Stock Code: 5274

ASPEED Technology Inc.

2019 Annual Report

Notice to readers

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

Printed on March 21, 2020

Website for accessing this annual report: http://mops.twse.com.tw

Annual Report is available at: http://www.aspeedtech.com

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ASPEED Technology Inc. Website

Website: http: //www.aspeedtech.com

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I. Letter to Shareholders

Dear Shareholders:

The year of 2019 is a brilliant year. This year we celebrate the 15th anniversary of ASPEED Technology, which is also an important milestone for us. We sincerely thank you for all your long-term support for us. For 15 years, ASPEED Technology still maintains a high profitable performance every year. Having such a fruitful result is a concerted effort for all employees and partners. In 2019, our revenue set a record high of NT$2.48 billion with YoY growth reaching 15.36%, and we continued our excellent performance of achieving revenue and profit growth every year since the Company was founded in 2004. NowASPEED is still the worldwide No. 1 BMC chip provider, and this year we successfully announced the 7th generation BMC SoC AST2600, which is the first 28nm BMC SoC. Also, under the solid R&D foundation and precise market planning, the PC/AV extension SoC and Cupola360 multi-image stitching SoC have both developed steadily and successfully. We are confident that all these two product lines will achieve excellent business performance for shareholders.

Financial Performance

ASPEED Technology's 2019 operating revenue was 2.48 billion and net profit after tax was 0.83 billion, 15.36% and 21.18% above 2.15 billion and 0.69 billion in 2018, respectively, and EPS was 24.39.ASPEED Technology's gross profit margin was 63.24% in 2019 and 59.89% the previous year. The increase in gross profit margin was due to its BMC product portfolio. Its operating profit margin was 40.59 % in 2019.

Market Development

In 2018, the overall server market was affected by US-China trade war, corporate investment tended to be conservative, and also the growth rate of data centers that previously played a driving role in market growth also converged from double-digit to about 5% growth. However in 2019, due to several factors including the slow down of U.S.-China Trade War, the increase in demand from North American data center operators, the coming of 5G era to stimulate the growth of cloud service demand, all in all the overall server market shipments are expected to continue to grow steadily.

In addition to the BMC SoC product line, we have developed the Cupola360 multi-image stitching processing SoC since 2017, and has gradually started a cooperative development phase with customers. In 2019, ASPEED Technology focuses on the enhancement of Cupola360’s core technology – Hyper-Stitching Technology and applies to different applications including: Video Conference, Automotive (Dash Cam), Surveillance Camera, and 360-degree Consumer Camera applications, and there’s no doubt Cupola360 series products will definitely gain great success.

Corporate Social Responsibility

The belief that a company's success and growth relies on harmony between the company, society, and the environment is deeply rooted in ASPEED Technology, which is committed to fulfilling its corporate social responsibility. ASPEED Technology's official website fully discloses the Company's efforts to uphold social welfare, environmental protection, and stakeholders. One of our outlooks for the coming year is that we hope to provide customers with the most suitable SoC solutions and high quality services. We will continue to invest resources into R&D to obtain superior core technologies. In the design and R&D process, we contribute to the preservation of the Earth's ecosystem and sustainability through eco-friendly design concepts and simplified product structures. Furthermore, we seek to build good relationships with our shareholders, employees, society, customers, and suppliers, so as to find a balance between the interests of all stakeholders.

The roles of the Board of Directors and professional managers are clearly defined for corporate governance, which emphasizes transparent operations, and upholds the rights and interests of shareholders and employees.

ASPEED Technology shows its gratitude to society by giving back to those in need. ASPEED Technology understands that education is the foundation of all things, and it continued to support disadvantaged students in remote areas in 2018, which it has always been concerned about. ASPEED Technology subsidizes the software/hardware and education resources for students in remote areas of Taitung County and Nantou County, in hopes that all students can gain equal and sufficient resources. This year, besides subsidizing hardware repair and purchase in schools at all levels, ASPEED Technology also provided funding to the baseball team and judo team of Taitung's Beinan Junior High School, hoping to let children focus on doing what they excel at without any additional worries. ASPEED Technology also provided funding to Nantou County's Vox Nativa Choir in hopes of letting the indigenous children use their gift and one day have the ability to give back to their hometown. Furthermore, in 2019 ASPEED Technology also took part in an event organized by Global Views Educational Foundation: Sow the Seeds of Reading to Give Children a Great Future, and donated monthly issues to children in Taitung County, hoping to use its capabilities to gradually reduce the gap in educational resources of urban and rural areas.

Future Outlook

As part of the outlooks for 2020, ASPEED Technology's BMCs will continue to generate considerable revenue for the Company on the existing foundation as large data centers are constructed. PC/AV extension product line began to contribute to revenue steadily, and the overall revenue increased by 14% compared with last year. As for Cupola360 multi-image stitching processing SoC, this year we have completed the overall product segmentation and positioning for 4 major applications; also with the continuos development of APPs, we believe it will bring more significant growth to ASPEED Technology.

ASPEED Technology has always been striving to stand firm every step of the way. At the same time, it has not succeeded in complacency, and has been brave enough to take the next step, and has therefore been able to enjoy the strong returns. ASPEED Technology's consistent and excellent business performance is the result of its employees' persistent efforts. We are truly grateful to our customers, suppliers, shareholders and the general public for their support in the past 15 years. In the future, we will continue to work towards steady growth so that our shareholders, customers, and employees can share the fruits of our excellent business performance. Finally, we would like to thank each shareholder for your support and care.

Chairman: Chris Lin

President: Chris Lin

II. Company Profile

1. Date of Incorporation:
   11/15/2004
2. A brief history of the Company

Year	Milestones
2004/11	Founded with NT$45,000 thousand capital and NT$1,000 thousand paid-up capital.
2004/12	Cash capital increased by issuing new shares of NT$11,000 thousand with NT$12,000 thousand paid-up capital after increase in total.
2005/03	Cash capital increased by issuing new shares of NT$14,000 thousand with NT$26,000 thousand paid-up capital after increase in total.
2005/11	Allied with QCI as a software partner.
2005/11	Launched the first generation BMC – AST2000/1000.
2005/11	Allied with AMI as a software partner.
2005/12	Allied with ATEN Technology as a software partner.
2006/03	Cash capital increased by issuing new shares of NT$10,000 thousand with NT$36,000 thousand paid-up capital after increase in total.
2006/06	Allied with Avocent as a software partner.
2006/09	Cash capital increased by issuing new shares of NT$14,000 thousand with NT$50,000 thousand paid-up capital after increase in total.
2007/01	Be certified to ISO 9001-2000.
2007/06	Launched the second generation BMC – AST2100/2050/1100.
2008/08	Employee bonus and surplus capital increased by issuing new shares of NT$29,000 thousand with NT$79,000 thousand paid-up capital after increase in total.
2008/10	Ranked no.37 in revenue growth"Deloitte Technology Fast 500 Asia Pacific 2008, and"by Deloitte & Touche.
2008/12	Launched the third generation BMC – AST2200/AST2150.
2009/06	AST1500 received the"Best Choice of COMPUTEX TAIPEI 2009 Award".
2009/06	Launched the new product AST1500 PC-Over-LAN Extension Processor.
2009/09	Employee bonus and surplus capital increased by issuing new shares of NT$21,230 thousand with NT$100,230 thousand paid-up capital after increase in total.
2009/11	Employee exercised stock warrants increased of NT$1,750 thousand with NT$101,980 thousand paid-up capital after increase in total.
2010/01	Launched the new product AST1600 PC-Over-GAT5 Extension Processor.
2010/02	Launched virtual desktop processors – AST1150/AST1160/AST1170/AST1180.
2010/07	Launched the fourth generation BMC – AST2300/AST1300.
2010/09	Employee bonus and surplus capital increased by issuing new shares of NT$27,885 thousand with NT$129,865 thousand paid-up capital after increase in total.
2010/10	Cash capital increased by issuing new shares of NT$20,000 thousand with NT$149,865 thousand paid-up capital after increase in total.
2011/01	Employee exercised stock warrants increased of NT$1,275 thousand with NT$151,140 thousand paid-up capital after increase in total.
2011/07	Employee bonus and surplus capital increased by issuing new shares of NT$35,091 thousand with NT$186,231 thousand paid-up capital after increase in total.
2011/09	Cash capital increased by issuing new shares of NT$12,000 thousand with NT$198,231 thousand paid-up capital after increase in total.
2011/11	Employee exercised stock warrants increased of NT$2,550 thousand with NT$200,781 thousand paid-up capital after increase in total.
2012/01	Corporation went public.

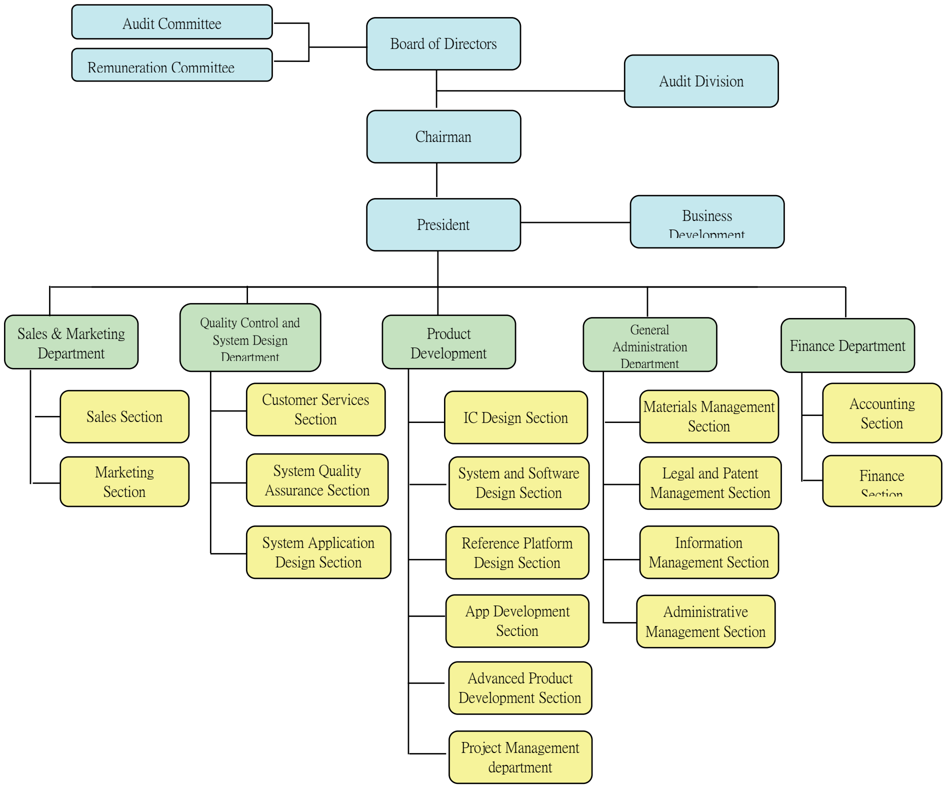
Year	Milestones
2012/05	Listed for trading in emerging markets.
2012/09	Employee bonus and capital surplus increased by issuing new shares of NT$10,588 thousand with NT$211,368 thousand paid-up capital after increase in total.
2012/11	Employee exercised stock warrants increased of NT$1,612 thousand with NT$212,980 thousand paid-up capital after increase in total.
2013/04	Listed on Taipei Exchange.
2013/05	Cash capital increased by issuing new shares of NT$20,360 thousand with NT$233,340 thousand paid-up capital after increase in total.
2013/09	Capital surplus increased by issuing new shares of NT$4,667 thousand with NT$238,007 thousand paid-up capital after increase in total.
2013/10	Issued new restricted employee shares increased of NT$610,000 thousand with NT$238,617 thousand paid-up capital after increase in total.
2013/12	Ranked no. 428 in revenue growth" Deloitte Technology Fast 500 Asia Pacific 2013, and."by Deloitte & Touche.
2014/05	Issued new employee restricted shares increased of NT$450 thousand with NT$239,067 thousand paid-up capital after increase in total.
2014/07	Retired restricted stock awards shares decreased of NT$100 thousand with NT$238,967 thousand paid-up capital after decrease in total.
2014/08	Capital surplus increased by issuing new shares of NT$23,907 thousand with NT$262,874 thousand paid-up capital after increase in total.
2014/11	Rated by Forbes "Asia's 200 Best Under A Billion in 2014".
2014/12	Issued new employee restricted shares increased of NT$220 thousand with NT$263,094 thousand paid-up capital after increase in total.
2014/12	Retired restricted stock awards shares decreased of NT$135,000 thousand with NT$262,959 thousand paid-up capital after decrease in total.
2014/12	Ranked no. 451 in revenue growth "Deloitte Technology Fast 500 Asia Pacific 2014" by Deloitte & Touche.
2015/08	Employee bonus and surplus capital increased by issuing new shares of NT$53,762 thousand with NT$316,720 thousand paid-up capital after increase in total.
2016/05	Acquired the BMC Pilot™ product line from Emulex Corporation, a subsidiary of Broadcom.
2016/06	Established the offshore investment company ASPEED Technology (Samoa) Inc.
2016/07	Established the subsidiary ASPEED Technology (U.S.A.) Inc.
2016/08	Employee bonus increased by issuing new shares of NT$1,160 thousand with NT$317,881 thousand paid-up capital after increase in total.
2016/10	Established the subsidiary ASPEED Technology India Private Limited.
2016/12	Issued new employee restricted shares increased of NT$300 thousand with NT$318,181 thousand paid-up capital after increase in total.
2016/12	Acquired the BMC Pilot™ product line from Emulex Corporation.
2017/01	Issued private placement increased by issuing new shares of NT$20,220 thousand with NT$338,401 thousand paid-up capital after increase in total.
2017/06	Retired restricted stock awards shares decreased of NT$40 thousand with NT$338,361 thousand paid-up capital after decrease in total.
2017/06	Employee bonus increased by issuing new shares of NT$1,057 thousand with NT$339,418 thousand paid-up capital after increase in total.
2017/11	Retired restricted stock awards shares decreased of NT$40 thousand with NT$339,378 thousand paid-up capital after decrease in total.
2017/12	Ranked no.486 in revenue growth "Deloitte Technology Fast 500 Asia Pacific 2017" by Deloitte & Touche.

Year	Milestones
2018/02	Established the subsidiary Cupola Co., Ltd.
2018/02	Issued new employee restricted shares increased of NT$360 thousand with NT$339,738 thousand paid-up capital after increase in total.
2018/05	Debuted All Eyes on Cupola360 the World's First 360-Degree Spherical Image Processor.
2018/08	Ranked no.21 in business performance "2018 TOP 5000" by CRIF TAIWAN.
2018/08	Employee bonus increased by issuing new shares of NT$707 thousand with NT$340,446 thousand paid-up capital after increase in total.
2018/11	Issued new employee restricted shares increased of NT$210 thousand with NT$340,656 thousand paid-up capital after increase in total.
2019/03	Ranked no. 470 in revenue growth "Deloitte Technology Fast 500 Asia Pacific 2018" by Deloitte & Touche.
2019/03	Retired restricted stock awards shares decreased of NT$72 thousand with NT$340,584 thousand paid-up capital after decrease in total.
2019/08	Employee bonus increased by issuing new shares of NT$1,034 thousand with NT$341,618 thousand paid-up capital after increase in total.
2019/08	Retired restricted stock awards shares decreased of NT$ 50 thousand with NT$341,568 thousand paid-up capital after decrease in total.
2019/09	Issued new employee restricted shares increased of NT$280 thousand with NT$341,848 thousand paid-up capital after increase in total.
2019/11	The head office moved to 4F., No. 1, Sec. 3, Gongdao 5th Rd., East Dist., Hsinchu City 30069, Taiwan.
2020/02	Issued new employee restricted shares increased of NT$310 thousand with NT$342,158 thousand paid-up capital after increase in total.
2020/03	Issued new employee restricted shares increased of NT$90 thousand with NT$342,248 thousand paid-up capital after increase in total.

III. Corporate Governance

1. Organization

(1) Organization Chart



(2) Major Corporate Functions

Department	Functions
President	1. Responsible for the Company's overall business planning and execution. 2. The development and execution of the Company's mid- and long-term business strategies. 3. The establishment, supervision, and management of the organizational operations and systems of each department 4. Directly accountable to the Board of Directors.
Audit Division	The auditing, evaluation, and formulation of the Company's internal controls, the provision of improvement recommendations, the improvement of sales efficiency, and the effective implementation of internal controls.

Department	Functions
Business Development	1. New business market analysis & product strategy development 2. Key account engagement & new business development 3. Corporate operation analysis & continuous improvement 4. Corporate long-term planning & execution
Sales & Marketing Department	1. Expanding marketing channels to serve customers effectively. 2. Effectively reach the annual sales goals. 3. Product competitiveness project planning. 4. New customer development, credit investigation, and lending. 5. The progress of plans related to customer satisfaction and market forecasts, and effective provision of services to customers. 6. Responsible for the product planning process. 7. Proposals and promotion activities for various products. 8. Product life cycle management.
Quality Control and System Design Department	1. Quality system planning, supervision and execution, auditing, management, and integration to make the quality system smoother, and improvement of product quality management. 2. Handling customer complaints and improvement of quality issues. 3. Product verification planning, execution and management. 4. Finished product testing and non-conforming product testing and reporting. 5. Customer and internal ISO auditing. 6. Data and file management, and related documents.
Product Development Department	1. Circuit design and R&D verification. 2. Complete product development and smooth transition to mass production. 3. Support for customer IC design, and verification and transition to product manufacturing. 4. Define new product specifications and evaluate its feasibility. 5. Analyze and respond to customers' product-related questions.
General Administration Department	1. Establish and implement the Company's administrative rules. 2. Talent recruitment, appointment, training, evaluation, and personnel changes. 3. Human resource planning and management. 4. Salary and bonus management, payment, investigation, and adjustment recommendations. 5. ERP system management. 6. Planning and execution of general affairs and factory safety.
Finance Department	1. Planning and management of accounting and financial affairs. 2. Operations of the Board of Directors. 3. Management of stock affairs.

2. Information of Directors and Officials

(1) Directors' Information

a. Information Regarding Board Menbers

March 21, 2020/Unit shares

Title	Nationality or Registry	Name	Gender	Date appointed	Term (Yrs)	Date first Elected	Shareholding when Elected		Current Shareholding		Spouse&Minor Shareholding		Shareholding by Nominee Arrangement		Selectededucation and experience	Concurrent positions at the company and other companies	Remark
							Shares	%	Shares	%	Shares	%	Shares	%			
Chairman	R.O.C.	Feng Hua Investment Limited	—	May 30, 2018	3 years	June 24, 2010	4,718,524	13.89%	4,775,524	13.95%	0	0%	0	0%	EMBA, National Chiao Tung University Master , Electrical Engineering, National Taiwan University BS , Electrical Engineering, National Tsing Hua University President, XGI Technology Inc. Vice President,, Multimedia Product Division, SiS	President, ASPEED Technology Inc. Director, Feng Hua Investment Limited Director, Shengl Hua Investment Limited Director, ASPEED Technology (Samoa) Inc. CEO, ASPEED Technology (U.S.A.) Inc. Director, ASPEED Technology India Private Limited Chairman, Cuploa360 Inc.	The chairman and general manager of the company are the same person. ASPEED has 3 independent directors and a majority of the directors are not employees or managers.
	R.O.C.	Corporate Representative – Chris Lin	Male				0	0%	355,510	1.04%	0	0%	1,074,884	3.14%			
Director	R.O.C.	Xian Hua Investment Co.,Ltd.	—	May 30, 2018	3 years	June 24, 2010	538,644	1.59%	538,644	1.57%	0	0%	0	0%	Master, Electrical Engineering, National Tsing Hua University Chairman/Chief Operating Officer, Machvision Inc. Chairmao, Ace Motors Inc. Vice President,, Stark Technology Inc. Director, Acer Inc.	Director, Machvision Inc. Director, Autovision Technology Inc. Supervisor, AtechOEM Inc. Director, Stark Technology Inc. Director, ASPEED Technology India Private Limited	
	R.O.C.	Corporate Representative – Arnold Yu	Male				0	0%	167,870	0.49%	0	0%	0	0%			
Director	R.O.C.	ATEN Technology Co., Ltd. (Note1)	—	May 30, 2018	3 years	Oct. 02, 2006	1,043,770	3.07%	920,770	2.64%	0	0%	0	0%	EMBA, National Taiwan University Master, Electrical Engineering, National Taiwan University BS, Electrical Engineering, National Taiwan University Business Group Director/Product Director/R&D Director, AVerMedia Technologies Inc.	Director, ATEN Technology Co., Ltd. Vice President, ATEN Technology Co., Ltd. Chairman, Zheng Sheng Technology Co., Ltd. Director, ATEN International Co., Ltd.	
	R.O.C.	Corporate Representative – Nicholas Lin	Male				0	0%	0	0%	0	0%	0	0%			
Director	R.O.C.	Avago Technologies International Sales PTE. Limited	—	May 30, 2018	3 years	May 26, 2017	2,022,000	5.95%	2,022,000	5.91%	0	0%	0	0%	BS, Electronic Engineering, National Tsing Hua University, Hsinchu NXP Semiconductor Inc, Taiwan Country manager, Sr. Sales Director Freescale Semiconductor Inc, Taiwan Country manager	Broadcom Corporation, Taiwan Country Manager	
	R.O.C.	Corporate Representative – Nick Chen	Male				0	0%	0	0%	0	0%	0	0%			
Director	R.O.C.	Shengl Hua Investment Limited	—	May 30, 2018	3 years	May 26, 2017	1,074,884	3.16%	1,074,884	3.14%	0	0%	0	0%	EMBA, National Chengchi University BS, Electrical Engineering, Chinese Culture University Assistant Manager of Strategy Marketing, SiS	Vice President , ASPEED Technology Inc.	
	R.O.C.	Corporate Representative – Luke Chen	Male				0	0%	61,046	0.18%	131	0%	0	0%			
Director	R.O.C.	Ted Tsai	Male	May 30, 2018	3 years	May 30, 2018	368,173	1.08%	368,173	1.08%	62,838	0.18%	0	0%	Chairman, Maojet Technology Corp. Bachelor's in Electronic Engineering, Chung Yuan Christian University	Chairman, Maojet Technology Corp.	

Title	Nationality or Registry	Name	Gender	Date appointed	Term (Yrs)	Date first Elected	Shareholding when Elected		Current Shareholding		Spouse&Minor Shareholding		Shareholding by Nominee Arrangement		Selectededucation and experience	Concurrent positions at the company and other companies	Remark
							Shares	%	Shares	%	Shares	%	Shares	%			
Independent Director	R.O.C.	Chyan Yang	Male	May 30, 2018	3 years	June 14, 2012	0	0%	0	0%	0	0%	0	0%	Ph.D. in Computer Science & Engineering, University of Washington Director, Institute of Business and Management, National Chiao Tung University Dean, College of Management, National Chiao Tung University CEO, EMBA, National Chiao Tung University	Adjunct Professor, Institute of Business and Management, National Chiao Tung University Independent Director, ACTER Co., Ltd. Supervisor, Chia Chang Co., Ltd. Independent Director, MARS Semiconductor Corp. Independent Director, Associated Industries China, Inc	
Independent Director	R.O.C.	Dyi- Chung Hu	Male	May 30, 2018	3 years	June 14, 2012	0	0%	0	0%	0	0%	0	0%	Ph.D. in Materials Science and Engineering, Massachusetts Institute of Technology Senior Vice President, Unimicron Technology Corp. Vice President , Hannstar Display Corporation Senior Assistant VP, E Ink Holdings Inc.	Chairman and CEO, Siplus Technology Co. Director, Raytek Semiconductor, Inc. Supervisor, Tantti Laboratory Inc.	
Independent Director	R.O.C.	Robert Lo	Male	May 30, 2018	3 years	May 30, 2018	0	0%	0	0%	0	0%	0	0%	Master, Graduate Institute of Business Administration, National Taiwan University BS, Department of Business Administration, Soochow University VP, TVBEAN CO., LTD PM, Department of Industrial Support, Institute for Information Industry Junior Manager, Investments, O-Bank	Vice President of Investment, Globaltec Dorector of unitech computer Co., Ltd Dorector of. Unitech Elextronics Co., Ltd.	

Note1：ATEN Aten Technology Co., Ltd. had resigned on April 1, 2020.

b. Major shareholders of institutional shareholders

(I) Major shareholders of institutional shareholders

March 21, 2020

Name of institutional shareholder	Major shareholders of institutional shareholders
Feng Hua Investment Limited	Chris Lin (64.94%), Yu-Hua Chang (28.20%), Han-Wei Lin (3.43%), Chong-Wei Lin (3.43%)
Xian Hua Investment Co.,Ltd.	Jui-Hua Chu (50.51%), Pin Yu (13.28%), Chun-Chi Yu (13.28%), Jui-Li Chu (0.34%), Ming-Chang Yu (22.58%)
ATEN Technology Co., Ltd.	Shang-Jen Chen (5.67%), Chin-Tang Chen (5.40%), investment account of CSC Securities (HK) Limited's customer Capital Securities Nominee Ltd. under the custody of Capital Securities Corporation (3.75%), Ren Liao (3.46%), Shang-Chong Chen (3.39%), Yuan Qiao Investment Limited (3.35%), Yu-Li Liao (2.21%), Li-Yueh Pan (2.0%), and investment account of Noregs Bank under the custody of Citibank Taiwan (2.43%)、Li-Meixing(1.86%)
Avago Technologies International Sales PTE. Limited	Avago Technologies Finance Pte. Ltd.(100%)
Shengl Hua Investment Limited	Chris Lin (51%), Yu-Hua Chang (47%), Han-Wei Lin (1%), Chong-Wei Lin (1%)

(II) Institutional shareholders of institutional shareholders and their major shareholders

March 21, 2020

Name of institution	Major shareholders of institution
Yuan Qiao Investment Limited	Qing-Qing Lin (0.22%)
Avago Technologies Finance Pte. Ltd.	AT Luxembourg S.a.r.l. (100%)

c. Professional qualifications and independence analysis of directors

March 21, 2020

Qualifications / Name	With five or more years of work experience and the following professional qualifications			Independence Status (Note2)												Number of Companies also Serves as Independent Director for
	An Instructor or Higher Positionin a Departmentof Commerce, Law, Finance, Accounting, or Other Academic Department Related to the Business Needs of the Company in a Public or Private Junior College,College or University	A Judge, Public Prosecutor, Attorney, CertifiedPublic Accountant, or Other Professional or Technical Specialist Who has Passed a National Examination and been Awarded a Certificate in a Profession Necessary for the Business of theCompany	Have Work Experience in the Areas of Commerce, Law, Finance, or Accounting, or Otherwise Necessary for the Business of the Company	1	2	3	4	5	6	7	8	9	10	11	12	
Chris Lin, Corporate Representative of Feng Hua Investment Limited			✓				✓		✓		✓	✓	✓	✓		None
Arnold Yu, Corporate Representative of Xian Hua Investment Co.,Ltd.			✓	✓			✓	✓	✓	✓	✓	✓	✓	✓		None
Nicholas Lin, Corporate Representative of ATEN Technology Co., Ltd. (Note1)			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		None
Nick Chen, Representative of Avago Technologies International Sales PTE. Limited			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		None
Luke Chen, Corporate Representative of Sheng Hua Investment Limited			✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		None
Ted Tsai			✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	None
Chyan Yang	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	3
Dyi- Chung Hu			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	None
Robert Lo		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	None

Note 1: ATEN Technology Co., Ltd. had resigned on April 1, 2020.

Note 2: Directors with a "✓" sign meets the following criteria:

(1) Not an employee of the Company or any of its affiliates.

(2) Not a director or supervisor of the Company's affiliates. (Except where the company and its parent company, subsidiaries or subsidiaries of the same parent company serve as independent directors of each other under this Law or local laws and regulations.)

(3) Not a natural-person shareholder who holds shares, together with those held by the person's spouse, minor children, or held by the person under others' names, in an aggregate amount of 1% or more of the total number of outstanding shares of the Company or ranking in the top 10 in holdings.

