which the repayment date cannot be unconditionally extended to more than 12 months after the balance sheet date. Liabilities bearing terms that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

All liabilities that do not meet the above criteria are classified as non-current liabilities.

(6) Cash equivalents

Cash equivalents refer to short-term, highly liquid investments that are readily convertible to known amounts of cash and are subject to an insignificant risk of changes in value (including time deposits with less than 3 months contract period). Time deposits that meet the above definition 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

A. Financial assets at fair value through profit or loss are financial assets that are not measured at amortized cost or fair value through other comprehensive income.

B. On a regular way purchase or sale basis, financial assets at fair value through profit or loss are recognized and derecognized using settlement date accounting.

C. At initial recognition, the Group measures the financial assets at fair value and recognizes the transaction costs in profit or loss. The Group subsequently measures the financial assets at fair value, and recognizes the gain or loss in profit or loss.

D. The Group recognizes the dividend income when the right to receive such payment is confirmed, inflow of the future economic benefits associated with the dividend is probable to the Group and the amount of the dividend can be measured reliably.

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

A. Financial assets at fair value through other comprehensive income comprise equity instruments which are not held for trading, and for which the Group has made an irrevocable election at initial recognition to recognize changes in fair value in other comprehensive income.

B. On a regular way purchase or sale basis, financial assets at fair value through other comprehensive income are recognized and derecognized using settlement 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 instruments that were recognized 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 recognized as income when the right to receive such payment is confirmed, inflow of the future economic benefits associated with the dividend is probable to the Group and the amount of the dividend can be measured reliably.

(9) Financial assets at amortized cost

A. Financial assets at amortized 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 financial assets' contractual cash flows represent solely payments of principal and interest.

B. The Group's bank 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 and notes receivable

A. Accounts and notes 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 financial assets at amortized cost, at each reporting date, the Group recognizes 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 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 or contract assets that do not contain a significant financing component, the Group recognizes the impairment provision for lifetime expected credit losses.

(12) Derecognition of financial assets

The Group derecognizes a financial asset when the contractual rights to receive the cash flows from the financial asset have expired.

(13) Inventories

Inventories are initially recorded at cost. Cost is determined on a weighted-average cost basis. At the end of reporting period, the differences were allocated to inventories and cost of revenue based on an appropriate rate. Allocation of fixed production overheads is based on the normal operating capacity of the production facilities. Costs associated with underutilized capacity are expensed in the period that the cost occurs.

Inventories are valued at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. The item by item approach is used in raw materials. The amount of any write-down of inventories to net realizable value and all losses of inventories are recognized as an expense in the period the write-down or loss occurs.

(14) Investments accounted for using equity method – associates

A. Associates are all entities over which the Group has significant influence but not control. In general, it is presumed that the investor has significant influence, if an investor holds, directly or indirectly 20 percent or more of the voting power of the investee. Investments in associates are accounted for using the equity method and are initially recognized at cost.

B. The Group's share of its associates' post-acquisition profits or losses is recognized in profit or loss, and its share of post-acquisition movements in other comprehensive income is recognized in other comprehensive income. When the Group's share of losses in an associate equals or exceeds its interests in the associate, including any other unsecured receivables, the Group does not recognize 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 that are not recognized in profit or loss or other comprehensive income of the associate and such changes not affecting the Group's ownership percentage of the associate, the Group recognizes the Group's share of change in equity of the associate in "Capital surplus" in proportion to its ownership.

D. Unrealized gains on transactions between the Group and its associates are eliminated to the extent of the Group's interests in the associates. Unrealized 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 where an associate issues new shares and the Group does not subscribe or proportionately acquire the new shares, which results in a change in the Group's ownership percentage of the associate while maintaining significant influence on the associate, then "Capital surplus" and "Investments accounted for using equity method" shall be adjusted for the increase or decrease of its share of equity interests. 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 recognized 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. When the Group disposes of its investment in an associate, if it loses significant influence on this associate, the amounts previously recognized 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 still retains significant influence on this associate, then the amounts previously recognized in other comprehensive income in relation to the associate are reclassified to profit or loss proportionately in accordance with the aforementioned approach.

(15) Property, plant and equipment

A. Property, plant and equipment are initially recorded at cost. Borrowing costs incurred during the construction period are capitalized.

B. Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. All other repairs and maintenance are charged to profit or loss during the financial period in which they are incurred.

C. Land is not depreciated. 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.

D. 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, Change in Accounting Estimates and Errors", from the date of the change. The estimated useful lives of property, plant and equipment are as follows:

Buildings	5 to 51 years
Machinery and equipment	2 to 8 years
Tools	2 to 4 years
Others	2 to 6 years

(16) <u>Leasing arrangements (lessee)－right-of-use assets / lease liabilities</u>

<u>Effective from 2019</u>

A. Leases are recognized as a right-of-use asset and a corresponding lease liability at the date at which the leased asset is available for use by the Group. For short-term leases or leases of low value assets, lease payments are recognized as an expense on a straight-line basis over the lease term.

B. Lease liabilities include the net present value of the remaining lease payments at the commencement date, discounted using the incremental borrowing interest rate.

Lease payments are comprised of the following:

(a) Fixed payments, less any lease incentives receivable;

(b) The exercise price of a purchase option, if the lessee is reasonably certain to exercise that option.

The Group subsequently measures the lease liability at amortized cost using the interest method and recognizes interest expense over the lease term. The lease liability is remeasured and the amount of remeasurement is recognized as an adjustment to the right-of-use asset when there are changes in the lease term or lease payments and such changes do not arise from contract modifications.

C. At the commencement date, the right-of-use asset is stated at the amount of the initial measurement of lease liability. The right-of-use asset is measured subsequently using the cost model and is depreciated from the commencement date to the earlier of the end of the asset's useful life or the end of the lease term. When the lease liability is remeasured, the amount of remeasurement is recognized as an adjustment to the right-of-use asset.

(17) Leased assets / operating leases (lessee)

Prior to 2019

A. Based on the terms of a lease contract, a lease is classified as a finance lease if the Group assumes substantially all the risks and rewards incidental to ownership of the leased asset.

(a) A finance lease is recognized as an asset and a liability at the lease's commencement at the lower of the fair value of the leased asset or the present value of the minimum lease payments.

(b) The minimum lease payments are apportioned between the finance charges and the reduction of the outstanding liability. The finance charges are allocated to each period over the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

(c) Property, plant and equipment held under finance leases are depreciated over their estimated useful lives. If there is no reasonable certainty that the Group will obtain ownership at the end of the lease, the asset shall be depreciated over the shorter of the lease term and its useful life.

B. Payments made under an operating lease (net of any incentives received from the lessor) are recognized in profit or loss on a straight-line basis over the lease term.

(18) Impairment of non-financial assets

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 recognized 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 amortized historical cost would have been if the impairment had not been recognized.

(19) Loans

Loans comprise long-term and short-term bank loans. Loans are recognized initially at fair value, net of transaction costs incurred. Loans are subsequently stated at amortized cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognized as interest expense in profit or loss over the period of the loans using the effective interest method.

(20) Accounts payable

Accounts payable are liabilities for purchases of raw materials, goods or services. The short-term accounts payable without bearing interest are subsequently measured at initial invoice amount as the effect of discounting is immaterial.

(21) Provisions for deficiency compensation

Provisions are recognized 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. When discounting is used, the increase in the provision arising from the passage of time is recognized as interest expense. Provisions are not recognized for future operating losses.

(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 and should be recognized as expenses when the employees render service.

B. Pensions

(a) Defined contribution plans

For defined contribution plans, the contributions are recognized as pension expenses when they are due on an accrual basis. Prepaid contributions are recognized as an asset to the extent of a cash refund or a reduction in 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 Group in the current period or prior periods. The liability recognized 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 discount rate is determined by using the interest rates of government 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.

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

iii. Past service costs are recognized immediately in profit or loss.

C. Termination benefits

Termination benefits are employee benefits provided in exchange for the termination of employment as a result from either the Group's decision to terminate an employee's employment before the normal retirement date, or an employee's decision to accept an offer of redundancy benefits in exchange for the termination of employment. The Group recognizes an expense as it can no longer withdraw an offer of termination benefits, or it recognizes related restructuring costs, whichever is earlier. Benefits that are expected to be due more than 12 months after balance sheet date shall be discounted to their present value.

D. Employees' compensation and directors' remuneration

Employees' compensation and directors' remuneration are recognized as expenses and liabilities, provided that such recognition is required under legal obligation 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.

(23) Employee share-based payments

Restricted shares

A. Restricted shares issued to employees are measured at the fair value of the equity instruments granted at the grant date, and are recognized as compensation cost over the vesting period.

B. For restricted shares where those shares do not restrict distribution of dividends to employees and employees are not required to return the dividends received if they resign during the vesting period, the Group recognizes the fair value of the dividends received by employees who are expected to resign during the vesting period as a compensation cost at the date the dividends were declared.

C. For restricted shares where employees do not need to pay to acquire those shares, if an employee resigns during the vesting period, the Group will recover and retire those shares at no cost.

(24) Income tax

A. The income tax expense for the period comprises current and deferred tax. Income tax is recognized in profit or loss, except to the extent that it relates to items recognized in other comprehensive income or items recognized directly in equity, in which cases the income tax is recognized 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 Group 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 income 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 recognized, 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 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 or 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 at the balance sheet date and are expected to apply when the related deferred tax asset is realized or the deferred tax liability is settled.

D. Deferred tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilized. At each balance sheet date, unrecognized and recognized deferred tax assets are reassessed.

E. A deferred tax asset shall be recognized for the carryforward of unused tax credits resulting from equity investments to the extent that it is possible that future taxable profit will be available against which the unused tax credits can be utilized.

F. If a change in tax rate is enacted or substantively enacted, the Group recognizes the effect of the change immediately in the period in which the change occurs. The effect of the change on items recognized outside profit or loss is recognized in other comprehensive income or equity while the effect of the change on items recognized in profit or loss is recognized in profit or loss.

(25) Capital stock

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

B. Where the Company repurchases the Company's shares that have been issued, the consideration paid, including any directly attributable incremental costs (net of income taxes) is deducted from equity attributable to the Company's equity holders. Where such shares are subsequently reissued, the difference between their book value and any consideration received, net of any directly attributable incremental transaction costs and the related income tax effects, is included in equity attributable to the Company's equity holders.

(26) 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.

(27) Revenue recognition

A. The Group is primarily engaged in the customized assembly and testing services of high-integration and high-precision integrated circuits based on customer's specification demand to create or enhance the product. When providing assembly and testing services, the Group considers:

(a) Customer controls the provided raw materials and the Group receives the instruction from the customer on providing assembly and testing services and subsequent treatments.

(b) The Group provides assembly and testing services to create or enhance an asset which is solely provided and controlled by the customer. The Group has no right to transfer the asset for another use.

As the asset ownership belongs to the customer, who bears the significant risk and rewards and rights on the use of the asset, the Group recognizes assembly and testing service revenue based on the progress towards completion of performance obligation during the service period.

B. The progress towards completion on assembly services, services for Liquid Crystal Display and other Flat-Panel Display Driver Semiconductors ("LCDD") and Bumping are measured by the actual input costs relative to estimate total expected input costs. The progress towards completion on testing services is measured by the actual incurred testing volume. The Group believes that aforementioned methods are the most appropriate manner to measure the satisfaction of performance obligation to customers because the input costs incurred to assembly and testing volume completed in testing services are based on customer's specification and not linear over the duration of these services. Customer payment on assembly and testing services is based on predetermined payment schedule. A contract asset is recognized when the Group provides services in excess of customer's payment.

(28) 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, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Chairman of the Board of Directors that makes strategic decisions.

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

The preparation of the accompanying consolidated financial statements requires management to make critical judgments 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 judgments in applying the Group's accounting policies

Provisions for deficiency compensation

The Group is primarily engaged in the research, development, manufacturing, sale, and assembly and testing of high-integration and high-precision integrated circuits. In any cases where deficiencies in the assembly and testing services arise, the Group has to clarify the reason for deficiencies and attribute of responsibilities. The Group follows the guidance of IAS 37 "Provisions, Contingent Liabilities and Contingent Assets" to determine warranty provisions. Since the timing and amount of these warranties are based on assumptions and estimates it requires management to make critical judgments.

(2) Critical accounting estimates and assumptions

Revenue recognition

A. The Group recognizes revenue from services for assembly, LCDD and Bumping based on the progress towards completion of performance obligation during the service period. The Group estimates total expected input costs based on historical experience and measures the progress towards completion by the actual input costs relative to the total expected input costs.

B. The Group estimates sales refund liabilities for sales allowance based on historical results and other known factors. Provisions for such liabilities are recorded as a deduction to revenues when the sales are recognized. The Group reassesses the reasonableness of estimates of discounts and returns periodically.

6. DETAILS OF SIGNIFICANT ACCOUNTS

(1) Cash and cash equivalents

	December 31, 2019	December 31, 2018
Cash on hand and petty cash	$ 470	$ 470
Checking accounts and demand deposits	915,134	1,396,302
Time deposits	3,788,480	3,245,750
	$ 4,704,084	$ 4,642,522

A. 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.

B. No cash and cash equivalents of the Group were pledged to others.

(2) Financial assets at amortized cost

	December 31, 2019	December 31,2018
Current:		
Time deposits	$ 168,970	$ 169,168
Non-current:		
Time deposits	$ -	$ 30,715
Restricted bank deposits	68,450	68,388
	$ 68,450	$ 99,103

A. Amounts recognized in profit or loss in relation to financial assets at amortized cost are listed below:

	2019	2018
Interest income	$ 4,467	$ 920

B. Without taking into account any collateral held or other credit enhancements, the maximum exposure to credit risk in respect of the amount that best represents the financial assets at amortized cost held by the Group is the carrying amount at the end of each reporting period.

C. Information about the financial assets at amortized cost that were pledged to others as collateral is provided in Note 8.

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

(3) Accounts receivable

	December 31, 2019	December 31, 2018
Accounts receivable	$ 4,454,255	$ 4,747,834
Less: Loss allowance	(1,351)	(2,141)
	$ 4,452,904	$ 4,745,693

A. The Group's credit term granted to customers is 30~90 days. Receivables do not bear interest. The loss allowance is determined based on the credit quality of customers. Information relating to credit risk is provided in Note 12(2).

B. The aging analysis of accounts receivable based on past due date is as follows:

	December 31, 2019	December 31, 2018
Current	$ 4,440,081	$ 4,595,300
Within 1 month	13,733	18,807
1-2 months	441	131,787
2-3 months	-	1,436
3-4 months	-	180
Over 4 months	-	324
	$ 4,454,255	$ 4,747,834

C. As of December 31, 2019 and 2018, accounts receivable were all from contracts with customers. And as of January 1, 2018, the balance of accounts receivable from contracts with customers was $4,013,705.

D. Without taking into account of any collateral held or other credit enhancements, the amount that best reflects the Group' maximum exposure to credit risk in respect of the accounts receivable is the carrying amount at the end of each reporting period.

E. No accounts receivable of the Group were pledged to others.

(4) Inventories

	December 31, 2019		
	Cost	Allowance for impairment losses	Carrying amount
Raw materials	$ 1,831,140	($ 63,498)	$ 1,767,642

	December 31, 2018		
	Cost	Allowance for impairment losses	Carrying amount
Raw materials	$ 1,814,992	($ 36,157)	$ 1,778,835

The cost of inventories recognized as an expense for the year:

	2019	2018
Cost of revenue	$ 16,372,032	$ 15,057,605
Loss on abandonment	12,369	5,497
Allowance for (reversal of) inventory valuation and obsolescence loss	27,341	(13,070)
	$ 16,411,742	$ 15,050,032

A. Reversal of allowance for inventory valuation and obsolescence loss was recognized due to the change in net realizable market value.

B. No inventories of the Group were pledged to others.

(5) Non-current financial assets at fair value through profit or loss

	December 31, 2019	December 31, 2018
Financial assets mandatorily measured at fair value through profit or loss		
Foreign partnership interests	$ 10,940	$ 10,940
Valuation adjustment	98	531
	$ 11,038	$ 11,471

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

	2019	2018
Financial assets mandatorily measured at fair value through profit or loss		
Foreign partnership interests	($ 433)	$ 38
Beneficiary certificates	1,750	1,396
Derivative instruments	-	51
	$ 1,317	$ 1,485

B. No financial assets at fair value through profit or loss were pledged to others.

(6) Non-current financial assets at fair value through other comprehensive income

	December 31, 2019	December 31, 2018
Designation of equity instruments		
Foreign unlisted stocks	$ 38,534	$ 38,534
Valuation adjustment	83,274	135,823
	$ 121,808	$ 174,357

A. Based on the Group's business model, the foreign unlisted stocks held for strategic investments were elected to classify as "Financial assets at fair value through other comprehensive income". As of December 31, 2019 and 2018, the fair value of aforementioned investments is the carrying amount at the end of each reporting period.

B. Amounts recognized in other comprehensive income in relation to the financial assets at fair value through other comprehensive income are listed below:

	2019	2018
Financial assets at fair value through other comprehensive income		
Foreign unlisted stocks	($ 52,549)	$ 85,022

C. No financial assets at fair value through other comprehensive income were pledged to others.

(7) Investments accounted for using equity method

Associates	December 31, 2019	December 31, 2018
JMC ELECTRONICS CO., LTD. ("JMC")	$ 249,793	$ 406,792
Unimos Microelectronics (Shanghai) Co., Ltd. ("Unimos Shanghai")	3,143,117	3,456,949
	$ 3,392,910	$ 3,863,741

A. In January 2018, ChipMOS BVI participated in Unimos Shanghai's increase of paid-in capital based on its shareholding amounted to $794,694.

B. JMC has quoted market prices. As of December 31, 2019 and 2018, the fair value was $807,000 and $2,081,900, respectively.

C. The Company's investments accounted for using equity method are based on the audited financial statements of investees for the reporting period. For the years ended December 31, 2019 and 2018, the Company recognized its share of profit (loss) of investments accounted for using equity method amounted to ($154,926) and ($300,101), respectively.

D. To further strengthen financial structure, increase balance of working capital and reduce debt ratio, the Company's Board of Directors adopted a resolution on April 2, 2019 to dispose of 9,100,000 common shares of JMC, which reduced the shareholding of equity investment in JMC to 10%. The disposal of shares was completed on April 8, 2019 for cash consideration of $1,180,179, and the Company recognized gain on disposal of investment in associates amounted to $981,675. JMC is still recognized as investment accounted for using equity method given that the Company retains significant influence by holding two seats in JMC's Board of Directors.

E. The basic information and summarized financial information of the associates of the Group are as follows:

(a) Basic information

Company name	Principal place of business	Shareholding ratio December 31, 2019	Shareholding ratio December 31, 2018	Nature of relationship	Method of measurement
JMC	Kaohsiung, Taiwan	10.00%	19.10%	Strategic Investee	Equity method
Unimos Shanghai	Shanghai, People's Republic of China ("P.R.C.")	45.02%	45.02%	Strategic Investee	Equity method

(b) Summarized financial information

Balance sheets

	JMC December 31, 2019	JMC December 31, 2018
Current assets	$ 1,347,546	$ 1,106,789
Non-current assets	2,457,975	1,699,498
Current liabilities	(888,184)	(817,697)
Non-current liabilities	(660,111)	(103,922)
Total net assets	$ 2,257,226	$ 1,884,668
Share in associate's net assets	$ 225,723	$ 359,972
Goodwill	24,070	46,820
Carrying amount of the associate	$ 249,793	$ 406,792

Balance sheets

	Unimos Shanghai	
	December 31, 2019	December 31, 2018
Current assets	$ 3,042,377	$ 3,946,082
Non-current assets	3,499,819	3,254,687
Current liabilities	(459,502)	(554,160)
Non-current liabilities	(448,929)	(442,306)
Total net assets	$ 5,633,765	$ 6,204,303
Share in associate's net assets	$ 2,536,558	$ 2,793,438
Depreciable assets	584,441	644,718
Goodwill	22,118	22,118
Inter-company transactions and amortization	-	(3,325)
Carrying amount of the associate	$ 3,143,117	$ 3,456,949

Statements of comprehensive income

	JMC	
	2019	2018
Revenue	$ 3,017,155	$ 1,931,008
Profit for the year from continuing operations	$ 524,347	$ 219,544
Other comprehensive income (loss), net of income tax	48,211	(14,074)
Total comprehensive income	$ 572,558	$ 205,470
Dividends received from the associate	$ 20,000	$ 5,730

Statements of comprehensive income

	Unimos Shanghai	
	2019	2018
Revenue	$ 1,584,648	$ 1,334,196
Loss for the year from continuing operations	($ 352,008)	($ 629,303)
Other comprehensive income (loss), net of income tax	-	-
Total comprehensive loss	($ 352,008)	($ 629,303)
Dividends received from the associate	$ -	$ -

(8) Property, plant and equipment

	2019						
	Land	Buildings	Machinery and equipment	Tools	Others	Construction in progress and equipment to be inspected	Total
January 1							
Cost	$ 452,738	$ 10,254,531	$ 48,274,171	$ 4,402,711	$ 2,610,893	$ 1,069,892	$ 67,064,936
Accumulated depreciation and impairment	-	(6,345,800)	(38,042,078)	(3,660,532)	(2,196,905)	-	(50,245,315)
	$ 452,738	$ 3,908,731	$ 10,232,093	$ 742,179	$ 413,988	$ 1,069,892	$ 16,819,621
January 1	$ 452,738	$ 3,908,731	$ 10,232,093	$ 742,179	$ 413,988	$ 1,069,892	$ 16,819,621
Effects on initial application of IFRS 16	-	-	-	-	(31,904)	-	(31,904)
Adjusted balance at January 1	452,738	3,908,731	10,232,093	742,179	382,084	1,069,892	16,787,717
Additions	-	116,238	2,334,358	781,465	224,287	1,440,308	4,896,656
Disposals	-	-	(16,033)	(9,336)	(416)	-	(25,785)
Reclassifications	-	455,792	1,111,715	7,880	25,042	(1,573,811)	26,618
Depreciation expenses	-	(384,832)	(2,489,070)	(625,712)	(196,201)	-	(3,695,815)
Impairment losses	-	-	(9,938)	-	-	-	(9,938)
Exchange adjustment	-	-	(4)	-	(5)	-	(9)
December 31	$ 452,738	$ 4,095,929	$ 11,163,121	$ 896,476	$ 434,791	$ 936,389	$ 17,979,444
December 31							
Cost	$ 452,738	$ 10,821,972	$ 51,244,512	$ 5,008,321	$ 1,937,755	$ 936,389	$ 70,401,687
Accumulated depreciation and impairment	-	(6,726,043)	(40,081,391)	(4,111,845)	(1,502,964)	-	(52,422,243)
	$ 452,738	$ 4,095,929	$ 11,163,121	$ 896,476	$ 434,791	$ 936,389	$ 17,979,444

	2018						
	Land	Buildings	Machinery and equipment	Tools	Others	Construction in progress and equipment to be inspected	Total
January 1							
Cost	$ 452,738	$ 9,809,970	$45,778,207	$4,004,703	$ 2,624,083	$ 968,719	$ 63,638,420
Accumulated depreciation and impairment	-	(5,890,884)	(36,964,480)	(3,314,234)	(2,203,511)	-	(48,373,109)
	$ 452,738	$ 3,919,086	$ 8,813,727	$ 690,469	$ 420,572	$ 968,719	$ 15,265,311
January 1	$ 452,738	$ 3,919,086	$ 8,813,727	$ 690,469	$ 420,572	$ 968,719	$ 15,265,311
Additions	-	247,186	2,445,313	591,229	172,652	1,489,190	4,945,570
Disposals	-	-	(904)	(11,745)	(2,067)	-	(14,716)
Reclassifications	-	199,724	1,154,663	7,604	26,026	(1,388,017)	-
Depreciation expenses	-	(457,265)	(2,180,718)	(535,378)	(203,218)	-	(3,376,579)
Exchange adjustment	-	-	12	-	23	-	35
December 31	$ 452,738	$ 3,908,731	$10,232,093	$ 742,179	$ 413,988	$ 1,069,892	$ 16,819,621
December 31							
Cost	$ 452,738	$ 10,254,531	$48,274,171	$4,402,711	$ 2,610,893	$ 1,069,892	$ 67,064,936
Accumulated depreciation and impairment	-	(6,345,800)	(38,042,078)	(3,660,532)	(2,196,905)	-	(50,245,315)
	$ 452,738	$ 3,908,731	$10,232,093	$ 742,179	$ 413,988	$ 1,069,892	$ 16,819,621

A. Amount of borrowing costs capitalized as part of property, plant and equipment and the range of the interest rates for such capitalization are as follows:

	2019	2018
Amount of interest capitalized	$ 15,114	$ 18,542
Range of the interest rates for capitalization	1.7822%	1.7582%

B. Information about the property, plant and equipment that were pledged to others as collaterals is provided in Note 8.

(9) Leasing arrangements－lessee

Effective from 2019

A. The Group leases various assets, including land, buildings, machinery and equipment, and others. Lease agreements are typically made for periods of 2 to 30 years. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose covenants, but leased assets may not be used as security for borrowing purposes.

B. The carrying amount of right-of-use assets and the depreciation expenses are as follows:

	December 31, 2019 Carrying amount	2019 Depreciation expenses
Land	$ 669,967	($ 22,657)
Buildings	15,043	(7,113)
Machinery and equipment	-	(4,520)
Others	2,058	(1,809)
	$ 687,068	($ 36,099)

C. For the year ended December 31, 2019, additions to right-of-use assets was $11,183.

D. The information on profit and loss accounts relating to lease contracts is as follows:

	2019
Items affecting profit or loss	
Interest expense on lease liabilities	$ 14,349
Expense on short-term lease contracts	230,589

E. For the year ended December 31, 2019, the Group's total cash outflow for leases was $273,709.

(10) Accounts payable

	December 31, 2019	December 31, 2018
Accounts payable	$ 419,520	$ 267,368
Estimated accounts payable	400,028	369,903
	$ 819,548	$ 637,271

(11) Current provisions

A. Movements in provisions are as follows:

	Provisions for deficiency compensation 2019
January 1	$ 29,352
Provision	5,204
Reversal	(1,967)
Payment	(30,591)
December 31	$ 1,998

B. The detailed explanation of provisions for deficiency compensation is provided in Note 5(1).

(12) Current refund liabilities

A. Movements in refund liabilities are as follows:

	Provisions for sales allowance	
	2019	2018
January 1	$ 32,627	$ 70,156
Provision	63,863	44,950
Reversal	-	(7,413)
Payment	(70,490)	(75,066)
December 31	$ 26,000	$ 32,627

B. The detailed explanation of provisions for sales allowance is provided in Note 5(2).

(13) Long-term bank loans

Type of loans	Period and payment term	December 31, 2019	December 31, 2018
Syndicated bank loan	Borrowing period is from May 30, 2018 to May 30, 2023; interest is repayable monthly; principal is repayable semi-annually from November 30, 2018	$ 9,066,000	$ 9,822,000
Less: Fee on syndicated bank loan		(24,355)	(32,482)
Less: Current portion (fee included)		(748,419)	(747,422)
		$ 8,293,226	$ 9,042,096
Interest rate range		1.7895%	1.7895%
Unused credit lines of long-term bank loans			
NT$		$ 1,800,000	$ 1,800,000

A. On May 15, 2018, the Company entered into a syndicated loan with eleven banks in Taiwan, including Taiwan Cooperative Bank, in the amount of NT$12 billion with a term of five years. Funding from this syndicated loan was used to repay the existing debt of financial institutions and broaden the Company's working capital. Pursuant to the syndicated loan agreement, the Group is required to maintain certain financial ratios including current ratio, interest protection multiples and debt to equity ratio during the loan periods.

B. On May 16, 2016, the Company entered into a syndicated loan with ten banks in Taiwan, including Land Bank of Taiwan, in the amount of NT$13.2 billion with a term of five years. Funding from this syndicated loan was used to repay the prior syndicated loan in 2014 and broaden the Company's working capital. Pursuant to the syndicated loan agreement, the Group is required to maintain certain financial ratios including current ratio, interest protection multiples and debt to equity ratio during the loan periods. The syndicated loan was fully repaid in May 2018.

C. Information about the items related to the long-term bank loans that are pledged to others as collaterals is provided in Note 8.

(14) Lease obligations payable

Prior to 2019

The Company leases equipment under finance lease and based on the terms of the lease contracts, the Company has the option to purchase the equipment at a price which is expected to be sufficiently lower than fair value at the date the option becomes exercisable when the leases expire.

