Enterprise Vision

The core value of an enterprise lies with its published management philosophy and its attendant mission and the continuous development of an enterprise is ofen built on a long-term architecture, as well as its core value. In view of the imperativeness and importance of the enterprise's core value for long-term development following gradual development of the company.

Vision Statement

To provide the frequency controlled application products for the computer, communication, optical, and automotive industry so as to become, the most outstanding company in FCP industry judged by performance matrix and managerial capability.

Mission Statement

Through the continuous improvement and the urge for discipline and execution to enhance the productivity to interact with tier one vendors' requests by promoting company's professionalism and globalization framework.

Corporate Culture

To strive for the declared goals in management philosophy and mission, the company shall further develops its founding spirit of Integrity, Practicality, Innovation and Services and convert the guildlines of Unity, Harmony and High Efficiency into a precise corporate culature.

Annual Report 2018 Table of Contents

I. Letter to Shareholders

Dear Shareholders,

In 2018, the global economy was almost the most turbulent year since the financial crisis. In addition, the US tariff policy and the corresponding retaliatory measures of other economic entities have also slowed down the overall economic growth. Only the United States still has strong economic performance, be an important engine for global growth; in the case of Japan’s failure of monetary policy, the economy has not improved significantly; emerging countries have been forced to bear pressure with the appreciation of the dollar; in the Eurozone, Brexit, the impact of Italy's confrontation with the EU, some crisis incrementally emerged. The overall economic environment does not seem optimistic. There are also many unfavorable changes in the company's operations. For example, market competition has led to an increase in the volume of existing product mix, but prices have fallen, imbalances in supply and demand have led to unreasonable price cuts and alternative competition in the industry, product application technology has been accelerate replaced, tariff disputes impact customers’ strategy for production base. The demand of handset industry has stagnated due to no new product application to stimulate consumption, Networking and information products market demand is not as expected, trade war affects the overall automotive supply chain and consumption, coupled with the failure of the company's new products to be developed in time and in line with customer needs, has led to a decline in our revenue and profitability.

I. 2018 Operation Results

1. Consolidated revenue and net profit — Unit: NT$1,000

Items \ Year	2018	2017	Increase(Decrease) Amount	Change Rate (%)
Net Revenue	8,156,268	8,781,552	(625,284)	(7.12)
Gross Profit	1,827,626	2,186,077	(358,451)	(16.40)
Net Profit	644,350	962,655	(318,305)	(33.07)

Consolidated statement of income and profitability

Item	Year	2018	2017
Financial Structure (%)	Debt/Assets Ratio	30.34	31.62
	Long-term Capital/ Fixed Assets Ratio	254.77	254.61
Debt-Paying Ability (%)	Current Ratio	340.73	350.63
	Quick Ratio	250.96	277.70
Profitability (%)	Return on Assets	5.09	6.86
	Return on Equity	7.19	10.04
	Earnings per Share（NT$）	2.08	3.11

2. Budget Execution：

   In 2018, we set up internal budgeted target only without make public of the financial estimates. The overall turnover and profit were affected by changes in industries and product mix, Sales revenues came in NT$8,156,268,000 in 2018 and then resulted to achieving the operation target of 90.38%.

3. Research and development：

   The company continuously enhancing Temperature Compensating Control Quartz Oscillator (TCXO)、Temperature Sensing Quartz Crystal (TSX)、Miniature Constant Temperature Control

Quartz Crystal Oscillator (OCXO), Miniature Quartz Crystal (XO)、Miniature Mobile Device Crystal(Crystal) 、Light sensors…etc. The development of miniaturized products focuses on the technologies such as wafer design and manufacturing and packaging testing, in response to the demand for high-drive, high-frequency and high-stability products. The development of new Sensor products will be developed towards miniaturization, integration and feature optimization to meet the needs of customers and the market. In terms of market development, we will focus resources on developing high-end products including AOM (high frequency), ACAP (vehicle products) and Sensors (sensing components), including new applications, new industries, new customers, and new product opportunities, in order to optimize product mix and increase growth momentum, and actively deploy the relevant customers of the 5G industry and the Internet of Things application, laying the foundation for the subsequent market growth momentum.

4. Results from execution of other projects：

(1) Green enterprise：

In addition to ongoing promotion of green enterprise certification and other activities including the Greenhouse Gas Inventory (ISO14064-1) and routine Carbon Footprint checks, TXC was given the EPA's Product Carbon Footprint Emission Factor Database Establishment Award and earned low carbon marks. TXC has also been promoting kitchen waste and plastic bag use reduction activities. The company hands out environmentally-friendly bags to further reduce the use of environmentally hazardous plastic bags.

(2) Occupational safety and health：

TXC has continued to promote Occupational Health and Safety Assessment Series certification to uphold labor safety under the guidance of the Occupational Safety & Health Committee and Labor-Management Conference. A number of health promotion activities such as Getting to Know Metabolic Syndrome health lecture, pap smear testing, HPV virus awareness lecture, CPR and Heimlick maneuver instruction, workplace quit smoking activity, oral cancer screening activity, individual weight reduction activity, stress relief activity, blood pressure monitoring activity and flu vaccine inoculation activity were held by TXC to help employees take positive steps towards a healthy lifestyle. TXC will continue on working to create of a safe work environment to provide maximum safety to our employees.

(3) System certification：

With regard to the maintenance of various operating systems, TXC has received the following certifications: Quality Management System (ISO9001), Automotive Industry Quality Management System (ISO/TS16949), Environmental Management System (ISO14001), Taiwan Occupational Safety and Health Management System (CNS15506), Information Safety Management System (ISO/IEC27001), Hazardous Substance Process Management System (IECQ QC 080000:2012), Occupational Safety and Health Management System (OHSAS 18001:2007) as well as ISO 14064-1:2006 Greenhouse Gas Inventory, Product Carbon Footprint Verification (PAS 2050:2011) and Material Flow Cost Accounting Verification (ISO 14051:2011). TXC will continue to update its management systems to satisfy and surpass customer requirements

(4) Corporate governance and responsibility：

TXC's was ranked among the top 20% of all listed companies for corporate governance ratings and the company continues to strive forward by embracing the spirit of open mindedness, dedication, honesty and happiness. Due to the long-term services provided by our company to neighboring disadvantaged families and orphanages. In addition, the company participation in a number of volunteer activities to show concern for local neighborhoods was included the CSR report. TXC Foundation was established to provide variously kind of support.

一、2019 Business Plan Summary：

1、 Strengthening industrial deployment and increasing market share: Consolidate existing markets to enhance competitiveness and maintain market share, actively develop new markets, new industries, new applications, and new products, deepen China and strengthen the European, American and Japanese markets.

2、 Optimize product mix and increase profitability: Combine production cost advantages to provide the best product mix and drive high-end, high-margin product sales. Through intelligent technology and big data analysis, we can instantly integrate information from various production bases to improve production yield and reduce quality costs.

3、 Technical cooperation, strategic alliances, mergers and acquisitions and integration: The future competitive market, shortened product life cycle, technology transfer and learning speed, accelerate the transfer of key technologies or capabilities and new technologies through technical cooperation, strategic alliances, mergers and acquisitions and integration The development speed of products and new processes can effectively enter new markets, enabling enterprises to have competitive advantages and expand the application of existing technologies or products to create synergies.

Looking forward 2019, with intelligent production, lean management and light asset management, the company hopes to face the challenges of this year with innovative thinking and efficient execution! Although the overall economic environment is still steep, we are convinced that the company with the efforts of the management team, we will be able to break through the status quo, open up new opportunities, and move forward.

II.Company Overview

A.Company Introduction

1. Date of the company´s incorporation

TXC is a professional frequency control component and sensor component manufacturer. Since the company’s founding in 1983, it has been devoted to research and development, design, production, and sale of quartz component product series. Products include high precision, high quality quartz crystal, automotive crystal, crystal oscillators, and timing modules. Market demand has led TXC to develop multiple kinds of sensors using independent core technology, products that are widely used in mobile communication, data &storage equipment, IoT, and automotive electronics, smart home, AI, medical, 5G…ext.

Over the years, we have upgraded customer value objectives and offered customers a variety of frequency control components for module design-in requirements to provide a total solution to satisfy the overall requirements of customers. TXC performance with regard to price, quality, delivery time and service continues to exceed customer expectations time and time again.

2. Company History

1983 Founded in Taiwan with US$95,000 capital.

1984 Began production on DIP type crystals and oscillators in Peitou factory.

1993 ISO9002 certified.

1995 Winner of the 4th National Award of Small and Medium Enterprises.

1997 Began production of SMD type crystals and oscillators in Taoyuan factory.

1998 Began production os SAW devices. Implemented Oracle ERP system.

1999 Established US sales office.

2000 Increased capital to US$25.3 million.

2001 IPO’ed with capital increased to US$37 million.

2002 Listed in the Taiwan Stock Exchange(Code-3042), ISO14001 certified.
Ranked among the top 10 worldwide frequency control product manufacturers.

2003 Began to offer value-added products(HF CXO/VCXO,OCXO,FX,etc.) for the telecom market.
Began production in new factory in NIngbo, China.

2004 Implemented QoS and 6-Sigma management systems. QS9000 certified.
Established US Technology Center.

2005 ISO/TS16949 certified.
Ranked number 6 among the worldwide frequency control product manufacturers.

2006 Expanding Tauouan factory. Adding production lines in Taiwan and China. The capacity reached to 70 million units per month. Authorized Capital: US$57.9 million.

2007 New factory in Pingzhen inaugurated, factory expansion project in Ningbo factory launched, Intel presented the Preferred Quality Supplier, promotion of the Six Sigma project to Ningbo plant green belt training, procurement of the Shenzhen office, implementation of employee stock option, CB conversion, and recapitalization of surplus to NT$2,415,530,000.

2008 Simultaneously expanded factories in Pingzhen, Taiwan and Ningbo, China; won Intel’s Supplier Continuous Quality Improvement (SCQI) Award; won A+ evaluation for information disclosure and top 10 potential golden torch award; continued to promote the 6-Sigma black belt training program at Ningbo and Pingzhen plants. Set up sales operations in Osaka, Japan and Singapore to promote sales. Issued employee options and implement the treasury stock system. Set up subsidiary TXC Hongkong; execute employee option, CB conversion, surplus conversion to increase capitalization to NT$2,716,980,000.

2009 Second phase of Taiwan Pingchen and China Ningbo plant expansion initiated, received A+ ranking and top 10 award at sixth annual Information Disclosure and Transparency Ranking, on-the-job training plan launched for personnel at Ningbo and Pingchen plants, received Preferred Quality Supplier Award recognition again from Intel, strengthen company internal controls to ensure corporate governance effectiveness, promoted transparency of corporate governance information, exercised employee stock warrants, convertible bonds, capital increase by retained earnings to NT$2,887.27 million.

2010 Issued third convertible bond, received corporate governance system evaluation certification from the Taiwan Corporate Governance Associations, received industry model award for the Technology Industry B group from Commonwealth Magazine, awarded National Quality Award from Executive Yuan, continued to implement 6-Sigma black belt training plan for Ningpo and Pingchen plants, set up sales office in Europe to expand business, purchased offices in Shanghai and Suzhou, started third phase of plant expansion for Taiwan PCF, purchased 5,733 level ground of land, built the factories for new energy business unit, execute employee stock option and increase capital out of earning to 2.971 billion NT dollars.

2011 Completion and launch of Taiwan Pingzhen Third-Stage plant expansion and New Energy Division plant, establishment if TXC (Chongqing) Electronics Co., Ltd. production site, established TXC (Chongqing) Corporation and Ningbo Jingyu Company Limited, expansion of European subsidiary, receives A+ grade and top 10 award at Eighth Annual Information Disclosure and Evaluation, passed CGR report review, received Energy Conservation Elite, Outstanding Innovation Award and Commonwealth Corporate Citizen Award, received Taoyuan County Corporate Innovation Award, received ISO50001 Energy Management System, ISO28000 Supplier Chain Management System, ISO27001 Information Security Management System certification, Oracle ERP system upgraded to R12 version, valid assessment of remuneration fairness combined with performance evaluation, establishment of remuneration committee, exercise of employee stock warrants, NT$3,022,420,000 capital increase by capital surplus.

2012 TXC (Chongqing) Corporation plant construction, awarded Authorized Economic Operator (AEO) by the MOF Customs Administration, passed BSI greenhouse gas (ISO 14064-1), product carbon footprint (PAS 2050) inventory, product carbon neutralization (PAS 2060) inventory, given Corporate Citizenship Award by Commonwealth Magazine, received green sustainable enterprise award from BSI, external certification of CSR Report conformed to GRI G3.1 A+ and AA 1000 standards, passed CNS 15506 TOSHMS, awarded ninth annual Information Disclosure and Transparency A++ and top ten ranking, exercised employee stock options, convertible bond and NT$3,097,579,000 capital increase.

2013 Issued fourth convertible bond, TXC (Chongqing) Corporation begin formal mass production, received Taiwan Mittlestadt Award from the Ministry of Economic Affairs, passed review for R&D subsidy for a leading new product development project from the Industrial Development Bureau, was awarded CG6008 Advanced Corporate Governance certification, 10th annual A++ information disclosure assessment rating, passed greenhouse gas inventory (ISO14064-1), product carbon footprint inventory (PAS2050) and product carbon neutrality (PAS2060) verification, named as one of the top 50 Excellence in CSR Award winners by Commonwealth Magazine and a three star 3rd annual Happiest Company Award from the Taipei City Government Department of Labor

2014 TXC's Pingzhen Plant, Ningbo Plant and Chongqing Plant expanded in 2014, new offices in Shenzhen and Beijing were bought, won the A++ award for the Eleventh Information Disclosure Assessment, the Fourth Place in the 8th Global Corporate Citizens Award for Pillar Enterprises of Commonwealth Magazine, the 2nd Excellent Enterprise in Hiring Foreign Workers of Taoyuan County Government, the silver award of Taiwan Top50 Enterprises Sustainability Report Award for large high-tech electronics manufacturing industry of Taiwan's Sustainable Energy Research Foundation, and passed certification of Greenhouse Gas Inspection (ISO14064-1), Corporation Sustainability Report, Product Carbon Footprint (PAS2050), Product Carbon Neutralization (PAS 2060), Information Security Management System (ISO 27001), Supply Chain Security Management System (ISO 28000) and Water Footprint for Information Security Launching Award and the GRC Management Paradigm Award by the British Standards Institute.

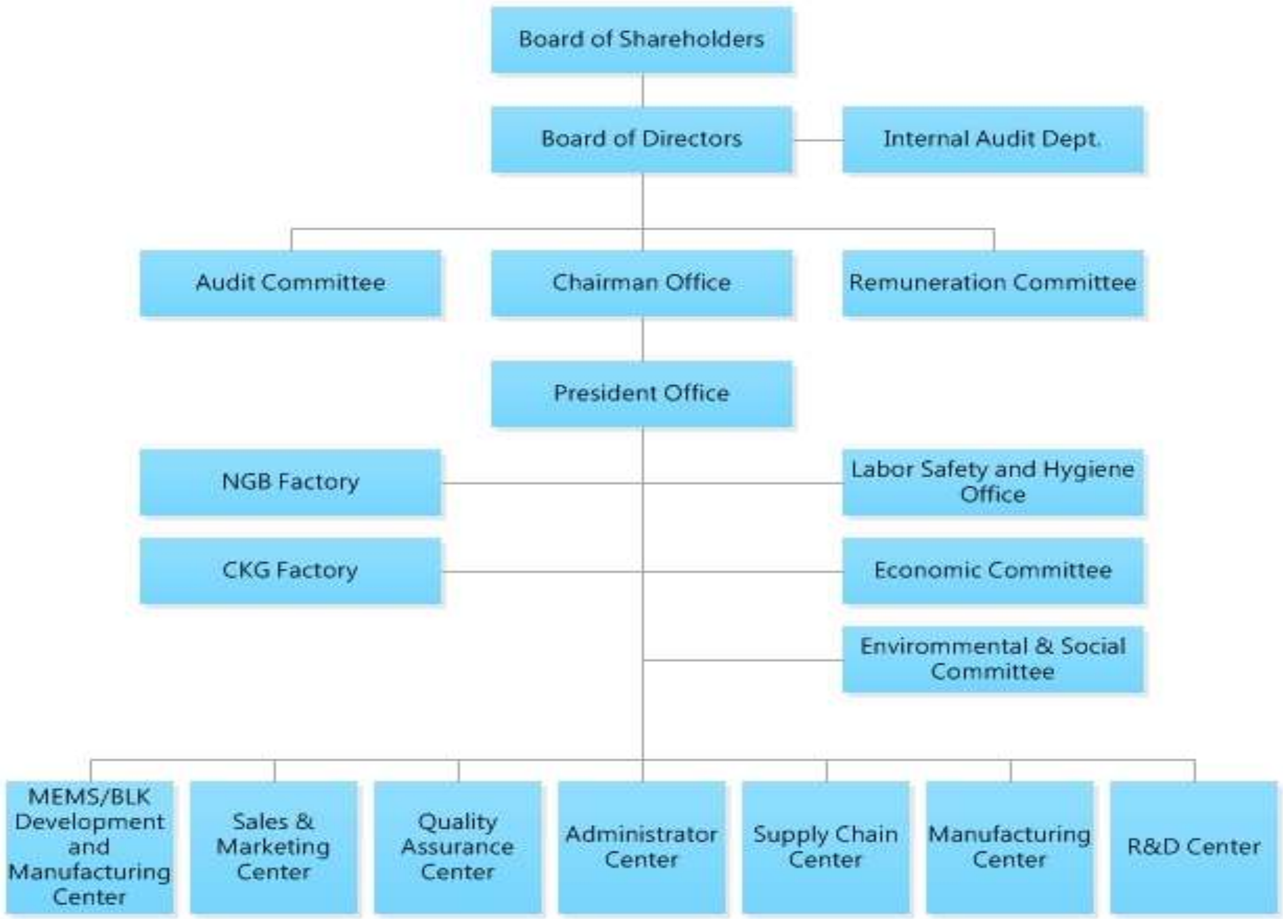
2015 Taiwan Pingzhen factory and TXC (Chongqing) continued production line expansion; successfully renewed "Authorized Economic Operator (AEO)" certification; received 12th "Information Disclosure Evaluation" A++ award; ranked within the top 20% of well-administered companies for the first time; passed "Greenhouse Gas Inspection (ISO14064-1); recognized by Huawei as "2015 Core Supplier"; praised by the British Standards Institution with an "Outstanding Management Model Award"; recognized by CommonWealth Magazine as a "Commonwealth CSR Corporation"; promoted Industry 4.0 intelligent factory transformations; the company's LED department officially established itself as a separate entity under the name TXC OPTECH Corporation.; the joint venture, Guangdong Failong Crystal Technology Co. Ltd., was officially listed on the Shenzhen Stock Exchange.

2016 Taiwan Pingzhen factory, Ningbo factory, and Chongqing factories continue expanding production lines; receives subsidies through the Department of Commerce Department of Industry Manufacturing Upgrade and Innovation Optimization Plan (particulate matter sensor development); ranked within the top 5% of well-administered companies; Awarded Authorized Economic Operator (AEO) certification by the Ministry of Finance, received EPA's Product Carbon Footprint Emission Factor Database Establishment Award, received BSI's Environment Governance Practice Award, BSI occupational safety and health certificcations and BSI CSR report verification.

2017 Continued expansion of the production lines at Taiwan's Pingzhen Plant, Ningbo Plant and Chongqing plant. The 3rd corporate governance rating ranked within the top 5% of rated companies, received IDB "Corporate Volunteer Award", passsed Material Flow Cost Accounting (ISO 14051 MFCA),passed"IATF 16949" verification、awarded"BSI Sustainability Awards","BSI Occupational safety and health"verification,"BSI CSR AA1000/GRI G4" verification,passed Information Security Management System (ISO 27001) verification, established TXC Foundation.

2018 Awarded Authorized Economic Operator (AEO) certification by the Ministry of Finance, established TXC Europe GmbH, The 4th corporate governance rating ranked within the top 5% of rated companies, Won the international trade bureau's import certificate of excellence、the approvel of the Ministry of Economic Affairs, the research and development project of the Ministry of Economics、Received the "Perpetual Pilot Award" from the British Standards Association

B、Company Structure
1. TXC's Organization



2. TXC corporation's operations of the major departments

Department	Duty of Operation
Chairman office	• Formulation of the Company's major strategic planning • Assistence in solving major quality and engineering issues • Improvement in technological capabilities and supervise product development • Risks and business opportunity assessment on the feasibility of new technology and investment • Overall Financial Planning and Investment Management Development
President office	• The Company's overall operating policies and objectives management, budget planning and setting, over the overall business supervision and coordination, and management over the advises, modifications and implementation on major business decisions • Supervision over the operations of overseas subsidiary
Internal Audit Dept.	• Planning for the annual audit plan • Perform audit operations based on the annual audit plan and present audit reports to CEO, Chairman, independent directors, the Audit Committee and the Board of Directors • Submit periodic reports to the Securities and Futures Bureau and the Stock Exchange • Supervision over the subsidiary's internal control and audits

	• Assessment on the management performance of each unit and guidance on improvement • Modifications on the internal control system and implementation rules • Management on key business ratios (KBR) and KPI of each unit • Promote the practice of corporate ethical management
Sales & Marketing Center	• Product sales, PO processing and customer development & services • Analysis on the competitors, production and sales, product marketing strategies and, products' marketing strategies and industrial market • Costs, prices and sample development management • Emerging market, new products and sales services development • Services and solution on customer's product application issues • Formulating product marketing strategy • Set the operational (sales, costs, quality) goals, strategies planning
R & D Center	• New product R & D and introduction of mass production • Technology transfer of new products / materials and introduction of mass production • Studying, execution and introduction of the R & D project • New product features assessment and marketing development • Planning, promotion, technology transfer and manufacturing for the development of new miniaturized, high precision and highly reliable products • Developing and improving new product equipment, modules, instruments and jigs • Planning, promotion, technology transfer and manufacturing for the development project of new production processes technology • Studying, execution and introduction of the R & D project • Assist in the trial production and assessment on new product samples from each product-engineering unit
Manufacturing Center	• Coordinating the use of overall production center (Ping-Zhen Plant, Ning-Bo Plant & Chong-Qing Plant) resources (manpower, equipment, production capacity, budgeted investment, etc.) • Managing the KPIs (Key Performance Indicators) of each production plant under the production center • Executing the production capacity expansion plan required to achieve the Company's operating goals • Acknowledge the overall production strategies and trends of the quartz crystal industry • Manufacturing for the products • Planning and improving the production flow • Improving and developing the production process flow • Management and maintenance operations for the production equipment • Production capacity & material requirements planning, production & sales control and arrangements, inventory and storage transportation management • Supervision and execution on industrial safety & health and environmental management system • Inspection and maintenance on public system equipment
MEMS/BLK Development and Manufacturing Center	• Coordinating the use of overall wafer production resources (equipment, production capacity, etc.) • Acknowledge the overall wafer production strategies and trends of the quartz crystal industry • Coordinating various management particulars under the MEMS chip center in terms

	of equipment, manpower and technology • Promotion of various managerial policies • Executing the wafer production capacity expansion plan and the product and technical development of micro-electromechanical system (MEMS) chips required to achieve the Company’s operating goals • Wafer production • Development of wafer technology and improvement on oscillator properties • Planning and improving the production flow • Improving and developing the production process flow • Management and maintenance operations for the production equipment • Executing various production and sales coordination, material control and delivery management particulars • Supervision and execution on industrial safety & health and environmental management system
Quality Assurance Center	• Review and set company-wide annual quality / environment, health and safety (EHS) goals • Establishing, auditing and coordinating the company-wide quality, environmental and green product systems to ensure their effective operations • Formulate work plan and implementation of various annual quality-related activities; • Promote quality improvement operations • Promote various quality certification systems • DCC's annual work planning and execution • Planning and execution for the quality control and inspection on purchased-materials feed, production processes of self-made wafers, finished goods and shipments • Products and materials quality management • Inspection and control on quality of the feed, production process and finished goods • Improving IQC test method to optimize inspection efficiency • Customer-complaint process management
Administrator Center	• Planning and formulating organizational system and departmental responsibilities of the Company • Establishment and implementation of various management systems of the Company; • Review on the effectiveness of intended promotion for the Company’s annual budget preparation and review • The generation and analysis of the Company's various accounting processes, costs and financial accounting information • Financial management, capital movement and handling of shares of listed companies • Personnel salary, benefits, recruitment, selection, promotion, evaluation, training and development and other various human resource management • Handling employee relations and various conference activities • General affairs and administrative operations • The provision and management of the Company’s operating information, and the establishment, development and maintenance of the Company’s information operating systems • Planning, building and maintenance of network communication; planning and implementation of electronic processes • Security and management of information and network communication • Promoting corporate social responsibility (CSR), corporate governance and ethical management

Supply Chain Center	• Purchase and management of equipment, raw materials, semi-finished goods, finished goods and general supplies • Price inquiries, purchases, trade term negotiation, billing, follow up, etc. • Promoting operation of the supplier management system and developing supplier management • Formulating the production and sales balancing plan; allocating, executing and managing production capacity • Review and request payment for import and export transportations, custom declarations, custom clearances, insurances and other operational expenditures; • Management and analysis on the costs of feed • Statistics, review and improvement on OTD (On Time Delivery) • Developing new materials, alternative materials, common materials for each plant, new manufacturers or new equipment • Aggregation and trends analysis on supply market information (supply, demand, prices, technology, policies, etc.)
Labor Safety and Hygiene Office	• Leading the safety and health review, safety and health risk assessment and other EHS management, as well as being in charge of the planning for the safety and health management system and the enactment of various related procedures • Supervising the safety and health management particulars • Formulating, planning and promoting safety and health management particulars, as well as guiding related departments in the implementation • Responsible for collecting and identifying safety and health related laws and regulations • Consultation and communication on internal and external safety and health issues
Remuneration Committee	• Formulate and review the remuneration policies, systems, standards and structures • Regularly evaluate the reasonable basis for the remuneration and performance appraisal of the Company's directors and managers • Regularly supervise the implementation of the remuneration system
Audit Committee	• Establishment or modification of the internal control system and the assessment on the effectiveness of internal control system • Establishment or modification of the procedures for material financial business behaviors such as acquisition or disposal of assets, engaging in derivative commodity transactions, capital lending to others, endorsing or providing guarantees for others • Assessment on matters concerning interests of the directors themselves • Assessment on major asset investments, major derivative commodity transactions, capital lending, endorsement or provision of guarantees • Assessment on the offering, issuing or private placement of equity securities • Evaluating the appointment, dismissal or remuneration of a Certified Public Accountant and the appointment or dismissal of a Chief Financial Officer, Chief Accounting Officer or chief audit executive • Review financial reports

III. Corporate Governance

A. Directors

1.

As of April 13, 2019

Title	Name	Major academic (professional) experience	Current position in our company or other company
Chairman	Lin, Jin-Bao	MBA, West Texas A&M University, USA Chairman of TXC Corporation	Chairman of TXC Corporation Chairman of Liang Shing EcLife Corp. Director of uPI Semiconductor Corp Director of Tai-Shing Electronics Components Corporation Juristic-person director representative of Hantic precision technology , Inc Director of Taiwan Quartz Crystal Industry Association Juristic-person director representative of Godsmith Sensor Inc.
Director	Hsu, Der-Jun	Kei-Nan Institute of Technology and Business Director of TXC Corporation	Director of TXC Corporation Chairman of Chan-Yu Corporation Chairman of Kuan-Ya Int'l Corporation Director of Kang-Shuo Chairman of Taiwan Crystal Technology International Limited
Director	Go, Tien-Chong	Electronics Dept, Taipei Institute Director of TXC Corporation	Director of TXC Corporation Vice president of ESS Technology International Inc.
Corporate Director	TLC Capital Co.,LTD	Director of TXC Corporation	Director of TXC Corporation
Director	Lin, Wan-Shing	Master in Management, National Taiwan University of Science and Technology Director and president of TXC Corporation	Director of TXC Corporation Chairman of Tai-Shing Electronics Components Corporation Chairman of TXC (NINGBO) CORPORATION Director of CHONGQING ALL SUNS COMPANY LIMITED Director of TXC (CHONGQING) CORPORATION Chairman of GROWING PROFITS TRADING LTD Corporation Director of TXC JAPAN CORPORATION LTD Chairman of TAIWAN CRYSTAL TECHNOLOGY(HK) LTD Corporation Nanjing Information Corporation

Director	Chen Chueh, Shang-Hsin	Master of management, Zhejiang University Director and vice president of TXC Corporation	Director and vice president of TXC Corporation Director of TXC (NINGBO) CORPORATION Chairman of TXC (CHONGQING) CORPORATION Chairman of Tai-Shing Electronics Components Corporation Director of Tai Shin Electronics Corporation Director of CHONGQING ALL SUNS COMPANY LIMITED Wei Lida Technology Co., Ltd Supervisor of Ningbo Jingyu Company Limited Vice Chairman and Juristic-person director representative of Ningbo Longying Semiconductor Co., Ltd
Corporate Director	Golden Talent Investment Holding co., Limited	Director of TXC Corporation	Director of TXC Corporation
Independent Director	Yu, Shang-Wu	Ph.D., Birmingham University Director of business and management college of Jinwen University of Science and Technology	Professor, Ming Chi University of Technology college of management and design Public welfare director of Taiwan Stock Exchange Independent Director of Taisun Int’l (Holding) Corp. Independent Director of TXC Corporation
Independent Director	Tsai, Song-Qi	Finance and Accounting Department of Shanghai University Business Administration, National Chengchi University Certified accountant and Executive Director of KMPG Taiwan	Chairman of EMCC Human Capital Solutions Inc
Independent Director	Su Yan-Syue	Master in Industrial Management of Carnegie Mellon University, USA CIO of Pegatron corporation	Independent Director of Zhong Yang Technology Co., Ltd Juristic-person director representative of Kinsus Interconnect Technology Corp.
Independent Director	Wang Chuan -Fen	Master in Law of Columbia University, USA	Partner of Chen & Lin Law Firm

Note: TLC Capital Co.,LTD changed their juristic-person director representative on Feb. 18th 2019, the juristic-person director representative is change from Mr. Chang Wen-Chin to Mr. Peng,Chih-Chiang.

2. Major shareholders of the corporate shareholders　　　　　　　　　　As of April 13, 2019

Name	Major Shareholder	Share (%)
TLC Capital Co., LTD (Chang Wen-Chin)	United Microelectronics Corporation	100%
Golden Talent Investment Holding co., Limited	Chou, Ming-chih	99.01%

3. Major shareholders are corporate shareholders　　　　　　　　　　As of April 13, 2019

Name	Major Shareholder	Share (%)
United Microelectronics Corporation	JPMorgan Chase Bank, N.A. acting in its capacity as depositary and representative to the holders of ADRs	5.70%
	JPMorgan Chase Bank N.A. Taipei Branch in custody for Capital World Growth and Income Fund	3.58%
	Hsun Chieh Investment Co., Ltd.	3.50%
	Silicon Integrated Systems Corp.	2.50%
	Silchester International Investors International Value Equity Trust	1.70%
	Prudential Assurance Company Ltd.	1.44%
	Yann Yuan Investment Co., Ltd.	1.36%
	Cathay Life Insurance Co., Ltd.	1.27%
	Taiwan Life Insurance Co., Ltd.	1.23%
	JPMorgan Chase Bank N.A. Taipei Branch in custody for EuroPacific Growth Fund	1.19%

Note 1: Names of the major shareholders (who shareholding percentage shall be top 10) of the corporate shareholders and its shareholding percentage.

Note 2: The ex-dividend date of the year 2018.is on 22 July 2018

4. Training of the directors

Title	Name	Date of assuming the post	Training date		Organizer	Course name
			From	To		
Chairman	Lin, Jin-Bao	2016/06/07	2018/07/16	2018/07/16	Taiwan Corporate Governance Association	Analysis of the Impact of Corporate Act Reform and the Practice of Capital Reduction
			2018/7/24	2018/7/24		The latest tax reform key analysis and corporate response
Director	Hsu, Der-Jun	2016/06/07	2018/07/16	2018/07/16	Taiwan Corporate Governance Association	Analysis of the Impact of Corporate Act Reform and the Practice of Capital Reduction
			2018/7/24	2018/7/24		The latest tax reform key analysis and corporate response
Director	Lin, Wan-Shing	2016/06/07	2018/07/16	2018/07/16	Taiwan Corporate Governance Association	Analysis of the Impact of Corporate Act Reform and the Practice of Capital Reduction
			2018/7/24	2018/7/24		The latest tax reform key analysis and corporate response
Director	Chen Chueh, Shang-Hsin	2016/06/07	2018/07/16	2018/07/16	Taiwan Corporate Governance Association	Analysis of the Impact of Corporate Act Reform and the Practice of Capital Reduction
			2018/7/24	2018/7/24		The latest tax reform key analysis and corporate response
Director	Go, Tien-Chong	2016/06/07	2018/07/16	2018/07/16	Taiwan Corporate Governance Association	Analysis of the Impact of Corporate Act Reform and the Practice of Capital Reduction
			2018/7/24	2018/7/24		The latest tax reform key analysis and corporate response
Director	TLC Capital Co.,LTD	2016/06/07	2018/07/16	2018/07/16	Taiwan Corporate Governance Association	Analysis of the Impact of Corporate Act Reform and the Practice of Capital Reduction
			2018/7/24	2018/7/24		The latest tax reform key analysis and corporate response
Director	Golden Talent Investment Holding co., Limited	2016/06/07	2018/07/16	2018/07/16	Taiwan Corporate Governance Association	Analysis of the Impact of Corporate Act Reform and the Practice of Capital Reduction
			2018/7/24	2018/7/24		The latest tax reform key analysis and corporate response
Director	Yu, Shang-Wu	2016/06/07	2018/07/16	2018/07/16	Taiwan Corporate Governance Association	Analysis of the Impact of Corporate Act Reform and the Practice of Capital Reduction
			2018/7/24	2018/7/24		The latest tax reform key analysis and corporate response
Director	Tsai, Song-Qi	2016/06/07	2018/07/16	2018/07/16	Taiwan Corporate Governance Association	Analysis of the Impact of Corporate Act Reform and the Practice of Capital Reduction
			2018/7/24	2018/7/24		The latest tax reform key analysis and corporate response
Director	Su Yan-Syue	2016/06/07	2018/07/16	2018/07/16	Taiwan Corporate Governance Association	Analysis of the Impact of Corporate Act Reform and the Practice of Capital Reduction
			2018/4/27	2018/4/27		Duty of directors of enterprise mergers and acquisitions-disccusion on unconsensual mergers and acquisitions
			2018/3/21	2018/3/21		Corporate Governance and Securities Regulations
Director	Wang Chuan -Fen	2016/06/07	2018/07/16	2018/07/16	Taiwan Corporate Governance Association	Analysis of the Impact of Corporate Act Reform and the Practice of Capital Reduction
			2018/7/24	2018/7/24		The latest tax reform key analysis and corporate response

Note: TLC Capital Co.,LTD changed their juristic-person director representative on Feb. 18th 2019, the juristic-person director representative is changed from Mr. Chang Wen-Chin to Mr. Peng,Chih-Chiang.

5. Information on directors’ independence

Directors’ Information

qualification / name	Does he/she have more than 5yrs of work experience and the following professional qualifications?			Degree of independence (Note)										Number of independent directors serving concurrently as other public companies
	Public and private universities lecturer (or above) in business, legal, financial, accounting or other fields related to the business of the Company	Judge, prosecutor, lawyer, accountants or other certified professionals and technicians in the fields related to the business of the Company	Work experience in business, legal, financial, accounting or fields related to the business of the Company	1	2	3	4	5	6	7	8	9	10	
Lin, Jin-Bao			V					V		V		V	V	none
Hsu, Der-Jun			V				V	V		V	V	V	V	none
Lin, Wan-Shing			V					V		V		V	V	none
Chen Chueh, Shang-Hsin			V			V	V	V		V	V	V	V	none
Go, Tien-Chong			V	V	V	V	V	V	V	V	V	V	V	none
TLC Capital Co.,LTD			V	V	V	V	V	V	V	V	V	V		none
Golden Talent Investment Holding co., Limited			V	V	V	V	V	V	V	V	V	V		none
Yu, Shang-Wu	V		V	V	V	V	V	V	V	V	V	V	V	1
Tsai, Song-Qi		V	V	V	V	V	V	V	V	V	V	V	V	none
Su Yan-Syue			V	V	V	V	V	V	V	V	V	V	V	1
Wang Chuan -Fen		V	V	V	V	V	V	V	V	V	V	V	V	none

Note: For each director who meets the following conditions during the past two years prior to his/her appointment and during his/her term, please mark “✓” in the cell under that number.

(1) Not an employee of the Company nor its affiliates;

(2) Not a director or supervisor of the Company’s affiliate (this does not apply to the independent director established pursuant to the Act or local law of the Company or its parent company and/or subsidiary);

(3) Not a person, or his/her spouse, or his/her children under twenty (20) years of age, or in the name of others, who holds more than 1 percent of the Company’s total shares issued or a top 10 natural person shareholder;

(4) Not the spouse, a relative by blood or marriage within second degree of kinship or relationship or a relative by blood within fifth degree of kinship of those listed in (1) – (3);

(5) Not a director, supervisor or employee of a corporate shareholder who directly holds more than 5% of the Company’s total shares issued, nor a director, supervisor or employee of a top 5 corporate shareholder;

(6) Not a director (council), supervisor, manager or shareholder with more than 5% shareholding of a specific company or organization having financial or business relationship with the Company;

(7) Not a professional providing business, legal, financial, and accounting services or consultation to the Company or its affiliates; not an owner, partner, directors (council), supervisor, manager or his/her spouse of a sole proprietorships, partnership, company or institution. However, this shall not apply where a member is performing his/her authority pursuant to Article 7 of the

<Regulations Governing the Appointment and Exercise of Powers by the Remuneration Committee of a Company Whose Stock is Listed on the Stock Exchange or Traded Over the Counter>;

(8) Not a spouse or a relative by blood or marriage within second degree of kinship or relationship of another director;

(9) Not having any one of the circumstances as identified in Article 30 of the Company Act;

(10) Not a government agency, juristic person or its proxy pursuant to Article 27 of the Company Act

B. Personnel data of the general manager, vice general manager, assistant vice general manager, chief of divisions

As of April 13, 2019

Title	Name	Date of employment	Major academic (professional)	Other part time position with other companies
General Manager	Lin, Wan-Hsing	1989.11.11	Master in Management, National Taiwan University of Science and Technology	Chairman of Tai Shin Electronics Corporation Chairman of TXC (NINGBO) CORPORATION Chairman of GROWING PROFITS TRADING LTD Corporation Chairman of TAIWAN CRYSTAL TECHNOLOGY(HK) LTD Corporation Director of TXC (CHONGQING) CORPORATION Director of TXC JAPAN CORPORATION LTD Director of CHONGQING ALL SUNS COMPANY LIMITED
Vice General Manager	Chen Chueh, Shan-hsing	2002.04.01	Master of management, Zhejiang University	Director of TXC (NINGBO) CORPORATION Chairman of TXC (CHONGQING) CORPORATION Chairman of Tai-Shing Electronics Components Corporation Director of Tai Shin Electronics Corporation Director of CHONGQING ALL SUNS COMPANY LIMITED
Vice General Manager	Kuo, Ya-Ping	2009.08.01	BOSTON UNIVERSITY, MBA	-
Vice General Manager	Lin, Shi-Bo	2011.01.31	Master of Physics, UC, Riverside, USA	-
Vice General Manager	Chang, Chien-Tsung	2012.01.01	City University of Macau, MBA Plant Manager, Taitien Electronics Co., Ltd.	Vice General Manager of TXC (NINGBO) CORPORATION
Vice General Manager	Chao, Min-Chiang	2012.01.01	Ph.D., Naval Architecture & Ocean Engineering, National Taiwan University Engineer, Biomedical Engineering Center, ITRI	Vice General Manager of TXC (NINGBO) CORPORATION
Vice General Manager	Yu, Fang-Ming	2012.01.01	Department of Electronic Engineering, Oriental Insitute of Technology	Vice General Manager of TXC (CHONGQING) CORPORATION
Vice General Manager	Chou, Chien-Fu	2017.04.01	Master of National Taiwan of Science and Technology	General Manager of TXC (CHONGQING) CORPORATION Chairman of Chongqing All Sun Company Limited
Vice General Manager	Cheng, Li-Wei	2018.01.01	Ph D., Materials Science and Engineering of National Tsing Hua University	-
Chief Technology Officer	Chu, Chih-Hsun	2017.12.18	Ph D., Materials Science and Engineering of National Tsing Hua University	Associate Professor, Department of Chemical Engineering and Materials Engineering, Central University
Vice General Manager	Kuo, Ya-Han	2009.08.01	West Coast University, MBA	-

Chief Engineer	Chang, Qi-Zhong	2006.04.01	Executive Master of Business Administration, EMBA National Chiao Tung University College of Management	-
Assistant Vice General Manager	Lin, Su-fen	2010.07.01	Electrical Department of Kaohsiung Institute	-
Assistant Vice General Manager	Su, Zhe-Ming	2011.01.31	Department of Electrical Engineering, National Taiwan Ocean University	-
Assistant Vice General Manager	Liu, Hsu-Er	2015.06.01	Master of Department of Materials Science and Engineering, National Taiwan University	Assistant Vice General Manager of TXC (NINGBO) CORPORATION
Assistant Vice General Manager	Su, Jing-Sheng	2015.12.05	Master of Department of Electrical Engineering, National Tsing Hua University	-
Chief Financial Officer	Hong, Gon-Wen	2003.03.11	MBA, National Taipei University	Supervisor of Win win precision technology

Note: Ms. Kuo,Ya Han was promoted to be Vice General Manager of marketing centro from Aug. 9^{th} 2018.

C. Remuneration and Compensation Paid to Directors, and General and Vice General Managers

(1) Remuneration Paid to Directors (including Independent Directors)

December 31, 2018 Unit: Shares, NT$ 1,000

Title	Name	Director's Remuneration								Total Remuneration (A+B+C+D) as a % of Net Income (Note 10)		Compensation Earned by a Director Who is an Employee								Total Compensation (A+B+C+D+E+F+G)as a % of Net Income (Note 10)		Compensation Paid to Directors from Non-Consolidated Affiliates (Note 11)
		Base Compensation(A) (Note 2)		Severance Pay and Pensions (B)		Compensation to Directors (C) (Note 3)		Allowances (D) (Note 4)				Base Compensation, Bonuses and Allowances (E) (Note 5)		Severance Pay and Pensions (F)		Compensation to Employees (G) (Note 6)						
		From TXC	From All Consolidated Entities (Note 7)	From TXC	From All Consolidated Entities (Note 7)	From TXC	From All Consolidated Entities (Note 7)	From TXC	From All Consolidated Entities (Note 7)	From TXC	From All Consolidated Entities (Note 7)	From TXC	From All Consolidated Entities (Note 7)	From TXC	From All Consolidated Entities (Note 7)	From TXC		From All Consolidated Entities (Note 7)		From TXC	From All Consolidated Entities (Note 7)	
																Cash	Stock	Cash	Stock			
Chairman	Lin, Jin-Bao	0	0	0	0	11,512	11,512	1,800	1,800	2.0660	2.0660	6,052	11,304	907	907	1,600	0	1,600	0	3.3944	4.2095	3,867
Director	Hsu, Der-Jun																					
Director	Lin, Wan-Shing																					
Director	Chen Chueh Shang-Hsin																					
Director	Go Tien-Chong																					
Director	TLC Capital Co.,LTD																					
Director	Golden Talent Investment Holding co., Limited																					
Independent Director	Yu, Shang-Wu																					
Independent Director	Tsai, Song-Qi																					
Independent Director	Su Yan-Syue																					
Independent Director	Wang Chuan -Fen																					

Remuneration Scale

Remuneration Paid to Directors	Director Names			
	Total Remuneration (A+B+C+D)		Total Compensation (A+B+C+D+E+F+G)	
	From TXC (Note 8)	From All Consolidated Entities (Note 9) H	From TXC (Note 8)	From All Consolidated Entities (Note 9) I
Less than NT$2,000,000	Lin, Jin-Bao,Hsu, Der-Jun, Lin, Wan-Shing ,Chen Chueh Shang-Hsin, Go Tien-Chong, Yu, Shang-Wu, Tsai, Song-Qi, Su Yan-Syue,Wang Chuan –Fen, Golden Talent Investment Holding co., Limited (Chou, Ming-chih) 、TLC Capital Co., LTD (Chang Wen-Chin)	Lin, Jin-Bao,Hsu, Der-Jun, Lin, Wan-Shing ,Chen Chueh Shang-Hsin, Go Tien-Chong, Yu, Shang-Wu, Tsai, Song-Qi, Su Yan-Syue,Wang Chuan –Fen, Golden Talent Investment Holding co., Limited (Chou, Ming-chih) 、TLC Capital Co., LTD (Chang Wen-Chin)	Hsu, Der-Jun,Go Tien-Chong, Yu, Shang-Wu, Tsai, Song-Qi, Su Yan-Syue ,Wang Chuan –Fen, Golden Talent Investment Holding co., Limited(Chou, Ming-chih), TLC Capital Co., LTD (Chang Wen-Chin)	Hsu, Der-Jun ,Go Tien-Chong, Yu, Shang-Wu, Tsai, Song-Qi, Su Yan-Syue ,Wang Chuan –Fen, Golden Talent Investment Holding co., Limited(Chou, Ming-chih), TLC Capital Co., LTD (Chang Wen-Chin)
NT$2,000,000 –NT$4,999,999			Lin, Jin-Bao, Lin, Wan-Shing Chen Chueh Shang-Hsin	Lin, Jin-Bao
NT$5,000,000 - NT$9,999,999				Lin, Wan-Shing, Chen Chueh Shang-Hsin
NT$10,000,000 - NT$14,999,999				
NT$15,000,000 - NT$29,999,999				
NT$30,000,000 - NT$49,999,999				
NT$50,000,000 - NT$99,999,999				
NT$100,000,000 and above				
Total	11 persons	11 persons	11 persons	11 persons

Note 1: Director names shall be listed separately (the shareholder name and representative shall be listed separately for corporate directors) and each payment amount shall be disclosed as a summary. If directors concurrently serve as general and vice general managers, list in this Table and Tables (3-1) or (3-2) below.

Note 2: 2018 director remuneration (includes director salary, allowances, severance pay, various bonuses and incentives).

Note 3: 2018 compensation to directors passed by the Board of Directors in 2019.

Note 4: Related 2018 director allowances (including travel expenses, special expenses, all kinds of allowances, accomodations, substantive objects offered in the form of vehicles and etc.). If real estate, cars and other transportation or exclusive personal expenses are offered, the asset category and cost, actual rent or rent calculated at fair market value, fuel expenses and other payments shall be disclosed. If a driver is assigned, attach an explanation of the driver’s related compensation but do not include the compensation into the remuneration.

Note 5: 2018 directors who concurrently hold positions in the company (including the general manager, vice general managers, other managers and employees) receive remunerations including salary, duty differential pay, severance pay, all kinds of bonuses, incentive pays, accomodations, and substantive objects offered in the form of vehicles. If real estate, cars and other transportation or exclusive personal expenses are offered, the asset category and cost, actual rent or rent calculated at fair market value, fuel expenses and other payments shall be disclosed. If a driver is assigned, attach an explanation of the driver’s related compensation but do not include the compensation into the remuneration.

Note 6: 2018 directors concurrently hold positions in the Company (including the general manager, vice general managers, other managers and employees) who receive employee bonuses (including stock and cash) shall disclose the 2018 employee compensation amounts passed and distributed by the 2019 Board of Directors meeting. If estimation is not possible, calculate this year’s proposed distribution amounts based on the actual percentages distributed for the previous year and list in Table 1-3.

Note 7: The total of all compensation items from all consolidated entities (including the Company) paid to Company directors shall be disclosed.

Note 8: The total of each of the remuneration items paid by the Company to each director are disclosed under the corresponding director name in the scale.

Note 9: The total of each of the remunderation items paid by all consolidated entities to Company directors shall be disclosed under the corresponding director name in the scale.

Note 10: Net Income refers to 2018 net income: Those who have adopted IFRS, net income refers to the net income in individual or separate financial reports for the most recent year.

Note 11: a. This column shall clearly list the related remuneration amounts from reinvested companies other than subsidiaries.

b. If Company directors receive remuneration from reinvested companies other than subsidiaries, the remuneration received by Company directors from reinvested companies other than subsidiaries is included in the Remuneration Scale column and the column is renamed All Reinvested Entities.

c. Compensation and remuneration refers to the compensation and remuneration (employee, director and supervisor remuneration), business execution expenses and other related remuneration received by Company directors as directors, supervisors and managers of reinvested entities other than subsidiaries.

(2) Compensation Paid to Executive Officers

December 31, 2018 Unit: Thousand Shares, NT$ 1,000

<table>
<tr><th rowspan="3">Title</th><th rowspan="3">Name</th><th colspan="2">Base Compensation (A) (Note 2)</th><th colspan="2">Severance Pay and Pensions (B)</th><th colspan="2">Bonuses and Allowances (C) (Note 3)</th><th colspan="4">Employee Compensation (D) (Note 4)</th><th colspan="2">Total Compensation as a % of Net Income (A+B+C+D) (Note 8)</th><th rowspan="3">Compensation Paid to Directors from Non-Consolidated Affiliates (Note 9)</th></tr>
<tr><th rowspan="2">From TXC</th><th rowspan="2">From All Consolidated Entities (Note 5)</th><th rowspan="2">From TXC</th><th rowspan="2">From All Consolidated Entities (Note 5)</th><th rowspan="2">From TXC</th><th rowspan="2">From All Consolidated Entities (Note 5)</th><th colspan="2">From TXC</th><th colspan="2">From All Consolidated Entities (Note 5)</th><th rowspan="2">From TXC</th><th rowspan="2">From All Consolidated Entities (Note 5)</th></tr>
<tr><th>Cash</th><th>Stock</th><th>Cash</th><th>Stock</th></tr>
<tr><td>Chairman</td><td>Lin, Jin-Bao</td><td rowspan="12">16,611</td><td rowspan="12">22,102</td><td rowspan="12">2,082</td><td rowspan="12">2,082</td><td rowspan="12">5,175</td><td rowspan="12">11,912</td><td rowspan="12">7,200</td><td rowspan="12">0</td><td rowspan="12">7,200</td><td rowspan="12">0</td><td rowspan="12">4.8217</td><td rowspan="12">6.7194</td><td rowspan="12">3,867</td></tr>
<tr><td>General Manager</td><td>Lin, Wan-Shing</td></tr>
<tr><td>Vice General Manager</td><td>Chen Chueh Shang-Hsin</td></tr>
<tr><td>Vice General Manager</td><td>Kuo, Ya-Ping</td></tr>
<tr><td>Vice General Manager</td><td>Lin, Shi-Bo</td></tr>
<tr><td>Vice General Manager</td><td>Chang,Chien-Tsung</td></tr>
<tr><td>Vice General Manager</td><td>Chao,Min-Chiang</td></tr>
<tr><td>Vice General Manager</td><td>Yu,Fang-Ming</td></tr>
<tr><td>Vice General Manager</td><td>Chou, Chien-Fu</td></tr>
<tr><td>Group Marketing Director</td><td>Cheng, Li-Wei</td></tr>
<tr><td>Chief Technology Officer</td><td>Chu,Chih-Hsun</td></tr>
<tr><td>Chief Technology Officer</td><td>Kuo,Ya Han</td></tr>
</table>

∗ Ms. Kuo, Ya Han was promoted to be Vice General Manager of marketing centro from Aug. 9th 2018.

∗ Regardless of the position, those positions equivalent to President and Vice-President (i.e.: President, CEO and Director) have all been disclosed.

Compensation Scale

Compensation Paid to Senior Executives	Names of Senior Executives	
	The Company (Note 6)	The Company in the financial report（Note 7）
Less than NT$2,000,000	Chang,Chien-Tsung, Yu,Fang-Ming, Chou, Chien-Fu,	
NT$2,000,000 –NT$4,999,999	Lin, Jin-Bao, Lin, Wan-Shin, Chen Chueh Shang-Hsin, Kuo, Ya-Ping, Chao,Min-Chiang, Lin, Shi-Bo, Chu,Chih-Hsun, Cheng, Li-Wei, Kuo,Ya Han	Lin, Jin-Bao, Lin, Wan-Shin, Kuo, Ya-Ping, Chao,Min-Chiang, Chang,Chien-Tsung, Yu,Fang-Ming, Chou, Chien-Fu,Lin, Shi-Bo, Chu,Chih-Hsun , Cheng, Li-Wei, Kuo,Ya Han
NT$5,000,000 - NT$9,999,999		Chen Chueh Shang-Hsin
NT$10,000,000 - NT$14,999,999		
NT$15,000,000 - NT$29,999,999		
NT$30,000,000 - NT$49,999,999		
NT$50,000,000 - NT$99,999,999		
NT$100,000,000 and above		
Total	12 persons	12 persons

Note 1: The names of general and vice general managers shall be listed separately (the shareholder name and representative shall be listed separately for corporate directors) and each payment amount shall be disclosed as a summary. If there are directors that concurrently serve as a general and vice general managers, list in this Table and Tables (1-1) or (1-2) below.

Note 2: Lists 2018 salary, allowances and severance pay for the general and vice general managers.

Note 3: Lists 2018 general and vice general manager bonuses, incentives, travel expenses, special expenses, all kinds of allowances, accomodations, substantive objects offered in the form of vehicles and other remuneration). If real estate, cars and other transportation or exclusive personal expenses are offered, the asset category and cost, actual rent or rent calculated at fair market value, fuel expenses and other payments shall be disclosed. If a driver is assigned, attach an explanation of the driver's related compensation but do not include the compensation into the remuneration

Note 4: 2017 directors concurrently hold positions in the Company (including the general manager, vice general managers, other managers and employees) who receive employee bonuses (including stock and cash) shall disclose the 2018 general manager and vice general manager employee compensation amounts passed and distributed by the 2019 Board of Directors meeting. If estimation is not possible, calculate this year's proposed distribution amounts based on the actual percentages distributed for the previous year and list in Table 1-3. Net Income refers to the most recent year's net income: Those who have adopted IFRS, net income refers to the net income in individual or separate financial reports for the most recent year.

Note 5: The total of all compensation items from all consolidated entities (including the Company) paid to Company general managers and vice general managers shall be disclosed.

Note 6: The total of each of the remuneration items paid by the Company to each general and vice general manager shall be disclosed under the corresponding general manager and vice general manager names in the scale.

Note 7: The total of each of the remuneration items paid by all consolidated entities (including the Company) to each general and vice general manager shall be disclosed under the corresponding general and vice general manager name is the scale.

Note 8: Net Income refers to 2018 net income: Those who have adopted IFRS, net income refer to the net income in individual or separate financial reports for the most recent year.

Note 9: a. This column shall clearly list the related remuneration amounts from reinvested companies other than subsidiaries.

b. If Company general and vice general managers receive remuneration from reinvested companies other than subsidiaries, the remuneration received by Company directors from reinvested companies other than subsidiaries is included in Remuneration Scale Column E and the column is renamed All Reinvested Entities.

c. Remuneration refers to the compensation and remuneration (employee, director and supervisor remuneration), business execution expenses and other related remuneration received by Company general and vice general managers serving as directors, supervisors and managers of reinvested entities other than subsidiaries.

＊There are differences in the income concept in the remuneration information disclosed in this Table and income tax laws so this Table is used for information disclosure and not taxation purposes.

(3) Profit Sharing Distributed to Managers (Proposed 2018 Employee Profit Sharing Amounts)

December 31, 2018 Unit: Thousand Shares, NT$ 1,000

	Title	Name	Stock	Cash	Total	Total as a % of Net Income
Managers	Chairman	Lin, Jin-Bao	0	11,000	11,000	1.7071
	General Manager	Lin, Wan-Shing				
	Vice General Manager	Chen Chueh Shang-Hsin				
	Vice General Manager	Kuo, Ya-Ping				
	Vice General Manager	Lin, Shi-Bo				
	Vice General Manager	Chang, Chien-Tsung				
	Vice General Manager	Chao, Min-Chiang				
	Vice General Manager	Yu, Fang-Ming				
	Vice General Manager	Chou, Chien-Fu				
	Vice General Manager	Cheng, Li-Wei				
	Chief Technology Officer	Chu, Chih-Hsun				
	Vice General Manager	Kuo, Ya-Han				
	Chief Engineer	Chang, Qi-Zhong				
	Assistant Vice General Manager	Lin, Su-Fen				
	Assistant Vice General Manager	Su, Che-Ming				
	Assistant Vice General Manager	Liu, Hsu-Er				
	Assistant Vice General Manager	Su, Jing-Sheng				
	Chief Financial Officer	Hong, Gon-Wen				

Note 1: Name and title of individuals shall be disclosed but earning distribution shall be disclosed in summarized form.

Note 2: Employee remuneration amounts (including stocks and cash) for managers passed by the 2019 Board of Directors meeting. If estimation is not possible, calculate this year's proposed distribution amounts based on the actual percentages distributed for the previous year. Net Income refers to 2018 net income: Those who have adopted IFRS, net income refers to the net income in individual or separate financial reports for the most recent year.

Note 3: The scope of application for managers is determined according to the rules set down in the March 27, 2003 Tai-tsai-cheng-san no. 0920001301 letters. The scope is as follows:

(1) President and equivalent level personnel

(2) Vice president and equivalent level personnel

(3) Assistant vice general manager and equivalent level personnel

(4) Financial department supervisor

(5) Accounting department supervisor

(6) Other persons handling company management affairs and with signature authority.

Note 4: If directors, presidents and vice presidents receive employee compensation (including stocks and cash), the compensation shall be listed in Table 1-2 and additionally in this Table.

Note 5: Ms. Kuo,Ya Han was promoted to be Vice General Manager of marketing centro from Aug. 9th 2018.

(4) Top 10 Recipients of Employee Profit sharing (employee profit sharing from 2017 earnings received in 2018)

Unit: Thousand Shares, NT$ 1,000

Title	Name	Stock	Cash
Vice General Manager	Chen Chueh Shang-Hsin	0	10,915
Vice General Manager	Kuo, Ya-Ping		
Vice General Manager	Chao, Min-Chiang		
Vice General Manager	Lin, Shi-Bo		
Vice General Manager	Chou, Chien-Fu		
Vice General Manager	Cheng, Li-Wei		
Vice General Manager	Kuo, Ya-Han		
Chief Engineer	Chang, Qi-Zhong		
Assistant Vice General Manager	Lin, Su-Fen		
Assistant Vice General Manager	Su, Che-Ming		

(5) Remuneration by the Company to individual directors shall be disclosed under the following circumstances:

1. Remuneration to individual directors shall be disclosed if there have been consecutive after-tax losses for the previous two year: Not applicable.
2. Remuneration to individual directors shall be disclosed in the event of insufficient director shareholdings for three consecutive months in the most recent year: Not applicable
3. If there are directors with an average pledged share ratio of over 50% for any three months in the most recent years, the individual director(s) with the average pledged share ratio exceeeding 50% for each of these months shall be disclosed: Not applicable.

(6) Individually compare and explain the analysis of the remuneration paid to Company directors, general and vice general managers as a percentage of net income by the Company and all consolidated entities over the past two years and explain the remuneration payment policy, standard and mix, procedure for setting remuneration and operation performance and future risk correlation.

1. Remuneration Paid to Company Directors, General and Vice General Managers as a Percentage of Net Income by the Company over the Past Two Years

Unit: %

Title	Remuneration as Percentage of Net Income			
	2018		2017	
	From TXC	From All Consolidated Entities	From TXC	From All Consolidated Entities
Director	3.39	4.21	3.16	3.62
General Manager and Vice General Manager	4.82	6.72	3.99	5.24

Note 1 2019 director and general and vice general manager remuneration amounts are passed and distributed by the 2018 Board of Directors meeeting so the remuneration at percentage of net income calculations in this column are temporary estimates.

Note 2 Actual numbers were used for the 2017 calculations.

2. Company director remuneration is determined based on the Company's Articles of Incorporation. Fair remuneration is provided by considering Company operation results and contributions towards company performance. General and vice general manager remuneration payment policy is based on the Company's Salary Management Rules and salary levels for that job position in the industry market, the scope of authority of that job position inside the Company and degree of contribution toward operation targets. The procedure for setting remuneration follows evaluation and review procedures in the Company's Director and Manager Performance Evaluation Rules. In addition to referring to the Company's overall operational performance, future industry risks and development trends, individual performance achievement rates and contribution towards company performance is considered in order to provide fair compensation. The fairness of related performance evaluations and remuneration are reviewed by the salary and compensation committee and Board of Directors. The remuneration system is discussed at appropriate times based on actual operating conditions and with respect to related laws to achieve a balance between sustainable company operation and risk control.

Corporate governance and operation

(1) Operation of the Board of Directors

In 2018, the Board of Directors had held 6 meetings (A), the attendance of which as as follows:

December 31, 2018

Job title	Name	Actual number of attendees (B)	Number of proxy attendees	Actual rate of attendance (%) [B/A]	Remark
Chairman	Lin, Jin-Bao	6	0	100	
Director	Hsu, Der-Jun	6	0	100	
Director	Lin, Wan-Shing	6	0	100	
Director	Chen Chueh, Shang-Hsin	6	0	100	
Director	Go, Tien-Chong	6	0	100	
Corporate Director	TLC Capital Co., LTD (Chang Wen-Chin)	6	0	100	

Corporate Director	GoldenTalent Investment Holding co., Limited (Chou, Ming-chih)	3	3	50	
Independent Director	Yu, Shang-Wu	6	0	100	
Independent Director	Tsai, Song-Qi	6	0	100	
Independent Director	Su, Yan-Syue	6	0	100	
Independent Director	Wang, Chuan -Fen	4	2	67	

Other items to be recorded:

1. The date, session, agenda, opinions of all independent directors and the Company's means of processing the opinions of independent directors shall be specified if one of the following circumstances occurred in the operation of the board of directors:
   (1) Matters listed under Article 14-3 of the Securities and Exchange Act: Not applicable, since the Company has established an audit committee; matters listed under Article 14-5 of the Securities and Exchange Act shall be applicable instead;
   (2) Other board resolutions recorded and stated in writing with opposing or reserved opinions from independent directors other than those mentioned above: None; there was no opposing or reserved opinions of the period from the independent directors.

2. Directors' implementation on the avoidance of interest-related motions:
   (1) Date: 2018/04/23
   Agenda: 2017Annual Performance Appraisal on the Directors and Managers.
   Directors avoiding conflicts of interest: Chairman LIN, CHIN-PAO, CEO LIN, WAN-SHING, Director CHEN CHUEH, SHANG-HSIN
   Reasons for the avoidance of conflict of interests and participation in voting: Whereas Chairman LIN, CHIN-PAO, CEO LIN, WAN-SHING, Director CHEN CHUEH, SHANG-HSIN are the Company's managers, the parties in question shall avoid conflict of interests by not participating in the discussion and voting pursuant to Item 2, Article 206 of the Company Act. Chairman LIN had appointed Independent Director Tsai, Song-Qi to preside in the discussion and voting on behalf of the Chairman.
   Resolutions of the Board of Directors: Except for the above-mentioned directors who avoided conflict of interests, the remaining directors have passed the motions without objection.

   (2) Date: 2018/04/23
   Agenda: Q2 / 2018 performance bonus amount.
   Directors avoiding conflicts of interest: Chairman LIN, CHIN-PAO, CEO LIN, WAN-SHING, Director CHEN CHUEH, SHANG-HSIN
   Reasons for the avoidance of conflict of interests and participation in voting: Whereas Chairman LIN, CHIN-PAO, CEO LIN, WAN-SHING, Director CHEN CHUEH, SHANG-HSIN are the Company's managers, the parties in question shall avoid conflict of interests by not participating in the discussion and voting pursuant to Item 2, Article 206 of the Company Act. Chairman LIN had appointed Independent Director Tsai, Song-Qi to preside in the discussion and voting on behalf of the Chairman.
   Resolutions of the Board of Directors: Except for the above-mentioned directors who avoided conflict of interests, the remaining directors have passed the motions without objection.

(3) Date: 2018/07/16

Agenda: TAIWAN CRYSTAL TECHNOLOGY (HK) LIMITED, a subsidiary of TXC, exercise the capital reduction.

Directors avoiding conflicts of interest: CEO LIN, WAN-SHING

Reasons for the avoidance of conflict of interests and participation in voting: Whereas CEO LIN, WAN-SHING is the Company's chairman, the parties in question shall avoid conflict of interests by not participating in the discussion and voting pursuant to Item 2, Article 206 of the Company Act.

Resolutions of the Board of Directors: Except for the above-mentioned directors who avoided conflict of interests, the remaining directors have passed the motions without objection.

(4) Date: 2018/08/09

Agenda: Review the 2017 annual payment of employee compensation and directors' remuneration.

Directors avoiding conflicts of interest: Chairman LIN, CHIN-PAO, CEO LIN, WAN-SHING, Director CHEN CHUEH, SHANG-HSIN

Reasons for the avoidance of conflict of interests and participation in voting: Whereas Chairman LIN, CHIN-PAO, CEO LIN, WAN-SHING, Director CHEN CHUEH, SHANG-HSIN are the Company's managers, the parties in question shall avoid conflict of interests by not participating in the discussion and voting pursuant to Item 2, Article 206 of the Company Act. Chairman LIN had appointed Independent Director YU, SHANG-WU to preside in the discussion and voting on behalf of the Chairman.

Resolutions of the Board of Directors: Except for the above-mentioned directors who avoided conflict of interests, the remaining directors have passed the motions without objection.

(5) Date: 2018/11/07

Agenda: Proposal of OOO investment

Directors avoiding conflicts of interest: Director Chou, Ming-chih, Director Chang Wen-Chin

Reasons for the avoidance of conflict of interests and participation in voting: Whereas Director Chou, Ming-chih, Director Chang Wen-Chin are the Company's shareholers, the parties in question shall avoid conflict of interests by not participating in the discussion and voting pursuant to Item 2, Article 206 of the Company Act.

Resolutions of the Board of Directors: Allow management team to invest comply with the procedures for Acquisition or Disposal of Assets of and report to the board of directors.

(6) Date: 2018/12/20

Agenda: 2018 performance bonus amount.

Directors avoiding conflicts of interest: Chairman LIN, CHIN-PAO, CEO LIN, WAN-SHING, Director CHEN CHUEH, SHANG-HSIN

Reasons for the avoidance of conflict of interests and participation in voting: Whereas Chairman LIN, CHIN-PAO, CEO LIN, WAN-SHING, Director CHEN CHUEH, SHANG-HSIN are the Company's managers, the parties in question shall avoid conflict of interests by not participating in the discussion and voting pursuant to Item 2, Article 206 of the Company Act. Chairman LIN had appointed Independent Director YU, SHANG-WU to preside in the discussion and voting on behalf of the Chairman.

Resolutions of the Board of Directors: Except for the above-mentioned directors who avoided conflict of interests, the remaining directors have passed the motions without objection.

3. The goals of the year and the most recent year on the strengthening of the board of directors'

functions (such as establishing an audit committee, improving information transparency, etc.) and performance evaluation:

(1) The Company's first Audit Committee was duly established on June 19, 2013 consisted by 3 independent directors and convenes meeting at least once every quarter. It is responsible for reviewing the proper presentation of the Company's financial statements, the selection (dismissal), independence and performance of the Certified Public Accountant, and the effective implementation of the Company's internal control, the Company's compliance with relevant laws and regulations and the Company's control over existing or potential risks. The shareholders' meeting re-elected on June 8, 2016 to increase 1 independent director for the purpose of strengthening corporate governance; therefore, there are currently 4 independent directors in the Audit Committee. Since the date the Audit Committee was established, the Audit Committee has invited Certified Public Accountant and related personnel to attend each meeting and participate in the discussion. The communication meetings were convened as-needed. Please see the Company's website for the communication records: investors relations / corporate governance / the Board of Directors / independent directors' information. The second the Audit Committee has convened 5 meetings in 2018 and all carried out successfully.

(2) The Company's first Remuneration Committee was duly established on December 28, 2011 along with its charter. he second Remuneration Committee was appointed upon the resolution of the Board of Directors on July 10, 2013 to be responsible for formulating and periodically reviewing the performance assessment and remuneration policies, system, standards and structure for the directors and managers, regularly evaluating and setting the remuneration of the directors and managers, as well as completing annual assessment before the first quarter of the following year pursuant to the Company's "Performance Assessment Method for the Directors and Managers". The third Remuneration Committee was appointed upon the resolution of the Board of Directors on July 18, 2016 consisted by 4 independent directors. The 2018 annual asssessment was completed on April 25, 2019 and reported to the Remuneration Committee and the Board of Directors. All related personnel have attended and participated in the discussion during the Remuneration Committee's meetings. There were 4 meetings in 2018 and all carried out successfully.

(3) The Company continued to strengthen its corporate governance. where the "CG6005 general version of corporate governance assessment and authentication" and the "CG6008 advanced corporate governance assessment and authentication" were certified by the Corporate Governance Association in in March 2012 and May 2013, respectively, and the minutes of the Board of Directors, the Audit Committee and the Remuneration Committee and the rules and regulations of the Company are all posted on the Company's website. The Company has always adhered to the principle of information transparency, actively safeguards interests of the shareholders, and discloses important resolutions on Market Observation Post System and the Company's website upon resolutions of the Board of Directors, which had earned it four consecutive years of A++ in Information Disclosure and Transparency Ranking and named it one of the top 20% and 5% companies by the first and the second ~ fourth Corporate Governance Rankings since year 2011.

(2) Operation of the Audit Committee

1. Operation of the Audit Committee

The Company's first Audit Committee was duly established on June 19, 2013 consisted by 3 independent directors and elected the independent director, YU, SHANG-WU, to serve as the convener. The shareholders' meeting re-elected on June 8, 2016 to increase 1 independent director for the purpose of strengthening corporate governance; therefore, there are currently 4 independent directors in the Audit Committee convening meeting at least once every quarter. It is responsible for reviewing the proper presentation of the Company's financial statements, the selection (dismissal), independence and performance of the Certified Public Accountant, the effective implementation of the Company's internal control, the Company's compliance with relevant laws and regulations and the Company's control over existing or potential risks. Its primary authorities are as follows:

(1) To establish or modify the internal control system as prescribed in Article 14 of the Securities and Exchange Act;
(2) To evaluate the effectiveness of the internal control system;
(3) To establish or modify the procedures for material financial business behaviors such as acquiring or disposing assets, engaging in derivative commodity transactions, lending capital to others, endorsing or providing guarantees for others as prescribed in Article 36-1 of the Securities and Exchange Act;
(4) Matters concerning the directors' personal interests;
(5) Material assets or derivative commodities transactions;
(6) Material capital lending, endorsement or provision of guarantees;
(7) Offering, issuance or private placement of equity securities;
(8) Appointment, dismissal or remuneration of Certified Public Accountant;
(9) Appointment or dismissal of chief financial officer, chief accounting officer or chief audit executive;
(10) Annual financial statements and semi-annual financial statements; and
(11) Other matters required by the Company or the competent authority.

In 2018, the Audit Committee had held 5 meetings (A), the attendance of which as as follows:

Job title	Name	Actual number of attendees (B)	Number of proxy attendees	Actual rate of attendance (%) [B/A]	Remark
Independent Director	Yu, Shang-Wu	5	0	100	
Independent Director	Tsai, Song-Qi	5	0	100	
Independent Director	Su, Yan-Syue	5	0	100	
Independent Director	Wang, Chuan -Fen	4	1	80	

Other items to be recorded:

1. The date, session, agenda, resolution of the Audit Committee and the Company's means of processing the opinions of the Audit Committee shall be specified if one of the following circumstances occurred in the operation of the Audit Committee:
   (1) Matters listed under Article 14-5 of the Securities and Exchange Act:

Meeting date (session)	Agenda	Opinions of all independent directors and the Company's means of processing the opinions of independent directors
2018/03/15 (10th meeting of the second session)	1. Bank credit extensions 2. 2017 business report and financial statements 3. Internal audit report 4. Annual internal control self-inspection reports, Statement on Internal Controls and auditing reports	Approved by all independent directors;
2018/04/23 (11th meeting of the second session)	1. Q1 / 2018 financial statements 2. 2017 Profit Distribution Proposal 3. 2017 annual review on the independence and performance appraisal of the accountant and modifications on the review methodology 4. Undertaking of bank credit extensions and derivative financial commodities 5. Proposal of OOO investment 6. Internal audit report	Approved by all independent director
2018/08/09 (12th meeting of the second session)	1. Q2 / 2018 financial statements 2. Undertaking of bank credit extensions and derivative financial commodities 3. Internal audit report	Approved by all independent directors
2018/11/07 (13th meeting of the second session)	1. Q3 / 2018 financial statements 2. Internal audit report 3. Change of TXC's internal audit officer 4. Undertaking of bank credit extensions and derivative financial commodities 5. Proposal of OOO investment and capacity expansion 6. Proposal of OOO investment	Approved by all independent directors
2018/12/20 (14th meeting of the second session)	1. 2019 annual operating plans and annual budgets 2. 5. 2019 annual review on the accountant fees 3. Internal audit report 4. 2019 annual audit plan	Approved by all independent directors

(2) Except for the foregoing, other matters that were not approved by the Audit Committee but were approved by more than two-thirds of all directors: None; there was no objection or reservation from the independent directors for the period.

2. Implementation of the independent directors' avoidance of motion with conflict of interests (please specify the independent director's name, content of the motion, reasons for the avoidance of conflict of interests, and participation in voting): None; each member of the autit committee has fully expressed his/her opinions.

3. Communication between the independent directors and chief audit executive and accountant (include major topics, methods and results relating to the Company's financial and business status that shall be communicated)：

(1) There are channels of direct contact between the independent directors and chief audit executive and the Certified Public Accountant and the communication condition is good;

(2) The Company convenes the Audit Committee meeting on regular basis, which will invite accountant, chief auditing executive to attend and invite related supervisors to attend if necessary;

(3) The chief audit executive submits aggregated auditing report to the Audit Committee on monthly basis according to the annual audit plan;

(4) Evaluate the performance and independence of the accountant annually and submit to the Audit Committee for review. The 2018 annual evaluation on the accountant's performance and independence was approved by the Audit Committee on April 25, 2019 and submitted to the Board of Directors. Please visit the Company's website for the assessment results;

(5) Due to accouting firm internal reorganization, TXC did CPA replacement from 2019 first quarter. The Audit Committee conducted CPA selection and independent evaluation on Apr. 25 2019.