(4) A spouse, a relative within the second degree of consanguinity, or an immediate blood relative within the third degree of consanguinity, who is not the manager listed in (1) or the spouse, a relative within the second degree of consanguinity, or an immediate blood relative within the third degree of consanguinity of the person listed in (2) or (3).

(5) A director, supervisor or employee of a corporate shareholder who does not directly hold more than 5% of the Company's total outstanding shares, who holds the top five shares or who has appointed a representative as a director or supervisor in accordance with Article 27, paragraph 1 or 2, of the Company Act. (Except where the Company and its parent company, subsidiaries or subsidiaries of the same parent company serve as independent directors of the Company in conjunction with each other under this Act or local national laws and regulations.)

(6) A director, supervisor or employee of another company controlled by the same person who holds more than half of the directorships or voting rights of the shares of that company. (Except where the company and its parent company, subsidiaries or subsidiaries of the same parent company serve as independent directors of each other under this Law or local laws and regulations.)

(7) A director, supervisor or servant of another company or organization not being the same person or spouse as the chairman, general manager or equivalent of the company. (Except where the company and its parent company, subsidiaries or subsidiaries of the same parent company serve as independent directors of each other under this Law or local laws and regulations.)

(8) Not a director, supervisor, officer, or shareholder holding 5% or more of the shares, of a specified company or institution which has a financial or business relationship with the Company. (Unless a particular company or organization holds more than 20%, but not more than 50%, of the total number of issued shares of the company, and the company and its parent, subsidiary or subsidiary of the same parent are independent directors of each other under this Law or local laws and regulations).

(9) Professionals, sole proprietors, partners, directors, supervisors, managers and their spouses who do not provide business, legal, financial, accounting or other related services to companies or affiliates that are not audited or have received compensation in an aggregate amount not exceeding NT$500,000 in the last two years. However, this does not apply to members of the Compensation Committee, the Public Mergers and Acquisitions Committee or the Special Committee on Mergers and Acquisitions, who perform their duties under the Securities and Exchange Act or the relevant laws and regulations of the Business Mergers and Acquisitions Act.

(10) Not having a marital relationship, or a relative within the second degree of kinship to any other director of the Company.

(11) Not been a person of any conditions defined in Article 30 of the Company Law.

(12) Not a governmental, juridical person or its representative as defined in Article 27 of the Company Law.

(2) Information of Chairman, Vice Presidents and Officers

March 21, 2020/ Unit shares

Title	Nationality	Name	Gender	Date appointed	Shareholding		Spouse and underage children shareholding		Shareholding under the title of a third party		Experience & Education	Serves concurrently as	Managers who are spouse or seconddegree relative			Remark
					Shares	%	Shares	%	Shares	%			Title	Name	Relation	
President	R.O.C.	Chris Lin	Male	2004.11.15	355,510	1.04%	0	0%	1,074,884	3.14%	EMBA, National Chiao Tung University Master , Electrical Engineering, National Taiwan University BS , Electrical Engineering, National Tsing Hua University President, XGI Technology Inc. Vice President,, Multimedia Product Division, SiS	Director, Feng Hua Investment Limited Director, Shengl Hua Investment Limited Director, ASPEED Technology (Samoa) Inc. CEO, ASPEED Technology (U.S.A.) Inc. Director, ASPEED Technology India Private Limited Chairman, Cuploa360 Inc.	None	None	None	ASPEED Technology has 3 independent directors and a majority of the directors are not employees or managers.
Vice President	R.O.C.	Hung-Ju Huang	Male	2004.11.15	175,329	0.51%	36,291	0.11%	0	0%	M.S., Electrical Engineering, National Cheng Kung University Assistant Manager of R&D, XGI Technology Inc. Senior VP of R&D, SiS	None	None	None	None	
Vice President	R.O.C.	Morris Yang	Male	2018.09.26	2,379	0.01%	0	0%	0	0%	M.S., Accounting and Management Decision- Making National Taiwan University B.S., Information Engineering, Feng Chia University Vice President VRM/HTC	None	None	None	None	
Vice President	R.O.C.	Luke Chen	Male	2005.10.03	61,046	0.18%	0	0%	131	0%	EMBA, National Chengchi University B.S., Electrical Engineering, Chinese Culture University General manager of Marketing,NITS. Marketing Assistant, SiS	None	None	None	None	
Assistant Manager	R.O.C.	James Yang	Male	2019.01.14	0	0%	0	0%	0	0%	Grobal MBA,National Taiwan University BS,Institute of Industrial Engineering National Taiwan University Vice President ,DeepForce Vice President Business Development TUTK Senior Manager New Business Development MediaTek	None	None	None	None	
Assistant Manager	R.O.C.	Charles Kuan	Male	2017.02.02	1,000	0.00%	0	0%	0	0%	School of Communication and Information Studies Rutgers University, State University of New Jersey Assistant Vice President of Sales in Asia, Avocent Taiwan Co., Ltd.	None	None	None	None	
Financial Manager	R.O.C.	Tina Chiu	Female	2007.04.09	759	0.00%	0	0%	0	0%	B.S., Accounting ,Feng Chia University Accounting Specialist, Foxconn	None	None	None	None	

(3) Remunerations Paid to Directors, Supervisors, President and Vice President

a. Remunerations Paid to Directors

Unit: NT$ 1,000

Title	Name	Remuneration Paid to Directors: Salary (A): The Company	Remuneration Paid to Directors: Salary (A): Consolidated Entities	Pension (B): The Company	Pension (B): Consolidated Entities	Remuneration (C) (Note): The Company	Remuneration (C) (Note): Consolidated Entities	Allowance (D): The Company	Allowance (D): Consolidated Entities	(A+B+ C+ D) as % of Net Income: The Company	(A+B+ C+ D) as % of Net Income: Consolidated Entities	Compensation Earned as Employee of the Company or of the Company's Affiliates: Salary, Bonus and special etc.(E): The Company	Salary, Bonus and special etc.(E): Consolidated Entities	Pension (F): The Company	Pension (F): Consolidated Entities	Employee Compensation (G) (Note): The Company: Cash	Employee Compensation (G) (Note): The Company: Stock	Employee Compensation (G) (Note): Consolidated Entities: Cash	Employee Compensation (G) (Note): Consolidated Entities: Stock	(A+B+C+D+E+F+G) as % of Net Income: The Company	(A+B+C+D+E+F+G) as % of Net Income: Consolidated Entities	Other Compensation from non-
Chairman	Chris Lin, Corporate Representative of Feng Hua Investment Limited	0	0	0	0	11,140	11,140	280	280	1.37%	1.37%	6,031	6,031	108	108	0	6,000	0	6,000	2.83%	2.83%	None
Director	Arnold Yu , Corporate Representative of Xian Hua Investment Co.,Ltd.																					
Director	Nicholas Lin , Corporate Representative of ATEN Technology Co., Ltd.																					
Director	Nick Chen, Corporate Representative of Avago Technologies International Sales PTE. Limited																					
Director	Luke Chen, Corporate Representative of Sheng Hua Investment Limited																					
Director	Ted Tsai																					
Independent Director	Chyan Yang	3,360	3,360	0	0	0	0	150	150	0.42%	0.42%	0	0	0	0	0	0	0	0	0.42%	0.42%	None
Independent Director	Dyi-Chung Hu																					
Independent Director	Robert Lo																					

1 Please describe the policy, system, standards and structure for the remuneration of independent directors, and the correlation with the amount of remuneration paid based on the responsibilities, risks, time commitment, etc.:

The remuneration paid by the Company to its directors consists of directors' salaries, carriage fees and directors' remuneration. Directors' salaries include compensation for serving as directors and functional committees under the Board of Directors, which is paid monthly with reference to the level of industry and the level of operational participation; horse and carriage expenses are paid with reference to the level of industry and are based on the attendance of the Board of Directors at Board meetings; directors' compensation is based on the annual operating performance of the Company and is determined in accordance with the Company's Articles of Incorporation; any profit contribution of not more than 3% is the directors' remuneration, which is approved by the Board of Directors and reported to the shareholders' meeting.

The compensation of directors and employees includes salaries, bonuses and employee compensation, which are determined based on the position held, the responsibilities assumed and the profitability of the Company, with reference to the standard of the same position in the industry.

2. Except as disclosed in the above table, the remuneration received by the directors of the Company for services rendered to all companies included in the financial statements for the most recent year, such as acting as consultants to non-employees.: None.

Note : The proposed amount of directors' remuneration and employee bonuses to be distributed in 2018 is calculated based on the ratio of the actual amount distributed in 2019.

Remuneration Paid to Directors

Remuneration Ranges	Name of Director			
	Total Remuneration (A+B+C+D)		Total Remuneration (A+B+C+D+E+F+G)	
	The Company	Consolidated Entities	The Company	Consolidated Entities
Less than NT$2 million	None	None	None	None
NT$1 million to NT$2 million	Feng Hua Investment Limited Xian Hua Investment Co.,Ltd. ATEN Technology Co., Ltd. Avago Technologies International Sales PTE. Limited Sheng Hua Investment Limited Ted Tsai Chyan Yang Dyi-Chung H Robert Lo	Feng Hua Investment Limited Xian Hua Investment Co.,Ltd. ATEN Technology Co., Ltd. Avago Technologies International Sales PTE. Limited Sheng Hua Investment Limited Ted Tsai Chyan Yang Dyi-Chung H Robert Lo	Feng Hua Investment Limited Xian Hua Investment Co.,Ltd. ATEN Technology Co., Ltd. Avago Technologies International Sales PTE. Limited Sheng Hua Investment Limited Ted Tsai Chyan Yang Dyi-Chung H Robert Lo	Feng Hua Investment Limited Xian Hua Investment Co.,Ltd. ATEN Technology Co., Ltd. Avago Technologies International Sales PTE. Limited Sheng Hua Investment Limited Ted Tsai Chyan Yang Dyi-Chung H Robert Lo
NT$2 million to NT$3.5 million	None	None	Chris Lin	Chris Lin
NT$3.5 million to NT$5 million	None	None	None	None
NT$5 million to NT$10 million	None	None	Luke Chen	Luke Chen
NT$10 million to NT$15 million	None	None	None	None
NT$15 million to NT$30 million	None	None	None	None
NT$30 million to NT$50 million	None	None	None	None
NT$50 million to NT$100 million	None	None	None	None
Above NT$100 million	None	None	None	None
Total	9 (including 5 legal persons)	9 (including 5 legal persons)	11(including 5 legal persons)	11 (including 5 legal persons)

b. Remunerations Paid to President and Vice President

Unit: NT$ 1,000

Title	Name	Salary (A)		Pension (B)		Salaries, bonuses and special expenses (C)		Employee Compensation(D) (Note)				(A+B+C+D) as % of Net Income		Other Compensation from non-subsidiary affiliates
		The Company	Consolidated Entities	The Company	Consolidated Entities	The Company	Consolidated Entities	The Company		Consolidated Entities		The Company	Consolidated Entities	
								Cash	Stock	Cash	Stock			
President	Chris Lin	10,407	10,407	324	324	4,920	4,920	0	20,000	0	20,000	4.29%	4.29%	None
Vice President	Hung-Ju Huang													
Vice President	Luke Chen													
Vice President	Morris Yang													

Note1: The proposed amount of employee bonuses to be distributed in 2018 is calculated based on the ratio of the actual amount distributed in 2019.

Range of remuneration table

Remuneration Ranges	Name of President and Vice Presidents	
	The Company	Consolidated Entities
Less than NT$1 million	None	None
NT$1 million to NT$2 million	None	None
NT$2 million to NT$3.5 million	Chris Lin	Chris Lin
NT$3.5 million to NT$5 million	Morris Yang	Morris Yang
NT$5 million to NT$10 million	Hung-Ju Huang, Luke Chen	Hung-Ju Huang, Luke Chen
NT$10 million to NT$15 million	None	None
NT$15 million to NT$30 million	None	None
NT$30 million to NT$50 million	None	None
NT$50 million to NT$100 million	None	None
Above NT$100 million	None	None
Total	4 person	4 person

c. Employees' Profit-Sharing bonus paid to Officers

Unit: NT$ 1,000

	Title	Name	Stock Bonus	Cash Bonus	Total	Ratio of total amount to net after-tax profit of entity financial statement (%)
Managerial Officers	President	Chris Lin	25,000	0	25,000	3.01%
	Vice President	Hung-Ju Huang				
	Vice President	Morris Yang				
	Vice President	Luke Chen				
	Assistant Manager	James Yang				
	Assistant Manager	Charles Kuan				
	Financial and Accounting Chief Officer	Tina Chiu				

Note: The proposed amount of employee bonuses to be distributed in 2018 is calculated based on the ratio of the actual amount distributed in 2019.

(4) Analysis of the ratios of the total remuneration of the Company's directors, president and vice president paid over the past two years to the net after-tax profit of the parent company only financial report, explanation of the Company's remuneration policy, standard and combination, establishment of the remuneration procedure, and the correlation with operating performance and future risk.

a. Ratios of total remuneration to the net after-tax profit of the Parent Company only financial reports

Year / Item	2018	2019
Ratios of total remuneration to the net after-tax profit paid to the directors, president and vice president of the company.	4.98%	6.09%

b. The remuneration policy, standard and combination, establishment of the remuneration procedure and correlation with operating performance and future risk:

The distribution of directors' remuneration is in accordance with the provisions of the Article of Incorporation and is submitted to the shareholders' meeting after the resolution of the Board of Directors has been passed. The remuneration of the General Manager and Vice President consists of salaries, bonuses and employee compensation, which are determined in accordance with the position held, the responsibilities assumed and the profitability of the Company, with reference to the standard of the same position in the industry, reviewed by the Compensation Committee and approved by the Board of Directors.

3. Corporate Governance Report

(1) Operation of the Board :

A total of 5 meetings of the Board of Directors were held in the previous period. The attendance of the directors is as follows:

Title	Name	Attend Attendance	By Proxy	Percentage of Actual Attendance	Remark
Chairman	Chris Lin, Corporate Representative of Feng Hua Investment Limited	5	0	100%	Re-Elected
Director	Arnold Yu, Corporate Representative of Xian Hua Investment Co.,Ltd.	4	1	80%	Re-Elected
Director	Nicholas Lin, Corporate Representative of ATEN Technology Co., Ltd.	5	0	100%	Re-Elected
Director	Nick Chen , Corporate Representative ofAvago Technologies International Sales PTE. Limited(Original Avago Technologies General IP Singapore Pte.Ltd.)	4	0	80%	Re-Elected
Director	Luke Chen, Corporate Representative of Sheng Hua Investment Limited	5	0	100%	Re-Elected
Director	Ted Tsai	5	0	100%	Elected
Independent Director	Chyan Yang	5	0	100%	Re-Elected
Independent Director	Dyi-Chung Hu	5	0	100%	Re-Elected
Independent Director	Robert Lo	5	0	100%	Elected

Other Required Notes for the Board Meetings:

1. If any of the following circumstances occur, the dates of the meetings, sessions, contents of motion, all ndependent directors' opinions and the company's response should be specified:

(1) Matters referred to in Article 14-3 of the Securities and Exchange Act. :

Date of meeting	Meeting	Content of motion	Independent director's opinion	Hndles the opinions of independent directors
Mar 11,2019	6th-term 6th	(1) Approve the employee bonuses to directors, supervisors, and managers 2018.	Proposal was approved as proposed	None
		(2) Approve the issuance of new outstanding shares for employee bonuses.	Proposal was approved as proposed	None
		(3) Approve the rule 2019 Rules for the Issuance of New Restricted Employee Shares.	Proposal was approved as proposed	None

Date of meeting	Meeting	Content of motion	Independent director's opinion	Hndles the opinions of independent directors
Mar 11,2019	6th-term 6th	(4) Amending Operating Procedures for Acquisition and Disposal of Assets.	Proposal was approved as proposed	None
		(5) Proclamation of the Company's auditor appointment.	Proposal was approved as proposed	None
May 06,2019	6th-term 7th	Approval of 2019 Manager's Salary Allocation.	Proposal was approved as proposed	None
Aug 02,2019	6th-term 8th	(1) Amending the rule 2019 Rules for the Issuance of New Restricted Employee Shares.	Proposal was approved as proposed	None
		(2)Issuance of 2018 New Restricted Employee Shares.	Proposal was approved as proposed	None
		(3) Approve the employee bonus to directors, supervisors, and managers.	Proposal was approved as proposed	None
Nov 04,2019	6th-term 9th	Revision of internal control (internal audit) and related regulations.	Proposal was approved as proposed	None

(2) Other matters involving objections or expressed reservations by independent directors that were recorded r stated in writing that require a resolution by the board of directors.: None.

2. If there are directors'avoidance of motions in conflict of interest, the directors' names, contents of motion,causes for avoidance and voting should be specified:

Date of Board of directors	Content of motion	Name of Director	Causes for Avoidance	Voting or Not (Note)
May 06,2019	Approval of 2019 Manager's Salary Allocation.	Chris Lin	Manager's Salary	Not
		Luke Chen	Manager's Salary	Not
Aug 02,2019	Approve the employee bonus to directors, supervisors, and managers.	Chris Lin	Manager's bonus	Not
		Luke Chen	managers bonus	Not

Note. Directors who are in interest conflict have avoided the discussions and voting.

3.Listed companies should disclose information on the board of directors's self (or peer) assessment cycle and period, the scope, manner and content of the assessment.: None.

4.Goals of the current and the recent years to improve the functions of board of directors (such as establishing audit committee, improving the information disclosure) and assessment of the implementation:

(1) Establishment of the Remuneration Committee and Audit Committee: the Company established a Compensation Committee on June 12, 2011 and an Audit Committee on June 11, 2018 to enhance the Board's operation.

(2) Corporate governance operations enhancement: the Company's Board approved "Ethical Corporate Management Best Practice Principles", "Corporate Governance Best Practice Principles" and "Corporate Social Responsibility Best Practice Principles".

(3) Information transparency improvement: the Company's Board previously approved "Procedures for Internal Material Information".

(2) Operation of Audit Committee

Audit Committee held 4 sessions in 2019.

The attendance of the Independent Directors is shown in thefollowing table

Title	Name	Attend Attendance	By Proxy	Percentage of Actual Attendance (%)	Remark
Independent Director	Chyan Yang	4	0	100%	None
Independent Director	Dyi-Chung Hu	4	0	100%	None
Independent Director	Robert Lo	4	0	100%	None

Other Required Notes for the Audit Committee Meeting :

1. The operation of the Audit Committee shall state the date and period of the Board meeting, the content of the motion, the result of the Audit Committee's resolution and the Company's handling of the Audit Committee's opinion, if any of the following circumstances apply:

(1) Matters referred to in Article 14-5 of the Securities and Exchange Act. ：

Date of meeting	Meeting		Content of motion	Any Independent Director had a Dissenting Opinion or Qualified Opinios
Nov 04,2019	1th-term	7th	(1) Matter of 2019 CPA compensation	None

(2) Other resolution which was not approved by the Audit Committee but was approved by two thirds or more of all directors: None.

2. The independent director should state the name of the independent director, the content of the motion, the reasons for the evasion of interest and the circumstances of voting: None.

3. Communications of Independent Directors with internal auditors and CPAs:

(1) Independent Directors and internal auditors regularly communicate with each other among the meetingsof Audit Committee and the communication functioned well. Internal auditors present the execution andimprovement of audit plan among the meetings. Also, they communicate and exchange ideas to assessinternal control effectiveness.

(2) Independent Directors and CPAs regularly communicate with each other among the meetings of AuditCommittee. CPAs report the Company's financial results and fully discuss with Independent Directorson the issues related to financials, taxes, internal control, etc.

(3) Corporate Governance Implementation as Required by the Taiwan Financial Supervisory Commission

Assessment Item	Implementation Status			Reason for Nonimplementation
	Yes	No	Summary Description	
1. Does the company establish and disclose the Corporate Governance Best-Practice Principles based on "Corporate Governance Best-Practice Principles for TWSE/ Listed Companies"?	V		The Company established the Corporate Governance Best Practice Principles and disclosed them on the Company's website and the Market Observation Post System in accordance with regulations.	None
2. Equity structure and shareholders' equity				None
(1) Does the company establish an internal operating procedure to deal with shareholders' suggestions, doubts, disputes and litigations, and implement based on the procedure?	V		(1) The Company has a spokesperson and acting spokesperson to respond to shareholders' suggestions or questions, and an Investor Relations section is available on the Company's website to handle shareholders' suggestions or disputes	
(2) Does the company possess the list of its major shareholders as well as the ultimate owners of those shares?		V	(2) The Company tracks the shareholdings of directors, officers, and top ten shareholders.	
(3) Does the company establish and execute the risk management and firewall system within its conglomerate structure?	V		(3) The Company has established rules in the Company's Internal Control System and Affiliated Corporations Management.	
(4) Does the company establish internal rules against insiders trading with undisclosed information?	V		(4) The Company has established "Insider Trading policy" with respect to transactions in the Company's securities. This policy prohibits any insider trading and the Company regularly provides internal training on this issue.	
3. Composition and Responsibilities of the Board of Directors				None
(1) Does the Board develop and implement a diversified policy for the composition of its members?	V		(1) The composition of the Company Board of Directors gives due consideration to the knowledge, skills and competencies required to perform its duties, and directors are elected by shareholders.	
(2) Does the company voluntarily establish other functional committees in addition to	V		(2) The Company established a Remuneration Committee and Audit Committee in accordance with regulations.	

Assessment Item	Implementation Status			Reason for Nonimplementation
	Yes	No	Summary Description	
the Remuneration Committee and the Audit Committee?				
(3) Does the company establish a standard to measure the performance of the Board, and implement it annually?		V	(3) The Company has not established Regulations Governing Evaluation of Board Performance or related evaluation methods.	
(4) Does the company regularly evaluate the independence of CPAs?	V		(4) The Company's external auditors belongs to the Taiwanese branch of one of the four major international accounting firms. The external auditors' independence is periodically evaluated, and the Company implements the policy of changing its external auditors every five years.	
4. Does the company established an exclusively (or concurrently) corporate governance unit or personnel to be in charge of corporate governance affairs (including but not limited to furnish information required for business execution by directors, handle matters relating to board meetings and shareholders' meetings according to laws, handle corporate registration and amendment registration, produce (or record?) minutes of board meetings and shareholders meetings, etc.		V	The Company does not establish a dedicated corporate governance unit, and corporate governance affairs are distributed among related units.	None

Assessment Item	Implementation Status			Reason for Nonimplementation
	Yes	No	Summary Description	
5. Does the company establish a communication channel and build a designated section on its website for stakeholders (including but not limited to shareholders, employees, customers, suppliers, etc.), as well as handle all the issues they care for in terms of corporate social responsibilities?	V		The Company established an Investor Relations section on our corporate website, as well as a Stakeholders & Employees section under Corporate Social Responsibility, providing a contact mail address to respond to stakeholders.	None
6. Does the company appoint a professional shareholder service agency to deal with shareholder affairs?	V		The Company designated a professional shareholder service agency to deal with shareholder affairs.	None
7. Information Disclosure				None
(1) Does the company have a corporate website to disclose both financial standings and the status of corporate governance?	V		(1) The Company disclose financial business information on its website at https://www.aspeedtech.com (in Chinese and English).	
(2) Does the company have other information disclosure channels (e.g. building an English website, appointing designated people to handle information collection and disclosure, creating a spokesman system, webcasting investor conferences)?	V		(2) The Company has designated personnel for information collection and disclosure, and also has a dedicated spokesperson for regularly holding investor conferences. Related materials of investor conferences (presentations and videos) are available on its website for shareholders and the general public.	
(3) Does the company announce and file annual financial report in two months after fiscal year end? And does the company announce and file quarterly financial report and monthly operations earlier than the regulated date?		V	(3) The Company has announced and filed annual financial reports according to regulation of Securities and Exchange Act. And the Company has announced and filed quarterly reports and monthly operations earlier than regulated date as possible.	

Assessment Item	Implementation Status			Reason for Nonimplementation
	Yes	No	Summary Description	
8. Is there any other important information to facilitate a better understanding of the company's corporate governance practices (e.g., including but not limited to employee rights, employee wellness, investor relations, supplier relations, rights of stakeholders, directors' and supervisors' training records, the implementation of risk management policies and risk evaluation measures, the implementation of customer relations policies, and purchasing insurance for directors and supervisors)?	V		(1) Employee rights and concern for employees The Company upholds the philosophy of stable and sustainable business, and takes employee benefits very seriously. In addition to the Employee Welfare Committee established in accordance with the law, the Company makes monthly contributions to the Employee Welfare Fund, which is used to provide the following benefits: Employee trips, cultural and health activities, emergency aid, health exams, and gift certificates for Chinese New Year's. Benefits are also provided for marriage, childbirth, and funerals (condolence money). The Company provides employee education and training, employee stock subscription, and bonuses. Monthly contributions are made for the retirement pension to employees' personal accounts at the Bureau of Labor Insurance in accordance with the Labor Pension Act. All measures relating to labor-management relations have been implemented in accordance with relevant laws and regulations, and attained good results (2) Investor relations The Company interacts with all shareholders based on the principle of being fair, just, and open. Besides notifying all shareholders to attend shareholders' meetings, the Company encourages shareholders to actively participate in directors and supervisors' elections, or propose amendments to the Articles of Incorporation. Material financial transactions, such as the acquisition or disposal of assets, endorsements, and guarantees, are all reported to the shareholders' meeting. The Company provides ample opportunity for shareholders to ask questions or make proposals, so as	None

Assessment Item	Implementation Status			Reason for Nonimplementation
	Yes	No	Summary Description	
			to achieve check of balance. Furthermore, to ensure that shareholders achieve check of balance and to protect their rights to know The Company's material information and participate in decisions, The Company discloses information in accordance with the law and has a spokesperson and acting spokesperson to properly handle shareholders' suggestions, questions, and disputes. (3) Rights of Suppliers and Stakeholders and Customer Policy The Company maintains open channels of communication with banks, customers, suppliers, and other stakeholders, and respects and protects their lawful rights and interests: a. The Company provides sufficient information to its partner banks to help them make the best judgment and decisions regarding The Company's operations and finances. b. The Company has dedicated personnel to respond to customers' questions regarding the Company's products. c. The Company has dedicated personnel for dealing with suppliers, does not have any owed or late payments, and has maintained good relationships with suppliers. d. The Company has a designated spokesperson and acting spokesperson to communicate with shareholders. It also has an external communication hotline for external stakeholders to file complaints and reports with the Company.	

Assessment Item	Implementation Status			Reason for Nonimplementation
	Yes	No	Summary Description	
			(4) Continuing education of directors and supervisors: The Company's directors and supervisors all have a professional background, and the Company occasionally provides them with information on continuing education. Please see Note 1 for details on the continuing education of directors and supervisors in 2018. (5) Implementation of risk management policies and risk assessment standards: The Company established various internal regulations in accordance with the law, and established proactive risk management mechanisms. Major risks are immediately identified, assessed, responded to, and reported through risk identification and assessment operations. The impact of the risks on current and future operations is also monitored to ensure the Company's sustainability. (6) Implementation of customer policies: The Company has a customer service management unit that provides customers with services related to the Company's products and answers any questions they may have, thereby maintaining smooth channels of communication with customers. (7) Status of purchase of liability insurance by the company for directors and supervisors: The Company maintains D&O Insurance for its directors and officer.	
9. The improvement status for the result of Corporate Governance Evaluation announced by Taiwan Stock Exchange. The Company continues to make gradual improvements to its corporate governance based on corporate governance evaluation results, including the truthful and detailed disclosure of specific matters in the annual reports and the election of directors and independent directors using the candidate nomination system.				

Assessment Item	Implementation Status			Reason for Nonimplementation
	Yes	No	Summary Description	
In the future, the Company will maintain effective corporate governance mechanisms for various aspects of its operations, and it will strengthen the structure and functions of the Board of Directors, increase the transparency of information disclosure, and fulfill its corporate social responsibility.				