Future minimum lease payables and their present values as of December 31, 2018 are as follows:

	December 31, 2018		
	Total finance lease liabilities	Future finance charges	Present value of finance lease liabilities
Current	$ 18,000	($ 208)	$ 17,792

(15) Pensions

A. Defined Benefit Plans

The Company has a defined benefit pension plan in accordance with the Labor Standards Act, 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 Labor Standards Act. 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 pension fund deposited with the Bank of Taiwan, the trustee, under the name of the independent pension fund committee. Also, the Company would assess the balance in the aforementioned labor pension reserve account by the end of every year. If the account balance is insufficient to pay the pension calculated by the aforementioned method, to the employees expected to be qualified for retirement next year, the Company will make contributions to cover the deficit by March of following year.

(a) The amounts recognized in the balance sheets are as follows:

	December 31, 2019	December 31, 2018
Present value of defined benefit obligations	($ 901,159)	($ 910,081)
Fair value of plan assets	421,052	389,316
Net defined benefit liability	($ 480,107)	($ 520,765)

(b) Movements in net defined benefit liability are as follows:

	2019		
	Present value of defined benefit obligations	Fair value of plan assets	Net defined benefit liability
January 1	($ 910,081)	$ 389,316	($ 520,765)
Current services cost	(332)	-	(332)
Interest (expense) income	(11,170)	4,831	(6,339)
	(921,583)	394,147	(527,436)
Remeasurements:			
Return on plan assets (excluding amounts included in interest income or expense)	-	12,601	12,601
Financial assumption movement effect	(27,993)	-	(27,993)
Experience adjustments	36,308	-	36,308
	8,315	12,601	20,916
Pension fund contribution	-	26,413	26,413
Paid pension	12,109	(12,109)	-
December 31	($ 901,159)	$ 421,052	($ 480,107)

	2018		
	Present value of defined benefit obligations	Fair value of plan assets	Net defined benefit liability
January 1	($ 838,543)	$ 360,017	($ 478,526)
Current services cost	(382)	-	(382)
Interest (expense) income	(14,429)	6,291	(8,138)
	(853,354)	366,308	(487,046)
Remeasurements:			
Return on plan assets (excluding amounts included in interest income or expense)	-	8,145	8,145
Financial assumption movement effect	(56,934)	-	(56,934)
Experience adjustments	(11,172)	-	(11,172)
	(68,106)	8,145	(59,961)
Pension fund contribution	-	26,242	26,242
Paid pension	11,379	(11,379)	-
December 31	($ 910,081)	$ 389,316	($ 520,765)

(c) 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 utilization plan and the "Regulations for Revenues, Expenditures, Safeguard and Utilization of the Labor Retirement Fund" (Article 6: The scope of utilization 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 utilization 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. If the earnings is less than aforementioned rates, government shall make payment for the deficit after being authorized by the authority. The Company has no right to participate in managing and operating that fund and hence the Company is unable to disclose the classification of the fair value of plan asset in accordance with IAS 19 "Employee Benefits" paragraph 142. The composition of fair value of plan assets as of December 31, 2019 and 2018 is given in the Annual Labor Retirement Fund Utilization Report announced by the government.

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

	2019	2018
Discount rate	1.00%	1.25%
Future salary increase	3.50%	3.50%

Assumptions regarding future mortality are set based on actuarial advice in accordance with published statistics and experience in each territory.

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

	Discount rate		Future salary increase	
	Increase 0.25%	Decrease 0.25%	Increase 0.25%	Decrease 0.25%
December 31, 2019				
Effect on present value of defined benefit obligations	($ 27,993)	$ 29,284	$ 28,501	($ 27,407)
December 31, 2018				
Effect on present value of defined benefit obligations	($ 29,052)	$ 30,430	$ 29,692	($ 28,513)

The sensitivity analysis above is based on a change in an assumption while holding all other assumptions constant. In practice, changes in some of the assumptions may be correlated. The method of sensitivity analysis and the method of calculating net defined benefit liability in the balance sheet are the same.

The methods and types of assumptions used in preparing the sensitivity analysis remain unchanged from previous period.

(e) Expected contributions to the defined benefit pension plans of the Company for the year ending December 31, 2020 amounts to $27,337.

(f) As of December 31, 2019, the weighted average duration of that retirement plan is 12.8 years. The analysis of timing of the future pension payment was as follows:

Within 1 year	$	35,272
1-2 years		34,647
2-5 years		122,670
5-10 years		167,707
	$	360,296

B. Defined Contribution Plans

Effective from July 1, 2005, the Company established a defined contribution pension plan (“New Plan”) under the Labor Pension Act, covering all regular employees with Republic of China (“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. The pension costs under defined contribution pension plans of the Company for the years ended December 31, 2019 and 2018 were $187,502 and $193,047, respectively.

(16) Share-based payments

Restricted shares

A. On July 14, 2015, the Company’s Board of Directors approved the issuance of restricted shares. The record dates for the shares issuance were July 21, 2015 and May 10, 2016. The relevant information is as follows:

Type of arrangement	Grant date	Share price on grant date (in dollars)	Number of shares (in thousands)	Number of shares returned due to employee resignation (in thousands) 2019	2018	Contract period	Vesting condition
Restricted shares award agreement	July 21, 2015	36.1	15,752	-	(256)	3 years	Meet service and performance conditions
Restricted shares award agreement	May 10, 2016	30.6	1,548	(25)	(116)	3 years	Meet service and performance conditions

The restricted shares issued by the Company cannot be transferred during the vesting period, but voting right and dividend right are not restricted. Employees are required to return the shares but not required to return the dividends received if they resign during the vesting period. When the employees accomplish the years of service and performance conditions, the received restricted shares will be vested based on the vesting ratio.

B. The expenses incurred on share-based payment transactions for the years ended December 31, 2019 and 2018 were $822 and $41,043, respectively.

(17) Capital stock

A. As of December 31, 2019, the Company's authorized capital was $9,700,000, consisting of 970,000 thousand ordinary shares, and the paid-in capital was $7,272,401 with a par value of $10 (in dollars) per share, consisting of 727,240 thousand ordinary shares. All proceeds from shares issued have been collected.

B. As of December 31, 2019, the outstanding ADSs were approximately 4,801,737 units representing 96,035 thousand ordinary shares and each ADS represents 20 ordinary shares of the Company. The major terms and conditions of the ADSs are summarized as follows:

(a) Voting rights:

ADS holders have no right to directly vote in shareholders' meetings with respect to the deposited shares. The depository bank shall vote on behalf of ADS holders or provide voting instruction to the designated person of the Company. The depository bank shall vote in the manner as instructed by ADS holders.

(b) Distribution of dividends:

ADS holders are deemed to have the same rights as holders of ordinary shares with respect to the distribution of dividends.

C. Movements in the number of the Company's ordinary shares outstanding are as follows:

	Number of shares (in thousands)	
	2019	2018
January 1	727,265	856,059
Restricted shares – cancelled	(25)	(349)
Restricted shares – uncancelled	-	(23)
Capital reduction	-	(128,422)
December 31	727,240	727,265

D. Treasury stock

(a) On March 7, 2019 and August 6, 2019, the Company's Board of Directors approved the cancellation of treasury stock 25,570 thousand shares amounted to $962,503. As of December 31, 2019, all of the Company's treasury stocks were cancelled. As of December 31, 2018, the reasons for share repurchases are as follows:

		December 31, 2018	
Name of company holding the shares	Reason for repurchase	Number of shares (in thousands)	Carrying amount
The Company	To be reissued to employees	30,000	$ 1,005,011
The Company	Dissenting shareholders	85	2,643
The Company	Capital reduction	(4,515)	(45,151)
		25,570	$ 962,503

(b) Pursuant to the R.O.C. Securities and Exchange Act, the number of shares repurchased as treasury stock may not exceed 10% of the number of the Company's issued shares and the amount bought back may not exceed the sum of retained earnings, paid-in capital in excess of par value and realized capital surplus.

(c) Pursuant to the R.O.C. Securities and Exchange Act, treasury stock may not be pledged as collateral and is not entitled to dividends before it is reissued.

(d) Pursuant to the R.O.C. Securities and Exchange Act, treasury stock should be reissued to the employees within five years from the reacquisition date and shares not reissued within the five-year period are to be retired. Treasury stock to enhance the Company's credit rating and the stockholders' equity should be retired within six months from acquisition.

E. In order to adjust capital structure and increase return of equity, the Company's shareholders adopted a resolution on June 26, 2018 to reduce capital stock and return cash to shareholders. Subsequently, the record date of the capital reduction was fixed on August 15, 2018, and capital was reduced approximately 15% amounted to $1,329,446, consisting of 132,945 thousand ordinary shares.

(18) Capital surplus

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

	2019			
	Share premium	Employee restricted shares	Long-term investment	Total
January 1	$ 5,873,743	$ 382,506	$ 24,233	$6,280,482
Share-based payments	-	(412)	-	(412)
Cancellation of treasury stock	(199,501)	(12,853)	-	(212,354)
Disposal of investment accounted for using equity method	-	-	(8,065)	(8,065)
December 31	$ 5,674,242	$ 369,241	$ 16,168	$6,059,651

	2018			
	Share premium	Employee restricted shares	Long-term investment	Total
January 1	$ 5,873,743	$ 390,401	$ 24,233	$6,288,377
Share-based payments	-	(7,967)	-	(7,967)
Capital reduction	-	72	-	72
December 31	$ 5,873,743	$ 382,506	$ 24,233	$6,280,482

(19) 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 a legal reserve. The Company may then appropriate or reverse a certain amount as special reserve according to the relevant regulations. After the distribution of earnings, the remaining earnings and prior years' unappropriated retained earnings may be appropriated according to a proposal by the Board of Directors and approved in the shareholders' meeting.

B. The Company's dividend policy is summarized here. As the Company operates in a volatile business environment, the issuance of dividends to be distributed takes into consideration the Company's financial structure, operating results and future expansion plans. The earnings distribution of the Company may be made by way of cash dividends or stock dividends, provided that cash dividends account for at least 10% of the total dividends distributed. The earnings distribution will be proposed by the Board of Directors and approved at the shareholders' meeting.

C. Except for covering accumulated deficits or issuing new shares or cash to shareholders in proportion to their share ownership, the legal reserve may not be used for any other purpose. The use of the legal reserve for the issuance of shares 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.

D. In accordance with the regulations, the Company must set aside a special reserve from the debit balance on other equity items at the balance sheet date before distributing earnings. When the debit balance on other equity items is reversed subsequently, the reversed amount may be included in the distributable earnings.

E. The appropriations of 2018 and 2017 earnings were resolved in the shareholders' meetings held on June 10, 2019 and June 26, 2018, respectively. The appropriations and dividends per share are as follows:

	2018		2017	
	Amount	Cash distribution per share (in dollars)	Amount	Cash distribution per share (in dollars)
Legal reserve	$ 110,308		$ 302,653	
Cash dividend	872,718	$ 1.20	256,806	$ 0.30

F. The information relating to employees' compensation and directors' remuneration is provided in Note 6(27).

(20) Other equity interest

	2019			
	Financial statements translation differences of foreign operations	Unrealized gain (loss) on valuation of financial assets at fair value through other comprehensive income	Unearned employee awards	Total
January 1	$ 14,516	$ 106,898	($ 1,701)	$ 119,713
Currency translation differences				
- The Company	(104,198)	-	-	(104,198)
Employee restricted shares				
- The Company	-	-	1,701	1,701
Evaluation adjustment				
- The Company	-	(52,549)	-	(52,549)
- Associates	-	5,093	-	5,093
Evaluation adjustment related tax				
- The Company	-	10,510	-	10,510
Disposal of investment accounted for using equity method	-	(72)	-	(72)
December 31	($ 89,682)	$ 69,880	$ -	($ 19,802)

	2018				
	Financial statements translation differences of foreign operations	Unrealized gain (loss) on valuation of financial assets at fair value through other comprehensive income	Unrealized gain (loss) on valuation of available-for-sale financial assets	Unearned employee awards	Total
January 1	$ 65,593	$ -	$ 678	($ 54,570)	$ 11,701
Effects on initial application of IFRS 9	-	42,843	(678)	-	42,165
Adjusted beginning balance	65,593	42,843	-	(54,570)	53,866
Currency translation differences					
- The Company	(51,077)	-	-	-	(51,077)
Employee restricted shares					
- The Company	-	-	-	52,869	52,869
Evaluation adjustment					
- The Company	-	85,022	-	-	85,022
- Associates	-	(2,438)	-	-	(2,438)
Evaluation adjustment related tax					
- The Company	-	(18,529)	-	-	(18,529)
December 31	$ 14,516	$ 106,898	$ -	($ 1,701)	$ 119,713

(21) Revenue

	2019	2018
Revenue from contracts with customers	$ 20,337,881	$ 18,480,027

A. The Group is primarily engaged in the assembly and testing services on high-integration and high-precision integrated circuits, and recognized revenue based on the progress towards completion of performance obligation during the service period. Information on revenue disaggregation is provided in Note 14.

B. Contract assets and liabilities

The Group has recognized the following contract assets and liabilities in relation to revenue from contracts with customers:

	December 31, 2019	December 31, 2018	January 1, 2018
Contract assets	$ 377,869	$ 299,835	$ 254,997
Contract liabilities (Advance payments)	$ 1,231	$ 1,432	$ 1,152

C. Contract assets have increased as the Group has completed more services in excess of customers' payments. The information relating to loss allowance for contract assets is provided in Note 12(2).

D. Revenue recognized in the current reporting period amounted to $766 was related to carried forward contract liabilities for performance obligations not satisfied in prior year.

E. All of the service contracts are for periods of one year or less. As permitted under IFRS 15, the transaction price allocated to these unsatisfied contracts is not disclosed. As of December 31, 2019, the Group did not recognized an asset in relation to costs to acquire or fulfill a service contract.

(22) Other income (expenses), net

	2019	2018
Gain on disposal of scrapped materials	$ 43,652	$ 59,380
Royalty income	12,336	43,224
Gain on disposal of items purchased on behalf of others	15,080	31,268
Gain on disposal of property, plant and equipment	20,271	14,274
Insurance compensation income	10,435	147
Impairment loss on property, plant and equipment	(9,938)	-
Others	1,092	(779)
	$ 92,928	$ 147,514

(23) Other income

	2019	2018
Interest income		
Bank deposits	$ 59,901	$ 49,051
Financial assets at amortized cost	4,467	920
	64,368	49,971
Rental income	9,249	7,819
Dividend income	585	571
Grant income	925	-
	$ 75,127	$ 58,361

(24) Other gains and losses

	2019	2018
Foreign exchange (losses) gains, net	($ 154,993)	$ 93,104
Gain on disposals of investment accounted for using equity method	981,675	-
Reimbursement of ADSs service charge	4,292	13,269
Gain on valuation of financial assets at fair value through profit or loss	1,317	1,485
Others	970	6,851
	$ 833,261	$ 114,709

(25) Finance costs

	2019	2018
Interest expense		
Bank loans	$ 171,840	$ 170,476
Lease liabilities	14,349	-
Lease obligations payable	-	482
Less: Amounts capitalized in qualifying assets	(15,114)	(18,542)
	171,075	152,416
Finance expense	9,187	37,832
	$ 180,262	$ 190,248

(26) Expenses by nature

	2019	2018
Raw materials and supplies used	$ 3,575,283	$ 3,079,909
Employee benefit expenses	6,075,773	5,606,833
Depreciation expenses	3,731,914	3,376,579
Others	4,590,720	4,464,499
	$ 17,973,690	$ 16,527,820

(27) Employee benefit expenses

	2019	2018
Salaries	$ 5,114,790	$ 4,628,039
Directors' remuneration	26,266	18,456
Labor and health insurance	422,106	406,111
Pension	194,173	201,567
Share-based payments	822	41,043
Other personnel expenses	317,616	311,617
	$ 6,075,773	$ 5,606,833

A. In accordance with the Company's Articles of Incorporation, employees' compensation is based on the current year's earnings, which should first be used to cover accumulated deficits, if any, and then 10% of the remaining balance distributed as employees' compensation, including distributions to certain qualifying employees in affiliate companies, and no more than 0.5% as directors' remuneration. Subject to the Board of Directors' approval, employees' compensation may be made by way of cash or share issuance. Distribution of employees' compensation and directors' remuneration shall be presented and reported in the subsequent shareholders' meeting.

B. Based on profit distributable as of the end of reporting period, for the years ended December 31, 2019 and 2018, the employees' compensation were accrued at $338,356 and $199,027, respectively; the directors' remuneration were accrued at $16,918 and $ 9,951, respectively.

C. For the year of 2018, employees' compensation and directors' remuneration recognized were consistent with the amounts resolved in the Board of Directors' meetings.

Information about the appropriation of employees' compensation and directors' remuneration by the Company as approved by the Board of Directors is posted in the "Market Observation Post System".

(28) Income tax expense

A. Income tax expense

(a) Components of income tax expense:

	2019	2018
Current income tax:		
Current income tax on profits for the period	$ 408,788	$ 326,057
Income tax on unappropriated retained earnings	7,019	250,914
Prior year income tax (over) under estimation	(5,016)	3,729
Total current income tax	410,791	580,700
Deferred income tax:		
Relating to origination and reversal of temporary differences	35,367	101,441
Impact of change in tax rate	-	(2,774)
Total deferred income tax	35,367	98,667
Income tax expense	$ 446,158	$ 679,367

(b) The income tax (charge)/credit relating to components of other comprehensive income is as follows:

	2019	2018
Unrealized (loss) gain on valuation of financial assets at fair value through other comprehensive income	($ 10,510)	$ 17,005
Remeasurement of defined benefit obligations	4,183	(11,992)
Impact of change in tax rate	-	(887)
	($ 6,327)	$ 4,126

B. Reconciliation of income tax expense and the accounting profit:

	2019	2018
Tax calculated based on profit before tax and statutory tax rate	$ 606,917	$ 356,488
Expenses disallowed by tax regulation	3,055	14,689
Tax exempted (income) expenses by tax regulation	(165,979)	66,353
Temporary difference not recognized as deferred tax assets	(608)	(10,951)
Prior year income tax (over) under estimation	(5,016)	3,729
Income tax on unappropriated retained earnings	7,019	250,914
Impact of change in tax rate	-	(2,774)
Effect of different tax rates in countries in which the Group operates	770	919
Income tax expense	$ 446,158	$ 679,367

C. The amounts of deferred tax assets or liabilities resulting from temporary differences and investment tax credits are as follows:

	2019			
	January 1	Recognized in profit or loss	Recognized in other comprehensive income	December 31
Deferred tax assets				
Loss on inventories	$ 7,232	$ 5,468	$ -	$ 12,700
Property, plant and equipment	64,183	(25,515)	-	38,668
Provisions	12,396	(6,796)	-	5,600
Deferred revenue	34,156	(6,506)	-	27,650
Net defined benefit liability	100,743	(3,948)	(4,183)	92,612
Unrealized exchange losses	3,575	13,721	-	17,296
Investment tax credits	4,420	(4,420)	-	-
Others	11	15	-	26
Total	$ 226,716	($ 27,981)	($ 4,183)	$ 194,552
Deferred tax liabilities				
Property, plant and equipment	($ 281,594)	($ 7,386)	$ -	($ 288,980)
Financial assets at fair value through other comprehensive income	(27,165)	-	10,510	(16,655)
Total	($ 308,759)	($ 7,386)	$ 10,510	($ 305,635)
Information presented on balance sheets:				
Deferred tax assets	$ 226,716			$ 194,552
Deferred tax liabilities	($ 308,759)			($ 305,635)

	2018				
	January 1	Effects on initial application of IFRS 9 and IFRS 15	Recognized in profit or loss	Recognized in other comprehensive income	December 31
Deferred tax assets					
Loss on inventories	$ 9,132	($ 770)	($ 1,130)	$ -	$ 7,232
Property, plant and equipment	55,494	-	8,689	-	64,183
Provisions	21,643	-	(9,247)	-	12,396
Deferred revenue	39,485	-	(5,329)	-	34,156
Net defined benefit liability	78,451	-	7,889	14,403	100,743
Unrealized exchange losses	8,167	144	(4,736)	-	3,575
Investment tax credits	-	-	4,420	-	4,420
Others	-	-	11	-	11
Total	$ 212,372	($ 626)	$ 567	$ 14,403	$ 226,716
Deferred tax liabilities					
Property, plant and equipment	($ 174,293)	$ -	($ 107,301)	$ -	($ 281,594)
Contract assets	-	(8,067)	8,067	-	-
Financial assets at fair value through other comprehensive income	-	(8,636)	-	(18,529)	(27,165)
Total	($ 174,293)	($ 16,703)	($ 99,234)	($ 18,529)	($ 308,759)
Information presented on balance sheets:					
Deferred tax assets	$ 212,372				$ 226,716
Deferred tax liabilities	($ 174,293)				($ 308,759)

D. The Company has not recognized deductible and taxable temporary differences associated with investments as deferred tax assets and liabilities. As of December 31, 2019 and 2018, the amount of taxable temporary differences not recognized as deferred tax liability were $180,395 and $495,154, respectively.

E. The Company's income tax returns through 2016 have been assessed and approved by the Tax Authority.

F. The amendment to the Income Tax Act has been approved and promulgated in February 2018 to raise the profit-seeking enterprise income tax rate from 17% to 20%, decrease the tax rate on unappropriated retained earnings from 10% to 5%, and abandon the imputation tax credit account effective from fiscal year starting January 1, 2018.

G. On October 31, 2016, the Company merged with its former parent company, ChipMOS TECHNOLOGIES (Bermuda) LTD. and as a result, the Company recognized its own shares originally held by former parent company as treasury stock. Subsequently, the Company deducted unappropriated retained earnings by $5,052,343 to reflect the loss due from the cancellation of treasury stock. In January 2017, the Company has filed an application to the National Taxation Bureau of the Northern Area, Ministry of Finance to apply the accumulated deficit amount, derived from subtracting the aforementioned amount from unappropriated retained earnings generated prior to year 2015 (not including 2015 unappropriated retained earnings), as a deduction in the calculation of years 2016 and 2015 additional 10% tax on unappropriated retained earnings. On August 26, 2019, the Ministry of Finance issued Interpretation No.10804006760 and agreed the aforementioned deduction of unappropriated retained earnings to reflect the loss due from the cancellation of treasury stock as a result of the merger. As of the issue date of this report, the Company has not received the Notice for Assessment of Tax approved by the National Taxation Bureau of the Northern Area, Ministry of Finance.

(29) Earnings per share

	2019		
Basic earnings per share	Amount after income tax	Weighted average number of ordinary shares outstanding (in thousands)	Earnings per share (in dollars)
Profit attributable to common share of the Company	$ 2,584,161	727,111	$ 3.55
Diluted earnings per share			
Assumed conversion of all dilutive potential ordinary shares:			
Employees' compensation		9,879	
Restricted shares		126	
Profit attributable to common share of the Company	$ 2,584,161	737,116	$ 3.51

	2018		
Basic earnings per share	Amount after income tax	Weighted average number of ordinary shares outstanding (in thousands)	Earnings per share (in dollars)
Profit attributable to common share of the Company	$ 1,103,075	802,725	$ 1.37
Diluted earnings per share			
Assumed conversion of all dilutive potential ordinary shares:			
Employees' compensation		7,626	
Restricted shares		3,356	
Profit attributable to common share of the Company	$ 1,103,075	813,707	$ 1.36

(30) Operating lease commitments

Prior to 2019

A. The Company has entered into several operating lease contracts for land with Hsinchu and Southern Taiwan Science Park Bureaus. These renewable operating leases will expire by 2032 and 2034. In accordance with the lease contracts, Science Park Bureau reserves the right to adjust annual rents and the annual rents for the year ended 2018 was $33,142.

B. ChipMOS USA has entered into renewable operating lease contracts for its office. The renewable operating leases will expire by 2019 and 2020.

C. Future aggregate minimum lease obligations payable under the aforementioned leases are as follows:

	December 31, 2018
Within 1 year	$ 68,631
1 to 5 years	140,137
Over 5 years	111,446
	$ 320,214

(31) Supplemental cash flow information

Partial cash paid for investing activities

Property, plant and equipment

	2019	2018
Purchase of property, plant and equipment	$ 4,896,656	$ 4,945,570
Add: Beginning balance of payable on equipment	1,516,735	713,313
Beginning balance of payable on lease	-	29,842
Less: Ending balance of payable on equipment	(972,770)	(1,516,735)
Ending balance of payable on lease	-	(17,792)
Cash paid during the year	$ 5,440,621	$ 4,154,198

(32) Changes in liabilities from financing activities

	2019			
	Long-term bank loans (including current portion)	Guarantee deposits	Lease liabilities	Total liabilities from financing activities
January 1	$ 9,789,518	$ 1,092	$ -	$ 9,790,610
Effects on initial application of IFRS 16	-	-	884,275	884,275
Adjusted balance at January 1	9,789,518	1,092	884,275	10,674,885
Changes in cash flow from financing activities	(756,450)	3	(48,161)	(804,608)
Adjustment to right-of-use assets	-	-	(148,512)	(148,512)
Reclassification to payable on equipment from lease liabilities	-	-	(9,000)	(9,000)
Amortization of loan fees	8,577	-	-	8,577
Amortization of interest expense	-	-	14,349	14,349
December 31	$ 9,041,645	$ 1,095	$ 692,951	$ 9,735,691

	2018			
	Short-term bank loans	Long-term bank loans (including current portion)	Guarantee deposits	Total liabilities from financing activities
January 1	$ 969,353	$ 9,642,021	$ 1,371	$ 10,612,745
Changes in cash flow from financing activities	(969,353)	110,250	(279)	(859,382)
Amortization of loan fees	-	37,247	-	37,247
December 31	$ -	$ 9,789,518	$ 1,092	$ 9,790,610

7. RELATED PARTY TRANSACTIONS

(1) Parent and ultimate controlling party

The Company has neither a parent company nor an ultimate controlling party. The transactions between the Company and its subsidiaries were eliminated in the accompanying consolidated financial statements and were not disclosed herein. The transactions between the Group and other related parties are as follows.

(2) Names of related parties and relationship

Name	Relationship
Unimos Shanghai	Associate
JMC	Associate

(3) Significant related party transactions

A. Purchases of materials

	2019	2018
JMC	$ 9	$ 132,494

Purchases of materials from associate is based on normal commercial terms and conditions. The payment terms of the purchases from associate have no significant differences with third party suppliers.

B. Acquisition of financial assets

In January 2018, ChipMOS BVI participated in Unimos Shanghai's increase of paid-in capital based on its shareholding amounted to $794,694, please refer to Note 6(7).

(4) Key management personnel compensation

	2019	2018
Salaries and other short-term employee benefits	$ 178,713	$ 151,095
Post-employment compensation	2,049	2,067
Share-based payments	-	6,763
	$ 180,762	$ 159,925

8. PLEDGED ASSETS

Assets	Purpose	Carrying amount December 31, 2019	Carrying amount December 31, 2018
Non-current financial assets at amortized cost	Lease and bank loan	$ 68,450	$ 68,388
Property, plant and equipment			
- Land	Bank loan	452,738	452,738
- Buildings	Bank loan	4,095,929	3,908,731
- Machinery and equipment	Bank loan	4,105,912	5,310,769
		$ 8,723,029	$ 9,740,626

9. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED CONTRACT COMMITMENTS

(1) A letter of guarantee was issued by the Bank of Taiwan to the Customs Administration of the Ministry of Finance for making payment of customs-duty deposits when importing. As of December 31, 2019 and 2018, the amounts of $100,800 and $97,500, respectively, were guaranteed by the Bank of Taiwan.

(2) Capital expenditures that are contracted for, but not provided for, are as follows:

	December 31, 2019	December 31, 2018
Property, plant and equipment	$ 1,640,712	$ 2,508,797

10. SIGNIFICANT DISASTER LOSS

None.

11. SIGNIFICANT EVENTS AFTER THE REPORTING PERIOD

On January 1, 2019, Ministry of Economic Affairs, R.O.C. ("MOEA") implemented the "Action Plan for Welcoming Overseas Taiwanese Businesses to Return to Invest in Taiwan" and companies are subsidized with preferential interest loans for qualified investment projects. The Company has obtained the qualification from the MOEA, and signed loan agreements with financial institutions during January and February 2020 with the line of credit amounted to $10,710,000 and terms from seven to ten years. As of the issue date of this report, the Company has not used the credit line of the aforementioned project loans.

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 Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt. The Group monitors capital on the basis of the liabilities to assets ratio. Total capital is shown as "Equity" in the consolidated balance sheet, which is also equal to total assets minus total liabilities.