(6) The Company's independent directors and accountant or auditors convene communication meetings on as need basis.

D. Corporate governance and variations with management principles of publicly-listed companies and reasons

Assessment Items	Operation Status (Note 1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary	
1. Comply with General Guideline of publicly-listed companies and disclose company's practical guideline in corporate governance?	Yes		TXC has formulated the Practical Guideline for Corporate Governance, and set up effective regulations governing corporate governance framework, protection of the rights and benefits of shareholders, strengthening the function of the board of directors, bringing up the function of the Auditing Committee, showing respect for the rights and benefits of the stakeholder, and enhancing the transparency of information. For details refer to the company website	Conforms with best-practice principles, no discrepancy
2. Company shareholding Structure and shareholders' rights				
（1）Has the Company formulated internal operating procedures for handling proposals, doubts, disputes and litigation of shareholders and follow procedures for implementation.	Yes		TXC has formulated procedures for handling proposals, doubts, disputes and litigation for protection of communication between the stakeholders and the company management, and timely find out and handle the various problems, as well as having dedicated persons for handling relevant matters. TXC also handles proposals and rights and benefits of relevant shareholders for subsidiaries. For details refer to the company website	Conforms with best-practice principles, no discrepancy
（2） Has the Company the list of the major shareholders with de fact control of the Company and the final controllers of the major shareholders?	Yes		In accordance with Article 25 of the Securities Trading Act, requires monthly posting of changes in shareholding of the internal staff including directors, managers and shareholders with over 10% equities, on the open information observation website specified by the Securities and Futures Bureau.	Conforms with best-practice principles, no discrepancy
（3）Has the Company set up a firewall mechanism for executing risk control of affiliated enterprises?	Yes		Aside from formulation of various risk control mechanisms, the Company also has formulated relevant operation methods for the operation, business and finance with the affiliated enterprises. For instance, in the subsidiary operation method TXC has formulated decision making and approval for the subsidiaries, the management of trading by the associates, specific companies, associates and group trading operation procedures, aside from counseling internal control for the subsidiaries in writing. Moreover, similar to that of the parent company, the acquisition or disposal of assets handling procedures, endorsement method, operation method for loaning to other persons, handling procedures for trading of derivative financial commodities so as to implement the risk control mechanism for subsidiaries. Subsidiaries have already formulated respective risk control mechanisms, and set up risk control mechanisms and firewalls with the affiliated enterprises according to the relevant operating methods of the Company.	Conforms with best-practice principles, no discrepancy

Assessment items	Operation status (Note1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary	
（4）Has the Company formulated internal regulations prohibiting internal staff utilizing information not yet open to the market for trading of securities?	Yes		In 2012 the Company formulated the Operating Procedure for Prevention of Insider Trading and 「 Regulations on whistle-blowing of illegal and unethical or dishonest conduct 」 to prohibit the internal staff utilizing information not yet open to the market for trading securities.	Conforms with best-practice principles, no discrepancy
3. Members and duties of board of directors				
（1） Has the Board of Directors drafted policies for a diversified board framework?	Yes		The Company board members have different professional backgrounds and work fields for implementing the board framework. Two women were elected as independent directors at the June 7, 2016 shareholders' meeting. The members of board of directors possess a diverse range of expertise in the fields of industry, law, finance, accounting, investment management and operations management. The relevant fields of expertise are stated in Note 2.	Conforms with best-practice principles, no discrepancy
（2） Aside from setting up the Remuneration Committee and the Auding Committee according to the law, is it willing to set up other function committees?	Yes		Aside from setting up the Remuneration Committee and the Auditing Committee according to the law, the Company also has set up the Environmental and Social Committee and the Economic Committee, and formulated operating methods for the economic, environmental and social committees. For details refer to the company website	Conforms with best-practice principles, no discrepancy

（3）Has the Company formulated board performance assessment method and regularly carry out performance assessment every year?	Yes		The Company has formulated the Directors and General Manager Performance Assessment Method. The performance of the board of directors is regularly evaluated (at least once per year), and regularly carry out performance assessment of the board every year and forward to the Remuneration Committee and the Board of Directors for discussion. Director performance evaluations are performed externally at least once every three years. The evaluation procedure divides the assessment into three sections: (1) Assessment of company overall operation performance and actual operation conditions of the board of directions. The boards of directors' performance assessment items are divided into five financial indicators including consolidated revenue and net profit achievement rate, competitor performance comparison and 15 non-financial indicators including director independence, director average attendance and education & training. (2) Board members must conduct a 25-item self-assessment each year including understanding of company targets and mission, awareness of director duties and internal relationship operation and communication. (3) The assessment items of the chairman and the administration department of the board of directors include 10 items including observance of related laws and regulations and participation in company operations in accordance to the board member assessment form. The chairman is authorized to approve the weight of each assessment item. The company's 2018 board of director performance evaluation has been completed and it passed review by the remuneration committee on April 25, 2019 and board of directors on April 23, 2018. Refer to the website for the related evaluation items and results. For details refer to the company website	Conforms with best-practice principles, no discrepancy

Assessment items	Operation status (Note1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary	
(4) Has the Company regularly assessed the independence of the certified accountant?	Yes		In order to strengthen the independence of the CPA and his /her familiarity with company business, an evaluation of CPA independence, competency and performance is performed by the company each year and an assessment is done based on the CPA Evaluation and Performance Assessment Procedure. The results are submitted to the Audit Committee and board of directors for discussion. The evaluation items include 10 independence indicators including no direct or significant indirect financial interest between the CPA and client, financial statements of the institution serviced may not have been audited within two years, CPA and all audit service team members may not have client shareholdings and other performance indicator items including financial statement completion date, interaction between CPA and the company, did the CPA actively submit recommendations regarding company systems and internal auditing. The company's 2018 CPA performance evaluation has been completed and it passed review by the audit committee on April 25, 2019 and board of directors on April 25, 2019. The results will be used to implement corporate governance and improve the function of the board of directors. The CPA performance evaluation results have been posted on the company website. Refer to the company website. If a situation occurs in which the CPA needs to be replaced, the chairman and general manager shall understand the reason for replacement and hold an interview for the replacement CPA. A profile of the CPA and other related information is submitted to the Review Committee for review and then it is passed to the Board of Directors for discussion. Afterward, the CPA may be invited to board of director meetings if necessary.	Conforms with best-practice principles, no discrepancy

Assessment items	Yes	No	Summary	Discrepancy with best-practice principles of TWSE/GTSM listed companies
4. Have public listed companies established dedicated (ad-hoc) corporate governance units or personnel responsible for corporate governance matters (including but not limitd to providing information needed by directors and supervisors to perform their duties, handle matters related to the board of directors meeting and shareholders' meeting, handle company registration and registration of related changes, preparation of the board of directors and shareholders meeting minutes)?	Yes		The company has set up a corporate governance work team. The General Manager was appointed to serve as convenor, on the board of March 22nd 2019, the new company secretary was appointed at the Chief Financial OfficerHong, Gon-Wen. The administration center, HR division, Ms. Tien (extension: 3226) is responsible for company governance matters, protecting shareholder rights, strengthening board functions. The implementation of the corporate governance in the year of 2018 is as follows: 1. 6 board meetings, 5 audit committees, and 4 remuneration committees were held. 2. Hold annual shareholders' meeting 3. Board members complete at least 6 credits of refresher courses 4. Insured liability insurance for directors and key staff and reported to the board of directors 5. The top 5% of the results of the fourth corporate governance review. 6. 5 meetings of independent directors and accountants, internal audits, etc.	Conforms with best-practice principles, no discrepancy

Assessment items	Yes	No	Summary	Discrepancy with best-practice principles of TWSE/GTSM listed companies
5. Any communication channel between the Company and the stakeholders? Any special zone on the website for the stakeholders for properly responding to the topic of corporate social responsibility where the stakeholders are concerned?	Yes		A dedicated CSR area, a dedicated stakeholder area, spokesman system and website has been established to provide communication channels and provide the latest news of the company and its subsidiaries. A dedicated shareholder mailbox and investor relations mailbox have also been established. Corresponding windows have been set up for business management and operation items. If company stakeholders have any relevant recommendations, questions or complaints, the mailbox in the dedicated stakeholder area or the dedicated stakeholder contact window may be used to contact the chairman, general manager, independent director or audit office of the company forming an effective and free-flowing communication channel.	Conforms with best-practice principles, no discrepancy

Assessment items	Operation status (Note1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary	
6. Any assigned professional stock affairs handling agency for shareholders' affairs?	Yes		The company has appointed Yuanta Securities to serve as the company's stock affairs agent and assist the company in handling matters related to the shareholders' meeting.	Conforms with best-practice principles, no discrepancy
7. Information Disclosure				
(1) Has the company set up website for disclosing finance, business and corporate governance?	Yes		The company and its subsidiaries have set up a website to provide financial and business information. A dedicated person has been assigned to be responsible for the updating of this information. For details refer to the company website	Conforms with best-practice principles, no discrepancy
(2) Are there other ways of information disclosure (such as English website, assign dedicated person for collection and disclosure of company information? Any spokesman system for implementation? Full process of briefing by the legal person posted on the company website)?	Yes		In addition to its Chinese language website, the company also provides English and Japanese languages websites. A dedicated person is responsible for collecting information and disclosure of major company information. External communication is handled by a spokesperson. Audio and video files of the company's institutional investor conferences are posted on the company's information disclosure website for general reference. Relevant information is posted on the Market Observation Post System designated by the competent authorities.	Conforms with best-practice principles, no discrepancy
8. Are there other important information for helping understand the operation of corporate governance (including but not limited to employee rights and benefits, employee care, investor relations, supplier relations, the rights and benefits of the stakeholders, further studies for directors and supervisors, risk control policy, and execution of risk assessment standard, client policy implementation, purchase of liability risk for directors and supervisors, others)?	Yes		1. Employee rights: Employee rights are handled by the company in accordance with the Labor Standards Act. in the company's annual report for information regarding other employee welfare measures, the pension system, continuing education and other related employee rights. The employee rights at our subsidiaries are handled in accordance with their respective national laws and regulations 2. Employee concern: In addition to setting up medical offices at the company and its subsidiaries that are staffed with professional medical care providers, a labor safety & health committee has been established for safety and health procedures for specialist personnel and personnel assistance projects including psychology, medical and health. A wide range of channels have been provided for personnel to express their opinions to create excellent two-way communication channels	Conforms with best-practice principles, no discrepancy

Assessment items	Operation status (Note1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary	
	Yes		3.Supplier relations and stakeholder rights are handled in accordance with the company and subsidiary work procedures and the contracts with cooperating companies to maintain the legal rights of both parties. No related lawsuits have been brought as of today. 4. Investor relations: The company and its subsidiaries are very concerned about investor rights. In addition to posting related information in a timely fashion on the Market Observation Post System and the company website, the company has been awarded an A+ information disclosure assessment rating for the fourth straight year, named a transparent voluntary information disclosure company for eight straight years and received an A++ rating for four straight years, ranked within the top 20% of public listed companies in the 1st corporate governance assessment and within the top 5% of public listed companies in the 2nd ~4th assessments. 5. Stakeholder rights: In holding the beliefs of integrity and honesty, the company is committed to building long-term relationships with stakeholders based on transparency and sincerity. See p.39 of the company's annual report and the company website for information regarding stakeholder communication. 6. The company's directors attend financial, business and professional knowledge continuing education courses on an irregular basis. Refer to the director and supervisor education and training table in the company's annual report. 7. Implemention of the company's risk management policy and risk measurement standard: In the company's annual report for information regarding the risk management policy, organization structure and related risk control work of the company and its subsidiaries. In addition, the company and its subsidiaries analyze, track and respond to possible high risk events caused by operation targets to establish a sound risk management system. 8. Protecting consumers or customer policy implementation: Our 'customer first, mission focused' philosophy demonstrates our determination and commitment to our customers, our dedication to quality and hard work to earn customer approval over the years. The company has been given best supplier awards from a number of companies as a form of encouragement.	Conforms with best-practice principles, no discrepancy

Assessment items	Operation status (Note1)		
	Yes	No	Discrepancy with best-practice principles of TWSE/GTSM listed companies
			9. The company purchases liability insurance for directors and managers every year. The current insurance coverage is US$ 5,000,000 and it is proposed to report the amount of insurance, insurance coverage and insurance rate during the renewal of the contract. The board of directors and board meeting minutes are detailed on the company website.
9. Any self-assessment report on corporate governance or any assessment report by a professional institution? (If yes, please provide opinions by the board of directors, self-assessment or assessment report by a third party and list the major defects or recommendations and status of improvement.)	Yes		Conforms with best-practice principles, no discrepancy

The company ranking within the top 20% of public listed companies in the 1st corporate governance assessment and within the top 5% of public listed companies in the 2nd and 4th assessments is acknowledgement of the hard work that TXC has put into corporate governance. Related explanations are as follows:

Items requiring improvement:

1. One director performance evaluation is performed each year and an external evaluation is performed once every three years.
2. Convene general shareholders' meeting before the end of May: The Company is actively evaluating holding the shareholders' meeting at any earlier date to make it more convenient for shareholders to attend.
3. Set up non-statutory functional committees: The Company is planned to establish a nomination committee to ensure that the nomination process is fair and transparent.
4. The company's board of directors' election was held on June 7, 2016. Out of the 11 directors, two female independent directors were elected (one of them is a practicing attorney) to conform to our sexual equality policy and create an environment of diverse backgrounds and competencies. However, women still do not make up one-third of the board seats. Further evaluation and planning is needed for the next term.
5. Post financial statements within two months of the end of the accounting year: Currently discussing this matter with the CPA. The company will put forth more effort to achieve this goal.
6. Voluntary disclosure of individual director and supervisor remunerion in the annual report: Not disclosed at this time due to personal information protection concerns. The company will consider disclosure in the future.
7. Collective agreements signed between the company and employees: No craft union has been established at the company. Collective agreements still do not need to be signed in accordance with the Collective Agreement Law. If a union is established, relevant laws and regulations will be followed.◦

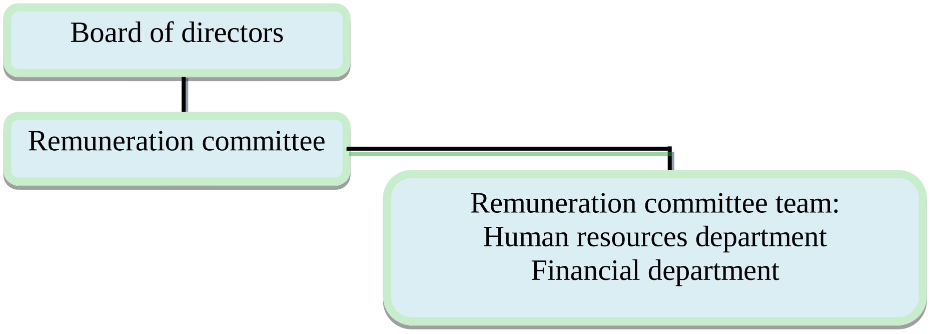
Note 1: Explanations should be provided in the summary column regardless of whether ‘yes’ or ‘no’ is checked under operating conditions.
Note 2: Descriptions of directors’ fields of expertise

Diversity items / Name of director	Gender	Operational Decision Making	Finance Accounting	Operation Management	Crisis Management	Industry Knowledge	International Market Outlook	Leadership Decision Making	Legal
Lin, Jin-Bao	Male	✓	✓	✓	✓	✓	✓	✓	
Hsu, Der-Jun	Male	✓	✓	✓	✓	✓	✓	✓	
Lin, Wan-Shing	Male	✓	✓	✓	✓	✓	✓	✓	
Chen Chueh, Shang-Hsin	Male	✓	✓	✓	✓	✓	✓	✓	
Go, Tien-Chong	Male	✓	✓	✓	✓	✓	✓	✓	
TLC Capital Co., LTD (Chang Wen-Chin)	Male	✓	✓	✓	✓	✓	✓	✓	
Golden Talent Investment Holding co., Limited (Chou, Ming-Chih)	Male	✓	✓	✓	✓	✓	✓	✓	
Yu, Shang-Wu	Male	✓	✓	✓	✓	✓	✓	✓	
Tsai, Song-Qi	Male	✓	✓	✓	✓	✓	✓	✓	
Su, Yan-Syue	Female	✓	✓	✓	✓	✓	✓	✓	
Wang, Chuan -Fen	Female	✓	✓	✓	✓	✓	✓	✓	✓

(4) Remuneration committee organization, duties and operation

1. The company established the remuneration committee on December 28, 2011. The third term of the remuneration committee was composed of four independent directors by July 18, 2016 board resolution. Independent director Yu Shang-Wu was reelected as convenor. The qualification review of this term's members includes member academic background, member qualification review sheet, statement and related confidentiality agreements. Refer to the company website for more detailed information.
http://www.txccorp.com/index.php?action=e_company_1-1&cid=3&sid=8&id=10

The committee organization is as follows:



2. Remuneration Committee Member Information

Position (Note 1)	Name\ Criteria	Meets the Following Professional Qualification Requirements and Has at Least Five Years of Work Experience			Meets Indepence Criteria (Note 2)								Number of Other Public Companies Concurrently Serving as Member of Compensation Committee	Note
		An Instructor of 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 of Private Junior College, College or University	A Judge, Public Proscutor, Attorney, CPA 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, Accounting or Otherwise Necessary for the Business of the Company	1	2	3	4	5	6	7	8		
Independent director (Convenor)	Yu, Shang-Wu	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	1	
Independent director	Tsai, Song-Qi		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0	
Independent director	Su, Yan-Syue			✓	✓	✓	✓	✓	✓	✓	✓	✓	1	
Independent director	Wang, Chuan -Fen		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0	

Note 1: Write director, independent director or other for position.

Note 2: Please check "✓" the corresponding box if the following circumstances apply to the director in the two-year period before being elected and during the term of office.

(1) Not an employee of the company or its affiatiates.

(2) Not a director or supervisor of the company or its affiliates. However, this shall not apply in cases where an independent director has been established for the company, its parent company, or a subsidiary in accordance with this law or the local national law.

(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 in other names in an aggregate amount of one percent or more of the total number of issued shares or ranks as one of its top shareholders.

(4) Not a spouse, relative within the second degree of kinship or linear relative within the third degree of kinship of any of the persons listed in the above three subparagraphs.
(5) Not a director, supervisor or employee of a corporate shareholder that directly holds five percent or more of the total number of shares issued by the company or ranks as one of its top five corporate shareholders.
(6) Not a director, supervisor, officer or shareholder holding five percent of more of a specified company or institution that has a financial or business relationship with the company.
(7) Not a professional individual who as an owner, partner, director, supervisor or officer of a sole proprietorship, partnership, company or institution that provides commercial, legal, financial or accounting services or consultation to the company or an affiliate of the company or a spouse thereof.
(8) None of the circumstances under Article 30 of the Company Law apply.

3. Remuneration Committee Operation Status

(1) The company's remuneration committee has four members.

(2) The current term of remuneration committee members is: July 18, 2016 to June 6, 2019. The Committee met five times (A) in 2018 (three times during the previous term and three times during this term). The member qualifications and attendance status is as follows:

Position	Name	Attendence in Person (B)	By Proxy	Attendence Rate in Person (%) (B/A) (Note)	Note
Independent director (Convenor)	Yu, Shang-Wu	4	0	100%	
Independent director	Tsai, Song-Qi	4	0	100%	
Independent director	Su, Yan-Syue	4	0	100%	
Independent director	Wang, Chuan -Fen	3	1	75%	

Other mentionable items:

1. If the Board of Directors declines to adopt or modifies a recommendation of the remuneration committee, the date of the board of directors meeting, term, content of motions, board resolution results and company handling of remuneration committee opinions (if the resolution passed by the board of directors exceeds the recommendations of the remuneration committee, the circumstances and cause of the difference shall be specifically stated): No such circumstances.
2. If any committee member has an objection or qualified opinion together with a record or written statement regarding a remuneration committee resolution, the remuneration committee date, term, content of motions, all member opinions and how member opinions were handled: No such circumstances.
3. Refer to the company website for more detailed information regarding the company's remuneration committee operation conditions and meeting minutes.
4. The discussion of the remuneration committee and the handling of the company's opinions:

Meeting date (session)	Agenda	Opinions of all independent directors and the Company's means of processing the opinions of independent directors
2018/03/15 (6th meeting of the third session)	1. 2017annual employee compensation and report on the distribution of directors' compensation	Approved by all independent directors;

2018/04/23 (7th meeting of the third session)	1. Performance appraisal of directors and managers in 2017 2. 2018 Q2 performance bonus issue	Approved by all independent director
2018/08/09 (8th meeting of the third session)	1. Review of 2017 employee compensation and directors' compensation 2. First-level supervisor assignment	Approved by all independent directors
2018/12/20 (9th meeting of the third session)	1. 2018 performance bonus payment amount 2. 2019annual employee compensation and directors' compensation ratio	Approved by all independent directors

Remuneration committee duties

In accordance with the charter of the company's remuneration committee, the remuneration committee has the following duties and its recommendations are submitted to the board of directors for discussion:

(1). Regular review on the charter and submission of amendment recommendations.

(2). Determine and regular review the policies, system, standards and structure for company director and officer performance evaluations and remuneration.

(3). Regularly evaluate the remuneration of company directors and officers.

The following principles must be followed before performance of the above remuneration committee duties:

(1). Ensure the company's remuneration arrangements conform to related laws and are sufficient to attract talent.

(2). Performance assessments and compensation levels of directors, supervisors and executive officers shall take into account the general pay levels in the industy, the time spent by the individual and their responsibilities, the extent of goal achiecement, their performance in other positions and the compensation paid to employees holding equivalent positions in recent years. The evaluation should also cover the reasonableness of the correlation between the individual's performance and the company's operational performance and future risk exposure, with respect to the achievement of short and long-term business goals and the financial position of the company.

(3). There shall be no incentive for directors or executive officers to pursue compensation by engaging in activities that exceed the tolerable risk level of the company.

(4). The percentage of the bonus to be distributed based on short-term performance and the time for payment of any variable compensation for directors and executive officers shall be determined based on industry characteristics and company business attributes.

(5). A committee member may not enter into discussions or voting when the committee is deciding on that member's individual remuneration.

(6). The decision making and handling of director and officer remuneration matters for subsidiaries is delegated to the subsidiary but requires the ratification of the company's board of directors. The company's remuneration committee is aksed to submit recommendation before the matter is submitted to the board of directors for discussion.

Refer to the company website for more detailed information on the company's remuneration committee charter. For details refer to the website: http://www.txccorp.com/

(5) Fulfillment of Social Responsibility

Assessment items	Operation Status (Note 1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary (Note 2)	
I. Exercising corporate governance				
(1) Does the company declare its corporate social responsibility (CSR) policy or system and examine the results of its implementation?	Yes		See company webpage for the CSR policy planning and drafting in accordance with Article 6-1 of Corporate Social Responsibility Best Practice Principles, policies and results. For details refer to the company website	Conforms with best-practice principles, no discrepancy
(2) Does the company hold regular CSR instruction and training?	Yes		The 2nd edition of the Code of Conduct issued by the company in 2010 includes the major scope of corporate social responsibility (CSR) covering business ethics guidelines and environmental protection. Related procedures were provided directed at company operation governance, employees, customers, community groups, suppliers, government and legal institutions, shareholdings and competitors. TXC employees and directors all keep this code of conduct manual. Employees must sign and return the responsibility declaration attached to the manual to ensure that the employee has received, read, understands, accepts and agrees to uphold the content of the manual. The manual provides guidelines for all employees to follow when performing their work. When a new employee joins the company, instruction and training is provided to remind employees to make sure to follow the code of conduct. In order to ensure that employees follow the code of conduct and do not forget its contents over time, the company and its subsidiaries hold CSR instruction and training seminars on an irregular basis to remind employees to follow the code of conduct.	Conforms with best-practice principles, no discrepancy

Assessment items	Operation Status (Note 1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary (Note 2)	
(3) Does the company have a dedicated (ad-hoc) CSR organization with board of directors' authorization for its executive officers, which reports to the board of directors?	Yes		The company has set up a Corporate Social Responsibility Management Committee and the company's Management Center is responsible for the overall coordination of the proficiencies of each department to jointly promote various CSR matters. Refer to the company website for the organization structure. In addition, Economy and Enviroment & Society Committees were established by the company in 2013 to effectively implement the decisions to the above issues and determine relevant authority and responsibility. The appointment of the various management representatives is approved by the board of directors and authorized by the General Manager's representative. The economic management representative is appointed by the board of directors' serves as the highest level financial supervisor. The environmental and social management representative appointed by the board of directors serves as the current environmental safety and health system management representative. The operation and implementation status of related promotional activities, except for those reported to the board of directirs at the end of each year, were reported at the December 20, 2018 board of directors' meeting. Refer to the board of directors' meeting minutes posted on the company website. For details refer to the company website Implementation status and resource requirements at ordinary times are reported on an ad-hoc basis to the chairman and general manager so they can stay informed about the status and received the required information. Since overseas subsidiaries are subject to different local laws, the operation of social responsibility systems is the responsibility of the Administration Center. The Labor and Ethics Team, Safety and Health Team, Environment and Energy Team, System Management Team has been set up under the center. The above teams and the company's safety committee include the issues of stakeholders into routine work, annual plan and annual management evaluation and review report to continue to promote and implement corporate responsibility-related activities and verification. The board of directors has authorized the company's general manager as the chief officer of the system and shall report the system's operating status to board of directors each year.	Conforms with best-practice principles, no discrepancy

Assessment items	Operation Status (Note 1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary (Note 2)	
(4) Has the company set up a reasonable remuneration policy which includes an employee performance evaluation system and CSR policy and established a clear and effective incentive and disciplinary system?	Yes		A salary grade table has been set up for the company and its subsidiaries to provide reasonable remuneration based on respective contribution of their position. Salary adjustment and bonus issuance is determined according to the company's development strategy, the individual performance of the employee, future development potential and company operation status to inspire exceptional performance and achieve the salary issuance goals of internal and individual fairness. In order to encourage personnel to work hard to produce operation results, a certain percentage of profits is allocated for employee bonuses so that employees can share in company success. Industry benchmark companies and various salary and welfare systems are considered to offer externally competitive salaries which can attract and retain talented persons. The remuneration committee regularly reviews the reasonableness of the remuneration system. In addition, the performance evaluation guidelines state that supervisors may give positive ratings for the employee's participation and level of cooperation with CSR-related activities in the performance evaluation for encouragement. The company has also set up incentive and disciplinary guidelines, a proposal improvement mechanism, workplace harassment and abuse prevention measures, complaint and disciplinary regulations to promptly reward achievements guard against illegal activity and provide a basis for code of conducts and a standard for incentives and disciplinary actions.	Conforms with best-practice principles, no discrepancy
II. Environmentally Sustainable Development				

Assessment items	Operation Status (Note 1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary (Note 2)	
(1) Is the company committed to utilizing all resources more efficiently and using renewable materials which have low environmental impact?	Yes		The company and its subsidiaries continue to promote energy conservation and carbon reduction projects such as solar power generation system installations, plant-wide use of energy saving lighting, adjustment of public lighting times at dawn and dusk, adjust air conditioning start / stop times based on weather conditions and domestic area hot water supply times, recycling process concentrated water for toilet water use in bathrooms, waste scrap is recycled by a certified scrap metal company to recover the gold and silver for reuse. Continue to provide employee with environmental protection knowledge and concepts so they can fulfill their responsibility to protect the Earth. For details refer to the company website	Conforms with best-practice principles, no discrepancy

Assessment items	Operation Status (Note 1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary (Note 2)	
(2) Has the company set up a suitable environmental management systems based on industry characteristics?	Yes		The environment and safety & health policy of the company and its subsidiaries are as follows: R&D, manufacturing, testing and sales processes must conform to laws, regulations and other related requirements to prevent occupational haards and continue to improve management system operation to meet international standards. In order to protect our employees and fulfill our corporate responsibility to love the Earth, we are committed to: • Guaranteeing worker safety and health which is the primary responsibility and obligation of every level of supervisors at the company. • Preventing work related injury, health issues, disease and accidents to protect all plant personnel. • Following laws and regulations, reducing environmental pollution impact and developing standard operating procedures and methods. • Conveying policy to employees, suppliers, customers, contractors and stakeholders and holding required instruction and training to ensure that they possess the environmental, safety and health knowledge and perform the correct actions. • Continuing to improve management system operation and performance. • Encouraging employees to submit recommendations. Establishing and maintaining good communication channels for company supervisors and personnel. • Producing green products launch waste reduction activities and continually organize to create a safe and healthy environment. • The company is committed to adopting the latest international and domestic environment, safety and health standards to provide a basis for self-improvement. For details refer to the company website	Conforms with best-practice principles, no discrepancy

Assessment items	Operation Status (Note 1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary (Note 2)	
(3) Does the company monitor the effect of climate change on its operations, conduct greenhouse gas inventories and has the company set up energy conservation, carbon reduction and greenhouse gas reduction strategies?	Yes		The company and its subsidiaries have been promoting carbon management work for some time. The various items of work are regularly performed for Greenhouse Gas Inventory (ISO 14064-1) and Product Carbon Footprint Verification (PAS 2050) each year. By means of the inventory, the company's actual carbon and greenhouse gas production amounts can be understood which can be used to devise corrective actions for achieving carbon dioxide emission reduction targets and demonstrate the company's commitment to environmental protection. For details refer to the company website	Conforms with best-practice principles, no discrepancy
III. Promotion of social welfare				
(1) Does the company comply with relevant laws and international human rights conventions? Have related management policies and procedures been set up?	Yes		In order to guarantee the worker rights, the company and its subsidiaries has drafted a worker's rights and ethics policy, follow local labor regulations, SA8000 and EICC recognized human rights principles. The corporate social responsibility system operation guidelines, prohibition of forced labor control procedure, child labor remedies and minor worker protection control procedure, anti-discrimation control procedure, prohibition of corporal punishment and abuse control procedure, worker free assembly guidelines were drafted in accordance with policy requirements. The drafted policy is reviewed at the labor-management meeting each quarter to determine if any amendments or adjustments are needed to uphold business ethics and fulfill our corporate social responsibility. For details refer to the company website	Conforms with best-practice principles, no discrepancy
(2) Has the company set up employee complaint system and channels and does the company reasonably handle such matters?	Yes		In order to maintain the legal rights of the company and its employees, the company and its subsidiaries have set a wide range of communication channels including employee opinion box, personnel satisfaction survey, supervisor mailbox / hotline, labor – management meeting, welfare committee meeting and other various meetings / conferences to allow free exchange of employee opinions and opinions regarding the company direction.	Conforms with best-practice principles, no discrepancy

Assessment items	Operation Status (Note 1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary (Note 2)	
(3) Does the company provide employees with a safe and healthy work environment and organize regular training on safety and health for employees?	Yes		The company and its subsidiaries have set up occupational safety and health committees. A work progress discussion meeting is held every quarter. Environmental protection, safety and health matters are also reviewed to ensure the safety and health of the work environment. Company employees who perform labor safety and health-related work obtain the relevant licenses in accordance with the law. Personnel are also sent to attend seminars and conferences held by government agencies and academic institutes as needed. In addition, a medical office has been established which is staffed with a resident physician and full-time nurse providing professional medical consultation services. Health information (including disease prevention) lectures are held on an irregular basis. For details refer to the company website An environment, health and safety committee and safe production management committee has been set up respectively at the company's Ningbo and Chongqing plants. A work progress discussion meeting is held each month to review environmental protection, safety and health matters. Many health instruction and promotion courses were held for new workers in 2017. Healthy lifestyle promotion materials are sent by mail to all personnel each month. Health information is provided from time to time on the company's internal website and by email to satisfy the health requirements of employees and their dependents.	Conforms with best-practice principles, no discrepancy
(4) Has the company established a regular communication system and a reasonable way of notifying employees of changes which could have a significant effect on operations?	Yes		The company and its subsidiaries conduct employee satisfaction surveys at a regular time each year. For example, when existing employee relations must be changed due to the occurrence of a certain accident such as basic wage adjustment, changes to working times, salary structure changes, access control measures, parking space adjustment, foreign and domestic legal procedures are followed (Labor Standards Act and its enforcement rules are followed domestically). Through the coordination of the Welfare Committee, active measures are taken to explain and report matters to relevant personnel. A certain period of advance notice is given to personnel to achieve the goal of full and seamless communication whenever possible.	Conforms with best-practice principles, no discrepancy

Assessment items	Operation Status (Note 1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary (Note 2)	
(5) Has the company established an effective career development training program?	Yes		The company and its subsidiaries plan employee training courses based on the job grade/level system and actual requirements in order to strengthen the professional knowledge, skill and expertise of personnel and improve work performance. The training courses include new employee training, professional training, management skill training, general training, self-inspired growth, project training and online learning platform courses.	Conforms with best-practice principles, no discrepancy
(6) Has the company established related policies and complaint procedures to protect consumer rights with regard to R&D, purchasing, production, work and service processes?	Yes		The company and its subsidiaries have taken out full product liability insurance for all company products. Since the company's products are mainly active and passive frequency components, they will not cause physical injury to the sales channel distributor or final consumer if the product malfunctions (frequency defect or unable to start oscillation). The company has set up a dedicated customer service section to handle consumer complaint-related problems.	Conforms with best-practice principles, no discrepancy
(7) Does the company follow related laws, regulations and international standards regarding the marketing and labelling of products and services?	Yes		The company and its subsidiaries keep track of changes in relevant international environmental protection laws and regulations (such as WEEE, ROHS, REACH) on a monthly basis to ensure that all materials, processes and supplied products meet international environmental protection requirements. When there is a new environmental protection requirement, the company immediately conducts an inventory and implements the required action plan. The new requirements are included in the EMS011 Environmental Controlled Substances Management Standard so related personnel and cooperating suppliers can follow this requirement.	Conforms with best-practice principles, no discrepancy
(8) Does the company evaluate the past environmental and social impact records of suppliers before conducting business with them?	Yes		In order to ensure that upstream and downstream companies have the ability to fulfill their corporate social responsibility, suppliers must submit and sign the supplier's company basic information survey, quality and environmental system self-evaluation form, industry code of conduct, SA8000 commitment, environment, occupation, safety & health status survey form, declaration of conflict-free metals when the company and its subsidiaries select suppliers or introduce new suppliers to serve as a basis for evaluation and review.	Conforms with best-practice principles, no discrepancy

Assessment items	Operation Status (Note 1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary (Note 2)	
(9) Do contracts between the company and its major supplies include contract termination or cancellation clauses if the supplier violates the company's CSR policy or has a significant environmental or social impact?	Yes		The ultimate goal of the supply and management business concepts of the company and its subsidiaries are close cooperation with suppliers to achieve customer satisfaction. In order to fulfill our CSR commitment as a member of the global supply chain, the company endaevors to spread its CSR commitment to its supplier group. The key points are as follows: 1. Approval of clean purchasing. 2. Quality and product safety assurance. 3. Environmental considerations (green purchasing). 4. Follow legal and social norms. 5. Ensure information security. 6. Consideration of human rights and labor safety & health. 7. Fulfillment of corporate social responsibilities If there is an actual or foreseeable major negative environmental, labor, human rights or social impact from the company's existing suppliers, the company shall immediately downgrade or remove the supplier from the certified supplier list in accordance with supplier management procedures. If the materials provided by the supplier are not highly replaceable, the company shall assist the supplier eliminate above actual or foreseeable major negative environmental, labor, human rights or social impact to maintain effective operation of the supply chain.	Conforms with best-practice principles, no discrepancy
IV. Enhanced information disclosure (1) Is relevant and reliable-CSR related information disclosed by the company on its website or Market Information Post System?	Yes		For CSR-related information including corporate governance, environmental safety & health and social philanthropy of the company and its subsidiaries, for details refer to the company website.	Conforms with best-practice principles, no discrepancy

Assessment items	Operation Status (Note 1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary (Note 2)	
V. If the company has established CSR best practice principles in accordance with Corporate Social Responsibilities Best Practice Principles for TWSE and TPEx-Listed Companies please explain any discrepancies between the principles and their implementation.	Yes		With regard to the annual CSR report prepared by the company, the content of the report and related operations shall conform to and have no major deviation from the Corporate Social Responsibilities Best Practice Principles for TWSE and TPEx-Listed Companies. Annual CSR reports are disclosed on the Market Information Post System and the company website.	Conforms with best-practice principles, no discrepancy
VI. Other important information to facilitate better understanding of CSR implementation conditions.	Yes		For CSR-related information including corporate governance, environmental safety & health and social philanthropy of the company and its subsidiaries, for details refer to the company website	Conforms with best-practice principles, no discrepancy
VII. If the company's CSR reports have passed the verification standards of certification institutions, an explanation should be provided.	Yes		A third-party verification agency, the British Standards Institution (BSI), has been appointed to verify the company's 2016-2017 CSR reports. For the year of 2018, the company has sufficient verification experience and confirmed that it meets the requirements for verification. The Corporate Social Responsibility Report adopts a self-management method to prepare a report in both Chinese and English. For details refer to the company website.	Conforms with best-practice principles, no discrepancy

Note 1: Explanations should be provided in the summary column regardless of whether 'yes' or 'no' is checked under operating conditions.

Note 2: For companies that have prepared a CSR report, the explanations in the summary may be replaced by referencing to the CSR report and indexing to pages of the reports.

(6) Company ethical corporate management and adopted practices

The company's Ethical Corporate Management Best Practice Principles was approved the board of director's meeting and was then presented the shareholders' meeting on June 19, 2013. Ethical Corporate Management Procedures and Guide of Good Conduct was approved by the board of directors on April 24, 2017. At the same time, the Ethical Corporate Management Best Practice Principle Internal Control System and Internal Audit Implementation Rules were included as actual audit items. In the future, the company will follow Ethical Corporate Management Best Practice Principles, operate the company with pragmatism, establish a sound corporate culture of ethical management and keep pace with domestic and international developments in ethical management rules. The company also encourages directors, independent directors, officers and employees to submit recommendations for discussion of how to improve ethical management principles in order to improve company ethical management results and put ethical management principles into practice. The company's CSR implementation results are reported to the board of directors at the end of each year.

1. Implementing Ethical Corporate Management

Assessment items	Operation Status (Note 1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary	
1. Ethical corporate management policy and programs				
(1) Does the company clearly state its integrity management policy, methods in its procedures and external documents? Are the board of directors and management committed to actively implementing the management policy?	Yes		The company has set up a code for integrity management and Chinese and English language versions of the code of conduct manual have been created. All of the employees and board members at the company and its subsidiaries understand its contents and must sign and hand in the responsibility declaration attached to the manual to ensure that the employee has received, read, understood and accepts the manual and agrees to uphold the entire content of the manual. The manual provides the principles for all employees to follow when performing their work. The integrity management implementation status is reported to the board of directors at least once each year.	Conforms with best-practice principles, no discrepancy
(2) Has the company set up programs to prevent to unethical conduct? Are work procedures, guides for conduct, disciplinary and complaint system for violations set up and implemented?	Yes		The company has set up procedures for handling reported cases of unethical or dishonest conduct. The company and its subsidiaries holds instruction and training for every new employee to remind employees that the code of conduct must be followed. Yes, the company performs total and complete announcement regarding integrity risks and reminds employees to make sure to follow the content of the code of conduct. When employees engage in dishonest conduct, the employee	Conforms with best-practice principles, no discrepancy

Assessment items	Operation Status (Note 1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary	
			disciplinary guidelines are followed to take a level of disciplinary action based on the severity of the case. For details refer to the company website.	
(3) Has the company taken actions to prevent unethical conduct in business activities where there is a higher risk of such conduct within the scope of Article 2 of Ethical Corporate Management Best Practice Principles for TWSE/GTSM Listed Companies or other scopes of business?	Yes		Code of conducts have been set up the company and the subsidiaries to encourage employees to report suspected or discovered cases of violation of laws, regulations and the code of conduct to the board of directors, management, internal audit supervisor or other suitable personnel. In order to encourage employees to report violations, the company has set up related procedures and systems as well as let employees know that the company will do its utmost to protect the person reporting the case from retaliation. In addition, if a director or a manager violates the code of conduct, the company shall handle the case using the disciplinary measures set up for code of conduct violations. The name, position, date of violation, reason for violation, rule violation and handling status shall be promptly disclosed on the Market Observation Post System. For details refer to the company website.	Conforms with best-practice principles, no discrepancy
2. Ethical Corporate Management Implementation				
(1) Has the company evaluated to ethical management records of its business counterparts? Are ethical conduct provisions included in the contracts signed with business counterparts?	Yes		The credit ratings of cooperating suppliers and customers are checked by the company and its subsidiaries. Suppliers are asked to sign an Ethical Conduct Commitment promising that business activities shall be performed in a fair and ethical manner, and follow related laws and regulations and contract provisions. If the supplier is involved in dishonest conduct, the contract may be cancelled or terminated at any time.	Conforms with best-practice principles, no discrepancy
(2) Has the company set up a dedicated (ad-hoc) ethical corporate management unit subordinate to the board of directors. Is the implementation status reported regularly to the board of directors?	Yes		In order to implement its ethical corporate management policy and conduct sound ethical corporate management, the company and its subsidiaries has commissioned the administration center to serve as the dedicated ethical corporate management unit. The highest-level supervisor of the administration center is responsible for drafting the ethical corporate management policy and subsequent creation and promotion of prevention programs. The status of the ethical corporate management implementation is reported to the board of directors at the end of each year. The	Conforms with best-practice principles, no discrepancy

Assessment items	Operation Status (Note 1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary	
			implementation status was reported to the board of directors on December 20 in 2018. For details refer to the company website. The company has set up the following procedures for ethical corporate management implementation: 1. Corporate Governance Best Practice Principles, Ethical Corporate Management Best Practice Principles, Ethical Corporate Management Procedures and Guide of Good Conduct, Ethical Code of Conduct have been set up and anti-fraud measures established to incorporate ethical corporate management into TXC corporate culture. 2. Internal Major Information Handling Procedure, Insider Trading Prevention Management Procedure. Risk Control Procedure and Procedure Governing Financial and Business Matters with Affiliated Enterprises were set up to define the standards of ethical conduct and provide a guide for conduct for all stakeholders of the company. 3. Define the work duties of every department in the company. Clearly define the code of conduct for employees in the Code of Conduct and Employee Manual. Sign employment agreements with employees to implement ethical corporate management. To implement ethical corporate management, related company procedures and honesty & ethics requirements are explained in detail to new employees. Ethical requirements are clearly stated in the employment contract. Ethical corporate management policies are continually announced in routine department meetings, business meetings and various speeches to stress the importance of ethical corporate management. A total of 130 related courses have been held with 3,160 persons attending.	
(3) Has the company drafted policies to prevent conflict of influence? Does the company provide appropriate channels? Have they been implemented?	Yes		The company and its subsidiaries have set up clear procedures in the Corporate Governance Best Practice Principles, Ethical Corporate Management Best Practice Principles, Article 14 of the Rules and Procedures of Board of Directors Meetings, Code of Conduct and Ethical Corporate Management Procedures and Guide of	Conforms with best-practice principles, no discrepancy

Assessment items	Operation Status (Note 1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary	
			Good Conduct. If recusal is required due to a conflict of interest, the individual shall voluntarily recuse himself/herself. If a director, a supervisor or officer violates the ethical code of conduct, the company shall take disciplinary action in accordance with employee disciplinary guidelines and the ethical violation date, reason, rule and handling measures are disclosed promptly on the Market Observation Post System. The company has set up dedicated stakeholder area and established procedures for handling stakeholder recommendations, questions, disputes and litigation matters. For details refer to the company website. If a company employee engages in illegal activities during the course of a transaction, the incident may be reported using the fair and honest transaction mailbox. The company is fully responsible for maintaining confidentiality and conduct an investigation in accordance with the law.	
(4) Has the company established an effective accounting system and internal control system to implement ethical corporate management? Does the internal audit section conduct regular audits or appoint CPAs to conduct audits?	Yes		The company and its subsidiaries has set up an audit office and external CPA audit system. Its duties are to investigate and evaluate internal control system deficiencies and operation measurement efficiency and submit timely improvement recommendations to ensure the ongoing effective operation of internal control system and help the board of directors and management fulfill their responsibilities. Over the years, no cases of corruption have occurred at the company.	Conforms with best-practice principles, no discrepancy
(5) Does the company hold regular internal and external education and training on ethical management?	Yes		The company and its subsidiaries hold instruction and training for every new employee to remind them to follow the code of conduct and instruction and training on ethical conduct is provided to company employees on an irregular basis to ensure that they do not forget its content over the passage of time.	Conforms with best-practice principles, no discrepancy
III. Operation of the company incident reporting system				
(1) Has the company set up a incident reporting and incentive system and convenient incident reporting channels? Is an appropriate dedicated person	Yes		Honesty and integrity are a part of our core corporate culture. When related enterprises of the company and its subsidiaries conduct transactions with cooperating suppliers, a spirit of integrity, honesty, fairness and transparency is embraced with the hope of building long-term partnerships with our suppliers.	Conforms with best-practice principles, no discrepancy

Assessment items	Operation Status (Note 1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary	
appointed to handle the respective reported cases?			Therefore, the company has set up a dedicated stakeholder area and established guidelines for the reporting of illegal, unethical or dishonest conduct. For details refer to the company website. If a company employee engages in illegal activities during the course of a transaction, the incident may be reported using the fair and honest transaction mailbox. The company is fully responsible for maintaining confidentiality and conduct an investigation in accordance with the law. In addition, an obstruction-free email communication channel has been established in the company website. Any stakeholder may communicate or make a complaint by email to the company's independent directors, chairman and general manager at any time to maintain smooth communication and complaint channels with all stakeholders.	
(2) Has reported incident investigation standards, work procedures and related confidentiality systems been set up by the company?	Yes		The company and its subsidiaries have established a Social Responsibility Manual, Employee Manual, Employee Complaint (Filing/Reporting) Control Procedure and Employee Participation in Industrial Safery and Health Consulting and Communication Procedure for reporting, investigation and confidential systems.	Conforms with best-practice principles, no discrepancy
(3) Does the company take actions to protect whistleblowers from improper treatment due to the reporting of the incident?	Yes		It is clearly stated in the Employee Handbook, Employee Complaint (Filing/Reporting) Control Procedure set up the company and its subsidiaries: Strict confidentiality shall be maintained for related persons during the entire complaint filing / reporting process. If there is any disclosure, disciplinary action will be taken in accordance with related procedures. If the person who made the complaint / reported the incident is subjected to retaliation, serious disciplinary action will be taken in accordance with related procedures.	Conforms with best-practice principles, no discrepancy
IV. Enhance information disclosure (1) Is ethical corporate management content and promotional results posted on the company website or the Market	Yes		The company and its subsidiaries provide explanations in the Chinese, English and Japanese language versions of the website. Financial information, share price and dividend information, organization structure and company operation results are fully disclosed in quarterly reports, annual reports and the company website which	Conforms with best-practice principles, no discrepancy

Assessment items	Operation Status (Note 1)			Discrepancy with best-practice principles of TWSE/GTSM listed companies
	Yes	No	Summary	
Observation Post System?			quickly and authentically reports various business information in the hope that stakeholders are kept updated on the company's operation status. Refer to the company website for further information on company governance.	
V. If the company has established ethical corporate management best practice principles in accordance with the Ethical Corporate Management Best Practice Principles for TWSE/GTSM Listed Companies, state the deviations in its operation and the best practive principles: The company and its subsidiaries have established ethical corporate management best practice principles and promotion and announcments are handled in accordance with the best practice principles to strengthen employee awareness at each level of the organization. Thre is no major deviation in its operation or with the Ethical Corporate Management Best Practice Principles for TWSE/GTSM Listed Companies.				
VI. Other major information useful in understanding ethical corporate management operation at the company: (such as review and revisions to the established ethical corporate management best practice principles) The company and its subsidiaries negotiate with customers and fulfill contract provisions with a spirit of honesty and integrity and also compete, negotiate and fulfill all contracts in a fair and ethical manner.				

2. Systems and practices adopted for social responsibility

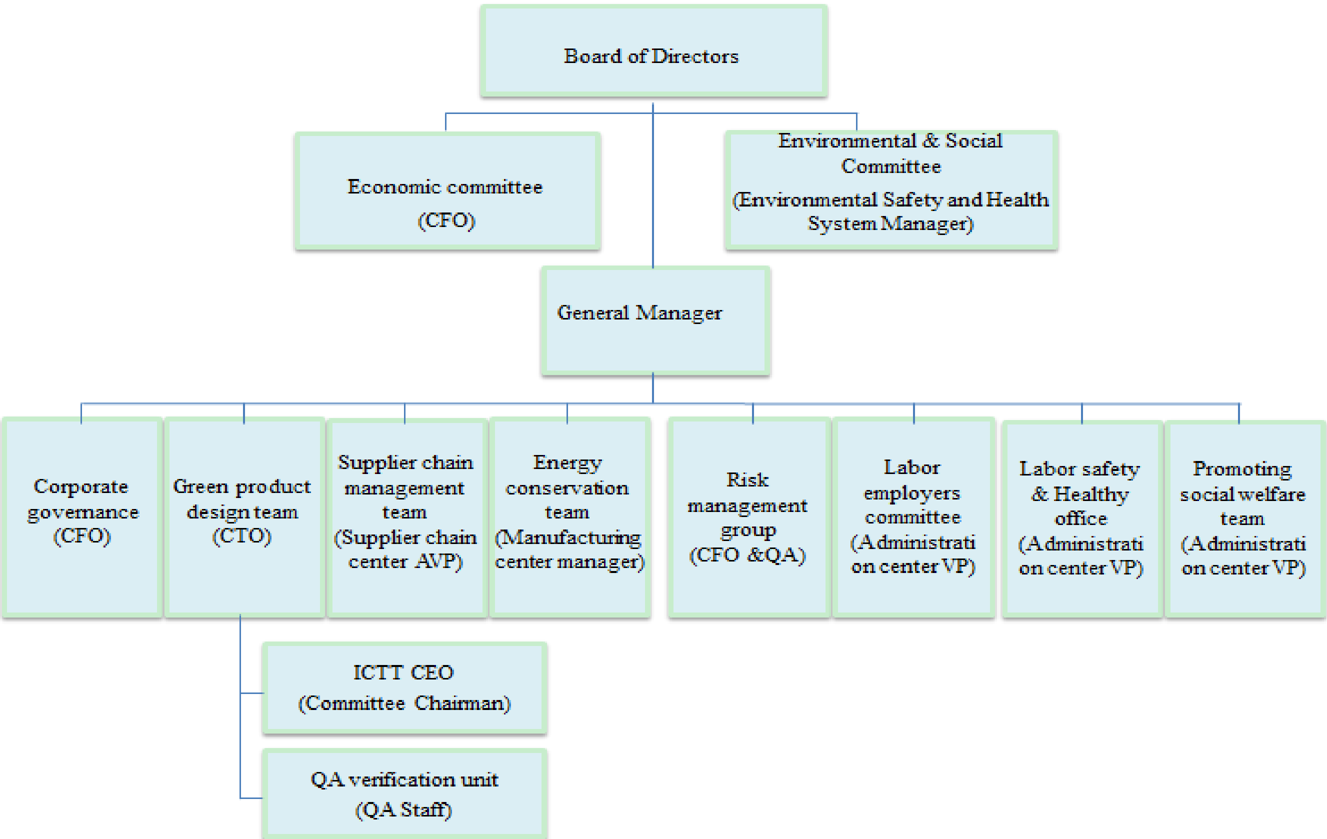
The CSR policies launched by the company are as follows:

1. Combine internal and external resources to launch various corporate social philanthropy activities.
2. Uphold shareholder rights, implement each corporate governance requirement.
3. Maintain the Earth's sustainability; implement environment safety & health procedures.
4. Form promotional organizations and give them the respective resources to reach CSR goals.
5. Continue to strengthen promotional functions in accordance with domestic and international CSR-related laws and regulations.

Besides investment of company resources, the implementation of the above policies also depends on the care and effort invested by all employees to ensure the effective promotion of the above policies. A Corporate Social Responsibility Management Committee has been established internally by the company to promote various CSR matters, adhere to laws and regulations, uphold shareholder rights and organize upstream and downstream companies to jointly provide resources to create a harmonious and content society.

The company's volunteer club has been established for three years now. Adopting the motto of 'everyone join in for charity and philanthropy, do your part to show that you care', the club is involved in community concern and year-end loving care donation activities such as nursing home pit barbecue family recreation activities and the Taoyuan spring beach cleaning activity, Refer to company website for more information about these activities. Http://www.txccorp.com/

3. Corporate social responsibility organization structure



4. Fulfillment of social responsibility

Major activities sponsored by the com

March 31, 2019

Item	Activity theme	Date	Donee / Cooperating organization
A	Community participation, social contribution, service and charity		
1	Joint charity fundraising	2018/01	Carpenter's home, Huashan Foundation, Xinger Autism Association, Shengai Correctional Institute, Lohas Nursery School
2	Social welfare institutions visit and care	2018/03、06、09、10、11	Lok Yu Yu Nursery, Hong Hua Huai Yuan, Long Zhi, Sheng Ai Nursing Home
3	“Love at TXC flea market” charity activities	2018/02、03	Carpenter's Home, Huashan Foundation, Star Autism Association, Andre Food Bank
4	Blood donation activities	2018/05、11	Medical Foundation Blood Donation Center Hsinchu
5	Caring activities for single elderlies	2018/02	Yong-an Township
6	Corporate volunteers startup sharing sessions	2018/07	Taoyuan City Volunteer Service Promotion Center
7	Packaged rice and food donations	2018/09	Yong-guang, Yong-an and Yong-feng townships、 Ark training center
8	“Year-end winter care for vulnerable family” caring activities	2019/01	Yong-guang, Yong-an and Yong-feng townships
9	Edcucation seedling sponsorship and scholarship	2018/01~12	Taoyuan Jeso primary school, Taoyuan Hsia-Yun primary school, Taipei RuiFang junior high school
10	Senior Education Series	2018/07~12	Senior citizens over 60 years old in Beitou District
B	Consumer rights: TXC operation model is B2B-oriented. In order to uphold the rights of our corporate customers, TXC conducts a customer satisfaction survey each year and reviews each opinion submitted by the customer so an appropriate and effective response is provided. The information received from the satisfaction survey is included in the company’s operation performance indicators. In addition, the company’s products are electronic components so their failure will not cause injury to the user. However, in order to allow consumers to use our company’s products without worry, the company has still taken full product liability insurance to show that we take responsibility for our products. When a product failure occurs, we not only perform a failure analysis and root cause determination to find a solution to the failure but also bear warranty or compensation liability based on the requirements set forth in the contract signed with the customer.		
C	Uphold employee human rights, implement safety and health measures: Refer to the annual report.		

Major sponsorships and activities of subsidiaries (Ningbo and Chongqing plants)

March 31, 2019

Item	Activity theme	Date	Donee / cooperating organization
A	Environmental protection		
1	Finished washing machine pure hot water recycling project	2018/03	Pinge Electromechanical Installation Engineering Co., Ltd.
2	Annual exhaust gas source detection (NGB)	2018/04	Zhejiang Zhongtong Testing Technology Co., Ltd.
3	Quartz oscillator production line and supporting facilities projects (second and third phases) Project completion environmental protection acceptance monitoring (CKG)	2018/05	Chongqing Ningling Environmental Protection Technology Development Co., Ltd.
4	Wastewater station pretreatment system optimization (increased Fenton reaction) (NGB)	2018/06	Suzhou Dengfeng Environmental Engineering Co., Ltd.
5	Annual exhaust emission source detection (CKG)	2018/07	Chongqing Painting and Testing Technology Co., Ltd.
6	Grinding oil interception tank sedimentation tank mud removal (CKG)	2018/07	Chongqing Huagao Mechanical and Electrical Installation Engineering Co.,

			Ltd.
7	Wastewater treatment station pipeline rectification (CKG)	2018/09	Shangpin Electromechanical Installation Engineering Co., Ltd.
8	Waste exhaust strip cleaning and Raschig ring replacement (CKG)	2018/09	Chongqing Junquan Water Treatment Equipment Co., Ltd.
9	Production area boiler water boiler and furnace cleaning (CKG)	2018/09	Dongyang Boiler Installation and Maintenance Co., Ltd
10	Emission of pollutants permit (CKG)	2018/11	Chongqing Jiulongpo District Environmental Protection Bureau
11	Monthly wastewater quality testing (NGB)	2018/01~12	Zhejiang Zhongtong Testing Technology Co., Ltd.
12	Quarterly wastewater testing (CKG)	2018/01~12	Chongqing Qingze Water Quality Testing Co., Ltd.
B	Community participation, social contribution, service and charity		
1	Jinfeng Park Yuanxiao Evening (CKG)	2018/02	Chongqing Jinfeng Park General Union
2	Funding Jinfeng Town Primary and Secondary School Outstanding Students (CKG)	2018/03	Jiulongpo District Electronic Information Industry Alliance
3	Jinfeng Park Marathon (CKG)	2018/04	Chongqing Jinfeng Park General Union
4	Dagang Community Creative Work Competition	2018/05	Dagang Community
5	National Model Workers' Home (CKG)	2018/05	National Federation of Trade Unions
6	Dagang Community 6th Games	2018/06	Dagang Community
7	Organized to participate in blood donation activities of Dagang community workers	2018/08	Dagang Community
8	Jiulongpo District Electronic Information Industry Alliance Tanabata Party (CKG)	2018/08	Jiulongpo District Electronic Information Industry Alliance
9	Staff Bookstore Municipal Demonstration Unit (CKG)	2018/09	Chongqing Federation of Trade Unions
10	Green Weekend Dagang Community Volunteer Activities	2018/10	Dagang Community
11	Chongqing Municipal Grassroots Trade Union Reform Municipal Demonstration Unit (CKG)	2018/11	Chongqing Federation of Trade Unions
12	AA-level Harmony Labor Relations Enterprise (CKG) in Jiulongpo District	2018/12	Chongqing Jiulongpo District Federation of Industry and Commerce
13	Jinfeng Park 7th Ball League (CKG)	2018/07-10	Chongqing Jinfeng Park General Union
C	Consumer rights: None		
D	Safety and health		
1	Canteen fume pipe cleaning (CKG)	2018/03	Chongqing Benniu Environmental Service Co., Ltd.
2	Annual canteen tableware hygiene test (CKG)	2018/06	Penny Test Group Shanghai Co., Ltd.
3	Occupational Health and Safety Assessment and Report in the Workplace (including X-ray section) (CKG)	2018/06	Chongqing Quanrong Occupational Health Technology Service Co., Ltd.
4	Water quality testing of drinking water in the factory (tested every 2 months, all drinking water points in the plant area are covered once a year, once tested) (CKG)	2018/06	Chongqing Qingze Water Quality Testing Co., Ltd.
5	Annual canteen drinking water quality test (CKG)	2018/08	Chongqing Qingze Water Quality Testing Co., Ltd.
6	Annual Plant Drinking Water Quality Inspection (NGB)	2018/10	Penny Test Group Shanghai Co., Ltd.
7	Annual canteen tableware hygiene test (NGB)	2018/10	Zhejiang Zhongtong Testing Technology Co., Ltd.
8	Annual canteen drinking water quality test (NGB)	2018/10	Zhejiang Zhongtong Testing Technology Co., Ltd.
9	Workplace Occupational Health and Safety Evaluation and Report (NGB)	2018/10	Zhejiang Multi-spectrum Testing Technology Co., Ltd.
10	Workplace Radiation Protection Testing (NGB)	2018/10	Zhejiang Multi-spectrum Testing Technology Co., Ltd.
11	Canteen soot emission concentration test (NGB)	2018/11	Zhejiang Zhongtong Testing Technology Co., Ltd.

E	Uphold employee rights		
1	Labor-management meeting (CKG)	2018/05	TXC (Ningbo) Union
2	Workers' Congress (NGB)	2018/12	TXC (Chongqing) Union

(7) Disclose the inquiry methods if the company has established a Corporate Governance Code of Conduct and other relevant regulations

1. In order to establish sound corporate governance, the company's board of directors have approved the drafting of the Code of Ethical Conduct and Corporate Governance Best Practice Principles and continue to draft more concrete and detailed regulations and procedures such as Related Party Transaction Management, Specific Company, Related Party and Group Company Transaction Procedure, Scope of Independent Director Duties and Responsibilities, Subsidiary Supervision Procedure, Procedure Governing Financial and Business Matters with Affiliated Enterprises, Risk Control Procedure, Important Internal Information Handling Procedure, Procedure for Handling Stakeholder Recommendations, Questions, Disputes and Litigation Matters, Procedure for Handling the Reporting Cases of Illegal, Unethical or Dishonest Conduct as well as the TXC Code of Conduct, Ethical Corporate Governance Best Practice Principles and Ethical Corporate Management Procedures and Guide of Good Conduct. In addition to their regular announcement, the company also posts this information for public access on the company website to regulate the conduct and ethics of company directors and all subordinate personnel. An ethical management section has been set up on the company website to provide full disclosure and complete explanations of ethical management policy implementation and the drafting and promotion of subsequent preventative programs. The company website also has a dedication section on social responsibility. Refer to the information provided on the company website.
   The company's Ningbo and Chongqing plants have established ethical corporate management code best practice principles and continue to draft more concrete and detailed regulations and procedures such as Related Party, Specific Company and Group Company Transaction Procedure, Board of Directors Agenda Procedure, Business Ethics Control Procedure, Subsidiary Operation Management Procedure, Debt Commitment and Contingency Management Procedure, Financial and Non-Financial Information Management Procedure, Derivative Financial Product Transaction Handling Procedure and regular announce this information to regulate the conduct and ethics of company directors and all subordinate personnel.

2. With regard to the announcement of related insider stock transactions, regular education courses are organized for directors and the announcements of competent authorities are posted on the company website for reference by insiders. Refer to the information on the company website.

3. The Corporate Social Responsibility Best Practice Principles drafted by the company has been approved by the board of directors. The principles are directed at the overall operation activities of the company and group companies including the active fulfillment of corporate social responsibility while performing company operations to conform to the international trends of balancing environmental, social and corporate governance developments and use corporate civic commitment to raise national economic contribution, improve the living quality of employees, communities and society to create competitive advantage based on corporate responsibility. Refer to the company website for information on CSR policy, organization, promotion and results.
   The subsidiary Ningbo and Chongqing plants have drafted Social Responsibility

Manuals. The manual is directed at the overall operation activities of the company including the active fulfillment of corporate social responsibility while performing company operations to conform to the international trends of balancing environmental, social and corporate governance developments and use corporate civic commitment to raise national economic contribution, and improve the living quality of employees, communities and society to create competitive advantage based on corporate responsibility.

(8) Other important information which is sufficient to understand corporate governance operation status must also be disclosed

1. Refer to the information in the company website for company director candidate nomination system, director and independent director nomination and selection method, nomination process, candidate information (conformance with qualification criteria), election process and election results.

2. In order to improve corporate governance, the company communicates with its CPA, independent directors, audit supervisor and accounting supervisors on an ad hoc basis. Refer to the information in the company website for status of communication.

3. In order to strengthen corporate governance, the company pays special attention to open disclosure of information and posts related financial information on the company website. Important information is concurrently disclosed on the company website and to company directors so related persons can clearly understand the operation status of the company and investors and stakeholders promptly receive important information from the company. Refer to the relevant information on the company website.
4. The effort invested and results obtained by the company in corporate governance and information disclosure has been widely recognized. The company has been awarded an A++ information disclosure assessment rating for four straight years, named a transparent voluntary information disclosure company for eight straight years, ranked within the top 20% of public listed companies in the 1st corporate governance assessment and ranked within the top 5% of public listed companies in the 2^{nd} ~ 4^{th} assessments.

(9) Statement on Internal Control

Public Company's Statement on Internal Control

Represents the effectiveness of both the design and execution

(This statement is applicable when all laws and ordinances are complied herewith)

Where accountant was commissioned to perform ad hoc review on the internal control system, the accountant review report required to be disclosed: N/A.

(10) Where, during the most recent year and until the publication date of the annual report, the Company and its internal personnel were sanctioned by law and/or the Company applied punitive measures on its internal personnel who violated provisions of the internal control system, the major deficiencies and improvement thereof: N/A

(11) Important resolutions of the shareholders' meeting and the Board of Directors during the most recent year and until the publication date of the annual report

1. Important resolutions of the board of directors

Date	Board meeting	Important resolution	Resolution result
03/15/2018	Board meeting	1. Accountant's internal control assessment opinion, the company's annual internal control effectiveness self-assessment report and internal control statement 2. Bank credit line extension case 3. 2017 annual directors' compensation and employee compensation distribution case 4. 2017 annual business report and financial statement 5. Hold 2018 shareholder meeting 6. Shareholders' general meeting accepts matters related to shareholder's proposal 7. Amendment of the "Articles of Corporate" case 8. Continental transfer investment subsidiary surplus plan 9. The company transferred investment case	1. Passed by all attending directors without objection 2. Passed by all attending directors without objection 3. Passed by all attending directors without objection 4. Passed by all attending directors without objection 5. Passed by all attending directors without objection, It is planned to hold a shareholders' meeting on June 5, 2018 6. Passed by all attending directors without objection 7. Passed by all attending directors without objection 8. Passed by all attending directors without objection 9. Passed by all attending directors without objection
04/23/2018	Board meeting	1. 2017 annual surplus distribution 2. 2017 accountant's independence, performance evaluation and audit 3. Performance appraisal of directors and managers in 2017 4. Q1/2018 financial statements 5. Bank credit line extension and derivative financial products 6. 2018 Q2 performance bonus issue 7. The company transferred investment case	1 Passed by all attending directors without objection Each share is issued NT2.5 cash dividends. 2 Passed by all attending directors without objection 3 Passed by all attending directors without objection 4 Passed by all attending directors without objection 5 Passed by all attending directors without objection 6 Passed by all attending directors without objection 7 Passed by all attending directors without objection
07/16/2018	Board meeting	1. 2017 annual surplus distribution and other related matters 2. Subsidiary TCTH intends to handle the case of cash reduction and repayment of shares	1 Passed by all attending directors without objection 2 Passed by all attending directors without objection
08/09/2018	Board meeting	1. Q2 / 2018 financial statements 2. Undertaking of bank credit extensions and derivative financial commodities 3. Review of 2017 annual directors' compensation and manager's employee compensation distribution 4. Level 1 supervisor assignment	1. Passed by all attending directors without objection 2. Passed by all attending directors without objection 3. Passed by all attending directors without objection 4. Passed by all attending directors without objection
11/07/2018	Board meeting	1. Q3 / 2018 financial statements 2. Appointment of the “Internal Audit Supervisor” of the Company 3. Undertaking of bank credit extensions and derivative financial commodities 4. The company transferred investment and production equipment expansion case 5. The company transferred investment in OO company shares 6. The company transferred investment case	1 Passed by all attending directors without objection 2 Passed by all attending directors without objection 3 Passed by all attending directors without objection 4 Passed by all attending directors without objection 5 Passed by all attending directors without objection 6 Please ask the management team to handle or dispose of the asset handling procedures and report it to the board of directors.

Date	Board meeting	Important resolution	Resolution result
12/20/2018	Board meeting	1. 2019 annual audit plan 2. 2018 Annual Performance Bonus Issues 3. 2019 annual employee compensation and directors' compensation ratio 4. 2019Annual Operating Plan and Annual Budget 5. 2019 annual accountant public fee review	1. Passed by all attending directors without objection 2. Passed by all attending directors without objection 3. Passed by all attending directors without objection 4. Passed by all attending directors without objection 5. Passed by all attending directors without objection
03/22/2019	Board meeting	1. The accountant's internal control assessment opinions, the Company's annual self-assessment report on the effectiveness of the internal control and the Statement on Internal Control 2. 2018Business report and financial statement 3. 2018 annual distribution of employee compensation and directors' remuneration 4. Undertaking of derivative financial commodities 5. Matters concerning the convening of 2018 Annual General Meeting of Shareholders 6. Matters concerning the rights of shareholders to propose agendas for the Annual General Meeting of Shareholders 7. The Company's handling of the list of candidates for the nomination of directors by shareholders 8. To elect eleven Directors (including four independent directors) 9. To Revise the Articles of Incorporation 10. To Revise the "Procedures for Acquisition or Disposal of Assets" 11. To Revise the "Procedures for Financial Derivatives Transactions" 12. To Revise the "Procedures for Lending Funds to Other Parties" 13. To Revise the "Procedures for Endorsement & Guarantee" 14. Revision of the "Code of Practice for Corporate Governance" 15. New "standard operating procedures for handling requests from directors'' 16. Designation of Company Secretary	1 Passed by all attending directors without objection 2 Passed by all attending directors without objection 3 Passed by all attending directors without objection 4 Passed by all attending directors without objection 5 Passed by all attending directors without objection (to be held on June 12th, 2019) 6 Passed by all attending directors without objection 7 Passed by all attending directors without objection 8 Passed by all attending directors without objection 9 Passed by all attending directors without objection 10 Passed by all attending directors without objection 11 Passed by all attending directors without objection 12 Passed by all attending directors without objection 13 Passed by all attending directors without objection 14 Passed by all attending directors without objection 15 Passed by all attending directors without objection 16 Passed by all attending directors without objection

2. Important Resolutions of the 2018 Shareholders' General Meeting

Time: 9:30 am, June 5, 2018 (Thusday)

Place: No. 4 Pingzhen Industrial Park 6th Rd., Pingzhen City, Taoyuan County

Implementation of major resolutions:

(1) Recognize 2017 business report and financial statement; resolution approved by the 2018 shareholders' meeting.

(2) Recognize distribution of 2017 profits; 2018 shareholders' general meeting, cash dividend of NT$2.5 per share, full amount issued on September 18, 2018 in accordance with the shareholders' meeting resolution.

(3) Revis the Articles of Incorporation; resolution approved by the 2018 shareholders' meeting and complete regislation on June 26th 2018, and was posted on the company website.

(12) Main content of recorded or written statements of dissenting opinions filed by directors or supervisors in connection with important resolutions passed by the board of directors in recent years up to the publication date of the annual reports:

(13) Summary of company chairman, general manager, accounting supervisor, finance supervisor, internal audit supervisor and R&D supervisor resignations and dismissals in

Title	Name	Resignation Date	Reason
Internal audit officer	Chang, Wei-Han	11/07/2018	Retirement

recent years up to the publication date of the annual report: No such circumstances.

6. Information concerning accountant fees

Change of Certified Public Accountant in 2018: none.

Name of the Accounting Firm	Accountant's Name		Audit Period	Remark
Deloitte & Touche	Lin, I-Hui	Weng, Po-Jen	From Jan. 1, 2018 to December 31, 2018	

Accountant fees for the year 2018: Unit：NT$1,000

Range of Amount \ Items		Auditing Fees	Non-Auditing Fees	Total
1	Less than NT$2,000,000		V	
2	NT$2,000,000 ~ NT$4,000,000	V		
3	NT$4,000,000 ~ NT$6,000,000			V
4	NT$6,000,000 ~ NT$8,000,000			
5	NT$8,000,000 ~ NT$10,000,000			
6	NT$10,000,000 and above			

(1) If the non-auditing fees for the Certified Public Accountant and his/her firm and its affiliate(s) are more than one quarter of the auditing fees, the auditing and non-auditing fees amount and non-auditing services shall be disclosed. The Company's non-auditing fees are discloed as follows:

Unit：NT$1,000

Name of the Accounting Firm	Accountant name	auditing fees	Non-auditing fees					Accountant's audit period	Remark
			System design	Business registration	Human resource	Other (Note 2)	Subtotal		
Deloitte & Touche	Lin, I-Hui	3,710	0	22	0	862	884	From Jan. 1, 2018	TP NT$600 thousnads, travel expenses, printing, postage and freight 262 thousands, etc.
	Weng, Po-Jen							to December 31, 2018	

Note 1: If the company changes its accountant or accounting firm in the current year, please list their audit periods separately and explain the reasons for replacement in the "remark" field. Please disclose the auditing and non-auditing fees in sequence.

Note 2: Please list the non-auditing fees separately according to the service items. If the "others" non-auditing fees amount to 25% of the total non-auditing fees, its service content shall be listed in the remark field.

(2) The amount, ratio and reasons for the decrease in auditing fees shall be disclosed if there is a change in accounting firm and the auditing fees in the year of such change is less than the auditing fees in the previous year: No such situation.

(3) The amount, ratio and reasons for the decrease in auditing fees shall be disclosed if the auditing fees was decrease by more than 15% comparing to that of in the previous year: No such situation.

6. **Change in accountant's information:** none.