Note 1: Directors Profession Enhancement Status:

Title	Name	Date	Host by	Training / Speech title	Hours
Director	Arnold Yu	Oct .21, 2019	Accounting Research And Development Foundation	Practice Workshop for Compliance of request to establish Independent Directors and Audit Committee	6 hours
Director	Nicholas Lin	May. 3, 2019	Securities and Futures Institute	Computer Crime and Information Security	3 hours
		Feb 2, 2019	Taiwan Corporate Governance Association	Seminar – With Corporate Governance and Sustainability to Increace Corporate's Long-term Value	3 hours
Director	Luke Chen	Nov. 27, 2019	Taiwan Corporate Governance Association	15th Taipei Corporate Governance Forum	6 hours
Director	Ted Tsai	Nov. 27, 2019	Taiwan Corporate Governance Association	15th Taipei Corporate Governance Forum	3 hours
		Feb 2, 2019	Taiwan Corporate Governance Association	Seminar – With Corporate Governance and Sustainability to Increace Corporate's Long-term Value	3 hours
Director	Nick Chen	Jun. 21, 2019	Taiwan Corporate Governance Association	Value and Disclosure of Non-financial Information – Global Trends and Impact to Taiwan Companies	3 hours
		Jun. 4, 2019	Taiwan Corporate Governance Association	Key Information and Responsibility of Annual Report: View from Broad of Directors	3 hours
Independent Director	Chyan Yang	July. 17, 2019	Securities and Futures Institute	2019 Propaganda to Compliance with Insiders Trading Regulations	3 hours
		Jan. 29, 2019	Taiwan Corporate Governance Association	Governance of Group and Subsidiaries' Broad of Directors	3 hours
Independent Director	Dyi-Chung Hu	Nov. 27, 2019	Taiwan Corporate Governance Association	15th Taipei Corporate Governance Forum	3 hours
		Feb 2, 2019	Taiwan Corporate Governance Association	Seminar – With Corporate Governance and Sustainability to Increase Corporate's Long-term Value	3 hours
Independent Director	Robert Lo	Oct. 29, 2019	Securities and Futures Institute	Enhance Corporate Governance with Self Evaluation of Board of Directors	3 hours
		Aug. 22, 2019	Taiwan Corporate Governance Association	Practice of Audit Committee	3hours

(4) Operation of the Company’s Remuneration Committee

a. Member of Remuneration Committee:

Title	Criteria / Name	With five or more years of experience and the following professional qualification			Independence Status (Note)										Number of Companies also Serves as Independent Director for Note	Remark
		An instructor or higher position in a department of commerce, law, finance, accounting, or other academic department related to the business needs of the company in a public or private junior college, college or university	A judge, public prosecutor, attorney, certified public accountant, or other professional or technical specialists who has passed a national examination and been awarded a certificate in a profession necessary for the business of the company	Work experience in business, law, finance, accounting or others related to company activity	1	2	3	4	5	6	7	8	9	10		
Independent Director	Chyan Yang	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	3	None
Independent Director	Dyi-Chung Hu			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0	None
Independent Director	Robert Lo		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0	None

Note : Directors or Supervisors with a "✓ sign meet the following criteria:

(1) Not an employee of the Company or any of its affiliates.

(2) Not a director or supervisor of the Company’s affiliates. (Except where the company and its parent company, subsidiaries or subsidiaries of the same parent company serve as independent directors of each other under this Law or local laws and regulations.)

(3) Not a natural-person shareholder who holds shares, together with those held by the person’s spouse, minor children, or held by the person under others’ names, in an aggregate amount of 1% or more of the total number of outstanding shares of the Company or ranking in the top 10 in holdings.

(4) A spouse, a relative within the second degree of consanguinity, or an immediate blood relative within the third degree of consanguinity, who is not the manager listed in (1) or the spouse, a relative within the second degree of consanguinity, or an immediate blood relative within the third degree of consanguinity of the person listed in (2) or (3).

(5) A director, supervisor or employee of a corporate shareholder who does not directly hold more than 5% of the Company's total outstanding shares, who holds the top five shares or who has appointed a representative as a director or supervisor in accordance with Article 27, paragraph 1 or 2, of the Company Act. (Except where the Company and its parent company, subsidiaries or subsidiaries of the same parent company serve as independent directors of the Company in conjunction with each other under this Act or local national laws and regulations.)

(6) A director, supervisor or employee of another company controlled by the same person who holds more than half of the directorships or voting rights of the shares of that company. (Except where the company and its parent company, subsidiaries or subsidiaries of the same parent company serve as independent directors of each other under this Law or local laws and regulations.)

(7) A director, supervisor or servant of another company or organization not being the same person or spouse as the chairman, general manager or equivalent of the company. (Except where the company and its parent company, subsidiaries or subsidiaries of the same parent company serve as independent directors of each other under this Law or local laws and regulations.)

(8) Not a director, supervisor, officer, or shareholder holding 5% or more of the shares, of a specified company or institution which has a financial or business relationship with the Company. (Unless a particular company or organization holds more than 20%, but not more than 50%, of the total number of issued shares of the company, and the company and its parent, subsidiary or subsidiary of the same parent are independent directors of each other under this Law or local laws and regulations).

(9) Professionals, sole proprietors, partners, directors, supervisors, managers and their spouses who do not provide business, legal, financial, accounting or other related services to companies or affiliates that are not audited or have received compensation in an aggregate amount not exceeding NT$500,000 in the last two years. However, this does not apply to members of the Compensation Committee, the Public Mergers and Acquisitions Committee or the Special Committee on Mergers and Acquisitions, who perform their duties under the Securities and Exchange Act or the relevant laws and regulations of the Business Mergers and Acquisitions Act.

(10) Not been a person of any conditions defined in Article 30 of the Company Law.

b. Remuneration Committee Meeting Status

Ⅰ. There are 3 members in the Remuneration Committee.

Ⅱ.The terms of this section of Remuneration Committee： June 11, 2018 to May 29, 2021. A total of 3 Remuneration Committee meetings were held in 2019. The attendance record of the Remuneration Committee members was as follows：

Title	Name	Attend in person	By Proxy	Attendance Rate (%)	Note
Convener	Chyan Yang	3	0	100%	Re-Elected
Menber	Dyi-Chung Hu	3	0	100%	Re-Elected
Menber	Robert Lo	3	0	100%	Elected
Other Required Remarks for Remuneration Committee: 1. In cases the Board doesn't adopt or revise Remuneration Committee's proposals, the Company shall listdate/number of the Board meeting, agenda, the Board's resolution and the Company's response to Remuneration Committee's proposal: None. 2. In cases Remuneration Committee members have dissenting opinions or qualified opinions against the resolution and recorded with notes in paper, the Company shall list date, number of the Remuneration Committee meeting, agenda, all members' opinion and the follow-up of the members' opinion: None.					

(5) Status of Fulfilling Corporate Social Responsibility

Assessment Item	Implementation Status			Reason for Nonimplementation
	Yes	No	Summary Description	
1. Does the company conduct risk assessments of environmental, social and corporate governance issues related to the company's operations considering the materiality principle, and establish relevant risk management policies or strategies?	V		The Company will pursue corporate sustainability and profitability while fulfilling its corporate social responsibility in accordance with the principle of materiality, emphasizing the rights and interests of its stakeholders, environmental, social and corporate governance issues, and incorporating them into its management policies and operational activities in order to achieve the goal of sustainable management.	None
2. Does the company establish exclusively (or concurrently) dedicated first-line managers authorized by the board to be in charge of proposing the corporate social responsibility policies and reporting to the board?	V		The Company's General Administration Department is responsible for overall planning and promotion of corporate social responsibility. However, all other departments have the duty of assisting with the fulfillment of corporate social responsibility.	None
3. Sustainable Environment Development (1) Does the company endeavor to utilize all resources more efficiently and use renewable materials which have low impact on the environment? (2) Does the company establish proper environmental management systems based on the characteristics of their industries?	 V V		 (1) The Company is a professional IC design company that reduces environmental pollution through eco-friendly design concepts and simplified product structures. (2) The Company established an environmental management system and management procedures based on industry characteristics, and implements the system and procedures in accordance with regulations. The Company has also acquired for ISO 14000 qulification.	None

Assessment Item	Implementation Status			Reason for Nonimplementation
	Yes	No	Summary Description	
(3) Does the company assess the potential risks and opportunities of climate change for the company now and in the future, and take measures to respond to climate-related issues?	V		(3) The Company monitors the impact of climate change on business operations and implements energy conservation, water conservation, and recycling during daily operations to reduce damage to the ecosystem.	
(4) Does the company collect stastics in the greenhouse gas emissions, water consumption and total weight of waste in past two years, and formulate policies on energy conservation and carbon reduction, greenhouse gas reduction, water consumption or other waste management?	V		(4) The company uses the data provided by the utility bills to calculate greenhouse gas emissions and water consumption for statistics, and promotes policies to save water and electricity. Due to the company's industrial characteristics, the company only produces general waste, so the promotion of waste classification is strengthened to reduce the generation of general waste.	
4. Preserving Public Welfare				None
(1) Does the company formulate appropriate management policies and procedures according to relevant regulations and the International Bill of Human Rights?	V		(1) The Company complies with labor-related laws and regulations to fully protect legitimate rights and interests of employees. The Company's personnel regulations all comply with the Labor Standards Act, and are executed in accordance with provisions of the Work Rules to protect employees' rights and interests. Work-related matters of employees are handled by dedicated personnel.	
(2) Does the company establish and implement reasonable employee benefits measures (including remuneration, vacation and other benefits, etc.), and reflect operating performance or results in employee compensation appropriately?	V		(2) The Company's remuneration are combined with employee performance appraisal system and corporate social responsibility. Relevant reward and punishment systems are also specified, and promoted through regular and irregular meetings, so that employees can understand and actively participate in corporate social responsibility work.	
(3) Does the company provide a healthy and safe working environment and organize	V		(3) The General Administration Department is responsible for providing a safe and healthy work	

Assessment Item	Implementation Status			Reason for Nonimplementation
	Yes	No	Summary Description	
training on health and safety for its employees on a regular basis?			environment to employees. The department arranges annual health exams and management for active employees, special health exams for employees that carry out special operations (operations involving lead), and offers safety and health education events and information for employees.	
(4) Does the company provide its employees with career development and training sessions?	V		(4) The Company provides internal and external training for different specializations to enrich employees' professional skills. The Company also encourages employees to evaluate their own interests, skills, values and goals, and communicate their intentions with managers to plan their future careers.	
(5) Does the company establish any consumer protection mechanisms and appealing procedures regarding research development, purchasing, producing, operating and service?	V		(5) The Company established operating procedures for customer complaints to show its concern and immediately handle customer complaints, striving to achieve customer satisfaction.	
5. Does the company prepare CSR reports to disclosure corporate non-financial information with reference to the general international reporting standards or guidelines? Has the CSR report obtained the third-party assurance?	V		The company has not yet prepared a CSR report. The Company discloses CSR related information on its website, the Market Observation Post System, annual reports, and prospectuses.	None
6. If the Company has established the corporate social responsibility principles based on "the Corporate Social Responsibility Best-Practice Principles for TWSE/TPEx Listed Companies", please describe any discrepancy between the Principles and their implementation: The Company has set up a corporate social responsibility policy in writtenformand the practices are in accordance with "the Corporate Social Responsibility Best-Practice Principles for TWSE/TPEx Listed Companies".				

Assessment Item	Implementation Status			Reason for Nonimplementation
	Yes	No	Summary Description	
7. Other important information to facilitate better understanding of the company's corporate social responsibility practices: (1) Implementation status of employee rights and concern for employees: For a description, please refer to "5. Labor-Management Relations" under V. Operational Highlights. (2) Human rights: The Company does not hire child labor, and has established Work Rules in accordance with the Act of Gender Equality in Employment and the Employment Service Act. The Company also established Ethical Corporate Management Best Practice Principles and Procedures for Ethical Management and Guidelines for Conduct. (3) Work-life balance: The Company implements an unpaid parental leave system, and provides family-care leaves, parental leaves, menstrual leaves, travel subsidies, and periodic health exams. (4) The Company has purchased D&O insurance for directors and supervisors.				

(6) Ethical Corporate Management

Assessment Item	Implementation Status			Reason for Nonimplementation
	Yes	No	Summary Description	
1. Establishment of ethical corporate management policies and programs				None
(1) Does the company declare its ethical corporate management policies and procedures in its guidelines and external documents, as well as the commitment from its board to implement the policies?	V		(1) The Company has established the Code of Ethics and Business Conduct (the "Ethics Code") and Guidelines for Conduct to require that each employee bears a heavy personal responsibility to uphold APSEED's ethics value. The Board of Directors and managers manage the Company based on the principle of integrity.	
(2) Does the Company establish a risk assessment mechanism against unethical conduct, analyze and assess on a regular basis business activities within their business scope which are at a higher risk of being involved in unethical conduct, and establish prevention programs accordingly, which at least covers activities stated in Article 2, Paragraph 7 of the Ethical Corporate Management Best-Practice Principles for TWSE/TPEx Listed Companies?	V		(2) The Company has established the Ethics Code and Guidelines for Conduct and its ethical corporate management policy to prevent the directors, the manager,and employees from engaging in any of activies stated in Article 2, Paragraph 7 of the Ethical Corporate Management Best-Practice Principles for TWSE/TPEx Listed Companies or other operating activities with highly-unethical risk. And the Company has announced them to employees.	
(3) Does the company clearly adopt the operating procedures, guidelines, punishment for violations and appeal system and implement it, and regularly review and revise the plan?	V		(3) In accordance with the Ethics Code and Guidelines for Conduct, the Company is required to evaluate the party's lawfulness, ethical corporate management policy, and	

Assessment Item	Implementation Status			Reason for Nonimplementation
	Yes	No	Summary Description	
			whether it has any unethical conduct records before establishing business relationships. The purpose is to ensure that the party does business in a fair and	
2. Fulfill operations integrity policy (1) Does the company evaluate business partners' ethical records and include ethics-related clauses in business contracts?	V		(1) In accordance with the Ethics Code and Guidelines for Conduct, the Company should immediately terminates its business relationship with parties that are found to have engaged in unethical conduct, and blacklists the parties.	None
(2) Does the company establish an exclusively (or concurrently) dedicated unit supervised by the Board to be in charge of corporate integrity on a regular basis(at least once a year)?	V		(2) The Company's General Administration Department is responsible for the promotion and execution of ethical corporate management, which reports unethical conduct, its handling method, and subsequent review of improvement measures to the Board of Directors.	
(3) Does the company establish policies to prevent conflicts of interest and provide appropriate communication channels, and implement it?	V		(3) If there are any conflicts of interest, the Company's employees can report it to their direct supervisor or directly report it to the supervisors of the General Administration Department.	
(4) Has the company established effective systems for both accounting and internal control to facilitate ethical corporate management, and are they	V		(4) The Company formulate an internal auditing plan; the internal auditor carries out audits according to the auditing plan, and special	

Assessment Item	Implementation Status			Reason for Nonimplementation
	Yes	No	Summary Description	
audited by either internal auditors or CPAs on a regular basis?			audits are arranged under special circumstances.	
(5) Does the company regularly hold internal and external educational trainings on operational integrity?	V		(5) The Company informs and helps employees clearly understand its ethical corporate management philosophy and standards during regular and irregular meetings.	
3. Operation of the integrity channel				None
(1) Does the company establish both a reward/punishment system and an integrity hotline? Can the accused be reached by an appropriate person for follow-up?	V		(1) Employees can report unethical conduct to their direct supervisor or the supervisors of the General Administration Department via telephone, e-mail or in person, and dedicated personnel at the General Administration Department are responsible for handling the report.	
(2) Does the company establish standard operating procedures for confidential reporting on investigating accusation cases?	V		(2) The Company currently does not have operating procedures for handling reported unethical conduct. However, documents and materials related to reports are all deemed classified documents, and all personnel that handle the report are responsible for maintaining the confidentiality of the process they partake in.	
(3) Does the company provide proper whistleblower protection?	V		(3) The Company is responsible for maintaining the confidentiality of whistleblowers, and does not take any inappropriate actions against them.	

Assessment Item	Implementation Status			Reason for Nonimplementation
	Yes	No	Summary Description	
4. Enhancing information disclosure Does the company disclose its ethical corporate management policies and the results of its implementation on the company's website and MOPS?	V		The Company's the Ethics Code are disclosed on its website and the Market Observation Post System.	None
5. If the company has established the ethical corporate management policies based on "the Ethical Corporate Management Best-Practice Principles for TWSE/TPEx Listed Companies", please describe any discrepancy between the policies and their implementation. The Company has established Code of Ethics and Business Conduct and Guidelines for Conduct. There is no discrepancy between the Ethics Code, including its affiliate policies and procedures, and its implementation.				
6. Other important information to facilitate a better understanding of the company's ethical corporate management policies (e.g., review and amend its policies): (1) Prohibition of offering or accepting improper benefits. (2) Public announcement of the ethical corporate management policy. (3) Explanation of the ethical corporate management policy to business partners.				

(7) Corporate governance best-practice principles shall be disclosed.

The Company's Board of Directors approved the Corporate Governance Best Practice Principles, Ethical Corporate Management Best Practice Principles, and Organizational Rules for the Remuneration Committee on March 14, 2012, and disclosed relevant information on the Market Observation Post System and the Company website.

(8) Other Important Corporate Governance Information：None.

(9) Status of the Internal Control System Implementation:

a. Declaration of Internal Control

Statement of Declaration of Internal Control

Date: March 2, 2020

Based on the findings of a self-assessment, ASPEED Technology Inc. (ASPEED) states the following with regard to its internal control system during the year 2019:

1. ASPEED's board of directors and management are responsible for establishing, implementing, and maintaining an adequate internal control system. Our internal control is a process designed to provide reasonable assurance over the effectiveness and efficiency of our operations (including profitability, performance and safeguarding of assets), reliability, timeliness, transparency of our reporting, and compliance with applicable rulings, laws and regulations.
2. An internal control system has inherent limitations. No matter how perfectly designed, an effective internal control system can provide only reasonable assurance of accomplishing its stated objectives. Moreover, the effectiveness of an internal control system may be subject to changes due to extenuating circumstances beyond our control. Nevertheless, our internal control system contains self-monitoring mechanisms, and ASPEED takes immediate remedial actions in response to any identified deficiencies.
3. ASPEED evaluates the design and operating effectiveness of its internal control system based on the criteria provided in the Regulations Governing the Establishment of Internal Control Systems by Public Companies (herein below, the Regulations). The criteria adopted by the Regulations identify five key components of managerial internal control: (1) control environment, (2) risk assessment, (3) control activities, (4) information and communication, and (5) monitoring activities. Each criteria further contains several items. For more information on the abovementioned items, please refer to the Regulations.
4. ASPEED has evaluated the design and operating effectiveness of its internal control system according to the aforesaid criteria.
5. Based on the findings of such evaluation, ASPEED believes it can reasonably assure that the design and implementation of its internal control system as of December 31, 2019 (including supervision and management of subsidiaries), including the effectiveness and efficiency in operation, reliability, timeliness and transparency in financial reporting, and compliance with relevant regulatory requirements, have reasonably and efficiently achieved the aforementioned objectives.
6. This statement is an integral part of ASPEED’s annual report for the year 2019 and prospectus, and will be made public. Any falsehood, concealment, or other illegality in the content made public will entail legal liability under Articles 20, 32, 171, and 174 of the Securities and Exchange Act.
7. This Statement was passed by the Board of Directors Meeting of the Company held on March 2, 2020, with none of the 9 attending Directors expressed dissenting opinions, and the remainder all affirming the content of this Statement.

ASPEED Technology Inc.

Chairman: Chris Lin

President: Chris Lin

b. Disclose the Review Report of Independent Auditors if They are Retained for Reviewing the Internal Control System: None.

(10) Reprimand on the Company and its Staff in Violation of Laws, or Reprimand on its Employees in Violation of Internal Control System and Other Internal Regulations, Major Shortcomings and Status of Correction: None.

(11) Important resolutions adopted in shareholders' meetings and Board of Directors meetings in the past year and up to the date of report:

a. Major Resolution of the Shareholders' meeting and Implementation status

The Company's 2019 annual shareholders' meeting was held in Hsinchu on May 29, 2019. The following proposals were approved during the shareholders' meeting:

Major Resolution	Implementation status
Acknowledgement Items (1) Adoption of 2018 business report and Financial statements. (2) Adoption of the proposal for distribution of 2018 profit.	(1) Approved. (2) Approved a cash dividends (per share of NT$18.00) ; and allocation baseline date was June 23,2019, cash dividend payment date was completed by July 19,2019
Dicussion and Election Items (1) Amendments to the Company's " Article of Incorporation" (2) Amendments to the Company's "Procedures Governing the Acquisition or Disposition of Assets" (3) Matter of request for approving issuance of restricted stock for employees under the 2019 Rules for Issuing Restricted Stock for Employees	(1) Approved. (2) Approved (3) Approved. It was issued on September 10,2019, February 5, 2020, and March 2,2020.

b.Major Resolution of the Board Meetings

During the 2019 calendar year and as of the printing date of this annual report, major resolutions approved at these meetings are summarized below:

Date	Meeting		Major Approvals
Mar 11, 2019	6th-term	6th	(1) Approve the Company's 2018 business report.
			(2) Approve the Company's 2018 financial statements.
			(3) Matter of appointing management personnel.
			(4) Approve the distribution of employee bonuses and Board remuneration in 2018.

Date	Meeting		Major Approvals
			(5) Approve the 2018 earnings distribution.
			(6) Approve the issuance of new outstanding shares for employee bonuses.
			(7) Approve the 2018 Internal Control System Statement.
			(8) Matter of request for approving issuance of restricted stock for employees under the 2019 Rules for Issuing Restricted Stock for Employees.
			(9) Amendments to the Company's "Article of Incorporation".
			(10) Amendments to the Company's "Procedures Governing the Acquisition or Disposition of Assets".
			(11) Matter of 2019 shareholder general meeting agenda.
May 6, 2019	6th-term	7th	(1) Approval of 2019 Bank Application for Credit Facility.
			(2) Approval of 2019 Manager's Salary Allocation.
Aug 2, 2019	6th-term	8th	(1) Amending the rule 2019 Rules for the Issuance of New Restricted Employee Shares.
			(2) Issuance of 2018 New Restricted Employee Shares.
			(3) Approve the employee bonus to directors, supervisors, and managers.
Nov 4, 2019	6th-term	9th	(1) Amendments to the Company's "Article of Incorporation".
			(2) Relocation of the Company's Business Address.
			(3) Revision of internal control (internal audit) and related regulations.
			(4) 2020 audit plan.
Dec 20, 2019	6th-term	10th	Approve the Company's 2020 financial budget.
Mar 2,2020	6th-term	11th	(1) Approve the Company's 2019 financial statements.
			(2) Approve the Company's 2019 business report.
			(3) Approve the distribution of employee bonuses and Board remuneration in 2019.
			(4) Approve the 2019 earnings distribution.
			(5) Approve the issuance of new outstanding shares for employee bonuses.
			(6) Approve the 2019 Internal Control System Statement.
			(7) Revision of the Internal Control System Procurement Cycle Internal Control Process and Approval Authority Table.
			(8) Amendments to the Company's "Article of Incorporation".

Date	Meeting		Major Approvals
			(9) Amendment to "Rules of Procedure for Shareholders Meetings".
			(10) Amendment to "Operating Procedures of Outward Loans to Others".
			(11) Amendment to "Operating Procedures of Endorsement/Guarantee".
			(12) Approval of a Supplemental Public Offering of the Company's Private Placement of Ordinary Shares.
			(13) Matter of 2020 shareholder general meeting agenda.

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

(13) Resignation of Personnel Related to Financial Statement Preparation in 2019 to the Printing Date of this Report: None.

4. Information Regarding the Company's Independent Auditors:

(1) Information on Audit Fees:

Accounting Firm	Name of CPA		Period Covered by CPA's Audit	Remarks
Deloitte & Touche	Ming Hui Chen	Yi-Shin Kao	2019	

Amount brackets \ Services with a fee		Audit fee	Non-Audit fee	Total
1	Less than NT$2 million		V	
2	NT$ 2 million to NT$ 4 million	V		V
3	NT$ 4 million to NT$ 6 million			
4	NT$ 6 million to NT$ 8 million			
5	NT$ 8 million to NT$ 10 million			
6	Above NT$10 million			

(2) The Company shall disclose the following items under any one of the following circumstances:

1 Non-audit fee paid to auditors, the audit firm and its affiliates accounted for more than one-fourth of total audit fee: None.

2 Replaced the audit firm and the audit fee paid to the new audit firm was less than the payment of previous year: None.

3 Audit fee reduced more than 15% year over year: None.

5. Replacement of Independent Auditors in the Last Two Years and Thereafter: None.

6. The Company's Chairman, President or managers in charge of finance or accounting has been under current audit firm or its affiliates' employment in 2019: None.

7. Changes in shareholding of directors, supervisors, officers and major shareholders holding more than 10% shares for the preceding year to the date of printing of this annual report:

   (1) Net Changes in Shareholding

Unit: Shares

<table>
<tr><th rowspan="2">Title</th><th rowspan="2">Name</th><th colspan="2">2019</th><th colspan="2">2020 up to March 21</th></tr>
<tr><th>Net Change in Shareholding</th><th>Net Change in Shares Pledged</th><th>Net Change in Shareholding</th><th>Net Change in Shares Pledged</th></tr>
<tr><td>Chairman</td><td>Feng Hua Investment Limited Representative–Chris Lin</td><td rowspan="2">0</td><td rowspan="2">(520,000)</td><td rowspan="2">0</td><td rowspan="2">450,000</td></tr>
<tr><td>Major shareholder with 10% or more shares</td><td>Feng Hua Investment Limited</td></tr>
<tr><td>Director</td><td>ATEN Technology Co., Ltd. Representative–Nicholas Lin</td><td>0</td><td>0</td><td>(141,000)</td><td>0</td></tr>
<tr><td>Director</td><td>Xian Hua Investments Co.,Ltd. Representative–Arnold Yu</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Director</td><td>Avago Technologies International Sales Pte.Ltd. Representative - Nick Chen</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Director</td><td>Sheng Hua Investment Limited Representative–Luke Chen</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Independent Director</td><td>Chyan Yang</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Independent Director</td><td>Dyi-Chung Hu</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Independent Director</td><td>Robert Lo</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>President</td><td>Chris Lin</td><td>9,000</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Vice President</td><td>Hung-Ju Huang</td><td>(47,104)</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Vice President</td><td>Luke Chen</td><td>(15,104)</td><td>0</td><td>(7,000)</td><td>0</td></tr>
<tr><td>Vice President</td><td>Morris Yang</td><td>2,379</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Assistant Manager</td><td>James Yang (Note 1)</td><td>369</td><td>0</td><td>(369)</td><td>0</td></tr>
<tr><td>Assistant Manager</td><td>Vidin Lu (Note 2)</td><td>(45)</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Assistant Manager</td><td>Charles Kuan</td><td>114</td><td>0</td><td>800</td><td>0</td></tr>
</table>

Title	Name	2019		2020 up to March 21	
		Net Change in Shareholding	Net Change in Shares Pledged	Net Change in Shareholding	Net Change in Shares Pledged
Financial Manager	Tina Chiu	(7,618)	0	(2,000)	0
Acting Spokesperson	Li-Li Wu	1,379	0	0	0
Audit Senior Manager	Jinny Chiu	690	0	0	0

Note 1: They were newly elected on January 14, 2019. The disclosed equity change and pledge status have occurred during their term of office.

Note 2: The resignation of Assistant Manager, Vidin Lu, took effect on February 27, 2019 and no longer has to disclose his share information since then.

(2) Trade with Related Party: None.