The liabilities to assets ratio at December 31, 2019 and 2018 were as follows:

	December 31, 2019	December 31, 2018
Total liabilities	$ 14,654,648	$ 15,062,907
Total assets	34,305,887	33,133,718
Liabilities to assets ratio	42.72%	45.46%

(2) Financial instruments

A. Financial instruments by category

	December 31, 2019	December 31, 2018
Financial assets		
Financial assets at fair value through profit or loss		
Financial assets mandatorily measured at fair value through profit or loss	$ 11,038	$ 11,471
Financial assets at fair value through other comprehensive income		
Designation of equity instruments	121,808	174,357
Financial assets at amortized cost		
Cash and cash equivalents	4,704,084	4,642,522
Financial assets at amortized cost	237,420	268,271
Notes receivable	765	1,595
Accounts receivable	4,452,904	4,745,693
Accounts receivable－related parties	1,045	140
Other receivables	89,676	63,037
Other receivables－related parties	2,948	3,131
Refundable deposits	21,145	22,006
	$ 9,642,833	$ 9,932,223

	December 31, 2019	December 31, 2018
Financial liabilities		
Financial liabilities at amortized cost		
Accounts payable	$ 819,548	$ 637,271
Accounts payable－related parties	-	347
Other payables	2,977,036	3,195,217
Other payables－related parties	-	218
Long-term bank loans (including current portion)	9,041,645	9,789,518
Guarantee deposits	1,095	1,092
	$ 12,839,324	$ 13,623,663
Lease liabilities (including current portion)	$ 692,951	$ -

B. Risk management policies

(a) The Group's risk management objective is to manage the market risk, credit risk and liquidity risk related to its operating activities.

(b) The Group has established appropriate policies, procedures and internal controls for financial risk management. Before entering into significant financial transactions, a due approval process must be carried out by the Board of Directors based on related protocols and internal control procedures. The Group complies with its financial risk management policies at all times.

(c) In order to minimize and manage financial risks, the Group's overall risk management program focuses on analyzing, identifying, and evaluating financial risk factors that may potentially have adverse effects on the Group's financial position, and provide feasible solutions to avoid those factors.

C. Significant financial risks and degrees of financial risks

(a) Market risk

The Group's market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risks comprise foreign currency risk, interest rate risk, and other price risks.

In practice, the risk variable rarely changes individually, and the change of each risk variable is usually correlative. The following sensitivity analysis did not consider the interaction of each risk variable.

Foreign exchange risk

i. The Group's exposure to the risk of changes in foreign exchange rates relates primarily to the Group's operating activities (when revenue or expense is denominated in a different currency from the Company's and its subsidiaries' functional currency) and the Group's net investments in foreign operations.

ii. The Group applies natural hedges by using accounts receivable and accounts payable denominated in the same currency. However, this natural hedge does not concur with the requirement for hedge accounting. Furthermore, as net investments in foreign operations are for strategic purposes, they are not hedged by the Group.

iii. The Group's foreign currency exposure gives rise to market risks associated with exchange rate movements against the NT dollar for cash and cash equivalents, accounts receivable, other receivables, bank loans, accounts payable and other payables.

iv. The Group's businesses involve some non-functional currency operations. 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, 2019		
	Foreign currency (in thousands)	Exchange rate	Carrying amount (NTD)
(Foreign currency: functional currency)			
Financial assets			
Monetary items			
USD:NTD	$ 188,369	29.9800	$ 5,647,303
JPY:NTD	266,819	0.2760	73,642
RMB:NTD	6,197	4.3050	26,678
Financial liabilities			
Monetary items			
USD:NTD	$ 7,867	29.9800	$ 235,853
JPY:NTD	1,033,394	0.2760	285,217

	December 31, 2018		
	Foreign currency (in thousands)	Exchange rate	Carrying amount (NTD)
(Foreign currency: functional currency)			
Financial assets			
Monetary items			
USD:NTD	$ 170,270	30.7150	$ 5,229,843
JPY:NTD	177,557	0.2782	49,396
RMB:NTD	8,850	4.4720	39,577
Financial liabilities			
Monetary items			
USD:NTD	$ 18,230	30.7150	$ 559,934
JPY:NTD	2,436,140	0.2782	677,734

v. The total exchange (loss) gain, including realized and unrealized (losses) gains arising from significant foreign exchange variations on monetary items held by the Group for the years ended December 31, 2019 and 2018, amounted to ($154,993) and $93,104, respectively.

vi. Analysis of foreign currency market risk arising from significant foreign exchange variations:

	2019			
	Sensitivity analysis			
	Change in exchange rate	Effect on profit (loss)		Effect on other comprehensive income
Financial assets				
Monetary items				
USD:NTD	5%	$	282,365	$ -
JPY:NTD	5%		3,682	-
RMB:NTD	5%		1,334	-
Financial liabilities				
Monetary items				
USD:NTD	5%	$	11,793	$ -
JPY:NTD	5%		14,261	-

	2018			
	Sensitivity analysis			
	Change in exchange rate	Effect on profit (loss)		Effect on other comprehensive income
Financial assets				
Monetary items				
USD:NTD	5%	$	261,492	$ -
JPY:NTD	5%		2,470	-
RMB:NTD	5%		1,979	-
Financial liabilities				
Monetary items				
USD:NTD	5%	$	27,997	$ -
JPY:NTD	5%		33,887	-

Price risk

i. The Group's financial instruments, which are exposed to price risk, are the financial assets at fair value through profit or loss and financial assets at fair value through other comprehensive income. To manage its price risk arising from investments in financial instruments, the Group diversifies its portfolio. Diversification of the portfolio is in accordance with the limits set by the Group.

ii. The Group's investments in financial instruments comprise foreign unlisted stocks and partnership. The prices of financial instruments would change due to different valuation models and assumptions used. Analysis related to the effect on profit or other comprehensive income if these assumptions change is provided in Note 12(3)G.

Interest rate risk on cash flow and fair value

i. Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's bank loans with floating interest rates. The Group manages its interest rate risk by having a balanced portfolio of fixed and variable rate bank loans. The Group reassesses the hedge management periodically to make sure it complies with the cost effectiveness.

ii. The sensitivity analysis depends on the exposure of interest rate risk at the end of the reporting period.

iii. Analysis of debt with floating interest rates is based on the assumption that the outstanding debt at the end of the reporting period is outstanding throughout the period. The degree of variation the Group used to report to internal management is increase or decrease of 1% in interest rates which is assessed as the reasonable degree of variation by the management.

iv. For the years ended December 31, 2019 and 2018, it is estimated that a general increase or decrease of 1% in interest rates, with all other variables held constant, would decrease or increase the Group's profit approximately by $90,660 and $98,220, respectively, mainly due to the Group's floating rate on bank loans.

(b) Credit risk

i. Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss, mainly resulted from its operating activities (primarily notes and accounts receivable) and from its financing activities (primarily deposits with banks and financial instruments). The Group is exposed to credit risk arising from the carrying amount of the financial assets recognized in the consolidated balance sheet.

ii. Each business unit performs ongoing credit evaluations of its debtors' financial conditions according to the Group's established policies, procedures and controls relating to customer credit risk management. The Group maintains an account for loss allowance based upon the available facts and circumstances, history of collection and write-off experiences of all trade and other receivables which consequently minimize the Group's exposure to bad debts.

iii. Credit risk from balances with banks and financial institutions is managed by the Group's finance unit in accordance with the Group's policies. Transaction counterparty of the Group is determined through its internal controls policy. For banks and financial institutions, only parties rated above BBB+ by Taiwan Ratings are accepted. The probability of counterparty default is remote, so there is no significant credit risk.

iv. The Group adopts the assumptions under IFRS 9 "Financial Instruments" ("IFRS 9") and the default is deemed to have occurred when the contract payments are past due over 90 days.

v. The Group categorized contract assets, accounts receivable and other receivables by characteristics of credit risk and applied the simplified approach using loss rate methodology to estimate expected credit loss.

vi. The Group referred to the forecastability of business monitoring indicators published by the National Development Council to adjust the loss rate which is based on historical and current information when assessing the future default possibility of contract assets, accounts receivable and other receivables. As of December 31, 2019 and 2018, the loss rate methodologies are as follows:

	December 31, 2019		
	Contract assets	Accounts receivable (including related parties)	Other receivables (including related parties)
Expected loss rate	0.030%	0.030%	0.030%
Total carrying amount	$ 377,983	$ 4,455,300	$ 92,642
Loss allowance	($ 114)	($ 1,351)	($ 18)

	December 31, 2018		
	Contract assets	Accounts receivable (including related parties)	Other receivables (including related parties)
Expected loss rate	0.045%	0.045%	0.045%
Total carrying amount	$ 299,970	$ 4,747,974	$ 66,181
Loss allowance	($ 135)	($ 2,141)	($ 13)

vii. Under the simplified approach, movements in relation to loss allowance for contract assets, accounts receivable, and other receivables are as follows:

	2019		
	Contract assets	Accounts receivable (including related parties)	Other receivables (including related parties)
January 1	($ 135)	($ 2,141)	($ 13)
Provision for impairment loss	-	-	(5)
Reversal of impairment loss	21	790	-
December 31	($ 114)	($ 1,351)	($ 18)

	2018		
	Contract assets	Accounts receivable (including related parties)	Other receivables (including related parties)
January 1_ IAS 39	$ -	$ -	$ -
Adjustments for applying new standards	(115)	(1,819)	(7)
January 1_IFRS 9	(115)	(1,819)	(7)
Provision for impairment loss	(20)	(322)	(7)
Reversal of impairment loss	-	-	1
December 31	($ 135)	($ 2,141)	($ 13)

viii. For investments in debt instruments at amortized cost, the credit rating levels are as follows:

	December 31, 2019			
		By lifetime		
	12 months	Increase in credit risk	Impairment of credit	Total
Financial assets at amortized cost				
Bank deposits (Note)	$ 237,420	$ -	$ -	$237,420

	December 31, 2018			
		By lifetime		
	12 months	Increase in credit risk	Impairment of credit	Total
Financial assets at amortized cost				
Bank deposits (Note)	$ 268,271	$ -	$ -	$268,271

Note: Time deposits with contract period over three months and restricted bank deposits.

(c) Liquidity risk

i. The Group manages and maintains adequate cash and cash equivalents to finance the Group's operations, and minimize the impact from cash flow fluctuations. The Group also monitors its debt financing plans to ensure it is in compliance with the financial covenants required under its loan agreements.

ii. The primary source of liquidity for the Group is from bank loans. See Note 6(13) for details of the unused credit lines of the Group as of December 31, 2019 and 2018.

iii. The contractual undiscounted cash flows of accounts payable (including related parties) and other payables (including related parties) are due within one year and are equivalent to their carrying amounts. Except for the aforementioned, the table below summarizes the maturity profile of the Group's non-derivative financial liabilities based on the earliest repayment dates and contractual undiscounted payments, including principal and interest. The Group does not consider the probability of early repayments requested by the banks.

	December 31, 2019				
	Within 1 year	1 to 3 years	3 to 5 years	Over 5 years	Total
Non-derivative financial liabilities					
Long-term bank loans	$ 914,159	$ 1,786,842	$ 6,848,327	$ -	$ 9,549,328
Lease liabilities	36,806	60,111	57,836	762,699	917,452
Guarantee deposits	-	-	-	1,095	1,095
	$ 950,965	$ 1,846,953	$ 6,906,163	$ 763,794	$ 10,467,875

	December 31, 2018				
	Within 1 year	1 to 3 years	3 to 5 years	Over 5 years	Total
Non-derivative financial liabilities					
Long-term bank loans	$ 927,243	$ 1,814,344	$ 7,734,983	$ -	$ 10,476,570
Lease obligations payable	18,000	-	-	-	18,000
Guarantee deposits	-	-	-	1,092	1,092
	$ 945,243	$ 1,814,344	$ 7,734,983	$ 1,092	$ 10,495,662

The difference between the floating interest rates and estimated interest rates will affect the non-derivative financial liabilities stated above.

(3) Fair value information

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

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that can be accessed at the measurement date. An active market is a market in which trading for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2: Inputs other than quoted prices from Level 1 that are observable information for the asset or liability, either directly or indirectly.

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. The carrying amounts of cash and cash equivalents, financial assets at amortized cost, contract assets, notes receivable, accounts receivable, other receivables, refundable deposits, bank loans, contract liabilities, accounts payable, other payables, lease liabilities and guarantee deposits are approximate to their fair values.

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 are as follows:

(a) The related information of natures of the assets and liabilities is as follows:

	December 31, 2019			
	Level 1	Level 2	Level 3	Total
Assets				
Recurring fair value measurements				
Financial assets at fair value through profit or loss				
- Foreign partnership interests	$ -	$ -	$ 11,038	$ 11,038
Financial assets at fair value through other comprehensive income				
- Foreign unlisted stocks	-	-	121,808	121,808
	$ -	$ -	$ 132,846	$ 132,846

	December 31, 2018			
	Level 1	Level 2	Level 3	Total
Assets				
Recurring fair value measurements				
Financial assets at fair value through profit or loss				
- Foreign partnership interests	$ -	$ -	$ 11,471	$ 11,471
Financial assets at fair value through other comprehensive income				
- Foreign unlisted stocks	-	-	174,357	174,357
	$ -	$ -	$ 185,828	$ 185,828

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

i. The fair value of the Group's 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.

ii. The Group's financial assets at fair value through profit or loss is measured by using the discounted cash flow method, which derives present value estimates by discounting expected future operating effectiveness and free cash flows projections.

iii. The Group's financial assets at fair value through other comprehensive income is measured by the comparable company valuation (EV/EBITDA ratio and P/B ratio).

iv. The Group takes into account adjustments for credit risks to measure the fair value of financial and non-financial instruments to reflect credit risk of the counterparty and the Group's credit quality.

D. The following table shows the movements of Level 3 for the years ended December 31, 2019 and 2018:

	2019		
	Debt instruments	Equity instruments	Total
January 1	$ 11,471	$ 174,357	$ 185,828
Gains or losses recognized in profit or loss			
Recorded as non-operating expenses	(433)	-	(433)
Gains or losses recognized in other comprehensive income			
Recorded as unrealized losses on valuation of financial assets at fair value through other comprehensive income	-	(52,549)	(52,549)
December 31	$ 11,038	$ 121,808	$ 132,846

	2018		
	Debt instruments	Equity instruments	Total
January 1	$ -	$ -	$ -
Effects on initial application of IFRS 9	11,433	89,335	100,768
Gains or losses recognized in profit or loss			
Recorded as non-operating income	38	-	38
Gains or losses recognized in other comprehensive income			
Recorded as unrealized gains on valuation of financial assets at fair value through other comprehensive income	-	85,022	85,022
December 31	$ 11,471	$ 174,357	$ 185,828

E. The Group engaged an external appraiser to perform the fair value measurements being categorized within Level 3, and the accounting unit is in charge of valuation procedures to independently verify the 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, and frequently calibrating valuation model, performing back-testing, updating inputs used to the valuation model and making any other necessary adjustments to the fair value.

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

	Fair value as of December 31, 2019	Valuation technique	Significant unobservable input	Range (weighted average method)	Relationship of inputs to fair value
Non-derivative debt instrument:					
Foreign partnership interests	$ 11,038	Discounted cash flow	Discount rate	0.30%	The lower the discount rate, the higher the fair value
Non-derivative equity instrument:					
Foreign unlisted stocks	121,808	Comparable companies	Price to book ratio multiple	1.22	The higher the multiple, the higher the fair value
			Enterprise value to EBITDA multiple	10.51	The higher the multiple, the higher the fair value
			Discount for lack of marketability	15.80%	The higher the discount for lack of marketability, the lower the fair value

	Fair value as of December 31, 2018	Valuation technique	Significant unobservable input	Range (weighted average method)	Relationship of inputs to fair value
Non-derivative debt instrument:					
Foreign partnership interests	$ 11,471	Discounted cash flow	Discount rate	0.35%	The lower the discount rate, the higher the fair value
Non-derivative equity instrument:					
Foreign unlisted stocks	174,357	Comparable companies	Price to book ratio multiple	1.19	The higher the multiple, the higher the fair value
			Enterprise value to EBITDA multiple	7.69	The higher the multiple, the higher the fair value
			Discount for lack of marketability	15.80%	The higher the discount for lack of marketability, the lower the fair value

G. The Group has carefully assessed the valuation models and assumptions used to measure fair value. 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 categorized within Level 3 if the inputs used to valuation models have changed:

			December 31, 2019			
			Recognized in profit or loss		Recognized in other comprehensive income	
	Input	Change	Favorable change	Unfavorable change	Favorable change	Unfavorable change
Financial assets						
Foreign partnership interests	Discount rate	Note	$ -	$ -	$ -	$ -
Foreign unlisted stocks	Price to book ratio multiple	± 1%	-	-	53	53
	Enterprise value to EBITDA multiple	± 1%	-	-	850	900
	Discount for lack of marketability	± 1%	-	-	1,460	1,460
			$ -	$ -	$ 2,363	$ 2,413

			December 31, 2018			
			Recognized in profit or loss		Recognized in other comprehensive income	
	Input	Change	Favorable change	Unfavorable change	Favorable change	Unfavorable change
Financial assets						
Foreign partnership interests	Discount rate	Note	$ -	$ -	$ -	$ -
Foreign unlisted stocks	Price to book ratio multiple	± 1%	-	-	69	68
	Enterprise value to EBITDA multiple	± 1%	-	-	1,563	1,512
	Discount for lack of marketability	± 1%	-	-	2,093	2,050
			$ -	$ -	$ 3,725	$ 3,630

Note: Based on the Group's assessment, change in input would not have significant impact on profit or loss or other comprehensive income.

13. SUPPLEMENTARY DISCLOSURES

(1) Significant transactions information

A. Financings provided: None.

B. Endorsements and guarantees provided: There were no endorsements and guarantees provided by the Company. For information related to the Company's letter of guarantee for duty, please refer to Note 9(1).

C. Marketable securities held at the end of the period (excluding investments in subsidiaries, associates and joint ventures):

				As of December 31, 2019				
Held company name	Marketable securities type and name	Relationship with the company	General ledger account	Number of shares	Carrying amount	Ownership (%)	Fair value	Note
The Company	RYOWA CO., LTD.	N/A	Financial assets at fair value through other comprehensive income	420	$116,726	18.12	$ 116,726	
The Company	CONNECTEC JAPAN Corporation	N/A	Financial assets at fair value through other comprehensive income	56,497	5,082	2.74	5,082	
ChipMOS BVI	Shanghai Zuzhu Business Consulting Partnership (Limited Partnership) ("Zuzhu")	N/A	Financial assets at fair value through profit or loss	-	4,492	5.10	4,492	
ChipMOS BVI	Shanghai Zuzhan Business Consulting Partnership (Limited Partnership) ("Zuzhan")	N/A	Financial assets at fair value through profit or loss	-	2,219	13.42	2,219	
ChipMOS BVI	Shanghai Zuchen Business Consulting Partnership (Limited Partnership) ("Zuchen")	N/A	Financial assets at fair value through profit or loss	-	2,164	11.34	2,164	
ChipMOS BVI	Shanghai Guizao Business Consulting Partnership (Limited Partnership) ("Guizao")	N/A	Financial assets at fair value through profit or loss	-	2,163	11.85	2,163	

D. Marketable securities acquired or disposed of with accumulated amount exceeding the lower of $300 million or 20% of the paid-in capital:

					Balance as of January 1, 2019		Acquisition		Disposal				Balance as of December 31, 2019	
Investor	Marketable securities type and name	General ledger account	Counterparty	Relationship with the investee	Number of shares/units (in thousands)	Amount	Number of shares/units (in thousands)	Amount	Number of shares/units (in thousands)	Selling price	Book value	Gain on disposal	Number of shares/units (in thousands)	Amount
The Company	Taishin 1699 Money Market Fund	Note	N/A	N/A	-	$ -	73,891	$1,000,000	73,891	$1,000,729	$1,000,000	$ 729	-	$ -
The Company	Union Money Market Fund	Note	N/A	N/A	-	-	45,417	600,000	45,417	600,231	600,000	231	-	-
The Company	UPAMC James Bond Money Market Fund	Note	N/A	N/A	-	-	17,949	300,000	17,949	300,183	300,000	183	-	-
The Company	JMC	Investments accounted for using equity method	N/A	N/A	19,100	406,792	-	-	9,100	1,180,179	206,569	981,675	10,000	249,793

Note : Accounted for as "Financial assets at fair value through profit or loss".

E. Acquisition of real estate properties with amount exceeding the lower of $300 million or 20% of the paid-in capital: None.

F. Disposal of real estate properties with amount exceeding the lower of $300 million or 20% of paid-in capital: None.

G. Purchases from or sales to related parties with amount exceeding the lower of $100 million or 20% of paid-in capital or more: None.

H. Receivables from related parties with amount exceeding the lower of $100 million or 20% of paid-in capital or more: None.

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

J. Significant inter-company transactions during the reporting periods:

				Transaction			
Number	Company name	Counterparty	Relationship	General ledger account	Amount	Transaction terms	Percentage of consolidated total revenues or total assets (%)
0	The Company	ChipMOS USA	Note	Service expense	$ 32,826	-	0.16

Note: Represents the transactions from parent company to subsidiary.

(2) Information on investees

Names, locations and related information of investees (excluding information on investments in the P.R.C.):

				Original investment amount		Shares held as of December 31, 2019					
Investor	Investee	Location	Main business activities	Ending balance	Beginning balance	Number of shares	Ownership (%)	Carrying amount	Net profit (loss) of the investee for the year ended December 31, 2019	Investment income (loss) recognized for the year ended December 31, 2019	Note
The Company	ChipMOS USA	San Jose, USA	Research, development and marketing of semiconductors, circuits, electronic related products	$ 217,918	$ 217,918	3,550,000	100	$ 235,742	$ 4,267	$ 4,267	
The Company	JMC	Kaohsiung, Taiwan	Manufacturing, processing and trading of high-end flexible IC substrates for display driver ICs	165,007	315,164	10,000,000	10	249,793	524,347	63,838	Note
The Company	ChipMOS BVI	British Virgin Islands	Holding company	3,072,712	3,072,712	2,407,742,975	100	3,175,040	(219,692)	(219,692)	

Note: Company’s associate accounted for using equity method.

(3) Information on investments in the P.R.C.

A. Basic information:

Investee in P.R.C.	Main business activities	Paid-in capital	Investment method	Accumulated amount of remittance from Taiwan to P.R.C.as of January 1, 2019	Amount remitted from Taiwan to P.R.C./ Amount remitted back to Taiwan for the year ended December 31, 2019		Accumulated amount of remittance from Taiwan to P.R.C. as of December 31, 2019	Net loss of investee for the year ended December 31, 2019	Ownership (%) held by the Company (directly or indirectly)	Investment loss recognized for the year ended December 31, 2019	Carrying amount of investments in P.R.C. as of December 31, 2019	Accumulated amount of investment income remitted back to Taiwan through December 31, 2019	Note
					Remitted to P.R.C.	Remitted back to Taiwan							
Unimos Shanghai	Semiconductor assembling and testing services	$ 10,817,191	Note 1	$ 2,885,586	$ -	$ -	$ 2,885,586	($ 352,008)	45.02	($ 218,764)	3,143,117	$ -	Note 2
Zuzhu	Business consulting services	87,139	Note 1	-	-	-	-	(2)	5.10	-	4,492	-	
Zuzhan	Business consulting services	16,606	Note 1	-	-	-	-	(1)	13.42	-	2,219	-	
Zuchen	Business consulting services	19,673	Note 1	-	-	-	-	(1)	11.34	-	2,164	-	
Guizao	Business consulting services	18,810	Note 1	-	-	-	-	(1)	11.85	-	2,163	-	

Note 1: Through investing in an existing company (ChipMOS BVI) in the third area, which then invested in the investee in P.R.C..

Note 2: The financial statements that are audited by the Company’s independent accountants.

Company name	Accumulated amount of remittance from Taiwan to P.R.C. as of December 31, 2019	Investment amount approved by the Investment Commission of MOEA	Limit on investments in P.R.C. imposed by the Investment Commission of MOEA
The Company	$ 2,885,586	$ 2,885,586	$ 11,790,743

B. Significant transactions, either directly or indirectly through a third area, with investee companies in the P.R.C.: None.

14. SEGMENT INFORMATION

(1) General information

The Group engages mainly in the assembly and testing of semiconductors, memory modules and investing. In accordance with IFRS 8 "Operating Segments", the Group's segments include Testing, Assembly, Testing and Assembly for Liquid Crystal Display and other Display Panel Driver Semiconductors ("LCDD"), Bumping and others as the five reportable segments.

(2) Measurement of segment information

The Group's reportable segments are strategic business units which provide different products and services. The accounting policies adopted by the operating segments are the same as the accounting policies described in Note 4.

(3) Information about segment profit or loss

The segment information provided to the chief operating decision maker for the reportable segments is as follows:

	2019						
	Testing	Assembly	LCDD	Bumping	Others	Elimination	Total
Revenue:							
External customers	$4,257,800	$ 5,148,877	$ 6,922,205	$ 4,008,999	$ -	$ -	$ 20,337,881
Inter-segment	-	-	-	-	32,808	(32,808)	-
Total revenue	$4,257,800	$ 5,148,877	$ 6,922,205	$ 4,008,999	$ 32,808	($ 32,808)	$ 20,337,881
Operating profit (loss)	$ 709,142	($ 227,096)	$ 1,740,720	$ 232,404	$ 1,931	$ 18	$ 2,457,119
Depreciation expenses	($ 802,740)	($ 521,311)	($1,796,951)	($ 604,553)	($ 6,359)	$ -	($ 3,731,914)
Share of profit of associates	$ -	$ -	$ -	$ -	($ 370,351)	$ 215,425	($ 154,926)
Interest income	$ -	$ -	$ -	$ -	$ 64,368	$ -	$ 64,368
Interest expense	$ -	$ -	$ -	$ -	($ 171,075)	$ -	($ 171,075)
Expenditure for segment assets	$ 764,105	$ 548,063	$ 3,077,806	$ 506,635	$ 47	$ -	$ 4,896,656

	2018						
	Testing	Assembly	LCDD	Bumping	Others	Elimination	Total
Revenue:							
External customers	$4,790,097	$ 4,679,676	$ 5,694,720	$ 3,315,534	$ -	$ -	$ 18,480,027
Inter-segment	-	-	-	-	35,738	(35,738)	-
Total revenue	$4,790,097	$ 4,679,676	$ 5,694,720	$ 3,315,534	$ 35,738	($ 35,738)	$ 18,480,027
Operating profit (loss)	$1,306,742	($ 207,700)	$ 1,226,755	($ 202,497)	($ 23,433)	($ 146)	$ 2,099,721
Depreciation expenses	($ 769,660)	($ 578,205)	($1,400,784)	($ 627,412)	($ 518)	$ -	($ 3,376,579)
Share of profit of associates	$ -	$ -	$ -	$ -	($ 668,377)	$ 368,276	($ 300,101)
Interest income	$ -	$ -	$ -	$ -	$ 49,971	$ -	$ 49,971
Interest expense	$ -	$ -	$ -	$ -	($ 152,416)	$ -	($ 152,416)
Expenditure for segment assets	$1,563,919	$ 321,976	$ 2,732,141	$ 327,251	$ 283	$ -	$ 4,945,570

The application of IFRS 16 had the following impact on the segment information in 2019:

	Testing	Assembly	LCDD	Bumping	Others	Elimination	Total
Depreciation expenses increased	$ 7,631	$ 6,035	$ 10,703	$ 1,137	$ 5,808	$ -	$ 31,314
Interest expense increased	$ 4,207	$ 3,260	$ 5,862	$ 492	$ 319	$ -	$ 14,140
Segment assets increased	$ 207,593	$ 160,864	$ 289,259	$ 24,188	$ 5,164	$ -	$ 687,068
Segment liabilities increased	$ 209,328	$ 162,208	$ 291,677	$ 24,390	$ 5,348	$ -	$ 692,951

(4) Reconciliation for segment income (loss)

Revenue from external customers and segment income (loss) reported to the chief operating decision maker are measured using the same method as for revenue and operating profit in the financial statements. Thus, no reconciliation is needed.

(5) Information on products and services

	2019		2018	
	Revenue	%	Revenue	%
Testing	$ 4,257,800	21	$ 4,790,097	26
Assembly	5,148,877	25	4,679,676	25
LCDD	6,922,205	34	5,694,720	31
Bumping	4,008,999	20	3,315,534	18
	$ 20,337,881	100	$ 18,480,027	100

(6) Geographical information

	2019		2018	
	Revenue	Non-current assets	Revenue	Non-current assets
Taiwan	$ 15,875,027	$ 18,727,979	$ 14,751,766	$ 16,936,724
Japan	1,905,032	-	1,825,479	-
Singapore	1,333,114	-	1,143,661	-
P.R.C.	789,496	-	163,831	-
Others	435,212	5,659	595,290	1,851
	$ 20,337,881	$ 18,733,638	$ 18,480,027	$ 16,938,575

(7) Major customer information

The information on the major customers which constituted more than 10% of the Group’s total revenue for the years ended December 31, 2019 and 2018 is as follows:

	2019		2018	
Company name	Amount	%	Amount	%
Customer A	$ 4,756,755	23	$ 3,794,991	21
Customer K	2,419,612	12	2,637,053	14
Customer C	2,048,260	10	1,957,467	11
Customer X	1,977,427	10	1,328,752	7

V. Parent Company Only Financial Report of the Most Recent Year

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Shareholders of ChipMOS TECHNOLOGIES INC.