(1) Regarding the former accountants:

<table>
<tr><td>Date of change</td><td colspan="4"></td></tr>
<tr><td>Reasons and explanations of change</td><td colspan="4"></td></tr>
<tr><td rowspan="3">Explanation whether it was the appointer or the accountant who called for termination or declined the appointment</td><td colspan="2">the parties / situation</td><td>accountant</td><td>appointer</td></tr>
<tr><td colspan="2">Proactively terminate the appointment</td><td></td><td></td></tr>
<tr><td colspan="2">Declined (discontinued) the appointment</td><td></td><td></td></tr>
<tr><td>Any issuance of audit report with reserved opinions within the past two years and the reasons thereof.</td><td colspan="4"></td></tr>
<tr><td rowspan="6">Any different opinion with the issuer?</td><td rowspan="4">Y</td><td></td><td colspan="2">Accounting the principle or practice</td></tr>
<tr><td></td><td colspan="2">Disclosure of financial statements</td></tr>
<tr><td></td><td colspan="2">Scope or steps of audit</td></tr>
<tr><td></td><td colspan="2">Other</td></tr>
<tr><td>N</td><td colspan="3"></td></tr>
<tr><td colspan="4">Explanation</td></tr>
<tr><td>Other disclosures (matters to be disclosed pursuant to Sub-paragraph 1.4 to 1.7 Paragraph 6, Section 10 of the Guidelines)</td><td colspan="4"></td></tr>
</table>

(2) Regarding the new accountant:

Name of the firm	
Accountant name	
Appointment date	
Pre-appointment consultations regarding the accounting treatment or accounting principles for specific transactions and opinions on the possible issuance of financial reports and the results thereof.	
Written opinions of new accountant stating different opinions to that of the previous accountants	

(3) Former accountant's reply to the matters stated in Sub-paragraph 1 and 2.3, Paragraph 6, Session 10 of the Guidelines: N/A

7. **Where the company's chairman, general manager or any officer in charge of finance or accounting matters has in the most recent year held a position at the accounting firm of is CPA or at an affiliated enterprise of the accounting, the name and position of the person and the period during which the position was held, shall be disclosed: No such circumstances.**

8. Any transfer of shareholdings and changed equity pledge from the directors, managers and shareholder(s) holding more than 10% of the shares during the most recent year and as of the publication date of the annual report:

(1) Changes in equity among the directors, manager and large shareholder(s)

Title (Note1)	Name	2018		As of April 13, 2019	
		Increase (decrease) in number of shareholding	Increase (decrease) in number of pledged shares	Increase (decrease) in number of shareholding	Increase (decrease) in number of pledged shares
Chairman	Lin, Chin-Pao	0	0	0	0
Director	Hsu, Der-Jun	(11,845)	0	(169,000)	0

Title (Note1)	Name	2018		As of April 13, 2019	
		Increase (decrease) in number of shareholding	Increase (decrease) in number of pledged shares	Increase (decrease) in number of shareholding	Increase (decrease) in number of pledged shares
Director	Lin, Wan-Shing	(117,000)	0	0	0
Director	Chen Chueh, Shang-Hsin	0	0	0	0
Director	Go, Tien-Chong	(10,000)	0	(5,000)	0
Corporate Director	TLC Capital Co., LTD	0	0	0	0
	Chang Wen-Chin	0	0	0	0
	Peng,Chih-Chiang	0	0	0	0
Corporate Director	Golden Talent Investment Holding co., Limited	0	0	0	0
	Chou, Ming-chih	0	0	0	0
Independent Director	Yu, Shang-Wu	0	0	0	0
Independent Director	Tsai, Song-Qi	0	0	0	0
Independent Director	Su , Yan-Syue	0	0	0	0
Independent Director	Wang, Chuan -Fen	0	0	0	0
Vice General Manager	Kuo, Ya-Ping	0	102,000	195,000	(102,000)
Vice General Manager	Lin, Shi-Bo	0	0	0	0
Vice General Manager	Chang, Chien-Tsung	128	0	0	0
Vice General Manager	Chao, Min-Chiang	0	0	0	0
Vice General Manager	Yu, Fang-Ming	0	0	0	0
Vice General Manager	Chou, Chien-Fu	0	0	0	0
Vice General Manager	Cheng, Li-Wei	0	0	0	0
Chief Technology Officer	Chu,Chih-Hsun	0	0	0	0
Vice General Manager	Kuo, Ya-Han	0	0	0	0
Chief Engineer	Chang, Qi-Zhong	(27,000)	0	0	0
Assistant Vice General Manager	Lin, Su-Fen	0	0	0	0
Assistant Vice General Manager	Su, Che-Ming	0	0	0	0
Assistant Vice General Manager	Liu, Hsu-Er	0	0	0	0
Assistant Vice General Manager	Su, Jing-Sheng	0	0	0	0
Chief Financial Officer/ Company Secretary	Hung, Kuan-Wen	0	0	0	0

Note 1: The Company has no shareholder holding more than 10% of the shares.

Note 2: Ms. Kuo,Ya Han was promoted to be Vice General Manager of marketing centro from Aug. 9th 2018.

TLC Capital Co.,LTD changed their juristic-person director representative on Feb. 18th 2019, the juristic-person director representative is change from Mr. Chang Wen-Chin to Mr. Peng,Chih-Chiang.

(2) Equity transfer information:

April 13, 2019 Unit: shares

Name (Note 1)	Equity transfer reasons	Transactions Date	Counterparty	Counterparty's relations with the Company, its director, supervisor and shareholder holding more than 10% of the shares	Number of Shares	Transactions Prices
Hsu, Der-Jun	Gift	2018/01/22	Hsu, Hsing-Hao	Father-Son	55,000	NA
Kang, Li-Yan	Gift	2018/01/23	Hsu, Hsing-Hao	Mother-Son	55,000	NA
Hsu, Der-Jun	Gift	2019/01/21	Kang, Li-Yan	Huasband-Wife	100,000	NA
Hsu, Der-Jun	Gift	2019/01/21	Hsu, Hsing-Hao	Father-Son	69,000	NA
Kang, Li-Yan	Gift	2019/01/28	Hsu, Hsing-Hao	Mother-Son	66,000	NA

Note 1: There is no transfer of shareholding by the Company's shareholder(s) holding more than 10% of the shares.

(3) Information of the counterparty of an equity pledge who is also a related party: None.

5. **Information of shareholders holding more than 10% of the shares whose relationship with each other is a related party, spouse, and/or a relative by blood or marriage within second degree of kinship or relationship:**

April 13, 2019 Unit: shares

Name	Own held shares		Shares held by spouse, children under twenty (20) years of age		Shareholding in the name of others		Where the relationship among the top 10 shareholders is a related party, spouse, and/or a relative by blood or marriage within second degree of kinship or relationship, please specify the name and relationship		Remark
	number of shares	shareholding ratio	number of shares	shareholding ratio	number of shares	shareholding ratio	name	relationship	
Fubon Life Insurance Co., Ltd. proxy: Tsai, Ming-Hsing	24,430,000	7.89%	0	0%	0	0%	None	None	
Edbertson Asia Stock Trust Investment Account entrusted in the Bank of Taiwan	21,647,000	6.99%	0	0%	0	0%	None	None	
Cathay Life Insurance Company, Ltd. proxy: Huang Tiao-Kuei	18,726,807	6.05%	0	0%	0	0%	None	None	
Nan Shan Life Insurance Co., Ltd. proxy: Tu, Ying-Tsung	9,965,000	3.22%	0	0%	0	0%	None	None	
Norges Bank Investment Account entrusted in Citibank Taiwan	7,366,032	2.38%	0	0%	0	0%	None	None	
Lin, Chin-Pao	6,071,263	1.96%	25,163	0%	0	0%	Lin, Wan-Hsing	Brother	
Edgbaston Asian Equity (Jersey) Trust account entrusted in the Bank of Taiwan	6,022,000	1.94%	0	0%	0	0%	None	None	
Lin, Wan-Hsing	5,072,000	1.64%	0	0%	0	0%	Lin, Chin-Pao	Brother	
Chunghwa Post Co., Ltd. proxy: Wang, Kuo-Tsai	4,980,722	1.61%	152,991	0.05%	0	0%	None	None	
Taipei Fubon Commercial Bank entrusted with trust propertySpecial account	4,733,518	1.53%	0	0%	0	0%	None	None	

Note 1: The top ten shareholders shall be listed in full; corporate shareholder shall list its name and the names of its proxy separately.

Note 2: The calculation of the shareholding percentage refers to the percentage of shares held in his/her/its own name, or under the name of his/her/its spouse, children under twenty (20) years of age, or others.

Note 3: The relationship between above-listed juristic person shareholders and natural person shareholders shall be disclosed pursuant to the regulations governing the preparation of financial reports of the issuer.

Top 10 Shareholder	Major Shareholders of the Juristic Person
Fubon Life Insurance Co., Ltd. proxy: Tsai, Ming-Hsing	Fubon Financial Holding Co., Ltd. (100%)
Cathay Life Insurance Company, Ltd. proxy: Tsai Hung-Tu	Cathay Financial Holding Co. Ltd. (100%)
Nan Shan Life Insurance Co., Ltd. proxy: Tu, Ying-Tsung	Runcheng Investment Holding Company Trust Account entrust in the First Commercial Bank (68.17%); Runcheng Investment Holding Company (22.46%); TU, YING-TSUNG (3.25%); Runhua Textile Manufacture Co., Ltd. (0.28%); Ruentex Leasing Co. Ltd. (0.13%); Jipin Investment Co., Ltd. (0.11%); KUO, WEN-TE (0.10%); Baohuang Investment Co., Ltd. (0.05%); Baohui Investment Co., Ltd. (0.05%); Baoyi Investment Co., Ltd. (0.05%); Baozhi Investment Co., Ltd. (0.05%)

10. The number of shares held by the company, the company's directors, supervisors, managers, and businesses directly or indirectly controlled by the Company in the same joint venture, and the combined shareholding percentage.

December 31, 2018 Unit: shares, %

Investees	Investments of the Company		Investments of the directors, supervisors, managers and their investment in business which they have direct or indirect control of.		Comprehensive investements	
	Number of Shares	Share (%)	Number of Shares	Share (%)	Number of Shares	Share (%)
TAIWAN CRYSTAL INTERNATIONAL LIMITED	42,835,294	100	0	0	42,835,294	100
TXC Technology Inc.	300,000	100	0	0	300,000	100
TXC Japan Corporation	2,100	100	0	0	2,100	100
Taiwan Crystal Technology International (HK) Limited	80,000	100	0	0	80,000	100
TXC Europe GmbH	50,000	100	0	0	50,000	100
TAI SHING ELECTRONICS COMPONENTS CORP.	6,913,000	26.19	3,173,500	12.02	10,086,500	38.21
Godsmith Sensor Inc.	2,350,000	34.96	0	0	2,350,000	34.96
Growing Profits Trading LTD	0	0	50,000	100	50,000	100
TXC (NINGBO) CORPORATION	0	0	45,835,294	100	45,835,294	100
TXC (CHONGQING) CORPORATION	0	0	187,876,609	100	187,876,609	100
CHONGQING ALL SUNS COMPANY LIMITED	0	0	111,000,000	100	111,000,000	100
Ningbo Jingyu Company Limited	0	0	2,500,000	100	2,500,000	100
NINGBO FREE TRADE ZONE DING KAI INVESTMENT MANAGEMENT COMPANY	0	0	35,050,000	100	35,050,000	100
Ningbo Longying Semiconductor Co., Ltd	0	0	2,000,000	40	2,000,000	40

Note: Equity investments of the Company.

IV. Fund Raising Overview
A. Capital and Shares
(1) Source of Capital

1. Capitalization

April 13, 2019 Unit: Shares, NT$

Year/ Month	Issue Price	Authorized Share Capital		Paid-In Capital		Remark		
		Shares	Amount	Shares	Amount	Source of Capital	Capital Increase by Assets Other Than Cash	Other (Approval document no.)
1983.12	10	310,000	3,100,000	310,000	3,100,000	Registered capital	Nil	-
1984.03	10	3,315,200	33,152,000	3,315,200	33,152,000	Capital increase by cash	Nil	-
1989.03	10	8,500,000	85,000,000	8,500,000	85,000,000	Capital increase by cash	Nil	-
1989.10	10	18,000,000	180,000,000	18,000,000	180,000,000	Capital increase by cash	Nil	-
1990.07	10	21,060,000	210,600,000	21,060,000	210,600,000	Capital increase by cash, by capital surplus	Nil	07/10/1990 (79) Tai-Tsai-Cheng(1) no. 01530
1991.08	10	60,000,000	600,000,000	31,590,000	315,900,000	Capital increase by cash, by earnings, by capital surplus	Nil	08/01/1991 (80) Tai-Tsai-Cheng(1) no. 02111
1992.07	10	60,000,000	600,000,000	41,067,000	410,670,000	Capital increase by earnings, by capital surplus	Nil	07/07/1992 (81) Tai-Tsai-Cheng(1) no. 01518
1993.07	10	60,000,000	600,000,000	47,300,000	473,000,000	Capital increase by earnings	Nil	07/14/1993 (82) Tai-Tsai-Cheng(1) no. 30047
1994.07	10	60,000,000	600,000,000	51,557,000	515,570,000	Capital increase by earnings, by capital surplus	Nil	07/07/1994 (83) Tai-Tsai-Cheng(1) no. 31774
1995.06	10	60,000,000	600,000,000	55,681,560	556,815,600	Capital increase by earnings	Nil	06/22/1995 (84) Tai-Tsai-Cheng(1) no. 36958
1996.09	10	100,000,000	1,000,000,000	75,681,560	756,815,600	Capital increase by cash	Nil	09/05/1996 (85) Tai-Tsai-Cheng(1) no. 53631
2000.09	10	100,000,000	1,000,000,000	82,201,820	822,018,200	Capital increase by earnings	Nil	09/06/2000 (89) Tai-Tsai-Cheng(1) no.5237
2001.07	10	260,000,000	2,600,000,000	110,348,515	1,103,485,150	Capital increase by earnings	Nil	05/14/2001 (90) Tai-Tsai-Cheng(1) no. 129296
2001.08	10	260,000,000	2,600,000,000	120,348,515	1,203,485,150	Capital increase by cash	Nil	06/12/2001 (90) Tai-Tsai-Cheng(1) no.135132
2002.09	10	260,000,000	2,600,000,000	137,673,100	1,376,731,000	Capital increase by earnings, by capital increase	Nil	08/21/2002 (91) Tai-Tsai-Cheng(1) no. 0910146351
2003.08	10	260,000,000	2,600,000,000	144,140,534	1,441,405,340	Capital increase by earnings	Nil	08/12/2003 Tai-Tsai-Cheng(1) no. 0920136359
2004.08	10	260,000,000	2,600,000,000	151,810,534	1,518,105,340	Convertible bonds, exercise of employee stock options	Nil	08/18/2004 Ching-Shou-Shang-Zi no. 09301157450
2004.10	10	260,000,000	2,600,000,000	160,779,678	1,607,796,780	Capital increase by earnings	Nil	10/13/2004 Ching-Shou-Shang-Zi no.09301188710
2004.10	10	260,000,000	2,600,000,000	160,784,678	1,607,846,780	Convertible bonds	Nil	10/19/2004 Ching-Shou-Shang-Zi no. 09301199790
2005.05	10	260,000,000	2,600,000,000	163,133,882	1,631,338,820	Convertible bonds	Nil	05/03/2005 Ching-Shou-Shang-Zi no. 09401077580

Year/ Month	Issue Price	Authorized Share Capital		Paid-In Capital		Remark		
		Shares	Amount	Shares	Amount	Source of Capital	Capital Increase by Assets Other Than Cash	Other (Approval document no.)
2005.07	10	260,000,000	2,600,000,000	168,068,138	1,680,681,380	Convertible bonds. exercise of employee stock options	Nil	07/25/2005 Ching-Shou-Shang-Zi no. 09401135020
2005.09	10	260,000,000	2,600,000,000	178,181,410	1,781,814,100	Capital increase by earnings	Nil	09/23/2005 Ching-Shou-Shang-Zi no. 09401185020
2005.10	10	260,000,000	2,600,000,000	181,557,883	1,815,578,830	Convertible bonds, exercise of employee stock options	Nil	10/20/2005 Ching-Shou-Shang-Zi no. 09401207340
2006.01	10	260,000,000	2,600,000,000	186,198,661	1,861,986,610	Convertible bonds, exercise of employee stock options	Nil	01/23/2006 Ching-Shou-Shang-Zi no. 09501010180
2006.03	10	260,000,000	2,600,000,000	188,908,827	1,889,088,270	Convertible bonds, exercise of employee stock options	Nil	04/17/2006 Ching-Shou-Shang-Zi no. 09501068450
2006.07	10	260,000,000	2,600,000,000	188,942,532	1,889,425,320	Convertible bonds	Nil	07/20/2006 Ching-Shou-Shang-Zi no. 09501152420
2006.09	10	300,000,000	3,000,000,000	203,711,768	2,037,117,680	Capital increase by earnings	Nil	09/04/2006 Ching-Shou-Shang-Zi no. 09501198120
2006.10	10	300,000,000	3,000,000,000	204,815,282	2,048,152,820	Convertible bonds, exercise of employee stock options	Nil	10/16/2006 Ching-Shou-Shang-Zi no.09501232600
2007.01	10	300,000,000	3,000,000,000	205,698,282	2,056,982,820	Exercise of employee stock options	Nil	01/16/2007 Ching-Shou-Shang-Zi no. 09601010470
2007.04	10	300,000,000	3,000,000,000	206,032,282	2,060,322,280	Exercise of employee stock options	Nil	04/14/2007 Ching-Shou-Shang-Zi no. 09601078450
2007.07	10	300,000,000	3,000,000,000	206,624,577	2,066,245,770	Convertible bonds	Nil	07/27/2007 Ching-Shou-Shang-Zi no. 09601180970
2007.08	10	300,000,000	3,000,000,000	230,7397,19	2,307,397,190	Capital increase by earnings	Nil	08/28/2007 Ching-Shou-Shang-Zi no.09601210120
2007.10	10	300,000,000	3,000,000,000	240,243,456	2,402,434,560	Convertible bonds	Nil	10/22/2007 Ching-Shou-Shang-Zi no. 09601258520
2008.01	10	300,000,000	3,000,000,000	241,552,590	2,415,525,900	Convertible bonds	Nil	01/29/2008 Ching-Shou-Shang-Zi no. 09701022010
2008.01	10	300,000,000	3,000,000,000	241,552,590	2,415,525,900	Convertible bonds	Nil	01/29/2008 Ching-Shou-Shang-Zi no. 09701022010
2008.04	10	300,000,000	3,000,000,000	241,627,148	2,416,271,480	Convertible bonds	Nil	04/11/2008 Ching-Shou-Shang-Zi no. 09701087040
2008.08	10	300,000,000	3,000,000,000	242,464,833	2,424,648,330	Convertible bonds	Nil	08/05/2008 Ching-Shou-Shang-Zi no.09701191720
2008.08	10	350,000,000	3,500,000,000	270,395,056	2,703,950,560	Capital increase by earnings	Nil	08/28/2008 Ching-Shou-Shang-Zi no. 09701819210
2008.11	10	350,000,000	3,500,000,000	271,698,090	2,716,980,900	convertible bonds	Nil	11/17/2008 Ching-Shou-Shang-Zi no. 09701293960
2009.09	10	400,000,000	4,000,000,000	287,312,523	2,873,125,230	Capital increase by earnings	Nil	09/11/2009 Ching-Shou-Shang-Zi no. 0980120690
2009.11	10	400,000,000	4,000,000,000	287,340,930	2,873,409,300	Convertible bonds	Nil	11/11/2009 Ching-Shou-Shang-Zi

Year/ Month	Issue Price	Authorized Share Capital		Paid-In Capital		Remark		
		Shares	Amount	Shares	Amount	Source of Capital	Capital Increase by Assets Other Than Cash	Other (Approval document no.)
								no. 09801260380
2010.01	10	400,000,000	4,000,000,000	288,727,249	2,887,272,490	Convertible bonds	Nil	01/26/2010 Ching-Shou-Shang-Zi no. 09901016750
2010.04	10	400,000,000	4,000,000,000	290,907,037	2,909,070,370	Employee stock options and convertible bonds	Nil	04/21/2010 Ching-Shou-Shang-Zi no. 09901078530
2010.09	10	400,000,000	4,000,000,000	296,665,178	2,966,651,780	Capital increase by earnings	Nil	09/02/2010 Ching-Shou-Shang-Zi no.09901199850
2010.11	10	400,000,000	4,000,000,000	297,183,178	2,971,831,780	Employee stock options	Nil	11/18/2010 Ching-Shou-Shang-Zi no. 099001257750
2011.04	10	400,000,000	4,000,000,000	296,305,178	2,963,051,780	Employee stock options treasury stock retired	Nil	4/15/2011 Ching-Shou-Shang-Zi no. 100001075170
2011.07	10	400,000,000	4,000,000,000	296,316,207	2,963,162,070	Convertible bonds	Nil	7/26/2011 Ching-Shou-Shang-Zi no. 100001171400
2011.08	10	400,000,000	4,000,000,000	302,242,310	3,022,423,100	Capital increase by earnings	Nil	8/25/2011 Ching-Shou-Shang-Zi no.100001197910
2013.01	10	500,000,000	5,000,000,000	309,757,040	3,097,570,400	Employee stock options and convertible bonds	Nil	1/17/2013 Ching-Shou-Shang-Zi no.10201011600

2. Types of Stock

April 13, 2019 Unit: Share

Type of Stock	Authorized Share Capital			Remarks
	Listed (Note)	Unlisted	Total	
Common Stock	309,757,040	90,242,960	400,000,000	

Note：The above stocks are listed company stocks. Statistics from the April 13, 2019 book closure date.

3. Shelf Registration Related Information: Not applicable.

(2) Composition of Shareholders

April 13, 2019, Unit: Person/Share/%

No.\ Composition	Government Agencise	Financial Institutions	Other Judicial Persons	Individuals	Foreign Institutions and Individuals	Total (Note)
No. of Shareholders	2	8	103	34,196	157	34,466
Shareholding	347,197	61,543,807	18,689,982	141,839,675	87,336,379	309,757,040
Shareholding Percentage	0.11%	19.87%	6.04%	45.79%	28.19%	100.00%

Note 1: The above share amount statistics are from the April 13, 2019 book closure date.
Note 2: TSWE primary listed, GTSM primary listed and emerging stock companies shall disclose Chinese capital shareholding percentages: Not applicable.

(3) Equity Dispersion

April 13, 2019, Unit: Share

Share types	Number of Shareholders	Shares	Shares %
1~999	16,659	1,075,378	0.35
1,000~5,000	13,453	28,519,672	9.21
5,001~10,000	2,236	17,316,785	5.59
10,001~15,000	698	8,835,700	2.85
15,001~20,000	396	7,322,927	2.36
20,001~30,000	347	8,776,994	2.83
30,001~50,000	284	11,253,546	3.63
50,001~100,000	183	13,335,533	4.31
100,001~200,000	91	12,830,820	4.14
200,001~400,000	48	13,276,560	4.29
400,001~600,000	20	9,915,671	3.20
600,001~800,000	10	6,874,154	2.22
800,001~1,000,000	8	6,963,531	2.25
1,000,001 above	33	163,459,769	52.77
Total	34,466	309,757,040	100.00

(4) List of Major Shareholders

Name(s), amount and proportion of shares held by shareholder(s) with shareholding ratios that accounted for more than 5% of the equity ratio or accounted for the top ten shareholders:

April 13, 2019, Unit: Person/Share/%

Shares / Major Shareholders	Shares	Shares (%)
1、 Fubon Life Insurance Co., Ltd.	24,430,000	7.89%
2、 Edbertson Asia Stock Trust Investment Account entrusted in the Bank of Taiwan	21,647,000	6.99%
3、 Cathay Life Insurance Company, Ltd	18,726,807	6.05%
4、 Nan Shan Life Insurance Co., Ltd.	9,965,000	3.22%
5、 Norges Bank Investment Account entrusted in Citibank Taiwan	7,366,032	2.38%
6、 Lin, Chin-Pao	6,071,263	1.96%
7、 Edgbaston Asian Equity (Jersey) Trust account entrusted in the Bank of Taiwan	6,022,000	1.94%
8、 ROBECO CAPITAL GROWTH FUNDS Account entrusted in JPMoargan Bank	5,072,000	1.64%
9、 Lin, Wan-Shing	4,980,722	1.61%
10、 Taipei Fubon Commercial Bank is entrusted with trust property account	4,733,518	1.53%

B. Data on share price, net value, profit, and dividend of the past two years

Item	Year		2017	2018	2019.03.31
Marketprice / share (Note 1)	Highest		46.50	44.80	34.90
	Lowest		38.85	30.00	31.50
	Average		42.35	36.35	33.36
Net value per share (Note 2)	Before distribution		29.45	28.25	29.00
	After distribution		26.95	(Note 9)	(Note 9)
Earnings Per Share	Weight average number of shares (1000's share)		309,757	309,757	309,757
	Earnings Per Share (Note 3)	Before adjustment	3.11	2.08	0.25
		After adjustment	3.23	(Note 9)	-
Dividend Per share	Cash dividend		2.50	(Note 9)	-
	Stock dividend without compensation	Earnings per share	-	(Note 9)	-
		Stock dividend	-	(Note 9)	-
	Accrued undistributed dividend (Note 4)		-	-	-
Analysis of rate of return	P/E (Note 5)		13.62	17.48	-
	P/C (Note 6)		16.94	(Note 9)	-
	C/P (Note 7)		5.90%	(Note 9)	-

＊ If use profits or capital reserve for raising capital shares appropriate, then it should announce the information of the number of appropriate shares and retroactivlye adjust market price and cash dividend.

Note 1：list the hightest and lowest price of the common stocks in that year, and the average market price for that year is calculated based on the transaction values and transaction amounts.

Note 2：Use the number of circulated shares at the end of the year as the base, then the dividend distributed determined in the coming year's stockholders' meeting.

Note 3：If there is any retroactive adjustment from the stock dividend without compensation, then it should list earning per share on before and after adjustment.

Note 4：If the equity investment has constraint that limits the undistributed dividend for that year and it is cumulated until to later profitable year. Then it should disclose the cumulative undistributed dividend up to that year.

Note 5：P/E＝current year average share price at closing／earning per share.

Note 6：P/C＝current year average share price at closing／cash dividend per share.

Note 7：C/P＝ cash dividend per share／current year average share price.

Note 8：The financial statements of TXC Corporation were audited or view or certified by CPA.

Note 9：As of 2019.03.31, the retained earnings of 2018 has not yet admitted by the stockholders' meeting.

C. Company’s dividend policy and its current implementation status

1.Dividend policy as defined in the articles of incorporation：

(1)
If the company generates annual profit, no less than 3% of that profit will be provided to employees as a bonus in the form of cash or company shares, as determined by the board of directors. Receipients of this bonus will include company employees who fulfill certain conditions. The company must apportion a directors’ bonus of no greater than 2% of posted profit figures, following the board of directors’ decision. Employee and director bonuses are announced at the general meeting of shareholders. However, the company shall retain a portion of funds prior to incurring losses, the amount beyond which will be distributed as bonuses according to the aforementioned proportion.

If there is a profit at the final settling of accounts after paying all taxes and offsetting of losses from previous years, the Company shall first set aside ten percent of the profits as legal reserve. This shall not apply when the legal reserve amounts to the total authorized capital. Director remuneration shall be no more than 2% and employee bonus shall be no lower than 3% of the special reserve allocated from the profits in accordance with the law or after reversal. The remainder together with undistributed earnings from previous periods after an appropriate amount is reserved depending on operating conditions is distributed as shareholder dividends as resolved by the shareholders' meeting. The board of directors is authorized to determine the counterparts for employee stock dividend distribution which include those company employees that conform to certain conditions.

The Company's dividend distribution policy is made in consideration of factors such as industry development being in a growth phase, long-term financial planning and shareholder cashflow requirements. Therefore, the earnings available for distribution for that year, after allocation of the legal reserve and special reserve in accordance with the law, shall be distributed as provided in the previous paragraph. Of this, the cash dividend portion of shareholder dividends shall not be lower than 20% of total dividends.

Specific dividend policy: Dividend payment over the years

Year	Cash Dividend	Stock dividend		X/R transactions date	Shareholders' meeting date	Cash dividend payment date	Stock dividend payment date
		Retained earnings transferred to common stock	Capital surplus transferred to common stock				
1999	0	0.8	0	2000/09/14	2000/05/13	N/A	2000/11/16
2000	0	2.9	0	2001/06/05	2001/04/26	N/A	2001/07/31
2001	0.2	0.8	0.5	2002/09/12	2002/05/30	2002/10/17	2002/11/27
2002	0.10222	0.4089	0	2003/09/09	2003/06/16	2003/10/16	2003/11/11
2003	0.2999	0.499901	0	2004/09/13	2004/06/24	2004/10/15	2004/11/12
2004	0.480681	0.480681	0	2005/08/31	2005/06/13	2005/10/21	2005/10/21
2005	0.99982162	0.59989298	0	2006/08/09	2006/06/15	2006/09/20	2006/09/20
2006	1.94210210	0.97105104	0	2007/08/09	2007/06/13	2007/09/20	2007/09/20
2007	1.98486059	0.9924303	0	2008/08/12	2008/06/13	2008/09/18	2008/09/18
2008	2	0.5	0	2009/08/24	2009/06/16	2009/09/30	2009/09/30
2009	1.99640807	0.1996408	0	2010/08/12	2010/06/15	2010/09/21	2010/09/21
2010	2.49990694	0.19999253	0	2011/08/03	2011/06/10	2011/09/09	2011/09/09
2011	2.2	0	0	2012/08/20	2012/06/13	2012/09/13	N/A
2012	2.2	0	0	2013/08/19	2013/06/19	2013/09/17	N/A
2013	2.2	0	0	2014/08/17	2014/06/18	2014/09/05	N/A
2014	2.5	0	0	2015/08/20	2015/06/16	2015/09/18	N/A
2015	2.5	0	0	2016/08/11	2016/06/07	2016/09/13	N/A
2016	2.8	0	0	2017/08/15	2017/06/08	2017/09/15	N/A
2017	2.5	0	0	2018/08/15	2018/06/05	2018/09/18	N/A
2018	2.0	0	0	Undetermined	2019/06/12	Undetermined	N/A

(2) Although the company's articles of association do not specify the distribution ratio of the dividends of the shareholders, the ratio of the distribution of the surplus of the preceding paragraph may be adjusted according to the relevant factors such as the actual pre-tax profit, capital budget and capital status of the year, and shall be handled after the resolution of the shareholders' meeting.

Estimated dividend distribution policy for the next three years
1. Employee bonus is 9%~12%
2. Directors' compensation is 1%~2%

The total dividend is based on more than 60% of the current year's profit (net of statutory surplus reserve) or not less than 30% of the total distributable surplus, and the cash dividend shall not be less than 20% of the total cash dividend and stock dividend.

2.Suggested dividend appropriate in this shareholders' meeting：

Profit distribution for 2018

Unit：NT$

Item	Amount	
	Sub-total	Sum
Beginning period undistributed profits		1,896,725,285
Effect of retrospective application		102,956,722
Adjusted beginning period undistributed profits		1,999,682,007
Disposal of equity instruments at fair value through other comprehensive income. Total gain of disposal transferred from other equity to retained earnings.		37,943,132
Adjusted retained earnings from investments accounted for using equity method		(171,660)
Remeasurement of defined employee benefit plans to retained earnings		(10,619,972)
Adjusted undistributed profits		2,026,833,507
Net profit after tax for this year		644,350,008
Setting aside 10% legal reserve		(64,435,001)
Setting aside special reserve		(32,113,976)
Profits available for distribution		2,574,634,538
Distribution Item:		
Cash Dividends (NT$2.0 per share)	(619,514,080)	(619,514,080)
End period of undistributed profits		1,955,120,458

Note: Allocation of 2018 undistributed profit shall be given priority for the above profit distribution.

(7) The effect of the shareholder's proposed stock grants on the Company's business performance and earnings per share: Not applicable. (The Company did not offer stock grants this time).

D. Employee bonus and rewards for directors and auditors

1. The principle of surplus distribution in accordance with company regulations:

If the company generates annual profit, no less than 3% of that profit will be provided to employees as a bonus in the form of cash or company shares, as determined by the board of directors. Receipients of this bonus will include company employees who fulfill certain conditions. The company must apportion a directors' bonus of no greater than 2% of posted profit figures, following the board of directors' decision. Employee and director bonuses are announced at the general meeting of shareholders. However, the company shall retain a portion of funds prior to incurring losses, the amount beyond which will be distributed as bonuses according to the aforementioned proportion.

If there is a profit at the final settling of accounts after paying all taxes and offsetting of losses from previous years, the Company shall first set aside ten percent of the profits as legal reserve. This shall not apply when the legal reserve amounts to the total authorized capital. Director remuneration shall be no more than 2% and employee bonus shall be no lower than 3% of the special reserve allocated from the profits in accordance with the law or after reversal. The remainder together with undistributed earnings from previous periods after an appropriate amount is reserved depending on operating conditions is distributed as shareholder dividends as resolved by the shareholders' meeting. The board of directors is authorized to determine the counterparts for employee stock dividend distribution which include those company employees that conform to certain conditions.

The Company's dividend distribution policy is made in consideration of factors such as industry development being in a growth phase, long-term financial planning and shareholder cashflow requirements. Therefore, the earnings available for distribution for that year, after allocation of the legal reserve and special reserve in accordance with the law, shall be distributed as provided in the previous paragraph. Of this, the cash dividend portion of shareholder dividends shall not be lower than 20% of total dividends.

2. Accountant procedures if a current period's estimated employee dividend, the basis of director/supervisor bonus amounts and calculations for stock dividend figures differ from the amounts that are actually apportioned:
   (1) The basis of estimating the current period's estimated employee bonus and director/sup bonus figures: please see the aforementioned (VI).1. Stock dividend policy.
   (2) The basis for calculating stock dividends apportions: if the company has not apportioned stock dividends during this period, please disregard.
   (3) Accounting procedures if the current period's actual apportioned value differs from the estimated figures: when a significant change occurs to the dividend value approved by the board of directors, that adjustment is due to annual expenses. If the figure remains changed by the day of the general meeting of shareholders, the matter will be processed according to the updated accounting estimate, and amounts transferred onto accounts according to general meeting of shareholder decision.

3. Proposal by the Board of Directors for surplus distribution in 2018:
As proposed by the Board of Directors on April 25, 2019 surplus distribution for employee bonus and directors' compensation are as follows:
   (1) Propose to allocate employee bonus in cash amounting to NT$ 69,072,417 and directors' compensation to NT$11,512,070. There is no difference between the planned allocation amount from expense for employee bonus and surplus in the 2018 financial statement. So, no adjustment for income and loss is required.
   (2) Propose to allocate employee bonus and directors' compensation in accordance with par value setting earnings per share at: NT$2.08.

4. The Company Board of Directors on surplus allocation in 2017:
The actual surplus allocation of employee bonus and directors' compensation is according to resolution adopted by the shareholders meeting on June 5, 2018.

(1) Actual employee bonus and directors' compensation in cash are respectively: NT$103,139,984 and NT$17,189,997.

(2) No difference between the proposed allocation adopted by the Board of Directors and the resolution by shareholders meeting.

E. Buyback of Common Stock: None

F. Convertible Corporate Bond: None

3、Preferred Shares：None

4、Issuance of Oversea Depositary Shares：None

5、Status of Employee Stock Option Plan：None

6、Status of Employee Restricted Stock：None

7、 Status of New Share Issuance in Connection with Mergers and Acquisitions:None

V. Financing Plans and Implementation: None

VI、Business Information

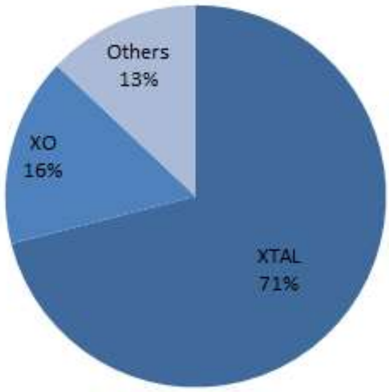
A、Business Contents

1、Business Scope

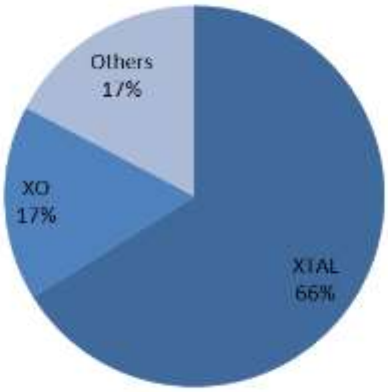
(1). Major Business Contents

TXC is a professional frequency control component and sensory component manufacturer. Since the company's founding in December, 1983, it has been devoted to research and development, design, production, and sale of quartz component product series. Products include high precision, high quality quartz crystal, automotive crystal, crystal oscillators, and timing modules. Market demand has led TXC to develop multiple kinds of sensors using independent core technology, products that are widely used in mobile communication, wearable devices, IoT, and automotive electronics markets. Over the years, we have upgraded customer value objectives and offered customers a variety of frequency control components for module design-in requirements to provide a total solution to satisfy the overall requirements of customers. TXC performance with regard to price, quality, delivery time and service continues to exceed customer expectations time and time again.

(2). Business Proportions

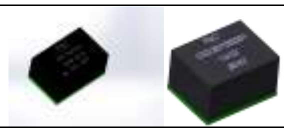


2018 Consolidated Revenue
NTD 8,156,268 thousands



2017 Consolidated Revenue
NTD 8,781,552 thousands

(3). Company's current products

Product Type	Type	Product Size	Product Picture
Crystals	Metal Can Type Crystals	HC-49S / HC-49S SMD	
	SMD Glass Sealing Crystals	5.0 x 3.2mm，3.2 x 2.5mm 2.0 x 1.6mm	
	SMD Seam Sealing Crystals	5.0 x 3.2mm，3.2 x 2.5mm 2.5 x 2.0mm，2.0 x 1.6mm 1.6 x 1.2mm，10.x 0.8mm	
	SMD AuSn Sealing Crystals	1.6 x 1.2mm，1.2 x 1.0mm	
	SMD Seam Temperature Sensing Crystals (TSX)	2.5 x 2.0mm，2.0 x 1.6mm 1.6 x 1.2mm	
	SMD kHz Crystals(Tuning Fork)	3.2 x 1.5mm，2.0 x 1.2mm 1.6 x 1.0mm	
Oscillators	SMD Crystal Oscillators (CMOS)	7.0 x 5.0mm，5.0 x 3.2mm 3.2 x 2.5mm，2.5 x 2.0mm 2.0 x 1.6mm，1.65x1.25mm	
	SMD Crystal Oscillators (Differential)	7.0 x 5.0mm，5.0 x 3.2mm 3.2 x 2.5mm	
	SMD kHz Crystal Oscillators	7.0 x 5.0mm，5.0 x 3.2mm 3.2 x 2.5mm，2.5x 2.0mm	
	SMD Voltage Controlled Crystal Oscillators (VCXO)	7.0 x 5.0mm 5.0 x 3.2mm，3.2 x 2.5mm	
	Oven Controlled Crystal Oscillators (OCXO)	9 x 14 x 7.7mm(SMD type) 9.7 x7.5 mm(SMD type)	
	SMD Temperature Compensated Crystal Oscillators (TCXO)	3.2 x 2.5mm，2.5 x 2.0mm 2.0 x 1.6mm，1.6 x 1.2mm	
	Precise SMD Temperature Compensated Crystal Oscillators (TCXO Stratum-3)	7.0 x 5.0mm (4 Pad) 7.0 x 5.0mm (10Pad) 5.0 x 3.2mm	

Product Type	Type	Product Size	Product Picture
Sensors	Light Sensors	2.5 x 2.0mm	
Automotive	DIP / Glass Sealed Crystal / Seam Sealed Crystal /XO/TCXO /TSX/kHz Crystal Oscillators/ kHz Crystals(Tuning Fork)	HC49S/HC-49S SMD/ 8.0*4.5mm/5*3.2mm/ 3.2*2.5mm 3.2*1.5mm / 2.5*2 mm/2.0*1.6 mm/2.2 x1.65mm 1.6x1.2mm	

(4). Scheduled new products development

TXC will pool more resources in research and development of new products so as to expand the market share of advance applied and high added-value products. Concomitantly, we'll actively engage in technology research and development of optics, micro-mechanical and electrical devices, sensors and medical electronics. In face of challenge from competitors at home and abroad, our focus on technology development as below:

i. Elevation of SMD miniaturized product development:

Over the years, TXC successful did mass production in 1.0 x 0.8 x 0.3mm quartz components and started to get in extra mini 0.8 x 0.6 x 0.3mm quartz components development for the next generation in 2019. To meet future miniaturized products and self-developed engineering technology, we'll further focus on production and research and development of still higher precision process technology requirement, as well as engage in low cost, low energy consumption, high anti-vibration and enlarged broadband.

ii. Automotive electronics development

TXC has won certification of the IATF-16949 quality operation system. We have completed version conversion of ISO 9001/ IATF-16949-2016 and the automotive electronics have ushered in the growth period. Continuoursly upgrading product technology, safety and quality toward grade 0, the highest quality reliability in technology upgrade. Currently we are developing crystal and TCXO for Grade 0.

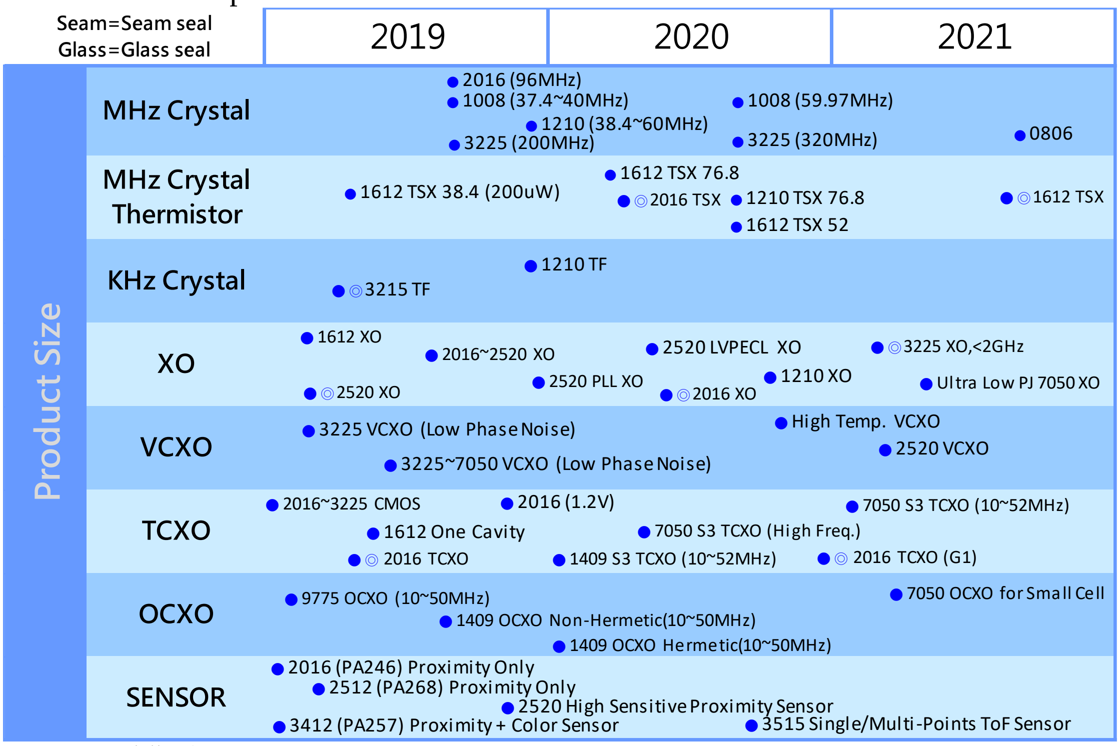
iii. Advanced oscillator and modular product development

Continue to engage in development of advanced products including for 5G Networking, and low consumption TCXO, HFF Low jitter XO(>250MHz) for optical fiber telecommunications module、high precision miniature OCXO for base station use、Stratum-3 TCXO and HFF VCXO etc. Such products can accommodate booming growth of telecommunications systems for 5G.

iv. Sensor application product development

Continuously developing proximity sensor , ambient light sensor and RGB sensor for use in smart handheld devices by using microminiaturized special ceramic seal technology and evaluation combined with temperature sensing for smart handheld devices and wearable devices; in environmental sensors, a micro-balance (QCM) sensing component platform will be developed to detect micro-mass using quartz piezoelectric sensing The way to change, to do aerosols in the air, biomedical or chemical detection, etc.; in the thermal image sensing layout, is developing a far-infrared thermal imager for auto-driving night vision with partners, developed by vacuum ceramic heterogeneity Bonded packaging technology will extend to temperature sensing component packaging services for monitoring and motion sensing

v. Product Roadmap



Note：◎表示車載用產品

2、The Industry

(1). Current industry status and development

The current domestic quartz industries are mainly for producing components such as crystals, crystal oscillators, and crystal filters. The basic manufacturing process of making crystals starts from cutting the quartz, and then after grinding and polish to the desired sizes; followed by depositing thin metal film electrodes on its surface under the vaccum, and subsequently, it is connected with condut wires; afterward it is packaged. In addition, by assembling and packaging the crystal components with IC oscillators then it will result the crystal oscillators. Assembling and packaging the crystal components and capacitors, wires, and resistors then it will be the crystal filters.

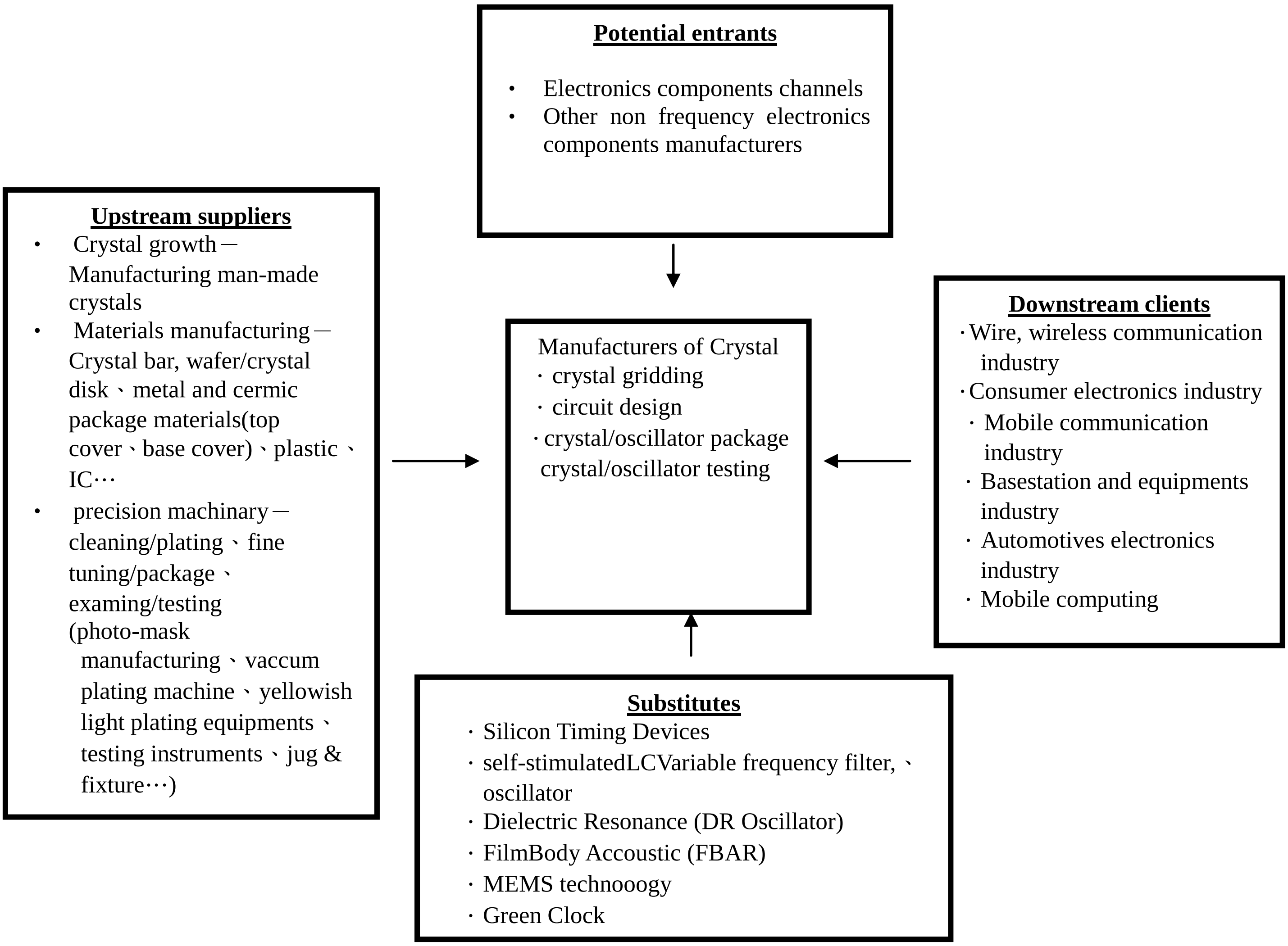
When you comparing the three crystal technologies: frequency, precision, and size dimension you can see that the European and U.S manufacturers are strong in the frequencies development. It was because of their development of the wireless technology that it gives them an advantage in the design and development; but production efficiency is lower. Japan manufacturers are the technology leaders and they are excellent in the precision and the scale size of the products. They have the advantages of products improvement, and can further to make it in mass production and automatic production. To the Taiwanese manufacturers, most of them are buying the material & know-how, machinery equipments, or purchasing the manufacturing process of which usually lead to a faster time in marketing the product. But recently, the manufacturers have improved their manufacturing process, and the manufacturing equipments; also the learning of the manufacturing process further improves it. Presently, the mainland manufacturers mainly produce low-end products wherein 80% of them are for export and their products still have not effectively satisfied the demand of their massive domestic market. In recent years Chinese manufacturers are aggressively to promote their technology abilities and to advance to the middle and high end. Below table is a comparison of advantages/disadvantages of competitions from the major producers.

Key element	European, USA manufactures	Japanese manufactures	Taiwanese manufactures	China manufactures
Frequency	Middle	High	High-middle	Middle-low
Precision	Middle	Very high	High-middle	Middle-low
Size	Middle	High	High-middle	Middle-low

Currently, in Taiwan the major crystal manufacturers are TXC Corp, Siward Crystal Technology, Taitien Electronics, Tai-Saw Technology, Harmony Electronics, and EChina Technology. Currently TXC Corp has the highest market share in Taiwan.

(2). Market relationship of up, middle, and down stream companies

Crystal components are our major product and it is also the basic electronics parts. Our upstream industries include crystal growth, material manufacturing, and precision machinery. The downstream applications include information technology, wire and wireless communications, consumer electronics, and network products etc. The relationship between the up, middle, and downstream manufacturers is given in the below diagram:



(3). Development Trend of Crystal Industry

Crystal products are important components in the electronics products. To sponsor the future 3C growth and trend, the future product style, its size, and the precision will have the following trend：

(i). Production trend

(a). Slim down and usage of SMD

In terms of the technology aspect, we have achieved the slim down level for use the single crystal IC, crystal design & manufacturing, and packaging & testing etc. For example take the case of SMD quartz crystal, its dimension has downsized from 7×5mm to 6×3.5mm、5×3.2mm、 4×2.5mm、3×2.5mm、2.5×2.0mm、2.0×1.6mm and further to the dimension of 1.6×1.2mm、1.2×1.0, and even 1.0×0.8；its height has also improved from 2mm、1.8mm、1.5mm、1.2mm to 1mm、0.9mm、0.8mm、0.7mm、0.5mm、0.35mm、0.30mm. By the effective SMD scale down improvement, we are also toning with the development trend of Chipset, design trend of brand clients and the SMT production from our downstream clients.

(b). High precision、High frequency modularized

High frequency, high frequency element modularization, high precision:
Fiber channel, Gigabit Ethernet, synchronous optical networking (SONET), synchronous digital hierarchy (SDH), Small Cell base station or access point base station, 4G/5G base station and other various high speed transmission system advances has raised high frequency, modularization, high precision requirements for quartz elements. Through the Company's self developed high frequency, high precision and low phase noise crystal oscillators (XO), voltage control crystal oscillators (VCXO), temperature compensating crystal oscillators (TCXO) and constant temperature crystal oscillators (OCXO) will assist simplification of customer circuit design and satisfy performance requirements for the high speed networks and the next generation of wireless telecommunication systems.

The products are as the below list

No	Projects	PKG (mm)	Type	Features
1	High Frequency XO (~2GHz)	7.0x5.0 5.0x3.2 3.2*2.5 2.5*2.0	CMOS LVPECL LVDS HCSL	High Frequency High Precision Low Noise
2	High Frequency VCXO (~2GHz)	7.0x5.0 5.0x3.2 3.2*2.5	CMOS LVPECL LVDS	High Frequency High Precision Low Noise High Pull
3	High Frequency SO (above 150MHz)	7.0x5.0 5.0x3.2	LVPECL LVDS	High Frequency Low Noise
4	TCXO	3.2x2.5 2.5x2.0 2.0x1.6 1.6*1.2	Clipped Sine	High Stability
5	Stratum 3 TCXO	7.0x5.0 5.0x3.2	Clipped Sine CMOS	Ultra High Stability
6	OCXO	36*27 25*25 14*9.0 9.7*7.5	LVCMOS HCMOS Sinewave	Ultra High Stability

(ii). Optical sensor industry development trends

Since 2017, full screen has become an important feature of smart phones in two major development directions: (1) super narrow border (2) reserve partial notch. The Optical Sensor product type, dimension and product features will be developed towards the following trend:

(1) Miniaturization

Using our exclusive patented ceramic 3D stacked packages and strategic partner's chip optimization design, the proximity sensor + ambient light sensor + IR emitter have a market leading single structure and dimensions. Following the development of the world smallest integrated proximity sensor with dimensions of 2.5 x 2.0mm, 2.0 x 1.6mm and 2.5 x 1.2mm dimension sensors were introduced to satisfy different types of smart phone design requirements.

(2) Characteristic optimization

The current full screen, whether it is super narrow border or with notch, is a transitional design. Ultimately, the application of Optical Sensor in smart phones will be developing towards under-screenization, that is, to be hidden under the Touch Panel & Cover Glass. The challenge faced by the Optical Sensor is how to make IR penetrate OLED or LCD without affecting the images on the screen and how to maintain stable and consistent performance under less than 5% ink transmittance.

(4). Competition Situation

For quite some time Taiwan electronics industry usually take the OEM fashion to function as a supplier to world's largest electronics and information technology companies. Applying Taiwan's capital, technical skills, labor or other market unique advantages that takes the advantages of "global labor division"、"regional labor division" to achieve the vertical integration purpose。With the advance of Taiwanese electronics manufacturer's technical level, their business operatios have transformed from the parts assembled in the early days, to the OEM, and even promoted to the ODM and OBM scale. In order to gain a more added value, many Taiwan electronics companies, reposition their value chain locations, and have gradually extended themselves from manufacturing to product R&D, design and even further to sales and marketing, post-sale and brand management; and amid the global work divisions, have stance in a unique place . The major global companies with their procurement arranging, are team with Taiwan electronics companies in value creations; and they would be able to intend more on their brand and sales management. This ends up in a win-win situation for both parties.

With Taiwanese electronics industry forms in the nature cluster groups, and it thus has a demand of 30% of the global crystal component product. But Taiwanese manufactures can only produce no more than the 20% of total global production, and this China domestic market would provide growing space for Taiwanese companies. But the crystal component industries are in the border of oligopoly competition since the ten largest manufacturers in the world have a total combination of production of 65% and more. This illustrates the great differences of the manufacturers in this industry, and this can be said it is an oligopoly competition market. Because of the wide applications of the products, each manufacturer emphasizes its own product and the market. The lower-end and mature market has a stronger tendency in cutting price to competition. This results a very strong competition market.

In the global crystal component industry, Japan is still the largest producer and it has about 40% of the worldwide productions. Our domestic competitors are Harmony Electronics, Siward Crystal Corporation, Tai-Saw Technology, Taitien Electronics and and Hosonic Electronics EChina Technology. Each corporation differentiates by specializing in different products and market. Our company has the highest market share which demonstrates our leading role in the crystal component industry.

3. Technology and Recent Research and Development

(1) Ratio of R&D expense of total revenue during recent years up to 2019.03.31

Units：NT$ 1,000，%

Year	2017	2018	2019.03.31
Net Revenue	8,781,552	8,156,268	1,622,940
Research and Development Expense	540,249	519,906	114,119
R&D Expense/Net Revenue (%)	6.20	6.37	7.03

(2) Research and Development Results

Products development	1、SMD 9.7 x 7.5mm Miniaturized Oven-Controlled Crystal Oscillator for telecommunication, stratum-level and base-station. 2、SMD 4.0 x 2.4mm Ambient Light Sensor and Proximity Sensor with Integrated IR LED for Mobile Phone. 3、SMD 2.5 x 2.0mm Ambient Light Sensor and Proximity Sensor with Integrated IR LED for Mobile Phone. 4、SMD 3 in 1 Light Sensor 2.5 x 2.0 mm for Smartphone, Tablet, DSLR, Smart wearable , Fitness devices. 5、SMD 3 in 1 Light Sensor 4.5 x 0.9 mm for Smartphone, Tablet, Smart wearable , Fitness devices. 6、SMD Crystal 2.5 x 2.0 mm for Automotive. 7、SMD Crystal 2.0 x 1.6 mm for Automotive. 8、SMD Crystal 1.6 × 1.2 mm for SIP. 9、SMD 5.0 × 3.2 mm TF CXO for variable. 10、SAW-based Oscillator for SAN. 11、SMD Seam CXO 2.0 × 1 .6 mm 2~54 MHz for digital camera, Portable TV. 12、SMD 3.2 x 2.5 mm TCXO for GPS and WiMAX. 13、SMD 2.5 x 2.0 mm TCXO for GPS and WiMAX SMD 2.0 x 1.6 mm TCXO for GPS and WiMAX. 14、SMD 1.6 x 1.2 mm TCXO for GPS and WiMAX. 15、SMD 5.0 x 3.2 mm Stratum-3 VC-TCXO for Base Station, Small-cell, Networking Infrastructure. 16、SMD 7.0 x 5.0 mm Stratum-3 TCXO for Base Station, Small-cell, Networking Infrastructure. 17、SMD Crystal 1.2×1.0mm for future. 18、SMD 5.0 × 3.2 mm TF CXO for variable. 19、Inverted MESA BLK 1.3 × 1.03mm 20、Inverted MESA BLK 1.6 × 1.14mm 21、Inverted MESA BLK 2.49 × 1.83mm 22、SMD 2.0 x 1.6 mm TSX for GPS 23、SMD 2.5 x 2.0 mm TSX for GPS 24、SMD 3.2 x 1.5 mm Tuning Fork

	25、 SMD 3.2 x 1.5 mm Tuning Fork for Automotive. 26、 SMD 2.0 x 1.2 mm Tuning Fork 27、 SMD 1.6 x 1.0 mm Tuning Fork 28、 SMD 7.0 x 5.0 mm Oscillator for HCSL 29、 SMD 5.0 x 3.2 mm Oscillator for HCSL 30、 DIP 25 x 25 mm OCXO for stratum-level and base-station. 31、 DIP 20 x 20 mm OCXO for telecommunication. 32、 RTC 10.1 x 7.4 mm for smart utilities devices, electric meters, gas meters. 33、 4” Single-side Polished Sapphire Wafer for LED application 34、 4” Double-side Polished Sapphire Wafer for LED application 35、 6” Single-side Polished Sapphire Wafer for LED application 36、 6” Double-side Polished Sapphire Wafer for LED application 37、 1.6 x 1.6 mm 3-axis electronic compass for Sensor application 38、 SMD 3.2 x 2.5 mm TCXO for Automotive. 39、 SMD 2.5 x 2.0 mm TSX for Automotive. 40、 SMD 7.0mm X 5.0mm High Frequency CXO (2.1GHz) for Base Station, Networking, Infrastructure 41、 SMD 7.0mm X 5.0mm High Frequency VCXO (2.1GHz) for Base Station, Networking, Infrastructure
Patents and Academic publications	Patent： 1. Electrode of the piezoelectric crystal oscillator components 2. Vacuum gas-tight system integration package structure 3. Structure and production method of the piezoelectric quartz oscillator chip 4. The production of piezoelectric quartz oscillator chip 5. Quartz crystal oscillator 6. Crystal oscillator with layout structure for the miniaturization of size 7. Piezoelectric material thinning device 8. Wafered composite material thinning device 9. Grooved resonator unit packaging structure 10. Light sensor chip packaging structure 11. Stacked light sensor chip packaging structure 12. Thru-hole resonator device wafer level packaging structure 13. Thru-hole resonator device wafer level packaging structure manufacturing method 14. Improved resonator wafer grade packaging structure 15. Strengthen hermetic sealing of oscillator wafer grade packaging structure 16. Partition and serial-type light sensor chip packaging structure 17. Partitioned side-by-side photo-sensing chip package structure 18. Micro aerosol sensing components 19. Micro aerosol sensing device with self-cleaning function 20. Quartz oscillator plate For the patents or possible patents of TXC, please refer to relative patent database http://www.tipo.gov.tw/ch/ Paper： 1、 Highly Stable Miniaturized OCXO with HeaterEmbedded Ceramic Package (English), 2018. 2、 Development of High-Stability Miniaturized Oven Controlled Crystal

	Oscillator (English), 2016. 3、 Anchor loss reduction of quartz resonators utilizing phononic crystals. (English), 2015. 4、 A Perspective for the Quartz Crystal Devices Industry and Technologies in Taiwan and China. (English), 2014. 5、 A Study for the Relationship between Drive Level and the Activity Energy in Arrhenius Accelerated Aging Model for the Small Quartz Resonators. (English), 2014. 6、 A Study on Raising the Fundamental TS-mode Resistance by Energy Trapping for 3rd Overtone. (English), 2014. 7、 Laser Measurement and Identification of Vibration Modes of AT-cut Quartz Crystal Resonators. (English), 2013. 8、 The Study of Aging Frequency Drift Mechanism for Quartz Crystal Resonators. (English), 2013. 9、 Advanced TSV-Based Crystal Resonator Devices Using 3-D Integration Scheme With Hermetic Sealing. (English), 2013. 10、 TSV-based quartz crystal resonator using 3D integration and Si Packaging technologies. (English), 2013. 11、 A Brief View of the Current State of the Development and Aging Performance of Fixed Frequency Surface Acoustic Wave (SAW) Oscillator (English), 2012. 12、 Properties of Miniature X- and Z'-Elongated Rectangular AT-CUT Quartz Resonators of Different Sizes (English), 2012. 13、 Vibration Mode Identification and Coupling Assessment with the Mindlin Plate Equations and Measurements is a Quartz Crystal Plate (English), 2012. 14、 Aging Performance of Small Size MHz Quartz Crystal Under High Drive (English),2011 15、 Inharmonic Overtones in Partially Plated AT-cut Quartz Crystal Plates (English),2011 16、 The Study of Activation Energy (Ea) by Aging and High Temperature Storage for Quartz Resonators' Life Evaluation (English), 2011. 17、 An Efficient AT-cut quartz Crystal Resonator Design Tool for Activity Dip in Working Temperature Range (English), 2011. 18、 Quartz Crystal Industry of China at Crossroads (English), 2011. For relative paper, please refer to the website of TXC: http://txccorp.com/

4. Long and short term sales and marketing plan

(1). Short term Development Plan

(a). Marketing Strategy：

- Strengthen the overall deployment of 5G and IoT new business opportunities
- If profit structure has been optimized, solidify current market share among target customers of mobile computing, mobile telecommunications,internet and consumptive electronic products; maintain service and flexibility advantages, and deepen relationships with core customers.
- Develop new applications, new customer bases, and new businesss opportunities for high-end products, including AOM (acoustic optic modulator – high frequency), ACAP

(automotive crystal application products), and sensors, and continue to maintain high growth levels.

- In accordance with customer management patterns, seize a space within market opportunity and competitive value by grasping and introducing Design in and CM syncing.
- Comprehensively strengthen the depth and breadth of relationships with IDH (IC Design House), understand the development trends of customer technology, and immediately release products that meet customer demands to ensure a front-end reference design win.
- Continue to strengthen the European, US, and Japanese markets, and develop markets in developing countries; establish TXC as the largest brand in China.
- Establish a special leading organization to enhance the atmosphere of team work and organization efficiency.
- Continually optimize marketing abilities, to help improve the depth and breadth of the marketing strategy layout.
- Build a complete global logistics network to satisfy customer demands for prompt product delivery, and provide customers with prompt technology integration services.
- Establish dynamic marketing channels and a global layout.
- Implement Industry 4.0 big data analysis on information systems, to assist staff in formulating and evaluating marketing strategies.
- Improve employee abilities and comprehensively strengthen the sales team’s competitiveness by establishing a marketing training system.

(b). Manufacturing Strategy：

- Integrate the cross-strait and three-site manufacturing resource engineering information exchange and construct the MES (Manufacturing Execution System) production system of the Group's T-MOM (Manufacturing Operations Management), and construct the optimal data capacity and benefit distribution under the big data analysis framework. Maximize the benefits.
- Continuously integrate the existing production management system with the iFactory 4.0 concept to instantly grasp production information.
- All members review COPQ (Cost of Poor Quality) and Total Cost, and pursue quality and improvement with the mental pattern of thinking.
- In response to the advent of the 5G wave, high-frequency, high-stability and a small amount of urgency production demand will become the future trend. Only by continuing to deepen the key process technology combined with big data and artificial intelligence for data analysis can we quickly respond to Time. To Volume, the basic concept of Time to Market
- For the challenges of industrial change, strengthen the logic of engineering thinking and the “sensitivity” of production personnel, condense the spirit of “group struggle”, and “customer first” business philosophy, construct the core spirit of production units and continue to optimize” Force + control and power + integration = core competitiveness".
- Quality management and promotion of project management to make production more competitive.

(c). MEMS Strategy：

- Combine internal and external resources of the Group to reduce the proportion of low value-added processes and focus resources on developing core technologies and products.
- Focus on the development of wafer processing technology, quartz etching technology, yellow light development technology, and accumulate wafer development and design capabilities, providing products that are miniaturized, high-frequency, high-stability, high-temperature resistant products to meet the high growth of 5G, IoT and automotive Product demand.
- In response to 5G demand development OCXO uses SC-cut wafer technology, this product needs to use double-angle wafer, and has two resonant modes of B Mode and C Mode. It needs to combine two core technologies of chip design and wafer process technology.
- Intensified-MESA wafer technology is strengthened in response to 5G demand. This product will be converted into a large number of special requirements due to the development of 5G. The use of Inverted-MESA wafer technology has the advantage of high product characteristics in high-frequency miniaturized products. Design, wafer process technology, quartz etching technology, yellow light development technology, and a large number of production processes through innovative processes.
- In order to develop Photo-AT chip technology in response to IoT miniaturization requirements, this type of product has extremely high requirements for wafer processing. Therefore, it needs to combine wafer design, wafer process technology, quartz etching technology, and yellow light development technology. The company can provide such products.
- Through the company's intelligent construction team, constructing technology and process mind maps, and based on this, intelligent factory development, improve process stability, reduce the proportion of abnormalities

(d). Quality Assurance Strategy：

- Quality Assurance Center continues to promote Quality Zero Risk, strengthen customer application requirements and risk identification and risk management of product development, and import DFM operations to reduce internal and external failure costs.
- Consolidate and promote the Operational Continuous Management, BCM system of the head office, and then promote it to Ningbo and Chongqing plants to reduce operational risks caused by external environmental factors and internal and external conditions.
- Actively introduce reliability laboratory automated measurement systems and data integration analysis capabilities to increase laboratory energy, thereby improving the ability to estimate products and reduce resource consumption.
- Strengthen supplier quality management of major raw materials.
- Accelerate the rotation and breeding of middle and high-level quality management and quality engineering supervisors.

(e). Product R&D Strategy：

- Plan company development strategy and product development direction based on market requirements and marketing deployment.
- Create technical map based on company development strategy for the development of products that meet market requirements with leading technology.
- Implement project management, reduce R&D times, flexibly address customer

requirements and take advantage of every business opportunity.

- Continue to strengthen R&D team, refine professional training and technology database systemization to make further progress toward become a world class R&D team.
- Connect incentive system and R&D management mechanism to further raise team morale and development efficiency.
- Make good use of school, R&D institute and government resources, utilize academic-industrial cooperation projects to accelerate product development. Reciprocate by introducing successful results back to related industries in Taiwan.
- Consider worker-friendly environment, energy saving, carbon reduction factors in product R&D to do our part for the Earth and the next generation.

(2). Long term Development Plan

(a) To pay attention on commercial operation timelines of 5G in each country and the technical development pace of each major manufacturer; to actively invest resources to R & D in each related application product and planning for the composition of 5G target customers.

(b) Dedicated to development applied to Infrastructure, including Fiber Channel、 Gigabit Ethernet、SDH-SONET、Small Cell and high-precision frequency control component products for high-end products of central office communication.

(c) Continue to develop miniaturized products to meet the application trend of IoT modular applications and mobile communications, consumer electronics products.

(d) Actively develop frequency control devices for automotive peripheral control module applications to achieve our foremost goal of meeting stringent quality requirements

(e) Continue to expand sales service network. Besides strengthening sales deployment in Europe and America, broaden and deepen the sales network in southern China (Shenzhen, Wuhan and Chongqing), eastern China (Suzhou, Beijing and Shanghai), Japan (Shin-Yokohama, Osaka) and also aggressively expand in the Korea market, strengthen Singapore, India and Vietnam sales marketing channel deployment to supply services and meet market demand in each region, increase market scale and build a foundation for China and emerging market development in order to reach the goal of becoming one of the top two manufacturers in the quartz crystal industry.

(f) Continue to develop high-end timing products and also focus on sensor product development. Develop diverse product applications and diversified operation strategy to find new blue water business opportunities.

B、Marketing & Sales Situation

1、Market Analysis

(1). Market for our major products

The product trend is toward to small and light. The products that use the SMD crystal will have a higher percentage than others. In the future, Asia still is the major OEM center, and the products from Asia are still very high. TXC would still need to work hard on the market expansion in America, Europe and Japan.

Regional sales distribution of our major products in the past two years：

Unit: NT$ 1,000

Rigion \Year	2017		2018	
	Amount	%	Amount	%
America	201,842	2.30	218,158	2.67
Europe	122,395	1.39	139,057	1.70
Asia	7,193,441	81.92	7,226,799	88.61
Domestic	1,263,873	14.39	572,254	7.02
Total	8,781,551	100.00	8,156,268	100.00

(2). Market share

According to the 2017 CS&A report, the company's operation scale in 2017 is currently the fourth largest in the world and the largest professional frequency control component manufacturing service company in Taiwan, with a global market share of 9.0%. Despite the severe price squeeze in the market, Taiwan Jingji has adopted a stable price strategy for some markets in order to maintain a reasonable profit level and a sound business performance, while continuing to provide customers with abundant production capacity and diverse process technologies. Advanced professional frequency control component manufacturing services such as modular design.

The 2018 global revenue ranking research institute has not yet announced that the company's 2018 consolidated revenue is about US$272 million, which is still expected to rank fourth in the world and Taiwan ranks first.

Total X'tal & Oscillator Market Shares (Millions of Dollars

Unit: USD Million

2017 Rank	Company Name	2017 Revenue	Market Share(%)
1	Seiko Epson	$382.10	11.7%
2	NDK	$353.72	10.8%
3	KCD	$344.39	10.5%
4	TXC	$293.96	9.0%
5	KDS	$205.36	6.3%
6	Microsemi(Vectron Acquired)	$168.09	5.1%
7	SIWARD	$104.30	3.2%
8	MegaChips(SiTime Acquired)	$103.00	3.1%
9	Hosonic	$97.76	3.0%
10	Harmony	$97.75	3.0%
	Other Companies	$1,120.11	34.2%
	Total Revenue	$3,270.54	100.0%

Source：TXC, CS&A, 2018

(3). Market future demand and supply condition, and its growth potential

(i) Industry side

Global frequency element production value was US$3.1 to 3.3 billion. Compound annual growth rate is 0.1%

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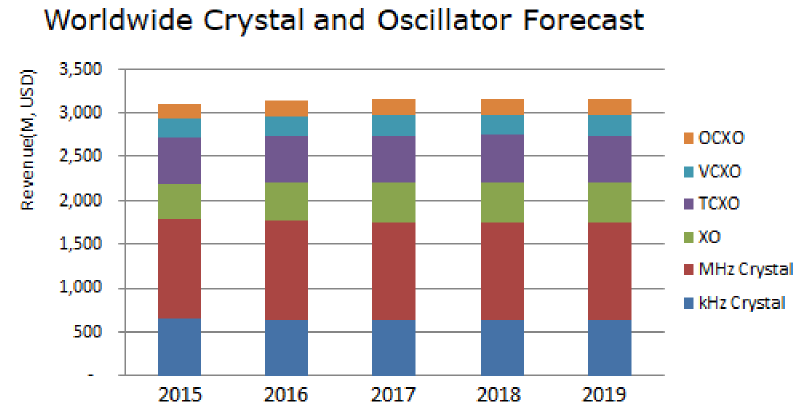
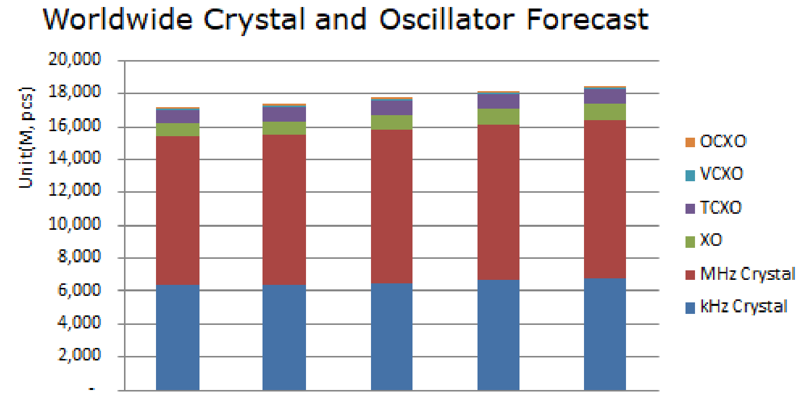
Unit: Million pcs



	2015	2016	2017	2018	2019
kHz Crystal	20.9%	20.4%	20.2%	20.2%	20.2%
MHz Crystal	36.5%	35.7%	35.2%	35.1%	35.2%
XO	13.0%	13.9%	14.3%	14.4%	14.4%
TCXO	17.2%	17.3%	17.4%	17.3%	17.2%
VCXO	7.1%	7.1%	7.1%	7.1%	7.1%
OCXO	5.4%	5.7%	5.8%	5.9%	6.0%

Source：CS&A, 2018

Annual global sales of frequency elements are estimated at 17.5-18.5 billion units. Compound annual growth rate is 2.1%.



	2015	2016	2017	2018	2019
kHz Crystal	6,394	6,404	6,532	6,663	6,796
MHz Crystal	8,986	9,092	9,274	9,460	9,649
XO	776	850	893	919	938
TCXO	867	886	904	922	931
VCXO	87	90	92	94	96
OCXO	3.09	3.35	3.49	3.59	3.67

Source：CS&A, 2018

4. Product applications

The company's product line is complete and diversified in line with the technological development of electronic products in various application fields. The Internet of Things (IoT) trend has stimulated each industry to interconnect opportunities; the future growth momentum can be expected.

The Internet of Things (IoT) continues to drive the related applications, including smart home, smart industries, smart vehicles, smart networking, smart medical care and various end products including wearable products, mobile devices, virtual reality and drones.

A. 5G (a high-speed, high capacity, high stability, low latency next generation network transmission technology)

In response to the big data era of Internet of Things (IoT), 5G is aiming at people-to-things demand and is being developed as a next generation network technology to meet the future high-speed data transmission demand. With 5G, many applications will have different application scenarios, while new business models are also gradually shaped, to allow the industry to be more flexible in commercial applications.