(3) Pledge with Related Party:

Unit: Shares, %

Name	Reasons	Date of change	Counterparty	Relationship	Shares	Shareholding %	Pledge%
Feng Hua Investment Limited	Redemption	July 22, 2019	Yuanta Financial Holding Co., Ltd	Director of ASPEED Technology	520,000	13.95%	9.42%
Feng Hua Investment Limited	Pledge	February 3 ,2020	Yuanta Financial Holding Co., Ltd	Director of ASPEED Technology	450,000	13.95%	9.42%

8. Top 10 Shareholders Who are Related Parties to Each Other:

March 21, 2020; Unit: shares, %

Top 10 Shareholders	Shareholding		Shareholding under Spouse and Minor		Shareholding under 3rd Party		Top 10 Shareholder who are Related Parties to Each Other		Remark
	Shares	%	Shares	%	Shares	%	Name	Relationship	
Feng Hua Investment Limited	4,775,524	13.95%	0	0%	0	0%	Sheng Hua Investment Limited	Chris Lin is the only director of both companies	None
Representative – Chris Lin	355,510	1.04%	0	0%	0	0%	None	None	None
Swedbank Robur IP under the custody of JP Morgan	2,375,000	6.94%	0	0%	0	0%	None	None	None
Avago Technologies International Sales Pte.Ltd.Private Limited Company Investment Account under the custody of CTBC Bank	2,022,000	5.91%	0	0%	0	0%	None	None	None
Wasatch Advisors Inc. under the custody of Deutsche Bank	1,135,680	3.32%	0	0%	0	0%	None	None	None
Account of Morgan Stanley International Limited under the custody of HSBC Bank	1,117,324	3.26%	0	0%	0	0%	None	None	None

Top 10 Shareholders	Shareholding		Shareholding under Spouse and Minor		Shareholding under 3rd Party		Top 10 Shareholder who are Related Parties to Each Other		Remark
	Shares	%	Shares	%	Shares	%	Name	Relationship	
Sheng Hua Investment Limited	1,074,884	3.14%	0	0%	0	0%	Feng Hua Investment Limited	Chris Lin is the only director of both companies	None
Representative – Chris Lin	355,510	1.04%	0	0%	0	0%	None	None	None
Cathay Life Insurance Co., Ltd.	1,058,810	3.09%	0	0%	0	0%	None	None	None
Representative – Hong-Tu Tsai	0	0%	0	0%	0	0%	None	None	None
ATEN Technology Co., Ltd.	902,770	2.64%	0	0%	0	0%	None	None	None
Representative – Shang-Chung Chen	0	0%	0	0%	0	0%	None	None	None
JPMorgan Chase Bank in Custody for Nordea 1 Emerging Stars Equity Fund.	657,000	1.92%	0	0%	0	0%	None	None	None
JPMorgan Chase Bank N.A., Taipei Branch in custody for Vanguard Total International Stock Index Fund, a series of Vanguard Star Funds	587,183	1.72%	0	0%	0	0%	None	None	None

9. Long-Term Investment Ownership:

As of December 31, 2019; Unit: 1,000 shares, %

Long-Term Investments	Investments by the Company (1)		Investments Directly or Indirectly Controlled by Directors and Managers of the Company (2)		Total Investment (1)+(2)	
	Shares	%	Shares	%	Shares	%
ASPEED Technology (Samoa) Inc.	1,550	100%	–	0%	1,550	100%
ASPEED Technology (U.S.A.) Inc.	–	0%	1,000	100%	1,000	100%
ASPEED Technology India Private Limited	35	1%	3,465	99%	3,500	100%
Cupola360 Inc.	1,500	100%	–	0%	1,500	100%

Note: The Investees refer to the investments accounted for using the equity method.

IV. Capital and Shares

1. Capital and Shares

(1) Capitalization

Unit: 1,000shares / NT$ 1,000

Year Month	Issue price	Authorized Capital		Paid-in Capital		Remarks		
		Shares	Amount	Shares	Amount	Source of Capital	Issuing shares for assets other than cash	Others
2013.05	10	30,000	300,000	23,334	233,340	Cash addition in the amount of NT$23,360 thousand	None	Note 1
2013.09	10	30,000	300,000	23,800	238,007	Capital surplus in the amount of NT$4,667 thousand	None	Note 2
2013.10	10	30,000	300,000	23,862	238,617	Issuance of restricted stock award in the amount of NT$610 thousand	None	Note 3
2014.05	10	30,000	300,000	23,907	239,067	Issuance of restricted stock award in the amount of NT$450 thousand	None	Note 4
2014.07	10	30,000	300,000	23,897	238,967	Retirement of restricted stock in the amount of NT$100 thousand	None	Note 5
2014.08	10	30,000	300,000	26,287	262,874	Capital surplus in the amount of NT$23,907 thousand	None	Note 6
2014.12	10	30,000	300,000	26,309	263,094	Issuance of restricted stock award in the amount of NT$220 thousand	None	Note 7
2014.12	10	30,000	300,000	26,296	262,959	Retirement of restricted stock in the amount of NT$135 thousand	None	Note 8
2015.08	10	50,000	500,000	31,672	316,720	Retained earnings and employee dividends in the amount of NT$53,762 thousand	None	Note 9
2016.08	10	50,000	500,000	31,788	317,881	Employee compensation in the amount of NT$1,161 thousand	None	Note 10
2016.12	10	50,000	500,000	31,818	318,181	Issuance of restricted stock award in the amount of NT$300 thousand 0	None	Note 11
2017.01	10	50,000	500,000	33,840	338,401	Private placement in the amount of NT$20,220 thousand	None	Note 12

Year Month	Issue price	Authorized Capital		Paid-in Capital		Remarks		
		Shares	Amount	Shares	Amount	Source of Capital	Issuing shares for assets other than cash	Others
2017.06	10	50,000	500,000	33,836	338,361	Retirement of restricted stock in the amount of NT$40 thousand	None	Note 13
2017.06	10	50,000	500,000	33,942	339,418	Employee compensation in the amount of NT$1,057 thousand	None	Note 14
2017.11	10	50,000	500,000	33,938	339,378	Retirement of restricted stock in the amount of NT$40 thousand	None	Note 15
2018.02	10	50,000	500,000	33,974	339,738	Issuance of restricted stock award in the amount of NT$360 thousand	None	Note 16
2018.08	10	50,000	500,000	34,045	340,446	Employee compensation in the amount of NT$707 thousand	None	Note 17
2018.11	10	50,000	500,000	34,065	340,656	Issuance of restricted stock award in the amount of NT$210 thousand	None	Note 18
2019.03	10	50,000	500,000	34,058	340,584	Retirement of restricted stock in the amount of NT$72 thousand	None	Note 19
2019.08	10	50,000	500,000	34,161	341,618	Employee compensation in the amount of NT$1,034 thousand	None	Note 20
2019.08	10	50,000	500,000	34,156	341,568	Retirement of restricted stock in the amount of NT$50 thousand	None	Note 21
2019.09	10	50,000	500,000	34,184	341,848	Issuance of restricted stock award in the amount of NT$280 thousand	None	Note 22
2020.02	10	50,000	500,000	34,215	342,158	Issuance of restricted stock award in the amount of NT$310 thousand	None	Note 23
2020.03	10	50,000	500,000	34,224	342,248	Issuance of restricted stock award in the amount of NT$90 thousand	None	Note 24

Note 1: Science Park Administration, approval letter No. 1020013768.
Note 2: Science Park Administration, approval letter No. 1020026873.
Note 3: Science Park Administration, approval letter No. 1020032385.

Note 4: Science Park Administration, approval letter No. 1030013318.
Note 5: Science Park Administration, approval letter No. 1030021928.
Note 6: Science Park Administration, approval letter No. 1030024741.
Note 7: Science Park Administration, approval letter No. 1030035249.
Note 8: Science Park Administration, approval letter No. 1030035249.
Note 9: Science Park Administration, approval letter No. 1040024074.
Note 10: Science Park Administration, approval letter No. 1050023327.
Note 11: Science Park Administration, approval letter No. 1050035128.
Note 12: Science Park Administration, approval letter No. 1060000930.
Note 13: Science Park Administration, approval letter No. 1060015391.
Note 14: Science Park Administration, approval letter No. 1060017298.
Note 15: Science Park Administration, approval letter No. 1060031378.
Note 16: Science Park Administration, approval letter No. 1070005193.
Note 17: Science Park Administration, approval letter No. 1070023699.
Note 18: Science Park Administration, approval letter No. 1070034305.
Note 19: Science Park Administration, approval letter No. 1080007259.
Note 20: Science Park Administration, approval letter No. 1080023054.
Note 21: Science Park Administration, approval letter No. 1080024268.
Note 22: Science Park Administration, approval letter No. 1080027357.
Note 23: Central Region Office, Ministry of Economic Affairs, approval letter No. 10933071290.
Note 24: Central Region Office, Ministry of Economic Affairs, approval letter No. 10933120630.

As of March 21, 2020; Unit: shares

Type of Shares	Authorized capital		
	Outstanding	Un-Issued	Total
Common stock	34,224,801	15,775,199	50,000,000

(2) Composition of Shareholders

As of March 21, 2020; Unit: shares/%

Type of Shareholders	Government Agencies	Financial Institutions	Other Juridical Persons	Foreign Institutions &Persons	Individuals	Total
Number of Shareholders	0	9	105	304	913	1,331
Shareholding	0	1,369,010	9,661,820	19,971,643	3,222,328	34,224,801
Holding Percentage	0.00%	4.00%	28.23%	58.35%	9.42%	100.00%

(3) Distribution of Shareholding

a. Distribution of Common Stock:

As of March 21, 2020; Unit: shares/%

Common Share Shareholder Ownership	Number of Shareholders	Shareholding	Shareholding ratio (%)
1-999	491	53,251	0.16%
1,000-5,000	495	913,700	2.67%
5,001-10,000	92	705,328	2.06%
10,001-15,000	40	517,222	1.51%
15,001-20,000	36	648,865	1.90%
20,001-30,000	38	979,904	2.86%

Common Share Shareholder Ownership	Number of Shareholders	Shareholding	Shareholding ratio (%)
30,001-40,000	27	989,516	2.89%
40,001-50,000	15	695,838	2.03%
50,001-100,000	43	3,054,846	8.93%
100,001-200,000	25	3,502,096	10.23%
200,001-400,000	16	4,959,416	14.49%
400,001-600,000	4	2,085,827	6.09%
600,001-800,000	1	657,000	1.92%
800,001-1,000,000	1	902,770	2.64%
1,000,001 shares or more	7	13,559,222	39.62%
Total	1,331	34,224,801	100.00%

b. Distribution of Preferred Stock: None.

(4) Major Shareholders

As of March 21, 2020; Unit: shares

Shareholding / Shareholder	Shareholding	%
Feng Hua Investment Limited	4,775,524	13.95%
Swedbank Robur IP under the custody of JP Morgan	2,375,000	6.94%
Avago Technologies International Sales Pte.Ltd Private Limited Company Investment Account under the custody of CTBC Bank	2,022,000	5.91%
Wasatch Advisors Inc. under the custody of Deutsche Bank	1,135,680	3.32%
Account of Morgan Stanley International Limited under the custody of HSBC Bank	1,117,324	3.26%
Sheng Hua Investment Limited	1,074,884	3.14%
Cathay Life Insurance Co., Ltd.	1,058,810	3.09%
ATEN Technology Co., Ltd.	902,770	2.64%
JPMorgan Chase Bank in Custody for Nordea 1 Emerging Stars Equity Fund.	657,000	1.92%
JPMorgan Chase Bank N.A., Taipei Branch in custody for Vanguard Total International Stock Index Fund, a series of Vanguard Star Funds	587,183	1.72%

(5) Market Price, Net Worth, Earnings, Dividends per Common Share

Unit: NT$ / 1,000shares

Item / Year		2018	2019	2020 up to March 21
Market Price Per Share	Highest	988.00	1,005.00	1,200.00
	Lowest	345.00	504.00	875.00
	Average	693.17	713.58	989.49
Book Value Per Share	Before Distribution	68.37	77.03	Note 4
	After Distribution	50.37	55.01	Note 4
	Weighted Average Shares	33,958	34,075	Note 4

Item \ Year			2018	2019	2020 up to March 21
Earnings Per Share	EPS		20.20	24.39	Note 4
Dividends Per Share	Cash Dividends		18.00	22.00	Note 4
	Stock Dividends	Earning Distribution	—	—	Note 4
		Capital Distributions	—	—	Note 4
	Accumulated Undistributed Dividend		—	—	Note 4
Return on Investment	Price/Earnings Ratio (Note 1)		34.32	29.26	Note 4
	Price/Dividend Ratio (Note 2)		38.51	32.44	Note 4
	Cash Dividend Yield (Note 3)		2.60%	3.08%	Note 4

Note 1: Price/Earnings Ratio = Average Market Price / Earnings Per Share
Note 2: Price/Dividend Ratio = Average Market Price / Cash Dividends Per Share
Note 3: Cash Dividend Yield = Cash Dividends Per Share / Annual Average Market Price
Note 4: Not applicable.

(6) Dividend Policy and Status

1. Dividend Policy:

   Pursuant to Article 28-1 of the Articles of Incorporation, the Company's dividend policy is to allocate not less than 10% of its distributable earnings to shareholders' dividends each year, taking into account current and future development plans, the investment environment, capital requirements, domestic and foreign competition, and shareholders' interests, but not less than 50% of its paid-in capital.

2. Proposal to Distribute 2019 Profits

   The Board adopted a proposal for 2019 profit distribution as follows:

   Cash dividends to common shareholders from retained earnings is NT$ 752,945,622, or NT$ 22 per share of cash to common shareholder. The proposal is subject to shareholders’ approval at the Annual Shareholders’ Meeting. The Chairman will then determine an ex-dividend date.

(7) Effect of 2019 Share Dividends to Operating Performance and EPS

Item Year		2020 estimate
Paid-in capital at the beginning of period (NT$)		341,848,010
Cash and stock dividends this year (Note 1)	Cash dividends per share (NT$)	22.00
	Number of shares distributed for each share in earned surplus turned capital increase (shares)	0
	Number of shares distributed for each share in capital surplus turned capital increase (shares)	0
Changes in business performance	Operating Income	N/A (Note 2)
	Increase (decrease) in operating profit compared with the same period last year	
	Net Income	
	Increase (decrease) in after-tax net profit compared with the same period last year	
	Earnings per share	
	Increase (decrease) in earnings per share compared with the same period last year	
	Average annual ROI (counting average annual P/E ratio in reverse)	

Item Year			2020 estimate
Pro forma earnings per share and P/E ratio	If earned surplus-turned capital increase was completely replaced by distribution of cash dividends	Pro forma EPS	N/A (Note 2)
		Pro forma annual average ROI	
	If capital surplus was not turned into capital increase	Pro forma EPS	N/A (Note 2)
		Pro forma annual average ROI	
	If capital surplus was not turned into capital increase and earned surplus-turned capital increase was completely replaced by distribution of cash dividends	Pro forma EPS	N/A (Note 2)
		Pro forma annual average ROI	

Note 1:Not yet approved by the annual shareholders' meeting.

Note 2:Pursuant to the Regulations Governing the Publication of Financial Forecasts of Public Companies, the Company is not required to disclose its 2020 financial forecasts. Hence, it is not applicable.

(8) Employee profit sharing bonus and Director/Supervisor remuneration

a. The ratios or scope of the employee profit sharing bonus and director's remuneration in the Company's Articles of Incorporation:

Pursuant to Article 28 of the Articles of Incorporation, if the Company has any annual profit left, it shall allocate no less than 8% of the profit for employee's compensation sharing bonus. Qualification requirements of employees, including the employees of parents or subsidiaries of the company meeting certain specific requirements, entitled to receive shares or cash in accordance with the Board of Directors shall determine. The Board of Directors may allocate no more than 3% of the profit for director remuneration. Employees' compensation and remuneration to directors distribution reports shall be submitted to the shareholders' meetings. However, the Company's accumulated losses shall have been covered (if any), and then allocate employee compensation and remuneration to director from the balance according to the ratio in the preceding Paragraph.

b. The estimation of the current year's employee profit sharing bonus and directors' remuneration, profit sharing bonus distributed in the form of shares

The Company estimates employee bonuses and Board remuneration according to the ratio within the range required by the Company's Articles of Incorporation. If there is any difference between the amount resolved by the board of directors and the estimated amount, and the difference is not significant, or if there is any variance between the distributed amount and estimated amount, the difference will be deemed change of accounting estimation and recognized as next year's profit or loss. There was no major deviation of the amount of employee bonuses and Board remuneration approved by the Board of Directors on March 2, 2020 from the amount recognized in 2019 as described below:

Unit: NT$

Item	Board Resolution
Employee Compensation – Stock	92,361,000
Remuneration of Directors & Supervisors– Cash	11,140,167

Note: The number of shares issued for employee bonuses is calculated based on the closing price on the business day preceding the Board meeting. Distributions of employee shares that amount to less than one full share will be made in cash.

c. Status of board of directors' adoption of employee compensation/ remuneration distribution

(I) The proposed amount of employee compensation and directors remuneration paid in cash was NT$ 0 and NT$ 11,140,167, respectively.

(II) The proposed amount of employee compensation to be paid in stocks was NT$ 92,361,000, which accounts for 10% of the sum of after-tax net profit and employee compensation for the current period.

(III) Earnings per share after the proposed employee compensation and directors remuneration was calculated at NT$ 24.32.

(IV) The distribution of the previous year's employee compensation and directors' remuneration. If there is any difference between the distributed amount and the estimated amount, the variance, reason and handling status shall be disclosed: There was no such discrepancy.

Distribution of employee compensation and directors remuneration in the previous year:

Unit: NT$

Item	2018			
	Distributed amount	Estimated amount	Difference	Reason and treatment for differences
Employee Compensation	74,991,406	74,991,406	-	N/A
Remuneration of Directors & Supervisors	9,373,926	9,373,926	-	N/A

(9) Repurchase of Company Shares: None.

2. Status of Corporate Bonds: None.

3. Status of Preferred Stocks: None.

4. Status of GDR/ADR: None.

5. Status of Employee Stock Option Plan:

(1) Employee stock options that have not matured yet: None.

(2) Names of managerial officers and top ten employees with respect to number of shares subscribable and subscribable amounts reaching NT$30 million, and their subscription of shares up to the annual report publication date: None.

6. Status of New Employee Restricted Stock Issuance

(1) Issuance of New Restricted Employee Share

Types of New Restricted Employee shares	1st time	2nd time	3rd time	4th time	5th time	6th time	7th time	8th time	9th time	10th time
Date of Effective Registration	Sep. 4, 2013	Sep. 4, 2013	Aug. 7, 2014	Jun. 25, 2015	Jul. 22, 2016	Jul. 3, 2017	Jul. 7, 2018	Jul. 10, 2019	Jul. 10, 2019	Jul. 10, 2019
Issue date	Oct. 8, 2013	Apr. 25, 2014	Nov. 19, 2014	None	Dec. 5, 2016	Feb. 5, 2018	Nov. 12, 2018	Sep. 10, 2019	Feb. 5, 2020	Mar. 2, 2020
Number of New Restricted Employee Shares Issued	61,000 shares	45,000 shares	22,000 shares	None	30,000 shares	36,000 shares	21,000 shares	28,000 shares	31,000 shares	9,000 shares
Issue price(NT$)	NT$0	NT$0	NT$0	None	NT$0	NT$0	NT$0	NT$0	NT$0	NT$0
New Restricted Employee Shares as a Percentage of Shares Issued	0.18%	0.13%	0.06%	None	0.09%	0.11%	0.06%	0.08%	0.09%	0.03%
Vesting Conditions of New Restricted Employee Shares	The percentage of shares distributed to employees at each of the following time points after receiving restricted share awards, provided that the employee is still an active employee and meets performance conditions that were agreed upon, is as follows: Serving for 1 full year: 10% Serving for 2 full years: 10% Serving for 3 full years: 40% Serving for 4 full years: 40%									
Restrictions Right of New Restricted Employee Shares	1. After employees are distributed new shares and before the restricted shares meet the vesting conditions, except for being inherited, the new restricted employee shares may not be sold, mortgaged, transferred, pledged, or disposed of using any other methods. 2. The custodian institution attends, makes proposals, speaks, and votes during shareholders' meetings according to the trust agreement.									
Custody Status of New Restricted Employee Shares	The shares will be handed over to a trustee during the restricted period specified in the vesting conditions.									
Measures to be Taken When Vesting Conditions are not Met	Recalling and cancellation.									

Types of New Restricted Employee shares	1st time	2nd time	3rd time	4th time	5th time	6th time	7th time	8th time	9th time	10th time
Number of New Restricted Employee Shares that have been Redeemed or Bought Back	23,500 shares	4,000 shares	0 shares	None	4,000 shares	7,200 shares	5,000 shares	0 shares	0 shares	0 shares
Number of Released New Restricted Employee Shares	37,500 shares	41,000 shares	22,000 shares	None	15,600 shares	6,400 shares	1,600 shares	0 shares	0 shares	0 shares
Number of Unreleased New Restricted Shares	0 shares	0 shares	0 shares	None	10,400 shares	22,400 shares	14,400 shares	28,000 shares	31,000 shares	9,000 shares
Ratio of Unreleased New Restricted Shares to Total Issued Shares(%)	0%	0%	0%	None	0.03%	0.07%	0.04%	0.08%	0.09%	0.03%
Impact on possible dilution of shareholdings	Dilution to original shareholders' holding is limited.			None	Dilution to original shareholders' holding is limited.					

(2) List of Executives Receiving New Restricted Employee Shares and the Top Ten Employees with New Restricted Employee Shares

Title	Name	No. of New Restricted Shares	New Restricted Shares as a Percentage of Shares Issued	Released (Note 1)				Unreleased			
				No. of Shares	Issued Price (NT$)	Amount (NT$ thousands)	Released Restricted Shares as a Percentage of Shares Issued	No. of Shares	Strike Price (NT$)	Amount (NT$ thousands)	Unreleased Restricted Shares as a Percentage of Shares Issued
Manager and Employee	Vindin Liu (Note 2.) Charles Kuan Morris Yang James Yang	44,000	0.10%	(10,600)	0	0	0.02%	33,400	0	0	0.08%
Employees	Tim Liu Lands Chen Brandon Chen Vincent Huang Lena Chou Steven Lin Joe Lin Will Chou Keng-yen Huang Joppa Tsao Andre Chen (Note 3.) Winston Liu	111,000	0.26%	(29,200)	0	0	0.07%	81,800	0	0	0.19%

Note 1: Includes shares that were canceled.
Note 2: Resigned on Feb. 27,2019, and no longer has to disclose his share information since then.
Note 3: Resigned on Jul. 31,2019, and no longer has to disclose his share information since then.

7. Status of News Shares Issuance in Connection with Mergers and Acquisitions: None.

8. Financing Plans and Implementation: Not applicable.

V. Business Activities

1. Business Scope

(1) Business Scope

a. The Main Business Activities of the Company

Design, develop, produce, manufacture and market the following products:

(I) Multimedia IC

(II) Computer peripherals IC

(III) High-end consumer electronics IC

(IV) Patent and services of the above-mentioned products

b. Revenue Breakdown

Unit: NT$1,000

Year / Category	2018		2019	
	Amount	%	Amount	%
Multimedia IC	2,014,508	93.54%	2,327,708	93.70%
Computer peripherals IC	136,556	6.34%	155,337	6.25%
Other	2,455	0.12%	1,250	0.05%
Total	2,153,519	100.00%	2,484,295	100.00%

(c) The Company's current products (services)

Name of main products	Purpose
Multimedia IC	ASPEED Server Management product lines are designed to enrich the basic feature set with 2D graphic controller, hardware monitoring capabilities, and iKVM function. Customer can select and implement from our Graphics & Remote Management Processors to best fit their design needs.
Computer peripherals IC	Our core technology includes display over IP, USB over IP and audio over IP.With our core technologies, we are able to support PC Extensions for application scenario such as PC-to-TV, PC centralization for Internet Cafe, and Enterprise PC over IP.
High-end consumer electronics IC	Applied to consumer cameras, live broadcast devices, security surveillance, video conferencing, and virtual reality.

(d) Plans for the development of new products (services)

ASPEED Technology Inc. accumulated long term experiences for BMC development and relationchips with customers. Feedbacks and requests from custmers helpped us to develop a comprehensive, high performance and high security 7th generation BMC chip. There are some whole new features in next generation BMC chip: Hardware Elliptic Curve Cryptography (ECC) and RSA engine, hardware root of trust engine, TruzeZone bus controller, Security memory management, cache parity check. At the same time, the firmware supports are also enriched, like OpenBMC and UEFI GOP driver etc.

Leveraging long-term experience of IC design and IP integration, the Company launched the world's first customized spherical image processing chip that instantly stitchs six high-pixel wide-angle lens images. The 360-degree videos can reach mainstream demand of 4K2K 30fps, and the photo resolution is even more up to 8K (32M pixels). Let customers achieve the best balance between achieving high-quality professional images and offering consumer-grade products.

In addition to the introduction of cost-effective spherical image processing chips, the Company also invested in the build-up of the Cupola360 ecosystem, while providing the iOS/Android Cupola360 APP, the 360-degree content sharing community platform, calibration equipment, and camera reference designs, etc. Through the joint efforts of ASPEED Technology and its partners, it will reduce barriers to enter into the supply chain of Cupola360 products and accelerate the development of the 360-degree camera market.

The Cupola360's exceptional functionality and performance have attracted customers and demand for different Vertical Market products, mainly

I. I.360/180 Panorama video conferencing equipment requirements. Unlike many limitations of traditional video equipment in conference video, The Cupola 360 Panorama video conferencing device provides powerful features.
   (I) 360/180-degree full-view video conferencing user experience and use situation.
   (II) 4K/8K high-resolution applications such as: video focus and distortion-free amplification, tracking, identification.
   (III) ePTZ application sits in meeting scenarios that require adaptation in different FOV environments.
   (IV) High-elastic video screen cutting, combination, video diversion and other functions, design a strong product competitiveness.

II. 360/180 Panorama vehicle driving video recorder product requirements. Cupola 360 provides powerful multi-lens stitching capabilities in addition to providing a video record of driving panoramic views, providing elastic image adjustment capabilities such as Individual EV for the video environment needs of each/block of lenses, allowing the EV values in the interior and inside the vehicle to be individually tuned for the best image quality. Similarly, high-elastic video screen cutting, combination, video diversion and other functions, so that the product has the best experience to use.

III. 360/180 Panorama security equipment product requirements. Panorama's dead-end monitoring capability is the Cupola 360's competitive weapon in security equipment, with 4K/8K high resolution and ePTZ features to provide security equipment without vulnerabilities of security protection.

(2) Industry Outlook

1. Industry Status and Trends

An overview of industries related to the Company's main products is provided below:

(I) Semiconductor Market

According to SEMICON Report, global semiconductor revenue totaled $418.3 billion in 2019, down 11.9% from 2018. The rapid growth in 2017 and 2018 contributed to the drop off in 2019. Downturn in the memory market because the weakness in data centers, smartphones and elsewhere; slow down in highend smartphone; cloud service providers CAPEX spending were more conservative; weak demand in auto and industrial semiconductor market also affected the growth. US-China trade war continue to impact 1H of 2019.

Semiconductor demand and sales revenue were forecasted to increase, however because Covid-19 global pandemic, TrendForce revised down from growth to decline.

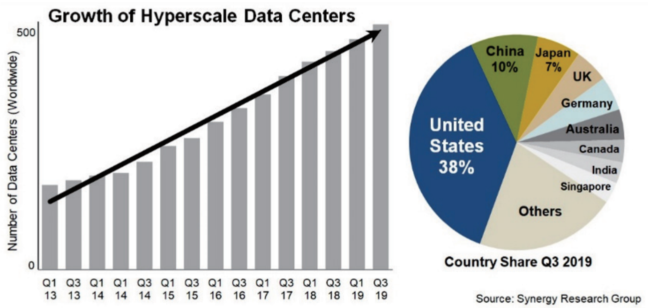
(II) Global server market

The number of data centers worldwide continued to grow in 2019 and onward, as companies such as Google, Amazon Web Services (AWS), Facebook, Microsoft Azure, Alibaba, and Baidu continue to plan and build new data centers, which has driven a significant increase in the demand on server peripheral parts and components. According to Synergy Research, hyperscale data center rose from 430 in 2018 to at least 504 in 2019. Despite that US still accounts for 38% of the major cloud and internet data center sites. The next most popular locations are China, Japan, the UK, Australia and Germany,which collectively account for another 32% of the total.

Among the hyperscale operators, Amazon and Microsoft opened the most new data centers in the last twelve months, accounting for over half of the total, with Google and Alibaba being the next more active companies.