Opinion

We have audited the accompanying parent company only balance sheets of ChipMOS TECHNOLOGIES INC. (the "Company") as of December 31, 2019 and 2018, 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 report of other independent accountants, as described in the *Other matters* section of our report, the accompanying parent company only financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and its financial performance and its cash flows for the years then ended in accordance with the "Regulations Governing the Preparations 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 this Code. Based on our audits and the report of 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 judgment, 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.

Key audit matters for the Company's parent company only financial statements of the year ended December 31, 2019 are stated as follows:

Measuring progress towards complete satisfaction of performance obligation

Description

Please refer to Note 4(26) to the parent company only financial statements for the accounting policies on revenue recognition; Note 5(2) for uncertainty of accounting estimate and assumptions of revenue recognition; and Note 6(20) for details of the revenue.

The Company's revenue is primarily generated from the assembly and testing services of high-integration and high-precision integrated circuits based on customer's specification, and is recognized based on measuring progress towards complete satisfaction of performance obligation during the service period. For assembly services, services for Liquid Crystal Display and other Flat-Panel Display Driver Semiconductors and Bumping, the Company recognizes revenue on the basis of input costs to the satisfaction of performance obligation relative to the total expected input costs to the satisfaction of that performance obligation. Since the total expected input costs is uncertain and subject to management's significant estimation, measuring progress towards complete satisfaction of performance obligation was identified as a key audit matter.

How our audit addressed the matter

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

1. Interviewed with management to understand and evaluate the accounting policies on revenue recognition, and validated the design and operating effectiveness of respective internal controls.
2. Validated management's assessment on progress completion of performance obligation and tested the logics applied on calculating the progress completion of performance obligation.
3. Verified the related documents provided by management, validated management report in relation to the calculation on progress completion of performance obligation, and tested the accuracy of revenue recognition.

Provisions for deficiency compensation

Description

Please refer to Note 4(20) to the parent company only financial statements for the accounting policies on provisions; Note 5(1) for uncertainty of accounting estimate and assumptions of provisions; and Note 6(10) for details of the provisions for deficiency compensation.

The Company is primarily engaged in assembly and testing services for high-integration and high-precision integrated circuits. In case of deficiencies in the assembling and testing services provided, the Company has to clarify the reason for such deficiencies and attribute responsibilities, and determine whether to provide related provisions. Since the timing and amounts of deficiency compensation are uncertain, and subject to management's significant judgment, the provision for deficiency compensation was identified as a key audit matter.

How our audit addressed the matter

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

1. Interviewed with management and verified the internal process on estimating provisions for deficiency compensation, and the consistency of process application during the financial reporting periods.
2. Validated related documents and evidence provided by management, sampled and tested the reasonableness of providing and reversing provisions for deficiency compensation during the current period.
3. Reviewed significant payments made subsequent to the reporting period and validated the reasonableness of provisions for deficiency compensation.

Other matters

The report of the other independent accountants

We did not audit the financial statements of a certain investee company accounted for using equity method. Those financial statements were audited by the 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 investee disclosed in Note 13 was based solely on the reports of the other independent accountants. Investments in this investee company amounted to NT$249,793 thousand and NT$406,792 thousand, respectively, representing 0.7% and 1.2% of total assets as of December 31, 2019 and 2018, and total net comprehensive income including the share of profit and other comprehensive income of associate accounted for using equity method amounted to NT$69,570 thousand and NT$39,245 thousand, representing 2.8% and 3.7% of total comprehensive income for the years then ended, respectively.

Responsibilities of management and those charged with governance for the 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 Preparations of Financial Reports by Securities Issuers", and for such internal controls as management determines are 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 judgment and maintain professional skepticism throughout the audit. We also:

1. Identify and assess the risks of material misstatement of the parent company only financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.

2. Obtain an understanding of internal controls 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 controls.
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 footnote 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's audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding the planned scope and timing of the audit, and significant audit findings including any significant deficiencies in internal controls 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.

/s/ Chun-Yuan Hsiao	/s/ Chih-Cheng Hsieh
Chun-Yuan Hsiao	Chih-Cheng Hsieh

For and on behalf of PricewaterhouseCoopers, Taiwan

March 10, 2020

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.

ChipMOS TECHNOLOGIES INC.
PARENT COMPANY ONLY BALANCE SHEETS
(Expressed in thousands of New Taiwan dollars)

	Assets	Notes	December 31, 2019 Amount	%	December 31, 2018 Amount	%
	Current assets					
1100	Cash and cash equivalents	6(1)	$ 4,619,365	14	$ 4,589,280	14
1140	Current contract assets	6(20)	377,869	1	299,835	1
1150	Notes receivable, net		765	-	1,595	-
1170	Accounts receivable, net	6(2)	4,452,904	13	4,745,693	14
1180	Accounts receivable－related parties, net		1,045	-	140	-
1200	Other receivables		89,652	-	62,317	-
1210	Other receivables－related parties		2,948	-	3,131	-
1220	Current tax assets		138,941	1	138,941	1
130X	Inventories	6(3)	1,767,642	5	1,778,835	5
1410	Prepayments		57,502	-	44,592	-
11XX	**Total current assets**		11,508,633	34	11,664,359	35
	Non-current assets					
1517	Non-current financial assets at fair value through other comprehensive income	6(4)	121,808	-	174,357	1
1535	Non-current financial assets at amortized cost	6(5) and 8	68,450	-	68,388	-
1550	Investments accounted for using equity method	6(6)	3,660,575	11	4,133,873	12
1600	Property, plant and equipment	6(7) and 8	17,978,949	52	16,818,613	51
1755	Right-of-use assets	6(8)	681,904	2	-	-
1840	Deferred tax assets	6(27)	194,552	1	226,716	1
1920	Refundable deposits		20,322	-	21,162	-
1990	Other non-current assets		67,126	-	28,560	-
15XX	**Total non-current assets**		22,793,686	66	21,471,669	65
1XXX	**Total assets**		$ 34,302,319	100	$ 33,136,028	100

(Continued)

ChipMOS TECHNOLOGIES INC.
PARENT COMPANY ONLY BALANCE SHEETS
(Expressed in thousands of New Taiwan dollars)

	Liabilities and Equity	Notes	December 31, 2019 Amount	%	December 31, 2018 Amount	%
	Liabilities					
	Current liabilities					
2130	Current contract liabilities	6(20)	$ 1,231	-	$ 1,432	-
2170	Accounts payable	6(9)	819,548	2	637,271	2
2180	Accounts payable－related parties		-	-	347	-
2200	Other payables		2,977,036	9	3,195,217	10
2220	Other payables－related parties		2,628	-	2,528	-
2230	Current tax liabilities		268,825	1	496,704	1
2250	Current provisions	6(10)	1,998	-	29,352	-
2280	Current lease liabilities	6(31)	19,218	-	-	-
2310	Receipts in advance		988	-	1,013	-
2320	Long-terms bank loans, current portion	6(12)(31) and 8	748,419	2	747,422	2
2355	Long-term lease obligations payable, current portion	6(13)	-	-	17,792	-
2365	Current refund liabilities	6(11)	26,000	-	32,627	-
2399	Other current liabilities		32,242	-	30,800	-
21XX	**Total current liabilities**		4,898,133	14	5,192,505	15
	Non-current liabilities					
2540	Long-terms bank loans	6(12)(31) and 8	8,293,226	24	9,042,096	27
2570	Deferred tax liabilities	6(27)	305,635	1	308,759	1
2580	Non-Current lease liabilities	6(31)	668,384	2	-	-
2640	Net defined benefit liability, non-current	6(14)	480,107	2	520,765	2
2645	Guarantee deposits	6(31)	1,095	-	1,092	-
2670	Other non-current liabilities		4,500	-	-	-
25XX	**Total non-current liabilities**		9,752,947	29	9,872,712	30
2XXX	**Total liabilities**		14,651,080	43	15,065,217	45
	Equity					
	Capital stock	6(16)				
3110	Capital stock－common stock		7,272,401	21	7,528,577	23
	Capital surplus	6(17)				
3200	Capital surplus		6,059,651	17	6,280,482	19
	Retained earnings	6(18)				
3310	Legal reserve		1,579,478	5	1,469,170	5
3350	Unappropriated retained earnings		4,759,511	14	3,635,372	11
	Other equity interest	6(19)				
3400	Other equity interest		(19,802)	-	119,713	-
3500	**Treasury stock**	6(16)	-	-	(962,503)	(3)
3XXX	**Total equity**		19,651,239	57	18,070,811	55
	Significant contingent liabilities and unrecognized contract commitments	9				
	Significant events after the reporting period	11				
3X2X	**Total liabilities and equity**		$ 34,302,319	100	$ 33,136,028	100

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

ChipMOS TECHNOLOGIES INC.
PARENT COMPANY ONLY STATEMENTS OF COMPREHENSIVE INCOME
(Expressed in thousands of New Taiwan dollars, except earnings per share)

			Years ended December 31,			
			2019		2018	
	Items	Notes	Amount	%	Amount	%
4000	**Revenue**	6(20)	$ 20,337,881	100	$ 18,480,027	100
5000	**Cost of revenue**	6(3)(25)(26)	(16,411,742)	(81)	(15,050,032)	(81)
5900	**Gross profit**		3,926,139	19	3,429,995	19
	Operating expenses	6(25)(26)				
6100	Sales and marketing expenses		(88,902)	(1)	(89,043)	(1)
6200	General and administrative expenses		(467,364)	(2)	(425,897)	(2)
6300	Research and development expenses		(1,007,631)	(5)	(939,269)	(5)
6000	**Total operating expenses**		(1,563,897)	(8)	(1,454,209)	(8)
6500	**Other income (expenses), net**	6(21)	92,928	1	147,514	1
6900	**Operating profit**		2,455,170	12	2,123,300	12
	Non-operating income (expenses)					
7010	Other income	6(22)	70,226	1	56,481	-
7020	Other gains and losses	6(23)	834,423	4	117,982	1
7050	Finance costs	6(24)	(179,942)	(1)	(190,248)	(1)
7070	Share of profit (loss) of subsidiaries, associates and joint ventures accounted for using equity method	6(6)	(151,587)	(1)	(326,220)	(2)
7000	**Total non-operating income (expenses)**		573,120	3	(342,005)	(2)
7900	**Profit before income tax**		3,028,290	15	1,781,295	10
7950	Income tax expense	6(27)	(444,129)	(2)	(678,220)	(4)
8200	**Profit for the year**		$ 2,584,161	13	$ 1,103,075	6

(Continued)

ChipMOS TECHNOLOGIES INC.
PARENT COMPANY ONLY STATEMENTS OF COMPREHENSIVE INCOME
(Expressed in thousands of New Taiwan dollars, except earnings per share)

	Items	Notes	2019 Amount	2019 %	2018 Amount	2018 %
	Other comprehensive income (loss)					
8311	Profit (loss) on remeasurements of defined benefit plans	6(14)	$ 20,916	-	($ 59,961)	-
8316	Unrealized (loss) gain on valuation of equity instruments at fair value through other comprehensive income	6(4)	(52,549)	-	85,022	-
8330	Share of other comprehensive income (loss) of subsidiaries, associates and joint ventures accounted for using equity method that will not be reclassified to profit or loss		5,732	-	(2,687)	-
8349	Income tax effect on components that will not be reclassified to profit or loss	6(27)	6,327	-	(4,126)	-
8310	**Components of other comprehensive (loss) income that will not be reclassified to profit or loss**		(19,574)	-	18,248	-
8361	Exchange differences on translation of foreign operations	6(19)	(104,198)	(1)	(51,077)	-
8360	**Components of other comprehensive loss that will be reclassified to profit or loss**		(104,198)	(1)	(51,077)	-
8300	**Other comprehensive loss, net of income tax**		($ 123,772)	(1)	($ 32,829)	-
8500	**Total comprehensive income for the year**		$ 2,460,389	12	$ 1,070,246	6
9750	**Earnings per share-basic**	6(28)	$ 3.55		$ 1.37	
9850	**Earnings per share-diluted**	6(28)	$ 3.51		$ 1.36	

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

ChipMOS TECHNOLOGIES INC.
PARENT COMPANY ONLY STATEMENTS OF CHANGES IN EQUITY
(Expressed in thousands of New Taiwan dollars)

				Retained earnings		Other equity interest					
	Notes	Capital stock - common stock	Capital surplus	Legal reserve	Unappropriated retained earnings	Financial statements translation differences of foreign operations	Unrealized gain (loss) on valuation of financial assets at fair value through other comprehensive income	Unrealized gain (loss) on valuation of available-for-sale financial assets	Unearned employee awards	Treasury stock	Total equity
Year 2018											
Balance at January 1, 2018		$ 8,862,971	$ 6,288,377	$ 1,166,517	$ 3,071,424	$ 65,593	$ -	$ 678	($ 54,570)	($ 1,007,654)	$ 18,393,336
Effects on initial application of IFRS 9 and IFRS 15		-	-	-	65,050	-	42,843	(678)	-	-	107,215
Adjusted balance at January 1, 2018		8,862,971	6,288,377	1,166,517	3,136,474	65,593	42,843	-	(54,570)	(1,007,654)	18,500,551
Profit for the year		-	-	-	1,103,075	-	-	-	-	-	1,103,075
Other comprehensive (loss) income	6(19)	-	-	-	(45,807)	(51,077)	64,055	-	(-)	-	(32,829)
Total comprehensive income (loss) for the year		-	-	-	1,057,268	(51,077)	64,055	-	(-)	-	1,070,246
Appropriation of prior year's earnings	6(18)										
Legal reserve		-	-	302,653	(302,653)	-	-	-	-	-	-
Cash dividends		-	-	-	(256,806)	-	-	-	-	-	(256,806)
Restricted shares	6(15)	(4,948)	(7,967)	-	1,089	-	-	-	52,869	-	41,043
Capital reduction	6(16)	(1,329,446)	72	-	-	-	-	-	-	45,151	(1,284,223)
Balance at December 31, 2018		$ 7,528,577	$ 6,280,482	$ 1,469,170	$ 3,635,372	$ 14,516	$ 106,898	$ -	($ 1,701)	($ 962,503)	$ 18,070,811
Year 2019											
Balance at January 1, 2019		$ 7,528,577	$ 6,280,482	$ 1,469,170	$ 3,635,372	$ 14,516	$ 106,898	$ -	($ 1,701)	($ 962,503)	$ 18,070,811
Profit for the year		-	-	-	2,584,161	-	-	-	-	-	2,584,161
Other comprehensive income (loss)	6(19)	-	-	-	17,372	(104,198)	(36,946)	-	-	-	(123,772)
Total comprehensive income (loss) for the year		-	-	-	2,601,533	(104,198)	(36,946)	-	-	-	2,460,389
Appropriation of prior year's earnings	6(18)										
Legal reserve		-	-	110,308	(110,308)	-	-	-	-	-	-
Cash dividends		-	-	-	(872,718)	-	-	-	-	-	(872,718)
Restricted shares	6(15)	(477)	(412)	-	10	-	-	-	1,701	-	822
Cancellation of treasury stock	6(16)	(255,699)	(212,354)	-	(494,450)	-	-	-	-	962,503	-
Disposal of investment accounted for using equity method	6(17)	-	(8,065)	-	72	-	(72)	-	-	-	(8,065)
Balance at December 31, 2019		$ 7,272,401	$ 6,059,651	$ 1,579,478	$ 4,759,511	($ 89,682)	$ 69,880	$ -	$ -	$ -	$ 19,651,239

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

ChipMOS TECHNOLOGIES INC.
PARENT COMPANY ONLY STATEMENTS OF CASH FLOWS
(Expressed in thousands of New Taiwan dollars)

	Notes	Years ended December 31, 2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES			
Profit before income tax		$ 3,028,290	$ 1,781,295
Adjustments to reconcile profit (loss)			
Depreciation expenses	6(7)(8)(25)	3,725,555	3,376,061
(Reversal of) expected credit losses		(806)	348
Interest expense	6(24)	170,755	152,416
Interest income	6(22)	(59,467)	(48,091)
Dividend income	6(22)	(585)	(571)
Share-based payments	6(15)(26)	822	41,043
Share of loss of subsidiaries and associates accounted for using equity method	6(6)	151,587	326,220
Gain on valuation of financial assets at fair value through profit or loss	6(23)	(1,750)	(1,447)
Gain on disposal of property, plant and equipment	6(21)	(20,271)	(14,274)
Impairment loss on property, plant and equipment	6(7)(21)	9,938	-
Gain on disposal of investment accounted for using equity method	6(6)(23)	(981,675)	-
Deferred income		(12,279)	(42,857)
Changes in operating assets and liabilities			
Changes in operating assets			
Financial assets at fair value through profit or loss		1,750	1,447
Current contract assets		(78,013)	(44,858)
Notes receivable		830	434
Accounts receivable		293,579	(734,129)
Accounts receivable－related parties		(905)	(129)
Other receivables		(8,079)	3,337
Other receivables－related parties		12,437	16,317
Inventories		11,193	(58,101)
Prepayments		(4,333)	46,781
Other non-current assets		6,914	6,914
Changes in operating liabilities			
Current contract liabilities		(201)	280
Accounts payable		182,277	(50,689)
Accounts payable－related parties		(347)	121
Other payables		330,886	(235,417)
Other payables－related parties		100	55
Current provisions		(27,354)	(27,803)
Current refund liabilities		(6,627)	(37,529)
Other current liabilities		1,442	(475)
Net defined benefit liability, non-current		(19,742)	(17,722)
Cash generated from operations		6,705,921	4,438,977
Interest received		61,507	47,430
Dividends received		20,585	6,184
Interest paid		(170,830)	(154,307)
Income tax paid		(636,642)	(116,881)
Net cash generated from operating activities		5,980,541	4,221,403

(Continued)

ChipMOS TECHNOLOGIES INC.
PARENT COMPANY ONLY STATEMENTS OF CASH FLOWS
(Expressed in thousands of New Taiwan dollars)

	Notes	Years ended December 31, 2019	2018
CASH FLOWS FROM INVESTING ACTIVITIES			
(Increase) decrease in financial assets at amortized cost		($ 62)	$ 1,853
Acquisition of investments accounted for using equity method	6(6) and 7	-	(89,280)
Proceeds from disposal of investment accounted for using equity method	6(6)	1,180,179	-
Acquisition of property, plant and equipment	6(30)	(5,440,574)	(4,153,915)
Proceeds from disposal of property, plant and equipment		21,434	18,160
Decrease (increase) in refundable deposits		840	(637)
Increase in other non-current assets		(45,480)	-
Increase in other non-current liabilities		4,500	-
Net cash used in investing activities		(4,279,163)	(4,223,819)
CASH FLOWS FROM FINANCING ACTIVITIES	6(31)		
Proceeds from short-term bank loans		834,955	1,053,202
Payments on short-term bank loans		(834,955)	(2,022,555)
Payments on lease liabilities		(42,128)	-
Proceeds from long-term bank loans		-	12,663,550
Payments on long-term bank loans		(756,450)	(12,553,300)
Increase (decrease) in guarantee deposits		3	(279)
Cash dividend paid	6(18)	(872,718)	(256,806)
Capital reduction		-	(1,284,223)
Net cash used in financing activities		(1,671,293)	(2,400,411)
Net increase (decrease) in cash and cash equivalents		30,085	(2,402,827)
Cash and cash equivalents at beginning of year		4,589,280	6,992,107
Cash and cash equivalents at end of year		$ 4,619,365	$ 4,589,280

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

ChipMOS TECHNOLOGIES INC.
NOTES TO THE PARENT COMPANY ONLY FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2019 AND 2018
(Expressed in thousands of New Taiwan dollars, except as otherwise indicated)

1. HISTORY AND ORGANIZATION

ChipMOS TECHNOLOGIES INC. (the "Company") was incorporated on July 28, 1997. The Company is primarily engaged in the research, development, manufacturing and sale of high-integration and high-precision integrated circuits and related assembly and testing services. On April 11, 2014, the Company's shares were listed on the Taiwan Stock Exchange. On November 1, 2016, the Company's American Depositary Shares ("ADSs") were listed on the NASDAQ Global Select Market.

2. THE AUTHORIZATION OF THE PARENT COMPANY ONLY FINANCIAL STATEMENTS

The accompanying parent company only financial statements were authorized for issuance by the Board of Directors on March 10, 2020.

3. APPLICATION OF NEW AND AMENDED INTERNATIONAL FINANCIAL REPORTING STANDARDS AND INTERPRETATIONS

(1) Effect of the adoption of new or amended International Financial Reporting Standards ("IFRS") as endorsed by the Financial Supervisory Commission ("FSC")

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

New Standards, Interpretations and Amendments	Effective date issued by International Accounting Standard Board ("IASB")
Amendments to IFRS 9 "Prepayment Features with Negative Compensation"	January 1, 2019
IFRS 16 "Leases"	January 1, 2019
Amendments to International Accounting Standards ("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
International Financial Reporting Interpretations Committee ("IFRIC") 23 "Uncertainty Over Income Tax Treatments"	January 1, 2019
Annual Improvements to IFRSs 2015－2017 Cycle	January 1, 2019

B. Except for the following, the above standards and interpretations have no significant impact on the Company's financial position and financial performance based on the Company's assessment.

IFRS 16 "Leases"

(a) IFRS 16 "Leases" ("IFRS 16"), supersedes IAS 17 "Leases" ("IAS 17") and the related interpretations issued by the Standing Interpretation Committee. The standard requires lessees to recognize 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.

(b) The Company has elected to apply IFRS 16 by not restating the comparative information (referred herein as the "modified retrospective approach") when applying IFRS, IAS, IFRIC interpretations, and SIC interpretations effective in 2019 as endorsed by FSC ("IFRSs"). IFRSs effective in 2019 as endorsed by the FSC. Accordingly, the Company increased right-of-use assets and lease liabilities by $887,325 and $873,213, respectively, and decreased leased assets and lease obligations payable by $31,904 and $17,792, respectively.

(c) The Company has adopted the following practical expedients permitted by the standard at the date of initial application of IFRS 16:

i. Reassessment as to whether a contract is, or contains, a lease is not required, instead, the application of IFRS 16 depends on whether or not the contracts were previously identified as leases applying IAS 17 and IFRIC 4 "Determining whether an Arrangement contains a Lease".

ii. The use of a single discount rate to a portfolio of leases with reasonably similar characteristics.

iii. The accounting for operating leases whose period will end before December 31, 2019 as short-term leases and accordingly, rent expense of $27,972 was recognized for the year ended 2019.

(d) The Company calculated the present value of lease liabilities by using the incremental borrowing interest rate, ranging from 1.7895% to 2.0000%.

(e) The reconciliation between operating lease commitments for the remaining lease payments under IAS 17 and lease liabilities recognized as of January 1, 2019, measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate is as follows:

Operating lease commitments disclosed by applying IAS 17 as of December 31, 2018	$ 308,807
Add: Lease payable recognized under finance lease by applying IAS 17 as of December 31, 2018	17,792
Less: Short-term leases	(27,972)
Add: Adjustments as a result of a different treatment of extension and termination options	874,298
Total lease contracts amount recognized as lease liabilities by applying IFRS 16 on January 1, 2019	$ 1,172,925
Incremental borrowing interest rate at the date of initial application	1.7895%~2.0000%
Lease liabilities recognized as of January 1, 2019 by applying IFRS 16	$ 873,213

(2) Effect of new, revised or amended IFRSs endorsed by the FSC that has not been adopted

A. New standards, interpretations and amendments endorsed by the FSC effective from 2020 are as follows:

New Standards, Interpretations and Amendments	Effective date issued by IASB
Amendments to IAS 1 and IAS 8 "Disclosure Initiative－Definition of Material"	January 1, 2020
Amendments to IFRS 3 "Definition of a Business"	January 1, 2020
Amendments to IFRS 9, IAS 39 and IFRS 7, "Interest Rate Benchmark Reform"	January 1, 2020

B. Based on the Company's assessment, the above standards and interpretations have no significant impact on the Company's financial position and financial performance.

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

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

New Standards, Interpretations and Amendments	Effective date issued by IASB
Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets between an Investor and its Associate or Joint Venture"	To be determined by IASB
IFRS 17 "Insurance Contracts"	January 1, 2021
Amendments to IAS 1, "Classification of Liabilities as Current or Non-current"	January 1, 2022

B. Based on the Company's assessment, the above standards and interpretations have no significant impact on the Company's financial position and financial performance.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The significant accounting policies applied in the preparation of these accompanying parent company only financial statements are set out below. These policies have been consistently applied during the reported periods, unless otherwise stated.

(1) Statement of compliance

The parent company only financial statements of the Company have been prepared in accordance with "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 at fair value through profit or loss (including derivative instruments).

(b) Financial assets at fair value through other comprehensive income.

(c) Defined benefit liabilities were recognized based on the net amount of pension fund assets less the present value of benefit obligation.

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

(3) Foreign currency translation

Items included in the financial statements are measured using the currency of the primary economic environment in which the Company operates (the "functional currency"). The parent company only financial statements are presented in New Taiwan dollars (NTD), which is the Company's functional currency.

A. Foreign currency transactions and balances

(a) Foreign currency transactions are translated into the functional currency using the exchange rates on the trade date or measurement date. Therefore, foreign exchange differences resulting from the settlement of such transactions are recognized 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 are recognized in profit or loss on the balance sheet date.

(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 exchange differences are recognized 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 exchange differences are recognized 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 initial dates of the transactions.

(d) All foreign exchange differences are presented in the statement of comprehensive income under "Other gains and losses" by the nature of transactions.

B. Translation of foreign operations

The operating results and financial position of all the group entities, associates that have different functional currency and presentation currency are translated into the presentation currency as follows:

(a) Assets and liabilities for each balance sheet are translated at the exchange rates prevailing at the balance sheet date;

(b) Income and expenses for each statement of comprehensive income are translated at average exchange rates of that period; and

(c) All exchange differences are recognized in other comprehensive income.

(4) Classification of current and non-current assets and liabilities

A. Assets that meet one of the following criteria are classified as current assets:

(a) Assets arising from operating activities that are expected to be realized, 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 realized within 12 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 pay off liabilities more than 12 months after the balance sheet date.

All assets that do not meet the above criteria are classified as non-current assets.

B. Liabilities that meet one of the following criteria are classified as 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 12 months from the balance sheet date;

(d) Liabilities for which the repayment date cannot be unconditionally extended to more than 12 months after the balance sheet date. Liabilities bearing terms that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

All liabilities that do not meet the above criteria are classified as non-current liabilities.

(5) Cash equivalents

Cash equivalents refer to short-term, highly liquid investments that are readily convertible to known amounts of cash and are subject to an insignificant risk of changes in value (including time deposits with less than three months contract period). Time deposits that meet the above definition and are held for the purpose of meeting short-term cash commitments in operations are classified as cash equivalents.

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

A. Financial assets at fair value through profit or loss are financial assets that are not measured at amortized cost or fair value through other comprehensive income.

B. On a regular way purchase or sale basis, financial assets at fair value through profit or loss are recognized and derecognized using settlement date accounting.

C. At initial recognition, the Company measures the financial assets at fair value and recognizes the transaction costs in profit or loss. The Company subsequently measures the financial assets at fair value, and recognizes the gains or losses in profit or loss.

D. The Company recognizes the dividend income when the right to receive such payment is confirmed, inflow of the future economic benefits associated with the dividend is probable to the Company and the amount of the dividend can be measured reliably.

E. As of December 31, 2019 and 2018, there were no financial assets at fair value through profit or loss.

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

A. Financial assets at fair value through other comprehensive income comprise equity instruments which are not held for trading, and for which the Company has made an irrevocable election at initial recognition to recognize changes in fair value in other comprehensive income.

B. On a regular way purchase or sale basis, financial assets at fair value through other comprehensive income are recognized and derecognized using settlement 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 instruments that were recognized 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 recognized as income when the right to receive such payment is confirmed, inflow of the future economic benefits associated with the dividend is probable to the Company and the amount of the dividend can be measured reliably.

(8) Financial assets at amortized cost

A. Financial assets at amortized 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. The Company's bank 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 and notes receivable

A. Accounts and notes 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 financial assets at amortized cost, at each reporting date, the Company recognizes 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 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 or contract assets that do not contain a significant financing component, the Company recognizes the impairment provision for lifetime expected credit losses.