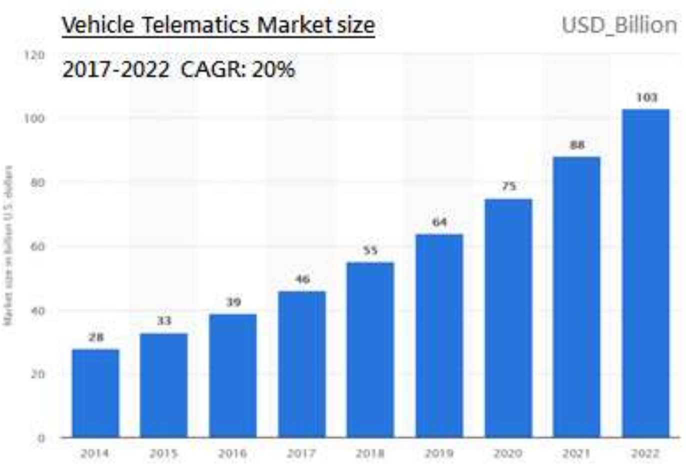
First, from the perspective of 5G communication properties, 5G speed is 100 times faster than 4G with only one-tenth of 4G's latency. In the future, a 5G base station can connect millions of devices within one square kilometer. According to the Ericsson report, mobile network traffic is expected to grow eight-fold during 2017 to 2023 with an average annual growth rate of 40%. By the year of 2023, the global 5G network will account for 20% of the total traffic. Therefore, from the perspective of capacity enhancement, 5G will be the most cost-effective network technology.

Currently, 5G is defined for three major application scenarios. The first is enhanced mobile broadband; through network coverage and capacity enhancement, it supports more efficient data transmission, such as AR and VR, which require computationally intensive experience. The second one is the promotion of large-scale application of Internet of Things, including smart homes, smart cities, etc. According to the research firm, Gartner's estimation, there will be more than 20 billion connected devices in the world by 2020. And the last one is the key business services, which are regarded as an important growth area of 5G, such as vehicle networking (V2V), advanced driver-assistance systems (ADAS), Industrial 4.0, smart medical care, etc. These service applications that were limited by 4G speed and stability in the past can all be realized in 5G era, because the diversified business models require frequency covering all low, medium and high frequency bands.

With the technical specifications of 3GPP frequency band for the non-standalone (NSA) 5G NR specifications (R15) confirmed at the end of 2017, telecom operators and chip manufacturers have accelerated their deployment in related solutions and carry out 5G-related wireless network access testing services, hoping for a perfect transition from 4G to 5G. It is expected that small quantity of 5G mobile phones, computers and other terminal products will hit the market in the second half of 2019 and more 5G commercial applications in 2020 followed by formal large-scale commercial operation. With the wireless transmission equipment comes the potential rise in demand for the construction and upgrading of related equipment such as base station, small cell, and core network, which will drive demands in high-end products such as OCXO, VCXO, S3-TCXO and high-frequency XO products, as well as facilitate the increase in overall product ASP and maintenance of gross profit margin.

B. Automotive Electronics

The new 5G high-speed network transmission technology gives the car the ability to perceive and opens up the new business model of vehicle networking (V2X). The key lies in the smart and real-time perceptive transmission. The disruption that the 5G brings to the automobile industry is not only in the technical aspect but



Source: Statista 2017, Telematics - global vehicle market size 2014-2022 also escalates the business model, allowing us to rethink the future of the “sharing” and “un-maned” automobile industry.

With the 5G technical standards entering a period of fierce development in 2018, various industries in every country will set about deploying large-scale test networks; vehicle networking (V2X) will enter the golden period of development. According to market research firm, Transparency Market Research’s estimation, the global output value of connected cars is expected to exceed US$131.9 billion (approximately NT$4 trillion) in 2019.

According to the plan of the US Department of Transportation (DOT), all new cars must be equipped with vehicle networking (V2X) devices since year 2020. The laws and regulations of every countries have also listed functions such as automatic emergency braking and lane departure warning as new car scoring items. The next generation vehicles will gradually introduce key equipment and components for the ADAS (Advanced Driver Assistance Systems) to enhance safety in driving. The ADAS market will show an explosive growth, which will lead to the increased demand in components for automotive electronics, sensors, and cameras.

It is estimated that by 2035, 90% of new vehicles will be equipped with car networking related applications (4G/5G, GNSS, V2X, etc.). By 2025, electric vehicles (EVs) are expected to account for 10% of all new cars. The compound growth rate from 2014 to 2022 will reach 37%. Currently, an electric vehicle (EV) is equipped with an average of 12 to 18 quartz components; the related applications ranging from Non-Safety to Safety. The reliability requirements for frequency component products are higher in automotive electronics than other consumer electronics products, and the introduction time is longer. The company continues to be optimistic in the new business model and development of automotive electronics with 5G applications by strategic planning and developing major customers in each application fields which are expected to replace consumer electronics as the main source of growth in the coming years.

C. Sensors

In the coming generation of the Internet of Things, all types of sensors will play an indispensable role in assisting individuals or companies in collecting data from the environment and further analyze and summarize into valuable information. Diversified service application scenarios, such as mobile communication, wearable devices, automotive electronics, and medical care and M2M applications will be possible under the development of the Internet of Things. In addition, PM2.5 sensors or modules can be further incorporated with air filters / cleaners in terms of application and add the elements of the Internet of Things to operate under the concept of “smart air circle”. All these will contribute to the growth momentum of the sensors.

5. Niches competition, the advantages/disadvantages of the future development, and the response strategies.

SWOT Analysis

Strengths	**Weaknesses**
1. TXC is well established in the market, has solid customer base of brand manufacturers, high market share, trustworthy reputation, can provide concurrent on-site service at customer design and manufacture bases. 2. Global logistics management, high level of delivery flexibility, meets customer delivery requirements on schedule. 3. Profession automated manufacturing team, stable quality and volume manufacture cost advantage. 4. Continued development and volume production of high precision and miniaturized products, continually narrows the technology gap with Japanese companies. 5. Professional marketing and application engineering teams satisfy the various requirements of customer and provide product technology support during each stage of the design and volume production process.	1. Must further strengthen channel deployment in emerging markets. 2. Lack ability to lead development of equipment for critical materials, long delivery times for orders. 3. 5G and ultra miniature products are more difficult to design and mass production than the previous Consumer materials, the market unreasonable peer price competition affects reasonable profit space 4. Limited ability to automate front-end processes. 5. China market is entering a slower period of growth, more serious business risk with small to medium customers
Opportunities	**Threatness**
1. China continues to nourish and develop technology giants in each industry; some brand customers are quickly developing into global players in their fields. 2. The design centers for automotive electronic supply chains and chipset manufacturers are being moved offshore to China. Competitive advantage of having the same cultural background. 3. The IoT industry will continue to drive development of peripheral products and related applications including sensors, M2M, wearable and medical, all of which will boost future growth. 4. High-end, high precision and high stability product and market deployments are steadily being completed, seeking out niche markets and products to provide steady sources of products. 5. Continue to receive honors and awards including the Taiwan Mittlestadt Award, CSR, Taiwan Excellence Award as well as Greenhouse Gas Inventory (ISO14064-1), Carbon Footprint Inventory (PAS2050), and Carbon Neutrality (PAS2060) certifications which will further raise our brand exposure and build up our company image.	1. Japanese manufacturers have advantages in brand status, control over raw material production and technical capabilities and a comparative advantage in cost structure. 2. Customers in mature industries are switching designs over to lower ASP or integrated-use materials due to cost considerations. 3. Competitive MEMS, green clock and HCR replacement products are threating low-end applications and putting pressure on current product price quotations. 4. Rise of Chinese red supply chain can easily affect mature products. 5. Changes in government labor laws have resulted in higher labor costs and manufacturing cost increases. 6. Customers adopt Bidding bargaining method to aggravate market unreasonable price cut competition

Respond Strategies
1. Enhance abroad sales teams，actively seeking Europe, USA,Japan and Korea etc Tier 1 clients. 2. Develop the market agreesively and expect to be the largest brand in China. 3. Enhance the engineering technlolist of NGB factory, train material handling/manufacture process automatic professionals in China. 4. Continuously to hire domestic trained as well as from abroad the research scientists and professionals in the communication and automobile parts industries. 5. Create more advantageous products，may take strategic alliance and partnership in some of the products for cost reduction. 6. Enhance product R&D ability, emphasis on the “Time to Market” strategic planning. 7. Planning for the Roadmap with optimized costs structure in order to gain future profitability 8. Speed up expand sensors business and market deploement. 9. Exercise stringent control over receivables and timely and closely verify demand on the customer side to facilitate flexible allocation. 10. Strengthen new products, new markets, development of new customers, and timely adjustment on strategies and resources. 11. Lean management, further optimization of each stage of management, raise operation efficiency.

2、Major products’ important applications and their manufacturing process

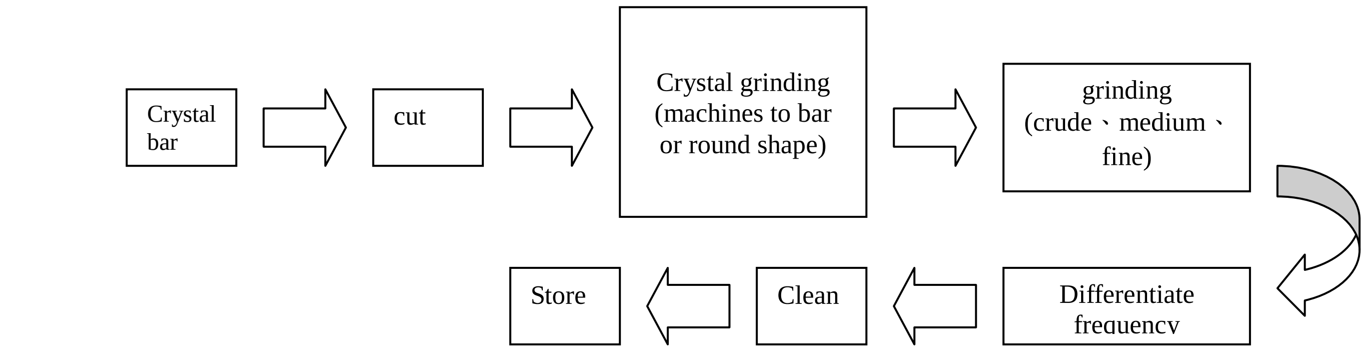
(1). Major products’ important applications

Crystal components product		Major Applications
Crystals		Mobile phone、 wireless equipment、W-LAN、wireless telephone、WiFi Module、Sip Module、 bluetooth、telephone terminal、automotive、 STB、NB/DT、Wearable、AR/VR、Game Console、storage
Crystal Oscillators	CXO、SO	Base station、wireless equipments、W-LAN、coxial cable communication、fiber optics communication、telphony terminal equipments、counter/sythesizers、intelligent transport(ITS)、computer、storage device、printer、audio-isual device、camera、games
Crystal Oscillators	VC-TCXO、TCXO	Mobile phone、basestation、wireless equipment、satellitecommunication、W-LAN、bluetooth、global positioning systems、coaxial cable communication、fiber optics communication
Crystal Oscillators	VCXO、VCSO	base、satellite communication、W-LAN、coaxial cable communication、fiber optics communication、phony terminal equipment、counter/synthesizer
Crystal Oscillators	OCXO	base、wireless equipments、satellite communication、global positioning systems、coaxial cable communication、fiber optics communication、counter/synthesizer
Sensor		mobile device
Tuning Fork		Mobile phone、smart home、DSC、wireless networking、computers 、automotives

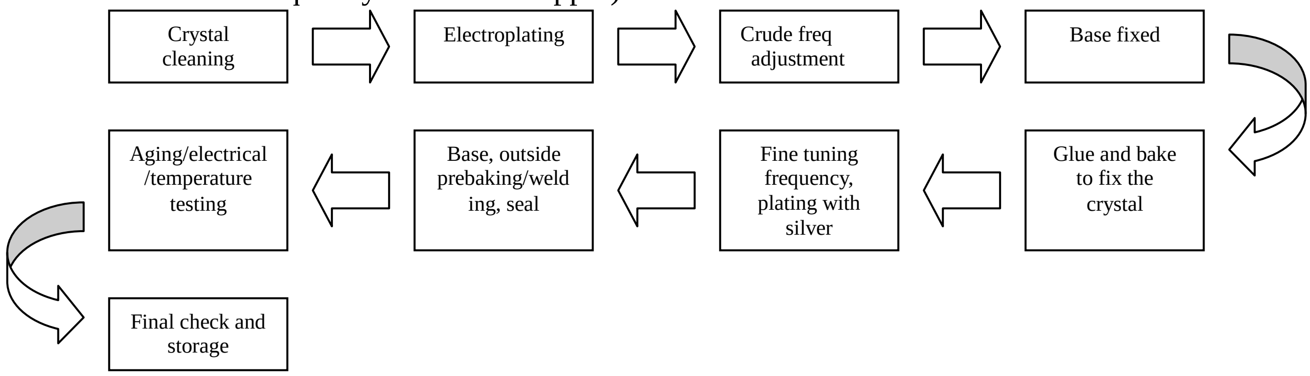
(2). Manufacturing Process

Steps for crystal components manufacturing are: first we need to manufacture the quartz crysal needed for the electrical material. It involves the cutting, polish, cleaning of the wafer form. Then with the mechanical arms to place the wafer on the base and fixed with the silver based glue. Then package it under vaccum. For oscillators it is necessary to add one more unit of oscillating circuit IC with golden line conduction via amplified output of crystal chip oscillation. It requires more IC placement and wire bonding process compared to the quartz crystal.

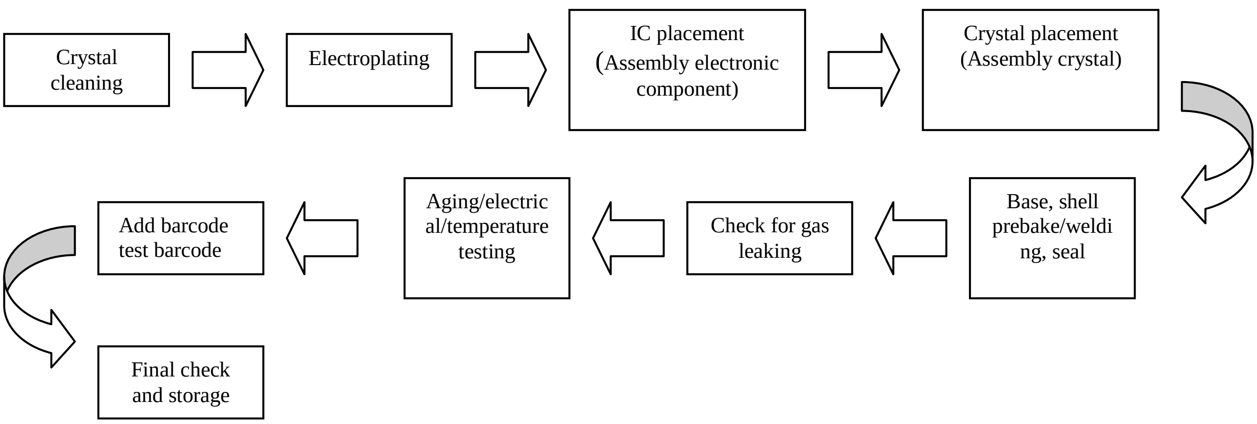
(a). Pre-manufacturing process－quartz crystal.



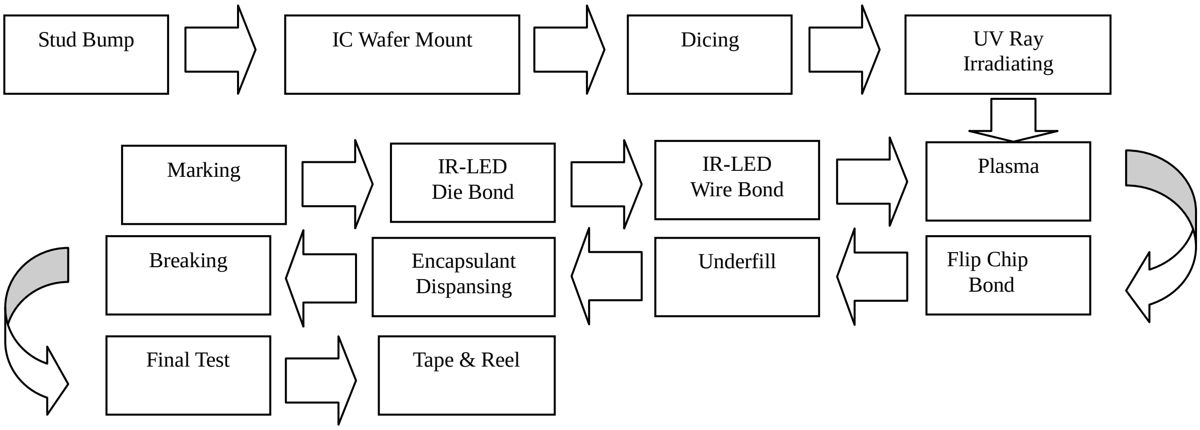
(b). Post-manufacturing process－quartz crystal (use silver, gold, nickel for electroplating, and the process would reduce crystal frequency. Fine tuning the electroplating that would reduce frequency error to 3~10ppm)



(c). Post manufacturing process－crystal oscillator (use silver, gold, nickel for electroplating, and the process would reduce crystal frequency.)



(3)、Light Sensor manufacturing process



(3)、State of the major materials suppliers

The major materials for crystal and crystal oscillators include the base, wire bond, IC package, crystal slice and crystal bars。Major materials in light sensors are ceramic substrate, IC, VCSEL and packaging tape.

(a). All the materials come from the at least two suppliers, and this would minimize the risk of all materials coming from a single supplier. Our company's procurement depends on the buying terms, state of supply, and specifications; before the materials to be ordered. And, it also depends on some special conditions that we would adjust the ratio of buying materials and this approach would help us not too concentrated the ordering from a single supplier, or running the risks of the orders being interrupted.

(b). All the suppliers have long term relationship with us. And, our friendship is good. With our company is growing strongly, these suppliers would also take highest priority to satisfy our company needs。Annually, we also meet with our suppliers on regular or irregular base to review our purchasing terms and any room for the improvement. This also helps a stable and continuous relationship in the materials supply.

(c). In considering the steady material supply, our company will provide the Rolling Forecast，to the suppliers and the production preparations. This can shorten the delivery time and an assurance of on time delivery. If there is any unusual situation, these suppliers will accommodate our needs to assure a stable supply.

(4)、The suppliers and customers over than 10% of the past two years:

(a). Main Suppliers

Unit：NT$1,000

2017			2018			2019 Q1		
Company	Amount	Percentage of annual procurement (%)	Company	Amount	Percentage of annual procurement (%)	Company	Amount	Percentage of annual procurement (%)
K Company	819,827	17.80%	K Company	765,597	16.84%	K Company	156,500	21.11%
Others	3,785,558	82.20%	Others	3,780,116	83.16%	Others	585,029	78.89%
Total	4,605,385	100.00%	Total	4,545,713	100.00%	Total	741,529	100.00%

(b). Main Clients

Unit：NT$1,000

2017			2018			2019 Q1		
Client	Amount	Percentage of annual sale (%)	Client	Amount	Percentage of annual sale (%)	Client	Amount	Percentage of annual sale (%)
F Group	1,288,174	14.67%	F Group	1,172,264	14.37%	F Group	239,618	14.76%
Others	7,493,378	85.33%	Others	6,984,004	85.63%	Others	1,383,322	85.24%
Total	8,781,552	100.00%	Total	8,156,268	100.00%	Total	1,622,940	100.00%

(5)、Production and monetary values for the past two years

Unit: 1000 PCS/NT$1000

Year Major products\	2017			2018		
	Capacity	Production	Value	Capacity	Production	Value
DIP Crystal Product	180,000	153,370	192,091	110,000	101,620	107,016
SMD Crystal Product	3,300,000	2,984,170	5,157,447	3,300,000	2,939,621	4,840,292
Others	0	1,828,268	1,357,164	-	2,004,887	1,308,337
Total	3,480,000	4,965,808	6,706,702	3,410,000	5,046,128	6,255,645

(6)、Volumes of sales and monetary values of the past two years

Unit: 1000 PCS/NT$1000

Year Major products\	2017				2018			
	Domestic sales		Export		Domestic sales		Export	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
DIP Crystal Product	8,457	12,463	146,700	241,540	10,073	13,241	118,718	185,867
SMD Crystal Product	69,439	228,249	2,772,293	6,802,916	96,566	244,130	2,913,339	6,632,131
Others	7,372	137,445	1,606,193	1,358,939	18	2,402	1,647,935	1,078,497
Total	85,268	378,157	4,525,186	8,403,395	106,657	259,773	4,679,992	7,896,495

C、Employees' average years in service, age, and educational background distribution

Year		2017	2018	2019.03.31
Total Number Employees	Engineer	555	564	553
	Administrative	480	429	417
	Sale	125	119	116
	Technicians/Operators	1,745	1,748	1,642
	Total	2,905	2,860	2,728
Average Age		31.54	32.69	33.15
Average Years in Service		4.99	5.53	5.84
Distribution of Educational Background	Ph.D.	0.52%	0.70%	0.59%
	M.S.	5.03%	6.07%	5.40%
	B.S.	41.87%	36.33%	34.35%
	High School	27.21%	33.90%	36.78%
	Below High School	25.37%	23.00%	22.88%

D、Data on our environmental protection expense

1. Briefing on environmental protection fines

No fines related to environmental protection at Pingzhen Plant, Ningbo Plant and Chongqing Plant.

2. The application of "Permit to Install Pollutant Emitting Facilities" or "Pollutant Emission Permit", payment for pollution prevention costs, or the establishment of environmental protection compliance officers pursuant to laws and regulations are described as follows:

A. The Company's Ping-Zhen Plant is responsible for the production of wafers and quartz components. It has, pursuant to the regulations, applied relevant permits from the local competent authority for the waste, waste water, and fixed pollution sources generated during the production processes, and has, pursuant to the requirements of the permit(s), set up relevant environmental protection personnel carry out the operation and maintenance in order to maintain effective operation of the relevant treatment facilities. The factory is also actively researching the feasibility of waste heat and wastewater recycling and recycling, and hopes to reduce the impact on the environment. The total amount of expenditure in 2018 is NT 4,860,000 mainly due to environmental cleaning, operating environment testing, operation and maintenance of pollution prevention equipment, protective equipment and other costs..

B. The Ning-Bo Plant continues to maintain the largest production capacity of quartz components in the world. In the production and operation processes, it emphasis on environmental governance and social contribution, to actively respond to and strictly observes the bottom line of the newly implemented "Environmental Protection Act" requirements to meet and exceed the local environmental protection requirements. In terms of on-site operation control over the wastewater, exhaust, factory noise, hazardous solid waste and other major items subject to environmental protection, this factory discharge wastewater with COD and fluoride indexes below 50% of the national standard level, applies online monitoring of PH value on exhaust emission processing process, and performs E-process flow control over changes in chemical use, so as to realize clean production concept and action by shifting the environmental management from end-of-pipe control to source control. In terms of the costs to protect the environmental protection facilities and management process, the factory has spent a total of RMB 650,000 on environmental protection governance in 2018 to meet the hardware requirements. The wastewater treatment system increases the Fenton reaction device (adjust the collection tank to improve the pretreatment time, water level reserved space, increase the intermediate water tank 1 & 3, increase the tank volume, increase the pretreatment space, reduce the pollutant index content before and after pretreatment), this operation can be Ensure that the front end increases the pre-treatment volume, reduces the back-end processing load, ensures stability treatment guarantee, and meets the standard discharge.

C. The Chong-Qing Plant's environmental protection facilities run smoothly, product quality is stable, all equipments maintain good operating conditions, in 2018 according to local environmental protection needs, complete environmental protection facilities prevention and treatment equipment optimization and maintenance, relying on self-monitoring and third-party periodic testing data, for each The treatment facility is optimized for operation and maintenance, and achieves 100% compliance discharge, including operation and maintenance of various treatment facilities for wastewater and waste gas, detection and replacement of various environmental monitoring instruments, and various tests, replacement and cleaning of waste exhaust gas, and the danger of the company according to regulations. The solid waste was legally processed and obtained five consecutive orders; in November 2018, it successfully passed the inspection of the local environmental protection bureau monitoring station, purchased the emission rights from the Chongqing United Assets and Equity Exchange in accordance with the law, and successfully issued the sewage discharge permit. In 2018, environmental protection totaled RMB 750,000. Recycling pure water and primary RO hot water to reduce process water and industrial wastewater discharge

3. Briefing on the safety and health execution

A. The Ping-Zhen Plant has established the Occupational Safety and Health Committee since 2009. There are currently 13 members, 4 of which are elected. The occupational safety and health meetings are held regularly every quarter to deal with various environmental, health and safety (EHS) issues. In order to improve workplace safety, the Company has previously promoted the "occupational safety and health performance appraisal" in 2009 under the promotion of the "Occupational Safety and Hygiene Committee" and in accordance with relevant operational guidelines. After carrying out risk identification, correction, and prevention measures, the factory was recognized by the Council of Labor for three years and was recognized by the Council of Labor for another two years upon passing the second performance accreditation in March 2013. In February 2015, the third performance accreditation application was filed and obtained yet another three years of recognition. It continued to proceed with the ISO 14001 environmental management system, the OHSAS 18001 occupational safety and health management system and the CNS 15506 Taiwan Occupational Safety and Health Management System certifications in August 2018 and held a total of 6 health promotion activities in 2018 to show that the factory continues to build safety and health work environment to ensure maximum security of colleagues. Please visit the Company's website for details.

B. Since 2012, the Ning-Bo Plant has adopted the Electronic Industry Citizenship Coalition (EICC) (Renamed as Responsible Business Alliance (RBA) in 2017) to integrate six resources including labor, health, safety, environment, business ethics and management system in order to form corporate social responsibility management system. The system is headed by the "Safety Production Committee" and aims for zero occurrence of safety and health incident. It depends on the safety personnel of each unit to carry out at least one safety production inspection every month; the hidden risk exclusion rate is 100%. It continued to adopt the means of PDCA cycle to improve and upgrade the daily safety and health management operations and successfully obtained the renewal certification of “Safety Production Standardization (Class 3)” in Ningbo. There was no major safety incident during the entire year. The company is fully concerned about the health management of employees, launches occupational health and safety promotion for each batch of new recruits, conducts 2 special trainings on women's health management, 1 first-aid training and 75 trainees, accounting for the total number of employees in the production line. Up to 10% or more, 17 times a month by mail and WeChat public health promotion, 2 times of Chinese medicine clinics, and 30 people's health is continuously tracked by the clinic. In the aspect of occupational health management, through the detection and evaluation of occupational hazards in the work environment and the evaluation of occupational hazard control effects, the improvement measures of risk sources such as elimination, substitution, engineering control, administrative management and PPE protection are continuously improved to continuously improve noise and dust. And the potential environment of occupational hazards that may be caused by chemical poisons, etc., and no occupational disease cases have occurred. In November 2018, the evaluation of occupational disease hazard control effects in 2016, 1612 and other miniaturized crystal vibration technical reform projects was completed. At the same time, radiation safety licenses such as new angle sorting machines and laboratory material composition testing machines were handled to ensure that occupational disease risks were controlled to a minimum.

C. The Chong-Qing Plant established the “Safe Production Management Committee” in March 2013. It has been following the “Safety Production Law of the People’s Republic of China” and the requirements of the government’s production safety supervision and management department to carry out safety production management activities, and is also in line with the “Safe Production Supervision of Chongqing Municipality”. The Regulations for Management, in 2015, completed the identification of the “Class III Certificate for Safety Production Standardization Enterprise” according to government requirements, and completed the review work in 2018 (three years of review). In order to achieve the goal of zero-work accidents, the safety production room organizes monthly safety inspections and organizes meetings to track missing improvements to ensure that safety hazards are eliminated in a timely manner. At the same time, the safety production room also has a sound investigation, declaration and disposal mechanism for the work safety incident. So far, there are no major safety accidents in the factory. The safety supervision bureau inspects the factory 6 to 7 times a year, and no obvious violations are found.

4. Briefing on the harmful substance management system

“Protecting the global environment” has become an important issue for the humankind in the 21st century. Based on our bona fide belief in protecting the planet and benefiting the next generation, and the corporate responsibility to jointly safeguard the overall ecological environment, the Company shoulders its mission of contributing to the society and actively promotes environmental management activities in a prudent manner.

The Company’s zero hazardous substances policies are as follows:
In order to fulfill the goal of Green Earth citizens, we undertake:

(1) To become the best green product partner for customers on the basis of the most stringent regulations or customer requirements;
(2) To confirm operation and provide resources to the organization, to promote education concerning the environment, and to strengthen awareness and goals on environmental protection among all employees and suppliers;
(3) To design green products and focus on products without harmful substances and production process;

(4) To continue the improvement through the Company's related activities to achieve the goal of business continuity.

The Company complies with the requirements prescribed in 2011/65/EU and EU/2015/863 of "European Union's Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS 2.0)", 2012/19/EU of "Waste Electrical and Electronic Equipment (WEEE)", 2006/122/EC of "The Perfluorooctane Sulfonates Directive (PFOS)", (EC) No 1907/2006 of "Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). Since July 1, 2006, the Company has, in addition to its ISO 14001 Environmental Management System and IECQ/QC 080000 Hazardous Substance Management System certification, banned the use of lead (Pb), cadmium (Cd), mercury (Hg), hexavalent chromium (Cr6+), polybrominated biphenyl (PBB), polybrominated diphenyl ether (PBDE) and Perfluorooctanesulfonic acid (PFOS) in line with international standards and meet customers' halogen-free requirements. Based on mutual understanding and common promotion of environmental improvement, the green procurement activities are used as the basis for continuous provision of green products to users. To ensure that the product quality complies with relevant green environmental protection regulations, the Company strictly prohibits the use of controlled substances during the production processes and also requires its suppliers to not use or contain banned substances in their production processes and products to reduce the impact of products and services on the environment by ensuring the compliance of no-use, no-inclusion, and no-contamination from product design to production and shipment.

The Company also has, in addition to its compliance with the code of conduct and related requirements set forth by RBA and GeSI, also carried out supply chain survey and set related policies to undertake that there is no use of any conflict metals from the Republic of the Congo and its neighboring countries.

In order to strengthen the supply chain's requirements for green products, the Company encourages suppliers to introduce IECQ QC 080000 systems in addition to the basic ISO 9001 Quality Management System in order to implement the control over environmental safety substances

5. Supplementary briefing

In order to strengthen the fulfillment of corporate social responsibility, Pingzhen completed the “Greenhouse Gas Inventory Report” in 2018, and passed the verification of the British Standards Association (BSI) and the verification of the environmental management system (ISO14001:2015); 2018 The corporate social welfare activities are listed below. For detailed activities, please refer to the company's website.

Later, it will continue to promote various activities related to environmental safety and health in the factory to ensure the safety and health of the operating environment and ensure the safety of the colleagues. All relevant environmental protection promotion and tracking, the company is detailed on the company's website.

Item	EHS Major Promotion
1	Workshop lighting fixtures with low energy-consuming lighting fixtures (LED)
2	Improve the exhaust odor of finished product warehouse
3	Process waste heat recovery and reuse and new heat pump system energy saving case
4	ISO 45001 Management System Reprint

E、Labor Relations

1. Since the establishment of the company, the labor-management relationship has been harmonious. In the most recent year and the end of the annual report, there was no loss due to labor disputes. Since the establishment of the company, there have been no major labor disputes, except for labor-management meetings, employee satisfaction surveys, New personnel discussion, foreign personnel talks, and set up employee opinions

Insurance and Retirement	Labor, health, group insurance, housing accumulation fund (china subsidiaries), social insurance(china subsidiaries)
Profit Sharing	Employee's remuneration, stock options, Cash gifts for three major holidays
Gifts	Cash gifts for three major holidays, birthdays, weddings, births, hospitalization and white card consolation gifts (blasket of flower)
Medical Insurance	1. Group insurance: Life insurance, major disease insurance, accident injury insurance, emergency medical treatment, hospitalization treatment and occupational injury insurance. 2.Regular health exams: Physical exam, complete blood count (CBC), vision exam, hearing exam, liver function exam, blood fat exam, urine examination, chest X-rays, seasonal flu vaccine inoculation subsidy. 3.Manager insurance 4. Aging business insurance、Critical illness medical insurance、basic medical insurance (China subsidiaries)
Activities	Domestic and international travel activities, birthday parties, employee athletic meets, year-end banquet and employee drawing, ball sport competitions, painting contests, photography contests, contracted merchant discounts, book reading club, a variety of employee social club activities and group purchase of movie ticket, art activies, course or activity for employee's anti-pressure, course for anti-smoking and anti-weight and family day.
Emergency Relief	Grants allocated based on real-life conditions experienced by employees
Book Reading	Regularly purchase book, magazine, newspapers for the reading enjoyment of employees , and VCD/DVD multimedia for employees' use
Other Welfare	Solid promotion channels, overseas assignment development opportunities , performance bonuses issued based on operation status, recognition of veteran and exceptional personnel, top ten outstanding project commendations, incentives for employee project proposals, bonuses for emplyees' child, bonsus for patents and proposal
Facilities	Employee cafeteria, employee dormitory, car and motorcycle parking spaces, table tennis room, billiards room, badminton court, fitness room, breast-feeding room, medical service office, convenience store, leisure room, shooting machines, libery, KTV and Chess room(china subsidiaries)

2. Employee education and training:

The Company provides employees a multiple learning environment. Colleagues can continually challenge their growth limit through internal／external training, OJT, KM（knowledge management system）, reading clubs, online／physical library, and supervisor／peer instruction. At the same time, through the new employees／professional technology／supervisor coaching／general knowledge course／self-development education and training system to bring maximun satisfaction for employees! On the other hand, through planning of job category／job level, work rotation, project allocation and overseas assignments to integrate their lives with their careers and enable them enjoy the happiness of growth in knowledge and skills and develop a bright future.

The Company has established Education and Training Guidelines and Mandatory Occupational Course Guidelines and our subsidiaries have established Employee Promotion and Reassignment Guidelines to plan related training courses in accordance with occupational and professional requirements in order to improve employee knowledge and skills, overall quality of employees and operation performance. Related education and training performance in 2018 is listed in the table below:

a. PCF Factory

Item	No. of Class	No. of Sessions	No of Trainees	No. of Hours	Expense(NTD)
1. Management Training	7	7	225	1,111	225,410
2. Self Heuristic Growth Training	3	3	259	303	0
3. Job Training	111	182	4,424	10,308	209,600
4. General Training	4	5	55	171	0
5. New employees Training	10	75	145	571	0
Total	135	272	5,108	12,464	435,010

b. NGB Factory

Item	No. of Class	No. of Sessions	No of Trainees	No. of Hours	Expense(RMB)
1. Management Training	30	30	222	2,332	319,238
2. Job Training	43	44	1,104	9,042	164,460
3. General Training	19	104	8,641	24,919	0
4. Project Training	1	1	39	273	0
5. Other Training	12	12	1,585	4,425	3,000
Total	105	191	11,591	40,991	486,698

c. CKG Factory

Item	No. of Class	No. of Sessions	No of Trainees	No. of Hours	Expense(RMB)
1. Management Training	7	7	207	36	33,494
2. Job Training	35	36	2,116	117	41,650
3. General Training	25	26	4,664	70	13,150
4. Other Training	13	13	443	68	19,656
Total	80	82	7,430	291	107,950

(1)The Company's three finance supervisor qualified for Professional Certification of Finance and Accounting Supervisor of Publicly-listed Companies sponsored by the R.O.C. Accounting Research Development Fund.

(2)One financial staffs of the Company acquired the Internal Auditor Certificate issued by the Internal Auditing Association.

(3) One financial staff of the Company acquired the Stock Professional Services certification test issued by the Securities and Futures Bureau, Financial Supervisory Commission.

(4) One financial staff of the Company acquired the Certified Public Accountant issued by the Ministry of Examination.

(5)Two financial staff of the Company acquired the Certified Accountant issued by the Ministry of Examination.

(6)One financial staffs of the Company acquired the Certificate of Securities Salespeerson issued by the Ministry of Examination.

(7)Two financial staffs of the Company acquired the Certificate of PMP (Project Management Professional).

(8)Two of the Company's financial officer has obtained the "Certificate of Proficiency Test for Associated Persons of Securities Firms" issued by the Securities and Futures Institute

(9)One of the Company's financial officer has obtained the "Certificate of Proficiency Test for Elementary Loan Officer" issued by the Securities and Futures Institute.

3. Pension System Implementation

TXC's employee retirement measures are fixed according to labor standard laws; in accordance with period legal reminders, reseave 9% of monthly salary for retirement preparatory funds are paid into the Bank of Taiwan, and an Occupational Retirement Preparatory Fund Supervisory Committee is then responsible for managing and using the retirement fund. Starting July 1st, 2005, in accordance with labor retirement fund regulations, reseave 6% of monthly salary for monthly retirement payments are transferred into special individual retirement accounts established by the department of labor; A separate appointed agent retirement fund was established in January 2007, reseave 8% of monthly salary for employee pension to ensure that retirement plans are managed professionally.

4. Labor and Management Negotiations and Employee Rights

In addition to handling labor-management meetings in accordance with the law, the company also organizes employee satisfaction surveys, employee discussions, and foreign personnel meetings, and sets up multiple channels of communication such as employee suggestion boxes, and is committed to providing a smooth communication channel so that the company's direction and employees' opinions can be fully realized. Communicate and serve as the basis for improving and providing a better working environment and conditions. Based on the protection of employees' work safety and the protection of the work environment and personal safety of employees, in addition to the establishment of the "Occupational Safety and Health Committee", regular committee meetings are held to review the effectiveness of business promotion and occupational safety and health matters, and various management measures are also in place. And ask their colleagues to fully implement. In addition to insuring group insurance every year, the company regularly holds occupational safety and health lectures, and sends people to participate in relevant occupational safety and health courses, and set up "TXC Emergency Response Plan" and "Environmental Safety Management Manual" to ensure the protection of their colleagues. Please refer to our website for safety and calm response to emergencies. In order to achieve the goal of zero disasters, the company will revise the annual emergency contingency plan and the environmental safety management manual from time to time, and then formulate detailed execution operations according to the content of the plan, and the implementation of the project schedule and content by the public institution, and then through the audit system. Exploring the lack of implementation, setting the emergency contingency plan for the next year, the management manual for environmental safety and health, and reviewing the amendments at any time according to the implementation process and auditing, etc., to reduce the risk of damage to the public institutions, in order to achieve the ultimate goal of zero disaster.

2. The losses suffered in the recent years due to labor disputes, and the estimated current and future estimated amounts and corresponding measures: None.

3. Whether there is a defined employee behavior or ethical code
   The company has set a second edition of the "TXC Code of Conduct" in both Chinese and English to regulate the behavioral ethics of all subordinates of the company.

4. Fulfillment of social responsibility
   There company’s corporate social responsibility has always including three aspects: corporate philanthropy, corporate governance and environmental safety & health. In the future, related resources from external units that have been cooperating over a long period with our company will be fully integrated. This combined with the high level of enthusiasm and caring shown by our volunteer employees and the newly established charity and compassion foundation will show our commitment to displaying a spirit of ‘giving back to society’, making maximum use of limited resources and encouraging the joint participation of neighboring communities and companies. By making a greater impact with our philanthropic activities, TXC will set out a path for sustainable operations and expand the reach of our philanthropy. Please refer to the company’s website.

F、Important Contracts

Contractual Nature	Contract Party	Start Date-End Date	Content	Restrictions
Industry-university cooperation	National Tsing Hua University	2018.06.01~2021.05.31	Develop a smart manufacturing management platform with heterogeneous and multi-mode deep learning technology	Reprinted without consent
Industry-university cooperation	National Central University	2018.09.01~2019.08.31	Quartz crystal copper glue process Technology development	Reprinted without consent
Industry-university cooperation	National Cheng Kung University	2018.11.01~2019.10.31	RF electronic component packaging Nanoparticle conductive silver glue	Reprinted without consent
Government Subsidy	Taiwan SME Joint Counseling Foundation	2018.10.01~2020.09.30	High-frequency high-precision micro-frequency component product key process intelligent manufacturing module development plan	Reprinted without consent
Commissioned research	Jieteng Intelligent Co., Ltd.	2018.10.01~2020.09.30	Smart Manufacturing Module Algorithm Development	Reprinted without consent
Commissioned research	Xinhan Intelligent System Co., Ltd.	2018.10.01~2020.09.30	Common device network import and field verification	Reprinted without consent
Contract	China Construction Eighth Engineering Bureau Co., Ltd.	2018.07.20~2021.09.30	All Suns Construction contract	None
Contract	Taichuang Engineering Co., Ltd.	2019.02.22~2019.05.30	MEMS FAB Air Conditioning & Special Chemical Supply Engineering Contract	None
Contract	Kaisheng Hydropower	2019.02.25~2019.05.30	MEMS FABE lectromechanical and wastewater facilities engineering	None
Software license	Oracle ERP	2002.09~ Permanent authorization	Oracle ERP R12.1.3	Prohibition of authorization to transfer
Software license	Huasheng Technology Co., Ltd.	2002.09~ Permanent authorization	Signing process Angent	Prohibition of authorization to transfer
Software license	Oracle ERP	2011.04~ Permanent authorization	Oracle Agile PLM	Prohibition of authorization to transfer
Software license	Zitong Computer (share) company	2011.08~ Permanent authorization	GUI/VAT Product authorization	Prohibition of authorization to transfer

Software license	Oracle ERP	2013.12~ Permanent authorization	Oracle WebLogic & WebCenter Portal	Prohibition of authorization to transfer
Software license	Shuowang Information Co., Ltd.	2014.10~ Permanent authorization	SmartKMS 8	Prohibition of authorization to transfer
Software license	Xulian Technology Co., Ltd.	2015.03~ Permanent authorization	CTMS	Prohibition of authorization to transfer
Software license	Xulian Technology Co., Ltd.	2015.03~ Permanent authorization	CSAS	Prohibition of authorization to transfer
Software license	Hangzhou Jinmai Software Co., Ltd.	2010.07~ Permanent authorization	CAD Network software software license	Reprinted without consent
Software license	Guangzhou Saiyi Information Technology Co., Ltd.	2018.06.28~ Permanent authorization	Smart factory	Prohibition of authorization to transfer
Software license	Shanghai Mupu Information Technology Co., Ltd.	2014.08~ Permanent authorization	Intranet security management software	Prohibition of authorization to transfer
Software license	Shanghai Xishi Electronic Technology Co., Ltd.	2016.10 ~2019.10	Avira Professional	Prohibition of authorization to transfer
Bank financing	China Trust Bank	2015.04.30~2020.04.30	Medium and long-term loans	None
Bank financing	China Trust Bank	2018.02.28~2020.05.28	Medium and long-term loans	None
Bank financing	China Trust Bank	2017.03.31~2019.03.31	Medium and long-term loans	None
Bank financing	DBS Bank(Taiwan)	2018.09.01~2019.09.01	Medium and long-term loans	None
Bank financing	BNP Bank	2018.03.04~2019.12.02	Short-term loans	None

VII. An Overview of the Company's Financial Status
A. Abbreviated Balance Sheets and P/L Statements for the Past 5 Years

(1)、Abbreviated Consolidated Balance Sheets (IFRS)

Unit：NT$ 1,000

		Financial information for the post 5 years (Note1)					Up to 2019.03.31 (Note 3)
		2014	2015	2016	2017	2018	
Current assets		7,806,568	8,573,807	8,818,130	7,983,192	7,117,289	6,956,174
Property, plant and equipment (Note 2)		5,153,830	4,570,352	4,277,905	4,369,810	4,110,722	4,070,435
Intangible assets		0	11,921	10,798	8,013	21,831	21,521
Other assets (Note 2)		661,849	2,424,335	1,735,135	1,041,784	1,311,884	1,361,196
Total assets		13,622,247	15,580,415	14,841,968	13,402,799	12,561,726	12,409,326
Current liabilities	Before distribution	2,791,774	3,444,554	3,156,105	2,276,802	2,088,860	1,946,591
	After distribution	3,566,167	4,218,947	4,023,425	3,051,195	(Note 6)	(Note 6)
Long-term liabilities		1,935,897	1,396,615	1,912,681	1,961,406	1,722,026	1,478,358
Total liabilities	Before distribution	4,727,671	4,841,169	5,068,786	4,238,208	3,810,886	3,424,949
	After distribution	5,502,064	5,615,562	5,936,106	5,012,601	(Note 6)	(Note 6)
Interests attributable to parent company		8,894,576	10,739,246	9,719,652	9,122,699	8,750,840	8,984,377
Common stock		3,097,570	3,097,570	3,097,570	3,097,570	3,097,570	3,097,570
Capital surplus		1,662,181	1,662,181	1,665,224	1,665,224	1,665,116	1,666,296
Retained earnings	Before distribution	3,792,029	3,940,109	4,163,101	4,242,994	4,243,060	4,371,262
	After distribution	3,017,636	3,165,716	3,295,781	3,468,601	(Note 6)	(Note 6)
Other interests		342,796	2,039,386	793,757	116,911	(254,906)	(150,751)
Treasury Stock		0	0	0	0	0	0
Non-controlling interests		0	0	53,530	41,892	0	0
Total stockholders' equity	Before distribution	8,894,576	10,739,246	9,773,182	9,164,591	8,750,840	8,984,377
	After distribution	8,120,183	9,964,853	8,905,862	8,390,198	(Note 6)	(Note 6)

＊ If individual financial reports are prepared, the Company shall also prepare condensed balance sheets and statements of income for the past five years.

＊ For financial data that has used international accounting reporting standards for less than five years, table (2) should be prepared separately with financial data which uses our country's financial accounting standards.

Note 1: The years which have not yet been audited and certified by a CPA should be noted.

Note 2: The assessment date and reassessed value amount should be listed for assets which have been reassessed in that year.

Note 3: Listed companies or companies with securities sold by securities firms should list the annual report publishing dates up to the previous quarter. Whether or not the financial data has been certified, audited or both should also be noted.
Note 4: For the above amounts after distribution, the amounts listed should be based on the following year's shareholders meeting resolution.
Note 5: For financial data which requires self-correction or revision as notified by the competent authorities, the corrected or revised amounts should be listed and the circumstances and reasons should be noted.
Note 6: Earnings in 2018 have not yet passed shareholders' meeting resolution as of March 31, 2019.

(2)、Abbreviated Balance Sheets (IFRS)

Unit：NT$ 1,000

		Financial information for the post 5 years (Note1)					Up to 2019.03.31 (Note 3)
		2014	2015	2016	2017	2018	
Current assets		5,042,763	4,812,193	4,650,756	4,068,933	3,896,214	Not Applicable
Property, plant and equipment (Note 2)		2,739,181	1,968,448	2,055,749	2,109,112	1,894,487	
Intangible assets		0	3,832	2,638	543	170	
Other assets (Note 2)		5,216,153	7,975,571	7,195,572	6,526,246	6,162,079	
Total assets		12,998,097	14,760,044	13,904,715	12,704,834	11,952,950	
Current liabilities	Before distribution	2,437,562	2,649,503	2,561,647	1,628,509	1,626,245	
	After distribution	3,211,955	3,423,896	3,428,967	2,402,902	Note 6	
Long-term liabilities		1,665,959	1,371,295	1,623,416	1,953,626	1,575,865	
Total liabilities	Before distribution	4,103,521	4,020,798	4,185,063	3,582,135	3,202,110	
	After distribution	4,877,914	4,795,191	5,052,383	4,356,528	Note 6	
Interests attributable to parent company		8,894,576	10,739,246	9,719,652	9,122,699	8,750,840	
Common stock		3,097,570	3,097,570	3,097,570	3,097,570	3,097,570	
Capital surplus		1,662,181	1,662,181	1,665,224	1,665,224	1,665,116	
Retained earnings	Before distribution	3,792,029	3,940,109	4,163,101	4,242,994	4,243,060	
	After distribution	3,017,636	3,165,716	3,295,781	3,468,601	(Note 6)	
Other interests		342,796	2,039,386	793,757	116,911	(254,906)	
Treasury Stock		0	0	0	0	0	
Non-controlling interests		0	0	0	0	0	
Total stockholders' equity	Before distribution	8,894,576	10,739,246	9,719,652	9,122,699	8,750,840	
	After distribution	8,120,183	9,964,853	8,852,332	8,348,306	(Note 6)	

＊ If individual financial reports are prepared, the Company shall also prepare condensed balance sheets and statements of income for the past five years.
＊ For financial data that has used international accounting reporting standards for less than five years, table (2) should be prepared separately with financial data which uses our country's financial accounting standards.
Note 1: The years which have not yet been audited and certified by a CPA should be noted.

Note 2: The assessment date and reassessed value amount should be listed for assets which have been reassessed in that year.
Note 3: Listed companies or companies with securities sold by securities firms should list the annual report publishing dates up to the previous quarter. Whether or not the financial data has been certified, audited or both should also be noted.
Note 4: For the above amounts after distribution, the amounts listed should be based on the following year's shareholders meeting resolution.
Note 5: For financial data which requires self-correction or revision as notified by the competent authorities, the corrected or revised amounts should be listed and the circumstances and reasons should be noted.
Note 6: Earnings in 2018 have not yet passed shareholders' meeting resolution as of March 31, 2019.

(3)、Abbreviated Consolidated P/L Statements (IFRS)

Unit：NT$ 1,000

Item \ Year	Financial information for the post 5 years (Note1)					Up to 2019.03.31 (Note 2)
	2014	2015	2016	2017	2018	
Net operating revenue	9,526,243	9,265,656	9,637,101	8,781,552	8,156,268	1,622,940
Gross profit	2,331,149	2,235,175	2,554,069	2,186,077	1,827,626	339,449
Operating income	1,004,022	908,335	1,114,394	802,056	533,301	57,835
Nonoperating gains and losses	141,733	179,275	77,878	272,877	200,196	28,563
Income before income tax	1,145,755	1,087,610	1,192,272	1,074,933	733,497	86,398
Continuing operations net Income	995,174	938,203	1,013,692	951,017	644,249	77,729
Discontinuing operations net Loss	0	0	0	0	0	0
Net income (loss)	995,174	938,203	1,013,692	951,017	644,249	77,729
Other comprehensive income （net amount）	255,984	1,680,945	(1,264,408)	(692,288)	(246,756)	154,628
Total comprehensive income	1,251,158	2,619,148	(250,716)	258,729	397,493	232,357
Net income attributable to parent company	995,174	938,203	1,016,164	962,655	644,350	77,729
Net income attributable to non-controlling interests	0	0	(2,472)	(11,638)	(101)	0
Comprehensive income attributable to parent company	1,251,158	2,619,148	(248,244)	270,367	397,594	232,357
Comprehensive income attributable to non-controlling interests	0	0	(2,472)	(11,638)	(101)	0
Earnings per share	3.21	3.03	3.28	3.11	2.08	0.25

＊If individual financial reports are prepared, the Company shall also prepare condensed balance sheets and statements of income for the past five years.

＊For financial data that has used international accounting reporting standards for less than five years, table (2) should be prepared separately with financial data which uses our country's financial accounting standards.

Note1: The years which have not yet been audited and certified by a CPA should be noted.

2: Listed companies or companies with securities sold by securities firms should list the annual report publishing dates up to the previous quarter. Whether or not the financial data has been certified, audited or both should also be noted.

3: Gains (losses) from discontinued operations are listed as net amounts after income tax deduction.

4: For financial data which requires self-correction or revision as notified by the competent authorities, the corrected or revised amounts should be listed and the circumstances and reasons should be noted.

5: Earnings in 2018 have not yet passed shareholders' meeting resolution as of March 31, 2019.

(4)、Abbreviated P/L Statements (IFRS)

Unit：NT$ 1,000

Item \ Year	Financial information for the post 5 years (Note1)					Up to 2019.03.31 (Note 2)
	2014	2015	2016	2017	2018	
Net operating revenue	8,178,579	7,898,695	7,887,769	7,054,964	6,556,906	Not Applicable
Gross profit	1,476,609	1,367,717	1,633,015	1,256,789	1,015,820	
Operating income	638,958	559,524	767,750	452,816	324,442	
Nonoperating gains and losses	444,759	475,633	364,143	572,854	362,445	
Income before income tax	1,083,717	1,035,157	1,131,893	1,025,670	686,887	
Continuing operations net Income	995,174	938,203	1,016,164	962,655	644,350	
Discontinuing operations net Loss	0	0	0	0	0	
Net income (loss)	995,174	938,203	1,016,164	962,655	644,350	
Other comprehensive income （net amount）	255,984	1,680,945	(1,264,408)	(692,288)	(246,756)	
Total comprehensive income	1,251,158	2,619,148	(248,244)	270,367	397,594	
Net income attributable to parent company	995,174	938,203	1,016,164	962,655	644,350	
Net income attributable to non-controlling interests	0	0	0	0	0	
Comprehensive income attributable to parent company	1,251,158	2,619,148	(248,244)	270,367	397,594	
Comprehensive income attributable to non-controlling interests	0	0	0	0	0	
Earnings per share	3.21	3.03	3.28	3.11	2.08	

＊If individual financial reports are prepared, the Company shall also prepare condensed balance sheets and statements of income for the past five years.

＊For financial data that has used international accounting reporting standards for less than five years, table (2) should be prepared separately with financial data which uses our country's financial accounting standards.

Note1: The years which have not yet been audited and certified by a CPA should be noted.

2: Listed companies or companies with securities sold by securities firms should list the annual report publishing dates up to the previous quarter. Whether or not the financial data has been certified, audited or both should also be noted.

3: Gains (losses) from discontinued operations are listed as net amounts after income tax deduction.

4: For financial data which requires self-correction or revision as notified by the competent authorities, the corrected or revised amounts should be listed and the circumstances and reasons should be noted.

5: Earnings in 2018 have not yet passed shareholders' meeting resolution as of March 31, 2019.

(5) Name and audit opinions of the Certified Public Accountant during the past 5 years

Year	Accounting firm	Certified Public Accountant	Audit opinions
2014	Deloitte & Touche	KUNG, SHUANG-HSIUNG, WENG, PO-JEN	No reserved opinions
2015	Deloitte & Touche	KUNG, SHUANG-HSIUNG, WENG, PO-JEN	No reserved opinions
2016	Deloitte & Touche	LIN, I-HUI, WENG, PO-JEN	No reserved opinions
2017	Deloitte & Touche	LIN, I-HUI, WENG, PO-JEN	No reserved opinions
2018	Deloitte & Touche	LIN, I-HUI, WENG, PO-JEN	No reserved opinions

Note: 1. Explanation for the change of accountants during the past five years:
Due to organizational changes, mergers and internal personnel and work arrangements of the accounting firm, as well as to be in line with the corporate governance measures.

B、Financial Analysis for the past 5 Years

（1） Consolidated Financial Analysis (IFRS)

Item	Year	Financial analysis for the post 5 years					Up to 2019.03.31
		2014	2015	2016	2017	2018	
Capital Structure Analysis (%)	Debt ratio (%)	34.71	31.07	32.83	31.62	30.34	27.60
	Long-term fund to fixed asstes ratio (%)	210.14	265.53	273.17	254.61	254.77	257.04
Liquidity Analysis (%)	Current Ratio (%)	279.63	248.91	279.40	350.63	340.73	357.35
	Quick Ration (%)	215.62	201.84	227.49	277.70	250.96	258.13
	Times interest earned (%)	2,538	2,610	4,349	5,000	3,696	1,574
Operating performace Analysis (%)	Average collection turnover(times)	3.36	3.12	3.18	3.05	3.02	2.61
	Days sales outstanding	108.63	116.94	114.77	119.67	120.86	139.84
	Average inventory turnover(times)	4.35	4.41	4.64	4.36	3.81	2.80
	Average payment turnover(times)	7.36	6.45	5.64	5.02	4.96	4.61
	Average inventory turnover(days)	83.97	82.85	78.66	83.71	95.80	130.35
	Fixed assets turnover(times)	1.85	1.91	2.18	2.03	1.92	1.59
	Total assets turnover(times)	0.7	0.63	0.63	0.62	0.63	0.52
Profitability Analysis (%)	Turn on total assets (%)	7.77	6.67	6.82	6.86	5.09	0.66
	Turn on total equity (%)	11.56	9.56	9.79	10.04	7.19	0.88
	Paid-in capital ratio (%)	36.99	35.11	38.49	34.70	23.68	2.79
	Net margin (%)	10.45	10.13	10.52	10.83	7.90	4.79
	Earnings per share(Basic) Note I	3.21	3.03	3.28	3.11	2.08	0.25
Cash Flow	Cash flow ratio (%)	54.96	65.35	78.70	73.06	51.15	11.81
	Cash flow adequacy ratio (%)	81.61	104.28	123.42	127.04	116.90	115.16
	Cash flow reinvestment ration (%)	5.76	9.83	10.87	4.92	1.87	1.87
Leverage	Operating leverage	1.9446	2.0825	1.8273	2.0191	2.5348	4.3047
	Financial Leverage	1.0491	1.0501	1.0258	1.0281	1.0398	1.1128
	Please explain the reasons of changes in financial ratio for the post two years (No needs for analysis if change of financial ratio is less than 20%) 1. Interest coverage ratio, return on assets, return on equity, net profit before tax, net income, net profit, and earnings per share were all reduced due to lower revenue, lower profit and other interests.						

	2. The decrease in operating income as a percentage of paid-in capital was due to the decrease in sales revenue and the decrease in gross profit margin. 3. The decrease in cash flow ratio and cash reinvestment ratio was due to the decrease in net cash flow from operating activities as compared with the same period last year. 4. The increase in operating leverage was mainly due to the decrease in marginal contribution and the decrease in operating profit. 5. The decrease in inventory turnover was due to the decrease in sales revenue and cost and the increase in average inventory.

Note：Glossary：

1. Capital StructureAnalysis
   (1) Debt ratio＝Total liabilities／Total assets
   (2) Long-term fund to fixed asstes ratio＝（Total stockholders' equity＋Long-term liabilities）／Net Fixed Assets
2. Liquidity Analysis
   (1) Current Ratio＝current assets／current liabilities
   (2) Quick Ration＝（current assets－Inventories－Prepaid expenses）／current liabilities
   (3) Times interest earned＝Earnings before interest and taxs／Interest expenses
3. Operating performace Analysis
   (1) Average collection turnover＝
   Net sales／Average trade Receivables
   (2) Days sales outstanding＝365／Average collection turnover
   (3) Average inventory turnover＝Cost of good sold／Average inventory。
   (4) Average payment turnover＝Cost of good sold／Average trade Payables
   (5) Average inventory turnover(Days)＝365／Average inventory turnover
   (6) Fixed assets turnover＝Net sales／Net Fixed Assets
   (7) Total assets turnover＝Net sales／Total assets
4. Profitability Analysis
   (1) Turn on total assets＝〔Net income＋Interest expenses×（1－Effective tax rate）〕／Average total assets。
   (2) Turn on total equit＝Net income／Average stockholders' equit。
   (3) Net margin＝Net income／net sales。
   (4) Earnings per share＝（Net income－Perferred stock dividend）／ Weighted average number of shares outstanding
5. Cash Flow
   (1) Cash flow ratio＝Net cash provided by operating activities／current liabilities
   (2) Cash flow adequacy ratio＝Five-year sum of cash from operations／Five-year sum of capital expenditures, inventory additions, and cash dividend.
   (3) Cash flow reinvestment ration＝(Cash provided from operating activities – Cash dividend) ／（Grosss fixed assets + investment + Other assets + Working capital）
6. Leverage
   (1) Operating leverage＝（Net sales – Variable cost）／Income from operations
   (2) Financial Leverage＝Income from operations ／（Income from operations－Interest expenses）

（2） Financial Analysis (IFRS)

Item		Year: Financial analysis for the post 5 years					Up to 2019.03.31
		2014	2015	2016	2017	2018	
Capital Structure Analysis (%)	Debt ratio (%)	31.57	27.24	28.69	28.20	26.79	Not Applicable
	Long-term fund to fixed asstes ratio (%)	385.54	615.23	551.77	525.17	545.09	
Liquidity Analysis (%)	Current Ratio (%)	206.88	181.63	181.55	249.86	239.58	
	Quick Ration (%)	161.39	145.87	143.09	190.42	177.65	
	Times interest earned (%)	3,230	3,377	6,630	6,818	5,620	
Operating performace Analysis (%)	Average collection turnover(times)	3.18	3.07	3.16	3.01	2.98	
	Days sales outstanding	114.80	118.73	115.50	121.26	122.48	
	Average inventory turnover(times)	5.89	6.52	6.80	6.16	5.67	
	Average payment turnover(times)	5.31	5.51	5.18	4.77	4.73	
	Average inventory turnover(days)	61.95	56	53.67	59.25	64.37	
	Fixed assets turnover(times)	2.99	3.36	3.92	3.39	3.28	
	Total assets turnover(times)	0.63	0.57	0.55	0.53	0.53	
Profitability Analysis (%)	Turn on total assets (%)	7.99	6.95	7.19	7.24	5.31	
	Turn on total equity (%)	11.56	9.56	9.84	10.22	7.21	
	Paid-in capital ratio (%)	34.99	33.42	36.54	33.11	22.18	
	Net margin (%)	12.17	11.88	12.88	13.65	9.83	
	Earnings per share(Basic) Note I	3.21	3.03	3.28	3.11	2.08	
Cash Flow	Cash flow ratio (%)	43.94	40.27	52.59	38.87	32.50	
	Cash flow adequacy ratio (%)	90.99	96.22	109.27	98.70	87.45	
	Cash flow reinvestment ration (%)	3.16	2.44	4.66	(1.77)	(1.93)	
Leverage	Operating leverage	1.7827	1.894	1.5353	1.8095	1.9043	
	Financial Leverage	1.0505	1.0598	1.0231	1.0349	1.0399	

Please explain the reasons of changes in financial ratio for the post two years (No needs for analysis if change of financial ratio is less than 20%)

1. Interest coverage ratio, return on assets, return on equity, net profit before tax, net income, net profit, and earnings per share were all reduced due to lower revenue, lower profit and other interests.

2 The decrease in operating income as a percentage of paid-in capital was due to the decrease in sales revenue and the decrease in gross profit margin.

3. The decrease in inventory turnover was due to the decrease in sales revenue and cost and the increase in average inventory.

Note：Glossary：

1. Capital StructureAnalysis
   (1) Debt ratio＝Total liabilities／Total assets
   (2) Long-term fund to fixed asstes ratio＝（Total stockholders' equity＋Long-term liabilities）／Net Fixed Assets
2. Liquidity Analysis
   (1) Current Ratio＝current assets／current liabilities
   (2) Quick Ration＝（current assets－Inventories－Prepaid expenses）／current liabilities
   (3) Times interest earned＝Earnings before interest and taxs／Interest expenses
3. Operating performace Analysis
   (1) Average collection turnover＝ Net sales／Average trade Receivables
   (2) Days sales outstanding＝365／Average collection turnover
   (3) Average inventory turnover＝Cost of good sold／Average inventory。
   (4) Average payment turnover＝Cost of good sold／Average trade Payables
   (5) Average inventory turnover(Days)＝365／Average inventory turnover
   (6) Fixed assets turnover＝Net sales／Net Fixed Assets
   (7) Total assets turnover＝Net sales／Total assets
4. Profitability Analysis
   (1) Turn on total assets＝〔Net income＋Interest expenses×（1－Effective tax rate）〕／Average total assets。
   (2) Turn on total equit＝Net income／Average stockholders' equit。
   (3) Net margin＝Net income／net sales。
   (4) Earnings per share＝（Net income－Perferred stock dividend）／ Weighted average number of shares outstanding
5. Cash Flow
   (1) Cash flow ratio＝Net cash provided by operating activities／current liabilities
   (2) Cash flow adequacy ratio＝Five-year sum of cash from operations／Five-year sum of capital expenditures, inventory additions, and cash dividend.
   (3) Cash flow reinvestment ration＝(Cash provided from operating activities – Cash dividend)／（Grosss fixed assets + investment + Other assets + Working capital）
6. Leverage
   (1) Operating leverage＝（Net sales – Variable cost）／Income from operations
   (2) Financial Leverage＝Income from operations ／（Income from operations－Interest expenses）

3. Audit Committee's Review Report

TXC Corporation
Audit Committee's Review Report

Board of Directors of the company has made business report of 2018, consolidated financial statements, the individual financial statements and proposal of earnings distribution, of which the consolidated financial statements and the individual financial statements have been audited by independent auditors Ms. Lin Yi Hui and Mr. Wong Bo Ren of Deloitte & Touche. The business report, consolidated financial statements, the individual financial statements and proposal of earnings distribution have been recognized by Audit Committee according to Article 14-4 of the Securities Exchange Act and Article 219 of the Corporate Act. Pleas examine.

2019 Shareholder Meeting of the Company

Convener of Audit Committee Yu Shang Wu

2019, April 25th

4. Consolidated Financial statements of the most recent year: please refer to Appendix 1

5. The Company's individual financial statements audit by a certified public accountant for the most recent year: please refer to Appendix 2

6. Where there is any financial difficulty in the Company and affiliates during the most recent year and as of the date the annual report was published, impact thereof on the financial status of the Company: Not Applicant

VIII. Review and analysis on the financial status and financial performance and the risks

1. Financial Statement

Unit: NT$1,000

Year / Item	2018	2017	Difference	
			Amount	%
Current Assets	7,117,289	7,983,192	(865,903)	(10.85)
Non Current Assets	5,444,437	5,419,607	24,830	0.46
Total Assets	12,561,726	13,402,799	(841,073)	(6.28)
Current Liabilities	2,088,860	2,276,802	(187,942)	(8.25)
Non Current Liabilities	1,722,026	1,961,406	(239,380)	(12.20)
Total Liabilities	3,810,886	4,238,208	(427,322)	(10.08)
Share Capital	3,097,570	3,097,570	0	0
Capital Surplus	1,665,116	1,665,224	(108)	(0.01)
Retainded Earnings	4,243,060	4,242,994	66	0
Other Equity	(254,906)	116,911	(371,817)	(318.03)
Non-Controlling Interests	0	41,892	(41,892)	(100.00)
Total Equity	8,750,840	9,164,591	(413,751)	(4.51)

Explanations regarding the financial status:

1. The decrease in other equity was attributable to the decrease in profit or loss due to the provision of financial assets for sale.
2. The decrease in non-controlling interests was due to the liquidation of non-controlling interests subsidiaries.

2. Financial performance

(1) Comparative analysis table for the operating results Unit: NT$1,000

Items \ Year	2018	2017	Increase(Decrease) Amount	Change %
Sales	8,156,268	8,781,552	(625,284)	(7.12)
Cost of Goods Sold	(6,328,642)	(6,595,475)	266,833	(4.05)
Gross Profit	1,827,626	2,186,077	(358,451)	(16.40)
Operating Expenses	(1,294,325)	(1,384,021)	89,696	(6.48)
Profit from Operations	533,301	802,056	(268,755)	(33.51)
Non-Operating Income and Expenses	200,196	272,877	(72,681)	(26.64)
Profit before Income Tax	733,497	1,074,933	(341,436)	(31.76)
Income Tax Expense	(89,248)	(123,916)	34,668	(27.98)
Net Profit for The Year	644,249	951,017	(306,768)	(32.26)
Other Comprehensive Income (Loss)	(246,756)	(692,288)	445,532	(64.36)
Total Comprehensive income (Loss) for The Year	397,493	258,729	138,764	53.63

Explanation:

1. Operating net profit and pre-tax net profit were due to decrease in sales revenue and operating gross profit.
2. The decrease in non-operating income was due to the decrease in investment.
4. The decrease in income tax expenses is due to the impact of deferred income tax liabilities.
5. Other comprehensive gains and losses, the increase in total consolidated profit and loss for the period is due to the increase in the amount of items that may be reclassified to profit or loss.

Note: 1. Explanation for the analysis on the changes in ratios during the past two years. (This analysis can be exempted if the change is less than 20%).

(2) Expected sales quantity and its basis

In the year of 108, the company will maintain a prudent and conservative attitude. In addition to the support of existing customer orders, it plans to expand the production capacity of new products and optimize the manufacturing process. As the company gradually acquires customers in the automotive industry products and high-end precision products. Certification and recognition, it is expected that the revenue of automotive, high-end precision and new products will contribute, and continue to be refined into miniaturized, high-frequency, low-energy precision products, under the conditions of effective operation of customer relationships and product diversification It is estimated that the total combined sales will reach more than 3.2 billion, and the global market share can be maintained at about 8% to 10%. It is estimated that the top five manufacturers in the global quartz industry can still be maintained.

3. Cash flow

Unit: NT$1,000

Beginning Cash Balance	Net Cash Provided by (Used in) Operating Activities of the year	Cash Inflow (Outflow) of the year	Cash Over and Short	Cash shortage remedy	
				Investing plan	Financing plan
2,331,366	1,068,473	(1,025,964)	1,305,402	NA	NA

(1) Analysis on changes in cash flow of the year:
The Company's net cash outflow for the year 2018 was NT$1,025,964,000 and the changes in cash flow from various operating activities are as follows:
A. Operating activities: inflow amount NT$1,068,473,000
B. Investing activities: outflow amount NT$924,094,000
C. Financing activities: outflow amount NT$1,146,968,000

(2) Remedy for cash shortage and liquidity analysis: none.

(3) Cash liquidity analysis for the coming year:

Unit: NT$1,000

Beginning Cash Balance	Net Cash Provided by (Used in) Operating Activities of the year	Cash Inflow (Outflow) of the year	Cash Over and Short	Cash shortage remedy	
				Investment plan	Financing plan
1,305,402	1,000,000	200,000	1,505,402	NA	NA
Expected cash shortage remedy and liquidity analysis: none					

4. Impact of major annual capital expenditure on financial operations

(1) The use of major capital expenditure and source of funds

Unit: NT$1,000

Project	Actual or expected source of funds	Actual or expected completion date	Total funds required	Actual or intended use of funds				
				2019	2020	2021	2022	2023
Purchase equipment to expand production line	Bank loans and working capital	2019 ~ 2023	$1,500,000	$500,000	$300,000	$300,000	$200,000	$200,000

Note: Explanation shall be provided if there will be significant changes in the carrying cost or debt and capital addition policies related to the expected future raise in debt and capital addition

(2) Expected benefits

1. Expected increase in production and sales volume, production and sales value and gross profit:

Year	Item	Output q'ty (1,000 PCS)	Sales volume (1,000 PCS)	Sales revenue (NT$1,000)	Gross revenue (NT$1,000)
2019	SMD Crystal	78,900	78,900	300,000	75,000
2020	SMD Crystal	97,500	97,500	370,000	92,500
2021	SMD Crystal	63,840	63,840	229,800	57,500
2022	SMD Crystal	48,000	48,000	163,200	40,800
2023	SMD Crystal	48,000	48,000	153,600	38,400

5. The main reasons for the profit or loss resulted from joint venture policies in the most recent year, the improvement plan thereof and the investment plan for the coming year:

Explanations / Projects	Amount	Policies	Main reasons for the profit or loss	Improvement plan	Other future investment plan
TAIWAN CRYSTAL TECHNOLOGY INTERNATIONAL LIMITED	NT 295,809,000	Investment Ning-Bo Plant, OBU	This year's profit mainly resulted from plant expansion, increase in production capacity, and active improvement in yield and quality.	Continue recruiting talents, and request for improvement in yield and quality standards	Other related expansion investment plans are in the assessment process
TAIWAN CRYSTAL TECHNOLOGY (HK) LIMITED	NT 612,000	Investment China Plant	This year's profit mainly resulted from plant expansion, increase in production capacity, and active improvement in yield and quality.	Continue recruiting talents, and request for improvement in yield and quality standards	Other related expansion investment plans are in the assessment process

6. Risks analysis and assessment

(1) Risk management policies and framework

The Company's risk management policy is to establish an integrated risk management system with risk management mechanisms for risk identification, measurement, supervision and control in order to promote achievement operatiional goals and shareholder value by appropriate risk management-oriented business model. The Company has, in addition to the original system, regulations and processing, actively involved in the development of advanced and sensitive risk supervising, assessing and controlling procedures and guidelines for the marketing market, production and operation, human resources planning, new product development progress, and financial and accounting control faced by each business operation in order to establish a cost-effective business operation model that balances safety and efficiency, such as strengthening the establishment of information systems, strengthening early warning monitoring capabilities, and promoting ISO22301 and ISO31000 risk management systems related to risk identification and control. The Company has also completed the establishment and certification of ISO27001 Information Security Management System and ISO 28000 Supply Chain Security Management System.

The Company has established key operational risks management measures for various identifiable risks and has been authorized by the Board of Directors to provide relevant departments with relevant risk identification and assessment based on the Company's key operational risks framework and guidelines and to formulate countermeasures and monitoring plans based on the results thereof, so that the identified potential key operational risks can be minimize through daily monitoring, managing and controlling. The Company has established a risk response team with CEO serving as the convener to coordinate and direct the promotion and operation of risk management plan, and various responsible units thereunder to promote various business risk management

Management Center:	Human resource allocation and contingency measures, financial risk assessment, implementation of various insurance operations, maintenance of system framework operation, establishment and maintenance of environmental safety and health, review and establishment of statutory regulations, media public relations and external contacts.
R & D Center:	Contingency measures for R&D operation environment, risk assessment for new product development, R&D progress control.
Marketing Center:	Collecting and establishing market information, coordinating between production and sales, establishing and processing customer relationships, following up and collecting account receivables.
Production Center:	Contingency measures for production operations, production contingency plan specifications, manpower support and allocation plans, and on-site environmental safety contingency plans.
Micro-electromechanical Center:	Contingency measures for production operations, production contingency plan specification, manpower supports and allocation plan, and on-site environmental safety contingency plan.
Supply Chain Center:	Alternative plans for the establishment of supplier contingency plans, procurement contingencies, import and export transportation, customs declaration, customs clearance, insurance-related operations and equipment acquisition.
Quality Assurance Center:	Document and data storage plan, damages and quality control for disasters and defective goods, and contingency measures for product testing operations.
Audit Office:	Regularly checks the implementation of risk control of each center / unit according to the Company's internal control and audit plans and generate audit reports based on the actual audit results.
Occupational Safety and Health Management Office:	Supervising review, risk assessment and other environment, health and safety (EHS) management to ensure the normal operation of safety and health system.

(2) Impact of recent year interest rates changes, exchange rate fluctuation and inflation on the profit or loss of the Company and the future countermeasures therefor.