China's new policy is another key factor that will create new demand on servers and drive overall server market growth. China's new Cyber Security Law took effect in June 2017 and requires that all personal information and data collected by foreign companies in China be stored in local servers. This is expected to stimulate the demand on servers and accelerate the increase of data centers in China.

Figure 1: Distribution of hyperscale data centers worldwide

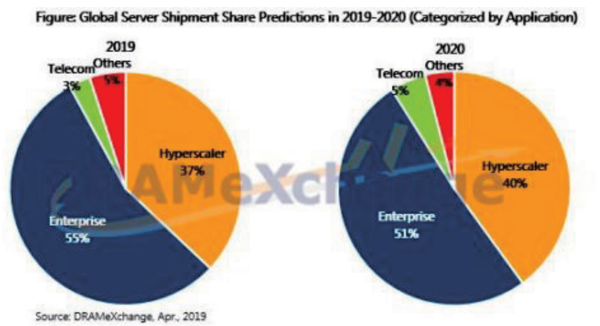


(III) Multimedia IC

In the server brand and ODM Direct models, the brand company designates the supplier. For core parts and components, including CPUs and baseboard management controllers (BMC), the brand company designates the supplier, whereas the ODM decides on the supplier of server and other passive components. In January 2017, ASPEED Technology formally included revenue from the Emulex BMC Pilot™ product line, which was acquired from Broadcom, into its revenue. This secured its position as the leader of the BMC market, and will significantly lower the level of competition in the current BMC market.

Intel formally released its next generation product Purley in July 2017, replacing a portion of Grantly and Romley products while increasing its overall server shipment. Shipments of Purley significantly increase in 2019, which will in turn drive further shipment growth in 2020.

Figure 2: Global server shipment statistics and estimates

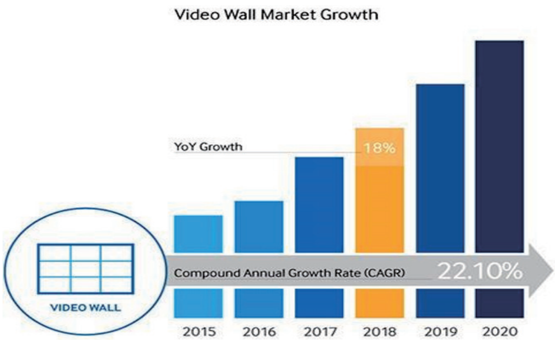


(IV) Computer peripherals IC

The rising importance of digital signage in the B2B market can be observed from the increasing number of digital signage among public spaces in airports, urban train stations, government buildings, commercial buildings, retail markets, shopping malls, chain drugstores, supermarkets, and movie theaters. The strong demand of the advertising market will continue to drive rapid growth of digital signage. In terms of shipment scale, about 4 million digital signage units were shipped in 2015, and this figure is expected to rapidly growth to 10 million by 2020, with a compound annual growth rate of 20.59%. Indoor digital signage accounts for about 62% of digital signage.

Overall deployment cost has continued to decrease each year following the rise of IoT and big data applications, bringing the retail industry into the era of smart retail. The integration of digital signage with big data, IoT, video cameras, and facial recognition technologies will help retailers to obtain information more effectively and increase their sales. Breakthroughs in interactive tabletop technologies have made ordering meals at a restaurants even more convenient. Many industries other than the retail industry are also using digital signage to let their product information reach even more consumers, and this has increased their illingness to set up digital signage.

Figure 3: Global digital signage shipment forecasts



(V) High-end consumer electronics IC

According to DIGITIMES Research, 360 panorama camera industry has accelerated the transition from the B2C to the B2B market through specification and software enhancements. For example, starting from 2018, facing the price competition of Insta360 from mainland manufacturers, 360 camera industry leader Ricoh has shifted its business focus to B2B. At present, real estate market has the highest visibility in the B2B market, and Ricoh offers Theta 360. biz, Ricoh 360– VR Presenter, Ricoh 360 VR Staging assist real estate market to make 360-degree panoramic images of cases, and provide in-store viewing of VR images and home beautifying services, while hotel online booking are another area that is expected to advance in the 360 camera market .

On the other hand, the trend of software services launched by 360 camera manufacturers has developed diversely. In addition to directly integrating 360-degree panoramic images into various industrial fields, new technologies such as big data and artificial intelligence have also been introduced. Among them, big data technologies are used in Image analysis, which visualizes the image including the number of visitors to the store, and provides a reference for store marketing activities. Artificial intelligence technology is used in advertising services. It accumulates previously learned image content and automatically screens out the images that should be awre of.

2. Infrastructure of the Semiconductor Industry
   The relationships among upstream, midstream and downstream suppliers in Taiwan's Semiconductor industry are shown in the table below. Generally the upstream is represented by fellow fabless IC design companies, midstream is represented by wafer foundry companies, and downstream is represented by various IC packaging and testing service providers.

Operation Stages	Processes	Definition	Basis for classification	Scope
Upstream	IC Design	Specializes in IC design and R&D but is not involved in IC manufacturing.	IC Design	Engages in design and outsources a portion of production to wafer foundry services.
Midstream	IC Manufacturing	Specializes in the establishment of production lines in foundries and provides IC manufacturing services.	Wafer Foundry	ODM for ICs.
			Memory manufacturing	DRAM, Flash, SRAM, ROM, etc.
Downstream	IC Packaging	Outputs functional signals from the IC through a carrier and protects the IC from damage.	Lead frame Packaging	Packaging that uses lead frames, such as DIP, SOP, QFP, etc.
			Substrate Packaging	Packaging that uses substrates, such as BGA, etc.
			FPC Packaging	Packaging that uses FPCs, such as COF, TCP, etc.
	IC Testing	After wafer fabrication is completed, testing instruments verify whether products are non-defective in two stages, before and after packaging, respectively.	Wafer Testing	A probe is used to test grains before wafer dicing and packaging.
			Product Testing	After IC packaging, IC function, speed, tolerance, power consumption, and heat diffusion testing are all part of product testing.

Source: Industrial Technology Research Institute of Taiwan, R.O.C. IEK, May 2012

Taiwan's semiconductor industry has a fully developed system with multiple companies that specialize in each link of production, such as: design tools, IC design, wafer materials, silicon wafers, mask production, IC manufacturing, packaging, lead frames, testing, and peripheral support. As a result of industry boom in recent years, the verticalization approach in the Semiconductor IC manufacturing industry involving various corporations has made up a complete ecosystem in our country in building a more comprehensive, professional and quality-driven supply chain.

3. Product Development Trends and Market Competition

The Company is a professional IC design house that mainly designs and sells Multimedia IC, Computer peripherals IC ,and High-end consumer electronics IC. Therefore, changes in the supply and demand of industries that use terminal applications of the Company's products are as follows:

(I) Multimedia IC

The development of BMC SoCs must give due consideration to specification changes in the industry, such as changes in the specifications of different generation CPUs and chipsets made by Intel and AMD, DRAM specifications (such as DDR2 and DDR3), the development of display interface specifications (such as PCI and PCIe), integration of peripheral parts, and the convenience requirements of end users on servers. The Company mainly designs and sells BMC SoCs with three major functions, namely 2D VGA, BMC, and KVMoIP. The products are mainly sold to domestic and overseas server design and manufacturing companies. The Company closely follows industry standards and the organizations which set them when planning products, thus being able to accurately determine market demand for immediate development. The Company plans next generation ICs based on Intel's plans for new generation platforms, and its operating risks are thereby reduced.

Currently, the major global players are ASPEED, Nuvoton Technology Corporation and Renesas Electronics Corporation. ASPEED Technology and Nuvoton Technology are currently the only competitors in the market. Over 80% of server motherboards worldwide are designed and manufactured by Taiwanese suppliers. The Company's design team is located in Taiwan, in the same region where server suppliers are located, and is thus able to rapidly provide technical support, reduce the amount of time required for discussing technologies with customers, and achieve quick product release into the market.

(II) Computer peripherals IC

Solutions for PC & Audio/Video Extension SoCs currently in the market include analog transmission, digital transmission, and packet transmission. The main goals are long-distance transmission and signal stability. Users do not need to specially calibrate their signals due to the environment, and product portfolios that can achieve one-to-many or many-to-many have expanded the scope of its application. The Company specializes in digital transmission and packet transmission technologies, which have been patented in Taiwan and the U.S. The technologies offer excellent performance in effectively reducing image lag, and using a standard network transmission interface to transmit audio and video without any distance limits.

The Company designs and sells the compressor and transmitter chips for A/V extensions. These chips are an important component of extensions, and are generally divided into transmitting and receiving ends, with each end requiring one chip. There are also combinations of one transmitter chip with multiple receptor chips or multiple transmitter chips with multiple receptor chips. The Company uses the same chips on both ends to simplify customers' inventory management. The Company specializes in development of digital transmission and packet transmission technologies. These technologies first compress video and audio, and then transmit them to a receiving end 100 m or farther away through a network cable. Furthermore, the Company's chips can also transmit data via USB interface to the receiving end. This is the greatest difference between the Company's products and competitors.

(III) High-end consumer electronics IC

Suppliers of panoramic image processing chips in the panoramic camera market include Qualcomm, Ambarella, Hisilicon, and iCatch. At present, the high-end solutions provided by other chip manufacturers use the high computing power of multi-core CPUs to meet the needs of real-time dynamic image stitching and image compression (encode), while the low-end solutions use simple stitching methods to directly paste the image content. The disadvantage of the former is that the price of the chip is too high, which causes the price of the end product to be in affordable to mass market. Although the price of the latter is low, the quality of the stitched panoramic image is not good, and the consumer satisfaction is not high. In addition, the effective pixels of the double fisheye panoramic lens are too low, which causes the current panoramic camera to encounter a bottleneck in the application of virtual reality or security monitoring, and the market adoption is still low.

The company developed a patented multi-lens image stitching algorithm and used hardware acceleration as a differentiation to achieve efficient real-time stitching of multiple images and provided post-processing solutions to meet customers' different needs.

(3) Technology and R&D

a. R&D Spending:

Unit: NT$1,000

Item Year	2018	2019
R&D expenditures	326,983	382,851

b. Successful R&D Technologies or Products

Important technologies and products successfully developed by ASPEED Technology are as follows:

Year	R&D Achievements	Description
2014	AST2500 6th Generation Server Management Controller	6th Generation BMC
	AST3200 RDP8.1 Client Controller	Microsoft RDP8.1 Remote Virtual Desktop Controller
	AST1520 4K PC/AV extension controller	PC & 4K Audio/Video Extension Controller
2015	ISP Image Sensor Processing Technology	Image Signal Processing Technology
2016	AST1620 4K PC/USB extension controller	PC & USB 4K Extension Controller
2017	AST1220 360 6 CAM Processor	Real-time 6 Lenses 360 Degree Camera Image Processor
	MIPI D-PHY interface controller	MIPI Interface Control Technology
2018	AST2500 7th Generation Server Management Controller	7th Generation BMC
	ARM multi-core bus interface controller	ARM multi-core bus interface controller
	Hardware ECC crypto engine	Hardware ECC crypto engine for new crypto technology
	Hardware Root of Trust Technology	Hardware Root of Trust Technology to improve sesystem security
	360 Camera APP	To enrich 360 camera product lines
2019	Seurity OTP Memory Management	For Root of Trust technology
	Trust Zone Bus Controller	For trusted bus management
	AST1530/AST1620 8K PC/AV Extension Controller	For next generation 8K extension
	Cupola360 Image Post Processing	Algorithm for functions Stablizer、Stitching、Lighting、WDR、
	360 Stitching Calibration Fixture	360 stitching calibration fixture design
	Sensor/ISP Calibrated Tools	Camera sensor/ISP calibration tools design
	UVC/UAC Protocols	USB Video/Audio Class
	Image Adaptive FOV	Adaptive FOV algorithm
	360 Video Conference F/W, VxD, App	S/W to enable video conference product
	Individual EV, Adaptive EV	EV algorithm and setting
	ePTZ Technology	Digital PTZ application
	360 Dash Cam F/W，App	S/W to enable dash cam DVR

(4) Long- and Short-Term Business Development Plans

In response to future industry developments and trends in the overall economic environment, the Company formulates various plans for its future business direction to enhance its competitiveness. The Company's long-term and short-term business development plans are summarized below:

a. Short-Term Business Development Plan

(I) Product strategy:

(a) Multimedia IC

Closely follow industry standards and the organizations which set them when planning products to accurately determine market demand for technology development; next generation ICs are planned based on Intel's new generation platforms. Increase the breadth and depth of technologies at a faster pace to provide a diversified product line.

Besides maintaining existing customers, continue to develop new customers to increase the market share of products. Continue to improve current product processes to raise the barriers to entry.

(b) Computer peripherals IC

Adopt a spanning tree protocol, develop applications for video walls and digital signage, and use a serial structure to improve the spanning tree and increase use scenarios. The second generation product is currently the only 4K2K over IP solution in the market.

(c) High-end consumer electronics IC

In addition to providing unique in-cam stitching technology, we provide complete software and hardware reference designs to shorten the development time and speed up go-to-market process:

I. iOS / Android Cupola360 APP (Camera/ Dash-cam Version).

II. Desktop software for video conferencing on Windows.

III. Software and hardware solutions for lens module test and calibration.

IV. Various customized services such as PCBA reference design and design review for customers.

(II) Sales and Marketing Strategies

(a) Server products with different functions satisfy the needs of different customers, and the Company offers the full array of VGA only, BMC only, to high-end product lines with complete functions. Products are developed to meet the specific needs of different customers to build stable, long-term partnerships.

(b) The rise of data centers has increased demand on entry level servers and increased the importance of such products in the product portfolio.

(c) ASPEED Technology and ODM customers jointly carried out brand customer promotion, and jointly demonstrated the cutting-edge technology provided by ASPEED and the product design and integration capabilities of ODM manufacturers.

b. Long-Term Business Development Plan

(I) Product Development

Expand the field of application for core technologies, and develop new application products to develop new product lines, new customers, and increase the market share of current products.

(II) Sales and Marketing Strategies

(a) Strengthen the Company's systems and organizational performance, improve the sales management system, and establish a global technical cooperation and service network.

(b) Nurture professional marketing talent, build stronger customer relations, and closely monitor changes and development trends in the product application market.

(c) Gradually attain higher market share in the international market through joint development or strategic alliances with first tier multinational corporations.

2. Market, Production and Sales Outlook

(1) Market Analysis

a. Sales by Region of Major Products and Services

Unit: NT$1,000

Region \ Year		2018		2019	
		Amount	%	Amount	%
Domestic sales		774,574	35.97%	985,081	39.65%
Exports	Asia	930,834	43.22%	1,086,059	43.72%
	Europe and America	448,111	20.81%	413,155	16.63%
Total		2,153,519	100.00%	2,484,295	100.00%

b. Market share

According to the Market Intelligence & Consulting Institute (MIC) the output value of Taiwan's fabless IC design industry was estimated at NT$ 2.656 trillion in 2019. Estimating based on the Company's 2019 operating income of approximately NT$ 2.484 billion, ASPEED Technology has about 0.09% market share in Taiwan's fabless IC design market. Rough estimates of the market share of each product are as follows:

(I) Multimedia IC

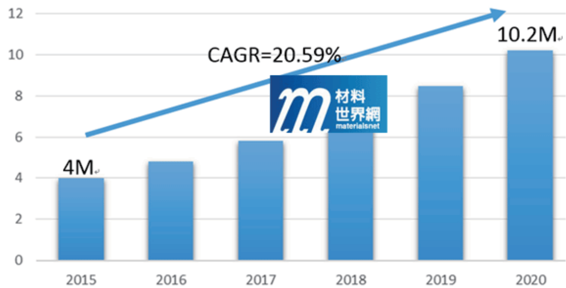
According the 2018 statistics of Digitimes, the total number of servers shipped worldwide was 12.18 million in 2018. Every motherboard needs at least one BMC, so the total number of BMCs shipped worldwide in 2019 was about 12.54 million. The Company shipped 8.4 million BMCs in 2018, so our market share was about 69%.

(II) Computer peripherals IC

According to IEK (Industrial Technology Research Institute), demand in stadiums, upgrade in the train stations, vending mashines, indoor and outdoor panels will continue to drive the growth of digital signage solution. Visual and interactive solution especially facial recognition will be one of the important key factor to adopt digital signage.

With the rise of IoT and Big Data, the retail industry has gradually entered the era of smart retail, including the use of digital electronic signage, intergrated IoT with AI systems, camera and facial recognition for analysis. Retailers will invest in digital signage throughout 2020, both in developed and emerging markets, because of the benefits that digital signage offers, and we'll see more retail shops, business disseminate information that is ccrucial to their business.

Figure 4: Global Digital Signage Size (in Millions)



Source: IEK

(III) High-end consumer electronics IC

Cupola360 image processor is a new product. After the mass production version of the chip was officially launched in 2018, ODM customers are actively initiating the projects in 2019. It is expected to start shipping in the second half of 2020 and begin to create revenue by then.

c. Major Markets

(I) Multimedia IC

Following the popularization of mobile devices with Internet access, user behavior has overturned conventional business models. As innovative services create new trends, people's lives are now inseparable from cloud computing. The ratio of structural data has increased as the total amount of data doubled. Services with added value and extended benefits, such as big data or artificial intelligence applications, continue to increase hardware requirements. Cloud computing products are customized products that usually involve controls of national policy. Taiwanese companies utilize the production foundation for end products along with local cloud computing services to aid the deployment of local data center hardware or integration solutions. Taiwanese companies have worked together with North American companies for a long period of time, and have maintained close cooperation in response to the rapid growth of China's cloud market. At present, China's local cloud computing service providers still mainly focus on the domestic market, and will work together with traditional brands before they achieve economies of scale.

(II) Computer peripherals IC

According to forecasts of Digitimes, a total of 2.462 million LCD digital signage systems were shipped worldwide in 2013, and the figure was expected to reach 3.52 million in 2015, with an annual compound growth rate of 20% or above. This shows the high expectations for the global digital signage market in the next few years. The North American market is relatively mature with about 32.5% market share. The European market has about 29.7% market share, but its spending has sequentially decreased each year due to the global financial crisis in 2009. The Asia-Pacific has about 33.8% market share and conforms the emerging market with the greatest potential, in which China has shown the most rapid growth. Following the rise of China’s GDP and consumer buying power, urbanization and public transportation infrastructure, and the potential business opportunities from China’s massive population, China's market is expected to be a key factor that will drive digital signage market growth.

(III) High-end consumer electronics IC

According to the latest report from Markets & Markets Research, the market value of the 360-degree camera market reached US$ 350 million in 2017, and it is expected to reach US$ 1.57 billion in a compound growth rate of 27.1% per year by 2023. It is expected that the market growth momentum will come from the increasingly diversified development of 360-degree camera applications, especially in the consumer and security surveillance market, which will bring great growth opportunities for Cupola360 solutions.

d. Competitive Advantage

(I) ASPEED Technology has independent development abilities and is fully aware of the latest market trends

The Company has a professional R&D team with excellent design and development abilities, integrating 2D VGA, BMC, and KVM over IP technologies, which is unlike competitors that need to acquire IP licensing from IP design service providers. This enables the Company to develop products that meet market demands anytime in response to market developments. Furthermore, our ability to design cloud computing remote management ICs for servers has gained recognition from Intel Capital, the global leader in the semiconductor industry. Intel Capital thus made a strategic investment to become a shareholder of ASPEED Technology, and will be able to offer advice on future development trends and market strategies, allowing us to stay up-to-date on the latest market trends.

(II) Long-term cooperation with semiconductor foundry service providers and business partners

Professional IC design companies rely almost entirely on foundry service providers, assembly houses and testing houses for product manufacturing. Hence, their process technologies, quality and yield, equipment capacity, and delivery speed are important factors to whether products are successful. The Company's good and close long-term relationships with semiconductor foundry service providers, business partners, and customers are key factors to its success.

The Company’s main products are sold to server ODMs, and comprehensive product development services are provided to customers to help shorten their development time, or rapidly begin mass production of new products. We have met the demands of our customers with respect to quality, yield, and delivery, and it has enabled us to maintain long-term relationships, which is a key factor to our success in the industry.

(III) Excellent quality control

The Company obtained ISO 14001 2017 quality certification, which is a guarantee of our product quality. We have also installed ERP software on our operating system to integrate and mechanize all processes from receiving purchase orders, production, material procurement, inventory, quality management, to financial management. The software can immediately provide correct statistics and data analysis results for the managers of each department to understand and control processes anytime.

(IV) Having an international strategic partner

Furthermore, our ability to design cloud computing management ICs for servers has gained recognition from Intel Capital, the global leader in the semiconductor industry. Intel Capital thus became our strategy partner. Besides making a strategic investment to become a shareholder of ASPEED Technology, it will also be able to offer advice on future development trends and market strategies, allowing us to develop the right products to meet market demand.

e. Favorable Developments, Unfavorable Factors and Countermeasures

<u>Favorable Developments</u>

(I) “Cloud” is the way of the future, and the corporate server market will flourish

Server market demand will be cut from various angles, including cloud, big data, artificial intelligence, Internet of Things (IoT), 5G applications and so on to create a faster and closer interconnection trend. These trends will also multiply the importance and quantity of servers in a further step. This contains the following:

- 5G servers will open up new computing and network connectivity.
- Artificial intelligence is gradually taking shape, driving technology trends and transformation.
- Internet of Things Technology Development.
- Cloud Computing Moves to Edge Computing.
- Virtual Reality/Virtual Education, etc.
- Cloud Streaming Games.

(II) Designated supplier of major Internet service providers

The amount of Internet services has grown significantly in recent years. In addition to the rise of Google, the leading search engine, the influence of social media platform Facebook on millennials has also created immense business opportunities. Under the explosive growth of online information, the demand on server hardware will only increase. Besides existing server brands, the supply chain of server hardware is also beginning to accommodate customized requirements. Internet service providers will directly designate suppliers and then directly purchase assembled products from server ODMs. This will benefit the development of Taiwan’s overall cloud supply chain, and we will work together with ODMs to find a suitable entry point.

(III) Comprehensive IC Manufacturing Infrastructure in Taiwan

The semiconductor industry is a capital and technology intensive industry, and in Taiwan, the industrial chain’s upstream and downstream all have clearly defined roles. Following the rapid development of process technologies, semiconductor foundry service providers, assembly houses, and testing houses are constantly increasing their capital expenditures on facilities and technologies under their economies of scale. This continues to enhance the international competitiveness of their IC manufacturing abilities. As semiconductor foundry service providers, assembly houses, and testing houses become more specialized and achieve economies of scale, they are able to provide professional IC design companies with logistic support, e.g., advanced technologies and processes, flexible production scheduling, world class service quality, and rapid response ability, allowing them to seize opportunities for entering the market.

(IV) Market share of Taiwan's server motherboards

Taiwan has about 80% of global market share in the design and production of server motherboards. The Company enjoys this geographic advantage and is able to provide faster technical support and information access than competitors.

(V) Difficulty of developing key technologies for products and high barriers to entry

The Company's SoC (System on Chip) product development requires the ability to design ICs with digital, analog, and remote management functions, and must develop controller firmware and server drivers based on server specifications, software system, and the integration functions of peripheral devices. This requires more advanced technologies, involves a wider range of fields, and therefore has higher barriers to entry than typical IC products. The Company is thus able to avoid bargaining or low-price competition from new competitors and maintain its profitability.

(VI) High control over independently developed technologies provides greater flexibility for making product adjustments.

Unlike competitors that develop products through patent licensing, the Company is able to develop SoC products that integrate 2D VGA, BMC, and KVM over IP using its own technologies. Hence, the Company has relatively higher control over technologies that it has independently developed. Since the Company is a Taiwanese company, it is located in the same region as Taiwanese server suppliers. The Company is geographically closer, speaks the same language, has no time zone difference, and can rapidly provide technical support with less time spent on discussing technologies with customers. Due to the different platforms of server products, their demand on remote management functions are not entirely the same, and the functional requirements of data centers are not entirely the same as for conventional servers. The Company is able to quickly make adjustments based on customers' requirements when facing such differences between platforms.

The Company currently provides ICs with different functions for the latest generation products that are in mass production, and pins are compatible, so that customers can use the same design module for different server platforms, which also reduces customers' development costs.

<u>Unfavorable Factors</u>

(I) Server virtualization

As cloud computing has doubled, servers are virtualizing and sharing system resources to increase system utilization. As a result, server growth has been far lower than cloud computing.

<u>Countermeasures</u>

BMCs can be applied in different markets, such as storage devices, high level adapters, and NAS.

(II) Difficulty of training professional IC designers

Due to the large number of IC related competing industries, it has become growingly difficult to recruit outstanding talent, which is often very expensive. The Company needs to spend even more to strengthen employees' loyalty to the Company.

<u>Countermeasures</u>

The Company provides generous compensation and a wide range of thoughtful employee benefits, caring for employees in every possible way, while providing an excellent working environment that is fair, healthy, pursues innovative R&D, and is performance based. We also implemented an employee stock option plan that allows employees to become shareholders and share the Company's profits, so as to attract outstanding talent.

(III) Exchange rate fluctuations

The Company's procurements and sales are all calculated in USD, so profits are highly affected by exchange rate fluctuations.

Countermeasures

(a) The Company's Finance Department utilizes the natural hedging effect from procurements and sales both denominated in foreign currency.

(b) Dedicated personnel closely follow exchange rate fluctuations, collect information on international exchange rate trends and exchange rate fluctuations, are fully aware of future trends in exchange rates, and keep in touch with the foreign exchange department of banks. After considering the professional advice provided by the departments and the Company’s cash requirements, the personnel reduce risks by exchanging currency at appropriate times.

(c) Depending on the position of foreign currency, hedging is carried out in accordance with the Operating Procedures “Procedures Governing the Acquitions or Disposition of Assets” when necessary.

(2) Key Product Applications and Manufacturing Processes

a. Key Product Applications

Product Series	Major Applications
Multimedia IC	ASPEED Server Management product lines are designed to enrich the basic feature set with 2D graphic controller, hardware monitoring capabilities, and iKVM function. Customer can select and implement from our Graphics & Remote Management Processors to best fit their design needs.
Computer peripherals IC	Our core technology includes display over IP, USB over IP and audio over IP.With our core technologies, we are able to support PC Extensions for application scenario such as PC-to-TV, PC centralization for Internet Cafe, and Enterprise PC over IP.
High-end consumer electronics IC	Applied to consumer cameras, live broadcast devices, security surveillance, video conferencing, and virtual reality.

b. Key Product Manufacturing Process

ASPEED Technology is a professional fabless IC design house that outsources the back-end design process involving IC layout and routing to design service companies after completing RTL design and verification. The turnkey service company is responsible for processes such as wafer foundry, packaging, and testing processes during mass production. It then delivers the products to ASPEED Technology for IC system testing, and then the IC products are packaged and put in storage after their quality is further verified.

The flowchart below shows the process of developing an IC product:

RTL Design → SoC Design Services → Wafer Foundry → Wafer Testing → IC Packaging → IC Testing → System Testing → Packaging and Shipping

(3) Supply of Essential Raw Materials

The Company is an IC Design house and all products are coordinated with mid- and down-stream companies through a turnkey service provider. Hence, when deciding on the turnkey service provider, besides considering the completeness of its silicon IP and APR (Auto Place & Route) technical capabilities, which foundry, assembly house and testing house it is in a strategic alliance with is even more important because the foundry's process technologies, quality and yield are key factors to whether or not a product is successful. Our current turnkey service provider provides raw materials and products in good condition and with stable quality.

(4) Major Suppliers Accounting for over 10% of the Annual Total Purchase in either 2018 or 2019

Unit：NT$1,000

2018				2019			
Supplier	Amount Purchase	% of Total Purchases	Relations	Supplier	Amount Purchase	% of Total Purchases	Relations
A	676,877	76.25%	None	A	725,044	87.33%	None
B	210,062	23.66%	Related Party	B	103,236	12.44%	Related Party
Other	733	0.09%	None	Other	1,923	0.23%	None
Total	887,672	100.00%		Total	830,203	100.00%	

Reasons for changes:

ASPEED Group purchases chips from a foundry through a turnkey service provider. Since foundries are technology and capital intensive, only a few companies provide such services and maintains long-term relationships with suppliers.