(11) Derecognition of financial assets

The Company derecognizes a financial asset when the contractual rights to receive the cash flows from the financial asset have expired.

(12) Inventories

Inventories are initially recorded at cost. Cost is determined on a weighted-average cost basis. At the end of reporting period, the differences were allocated to inventories and cost of revenue based on an appropriate rate. Allocation of fixed production overheads is based on the normal operating capacity of the production facilities. Costs associated with underutilized capacity are expensed in the period that the cost occurs.

Inventories are valued at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. The item by item approach is used in raw materials. The amount of any write-down of inventories to net realizable value and all losses of inventories are recognized as an expense in the period the write-down or loss occurs.

(13) Investments accounted for using equity method – subsidiaries and 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. Unrealized gains or losses resulting from inter-company transactions with subsidiaries are eliminated. Necessary adjustments are made to the accounting policies of subsidiaries, to be consistent with the accounting policies of the Company.

C. The Company's share of its subsidiaries' post-acquisition profits or losses is recognized in profit or loss, and its share of post-acquisition movements in other comprehensive income is recognized 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 its share in the subsidiary's loss proportionately.

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 owner. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity.

E. 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 recognized at cost.

F. The Company's share of its associates' post-acquisition profits or losses is recognized in profit or loss, and its share of post-acquisition movements in other comprehensive income is recognized in other comprehensive income. When the Company's share of losses in an associate equals or exceeds its interests in the associate, including any other unsecured receivables, the Company does not recognize further losses, unless it has incurred legal or constructive obligations or made payments on behalf of the associate.

G. When changes in an associate's equity that are not recognized in profit or loss or other comprehensive income of the associate and such changes not affecting the Company's ownership percentage of the associate, the Company recognizes the Company's share of change in equity of the associate in "Capital surplus" in proportion to its ownership.

H. Unrealized gains on transactions between the Company and its associates are eliminated to the extent of the Company's interests in the associates. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates have been adjusted where necessary to ensure consistency with the policies adopted by the Company.

I. In the case where an associate issues new shares and the Company does not subscribe or proportionately acquire the new shares, which results in a change in the Company's ownership percentage of the associate while maintaining significant influence on the associate, then "Capital surplus" and "Investments accounted for using equity method" shall be adjusted for the increase or decrease of its share of equity interests. 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 recognized 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.

J. When the Company disposes of its investment in an associate, if it loses significant influence over this associate, the amounts previously recognized 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 still retains significant influence over this associate, then the amounts previously recognized in other comprehensive income in relation to the associate are reclassified to profit or loss proportionately in accordance with the aforementioned approach.

K. According to "Rules Governing the Preparation of Financial Statements by Securities Issuers", profit for the year and other comprehensive income for the year reported in the parent company only financial statements, shall be equal to profit for the year and other comprehensive income attributable to owners of the parent reported in the consolidated financial statements, equity reported in the parent company only financial statements shall be equal to equity attributable to owners of parent reported in the consolidated financial statements.

(14) Property, plant and equipment

A. Property, plant and equipment are initially recorded at cost. Borrowing costs incurred during the construction period are capitalized.

B. Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. All other repairs and maintenance are charged to profit or loss during the financial period in which they are incurred.

C. Land is not depreciated. 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.

D. 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, Change in Accounting Estimates and Errors", from the date of the change. The estimated useful lives of property, plant and equipment are as follows:

Buildings	5 to 51 years
Machinery and equipment	2 to 8 years
Tools	2 to 4 years
Others	2 to 6 years

(15) Leasing arrangements (lessee)－right-of-use assets / lease liabilities

Effective from 2019

A. Leases are recognized as a right-of-use asset and a corresponding lease liability at the date at which the leased asset is available for use by the Company. For short-term leases or leases of low value assets, lease payments are recognized as an expense on a straight-line basis over the lease term.

B. Lease liabilities include the net present value of the remaining lease payments at the commencement date, discounted using the incremental borrowing interest rate.

Lease payments are comprised of the following:

(a) Fixed payments, less any lease incentives receivable;

(b) The exercise price of a purchase option, if the lessee is reasonably certain to exercise that option.

The Company subsequently measures the lease liability at amortized cost using the interest method and recognizes interest expense over the lease term. The lease liability is remeasured and the amount of remeasurement is recognized as an adjustment to the right-of-use asset when there are changes in the lease term or lease payments and such changes do not arise from contract modifications.

C. At the commencement date, the right-of-use asset is stated at the amount of the initial measurement of lease liability. The right-of-use asset is measured subsequently using the cost model and is depreciated from the commencement date to the earlier of the end of the asset's useful life or the end of the lease term. When the lease liability is remeasured, the amount of remeasurement is recognized as an adjustment to the right-of-use asset.

(16) Leased assets / operating leases (lessee)

Prior to 2019

A. Based on the terms of a lease contract, a lease is classified as a finance lease if the Company assumes substantially all the risks and rewards incidental to ownership of the leased asset.

(a) A finance lease is recognized as an asset and a liability at the lease's commencement at the lower of the fair value of the leased asset or the present value of the minimum lease payments.

(b) The minimum lease payments are apportioned between the finance charges and the reduction of the outstanding liability. The finance charges are allocated to each period over the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

(c) Property, plant and equipment held under finance leases are depreciated over their estimated useful lives. If there is no reasonable certainty that the Company will obtain ownership at the end of the lease, the asset shall be depreciated over the shorter of the lease term and its useful life.

B. Payments made under an operating lease (net of any incentives received from the lessor) are recognized in profit or loss on a straight-line basis over the lease term.

(17) Impairment of non-financial assets

The Company 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 recognized 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 amortized historical cost would have been if the impairment had not been recognized.

(18) Loans

Loans comprise long-term and short-term bank loans. Loans are recognized initially at fair value, net of transaction costs incurred. Loans are subsequently stated at amortized cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognized as interest expense in profit or loss over the period of the loans using the effective interest method.

(19) Accounts payable

Accounts payable are liabilities for purchases of raw materials, goods or services. The short-term accounts payable without bearing interest are subsequently measured at initial invoice amount as the effect of discounting is immaterial.

(20) Provisions for deficiency compensation

Provisions are recognized 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. When discounting is used, the increase in the provision arising from the passage of time is recognized as interest expense. Provisions are not recognized for future operating losses.

(21) 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 and should be recognized as expenses when the employees render service.

B. Pensions

(a) Defined contribution plans

For defined contribution plans, the contributions are recognized as pension expenses when they are due on an accrual basis. Prepaid contributions are recognized as an asset to the extent of a cash refund or a reduction in 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 the current period or prior periods. The liability recognized 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 discount rate is determined by using the interest rates of government 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.

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

iii. Past service costs are recognized immediately in profit or loss.

C. Termination benefits

Termination benefits are employee benefits provided in exchange for the termination of employment as a result from either the Company's decision to terminate an employee's employment before the normal retirement date, or an employee's decision to accept an offer of redundancy benefits in exchange for the termination of employment. The Company recognizes an expense as it can no longer withdraw an offer of termination benefits, or it recognizes related restructuring costs, whichever is earlier. Benefits that are expected to be due more than 12 months after balance sheet date shall be discounted to their present value.

D. Employees' compensation and directors' remuneration

Employees' compensation and directors' remuneration are recognized as expenses and liabilities, provided that such recognition is required under legal obligation 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.

(22) Employee share-based payments

Restricted shares

(a) Restricted shares issued to employees are measured at the fair value of the equity instruments granted at the grant date, and are recognized as compensation cost over the vesting period.

(b) For restricted shares where those shares do not restrict distribution of dividends to employees and employees are not required to return the dividends received if they resign during the vesting period, the Company recognizes the fair value of the dividends received by employees who are expected to resign during the vesting period as a compensation cost at the date the dividends were declared.

(c) For restricted shares where employees do not need to pay to acquire those shares, if an employee resigns during the vesting period, the Company will recover and retire those shares at no cost.

(23) Income tax

A. The income tax expense for the period comprises current and deferred tax. Income tax is recognized in profit or loss, except to the extent that it relates to items recognized in other comprehensive income or items recognized directly in equity, in which cases the income tax is recognized 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 income 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 recognized, 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 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 or 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 at the balance sheet date and are expected to apply when the related deferred tax asset is realized or the deferred tax liability is settled.

D. Deferred tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilized. At each balance sheet date, unrecognized and recognized deferred tax assets are reassessed.

E. A deferred tax asset shall be recognized for the carryforward of unused tax credits resulting from equity investments to the extent that it is possible that future taxable profit will be available against which the unused tax credits can be utilized.

F. If a change in tax rate is enacted or substantively enacted, the Company recognizes the effect of the change immediately in the period in which the change occurs. The effect of the change on items recognized outside profit or loss is recognized in other comprehensive income or equity while the effect of the change on items recognized in profit or loss is recognized in profit or loss.

(24) Capital stock

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

B. Where the Company repurchases the Company's shares that have been issued, the consideration paid, including any directly attributable incremental costs (net of income taxes) is deducted from equity attributable to the Company's equity holders. Where such shares are subsequently reissued, the difference between their book value and any consideration received, net of any directly attributable incremental transaction costs and the related income tax effects, is included in equity attributable to the Company's equity holders.

(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. The Company is primarily engaged in the customized assembly and testing services of high-integration and high-precision integrated circuits based on customer's specification demand to create or enhance the product. When providing assembly and testing services, the Company considers:

(a) Customer controls the provided raw materials and the Company receives the instruction from the customer on providing assembly and testing services and subsequent treatments.

(b) The Company provides assembly and testing services to create or enhance an asset which solely provided and controlled by the customer. The Company has no right to transfer the asset for another use.

As the asset ownership belongs to the customer, who bears the significant risk and rewards and rights on the use of the asset, the Company recognizes assembly and testing service revenue based on the progress towards completion of performance obligation during the service period.

B. The progress towards completion on assembly services, services for Liquid Crystal Display and other Flat-Panel Display Driver Semiconductors ("LCDD") and Bumping are measured by the actual input costs relative to estimate total expected input costs. The progress towards completion on testing services is measured by the actual incurred testing volume. The Company believes that aforementioned methods are the most appropriate manner to measure the satisfaction of performance obligation to customers because the input costs incurred to assembly and testing volume completed in testing services are based on customer's specification and not linear over the duration of these services. Customer payment on assembly and testing services is based on predetermined payment schedule. A contract asset is recognized when the Company provides services in excess of customer's payment.

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

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

(1) Critical judgments in applying the Company's accounting policies

Provisions for deficiency compensation

The Company is primarily engaged in the research, development, manufacturing, sale, and assembly and testing of high-integration and high-precision integrated circuits. In any cases where deficiencies in the assembly and testing services arise, the Company has to clarify the reason for deficiencies and attribute of responsibilities. The Company follows the guidance of IAS 37 "Provisions, Contingent Liabilities and Contingent Assets" to determine warranty provisions. Since the timing and amount of these warranties are based on assumptions and estimates it requires management to make critical judgments.

(2) Critical accounting estimates and assumptions

Revenue recognition

A. The Company recognizes revenue from services for assembly, LCDD and Bumping based on the progress towards completion of performance obligation during the service period. The Company estimates total expected input costs based on historical experience and measures the progress towards completion by the actual input costs relative to the total expected input costs.

B. The Company estimates sales refund liabilities for sales allowance based on historical results and other known factors. Provisions for such liabilities are recorded as a deduction to revenues when the sales are recognized. The Company reassesses the reasonableness of estimates of discounts and returns periodically.

6. DETAILS OF SIGNIFICANT ACCOUNTS

(1) Cash and cash equivalents

	December 31, 2019	December 31, 2018
Cash on hand and petty cash	$ 470	$ 470
Checking accounts and demand deposits	830,415	1,343,060
Time deposits	3,788,480	3,245,750
	$ 4,619,365	$ 4,589,280

A. 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.

B. No cash and cash equivalents of the Company were pledged to others.

(2) Accounts receivable

	December 31, 2019	December 31, 2018
Accounts receivable	$ 4,454,255	$ 4,747,834
Less: Loss allowance	(1,351)	(2,141)
	$ 4,452,904	$ 4,745,693

A. The Company's credit term granted to customers is 30~90 days. Receivables do not bear interest. The loss allowance is determined based on the credit quality of customers. Information relating to credit risk is provided in Note 12(2).

B. The aging analysis of accounts receivable based on past due date is as follows:

	December 31, 2019	December 31, 2018
Current	$ 4,440,081	$ 4,595,300
Within 1 month	13,733	18,807
1-2 months	441	131,787
2-3 months	-	1,436
3-4 months	-	180
Over 4 months	-	324
	$ 4,454,255	$ 4,747,834

C. As of December 31, 2019 and 2018, accounts receivable were all from contracts with customers. And as of January 1, 2018, the balance of accounts receivable from contracts with customers was $4,013,705.

D. Without taking into account of any collateral held or other credit enhancements, the amount that best reflects the Company maximum exposure to credit risk in respect of the accounts receivable is the carrying amount at the end of each reporting period.

E. No accounts receivable of the Company were pledged to others.

(3) Inventories

	December 31, 2019		
	Cost	Allowance for impairment losses	Carrying amount
Raw materials	$ 1,831,140	($ 63,498)	$ 1,767,642

	December 31, 2018		
	Cost	Allowance for impairment losses	Carrying amount
Raw materials	$ 1,814,992	($ 36,157)	$ 1,778,835

The cost of inventories recognized as an expense for the year:

	2019	2018
Cost of revenue	$ 16,372,032	$ 15,057,605
Loss on abandonment	12,369	5,497
Allowance for (reversal of) inventory valuation and obsolescence loss	27,341	(13,070)
	$ 16,411,742	$ 15,050,032

A. Reversal of allowance for inventory valuation and obsolescence loss was recognized due to the change in net realizable market value.

B. No inventories of the Company were pledged to others.

(4) Non-current financial assets at fair value through other comprehensive income

	December 31, 2019	December 31, 2018
Designation of equity instruments		
Foreign unlisted stocks	$ 38,534	$ 38,534
Valuation adjustment	83,274	135,823
	$ 121,808	$ 174,357

A. Based on the Company's business model, the foreign unlisted stocks held for strategic investments were elected to classify as "Financial assets at fair value through other comprehensive income". As of December 31, 2019 and 2018, the fair value of aforementioned investments is the carrying amount at the end of each reporting period.

B. Amounts recognized in other comprehensive income in relation to the financial assets at fair value through other comprehensive income are listed below:

	2019	2018
Financial assets at fair value through other comprehensive income		
Foreign unlisted stocks	($ 52,549)	$ 85,022

C. No financial assets at fair value through other comprehensive income were pledged to others.

(5) Financial assets at amortized cost

	December 31, 2019	December 31, 2018
Non-current:		
Restricted bank deposits	$ 68,450	$ 68,388

A. Amounts recognized in profit or loss in relation to financial assets at amortized cost are listed below:

	2019	2018
Interest income	$ 93	$ 80

B. Without taking into account any collateral held or other credit enhancements, the maximum exposure to credit risk in respect of the amount that best represents the financial assets at amortized cost held by the Company was the carrying amount at the end of each reporting period.

C. Details of the financial assets at amortized cost pledged to others as collateral are provided in Note 8.

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

(6) Investments accounted for using equity method

	2019	2018
January 1	$ 4,133,873	$ 4,427,157
Acquisition	-	89,280
Disposal	(206,569)	-
Share of profit or loss	(151,587)	(326,220)
Earnings distribution	(20,000)	(5,730)
Elimination of intercompany transactions	3,324	2,657
Effects on initial application of IFRS 9 from subsidiaries	-	493
Change in other equity interest - exchange differences from translation of foreign operations	(104,198)	(51,077)
Share of other comprehensive income	5,732	(2,687)
December 31	$ 3,660,575	$ 4,133,873

Subsidiaries	December 31, 2019	December 31, 2018
ChipMOS TECHNOLOGIES (BVI) LTD. (“ChipMOS BVI”)	$ 3,175,040	$ 3,489,799
ChipMOS U.S.A., Inc. (“ChipMOS USA”)	235,742	237,282
	3,410,782	3,727,081
Associate		
JMC ELECTRONICS CO., LTD. (“JMC”)	249,793	406,792
	$ 3,660,575	$ 4,133,873

A. Subsidiaries

(a) Information about the Company's subsidiaries is provided in Note 4(3) of the consolidated financial statements for the year ended December 31, 2019.

(b) In January 2018, the Company participated in ChipMOS BVI's increase of paid-in capital based on its shareholding amounted to $89,280.

(c) To reflect effects on initial application of IFRS 9 for 2018 from ChipMOS BVI, the Company recognized investment through equity method and retained earnings of $493.

(d) In January 2018, ChipMOS BVI participated in Unimos Microelectronics (Shanghai) Co., Ltd.'s ("Unimos Shanghai") increase of paid-in capital based on its shareholding amounted to $794,694.

B. Associate

(a) JMC has quoted market prices. As of December 31, 2019 and 2018, the fair value was $807,000 and $2,081,900, respectively.

(b) For the years ended December 31, 2019 and 2018, the Company recognized its share of profit of investments accounted for using equity method amounted to $63,838 and $41,933, respectively.

(c) To further strengthen financial structure, increase balance of working capital and reduce debt ratio, the Company's Board of Directors adopted a resolution on April 2, 2019 to dispose of 9,100,000 common shares of JMC, which reduced the shareholding of equity investment in JMC to 10%. The disposal of shares was completed on April 8, 2019 for cash consideration of $1,180,179, and the Company recognized gain on disposal of investment in associates amounted to $981,675. JMC is still recognized as investment accounted for using equity method given that the Company retains significant influence by holding two seats in JMC's Board of Directors.

C. The basic information and summarized financial information of JMC is as follows:

(a) Basic information

Company name	Principal place of business	Shareholding ratio		Nature of relationship	Method of measurement
		December 31, 2019	December 31, 2018		
JMC	Kaohsiung, Taiwan	10.00%	19.10%	Strategic Investee	Equity method

(b) Summarized financial information

Balance Sheet

	JMC	
	December 31, 2019	December 31, 2018
Current assets	$ 1,347,546	$ 1,106,789
Non-current assets	2,457,975	1,699,498
Current liabilities	(888,184)	(817,697)
Non-current liabilities	(660,111)	(103,922)
Total net assets	$ 2,257,226	$ 1,884,668
Share in associate's net assets	$ 225,723	$ 359,972
Goodwill	24,070	46,820
Carrying amount of the associate	$ 249,793	$ 406,792

Statements of comprehensive income

	JMC	
	2019	2018
Revenue	$ 3,017,155	$ 1,931,008
Profit for the year from continuing operations	$ 524,347	$ 219,544
Other comprehensive income (loss), net of income tax	48,211	(14,074)
Total comprehensive income	$ 572,558	$ 205,470
Dividends received from the associate	$ 20,000	$ 5,730

(7) Property, plant and equipment

	2019						
	Land	Buildings	Machinery and equipment	Tools	Others	Construction in progress and equipment to be inspected	Total
January 1							
Cost	$ 452,738	$ 10,254,531	$ 48,270,023	$ 4,402,711	$ 2,605,494	$ 1,069,892	$ 67,055,389
Accumulated depreciation and impairment	-	(6,345,800)	(38,038,341)	(3,660,532)	(2,192,103)	-	(50,236,776)
	$ 452,738	$ 3,908,731	$ 10,231,682	$ 742,179	$ 413,391	$ 1,069,892	$ 16,818,613
January 1	$ 452,738	$ 3,908,731	$ 10,231,682	$ 742,179	$ 413,391	$ 1,069,892	$ 16,818,613
Effects on initial application of IFRS 16	-	-	-	-	(31,904)	-	(31,904)
Adjusted balance at January 1	452,738	3,908,731	10,231,682	742,179	381,487	1,069,892	16,786,709
Additions	-	116,238	2,334,311	781,465	224,287	1,440,308	4,896,609
Disposals	-	-	(16,033)	(9,336)	(416)	-	(25,785)
Reclassifications	-	455,792	1,111,715	7,880	25,042	(1,573,811)	26,618
Depreciation expenses	-	(384,832)	(2,488,851)	(625,712)	(195,869)	-	(3,695,264)
Impairment losses	-	-	(9,938)	-	-	-	(9,938)
December 31	$ 452,738	$ 4,095,929	$ 11,162,886	$ 896,476	$ 434,531	$ 936,389	$ 17,978,949
December 31							
Cost	$ 452,738	$ 10,821,972	$ 51,240,417	$ 5,008,321	$ 1,932,485	$ 936,389	$ 70,392,322
Accumulated depreciation and impairment	-	(6,726,043)	(40,077,531)	(4,111,845)	(1,497,954)	-	(52,413,373)
	$ 452,738	$ 4,095,929	$ 11,162,886	$ 896,476	$ 434,531	$ 936,389	$ 17,978,949

	2018						
	Land	Buildings	Machinery and equipment	Tools	Others	Construction in progress and equipment to be inspected	Total
January 1							
Cost	$ 452,738	$ 9,809,970	$ 45,774,402	$ 4,004,703	$ 2,618,917	$ 968,719	$ 63,629,449
Accumulated depreciation and impairment	-	(5,890,884)	(36,961,056)	(3,314,234)	(2,199,172)	-	(48,365,346)
	$ 452,738	$ 3,919,086	$ 8,813,346	$ 690,469	$ 419,745	$ 968,719	$ 15,264,103
January 1	$ 452,738	$ 3,919,086	$ 8,813,346	$ 690,469	$ 419,745	$ 968,719	$ 15,264,103
Additions	-	247,186	2,445,095	591,229	172,587	1,489,190	4,945,287
Disposals	-	-	(904)	(11,745)	(2,067)	-	(14,716)
Reclassifications	-	199,724	1,154,663	7,604	26,026	(1,388,017)	-
Depreciation expenses	-	(457,265)	(2,180,518)	(535,378)	(202,900)	-	(3,376,061)
December 31	$ 452,738	$ 3,908,731	$ 10,231,682	$ 742,179	$ 413,391	$ 1,069,892	$ 16,818,613
December 31							
Cost	$ 452,738	$ 10,254,531	$ 48,270,023	$ 4,402,711	$ 2,605,494	$ 1,069,892	$ 67,055,389
Accumulated depreciation and impairment	-	(6,345,800)	(38,038,341)	(3,660,532)	(2,192,103)	-	(50,236,776)
	$ 452,738	$ 3,908,731	$ 10,231,682	$ 742,179	$ 413,391	$ 1,069,892	$ 16,818,613

A. Amount of borrowing costs capitalized as part of property, plant and equipment and the range of the interest rates for such capitalization are as follows:

	2019	2018
Amount of interest capitalized	$ 15,114	$ 18,542
Range of interest rates for capitalization	1.7822%	1.7582%

B. Information about the property, plant and equipment that were pledged to others as collaterals is provided in Note 8.

(8) Leasing arrangements－lessee

Effective from 2019

A. The Company leases various assets, including land, buildings, machinery and equipment, and others. Lease agreements are typically made for periods of 2 to 30 years. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose covenants, but leased assets may not be used as security for borrowing purposes.

B. The carrying amount of right-of-use assets and the depreciation expenses are as follows:

	December 31, 2019	2019
	Carrying amount	Depreciation expenses
Land	$ 669,967	($ 22,657)
Buildings	9,879	(1,305)
Machinery and equipment	-	(4,520)
Others	2,058	(1,809)
	$ 681,904	($ 30,291)

C. For the year ended December 31, 2019, additions to right-of-use assets was $11,183.

D. The information on profit and loss accounts relating to lease contracts is as follows:

	2019
Items affecting profit or loss	
Interest expense on lease liabilities	$ 14,029
Expense on short-term lease contracts	230,385

E. For the year ended December 31, 2019, the Company's total cash outflow for leases was $267,472.

(9) Accounts payable

	December 31, 2019	December 31, 2018
Accounts payable	$ 419,520	$ 267,368
Estimated accounts payable	400,028	369,903
	$ 819,548	$ 637,271

(10) Current provisions

A. Movements in provisions are as follows:

	Provisions for deficiency compensation
	2019
January 1	$ 29,352
Provision	5,204
Reversal	(1,967)
Payment	(30,591)
December 31	$ 1,998

B. By applying IFRS 15, the Company's provision for sales allowance is presented as "Current refund liabilities" from January 1, 2018, which was previously presented as "Current provisions". Information is provided in Note 6(11).

C. The detailed explanation of provisions for deficiency compensation is provided in Note 5(1).

(11) Current refund liabilities

A. Movements in refund liabilities are as follows:

	Provisions for sales allowance	
	2019	2018
January 1	$ 32,627	$ 70,156
Provision	63,863	44,950
Reversal	-	(7,413)
Payment	(70,490)	(75,066)
December 31	$ 26,000	$ 32,627

B. The detailed explanation of provisions for sales allowance is provided in Note 5(2).

(12) Long-term bank loans

Type of loans	Period and payment term	December 31, 2019	December 31, 2018
Syndicated bank loan	Borrowing period is from May 30, 2018 to May 30, 2023; interest is repayable monthly; principal is repayable semi-annually from November 30, 2018.	$ 9,066,000	$ 9,822,000
Less: Fee on syndicated bank loan		(24,355)	(32,482)
Less: Current portion (fee included)		(748,419)	(747,422)
		$ 8,293,226	$ 9,042,096
Interest rate range		1.7895%	1.7895%
Unused credit lines of long-term bank loans			
NT$		$ 1,800,000	$ 1,800,000

A. On May 15, 2018, the Company entered into a syndicated loan with eleven banks in Taiwan, including Taiwan Cooperative Bank, in the amount of NT$12 billion with a term of five years. Funding from this syndicated loan was used to repay the existing debt of financial institutions and broaden the Company’s working capital. Pursuant to the syndicated loan agreement, the Group is required to maintain certain financial ratios including current ratio, interest protection multiples and debt to equity ratio during the loan periods.

B. On May 16, 2016, the Company entered into a syndicated loan with ten banks in Taiwan, including Land Bank of Taiwan, in the amount of NT$13.2 billion with a term of five years. Funding from this syndicated loan was used to repay the prior syndicated loan in 2014 and broaden the Company’s working capital. Pursuant to the syndicated loan agreement, the Group is required to maintain certain financial ratios including current ratio, interest protection multiples and debt to equity ratio during the loan periods. The syndicated loan was fully repaid in May 2018.

C. Information about the items related to the long-term bank loans that are pledged to others as collaterals is provided in Note 8.

(13) Lease obligations payable

Prior to 2019

The Company leases equipment under finance lease and based on the terms of the lease contracts, the Company has the option to purchase the equipment at a price which is expected to be sufficiently lower than fair value at the date the option becomes exercisable when the leases expire.

Future minimum lease payables and their present values as of December 31, 2018 are as follows:

	December 31, 2018		
	Total finance lease liabilities	Future finance charges	Present value of finance lease liabilities
Current	$ 18,000	($ 208)	$ 17,792

(14) Pensions

A. Defined Benefit Plans

The Company has a defined benefit pension plan in accordance with the Labor Standards Act, 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 Labor Standards Act. 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 pension fund deposited with the Bank of Taiwan, the trustee, under the name of the independent pension fund committee. Also, the Company would assess the balance in the aforementioned labor pension reserve account by the end of every year. If the account balance is insufficient to pay the pension calculated by the aforementioned method, to the employees expected to be qualified for retirement next year, the Company will make contributions to cover the deficit by March of following year.

(a) The amounts recognized in the balance sheets are as follows:

	December 31, 2019	December 31, 2018
Present value of defined benefit obligations	($ 901,159)	($ 910,081)
Fair value of plan assets	421,052	389,316
Net defined benefit liability	($ 480,107)	($ 520,765)

(b) Movements in net defined benefit liability are as follows:

	2019		
	Present value of defined benefit obligations	Fair value of plan assets	Net defined benefit liability
January 1	($ 910,081)	$ 389,316	($ 520,765)
Current service cost	(332)	-	(332)
Interest (expense) income	(11,170)	4,831	(6,339)
	(921,583)	394,147	(527,436)
Remeasurements:			
Return on plan assets (excluding amounts included in interest income or expense)	-	12,601	12,601
Financial assumption movement effect	(27,993)	-	(27,993)
Experience adjustments	36,308	-	36,308
	8,315	12,601	20,916
Pension fund contribution	-	26,413	26,413
Paid pension	12,109	(12,109)	-
December 31	($ 901,159)	$ 421,052	($ 480,107)

	2018		
	Present value of defined benefit obligations	Fair value of plan assets	Net defined benefit liability
January 1	($ 838,543)	$ 360,017	($ 478,526)
Current service cost	(382)	-	(382)
Interest (expense) income	(14,429)	6,291	(8,138)
	(853,354)	366,308	(487,046)
Remeasurements:			
Return on plan assets (excluding amounts included in interest income or expense)	-	8,145	8,145
Financial assumption movement effect	(56,934)	-	(56,934)
Experience adjustments	(11,172)	-	(11,172)
	(68,106)	8,145	(59,961)
Pension fund contribution	-	26,242	26,242
Paid pension	11,379	(11,379)	-
December 31	($ 910,081)	$ 389,316	($ 520,765)

(c) 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 utilization plan and the "Regulations for Revenues, Expenditures, Safeguard and Utilization of the Labor Retirement Fund" (Article 6: The scope of utilization 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 utilization 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. If the earnings is less than aforementioned rates, government shall make payment for the deficit after being authorized by the authority. The Company has no right to participate in managing and operating that fund and hence the Company is unable to disclose the classification of the fair value of plan asset in accordance with IAS 19 "Employee Benefits" paragraph 142. The composition of fair value of plan assets as of December 31, 2019 and 2018 is given in the Annual Labor Retirement Fund Utilization Report announced by the government.