1. Impact of recent year interest rates on the profit or loss of the Company and the future countermeasures therefor:

   (1) Impact of interest rates on the profit or loss of the Company and the subsidiary
   In 20178, the net interest of the Company and its subsidiary was NT$20,645,000 and the

Company's interest expense will be increased by approximately NT$4,130,000 for every 0.25% increment in the market interest rate.

(2) Future countermeasures

Since the Company and its subsidiary have sound financial structure together with the gradual expansion of the Company's business scale, it has close long-term cooperation with the banks. Through the bank's assistance, it has been able to obtain better interest rates and terms to improve its financial structure, enrich medium and long-term working capital and reduce the risks of interest rate changes. Its financing costs have been 1.5% lower than the average market interest rate.

2. Impact of recent year exchange rate fluctuation on the profit or loss of the Company and the future countermeasures therefor:

(1) Impact of exchange rate fluctuation on the profit or loss of the Company and subsidiary

Due to nature of the industry, the Company's foreign procurement of raw materials account for about 80% and export income accounted for more than 90%, therefore, exchange rate control is relatively important. In 2018, the sharp fluctuations in exchange rates has made hedging operations relatively difficult. However, the Company and subsidiary have established appropriate risk management mechanisms to avoid risks. In the future, the Company's gross margin will be affected by approximately 0.5%, for every 1% market exchange rate appreciation.

(2) Future countermeasures

As for the response to exchange rate changes, the Company and subsidiary have established a risk assessment team to adopt dynamic natural hedging. The remaining mainly undertakes hedging instruments such as spot exchange transactions and/or foreign exchange forward contract to reduce risks by maintaining a high hedging ratio.

3. Impact of the recent year inflation on the profit or loss of the Company and the future countermeasures therefor:

(1) Impact of inflation on the profit or loss of the Company and subsidiary

The Company's expenses will be increased by approximately NT$12,943,000 for every 1% increment in inflation.

(2) Future countermeasures

In recent years, there has been little impact on the costs and prices due to stable inflation data. In the future, the Company will remain on the lookout for the inflation trend for the purpose of costs control and price quotation and make appropriate adjustments.

(3) The main reasons for engaging in high risk and highly leveraged investments, capital lending to others, endorsement, the policies and profit (or loss) of derivative commodity transactions and the future countermeasures therefor:

1. The Company and subsidiary did not engage in any high risk and highly leveraged investments in 2018.

2. The Company and subsidiary engaged in capital lending to others and endorsement according to the regulatory statue and performed regular auditing and filing pursuant to the relevant regulations of the competent authority and the Company. The details are as follows:

(1) Capital lending to others: none.

(2) Endorsement: As of the end of the annual report, the company's subsidiary endorsement is guaranteed to be a 100% owned subsidiary.

(3) The policies and profit (or loss) of derivative commodity transactions and the future countermeasures therefor:

A. The Company and subsidiary engaged in derivative financial commodity transactions to avoid risks in foreign currency claims, debts and commitments arising from changes in exchange rate and/or interest rate. The hedging strategy is for the purpose of avoiding most of the market price risks.

B. In 2018, the Company and its subsidiary recognized foreign exchange losses of NT$18,693,000 due to large fluctuations in exchange rates.

C. The Company and subsidiary use derivative financial commodity that are highly correlated with changes in the fair value of the hedged items as hedging instruments to avoid the risks arising from the Company's business operations and perform periodic assessments to control the risks thereof.

(4) Future R & D plan and estimated investment in R & D

1. The Company has systematically introduced the R & D plan into the PLM (Product Lifecycle Management) system and grasped products' R & D progress through the PLM system. In 2018, the Company has established different R & D projects based on product categories and set goals, progress and timelines in line with market demand. In 2019, R & D expenses are expected to be approximately NT$45 million.

No.	name of the program	current progress	reinvestment in R & D	estimated time of mass production	Primary factor of success
1	Slim Type Light Sensor	50%	NT$ 20M	to be completed by Sep. 2019	Master key technology
2	1210 TSX	40%	NT$ 30M	to be completed by Sep. 2019	Master key technology
3	1008 XTAL	60%	NT$ 60M	to be completed by Sep. 2019	Master key technology
4	2016 XTAL >96MHz	80%	NT$ 10M	to be completed by Jun. 2019	Master key technology
5	9775 OC XO	85%	NT$ 15M	to be completed by Jun. 2019	Master key technology

17. The new R & D projects in 2019 that has been launched are expected to be introduced into mass production phase in one to two years. The R & D expenditure for the entire year is estimated to be NT$170million.

No.	name of the program	current progress	reinvestment in R & D	estimated time of mass production	Primary factor of success
1	u-bolometer Innovation optimization plan	15%	NT$ 70M	to be completed by Dec. 2020	Master key technology
2	MEMS Technology development	20%	NT$ 20M	to be completed by Jun. 2020	Master key technology
3	3 inch IM wafer development	20%	NT$ 20M	to be completed by Sep. 2020	Master key technology
4	UHF basic wave development for 5G application	30%	NT$ 20M	to be completed by Dec. 2019	Master key technology
5	QCM Sensor Sensing thin film technology	20%	NT$ 10M	to be completed by Dec. 2019	Master key technology
6	1409 OCXO	20%	NT$ 30M	to be completed by Mar. 2020	Master key technology

3. Factors to R & D's success: The Company's competitive edge lies in continuous innovation, and the innovation is reflected on futuristic products. Therefore, in addition to considering the

strength of market demand, the control and effective monitoring over the progress of R & D projects to shorten the R & D timeline and continued strengthening of R&D team by developing efficient training and upgrading the overall professional quality are the key factors that directly affects the success of R & D. In addition, whether the production process capability can increase the production yield to reduce the product cost while the product is advanced is another important factor that determines whether the new product can be successfully introduced into the market.

(5) Impact on the Company’s financial operations from the changes in important domestic and foreign policies and laws during the most recent years and the countermeasures therefor:

1. Since 2017-2019, the basic salary has increased by three degrees, and the annual adjustment has been about 5%. The personnel cost has increased. The company has improved its process and improved its work efficiency to reduce production costs.
2. The Third Reading of the Legislative Yuan passed the "anti-tax avoidance clause" of the income tax amendment. Taiwan officially joined the anti-tax avoidance camp. In response to the increasing international standards for information transparency, the government officially announced the CRS operation method in November 2006 and began to implement information exchange in 2019. In addition, in response to the OECD's anti-rental tax erosion and profit transfer BEPS action plan, each tax haven has legislated to revise the local tax system and incorporate the requirements of economic substantive entry into the law. Relevant regulations have also come into effect in 2019. The relevant units of the company have evaluated and responded to the transfer pricing, country reports, related party transactions, transfer investment structure and tax planning.

(6) Impact on the Company’s financial operations from the changes in technologies and the industry during the most recent years and the countermeasures therefor:

1. With the development of information technology, applications such as automotive frequency components, wireless communication, digital home, mobile video, digital mobile devices, medical and health technology, and Internet of Things (IoT) will have an integral and additive benefit on quartz components, and the global IT industrial application is expected to increase continuously. Overall, the market demand for the quartz component will basically be stable in the coming years. In order to maintain stable profitability and industrial competitiveness, the Company will continue to improve the production processes and technology to maintain its cost advantages.
2. When the fluctuations in the oil and electricity prices and industrial water restrictions become the norm, the industries and businesses will take the first blow and the operating costs will increase substantially. The Company will continue to promote energy-saving and carbon-saving schemes to reduce energy consumption.

(7) Impact on the corporate crisis management from the changes in corporate image during the most recent years and the countermeasures therefor:

1. The company is committed to the humanitarian beliefs of caring for the disadvantaged groups by preparing and listing annually budgets, hoping to give back to the society in multiple ways and fulfill its corporate social responsibility. It has, in addition to annual donations to elementary education and disadvantaged groups, strengthened its investment in education, public welfare and other sponsorships.
2. In order to improve corporate governance and strengthen communication channels with shareholders, in addition to the company's website regularly update the company's latest financial and business information, and organize a corporate briefing every year, investing

considerable efforts to improve the transparency of financial information, and will continue to promote corporate governance related matters in the future.

3. In order to improve customer satisfaction, the company has strengthened its existing "customer relationship management system", which has been recognized by many manufacturers and affirmed by customers, and continues to strengthen the technology level of the company to meet the application needs of customers.
4. In order to implement the Company's supply chain security management and information confidentiality management to enhance trade competitiveness; therefore, the related system security control is a top priority for the Company. It was certified "Authorized Economic Operator" (AEO) by the General Administration of Customs, Ministry of Finance, "ISO28000 Supply Chain Safety Management System", "ISO27001 Information Security Management System", etc.
5. In response to crisis events and external potential risks, if there is any impact on the company's operations and corporate reputation, the crisis management mechanism will be launched immediately, and the emergency response team will conduct risk assessment and take necessary actions.

(8) Expected benefits, possible risks and countermeasures for merger: none.

(9) Expected benefits, possible risks and countermeasures for plant and production line expansions

Production line expansion benefits: The Company continues to expand production capacity of its Ping-Zhen Plant (Taiwan), Ning-Bo Plant and Chong-Qing Plant to expand its economic scale, reduce production costs and upgrade product specification. The production capacity is, according to the production capacity plan, expected to increase to meet market demand and increase market share

Possible risks: Declined demand, low production capacity, increased production costs.

(10) Risks involved in intensive purchase or sales and the countermeasures therefor:

Each major raw material shall have purchase source of more than two suppliers to avoid risks from intensive purchase. The sales targets are mainly the prestigious domestic and foreign manufactures in communications, information and consumer products industries; except for a customer who accounts for more than 10% of the Company's total sales ratio due to its scale of operations, continued expansion and growth requirements, there are no risks from intensive sales.

(11) The impact and risk on the Company from massive transfer or replacement of equity by directors, supervisor or shareholder(s) holding more than 10% of the shares and the countermeasures therefor: No such situation.

(12) The impact and risk on the Company from changes in the right to operate and the countermeasures therefor: No such situation.

(12) Litigation or non-litigation incidents: Major lawsuits, non-litigations or administrative disputes (determined or in-process) involving the Company and the Company's directors, supervisor, CEO, substantive directors, large shareholder(s) and subsidiary holding more than 10% of the Company's shares shall, if outcome of the lawsuit may have a material effect on shareholders' equity or the price of securities, be specified and disclosed of the facts of the dispute, the amount of the subject matter, the commencement date of the lawsuit, the main parties involved in the case, and status of the cases as of the publication

date of the annual report: none.

(14) Other important risks and countermeasures

The information security architecture and operation of the Company are as follows:

1. Information Security Committee:

   The company has set up an information security management committee. The committee sets up an information security chief (and convener), and is appointed by the top manager of the management center. The deputy convener is one of the top directors of the Netcom Information Division. The convening members are concurrently appointed by the directors of the centers/offices sent representatives to hold regular meetings to develop and review information security management objectives and policies. To implement information security management, an Information Security Implementation Team and an Information Security Audit Team are set up under the Information Security Committee to promote the promotion, review and maintenance of information security.

2. Information security policy:

   The Company's information security policy is to "ensure the security of internal information, prevent information from being improperly disclosed, and enable the continuous operation of the information operations of various businesses, and maintain the effectiveness of the internal management system to strengthen customers and manufacturers. Confidence and satisfaction of stakeholders." In order to comply with the international information security management trend and respond to customer information security requirements, the ISO27001 information security management system was introduced and certified in 2011, and passed the ISO27001:2013 version of the certification in 2014. Imported through the ISO27001 Information Security Management System to implement information security policies, protect customer data and company intelligence output, strengthen information security incident response capabilities and achieve information security policy metrics.

3. Security and network risk control:

   The cyber attack method is changing with each passing day. Through malicious emails, phishing, brute force attacks, etc., malware is introduced into the company's internal network for destruction or data theft. Destructive attacks may result in disruption of the company's production operations, and data theft attacks may result in the loss of important operational information or personal data such as employees and customers. The company adopts active information security to strengthen operations, in addition to establishing firewalls, malicious mail filtering, employee Internet protection, operating system updates, anti-virus software deployment, and information security monitoring services, each quarter through the internal risk management system to assess information system related Risk and regularly report risk control and improvement to the risk management team to control and reduce related network risks.

4. Information security objectives and training:

   In order to ensure the achievement of information security objectives, in the case of the usual monitoring of effectiveness assessment, when non-conformities occur, they should immediately report and take corrective measures to report the information security objectives in the Information Security Management Committee. Through information security education training and advocacy activities, and disseminate information security-related publicity in executive meetings, promote employee information security awareness and strengthen their understanding of related responsibilities.

5. The company did not have any major cyber attacks that affected the company's operations in 2018.

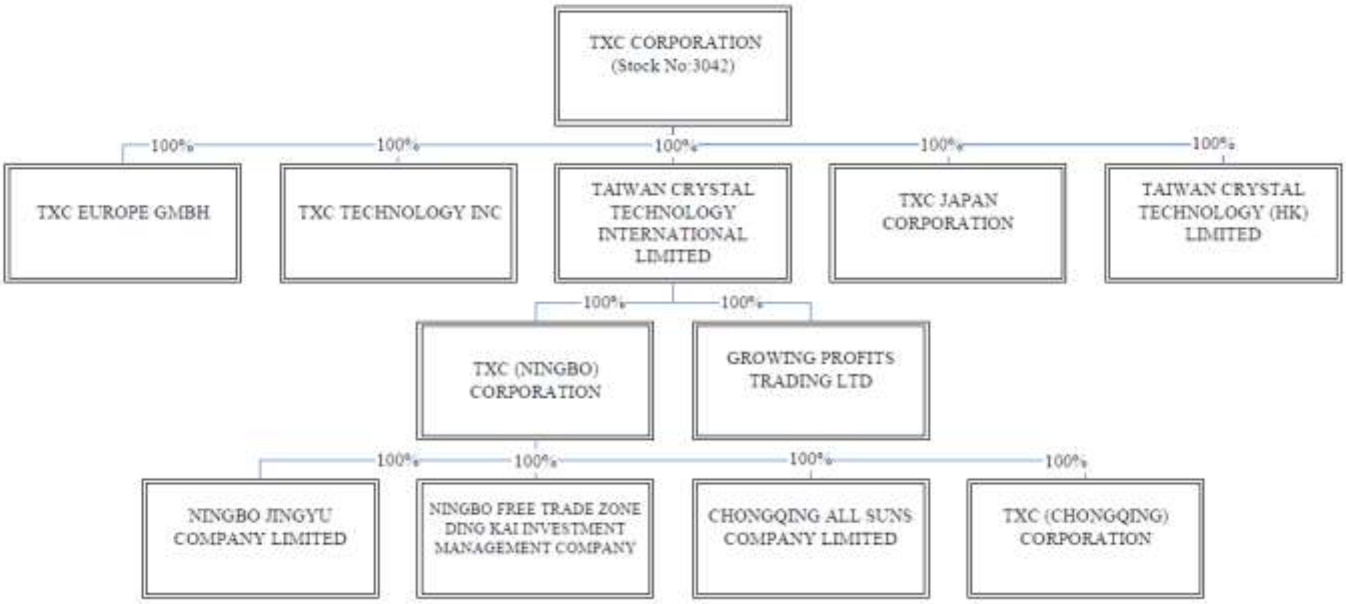
7. Other important matters: none.

IX Subsidiary Information and other Special Notes

1. Subsidiaries

(1). TXC Subsidiaries Chart

December 31, 2018



(2).Basic information of TXC Subsidiaries

December 31, 2018

Name	Date of Incorporated	Address	Capital	Business Activities
Taiwan Crystal Technology International Limited	1998.12.23	WESTERN SAMOA	USD 42,835,294	Investment holding
TXC Technology Inc	2000.12.01	431 Lambert Road,Suite 306 Brea,California 92812, U.S.A.	USD 300,000	Marketing activities
TXC Japan Corporation	2005.09.13	Davinici-shin-yokohama Bldg.,1-3-1, Shin-yokohama, Kohoku-ku,Yokohama,222-0033 Japan	JPY 21,000,000	Marketing activities
TAIWAN CRYSTAL TECHNOLOGY (HK) LIMITED	2010.07.06	Rm.804, Sino Centre, 582-592 Nathan Rd.,Kln.H.K	USD 80,000	Investment holding
TXC Europe GmbH	2018.08.17	Sebastian-Kneipp-Straße 41, 60439 Frankfurt am Main	EUR50,000	Marketing activities
Growing Profits Trading Ltd	1999.03.09	BRITISH VIRGIN ISLANDS	USD 50,000	Trading
TXC (NINGBO) CORPORATION	1999.03.12	No.189, Huangshan Xi Rd., Economic & Technical Development Zone,Ningbo Zhejiang, China	USD 45,835,294	Manufacture and sales of electronics products
TXC (CHONGQING) CORPORATION	2010.10.11	JinFeng Industrial Region, Jiulongpo District, Chongqing City, China	RMB 187,876,609	Manufacture and sales of electronics products
Chongqing All Suns Company Limited	2011.02.14	Jiulongpo District, Chongqing, China Jinfeng Road 108,	RMB 111,000,000	Real estate related
Ningbo Jingyu Company Limited	2011.09.07	No.189, Huangshan Xi Rd., Economic & Technical Development Zone,Ningbo Zhejiang, China	RMB 2,500,000	Trading
Ningbo Free Trade Zon Ding Kai Investment Management Company	2017.05.12	Room 4211, Office Building, 11 Meishan Avenue Business Center, Beilun District, Ningbo City	RMB 35,050,000	Investment

(3).Resters of Directors, Supervisors, and General Manager of TXC's Subsidiaries

December 31, 2018

Number of shares; share (%)

Name	Title	Name or representive	Shares	Share (%)
Taiwan Crystal Technology International Limited	Chairman	TXC Corporation Representive: Hsu, Der-Jun	42,835,294	100%
TXC Technology Inc	Chairman	TXC Corporation Representive: Li,Lo	300,000	100%
TXC Japan Corporation	Chairman	TXC Corporation Representive: Shih Tien,Tun-Hsiung	2,100	100%
	Director	TXC Corporation Representive: Lin, Wan-Shing	2,100	100%
	Supervisor	TXC Corporation Representive: Tsai,Jung-Hsien	2,100	100%
TAIWAN CRYSTAL TECHNOLOGY (HK) LIMITED	Chairman	TXC Corporation Representive: Lin, Wan-Shing	80,000	100%
TXC Europe GmbH	Chairman	TXC Corporation Representive: Kuo,Ya-Han	50,000	100%
Growing Profits Trading Ltd	Chairman	Taiwan Crystal Technology International Limited Representive: Lin, Wan-Shing	50,000	100%
TXC (NINGBO) CORPORATION	Chairman	Taiwan Crystal Technology International Limited Representive: Lin, Wan-Shing	45,835,294	100%
	Director/ General Manager	Taiwan Crystal Technology International Limited Representive: Chen Chueh, Shang-Hsin	45,835,294	100%
	Director	Taiwan Crystal Technology International Limited Representive: Chang, Chien-Tsung	45,835,294	100%
	Supervisor	Taiwan Crystal Technology International Limited Representive: Lin,Chia-Ching	45,835,294	100%
TXC (CHONGQING) CORPORATION	Chairman	TXC (NINGBO) CORPORATION Representive: Chen Chueh, Shang-Hsin	187,876,609	100%
	Director	TXC (NINGBO) CORPORATION Representive: Chang, Chien-Tsung	187,876,609	100%
	Director	TXC (NINGBO) CORPORATION Representive: Lin, Wan-Shing	187,876,609	100%
	Supervisor	TXC (NINGBO) CORPORATION Representive: Lin,Chia-Ching	187,876,609	100%
Chongqing All Suns Company Limited	Chairman	TXC (NINGBO) CORPORATION Representive: Chou,Chien-Fu	111,000,000	100%

	Director	TXC (NINGBO) CORPORATION Representive: Lin, Wan-Shing	111,000,000	100%
	Director	TXC (NINGBO) CORPORATION Representive: Chen Chueh, Shang-Hsin	111,000,000	100%
	Supervisor	TXC (NINGBO) CORPORATION Representive: Lin,Chia-Ching	111,000,000	100%
Ningbo Jingyu Company Limited	Chairman	TXC (NINGBO) CORPORATION Representive: Lin,Chia-Ching	2,500,000	100%
	Supervisor	TXC (NINGBO) CORPORATION Representive: Chen Chueh, Shang-Hsin	2,500,000	100%
Ningbo Free Trade Zon Ding Kai Investment Management Company	Chairman	TXC (NINGBO) CORPORATION Representive: Lin,Chia-Ching	35,050,000	100%
	Supervisor	TXC (NINGBO) CORPORATION Representive: Lin, Hai	35,050,000	100%
	General Manager	TXC (NINGBO) CORPORATION Representive: Chao,Min-Chiang	35,050,000	100%

(4).Operational Highlights of TXC Subsidiaries

December 31, 2018

Unit: NT$ thousands, expect EPS (NT$)

Name	Capital	Total Assets	Total Liabilities	Shareholder Equity	Sales Revenues	Operating Profits(Loss)	Net Income (after tax)	EPS (after tax)
Taiwan Crystal Technology International Limited	1,390,461	5,139,841	-	5,139,841	-	(29)	295,809	6.91
TXC Technology Inc	9,879	17,597	2,025	15,572	78,433	732	732	2.44
TXC Japan Corporation	6,172	56,048	28,242	27,806	151,961	8,411	4,918	2,459.05
TAIWAN CRYSTAL TECHNOLOGY (HK) LIMITED	1,958	97,694	4,641	93,053	-	(4,798)	612	7.64
TXC Europe GmbH	1,746	2,539	409	2,130	2,465	(209)	369	7.38
Growing Profits Trading Ltd	1,691	344,137	168,789	175,348	611,557	11,841	2,661	53.21
TXC (NINGBO) CORPORATION	1,487,211	5,871,291	906,858	4,964,433	3,138,328	124,245	284,108	6.20
TXC (CHONGQING) CORPORATION	1,003,222	1,620,414	364,343	1,256,071	990,457	94,510	94,527	0.50
Chongqing All Suns Company Limited	426,259	496,387	12,717	483,670	-	(12,426)	(8,294)	(0.07)
Ningbo Jingyu Company Limited	7,090	8,992	4,915	4,077	12,481	(2,295)	(2,350)	(0.94)
Ningbo Free Trade Zon Ding Kai Investment Management Company	160,043	163,464	-	163,464	-	-	(1)	-

Note: All related companies were exposed by the number of financial statements audited by CPA in 2018.

2. Private Placement Securities in 2018 and as of the Date of this Annaul Report: None

3. Status of TXC’s Common Shares Acquired, Disposed of, and Held by Subsidiares: None

4. Other Necessary Supplement: None

5. Any Events in 2018 and as of the Date of this Annual Report that Had Significant Impacts on Shareholders’ Right or Security Prices as Stated in Item 3: None

Appendix 1

TXC Corporation and Subsidiaries

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

DECLARATION OF CONSOLIDATION OF FINANCIAL STATEMENTS OF AFFILIATES

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

Very truly yours,

TXC CORPORATION

By

PAUL LIN
Chairman

March 27, 2019

INDEPENDENT AUDITORS' REPORT

The Board of Directors and Stockholders
TXC Corporation

Opinion

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

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

Basis for Opinion

We conducted our audits in accordance with the Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants and auditing standards generally accepted in the Republic of China. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with The Norm of Professional Ethics for Certified Public Accountant of the Republic of China, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the year ended December 31, 2018. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters for the Company's consolidated financial statements for the year ended December 31, 2018 are stated as follows:

Key Audit Matter

Inventory of the Group as of December 31, 2018 was NT$1,816,896 thousands, accounted for 14% of the total assets in the consolidated financial statements. The valuation of inventory is subjected to fluctuation of market demand and technology changing rapidly. It may result in the impairment of inventory. The management determines the inventory book value and the allowance for inventories at lower of cost or net realize value in accordance with IAS 2 "Inventory". Since the value of inventory is subject to management's judgement and significant in the consolidated financial statements, the inventory valuation is identified as a key audit matter.

Refer to Notes 4, 5 and 15 for a summary of the significant accounting policies.

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

1. Tested the net realized value of inventories on the balance sheet date. Sampled testing the price on the latest purchase order and sales order to verify whether the net realized value of inventories is reasonable.

2. Verified the accuracy of the inventory aging report by testing the inventory's aging details. Obtained the list of inferior goods and spoilage to understand the slow moving inventory and evaluate whether the impairment for inventories is appropriate.

3. Performing physical count, in order to assess the appropriateness regarding write-downs of the inventories.

Other Matter

We have audited the accompanying financial statements of TXC Corporation as of December 31, 2018 and 2017 on which we have issued an unmodified opinion.

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

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers, and International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), IFRIC Interpretations (IFRIC), and SIC Interpretations (SIC) endorsed and issued into effect by the Financial Supervisory Commission of the Republic of China, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

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

Those charged with governance, including the audit committee, are responsible for overseeing the Group's financial reporting process.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the auditing standards generally accepted in the Republic of China will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

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

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

2. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

4. Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.

5. Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

6. Obtain sufficient and appropriate audit evidence regarding the financial information of entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision, and performance of the group audit. We remain solely responsible for our audit opinion.

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements for the year ended December 31, 2018 and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partners on the audit resulting in this independent auditors' report are Yi-Hui Lin and Po-Jen Weng.

Deloitte & Touche
Taipei, Taiwan
Republic of China

March 27, 2019

<u>*Notice to Readers*</u>

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

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

TXC CORPORATION AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018		2017	
ASSETS	**Amount**	**%**	**Amount**	**%**
CURRENT ASSETS				
Cash and cash equivalents (Note 6)	$ 1,305,402	10	$ 2,331,366	18
Financial assets at fair value through profit or loss - current (Note 7)	902,869	7	1,007,122	8
Available-for-sale financial assets - current (Note 10)	-	-	39,657	-
Held-to-maturity financial assets - current (Note 11)	-	-	45,680	-
Financial assets at amortized cost - current (Note 9)	189,588	2	-	-
Notes receivable (Note 14)	85,661	1	65,656	1
Trade receivables (Note 14)	2,631,163	21	2,578,552	19
Trade receivables from related parties (Notes 14 and 33)	8,995	-	6,735	-
Other receivables	112,451	1	147,077	1
Other receivables from related parties (Note 33)	796	-	772	-
Current tax assets(Note 28)	5,245	-	-	-
Inventories (Note 15)	1,816,896	15	1,504,066	11
Prepayment for lease (Note 21)	2,323	-	2,371	-
Non-current Assets Held for Sale(Note 16)	-	-	60,816	1
Debt investments with no active market - current (Note 13)	-	-	39,200	-
Other current assets	55,900	-	154,122	1
Total current assets	7,117,289	57	7,983,192	60
NON-CURRENT ASSETS				
Financial assets at fair value through profit or loss - non-current (Note 7)	30,975	-	-	-
Financial assets at fair value through other comprehensive income - non-current (Note 8)	494,242	4	-	-
Available-for-sale financial assets - non-current (Note 10)	-	-	512,967	4
Financial assets measured at cost - non-current (Note 12)	-	-	197,202	1
Investments accounted for using equity method (Note 18)	396,390	3	96,189	1
Property, plant and equipment (Note 19)	4,110,722	33	4,369,810	33
Investment properties (Note 20)	160,088	1	49,957	-
Other intangible assets	21,831	-	8,013	-
Deferred tax assets (Note 28)	36,574	-	48,199	-
Prepayment for equipment	87,174	1	23,139	-
Long-term prepayment for lease (Note 21)	93,868	1	98,184	1
Other noncurrent assets	12,573	-	15,947	-
Total noncurrent assets	5,444,437	43	5,419,607	40
TOTAL	$ 12,561,726	100	$ 13,402,799	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Short-term loans (Note 22)	$ 30,715	-	$ 549	-
Financial liabilities at fair value through profit or loss - current (Note 7)	-	-	1,265	-
Notes payable	-	-	276	-
Trade payables	1,326,822	11	1,226,991	9
Trade payables to related parties (Note 33)	97	-	24	-
Other payables (Note 23)	563,676	4	700,743	6
Other payables to related parties (Note 33)	3,117	-	1,821	-
Current tax liabilities (Note 28)	3,647	-	30,043	-
Current portion of long-term borrowings and bonds payable (Note 22)	139,020	1	286,362	2
Other current liabilities	21,766	-	28,728	-
Total current liabilities	2,088,860	16	2,276,802	17
NON-CURRENT LIABILITIES				
Long-term borrowings (Note 22)	1,482,346	12	1,696,875	13
Deferred income tax liabilities (Note 28)	145,490	1	182,393	1
Net defined benefit liabilities - non-current (Note 24)	68,033	1	62,024	1
Guarantee deposits received	26,157	-	20,114	-
Total non-current liabilities	1,722,026	14	1,961,406	15
Total liabilities	3,810,886	30	4,238,208	32
EQUITY ATTRIBUTABLE TO OWNERS OF THE PARENT (Note 25)				
Share capital				
Ordinary shares	3,097,570	25	3,097,570	23
Capital surplus	1,665,116	13	1,665,224	12
Retained earnings				
Legal reserve	1,349,083	11	1,252,818	9
Special reserve	222,793	2	222,793	2
Unappropriated earnings	2,671,184	21	2,767,383	21
Total retained earnings	4,243,060	34	4,242,994	32
Other equity				
Exchange differences on translating foreign operations	(359,923)	(3)	(264,137)	(2)
Unrealized gain on Financial assets at fair value through other comprehensive income	105,017	1	-	-
Unrealized loss on available-for-sale financial assets	-	-	381,048	3
Total other equity	(254,906)	(2)	116,911	1
Total equity attributable to owners of the company	8,750,840	70	9,122,699	68
NON-CONTROLLING INTERESTS	-	-	41,892	-
Total equity	8,750,840	70	9,164,591	68
TOTAL	$ 12,561,726	100	$ 13,402,799	100

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

TXC CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017	
	Amount	**%**	**Amount**	**%**
SALES (Note 26)	$ 8,156,268	100	$ 8,781,552	100
COST OF GOODS SOLD (Note 27)	(6,328,642)	(77)	(6,595,475)	(75)
GROSS PROFIT	1,827,626	23	2,186,077	25
OPERATING EXPENSES (Note 27)				
Selling and marketing expenses	442,479	6	466,267	6
General and administrative expenses	332,453	4	377,505	4
Research and development expenses	519,906	6	540,249	6
Expected credit loss reversed on trade receivables	(513)	-	-	-
Total operating expenses	1,294,325	16	1,384,021	16
PROFIT FROM OPERATIONS	533,301	7	802,056	9
NON-OPERATING INCOME AND EXPENSES				
Other income (Note 27)	145,629	2	109,835	1
Other gains and losses (Note 27)	64,841	1	173,361	2
Finance costs (Note 27)	(20,400)	(1)	(21,937)	-
Share of profits of associates and joint venture (Note 18)	10,126	-	11,618	-
Total non-operating income and expenses	200,196	2	272,877	3
PROFIT BEFORE INCOME TAX	733,497	9	1,074,933	12
INCOME TAX EXPENSE (Note 28)	(89,248)	(1)	(123,916)	(1)
NET PROFIT FOR THE YEAR	644,249	8	951,017	11
OTHER COMPREHENSIVE INCOME (LOSS)				
Item that will not be reclassified subsequently to profit or loss:				
Remeasurement of defined benefit plans	(10,620)	-	(15,255)	-
Unrealized loss on investments in equity instruments at fair value through other comprehensive income	(140,093)	(2)	-	-
Share of the other comprehensive income of associates accounted for using the equity method	(257)	-	(187)	-
	(150,970)	(2)	(15,442)	-

(Continued)

TXC CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017	
	Amount	**%**	**Amount**	**%**
Item that maybe reclassified subsequently to profit or loss:				
Exchange differences on translating foreign operations	$ (94,043)	(1)	$ (101,905)	(1)
Unrealized loss on available-for-sale financial assets	-	-	(573,997)	(7)
Share of the other comprehensive income of associates accounted for using the equity method	(1,743)	-	(944)	-
	(95,786)	(1)	(676,846)	(8)
Other comprehensive loss for the year, net of income tax	(246,756)	(3)	(692,288)	(8)
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	$ 397,493	5	$ 258,729	3
NET PROFIT ATTRIBUTABLE TO:				
Owners of the Company	$ 644,350	8	$ 962,655	11
Non-controlling interests	(101)	-	(11,638)	-
	$ 644,249	8	$ 951,017	11
TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO:				
Owners of the Company	$ 397,594	5	$ 270,367	3
Non-controlling interests	(101)	-	(11,638)	-
	$ 397,493	5	$ 258,729	3
EARNINGS PER SHARE (Note 29)				
From continuing and discounted operations				
Basic	$2.08		$3.11	
Diluted	$2.06		$3.07	

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

TXC CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	Equity Attributable to Owners of the Parent											
				Retained Earnings			Others					
	Shares (In Thousands)	Share Capital	Capital Surplus	Legal Reserve	Special Reserve	Unappropriated Earnings	Exchange Differences on Translating Foreign Operations	Unrealized Gain (Loss) on Financial Assets at Fair Value Through Other Comprehensive Income	Unrealized Gain (Loss) on Available-for-sale Financial Assets	Total	Non-controlling Interests	Total Equity
BALANCE AT JANUARY 1, 2017	309,757	$ 3,097,570	$ 1,665,224	$ 1,151,202	$ 222,793	$ 2,789,106	$ (161,346)	$ -	$ 955,103	$ 9,719,652	$ 53,530	$ 9,773,182
Appropriation of 2016 earnings												
Legal reserve	-	-	-	101,616	-	(101,616)	-	-	-	-	-	-
Cash dividends distributed by the company	-	-	-	-	-	(867,320)	-	-	-	(867,320)	-	(867,320)
Net profit for the year ended December 31, 2017	-	-	-	-	-	962,655	-	-	-	962,655	(11,638)	951,017
Other comprehensive income (loss) for the year ended December 31, 2017, net of income tax	-	-	-	-	-	(15,442)	(102,791)	-	(574,055)	(692,288)	-	(692,288)
Total comprehensive income (loss) for the year ended December 31, 2017	-	-	-	-	-	947,213	(102,791)	-	(574,055)	270,367	(11,638)	258,729
BALANCE AT DECEMBER 31, 2017	309,757	3,097,570	1,665,224	1,252,818	222,793	2,767,383	(264,137)	-	381,048	9,122,699	41,892	9,164,591
Effect of retrospective application and retrospective restatement	-	-	-	-	-	102,957	-	283,139	(381,048)	5,048	-	5,048
BALANCE AT JANUARY 1, 2018 AS RESTATED	309,757	3,097,570	1,665,224	1,252,818	222,793	2,870,340	(264,137)	283,139	-	9,127,747	41,892	9,169,639
Appropriation of 2017 earnings												
Legal reserve	-	-	-	96,265	-	(96,265)	-	-	-	-	-	-
Cash dividends distributed by the company	-	-	-	-	-	(774,393)	-	-	-	(774,393)	-	(774,393)
Net profit for the for the year ended December 31, 2018	-	-	-	-	-	644,350	-	-	-	644,350	(101)	644,249
Other comprehensive loss for the for the year ended December 31, 2018, net of income tax	-	-	-	-	-	(10,792)	(95,786)	(140,178)	-	(246,756)	-	(246,756)
Total comprehensive income (loss) for the for the year ended December 31, 2018	-	-	-	-	-	633,558	(95,786)	(140,178)	-	397,594	(101)	397,493
Other changes in capital surplus	-	-	-	-	-	-	-	-	-	-	(41,791)	(41,791)
Actual disposal or acquisition of interest in subsidiaries	-	-	-	-	-	-	-	-	-	-	-	-
Disposal of equity instruments at fair value through other comprehensive income	-	-	-	-	-	37,944	-	(37,944)	-	-	-	-
Changes in capital surplus from investment in associates and joint ventures accounted for using the equity method	-	-	(108)	-	-	-	-	-	-	(108)	-	(108)
BALANCE AT DECEMBER 31, 2018	309,757	$ 3,097,570	$ 1,665,116	$ 1,349,083	$ 222,793	$ 2,671,184	$ (359,923)	$ 105,017	$ -	$ 8,750,840	$ -	$ 8,750,840

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

TXC CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES		
Income before income tax	$ 733,497	$ 1,074,933
Adjustments for:		
Depreciation expenses	788,289	808,352
Depreciation expenses of investment properties	25,742	3,973
Amortization expenses	2,121	2,722
Amortization of prepayments for lease	2,354	2,338
Expected credit loss reversed on trade receivables	(513)	-
Impairment loss reversed on accounts receivables	-	(2,437)
Net gain on fair value change of financial assets and liabilities at fair value through profit or loss	(29,802)	(47,211)
Finance costs	20,400	21,937
Interest income	(21,088)	(18,607)
Dividend income	(1,527)	(2,288)
Share of profit of associates and joint ventures	(10,126)	(11,618)
Loss on disposal of property, plant and equipment	(2,016)	(1,754)
Gain on disposal of investment property	(26,629)	(50,061)
Gain on disposal of non-current assets held for sales	(3,152)	-
Gain on disposal of investment	-	(228,666)
Impairment loss recognized on financial assets	-	9,971
Write-down of inventories	6,763	-
Impairment loss reversed on property, plant and equipment	(2,961)	(3,202)
Changes in operating assets and liabilities		
Financial assets mandatorily classified as at fair value through profit or loss	123,407	-
Financial asset held for trading	-	306,430
Notes receivable	(20,006)	(14,414)
Trade receivables	(51,997)	447,529
Trade receivables from related parties	(2,288)	2,914
Other receivables	(5,282)	(1,914)
Other receivables from related parties	(24)	(63)
Inventories	(319,450)	16,241
Other current assets	52,241	(37,444)
Financial liabilities held or trading	-	(13,445)
Financial liabilities mandatorily classified as at fair value through profit or loss	(1,265)	-
Notes payable	(276)	(480)
Trade payables	99,831	(168,666)
Trade payables to related parties	73	(1,578)
Other payables	(136,822)	(174,648)
Other payables to related parties	1,296	849
Other current liabilities	(6,962)	(16,272)
Net defined benefit liabilities	(4,611)	(9,542)
Cash generated from operations	1,209,217	1,893,879

(Continued)

TXC CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018	2017
Interest paid	$ (20,645)	$ (21,902)
Income tax paid	(120,099)	(208,503)
Net cash generated from operating activities	1,068,473	1,663,474
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchase of financial assets at fair value through profit or loss	-	(2,246,052)
Proceeds from sale of financial assets at fair value through profit or loss	-	2,824,366
Proceeds from sale of financial assets at fair value through other comprehensive income	53,886	-
Purchase of financial assets at amortized cost	(191,646)	-
Proceeds from financial assets at amortized cost	89,480	-
Proceeds from sale of debt investments with no active market	-	(39,200)
Proceeds from sale of available-for-sale financial assets	-	214,181
Purchase of sale of financial assets measured at cost	-	(161,587)
Proceeds from sale of financial assets measured at cost	-	87,237
Purchase of investment accounted for using equity method	(294,842)	(26,540)
Payments for property, plant and equipment	(774,529)	(997,727)
Proceeds from Investment property	38,897	56,653
Proceeds from disposal of property, plant and equipment	58,136	7,312
Payments for intangible assets	(15,994)	(1,281)
Decrease in other noncurrent assets	3,374	3,972
Increase in prepayment for equipment	(15,126)	-
Proceeds from disposal of non-current assets held for sale	97,837	-
Interest received	21,701	18,685
Dividends received from associates	3,205	6,067
Other dividends received	1,527	2,288
Net cash used in investing activities	(924,094)	(251,626)
CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from short-term borrowings	30,166	-
Repayments of short-term borrowings	-	(19,731)
Proceeds from long-term borrowings	409,611	500,000
Repayments of long-term borrowings	(776,604)	(693,535)
Proceeds from guarantee deposits received	6,043	-
Refund of guarantee deposits received	-	(21,079)
Dividends paid to owners of the Company	(774,393)	(867,320)
Decrease in non-controlling	(41,791)	-
Net cash used in financing activities	(1,146,968)	(1,101,665)
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	(23,375)	(71,714)

(Continued)

TXC CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018	2017
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	$ (1,025,964)	$ 238,469
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	2,331,366	2,092,897
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	$ 1,305,402	$ 2,331,366

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

1. GENERAL INFORMATION

TXC Corporation (the "Company") was incorporated in the Republic of China ("ROC") on December 28, 1983.

TXC specializes in producing high quality Quartz Unite Crystal, Automotive Crystal, Crystal Oscillator (CXO), and Timing Module (TM) as well as develops a variety of sensors by core technology to satisfy the market demand. Sensors are applied to various applications including mobile communication, wearable device, Internet of Things and vehicle electronics, etc.

On August 26, 2002, TXC's shares began to be traded on the Taiwan Stock Exchange.

The functional currency of the Company is New Taiwan dollars. The consolidated financial statements are presented in New Taiwan dollars.

In order to ensure investors' rights and interests, the Company had applied to Taiwan Corporate Governance Association for corporate governance assessment certification. The Company has acquired (CG6005 general version of corporate governance assessment and authentication) and (CG6008 advanced version of corporate governance assessment and authentication), on March 23, 2011 and June 27, 2013, respectively. The Company will continue to strengthen corporate governance functions in order to work with international standards and to protect public interests.

2. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements were approved by the Company's board of directors on March 22, 2019.

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

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

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

   1) IFRS 9 "Financial Instruments" and related amendments

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

Classification, measurement and impairment of financial assets

On the basis of the facts and circumstances that existed as of January 1, 2018, the Group has performed an assessment of the classification of recognized financial assets and has elected not to restate prior reporting periods.

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

	Measurement Category		**Carrying Amount**		
Financial Assets	**IAS 39**	**IFRS 9**	**IAS 39**	**IFRS 9**	**Remark**
Equity securities	Available-for-sale - non-current	Fair value through other comprehensive income (i.e. FVTOCI) - equity instruments	$ 512,967	$ 512,967	a)
	Financial assets measured at cost	Fair value through other comprehensive income (i.e. FVTOCI) - equity instruments	197,202	202,250	a)
Mutual funds	Available-for-sale - current	FVTPL - current	39,657	39,657	b)
Structured deposits	Designated as at FVTPL	Mandatorily at FVTPL	864,946	864,946	d)
Debt securities	Held-to-maturity financial assets - current	Amortized cost	45,680	45,680	c)
Time deposits with original maturity of more than 3 months	Debt investments with no active markets	Amortized cost	39,200	39,200	c)

	IAS 39 Carrying Amount as of January 1, 2018	**Reclassifications**	**Remea-surements**	**IFRS 9 Carrying Amount as of January 1, 2018**	**Retained Earnings Effect on January 1, 2018**	**Other Equity Effect on January 1, 2018**	**Remark**
FVTOCI	$ -	$ 710,169	$ 5,048	$ 715,217	$ 103,300	$ (98,252)	a)
Equity instruments							
Add: Reclassification from available-for-sale - non-current (IAS 39)	512,967	(512,967)	-	-	-	-	a)
Add: Reclassification from financial assets measured at cost (IAS 39)	197,202	(197,202)	-	-	-	-	a)
	710,169	-	5,048	715,217	103,300	(98,252)	
FVTPL	1,007,122	39,657	-	1,046,779	(343)	343	a)
Add: Reclassification from available-for-sale - current (IAS 39)	39,657	(39,657)	-	-	-	-	b)
	1,046,779	-	-	1,046,779	(343)	343	
Amortized cost	-	84,880	-	84,880	-	-	c)
Add: Reclassification from held-to-maturity - current (IAS 39)	45,680	(45,680)	-	-	-	-	c)
Add: Reclassification from investments in debt security with no active market (IAS 39)	39,200	(39,200)	-	-	-	-	(c)
	84,880	-	-	84,880	-	-	
	$ 1,841,828	$ -	$ 5,048	$ 1,846,876	$ 102,957	$ (97,909)	

a) The Group elected to designate all its investments in equity securities previously classified as available-for-sale under IAS 39 as at FVTOCI under IFRS 9, because these investments are not held for trading. As a result, the related other equity - unrealized loss on available-for-sale financial assets of $381,048 thousand was reclassified to other equity - unrealized loss on financial assets at FVTOCI.

   Investments in unlisted shares previously measured at cost under IAS 39 have been designated as at FVTOCI under IFRS 9 and were remeasured at fair value. Consequently, an increase of $5,048 thousand was recognized in both financial assets at FVTOCI and other equity - unrealized gain on financial assets at FVTOCI on January 1, 2018.

The Group recognized under IAS 39 impairment loss on certain investments in equity securities previously classified as available-for-sale and measured at cost and the loss was accumulated in retained earnings. Since those investments were designated as at FVTOCI under IFRS 9 and no impairment assessment is required, an adjustment was made that resulted in a decrease of $103,300 thousand in other equity - unrealized gain on financial assets at FVTOCI and an increase of $103,300 thousand in retained earnings on January 1, 2018.

b) Mutual funds previously classified as available-for-sale under IAS 39 were classified mandatorily as at FVTPL under IFRS 9, because the contractual cash flows are not solely payments of principal and interest on the principal outstanding and they are not equity instruments. The retrospective adjustment resulted in an increase of $343 thousand in other equity - unrealized gain (loss) on available-for-sale financial assets and a decrease of $343 thousand in retained earnings on January 1, 2018.

c) Debt investments previously classified as held-to-maturity financial assets and debt investments with no active market and measured at amortized cost under IAS 39 were classified as measured at amortized cost with an assessment of expected credit losses under IFRS 9, because on January 1, 2018, the contractual cash flows were solely payments of principal and interest on the principal outstanding and these investments were held within a business model whose objective is to collect contractual cash flows.

d) Structured deposits were designated as at FVTPL under IAS 39 because they were hybrid instruments. They have been classified as mandatorily measured at FVTPL in their entirety under IFRS 9 since they contain host contracts that are assets within the scope of IFRS 9.

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

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

b. Amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC) and Interpretations of IAS (SIC) (collectively, the "IFRSs") endorsed by the FSC for application starting from 2019

New, Amended or Revised Standards and Interpretations (the "New IFRSs")	Effective Date Announced by IASB (Note 1)
Annual Improvements to IFRSs 2015-2017 Cycle	January 1, 2019
Amendments to IFRS 9 "Prepayment Features with Negative Compensation"	January 1, 2019 (Note 2)
IFRS 16 "Leases"	January 1, 2019
Amendments to IAS 19 "Plan Amendment, Curtailment or Settlement"	January 1, 2019 (Note 3)
Amendments to IAS 28 "Long-term Interests in Associates and Joint Ventures"	January 1, 2019
IFRIC 23 "Uncertainty over Income Tax Treatments"	January 1, 2019

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

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

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

1) IFRS 16 “Leases”

IFRS 16 sets out the accounting standards for leases that will supersede IAS 17 and a number of related interpretations.

Definition of a lease

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

The Group as lessee

Upon initial application of IFRS 16, the Group will recognize right-of-use assets, or investment properties if the right-of-use assets meet the definition of investment properties, and lease liabilities for all leases on the consolidated balance sheets except for those whose payments under low-value and short-term leases will be recognized as expenses on a straight-line basis. On the consolidated statements of comprehensive income, the Group will present the depreciation expense charged on right-of-use assets separately from the interest expense accrued on lease liabilities; interest is computed using the effective interest method. On the consolidated statements of cash flows, cash payments for the principal portion of lease liabilities will be classified within financing activities; cash payments for the interest portion will be classified within operating activities. Currently, payments under operating lease contracts, including property interest qualified as investment properties, are recognized as expenses on a straight-line basis. Prepaid lease payments for land use rights of land located in China are recognized as prepayments for leases. The difference between the actual payments and the expenses, as adjusted for lease incentives, is recognized as prepayments for leases. Cash flows for operating leases are classified within operating activities on the consolidated statements of cash flows. Leased assets and finance lease payables are recognized for contracts classified as finance leases.

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

The Group as lessor

The Group will not make any adjustments for leases in which it is a lessor and will account for those leases with the application of IFRS 16 starting from January 1, 2019.

Anticipated impact on assets, liabilities and equity

	Carrying Amount as of December 31, 2018	**Adjustments Arising from Initial Application**	**Adjusted Carrying Amount as of January 1, 2019**
Right-of-use assets - building	$ -	$ 1,397	$ 1,397
Lease liabilities - current	-	1,397	1,397
Lease liabilities - non-current	-	-	-

2) IFRIC 23 “Uncertainty over Income Tax Treatments”

IFRIC 23 clarifies that when there is uncertainty over income tax treatments, the Group should assume that the taxation authority will have full knowledge of all related information when making related examinations. If the Group concludes that it is probable that the taxation authority will accept an uncertain tax treatment, the Group should determine the taxable profit, tax bases, unused tax losses, unused tax credits or tax rates consistently with the tax treatments used or planned to be used in its income tax filings. If it is not probable that the taxation authority will accept an uncertain tax treatment, the Group should make estimates using either the most likely amount or the expected value of the tax treatment, depending on which method the Group expects to better predict the resolution of the uncertainty. The Group has to reassess its judgments and estimates if facts and circumstances change.

3) Amendments to IAS 28 “Long-term Interests in Associates and Joint Ventures”

The amendments clarified that IFRS 9 shall be applied to account for other financial instruments in an associate or joint venture to which the equity method is not applied. These included long-term interests that, in substance, form part of the Group’s net investment in an associate or joint venture.

4) Amendments to IFRS 9 “Prepayment Features with Negative Compensation”

IFRS 9 stipulated that if a contractual term of a financial asset permits the issuer (i.e. the debtor) to prepay a debt instrument or permits the holder (i.e. the creditor) to put a debt instrument back to the issuer before maturity and the prepayment amount substantially represents unpaid amounts of the principal and interest on the principal amount outstanding, which may include reasonable compensation for early termination, the financial asset has contractual cash flows that are solely payments of principal and interest on the principal amount outstanding. The amendments further explain that reasonable compensation may be paid or received by either of the parties, i.e. a party may receive reasonable compensation when it chooses to terminate the contract early.

5) Annual Improvements to IFRSs 2015-2017 Cycle

Several standards, including IFRS 3, IFRS 11, IAS 12 and IAS 23 “Borrowing Costs”, were amended in this annual improvement. IAS 23 was amended to clarify that, if any specific borrowing remains outstanding after the related asset is ready for its intended use or sale, the related borrowing costs shall be included in the calculation of the capitalization rate on general borrowings.

6) Amendments to IAS 19 “Plan Amendment, Curtailment or Settlement”

The amendments stipulate that, if a plan amendment, curtailment or settlement occurs, the current service cost and the net interest for the remainder of the annual reporting period are determined using the actuarial assumptions used for the remeasurement of the net defined benefit liabilities (assets). In addition, the amendments clarify the effect of a plan amendment, curtailment or settlement on the requirements regarding the asset ceiling. The Group will apply the above amendments prospectively.

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

c. New IFRSs in issue but not yet endorsed and issued into effect by the FSC

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

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

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

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

1) Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets between an Investor and its Associate or Joint Venture"

The amendments stipulate that, when the Group sells or contributes assets that constitute a business (as defined in IFRS 3) to an associate or joint venture, the gain or loss resulting from the transaction is recognized in full. Also, when the Group loses control of a subsidiary that contains a business but retains significant influence or joint control, the gain or loss resulting from the transaction is recognized in full.

Conversely, when the Group sells or contributes assets that do not constitute a business to an associate or joint venture, the gain or loss resulting from the transaction is recognized only to the extent of the Group's interest as an unrelated investor in the associate or joint venture, i.e. the Group's share of the gain or loss is eliminated. Also, when the Group loses control of a subsidiary that does not contain a business but retains significant influence or joint control over an associate or a joint venture, the gain or loss resulting from the transaction is recognized only to the extent of the Group's interest as an unrelated investor in the associate or joint venture, i.e. the Group's share of the gain or loss is eliminated.

2) Amendments to IFRS 3 "Definition of a Business"

The amendments clarify that, to be considered a business, an acquired set of activities and assets must include, at a minimum, an input and a substantive process applied to the input that together significantly contribute to the ability to create outputs. The amendments narrow the definitions of outputs by focusing on goods and services provided to customers, and the reference to an ability to reduce costs is removed. Moreover, the amendments remove the assessment of whether market participants are capable of replacing any missing inputs or processes and continuing to produce outputs. In addition, the amendments introduce an optional concentration test that permits a simplified assessment of whether an acquired set of activities and assets is not a business.

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

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a. Statement of compliance

These interim consolidated financial statements have been prepared in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and IAS 34 "Interim Financial Reporting" as endorsed and issued into effect by the FSC. Disclosure information included in these interim consolidated financial statements is less than the disclosure information required in a complete set of annual financial statements.

b. Basis of preparation

The consolidated financial statements have been prepared on the historical cost basis except for financial instruments which are measured at fair value.

The fair value measurements, which are grouped into Levels 1 to 3 based on the degree to which the fair value measurement inputs are observable and based on the significance of the inputs to the fair value measurement in its entirety, are described as follows:

1) Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;

2) Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and

3) Level 3 inputs are unobservable inputs for the asset or liability.

c. Classification of current and noncurrent assets and liabilities

Current assets include:

1) Assets held primarily for the purpose of trading;

2) Assets expected to be realized within 12 months after the reporting period; and

3) Cash and cash equivalents unless the asset is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period.

Current liabilities include:

1) Liabilities held primarily for the purpose of trading;

2) Liabilities due to be settled within 12 months after the reporting period, even if an agreement to refinance, or to reschedule payments, on a long-term basis is completed after the reporting period and before the consolidated financial statements are authorized for issue; and

3) Liabilities for which the Group does not have an unconditional right to defer settlement for at least 12 months after the reporting period. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

Assets and liabilities that are not classified as current are classified as noncurrent.

d. Basis of consolidation

Principles for preparing consolidated financial statements

The consolidated financial statements incorporate the financial statements of the Company and the entities controlled by the Company (i.e. its subsidiaries).

Income and expenses of subsidiaries acquired or disposed of during the period are included in the consolidated statement of profit or loss and other comprehensive income from the effective date of acquisition up to the effective date of disposal, as appropriate.

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

All intra-group transactions, balances, income and expenses are eliminated in full upon consolidation. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Changes in the Group's ownership interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the Group's interests and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries. 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 and attributed to the owners of the Company.

e. Foreign currencies

In preparing the financial statements of each individual group entity, transactions in currencies other than the entity's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions.

At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Exchange differences on monetary items arising from settlement or translation are recognized in profit or loss.

Non-monetary items measured at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Exchange differences arising from the retranslation of non-monetary items are included in profit or loss for the period except for exchange differences arising from the retranslation of non-monetary items in respect of which gains and losses are recognized directly in other comprehensive income, in which cases, the exchange differences are also recognized directly in other comprehensive income.

Non-monetary items that are measured at historical cost in a foreign currency are not retranslated.

For the purpose of presenting consolidated financial statements, the functional currencies of the Company and the Group entities (including subsidiaries, associates, joint ventures and branches in other countries that use currency different from the currency of the Company) are translated into the presentation currency - the New Taiwan dollar as follows: Assets and liabilities are translated at the exchange rates prevailing at the end of the reporting period; income and expense items are translated at the average exchange rates for the period. The resulting currency translation differences are recognized in other comprehensive income (attributed to the owners of the Company and non-controlling interests as appropriate).

On the disposal of a foreign operation (i.e. a disposal of the Company's entire interest in a foreign operation, or a disposal involving the loss of control over a subsidiary that includes a foreign operation, or a partial disposal of an interest in a joint arrangement or an associate that includes a foreign operation of which the retained interest becomes a financial asset), all of the exchange differences accumulated in equity in respect of that operation are reclassified to profit or loss.

In relation to a partial disposal of a subsidiary that does not result in the Company losing control over the subsidiary, the proportionate share of accumulated exchange differences is re-attributed to the non-controlling interests of the subsidiary but is not recognized in profit or loss. For all other partial disposals, the proportionate share of the accumulated exchange differences recognized in other comprehensive income is reclassified to profit or loss.

f. Inventories

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

For a contract where an owner of land provides land for construction of buildings by a property developer in exchange for a certain percentage of the buildings, no exchange gain or loss is recognized if the buildings acquired are classified as properties held for sale. Revenue is recognized when the properties held for sale are sold to third parties.

g. Investments in associates

An associate is an entity over which the Group has significant influence and which is neither a subsidiary nor an interest in a joint venture. A joint venture is a joint arrangement whereby the Group and other parties that have joint control of the arrangement have rights to the net assets of the arrangement.

The Group uses the equity method to account for its investments in associates and joint ventures.

Under the equity method, investments in an associate and a joint venture are initially recognized at cost and adjusted thereafter to recognize the Group's share of the profit or loss and other comprehensive income of the associate and joint venture. The Group also recognizes the changes in the Group's share of the equity of associates and joint ventures attributable to the Group.

Any excess of the cost of acquisition over the Group's share of the net fair value of the identifiable assets and liabilities of an associate or a joint venture at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment and is not amortized. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of acquisition, after reassessment, is recognized immediately in profit or loss.

When the Company subscribes for additional new shares of an associate and joint venture at a percentage different from its existing ownership percentage, the resulting carrying amount of the investment differs from the amount of the Group's proportionate interest in the associate and joint venture. The Group records such a difference as an adjustment to investments with the corresponding amount charged or credited to capital surplus - changes in capital surplus from investments in associates and joint ventures accounted for using the equity method. If the Group's ownership interest is reduced due to its additional subscription of the new shares of the associate and joint venture, the proportionate amount of the gains or losses previously recognized in other comprehensive income in relation to that associate and joint venture is reclassified to profit or loss on the same basis as would be required if the investee had directly disposed of the related assets or liabilities. When the adjustment should be debited to capital surplus, but the capital surplus recognized from investments accounted for using the equity method is insufficient, the shortage is debited to retained earnings.

When the Group's share of losses of an associate and a joint venture equals or exceeds its interest in that associate and joint venture (which includes any carrying amount of the investment accounted for using the equity method and long-term interests that, in substance, form part of the Group's net investment in the associate and joint venture), the Group discontinues recognizing its share of further losses. Additional losses and liabilities are recognized only to the extent that the Group has incurred legal obligations, or constructive obligations, or made payments on behalf of that associate and joint venture.

The entire carrying amount of an investment (including goodwill) is tested for impairment as a single asset by comparing its recoverable amount with its carrying amount. Any impairment loss recognized forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized to the extent that the recoverable amount of the investment subsequently increases.

The Group discontinues the use of the equity method from the date on which its investment ceases to be an associate and a joint venture. Any retained investment is measured at fair value at that date, and the fair value is regarded as the investment's fair value on initial recognition as a financial asset. The difference between the previous carrying amount of the associate and the joint venture attributable to the retained interest and its fair value is included in the determination of the gain or loss on disposal of the associate and the joint venture. The Group accounts for all amounts previously recognized in other comprehensive income in relation to that associate and joint venture on the same basis as would be required if that associate had directly disposed of the related assets or liabilities. If an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate, the Group continues to apply the equity method and does not remeasure the retained interest.

When a group entity transacts with its associate and joint venture, profits and losses resulting from the transactions with the associate and joint venture are recognized in the Group' consolidated financial statements only to the extent that interests in the associate and the joint venture are not related to the Group.

h. Property, plant and equipment

Property, plant and equipment are stated at cost, less subsequent accumulated depreciation and subsequent accumulated impairment loss.

Properties in the course of construction for production, supply or administrative purposes are carried at cost, less any recognized impairment loss. Cost includes professional fees and borrowing costs eligible for capitalization. Such properties are depreciated and classified to the appropriate categories of property, plant and equipment when completed and ready for intended use.

Freehold land is not depreciated.

Depreciation on property, plant and equipment (including assets held under finance leases) is recognized using the straight-line method. Each significant part is depreciated separately. If the lease term is shorter than the useful lives, assets are depreciated over the lease term. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

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

i. Investment properties

Investment properties are properties held to earn rentals and/or for capital appreciation (including property under construction for such purposes). Investment properties also include land held for a currently undetermined future use.

Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are measured at cost less accumulated depreciation and accumulated impairment loss. Depreciation is recognized using the straight-line method.

j. Intangible assets

1) Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are initially measured at cost and subsequently measured at cost less accumulated amortization and accumulated impairment loss. Amortization is recognized on a straight-line basis. The estimated useful life, residual value, and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimates accounted for on a prospective basis. Intangible assets with indefinite useful lives that are acquired separately are measured at cost less accumulated impairment loss.

2) Derecognition of intangible assets

On derecognition of an intangible asset, the difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss.

k. Impairment of tangible and intangible assets other than goodwill

At the end of each reporting period, the Group reviews the carrying amounts of its tangible and intangible assets, excluding goodwill, to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. Corporate assets are allocated to the individual cash-generating units on a reasonable and consistent basis of allocation.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually and whenever there is an indication that the asset may be impaired.

The recoverable amount is the higher of fair value less costs to sell and value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount, with the resulting impairment loss recognized in profit or loss.

When an impairment loss is subsequently reversed, the carrying amount of the asset or cash-generating unit is increased to the revised estimate of its recoverable amount, but only to the extent of the carrying amount that would have been determined had no impairment loss been recognized for the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized in profit or loss.

l. Noncurrent assets held for sale

Noncurrent assets are classified as held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the noncurrent asset is available for immediate sale in its present condition. To meet the criteria for the sale being highly probable, the appropriate level of management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within 1 year from the date of classification.

Noncurrent assets classified as held for sale are measured at the lower of their previous carrying amount and fair value less costs to sell. Recognition of depreciation of those assets would cease.

m. Financial instruments

Financial assets and financial liabilities are recognized when a group entity becomes a party to the contractual provisions of the instruments.

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

1) Financial assets

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

a) Measurement categories

<u>2018</u>

Financial assets are classified into the following categories: Financial assets at FVTPL, financial assets at amortized cost, and investments in equity instruments at FVTOCI.

i. Financial assets at FVTPL

Financial assets are classified as at FVTPL when such a financial asset is mandatorily classified as at FVTPL. Financial assets mandatorily classified as at FVTPL include investments in equity instruments which are not designated as at FVTOCI and debt instruments that do not meet the amortized cost criteria or the FVTOCI criteria.

Financial assets at FVTPL are subsequently measured at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss does not incorporate any dividends or interest earned on such a financial asset. Fair value is determined in the manner described in Note 32.

ii. Financial assets at amortized cost

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

i) The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and

ii) The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Subsequent to initial recognition, financial assets at amortized cost, including cash and cash equivalents, trade receivables at amortized cost and debt investments with no active market, are measured at amortized cost, which equals the gross carrying amount determined by the effective interest method less any impairment loss. Exchange differences are recognized in profit or loss.

Interest income is calculated by applying the effective interest rate to the gross carrying amount of such a financial asset, except for:

i) Purchased or originated credit-impaired financial assets, for which interest income is calculated by applying the credit-adjusted effective interest rate to the amortized cost of such financial assets; and

ii) Financial assets that have subsequently become credit-impaired, for which interest income is calculated by applying the effective interest rate to the amortized cost of such financial assets.

Cash equivalents include time deposits and repurchase agreement with original maturities within 3 months from the date of acquisition, which are highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

iii. Investments in equity instruments at FVTOCI

On initial recognition, the Group may make an irrevocable election to designate investments in equity instruments as at FVTOCI. Designation as at FVTOCI is not permitted if the equity investment is held for trading or if it is contingent consideration recognized by an acquirer in a business combination.

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in other equity. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments; instead, it will be transferred to retained earnings.

Dividends on these investments in equity instruments are recognized in profit or loss when the Group’s right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment.

2017

Financial assets are classified into the following categories: Financial assets at fair value through profit or loss, held-to-maturity investments, available-for-sale financial assets, and loans and receivables.

i. Financial assets at fair value through profit or loss

Financial assets are classified as at fair value through profit or loss when such financial assets are either held for trading or designated as at fair value through profit or loss.

A financial asset may be designated as at fair value through profit or loss upon initial recognition if:

i) Such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or

ii) The financial asset forms part of a group of financial assets or financial liabilities or both, which is managed and has performance evaluated on a fair value basis in accordance with the Company's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or

iii) The contract contains one or more embedded derivatives so that the entire hybrid (combined) contract can be designated as at fair value through profit or loss.

Financial assets at fair value through profit or loss are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any dividends or interest earned on such a financial asset. Fair value is determined in the manner described in Note 32.

ii. Held-to-maturity investments

Corporate bonds, which have credit ratings above a specific credit rating and which the Group has a positive intent and ability to hold to maturity, are classified as held-to-maturity investments.

Subsequent to initial recognition, held-to-maturity investments are measured at amortized cost using the effective interest method less any impairment.

iii. Available-for-sale financial assets

Available-for-sale financial assets are non-derivatives that are either designated as available-for-sale or are not classified as loans and receivables, held-to-maturity investments or financial assets at fair value through profit or loss.

Available-for-sale financial assets are measured at fair value. Changes in the carrying amount of available-for-sale monetary financial assets relating to changes in foreign currency exchange rates, interest income calculated using the effective interest method and dividends on available-for-sale equity investments are recognized in profit or loss. Other changes in the carrying amount of available-for-sale financial assets are recognized in other comprehensive income and will be reclassified to profit or loss when the investment is disposed of or is determined to be impaired.

Dividends on available-for-sale equity instruments are recognized in profit or loss when the Group's right to receive the dividends is established.

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

iv. Loans and receivables

Loans and receivables (including trade receivables and cash and cash equivalent) are measured at amortized cost using the effective interest method, less any impairment, except for short-term receivables when the effect of discounting is immaterial.

Cash equivalent includes time deposits with original maturities within three months from the date of acquisition, highly liquid, readily convertible to a known amount of cash and be subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

b) Impairment of financial assets

2018

The Group recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including trade receivables), investments in debt instruments that are measured at FVTOCI, lease receivables, as well as contract assets.

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

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

The Group recognizes an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for investments in debt instruments that are measured at FVTOCI, for which the loss allowance is recognized in other comprehensive income and does not reduce the carrying amount of such a financial asset.

2017

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

For financial assets carried at amortized cost, such as trade receivables and held-to-maturity financial assets, such assets are assessed for impairment on a collective basis even if they were assessed not to be impaired individually. Objective evidence of impairment for a portfolio of receivables could include the Group’s past experience of collecting payments, an increase in the number of delayed payments in the portfolio past the average credit period, as well as observable changes in national or local economic conditions that correlate with a default on receivables.

For financial assets carried at amortized cost, the amount of the impairment loss recognized is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate.

For financial assets measured at amortized cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment loss is reversed through profit or loss to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortized cost would have been had the impairment not been recognized.

For available-for-sale equity investments, a significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment.

For all other financial assets, objective evidence of impairment could include significant financial difficulty of the issuer or counterparty, breach of contract, such as a default or delinquency in interest or principal payments, it becoming probable that the borrower will enter bankruptcy or financial re-organization, or the disappearance of an active market for that financial asset because of financial difficulties.

When an available-for-sale financial asset is considered to be impaired, cumulative gains or losses previously recognized in other comprehensive income are reclassified to profit or loss in the period.

In respect of available-for-sale equity securities, impairment loss previously recognized in profit or loss are not reversed through profit or loss. Any increase in fair value subsequent to an impairment loss is recognized in other comprehensive income. In respect of available-for-sale debt securities, the impairment loss is subsequently reversed through profit or loss if an increase in the fair value of the investment can be objectively related to an event occurring after the recognition of the impairment loss.

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

The carrying amount of the financial asset is reduced by the impairment loss directly for all financial assets with the exception of trade receivables where the carrying amount is reduced through the use of an allowance account. When a trade receivable and other receivables are considered uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account. Changes in the carrying amount of the allowance account are recognized in profit or loss except for uncollectible trade receivables that are written off against the allowance account.

c) Derecognition of financial assets

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

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

n. Revenue recognition

2018

The Group identifies contracts with customers, allocates the transaction price to the performance obligations and recognizes revenue when performance obligations are satisfied.

- Revenue from the sale of goods

  Revenue from the sale of goods comes from sales of crystals frequency control devices and sensors. Sales of crystals frequency control devices and sensors are recognized as revenue when the goods are delivered to the customer's specific location, the goods are shipped and the goods are picked up by customers because it is the time when the customer has full discretion over the manner of distribution and price to sell the goods, has the primary responsibility for sales to future customers and bears the risks of obsolescence. Trade receivables are recognized concurrently.

2017

Revenue is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances. Allowances for sales returns and liabilities for returns are recognized at the time of sale based on the seller's reliable estimate of future returns and based on past experience and other relevant factors.

1) Revenue from the sale of goods

   Revenue from the sale of goods is recognized when all the following conditions are satisfied:

   a) The Group has transferred to the buyer the significant risks and rewards of ownership of the goods;

   b) The Group retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;

   c) The amount of revenue can be measured reliably;

   d) It is probable that the economic benefits associated with the transaction will flow to the Group; and

   e) The costs incurred or to be incurred in respect of the transaction can be measured reliably.

   The Group does not recognize sales revenue on materials delivered to subcontractors because this delivery does not involve a transfer of risks and rewards of the materials' ownership.

   Revenue from the sale of property in the ordinary course of business is recognized when the construction is completed and the property is transferred to the buyer. Until such revenue is recognized, deposits and installment payments received from sales of properties are carried in the consolidated balance sheets under current liabilities.

2) Dividend and interest income

   Dividend income from investments is recognized when a shareholder's right to receive payment has been established and provided that it is probable that the economic benefits will flow to the Group and that the amount of income can be measured reliably.

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

o. Leasing

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

1) The Group as lessor

Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease. Finance expenses implicit in lease payments for each period are recognized immediately in profit or loss, unless they are directly attributable to qualifying assets; in which case, they are capitalized.

2) The Group as lessee

Operating lease payments are recognized as an expense on a straight-line basis over the lease term.

p. Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

Other than stated above, all other borrowing costs are recognized in profit or loss in the period in which they are incurred.

q. Government grants

Government grants are not recognized until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognized in profit or loss on a systematic basis over the periods in which the Group recognizes as expenses the related costs for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Group should purchase, construct or otherwise acquire noncurrent assets are recognized as a deduction from the carrying amount of the relevant asset and recognized in profit or loss on a systematic and rational basis over the useful lives of the related assets.

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognized in profit or loss in the period in which they become receivable.

r. Employee benefits

1) Short-term employee benefits

Liabilities recognized in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

2) Retirement benefits

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

Defined benefit costs (including service cost, net interest and remeasurement) under defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost (including current service cost and net interest on the net defined benefit liability (asset)) are recognized as employee benefit expenses in the period they occur, when the plan amendment or curtailment occurs. Remeasurement, comprising actuarial gains and losses and the return on plan assets (excluding interest), is recognized in other comprehensive income in the period in which it occurs. Remeasurement recognized in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss.

Net defined benefit liability (asset) represents the actual deficit (surplus) in the Group's defined benefit plan. Any surplus resulting from this calculation is limited to the present value of any refunds from the plans or reductions in future contributions to the plans.

s. Taxation

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

1) Current tax

According to the Income Tax Law, an additional tax at 10% of unappropriated earnings is provided for as income tax in the year the shareholders approve to retain the earnings.

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

2) Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities and the corresponding tax bases used in the computation of taxable profit.

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

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

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the assets to be recovered. A previously unrecognized deferred tax asset is also reviewed at the end of each reporting period and recognized to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

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

3) Current and deferred tax for the year

Current and deferred tax are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognized in other comprehensive income or directly in equity respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

5. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

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

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

Write-down of Inventory

The net realizable value of inventories is the estimated selling price in the ordinary course of business less the estimated costs of completion and disposal. The estimation of net realizable value was based on current market conditions and historical experience with product sales of a similar nature. Changes in market conditions may have a material impact on the estimation of the net realizable value.

6. CASH AND CASH EQUIVALENTS

	December 31	
	2018	**2017**
Cash on hand	$ 1,260	$ 920
Demand deposits	1,301,939	1,823,081
Checking accounts	2,203	2,717
Cash equivalents (investments with original maturities less than three months)		
Time deposits	-	119,648
Repurchase agreements collateralized by bonds	-	385,000
	$ 1,305,402	$ 2,331,366

The market rate intervals of cash in bank repurchase agreements collateralized by bonds at the end of the reporting period were as follows:

	December 31	
	2018	2017
Bank balance	2%-4.3%	0.6%-1.9%
Repurchase agreements collateralized by bonds	-	0.34%-0.36%

7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31	
	2018	2017
Financial assets at FVTPL - current		
Financial assets designated as at FVTPL		
Structured deposit (a)	$ -	$ 864,946
Financial assets held for trading		
Derivative financial instruments (not under hedge accounting)		
Foreign exchange forward contracts (b)	-	3,336
Non-derivative financial assets		
Mutual funds	-	138,840
	$ -	$ 1,007,122
Financial assets mandatorily classified as at FVTPL		
Derivative financial instruments (not under hedge accounting)		
Foreign exchange forward contracts (b)	$ 1,757	$ -
Exchange contracts (b)	76	-
	1,833	-
Non-derivative financial assets		
Mutual funds	559,068	-
Hybrid financial assets		
Structured deposits (a)	341,968	-
	901,036	-
	$ 902,869	$ -
Financial assets at FVTPL - non-current		
Financial assets mandatorily classified as at FVTPL		
Non-derivative financial assets		
Domestic listed shares	$ 30,975	$ -
Financial liabilities at FVTPL - current		
Financial liabilities held for trading		
Derivative financial liabilities (not under hedge accounting)		
Foreign exchange forward contracts (b)	$ -	$ 323
Exchange contracts (b)	-	942
	$ -	$ 1,265

a. The Group entered into short-term structured time deposit contracts with a bank from January 1, to December 31, 2018 and 2017. The structured time deposit contract includes an embedded derivative instrument which is not closely related to the host contract. The contract was designated as at FVTPL under IAS 39. But under IFRS 9, the entire contract is assessed and classified mandatorily as at FVTPL since it contained a host that is an asset within the scope of IFRS 9.

b. At the end of the reporting period, outstanding foreign exchange contracts not under hedge accounting were as follows:

	Currency	Maturity Date	Contract Amount (In Thousands)
December 31, 2018			
Sell	USD/RMB	2019.01.04-2019.02.11	USD5,500/RMB38,107
Knock-out forward	USD/JPY	2019.01.15	USD1,000/JPY114,000
Knock-out forward	USD/NTD	2019.01.10-2019.02.20	USD9,000/NTD279,020
Foreign exchange forward contracts	USD/NTD	2019.01.10-2019.01.24	USD6,000/NTD186,950
Exchange contracts	USD/NTD	2019.01.07-2019.02.20	USD10,000/NTD308,227
December 31, 2017			
Buy	USD/JPY	2018.01.04	USD1,000/JPY112,980
Sell	USD/RMB	2018.01.08-2018.04.04	USD7,000/RMB46,414
Knock-out forward	USD/JPY	2018.02.07-2018.03.12	USD4,500/JPY513,225
Foreign exchange forward contracts	USD/NTD	2018.01.09-2018.02.23	USD4,000/NTD120,450
Foreign exchange forward contracts	USD/JPY	2018.01.31	USD2,000/JPY226,700
Exchange contracts	USD/NTD	2018.01.08-2018.02.23	USD4,000/JPY120,199

The Group entered into foreign exchange forward contracts during the years ended December 31, 2018 and 2017 to manage exposures due to exchange rate fluctuations of foreign currency denominated assets and liabilities. However, those contracts did not meet the criteria of hedge effectiveness and therefore were not accounted for by using hedge accounting.