(5) Major Customers Accounting for over 10% of the Annual Total Sales in either 2018 or 2019

Unit：NT$1,000

2018				2019			
Customer	Amount Revenu	% of Total Revenue	Relations	Customer	Amount Revenu	% of Total Revenue	Relations
A	473,283	21.98%	None	A	537,116	21.62%	None
B	228,113	10.59%	None	B	368,222	14.82%	None
C	207,400	9.63%	None	C	253,925	10.22%	None
D	300,207	13.94%	None	D	200,170	8.06%	None
E	244,040	11.33%	None	E	186,551	7.51%	None
Other	700,476	32.53%	None	Other	938,311	37.77%	None
Total	2,153,519	100.00%		Total	2,484,295	100.00%	

(6) Production Volume and Value in the Past Two Years: Not applicable.

The Company does not manufacture chips. “Production Capacity” is not applicable as the ASPEED Group outsourced manufacturing procedures to wafer foundry, packaging and testing plants.

(7) Sales Volume and Value in the Past Two Years

Unit：1,000PCS/NT$1,000

Year and Major Products	2018				2019			
	Domestic		Exports		Domestic		Exports	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Multimedia IC	2,230	640,541	5,672	1,373,967	2,852	835,859	5,748	1,491,848
Computer peripherals IC	170	131,880	6	4,676	202	148,894	7	6,444
Other	－	2,153	－	302	1	328	1	922
Total	2,400	774,574	5,678	1,378,945	3,055	985,081	5,756	1,499,214

3. Employees

Unit：Person / %

Year		2018	2019	2020 (As of March 31)
Number of Employees	R&D	55	61	63
	Sales and Management	18	16	17
	Total	73	77	80
Average Age		39.37	38.84	39.09
Average Years of Service		5.21	5.12	5.19
Education	Doctoral	1.33%	1.23%	1.19%
	Master	61.33%	67.90%	67.86%
	Bachelor	37.33%	30.86%	30.95%
	High School	－	－	－

4. Environmental Protection Expenditure

ASPEED Group 's scope of business includes IC R&D, testing and sales, and focuses on product development and market sales. All products are manufactured through a turnkey service provider, so ASPEED Group does not cause any environmental pollution and is therefore not required to apply for a pollution control facility permit or pollutant emission permit, pay a pollution control fee, or establish a dedicated unit or personnel for environmental protection.

5. Labor-Management Relations

(1) The Group’s employee welfare program, training and development, and retirement policy and settlement between employees and the employer

a. Labor Benefits and Welfare Program

ASPEED Group established the Staff Welfare Committee in accordance with laws and regulations, and makes monthly contributions to the Staff Welfare Fund, which is used by the Staff Welfare Committee to provide the following benefits: Employee trips, cultural and health activities, emergency aid, health exams, and gift certificates for Chinese New Year's. Benefits are also provided for marriage, childbirth, and funerals (condolence money). ASPEED Group also provides employee education and training, employee stock subscription, and bonuses. Furthermore, besides enrolling employees in the Labor Insurance and National Health Insurance in accordance with the Labor Standards Act and related laws and regulations, the Company also provides employees with group medical insurance and travel insurance for even greater protection.

b. Training and Development

ASPEED Technology provides employees with continuing education, utilizing both internal and external on-the-job training resources. With various learning resources and channels to encourage employees to do training for self-improvement to further uplift their performance and potential.

In order to enable the effective training plans which meet employees' requirements of general, professional, and management course as well, ASPEED Technology provides a diverse network of learning resources, including on-the-job training, classroom training, e-learning, mentoring, to realign and refresh its workforce skill set and are a useful tool for motivating and re-energizing employees morale. Company training will continue to be part of companies' strategies to achieve competitive advantage.

ASPEED's training programs include:

- New employee training

  Designed to meet each department's requirement, ASPEED introduce a senior mentor program for new employees, providing assistance in life and work techniques for them to quickly adapt to the environment.

- General Training

  To provide trainings on general subjects for all employees, or the trainings required by government regulations to enable employees to fit in the environment and meet business goal as soon as possible.

- Professional Skill Training

  Identify the professional training needs of each department, and provide the training to employees to strengthen their professional competence.

- Management Skill Training

  For potential employees with management talents, ASPEED provide training courses to establish management thinking, cultivate strategic analysis and planning capabilities for organization development and team operations.

- Celebrity Lectures

  The series of lectures provide the opportunity for employees to hear from a top thought leader in various fields to broaden their horizons.

- Workshop

  Through experiential learning, employees can learn how to implement theoretical management theory to practical daily work, hence high performance can be achieved.

- Self-Study and Development

ASPEED offers an open and diversified platform for employees to access unlimited online courses which suitable for their professions. For external training courses, ASPEED also full subsidized the tuition for employees to participate in external training courses.

c. Retirement Systems

ASPEED Group established Regulations for Employee Retirement in accordance with the Labor Standards Act, and makes monthly contributions to employees' personal accounts at the Bureau of Labor Insurance in accordance with the Labor Pension Act if they select the new labor pension plan.

d. Negotiation and settlement between Interest of Employees and Management:

The ASPEED Group emphasizes the right to know and therefore convenes quarterly business performance meetings and labor-management meetings, which allow employees to understand the Company's business performance and future plans. The ASPEED Group takes employees' opinions very seriously and encourages employees to offer their advice, which it uses as the basis for improving its management and benefits system. It is for this reason that labor and management are on good terms and there have been no litigations or matters requiring negotiation between labor and management.

(2) Losses incurred by Labor Disputes in recent years as at the Date of Print for Annual Report 2020

The ASPEED Group ensures that the relationship among employees and managements are harmonious by maintaining effective two-way communication channels at all times. No labor disputes were occurred in the past.

6. Material Contracts

Agreement Type	Counterparty	Term	Summary	Restriction
Factory lease agreement	Taiwan Fertilizer Co., Ltd.	2019/09/01~ 2024/08/31	Factory lease agreement (4F., No. 1, Sec. 3, Gongdao 5th Rd., East Dist., Hsinchu City)	None
Factory lease agreement	Cathay Life Insurance.	2019/10/01~ 2021/09/30	Factory lease agreement (5F, No. 16, Sec. 4, Nanjing East Road, Taipei)	None
Loan	Hsinchu Science Park Hsin-an Branch, Mega International Commercial Bank	2019/05/21~ 2020/05/20	2019 Credit agreement/Credit limit of NT$200,000,000	None
Loan	Zhubei Branch, Hua Nan Commercial Bank	2019/06/14~ 2020/06/14	2019 Credit agreement/Credit limit of NT$100,000,000	None
Loan	CTBC Bank Dunbei Branch	2019/06/30~ 2020/06/30	2019 Credit agreement/Credit limit of NT$200,000,000	None
Loan	International Bills Finance Corporation	2019/12/02~ 2020/12/01	2019 Credit agreement/Credit limit of NT$150,000,000	None
Commercial fire insurance	Fubon Insurance	2019/11/21~ 2020/11/21	2019 Commercial fire insurance/Total insurance amount of NT$152,372 thousand	None

VI. Corporate Social Responsibility

1. Corporate Promise

(1) Our commitment

The belief that a company's success and growth relies on harmony between the company, society, and the environment is deeply rooted in ASPEED Technology, which is committed to fulfilling its corporate social responsibility. We hope to provide customers with the most suitable SoC solutions and high quality services. We will continue to invest resources into R&D to obtain superior core technologies. In the design and R&D process, we contribute to the preservation of the Earth's ecosystem and sustainability through eco-friendly design concepts and simplified product structures. Furthermore, we seek to build good relationships with our shareholders, employees, society, customers, and suppliers, so as to find a balance between the interests of all stakeholders. This allows us to create synergistic effects among the industry's volatile competition and create a win-win situation for multiple parties. The roles of the Board of Directors, professional managers, and supervisors are clearly defined for corporate governance, which emphasizes transparent operations, and upholds the rights and interests of shareholders and employees.

ASPEED Technology actively supports disadvantaged social groups to give back to society. In recent years, ASPEED Technology became aware of the gap between urban and rural areas, as well as the lack of education resources in rural areas, and thus decided to fulfill its corporate social responsibility by contributing to classrooms in rural areas. Each year, ASPEED Technology provides resources to schools in remote mountain areas, with hopes of giving the students more abundant education resources so they have an easier time learning. We are also working together with excellent universities and use our resources to encourage students to focus on academic research. We play the role of a good corporate mentor, and hope to fulfill our corporate social responsibility by providing students with guidance as they fumble around searching for a direction in life.

(2) Nurturing talent

We believe that the younger generation is the future pillar of the nation and enterprises. ASPEED Technology participated in the World Citizen Island Program in 2011 to broaden the horizons of the youth, hoping that they will contribute to the nation and society with a broader perspective. ASPEED Technology fulfills its corporate responsibilities as a means of giving back to the society. Core & Corner Inc. builds a bridge between the youth and the world, and gives them the opportunity to learn about other cultures, so that Taiwan will not have such a big cultural gap with other countries around the world. Furthermore, ASPEED Technology began sponsoring scholarships for students at the Department of Electrical Engineering, National Tsing Hua University in 2013, and hopes to thereby encourage young students to learn more actively and develop an interest in academic research. ASPEED Technology further participated in the Explore Your Future Career –

Corporate Mentor Event of the Department of Electrical Engineering, National Tsing Hua University in 2015. We not only sponsor young students through money, but also hope to help outstanding students explore their interests through personal interactions, so that they will have a clearer picture of their future career.

Starting in 2016, ASPEED Technology became involved in education in rural areas, and actively subsidized the repair of campus buildings and provided education resources for rural areas. ASPEED Technology continued to support disadvantaged students in remote areas in 2017, and subsidized the software/hardware and education resources for students in remote areas of Taitung County and Nantou County, in hopes that all students can gain equal and sufficient resources. This year, besides subsidizing hardware repair and purchase in schools at all levels, ASPEED Technology also provided funding to the baseball team and judo team of Taitung's Beinan Junior High School, and Dragon boat team of Taitung County, hoping to let children focus on doing what they excel at without any additional worries. ASPEED Technology also provided funding to Nantou County's Vox Nativa Choir in hopes of letting the indigenous children use their gift and one day have the ability to give back to their hometown. Furthermore, ASPEED Technology also took part in an event organized by Global Views Educational Foundation: Sow the Seeds of Reading to Give Children a Great Future, and donated monthly issues to children in Taitung County, hoping to use its capabilities to gradually reduce the gap in educational resources of urban and rural areas.

(3) Employee Rights

Employees are our most cherished assets. We are dedicated to providing a safe and comfortable work environment, optimal education and training, and a comprehensive compensation and benefits package. Employee affairs are handled by dedicated personnel in accordance with the Labor Standards Act and related laws and regulations to protect employee rights. In addition to the Employee Welfare Committee established in accordance with the law, the Company makes monthly contributions to the Employee Welfare Fund, which is used to provide the various benefits, and offers internal and external employee education and training, employee stock options, and employee dividends. Furthermore, the Company makes monthly pension contributions to the personal accounts of employees at the Bureau of Labor Insurance in accordance with the Labor Pension Act. All measures relating to labor-management relations have been implemented in accordance with relevant laws and regulations, and good labor-management relations have been maintained. The Company established Safety and Health Work Guidelines to promote employee health. The guidelines set forth standards for the safety and health of employees' work environment, as well as employee education and training. Furthermore, the Company provides employees with annual health exams, so that they are clearly aware of their health condition.

Employees can directly express their opinions to their supervisor via telephone or e-mail, or they can file a complaint with their direct supervisor or the President, which will then be handled by dedicated personnel.

(4) Stakeholders

ASPEED Technology provides effective and transparent communication channels for all of its internal and external stakeholders based on its business strategy of transparency. We try our best to look into the needs of all parties and use this as an important basis for formulating our business strategy and fulfilling our corporate social responsibility.

(5) Shareholders/Investors

ASPEED Technology is a public company whose shares are traded on TPEx, and has established its own Corporate Governance Best Practice Principles, which are disclosed on the Company's website and the Market Observation Post System in accordance with regulations, with hopes of providing shareholders and investors with equal access to public information. The Company regularly discloses the list of major shareholders and the ultimate controllers of major shareholders in accordance with relevant laws and regulations, and reports any changes in accordance with regulations as well. In terms of operations, the Company interacts with all shareholders based on the principle of being fair, just, and open. Besides notifying all shareholders to attend shareholders' meetings, the Company encourages shareholders to actively participate in directors and supervisors elections, and provides ample opportunity for shareholders to speak. Furthermore, to protect shareholders' rights to know the Company's material information and to participate in decisions, the Company discloses information in accordance with the law, and provides information on its operations, such as quarterly financial statements and investor conferences, on the Investor Relations section of its website for access by shareholders and the general public.

The Company has a spokesperson and acting spokesperson to quickly handle shareholders' suggestions or questions, and an Investors Relations section is available on the Company's website to handle shareholders' suggestions or disputes.

(6) Customers/Suppliers/Banks

The Company maintains open and smooth channels of communication with banks, customers, suppliers and other stakeholders, and respects and protects their lawful rights and interests.

The Company provides sufficient information to its partner banks to help them make the best judgment and decisions regarding the Company's operations and finances. Furthermore, all of the Company's latest financial information can be accessed on the Market Observation Post System or the Investor Relations section of the Company's website.

The Company has a dedicated unit that is responsible for collecting, handling, and responding to customer complaints, and also has dedicated personnel for responding to customers' questions regarding the Company's products. The Company also established regulations for the management of customer complaints, so that customer's questions can be resolved within the shortest time possible. The Contact Us section on the Company's website also has a product related area that can be used for contact to resolve customers' questions.

The Company has dedicated personnel for dealing with suppliers, and has maintained good long-term relationships with them. When selecting suppliers, we assess whether or not they have previous records of negatively affecting the environment or society, and suppliers with ISO 14001 and OHSAS 18001 certifications are selected. When the Company discovers that a supplier breaches its corporate social responsibility policy or impacts the environment and society, the Company considers suspending its business dealings with the supplier. Suppliers can contact the Company through the dedicated personnel whenever they have any questions or complaints.

2. Social Participation

ASPEED Technology not only focuses on business, but also strives to become an exemplary corporate citizen and fulfill its corporate social responsibility. We began working with Hsinchu Center for Children and Families in the Book Rotation Project in 2013. The project provides a large amount of books that are rotated between schools in rural areas, so that they can satisfy children's interest in reading and also help students develop good reading habits. We used the theme "Books for Children and Families" in 2015 to encourage reading and friendly interactions. We believe that reducing the gap between urban and rural areas should start from education. Besides purchasing over 600 new books and donating them to Hsinchu Center for Children and Families as extracurricular reading materials for children in rural areas, we also sponsored the school work guidance provided by Boyo Social Welfare Foundation to children in disadvantaged families. We hope that children in rural areas will have access to sufficient resources and develop good reading habits. Starting in 2016, we allocated budget for renewing the facilities of old campus buildings, and providing learning resources, instruments and equipment of middle and elementary schools in Taitung County. In 2018, we further sponsored sports events for children in Taitung County, and Vox Nativa Choir in Nantou County, so that children can walk the first mile in the future more easily. From 2011 to 2019, the total donation amount is NT$ 7,697 thousand.

3. Environmental Efforts

(1) Sustainable environment

ASPEED Technology is a professional IC design company that hopes to reduce environmental pollution from production and R&D activities through eco-friendly design concepts and simplified product structures. The Company establishes operating standards based on industry characteristics, and strictly abides by these. Units related to product quality assurance are responsible for promoting and executing environmental protection, security, and health operations. With regard to energy conservation, carbon reduction and greenhouse gas emissions reduction strategies, the Company incorporates water and energy conservation measures in daily operations to reduce damage to the ecosystem. When selecting suppliers, whether or not the suppliers have previous records of negatively impacting the environment or society is assessed, and suppliers with ISO 14001 and OHSAS 18001 certifications are given priority.

(2) Conflict Minerals Policy Statement

ASPEED Technology understands, fully supports and cooperates with the Conflict-Free Sourcing Initiative jointly implemented by the Electronic Industry Citizenship Coalition (EICC) and Global e-Sustainability Initiative (GeSI), and conducts a thorough investigation into its supply chain and the minerals it uses that are mined in the Democratic Republic of the Congo or nearby countries (hereinafter referred to as "conflict minerals"). Conflict minerals include Tin (Sn), Gold (Au), Tantalum (Ta), and Tungsten (W). ASPEED Technology ensures that the sources of conflict minerals used in its supply chain were not obtained from armed groups in conflict mineral zones (non-governmental organizations or illegal organizations) by violating human rights, smuggling or other illegal channels.

The Company does not support the use of conflict minerals from illegal sources to fulfill its corporate social responsibility, and hopes that suppliers will use qualified smelters or require their smelters to obtain certification. If suppliers' products and raw materials contain conflict minerals from non-conforming sources, the Company will take necessary measures and stop the use of such conflict minerals.

The Company therefore established its Conflict Mineral Policy and abides by the following commitment:

ASPEED Technology will do everything in its power to thoroughly investigate information regarding its conflict minerals. It is the Company's policy to avoid purchasing products or raw materials that contain conflict minerals according to its conflict mineral investigation report. The Company expects and requires its suppliers to purchase conflict minerals from supply chains of non-conflict minerals and qualified suppliers. The Company uses the CFSI investigation form provided by the EICC and GeSI when investigating the source of conflict minerals, so as to implement its conflict mineral free procurement plan and strategy, and then provides information on its conflict minerals in a transparent and open way to direct customers.

(3) EICC Code of Conduct

ASPEED Technology not only requires itself, but also all of its suppliers to comply with the EICC Code of Conduct. ASPEED Technology makes sure that the working environment is safe, employees are respected and have dignity, and its business operations are eco-friendly and comply with ethical conduct.

The EICC Code of Conduct complies with international essential standards for human rights such as the UN Guiding Principles on Business and Human Rights, the International Labour Organization's Declaration of Fundamental Principles and Rights at Work, and UN Universal Declaration of Human Rights. It is a social, environmental, and ethical code of conduct relevant to the supply chain of the electronics industry.

VII. Financial Information

1. Financial Status

(1) Condensed Balance Sheet

a. Condensed Balance Sheet－IFRS (Consolidated)

Unit: NT$1,000

Account Title \ Year		Financial Information for the last five years				
		2014	2016	2017	2018	2019 (Note 2)
Current assets		Note 1	1,566,303	1,599,460	1,819,316	2,316,234
Investment accounted for under equity method			－	－	－	－
Property, plant, and equipment			27,638	53,213	84,841	123,198
Investment property			－	－	－	－
Right-of-use assets			－	－	－	110,675
Intangible assets			1,019,948	938,585	841,843	811,085
Other assets			7,338	72,105	86,675	57,702
Total assets			2,621,227	2,663,363	2,832,675	3,418,894
Current liabilities	before distribution		634,283	510,660	424,282	636,265
	after distribution		1,040,364	1,020,267	1,037,333	1,389,211
Non-current liabilities			85,779	74,756	79,453	149,243
Total liabilities	before distribution		720,062	585,416	503,735	785,508
	after distribution		1,126,143	1,095,023	1,116,786	1,538,454
Equity attributable to owners of the parent			1,901,165	2,077,947	2,328,940	2,633,386
Capital			338,401	339,378	340,656	341,848
Capital surplus			912,860	960,462	1,056,831	1,145,044
Retained earnings	before distribution		662,990	788,275	962,953	1,181,087
	after distribution		256,909	278,668	349,902	428,141
Other equity			(13,086)	(10,168)	(31,500)	(34,593)
Treasury shares			－	－	－	－
Non-controlling interests			－	－	－	－
Total equity	before distribution		1,901,165	2,077,947	2,328,940	2,633,386
	after distribution		1,495,084	1,568,340	1,715,889	1,880,440

Note 1: The Company did not prepare consolidated financial statements between 2015.

Note 2: The 2019 earnings distribution proposal was approved in the Board meeting on March 2, 2020.

b. Condensed Balance Sheet —IFRS (Parent Company Only)

Unit: NT$1,000

Account Title		Financial Information for the last five years				
		2014	2016	2017	2018	2019 (Note)
Current assets		1,139,476	1,523,715	1,570,138	1,788,817	2,279,842
Investment accounted for under equity method		—	44,685	19,085	38,055	42,372
Property, plant, and equipment		44,766	26,580	52,442	84,277	122,691
Investment property		—	—	—	—	—
Right-of-use assets		—	—	—	—	98,690
Intangible assets		19,269	1,019,948	938,585	832,937	804,275
Other assets		3,517	5,440	65,807	81,100	51,102
Total assets		1,207,028	2,620,368	2,646,057	2,825,186	3,398,972
Current liabilities	before distribution	151,788	633,424	494,143	418,402	625,420
	after distribution	405,164	1,039,505	1,003,750	1,031,453	1,378,366
Non-current liabilities		—	85,779	73,967	77,844	140,166
Total liabilities	before distribution	151,788	719,203	568,110	496,246	765,586
	after distribution	405,164	1,125,284	1,077,717	1,109,297	1,518,532
Equity attributable to owners of the parent		1,055,240	1,901,165	2,077,947	2,328,940	2,633,386
Capital		316,721	338,401	339,378	340,656	341,848
Capital surplus		277,116	912,860	960,462	1,056,831	1,145,044
Retained earnings	before distribution	470,447	662,990	788,275	962,953	1,181,087
	after distribution	217,071	256,909	278,668	349,902	428,141
Other equity		(9,044)	(13,086)	(10,168)	(31,500)	(34,593)
Treasury shares		—	—	—	—	—
Non-controlling interests		—	—	—	—	—
Total equity	before distribution	1,055,240	1,901,165	2,077,947	2,328,940	2,633,386
	after distribution	801,864	1,495,084	1,568,340	1,715,889	1,880,440

Note: The 2019 earnings distribution proposal was approved in the Board meeting on March 2, 2020.

(2) Condensed Statement of Comprehensive Income

a. Condensed Statement of Comprehensive Income－IFRS(Consolidated)

Unit: NT$1,000

Account Title \ Year	Financial information over the last five years				
	2014	2016	2017	2018	2019
Operating revenues	Note	1,345,678	1,894,194	2,153,519	2,484,295
Gross profit		767,107	1,096,841	1,289,831	1,571,047
Operating Gain (loss)		534,782	647,571	799,888	1,008,389
Non-operating income and expenses		8,946	(18,478)	54,142	2,178
Income before income tax		543,728	629,093	854,030	1,010,567
Earnings from continuing operations		445,919	531,366	685,922	831,185
Profit or loss of discontinued operations		—	—	—	—
Net income		445,919	531,366	685,922	831,185
Other comprehensive income		3,676	(6,153)	(152)	(1,097)
Total comprehensive income		449,595	525,213	685,770	830,088
Net income attributable to owners of the Company		445,919	531,366	685,922	831,185
Net income attributable to non-controlling interest		—	—	—	—
Total comprehensive income attributable to owners of the Company		449,595	525,213	685,770	830,088
Total comprehensive income attributable to non-controlling interest		—	—	—	—
EPS		14.07	15.70	20.20	24.39

Note: The Company did not prepare consolidated financial statements between 2015.

b. Condensed Statement of Comprehensive Income－IFRS
(Parent Company only)

Unit: NT$1,000

Account Title \ Year	Financial information over the last five years				
	2014	2016	2017	2018	2019
Operating revenues	992,560	1,345,678	1,894,194	2,153,519	2,484,295
Gross profit	554,558	767,107	1,096,841	1,289,831	1,571,047
Operating Gain (loss)	368,076	540,153	666,656	794,819	1,002,748
Non-operating income and expenses	21,089	3,575	(41,819)	58,208	7,768
Income before income tax	389,165	543,728	624,837	853,027	1,010,516
Earnings from continuing operations	339,908	445,919	531,366	685,922	831,185
Profit or loss of discontinued operations	—	—	—	—	—
Net income	339,908	445,919	531,366	685,922	831,185
Other comprehensive income	(133)	3,676	(6,153)	(152)	(1,097)
Total comprehensive income	339,775	449,595	525,213	685,770	830,088
Net income attributable to owners of the Company	339,908	445,919	531,366	685,922	831,185
Net income attributable to non-controlling interest	—	—	—	—	—
Total comprehensive income attributable to owners of the Company	339,775	449,595	525,213	685,770	830,088
Total comprehensive income attributable to non-controlling interest	—	—	—	—	—
EPS	10.79	14.07	15.70	20.20	24.39

Note: The financial statements were prepared under IFRS and audited.

(3) Information on CPAs and Auditors' Opinions

a. Information on CPAs and Auditors' Opinion

Year	Name of auditors (CPA)	CPA firm	Auditors' opinion
2015	Ming-Hui Chen and Su-Li Fang	Deloitte & Touche	Unqualified opinion
2016	Ming-Hui Chen and Su-Li Fang	Deloitte & Touche	Unqualified opinion
2017	Ming-Hui Chen and I-Hsin Kao	Deloitte & Touche	Unqualified opinion
2018	Ming-Hui Chen and I-Hsin Kao	Deloitte & Touche	Unqualified opinion
2019	Ming-Hui Chen and I-Hsin Kao	Deloitte & Touche	Unqualified opinion

b. Reason for replacement of accountants in the most recent five years:
Due to internal adjustments of the accounting firm.

2. Five-Year Financial Analysis

(1) Financial analysis

a. Five-Year Financial Analysis－IFRS (Consolidated)

Analysis item / Year		Financial information from 2015 to 2019				
		2015	2016	2017	2018	2019
Capital Structure (%)	Debt ratio	Note 1	27.47	21.98	17.78	22.97
	Long-term capital to Property , plant, and equipment ratio		7,189.17	4,045.44	2,838.71	2,258.66
Ability to repay debts	Current ratio %		246.94	313.21	428.79	364.03
	Quick ratio %		233.16	294.25	393.73	349.05
	Times Interest Earned(Times)		410.43	254.25	1,182.23	543.15
Operation ability	A/R turnover (times)		5.50	5.81	5.63	4.82
	A/R collection days		66.36	62.82	64.83	75.72
	Inventory turnover (times)		9.34	9.30	7.53	8.26
	A/P turnover (times)		16.20	13.96	13.22	8.73
	Inventory turnover days		39.07	39.24	48.47	44.18
	Property , plant, and equipment ratio turnover rate (times)		37.17	46.85	31.19	23.88
	Total assets turnover rate (times)		0.70	0.71	0.78	0.79
Profitability	Return on assets (%)		23.35	20.18	24.98	26.63
	Return on equity attributable to shareholders of the parent (%)		30.16	26.70	31.13	33.50
	EBIT proportion to paid-in capital (%)		160.67	185.36	250.70	295.61
	Net profit margin (%)		33.13	28.05	31.85	33.45
	Basic earnings per share (NT$)		14.07	15.70	20.20	24.39
Cash flow	Cash flow ratio (%)		70.25	160.64	183.62	157.36
	Cash flow adequacy ratio (%)		144.62	157.12	143.78	140.82
	Cash reinvestment ratio (%)		19.07	34.52	17.20	20.67
Leverage	Operation leverage		2.52	2.93	2.69	2.46
	Financial leverage		1	1	1	1

Changes in financial ratios that exceed 20% in the past two years:

1. Increase in Debt ratio: Due to the recognition of a Lease liabilities due to the application of IFRS16 beginning in 2019.
2. Decrease in long-term fund to property, factories and equipment ratio: Due to the purchase of fixed assets for operating requirements this year.
3. Decrease in times interest earned: Mainly due to increased interest expenses.
4. Decrease in A/P turnover: Due to increased trade payables.
5. Decrease in property, factories and equipment turnover ratio: Due to the purchase of fixed assets for operating requirements this year.

6. Increase EPS: Due to increased revenue. 7. Increase in cash reinvestment ratio: Due to the increase in net cash inflow from operating activities this year.

Note 1:The Company did not prepare consolidated financial statements between 2015-2019.

Note 2:The financial statements for each year above were certified by the accountant.