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

	2019	2018
Discount rate	1,00%	1.25%
Future salary increase	3.50%	3.50%

Assumptions regarding future mortality are set based on actuarial advice in accordance with published statistics and experience in each territory.

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

	Discount rate		Future salary increase	
	Increase 0.25%	Decrease 0.25%	Increase 0.25%	Decrease 0.25%
December 31, 2019				
Effect on present value of defined benefit obligations	($ 27,993)	$ 29,284	$ 28,501	($ 27,407)
December 31, 2018				
Effect on present value of defined benefit obligations	($ 29,052)	$ 30,430	$ 29,692	($ 28,513)

The sensitivity analysis above is based on a change in an assumption while holding all other assumptions constant. In practice, changes in some of the assumptions may be correlated. The method of analysing sensitivity and the method of calculating net pension liability in the balance sheet are the same.

The methods and types of assumptions used in preparing the sensitivity analysis remain unchanged from previous period.

(e) Expected contributions to the defined benefit pension plans of the Company for the year ending December 31, 2020 amounts to $27,337.

(f) As of December 31, 2019, the weighted average duration of that retirement plan is 12.8 years. The analysis of timing of the future pension payment was as follows:

Within 1 year	$	35,272
1-2 years		34,647
2-5 years		122,670
5-10 years		167,707
	$	360,296

B. Define Contribution Plans

Effective from July 1, 2005, the Company established a defined contribution pension plan ("New Plan") under the Labor Pension Act, covering all regular employees with Republic of China ("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. The pension costs under defined contribution pension plans of the Company for the years ended December 31, 2019 and 2018 were $187,502 and $193,047, respectively.

(15) Share-based payments

Restricted shares

A. On July 14, 2015, the Company's Board of Directors approved the issuance of restricted shares. The record dates for the shares issuance were July 21, 2015 and May 10, 2016. The relevant information is as follows:

Type of arrangement	Grant date	Share price on grant date (in dollars)	Number of shares (in thousands)	Number of shares returned due to employee resignation (in thousands) 2019	2018	Contract period	Vesting condition
Restricted shares award agreement	July 21, 2015	36.1	15,752	-	(256)	3 years	Meet service and performance conditions
Restricted shares award agreement	May 10, 2016	30.6	1,548	(25)	(116)	3 years	Meet service and performance conditions

The restricted shares issued by the Company cannot be transferred during the vesting period, but voting right and dividend right are not restricted. Employees are required to return the shares but not required to return the dividends received if they resign during the vesting period. When the employees accomplish the years of service and performance conditions, the received restricted shares will be vested based on the vesting ratio.

B. The expenses incurred on share-based payment transactions for the years ended December 31, 2019 and 2018 were $822 and $41,043, respectively.

(16) Capital stock

A. As of December 31, 2019, the Company's authorized capital was $9,700,000, consisting of 970,000 thousand ordinary shares, and the paid-in capital was $7,272,401 with a par value of $10 (in dollars) per share, consisting of 727,240 thousand ordinary shares. All proceeds from shares issued have been collected.

B. As of December 31, 2019, the outstanding ADSs were approximately 4,801,737 units representing 96,035 thousand ordinary shares and each ADS represents 20 ordinary shares of the Company. The major terms and conditions of the ADSs are summarized as follows:

(a) Voting rights:

ADS holders have no right to directly vote in shareholders' meetings with respect to the deposited shares. The depository bank shall vote on behalf of ADS holders or provide voting instruction to the designated person of the Company. The depository bank shall vote in the manner as instructed by ADS holders.

(b) Distribution of dividends:

ADS holders are deemed to have the same rights as holders of ordinary shares with respect to the distribution of dividends.

C. Movements in the number of the Company's ordinary shares outstanding are as follows:

	Number of shares (in thousands)	
	2019	2018
January 1	727,265	856,059
Restricted shares – cancelled	(25)	(349)
Restricted shares – uncancelled	-	(23)
Capital reduction	-	(128,422)
December 31	727,240	727,265

D. Treasury stock

(a) On March 7, 2019 and August 6, 2019, the Company's Board of Directors approved the cancellation of treasury stock 25,570 thousand shares amounted to $962,503. As of December 31, 2019, all of the Company's treasury stocks were cancelled. As of December 31, 2018, the reasons for share repurchases are as follows:

		December 31, 2018	
Name of company holding the shares	Reason for repurchase	Number of shares (in thousands)	Carrying amount
The Company	To be reissued to employees	30,000	$ 1,005,011
The Company	Dissenting shareholders	85	2,643
The Company	Capital reduction	(4,515)	(45,151)
		25,570	$ 962,503

(b) Pursuant to the R.O.C. Securities and Exchange Act, the number of shares repurchased as treasury stock may not exceed 10% of the number of the Company's issued shares and the amount bought back may not exceed the sum of retained earnings, paid-in capital in excess of par value and realized capital surplus.

(c) Pursuant to the R.O.C. Securities and Exchange Act, treasury stock may not be pledged as collateral and is not entitled to dividends before it is reissued.

(d) Pursuant to the R.O.C. Securities and Exchange Act, treasury shares should be reissued to the employees within five years from the reacquisition date and shares not reissued within the five-year period are to be retired. Treasury stocks to enhance the Company's credit rating and the stockholders' equity should be retired within six months from acquisition.

E. In order to adjust capital structure and increase return of equity, the Company's shareholders adopted a resolution on June 26, 2018 to reduce capital stock and return cash to shareholders. Subsequently, the record date of the capital reduction was fixed on August 15, 2018, and capital was reduced approximately 15% amounted to $1,329,446, consisting of 132,945 thousand ordinary shares.

(17) Capital surplus

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

	2019			
	Share premium	Employee restricted shares	Long-term investment	Total
January 1	$ 5,873,743	$ 382,506	$ 24,233	$ 6,280,482
Share-based payments	-	(412)	-	(412)
Cancellation of treasury stock	(199,501)	(12,853)	-	(212,354)
Disposal of investment accounted for using equity method	-	-	(8,065)	(8,065)
December 31	$ 5,674,242	$ 369,241	$ 16,168	$ 6,059,651

	2018			
	Share premium	Employee restricted shares	Long-term investment	Total
January 1	$ 5,873,743	$ 390,401	$ 24,233	$ 6,288,377
Share-based payments	-	(7,967)	-	(7,967)
Capital reduction	-	72	-	72
December 31	$ 5,873,743	$ 382,506	$ 24,233	$ 6,280,482

(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 a legal reserve. The Company may then appropriate or reverse a certain amount as special reserve according to the relevant regulations. After the distribution of earnings, the remaining earnings and prior years' unappropriated retained earnings may be appropriated according to a proposal by the Board of Directors and approved in the shareholders' meeting.

B. The Company's dividend policy is summarized here. As the Company operates in a volatile business environment, the issuance of dividends to be distributed takes into consideration the Company's financial structure, operating results and future expansion plans. The earnings distribution of the Company may be made by way of cash dividends or stock dividends, provided that cash dividends account for at least 10% of the total dividends distributed. The earnings distribution will be proposed by the Board of Directors and approved at the shareholders' meeting.

C. Except for covering accumulated deficits or issuing new shares or cash to shareholders in proportion to their share ownership, the legal reserve may not be used for any other purpose. The use of the legal reserve for the issuance of shares 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.

D. In accordance with the regulations, the Company must set aside a special reserve from the debit balance on other equity items at the balance sheet date before distributing earnings. When the debit balance on other equity items is reversed subsequently, the reversed amount may be included in the distributable earnings.

E. The appropriations of 2018 and 2017 earnings were resolved in the shareholders' meetings held on June 10, 2019 and June 26, 2018, respectively. The appropriations and dividends per share are as follows:

	2018		2017	
	Amount	Cash distribution per share (in dollars)	Amount	Cash distribution per share (in dollars)
Legal reserve	$ 110,308		$ 302,653	
Cash dividend	872,718	$ 1.20	256,806	$ 0.30

F. The information relating to employees' compensation and director's remuneration is provided in Note 6(26)

(19) Other equity interest

	2019			
	Financial statements translation differences of foreign operations	Unrealized gain (loss) on valuation of financial assets at fair value through other comprehensive income	Unearned employee awards	Total
January 1	$ 14,516	$ 106,898	($ 1,701)	$ 119,713
Currency translation differences				
- The Company	(104,198)	-	-	(104,198)
Employee restricted shares				
- The Company	-	-	1,701	1,701
Evaluation adjustment				
- The Company	-	(52,549)	-	(52,549)
- Associates	-	5,093	-	5,093
Evaluation adjustment related tax				
- The Company	-	10,510	-	10,510
Disposal of investment accounted for using equity method	-	(72)	-	(72)
December 31	($ 89,682)	$ 69,880	$ -	($ 19,802)

	2018				
	Financial statements translation differences of foreign operations	Unrealized gain (loss) on valuation of financial assets at fair value through other comprehensive income	Unrealized gain (loss) on valuation of available-for-sale financial assets	Unearned employee awards	Total
January 1	$ 65,593	$ -	$ 678	($ 54,570)	$ 11,701
Effects on initial application of IFRS 9	-	42,843	(678)	-	42,165
Adjusted beginning balance	65,593	42,843	-	(54,570)	53,866
Currency translation differences					
- The Company	(51,077)	-	-	-	(51,077)
Employee restricted shares					
- The Company	-	-	-	52,869	52,869
Evaluation adjustment					
- The Company	-	85,022	-	-	85,022
- Associates	-	(2,438)	-	-	(2,438)
Evaluation adjustment related tax					
- The Company	-	(18,529)	-	-	(18,529)
December 31	$ 14,516	$ 106,898	$ -	($ 1,701)	$ 119,713

(20) Revenue

	2019	2018
Testing	$ 4,257,800	$ 4,790,097
Assembly	5,148,877	4,679,676
LCDD	6,922,205	5,694,720
Bumping	4,008,999	3,315,534
	$ 20,337,881	$ 18,480,027

A. The Company is primarily engaged in the assembly and testing services on high-integration and high-precision integrated circuits, and recognized revenue based on the progress towards completion of performance obligation during the service period.

B. Contract assets and liabilities
The Company has recognized the following contract assets and liabilities in relation to revenue from contracts with customers:

	December 31, 2019	December 31, 2018	January 1, 2018
Contract assets	$ 377,869	$ 299,835	$ 254,997
Contract liabilities (Advance payments)	$ 1,231	$ 1,432	$ 1,152

C. Contract assets have increased as the Company has completed more services in excess of customers' payments. The information relating to loss allowance for contract assets is provided in Note 12(2).

D. Revenue recognized in the current reporting period amounted to $766 was related to carried forward contract liabilities for performance obligations not satisfied in prior year.

E. All of the service contracts are for periods of one year or less. As permitted under IFRS 15, the transaction price allocated to these unsatisfied contracts is not disclosed. As of December 31, 2019, the Company did not recognized an asset in relation to costs to acquire or fulfill a service contract.

(21) Other income (expenses), net

	2019	2018
Gain on disposal of scrapped materials	$ 43,652	$ 59,380
Royalty income	12,336	43,224
Gain on disposal of items purchased on behalf of others	15,080	31,268
Gain on disposal of property, plant and equipment	20,271	14,274
Insurance compensation income	10,435	147
Impairment loss on property, plant and equipment	(9,938)	-
Others	1,092	(779)
	$ 92,928	$ 147,514

(22) Other income

	2019	2018
Interest income		
Bank deposits	$ 59,374	$ 48,011
Financial assets at amortized cost	93	80
	59,467	48,091
Rental income	9,249	7,819
Dividend income	585	571
Grant income	925	-
	$ 70,226	$ 56,481

(23) Other gains and losses

	2019	2018
Foreign exchange (losses) gains, net	($ 154,264)	$ 96,415
Gain on disposal of investment accounted using equity method	981,675	-
Reimbursement of ADSs service charge	4,292	13,269
Gain on valuation of financial assets at fair value through profit or loss	1,750	1,447
Others	970	6,851
	$ 834,423	$ 117,982

(24) Finance costs

	2019	2018
Interest expense		
Bank loans	$ 171,840	$ 170,476
Lease liabilities	14,029	-
Lease obligations payable	-	482
Less: Amounts capitalized in qualifying assets	(15,114)	(18,542)
	170,755	152,416
Finance expense	9,187	37,832
	$ 179,942	$ 190,248

(25) Expenses by nature

	2019	2018
Raw materials and supplies used	$ 3,575,283	$ 3,079,910
Employee benefit expenses	6,058,578	5,587,031
Depreciation expenses	3,725,555	3,376,061
Others	4,616,223	4,461,239
	$ 17,975,639	$ 16,504,241

(26) Employee benefit expenses

	2019	2018
Salaries	$ 5,101,085	$ 4,611,770
Directors' remuneration	26,266	18,456
Labor and health insurance	418,616	402,578
Pension	194,173	201,567
Share-based payments	822	41,043
Other personnel expenses	317,616	311,617
	$ 6,058,578	$ 5,587,031

A. In accordance with the Company's Articles of Incorporation, employees' compensation is based on the current year's earnings, which should first be used to cover accumulated deficits, if any, and then 10% of the remaining balance distributed as employees' compensation, including distributions to certain qualifying employees in affiliate companies, and no more than 0.5% as directors' remuneration. Subject to the Board of Directors' approval, employees' compensation may be made by way of cash or share issuance. Distribution of employees' compensation and directors' remuneration shall be presented and reported in the subsequent shareholders' meeting.

B. Based on profit distributable as of the end of reporting period, for the years ended December 31, 2019 and 2018, the employees' compensation were accrued at $338,356 and $199,027, respectively; the directors' remuneration were accrued at $16,918 and $9,951, respectively.

C. For the year of 2018, employees' compensation and directors' remuneration recognized were consistent with the amounts resolved in the Board of Directors' meetings.

Information about the appropriation of employees' compensation and directors' remuneration by the Company as approved by the Board of Directors is posted in the "Market Observation Post System".

(27) Income tax expense

A. Income tax expense

(a) Components of income tax expense:

	2019	2018
Current income tax:		
Current income tax on profits for the period	$ 406,759	$ 324,910
Income tax on unappropriated retained earnings	7,019	250,914
Prior year income tax (over) under estimation	(5,016)	3,729
Total current income tax	408,762	579,553
Deferred income tax:		
Relating to origination and reversal of temporary differences	35,367	101,441
Impact of change in tax rate	-	(2,774)
Total deferred income tax	35,367	98,667
Income tax expense	$ 444,129	$ 678,220

(b) The income tax (charge)/credit relating to components of other comprehensive income is as follows:

	2019	2018
Unrealized (loss)gain on valuation of financial assets at fair value through other comprehensive income	($ 10,510)	$ 17,005
Remeasurement of defined benefit obligations	4,183	(11,992)
Impact of change in tax rate	-	(887)
	($ 6,327)	$ 4,126

B. Reconciliation of income tax expense and the accounting profit:

	2019	2018
Tax calculated based on profit before tax and statutory tax rate	$ 605,658	$ 356,260
Expenses disallowed by tax regulation	3,055	14,689
Tax exempted (income) expenses by tax regulation	(165,979)	66,353
Temporary difference not recognized as deferred tax assets	(608)	(10,951)
Prior year income tax (over) under estimation	(5,016)	3,729
Income tax on unappropriated retained earnings	7,019	250,914
Impact of change in tax rate	-	(2,774)
Income tax expense	$ 444,129	$ 678,220

C. The amounts of deferred tax assets or liabilities resulting from temporary differences and investment tax credits are as follows:

	2019			
	January 1	Recognized in profit or loss	Recognized in other comprehensive income	December 31
Deferred tax assets				
Loss on inventories	$ 7,232	$ 5,468	$ -	$ 12,700
Property, plant and equipment	64,183	(25,515)	-	38,668
Provisions	12,396	(6,796)	-	5,600
Deferred revenue	34,156	(6,506)	-	27,650
Net defined benefit liability	100,743	(3,948)	(4,183)	92,612
Unrealized exchange losses	3,575	13,721	-	17,296
Investment tax credits	4,420	(4,420)	-	-
Others	11	15	-	26
Total	$ 226,716	($ 27,981)	($ 4,183)	$ 194,552
Deferred tax liabilities				
Property, plant and equipment	($ 281,594)	($ 7,386)	$ -	($ 288,980)
Financial assets at fair value through other comprehensive income	(27,165)	-	10,510	(16,655)
Total	($ 308,759)	($ 7,386)	$ 10,510	($ 305,635)
Information presented on balance sheets:				
Deferred tax assets	$ 226,716			$ 194,552
Deferred tax liabilities	($ 308,759)			($ 305,635)

	2018				
	January 1	Effects on initial application of IFRS 9 and IFRS 15	Recognized in profit or loss	Recognized in other comprehensive income	December 31
Deferred tax assets					
Loss on inventories	$ 9,132	($ 770)	($ 1,130)	$ -	$ 7,232
Property, plant and equipment	55,494	-	8,689	-	64,183
Provisions	21,643	-	(9,247)	-	12,396
Deferred revenue	39,485	-	(5,329)	-	34,156
Net defined benefit liability	78,451	-	7,889	14,403	100,743
Unrealized exchange losses	8,167	144	(4,736)	-	3,575
Investment tax credits	-	-	4,420	-	4,420
Others	-	-	11	-	11
Total	$ 212,372	($ 626)	$ 567	$ 14,403	$ 226,716
Deferred tax liabilities					
Property, plant and equipment	($ 174,293)	$ -	($ 107,301)	$ -	($ 281,594)
Contract assets	-	(8,067)	8,067	-	-
Financial assets at fair value through other comprehensive income	-	(8,636)	-	(18,529)	(27,165)
Total	($ 174,293)	($ 16,703)	($ 99,234)	($ 18,529)	($ 308,759)
Information presented on balance sheets:					
Deferred tax assets	$ 212,372				$ 226,716
Deferred tax liabilities	($ 174,293)				($ 308,759)

D. The Company has not recognized deductible and taxable temporary differences associated with investments as deferred tax assets and liabilities. As of December 31, 2019 and 2018, the amounts of deductible temporary differences not recognized as deferred tax liabilities were $180,395 and $495,154, respectively.

E. The Company's income tax returns through 2016 have been assessed and approved by the Tax Authority.

F. The amendment to the Income Tax Act has been approved and promulgated in February 2018 to raise the profit-seeking enterprise income tax rate from 17% to 20%, decrease the tax rate on unappropriated retained earnings from 10% to 5%, and abandon the imputation tax credit account effective from fiscal year starting January 1, 2018.

G. On October 31, 2016, the Company merged with its former parent company, ChipMOS TECHNOLOGIES (Bermuda) LTD. and as a result, the Company recognized its own shares originally held by former parent company as treasury stock. Subsequently, the Company deducted unappropriated retained earnings by $5,052,343 to reflect the loss due from the cancellation of treasury stock. In January 2017, the Company has filed an application to the National Taxation Bureau of the Northern Area, Ministry of Finance to apply the accumulated deficit amount, derived from subtracting the aforementioned amount from unappropriated retained earnings generated prior to year 2015 (not including 2015 unappropriated retained earnings), as a deduction in the calculation of years 2016 and 2015 additional 10% tax on unappropriated retained earnings. On August 26, 2019, the Ministry of Finance issued Interpretation No.10804006760 and agreed the aforementioned deduction of unappropriated retained earnings to reflect the loss due from the cancellation of treasury stock as a result of the merger. As of the issue date of this report, the Company has not received the Notice for Assessment of Tax approved by the National Taxation Bureau of the Northern Area, Ministry of Finance.

(28) Earnings per share

	2019		
Basic earnings per share	Amount after income tax	Weighted average number of ordinary shares outstanding (in thousands)	Earnings per share (in dollars)
Profit attributable to common share of the Company	$ 2,584,161	727,111	$ 3.55
Diluted earnings per share			
Assumed conversion of all dilutive potential ordinary shares:			
Employees' compensation		9,879	
Restricted shares		126	
Profit attributable to common share of the Company	$ 2,584,161	737,116	$ 3.51

	2018		
Basic earnings per share	Amount after income tax	Weighted average number of ordinary shares outstanding (in thousands)	Earnings per share (in dollars)
Profit attributable to common share of the Company	$ 1,103,075	802,725	$ 1.37
Diluted earnings per share			
Assumed conversion of all dilutive potential ordinary shares:			
Employees' compensation		7,626	
Restricted shares		3,356	
Profit attributable to common share of the Company	$ 1,103,075	813,707	$ 1.36

(29) Operating lease commitments

Prior to 2019

A. The Company has entered into several operating lease contracts for land with Hsinchu and Southern Taiwan Science Park Bureaus. These renewable operating leases will expire by 2032 and 2034. In accordance with the lease contracts, Science Park Bureau reserves the right to adjust annual rents and the annual rents for the year ended 2018 was $33,142.

B. Future aggregate minimum lease obligations payable under the aforementioned leases are as follows:

	December 31, 2018
Within 1 year	$ 62,691
1 to 5 years	134,670
Over 5 years	111,446
	$ 308,807

(30) Supplemental cash flow information

Partial cash paid for investing activities

Property, plant and equipment

	2019	2018
Purchase of property, plant and equipment	$ 4,896,609	$ 4,945,287
Add: Beginning balance of payable on equipment	1,516,735	713,313
Beginning balance of payable on lease	-	29,842
Less: Ending balance of payable on equipment	(972,770)	(1,516,735)
Ending balance of payable on lease	-	(17,792)
Cash paid during the year	$ 5,440,574	$ 4,153,915

(31) Changes in liabilities from financing activities

	2019			
	Long-term bank loans (including current portion)	Guarantee deposits	Lease liabilities	Total liabilities from financing activities
January 1	$ 9,789,518	$ 1,092	$ -	$ 9,790,610
Effects on initial application of IFRS 16	-	-	873,213	873,213
Adjusted balance at January 1	9,789,518	1,092	873,213	10,663,823
Changes in cash flow from financing activities	(756,450)	3	(42,128)	(798,575)
Adjustment to right-of-use assets	-	-	(148,512)	(148,512)
Reclassification to payable on equipment from lease liabilities	-	-	(9,000)	(9,000)
Amortization of loan fees	8,577	-	-	8,577
Amortization of interest expenses	-	-	14,029	14,029
December 31	$ 9,041,645	$ 1,095	$ 687,602	$ 9,730,342

	2018			
	Short-term bank loans	Long-term bank loans (including current portion)	Guarantee deposits	Total liabilities from financing activities
January 1	$ 969,353	$ 9,642,021	$ 1,371	$ 10,612,745
Changes in cash flow from financing activities	(969,353)	110,250	(279)	(859,382)
Amortization of loan fees	-	37,247	-	37,247
December 31	$ -	$ 9,789,518	$ 1,092	$ 9,790,610

7. RELATED PARTY TRANSACTIONS

(1) Names of related parties and relationship

Name	Relationship
ChipMOS BVI	Subsidiary
ChipMOS USA	Subsidiary
JMC	Associate
Unimos Shanghai	Associate

(2) Significant related party transactions

A. Purchases of materials

	2019	2018
JMC	$ 9	$ 132,494

Purchases of materials from associates are based on normal commercial terms and conditions. The payment terms of the purchase from associates have no significant differences with third party suppliers.

B. Service expense

	2019	2018
ChipMOS USA	$ 32,826	$ 35,591

C. Acquisition of financial assets

(a) In January 2018, the Company participated in ChipMOS BVI's increase of paid-in capital amounted to $89,280, please refer to Note 6(6).

(b) In January 2018, ChipMOS BVI participated in Unimos Shanghai's increase of paid-in capital based on its shareholding amounted to $794,694, please refer to Note 6(6).

(3) Key management personnel compensation

	2019	2018
Salaries and other short-term employee benefits	$ 172,490	$ 142,666
Post-employment compensation	2,049	2,067
Share-based payments	-	6,763
	$ 174,539	$ 151,496

8. PLEDGED ASSETS

Assets	Purpose	Carrying amount December 31, 2019	Carrying amount December 31, 2018
Non-current financial assets at amortized cost	Lease and bank loan	$ 68,450	$ 68,388
Property, plant and equipment			
- Land	Bank loan	452,738	452,738
- Buildings	Bank loan	4,095,929	3,908,731
- Machinery and equipment	Bank loan	4,105,912	5,310,769
		$ 8,723,029	$ 9,740,626

9. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED CONTRACT COMMITMENTS

(1) A letter of guarantee was issued by the Bank of Taiwan to the Customs Administration of the Ministry of Finance for making payment of customs-duty deposits when importing. As of December 31, 2019 and 2018, the amount guaranteed by the Bank of Taiwan were $100,800 and $97,500, respectively.

(2) Capital expenditures that are contracted for, but not provided for, are as follows:

	December 31, 2019	December 31, 2018
Property, plant and equipment	$ 1,640,712	$ 2,508,797

10. SIGNIFICANT DISASTER LOSS

None.

11. SIGNIFICANT EVENTS AFTER THE REPORTING PERIOD

On January 1, 2019, Ministry of Economic Affairs, R.O.C. ("MOEA") implemented the "Action Plan for Welcoming Overseas Taiwanese Businesses to Return to Invest in Taiwan" and companies are subsidized with preferential interest loans for qualified investment projects. The Company has obtained the qualification from the MOEA, and signed loan agreements with financial institutions during January and February 2020 with the line of credit amounted to $10,710,000 and terms from seven to ten years. As of the issue date of this report, the Company has not used the credit line of the aforementioned project loans.

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. The Company monitors capital on the basis of the liabilities to assets ratio. Total capital is shown as "Equity" in the parent company only balance sheet, which is also equal to total assets minus total liabilities.

The liabilities to assets ratio at December 31, 2019 and 2018 were as follows:

	December 31, 2019	December 31, 2018
Total liabilities	$ 14,651,080	$ 15,065,217
Total assets	34,302,319	33,136,028
Liabilities to assets ratio	42.71%	45.46%

(2) Financial instruments

A. Financial instruments by category

	December 31, 2019	December 31, 2018
Financial assets		
Financial assets at fair value through other comprehensive income		
Designation of equity instruments	$ 121,808	$ 174,357
Financial assets at amortized cost		
Cash and cash equivalents	4,619,365	4,589,280
Financial assets at amortized cost	68,450	68,388
Notes receivable	765	1,595
Accounts receivable	4,452,904	4,745,693
Accounts receivable－related parties	1,045	140
Other receivables	89,652	62,317
Other receivables－related parties	2,948	3,131
Refundable deposits	20,322	21,162
	$ 9,377,259	$ 9,666,063
Financial liabilities		
Financial liabilities at amortized cost		
Accounts payable	$ 819,548	$ 637,271
Accounts payable－related parties	-	347
Other payables	2,977,036	3,195,217
Other payables－related parties	2,628	2,528
Long-term bank loans (including current portion)	9,041,645	9,789,518
Guarantee deposits	1,095	1,092
	$ 12,841,952	$ 13,625,973
Lease liabilities (including current portion)	$ 687,602	$ -

B. Risk management policies

(a) The Company's risk management objective is to manage the market risk, credit risk and liquidity risk related to its operating activities.

(b) The Company has established appropriate policies, procedures and internal controls for financial risk management. Before entering into significant financial transactions, a due approval process must be carried out by the Board of Directors based on related protocols and internal control procedures. The Company complies with its financial risk management policies at all times.

(c) In order to minimize and manage financial risks, the Company's overall risk management program focuses on analyzing, identifying, and evaluating financial risk factors that may potentially have adverse effects on the Company's financial position, and provide feasible solutions to avoid those factors.

C. Significant financial risks and degrees of financial risks

(a) Market risk

The Company's market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risks comprise foreign currency risk, interest rate risk, and other price risks.

In practice, the risk variable rarely changes individually, and the change of each risk variable is usually correlative. The following sensitivity analysis did not consider the interaction of each risk variable.