8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME - 2018

	December 31, 2018
Non-current	
Investments in equity instruments at FVTOCI	$ 494,242

Investments in Equity Instruments at FVTOCI

	December 31, 2018
Non-current	
Domestic investments	
Unlisted shares	
Win Precision Technology Company Limited	$ 14,256
Marson Technology Company Limited.	4,773
UPI Semiconductor Corp.	61,198
	80,227
Foreign investments	
Listed shares	
Guandong Failong Crystal Technology Company Limited	250,698
Unlisted shares	
Zhejiang Bright Semiconductor Technology Company Limited	163,317
	414,015
	$ 494,242

These investments in equity instruments are not held for trading. Instead, they are held for medium to long-term strategic purposes. Accordingly, the management elected to designate these investments in equity instruments as at FVTOCI as they believe that recognizing short-term fluctuations in these investments' fair value in profit or loss would not be consistent with the Group's strategy of holding these investments for long-term purposes. These investments in equity instruments were classified as available-for-sale and measured at cost under IAS 39. Refer to Note 3, Note 10 and Note 12 relating to their reclassification and comparative information for 2017.

In June and December 2018, the Group sold its 1,402 thousand shares in Guandong Failong Crystal Technology Company Limited in order to manage concentration risk. The sold shares had a fair value of $53,886 thousand and the Group transferred a gain of $37,944 thousand from other equity to retained earnings.

9. FINANCIAL ASSETS AT AMORTIZED COST - 2018

	December 31, 2018
Current	
Domestic investments	
Pledge deposits (a)	$ 149,233
Foreign investments	
Debt investments - Westpac Banking Corp. (b)	40,355
	$ 189,588

a. Financial assets at amortized cost pledged as collateral for bank borrowings is set out in Note 34.

b. In May 23, 2018, the Group bought one-year corporate bonds issued by Westpac Banking Corporation at value of RMB9,116 thousand with a coupon rate of 4.35%, an effective interest rate of 3.60% and a maturity date of March 29, 2019. The bonds were classified as held-to-maturity financial assets under IAS 39. Refer to Note 3 and 11 for information relating to their reclassification and comparative information for 2017.

10. AVAILABLE-FOR-SALE FINANCIAL ASSETS - 2017

	December 31, 2017
Current	
Domestic investments	
Mutual funds	$ 39,657
Noncurrent	
Domestic investments	
Listed shares and emerging market shares (a)	$ 21,498
Foreign investments	
Listed shares (b)	491,469
	$ 512,967

The Group disposed of 2,000 thousand shares of Guandong Failong Crystal Technolog Company's stock in the year of 2017, which generated a disposal investment gain of $181,773 thousand.

11. HELD-TO-MATURITY FINANCIAL ASSETS - 2017

	December 31, 2017
Current	
Domestic investments	
Corporate bonds - Chinatrust*	$ 45,680

* In February 2015, the Group bought a unsecured 3-year corporate bonds issued by Cayman Ton Yi with a coupon rate and an effective interest rate of 4.2%, at a par value of RMB10,000 thousand and a maturity date of February 2018. The redemption price was $48,401 thousand.

12. FINANCIAL ASSETS MEASURED AT COST - 2017

	December 31, 2017
Noncurrent	
Domestic unlisted ordinary shares	$ 37,322
Foreign unlisted ordinary shares	159,880
	$ 197,202
Classified according to financial asset measurement categories	
Available-for-sale financial assets	$ 197,202

The Group has assessed the recoverable amount of the financial assets measured at cost and recognized impairment loss of $9,971 thousand during the period of years ended December 31, 2017.

Management believed that the above unlisted equity investments held by the Group, whose fair value cannot be reliably measured, because the range of reasonable fair value estimates was so significant. Therefore they were measured at cost less impairment at the end of reporting period.

13. OTHER FINANCIAL ASSETS - 2017

	December 31, 2017
Current	
Time deposits with original maturity more than 3 months	$ 39,200

The market interest rates of the time deposits with original maturity more than 3 months were 0.77%-0.78% per annum as of December 31, 2017.

14. NOTES RECEIVABLE, TRADE RECEIVABLES AND OTHER RECEIVABLES

	December 31	
	2018	2017
Notes receivable		
Notes receivable - operating	$ 85,667	$ 65,662
Less: Allowance for impairment loss	(6)	(6)
	$ 85,661	$ 65,656
Notes receivable - operating	$ 85,661	$ 65,656
Trade receivables		
At amortized cost		
Gross carrying amount	$ 2,653,706	$ 2,599,422
Less: Allowance for impairment loss	(13,548)	(14,135)
	$ 2,640,158	$ 2,585,287

In 2018

The average credit period of sales of goods was 60 to 120 days. No interest was charged on trade receivables. In order to minimize credit risk, the management of the Company has delegated a team responsible for determining credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover overdue debts. In addition, the Group reviews the recoverable amount of each individual trade debt at the end of the reporting period to ensure that adequate allowance is made for possible irrecoverable amounts. In this regard, the management believes the Group's credit risk was significantly reduced.

The Group applies the simplified approach to providing for expected credit losses prescribed by IFRS 9, which permits the use of lifetime expected loss provision for all trade receivables. The expected credit losses on trade receivables are estimated using a provision matrix by reference to past default experience of the debtor and an analysis of the debtor's current financial position, adjusted for general economic conditions of the industry in which the debtors operate and an assessment of both the current as well as the forecast direction of economic conditions at the reporting date. As the Group's historical credit loss experience does not show significantly different loss patterns for different customer segments, the provision for loss allowance based on past due status is not further distinguished according to the Group's different customer base.

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

The following table details the loss allowance of trade receivables based on the Group's provision matrix.

December 31, 2018

	Not Past Due	31 to 90 Days	91 to 150 Days	151 to 180 Days	Over 180 Days	Total
Gross carrying amount	$ 2,729,830	$ 9,543	$ -	$ -	$ -	$ 2,739,373
Loss allowance (Lifetime ECL)	(13,468)	(86)	-	-	-	(13,554)
Amortized cost	$ 2,716,362	$ 9,457	$ -	$ -	$ -	$ 2,725,819

The expected credit loss rate for each above range of the Group is not more than 1% within and within 90 days of the overdue period; 5% or less within the overdue period from 91 to 180 days; and 5%-100% when the overdue period exceeds 180 days.

	2018
Balance at January 1, 2018 per IAS 39	$ 14,141
Adjustment on initial application of IFRS 9	-
Balance at January 1, 2018 per IFRS 9	14,141
Less: Impairment losses reversed	(513)
Foreign exchange gains and losses	(74)
Balance at December 31, 2018	$ 13,554

December 31, 2017

The Group applied the same credit policy in 2018 and 2017. Historical experience shows that the Group recognized an allowance in accordance with the proportion of trade receivables of each customers, not the aging schedule.

The aging of receivables that were past due was as follows:

	December 31, 2017
31- 60 days	$ 235
61-90 days	-
91-365 days	1,431
	$ 1,666

The above aging schedule was based on the past due days from end of credit term.

The movements of the allowance for doubtful trade receivables were as follows:

	Individually Assessed for Impairment	Collectively Assessed for Impairment	Total
Balance at January 1, 2017	$	$ 16,595	$ 16,595
Add: Impairment losses reversed	-	(2,431)	(2,431)
Foreign exchange translation gains and losses	-	(29)	(29)
Balance at December 31, 2017	$ -	$ 14,135	$ 14,135

The movements of the allowance for doubtful notes receivable were as follows:

	Individually Assessed for Impairment	Collectively Assessed for Impairment	Total
Balance at January 1, 2017	$ -	$ 12	$ 12
Less: Impairment losses reversed	-	(6)	(6)
Balance at December 31, 2017	$ -	$ 6	$ 6

15. INVENTORIES

	December 31	
	2018	2017
Finished goods	$ 417,239	$ 350,089
Work in process	297,709	324,357
Raw materials	351,707	272,154
Supplies and spare parts	88,308	64,404
Merchandise	342,011	284,231
Land to be development	319,922	208,831
	$ 1,816,896	$ 1,504,066

Prepayment for land purchases is the payment made by Chongqing All Sum to acquire the land use right in Chongqing Gao-Shing District to develop and sell real estate. Chongqing All Sum has acquired real estate certificate issued by Chongqing Association of land and real estate resources during 2013.

The cost of inventories recognized as cost of goods sold in the years ended December 31, 2018 and 2017 included $6,328,642 thousand and $6,595,475 thousand, respectively, which include $6,763 thousand, due to write-downs of inventories in the year ended December 31, 2018.

The details of the land to be development site are as follows:

	December 31, 2018		
Area	**Prepaid Land Rights**	**Project Cost**	**Total**
Jinfeng Group C Division	$ 199,285	$ 120,637	$ 319,922

	December 31, 2017		
Area	**Prepaid Land Rights**	**Project Cost**	**Total**
Jinfeng Group C Division	$ 201,837	$ 6,994	$ 208,831

16. NONCURRENT ASSETS CLASSIFIED AS HELD FOR SALE

	December 31	
	2018	**2017**
Equipment held for sale	$ -	$ 60,816

The disposal of the equipment classified as held for sale in 2017 was complete as of March 31, 2018. The proceeds on disposal is $3,152 thousand. Refer to Note 27 for the disposal.

17. SUBSIDIARIES

Subsidiary Included in Consolidated Financial Statements

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

			Percentage of Ownership at December 31		
Investor	**Investee**	**Business Nature**	**2018**	**2017**	**Note**
TXC Corporation	Taiwan Crystal Technology International Limited (TCTI)	Investment holding	100.00	100.00	a
	TXC Technology, Inc.	Marketing activities	100.00	100.00	b
	TXC Japan Corporation	Marketing activities	100.00	100.00	c
	Taiwan Crystal Technology (HK) Limited (TCT-HK)	Investment holding	100.00	100.00	f
	TXC Optec Corporation	Manufacture and sales of electronic products	-	88.90	j
	TXC EUROPE GMBH	Marketing activities	100.00	-	l
Taiwan Crystal Technology International Limited	Growing Profits Trading Ltd. (GPT)	International trading	100.00	100.00	d
	TXC (Ningbo) Corporation (NGB)	Manufacture and sales of electronic products	100.00	100.00	e

(Continued)

Investor	Investee	Business Nature	Percentage of Ownership at December 31		Note
			2018	2017	
TXC (Ningbo) Corporation	TXC (Chongqing) Corporation (Chongqing)	Manufacture and sales of electronic products	100.00	66.40	g
	Chongqing All Sun Company Limited (Chongqing All sun)	Marketing activities	100.00	100.00	h
	Ningbo Jingyu Company Limited (Ningbo Jingyu)	Purchasing and selling electronic component	100.00	100.00	i
	Ningbo Meishan Bonded Port Area Dingkai Investment Management (Ding Kai Investment)	Investment Management	100.00	100.00	k
Taiwan Crystal Technology (HK) Limited	TXC (Chongqing) Corporation (Chongqing)	Manufacture and sales of electronic products	-	33.60	g

(Concluded)

a. Taiwan Crystal Technology International Limited was incorporated on December 23, 1998 in Samoa.

b. TXC Technology, Inc. was incorporated on December 1, 2000 in California, U.S.A.

c. TXC Japan Corporation was incorporated on September 13, 2005 in Yokohama, Japan.

d. Growing Profits Limited was incorporated on March 9, 1999 in the British Virgin Islands.

e. TXC (Ningbo) Corporation was incorporated on March 12, 1999 in Ningbo, China.

f. Taiwan Crystal Technology (HK) Limited was incorporated on July 6, 2010 in Hong Kong Special Administrative Region, China.

g. TXC (Chongqing) Corporation was incorporated on October 11, 2010 in Chongqing, China. In the first quarter of 2018, Taiwan Crystal Technology (HK) Limited transferred its entire equity holding of TXC (Chongqing) Corporation to TXC (Ningbo) Corporation with a consideration of RMB86,600 thousand.

h. Chongqing All Sun Corporation was incorporated on February 14, 2011 in Chongqing, China.

i. Ningbo Jingyu Company Limited was incorporated on September 7, 2011 in Ningbo, China.

j. TXC Optec Corporation was established on April 22, 2015 in Taiwan. On August 24, 2017, it was resolved by the resolution of the shareholders meeting. It was clear that the liquidation process had not been completed as of December 31, 2017, completed the liquidation on April 9, 2018.

k. Ningbo Meishan Bonded Port Area Dingkai Investment Management Co., Ltd. was incorporated on May 12, 2017 in Beilun District, Ningbo, China.

l. TXC EUROPE GMBH was founded in Germany on August 17, 2018.

18. INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD

	December 31	
	2018	2017
Investments in associates	$ 337,385	$ 96,189

a. Investment in associates

	December 31	
	2018	2017
Associates that are not individually material	$ 337,385	$ 96,189

	For the Year Ended December 31	
	2018	2017
The Group's share of:		
Profit from continuing operations	$ 12,207	$ 11,618
Other comprehensive income	(2,000)	(1,131)
Total comprehensive income for the year	$ 10,207	$ 10,487

Refer to the Table "name, locations, and related information of investees on which the Company exercises significant influence" for the nature of activities, principal place of business and country of incorporation of the associates.

The TXC has power to govern the financial and operating policies of Tai-Shing due to part of directors of TXC are the same as Tai-Shing. As a result, Tai-Shing is accounted for using the equity method.

In 2018, the Group subscribed for 4,242 thousand shares of the ordinary shares of Tai-Shing for cash of $196,202 thousands; after the subscription, the Group's percentage of ownership in Tai-Shing was 26.19%. The Group recognized goodwill of $104,996 thousand as cost of Investments in associates.

In May 2018, the Group subscribed for 2,350 thousand shares of the ordinary shares of Godsmith Sensor Inc. for cash of $38,100 thousands; after the subscription, the Group's percentage of ownership in Godsmith Sensor Inc. was 34.96% and the Group was able to exercise significant influence over Godsmith Sensor Inc. The Group recognized goodwill of $20,832 thousand as cost of Investments in associates.

b. Investment joint venture

	December 31	
	2018	2017
Joint ventures that are not individually material	$ 59,005	$ -

Refer to Table 6"name, locations, and related information of investees on which the Company exercises significant influence" and Table 7 "information on investment in Mainland China" for the nature of activities, principal place of business and country of incorporation of the joint venture.

The Group and LFC SEMICONDUCTOR LIMITED founded a joint venture named Ningbo Longying Semiconductor Co., LTD. for $60,540 thousand. After the subscription, the Group's percentage of ownership in Ningbo Longying Semiconductor Co., LTD was 40% and able to exercise significant influence over Ningbo Longying Semiconductor Co., LTD.

	For the Year Ended December 31	
	2018	2017
The Group's share of:		
Profit from continuing operations	$ (2,081)	$ -
Other comprehensive income	-	-
Total comprehensive income for the year	$ (2,081)	$ -

19. PROPERTY, PLANT AND EQUIPMENT

	Freehold Land	Land Improvements	Buildings	Machinery and Equipment	Transportation Equipment	Office Equipment	Property in Construction	Total
Cost								
Balance at January 1, 2017	$ 598,145	$ 920	$ 2,421,579	$ 6,704,359	$ 19,417	$ 227,457	$ 1,044	$ 9,972,921
Additions	-	-	111,761	806,350	35	43,643	35,938	997,727
Disposals	-	-	(9,904)	(558,250)	(1,440)	(6,597)	-	(576,191)
Effect of foreign currency exchange differences	-	-	(15,247)	(57,597)	(314)	(2,370)	499	(75,029)
Transfer from investment property	-	-	3,573	-	-	-	-	3,573
Transfer to investment property	-	-	(4,160)	-	-	-	-	(4,160)
Transfer to assets classified as held for sale	-	-		(53,276)	-	-	-	(53,276)
Prepayments, buildings, land operating purpose	-	-	-	84,457	-	-	-	84,457
Reclassifications	-	-	(120)	85	-	35	-	-
Balance at December 31, 2017	$ 598,145	$ 920	$ 2,507,482	$ 6,926,128	$ 17,698	$ 262,168	$ 37,481	$ 10,350,022
Accumulated depreciation and impairment								
Balance at January 1, 2017	$ -	$ 153	$ 876,558	$ 4,629,247	$ 11,810	$ 177,248	$ -	$ 5,695,016
Disposals	-	-	(1,747)	(465,860)	(384)	(6,162)	-	(474,153)
Depreciation expense	-	132	135,636	649,237	2,620	20,727	-	808,352
Transfer from investment property	-	-	1,236	-	-	-	-	1,236
Transfer to investment property	-	-	(1,917)	-	-	-	-	(1,917)
Reclassifications	-	-	-	22	-	(22)	-	-
Impairment losses reversed	-	-	-	(3,202)	-	-	-	(3,202)
Effect of foreign currency exchange differences	-	-	(4,711)	(37,946)	(177)	(2,286)	-	(45,120)
Balance at December 31, 2017	$ -	$ 285	$ 1,005,055	$ 4,771,498	$ 13,869	$ 189,505	$ -	$ 5,980,212
Carrying amounts at December 31, 2017	$ 598,145	$ 635	$ 1,502,427	$ 2,154,630	$ 3,829	$ 72,663	$ 37,481	$ 4,369,810
Cost								
Balance at January 1, 2018	$ 598,145	$ 920	$ 2,507,482	$ 6,926,128	$ 17,698	$ 262,168	$ 37,481	$ 10,350,022
Additions	-	395	16,907	715,005	2,794	39,428	-	774,529
Disposals	-	-	(14,981)	(376,733)	(3,063)	(13,587)	-	(408,364)
Effect of foreign currency exchange differences	-	-	(20,039)	(86,007)	(330)	(2,842)	(275)	(109,493)
Transfer to investment property	-	-	(277,957)	-	-	-		(277,957)
Reclassifications	-	-	-	55,450	-	(18,244)	(37,206)	-
Balance at December 31, 2018	$ 598,145	$ 1,315	$ 2,211,412	$ 7,233,843	$ 17,099	$ 266,923	$ -	$ 10,328,737
Accumulated depreciation and impairment								
Balance at January 1, 2018	$ -	$ 285	$ 1,005,055	$ 4,771,498	$ 13,869	$ 189,505	$ -	$ 5,980,212
Disposals	-	-	(6,426)	(329,522)	(3,063)	(13,233)	-	(352,244)
Depreciation expense	-	178	110,838	650,375	2,471	24,427	-	788,289
Transfer to investment property	-	-	(128,873)	-	-	-	-	(128,873)
Impairment losses reversed	-	-	-	(2,961)	-	-	-	(2,961)
Effect of foreign currency exchange differences	-	-	(7,218)	(57,361)	(264)	(1,565)	-	(66,408)
Balance at December 31, 2018	$ -	$ 463	$ 973,376	$ 5,032,029	$ 13,013	$ 199,134	$ -	$ 6,218,015
Carrying amounts at December 31, 2018	$ 598,145	$ 852	$ 1,238,036	$ 2,201,814	$ 4,086	$ 67,789	$ -	$ 4,110,722

The above items of property, plant and equipment were depreciated on a straight-line basis over the estimated useful lives as follows:

Land improvements	6 years
Buildings	
Industrial building	35-61 years
Electrical power systems	4-10 years
Engineering systems	1-17 years
Equipment	
Major production equipment	1-5 years
Temperature control systems	4-7 years
Transportation equipment	4-7 years
Transportation equipment	3-8 years
Office equipment	2-6 years

Property, plant and equipment pledged as collateral for bank borrowings were set out on Note 34.

20. INVESTMENT PROPERTIES

	December 31 2018	December 31 2017
Completed investment property	$ 160,088	$ 49,957

	Completed Investment Property
Cost	
Balance at January 1, 2017	$ 103,492
Disposals	(10,709)
Transferred from property, plant and equipment	4,160
Transfer to real estate, plant and equipment	(3,573)
Effect of foreign currency exchange differences	(1,760)
Balance at December 31, 2017	$ 91,610
Accumulated depreciation and impairment	
Balance at January 1, 2017	$ (41,769)
Disposals	4,117
Transferred from property, plant and equipment	(1,917)
Depreciation expense	(3,973)
Transfer to real estate, plant and equipment	1,236
Effect of foreign currency exchange differences	653
	$ (41,653)
Balance at December 31, 2017	$ 49,957
Cost	
Balance at January 1, 2018	$ 91,610
Disposals	(26,894)
Transferred from property, plant and equipment	277,957
Effect of foreign currency exchange differences	(1,720)
Balance at December 31, 2018	$ 340,953
Accumulated depreciation and impairment	
Balance at January 1, 2018	$ (41,653)
Disposals	14,626
Transferred from property, plant and equipment	(128,873)
Depreciation expense	(25,742)
Effect of foreign currency exchange differences	777
	$ (180,865)
Balance at December 31, 2018	$ 160,088

The investment properties held by the Group were depreciated using the straight-line method over their useful lives of 5-61 years.

The fair value of the Group's investment properties as of December 31, 2018 and 2017 was $530,915 thousand and $408,123 thousand, respectively. The fair value valuation had not been performed by independent qualified professional valuers; however, management of the Group used the valuation model that market participants would use in determining the fair value the valuation was arrived at by reference to market evidence of transaction prices for similar properties.

All of the Group's investment property was held under freehold interests. The investment properties pledged as collateral for bank borrowing were set out in Note 34.

21. PREPAYMENTS FOR LEASE

	December 31	
	2018	**2017**
Current asset (included in prepayments for leases)	$ 2,323	$ 2,371
Noncurrent asset	93,868	98,184
	$ 96,191	$ 100,555

As of December 31, 2018 and 2017, prepaid lease payments include land use right, which are located in Mainland China.

The prepayment for lease pledged as collateral for bank borrowing were set out in Note 34.

22. BORROWINGS

a. Short-term borrowings

	December 31	
	2018	**2017**
Unsecured borrowings		
Bank loans (1)	$ 30,715	$ -
Letters of credit (2)	-	549
	$ 30,715	$ 549

1) The interest rate on the bank loans was 0.6% per annum as of December 31, 2018.

2) The interest rate on the letters of credit was 2.86% per annum as of December 31, 2017.

b. Long-term borrowings

	December 31	
	2018	2017
Secured borrowings (Note 34)		
Bank loans*	$ 56,361	$ 109,375
Unsecured borrowings		
Bank loans	1,565,005	1,873,862
Less: Current portions	(139,020)	(286,362)
Long-term borrowings	$ 1,482,346	$ 1,696,875

The borrowings of the Group were as follows:

		December 31	
	Maturity Date	2018	2017
Floating rate borrowings			
Secured bank borrowing denominated in NT$	2019.09.01	$ 46,875	$ 109,375
Secured bank borrowing denominated in RMB	2021.09.04	9,486	-
Unsecured bank borrowing denominated in NT$	2020.08.27	200,000	-
Unsecured bank borrowing denominated in NT$	2020.09.06	200,000	300,000
Unsecured bank borrowing denominated in NT$	2019.06.02	-	200,000
Unsecured bank borrowing denominated in NT$	2020.01.25	250,000	250,000
Unsecured bank borrowing denominated in NT$	2020.09.04	200,000	400,000
Unsecured bank borrowing denominated in NT$	2020.09.06	200,000	200,000
Unsecured bank borrowing denominated in NT$	2021.12.12	100,000	100,000
Unsecured bank borrowing denominated in NT$	2021.12.19	200,000	200,000
Unsecured bank borrowing denominated in US$	2020.02.26	61,430	59,696
Unsecured bank borrowing denominated in US$	2020.05.28	61,430	74,621
Unsecured bank borrowing denominated in US$	2019.09.01	92,145	89,545
Less: Current portions		(139,020)	(286,362)
		$ 1,482,346	$ 1,696,875

The range of interest rate on bank loans was 0.86%-6.18% and 0.85%-3.2% per annum as of December 31, 2018 and 2017 respectively.

23. OTHER LIABILITIES

	December 31 2018	December 31 2017
Current		
Other payables		
Payable for bonus to employees and directors	$ 85,014	$ 125,404
Payable for commission	24,640	33,669
Payable for salaries	98,292	99,893
Payable for bonus	190,419	215,833
Payable for annual leave	28,199	29,309
Payable for purchase of equipment	32,022	85,073
Others	105,090	111,562
	$ 563,676	$ 700,743

24. RETIREMENT BENEFIT PLANS

a. Defined contribution plans

The Company and TXC Optec Corporation of the Group adopted a pension plan under the Labor Pension Act (the "LPA"), which is a state-managed defined contribution plan. Under the LPA, an entity makes monthly contributions to employees' individual pension accounts at 6% of monthly salaries and wages.

The employees of the Group's subsidiaries in NGB and CKG are members of a state-managed retirement benefit plan operated by the government of China. The subsidiaries are required to contribute a specified percentage of payroll costs to the retirement benefit scheme to fund the benefits. The only obligation of the Group with respect to the retirement benefit plan is to make the specified contributions.

b. Defined benefit plans

The defined benefit plan adopted by the Company of the Group in accordance with the Labor Standards Law is operated by the government. Pension benefits are calculated on the basis of the length of service and average monthly salaries of the 6 months before retirement. The Company contribute amounts equal to 4% of total monthly salaries and wages to a pension fund administered by the pension fund monitoring committee. Pension contributions are deposited in the Bank of Taiwan in the committee's name. Before the end of each year, the Group assesses the balance in the pension fund. If the amount of the balance in the pension fund is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Group is required to fund the difference in one appropriation that should be made before the end of March of the next year. The pension fund is managed by the Bureau of Labor Funds, Ministry of Labor ("the Bureau"); the Group has no right to influence the investment policy and strategy.

The amounts included in the consolidated balance sheets in respect of the Group's defined benefit plans were as follows:

	December 31	
	2018	2017
Present value of defined benefit obligation	$ 165,146	$ 153,518
Fair value of plan assets	(97,113)	(91,494)
Net defined benefit liability	$ 68,033	$ 62,024

Movements in net defined benefit liability (asset) were as follows:

	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liability (Asset)
Balance at January 1, 2017	$ 141,977	$ (85,666)	$ 56,311
Service cost			
Current service cost	2,066	-	2,066
Net interest expense (income)	1,221	(673)	548
Recognized in profit or loss	3,287	(673)	2,614
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	(149)	(149)
Actuarial (gain) loss - changes in demographic assumptions	13,390	-	13,390
Actuarial (gain) loss - changes in financial assumptions	(1,703)	-	(1,703)
Actuarial (gain) loss - experience adjustments	6,841	-	6,841
Recognized in other comprehensive income	18,528	(149)	18,379
Contributions from the employer		(15,280)	(15,280)
Benefits paid	(10,274)	10,274	-
Balance at December 31, 2017	153,518	(91,494)	62,024
Service cost			
Current service cost	1,956	-	1,956
Past service cost and loss on settlements	617	-	617
Net interest expense (income)	1,475	(794)	681
Recognized in profit or loss	4,048	(794)	3,254
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	(2,783)	(2,783)
Actuarial (gain) loss - changes in demographic assumptions	11,053	-	11,053
Actuarial (gain) loss - changes in financial assumptions	2,042	-	2,042
Actuarial (gain) loss - experience adjustments	6,479	-	6,479
Recognized in other comprehensive income	19,574	(2,783)	16,791
Contributions from the employer	-	(14,036)	(14,036)
Benefits paid	(11,994)	11,994	-
Balance at December 31, 2018	$ 165,146	$ (97,113)	$ 68,033

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

	For the Year Ended December 31	
	2018	2017
Cost of goods sold	$ 1,608	$ 1,268
Selling and marketing expenses	341	341
General and administrative expenses	553	495
Research and development expenses	752	510
	$ 3,254	$ 2,614

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

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

2) Interest risk: A decrease in the (government/corporate) bond interest rate will increase the present value of the defined benefit obligation; however, this will be partially offset by an increase in the return on the plan's debt investments.

3) Salary risk: The present value of the defined benefit obligation is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the present value of the defined benefit obligation.

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

	December 31	
	2018	2017
Discount rate(s)	1.125%	1.25%
Expected rate(s) of salary increase	2.00%	2.00%

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

	December 31	
	2018	2017
Discount rate(s)		
0.25% increase	$ (4,625)	$ (4,002)
0.25% decrease	$ 4,814	$ 4,159
Expected rate(s) of salary increase		
0.25% increase	$ 4,683	$ 4,038
0.25% decrease	$ (4,523)	$ (3,905)

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

	December 31	
	2018	**2017**
The expected contributions to the plan for the next year	$ 14,036	$ 15,280
The average duration of the defined benefit obligation	11.6 years	10.7 years

25. EQUITY

a. Share capital

Ordinary shares

	December 31	
	2018	**2017**
Numbers of shares authorized (in thousands)	500,000	500,000
Shares authorized	$ 5,000,000	$ 5,000,000
Number of shares issued and fully paid (in thousands)	309,757	309,757
Shares issued	$ 3,097,570	$ 3,097,570

Fully paid ordinary shares, which have a par value of $10, carry one vote per share and carry a right to dividends.

30,000 thousand shares of the Company's shares authorized were reserved for the issuance of convertible bonds and employee share options.

b. Capital surplus

	December 31	
	2018	**2017**
May be used to offset a deficit, distributed as cash dividends, or transferred to share capital *		
Issuance of ordinary shares	$ 611,776	$ 611,776
Conversion of bonds	977,028	977,028
Overdue options	73,377	73,377
The difference between consideration received or paid and the carrying amount of the subsidiaries' net assets during actual disposal or acquisition	331	331
Share of changes in capital surplus of associates or joint venture	2,604	2,712
	$ 1,665,116	$ 1,665,224

* Such capital surplus may be used to offset a deficit; in addition, when the Company has no deficit, such capital surplus may be distributed as cash dividends or transferred to share capital (limited to a certain percentage of the Company's capital surplus and once a year).

c. Retained earnings and dividend policy

Under the dividend policy as set forth in the amended Articles, where the Company made profit in a fiscal year, the profit shall be first utilized for paying taxes, offsetting losses of previous years, setting aside as legal reserve 10% of the remaining profit, setting aside or reversing a special reserve in accordance with the laws and regulations, and then any remaining profit together with any undistributed retained earnings shall be used by the Company's board of directors as the basis for proposing a distribution plan, which should be resolved in the shareholders' meeting for distribution of dividends and bonus to shareholders. For the policies on distribution of employees' compensation and remuneration of directors and supervisors before and after amendment, please refer to employee benefits expense in Note 27(g).

Dividends are recommended by the board of directors in accordance with the Corporation's dividend policy. Under this policy, industry trend and growth should be evaluated, investment opportunities should be fully understood, and proper capital adequacy ratios should be considered in determining the dividend to be distributed. In addition, cash dividends should not be less than 20% of the total dividends to be appropriated.

Appropriation of earnings to the legal reserve shall be made until the legal reserve equals the Company's paid-in capital. The legal reserve may be used to offset deficits. If the Company has no deficit and the legal reserve has exceeded 25% of the Company's paid-in capital, the excess may be transferred to capital or distributed in cash.

Items referred to under Rule No. 1010012865, Rule No. 1010047490 and Rule No. 1030006415 issued by the FSC and the directive titled "Questions and Answers for Special Reserves Appropriated Following Adoption of IFRSs" should be appropriated to or reversed from a special reserve by the Company.

The appropriations of earnings for 2017 and 2016 had been approved in the shareholders' meetings on June 5, 2018 and June 8, 2017, respectively. The appropriations and dividends per share were as follows:

	Appropriation of Earnings		**Dividends Per Share (NT$)**	
	For Fiscal Year 2017	**For Fiscal Year 2016**	**For Fiscal Year 2017**	**For Fiscal Year 2016**
Legal reserve	$ 96,265	$ 101,616	$ -	$ -
Cash dividends	774,393	867,320	2.5	2.8

The appropriations of earnings for 2018 annual surplus distribution on April 25, 2019 was as follows:

	Appropriation of Earnings	**Dividends Per Share (NT$)**
Legal reserve	$ 64,435	$ -
Cash dividends	619,514	2

The appropriation of earnings for 2018 are subject to the resolution of the shareholders' meeting to be held on June 12, 2019.

d. Others equity items

1) Exchange differences on translating the financial statements of foreign operations

	For the Year Ended December 31	
	2018	**2017**
Balance at January 1	$ (264,137)	$ (161,346)
Exchange differences on translating financial statements of foreign operations	(94,043)	(101,905)
Share of exchange differences of associates accounted for using the equity method	(1,743)	(886)
Balance at December 31	$ (359,923)	$ (264,137)

2) Unrealized gain/(loss) on available-for-sale financial assets

	For the Year Ended December 31, 2017
Balance at January 1, 2017	$ 955,103
Recognized for the year	
Unrealized gain arising on revaluation of available-for-sale financial assets	(423,470)
Share of unrealized gain on revaluation of available-for-sale financial assets of associates accounted for using the equity method	(58)
Reclassification adjustment	
Cumulative (gain)/loss reclassified to profit or loss on sale of available-for-sale financial assets	(150,527)
Other comprehensive income recognized for the year	(574,055)
Balance at December 31 , 2017	$ 381,048
Balance at January 1, 2018 per IAS 39	$ 381,048
Adjustment on initial application of IFRS 9	(381,048)
Balance at January 1, 2018 per IFRS 9	$ -
Balance at January 1, 2018 per IAS 39	$ 381,048
Adjustment on initial application of IFRS 9	(381,048)
Balance at January 1, 2018 per IFRS 9	$ -

3) Unrealized gain (loss) on financial assets at FVTOCI

	For the Year Ended December 31, 2018
Balance at January 1 per IAS 39	$ -
Adjustment on initial application of IFRS 9	283,139
Balance at January 1 per IFRS 9	283,139
Effect of change in tax rate	(13,626)
Recognized during the period	
Unrealized loss - equity instruments	(126,427)
Share from associates accounted for using the equity method	(85)
Other comprehensive income recognized in the period	(140,178)
Cumulative unrealized gain/(loss) of equity instruments transferred to retained earnings due to disposal	(37,944)
Balance at December 31	$ 105,017

26. REVENUE

	For the Year Ended December 31	
	2018	2017
Revenue from contracts with customers		
Revenue from sale of goods	$ 8,156,268	$ 8,781,552

	For the Year Ended December 31, 2018
Trade receivables (Note 14)	$ 2,640,158
Contract liabilities	
Sale of goods	$ 10,853
Contract liabilities - current	$ 10,853

The contract liabilities were unearned sales revenue and accounted for other current liabilities.

27. NET PROFIT AND OTHER COMPREHENSIVE INCOME (LOSS) FROM CONTINUING OPERATIONS

Net profit from continuing operations was attributable to:

a. Other income

	For the Year Ended December 31	
	2018	2017
Interest income	$ 21,088	$ 18,607
Income from government grants	61,005	42,779
Dividends income	1,527	2,288
Revenue from planning of equipment	22,098	-
Others	39,911	46,161
	$ 145,629	$ 109,835

b. Other gains and losses

	For the Year Ended December 31	
	2018	2017
Gain on disposal of property, plant and equipment	$ 2,016	$ 1,754
Gain on disposal of investment property	26,629	50,061
Gain on disposal of investment		
Available-for-sale financial assets	-	181,429
Financial assets measured at cost	-	47,237
Fair value changes of financial assets and financial liabilities		
Financial assets mandatorily at FVTPL	29,802	-
Financial assets designated as at FVTPL	-	47,211
Net foreign exchange gains (loss)	18,693	(131,962)
Gain on disposal of non-current assets classified as held for sale	3,152	-
Impairment loss on financial assets	-	(9,971)
Impairment loss reversed on property, plant and equipment	2,961	3,202
Others	(18,412)	(15,600)
	$ 64,841	$ 173,361

c. Impairment loss on financial assets

	For the Year Ended December 31	
	2018	2017
Financial assets measured at cost	$ -	$ (9,971)

d. Finance costs

	For the Year Ended December 31	
	2018	2017
Interest on bank loans	$ (20,400)	$ (21,937)

e. Depreciation and amortization

	For the Year Ended December 31	
	2018	2017
Property, plant and equipment	$ 788,289	$ 808,352
Intangible assets	2,121	2,722
	$ 790,410	$ 811,074
An analysis of deprecation by function		
Operating costs	$ 674,649	$ 685,543
Operating expenses	113,640	122,809
	$ 788,289	$ 808,352
An analysis of amortization by function		
Operating expenses	$ 2,121	$ 2,722

f. Employee benefits expense

	For the Year Ended December 31	
	2018	2017
Post-employment benefits (see Note 24)		
Defined contribution plans	$ 71,158	$ 67,670
Defined benefit plans	3,254	2,614
	74,412	70,284
Other employee benefits		
Payroll expense	1,476,012	1,499,460
Labor and health insurance	92,640	94,900
Others	35,747	35,444
	1,604,399	1,629,804
	$ 1,678,811	$ 1,700,088
An analysis of employee benefits expense by function		
Operating costs	$ 1,014,388	$ 978,787
Operating expenses	664,423	721,301
	$ 1,678,811	$ 1,700,088

- Employees' compensation and remuneration of directors for 2018 and 2017

  The Company accrued employees' compensation and remuneration of directors at the rates no less than 3% and no higher than 2%, respectively, of net profit before income tax, employees' compensation, and remuneration of directors. The employees' compensation and remuneration of directors for the years ended December 31, 2018 and 2017 which have been approved by the Company's board of directors on March 22, 2019 and March 15, 2018, respectively, were as follows:

  Accrual rate

	For the Year Ended December 31	
	2018	2017
Employees' compensation	9%	9%
Remuneration of directors	1.5%	1.5%

  Amount

	For the Year Ended December 31			
	2018		2017	
	Cash	Share	Cash	Share
Employees' compensation	$ 69,072	$ -	$ 103,140	$ -
Remuneration of directors	11,512	-	17,190	-

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

  There was no difference between the actual amounts of employees' compensation and remuneration of directors paid and the amounts recognized in the consolidated financial statements for the years ended December 31, 2017 and 2016.

  Information on the employees' compensation and remuneration of directors resolved by the Company's board of directors in 2019 and 2018 is available at the Market Observation Post System website of the Taiwan Stock Exchange.

28. INCOME TAXES RELATING TO CONTINUING

a. The major components of tax expense (income) were as follows:

	For the Year Ended December 31	
	2018	2017
Current tax		
In respect of the current period	$ 61,191	$ 160,202
Income tax of unappropriated earnings	7,656	2,845
Adjustments for prior year	6,418	5,426
	75,265	168,473
Deferred tax		
In respect of the current period	69	(44,557)
Change in tax rate	13,914	-
	13,983	(44,557)
Income tax expense recognized in profit or loss	$ 89,248	$ 123,916

A reconciliation of accounting profit and current income tax expenses is as follows:

	For the Year Ended December 31	
	2018	2017
Profit before tax from continuing operations	$ 733,497	$ 1,074,933
Income tax expense calculated at the statutory rate	$ 146,699	$ 182,739
Tax effect of adjusting items:		
Nondeductible expenses in determining taxable income	1,289	1,246
Tax-exempt income	(4,285)	(23,852)
Tax-exempt income for five years	(8,118)	(9,182)
Additional income tax on unappropriated earnings	7,656	2,845
Unrecognized temporary differences	(21,655)	(20,896)
Unrecognized loss carryforwards	2,662	19,633
Investment tax credit	(34,621)	(34,336)
Additional income tax under the Alternative Minimum Tax Act	-	1,713
Deferred tax effect of earnings of subsidiaries	2,019	10,271
Effect of different tax rate of group entities operating in other jurisdictions	(20,822)	(11,524)
Change in tax rate	13,914	-
Adjustment for prior years' tax	6,418	5,426
Other	(108)	(167)
Income tax expense recognized in profit or loss	$ 89,248	$ 123,916

In 2017, the applicable corporate income tax rate used by the group entities in the ROC is 17%. However, the Income Tax Act in the ROC was amended in 2018, and the corporate income tax rate was adjusted from 17% to 20%, effective in 2018. In addition, the rate of the corporate surtax applicable to the 2018 unappropriated earnings will be reduced from 10% to 5%. The applicable tax rate used by subsidiaries in China is 15%-25%. Tax rates used by other group entities operating in other jurisdictions are based on the tax laws in those jurisdictions.

As the status of 2019 appropriations of earnings is uncertain, the potential income tax consequences of 2018 unappropriated earnings are not reliably determinable.

b. Income tax expense recognized in other comprehensive income

	For the Year Ended December 31	
	2018	2017
Deferred tax		
In respect of the current year		
Fair value changes of financial assets at FVTOCI	$ (37,377)	$ -
Fair value changes of available-for-sale financial assets	-	(118,528)
Remeasurement of defined benefit plans	(3,358)	(3,124)
Reclassification adjustment		
Disposal of equity instruments at fair value through other comprehensive income	(9,486)	-
Effect of change in tax rate		
Remeasurement of defined benefit plans	(2,813)	-
Fair value changes of financial assets at FVTOCI	13,626	-
	$ (39,408)	$ (121,652)

c. Current tax assets and liabilities

	December 31 2018	2017
Current tax assets		
Income tax receivable	$ 5,245	$ -
Current tax liabilities		
Income tax payable	$ 3,647	$ 30,043

d. Deferred tax assets and liabilities

The movements of deferred tax assets and deferred tax liabilities were as follows:

For the year ended December 31, 2018

	Opening Balance	Recognize in Profit or Loss	Recognize in Other Comprehen-sive Income	Exchange Differences	Closing Balance
Deferred tax assets					
Unrealized loss on inventories	$ 6,481	$ 2,846	$ -	$ (21)	$ 9,306
Unrealized exchange loss	1,716	(1,716)	-	-	-
Financial assets at fair value through profit or loss	215	(215)	-	-	-
Payable for annual leave	4,409	550	-	(26)	4,933
Determine benefit obligation	12,553	(2,753)	6,171	-	15,971
Property, plant and equipment	1,607	177	-	(27)	1,757
Allowance for impaired receivables	535	-	-	(10)	525
Investment subsidiary	18,621	(18,621)	-	-	-
Others	2,062	2,083	-	(63)	4,082
	$ 48,199	$ (17,649)	$ 6,171	$ (147)	$ 36,574
Deferred tax liabilities					
Unrealized exchange gain	$ -	$ 17	$ -	$ -	$ 17
Associates	105,179	(3,683)	-	-	101,496
AFS financial assets	77,214	-	(33,237)	-	43,977
	$ 182,393	$ (3,666)	$ (33,237)	$ -	$ 145,490

For the year ended December 31, 2017

	Opening Balance	Recognize in Profit or Loss	Recognize in Other Comprehen-sive Income	Exchange Differences	Closing Balance
Deferred tax assets					
Unrealized loss on inventories	$ 8,834	$ (2,319)	$ -	$ (34)	$ 6,481
Unrealized exchange loss	-	1,716	-	-	1,716
Financial assets at fair value through profit or loss	2,286	(2,071)	-	-	215
Payable for annual leave	4,141	286	-	(18)	4,409
Determine benefit obligation	11,582	(2,153)	3,124	-	12,553
Property, plant and equipment	2,133	(480)	-	(46)	1,607

(Continued)

	Opening Balance	Recognize in Profit or Loss	Recognize in Other Comprehen-sive Income	Exchange Differences	Closing Balance
Allowance for impaired receivables	$ 366	$ 173	$ -	$ (4)	$ 535
Investment subsidiary	-	18,621	-	-	18,621
Others	1,794	277	-	(9)	2,062
	$ 31,136	$ 14,050	$ 3,124	$ (111)	$ 48,199
Deferred tax liabilities					
Unrealized exchange gain	$ 11,250	$ (11,250)	$ -	$ -	$ -
Associates	124,436	(19,257)	-	-	105,179
AFS financial assets	195,742	-	(118,528)	-	77,214
	$ 331,428	$ (30,507)	$ (118,528)	$ -	$ 182,393

(Concluded)

e. As of December 31, 2018, profits attributable to the following expansion projects were exempted from income tax for 5 year period

Expansion of Construction Project	Tax-exemption Period
2009	2014-2018

f. Income tax assessments

The tax returns had been assessed by the tax authorities before in 2016.

29. EARNINGS PER SHARE

The earnings and weighted average number of ordinary shares outstanding in the computation of earnings per share from continuing operations were as follows:

Net Profit for the Year

	For the Year Ended December 31 2018	2017
Profit for the period attributable to owners of the Company	$ 644,350	$ 962,655
Effect of dilutive potential ordinary shares:		
Convertible bonds	-	-
Earnings used in the computation of diluted earnings per share	$ 644,350	$ 962,655

Weighted average number of ordinary shares outstanding (in thousand shares):

	For the Year Ended December 31	
	2018	**2017**
Weighted average number of ordinary shares in computation of basic earnings per share	309,757	309,757
Effect of dilutive potential ordinary shares:		
Convertible bonds		-
Employees' compensation	2,658	3,443
Weighted average number of ordinary shares used in the computation of diluted earnings per share	312,415	313,200

If the Group was able to settle the compensation paid to employees by cash or shares, the Group presumed that the entire amount of the compensation would be settled in shares and the resulting potential shares were included in the weighted average number of shares outstanding used in the computation of diluted earnings per share, if the shares had a dilutive effect. Such dilutive effect of the potential shares was included in the computation of diluted earnings per share until the shareholders resolve the number of shares to be distributed to employees at their meeting in the following year.

30. OPERATING LEASE ARRANGEMENTS

a. The Group as lessee

Operating leases relate to leases of warehouse in trade zone with lease terms 3 years. All operating lease contracts contain clauses for 3-yearly market rental reviews. The Group does not have a bargain purchase option to acquire the leased land at the expiry of the lease periods.

The future minimum lease payments of non-cancellable operating lease commitments were as follows:

	December 31	
	2018	**2017**
Not later than 1 year	$ 1,400	$ 2,800
Later than 1 year and not later than 5 years	-	1,400
	$ 1,400	$ 4,200

b. The Group as lessor

Operating leases relate to the investment property owned by the Group with lease terms between 1 to 2 years. All operating lease contracts contain market review clauses in the event that the lessee exercises its option to renew. The lessee does not have a bargain purchase option to acquire the property at the expiry of the lease period.

The future minimum lease payments of non-cancellable operating lease were as follows:

	December 31	
	2018	**2017**
Not later than 1 year	$ 4,402	$ 1,437
Later than 1 year and not later than 5 years	1,892	-
	$ 6,294	$ 1,437

31. CAPITAL MANAGEMENT

The Group manages its capital to ensure that entities in the Group will be able to continue as going concerns while maximizing the return to stakeholders through the optimization of the debt and equity balance.

The capital structure of the Group consists of net debt (borrowings offset by cash and cash equivalents) and equity attributable to owners of the Company (comprising issued capital, reserves, retained earnings and other equity).

The Group is not subject to any externally imposed capital requirements.

32. FINANCIAL INSTRUMENTS

a. Fair value of financial instruments

1) Fair value of financial instruments that are not measured at fair value

The management believes the carrying amounts of financial assets and financial liabilities recognized in the consolidated financial statements approximate their fair values.

2) Fair value of financial instruments that are measured at fair value on a recurring basis

a) Fair value hierarchy

December 31, 2018

	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Domestic listed shares and emerging market shares	$ 30,975	$ -	$ -	$ 30,975
Forward foreign exchange contracts	-	1,757	-	1,757
Exchange contracts	-	76	-	76
Mutual funds	559,068	-	-	559,068
Structured deposits	-	341,968	-	341,968
	$ 590,043	$ 343,801	$ -	$ 933,844
Financial assets at FVTOCI				
Unlisted securities - ROC Equity securities	$ -	$ -	$ 80,227	$ 80,227
Securities listed in other countries	250,698	-	-	250,698
Securities unlisted in foreign countries	-	-	163,317	163,317
	$ 250,698	$ -	$ 243,544	$ 494,242

December 31, 2017

	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Forward foreign exchange contracts	$ -	$ 3,336	$ -	$ 3,336
Mutual funds	138,840	-	-	138,840
Structured deposits	-	864,946	-	864,946
	$ 138,840	$ 868,282	$ -	$ 1,007,122
Available-for-sale financial assets				
Unlisted securities - ROC Equity securities	$ -	$ -	$ 21,498	$ 21,498
Securities listed in foreign countries	491,469	-	-	491,469
Equity securities Mutual funds	39,657	-	-	39,657
	$ 531,126	$ -	$ 21,498	$ 552,624
Financial liabilities at FVTPL				
Forward exchange contracts	$ -	$ 323	$ -	$ 323
Exchange contracts	-	942	-	942
	$ -	$ 1,265	$ -	$ 1,265

There were no transfers between Levels 1 and 2 in the current and prior periods.

b) Reconciliation of Level 3 fair value measurements of financial assets

For the year ended December 31, 2018

	Unrealized Gain on Financial Assets at Fair Value Through Other Comprehensive Income
	Equity Instruments
Financial assets	
Balance at January 1, 2018 (IAS 39)	$ 21,498
Effect of retrospective application and retrospective restatement	202,250
Balance at January 1, 2018 (IFRS 9)	223,748
Recognized in other comprehensive income	23,041
Exchange differences on translating the financial statements of foreign operations	(3,245)
Balance at December 31, 2018	$ 243,544

For the year ended December 31, 2017

	Available-for-sale Financial Assets Equity Instruments
Financial assets	
Balance at January 1, 2017	$ 17,148
Recognized in other comprehensive income	4,350
Balance at December 31, 2017	$ 21,498

c) Valuation techniques and inputs applied for the purpose of measuring Level 2 fair value measurement

Financial Instruments	Valuation Techniques and Inputs
Derivatives - foreign currency forward contracts	Discounted cash flow. Future cash flows are estimated based on observable forward exchange rates at the end of the reporting period and contract forward rates, discounted at a rate that reflects the credit risk of various counterparties.
Structured deposits	Discounted cash flow. The products had short matured period, therefore the fair value is reasonable to be estimated based on the book value.

d) Valuation techniques and inputs applied for the purpose of measuring Level 3 fair value measurement

The Group uses price-book ratio approach, comparing the net value per share with other public companies among the similar industries or evaluating stock price based on average price-book ratio of other competitors, to capture the present value of the expected future economic benefits to be derived from the ownership of these investees.

The fair values of unlisted equity securities - ROC were determined using income approach. In this approach, the discounted cash flow method was used to capture the present value of the expected future economic benefits to be derived from the ownership of these investees. The significant unobservable inputs used are listed on the table below. An increase in long-term revenue growth rates or long-term pre-tax operating margin or a decrease in WACC or discount for lack of marketability used in isolation would result in increase in fair value.

	December 31, 2017
Long-term revenue growth rates	12.89%
Long-term pre-tax operating margin	4.34%
WACC	10.96%
Discount for lack of marketability	30.24%

b. Categories of financial instruments

	December 31	
	2018	**2017**
Financial assets		
FVTPL		
Designated as at FVTPL (1)	$ -	$ 1,007,122
Mandatorily at FVTPL (1)	933,844	-
Loans and receivables (2)	-	5,169,358
Held-to-maturity investments (3)	-	45,680
Available-for-sale financial assets (4)	-	749,826
Financial assets at amortized cost (5)	4,334,056	-
Financial assets at FVTOCI		
Equity instruments	494,242	-
Financial liabilities		
FVTPL		
Designated as at FVTPL (6)	-	1,265
Amortized cost (7)	3,545,793	3,913,641

1) The balances included the carrying amount of mutual fund, foreign exchange forward contracts and structured deposits.

2) The balances included loans and receivables measured at amortized cost, which comprise cash and cash equivalents, notes receivable, trade and other receivables, debt investments with no active market.

3) The balances included the carrying amount of financial debt investment.

4) The balances included the carrying amount of available-for-sale financial assets measured at cost.

5) The balances include financial assets measured at amortized cost, which comprise cash and cash equivalents, notes receivable, trade receivables, financial debt investment and other receivables.

6) The balances included the carrying amount of foreign exchange forward contracts and exchange contracts.

7) The balances included financial liabilities measured at amortized cost, which comprise short-term and long-term loans, notes payable, trade and other payables.

c. Financial risk management objectives and policies

The Group's major financial instruments included equity and debt investments, bonds payable, borrowings. The Group's corporate treasury function provides services to the business, coordinates access to domestic and international financial markets, monitors and manages the financial risks relating to the operations of the Group through internal risk reports which analyze exposures by degree and magnitude of risks. These risks include market risk (including currency risk, interest rate risk and other price risk), credit risk and liquidity risk.

The Group sought to minimize the effects of these risks by using derivative financial instruments to hedge risk exposures. The use of financial derivatives was governed by the Group's policies approved by the board of directors, which provided written principles on foreign exchange risk, interest rate risk, credit risk, the use of financial derivatives and non-derivative financial instruments, and the investment of excess liquidity. Compliance with policies and exposure limits was reviewed by the internal auditors on a continuous basis. The Group did not enter into or trade financial instruments, including derivative financial instruments, for speculative purposes.

The corporate treasury function reported quarterly to the Group's risk management committee, an independent body that monitors risks and policies implemented to mitigate risk exposures.

1) Market risk

The Group's activities exposed it primarily to the financial risks of changes in foreign currency exchange rates (see (a) below) and interest rates (see (b) below). The Group entered into a variety of derivative financial instruments to manage its exposure to foreign currency risk and interest rate risk, including:

a) Foreign currency risk

Several subsidiaries of the Company had foreign currency sales and purchases, which exposed the Group to foreign currency risk.

The carrying amounts of the Group's foreign currency denominated monetary assets and monetary liabilities (including those eliminated on consolidation) at the end of the reporting period (see Note 34).

Sensitivity analysis

The Group was mainly exposed to the USD and JPY.

The following table details the Group's sensitivity to a 1% increase and decrease in New Taiwan dollars (the functional currency) against the relevant foreign currencies. 1% is the sensitivity rate used when reporting foreign currency risk internally to key management personnel and represents management's assessment of the reasonably possible change in foreign exchange rates. The sensitivity analysis included only outstanding foreign currency denominated monetary items and foreign currency forward contracts designated as cash flow hedges, and adjusts their translation at the end of the reporting period for a 1% change in foreign currency rates. The sensitivity analysis included external loans/borrowings as well as loans/borrowings to foreign operations within the Group where the denomination of the loan is in a currency other than the functional currency of the lender or the borrower. A positive number below indicates an increase in pre-tax/post-tax profit and other equity associated with New Taiwan dollars strengthen 1% against the relevant currency. For a 1% weakening of New Taiwan dollars against the relevant currency, there would be an equal and opposite impact on post-tax profit and other equity and the balances below would be negative.

	USD Impact		**JPY Impact**	
	For the Year Ended December 31		**For the Year Ended December 31**	
	2018	**2017**	**2018**	**2017**
Profit or loss	$ 23,015	$ 25,362	$ (3,169)	$ (1,929)

i. This was mainly attributable to the exposure outstanding on USD receivables and payables, which were not hedged at the end of the reporting period.

ii. This was mainly attributable to the exposure to outstanding JPY payables, which were not hedged, at the end of the reporting period.

b) Interest rate risk

The Group was exposed to interest rate risk because the Group's bank deposits and the Group borrowed funds at floating interest rates.

The carrying amount of the Group's financial assets and financial liabilities with exposure to interest rates at the end of the reporting period were as follows.

	December 31	
	2018	**2017**
Fair value interest rate risk		
Financial assets	$ 40,355	$ 543,848
Financial liabilities	-	-
Cash flow interest rate risk		
Financial assets	1,451,172	1,823,081
Financial liabilities	1,652,081	1,983,786

Sensitivity analysis

The sensitivity analyses below were determined based on the Group's exposure to interest rates for both derivatives and non-derivative instruments at the end of the reporting period. For floating rate liabilities, the analysis was prepared assuming the amount of the liability outstanding at the end of the reporting period was outstanding for the whole year. A 0.25% basis point increase or decrease was used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates.

If interest rates had been 0.25% basis points higher/lower and all other variables were held constant, the Group's pre-tax profit for the years ended December 31, 2018 and 2017 would decrease by $502 thousand and $402 thousand, which was mainly attributable to the Group's exposure to interest rates on its floating rate bank deposits and bank borrowings.

c) Other price risk

The Group was exposed to equity price risk through its investments in listed equity securities. Equity investments are held for strategic rather than trading purposes. The Group does not actively trade these investments. The Group's equity price risk was mainly concentrated on equity instruments operating in Shenzhen stock exchange, growth enterprise.

Sensitivity analysis

The sensitivity analyses below were determined based on the exposure to equity price risks at the end of the reporting period.

If equity prices had been 1% higher/lower, other comprehensive income for the years ended December 31, 2018 and 2017 would increase/decrease by $2,507 thousand and $4,915 thousand, respectively.

2) Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Group. As at the end of the reporting period, the Group's maximum exposure to credit risk which will cause a financial loss to the Group due to failure to discharge an obligation by the counterparties and financial guarantees provided by the Group is arising from:

The carrying amount of the respective recognized financial assets as stated in the balance sheets.

3) Liquidity risk

The Group manages liquidity risk by monitoring and maintaining a level of cash and cash equivalents deemed adequate to finance the Group's operations and mitigate the effects of fluctuations in cash flows. In addition, management monitors the utilization of bank borrowings and ensures compliance with loan covenants.

The Group relies on bank borrowings as a significant source of liability. As of December 31, 2018 and 2017, the Group had available unutilized overdraft and short-term bank loan facilities of approximately $5,544,897 thousand and $5,261,301 thousand, respectively.

- Liquidity and interest risk rate tables

  The following table details the Group's remaining contractual maturity for its non-derivative financial liabilities with agreed repayment periods. The tables had been drawn up based on the undiscounted cash flows of financial liabilities from the earliest date on which the Group can be required to pay. The tables included both interest and principal cash flows.

  To extend that interest flows are floating rate, the undiscounted amount was derived from the interest rate curve at the end of the reporting period.

December 31, 2018

	Weighted Interest Average Effective Rate (%)	**Less Than 1 Year**	**2-3 Years**	**4-5 Years**	**5+ Years**	**Total**
Non-derivative financial liabilities						
Trade payables		$ 1,326,919	$ -	$ -	$ -	$ 1,326,919
Other payables		566,793	-	-	-	566,793
Other current liabilities		21,766	-	-	-	21,766
Variable interest rate (liabilities)	0.6-6.18	169,735	1,482,346	-	-	1,652,081

December 31, 2017

	Weighted Interest Average Effective Rate (%)	**Less Than 1 Year**	**2-3 Years**	**4-5 Years**	**5+ Years**	**Total**
Non-derivative financial liabilities						
Trade payables	-	$ 1,227,291	$ -	$ -	$ -	$ 1,227,291
Other payables	-	702,564	-	-	-	702,564
Other current liabilities	-	28,728	-	-	-	28,728
Variable interest rate (liabilities)	0.85-3.2	286,911	1,696,875	-	-	1,983,786

The amounts included above for variable interest rate instruments for both non-derivative financial assets and liabilities was subject to change if changes in variable interest rates differ from those estimates of interest rates determined at the end of the reporting period.

The following table detailed the Group's liquidity analysis for its derivative financial instruments. The table was based on the undiscounted contractual net cash inflows and outflows on derivative instruments that settle on a net basis, and the undiscounted gross inflows and outflows on those derivatives that require gross settlement.

December 31, 2018

	On Demand or Less Than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	5+ Years
Net settled					
Foreign exchange forward contracts	$ -	$ (394)	$ -	$ -	$ -

December 31, 2017

	On Demand or Less Than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	5+ Years
Net settled					
Foreign exchange forward contracts	$ (856)	$ (409)	$ -	$ -	$ -

33. RELATED-PARTY TRANSACTIONS

Balances and transactions between the Company and its subsidiaries, which are related parties of the Company, have been eliminated on consolidation and are not disclosed in this note. Details of transactions between the Group and other related parties are disclosed below.

Related Party Name	Relationship with the Company
Tai-Shing Electronics Components Corporation	Associate
Liang Shing Eclife Corp. ("Eclife")	Other associate
Ningbo Xingmao Electron Technology Co., Ltd.	Associate
GODSMITH SENSOR INC.	Associate

a. Sales of goods

	For the Year Ended December 31 2018	2017
Associates	$ 32,965	$ 21,710
Other associate	33	-
	$ 32,998	$ 21,710

b. Purchase of goods

	For the Year Ended December 31	
	2018	2017
Other associates	$ 188	$ 47

c. Operating expenses

	For the Year Ended December 31	
	2018	2017
Other associates	$ 722	$ 830

d. Commission revenue

	For the Year Ended December 31	
	2018	2017
Associates	$ 2,567	$ 2,039

e. Rental revenue

			For the Year Ended December 31			
			2018		2017	
Related Party	Location	Rent Collection	Amount	% to Total Account Balance	Amount	% to Total Account Balance
Other associates	1F., No. 189, Huangshan W. Rd., Beilun Dist., Ningbo City	Based on contract, and paid on a monthly basis	$ 3,265	-	$ 3,242	-

Selling prices to related parties were similar to those for third parties.

f. Trade receivables from related parties

	December 31	
	2018	2017
Associates	$ 9,062	$ 6,776
Less: Allowance for impairment loss	(67)	(41)
	$ 8,995	$ 6,735

g. Trade payables to related parties

	December 31	
	2018	2017
Other associates	$ 97	$ 24

h. Other receivable from related parties

	December 31	
	2018	2017
Associates	$ 796	$ 772

i. Other payables to related parties

	December 31	
	2018	2017
Associates	$ 1,760	$ -
Other associates	1,357	1,821
	$ 3,117	$ 1,821

j. Acquisition of property, plant and equipment

	Acquisition Amounts For the Year Ended December 31	
	2018	2017
Other associates	$ 1,299	$ 1,691

k. Compensation of key management personnel

	For the Year Ended December 31	
	2018	2017
Short-term benefits	$ 61,628	$ 91,141
Post-employment benefits	3,054	3,323
	$ 64,682	$ 94,464

The remuneration of directors and key executives was determined by the remuneration committee having regard to the performance of individuals and market trends.

34. ASSETS PLEDGED AS COLLATERAL OR FOR SECURITY

The following assets were provided as collateral for bank borrowings:

	December 31	
	2018	2017
Land and land improvement	$ 573,080	$ 573,770
Building equipment, net	848,918	925,175
Investment property	135,344	22,019
Land to be developed	319,922	-
Pledge deposits	149,233	-
Prepayments for leases	12,383	13,026
	$ 2,038,880	$ 1,533,990

35. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

In addition to those disclosed in other notes, significant commitments and contingencies of the Group as of December 31, 2018 and 2017 were as follows:

a. Unused letters of credit amounted to approximately JPY2,450 thousand and JPY8,292 thousand as of December 31, 2018 and 2017.

b. As of December 31, 2018, the Company unrecognized commitments are as follows:

	Contract Amount	Paid Amount	Unpaid Amount
Acquisition of equipment	$ 62,742	$ 30,767	$ 31,975
Acquisition of buildings	$ 7,180	$ 2,154	$ 5,026
Acquisition of equipment	US$ 3,395	US$ -	US$ 3,395
Acquisition of equipment	RMB 574	RMB -	RMB 574
Acquisition of equipment	JPY 40,000	JPY -	JPY 40,000

36. SIGNIFICANT EVENTS AFTER REPORTING PERIOD: NONE

37. EXCHANGE RATE OF FINANCIAL ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The group entities' significant financial assets and liabilities denominated in foreign currencies aggregated by the foreign currencies other than functional currencies and the related exchange rates between foreign currencies and respective functional currencies were as follows:

December 31, 2018

	Foreign Currencies	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
USD	$ 84,664	30.715 (USD:NTD)	$ 2,600,455
USD	29,325	6.8632 (USD:RMB)	900,717
JPY	432,583	0.2782 (JPY:NTD)	120,345
JPY	159,616	0.0622 (JPY:RMB)	44,405
Financial liabilities			
Monetary items			
USD	28,484	30.715 (USD:NTD)	874,886
USD	10,573	6.8632 (USD:RMB)	324,750
JPY	1,168,067	0.2782 (JPY:NTD)	324,956
JPY	563,363	0.0622 (JPY:RMB)	156,728

December 31, 2017

	Foreign Currencies	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
USD	$ 88,327	29.848 (USD:NTD)	$ 2,636,384
USD	38,845	6.5342 (USD:RMB)	1,159,446
JPY	359,244	0.2649 (JPY:NTD)	95,164
JPY	145,623	0.058 (JPY:RMB)	38,576
Financial liabilities			
Monetary items			
USD	31,922	29.848 (USD:NTD)	952,808
USD	10,280	6.5342 (USD:RMB)	306,837
JPY	744,028	0.2649 (JPY:NTD)	197,093
JPY	489,148	0.058(JPY:RMB)	129,575

For the years ended December 31, 2018 and 2017, unrealized net foreign exchange gains were $18,693 thousand and $(131,962) thousand, respectively. It is impractical to disclose net foreign exchange gains (losses) by each significant foreign currency due to the variety of the foreign currency transactions and functional currencies of the group entities.

38. SEPARATELY DISCLOSED ITEMS

a. Information on significant transactions and information on investees:

1) Lending funds to others. (None)

2) Providing endorsements or guarantees for others. (Table 1)

3) Holding of securities at the end of the period. (Table 2)

4) Aggregate purchases or sales of the same securities reaching NT$300 million or 20 percent of paid-in capital or more. (Table 3)

5) Acquisition of real estate reaching NT$300 million or 20 percent of paid-in capital or more. (None)

6) Disposal of real estate reaching NT$300 million or 20 percent of paid-in capital or more. (None)

7) Purchases or sales of goods from or to related parties reaching NT$100 million or 20 percent of paid-in capital or more. (Table 4)

8) Trade receivables from related parties reaching NT$100 million or 20 percent of paid-in capital or more. (Table 5)

9) Trading in derivative instruments. (Note 7)

10) Others: The business relationship between the parent and the subsidiaries and between each subsidiary, and the circumstances and amounts of any significant transactions between them. (Table 9)

11) Information on investees. (Table 6)

b. Information on investments in mainland China

1) Information on any investee company in mainland China, showing the name, principal business activities, paid-in capital, method of investment, inward and outward remittance of funds, shareholding ratio, investment gain or loss, carrying amount of the investment at the end of the period, repatriated investment gains, and limit on the amount of investment in the mainland China area. (Table 7)

2) Any of the following significant transactions with investee companies in mainland China, either directly or indirectly through a third area, and their prices, payment terms, and unrealized gains or losses. (Table 8)

   a) The amount and percentage of purchases and the balance and percentage of the related payables at the end of the period.

   b) The amount and percentage of sales and the balance and percentage of the related receivables at the end of the period.

   c) The amount of property transactions and the amount of the resultant gains or losses.

   d) The balance of negotiable instrument endorsements or guarantees or pledges of collateral at the end of the period and the purposes.

   e) The highest balance, the end of period balance, the interest rate range, and total current period interest with respect to financing of funds.

   f) Other transactions that have a material effect on the profit or loss for the period or on the financial position, such as the rendering or receiving of services.

39. SEGMENT INFORMATION

Information reported to the chief operating decision maker for the purpose of resource allocation and assessment of segment performance focuses on the types of goods or services delivered or provided. Specifically, the Group's reportable segments under IFRS 8 "Operating Segments" were as follows:

Crystal
Optec

a. Segment revenues and results

	Segment Revenue For the Year Ended December 31		Segment Profit For the Year Ended December 31	
	2018	**2017**	**2018**	**2017**
Crystal	$ 8,156,268	$ 8,645,931	$ 533,301	$ 894,601
Optec	-	135,621	-	(92,545)
	$ 8,156,268	$ 8,781,552	533,301	802,056

(Continued)

	Segment Revenue		Segment Profit	
	For the Year Ended December 31		For the Year Ended December 31	
	2018	2017	2018	2017
Other income			$ 145,629	$ 109,835
Other gains and losses			64,841	173,361
Financial costs			(20,400)	(21,937)
Share of profit or loss of subsidiaries, associates and joint ventures			10,126	11,618
Profit before tax (continuing operations)			$ 733,497	$ 1,074,933

(Concluded)

Segment revenue reported above represents revenue generated from external customers. There were no inter-segment sales for the years ended December 31, 2018 and 2017.

Segment profit represented the profit before tax earned by each segment without allocation of central administration costs and directors' salaries, share of profits of associates, gain recognized on the disposal of interest in former associates, rental revenue, interest income, gain or loss on disposal of property, plant and equipment, gain or loss on disposal of financial instruments, exchange gain or loss, valuation gain or loss on financial instruments, finance costs and income tax expense. This was the measure reported to the chief operating decision maker for the purpose of resource allocation and assessment of segment performance.

b. Revenue from major products and services

	2018	2017
Crystal	$ 8,156,268	$ 8,645,931
Optec	-	135,621
	$ 8,156,268	$ 8,781,552

Assets and liabilities not used by the chief operating decision maker in the allocation of resources and assessment of performance of segments are not disclosed.

c. Geographical information

The Group's operates in two principal geographical areas - Taiwan and China.

The Group's revenue from continuing operations from external customers and information about its noncurrent assets by geographical location are detailed below:

	Revenue from External Customers		Noncurrent Assets	
	December 31		December 31	
	2018	2017	2018	2017
Taiwan	$ 6,612,774	$ 7,253,687	$ 2,061,966	$ 2,256,455
China	1,424,853	1,453,781	2,423,601	2,307,011
Others	118,641	74,084	689	1,584
	$ 8,156,268	$ 8,781,552	$ 4,486,256	$ 4,565,050

Noncurrent assets included property, plant and equipment, intangible assets and other assets but excluded deferred tax assets and financial instruments.

d. Major customer information

Major customer did not account for 10% or more of sales in 2018 and 2017.

TXC CORPORATION AND SUBSIDIARIES

ENDORSEMENTS/GUARANTEES PROVIDED
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

No. (Note 1)	Endorser/Guarantor	Endorsee/Guarantee		Limit on Endorsement/ Guarantee Given on Behalf of Each Party (Note 3)	Maximum Amount Endorsed/ Guaranteed During the Period	Outstanding Endorsement/ Guarantee at the End of the Period	Actual Borrowing Amount	Amount Endorsed/ Guaranteed by Collateral	Ratio of Accumulated Endorsement/ Guarantee to Net Equity in Latest Financial Statements (%)	Aggregate Endorsement/ Guarantee Limit	Note
		Name	Relationship (Note 2)								
1	TXC (Ningbo) Corporation	Chongqing All Sun Company Limited	Subsidiary with equity method	$ 2,482,217	$ 358,024	$ 358,024	$ 12,978	$ -	7.21	$ 4,964,433	

Note 1: The total amount of TXC (Ningbo) Corporation endorsements and guarantees provided shall not exceed 100% of the amount of the net value of TXC (Ningbo) Corporation; and the amount of individual entity endorsements shall not exceed 5% of the amount of the net value of the individual entity. However, the amount of individual entity endorsements is permitted with 100% of net value of subsidiary.

TXC CORPORATION AND SUBSIDIARIES

MARKETABLE SECURITIES HELD
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Holding Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	December 31, 2018				Note
				Shares	Carrying Amount	Percentage of Ownership	Shares	
TXC Corporation	Stock listed overseas							
	Guandong Failong Crystal Technology Co., Ltd.	None	Financial assets at fair value through other comprehensive income - non-current	6,693	$ 250,698	4	$ 250,698	
	Stock - unlisted company							
	Marson Technology Co., Ltd.	None	Financial assets at fair value through other comprehensive income - non-current	523	$ 4,773	4	$ 4,773	
	Win Win Precision Technology Co., Ltd.	None	〃	1,365	14,256	3	14,256	
	UPI Semiconductor Corp.	Chairman is a direct of the Company	〃	1,516	61,198	2	61,198	
					$ 80,227		$ 80,227	
	Stock - listed company							
	Fubon B special stock	None	Financial assets at fair value through profit or loss - non-current	250	$ 15,500	-	$ 15,500	
	Cathay B special stock	None	〃	250	15,475	-	15,475	
					$ 30,975		$ 30,975	
	Financial bonds							
	Westpac Banking Corp.	None	Financial assets at amortized cost - current	RMB 9,000	$ 40,355		$ 40,355	
TXC (Ningbo) Corporation	Structured deposits							
	China Everbright Bank	None	Financial assets at fair value through profit or loss - current	RMB 36,245	$ 162,208		$ 162,208	
	Bank of Communication	〃	〃	RMB 30,088	134,654		134,654	
	HengFeng Bank	〃	〃	RMB 10,079	45,106		45,106	
					$ 341,968		$ 341,968	
	Mutual fund							
	GF Fund	None	Financial assets at fair value through profit or loss - current	RMB 5,080	$ 22,735		$ 22,735	
	ABC Monetary Fund	〃	〃	RMB 26,260	117,523		117,523	
	China Monetary Fund	〃	〃	RMB 10,030	44,889		44,889	
	Taijing No. 1 Monetary Fund	〃	〃	RMB 33,460	149,742		149,742	
					$ 334,889		$ 334,889	

(Continued)

Holding Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	December 31, 2018				Note
				Shares	Carrying Amount	Percentage of Ownership	Shares	
TXC (Chongqing) Limited	Mutual fund							
	Southern Currency Fund B	None	Financial assets at fair value through profit or loss - current	RMB 19,542	$ 87,455		$ 87,455	
	Southern Currency Fund E	〃	〃	RMB 8,346	37,351		37,351	
	Southern Currency Fund A	〃	〃	RMB 2,004	8,970		8,970	
	E Fund Monetary Fund A	〃	〃	RMB 2,057	9,208		9,208	
	E Fund Monetary Fund B	〃	〃	RMB 10,023	44,854		44,854	
					$ 187,838		$ 187,838	
Ningbo Jingyu Company Limited	Mutual fund							
	Southern Cash Fund	None	Financial assets at fair value through profit or loss - current	RMB 60	$ 267		$ 267	
Chongqing All Sun Company Limited	Mutual fund							
	Southern Currency Fund B	None	Financial assets at fair value through profit or loss - current	RMB 8,061	$ 36,074		$ 36,074	
	Stock unlisted overseas							
Ding Kai Investment Management Company Limited	Zhejiang Boland Semiconductor Technology Co., Ltd.	None	Financial assets at fair value through other comprehensive income - non-current	RMB 7,000	$ 163,317	6	$ 163,317	

(Concluded)

TABLE 3

TXC CORPORATION AND SUBSIDIARIES

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

Company Name	Marketable Securities Type and Name	Financial Statement Account	Counterparty	Relationship	Beginning Balance		Acquisition		Disposal				Equity in Net Gain (Loss)	Ending Balance	
					Shares	Amount	Shares	Amount	Shares	Amount	Carrying Amount	Gain (Loss) on Disposal		Shares	Amount
TXC (Chongqing) Limited	Mutual Fund	Financial instruments at FVTPL - current	Southern Currency Fund B	None	-	$ 117,791	-	$ 307,932	-	$ (337,721)	$ (337,721)	$ -	$ (547)	-	$ 87,455
TXC (Ninbo) Limited	Structured deposits	Financial instruments at FVTPL - current	Agricultural Bank of China Limited	None	-	160,436	-	272,065	-	(301,598)	(301,598)	-	3,751	-	134,654

TABLE 4

TXC CORPORATION AND SUBSIDIARIES

TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES OF AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Buyer	Related Party	Relationship	Transaction Details				Abnormal Transaction		Notes/Accounts Payable or Receivable		Note
			Purchase/ Sale	Amount	% to Total	Payment Terms	Unit Price	Payment Terms	Ending Balance	% to Total	
TXC Corporation	TXC (Ningbo) Corporation	Subsidiary	Purchase	$ 1,663,711	33	Note	Its trading price depends on its function within the Group	Note	$ (423,140)	(35)	
			Sale	(297,164)	(5)	〃	〃	〃	98,303	4	
	TXC (Chongqing) Limited	Subsidiary	Purchase	731,936	15	〃	〃	〃	(178,878)	(15)	
	Growing Profit Trading Ltd.	Subsidiary	Purchase	133,329	3	〃	〃	〃	(33,855)	(3)	
TXC (Ningbo) Corporation	Growing Profit Trading Ltd.	Subsidiary	Purchase	166,868	9	〃	〃	〃	(34,631)	(6)	
	TXC (Chongqing) Limited	Subsidiary	Purchase	259,549	14	〃	〃	〃	(88,568)	(14)	

Note: The terms of purchases from related parties were not significantly different from those with third parties.