Note 3:The formula for financial analysis is as follows:

1. Capital structure
   (1) Debt-ratio = Total liabilities / Total assets.
   (2) Long-term capital to Property , plant, and equipment ratio= (Shareholders' equity + longterm liabilities)/ net fixed assets
2. Ability to repay debts
   (1) Current ratio = current assets / current liabilities.
   (2) Quick ratio = (current assets - inventory - prepaidments) / current liabilities.
   (3) Times interest earned (times) = EBIT/interest expense for the current period
3. Operating ability
   (1) A/R (including account receivable and business notes receivable) turnover times= net sales / average balance of receivables (including account receivable and business notes receivable)
   (2) Average A/R turnover days = 365 / A/R turnover times
   (3) Inventory turnover = cost of goods sold/ average inventory balance
   (4) A/P turnover (including account payable and business notes payable) = cost of goods sold/average balance of payables (including account payable and business notes payable)
   (5) Inventory turnover days = 365/ inventory turnover times
   (6) Property , plant, and equipment ratio turnover = net sales/ net fixed assets
   (7) Total assets turnover = net sales/ total assets
4. Profitability
   (1) Return on assets = [Earnings + interest expenses x (1 – tax rate)]/average total assets
   (2) Return on shareholders' equity = Earnings/ net average shareholders' equity
   (3) Net profit margin= Earnings /net sales
   (4) Earning per share = (earning –preferred stock dividend)/weighed average outstanding shares
5. Cash flows
   (1) Cash ratio = net cash flow from operation/ current liabilities
   (2) Cash flow adequacy ratio = net cash flow from operation over the last five years/ (capital spending + increase in inventory+ cash dividend) in the last five years
   (3) Cash reinvestment ratio = (net cash flow from operation – cash dividend)/ (gross fixed assets + long-term investment+ other assets + working capital)
6. Leverage:
   (1) Operating leverage = (net income from operation – variable operating cost and expenses)/ income from operation
   (2) Financial leverage = income from operation/ (income from operation – interest expenses)

b. Five-Year Financial analysis－IFRS (Parent Company only)

Analysis item / Year		Financial information from 2015 to 2019				
		2015	2016	2017	2018	2019
Capital Structure (%)	Debt ratio	12.58	27.45	21.47	17.56	22.52
	Long-term capital to Property , plant, and equipment ratio	2,357.22	7,475.34	4,103.41	2,855.80	2,260.59
Ability to repay debts	Current ratio %	750.70	240.55	317.75	427.53	364.52
	Quick ratio %	720.10	226.85	298.31	392.23	349.38
	Times Interest Earned(Times)	587.73	410.43	252.54	1180.84	562.70
Operation ability	A/R turnover (times)	5.30	5.50	5.81	5.63	4.82
	A/R collection days	68.82	66.33	62.82	64.83	75.72
	Inventory turnover (times)	9.85	9.34	9.30	7.53	8.26
	A/P turnover (times)	12.79	16.20	13.96	13.22	8.73
	Inventory turnover days	37.05	39.07	39.24	48.47	44.18
	Property , plant, and equipment ratio turnover rate (times)	34.66	37.72	47.94	31.50	24.00
	Total assets turnover rate (times)	0.88	0.70	0.71	0.78	0.79
Profitability	Return on assets (%)	30.27	23.36	20.25	25.09	26.75
	Return on equity attributable to shareholders of the parent (%)	35.48	30.17	26.70	31.13	33.49
	EBIT proportion to paid-in capital (%)	122.87	160.68	184.11	250.40	293.33
	Net profit margin (%)	34.24	33.14	28.05	31.85	33.45
	Basic earnings per share (NT$)	10.79	14.07	15.70	20.20	24.39
Cash flow	Cash flow ratio (%)	262.77	71.15	169.19	187.69	158.42
	Cash flow adequacy ratio (%)	146.72	145.28	158.80	146.13	142.20
	Cash reinvestment ratio (%)	20.26	20.48	35.73	17.48	20.42
Leverage	Operation leverage	2.70	2.49	2.84	2.71	2.47
	Financial leverage	1	1	1	1	1

Changes in financial ratios that exceed 20% in the past two years:

1. Increase in Debt ratio: Due to the recognition of a Lease liabilities due to the application of IFRS16 beginning in 2019.
2. Decrease in long-term fund to property, factories and equipment ratio: Due to the purchase of fixed assets for operating requirements this year.
3. Decrease in times interest earned: Mainly due to increased interest expenses.
4. Decrease in A/P turnover: Due to increased trade payables.
5. Decrease in property, factories and equipment turnover ratio: Due to the purchase of fixed assets for operating requirements this year.
6. Increase EPS: Due to increased revenue.

Note 1:The financial statements for each year above were certified by the accountant.

Note 2:The formula for financial analysis is as follows:

1. Capital structure
   (1) Debt-ratio = Total liabilities / Total assets.
   (2) Long-term capital to Property , plant, and equipment ratio= (Shareholders' equity + longterm liabilities)/ net fixed assets
2. Ability to repay debts
   (1) Current ratio = current assets / current liabilities.
   (2) Quick ratio = (current assets - inventory - prepaidments) / current liabilities.
   (3) Times interest earned (times) = EBIT/interest expense for the current period
3. Operating ability
   (1) A/R (including account receivable and business notes receivable) turnover times= net sales / average balance of receivables (including account receivable and business notes receivable)
   (2) Average A/R turnover days = 365 / A/R turnover times
   (3) Inventory turnover = cost of goods sold/ average inventory balance
   (4) A/P turnover (including account payable and business notes payable) = cost of goods sold/average balance of payables (including account payable and business notes payable)
   (5) Inventory turnover days = 365/ inventory turnover times
   (6) Property , plant, and equipment ratio turnover = net sales/ net fixed assets
   (7) Total assets turnover = net sales/ total assets
4. Profitability
   (1) Return on assets = [Earnings + interest expenses x (1 – tax rate)]/average total assets
   (2) Return on shareholders' equity = Earnings/ net average shareholders' equity
   (3) Net profit margin= Earnings /net sales
   (4) Earning per share = (earning –preferred stock dividend)/weighed average outstanding shares
5. Cash flows
   (1) Cash ratio = net cash flow from operation/ current liabilities
   (2) Cash flow adequacy ratio = net cash flow from operation over the last five years/ (capital spending + increase in inventory+ cash dividend) in the last five years
   (3) Cash reinvestment ratio = (net cash flow from operation – cash dividend)/ (gross fixed assets + long-term investment+ other assets + working capital)
6. Leverage:
   (1) Operating leverage = (net income from operation – variable operating cost and expenses)/ income from operation
   (2) Financial leverage = income from operation/ (income from operation – interest expenses)

3. Audit Committee’s Review Report

ASPEED Technology Inc.

Audit Committee’s Review Report

The Board of Directors has prepared the Company's 2019 Business Report, Financial Statements, and proposal for allocation of earnings. The CPA firm of Deloitte & Touche was retained to audit ASPEED's Financial Statements and has issued an audit report relating to the Financial Statements. The Business Report, Financial Statements, and earnings allocation proposal have been reviewed and determined to be correct and accurate by the Audit Committee members of ASPEED Technology Inc. According to relevant requirements of the Securities and Exchange Act and the Company Law,we hereby submit this report.

ASPEED Technology Inc.

Chairman of the Aduit Committe: Chyan Yang

Deloitte.

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INDEPENDENT AUDITORS' REPORT

The Board of Directors and the Shareholders
ASPEED Technology Inc.

Opinion

We have audited the accompanying consolidated financial statements of ASPEED Technology Inc. and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated balance sheets as of December 31, 2019 and 2018, 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 (collectively referred to as the "consolidated financial statements").

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, 2019 and 2018, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with the Regulations Governing the 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, 2019. 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 Group's consolidated financial statements for the year ended December 31, 2019 are stated as follows:

Recognition of revenue

The Group operates principally as a supplier of multimedia integrated circuits (ICs) and computer peripherals oriented ICs. For the year ended December 31, 2019, the Group recognized revenue of NT$2,484,295 thousand, which increased by 15% compared with that of last year, refer to Note 22 for related information. Due to the increasing market demand for remote server management system, the significant changes in the amount of the Group's operating revenue in recent years have a significant impact on the consolidated financial statements for the year ended December 31, 2019. For customers whose sales growth rates were significant, we considered that testing the existence and occurrence of sales is a key audit matter of the current period.

Our audit procedures performed included, but not limited to the following: We evaluated the appropriateness of the Company's accounting policies relating to revenue recognition. We understood the internal controls over the approval of sales order and shipping. We tested the effectiveness of those internal controls and sampled the sales documents to inspect sales details, including cash collections in the audited period and the subsequent period. Moreover, we verified if any deviant occurred in those parties when the sales were recorded and cash was received.

Goodwill impairment test

To create synergy that benefits the Group's existing products in response to the global growth of server remote management system, ASPEED Technology Inc. acquired Emulex Corporation's Pilot Business, which was under Broadcom Group, at the price of NT$926,937 thousand (or US$28,658 thousand), and ASPEED technology Inc. also recognized intangible assets including client relationship, know-how, licenses, trademark, and goodwill. As of December 31, 2019, goodwill was NT$369,040 thousand, accounting for 11% of the total assets, and it was significant to the consolidated financial statements. According to IAS 36, the goodwill impairment assessment test should be conducted annually. When assessing whether goodwill is impaired or not, the management needs to assess whether the recoverable amount calculated according to the value-of-use model is still higher than the book value of goodwill. In assessing the foregoing, it is necessary to estimate the operating cash flow that may arise in the future and determine the appropriate discount rate to calculate the recoverable amount.

The management engaged an external appraiser to issue a goodwill impairment assessment report. When determining the future operating cash flow, the management will consider the sales growth rate and profit rate based on the future operating outlook, and calculate the weighted average cost of capital as the discount rate. Since these key assumptions involve subjective judgments of management and may be affected by future market or economy, there is a high degree of uncertainty over the estimates. Therefore, the goodwill impairment assessment is one of the key audit matters for the year.

Refer to Note 4 (i), Note 5 and Note 14 to the consolidated financial statements for the information on the accounting policies, accounting estimates and assumptions of the impairment assessments.

We performed the following major auditing procedures (but not limited to the following) to assess the significant estimates and the reasonableness of assumptions used in the estimated future operating cash flows and weighted average cost of capital ratios when the Group estimates the impairment of goodwill:

1. We understood the process and basis for the management's estimated sales growth rate and profit margin for the future operating outlook.

2. We examined whether the estimates of the future operating cash flows are consistent with the future operating plans approved by the board of directors or not. The future sales growth rates and profit margins adopted, whether to consider the recent operating results, historical trends and industry profiles, etc., were updated as appropriate.

3. We adopted the financial advisors of the firm to assist in assessing the recoverable amount calculated by the management based on the value-of-use model, using the weighted average cost of capital, including the risk-free rate, volatility and risk premium assumptions, whether or not to comply with the industry situation, re-calculated and checked.

Other Matter

We have also audited the parent company only financial statements of ASPEED Technology Inc. as of and for the years ended December 31, 2019 and 2018 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 the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements for the year ended December 31, 2019 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 Ming Hui Chen and Yi Shin Kao.

Deloitte & Touche
Taipei, Taiwan
Republic of China

March 2, 2020

<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.

ASPEED TECHNOLOGY INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars)

ASSETS	2019 Amount	2019 %	2018 Amount	2018 %
CURRENT ASSETS				
Cash and cash equivalents (Note 6)	$ 1,421,959	42	$ 1,093,346	38
Financial assets at fair value through profit or loss - current (Note 7)	162,941	5	89,030	3
Financial assets at amortized cost - current (Note 8)	-	-	80,000	3
Trade receivable, net (Note 9)	627,829	18	398,741	14
Receivables from related parties, net (Notes 9 and 30)	1,018	-	2,249	-
Inventories (Note 10)	82,078	2	138,841	5
Prepayments and other current assets (Note 16)	20,409	1	17,109	1
Total current assets	2,316,234	68	1,819,316	64
NON-CURRENT ASSETS				
Property, plant and equipment (Note 12)	123,198	4	84,841	3
Right-of-use assets (Notes 3 and 13)	110,675	3	-	-
Goodwill (Notes 5 and 14)	369,040	11	369,040	13
Other Intangible assets, net (Note 15)	442,045	13	472,803	17
Deferred tax assets (Note 24)	42,919	1	35,700	1
Refundable deposits (Note 16)	11,938	-	7,232	-
Other non-current assets (Note 16)	2,845	-	43,743	2
Total non-current assets	1,102,660	32	1,013,359	36
TOTAL	$ 3,418,894	100	$ 2,832,675	100

LIABILITIES AND EQUITY	2019 Amount	2019 %	2018 Amount	2018 %
CURRENT LIABILITIES				
Trade payables (Note 17)	$ 140,791	4	$ 35,497	1
Payables to related parties (Note 30)	14,990	1	17,915	1
Accrued employees' compensation and remuneration of directors (Note 23)	103,501	3	84,365	3
Other payables (Note 18)	43,397	1	42,177	1
Current tax liabilities (Note 24)	141,092	4	113,794	4
Provisions - current (Note 19)	26,571	1	21,670	1
Lease liabilities - current (Notes 3 and 13)	23,886	1	-	-
Other current liabilities (Note 18)	142,037	4	108,864	4
Total current liabilities	636,265	19	424,282	15
NON-CURRENT LIABILITIES				
Deferred tax liabilities (Note 24)	62,135	2	77,844	3
Lease liabilities - non-current (Notes 3 and 13)	86,090	2	-	-
Other non-current liabilities (Note 18)	108	-	1,609	-
Provisions - non-current (Note 19)	910	-	-	-
Total liabilities	785,508	23	503,735	18
SHAREHOLDERS' EQUITY (Note 21)				
Capital				
Capital stock	341,848	10	340,656	12
Capital surplus	1,145,044	33	1,056,831	37
Retained earnings				
Legal reserve	286,740	9	218,148	8
Special reserve	31,499	1	10,166	-
Unappropriated earnings	862,848	25	734,639	26
Total retained earnings	1,181,087	35	962,953	34
Other equity	(34,593)	(1)	(31,500)	(1)
Total equity	2,633,386	77	2,328,940	82
TOTAL	$ 3,418,894	100	$ 2,832,675	100

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

ASPEED TECHNOLOGY INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2019		2018	
	Amount	%	Amount	%
OPERATING REVENUE (Notes 22, 30 and 34)				
Sale	$ 2,483,373	100	$ 2,152,754	100
Other operating revenue	922	-	765	-
Total operating revenue	2,484,295	100	2,153,519	100
OPERATING COSTS (Notes 10, 23 and 30)	913,248	37	863,688	40
GROSS PROFIT	1,571,047	63	1,289,831	60
OPERATING EXPENSES (Note 23)				
Selling and marketing expenses	62,227	3	67,817	3
General and administrative expenses	117,580	5	95,143	5
Research and development expenses	382,851	15	326,983	15
Total operating expenses	562,658	23	489,943	23
INCOME FROM OPERATIONS	1,008,389	40	799,888	37
NON-OPERATING INCOME AND EXPENSES				
Other income (Note 23)	16,950	1	34,589	2
Other gains and losses (Note 23)	(12,908)	(1)	20,276	1
Finance costs (Note 23)	(1,864)	-	(723)	-
Total non-operating income and expenses, net	2,178	-	54,142	3
INCOME BEFORE INCOME TAX FROM CONTINUING OPERATIONS	1,010,567	40	854,030	40
INCOME TAX EXPENSE (Note 24)	179,382	7	168,108	8
NET INCOME FOR THE YEAR	831,185	33	685,922	32
OTHER COMPREHENSIVE INCOME (LOSS)				
Items that may be reclassified subsequently to profit or loss:				
Exchange differences on translating financial statements of foreign operations	(1,097)	-	(152)	-
Total other comprehensive income (loss)	(1,097)	-	(152)	-
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	$ 830,088	33	$ 685,770	32

(Continued)

ASPEED TECHNOLOGY INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2019		2018	
	Amount	**%**	**Amount**	**%**
NET INCOME ATTRIBUTABLE TO:				
Owners of the Company	$ 831,185	33	$ 685,922	32
TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO:				
Owners of the Company	$ 830,088	33	$ 685,770	32
EARNINGS PER SHARE (Note 25)				
Basic	$ 24.39		$ 20.20	
Diluted	$ 24.28		$ 20.10	

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

ASPEED TECHNOLOGY INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars, Except For Share Data)

	Capital Stock - Common Stock			Retained Earnings			Other Equity			
	Shares (In Thousands)	Amount	Capital Surplus	Legal Reserve	Special Reserve	Unappropriated Earnings (Accumulated Deficit)	Employee Unearned Compensation	Exchange Differences on Translating Foreign Operations	Unrealized Gain (Loss) from Available-for-sale Financial Assets	Total Equity
BALANCE AT JANUARY 1, 2018	33,937	$ 339,378	$ 960,462	$ 165,011	$ 13,085	$ 610,179	$ (7,558)	$ (973)	$ (1,637)	$ 2,077,947
Effect of retrospective application	-	-	-	-	-	(1,637)	-	-	1,637	-
BALANCE AT JANUARY 1, 2018 AS RESTATED	33,937	339,378	960,462	165,011	13,085	608,542	(7,558)	(973)	-	2,077,947
Appropriations of prior year's earnings										
Legal reserve	-	-	-	53,137	-	(53,137)	-	-	-	-
Special reserve	-	-	-	-	(2,919)	2,919	-	-	-	-
Cash dividends to shareholders - NT$15.00 per share	-	-	-	-	-	(509,607)	-	-	-	(509,607)
Net income for the year ended December 31, 2018	-	-	-	-	-	685,922	-	-	-	685,922
Other comprehensive income (loss) after tax	-	-	-	-	-	-	-	(152)	-	(152)
Comprehensive income (loss) for the year ended December 31, 2018	-	-	-	-	-	685,922	-	(152)	-	685,770
Employee stock bonus - Record date: August 7, 2018	71	708	60,198	-	-	-	-	-	-	60,906
Issuance of restricted stock under employees share options on February 5 and November 12, 2018	57	570	36,171	-	-	-	(36,741)	-	-	-
Compensation cost of restricted shares for employees	-	-	-	-	-	-	13,924	-	-	13,924
BALANCE AT DECEMBER 31, 2018	34,065	340,656	1,056,831	218,148	10,166	734,639	(30,375)	(1,125)	-	2,328,940
Appropriations of prior year's earnings										
Legal reserve	-	-	-	68,592	-	(68,592)	-	-	-	-
Special reserve	-	-	-	-	21,333	(21,333)	-	-	-	-
Cash dividends to shareholders - NT$18.00 per share	-	-	-	-	-	(613,051)	-	-	-	(613,051)
Net income for the year ended December 31, 2019	-	-	-	-	-	831,185	-	-	-	831,185
Other comprehensive income (loss) after tax	-	-	-	-	-	-	-	(1,097)	-	(1,097)
Comprehensive income (loss) for the year ended December 31, 2019	-	-	-	-	-	831,185	-	(1,097)	-	830,088
Employee stock bonus - Record date: August 2, 2019	103	1,034	73,957	-	-	-	-	-	-	74,991
Issuance of restricted stock under employees share options on September 10, 2019	28	280	21,867	-	-	-	(22,147)	-	-	-
Cancellation of restricted stock under employees share options on March 11, 2019 and August 5, 2019	(12)	(122)	(7,611)	-	-	-	7,733	-	-	-
Compensation cost of restricted shares for employees	-	-	-	-	-	-	12,418	-	-	12,418
BALANCE AT DECEMBER 31, 2019	34,184	$ 341,848	$ 1,145,044	$ 286,740	$ 31,499	$ 862,848	$ (32,371)	$ (2,222)	$ -	$ 2,633,386

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

ASPEED TECHNOLOGY INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars)

	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES		
Income before income tax	$ 1,010,567	$ 854,030
Adjustments for:		
Depreciation expense	48,879	30,964
Amortization expense	105,393	107,218
Net gain on fair value changes of financial assets designated as at fair value through profit or loss	(2,692)	(1,640)
Finance costs	1,864	723
Interest income	(14,296)	(13,676)
Compensation cost of employee restricted shares	12,418	13,924
Loss on disposal of Property, plant and equipment	1,643	-
(Gain) loss on disposal of financial assets	(6,282)	8,075
(Reversal of) write-down of inventories	(1,928)	5,329
Net gain on foreign currency exchange	(37,877)	(25,186)
Recognition of provisions	4,901	4,688
Changes in operating assets and liabilities:		
Trade receivables (include related parties)	(239,469)	(35,899)
Inventories	58,691	(53,664)
Other current assets	(3,384)	1,748
Trade payables (include related parties)	104,906	(24,191)
Other payables	7,147	(11,900)
Provisions	-	(3,674)
Other current liabilities	35,176	(4,301)
Payables for employees' compensation and remuneration of directors	94,127	77,439
Other non-current liabilities	(1,501)	820
Cash generated from operations	1,178,283	930,827
Interest paid	(1,864)	(751)
Income taxes paid	(175,142)	(150,972)
Net cash generated from operating activities	1,001,277	779,104
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchase of financial assets at amortized cost	-	(80,000)
Proceeds from of financial assets at amortized cost	80,000	-
Purchase of financial assets at fair value through profit or loss	(180,112)	(89,894)
Proceeds from sale of financial assets at fair value through profit or loss	115,175	271,960
Payments for Property, plant and equipment	(81,619)	(75,413)
Increase in refundable deposits	(4,706)	(1,347)
Payments for intangible assets	(36,697)	(46,105)
Increase in prepayments for equipment	(2,845)	-
Interest received	14,227	13,654
Net cash used in investing activities	(96,577)	(7,145)

(Continued)

ASPEED TECHNOLOGY INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars)

	2019	2018
CASH FLOWS FROM FINANCING ACTIVITIES		
Repayments of short-term borrowings	$ -	$ (50,000)
Repayments of the principal portion of lease liabilities	(7,042)	-
Cash dividends	(613,051)	(509,607)
Net cash used in financing activities	(620,093)	(559,607)
EFFECT OF EXCHANGE RATE CHANGES ON THE BALANCE OF CASH AND CASH EQUIVALENTS HELD IN FOREIGN CURRENCIES	44,006	27,058
NET INCREASE IN CASH AND CASH EQUIVALENTS	328,613	239,410
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	1,093,346	853,936
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	$ 1,421,959	$ 1,093,346

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

ASPEED TECHNOLOGY INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

1. GENERAL INFORMATION

ASPEED Technology Inc. (the "Company") has been approved by the Ministry of Economic Affairs for establishment on November 15, 2004. The Company is mainly engaged in the manufacturing of electronic products, wholesale of information software, retail and service industry, international trade, intellectual property, product design, and other industrial and commercial service. The Company's shares have been traded on the Taipei Exchange since April 30, 2013.

The financial statements are presented in the Company's functional currency, the New Taiwan dollar.

2. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements were approved by the Company's board of directors on March 2, 2020.

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

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

   Except for the following, 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 did not have material impact on the accounting policies of the Company and its subsidiaries (collectively referred to as the "Group"):

   1) IFRS 16 "Leases"

      IFRS 16 provides a comprehensive model for the identification of lease arrangements and their treatment in the financial statements of both lessee and lessor. It supersedes IAS 17 "Leases", IFRIC 4 "Determining whether an Arrangement contains a Lease", and a number of related interpretations. Refer to Note 4 for information relating to the relevant accounting policies.

      <u>Definition of a lease</u>

      The Group elects 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 are not reassessed and are accounted for in accordance with the transitional provisions under IFRS 16.

The Group as lessee

The Group recognizes right-of-use assets, and lease liabilities for all leases on the consolidated balance sheets except for those whose payments under low-value asset and short-term leases are recognized as expenses on a straight-line basis. On the consolidated statements of comprehensive income, the Group presents 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 are classified within financing activities; cash payments for the interest portion are classified within operating activities. Prior to the application of IFRS 16, payments under operating lease contracts were recognized as expenses on a straight-line basis. Cash flows for operating leases were classified within operating activities on the consolidated statements of cash flows. Leased assets and finance lease payables were recognized on the consolidated balance sheets for contracts classified as finance leases.

The Group elects to apply IFRS 16 retrospectively with the cumulative effect of the initial application of this standard recognized in retained earnings on January 1, 2019. Comparative information is not restated.

The weighted average lessee's incremental borrowing rate applied to lease liabilities recognized on January 1, 2019 is 2.15%. The difference between the (i) lease liabilities recognized and (ii) operating lease commitments disclosed under IAS 17 on December 31, 2018 is explained as follows:

The future minimum lease payments of non-cancellable operating lease commitments on December 31, 2018	$ 12,100
Less: Recognition exemption for short-term leases	(3,795)
Undiscounted amounts on January 1, 2019	$ 8,305
Discounted amounts using the incremental borrowing rate on January 1, 2019	$ 8,098
Lease liabilities recognized on January 1, 2019	$ 8,098

The impact on assets, liabilities and equity as of January 1, 2019 from the initial application of IFRS 16 is set out as follows:

	Pre-adjusted Amount on January 1, 2019	**Adjustments Arising from Initial Application**	**Adjusted Amount on January 1, 2019**
Right-of-use assets	$ -	$ 8,098	$ 8,098
Total effect on assets	$ -	$ 8,098	$ 8,098
Lease liabilities - current	$ -	$ 3,670	$ 3,670
Lease liabilities - non-current	-	4,428	4,428
Total effect on liabilities	$ -	$ 8,098	$ 8,098

b. The IFRSs endorsed by the FSC for application starting from 2020

New, Amended or Revised Standards and Interpretations (the "New IFRSs")	Effective Date Announced by IASB (Note 1)
Amendments to IFRS 3 "Definition of a Business"	January 1, 2020 (Note 1)
Amendments to IFRS 9, IAS 39 and IFRS 7 "Interest Rate Benchmark Reform"	January 1, 2020 (Note 2)
Amendments to IAS 1 and IAS 8 "Definition of Material"	January 1, 2020 (Note 3)

Note 1: 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 2: The Group shall apply these amendments retrospectively for annual reporting periods beginning on or after January 1, 2020.

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

As of the date the consolidated financial statements were authorized for issue, the 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.

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 10 and IAS 28 "Sale or Contribution of Assets between An Investor and Its Associate or Joint Venture"	To be determined by IASB
IFRS 17 "Insurance Contracts"	January 1, 2021
Amendments to IAS 1 "Classification of Liabilities as Current or Non-current"	January 1, 2022

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

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 POLICY

For the convenience of readers, the accompanying consolidated financial statements have been translated into English from the original Chinese version prepared and used in the 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 consolidated financial statements shall prevail.

a. Statement of compliance

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

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 an 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 an asset or liability.

c. Classification of current and non-current 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.

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

d. Basis of consolidation

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 dates of acquisitions up to the effective dates of disposals, 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 interests of the Group 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.

Refer to Note 11 and Note 33 for the detailed information of subsidiaries (including the percentage of ownership and main business).

e. Business combinations

Acquisitions of businesses are accounted for using the acquisition method. Acquisition-related costs are generally recognized in profit or loss as they are incurred.

Goodwill is measured as the excess of the sum of the consideration transferred and the fair value of the acquirer's previously held equity interests in the acquiree over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed.

f. Foreign currencies

In preparing the financial statements of each individual entity, transactions in currencies other than the entity's functional currency (i.e., 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 in which they arise.

Non-monetary items measured at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Exchange differences 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 its foreign operations (including subsidiaries 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).

g. Inventories

Inventories consist of work-in-process and finished goods 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 standard cost and adjusted to approximate weighted-average cost on the balance sheet date.

h. Property, plant, and equipment

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

Depreciation on property, plant and equipment is recognized using the straight-line method. Each significant part is depreciated separately. The estimated useful lives, residual values and depreciation methods are reviewed at the end of each reporting period, with the effects of any changes in estimates 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. Goodwill

Goodwill arising from the acquisition of a business is measured at cost as established at the date of acquisition of the business less accumulated impairment loss.