<u>Foreign exchange risk</u>

i. The Company's exposure to the risk of changes in foreign exchange rates relates primarily to the Company's operating activities (when revenue or expense is denominated in a different currency from the Company's functional currency) and the Company's net investments in foreign operations.

ii. The Company applies natural hedges by using accounts receivable and accounts payable denominated in the same currency. However, this natural hedge does not concur with the requirement for hedge accounting. Furthermore, as net investments in foreign operations are for strategic purposes, they are not hedged by the Company.

iii. The Company's foreign currency exposure gives rise to market risks associated with exchange rate movements against the NT dollar for cash and cash equivalents, accounts receivable, other receivables, bank loans, accounts payable and other payables.

iv. The Company's businesses involve some non-functional currency operations. 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, 2019			
	Foreign currency (in thousands)	Exchange rate		Carrying amount (NTD)
(Foreign currency: functional currency)				
Financial assets				
Monetary items				
USD:NTD	$ 180,348	29.9800	$	5,406,833
JPY:NTD	266,819	0.2760		73,642
RMB:NTD	2,937	4.3050		12,644
Financial liabilities				
Monetary items				
USD:NTD	$ 7,925	29.9800	$	237,592
JPY:NTD	1,033,394	0.2760		285,217

	December 31, 2018			
	Foreign currency (in thousands)	Exchange rate		Carrying amount (NTD)
(Foreign currency: functional currency)				
Financial assets				
Monetary items				
USD:NTD	$ 162,426	30.7150	$	4,988,915
JPY:NTD	177,557	0.2782		49,396
RMB:NTD	5,630	4.4720		25,177
Financial liabilities				
Monetary items				
USD:NTD	$ 18,305	30.7150	$	562,238
JPY:NTD	2,436,140	0.2782		677,734

v. The total exchange (loss) gain, including realized and unrealized (losses) gains arising from significant foreign exchange variations on monetary items held by the Company for the years ended December 31, 2019 and 2018, amounted to ($154,264) and $96,415, respectively.

vi. Analysis of foreign currency market risk arising from significant foreign exchange variations:

	2019				
	Sensitivity analysis				
	Change in exchange rate	Effect on profit (loss)		Effect on other comprehensive income	
Financial assets					
Monetary items					
USD:NTD	5%	$	270,342	$	-
JPY:NTD	5%		3,682		-
RMB:NTD	5%		632		-
Financial liabilities					
Monetary items					
USD:NTD	5%	$	11,880	$	-
JPY:NTD	5%		14,261		-

	2018				
	Sensitivity analysis				
	Change in exchange rate	Effect on profit (loss)		Effect on other comprehensive income	
Financial assets					
Monetary items					
USD:NTD	5%	$	249,446	$	-
JPY:NTD	5%		2,470		-
RMB:NTD	5%		1,259		-
Financial liabilities					
Monetary items					
USD:NTD	5%	$	28,112	$	-
JPY:NTD	5%		33,887		-

Price risk

i. The Company’s financial instruments, which are exposed to price risk, are the financial assets at fair value through profit or loss and financial assets at fair value through other comprehensive income. To manage its price risk arising from investments in financial instruments, the Company diversifies its portfolio. Diversification of the portfolio is in accordance with the limits set by the Company.

ii. The Company’s investments in financial instruments comprise foreign unlisted stocks. The prices of financial instruments would change due to different valuation models and assumptions used. Analysis related to the effect on profit or other comprehensive income if these assumptions change is provided in Note 12(3)G.

<u>Interest rate risk on cash flow and fair value</u>

i. Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company's exposure to the risk of changes in market interest rates relates primarily to the Company's bank loans with floating interest rates. The Company manages its interest rate risk by having a balanced portfolio of fixed and variable rate bank loans. The Company reassesses the hedge management periodically to make sure it complies with the cost effectiveness.

ii. The sensitivity analysis depends on the exposure of interest rate risk at the end of the reporting period.

iii. Analysis of debt with floating interest rates is based on the assumption that the outstanding debt at the end of the reporting period is outstanding throughout the period. The degree of variation the Company used to report to internal management is increase or decrease of 1% in interest rates which is assessed as the reasonable degree of variation by the management.

iv. For the years ended December 31, 2019 and 2018, it is estimated that a general increase or decrease of 1% in interest rates, with all other variables held constant, would decrease or increase the Company's profit before tax approximately by $90,660 and $98,220, respectively, mainly due to the Company's floating rate on bank loans.

(b) Credit risk

i. Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss, mainly resulted from its operating activities (primarily notes and accounts receivable) and from its financing activities (primarily deposits with bank and financial instruments). The Company is exposed to credit risk arising from the carrying amount of the financial assets recognized in the parent company only balance sheet.

ii. Each business unit performs ongoing credit evaluations of its debtors' financial conditions according to the Company's established policies, procedures and controls relating to customer credit risk management. The Company maintains an account for loss allowance based upon the available facts and circumstances, history of collection and write-off experiences of all trade and other receivables which consequently minimize the Company's exposure to bad debts.

iii. Credit risk from balances with banks and financial institutions is managed by the Company's finance unit in accordance with the Company's policies. Transaction counterparty of the Company is determined through its internal controls policy. For banks and financial institutions, only parties rated above BBB+ by Taiwan Ratings are accepted. The probability of counterparty default is remote, so there is no significant credit risk.

iv. The Company adopts the assumptions under IFRS 9 "Financial Instruments" ("IFRS 9") and the default is deemed to have occurred when the contract payments are past due over 90 days.

v. The Company categorized contract assets, accounts receivable and other receivables by characteristics of credit risk and applied the simplified approach using loss rate methodology to estimate expected credit loss.

vi. The Company referred to the forecastability of business monitoring indicators published by the National Development Council to adjust the loss rate which is based on historical and current information when assessing the future default possibility of contract assets, accounts receivable and other receivables. As of December 31, 2019 and 2018, the loss rate methodologies are as follows:

	December 31, 2019		
	Contract assets	Accounts receivable (including related parties)	Other receivables (including related parties)
Expected loss rate	0.030%	0.030%	0.030%
Total carrying amount	$ 377,983	$ 4,455,300	$ 92,618
Loss allowance	($ 114)	($ 1,351)	($ 18)

	December 31, 2018		
	Contract assets	Accounts receivable (including related parties)	Other receivables (including related parties)
Expected loss rate	0.045%	0.045%	0.045%
Total carrying amount	$ 299,970	$ 4,747,974	$ 65,461
Loss allowance	($ 135)	($ 2,141)	($ 13)

vii. Under the simplified approach, movements in relation to loss allowance for contract assets, accounts receivable, and other receivables are as follows:

	2019		
	Contract assets	Accounts receivable (including related parties)	Other receivables (including related parties)
January 1	($ 135)	($ 2,141)	($ 13)
Provision for impairment loss	-	-	(5)
Reversal of impairment loss	21	790	-
December 31	($ 114)	($ 1,351)	($ 18)

	2018		
	Contract assets	Accounts receivable (including related parties)	Other receivables (including related parties)
January 1_ IAS 39	$ -	$ -	$ -
Adjustments for applying new standards	(115)	(1,819)	(7)
January 1_IFRS 9	(115)	(1,819)	(7)
Provision for impairment loss	(20)	(322)	(7)
Reversal of impairment loss	-	-	1
December 31	($ 135)	($ 2,141)	($ 13)

viii. For investments in debt instruments at amortized cost, the credit rating levels are presented below:

	December 31, 2019			
		By lifetime		
	12 months	Increase in credit risk	Impairment of credit	Total
Financial assets at amortized cost				
Bank deposits (Note)	$ 68,450	$ -	$ -	$ 68,450

	December 31, 2018			
		By lifetime		
	12 months	Increase in credit risk	Impairment of credit	Total
Financial assets at amortized cost				
Bank deposits (Note)	$ 68,388	$ -	$ -	$ 68,388

Note: Restricted bank deposits.

(c) Liquidity risk

i. The Company manages and maintains adequate cash and cash equivalents to finance the Company's operations, and minimize the impact from cash flow fluctuations. The Company also monitors its debt financing plans to ensure it is in compliance with the financial covenants required under its loan agreements.

ii. The primary source of liquidity for the Company is from bank loans. See Note 6(12) for details of the unused credit lines of the Company as of December 31, 2019 and 2018.

iii. The contractual undiscounted cash flows of accounts payable (including related parties) and other payables (including related parties) are due within one year and are equivalent to their carrying amounts. Except for the aforementioned, the table below summarizes the maturity profile of the Company's non-derivative financial liabilities based on the earliest repayment dates and contractual undiscounted payments, including principal and interest. The Company does not consider the probability of early repayments requested by the banks.

	December 31, 2019				
	Within 1 year	1 to 3 years	3 to 5 years	Over 5 years	Total
Non-derivative financial liabilities					
Long-term bank loans	$ 914,159	$ 1,786,842	$ 6,848,327	$ -	9,549,328
Lease liabilities	31,370	60,111	57,836	762,699	912,016
Guarantee deposits	-	-	-	1,095	1,095
	$ 945,529	$ 1,846,953	$ 6,906,163	$ 763,794	$ 10,462,439

	December 31, 2018				
	Within 1 year	1 to 3 years	3 to 5 years	Over 5 years	Total
Non-derivative financial liabilities					
Long-term bank loans	$ 927,243	$ 1,814,344	$ 7,734,983	$ -	$ 10,476,570
Lease obligations payable	18,000	-	-	-	18,000
Guarantee deposits	-	-	-	1,092	1,092
	$ 945,243	$ 1,814,344	$ 7,734,983	$ 1,092	$ 10,495,662

The difference between the floating interest rates and estimated interest rates will affect the non-derivative financial liabilities stated above.

(3) Fair value information

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

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that can be accessed at the measurement date. An active market is a market in which trading for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2: Inputs other than quoted prices from Level 1 that are observable information for the asset or liability, either directly or indirectly.

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

B. The carrying amounts of cash and cash equivalents, contract assets, notes receivable, accounts receivable, other receivables, other financial assets, refundable deposits, bank loans, contract liabilities, accounts payable, other payables, lease liabilities and guarantee deposits are approximate to their fair values.

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 are as follows:

(a) The related information of natures of the assets and liabilities is as follows:

	December 31, 2019			
	Level 1	Level 2	Level 3	Total
Assets				
Recurring fair value measurements				
Financial assets at fair value through other comprehensive income				
- Foreign unlisted stocks	$ -	$ -	$ 121,808	$ 121,808

	December 31, 2018			
	Level 1	Level 2	Level 3	Total
Assets				
Recurring fair value measurements				
Financial assets at fair value through other comprehensive income				
- Foreign unlisted stocks	$ -	$ -	$ 174,357	$ 174,357

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

i. The fair value of the Company's 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.

ii. The Company's financial assets at fair value through other comprehensive income is measured by the comparable company valuation (EV/EBITDA ratio and P/B ratio).

iii. The Company takes into account adjustments for credit risks to measure the fair value of financial and non-financial instruments to reflect credit risk of the counterparty and the Company's credit quality.

D. The following table shows the movements of Level 3 for the years ended December 31, 2019 and 2018:

	Equity instruments	
	2019	2018
January 1	$ 174,357	$ -
Effects on initial application of IFRS 9	-	89,335
Gains or losses recognized in other comprehensive income		
Recorded as unrealized (losses) gains on valuation of financial assets at fair value through other comprehensive income	(52,549)	85,022
December 31	$ 121,808	$ 174,357

E. The Company engaged an external appraiser to perform the fair value measurements being categorized within Level 3, and the accounting unit is in charge of valuation procedures to independently verify the 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, and frequently calibrating valuation model, performing back-testing, updating inputs used to the valuation model and making any other necessary adjustments to the fair value.

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

	Fair value as of December 31, 2019	Valuation technique	Significant unobservable input	Range (weighted average method)	Relationship of inputs to fair value
Non-derivative equity instrument:					
Foreign unlisted stocks	$ 121,808	Comparable companies	Price to book ratio multiple	1.22	The higher the multiple, the higher the fair value
			Enterprise value to EBITDA multiple	10.51	The higher the multiple, the higher the fair value
			Discount for lack of marketability	15.80%	The higher the discount for lack of marketability, the lower the fair value

	Fair value as of December 31, 2018	Valuation technique	Significant unobservable input	Range (weighted average method)	Relationship of inputs to fair value
Non-derivative equity instrument:					
Foreign unlisted stocks	$ 174,357	Comparable companies	Price to book ratio multiple	1.19	The higher the multiple, the higher the fair value
			Enterprise value to EBITDA multiple	7.69	The higher the multiple, the higher the fair value
			Discount for lack of marketability	15.80%	The higher the discount for lack of marketability, the lower the fair value

G. The Company has carefully assessed the valuation models and assumptions used to measure fair value. 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 categorized within Level 3 if the inputs used to valuation models have changed:

	Input	Change	December 31, 2019 Recognized in profit or loss Favorable change	December 31, 2019 Recognized in profit or loss Unfavorable change	December 31, 2019 Recognized in other comprehensive income Favorable change	December 31, 2019 Recognized in other comprehensive income Unfavorable change
Financial assets						
Foreign unlisted stocks	Price to book ratio multiple	± 1%	$ -	$ -	$ 53	$ 53
	Enterprise value to EBITDA multiple	± 1%	-	-	850	900
	Discount for lack of marketability	± 1%	-	-	1,460	1,460
			$ -	$ -	$ 2,363	$ 2,413

	Input	Change	December 31, 2018 Recognized in profit or loss Favorable change	December 31, 2018 Recognized in profit or loss Unfavorable change	December 31, 2018 Recognized in other comprehensive income Favorable change	December 31, 2018 Recognized in other comprehensive income Unfavorable change
Financial assets						
Foreign unlisted stocks	Price to book ratio multiple	± 1%	$ -	$ -	$ 69	$ 68
	Enterprise value to EBITDA multiple	± 1%	-	-	1,563	1,512
	Discount for lack of marketability	± 1%	-	-	2,093	2,050
			$ -	$ -	$ 3,725	$ 3,630

13. SUPPLEMENTARY DISCLOSURES

(1) Significant transactions information

A. Financings provided: None.

B. Endorsements and guarantees provided: There were no endorsements and guarantees provided by the Company. For information related to the Company's letter of guarantee for duty, please refer to Note 9(1).

C. Marketable securities held at the end of the period (excluding investments in subsidiaries, associates and joint ventures):

Held company name	Marketable securities type and name	Relationship with the company	General ledger account	As of December 31, 2019				Note
				Number of shares	Carrying amount	Ownership (%)	Fair value	
The Company	RYOWA CO., LTD.	N/A	Financial assets at fair value through other comprehensive income	420	$116,726	18.12	$ 116,726	
The Company	CONNECTEC JAPAN Corporation	N/A	Financial assets at fair value through other comprehensive income	56,497	5,082	2.74	5,082	
ChipMOS BVI	Shanghai Zuzhu Business Consulting Partnership (Limited Partnership) ("Zuzhu")	N/A	Financial assets at fair value through profit or loss	-	4,492	5.10	4,492	
ChipMOS BVI	Shanghai Zuzhan Business Consulting Partnership (Limited Partnership) ("Zuzhan")	N/A	Financial assets at fair value through profit or loss	-	2,219	13.42	2,219	
ChipMOS BVI	Shanghai Zuchen Business Consulting Partnership (Limited Partnership) ("Zuchen")	N/A	Financial assets at fair value through profit or loss	-	2,164	11.34	2,164	
ChipMOS BVI	Shanghai Guizao Business Consulting Partnership (Limited Partnership) ("Guizao")	N/A	Financial assets at fair value through profit or loss	-	2,163	11.85	2,163	

D. Marketable securities acquired or disposed of with accumulated amount exceeding the lower of $300 million or 20% of the paid-in capital:

					Balance as of January 1, 2019		Acquisition		Disposal				Balance as of December 31, 2019	
Investor	Marketable securities type and name	General ledger account	Counterparty	Relationship with the investee	Number of shares/units (in thousands)	Amount	Number of shares/units (in thousands)	Amount	Number of shares/units (in thousands)	Selling price	Book value	Gain on disposal	Number of shares/units (in thousands)	Amount
The Company	Taishin 1699 Money Market Fund	Note	N/A	N/A	-	$ -	73,891	$1,000,000	73,891	$1,000,729	$1,000,000	$ 729	-	$ -
The Company	Union Money Market Fund	Note	N/A	N/A	-	-	45,417	600,000	45,417	600,231	600,000	231	-	-
The Company	UPAMC James Bond Money Market Fund	Note	N/A	N/A	-	-	17,949	300,000	17,949	300,183	300,000	183	-	-
The Company	JMC	Investments accounted for using equity method	N/A	N/A	19,100	406,792	-	-	9,100	1,180,179	206,569	981,675	10,000	249,793

Note : Accounted for as “Financial assets at fair value through profit or loss”.

E. Acquisition of real estate properties with amount exceeding the lower of $300 million or 20% of the paid-in capital: None.

F. Disposal of real estate properties with amount exceeding the lower of $300 million or 20% of paid-in capital: None.

G. Purchases from or sales to related parties with amount exceeding the lower of $100 million or 20% of paid-in capital or more: None.

H. Receivables from related parties with amount exceeding the lower of $100 million or 20% of paid-in capital or more: None.

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

J. Significant inter-company transactions during the reporting periods:

				Transaction			
Number	Company name	Counterparty	Relationship	General ledger account	Amount	Transaction terms	Percentage of consolidated total revenues or total assets (%)
0	The Company	ChipMOS USA	Note	Service expense	$ 32,826	-	0.16

Note: Represents the transactions from parent company to subsidiary.

(2) Information on investees

Names, locations and related information of investees (excluding information on investments in the P.R.C.):

				Original investment amount		Shares held as of December 31, 2019					
Investor	Investee	Location	Main business activities	Ending balance	Beginning balance	Number of shares	Ownership (%)	Carrying amount	Net profit (loss) of the investee for the year ended December 31, 2019	Investment income (loss) recognized for the year ended December 31, 2019	Note
The Company	ChipMOS USA	San Jose, USA	Research, development and marketing of semiconductors, circuits, electronic related products	$ 217,918	$ 217,918	3,550,000	100	$ 235,742	$ 4,267	$ 4,267	
The Company	JMC	Kaohsiung, Taiwan	Manufacturing, processing and trading of high-end flexible IC substrates for display driver ICs	165,007	315,164	10,000,000	10	249,793	524,347	63,838	Note
The Company	ChipMOS BVI	British Virgin Islands	Holding company	3,072,712	3,072,712	2,407,742,975	100	3,175,040	(219,692)	(219,692)	

Note: Company’s associate accounted for using equity method.

(3) Information on investments in the P.R.C.

A. Basic information:

Investee in P.R.C.	Main business activities	Paid-in capital	Investment method	Accumulated amount of remittance from Taiwan to P.R.C.as of January 1, 2019	Amount remitted from Taiwan to P.R.C./ Amount remitted back to Taiwan for the year ended December 31, 2019		Accumulated amount of remittance from Taiwan to P.R.C. as of December 31, 2019	Net loss of investee for the year ended December 31, 2019	Ownership (%) held by the Company (directly or indirectly)	Investment loss recognized for the year ended December 31, 2019	Carrying amount of investments in P.R.C. as of December 31, 2019	Accumulated amount of investment income remitted back to Taiwan through December 31, 2019	Note
					Remitted to P.R.C.	Remitted back to Taiwan							
Unimos Shanghai	Semiconductor assembling and testing services	$ 10,817,191	Note 1	$ 2,885,586	$ -	$ -	$ 2,885,586	($ 352,008)	45.02	($ 218,764)	$3,143,117	$ -	Note 2
Zuzhu	Business consulting services	87,139	Note 1	-	-	-	-	(2)	5.10	-	4,492	-	
Zuzhan	Business consulting services	16,606	Note 1	-	-	-	-	(1)	13.42	-	2,219	-	
Zuchen	Business consulting services	19,673	Note 1	-	-	-	-	(1)	11.34	-	2,164	-	
Guizao	Business consulting services	18,810	Note 1	-	-	-	-	(1)	11.85	-	2,163	-	

Note 1: Through investing in an existing company (ChipMOS BVI) in the third area, which then invested in the investee in P.R.C..

Note 2: The financial statements that are audited by the Company's independent accountants.

Company name	Accumulated amount of remittance from Taiwan to P.R.C. as of December 31, 2019	Investment amount approved by the Investment Commission of MOEA	Limit on investments in P.R.C. imposed by the Investment Commission of MOEA
The Company	$ 2,885,586	$ 2,885,586	$ 11,790,743

B. Significant transactions, either directly or indirectly through a third area, with investee companies in the P.R.C.: None.

ChipMOS TECHNOLOGIES INC.
STATEMENT OF CASH AND CASH EQUIVALENTS
DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars)

Item	Description	Amount
Cash on hand and petty cash		$ 470
Bank savings:		
Checking accounts		920
Demand deposits		355,885
Demand deposits – foreign currencies	USD 13,071 thousand, exchange rate 29.980	473,610
	JPY 261,067 thousand, exchange rate 0.276	
	RMB 2,252 thousand, exchange rate 4.305	
Time deposits	Interest rates: 0.09%~2.35%	3,788,480
		$ 4,619,365

ChipMOS TECHNOLOGIES INC.
STATEMENT OF ACCOUNTS RECEIVABLE
DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars)

Name of the clients	Description	Amount	Note
Related parties:			
Others		$ 1,045	Note
Non-related parties:			
Company A		$ 794,493	
Company C		537,093	
Company K		466,798	
Company B		437,171	
Company M		323,707	
Company I		294,414	
Company G		290,562	
Others		1,310,017	Note
		4,454,255	
Less: Loss allowance		(1,351)	
		$ 4,452,904	

Note: None of the individual customer’s owing balance exceed 5% of the ending balance of this account.

ChipMOS TECHNOLOGIES INC.
STATEMENT OF INVENTORIES
DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars)

Item	Description	Amount: Cost	Amount: Net realizable value	Note
Raw material		$ 1,831,140	$ 1,807,100	
Less: Allowance for impairment losses		(63,498)		
Inventories, net		$ 1,767,642		

ChipMOS TECHNOLOGIES INC.
STATEMENT OF CHANGES IN INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD
YEAR ENDED DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars)

	Balance as of January 1, 2019		Increases (Note 1)		Decreases (Note 2)		Other adjustments (Note 3)	Balance as of December 31, 2019			Market price or equity			
Name	Shares (in thousands)	Amount	Shares (in thousands)	Amount	Shares (in thousands)	Amount	Amount	Shares (in thousands)	Percentage of ownership	Amount	Unit Price	Total price	Collateral or pledge	Note
JMC	19,100	$ 406,792	-	$ 63,838	(9,100)	($ 226,569)	$ 5,732	10,000	10%	$ 249,793	$ 80.70	$ 807,000	None	
ChipMOS BVI	2,407,743	3,489,799	-	3,324	-	(219,692)	(98,391)	2,407,743	100%	3,175,040	1.32	3,175,040	None	
ChipMOS USA	3,550	237,282	-	4,267	-	-	(5,807)	3,550	100%	235,742	66.41	235,742	None	
		$ 4,133,873		$ 71,429		($ 446,261)	($ 98,466)			$ 3,660,575				

Note 1: Includes increase in share of profit of subsidiaries and associates of $68,105 and amortization of downstream transactions of $3,324.

Note 2: Includes decrease in share of loss of subsidiaries and associates of $219,692, cash dividend paid by JMC of $20,000, and the disposal of JMC $206,569.

Note 3: Includes unrealized gains on financial assets at fair value through other comprehensive income of $5,540, adjustments of exchange differences from translation of foreign operations of ($104,198), and recognition of remeasurements of defined benefit plans of $192.

ChipMOS TECHNOLOGIES INC.
STATEMENT OF CHANGES IN PROPERTY, PLANT AND EQUIPMENT
YEAR ENDED DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars)

Item	Balance as of January 1, 2019	Effects on initial application of IFRS 16	Adjusted balance at January 1	Additions	Disposals	Reclassifications	Balance as of December 31, 2019	Collateral
Cost								
Land	$ 452,738	$ -	$ 452,738	$ -	$ -	$ -	$ 452,738	See Note 8
Buildings	10,254,531	-	10,254,531	116,238	(4,589)	455,792	10,821,972	See Note 8
Machinery and equipment	48,270,023	-	48,270,023	2,334,311	(831,318)	1,467,401	51,240,417	See Note 8
Tools	4,402,711	-	4,402,711	781,465	(205,932)	30,077	5,008,321	None
Others	2,605,494	(44,452)	2,561,042	224,287	(501,065)	(351,779)	1,932,485	None
Construction in progress and equipment to be inspected	1,069,892	-	1,069,892	1,440,308	-	(1,573,811)	936,389	None
	67,055,389	($ 44,452)	67,010,937	$ 4,896,609	($ 1,542,904)	$ 27,680	70,392,322	
Accumulated depreciation								
Buildings	(6,345,800)	$ -	(6,345,800)	(384,832)	$ 4,589	$ -	(6,726,043)	
Machinery and equipment	(37,928,956)	-	(37,928,956)	(2,488,851)	815,285	(281,669)	(39,884,191)	
Tools	(3,660,532)	-	(3,660,532)	(625,712)	196,596	(22,197)	(4,111,845)	
Others	(1,983,895)	12,548	(1,971,347)	(195,869)	366,458	302,804	(1,497,954)	
	(49,919,183)	$ 12,548	(49,906,635)	($ 3,695,264)	$ 1,382,928	($ 1,062)	(52,220,033)	
Accumulated impairment								
Machinery and equipment	(109,385)	$ -	(109,385)	($ 9,938)	$ -	($ 74,017)	193,340	
Others	(208,208)	-	(208,208)	-	134,191	74,017	-	
	(317,593)	$ -	(317,593)	($ 9,938)	$ 134,191	$ -	193,340	
Carrying amount	$ 16,818,613		$ $16,786,709				$ $17,978,949	

ChipMOS TECHNOLOGIES INC.
LONG-TERM BANK LOANS
DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars)

Creditor	Description	Amount	Period	Range of interest rate	Collateral	Note
Taiwan Cooperative Bank and others	Syndicated bank loans	$ 9,066,000	May 30, 2018 ~ May 30, 2023	1.7895%	See Note 8	
	Less: Fee on syndicated bank loan	(24,355)				
	Current portion (fee included)	(748,419)				
		$ 8,293,226				

ChipMOS TECHNOLOGIES INC.
STATEMENT OF REVENUE
YEAR ENDED DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars)

Item	Quantity (in thousands)	Amount	Note
Testing			
Memory	2,067,591	$ 3,321,894	
Logic/mixed-signal	369,330	969,743	
Total testing		$ 4,291,637	
Assembly			
Memory	1,177,469	4,178,709	
Logic/mixed-signal	1,569,330	997,375	
Total assembly		$ 5,176,084	
LCDD			
Total LCDD	1,867,681	$ 6,940,923	
Bumping			
Total bumping	1,313	$ 4,018,976	
Less: Sales allowance		(89,739)	
Net revenue		$ 20,337,881	

ChipMOS TECHNOLOGIES INC.
STATEMENT OF COST OF REVENUE
YEAR ENDED DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars)

Item	Amount
Raw material at January 1, 2019	$ 1,814,992
Raw material purchased	4,976,383
Less: Raw material at December 31, 2019	(1,831,140)
Raw material sold	(18,387)
Transfer to research and development expenses	(15,318)
Transfer to operating expenses	(1,338,878)
Scrap of raw material	(12,369)
Consumption of raw material for the year	3,575,283
Direct labor	2,665,403
Manufacturing expenses	10,105,151
Manufacturing costs of the year	16,345,837
Deficiency compensation	7,808
Raw material sold	18,387
Scrap of raw material	12,369
Reversal of impairment losses on inventories	27,341
Total cost of revenue	$ 16,411,742

ChipMOS TECHNOLOGIES INC.
STATEMENT OF OPERATING EXPENSES
YEAR ENDED DECEMBER 31, 2019

(In Thousands of New Taiwan Dollars)

Item	Amount	Note
Sales and marketing expenses		
Salaries and wages	$ 33,338	
Services fees	32,826	
Others	22,738	None of the individual item exceeds 5% of this account
	$ 88,902	
General and administrative expenses		
Salaries and wages	$ 282,853	
Professional service expenses	52,262	
Insurance fees	26,720	
Others	105,529	None of the individual item exceeds 5% of this account
	$ 467,364	
Research and development expenses		
Salaries and wages	$ 750,370	
Insurance fees	61,050	
Others	196,211	None of the individual item exceeds 5% of this account
	$ 1,007,631	

ChipMOS TECHNOLOGIES INC.
LABOR, DEPRECIATION AND AMORTIZATION BY FUNCTION
YEARS ENDED DECEMBER 31, 2019 AND 2018

(In Thousands of New Taiwan Dollars)

	2019			2018		
By function / By nature	Classified as costs of revenue	Classified as operating expenses	Total	Classified as costs of revenue	Classified as operating expenses	Total
Employee benefit expense	$ 4,852,592	$ 1,205,986	$ 6,058,578	$ 4,482,306	$ 1,104,725	$ 5,587,031
Salaries	4,060,898	1,040,187	5,101,085	3,684,278	927,492	4,611,770
Directors' remuneration	-	26,266	26,266	-	18,456	18,456
Labor and health insurance	343,030	75,586	418,616	330,393	72,185	402,578
Pension	151,895	42,278	194,173	158,910	42,657	201,567
Share-based payments	714	108	822	19,639	21,404	41,043
Other personnel expenses	296,055	21,561	317,616	289,086	22,531	311,617
Depreciation	$ 3,679,861	$ 45,694	$ 3,725,555	$ 3,331,819	$ 44,242	$ 3,376,061

Note: 1. For the years ended December 31, 2019 and 2018, the Company had 5,828 and 5,908 employees on average, including 7 directors in both years.