TABLE 5

TXC CORPORATION AND SUBSIDIARIES

RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Company Name	Related Party	Relationship	Ending Balance	Turnover Rate	Overdue		Amount Received in Subsequent Period	Allowance for Impairment Loss
					Amount	Actions Taken		
TXC (Ningbo) Corporation	TXC Corporation	Parent entity	$ 423,140	3.9	$ -	-	$ 422,493	$ -
TXC (Chongqing) Corporation	TXC Corporation	Parent entity	178,878	4.1	-	-	178,878	-

TABLE 6

TXC CORPORATION AND SUBSIDIARIES

NAMES, LOCATIONS, AND RELATED INFORMATION OF INVESTEES ON WHICH THE COMPANY EXERCISES SIGNIFICANT INFLUENCE
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars or U.S. Dollars)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount		Balance as of December 31, 2018			Net Income (Losses) of the Investee	Equity in the Earnings (Losses)	Note
				December 31, 2018	December 31, 2017	Shares (In Thousands)	Percentage of Ownership	Carrying Value			
TXC Corporation	Taiwan Crystal Technology International Ltd.	Western Samoa	Investment	$ 1,390,461	$ 1,390,461	42,835	100.00	$ 5,128,270	$ 295,809	$ 295,563	Difference from upstream transactions $(246) thousand
	TXC Technology Inc.	U.S.A.	Marketing activities	9,879	9,879	300	100.00	15,572	732	732	
	TXC Japan Corporation	Japan	Marketing activities	6,172	6,172	2	100.00	27,806	4,918	4,918	
	Taiwan Crystal Technology International (HK) Limited	Hong Kong	Investment	1,958	298,362	80	100.00	93,053	612	612	
	TXC EUROPE GNBH	Germany	Marketing activities	1,746	-	50	100.00	2,130	369	369	
	Tai-Shing Electronics Components Corporation	Taiwan	Manufacture and sales of electronics products	282,306	86,104	6,913	26.19	302,443	99,379	15,257	
	TXC Optec Corporation	Taiwan	Manufacture and sales of sapphire	-	444,718	-	-	-	(909)	(808)	Note 1
	Godsmith Sensor Inc.	Taiwan	Manufacture of equipment	38,100	-	2,350	34.96	34,942	(12,958)	(3,050)	
Taiwan Crystal Technology International Ltd.	Growing Profit Trading Ltd.	B.V.I.	International trading	1,691	1,691	50	100.00	175,348	2,661	2,661	
	TXC (Ningbo) Corporation	Ningbo	Manufacture and sales of electronics products	1,487,211	1,487,211	45,835	100.00	4,964,433	284,108	284,108	
TXC (Ningbo) Corporation	TXC (Chongqing) Corporation	Chongqing	Manufacture and sales of electronics products	1,003,222	604,152	133,825	100.00	1,234,396	94,527	92,985	
	Chongqing All Sun Company Limited	Chongqing	Market activities	426,259	312,644	111,000	100.00	483,670	(8,294)	(8,294)	
	Ningbo Jingyu Company Limited	Ningbo	International trading	7,090	7,090	2,500	100.00	4,077	(2,350)	(2,350)	
	Ningbo Free Trade Zon Ding Kai Investment Management Company	Ningbo	Investment management	160,043	160,043	35,050	100.00	163,464	(1)	(1)	
	Ningbo Longying Semiconductor Co., LTD.	Ningbo	Research and development in integrated circuit	60,540	-	2,400	40.00	59,005	(5,200)	(2,081)	
Taiwan Crystal Technology International (HK) Limited	TXC (Chongqing) Limited	Chongqing	Manufacture and sales of electronics products	-	298,362	-	-	-	94,527	1,542	Note 2

Note 1: TXC Optec Corporation. was cleared and cleared by resolution of the shareholders meeting on August 24, 2017. And completed the liquidation on April 9, 2018.

Note 2: In the first quarter of 2018, Taiwan Crystal Technology (HK) Limited transferred its entire equity holding of TXC (Chongqing) Corporation to TXC (Ningbo) Corporation with a consideration of RMB86,600 thousand.

TXC CORPORATION AND SUBSIDIARIES

INFORMATION ON INVESTMENT IN MAINLAND CHINA
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars or U.S. Dollars)

1. Name of the investees in Mainland China, main businesses and products, paid-in capital, method of investment, information on inflow or outflow of capital, percentage of ownership, investment income or loss, ending balance of investment, dividends remitted by the investee, and the limit of investment in Mainland China:

Investee Company	Main Businesses and Products	Total Amount of Paid-in Capital	Method of Investment	Accumulated Outflow of Investment from Taiwan as of January 1, 2018 (US$ in Thousand)	Investment Flows		Accumulated Outflow of Investment from Taiwan as of December 31, 2018 (US$ in Thousand)	Investee Company Current Net Income	Percentage of Ownership	Investment Income (Loss) Recognized	Carrying Amount as of December 31, 2018	Accumulated Inward Remittance of Earnings as of December 31, 2018
					Outflow	Inflow						
TXC (Ningbo) Corporation	Manufacturing and sales of crystal and crystal oscillator	$ 1,487,211	Indirect investment of the Corporation in Mainland China through the Corporation's subsidiary in a third region	$ 1,427,630	$ -	$ -	$ 1,427,630	$ 284,108	100	$ 284,108	$ 4,964,433	$ 256,146
Guandong Failong Crystal Technology Co., Ltd.	Manufacturing and sales of new electronic components	580,947	Direct investment of the Corporation in Mainland China	46,478	-	-	46,478	80,132	4	-	250,698	252,022
TXC (Chongqing) Corporation	Manufacturing and sales of electronic devices and hardware components	902,514	Indirect investment of the Corporation in Mainland China through the Corporation's subsidiary in a third region	298,362	-	298,362	-	94,527	100	92,985	1,234,396	306,500
Chongqing All Suns Company Limited	Real estate intermediary service, real estate management and electronic product wholesale	312,644	Other investment of the Corporation Mainland China	-	-	-	-	(8,294)	100	(8,294)	483,670	-
Ningbo Jingyu Company Limited	Purchasing and selling electronic component	7,090	Other investment of the Corporation Mainland China	-	-	-	-	(2,350)	100	(2,350)	4,077	-
Ningbo Longying Semiconductor Co., LTD.	Research and development in integrated circuit	183,180	Other investment of the Corporation Mainland China	-	-	-	-	(5,200)	40	(2,081)	59,005	-
Ningbo Free Trade Zon Ding Kai Investment Management Company	Investment Management	160,043	Other investment of the Corporation Mainland China	-	-	-	-	(1)	100	(1)	163,464	-

2. Investment limits in Mainland China:

Accumulated Investment in Mainland China as of December 31, 2018	Investment Amounts Authorized by Investment Commission, MOEA	Upper Limit on the Amount of Investment Stipulated by Investment Commission, MOEA
$1,474,108	$1,832,878	$ -

Note: The investment in Mainland China has no maximum limitation since TXC Corporation had acquire the approval by the Industrial Development Bureau of the Company's establishment of operating head quarters in Taiwan.

TXC CORPORATION AND SUBSIDIARIES

SIGNIFICANT TRANSACTIONS WITH INVESTEE COMPANIES IN MAINLAND CHINA, EITHER DIRECTLY OR INDIRECTLY THROUGH A THIRD AREA, AND THEIR PRICES, PAYMENT TERMS, AND UNREALIZED GAINS OR LOSSES
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

1. Significant direct or indirect transactions with the investees, prices and terms of payment, unrealized gain or loss:

Company Name	Related Party	Transaction Type	Transaction Details					Accounts/Notes Receivable/Payable		Unrealized Gain or Loss
			Amount	Percentage (%)	Price	Payment Term	Compared with Terms of Third Parties	Balance	%	
TXC Corporation	TXC (Ningbo) Corporation	Purchase	$ 1,633,711	33	Its trading price depends on its function within the Group	Similar with third parties	Its trading price depends on its function within the Group	$ (423,140)	(35)	$ 6,601
	TXC (Ningbo) Corporation	Sale	297,164	5	〃	〃	〃	98,303	4	452
	TXC (Chongqing) Corporation	Purchase	731,936	15	〃	〃	〃	(178,878)	(15)	3,725
Growing profits Trading Ltd.	TXC (Ningbo) Corporation	Sale	166,868	27	〃	〃	〃	34,631	20	-

2. Endorsements guarantees or collateral directly or indirectly provided to the investees: None.

3. Financings directly or indirectly provided to the investees: None.

4. The maximum balance of funds, the ending balance, the interest rate range and the total amount of current interest: None.

5. Other transactions that significantly impacted current year’s profit or loss or financial position: None.

TABLE 9

TXC CORPORATION AND SUBSIDIARIES

INTERCOMPANY RELATIONSHIPS AND SIGNIFICANT INTERCOMPANY TRANSACTIONS
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

For the year ended December 31, 2018

No.	Company Name	Counterparty	Natural of Relationship (Note 1)	Intercompany Transactions			
				Accounts	Amount	Terms (Note 2)	Percentage of Consolidated Total Gross Sales or Total Assets (%)
0	TXC Corporation	TXC Technology, Inc.	a	Other expense - consulting expense	$ 69,758	1	1
		TXC Japan Corporation	a	Other expense - consulting expense	32,787	1	-
				Purchase	5,494	1	-
				Sales	8,185	1	-
		TXC (Ningbo) Corporation	a	Sales	297,164	1	4
				Purchase	1,663,711	1	20
				Trade receivables	98,303	1	1
				Other receivables	6,143	1	-
				Trade payables	423,140	1	3
		TXC (Chongqing) Corporation	a	Purchase	731,936	1	9
				Trade payables	178,878	1	1
		Growing profits Trading Ltd.		Purchase	133,329	1	2
				Trade payables	33,855	1	-
1	TXC (Ningbo) Corporation	Growing profits Trading Ltd.	c	Purchase	166,868	3	2
				Trade payables	34,631	3	-
		TXC (Chongqing) Corporation	c	Sales	74,954	3	1
				Purchase	259,549	3	3
				Trade receivables	11,143	3	-
				Trade payables	88,568	3	1

Note 1: a. Represent the transactions from parent company to subsidiary.
c. Represent the transactions between subsidiaries.

Note 2: In 2018, the selling price and purchasing price were not significantly different from those with third parties, except those for TXC (Ningbo) Corporation, TXC (Chongqing) Limited and Growing profits Trading Ltd which is depends on its function within the Group.

Appendix 2

TXC Corporation

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

INDEPENDENT AUDITORS' REPORT

The Board of Directors and Stockholders
TXC Corporation

Opinion

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

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

Basis for Opinion

We conducted our audits in accordance with the Regulations Governing Auditing and Attestation of Financial Statements by Certified Public Accountants and auditing standards generally accepted in the Republic of China. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with The Norm of Professional Ethics for Certified Public Accountant of the Republic of China, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements for the year ended December 31, 2018. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key Audit Matter

Inventory of the Company as of December 31, 2018 was NT$997,780 thousands, accounted for 8.3% of the total assets in the financial statements. The valuation of inventory is subjected to fluctuation of market demand and technology changing rapidly. It may result in the impairment of inventory. The management determines the inventory book value and the allowance for inventories at lower of cost or net realize value in accordance with IAS 2 "Inventory". Since the value of inventory is subject to management's judgement and significant in the financial statements, the inventory valuation is identified as a key audit matter.

Refer to Notes 4, 5 and 15 for a summary of the significant accounting policies and refer to Note 15 for the amount of the allowance for inventories.

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

1. Tested the net realized value of inventories on the balance sheet date. Sampled testing the price on the latest purchase order and sales order to verify whether the net realized value of inventories is reasonable.

2. Verified the accuracy of the inventory aging report by testing the inventory's aging details. Obtained the list of inferior goods and spoilage to understand the slow moving inventory and evaluate whether the impairment for inventories is appropriate.

3. Performing physical count, in order to assess the appropriateness regarding write-downs of the inventories.

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

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

In preparing the 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.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the auditing standards generally accepted in the Republic of China will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

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

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

2. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.

3. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

4. Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.

5. Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the 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 financial statements. We are responsible for the direction, supervision and performance of the audit. We remain solely responsible for our audit opinion.

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

We also provide those charged with governance with 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 financial statements for the year ended December 31, 2018 and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partners on the audit resulting in this independent auditors' report are Yi Hui Lin. and Po-Jen Weng.

Deloitte & Touche
Taipei, Taiwan
Republic of China

March 27, 2019

<u>Notice to Readers</u>

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

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

TXC CORPORATION

BALANCE SHEETS
DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018		2017	
ASSETS	**Amount**	**%**	**Amount**	**%**
CURRENT ASSETS				
Cash and cash equivalents (Notes 4 and 6)	$ 557,442	5	$ 798,761	6
Financial assets at fair value through profit or loss - current (Notes 4 and 7)	86	-	-	-
Available-for-sale financial assets - current (Notes 4 and 10)	-	-	39,657	-
Held-to-maturity financial assets - current (Notes 4, 5 and 11)	-	-	45,680	1
Financial assets at amortized cost - current (Note 9)	68,946	1	-	-
Notes receivable (Notes 4, 5 and 14)	1,293	-	1,083	-
Trade receivables (Notes 4, 5 and 14)	2,121,827	18	2,072,532	16
Trade receivables from related parties (Notes 4, 5, 14 and 30)	110,001	1	69,939	1
Other receivables (Notes 4 and 14)	17,784	-	14,425	-
Other receivables from related parties (Notes 4 and 30)	6,458	-	19,782	-
Current tax assets (Note 25)	5,245	-	-	-
Inventories (Notes 4 and 15)	997,780	8	956,153	8
Debt investments with no active market - current (Note 13)	-	-	39,200	-
Other current assets	9,352	-	11,721	-
Total current assets	3,896,214	33	4,068,933	32
NON-CURRENT ASSETS				
Financial assets at fair value through profit or loss - non-current (Notes 4 and 7)	30,975	-	-	-
Financial assets at fair value through other comprehensive income - non-current (Notes 4 and 8)	330,925	3	-	-
Available-for-sale financial assets - non-current (Notes 4 and 10)	-	-	512,967	4
Financial assets measured at cost - non-current (Notes 4 and 12)	-	-	37,322	-
Investments accounted for using equity method (Notes 4 and 16)	5,604,216	47	5,786,886	46
Property, plant and equipment (Notes 4 and 17)	1,894,487	16	2,109,112	17
Investment properties (Notes 4 and 18)	115,474	1	137,132	1
Other intangible assets (Note 4)	170	-	543	-
Deferred tax assets (Notes 4, 5 and 25)	28,654	-	42,271	-
Prepayment for equipment	50,827	-	6,940	-
Refundable deposits	1,008	-	2,728	-
Total non-current assets	8,056,736	67	8,635,901	68
TOTAL	$ 11,952,950	100	$ 12,704,834	100
LIABILITIES AND EQUITY				
CURRENT LIABILITIES				
Short-term loans (Note 19)	$ -	-	$ 549	-
Financial liabilities at fair value through profit or loss - current (Notes 4 and 7)	-	-	1,265	-
Notes payable	-	-	276	-
Trade payables	577,266	5	428,413	3
Trade payables to related parties (Note 30)	635,993	5	702,531	6
Other payables (Note 22)	354,404	3	395,778	3
Other payables to related parties (Note 30)	3,221	-	2,974	-
Current tax liabilities (Notes 4 and 25)	-	-	23,239	-
Current portion of long-term borrowings and bonds payable (Note 19)	46,875	1	62,500	1
Other current liabilities	8,486	-	10,984	-
Total current liabilities	1,626,245	14	1,628,509	13
NON-CURRENT LIABILITIES				
Long-term borrowings (Note 19)	1,350,000	11	1,696,875	13
Deferred tax liabilities (Notes 4 and 25)	145,490	1	182,393	1
Net defined benefit liabilities - non-current (Notes 4 and 21)	68,033	1	62,024	1
Guarantee deposits received	12,342	-	12,334	-
Total non-current liabilities	1,575,865	13	1,953,626	15
Total liabilities	3,202,110	27	3,582,135	28
EQUITY (Note 22)				
Share capital				
Ordinary shares	3,097,570	26	3,097,570	24
Capital surplus	1,665,116	14	1,665,224	13
Retained earnings				
Legal reserve	1,349,083	11	1,252,818	10
Special reserve	222,793	2	222,793	2
Unappropriated earnings	2,671,184	22	2,767,383	22
Total retained earnings	4,243,060	35	4,242,994	34
Other equity				
Exchange differences on translating foreign operations	(359,923)	(3)	(264,137)	(2)
Unrealized gain on Financial assets at fair value through other comprehensive income	105,017	1	-	-
Unrealized gain or loss on available-for-sale financial assets	-	-	381,048	3
Total other equity	(254,906)	(2)	116,911	1
Total equity	8,750,840	73	9,122,699	72
TOTAL	$ 11,952,950	100	$ 12,704,834	100

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

TXC CORPORATION

STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017	
	Amount	%	Amount	%
OPERATING REVENUE (Note 23)				
Sales	$ 6,657,254	101	$ 7,158,878	101
Less: Sales returns	17,427	-	20,397	-
Less: Sales allowances	82,921	1	83,517	1
Net operating revenue	6,556,906	100	7,054,964	100
COST OF GOODS SOLD (Notes 15 and 24)	5,542,656	84	5,800,259	82
GROSS PROFIT	1,014,250	16	1,254,705	18
UNREALIZED INTER-COMPANY GAIN	(1,064)	-	(2,634)	-
REALIZED GAIN ON INTER AFFILIATE ACCOUNTS	2,634	-	4,718	-
REALIZED GROSS PROFIT	1,015,820	16	1,256,789	18
OPERATING EXPENSES (Notes 4 and 24)				
Selling and marketing expenses	245,375	4	283,204	4
General and administrative expenses	119,397	2	152,821	2
Research and development expenses	327,119	5	367,948	5
Expected credit loss reversed on trade receivables	(513)	-	-	-
Total operating expenses	691,378	11	803,973	11
PROFIT FROM OPERATIONS	324,442	5	452,816	7
NON-OPERATING INCOME AND EXPENSES				
Other income (Notes 4 and 24)	54,715	1	49,977	1
Other gains and losses (Note 24)	6,580	-	176,895	2
Finance costs (Notes 4 and 24)	(12,443)	-	(15,267)	-
Share of profit of associates and joint ventures	313,593	5	361,249	5
Total non-operating income and expenses	362,445	6	572,854	8
PROFIT BEFORE INCOME TAX	686,887	11	1,025,670	15
INCOME TAX EXPENSE (Note 25)	42,537	1	63,015	1
NET PROFIT FOR THE YEAR	644,350	10	962,655	14

(Continued)

TXC CORPORATION

STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2018		2017	
	Amount	**%**	**Amount**	**%**
OTHER COMPREHENSIVE INCOME (LOSS)				
Items that will not be reclassified subsequently to profit or loss:				
Remeasurement of defined benefit plans	$ (10,620)	-	$ (15,255)	-
Unrealized loss on investments in equity instruments at fair value through other comprehensive income	(146,774)	(2)	-	-
Share of the other comprehensive income of associates accounted for using the equity method	6,424	-	(187)	-
	(150,970)	(2)	(15,442)	-
Items that may be reclassified subsequently to profit or loss:				
Exchange differences on translating foreign operations	(94,043)	(2)	(101,905)	(2)
Share of the other comprehensive income of associates accounted for using the equity method	(1,743)	-	(944)	-
Unrealized loss on available-for-sale financial assets	-	-	(573,997)	(8)
	(95,786)	(2)	(676,846)	(10)
Other comprehensive (loss) income for the year, net of income tax	(246,756)	(4)	(692,288)	(10)
TOTAL COMPREHENSIVE (LOSS) INCOME FOR THE YEAR	$ 397,594	6	$ 270,367	4
EARNINGS PER SHARE (Note 26)				
From continuing and discontinued operations				
Basic	$ 2.08		$ 3.11	
Diluted	$ 2.06		$ 3.07	

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

TXC CORPORATION

STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

				Retained Earnings			Others			
	Shares (In Thousands)	Share Capital	Capital Surplus	Legal Reserve	Special Reserve	Unappropriated Earnings	Exchange Differences on Translating Foreign Operations	Unrealized Gain (Loss) on Financial Assets at Fair Value Through Other Comprehensive Income	Unrealized Gain (Loss) on Available-for-sale Financial Assets	Total Equity
BALANCE AT JANUARY 1, 2017	309,757	$ 3,097,570	$ 1,665,224	$ 1,151,202	$ 222,793	$ 2,789,106	$ (161,346)	$ -	$ 955,103	$ 9,719,652
Appropriation of 2016 earnings										
Cash dividends distributed by the Company	-	-	-	-	-	(867,320)	-	-	-	(867,320)
Legal reserve	-	-	-	101,616	-	(101,616)	-	-	-	-
Other comprehensive income (loss) for the year ended December 31, 2017, net of income tax	-	-	-	-	-	(15,442)	(102,791)	-	(574,055)	(692,288)
Net profit for the year ended December 31, 2017	-	-	-	-	-	962,655	-	-	-	962,655
Total comprehensive loss for the year ended December 31, 2017	-	-	-	-	-	947,213	(102,791)	-	(574,055)	270,367
BALANCE AT DECEMBER 31, 2017	309,757	3,097,570	1,665,224	1,252,818	222,793	2,767,383	(264,137)	-	381,048	9,122,699
Effect of retrospective application and retrospective restatements	-	-	-	-	-	102,957	-	283,139	(381,048)	5,048
BALANCE AT JANUARY 1, 2018 AS RESTATED	309,757	3,097,570	1,665,224	1,252,818	222,793	2,870,340	(264,137)	283,139	-	9,127,747
Appropriation of 2017 earnings										
Legal reserve	-	-	-	96,265	-	(96,265)	-	-	-	-
Cash dividends distributed by the Company	-	-	-	-	-	(774,393)	-	-	-	(774,393)
Net profit for the for the year ended December 31, 2018	-	-	-	-	-	644,350	-	-	-	644,350
Other comprehensive loss for the for the year ended December 31, 2018, net of income tax	-	-	-	-	-	(10,792)	(95,786)	(140,178)	-	(246,756)
Total comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	-	633,558	(95,786)	(140,178)	-	397,594
Disposal of equity instruments at fair value through other comprehensive income	-	-	-	-	-	37,944	-	(37,944)	-	-
Changes in capital surplus from investment in associates and joint ventures accounted for using the equity method	-	-	(108)	-	-	-	-	-	-	(108)
BALANCE AT DECEMBER 31, 2018	309,757	$ 3,097,570	$ 1,665,116	$ 1,349,083	$ 222,793	$ 2,671,184	$ (359,923)	$ 105,017	$ -	$ 8,750,840

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

TXC CORPORATION

STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES		
Income before income tax	$ 686,887	$ 1,025,670
Adjustments for:		
Depreciation expenses	294,404	367,396
Depreciation expenses of investment properties	21,658	22,255
Amortization expenses	558	1,255
Expected credit loss reversed on trade receivables	(513)	-
Impairment loss recognized on accounts receivables	-	(2,223)
Net (gain) loss on fair value change of financial assets and liabilities designated as at fair value through profit or loss	(1,414)	306
Finance costs	12,443	15,267
Interest income	(8,103)	(7,217)
Dividend income	(1,527)	(2,288)
Share of profit of associates and joint ventures	(313,593)	(361,249)
Gain on disposal of property, plant and equipment	(1,232)	(66)
Gain on disposal of investment property	-	(50,061)
Gain on disposal of investment	-	(228,666)
Impairment loss recognized on financial assets	-	9,971
Write-down of inventories	4,995	-
Unrealized gain on the transactions with subsidiaries, associates and joint ventures	1,064	2,634
Realized gain on the transactions with subsidiaries, associates and joint ventures	(2,634)	(4,718)
Changes in operating assets and liabilities:		
Financial assets mandatorily classified as at fair value through profit or loss	10,010	-
Notes receivable	(211)	1,281
Trade receivables	(48,753)	351,689
Trade receivables from related parties	(40,090)	25,480
Other receivables	(9,217)	17,074
Other receivables from related parties	13,324	(18,765)
Inventories	(46,622)	(28,808)
Other current assets	2,369	47,073
Decrease in financial liabilities mandatorily classified as at fair value through profit or loss	(1,265)	-
Financial liabilities held or trading	-	(13,445)
Notes payable	(276)	(480)
Trade payables	148,853	(176,762)
Trade payables to related parties	(66,538)	5,278
Other payables	(42,186)	(184,867)
Other payables to related parties	247	2,711

(Continued)

TXC CORPORATION

STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018	2017
Other current liabilities	$ (2,498)	$ (14,407)
Defined benefit liabilities - non-current	(4,611)	(9,542)
Cash generated from operations	605,529	791,776
Interest paid	(12,931)	(14,828)
Income taxes paid	(64,010)	(143,870)
Net cash generated from operating activities	528,588	633,078
CASH FLOWS FROM INVESTING ACTIVITIES		
Proceeds from sale of financial assets at fair value through other comprehensive income	53,886	-
Purchase of financial assets at amortized cost	(71,004)	-
Proceeds on sale of financial assets at amortized co	89,480	-
Increase in other financial assets	-	(39,200)
Proceeds from sale of available-for-sale financial assets	-	214,181
Proceeds on sale of financial assets at fair value through profit or loss	-	110,911
Purchase of financial assets measured at cost	-	(1,772)
Proceeds from sale of financial assets measured at cost	-	87,237
Acquisition of associates	(234,302)	(26,540)
Net cash outflow on acquisition of associates(Note 16)	(1,746)	-
Net cash inflow on disposal of associates (Note 16)	641,205	-
Payments for property, plant and equipment	(104,393)	(340,765)
Proceeds from disposal of property, plant and equipment	25,846	1,272
Proceeds from disposal of investment property	-	56,674
Decrease in refundable deposits	1,720	11
Payments for intangible assets	(185)	-
Increase in prepayment for equipment	(43,887)	-
Interest received	8,716	7,295
Dividend received from associates	3,205	66,487
Other dividends received	1,527	2,288
Net cash generated from investing activities	370,068	138,079
CASH FLOWS FROM FINANCING ACTIVITIES		
Decrease in short-term borrowings	(549)	(19,731)
Proceeds from long-term borrowings	400,000	500,000
Repayments of long-term borrowings	(762,500)	(512,500)
Proceeds from guarantee deposits received	8	-
Refunds of guarantee deposits received	-	(13,973)
Dividends paid to owners of the Company	(774,393)	(867,320)
Net cash used in financing activities	(1,137,434)	(913,524)
EFFECTS OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	(2,541)	4,534

(Continued)

TXC CORPORATION

STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017
(In Thousands of New Taiwan Dollars)

	2018	2017
NET DECREASE IN CASH AND CASH EQUIVALENTS	$ (241,319)	$ (137,833)
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	798,761	936,594
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	$ 557,442	$ 798,761

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

1. ORGANIZATION AND OPERATIONS

TXC Corporation (TXC) was incorporated on December 28, 1983 under the Company Law and other related regulations of the Republic of China (ROC).

TXC specializes in producing high quality Quartz Unite Crystal, Automotive Crystal, Crystal Oscillator (CXO), and Timing Module (TM) as well as develops a variety of sensors by core technology to satisfy the market demand. Sensors are applied to various applications including mobile communication, wearable device, Internet of Things and vehicle electronics, etc.

On August 26, 2002, TXC's shares began to be traded on the Taiwan Stock Exchange.

The functional currency of the Company is New Taiwan dollars. The financial statements are presented in New Taiwan dollars.

In order to ensure investors' rights and interests, the Company had applied to Taiwan Corporate Governance Association for corporate governance assessment certification. The Company has acquired (CG6005 general version of corporate governance assessment and authentication) and (CG6008 advanced version of corporate governance assessment and authentication), on March 23, 2011 and June 27, 2013, respectively. The Company will continue to strengthen corporate governance functions in order to work with international standards and to protect public interests.

2. THE AUTHORIZATION OF FINANCIAL STATEMENTS

The financial statements were reported to the Board of Directors and issued on March 22, 2019.

3. APPLICATION OF NEW AND REVISED INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRSs)

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

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

   1) IFRS 9 "Financial Instruments" and related amendments

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

Classification, measurement and impairment of financial assets

On the basis of the facts and circumstances that existed as of January 1, 2018, the Company has performed an assessment of the classification of recognized financial assets and has elected not to restate prior reporting periods.

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

	Measurement Category		Carrying Amount		
Financial Assets	**IAS 39**	**IFRS 9**	**IAS 39**	**IFRS 9**	**Remark**
Equity securities	Available-for-sale - non-current	Fair value through other comprehensive income (i.e. FVTOCI) - equity instruments	$ 512,967	$ 512,967	a)
	Financial assets measured at cost	Fair value through other comprehensive income (i.e. FVTOCI) - equity instruments	37,322	42,370	a)
Mutual funds	Available-for-sale - current	FVTPL - current	39,657	39,657	b)
Debt securities	Held-to-maturity financial assets - current	Amortized cost	45,680	45,680	c)
Time deposits with original maturity of more than 3 months	Debt investments with no active markets	Amortized cost	39,200	39,200	c)

	IAS 39 Carrying Amount as of January 1, 2018	Reclassifi-cations	Remea-surements	IFRS 9 Carrying Amount as of January 1, 2018	Retained Earnings Effect on January 1, 2018	Other Equity Effect on January 1, 2018	Remark
FVTOCI	$ -	$ 550,289	$ 5,048	$ 555,337	$ 103,300	$ (98,252)	a)
Equity instruments							
Add: Reclassification from available-for-sale - non-current (IAS 39)	512,967	(512,967)	-	-	-	-	a)
Add: Reclassification from financial assets measured at cost (IAS 39)	37,322	(37,322)	-	-	-	-	a)
	550,289	-	5,048	555,337	103,300	(98,252)	
FVTPL	-	39,657	-	39,657	(343)	343	a)
Add: Reclassification from available-for-sale - current (IAS 39)	39,657	(39,657)	-	-	-	-	b)
	39,657	-	-	39,657	(343)	343	
Amortized cost	-	84,880	-	84,880	-	-	c)
Add: Reclassification from held-to-maturity - current (IAS 39)	45,680	(45,680)	-	-	-	-	c)
Add: Reclassification from investments in debt security with no active market (IAS 39)	39,200	(39,200)	-	-	-	-	(c)
	84,880	-	-	84,880	-	-	
	$ 674,826	$ -	$ 5,048	$ 679,874	$ 102,957	$ (97,909)	

a) The Company elected to designate all its investments in equity securities previously classified as available-for-sale under IAS 39 as at FVTOCI under IFRS 9, because these investments are not held for trading. As a result, the related other equity - unrealized loss on available-for-sale financial assets of $381,048 thousand was reclassified to other equity - unrealized loss on financial assets at FVTOCI.

   Investments in unlisted shares previously measured at cost under IAS 39 have been designated as at FVTOCI under IFRS 9 and were remeasured at fair value. Consequently, an increase of $5,048 thousand was recognized in both financial assets at FVTOCI and other equity - unrealized gain on financial assets at FVTOCI on January 1, 2018.

The Company recognized under IAS 39 impairment loss on certain investments in equity securities previously classified as available-for-sale and measured at cost and the loss was accumulated in retained earnings. Since those investments were designated as at FVTOCI under IFRS 9 and no impairment assessment is required, an adjustment was made that resulted in a decrease of $103,300 thousand in other equity - unrealized gain on financial assets at FVTOCI and an increase of $103,300 thousand in retained earnings on January 1, 2018.

b) Mutual funds previously classified as available-for-sale under IAS 39 were classified mandatorily as at FVTPL under IFRS 9, because the contractual cash flows are not solely payments of principal and interest on the principal outstanding and they are not equity instruments. The retrospective adjustment resulted in an increase of $343 thousand in other equity - unrealized gain (loss) on available-for-sale financial assets and an decrease of $343 thousand in retained earnings on January 1, 2018.

c) Debt investments previously classified as held-to-maturity financial assets and debt investments with no active market and measured at amortized cost under IAS 39 were classified as measured at amortized cost with an assessment of expected credit losses under IFRS 9, because on January 1, 2018, the contractual cash flows were solely payments of principal and interest on the principal outstanding and these investments were held within a business model whose objective is to collect contractual cash flows.

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

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

b. Amendments to the Regulations Governing the Preparation of Financial Reports by Securities Issuers and the International Financial Reporting Standards (IFRS), International Accounting Standards (IAS), Interpretations of IFRS (IFRIC) and Interpretations of IAS (SIC) (collectively, the “IFRSs”) endorsed by the FSC for application starting from 2019

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

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

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

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

1) IFRS 16 "Leases"

IFRS 16 sets out the accounting standards for leases that will supersede IAS 17 and a number of related interpretations.

<u>Definition of a lease</u>

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

<u>The Company as lessee</u>

Upon initial application of IFRS 16, the Company will recognize right-of-use assets, or investment properties if the right-of-use assets meet the definition of investment properties, and lease liabilities for all leases on the balance sheets except for those whose payments under low-value asset and short-term leases will be recognized as expenses on a straight-line basis. On the statements of comprehensive income, the Company will present the depreciation expense charged on right-of-use assets separately from the interest expense accrued on lease liabilities; interest is computed using the effective interest method. On the statements of cash flows, cash payments for the principal portion of lease liabilities will be classified within financing activities; cash payments for the interest portion will be classified within operating activities. Currently, payments under operating lease contracts, including property interest qualified as investment properties, are recognized as expenses on a straight-line basis. Prepaid lease payments for land use rights of land located in China are recognized as prepayments for leases. The difference between the actual payments and the expenses, as adjusted for lease incentives, is recognized as prepayments for leases. Cash flows for operating leases are classified within operating activities on the statements of cash flows. Leased assets and finance lease payables are recognized for contracts classified as finance leases.

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

<u>The Company as lessor</u>

The Company will not make any adjustments for leases in which it is a lessor and will account for those leases with the application of IFRS 16 starting from January 1, 2019.

<u>Anticipated impact on assets, liabilities and equity</u>

	Carrying Amount as of December 31, 2018	**Adjustments Arising from Initial Application**	**Adjusted Carrying Amount as of January 1, 2019**
Right-of-use assets - building	$ -	$ 1,397	$ 1,397
Lease liabilities - current	-	1,397	1,397
Lease liabilities - non-current	-	-	-

2) IFRIC 23 "Uncertainty over Income Tax Treatments"

IFRIC 23 clarifies that when there is uncertainty over income tax treatments, the Company should assume that the taxation authority will have full knowledge of all related information when making related examinations. If the Company concludes that it is probable that the taxation authority will accept an uncertain tax treatment, the Company should determine the taxable profit, tax bases, unused tax losses, unused tax credits or tax rates consistently with the tax treatments used or planned to be used in its income tax filings. If it is not probable that the taxation authority will accept an uncertain tax treatment, the Company should make estimates using either the most likely amount or the expected value of the tax treatment, depending on which method the Company expects to better predict the resolution of the uncertainty. The Company has to reassess its judgments and estimates if facts and circumstances change.

3) Amendments to IAS 28 "Long-term Interests in Associates and Joint Ventures"

The amendments clarified that IFRS 9 shall be applied to account for other financial instruments in an associate or joint venture to which the equity method is not applied. These included long-term interests that, in substance, form part of the Company's net investment in an associate or joint venture.

4) Amendments to IFRS 9 "Prepayment Features with Negative Compensation"

IFRS 9 stipulated that if a contractual term of a financial asset permits the issuer (i.e. the debtor) to prepay a debt instrument or permits the holder (i.e. the creditor) to put a debt instrument back to the issuer before maturity and the prepayment amount substantially represents unpaid amounts of the principal and interest on the principal amount outstanding, which may include reasonable compensation for early termination, the financial asset has contractual cash flows that are solely payments of principal and interest on the principal amount outstanding. The amendments further explain that reasonable compensation may be paid or received by either of the parties, i.e. a party may receive reasonable compensation when it chooses to terminate the contract early.

5) Annual Improvements to IFRSs 2015-2017 Cycle

Several standards, including IFRS 3, IFRS 11, IAS 12 and IAS 23 "Borrowing Costs", were amended in this annual improvement. IAS 23 was amended to clarify that, if any specific borrowing remains outstanding after the related asset is ready for its intended use or sale, the related borrowing costs shall be included in the calculation of the capitalization rate on general borrowings.

6) Amendments to IAS 19 "Plan Amendment, Curtailment or Settlement"

The amendments stipulate that, if a plan amendment, curtailment or settlement occurs, the current service cost and the net interest for the remainder of the annual reporting period are determined using the actuarial assumptions used for the remeasurement of the net defined benefit liabilities (assets). In addition, the amendments clarify the effect of a plan amendment, curtailment or settlement on the requirements regarding the asset ceiling. The Company will apply the above amendments prospectively.

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

c. New IFRSs in issue but not yet endorsed and issued into effect by the FSC

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

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

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

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

1) Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets between an Investor and its Associate or Joint Venture"

The amendments stipulate that, when the Company sells or contributes assets that constitute a business (as defined in IFRS 3) to an associate or joint venture, the gain or loss resulting from the transaction is recognized in full. Also, when the Company loses control of a subsidiary that contains a business but retains significant influence or joint control, the gain or loss resulting from the transaction is recognized in full.

Conversely, when the Company sells or contributes assets that do not constitute a business to an associate or joint venture, the gain or loss resulting from the transaction is recognized only to the extent of the Company's interest as an unrelated investor in the associate or joint venture, i.e. the Company's share of the gain or loss is eliminated. Also, when the Company loses control of a subsidiary that does not contain a business but retains significant influence or joint control over an associate or a joint venture, the gain or loss resulting from the transaction is recognized only to the extent of the Company's interest as an unrelated investor in the associate or joint venture, i.e. the Company's share of the gain or loss is eliminated.

2) Amendments to IFRS 3 "Definition of a Business"

The amendments clarify that, to be considered a business, an acquired set of activities and assets must include, at a minimum, an input and a substantive process applied to the input that together significantly contribute to the ability to create outputs. The amendments narrow the definitions of outputs by focusing on goods and services provided to customers, and the reference to an ability to reduce costs is removed. Moreover, the amendments remove the assessment of whether market participants are capable of replacing any missing inputs or processes and continuing to produce outputs. In addition, the amendments introduce an optional concentration test that permits a simplified assessment of whether an acquired set of activities and assets is not a business.

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

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Statement of Compliance

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

Basis of Preparation

The financial statements have been prepared on the historical cost basis except for financial instruments that are measured at fair values. Historical cost is generally based on the fair value of the consideration given in exchange for assets.

The fair value measurements are grouped into Levels 1 to 3 based on the degree to which the fair value measurement inputs are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

a. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;

b. Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and

c. Level 3 inputs are unobservable inputs for the asset or liability.

When preparing its parent company only financial statements, the Company used equity method to account for its investment in subsidiaries, associates and jointly controlled entities. In order for the amounts of the net profit for the year, other comprehensive income for the year and total equity in the parent company only financial statements to be the same with the amounts attributable to the owner of the Company in its financial statements, adjustments arising from the differences in accounting treatment between parent company only basis and basis were made to investments accounted for by equity method, share of profit or loss of subsidiaries, associates and joint ventures, share of other comprehensive income of subsidiaries, associates and joint ventures and related equity items, as appropriate, in the parent company only financial statements.

Classification of Current and Non-current Assets and Liabilities

Current assets include:

a. Assets held primarily for the purpose of trading;

b. Assets expected to be realized within twelve months after the reporting period; and

c. Cash and cash equivalents unless the asset is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

Current liabilities include:

a. Liabilities held primarily for the purpose of trading;

b. Liabilities due to be settled within twelve months after the reporting period, even if an agreement to refinance, or to reschedule payments, on a long-term basis is completed after the reporting period and before the financial statements are authorized for issue; and

c. Liabilities for which the Company does not have an unconditional right to defer settlement for at least twelve months after the reporting period. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

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

Foreign Currencies

In preparing the Company's financial statements, transactions in currencies other than the Company's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions.

At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Exchange differences on monetary items arising from settlement or translation are recognized in profit or loss in the period.

Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

For the purposes of presenting financial statements, the assets and liabilities of the Company's foreign operations (including of the subsidiaries, associates, joint ventures or branches operations in other countries or currencies used different with the Company) are translated into New Taiwan dollars using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period. Exchange differences arising are recognized in other comprehensive income.

On the disposal of a foreign operation (i.e. a disposal of the Company's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, a disposal involving loss of joint control over a jointly controlled entity that includes a foreign operation, or a disposal involving loss of significant influence over an associate that includes a foreign operation), all of the exchange differences accumulated in equity in respect of that operation attributable to the owners of the Company are reclassified to profit or loss.

In relation to a partial disposal of a subsidiary that does not result in the Company losing control over the subsidiary, the proportionate share of accumulated exchange differences are re-attributed to non-controlling interests of the subsidiary and are not recognized in profit or loss. For all other partial disposals (i.e. partial disposals of associates or jointly controlled entities that do not result in the Company losing significant influence or joint control), the proportionate share of the accumulated exchange differences recognized in other comprehensive income is reclassified to profit or loss.

Inventories

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

Investments in Subsidiaries

The Company uses the equity method to account for its investments in subsidiaries.

Subsidiary is an entity that is controlled by the Company.

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

Changes in the Company's ownership interest in a subsidiary that do not result in the Company losing control of the subsidiary are equity transactions. The Company recognizes directly in equity any difference between the carrying amount of the investment and the fair value of the consideration paid or received.

When the Company's share of losses of a subsidiary exceeds its interest in that subsidiary (which includes any carrying amount of the investment accounted for by the equity method and long-term interests that, in substance, form part of the Company's net investment in the subsidiary), the Company continues recognizing its share of further losses.

Any excess of the cost of acquisition over the Company's share of the net fair value of the identifiable assets and liabilities of a subsidiary at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment and is not amortized. Any excess of the Company's share of the net fair value of the identifiable assets and liabilities over the cost of acquisition is recognized immediately in profit or loss.

The Company assesses its investment for any impairment by comparing the carrying amount with the estimated recoverable amount as assessed based on the entire financial statements of the invested company. Impairment loss is recognized when the carrying amount exceeds the recoverable amount. If the recoverable amount of the investment subsequently increases, the Company recognizes reversal of the impairment loss; the adjusted post-reversal carrying amount should not exceed the carrying amount that would have been recognized (net of amortization or depreciation) had no impairment loss been recognized in prior years. An impairment loss recognized on goodwill cannot be reversed in a subsequent period.

When the Company loses control of a subsidiary, it recognizes the investment retained in the former subsidiary at its fair value at the date when control is lost. The difference between the fair value of the retained investment plus any consideration received and the carrying amount of previous investment at the date when control is lost is recognized as a gain or loss in profit or loss. Besides, the Company accounts for all amounts previously recognized in other comprehensive income in relation to that subsidiary on the same basis as would be required if the Company had directly disposed of the related assets or liabilities.

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

Investments in Associates

An associate is an entity over which the Company has significant influence and that is neither a subsidiary nor an interest in a joint venture.

The Company uses the equity method to account for its investments in associates.

Under the equity method, investments in an associate are initially recognized at cost and adjusted thereafter to recognize the Company's share of the profit or loss and other comprehensive income of the associate. The Company also recognizes the changes in the Company's share of equity of associates.

Any excess of the cost of acquisition over the Company's share of the net fair value of the identifiable assets and liabilities of an associate at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment and is not amortized. Any excess of the Company's share of the net fair value of the identifiable assets and liabilities over the cost of acquisition, after reassessment, is recognized immediately in profit or loss.

When the Company subscribes for additional new shares of the associate at a percentage different from its existing ownership percentage, the resulting carrying amount of the investment differs from the amount of the Company's proportionate interest in the associate. The Company records such a difference as an adjustment to investments with the corresponding amount charged or credited to capital surplus - changes in the Company's share of equity of associates. If the Company's ownership interest is reduced due to the additional subscription of the new shares of associate, the proportionate amount of the gains or losses previously recognized in other comprehensive income in relation to that associate is reclassified to profit or loss on the same basis as would be required if the investee had directly disposed of the related assets or liabilities. When the adjustment should be debited to capital surplus, but the capital surplus recognized from investments accounted for by the equity method is insufficient, the shortage is debited to retained earnings.

When the Company's share of losses of an associate equals or exceeds its interest in that associate (which includes any carrying amount of the investment accounted for by the equity method and long-term interests that, in substance, form part of the Company's net investment in the associate), the Company discontinues recognizing its share of further losses. Additional losses and liabilities are recognized only to the extent that the Company has incurred legal obligations, or constructive obligations, or made payments on behalf of that associate.

The entire carrying amount of the investment (including goodwill) is tested for impairment as a single asset by comparing its recoverable amount with its carrying amount. Any impairment loss recognized forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized to the extent that the recoverable amount of the investment subsequently increases.

The Company discontinues the use of the equity method from the date on which its investment ceases to be an associate. Any retained investment is measured at fair value at that date and the fair value is regarded as its fair value on initial recognition as a financial asset. The difference between the previous carrying amount of the associate attributable to the retained interest and its fair value is included in the determination of the gain or loss on disposal of the associate. The Company accounts for all amounts previously recognized in other comprehensive income in relation to that associate on the same basis as would be required if that associate had directly disposed of the related assets or liabilities. If an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate, the Company continues to apply the equity method and does not remeasure the retained interest.

When the Company transacts with its associate, profits and losses resulting from the transactions with the associate are recognized in the Company's financial statements only to the extent of interests in the associate that are not related to the Company.

Property, Plant and Equipment

Property, plant and equipment are stated at cost, less subsequent accumulated depreciation and subsequent accumulated impairment loss.

Properties in the course of construction for production, supply or administrative purposes are carried at cost, less any recognized impairment loss. Cost includes professional fees and borrowing costs eligible for capitalization. Such properties are depreciated and classified to the appropriate categories of property, plant and equipment when completed and ready for intended use.

Depreciation is recognized using the straight-line method. Each significant part is depreciated separately. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

Assets held under finance leases are depreciated over their expected useful lives on the same basis as owned assets. Assets are depreciated over the shorter of the lease term and their useful lives using the straight-line method.

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

Investment Properties

Investment properties are properties held to earn rentals and/or for capital appreciation.

Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are measured at cost less accumulated depreciation and accumulated impairment loss. Depreciation is recognized using the straight-line method.

On derecognition of an investment property, the difference between the net disposal proceeds and the carrying amount of the asset and is included in profit or loss in the period.

Intangible Assets

a. Intangible assets acquired separately

   Intangible assets with finite useful lives that are acquired separately are initially measured at cost and subsequently measured at cost less accumulated amortization and accumulated impairment loss. Amortization is recognized on a straight-line basis over their estimated useful lives. The estimated useful life, residual value, and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis which is in accordance with IAS 8 “Accounting Policies, Changes in Accounting Estimates and Errors”. The residual value of an intangible asset with a finite useful life shall be assumed to be zero unless the Company expects to dispose of the intangible asset before the end of its economic life. Intangible assets with indefinite useful lives that are acquired separately are measured at cost less accumulated impairment loss.

b. Derecognition of intangible assets

   On derecognition of an intangible asset, the difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss.

Impairment of Tangible and Intangible Assets Other Than Goodwill

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

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired.

Recoverable amount is the higher of fair value less costs to sell and value in use. If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount of the asset or cash-generating unit is reduced to its recoverable amount, with the resulting impairment loss recognized in profit or loss.

When an impairment loss is subsequently reversed, the carrying amount of the asset or cash-generating unit is increased to the revised estimate of its recoverable amount, but only to the extent of the carrying amount that would have been determined had no impairment loss been recognized for the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized in profit or loss.

Financial Instruments

Financial assets and financial liabilities are recognized when a group entity becomes a party to the contractual provisions of the instruments.

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

a. Financial assets

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

1) Measurement category

<u>2018</u>

Financial assets are classified into the following categories: Financial assets at FVTPL, financial assets at amortized cost, and investments in equity instruments at FVTOCI.

a) Financial assets at FVTPL

Financial assets are classified as at FVTPL when such a financial asset is mandatorily classified as at FVTPL. Financial assets mandatorily classified as at FVTPL include investments in equity instruments which are not designated as at FVTOCI and debt instruments that do not meet the amortized cost criteria or the FVTOCI criteria.

Financial assets at FVTPL are subsequently measured at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss does not incorporate any dividends or interest earned on such a financial asset. Fair value is determined in the manner described in Note 29.

b) Financial assets at amortized cost

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

i. The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and

ii. The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Subsequent to initial recognition, financial assets at amortized cost, including cash and cash equivalents, trade receivables at amortized cost and debt investments with no active market, are measured at amortized cost, which equals the gross carrying amount determined by the effective interest method less any impairment loss. Exchange differences are recognized in profit or loss.

Interest income is calculated by applying the effective interest rate to the gross carrying amount of such a financial asset, except for:

i. Purchased or originated credit-impaired financial assets, for which interest income is calculated by applying the credit-adjusted effective interest rate to the amortized cost of such financial assets; and

ii. Financial assets that have subsequently become credit-impaired, for which interest income is calculated by applying the effective interest rate to the amortized cost of such financial assets.

Cash equivalents include time deposits and repurchase agreement with original maturities within 3 months from the date of acquisition, which are highly liquid, readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

c) Investments in equity instruments at FVTOCI

On initial recognition, the Company may make an irrevocable election to designate investments in equity instruments as at FVTOCI. Designation as at FVTOCI is not permitted if the equity investment is held for trading or if it is contingent consideration recognized by an acquirer in a business combination.

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in other equity. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments; instead, it will be transferred to retained earnings.

Dividends on these investments in equity instruments are recognized in profit or loss when the Company's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment.

<u>2017</u>

Financial assets are classified into the following categories: Financial assets at fair value through profit or loss, held-to-maturity investments, available-for-sale financial assets, and loans and receivables.

a) Financial assets at fair value through profit or loss

Financial assets are classified as at fair value through profit or loss when the financial asset is either held for trading or it is designated as at fair value through profit or loss.

A financial asset may be designated as at fair value through profit or loss upon initial recognition if:

i. Such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or

ii. The financial asset forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Company's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or

iii. The contract contains one or more embedded derivatives so that the entire hybrid (combined) contract can be designated as at fair value through profit or loss.

Financial assets at fair value through profit or loss are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any dividend or interest earned on the financial asset.

Fair value is determined in the manner described in Note 29.

b) Held-to-maturity investments

Commercial paper, which is above specific credit ratings and the Company has positive intent and ability to hold to maturity, are classified as held-to-maturity investments.

Subsequent to initial recognition, held-to-maturity investments are measured at amortized cost using the effective interest method less any impairment.

c) Available-for-sale financial assets

Available-for-sale financial assets are non-derivatives that are either designated as available-for-sale or are not classified as loans and receivables, held-to-maturity investments or financial assets at fair value through profit or loss.

Available-for-sale financial assets are measured at fair value. Changes in the carrying amount of available-for-sale monetary financial assets relating to changes in foreign currency exchange rates, interest income calculated using the effective interest method and dividends on available-for-sale equity investments are recognized in profit or loss. Other changes in the carrying amount of available-for-sale financial assets are recognized in other comprehensive income and will be reclassified to profit or loss when the investment is disposed of or is determined to be impaired.

Dividends on available-for-sale equity instruments are recognized in profit or loss when the Company's right to receive the dividends is established.

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

d) Loans and receivables

Loans and receivables (including trade receivables, cash and cash equivalent, debt investments with no active market, and other receivables are measured at amortized cost using the effective interest method, less any impairment, except for short-term receivables when the effect of discounting is immaterial.

Cash equivalent includes time deposits and investments with original maturities within three months from the date of acquisition, highly liquid, readily convertible to a known amount of cash and be subject to an insignificant risk of changes in value. These cash equivalents are held for the purpose of meeting short-term cash commitments.

2) Impairment of financial assets

<u>2018</u>

The Company recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including trade receivables), investments in debt instruments that are measured at FVTOCI, lease receivables, as well as contract assets.

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

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

The Company recognizes an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for investments in debt instruments that are measured at FVTOCI, for which the loss allowance is recognized in other comprehensive income and does not reduce the carrying amount of such a financial asset.

<u>2017</u>

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

For financial assets carried at amortized cost, such as trade receivables and other receivables, assets are assessed for impairment on a collective basis even if they were assessed not to be impaired individually. Objective evidence of impairment for a portfolio of receivables could include the Company’s past experience of collecting payments, an increase in the number of delayed payments in the portfolio past the average credit period of 60 days, as well as observable changes in national or local economic conditions that correlate with default on receivables, and other situations.

For financial assets carried at amortized cost, the amount of the impairment loss recognized is the difference between the asset’s carrying amount and the present value of estimated future cash flows, discounted at the financial asset’s original effective interest rate.

For financial assets measured at amortized cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment loss is reversed through profit or loss to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortized cost would have been had the impairment not been recognized.

For available-for-sale equity investments, a significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment.

For all other financial assets, objective evidence of impairment could include significant financial difficulty of the issuer or counterparty, breach of contract, such as a default or delinquency in interest or principal payments, it becoming probable that the borrower will enter bankruptcy or financial re-organization, or the disappearance of an active market for that financial asset because of financial difficulties.

When an available-for-sale financial asset is considered to be impaired, cumulative gains or losses previously recognized in other comprehensive income are reclassified to profit or loss in the period.

In respect of available-for-sale equity securities, impairment loss previously recognized in profit or loss are not reversed through profit or loss. Any increase in fair value subsequent to an impairment loss is recognized in other comprehensive income. In respect of available-for-sale debt securities, the impairment loss is subsequently reversed through profit or loss if an increase in the fair value of the investment can be objectively related to an event occurring after the recognition of the impairment loss.

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

The carrying amount of the financial asset is reduced by the impairment loss directly for all financial assets with the exception of trade receivables and other receivables, where the carrying amount is reduced through the use of an allowance account. When a trade receivable and other receivables are considered uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account. Changes in the carrying amount of the allowance account are recognized in profit or loss except for uncollectible trade receivables and other receivables that are written off against the allowance account.

3) Derecognition of financial assets

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

Before 2018, on derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss which had been recognized in other comprehensive income is recognized in profit or loss. Starting from 2018, on derecognition of a financial asset at amortized cost in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. On derecognition of an investment in a debt instrument at FVTOCI, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss which had been recognized in other comprehensive income is recognized in profit or loss. However, on derecognition of an investment in an equity instrument at FVTOCI, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss, and the cumulative gain or loss which had been recognized in other comprehensive income is transferred directly to retained earnings, without recycling through profit or loss.

Revenue Recognition

<u>2018</u>

The Company identifies contracts with customers, allocates the transaction price to the performance obligations and recognizes revenue when performance obligations are satisfied.

- Revenue from the sale of goods

  Revenue from the sale of goods comes from sales of crystals frequency control devices and sensors. Sales of crystals frequency control devices and sensors are recognized as revenue when the goods are delivered to the customer's specific location, the goods are shipped and the goods are picked up by customers because it is the time when the customer has full discretion over the manner of distribution and price to sell the goods, has the primary responsibility for sales to future customers and bears the risks of obsolescence. Trade receivables are recognized concurrently.

2017

Revenue is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances. Sales returns are recognized at the time of sale provided the seller can reliably estimate future returns and recognizes a liability for returns based on previous experience and other relevant factors.

a. Sale of goods

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

   1) The Company has transferred to the buyer the significant risks and rewards of ownership of the goods;

   2) The Company retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;

   3) The amount of revenue can be measured reliably;

   4) It is probable that the economic benefits associated with the transaction will flow to the Company; and

   5) The costs incurred or to be incurred in respect of the transaction can be measured reliably.

   The Company does not recognize sales revenue on materials delivered to subcontractors because this delivery does not involve a transfer of risks and rewards of materials ownership.

   Income from properties developed for sale is recognized when construction is complete, rewards of ownership of the properties are transferred to buyers, and collectability of the related receivables is reasonably assured. Deposits received from sales of properties and installment payments are carried in the balance sheets under current liabilities.

b. Dividend and interest income

   Dividend income from investments is recognized when the shareholder's right to receive payment has been established provided that it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably.

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

Leasing

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

a. The Company as lessor

   Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and amortized on a straight-line basis over the lease term.

b. The Company as lessee

   Operating lease payments are recognized as an expense on a straight-line basis over the lease term.

Borrowing Costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

Other than stated above, all other borrowing costs are recognized in profit or loss in the period in which they are incurred.

Government Grants

Government grants are not recognized until there is reasonable assurance that the Company will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognized in profit or loss on a systematic basis over the periods in which the Company recognizes as expenses the related costs for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Company should purchase, construct or otherwise acquire non-current assets are recognized as a deduction from the carrying amount of the relevant asset and recognized in profit or loss on a systematic and rational basis over the useful lives of the related assets.

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Company with no future related costs are recognized in profit or loss in the period in which they become receivable.

Employee Benefits

a. Short-term employee benefits

   Liabilities recognized in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

b. Retirement benefits

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

Defined benefit costs (including service cost, net interest and remeasurement) under the defined benefit retirement benefit plans are determined using the projected unit credit method. Service cost (including current service cost), past service cost and net interest on the net defined benefit liability (asset) are recognized as employee benefits expense in the period they occur. Remeasurement, comprising actuarial gains and losses and the return on plan assets (excluding interest), is recognized in other comprehensive income in the period in which they occur. Remeasurement recognized in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss.

Net defined benefit liability (asset) represents the actual deficit (surplus) in the Group’s defined benefit plan. Any surplus resulting from this calculation is limited to the present value of any refunds from the plans or reductions in future contributions to the plans.

Taxation

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

a. Current tax

According to the Income Tax Law, an additional tax at 10% of unappropriated earnings is provided for as income tax in the year the shareholders approve to retain the earnings.

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

b. Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit.

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences, to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized.

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

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. A previously unrecognized deferred tax asset is also reviewed at the end of each reporting period and recognized to the to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

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

c. Current and deferred tax for the year

Current and deferred tax are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognized in other comprehensive income or directly in equity respectively. Where current tax or deferred tax arises from the initial accounting for a business combination and the acquisition of a subsidiary, the tax effect is included in the accounting for the business combination and investment in subsidiary.

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

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

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

Write-down of Inventory

The net realizable value of inventories is the estimated selling price in the ordinary course of business less the estimated costs of completion and disposal. The estimation of net realizable value was based on current market conditions and historical experience with product sales of a similar nature. Changes in market conditions may have a material impact on the estimation of the net realizable value.

6. CASH AND CASH EQUIVALENTS

	December 31	
	2018	**2017**
Cash on hand	$ 1,116	$ 682
Checking accounts and demand deposits	556,326	583,431
Cash equivalents (investments with original maturities less than 3 months)		
Time deposits	-	119,648
Repurchase agreements collateralized by bonds	-	95,000
	$ 557,442	$ 798,761

The market rate intervals of cash in bank and repurchase agreements collateralized by bonds at the end of the reporting period were as follows:

	December 31	
	2018	**2017**
Bank balance	-	0.6%-1.9%
Repurchase agreements collateralized by bonds	-	0.34%-0.36%

7. FINANCIAL ASSETS AND LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31 2018	December 31 2017
Financial assets at FVTPL - current		
Financial assets mandatorily classified as at FVTPL		
Derivative financial instruments (not under hedge accounting)		
Foreign exchange forward contracts (a)	$ 10	$ -
Exchange contracts (a)	76	-
	$ 86	$ -
Financial assets at FVTPL - non-current		
Financial assets mandatorily classified as at FVTPL		
Non-derivative financial assets		
Domestic listed shares	$ 30,975	$ -
Financial liabilities at FVTPL - current		
Financial liabilities held for trading		
Derivative financial assets (not under hedge accounting)		
Foreign exchange forward contracts (b)	$ -	$ 323
Exchange contracts(b)	-	942
	$ -	$ 1,265

At the end of the reporting period, outstanding forward exchange contracts not under hedge accounting were as follows:

	Currency	Maturity Date	Contract Amount (In Thousands)
December 31, 2018			
Knock-out forward	USD/JPY	2019.01.15	USD1,000/JPY114,000
Knock-out forward	USD/NTD	2019.01.10-2019.02.20	USD9,000/NTD279,020
Foreign exchange forward contracts	USD/NTD	2019.01.10-2019.01.24	USD6,000/NTD186,950
Exchange contracts	USD/NTD	2019.01.07-2019.02.20	USD10,000/NTD308,227
December 31, 2017			
Buy	USD/JPY	2018.01.04	USD1,000/JPY112,980
Knock-out forward	USD/JPY	2018.02.07-2018.03.12	USD4,500/JPY513,225
Foreign exchange forward contracts	USD/NTD	2018.01.09-2018.02.23	USD4,000/NTD120,450
Foreign exchange forward contracts	USD/JPY	2018.01.31	USD2,000/JPY226,700
Exchange contracts	USD/NTD	2018.01.08-2018.02.23	USD4,000/NTD120,199

The Company entered into foreign exchange forward contracts during the years ended December 31, 2018 and 2017 to manage exposures to exchange rate fluctuations of foreign currency denominated assets and liabilities. Those contracts did not meet the criteria of hedge effectiveness and therefore were not accounted for by using hedge accounting.

8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME - 2018

	December 31, 2018
Non-current	
Investments in equity instruments at FVTOCI	$ 330,925

Investments in Equity Instruments at FVTOCI

	December 31, 2018
Non-current	
Domestic investments	
Unlisted shares	
Win Win Precision Technology Company Limited	$ 14,256
Marson Technology Company Limited.	4,773
UPI Semiconductor Corp.	61,198
	80,227
Foreign investments	
Listed shares	
Guandong Failong Crystal Technology Company Limited	250,698
	$ 330,925

These investments in equity instruments are not held for trading. Instead, they are held for medium to long-term strategic purposes. Accordingly, the management elected to designate these investments in equity instruments as at FVTOCI as they believe that recognizing short-term fluctuations in these investments' fair value in profit or loss would not be consistent with the Company's strategy of holding these investments for long-term purposes. These investments in equity instruments were classified as available-for-sale and measured at cost under IAS 39. Refer to Note 3, Note 10 and Note 12 relating to their reclassification and comparative information for 2017.

In June and December 2018, the Company sold its 1,402 thousand shares in Guandong Failong Crystal Technology Company Limited in order to manage concentration risk. The sold shares had a fair value of $53,886 thousand and the Company transferred a gain of $37,944 thousand from other equity to retained earnings.

9. FINANCIAL ASSETS AT AMORTIZED COST - 2018

	December 31, 2018
Current	
Domestic investments	
Pledge deposits (a)	$ 28,591
Foreign investments	
Debt investments - Westpac Banking Corp.(b)	40,355
	$ 68,946

a. Financial assets at amortized cost pledged as collateral for bank borrowings is set out in Note 31.

b. In May 23, 2018, the Company bought one-year corporate bonds issued by Westpac Banking Corporation at value of RMB9,116 thousand with a coupon rate of 4.35%, an effective interest rate of 3.60% and a maturity date of March 29, 2019. The bonds were classified as held to maturity financial assets under IAS 39. The bonds were classified as held-to-maturity financial assets under IAS 39. Refer to Note 3 and Note 11 for information relating to their reclassification and comparative information for 2017.

10. AVAILABLE-FOR-SALE FINANCIAL ASSETS - 2017

	December 31, 2017
Current	
Domestic investments	
Mutual funds	$ 39,657
Non-current	
Domestic investments	
Listed shares (a)	$ 21,498
Foreign investments	
Listed shares (b)	491,469
	$ 512,967

The Company disposed of 2,000 thousand shares of Guandong Failong Crystal Technology Company's stock in the year of 2017, which generated a disposal investment gain of $181,773 thousand.

11. HELD-TO-MATURITY FINANCIAL ASSETS - 2017

	December 31, 2017
Current	
Domestic investments	
Corporate bonds - Cayman Ton Yi	$ 45,680

In February 2015, the Company bought a unsecured 3-year corporate bonds issued by Cayman Ton Yi with a coupon rate and an effective interest rate of 4.2%, at a par value of RMB10,000 thousand and a maturity date of February 2018. The redemption price was $48,401 thousand.

12. FINANCIAL ASSETS MEASURED AT COST

	December 31, 2017
Non-current	
Domestic unlisted ordinary shares	$ 37,322
Classified according to financial asset measurement categories	
Available-for-sale financial assets	$ 37,322

The Company has assessed the recoverable amount of the financial assets measured at cost and recognized an impairment loss of $9,971 thousand during the period of year ended December 31, 2017.

Management believed that the above unlisted equity investments held by the Company had fair values which cannot be reliably measured, because the range of reasonable fair value estimates was so significant. Therefore, they were measured at cost less impairment at the end of the reporting period.

13. OTHER FINANCIAL ASSETS

	December 31, 2017
Current	
Time deposits with original maturity more than 3 months	$ 39,200

The market interest rates of the time deposits with original maturity more than 3 months were 0.77%-0.78% per annum as of December 31, 2017.

14. NOTES, ACCOUNTS RECEIVABLE AND OTHER RECEIVABLES

	December 31	
	2018	2017
Notes receivable		
At amortized cost		
Gross carrying amount	$ 1,299	$ 1,089
Less: Allowance for impairment loss	(6)	(6)
	$ 1,293	$ 1,083
Notes receivable - operating	$ 1,293	$ 1,083
Trade receivables		
At amortized cost		
Gross carrying amount	$ 2,241,881	$ 2,153,037
Less: Allowance for impairment loss	(10,053)	(10,566)
	$ 2,231,828	$ 2,142,471

(Continued)

	December 31	
	2018	2017
Other receivables		
Income tax refund receivable	$ 16,306	$ 12,238
Others	1,478	2,187
	$ 17,784	$ 14,425

(Concluded)

In 2018

The average credit period of sales of goods was 60 to 120 days. No interest was charged on trade receivables. In order to minimize credit risk, the management of the Company has delegated a team responsible for determining credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover overdue debts. In addition, the Company reviews the recoverable amount of each individual trade debt at the end of the reporting period to ensure that adequate allowance is made for possible irrecoverable amounts. In this regard, the management believes the Company's credit risk was significantly reduced.

The Company applies the simplified approach to providing for expected credit losses prescribed by IFRS 9, which permits the use of lifetime expected loss provision for all trade receivables. The expected credit losses on trade receivables are estimated using a provision matrix by reference to past default experience of the debtor and an analysis of the debtor's current financial position, adjusted for general economic conditions of the industry in which the debtors operate and an assessment of both the current as well as the forecast direction of economic conditions at the reporting date. As the Company's historical credit loss experience does not show significantly different loss patterns for different customer segments, the provision for loss allowance based on past due status is not further distinguished according to the Company's different customer base.

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

The following table details the loss allowance of trade receivables based on the Company's provision matrix.

December 31, 2018

	Not Past Due	31 to 90 Days	91 to 150 Days	151 to 180 Days	Over 180 Days	Total
Gross carrying amount	$ 2,242,237	$ 943	$ -	$ -	$ -	$ 2,243,180
Loss allowance (Lifetime ECL)	(10,050)	(9)	-	-	-	(10,059)
Amortized cost	$ 2,232,187	$ 934	$ -	$ -	$ -	$ 2,233,121

The expected credit loss rate for each above range of the Company is not more than 1% within and within 90 days of the overdue period; 5% or less within the overdue period from 91 to 180 days; and 5%-100% when the overdue period exceeds 180 days.

The movements of the loss allowance of trade receivables were as follows:

	December 31, 2018
Balance at January 1, 2018 per IAS 39	$ 10,572
Adjustment on initial application of IFRS 9	-
Balance at January 1, 2018 per IFRS 9	10,572
Less: Impairment losses reversed	(513)
Balance at December 31, 2018	$ 10,059

In 2017

The Company applied the same credit policy in 2018 and 2017. Historical experience shows that the Company recognized an allowance in accordance with the proportion of trade receivables of each customers, not the aging schedule.

The aging of receivables was as follows:

	December 31, 2017
31-60 days	$ 235
61-90 days	-
91-365 days	1,431
	$ 1,666

The above aging schedule was based on the past due date from end of credit term.

The Movements of the Allowance for Doubtful Trade Receivables were as follows:

	Individually Assessed for Impairment	Collectively Assessed for Impairment	Total
Balance at January 1, 2017	$ -	$ 12,783	$ 12,783
Less: Impairment losses reversed on receivables	-	(2,217)	(2,217)
Balance at December 31, 2017	$ -	$ 10,566	$ 10,566

The movements of the allowance for doubtful notes receivable:

	Individually Assessed for Impairment	Collectively Assessed for Impairment	Total
Balance at January 1, 2017	$ -	$ 12	$ 12
Less: Impairment losses reversed	-	(6)	(6)
Balance at December 31, 2017	$ -	$ 6	$ 6

15. INVENTORIES

	December 31	
	2018	2017
Finished goods	$ 249,927	$ 255,873
Work in process	173,982	208,445
Raw materials	197,888	206,240
Supplies and spare parts	66,402	46,169
Merchandise	307,972	221,866
Inventory in transit	1,609	17,560
	$ 997,780	$ 956,153

The cost of inventories recognized as cost of goods sold for the years ended December 31, 2018 and 2017 was $5,542,656 thousand and $5,800,259 thousand, respectively. The costs of goods sold inventory write-downs of $4,995 thousand in the years ended December 31, 2018.

16. INVESTMENTS ACCOUNTED FOR USING EQUITY METHOD

	December 31	
	2018	2017
Investments in subsidiaries	$ 5,266,831	$ 5,690,697
Investments in associates	337,385	96,189
	$ 5,604,216	$ 5,786,886

Investments in Subsidiaries

	December 31	
	2018	2017
Unlisted companies		
Taiwan Crystal Technology International Ltd.	$ 5,128,270	$ 4,919,872
TXC Technology Inc.	15,572	14,407
TXC Japan Corporation	27,806	21,715
Taiwan Crystal Technology (HK) Limited (a)	93,053	399,190
TXC EUROPE GMBH	2,130	-
TXC Optec Corporation (b)	-	335,513
	$ 5,266,831	$ 5,690,697

a. On July 2018 Taiwan Crystal Technology (HK) Limited was determined to have capital reduction and share return $306,500 thousand in the shareholders meeting.

b. TXC Optec Corporation was resolved to liquidate in the shareholders meeting on August 24, 2017 receiving $334,705 thousand of share returns on January 2018. And completed the liquidation on April 9, 2018.

The proportion of the Company's ownership was as follows:

	December 31	
	2018	2017
Taiwan Crystal Technology International Ltd.	100.0%	100.0%
TXC Technology Inc.	100.0%	100.0%
TXC Japan Corporation	100.0%	100.0%
Taiwan Crystal Technology (HK) Limited	100.0%	100.0%
TXC EUROPE GMBH	100.0%	-
TXC Optec Corporation	-	88.9%

Investments in Associates

	December 31	
	2018	2017
Associate that is not individually material	$ 337,385	$ 96,189

	For the Year Ended December 31	
	2018	2017
The Company's share of:		
Profit from continuing operations	$ 12,207	$ 11,618
Other comprehensive loss	(2,000)	(1,131)
Total comprehensive income for the year	$ 10,207	$ 10,487

Refer to Table 7 "name, locations, and related information of investees on which the Company exercises significant influence" for the nature of activities, principal place of business and country of incorporation of the associates.

Since part of directors of TXC are the same as Tai-Shing, the TXC has power to govern the financial and operating policies of Tai-Shing. As a result, Tai-Shing is accounted for using the equity method.

In 2018, the Company subscribed for 4,242 thousand shares of the ordinary shares of Tai-Shing for cash 196,202 thousand, after the subscription, the Company's percentage of ownership in Tai-Shing was 26.19%. Included in the cost of investment in associates was goodwill of $104,966 thousand recognized from the acquisition of Tai-Shing. The Company recognized goodwill of $104,996 thousand as cost of Investments in associates.

In 2018, the Company subscribed for 2,350 thousand shares of the ordinary shares of Godsmith Sensor Inc. for cash of $38,100 thousands; after the subscription, the Company's percentage of ownership in Godsmith Sensor Inc. was 34.96% and the Company was able to exercise significant influence over Godsmith Sensor Inc. The Company recognized goodwill of $20,832 thousand as cost of Investments in associates.

17. PROPERTY, PLANT AND EQUIPMENT

	Freehold Land	Land Improvements	Buildings	Machinery and Equipment	Transpor-tation Equipment	Office Equipment	Total
Cost							
Balance at January 1, 2017	$ 598,145	$ 920	$ 1,239,624	$ 2,692,757	$ 2,229	$ 89,352	$ 4,623,027
Additions	-	-	9,754	324,122	-	6,889	340,765
Transfer to investment property	-	-	(4,160)	-	-	-	(4,160)
Reclassifications	-	-	(120)	146	-	(26)	-
Prepayments, buildings, land operating purpose	-	-	-	83,443	-	-	83,443
Disposals	-	-	-	(65,893)	(1,439)	(616)	(67,948)
Balance at December 31, 2017	$ 598,145	$ 920	$ 1,245,098	$ 3,034,575	$ 790	$ 95,599	$ 4,975,127
Accumulated depreciation and impairment							
Balance at January 1, 2017	$ -	$ 153	$ 483,770	$ 2,008,766	$ 350	$ 74,239	$ 2,567,278
Disposals	-	-	-	(65,742)	(384)	(616)	(66,742)
Depreciation expense	-	132	68,618	290,833	350	7,463	367,396
Reclassifications	-	-	-	22	-	(22)	-
Transfer to investment property e	-		(1,917)	-	-	-	(1,917)
Balance at December 31, 2017	$ -	$ 285	$ 550,471	$ 2,233,879	$ 316	$ 81,064	$ 2,866,015
Carrying amount at December 31, 2017	$ 598,145	$ 635	$ 694,627	$ 800,696	$ 474	$ 14,535	$ 2,109,112
Cost							
Balance at January 1, 2018	$ 598,145	$ 920	$ 1,245,098	$ 3,034,575	$ 790	$ 95,599	$ 4,975,127
Additions	-	395	10,302	84,676	744	8,276	104,393
Disposals	-	-	(820)	(230,466)	-	(7,352)	(238,638)
Balance at December 31, 2018	$ 598,145	$ 1,315	$ 1,254,580	$ 2,888,785	$ 1,534	$ 96,523	$ 4,840,882
Accumulated depreciation and impairment							
Balance at January 1, 2018	$ -	$ 285	$ 550,471	$ 2,233,879	$ 316	$ 81,064	$ 2,866,015
Disposals	-	-	(821)	(205,874)	-	(7,329)	(214,024)
Depreciation expense	-	178	63,046	224,166	232	6,782	294,404
Balance at December 31, 2018	$ -	$ 463	$ 612,696	$ 2,252,171	$ 548	$ 80,517	$ 2,946,395
Carrying amount at December 31, 2018	$ 598,145	$ 852	$ 641,884	$ 636,614	$ 986	$ 16,006	$ 1,894,487

No impairment assessment was performed for the year ended December 31, 2018 as there was no indication of impairment.

The above items of property, plant and equipment were depreciated on a straight-line basis at follows:

Land improvements	7 years
Buildings	
Industrial building	35-51 years
Electrical power systems	3-11 years
Engineering systems	3-51 years
Equipment	
Major production equipments	1-5 years
Temperature control systems	4-7 years
Transportation equipments	4-7 years
Transportation equipments	5 years
Office equipment	2-6 years

Property, plant and equipment pledged as collateral for bank borrowings were set out on Note 31.

18. INVESTMENT PROPERTIES

	Completed Investment Property
Cost	
Balance at January 1, 2017	$ 266,627
Transferred from property, plant and equipment	4,160
Disposals	(11,175)
Balance at December 31, 2017	$ 259,612
Accumulated depreciation and impairment	
Balance at January 1, 2017	$ (102,870)
Depreciation expense	(22,255)
Disposals	4,562
Transferred from property, plant and equipment	(1,917)
Balance at December 31, 2017	$ (122,480)
Carrying amount at December 31, 2017	$ 137,132
Cost	
Balance at January 1, 2018	$ 259,612
Disposals	-
Balance at December 31, 2018	$ 259,612
Accumulated depreciation and impairment	
Balance at January 1, 2018	$ (122,480)
Depreciation expense	(21,658)
Balance at December 31, 2018	$ (144,138)
Carrying amount at December 31, 2018	$ 115,474

The investment properties were depreciated using the straight-line method over their estimated useful lives of 5-61 years.

The fair value of the Company's investment properties as of December 31, 2018 and 2017 was $498,154 thousand and $367,078 thousand, respectively. The fair value valuation had not been performed by independent qualified professional appraisers. The management of the Company had used the valuation model that market participants would use in determining the fair value. The valuation was arrived at by reference to market evidence of transaction prices for similar properties.

All of the Company's investment property was held under freehold interests. The investment properties pledged as collateral for bank borrowing were set out in Note 31.

19. BORROWINGS

a. Short-term borrowings

	December 31 2018	December 31 2017
Unsecured borrowings		
Letters of credit	$ -	$ 549

The interest rate on the letters of credit was 2.86% annum as of December 31, 2017.

b. Long-term borrowings

	December 31 2018	December 31 2017
Secured borrowings (Note 31)		
Bank loans (1)	$ 46,875	$ 109,375
Unsecured borrowings		
Line of credit borrowings (2)	1,350,000	1,650,000
Less: Current portions	(46,875)	(62,500)
Long-term borrowings	$ 1,350,000	$ 1,696,875

1) As of December 31, 2018 and 2017, the weighted average effective interest rate on the bank loan was 1.15% and 0.89% per annum. See Note 31 for collaterals on long-term loans.

2) The interest rate on the line of credit was 0.86%-0.89% and 0.85%-0.9% annum as of December 31, 2018 and 2017, respectively.

20. OTHER LIABILITIES

	December 31 2018	December 31 2017
Current		
Other payables		
Payables for bonus to employees and directors	$ 85,014	$ 125,404
Payables for commission	24,479	33,343
Payables for salaries	36,112	38,068
Payables for bonus	94,833	98,675
Payables for annual leave	18,336	18,336
Payable for purchase of equipment	27,123	13,533
Others	68,507	68,419
	$ 354,404	$ 395,778

21. RETIREMENT BENEFIT PLANS

a. Defined contribution plans

The Company adopted a pension plan under the Labor Pension Act (the "LPA"), which is a state-managed defined contribution plan. Under the LPA, the Company makes monthly contributions to employees' individual pension accounts equal at 6% of monthly salaries and wages.

The Company has set up appointed manager's pension fund and contributes monthly an amount of not less than 8% of the appointed manager's monthly salaries and wages to the Bank of Taiwan.

b. Defined benefit plans

The defined benefit plan adopted by the Company in accordance with the Labor Standards Law is operated by the government. Pension benefits are calculated on the basis of the length of service and average monthly salaries of the 6 months before retirement. The Company contributes amounts equal to 4% of total monthly salaries and wages to a pension fund administered by the pension fund monitoring committee. Pension contributions are deposited in the Bank of Taiwan in the committee's name. Before the end of each year, the Company assesses the balance in the pension fund. If the amount of the balance in the pension fund is inadequate to pay retirement benefits for employees who conform to retirement requirements in the next year, the Company is required to fund the difference in one appropriation that should be made before the end of March of the next year. The pension fund is managed by the Bureau of Labor Funds, Ministry of Labor ("the Bureau"); the Company has no right to influence the investment policy and strategy.

The amounts included in the balance sheets in respect of the Company's defined benefit plans were as follows:

	December 31	
	2018	2017
Present value of defined benefit obligation	$ 165,146	$ 153,518
Fair value of plan assets	(97,113)	(91,494)
Net defined benefit liability	$ 68,033	$ 62,024

Movements in net defined benefit liability (asset) were as follows:

	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liability (Asset)
Balance at January 1, 2017	$ 141,977	$ (85,666)	$ 56,311
Service cost			
Current service cost	2,066	-	2,066
Net interest expense (income)	1,221	(673)	548
Recognized in profit or loss	3,287	(673)	2,614
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	(149)	(149)
Actuarial (gain) loss - changes in demographic assumptions	13,390	-	13,390

(Continued)

	Present Value of the Defined Benefit Obligation	Fair Value of the Plan Assets	Net Defined Benefit Liability (Asset)
Actuarial (gain) loss - changes in financial assumptions	$ (1,703)	$ -	$ (1,703)
Actuarial (gain) loss - experience adjustments	6,841	-	6,841
Recognized in other comprehensive income	18,528	(149)	18,379
Contributions from the employer		(15,280)	(15,280)
Benefits paid	(10,274)	10,274	-
Balance at December 31, 2017	153,518	(91,494)	62,024
Service cost			
Current service cost	1,956	-	1,956
Past service cost and loss on settlements	617	-	617
Net interest expense (income)	1,475	(794)	681
Recognized in profit or loss	4,048	(794)	3,254
Remeasurement			
Return on plan assets (excluding amounts included in net interest)	-	(2,783)	(2,783)
Actuarial (gain) loss - changes in demographic assumptions	11,053	-	11,053
Actuarial (gain) loss - changes in financial assumptions	2,042	-	2,042
Actuarial (gain) loss - experience adjustments	6,479	-	6,479
Recognized in other comprehensive income	19,574	(2,783)	16,791
Contributions from the employer	-	(14,036)	(14,036)
Benefits paid	(11,994)	11,994	-
Balance at December 31, 2018	$ 165,146	$ (97,113)	$ 68,033

(Concluded)

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

	For the Year Ended December 31	
	2018	2017
Cost of goods sold	$ 1,608	$ 1,268
Selling and marketing expenses	341	341
General and administrative expenses	553	495
Research and development expenses	752	510
	$ 3,254	$ 2,614

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

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

2) Interest risk: A decrease in the government and corporate bond interest rate will increase the present value of the defined benefit obligation; however, this will be partially offset by an increase in the return on the plan's debt investments.

3) Salary risk: The present value of the defined benefit obligation is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the present value of the defined benefit obligation.

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

	December 31	
	2018	**2017**
Discount rate(s)	1.125%	1.25%
Expected rate(s) of salary increase	2.00%	2.00%

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

	December 31	
	2018	**2017**
Discount rate(s)		
0.25% increase	$ (4,625)	$ (4,002)
0.25% decrease	$ 4,814	$ 4,159
Expected rate(s) of salary increase		
0.25% increase	$ 4,683	$ 4,038
0.25% decrease	$ (4,523)	$ (3,905)

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

	December 31	
	2018	**2017**
The expected contributions to the plan for the next year	$ 14,036	$ 15,280
The average duration of the defined benefit obligation	11.6 years	10.7 years

22. EQUITY

a. Share capital

Ordinary shares

	December 31	
	2018	2017
Numbers of shares authorized (in thousands)	500,000	500,000
Shares authorized	$ 5,000,000	$ 5,000,000
Number of shares issued and fully paid (in thousands)	309,757	309,757
Shares issued	$ 3,097,570	$ 3,097,570

Fully paid ordinary shares, which have a par value of $10, carry one vote per share and carry a right to dividends.

30,000 thousand shares of the Company's shares authorized were reserved for the issuance of convertible bonds and employee share options.

b. Capital surplus

	December 31	
	2018	2017
May be used to offset a deficit, distributed as cash dividends, or transferred to share capital*		
Issuance of ordinary shares	$ 611,776	$ 611,776
Conversion of bonds	977,028	977,028
Overdue options	73,377	73,377
The difference between consideration received or paid and the carrying amount of the subsidiaries' net assets during actual disposal or acquisition	331	331
Share of changes in capital surplus of associates or joint venture	2,604	2,712
	$ 1,665,116	$ 1,665,224

* Such capital surplus may be used to offset a deficit; in addition, when the Company has no deficit, such capital surplus may be distributed as cash dividends or transferred to share capital (limited to a certain percentage of the Company's capital surplus and once a year).

c. Retained earnings and dividend policy

Under the dividend policy as set forth in the amended Articles, where the Company made profit in a fiscal year, the profit shall be first utilized for paying taxes, offsetting losses of previous years, setting aside as legal reserve 10% of the remaining profit, setting aside or reversing a special reserve in accordance with the laws and regulations, and then any remaining profit together with any undistributed retained earnings shall be used by the Company's board of directors as the basis for proposing a distribution plan, which should be resolved in the shareholders' meeting for distribution of dividends and bonus to shareholders. For the policies on distribution of employees' compensation and remuneration of directors and supervisors before and after amendment, please refer to employee benefits expense in Note 24(f).

Dividends are recommended by the board of directors in accordance with the Corporation's dividend policy. Under this policy, industry trend and growth should be evaluated, investment opportunities should be fully understood, and proper capital adequacy ratios should be considered in determining the dividend to be distributed. In addition, cash dividends should not be less than 20% of the total dividends to be appropriated.

Appropriation of earnings to legal reserve shall be made until the legal reserve equals the Company's paid-in capital. Legal reserve may be used to offset deficit. If the Company has no deficit and the legal reserve has exceeded 25% of the Company's paid-in capital, the excess may be transferred to capital or distributed in cash.

Under Rule No. 1010012865, Rule No. 1010047490 and Rule No. 1030006415 issued by the FSC and the directive titled "Questions and Answers for Special Reserves Appropriated Following Adoption of IFRSs", the Company should appropriate or reverse to a special reserve.

The appropriations of earnings for 2017 and 2016 had been approved in the shareholders' meetings on June 5, 2018 and June 8, 2017, respectively. The appropriations and dividends per share were as follows:

	Appropriation of Earnings		Dividends Per Share (NT$)	
	For Fiscal Year 2017	**For Fiscal Year 2016**	**For Fiscal Year 2017**	**For Fiscal Year 2016**
Legal reserve	$ 96,265	$ 101,616	$ -	$ -
Cash dividends	774,393	867,320	2.5	2.8

The appropriations of earnings for 2018 annual surplus distribution on April 25, 2019 was as follows:

	Appropriation of Earnings	**Dividends Per Share (NT$)**
Legal reserve	$ 64,435	$ -
Cash dividends	619,514	2

The appropriation of earnings for 2018 are subject to the resolution of the shareholders' meeting to be held on June 12, 2019.

d. Others equity items

1) Exchange differences on translating the financial statements of foreign operations

	For the Year Ended December 31	
	2018	**2017**
Balance at January 1	$ (264,137)	$ (161,346)
Exchange differences on translating financial statements of foreign operations	(94,043)	(101,905)
Share of exchange differences of associates accounted for using the equity method	(1,743)	(886)
Balance at December 31	$ (359,923)	$ (264,137)

2) Unrealized gain (loss) on available-for-sale financial assets

	For the Year Ended December 31, 2017
Balance at January 1, 2017	$ 955,103
Recognized for the year	
Unrealized gain arising on revaluation of available-for-sale financial assets	(423,470)
Share of unrealized gain on revaluation of available-for-sale financial assets of associates accounted for using the equity method	(58)
Reclassification adjustment	
Cumulative (gain)/loss reclassified to profit or loss on sale of available-for-sale financial assets	(150,527)
Other comprehensive income recognized for the year	(574,055)
Balance at December 31, 2017	$ 381,048
Balance at January 1, 2018 per IAS 39	$ 381,048
Adjustment on initial application of IFRS 9	(381,048)
Balance at January 1, 2018 per IFRS 9	$ -

3) Unrealized gain (loss) on financial assets at FVTOCI

	For the Year Ended December 31, 2018
Balance at January 1 per IAS 39	$ -
Adjustment on initial application of IFRS 9	283,139
Balance at January 1 per IFRS 9	283,139
Effect of change in tax rate	(13,626)
Recognized during the period	
Unrealized loss - equity instruments	(133,148)
Share from associates accounted for using the equity method	6,596
Other comprehensive income recognized in the period	(140,178)
Cumulative unrealized gain/(loss) of equity instruments transferred to retained earnings due to disposal	(37,944)
Balance at December 31	$ 105,017

23. REVENUE

	For the Year Ended December 31	
	2018	2017
Revenue from contracts with customers		
Revenue from sale of goods	$ 6,556,906	$ 7,054,964

	For the Year Ended December 31, 2018
Trade receivables (Note 14)	$ 2,231,828

24. NET PROFIT FROM CONTINUING OPERATIONS

Net profit from continuing operations had been arrived at after charging:

a. Other income

	For the Year Ended December 31	
	2018	2017
Interest income	$ 8,103	$ 7,217
Rental income	2,616	7,596
Dividends income	1,527	2,288
Income from government grants	6,224	12,990
Income from equipment	22,098	-
Others	14,147	19,886
	$ 54,715	$ 49,977

b. Other gains and losses

	For the Year Ended December 31	
	2018	2017
Gain on disposal of property, plant and equipment	$ 1,232	$ 66
Gain on disposal of investment property	-	50,061
Gain on disposal of investment		
Available-for-sale financial assets	-	181,429
Financial assets measured at cost	-	47,237
Fair value changes of financial assets and financial liabilities		
Financial assets mandatorily at FVTPL	1,414	-
Financial assets designated as at FVTPL	-	(306)
Net foreign exchange gains (loss)	26,289	(69,185)
Impairment loss on financial assets	-	(9,971)
Depreciation expenses of investment properties	(21,658)	(22,255)
Others	(697)	(181)
	$ 6,580	$ 176,895

c. Impairment loss on financial assets

	For the Year Ended December 31	
	2018	2017
Financial assets measured at cost	$ -	$ (9,971)

d. Finance costs

	For the Year Ended December 31	
	2018	2017
Interest on bank loans	$ (12,443)	$ (15,267)

e. Depreciation and amortization

	For the Year Ended December 31	
	2018	2017
Property, plant and equipment	$ 294,404	$ 367,396
Intangible assets	558	1,255
	$ 294,962	$ 368,651
An analysis of deprecation by function		
Cost of goods sold	$ 238,278	$ 299,249
Selling and marketing expenses	1,136	1,218
General and administrative expenses	3,163	4,215
Research and development expenses	51,827	62,714
	$ 294,404	$ 367,396
An analysis of amortization by function		
General and administrative expenses	$ 406	$ 888
Research and development expenses	152	367
	$ 558	$ 1,255

f. Employee benefits expense

	For the Year Ended December 31	
	2018	2017
Post-employment benefits (see Note 21)		
Defined contribution plans	$ 25,575	$ 25,752
Defined benefit plans	3,254	2,614
	28,829	28,366
Other employee benefits	719,367	795,701
	$ 748,196	$ 824,067
An analysis of employee benefits expense by function		
Operating costs	$ 429,653	$ 452,944
Operating expenses	318,543	371,123
	$ 748,196	$ 824,067

- Employees’ compensation and remuneration of directors for 2018 and 2017

In compliance with the Company Act the Company accrued employees’ compensation and remuneration of directors at the rates no less than 3% and no higher than 2%, respectively, of net profit before income tax, employees’ compensation, and remuneration of directors. The employees’ compensation and remuneration of directors for the years ended December 31, 2018 and 2017 which have been approved by the Company’s board of directors on March 22, 2019 and March 15, 2018, respectively, were as follows:

Accrual rate

	For the Year Ended December 31	
	2018	**2017**
Employees’ compensation	9%	9%
Remuneration of directors	1.5%	1.5%

Amount

	For Fiscal Year 2018		For Fiscal Year 2017	
	Cash Bonus	**Share Bonus**	**Cash Bonus**	**Share Bonus**
Employees’ compensation	$ 69,072	$ -	$ 103,140	$ -
Remuneration of directors	11,512	-	17,190	-

If there is a change in the amounts after the actual financial statements were authorized for issue, the different are recorded as a change in the accounting estimate.

There was no difference between the actual amounts of employees’ compensation and remuneration of directors paid and the amounts recognized in the financial statements for the years ended December 31, 2017 and 2016.

Information on the employees’ compensation and remuneration of directors resolved by the Company’s board of directors in 2019 and 2018 is available at the Market Observation Post System website of the Taiwan Stock Exchange.

25. INCOME TAXES RELATING TO CONTINUING OPERATIONS

a. Major components of tax expense recognized in profit or loss

	For the Year Ended December 31	
	2018	**2017**
Current tax		
In respect of the current year	$ 25,309	$ 100,039
Income tax of unappropriated earnings	7,656	2,845
Adjustments for prior year	(6,550)	4,724
	26,415	107,608
Deferred tax		
Change in tax rate	13,914	-
In respect of the current period	2,208	(44,593)
	16,122	(44,593)
Income tax expense recognized in profit or loss	$ 42,537	$ 63,015

A reconciliation of accounting profit and income tax expense is as follows:

	For the Year Ended December 31	
	2018	2017
Profit before tax from continuing operations	$ 686,887	$ 1,025,670
Income tax expense calculated at the statutory rate	$ 137,377	$ 174,364
Tax-exempt income	(63,169)	(78,192)
Tax-exempt income for five years	(8,118)	(9,182)
Income tax on unappropriated earnings	7,656	2,845
Unrecognized deductible temporary differences	(22,245)	(20,958)
Subsidiaries to repatriate earnings withholding tax	2,019	10,271
Investment tax credits	(18,239)	(22,403)
Additional income tax under the Alternative Minimum Tax Act	-	1,713
Change in tax rate	13,914	-
Adjustment for prior years' tax	(6,550)	4,724
Others	(108)	(167)
Income tax expense recognized in profit or loss	$ 42,537	$ 63,105

In 2017, the applicable corporate income tax rate used by the group entities in the ROC is 17%. In February 2018, Income Tax Law, which adjusted the income tax rate for profit-making business from 17% to 20%, and implemented it in year 2018. In addition, the tax rate applicable to the undistributed earnings for the year 2018 will be reduced from 10% to 5%.

As the status of 2019 appropriations of earnings is uncertain, the potential income tax consequences of 2018 unappropriated earnings are not reliably determinable.

b. Income tax expense recognized in other comprehensive income

	For the Year Ended December 31	
	2018	2017
Deferred tax		
In respect of the current year		
Fair value changes of financial assets at FVTOCI	$ (37,377)	$ -
Fair value changes of available-for-sale financial assets	-	(118,528)
Remeasurement of defined benefit plans	(3,358)	(3,124)
Reclassification adjustment		
Disposal of equity instruments at fair value through other comprehensive income	(9,486)	-
Effect of change in tax rate		
Remeasurement of defined benefit plans	(2,813)	-
Fair value changes of financial assets at FVTOCI	13,626	-
	$ (39,408)	$ (121,652)

c. Current income tax assets and liabilities

	December 31 2018	December 31 2017
Current tax assets		
Income tax receivable	$ 5,245	$ -
Current tax liabilities		
Income tax payable	$ -	$ 23,239

d. Deferred tax assets and liabilities

The movements of deferred tax assets and deferred tax liabilities were as follows:

For the year ended December 31, 2018

	Opening Balance	Recognize in Profit or Loss	Recognize in Other Comprehensive Income	Closing Balance
Deferred tax assets				
Unrealized loss on inventories	$ 5,601	$ 2,581	$ -	$ 8,182
Unrealized exchange loss	1,716	(1,095)	-	621
Financial assets at fair value through profit or loss	215	(215)	-	-
Payable for annual leave	3,117	550	-	3,667
Determine benefit obligation	12,553	(2,753)	6,171	15,971
Investment subsidiary	18,621	(18,621)	-	-
Others	448	(235)	-	213
	$ 42,271	$ (19,788)	$ 6,171	$ 28,654
Deferred tax liabilities				
Financial assets at fair value through profit or loss	$ -	$ 17	$ -	$ 17
Associates	105,179	(3,683)	-	101,496
Financial assets at fair value through other comprehensive income	77,214	-	(33,237)	43,977
	$ 182,393	$ (3,666)	$ (33,237)	$ 145,490

For the year ended December 31, 2017

	Opening Balance	Recognize in Profit or Loss	Recognize in Other Comprehen-sive Income	Closing Balance
Deferred tax assets				
Unrealized loss on inventories	$ 7,364	$ (1,763)	$ -	$ 5,601
Unrealized exchange loss	-	1,716	-	1,716
Financial assets at fair value through profit or loss	2,286	(2,071)	-	215
Payable for annual leave	3,022	95	-	3,117
Determine benefit obligation	11,582	(2,153)	3,124	12,553
Investment subsidiary	-	18,621	-	18,621
Others	802	(354)	-	448
	$ 25,056	$ 14,091	$ 3,124	$ 42,271
Deferred tax liabilities				
Unrealized exchange gain	$ 11,245	$ (11,245)	$ -	$ -
Associates	124,436	(19,257)	-	105,179
Unrealized gain/loss on available-for-sale financial assets	195,742	-	(118,528)	77,214
	$ 331,423	$ (30,502)	$ (118,528)	$ 182,393

e. Unused investment tax credits, operating loss carryforward and tax-exemption information

As of December 31, 2018, profits attributable to the following expansion projects were exempted from income tax for a five-year period:

Expansion of Construction Project	Tax-exemption Period
2009	2014 to 2018

f. Income tax assessments

The tax returns had been assessed by the tax authorities before 2016.

26. EARNINGS PER SHARE

The earnings and weighted average number of ordinary shares outstanding in the computation of earnings per share from continuing operations were as follows:

Net Profit for the Year

	For the Year Ended December 31	
	2018	**2017**
Earnings used in the computation of basic earnings per share	$ 644,350	$ 962,655
Effect of dilutive potential ordinary shares:		
Interest on convertible bonds (after tax)	-	-
Earnings used in the computation of diluted earnings per share	$ 644,350	$ 962,655

Weighted average number of ordinary shares outstanding (in thousand shares):

	For the Year Ended December 31	
	2018	**2017**
Weighted average number of ordinary shares in computation of basic earnings per share	309,757	309,757
Effect of potentially dilutive ordinary shares:		
Employees' compensation	2,658	3,443
Weighted average number of ordinary shares used in the computation of diluted earnings per share	312,415	313,200

If the Company offered to settle compensation or bonuses paid to employees in cash or shares, the Company assumed the entire amount of the compensation or bonus will be settled in shares and the resulting potential shares were included in the weighted average number of shares outstanding used in the computation of diluted earnings per share, as the effect is dilutive. Such dilutive effect of the potential shares is included in the computation of diluted earnings per share until the number of shares to be distributed to employees is resolved in the following year.

27. OPERATING LEASE ARRANGEMENTS

a. The Company as lessee

Operating leases relate to leases of warehouse in trade zone with lease terms 3 years. All operating lease contracts contain clauses for 3-yearly market rental reviews. The Company does not have a bargain purchase option to acquire the leased land at the expiry of the lease periods.

The future minimum lease payments of non-cancellable operating lease commitments were as follows:

	December 31	
	2018	**2017**
Not later than 1 year	$ 1,400	$ 2,800
Later than 1 year and not later than 5 years	-	1,400
	$ 1,400	$ 4,200

b. The Company as lessor

Operating leases relate to the investment property owned by the Company with lease terms between 1 to 3 years. All operating lease contracts contain market review clauses in the event that the lessee exercises its option to renew. The lessee does not have a bargain purchase option to acquire the property at the expiry of the lease period.

The future minimum lease payments of non-cancellable operating lease were as follows:

	December 31	
	2018	**2017**
Not later than 1 year	$ 1,991	$ -
Later than 1 year and not later than 5 years	1,378	-
	$ 3,369	$ -

28. CAPITAL MANAGEMENT

The Company manages its capital to ensure that entities in the Company will be able to continue as going concerns while maximizing the return to stakeholders through the optimization of the debt and equity balance.)

The capital structure of the Company consists of net debt (borrowings offset by cash and cash equivalents) and equity attributable to owners of the Company (comprising issued capital, reserves, retained earnings and other equity).

The Company is not subject to any externally imposed capital requirements.

29. FINANCIAL INSTRUMENTS

a. Fair value of financial instruments that are not measured at fair value

The management believes the carrying amounts of financial assets and financial liabilities recognized in the financial statements approximate their fair values.

b. Fair value of financial instruments that are measured at fair value on a recurring basis

1) Fair value hierarchy

December 31, 2018

	Level 1	**Level 2**	**Level 3**	**Total**
Financial assets at FVTPL				
Listed securities - ROC				
Equity securities	$ 30,975	$ -	$ -	$ 30,975
Foreign exchange forward contracts	-	10	-	10
Exchange contracts	-	76	-	76
	$ 30,975	$ 86	$ -	$ 31,061

(Continued)

	Level 1	Level 2	Level 3	Total
Financial assets at FVTOCI				
Investments in equity instruments				
Unlisted shares	$ -	$ -	$ 80,227	$ 80,227
Foreign listed shares	250,698	-	-	250,698
	$ 250,698	$ -	$ 80,227	$ 330,925

(Concluded)

December 31, 2017

	Level 1	Level 2	Level 3	Total
Available-for-sale financial assets				
Unlisted securities - ROC				
Equity securities	$ -	$ -	$ 21,498	$ 21,498
Securities listed in other countries	491,469	-	-	491,469
Equity securities				
Mutual funds	39,657	-	-	39,657
	$ 531,126	$ -	$ 21,498	$ 552,624
Financial liabilities at FVTPL				
Forward exchange contracts	$ -	$ 323	$ -	$ 323
Exchange contracts	-	942	-	942
	$ -	$ 1,265	$ -	$ 1,265

There were no transfers between Levels 1 and 2 in the current and prior periods.

2) Reconciliation of Level 3 fair value measurements of financial instruments

For the year ended December 31, 2018

	Unrealized Gain on Financial Assets at Fair Value Through Other Comprehensive Income
	Equity Instruments
Balance at January 1, 2018 (IAS 39)	$ 21,498
Effect of retrospective application and retrospective restatement	42,370
Balance at January 1, 2018 (IFRS 9)	63,868
Other comprehensive income recognized for the year	16,359
Balance at December 31, 2018	$ 80,227

For the year ended December 31, 2017

	Available-for-sale Financial Assets
	Equity Instruments
Financial assets	
Balance at January 1, 2017	$ 17,148
Recognized in other comprehensive income (included in unrealized gain/(loss) on financial assets at FVTOCI)	4,350
	$ 21,498

3) Valuation techniques and inputs applied for the purpose of measuring Level 2 fair value measurement

Financial Instruments	Valuation Techniques and Inputs
Derivatives - foreign currency forward contracts	Discounted cash flow. Future cash flows are estimated based on observable forward exchange rates at the end of the reporting period and contract forward rates, discounted at a rate that reflects the credit risk of various counterparties.

4) Valuation techniques and inputs applied for the purpose of measuring Level 3 fair value measurement

The Company uses price-book ratio approach, comparing the net value per share with other public companies among the similar industries or evaluating stock price based on average price-book ratio of other competitors, to capture the present value of the expected future economic benefits to be derived from the ownership of these investees.

The fair values of unlisted equity securities - ROC were determined using income approach. In this approach, the discounted cash flow method was used to capture the present value of the expected future economic benefits to be derived from the ownership of these investees. The significant unobservable inputs used are listed on the table below. An increase in long-term revenue growth rates or long-term pre-tax operating margin or a decrease in WACC or discount for lack of marketability used in isolation would result in increase in fair value.

	December 31, 2017
Long-term revenue growth rates	12.89%
Long-term pre-tax operating margin	4.34%
WACC	10.96%
Discount for lack of marketability	30.24%

c. Categories of financial instruments

	December 31	
	2018	2017
Financial assets		
FVTPL		
Mandatorily at FVTPL (1)	$ 31,061	$ -
Loans and receivables (2)	-	3,018,450
Held-to-maturity investments (3)	-	45,680
Available-for-sale financial assets (4)	-	589,946
Financial assets at amortized cost (5)	2,884,759	-
Financial assets at FVTOCI		
Equity instruments	330,925	-
Financial liabilities		
FVTPL		
Designated as at FVTPL (6)	-	1,265
Amortized cost (7)	2,967,759	3,289,896

1) The balances included the carrying amount of domestic listed shares, foreign exchange forward contracts and exchange contracts.

2) The balances included loans and receivables measured at amortized cost, which comprise cash and cash equivalents, notes receivable, trade and other receivables, debt investments with no active market.

3) The balances included the carrying amount of financial debt investment.

4) The balances included the carrying amount of available-for-sale financial assets measured at cost.

5) The balances include financial assets measured at amortized cost, which comprise cash and cash equivalents, notes receivable, trade receivables, financial debt investment and other receivables.

6) The balances included the carrying amount of foreign exchange forward contracts and exchange contracts.

7) The balances included financial liabilities measured at amortized cost, which comprise short-term and long-term loans, notes payable, trade and other payables.

d. Financial risk management objectives and policies

The Company’s major financial instruments included equity and debt investments, notes receivable, trade receivables, other receivables, notes payable, trade payables, other payables, borrowings. The Company’s Corporate Treasury function provides services to the business, coordinates access to domestic and international financial markets, monitors and manages the financial risks relating to the operations of the Company through internal risk reports which analyze exposures by degree and magnitude of risks. These risks include market risk (including currency risk, interest rate risk and other price risk), credit risk and liquidity risk.

The Company sought to minimize the effects of these risks by using derivative financial instruments to hedge risk exposures. The use of financial derivatives was governed by the Company's policies approved by the board of directors, which provided written principles on foreign exchange risk, interest rate risk, credit risk, the use of financial derivatives and non-derivative financial instruments, and the investment of excess liquidity. Compliance with policies and exposure limits was reviewed by the internal auditors on a continuous basis. The Company did not enter into or trade financial instruments, including derivative financial instruments, for speculative purposes.

The financial department reported quarterly to the Board of directors, which monitors risks and policies implemented to mitigate risk exposures.

1) Market risk

The Company's activities exposed it primarily to the financial risks of changes in foreign currency exchange rates (see (a) below) and interest rates (see (b) below). The Company entered into a variety of derivative financial instruments to manage its exposure to foreign currency risk and interest rate risk, including forward foreign exchange contracts to hedge the exchange rate risk arising on the Company's foreign currency monetary.

a) Foreign currency risk

Several subsidiaries of the Company had foreign currency sales and purchases, which exposed the Company to foreign currency risk.

The carrying amounts of the Company's foreign currency denominated monetary assets and monetary liabilities (including those eliminated on consolidation) at the end of the reporting period (see Note 34).

Sensitivity analysis

The Company was mainly exposed to the USD and JPY.

The following table details the Company's sensitivity to a 1% increase and decrease in New Taiwan dollars (the functional currency) against the relevant foreign currencies. 1% is the sensitivity rate used when reporting foreign currency risk internally to key management personnel and represents management's assessment of the reasonably possible change in foreign exchange rates. The sensitivity analysis included only outstanding foreign currency denominated monetary items and foreign currency forward contracts designated as cash flow hedges, and adjusts their translation at the end of the reporting period for a 1% change in foreign currency rates. The sensitivity analysis included external loans/borrowings as well as loans/borrowings to foreign operations within the Company where the denomination of the loan is in a currency other than the functional currency of the lender or the borrower. A positive number below indicates an increase in post-tax profit and other equity associated with New Taiwan dollars strengthen 1% against the relevant currency. For a 1% weakening of New Taiwan dollars against the relevant currency, there would be an equal and opposite impact on post-tax profit and other equity and the balances below would be negative.

	USD Impact		**JPY Impact**	
	For the Year Ended December 31		**For the Year Ended December 31**	
	2018	**2017**	**2018**	**2017**
Profit or loss	$ 17,256	$ 16,044	$ (2,046)	$ (1,020)

i. This was mainly attributable to the exposure outstanding on USD receivables and payables, which were not hedged at the end of the reporting period.

ii. This was mainly attributable to the exposure to outstanding JPY payables, which were not hedged, at the end of the reporting period.

b) Interest rate risk

The Company was exposed to interest rate risk because the Company's bank deposits and the Company borrowed funds at floating interest rates.

The carrying amount of the Company's financial assets and financial liabilities with exposure to interest rates at the end of the reporting period were as follows:

	December 31	
	2018	**2017**
Fair value interest rate risk		
Financial assets	$ 40,355	$ 253,848
Financial liabilities	-	-
Cash flow interest rate risk		
Financial assets	584,917	583,431
Financial liabilities	1,396,875	1,759,924

Sensitivity analysis

The sensitivity analyses below were determined based on the Company's exposure to interest rates for both derivatives and non-derivative instruments at the end of the reporting period. For floating rate liabilities, the analysis was prepared assuming the amount of the liability outstanding at the end of the reporting period was outstanding for the whole year. A 0.25% basis point increase or decrease was used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates.

If interest rates had been 0.25% basis points higher/lower and all other variables were held constant, the Company's pre-tax profit for the years ended December 31, 2018 and 2017 would decrease by $2,030 thousand and $2,941 thousand, respectively, which was mainly attributable to the Company's exposure to interest rates on its floating rate bank deposits and bank borrowings.

c) Other price risk

The Company was exposed to equity price risk through its investments in listed equity securities. Equity investments are held for strategic rather than trading purposes. The Company does not actively trade these investments. The Company's equity price risk was mainly concentrated on equity instruments operating in Shenzhen stock exchange, growth enterprise.

Sensitivity analysis

The sensitivity analyses below were determined based on the exposure to equity price risks at the end of the reporting period.

If equity prices had been 1% higher/lower, other comprehensive income for the year ended December 31, 2018 and 2017 would increase/decrease by $2,507 thousand and $4,915 thousand, respectively.

2) Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Company. As at the end of the reporting period, the Company's maximum exposure to credit risk which will cause a financial loss to the Company due to failure of discharge an obligation by the counterparties and financial guarantees provided by the Company arises from:

a) The carrying amount of the respective recognized financial assets as stated in the balance sheets;

b) The amount of contingent liabilities in relation to financial guarantee issued by the Company.

3) Liquidity risk

The Company manages liquidity risk by monitoring and maintaining a level of cash and cash equivalents deemed adequate to finance the Company's operations and mitigate the effects of fluctuations in cash flows. In addition, management monitors the utilization of bank borrowings and ensures compliance with loan covenants.

The Company relies on bank borrowings as a significant source of liability. As of December 31, 2018 and 2017, the Company had available unutilized overdraft and short-term bank loan facilities of approximately $3,528,150 thousand and $3,243,160 thousand, respectively.

a) Liquidity and interest risk rate tables

The following table details the Company's remaining contractual maturity for its non-derivative financial liabilities with agreed repayment periods. The tables had been drawn up based on the undiscounted cash flows of financial liabilities from the earliest date on which the Company can be required to pay. The tables included both interest and principal cash flows. Specifically, bank loans with a repayment on demand clause were included in the earliest time band regardless of the probability of the banks choosing to exercise their rights. The maturity dates for other non-derivative financial liabilities were based on the agreed repayment dates.

To extend that interest flows are floating rate, the undiscounted amount was derived from the interest rate curve at the end of the reporting period.

December 31, 2018

	Weighted Interest Average Effective Rate (%)	Less Than 1 Year	2-3 Years	4-5 Years	5+ Years	Total
Non-derivative financial liabilities						
Trade payable	-	$ 1,213,259	$ -	$ -	$ -	$ 1,213,259
Other payables	-	357,625	-	-	-	357,625
Other current liabilities	-	8,486	-	-	-	8,486
Variable interest rate liabilities	0.86-1.15	46,875	1,350,000	-	-	1,396,875

December 31, 2017

	Weighted Interest Average Effective Rate (%)	Less Than 1 Year	2-3 Years	4-5 Years	5+ Years	Total
Non-derivative financial liabilities						
Trade payable	-	$ 1,131,220	$ -	$ -	$ -	$ 1,131,220
Other payables	-	398,752	-	-	-	398,752
Other current liabilities	-	10,984	-	-	-	10,984
Variable interest rate liabilities	0.85-2.86	63,049	1,696,875	-	-	1,759,924
Guarantee deposits received	-	-	12,334	-	-	12,334

The amounts included above for variable interest rate instruments for both non-derivative financial assets and liabilities was subject to change if changes in variable interest rates differ from those estimates of interest rates determined at the end of the reporting period.

b) Liquidity and interest risk rate tables for derivative financial liabilities

The following table detailed the Company's liquidity analysis for its derivative financial instruments. The table was based on the undiscounted contractual net cash inflows and outflows on derivative instruments that settle on a net basis, and the undiscounted gross inflows and outflows on those derivatives that require gross settlement.

December 31, 2018

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	5+ Years
Net settled					
Foreign exchange forward contracts and exchange contracts	$ -	$ (394)	$ -	$ -	$ -

December 31, 2017

	On Demand or Less than 1 Month	1-3 Months	3 Months to 1 Year	1-5 Years	5+ Years
Net settled					
Foreign exchange forward contracts	$ (856)	$ (409)	$ -	$ -	$ -

30. TRANSACTIONS WITH RELATED PARTY

Details of transactions between the Company and related parties are disclosed below.

a. Related party name and relationship

Related Party Name	Relationship with the Company
Tai-Shing Electronics Components Corporation	Associate
Liang Shing Eclife Corp. (“Eclife”)	Other associate
GODSMITH SENSOR INC.	Associate
TXC (Ningbo) Corporation	Subsidiaries
TXC (Chongqing) Limited	Subsidiaries
Growing profits Trading Ltd.	Subsidiaries
TXC Technology, Inc.	Subsidiaries
TXC Japan Corporation	Subsidiaries
TXC EUROPE GMBH	Subsidiaries

b. Sales of goods

	For the Year Ended December 31	
	2018	2017
Subsidiaries	$ 315,806	$ 246,747
Other associate	33	-
Associates	32,965	21,710
	$ 348,804	$ 268,457

b. Purchase of goods

	For the Year Ended December 31	
	2018	2017
Subsidiaries		
TXC (Ningbo) Corporation	$ 1,663,711	$ 1,710,486
TXC (Chongqing) Limited	731,936	715,496
Others	139,286	146,439
	2,534,933	2,572,421
Other associates	188	47
	$ 2,535,121	$ 2,572,468

c. Consulting fees

	For the Year Ended December 31	
	2018	2017
Subsidiaries		
TXC Technology, Inc.	$ 69,758	$ 71,551
TXC Japan Corporation	32,787	38,153
TXC EUROPE GMBH	4,978	-
	$ 107,523	$ 109,704

The consulting fee above is due to the Company's part of business activities committed to the related parties.

d. Operating expenses

	For the Year Ended December 31	
	2018	**2017**
Other associates	$ 722	$ 830

e. Rental income

	For the Year Ended December 31	
	2018	**2017**
Subsidiaries	$ -	$ 5,000

In 2018 and 2017, the selling price and purchasing price were not significantly different from those with third parties, except those for NGB, GPT, CKG, Ningbo Jingyu and TXC JP whose trading price depends on its function within the Group.

f. Trade receivables from related parties

	December 31	
	2018	**2017**
Subsidiaries	$ 101,006	$ 63,204
Associates	9,028	6,776
Other associates	34	-
Less: Allowance for impairment loss	(67)	(41)
	$ 110,001	$ 69,939

The outstanding accounts receivables from related parties are unsecured.

g. Trade payables to related parties

	December 31	
	2018	**2017**
Subsidiaries		
TXC (Ningbo) Corporation	$ 423,140	$ 396,754
TXC (Chongqing) Limited	178,878	257,116
Others	33,878	48,637
	635,896	702,507
Other associates	97	24
	$ 635,993	$ 702,531

The outstanding trade payables from related parties are unsecured.

h. Other receivables from related parties

	December 31	
	2018	2017
Subsidiaries		
TXC (Chongqing) Limited	$ -	$ 19,635
TXC (Ningbo) Corporation	6,143	-
Others	188	65
	6,331	19,700
Associates	127	82
	$ 6,458	$ 19,782

Other receivables resulted from purchasing machinery and equipment on behalf of subsidiaries.

i. Other payables from related parties

	December 31	
	2018	2017
Subsidiaries	$ 104	$ 1,153
Associates	1,760	-
Other associates	1,357	1,821
	$ 3,221	$ 2,974

The credit period of the transaction above is similar to those for the third parties.

j. Payments for property, plant and equipment

	For the Year Ended December 31	
	2018	2017
Other associates	$ 1,299	$ 1,691

k. Compensation of key management personnel

	For the Year Ended December 31	
	2018	2017
Short-term employee benefits	$ 61,628	$ 91,141
Post-employment benefits	3,054	3,323
	$ 64,682	$ 94,464

The remuneration of directors and key executives was determined by the remuneration committee based on the performance of individuals and market trends.

31. ASSETS PLEDGED AS COLLATERAL OR FOR SECURITY

The following assets were provided as collateral for bank borrowings and foreign exchange forward contracts::

	December 31	
	2018	2017
Land and Land Improvement	$ 573,080	$ 573,770
Building equipment, net	632,184	694,279
Pledge deposits	28,591	-
Investment properties, net	113,772	135,356
	$ 1,347,627	$ 1,403,405

32. SIGNIFICANT CONTINGENT LIABILITIES AND UNRECOGNIZED COMMITMENTS

In addition to those disclosed in other notes, significant commitments and contingencies of the Company as of December 31, 2018 and 2017 were as follows:

a. Unused letters of credit amounted to approximately JPY2,450 thousand and JPY8,292 thousand as of December 31, 2018 and 2017, respectively.

b. As of December 31, 2018, the Company unrecognized commitments are as follows:

	Contract Amount	Paid Amount	Unpaid Amount
Acquisition of equipment	$ 67,742	$ 30,767	$ 31,975
Acquisition of building	$ 7,180	$ 2,154	$ 5,026

33. SIGNIFICANT EVENTS AFTER REPORTING PERIOD: NONE

34. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The Company's significant financial assets and liabilities denominated in foreign currencies aggregated by the foreign currencies other than functional currencies and the related exchange rates between foreign currencies and respective functional currencies were as follows:

December 31, 2018

	Foreign Currencies	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
USD	$ 84,664	30.715 (USD:NTD)	$ 2,600,455
JPY	432,583	0.2782 (JPY:NTD)	120,345
RMB	21,009	4.4753 (RMB:NTD)	94,022

(Continued)

	Foreign Currencies	Exchange Rate	Carrying Amount
Non-monetary items			
Investments accounted for using equity method			
USD	$ 507	30.715 (USD:NTD)	$ 15,572
JPY	99,948	0.2782 (JPY:NTD)	27,806
RMB	1,166,698	4.4753 (RMB:NTD)	5,221,323
EUR	61	35.2 (EUR:NTD)	2,130
Financial liabilities			
Monetary items			
USD	28,484	30.715 (USD:NTD)	874,886
JPY	1,168,067	0.2782 (JPY:NTD)	324,956

(Concluded)

December 31, 2017

	Foreign Currencies	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
USD	$ 85,673	29.848 (USD:NTD)	$ 2,557,168
JPY	359,067	0.2649 (JPY:NTD)	95,117
RMB	193	4.568 (RMB:NTD)	882
Non-monetary items			
Investments accounted for using equity method			
USD	483	29.848 (USD:NTD)	14,407
JPY	81,973	0.2649 (JPY:NTD)	21,715
RMB	1,164,418	4.568 (RMB:NTD)	5,319,062
Financial liabilities			
Monetary items			
USD	31,922	29.848 (USD:NTD)	952,808
JPY	744,028	0.2649 (JPY:NTD)	197,093

For the years ended December 31, 2018 and 2017, unrealized net foreign exchange gains were $26,289 thousand and $(69,185) thousand, respectively. It is impractical to disclose net foreign exchange gains (losses) by each significant foreign currency due to the variety of the foreign currency transactions and functional currencies of the group entities.

35. SEPARATELY DISCLOSED ITEMS

a. Information on significant transactions and information on investees:

1) Lending funds to others. (None)

2) Providing endorsements or guarantees for others. (Table 1)

3) Holding of securities at the end of the period. (Table 2)

4) Aggregate purchases or sales of the same securities reaching NT$300 million or 20 percent of paid-in capital or more. (Table 3)

5) Acquisition of real estate reaching NT$300 million or 20 percent of paid-in capital or more. (None)

6) Disposal of real estate reaching NT$300 million or 20 percent of paid-in capital or more. (None)

7) Purchases or sales of goods from or to related parties reaching NT$100 million or 20 percent of paid-in capital or more. (Table 4)

8) Trade receivables from related parties reaching NT$100 million or 20 percent of paid-in capital or more. (Table 5)

9) Trading in derivative instruments. (Table 6 and Note 7)

10) Others: The business relationship between the parent and the subsidiaries and between each subsidiary, and the circumstances and amounts of any significant transactions between them. (Table 7)

b. Information on investments in mainland China

1) Information on any investee company in mainland China, showing the name, principal business activities, paid-in capital, method of investment, inward and outward remittance of funds, shareholding ratio, investment gain or loss, carrying amount of the investment at the end of the period, repatriated investment gains, and limit on the amount of investment in the mainland China area. (Table 8)

2) Any of the following significant transactions with investee companies in mainland China, either directly or indirectly through a third area, and their prices, payment terms, and unrealized gains or losses: (Table 9)

a) The amount and percentage of purchases and the balance and percentage of the related payables at the end of the period.

b) The amount and percentage of sales and the balance and percentage of the related receivables at the end of the period.

c) The amount of property transactions and the amount of the resultant gains or losses.

d) The balance of negotiable instrument endorsements or guarantees or pledges of collateral at the end of the period and the purposes.

e) The highest balance, the end of period balance, the interest rate range, and total current period interest with respect to financing of funds.

f) Other transactions that have a material effect on the profit or loss for the period or on the financial position, such as the rendering or receiving of services.

TABLE 1

TXC CORPORATION

ENDORSEMENTS/GUARANTEES PROVIDED
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

No. (Note 1)	Endorser/Guarantor	Endorsee/Guarantee		Limit on Endorsement/ Guarantee Given on Behalf of Each Party (Note 3)	Maximum Amount Endorsed/ Guaranteed During the Period	Outstanding Endorsement/ Guarantee at the End of the Period	Actual Borrowing Amount	Amount Endorsed/ Guaranteed by Collateral	Ratio of Accumulated Endorsement/ Guarantee to Net Equity in Latest Financial Statements (%)	Aggregate Endorsement/ Guarantee Limit	Note
		Name	Relationship (Note 2)								
1	TXC (Ningbo) Corporation	Chongqing All Sun Company Limited	Subsidiary with equity method	$ 2,482,217	$ 358,024	$ 358,024	$ 12,978	$ -	7.21	$ 4,964,433	

Note: The total amount of TXC (Ningbo) Corporation endorsements and guarantees provided shall not exceed 100% of the amount of the net value of TXC (Ningbo) Corporation; and the amount of individual entity endorsements shall not exceed 5% of the amount of the net value of the individual entity. However, the amount of individual entity endorsements is permitted with 100% of net value of subsidiary.

TABLE 2

TXC CORPORATION

MARKETABLE SECURITIES HELD
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Holding Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	December 31, 2018				Note
				Shares	Carrying Amount	Percentage of Ownership	Shares	
TXC Corporation	Stock listed overseas							
	Guandong Failong Crystal Technology Co., Ltd.	None	Financial assets at fair value through other comprehensive income - non-current	6,693	$ 250,698	4	$ 250,698	
	Stock - unlisted company							
	Marson Technology Co., Ltd.	None	Financial assets at fair value through other comprehensive income - non-current	523	$ 4,773	4	$ 4,773	
	Win Win Precision Technology Co., Ltd.	None	〃	1,365	14,256	3	14,256	
	UPI Semiconductor Corp.	Chairman is a direct of the Company	〃	1,516	61,198	2	61,198	
					$ 80,227		$ 80,227	
	Stock - listed company							
	Fubon B special stock	None	Financial assets at fair value through profit or loss - non-current	250	$ 15,500	-	$ 15,500	
	Cathay B special stock	None	〃	250	15,475	-	15,475	
					$ 30,975		$ 30,975	
	Financial bonds							
	Westpac Banking Corp.	None	Financial assets at amortized cost - current	RMB 9,000	$ 40,355		$ 40,355	
TXC (Ningbo) Corporation	Structured deposits							
	China Everbright Bank	None	Financial assets at fair value through profit or loss - current	RMB 36,245	$ 162,208		$ 162,208	
	Bank of Communication	〃	〃	RMB 30,088	134,654		134,654	
	HengFeng Bank	〃	〃	RMB 10,079	45,106		45,106	
					$ 341,968		$ 341,968	
	Mutual fund							
	GF Fund	None	Financial assets at fair value through profit or loss - current	RMB 5,080	$ 22,735		$ 22,735	
	ABC Monetary Fund	〃	〃	RMB 26,260	117,523		117,523	
	China Monetary Fund	〃	〃	RMB 10,030	44,889		44,889	
	Taijing No. 1 Monetary Fund	〃	〃	RMB 33,460	149,742		149,742	
					$ 334,889		$ 334,889	

(Continued)

Holding Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	December 31, 2018				Note
				Shares	Carrying Amount	Percentage of Ownership	Shares	
TXC (Chongqing) Limited	Mutual fund							
	Southern Currency Fund B	None	Financial assets at fair value through profit or loss - current	RMB 19,542	$ 87,455		$ 87,455	
	Southern Currency Fund E	〃	〃	RMB 8,346	37,351		37,351	
	Southern Currency Fund A	〃	〃	RMB 2,004	8,970		8,970	
	E Fund Monetary Fund A	〃	〃	RMB 2,057	9,208		9,208	
	E Fund Monetary Fund B	〃	〃	RMB 10,023	44,854		44,854	
					$ 187,838		$ 187,838	
Ningbo Jingyu Company Limited	Mutual fund							
	Southern Cash Fund	None	Financial assets at fair value through profit or loss - current	RMB 60	$ 267		$ 267	
Chongqing All Sun Company Limited	Mutual fund							
	Southern Currency Fund B	None	Financial assets at fair value through profit or loss - current	RMB 8,061	$ 36,074		$ 36,074	
Ding Kai Investment Management Company Limited	Stock unlisted overseas							
	Zhejiang Boland Semiconductor Technology Co., Ltd.	None	Financial assets at fair value through other comprehensive income - non-current	RMB 7,000	$ 163,317	6	$ 163,317	

(Concluded)

TABLE 3

TXC CORPORATION

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

Company Name	Marketable Securities Type and Name	Financial Statement Account	Counterparty	Relationship	Beginning Balance		Acquisition		Disposal				Equity in Net Gain (Loss)	Ending Balance	
					Shares	Amount	Shares	Amount	Shares	Amount	Carrying Amount	Gain (Loss) on Disposal		Shares	Amount
TXC (Chongqing) Limited	Mutual fund	Financial instruments at FVTPL - current	Southern Currency Fund B	None	-	$ 117,791	-	$ 307,932	-	$ (337,721)	$ (337,721)	$ -	$ (547)	-	$ 87,455
TXC (Ninbo) Limited	Structured deposits	Financial instruments at FVTPL - current	Agricultural Bank of China Limited	None	-	160,436	-	272,065	-	(301,598)	(301,598)	-	3,751	-	134,654

TABLE 4

TXC CORPORATION

TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES OF AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Buyer	Related Party	Relationship	Transaction Details				Abnormal Transaction		Notes/Accounts Payable or Receivable		Note
			Purchase/ Sale	Amount	% to Total	Payment Terms	Unit Price	Payment Terms	Ending Balance	% to Total	
TXC Corporation	TXC (Ningbo) Corporation	Subsidiary	Purchase	$ 1,663,711	33	Note	Its trading price depends on its function within the Group	Note	$ (423,140)	(35)	
			Sale	(297,164)	(5)	〃	〃	〃	98,303	4	
	TXC (Chongqing) Limited	Subsidiary	Purchase	731,936	15	〃	〃	〃	(178,878)	(15)	
	Growing Profit Trading Ltd.	Subsidiary	Purchase	133,329	3	〃	〃	〃	(33,855)	(3)	
TXC (Ningbo) Corporation	Growing Profit Trading Ltd.	Subsidiary	Purchase	166,868	9	〃	〃	〃	(34,631)	(6)	
	TXC (Chongqing) Limited	Subsidiary	Purchase	259,549	14	〃	〃	〃	(88,568)	(14)	

Note: The terms of purchases from related parties were not significantly different from those with third parties.

TABLE 5

TXC CORPORATION

RECEIVABLES FROM RELATED PARTIES AMOUNTING TO AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Company Name	Related Party	Relationship	Ending Balance	Turnover Rate	Overdue		Amount Received in Subsequent Period	Allowance for Impairment Loss
					Amount	Actions Taken		
TXC (Ningbo) Corporation	TXC Corporation	Parent entity	$ 423,140	3.9	$ -	-	$ 422,493	$ -
TXC (Chongqing) Corporation	TXC Corporation	Parent entity	178,878	4.1	-	-	178,878	-

TABLE 6

TXC CORPORATION

TRADING IN DERIVATIVE INSTRUMENTS
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

TXC (Ningbo) entered into the trading derivative instruments to manage its exposure to interest rate risks of foreign bonds and borrowings.

As of December 31, 2018, unexpired forward contract was below:

	Company Name	Currency	Expired Period	Contract Amount (In Thousand Dollar)
December 31, 2018				
Sell the forward contract	NGB	USD/RMB	2019.01.04-2019.02.11	USD5,500/RMB38,107

TXC CORPORATION

NAMES, LOCATIONS, AND RELATED INFORMATION OF INVESTEES ON WHICH THE COMPANY EXERCISES SIGNIFICANT INFLUENCE
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars or U.S. Dollars)

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount		Balance as of December 31, 2018			Net Income (Losses) of the Investee	Equity in the Earnings (Losses)	Note
				December 31, 2018	December 31, 2017	Shares (In Thousands)	Percentage of Ownership	Carrying Value			
TXC Corporation	Taiwan Crystal Technology International Ltd.	Western Samoa	Investment	$ 1,390,461	$ 1,390,461	42,835	100.00	$ 5,128,270	$ 295,809	$ 295,563	Difference from upstream transactions $(246) thousand
	TXC Technology Inc.	U.S.A.	Marketing activities	9,879	9,879	300	100.00	15,572	732	732	
	TXC Japan Corporation	Japan	Marketing activities	6,172	6,172	2	100.00	27,806	4,918	4,918	
	Taiwan Crystal Technology International (HK) Limited	Hong Kong	Investment	1,958	298,362	80	100.00	93,053	612	612	
	TXC EUROPE GNBH	Germany	Marketing activities	1,746	-	50	100.00	2,130	369	369	
	Tai-Shing Electronics Components Corporation	Taiwan	Manufacture and sales of electronics products	282,306	86,104	6,913	12.14	302,443	99,379	15,257	
	TXC Optec Corporation	Taiwan	Manufacture and sales of sapphire	-	444,718	-	-	-	(909)	(808)	Note 1
	Godsmith Sensor Inc.	Taiwan	Manufacture of equipment	38,100	-	2,350	34.96	34,942	(12,958)	(3,050)	
Taiwan Crystal Technology International Ltd.	Growing Profit Trading Ltd.	B.V.I.	International trading	1,691	1,691	50	100.00	175,348	2,661	2,661	
	TXC (Ningbo) Corporation	Ningbo	Manufacture and sales of electronics products	1,487,211	1,487,211	45,835	100.00	4,964,433	284,108	284,108	
TXC (Ningbo) Corporation	TXC (Chongqing) Corporation	Chongqing	Manufacture and sales of electronics products	1,003,222	604,152	133,825	100.00	1,234,296	94,527	92,985	
	Chongqing All Sun Company Limited	Chongqing	Market activities	426,259	312,644	111,000	100.00	483,670	(8,294)	(8,294)	
	Ningbo Jingyu Company Limited	Ningbo	International trading	7,090	7,090	2,500	100.00	4,077	(2,350)	(2,350)	
	Ningbo Free Trade Zon Ding Kai Investment Management Company	Ningbo	Investment management	160,043	160,043	35,050	100.00	163,464	(1)	(1)	
	Ningbo Longying Semiconductor Co., LTD.	Ningbo	Research and development in integrated circuit	60,540	-	2,400	40.00	59,005	(5,200)	(2,081)	
Taiwan Crystal Technology International (HK) Limited	TXC (Chongqing) Limited	Chongqing	Manufacture and sales of electronics products	-	298,362	-	-	-	94,527	1,542	Note 2

Note 1: TXC Optec Corporation. Was cleared and cleared by resolution of the shareholders meeting on August 24, 2017. And completed the liquidation on April 9, 2018.

Note 2: In the first quarter of 2018, Taiwan Crystal Technology (HK) Limited transferred its entire equity holding of TXC (Chongqing) Corporation to TXC (Ningbo) Corporation with a consideration of RMB86,600 thousand.

TXC CORPORATION

INFORMATION ON INVESTMENT IN MAINLAND CHINA
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars or U.S. Dollars)

1. Name of the investees in Mainland China, main businesses and products, paid-in capital, method of investment, information on inflow or outflow of capital, percentage of ownership, investment income or loss, ending balance of investment, dividends remitted by the investee, and the limit of investment in Mainland China:

Investee Company	Main Businesses and Products	Total Amount of Paid-in Capital	Method of Investment	Accumulated Outflow of Investment from Taiwan as of January 1, 2018 (US$ in Thousand)	Investment Flows		Accumulated Outflow of Investment from Taiwan as of December 31, 2018 (US$ in Thousand)	Investee Company Current Net Income	Percentage of Ownership	Investment Income (Loss) Recognized	Carrying Amount as of December 31, 2018	Accumulated Inward Remittance of Earnings as of December 31, 2018
					Outflow	Inflow						
TXC (Ningbo) Corporation	Manufacturing and sales of crystal and crystal oscillator	$ 1,487,211	Indirect investment of the Corporation in Mainland China through the Corporation's subsidiary in a third region	$ 1,427,630	$ -	$ -	$ 1,427,630	$ 284,108	100	$ 284,108	$ 4,964,433	$ 256,146
Guandong Failong Crystal Technology Co., Ltd.	Manufacturing and sales of new electronic components	580,947	Direct investment of the Corporation in Mainland China	46,478	-	-	46,478	80,132	4	-	250,698	252,022
TXC (Chongqing) Corporation	Manufacturing and sales of electronic devices and hardware components	902,514	Indirect investment of the Corporation in Mainland China through the Corporation's subsidiary in a third region	298,362	-	298,362	-	94,527	100	92,985	1,234,396	306,500
Chongqing All Suns Company Limited	Real estate intermediary service, real estate management and electronic product wholesale	426,259	Other investment of the Corporation Mainland China	-	-	-	-	(8,294)	100	(8,294)	483,670	-
Ningbo Jingyu Company Limited	Purchasing and selling electronic component	7,090	Other investment of the Corporation Mainland China	-	-	-	-	(2,350)	100	(2,350)	4,077	-
Ningbo Longying Semiconductor Co., LTD.	Research and development in integrated circuit	183,180	Other investment of the Corporation Mainland China	-	-	-	-	(5,200)	40	(2,081)	59,005	-
Ningbo Free Trade Zon Ding Kai Investment Management Company	Investment Management	160,043	Other investment of the Corporation Mainland China	-	-	-	-	(1)	100	(1)	163,464	-

2. The limited amounts of the investment in Mainland China

Accumulated Investment in Mainland China as of December 31, 2018	Investment Amounts Authorized by Investment Commission, MOEA	Upper Limit on the Amount of Investment Stipulated by Investment Commission, MOEA
$1,474,108	$1,832,878	$ -

Note: The investment in Mainland China has no maximum limitation since TXC Corporation had acquire the approval by the Industrial Development Bureau of the Company's establishment of operating head quarters in Taiwan.

TXC CORPORATION

SIGNIFICANT TRANSACTIONS WITH INVESTEE COMPANIES IN MAINLAND CHINA, EITHER DIRECTLY OR INDIRECTLY THROUGH A THIRD AREA, AND THEIR PRICES, PAYMENT TERMS, AND UNREALIZED GAINS OR LOSSES
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

1. Significant direct or indirect transactions with the investees, prices and terms of payment, unrealized gain or loss:

Company Name	Related Party	Transaction Type	Transaction Details					Accounts/Notes Receivable/Payable		Unrealized Gain or Loss
			Amount	Percentage (%)	Price	Payment Term	Compared with Terms of Third Parties	Balance	%	
TXC Corporation	NGB	Purchase	$ 1,633,711	33	Its trading price depends on its function within the Group	Similar with third parties	Its trading price depends on its function within the Group	$ (423,140)	(35)	$ 6,601
	NGB	Sale	297,164	5	〃	〃	〃	98,303	4	452
	CKG	Purchase	731,936	15	〃	〃	〃	(178,878)	(15)	3,725
GPT	NGB	Sale	166,868	27	〃	〃	〃	34,631	20	-

2. The transactions of properties and the profit or loss: None.

3. Endorsements guarantees or collateral directly or indirectly provided to the investees: None

4. Financings directly or indirectly provided to the investees: None

5. Other transactions that significantly impacted current year’s profit or loss or financial position: None

TXC CORPORATION

THE CONTENTS OF STATEMENTS OF MAJOR ACCOUNTING ITEMS

TXC CORPORATION

CASH AND CASH EQUIVALENTS
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars, and Foreign Currency)

Item		Amount
Cash		
Cash on hand	Including US$25 thousand @30.715; JPY124 thousand @0.2782; HK$4 thousand @3.921; and RMB29 thousand @4.4753; SGD3 thousand @22.48; EUR1 thousand @35.2	$ 1,116
Cash in banks		
Checking accounts and demand deposits		46,985
Foreign-currency deposits	Including US$12,509 thousand @30.715; JPY252,255 thousand @0.2782; EUR36 thousand @35.2; RMB11,980 thousand @4.4753	509,341
		$ 557,442

TXC CORPORATION

TRADE RECEIVABLES
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Explanation	Amount
Related parties		
TXC (Ningbo) Corporation	For goods	$ 98,303
TXC (Chongqing) Corporation	〃	911
Tai-Shing	〃	9,028
TXC Technology Inc.	〃	115
TXC Japan Corporation	〃	368
Ningbo Jingyu Company Limited	〃	1,309
Liang Shing	〃	34
		110,068
Less: Allowance for impairment loss		(67)
		110,001
Third parties		
A Company	For goods	147,611
B Company	〃	147,538
Others (Note)	〃	1,836,663
		2,131,812
Less: Allowance for doubtful accounts		(9,985)
		2,121,827
		$ 2,231,828

Note: Each of the accounts was less than 5% of the total account balance.

STATEMENT 3

TXC CORPORATION

INVENTORIES
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Explanation	Cost	Market Value (Note)
Raw materials		$ 203,557	$ 197,888
Supplies and spare parts		67,016	66,402
Work in process		183,501	173,982
Finished goods		262,205	249,927
Merchandise		314,961	307,972
Goods in transit		1,609	1,609
		1,032,849	$ 997,780
Less: Allowance for loss		(35,069)	
		$ 997,780	

Note: The market value is based on net realizable value.

TXC CORPORATION

CHANGES IN FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME - NON- CURRENT
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars and Shares)

	Beginning Balance			Increase		Decrease		Ending Balance			
	Shares	Amount	Remeasure	Shares	Amount	Shares	Amount	Shares	% of Ownership	Amount	Pledge or Security
Listed shares											
Guandong Failong Crystal Technology Co., Ltd.	8,096	$ 491,469	$ -	-	$ -	1,403	$ 240,771	6,693	4	$ 250,698	None
Unlisted shares											
Marson Technology Ltd.	523	4,773	-	-	-	-	-	523	4	4,773	〃
Win Win Precision Technology Co., Ltd.	1,365	21,498	-	-	-	-	7,242	1,365	3	14,256	〃
UPI Semiconductor Corp	1,516	32,549	5,048	-	23,601	-	-	1,516	2	61,198	〃
		58,820	5,048	-	23,601		7,242			80,227	
		$ 550,289	$ 5,048	-	$ 23,601		$ 248,013			$ 330,925	

TXC CORPORATION

CHANGES IN INVESTMENTS ACCOUNTED FOR BY THE EQUITY METHOD
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars and Shares)

	Beginning Balance		Increase		Decrease		Equity in Investees Gain (Loss)	Ending Balance			Market Price or Net Asset Value		Valuation Method	Pledge or Security
	Shares	Amount	Shares	Amount	Shares	Amount		Shares	% of Ownership	Amount	Unit Price	Amount		
Unlisted company														
Taiwan Crystal Technology International Ltd.	42,835	$ 4,919,872	-	$ -	-	$	$ 208,398	42,835	100.00	$ 5,128,270	$ -	$ 5,139,841 (Note 1)	Equity method	None
TXC Technology Inc.	300	14,407	-	-	-	-	1,165	300	100.00	15,572	-	15,572 (Note 1)	Equity method	None
TXC Japan Corporation	2	21,715	-	-	-	-	6,091	2	100.00	27,806	-	27,806 (Note 1)	Equity method	None
Taiwan Crystal Technology International (HK) Limited	10,080	399,190	-	-	10,000	306,500	363	80	100.00	93,053	-	93,053 (Notes 1 and 3)	Equity method	None
Tai-Shing Electronics Components Corporation	2,671	96,189	4,242	196,202	-	3,205	13,257	6,913	26.19	302,443	51.7	357,402 (Note 1)	Equity method	None
TXC Optec Corporation	22,225	335,513	-	-	22,225	334,705	(808)	-	-	-	-	- (Notes 1 and 2)	Equity method	None
TXC EUROPE GMBH		-	50	1,746	-	-	384	50	100.00	2,130	-	2,130 (Note 1)	Equity method	None
Godsmith Sensor Inc.		-	2,305	38,100	-	-	(3,158)	2,305	34.96	34,942	-	34,942 (Note 1)	Equity method	None
		$ 5,786,886		$ 236,048		$ 644,410	$ 225,692			$ 5,604,216		$ 5,670,746		

Note 1: The above are unlisted companies, and have no market price.

Note 2: TXC Optec Corporation, was cleared and cleared by resolution of the shareholders meeting on August 24, 2017. And completed the liquidation on April 9, 2018.

Note 3: Taiwan Crystal Technology (HK) Limited, was determined to have capital reduction and share return. After reduction the ending shares is 80 thousand shares.

TXC CORPORATION

ACCOUNTS PAYABLE
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Explanation	Amount
Related parties		
NGB	Payment for goods	$ 423,140
CKG	〃	178,878
GPT	〃	33,855
Liang Shing Eclife	〃	97
Ningbo Jingyu Company Limited	〃	23
Third parties		635,993
A Corporation	Payment for goods	120,159
B Corporation	〃	75,336
C Corporation	〃	65,976
D Corporation	〃	40,518
E Corporation	〃	33,266
F Corporation	〃	28,946
Others (Note)	〃	213,065
		577,266
		$ 1,213,259

Note: Each of the accounts was less than 5% of the total account balance.

TXC CORPORATION

LONG-TERM LOANS
DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

				Amount			
	Repayment Period	**Repayment Method**	**Interest Rate %**	**Current Portion**	**Noncurrent Portion**	**Total Amount**	**Pledge or Security**
HSBC Bank	2017.12.12-2021.12.12	Repayable upon maturity	0.88	$ -	$ 100,00	$ 100,000	-
CTBC Bank	2014.9.1-2019.9.1	Repayable from August 2015 in quarterly installment	0.86-0.89	46,875	-	46,875	Note 31
CTBC Bank	2018.9.6-2019.9.6	Repayable upon maturity	0.86	-	200,000	200,000	-
KGI Bank	2018.9.4-2020.9.4	Repayable upon maturity	0.89	-	200,000	200,000	-
KGI Bank	2018.8.27-2020.8.27	Repayable upon maturity	0.89	-	200,000	200,000	-
Taishin International Bank	2018.12.19-2021-12.19	Repayable upon maturity	0.86	-	200,000	200,000	-
DBS	2018.1.25-2020.1.25	Repayable upon maturity	0.88	-	250,000	250,000	-
DBS	2017.9.6-2020.9.6	Repayable upon maturity	0.88	-	200,000	200,000	-
				$ 46,875	$ 1,350,000	$ 1,396,875	

TXC CORPORATION

OPERATING REVENUES
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Amount
Quartz crystal products	$ 6,657,254
Less: Sales returns	(17,427)
Less: Sales allowances	(82,921)
	$ 6,556,906

STATEMENT 9

TXC CORPORATION

COST OF GOODS SOLD
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Amount
Direct materials	
Beginning materials	$ 252,409
Add: Material purchase	1,001,240
Less: Unfavorable cost variance	134,082
Less: Expense	(117,801)
Less: Adjustment items	(96,030)
Ending materials	(264,290)
	909,610
Direct labor	277,007
Overhead	685,254
Manufacturing cost	1,871,871
Beginning work in process	208,445
Add: Purchases	38,855
Add: Others	13,371
Less: Expense	(38,259)
Less: Favorable cost variance	(79,354)
Ending work in process	(173,982)
Finished goods cost	1,840,947
Beginning finished goods	255,873
Add: Purchases	1,083
Add: Favorable cost variance	(27,868)
Less: Expense	(7,868)
Adds: Others	57,210
Ending finished goods	(249,927)
Production cost	1,869,450
Beginning merchandise inventory	221,866
Add: Purchase	3,716,479
Add: Others	42,334
Add: Favorable cost variance	(7,691)
Less: Expense	(1,029)
Ending merchandise inventory	(307,972)
Purchase cost	3,663,987
Loss on physical inventory	9,219
	$ 5,542,656

STATEMENT 10

TXC CORPORATION

OVERHEAD EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Explanation	Amount
Indirect labor	Including salary and wages, pension, food stipend, employee benefits and insurance etc.	$ 171,672
Indirect materials		95,238
Depreciation		238,258
Utilities		78,581
Maintenance expense		42,707
Others		58,798
		$ 685,254

STATEMENT 11

TXC CORPORATION

OPERATING EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	Explanation	Selling and Marketing	General and Administration	Research and Development
Salary		$ 48,134	$ 60,606	$ 172,290
Depreciation		1,136	3,163	51,827
Research expense		-	-	61,074
Commission		14,179	-	-
Import and export expense		42,756	-	93
Others		138,657	55,628	41,835
		$ 244,862	$ 119,397	$ 327,119

TXC CORPORATION

EMPLOYEE WELFARE, DEPRECIATION AND AMORTIZATION EXPENSES
FOR THE YEAR ENDED DECEMBER 31, 2018
(In Thousands of New Taiwan Dollars)

Item	2018 Operating Cost	2018 Operating Expense	2018 Total	2017 Operating Cost	2017 Operating Expense	2017 Total
Salaries	$ 380,834	$ 267,666	$ 648,500	$ 402,910	$ 312,709	$ 715,619
Insurance	33,801	23,110	56,911	34,842	24,204	59,046
Pension	14,873	13,956	28,829	14,765	13,601	28,366
Other employee benefit	145	447	592	427	1,563	1,990
Remuneration of directors	-	13,364	13,364	-	19,046	19,046
Depreciation expense	238,278	56,126	294,404	299,249	68,147	367,396
	$ 667,931	$ 374,669	$ 1,042,600	$ 752,193	$ 439,270	$ 1,191,463

Note: As of December 31, 2018 and 2017, the number of employees was 1,021 and 1,048 people with 8 and 7 directors not included in employees, respectively.