Note 2. (1) The average employee benefit expenses for the years ended December, 31, 2019 and 2018 were $1,036 and $944, respectively.
(2) The average salaries for the years ended December 31, 2019 and 2018 were $876 and $782, respectively.
(3) The difference of average salaries for 2019 compared with 2018 was 12.02%.

VI. Explanations Regarding Impacts on Company's Financial Status in the Event that the Company or its Affiliates Have Financial Difficulties: None.

VII. Review of Financial Status, Financial Performance and Risk Management

I Analysis of Financial Status (consolidated financial statements)

Unit: NT$ thousands ; %

Item \ Year	2019	2018	Difference	
			Amount	%
Current assets	11,762,346	11,888,143	(125,797)	(1.06)
Property, plant and equipment	17,979,444	16,819,621	1,159,823	6.90
Other assets	4,564,097	4,425,954	138,143	3.12
Total assets	34,305,887	33,133,718	1,172,169	3.54
Current liabilities	4,901,701	5,190,195	(288,494)	(5.56)
Non-current liabilities	9,752,947	9,872,712	(119,765)	(1.21)
Total liabilities	14,654,648	15,062,907	(408,259)	(2.71)
Capital stock	7,272,401	7,528,577	(256,176)	(3.40)
Capital surplus	6,059,651	6,280,482	(220,831)	(3.52)
Retained earnings	6,338,989	5,104,542	1,234,447	24.18
Other equity interest	(19,802)	119,713	(139,515)	(116.54)
Treasury stock	—	(962,503)	962,503	(100.00)
Equity attributable to equity holders of the Company	19,651,239	18,070,811	1,580,428	8.75

Analysis of deviation over 20%:

1. Retained earnings increase was mainly due to the increase of profit in 2019.
2. Other equity interest decrease was mainly due to the increase of unrealized loss on valuation of finance assets at fair value through other comprehensive income and currency exchange loss arising from translation of foreign operations in 2019.
3. Treasury stock decrease was mainly due to cancellation of treasury stock in 2019.

II Analysis of Financial Performance: (consolidated financial statements)

(I) Operating Results Comparative Analysis

Unit: NT$ thousands ; %

Item \ Year	2019	2018	Difference	
			Amount	%
Revenue	20,337,881	18,480,027	1,857,854	10.05
Cost of revenue	(16,411,742)	(15,050,032)	(1,361,710)	9.05
Gross profit	3,926,139	3,429,995	496,144	14.46
Operating expenses	(1,561,948)	(1,477,788)	(84,160)	5.69
Other income (expenses), net	92,928	147,514	(54,586)	(37.00)
Operating profit	2,457,119	2,099,721	357,398	17.02
Non-operating income (expenses)	573,200	(317,279)	890,479	(280.66)
Profit before income tax	3,030,319	1,782,442	1,247,877	70.01
Income tax expense	(446,158)	(679,367)	233,209	(34.33)
Profit for the year	2,584,161	1,103,075	1,481,086	134.27
Other comprehensive loss, net of income tax	(123,772)	(32,829)	(90,943)	277.02
Total comprehensive income for the year	2,460,389	1,070,246	1,390,143	129.89

Analysis of deviation over 20%:

1. Other income (expenses), net decrease was mainly due to the decrease of gain on disposal of scrapped materials and royalty income in 2019.
2. Non-operating income, net, increase was mainly due to the recognized of gain on disposal of investment accounted for using equity method in 2019.
3. Profit before income tax and profit for the year increase were mainly due to the recognized of gain on disposal of investment accounted for using equity method and the increase of profit in 2019.
4. Income tax expense decrease was mainly due to higher income tax expense on upappropriated retained earnings of 2018.
5. Other comprehensive loss, net of income tax increase was mainly due to the increase of unrealized loss on valuation of finance assets at fair value through other comprehensive income and currency exchange loss arising from translation of foreign operations in 2019.

(II) Sales Volume Forecast and Effect of Changes on the Company’ s Future Business and Future Response Actions : Please refer to “I. Letter to Shareholders” .

III Analysis of Cash Flow

(I) Cash Flow Analysis for the Current Year

Item \ Year	2019	2018	Increase (decrease) ratio
Cash flow ratio (%)	122.26%	76.30%	60.24%
Cash flow adequacy ratio (%)	85.76%	91.84%	(6.62%)
Cash reinvestment ratio (%)	6.27%	4.75%	32.00%
Analysis and explanation for changes exceeding 20%: Cash flow ratio and cash reinvestment ratio: Mainly due to increase of profit in 2019.			

(II) Remedial Plan for Liquidity Shortage: None

(III) Company's Cash Liquidity Analysis for the Coming Year

Unit: NT$ thousands

Opening cash balance	Net cash flow provided by operating activities	Annual cash outflow	Cash balance amount	Remedial actions for cash deficit	
				Investment plan	Financial plan
4,704,084	6,057,470	6,263,723	4,497,831	—	—
1. Analysis on the cash flow changes for the coming year : (1) Operating activities $6,057,470: Mainly due to operating profit estimated. (2) Investing activities ($5,382,904): Mainly due to the acquisition of operating equipment. (3) Financing activities ($880,819): Mainly due to the proceeds from bank loans and payment of cash dividend. 2. Remedial action for cash deficit and liquidity analysis: Not applicable.					

IV Major Capital Expenditure Items

Major Capital Expenditure Items and Source of Capital

Unit:NT$ thousands

Project	Actual or expected source of funds	Total actual funding need	Actual or expected status of use	
			2019	2020
Plant and equipment	Own funds or bank loan	10,171,464	4,896,609	5,274,855

V Investment Policy in the Last Year, Main Causes for Profits or Losses, Improvement Plans and Investment Plans for the Coming Year

The Company and its subsidiaries' investments in the most recent year, accounted for using equity method, were all made for long-term strategic purposes and to enhance our international market competitiveness. Each investment was made with prudent evaluation. The Company and its subsidiaries recognized its share of loss of investments accounted for using equity method amount to NT$154,926 thousand for the year of 2019 which decreased NT$145,175 thousand from the last year. The loss from the investments mainly due to part of them are still under the initial stage of development and expansion but the capacity utilization has gradually increased. The Company and its subsidiaries will continue to give guidance in accelerating investees to reach the profit goal

VI Analysis of Risk Management as in Most Recent Year and Up to the Date of Publication Date of the Annual Report

I. Effects of Changes in Interest Rates, Foreign Exchange Rates and Inflation on Corporate Finance, and Future Response Measures

1. Variations of Interest rate

The borrowings of the Company and its subsidiaries are mainly generated for the purposes of operating activities. However, as the Company acquired better rates at the time of such borrowings, and thus rate changes are not expected to produce much impact on the Company's operations. The Company will keep an eye on the interest rate fluctuation, maintain good rapport with correspondent banks, and assess loan interest rate and average market interest rate periodically to lower the impact of interest rate changes on the Company's profit.

2. Variations of foreign currency exchange rate

(1) Impact of exchange rate on the Company's revenue and profit

The major foreign currency-denominated sales of the Company and its subsidiaries are denominated in US dollars, while the major raw material and machinery equipment are partial denominated in US dollars or Japanese yen. Therefore, accounts receivable charge against accounts payable for foreign currency-denominated will bring part of nature hedge effect. However, exchange gain or loss may arise when exchanging such funds to New Taiwan Dollars. Thus, exchange rate changes may have impacts on the Company's revenue and profit.

(2) Countermeasures

The exchange rate fluctuation of foreign currency assets and liabilities of the Company and its subsidiaries is based in nature hedge, supplemented with the related hedge management measures as follows to serve as short-term response:

A. The finance department will monitor international exchange rate changes from time to time, and gather the related information of exchange rate changes at all times to grasp the trend of international exchange rate changes. The finance department will also conduct timely exchange pursuant to the Company's needs of funds to lower the risk exposure of exchange rate changes.

B. With the characteristic of nature hedge, the Company will use foreign currency liabilities to balance foreign currency assets. Further, the Company will also use bank loan and other methods to adjust the ratio of foreign currency assets and liabilities. Such actions may help the Company to lower the impact of exchange rate changes.

3. Inflation

The impact of inflation is enormous, and the Company will gather information of international economic situation and the factors might trigger an unusually heated inflation to keep constant watch of market price fluctuation of raw material and keep looking for substitutive materials. Also, the Company and its subsidiaries will provide relevant information to Company's management team as a basis for review and decision making. The Company and its subsidiaries will also keep good interactive relationship with suppliers and customers to enhance the response to cost changes, and proceed with further negotiate regarding purchases and prices in order to avoid adverse impact of inflation on the Company. The company demand for precious metals accounted for a certain proportion of the production, to establish a precious metal processing and supply chain to improve the establishment of a more flexible response to the risk of loss caused by precious metal price fluctuations.

(II) Policies, Main Causes of Gain or Loss and Future Response Measures with Respect to High-risk, High-leveraged Investments, Lending or Endorsement Guarantees, and Derivatives Transactions

The Company and its subsidiaries do not engage in any high-risk, high-leverage investment. The Company's derivatives transactions are strictly for hedging the risk of exchange rate changes of the Company's assets and liabilities denominated in foreign currency and are all under the Company's control. Every banking transaction is handled in accordance with the operation process of derivatives transactions provided in our "Operational Procedures for the Acquisition or Disposal of Assets" and "Authority Table of Finance Operation Authorization and Approval."

As of the date of publication of this annual report, the Company and its subsidiaries have not lent loans nor made endorsement/guarantee to others. Only for the company’s operation activities for customs tariff endorsement guarantee amounted to NT$100,800 thousand.

(III) Future Research & Development Projects and Corresponding Budget:

R&D projects in the future

The Company and its subsidiaries have been established in line with "R&D-based" objective, focusing on advanced R&D and production problem solving of assembly and testing business. Every year we will devote in R&D regarding various issues in mechanics, material, electrical and other related domain in order to provide customers with all round information. 3C products have to be possessed of the characters of light, thin, short and small for mobile platform and prevalence stretching over different applicable electronic products, such as touch panel controller IC, power management IC, biometrics authentication (such as fingerprint sensor) etc. Therefore, further advanced multi-chip assembly technologies have become a basic equipment to achieve full-scale integration.

The assembly and testing houses need build up the state of the art capabilities and develop the R&D technologies to provide customers with effective solutions and to maintain the market competitiveness. Thus, the Company and its subsidiaries keep enhancing investments in core technologies and working toward R&D in advanced technologies regarding assembly and testing. The Company and its subsidiaries have put a lot of effort on R&D over decades, and the achievement should be attributed to the professional skills of the engineers and their accumulated experiences. Their appropriate control of materials and improvement in equipment also helped in reducing production costs. In addition, the Company and its subsidiaries conducted an industry, research institution and university co-development project to jointly research and develop in next generation advanced assembly and testing technologies. The Company and its subsidiaries will align customer's product development schedule and technology development roadmap by more aggressive R&D development resource. Meanwhile, the involved R&D resource also could enhance the core technology capability and expand the new business opportunity. Based on the foregoing, the Company and its subsidiaries have the self-confidence to be the pioneer in the assembly and testing industry.

New products (services) planned to be developed

The Group not only plans to keep increasing capacity of assembly and testing services for high-end memory, but also plans to expand regarding the assembly and testing services for the following products:

A. Developing 3P/3M Cu pillar and WLCSP for high pin count product.
B. Continually develop fine pitch RDL line width and space (4um/4um) for copper RDL application.
C. Developing fine pitch inner lead width and space for COF ILB assembly.
D. Evaluate thinner PI film of COF tape to increase the tape flexible property for full screen of FDP device development.
E. Developing COF FT test condition in low temperature condition -40℃ for automotive device specification.
F. Implement DBG/ SDBG for thin wafer capability.
G. 16DP BGA/SiP product developmentEstimated R&D expenditure

The estimated R&D expenditure of the Company and its subsidiaries are gradually recognized in accordance with the developing progress of new products and technologies, and will maintain a certain rate of growth based on future operating conditions to ensure the competitiveness of the Company and its subsidiaries.

(IV) Effects of and Response to Changes in Policies and Regulations Relating to Corporate Finance and Sales

The Company and its subsidiaries' financial status are not affected by major changes in domestic and foreign government policies and laws in recent years. Nevertheless, since the rules and regulations of the Company and its subsidiaries are stipulated and enforced with the relative laws and regulations, if there is any amendment, the Company and its subsidiaries will amend and renew their rules and regulations in accordance with such amendment.

(V) Effects of and Response to Changes in Technology and the Industry Relating to Corporate Finance and Sales

The industry, products and technologies which the Company and its subsidiaries now engaged are changing rapidly, requiring the Company to not only introduce advanced process technologies but also enhance the partnership of the strategic alliance with upstream and downstream vendors of the supply chain. The Company and its subsidiaries shall devote to acquiring and developing advanced process technologies, obtain strategic cooperative alliance with major material suppliers and customers, and enhance marketing channel to make a diverse development in products and customers. As for financial operation, the Company and its subsidiaries shall aim at the characteristic of business to strengthen the management of cash flow and to maintain adequate financial structure to disperse operating risks.

(VI) The Impact of Changes in Corporate Image on Corporate Risk Management, and the Company’s Response Measures

The Company and its subsidiaries maintained an excellent corporate image by operating with integrity and complying with the relevant laws and regulations. Up to date, there has been no event that adversely impact in the corporate image of the Company and its subsidiaries..

(VII) Expected Benefits from, Risks Relating to and Response to Merger and Acquisition Plans

None.

(VIII) Expected Benefits from, Risks Relating to and Response to Factory Expansion Plans

The layout of plant of the Company and its subsidiaries is according to fill up current capacity first and consider the necessary to satisfy the future needs of customers and market development trend. Expansion of the plant of the Company and its subsidiaries has been completely and prudently evaluated by responsible departments. Investment recovery and possible risks have also been taken into consideration.

(IX) Risks Relating to and Response to Excessive Concentration of Purchasing Sources and Excessive Customer Concentration

(1) Purchases

The Company duly evaluates the financial and operating status of our major suppliers. Purchases of major raw materials are generally purchased from two or more suppliers except in the event that such materials shall be purchased from suppliers certified or designated by customers. Our suppliers are all well-known manufacturers from home or abroad. We keep long-term partnership with all the suppliers in order to assure a steady purchase. We also develop substitute materials and suppliers to increase the flexibility of supply sources. In view of the impact of the serious earthquake in northeast Japan on the material supply, we take the location of suppliers' manufacturing facilities into account in order to disperse risks of purchase concentration and to enhance the integrity and reliability of supply chain.

(2) Sales

The Company is the second largest assembly and testing house for LCD display driver IC in Taiwan and have deeply ploughed the assembly and testing services in semiconductor back-end processes industry. The major business lies in providing assembly and testing services for MF/HF memory, high density memory, LCD display driver IC, communication IC, and logic/mixed-signal IC etc. The major customers include semiconductor design companies, integrated device manufacturers and semiconductor IC Fabs at home and abroad. Sales made to the top 10 customers of the Company respectively accounted for 85.2%, 84.7% and 84.2% of the net revenue for each year from 2017 to 2019. Sales made to the top 10 customers in each season were very stable and no sales made to any singular customer or group accounted for over 30% of all sales. Therefore, the Company does not run the risk of over-concentration in sales. Further, the Company will not only keep providing fine services for solutions and technical support to customers, but will also maintain a well and long-term relationship with existing customers. We will also further devote to win new customers that engage in logic/mixed-signal IC and consumer IC products in order to reduce risks associated with sales concentration.

(X) Hazardous Risks and Utility Supply Interruption or Shortage Risks

The frequency and severity of catastrophic events, including natural disasters and severe weather has been increasing, in part due to climate change or systemic regional geological changes that manifest in damaging earthquakes. ChipMOS has manufacturing and other operations in locations subject to natural disasters, such as flooding, earthquakes, tsunamis, typhoons, and droughts that may cause interruptions or shortages in the supply of utilities, such as water and electricity, that could disrupt operations. In addition, ChipMOS's suppliers and customers also have operations in such locations. For example, most of ChipMOS's production facilities, as well as those of many of its material suppliers and equipment vendors, are located in Taiwan and Japan, which are susceptible to earthquakes, tsunamis, flooding, typhoons, and droughts from time to time that may cause shortages in electricity and water or interruptions to our operations. Thus, if one or more natural disasters that result in a prolonged disruption to ChipMOS's operations or those of its customers or suppliers, or if any of its or vendor facilities were to be damaged or cease operations as a result of an explosion or fire, it could reduce the Company's manufacturing capacity and may cause us to lose important customers, thereby having a potentially adverse and material impact on our operational and financial performance. ChipMOS has occasionally suffered power outages or surges in Taiwan caused by difficulties encountered by its electricity supplier, the Taiwan Power Company, or other power consumers on the same power grid, which have resulted in interruptions to our operations.

ChipMOS maintains a comprehensive risk management system dedicated to the safety of people, the conservation of natural resources, and the protection of property. In order to effectively handle emergencies and natural disasters, at each facility management has developed comprehensive plans and procedures that focus on risk prevention, emergency response, crisis management and business continuity. All ChipMOS manufacturing factories have been ISO 14001 certified (environmental management system) and OHSAS 18001 certified (occupational health and safety management system).

The Company pays special attention to preparedness of emergency response to disasters, such as typhoons, floods and droughts caused by climate change, earthquakes, pandemics (such as H1N1 influenza, new coronavirus), and disruptions to water, electricity and other public utilities. ChipMOS has established a company-wide taskforce dedicated to managing the risk of a water or electricity shortage that might arise due to climate change.

In response to the impact of the earthquake that occurred in Taiwan, ChipMOS conducted a continuous improvements including enhancing earthquake emergency response, enhancing tool anchorage and seismic isolation facilities, preparedness for speeding up tool salvage and production recovery. Although the Company maintains many overlapping risk prevention and protection systems, as well as fire and casualty insurance, ChipMOS's risk management and insurance coverage may not always be sufficient to cover all of the Company's potential losses. If any of ChipMOS's or vendor facilities were to be damaged or cease operations as a result of an explosion, fire or environmental causes, it could reduce the Company's manufacturing capacity and may lead to the loss of important sales and customers, and impact on ChipMOS's financial performance. In addition to periodic fire-protection inspections and firefighting drills, the

Company has also carried out a corporate-wide fire risk mitigation project focused on managerial and hardware improvements.

In addition, beginning in late 2019, the media has reported a public health epidemic, new coronavirus, COVID-19, originating in China, prompting precautionary government-imposed closures of certain travel and business. It is unknown whether and how global supply chains may be affected if such an epidemic persists for an extended period of time. We may incur expenses or delays relating to such events outside of our control, which could have a material adverse impact on our business, operating results and financial condition.

(XI) Effects of, Risks Relating to and Response to Large Share Transfers or Changes in Shareholdings by Directors, Supervisors, or Shareholders with Shareholdings of over 10%: None.

(XII) Effects of, Risks Relating to and Response to the Changes in Management Rights:

In the most recent year and as of the publication date of this annual report, there was no such situation. This section is thus not applicable.

(XIII) Litigation or Non-litigation Matters

1. Major ongoing lawsuits, non-lawsuits or administrative lawsuit: None.
2. Major ongoing lawsuits, non-lawsuits or administrative lawsuits caused by directors, supervisors or shareholders with over 10% shareholdings:

Broadcom Corporation, Broadcom Singapore PTE, Ltd., and Broadcom Limited (collectively, "Broadcom") previously filed a request to the American Arbitration Association ("AAA") for arbitration against Siliconware Precision Industries Co., Ltd. ("SPIL"), the major shareholder holding more than 10% of ChipMOS TECHNOLOGIES INC.'s shares, regarding the dispute related to the performance of the Semiconductor Packaging Agreement (the "Agreement") executed by and between SPIL and Broadcom in September, 2012. According to the Agreement, in the event that the assembling and testing services provided by SPIL infringes the patents of any third party and, as a result of such infringement, causes any losses for Broadcom, SPIL shall indemnify and hold harmless Broadcom from such losses. In the aforementioned arbitration proceeding, Broadcom and SPIL ultimately reached an agreement in December, 2019 for the patent infringement dispute between Broadcom and Tessera Technologies, Inc., under which SPIL shall pay USD 5 million for settlement. Therefore, SPIL has earmarked funds totaling NTD 149.9 million as provision for liabilities (recorded as other current liabilities) and executed the settlement agreement with Broadcom in February, 2020. Aside from the abovementioned dispute, no other lawsuits have been filed against SPIL

(XIV) Other Major Risks and Countermeasures

1. Risks Associated with Cyber Attacks

The Company has announced an Information Security Policy since 2014. Setting up an Information Security Management Committee and communication email in organization. Implementing an ISMS (information security management system) based on ISO/IEC 27001:2013 information security standard. The Company has established ISO 27001 framework contains 14 domains. These domains cover a wide variety of control objectives, policies to protect the Confidentiality, Integrity and Availability of the Company information assets security.

Formulate operational standards for information security related management procedures, plan internal management related activities of the security, and assist in the internal information security related risk assessment and needs. Each year, information technology center's related control objectives and control measures are reviewed through internal audit activities and external third-party verification. Currently, in 2017, ISO/IEC 27001 certifications have been obtained. The annual review was also completed in December 2019.

The Company continuously develop disaster recovery architecture for important information assets and conduct disaster recovery plan & implement disaster recovery rehearsal (DR rehearsal). The rehearsal information system recovery time objective (RTO) can be completed within the maximum tolerable period of disruption (MTPD) to reduce the production interruption time or property loss caused by disasters. The Information Technology Center has completed 30 items DR rehearsal for important information systems and services in last year. It includes databases, production system hosts, networking, core switches, firewall and other types of information assets. DR rehearsal adopts standardized disaster recovery plan to make the same expected disaster recovery effect can be obtained in the different factory area and different system administrator.

In order to obtain the cyber security threats and vulnerability risk assessments. The Company join the Science Park Information Sharing and Analysis Center (SP-ISAC) external security organization. SP-ISAC provide information security analysis services and provide information alerts about current security issues, vulnerabilities, and exploits. Using submit security incident support form can help ISMS security team analysis and response to the security incident. To reduce cyber security risk by setting up network security equipment, in addition using intrusion detection system to real time analyze & block abnormal network behaviors. Maintain and identifying information assets value (confidentiality, integrity and availability) through information assets inventory every year. The information assets value corresponds to determines the assets protection level plan needs. In response to the increasing trend of phishing email cybercrime by social engineering email attacks, implement phishing simulations test and educate employees on how to spot phishing and avoid attacks, increase employee awareness for reduce risk.

VII Special Disclosure: None.

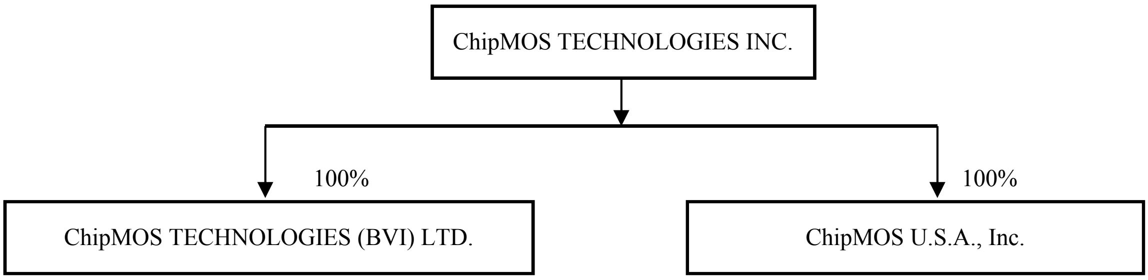
VIII. Other Special Disclosure

I Summary of Affiliated Companies

(I) Consolidated Business Report of Affiliated Enterprises

1. Affiliated Companies Chart

December 31, 2019



2. Affiliated Companies Profile

December 31, 2019

Company Name	Date of Incorporation	Location	Paid-in Capital	Major Business Activities
ChipMOS U.S.A., Inc.	October 25, 1999	San Jose, USA	US$7,100 thousand (NT$217,918 thousand)	Research, development and marketing of semiconductor, circuits, electronic related products
ChipMOS TECHNOLOGIES (BVI) LTD.	January 29, 2002	British Virgin Islands	NT$5,958,210 thousand	Holding company

3. Shareholders in Common of the Company and Its Subsidiaries with Deemed Control and Subordination: None.

4. Business Scope of the Company and Its Affiliated Companies

Business scope of the Company and its affiliates include the research, development, manufacturing and sale of high-integration and high-precision integrated circuits and related assembly and testing services. A few affiliates engage in investment business only in order to create a greatest benefit for the Company and its affiliated companies through mutual support of technologies, production, marketing and services.

5. Roster of Directors, Supervisors and Presidents of Affiliated Enterprises

December 31, 2019 (Unit: shares / %)

Company Name	Title	Name or Representative	Shareholding	
			Shares	%
ChipMOS U.S.A., Inc.	Chairman/Director	Representative of ChipMOS TECHNOLOGIES INC.: Lafair Cho	3,550,000	100%
	President/Director	Representative of ChipMOS TECHNOLOGIES INC.: Shih-Fan Cheng		
	Director	Representative of ChipMOS TECHNOLOGIES INC.: Shih-Jye Cheng		
	Director	Representative of ChipMOS TECHNOLOGIES INC.: Yung-Wen Li		
	Director	Representative of ChipMOS TECHNOLOGIES INC.: Silvia Su		
ChipMOS TECHNOLOGIES (BVI) LTD.	Chairman/Director	Representative of ChipMOS TECHNOLOGIES INC.: Lafair Cho	2,407,742,975	100%
	Director	Representative of ChipMOS TECHNOLOGIES INC.: Silvia Su		

6. Business Overview of Affiliated Companies

December 31, 2019 (Unit: NT$ thousands)

Company Name	Paid-in Capital	Total Assets	Total Liabilities	Net worth	Revenue	Operating profit (loss)	Profit for the year	Earnings per share (NT$)
ChipMOS U.S.A., Inc.	217,918	241,938	6,196	235,742	32,808	1,986	4,267	1.20
ChipMOS TECHNOLOGIES (BVI) LTD.	5,958,210	3,175,040	－	3,175,040	Note1	(55)	(219,692)	(0.09)

Note 1: No operating activities as a holding company.

(II) Consolidated Financial Statements of Affiliated Companies

For the year ended December 31, 2019, pursuant to “Criteria Governing Preparation of Affiliation Reports, Consolidated Business Reports and Consolidated Financial Statements of Affiliated Enterprises”, the company that is required to be included in the consolidated financial statements of affiliates, is the same as the company required to be included in the consolidated financial statements under International Financial Reporting Standards No.10. And if relevant information that should be disclosed in the consolidated financial statements of affiliated enterprises has all been disclosed in the consolidated financial statements of parent and subsidiary companies, it shall not be required to prepare consolidated financial statements of affiliated enterprises.

(III) Affiliation Report: Not applicable.

II Status of Company's Private Placement in the Most Recent Year and Up to the Date of Publication of the Annual Report: None.

III Holding or Disposal of Shares of the Company by Subsidiaries in the Most Recent Year and Up to the Date of Publication of the Annual Report: None.

IV Other Necessary Supplement: None.

IX. Any Event that Have Significant Impacts on Shareholders' Rights or Security Prices as Stated in Item 2 of Paragraph 3 of Article 36 of Securities and Exchange Law in the Most Recent Year and Up to the Date of Publication of the Annual Report: None.

ChipMOS TECHNOLOGIES INC.

Chairman: Shih-Jye Cheng

2019

ANNUAL REPORT

ChipMOS

傑登廣告 設計 編印
02-29257555