For the purposes of impairment testing, goodwill is allocated to each of the Group’s cash-generating units or groups of cash-generating units (referred to as “cash-generating units”) that is expected to benefit from the synergies of the combination.

A cash-generating unit to which goodwill has been allocated is tested for impairment annually or more frequently when there is an indication that the unit may be impaired, by comparing its carrying amount, including the attributed goodwill, with its recoverable amount. However, if the goodwill allocated to a cash-generating unit was acquired in a business combination during the current annual period, that unit shall be tested for impairment before the end of the current annual period. If the recoverable amount of the cash-generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then pro rata to the other assets of the unit based on the carrying amount of each asset in the unit. Any impairment loss is recognized directly in profit or loss. Any impairment loss recognized for goodwill is not reversed in subsequent periods.

If goodwill has been allocated to a cash-generating unit and the Group disposes of an operation within that unit, the goodwill associated with the operation which is disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal and is measured on the basis of the relative values of the operation disposed of and the portion of the cash-generating unit retained.

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. 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 the estimate 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) Internally-generated intangible assets - research and development expenditure

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from the development phase of an internal project is recognized if, and only if, all of the following have been demonstrated:

a) The technical feasibility of completing the intangible asset so that it will be available for use or sale;

b) The intention to complete the intangible asset and use or sell it;

c) The ability to use or sell the intangible asset;

d) How the intangible asset will generate probable future economic benefits;

e) The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and

f) The ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for internally-generated intangible assets is the sum of the expenditure incurred from the date when such an intangible asset first meets the recognition criteria listed above. Subsequent to initial recognition, they are measured on the same basis as intangible assets that are acquired separately.

3) Intangible assets acquired in a business combination

Intangible assets acquired in a business combination and recognized separately from goodwill are initially recognized at their fair value at the acquisition date (which is regarded as their cost). Subsequent to initial recognition, they are measured on the same basis as intangible assets that are acquired separately.

4) 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 smallest group of 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 on the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized in profit or loss.

l. Financial instruments

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

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 FVTPL) 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 FVTPL 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 trade date basis.

a) Measurement categories

Financial assets are classified into the following categories: Financial assets at FVTPL and financial assets at amortized cost.

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 incorporates any dividends or interest earned on such a financial asset. Fair value is determined in the manner described in Note 29.

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 (including related parties) at amortized cost and other receivables, are measured at amortized cost, which equals the gross carrying amount determined using 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 are not credit-impaired on purchase or origination but 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 in subsequent reporting periods.

A financial asset is credit impaired when one or more of the following events have occurred:

i) Significant financial difficulty of the issuer or the borrower;

ii) Breach of contract, such as a default;

iii) It is becoming probable that the borrower will enter bankruptcy or undergo a financial reorganization; or

iv) The disappearance of an active market for that financial asset because of financial difficulties.

Cash equivalents include time deposits 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.

b) Impairment of financial assets

The Group recognizes a loss allowance for expected credit losses on financial assets at amortized cost (including trade receivables (including related parties)).

The Group always recognizes lifetime expected credit losses (ECLs) for trade 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 the financial asset.

For internal credit risk management purposes, the Group determines that the following situations indicate that a financial asset is in default (without taking into account any collateral held by the Group):

i. Internal or external information show that the debtor is unlikely to pay its creditors.

ii. When a financial asset is more than 90 days past due unless the Group has reasonable and corroborative information to support a more lagged default criterion.

c) Derecognition of financial assets

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

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.

2) Equity instruments

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

Equity instruments issued by the Group are recognized at the proceeds received, net of direct issue costs.

The repurchase of the Group's own equity instruments is recognized in and deducted directly from equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

3) Financial liabilities

a) Subsequent measurement

All financial liabilities are measured at amortized cost using the effective interest method.

b) Derecognition of financial liabilities

The difference between the carrying amount of the financial liabilities derecognized and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognized in profit or loss.

m. Provisions

Provisions are measured at the best estimate of the discounted cash flows of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation.

1) Warranties

Provisions for the expected cost of warranty obligations to assure that products comply with agreed-upon specifications are recognized on the date of sale of the relevant products at the best estimate by the management of the Group of the expenditures required to settle the Group's obligations.

2) Decommissioning

The Group has the obligation for decommissioning at the end of the useful lives of offices. Pursuant to regulations, the Group estimates the decommissioning costs, which are discounted by applying the effective interest rate and recognized as the carrying amount. The decommissioning costs are capitalized and added to the carrying amount of property, plant and equipment.

The Group recognizes both the increased decommissioning provisions discounted on a time basis and interest expenses. The Group regularly reviews the change of decommissioning obligation at each end of the reporting period and adjusts it to reflect the best estimates.

n. Revenue recognition

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. Allowance for sales returns and liability for returns are recognized at the time of sale based on the seller's reliable estimate of future returns and past experience and other relevant factors.

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

1) Revenue from the sale of goods

Revenue from the sale of goods comes from sales of multimedia integrated circuits (ICs) and computer peripherals oriented ICs. Sales of multimedia ICs and computer peripherals oriented ICs are recognized as revenue when the ICs are delivered to the customer. Trade receivables are recognized concurrently. Any amounts are reclassified to trade receivables when the remaining obligations are performed.

The Group does not recognize revenue on materials delivered to subcontractors because this delivery does not involve a transfer of control. There were no materials delivered to subcontractors in 2019.

2) Royalties Revenue

Royalty revenue is recognized on an accrual basis in accordance with the substance of the relevant agreement and provided that it is probable that the economic benefits will flow to the Group and that the amount of revenue can be measured reliably. Royalties determined on a time basis are recognized on a straight-line basis over the period of the agreement. Royalty arrangements that are based on production, sales and other measures are recognized by reference to the underlying arrangements.

o. Leasing

<u>2019</u>

At the inception of a contract, the Group assesses whether the contract is, or contains, a lease.

1) The Group as lessor

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

When the Group subleases a right-of-use asset, the sublease is classified by reference to the right-of-use asset arising from the head lease, not with reference to the underlying asset. However, if the head lease is a short-term lease that the Group, as a lessee, has accounted for applying recognition exemption, the sublease is classified as an operating lease.

2) The Group as lessee

The Group recognizes right-of-use assets and lease liabilities for all leases at the commencement date of a lease, except for short-term leases and low-value asset leases accounted for applying a recognition exemption where lease payments are recognized as expenses on a straight-line over the lease terms.

Right-of-use assets are initially measured at cost, which comprises the initial measurement of lease liabilities adjusted for lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs needed to restore the underlying assets, and less any lease incentives received. Right-of-use assets are subsequently measured at cost less accumulated depreciation and impairment losses and adjusted for any remeasurement of the lease liabilities. Right-of-use assets are presented on a separate line in the consolidated balance sheets.

Right-of-use assets are depreciated using the straight-line method from the commencement dates to the earlier of the end of the useful lives of the right-of-use assets or the end of the lease terms.

Lease liabilities are initially measured at the present value of the lease payments. The lease payments are discounted using the interest rate implicit in a lease, if that rate can be readily determined. If that rate cannot be readily determined, the Group uses the lessee's incremental borrowing rate.

Subsequently, lease liabilities are measured at amortized cost using the effective interest method, with interest expense recognized over the lease terms. When there is a change in a lease term, the Group remeasures the lease liabilities with a corresponding adjustment to the right-of-use-assets. However, if the carrying amount of the right-of-use assets is reduced to zero, any remaining amount of the remeasurement is recognized in profit or loss. Lease liabilities are presented on a separate line in the consolidated balance sheets.

2018

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 lessee

Assets held under finance leases are initially recognized as assets of the Group at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lessor is included in the consolidated balance sheets as a finance lease obligation.

Operating lease payments are recognized as an expense on a straight-line basis over the lease term.

p. Government grants

Government grants are not recognized until there is reasonable assurance that the Group will comply with the conditions attached to them and that the grants will be received.

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.

q. 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 services.

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.

r. Restricted shares for employees

The fair value at the grant date of the restricted shares for employees is expensed on a straight-line basis over the vesting period, based on the Group's best estimates of the number of shares or options that are expected to ultimately vest, with a corresponding increase in other equity - unearned employee benefit. It is recognized as an expense in full at the grant date if vesting immediately.

When restricted shares for employees are issued, other equity - unearned employee benefits is recognized on the grant date, with a corresponding increase in capital surplus - restricted shares for employees. If restricted shares for employees are granted for consideration and should be returned, they are recognized as payables. Dividends paid to employees on restricted shares that do not need to be returned if employees resign in the vesting period are recognized as expenses when the dividends are declared with a corresponding adjustment in capital surplus - restricted shares for employees.

At the end of each reporting period, the Group revises its estimate of the number of restricted shares for employees expected to vest. The impact of the revision of the original estimates is recognized in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to capital surplus - restricted share option for employees.

s. Taxation

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

1) Current tax

Income tax on unappropriated earnings is expensed in the year the shareholders approve the appropriation of earnings which is the year subsequent to the year the earnings are generated.

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.

If a temporary difference arises from the initial recognition of assets and liabilities in a transaction that (other than in the acquisition of a subsidiary) affects neither the taxable profit nor the accounting profit, the resulting deferred tax asset or liability is not recognized. In addition, a deferred tax liability is not recognized on any taxable temporary difference arising from the initial recognition of goodwill included in the investment in the subsidiary.

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences, research and development expenditures and personnel training expenditures 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, 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 asset 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 year which the liability is settled or the asset is 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 taxes

Current and deferred taxes 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 taxes 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 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 years.

Key Sources of Estimation Uncertainty

Impairment of goodwill

Determining whether goodwill is impaired requires an estimation of the value in use of the cash-generating units to which goodwill has been allocated. The calculation of the value in use requires management to estimate the future cash flows expected to arise from the cash-generating units and a suitable discount rate in order to calculate the present value. Where the actual future cash flows are less than expected, a material impairment loss may arise.

6. CASH AND CASH EQUIVALENTS

	December 31	
	2019	2018
Cash on hand	$ 76	$ 76
Checking accounts and demand deposits	274,118	180,382
Cash equivalents		
Time deposits with original maturities of less than 3 months	815,956	668,430
Repurchase agreements collateralized by bonds	331,809	244,458
	$ 1,421,959	$ 1,093,346

The market rate intervals of cash in bank at the end of the reporting period were as follows:

	December 31	
	2019	2018
Bank deposits	0.01%-2.30%	0.01%-2.90%
Repurchase agreements collateralized by bonds	2.10%	0.45%-3.25%

7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31	
	2019	2018
Financial assets mandatorily classified as at FVTPL		
Non-derivative financial assets		
Domestic listed shares	$ 132,325	$ -
Mutual funds	30,616	89,030
	$ 162,941	$ 89,030

8. FINANCIAL ASSETS AT AMORTIZED COST

	December 31	
	2019	2018
Current		
Time deposits with original maturity of more than 3 months	$ -	$ 80,000

The range of interest rates for time deposits with original maturity of more than 3 months was 0.15% to 0.78% per annum as at the end of December 31, 2018.

9. TRADE RECEIVABLES

	December 31	
	2019	2018
Trade receivables		
Non-related parties	$ 627,829	$ 398,741
Related parties	1,018	2,249
	$ 628,847	$ 400,990
Trade receivables		
At amortized cost		
Gross carrying amount	$ 628,847	$ 400,990
Less: Allowance for impairment loss	-	-
	$ 628,847	$ 400,990

The average credit period of sale of goods was 30-60 days. The Group adopted a policy that is in order to minimize credit risk, the management of the Group regularly reviews credit limits and credit approvals and performs other monitoring procedures to ensure that follow-up action is taken to recover overdue debts.

Before trading with new customers, the Group assesses the potential customer's credit quality and defines credit limits based on the credit rating system. Credit rating information is obtained from independent rating agencies where available or, if not available, the Group uses other publicly available financial information or its own trading records to rate its major customers.

As for the trade receivables that are overdue at the end of the reporting date but not yet recognized as the allowance for bad debts, the credit quality has not changed significantly; thus, the management of the Group believes that the amount can still be recovered. The Group does not hold any collateral or other credit enhancements to those trade receivables.

The Group applies the simplified approach to provisions 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, 2019

	Gross Carrying Amount	Loss Allowance	Amortized Cost
Not past due	$ 481,267	$ -	$ 481,267
Past due			
Within 30 days	140,311	-	140,311
31-60 days	7,269	-	7,269
61-90 days	-	-	-
91-180 days	-	-	-
	$ 628,847	$ -	$ 628,847

December 31, 2018

	Gross Carrying Amount	Loss Allowance	Amortized Cost
Not past due	$ 307,346	$ -	$ 307,346
Past due			
Within 30 days	93,339	-	93,339
31-60 days	305	-	305
61-90 days	-	-	-
91-180 days	-	-	-
	$ 400,990	$ -	$ 400,990

10. INVENTORIES

	December 31	
	2019	2018
Finished goods	$ 69,044	$ 130,581
Work in progress	13,034	8,260
	$ 82,078	$ 138,841

The cost of inventories recognized as cost of goods sold for the years ended December 31, 2019 and 2018 was $913,248 thousand and $863,688 thousand, respectively. The cost of inventories recognized as operating cost were as follows:

	December 31	
	2019	2018
Inventory write-downs (reversed)	$ (1,928)	$ 5,329

11. SUBSIDIARIES

a. Subsidiaries included in the consolidated financial statements

Investor	Investee	Nature of Activities	Proportion of Ownership (%) December 31 2019	Proportion of Ownership (%) December 31 2018	Remark
ASPEED Technology Inc.	ASPEED Technology (Samoa) Inc.	Investment holding company	100	100	-
	ASPEED Technology India Private Limited	R&D and technical services	1	1	-
	Cupola360 Inc.	Software Design Services	100	100	1
ASPEED Technology (Samoa) Inc.	ASPEED Technology (U.S.A) Inc.	R&D and technical services	100	100	-
	ASPEED Technology India Private Limited	R&D and technical services	99	99	-

Remarks:

1) Cupola360 Inc. was established in February 2018.

2) The investment accounted for using the equity method and the calculation of the share of profit or loss and other comprehensive income were recognized based on the financial statements of subsidiaries that have been audited.

12. PROPERTY, PLANT AND EQUIPMENT

	December 31, 2019
Assets used by the Group	$ 123,198

a. Assets used by the Group - 2019

	Year Ended December 31, 2019				
	Balance, Beginning of the Year	Additions	Disposals	Net Exchange Differences	Balance, End of the Year
Cost					
Machinery equipment	$ 19,463	$ 7,233	$ -	$ -	$ 26,696
Office equipment	6,938	2,962	-	(45)	9,855
Other equipment	94,247	46,327	(18,880)	-	121,694
Construction in progress	-	25,097	-	-	25,097
	120,648	$ 81,619	$ (18,880)	$ (45)	183,342
Accumulated depreciation					
Machinery equipment	4,191	$ 4,745	$ -	$ -	8,936
Office equipment	1,916	1,789	-	(28)	3,677
Other equipment	29,700	35,068	(17,237)	-	47,531
	35,807	$ 41,602	$ (17,237)	$ (28)	60,144
Carrying amount	$ 84,841				$ 123,198

b. 2018

	Year Ended December 31, 2018				
	Balance, Beginning of the Year	Additions	Disposals	Net Exchange Differences	Balance, End of the Year
Cost					
Machinery equipment	$ 4,825	$ 15,751	$ (1,113)	$ -	$ 19,463
Office equipment	3,437	3,630	(150)	21	6,938
Other equipment	62,432	43,198	(11,383)	-	94,247
	70,694	$ 62,579	$ (12,646)	$ 21	120,648
Accumulated depreciation					
Machinery equipment	1,936	$ 3,368	$ (1,113)	$ -	4,191
Office equipment	875	1,183	(150)	8	1,916
Other equipment	14,670	26,413	(11,383)	-	29,700
	17,481	$ 30,964	$ (12,646)	$ 8	35,807
Carrying amount	$ 52,213				$ 84,841

The above items of property, plant and equipment are depreciated on a straight-line basis over their following estimated useful lives as follows:

Machinery equipment	3-5 years
Office equipment	3-7 years
Other equipment	2-6 years

13. LEASE ARRANGEMENTS

a. Right-of-use assets - 2019

	December 31, 2019
Carrying amounts	
Buildings	$ 109,131
Transportation equipment	1,544
	$ 110,675

	For the Year Ended December 31, 2019
Depreciation charge for right-of-use assets	
Buildings	$ 6,394
Transportation equipment	883
	$ 7,277

b. Lease liabilities - 2019

	December 31, 2019
Carrying amounts	
Current	$ 23,886
Non-current	$ 86,090

Range of discount rate for lease liabilities was as follows:

	December 31, 2019
Buildings	2.00%
Transportation equipment	2.50%

c. Material lease-in activities and terms

The Group leases certain buildings for the use of manufacturing and office with lease terms of 1 to 5 years. The Group doesn't have options to purchase the equipment for a nominal amount at the end of the lease terms. In addition, the Group is prohibited from subleasing or transferring all or any portion of the underlying assets without the lessor's consent.

d. Other lease information

2019

	For the Year Ended December 31, 2019
Expenses relating to short-term leases	$ 4,487
Expenses relating to low-value asset leases	$ 165
Total cash outflow for leases	$ (12,104)

The Group leases certain office equipment which qualifies as short-term and low-value asset leases. The Group has elected to apply the recognition exemption and thus, did not recognize right-of-use assets and lease liabilities for these leases.

2018

The future minimum lease payments of non-cancellable operating lease commitments are as follows:

	December 31, 2018
Not later than 1 year	$ 7,952
Later than 1 year and not later than 5 years	4,148
	$ 12,100

14. GOODWILL

	December 31 2019	December 31 2018
Cost		
Balance at the January 1 and December 31	$ 369,040	$ 369,040

The Group acquired the Pilot product line on December 30, 2016, which is mainly expected to create synergies and benefit the Group's existing products. When an impairment test is performed, the goodwill is related to the Group and deemed as a single cash-generating unit. Therefore, the impairment of goodwill is assessed by calculating the recoverable amount of the Group and the carrying amount of the net assets.

In addition, according to the asset impairment assessment analysis report issued by the Group, the financial forecast of the Group from 2020 to 2024 is based on the financial analysis, according to the following: (a) management's reference to revenue growth rate of historical period, and (b) the difference between actual results and estimates on operating profit in 2019, 2018 and 2017, with conservative data as the basis for prediction.

The recoverable amount of the consolidated total cash-generating unit is still greater than the book value, so no impairment loss is recognized.

The Group's recoverable amount is determined on the basis of the value in use, and the cash flow estimate of the financial budget for the next five years is approved by the management of the Group, and is calculated using the annual discount rate of 13.73%.

15. OTHER INTANGIBLE ASSETS

	Years Ended December 31, 2019			
	Balance, Beginning of the Year	Additions	Disposals	Balance, End of the Year
Cost				
Licenses	$ 98,037	$ 73,667	$ (6,773)	$ 164,931
Software	1,212	518	(96)	1,634
Client relationship	145,552	-	-	145,552
Existing technology	359,030	-	-	359,030
Trademark	45,283	-	-	45,283
Others	10,476	450	-	10,926
Carrying amounts	659,590	$ 74,635	$ (6,869)	727,356
Accumulated amortization				
Licenses	$ 32,668	$ 26,902	$ (6,773)	$ 52,797
Software	642	418	(96)	964
Client relationship	36,388	18,194	-	54,582
Existing technology	102,581	51,289	-	153,870
Trademark	12,938	6,469	-	19,407
Others	1,570	2,121	-	3,691
Balance at December 31, 2019	186,787	$ 105,393	$ (6,869)	285,311
Carrying amounts	$ 472,803			$ 442,045

	Years Ended December 31, 2018			
	Balance, Beginning of the Year	Additions	Disposals	Balance, End of the Year
Cost				
Licenses	$ 110,289	$ -	$ (12,252)	$ 98,037
Software	2,315	-	(1,103)	1,212
Client relationship	145,552	-	-	145,552
Existing technology	359,030	-	-	359,030
Trademark	45,283	-	-	45,283
Others	15,822	10,476	(15,822)	10,476
Carrying amounts	678,291	$ 10,476	$ (29,177)	659,590
Accumulated amortization				
Licenses	20,624	$ 24,296	$ (12,252)	32,668
Software	1,176	569	(1,103)	642
Client relationship	18,194	18,194	-	36,388
Existing technology	51,290	51,291	-	102,581
Trademark	6,469	6,469	-	12,938
Others	10,993	6,399	(15,822)	1,570
Balance at December 31, 2018	108,746	$ 107,218	$ (29,177)	186,787
Carrying amounts	$ 569,545			$ 472,803

Intangible assets are amortized on a straight-line basis over their estimated useful lives as follows:

Licenses	2-7 years
Software	3-5 years
Client relationship	8 years
Existing technology	7 years
Trademark	7 years
Others	2-5 years

16. OTHER ASSETS

	December 31	
	2019	2018
Current		
Prepayments	$ 13,245	$ 9,943
Tax refund receivables	5,550	5,703
Others	1,614	1,463
	$ 20,409	$ 17,109

(Continued)

	December 31	
	2019	2018
Non-current		
Refundable deposits	$ 11,938	$ 7,232
Prepayments for equipment	2,845	-
Prepayments for licenses	-	43,743
	$ 14,783	$ 50,975

(Concluded)

17. TRADE PAYABLES

	December 31	
	2019	2018
Trade payables		
Operating	$ 140,791	$ 35,497

18. OTHER PAYABLES

	December 31	
	2019	2018
Current		
Other payables		
Payables for salaries or bonuses	$ 26,834	$ 20,616
Payables for service	4,998	3,676
Payables for royalties	4,468	4,080
Payables for licenses	-	5,805
Others	7,097	8,000
	$ 43,397	$ 42,177
Other liabilities		
Refund liabilities	$ 141,015	$ 107,992
Others	1,022	872
	$ 142,037	$ 108,864
Non-current		
Other non-current liabilities		
Payables for salaries or bonuses	$ 108	$ 1,609

19. PROVISIONS

	December 31	
	2019	2018
Current		
Warranties (a)	$ 26,571	$ 21,670
Non-current		
Decommissioning (b)	$ 910	$ -

	Warranties	Decommissioning
Balance at January 1, 2019	$ 21,670	$ -
Additional provisions recognized	4,901	910
Balance at December 31, 2019	$ 26,571	$ 910

a. The provision for warranty claims represents the present value of management's best estimate of the future outflow of economic benefits. The estimate has been made on the basis of historical warranty trends and may vary as a result of new materials, altered manufacturing processes or other events affecting product quality.

b. The provision for decommissioning represents the Company's obligation to decommission (including the restoration of the office). The costs are estimated based on internal research, and the Company regularly reviews and adjusts it to reflect the best estimates.

20. RETIREMENT BENEFIT PLANS

a. Defined contribution plans

The Company adopted a pension plan under the Labor Pension Act (the LPA), which is deemed a defined contribution plan. Pursuant to the LPA, the Company makes monthly contributions to employees' individual pension accounts at 6% of monthly salaries and wages.

ASPEED Technology (U.S.A.) Inc. and ASPEED Technology India Private Limited contribute a specified percentage of employees' monthly payroll costs to the retirement benefit scheme.

The total expenses recognized in the consolidated statement of comprehensive income were $5,024 thousand and $4,181 thousand, representing the contributions made and to be made to these plans by the Company at the rates specified in the plans for the years ended December 31, 2019 and 2018, respectively.

21. EQUITY

a. Share capital

Ordinary shares

	December 31	
	2019	2018
Number of shares authorized (in thousands of shares)	50,000	50,000
Shares authorized par value $10 (in thousands of NTD)	$ 500,000	$ 500,000
Number of shares issued and fully paid (in thousands of shares)	34,184	34,065
Shares issued and fully paid (in thousands of NTD)	$ 341,848	$ 340,656

Fully paid ordinary shares issued each has a par value of NT$10. Each share is entitled to the rights to vote and to dividends.

In order to cooperate with the Group's acquisition of Emulex Corporation’s server remote management chip Pilot product line and related assets follow-up strategic cooperation plan, the Company held a resolution of the temporary shareholders meeting on December 23, 2016, and issued a private placement in accordance with Article 43-6 of the Securities Exchange Act. The total ordinary shares issued were 2,022 thousand shares, and the price per share of private placement was NT$297.6. The total private placement price was NT$601,747 thousand, and the capital increase base date was December 30, 2016.

The above-mentioned private shares issued by private placement have the same rights and obligations as the issued ordinary shares of the Company; they are not freely transferable within 3 years after delivery, except in the specific circumstances that comply with the law. The board of directors were authorized to complete supplementary procedures for classification as a public company and apply for listing cabinet transactions to the competent authority in accordance with relevant laws and regulations after the delivery of the private equity ordinary shares for three years.

b. Capital surplus

	December 31	
	2019	2018
May be used to offset a deficit, distributed as cash dividends, or transferred to share capital (a)		
Issuance of ordinary shares	$ 793,019	$ 793,019
May be used to offset a deficit only		
Employee stock bonus	268,353	194,396
Arising from expired/vested employee restricted shares	29,936	22,020
Arising from exercised/expired employee share options	2,156	2,156
May not be used for any purpose		
Employee restricted shares	51,580	45,240
	$ 1,145,044	$ 1,056,831

a) The 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 to once a year).

c. Retained earnings and dividend policy

The shareholders of the Company held their regular meeting on May 29, 2019 and in that meeting, resolved the amendments to the Company's Articles of Incorporation (the "Articles"). The amendments explicitly stipulate that the Corporation may allocate a portion or all of its reserves for distribution in accordance with relevant laws or regulations or the orders of the authorities in charge. When the reserves are to be distributed in cash, the distribution may be approved by the board of directors and reported to the shareholders' meeting.

Under the dividends policy as set forth in the Articles after the amendments, where the Company made a profit in a fiscal year, the profit shall be first utilized for paying taxes, offsetting losses of previous years, setting aside as a legal reserve of 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 bonuses to shareholders.

For the policies on the distribution of employees' compensation and remuneration of directors and supervisors after the amendment, refer to employees' compensation and remuneration of directors and supervisors in Note 23(f).

The Company's Articles stipulate the dividends policy based on present and future projects, investment environment, capital requirements, domestic and international competitive environment, and the interests of shareholders, whereby the Company distributes no less than 10% of the distributable earnings in the form of dividend bonus. If the accumulatively distributable earnings were less than 50% of the Company's paid-in capital, the dividend bonus would not distributed. In principle, cash dividends are limited to no less than 10% of the total dividends distributed.

The appropriation of earnings to a legal reserve shall be made until the legal reserve equals the Company's paid-in capital. The legal reserve may be used to offset any 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.

Items referred to under Rule No. 1010012865 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 2018 and 2017 approved in the shareholders' meetings on May 29, 2019 and May 30, 2018, respectively, were as follows:

	Appropriation of Earnings For the Year Ended December 31	
	2018	**2017**
Legal reserve	$ 68,592	$ 53,137
Special reserve	$ 21,333	$ (2,919)
Cash dividends	$ 613,051	$ 509,607
Cash dividends per share (NT$)	$ 18.00	$ 15.00

The appropriation of earnings for 2019 has been proposed by the Company's board of directors on March 2, 2020. The appropriation and dividends per share were as follows:

	For the Year Ended December 31, 2019
Legal reserve	$ 83,118
Special reserve	$ 3,093
Cash dividends	$ 752,946
Cash dividends per share (NT$)	$ 22.00

d. Special reserve

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ 10,166	$ 13,085
Appropriation (reversal)		
Debits (reversal of debits) to other equity items	21,333	(2,919)
Balance at December 31	$ 31,499	$ 10,166

e. Other equity items

1) Unearned employee benefits

For information about the restricted share plans for employees, refer to Note 26.

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ (30,375)	$ (7,558)
Issued	(22,147)	(36,741)
Cancelled	7,733	-
Share-based payment expenses recognized	12,418	13,924
Balance at December 31	$ (32,371)	$ (30,375)

2) Exchange differences on translating foreign operations

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ (1,125)	$ (973)
Exchange differences on translating the financial statements of foreign operations	(1,097)	(152)
Balance at December 31	$ (2,222)	$ (1,125)

22. REVENUE

a. Revenue from contracts with customers

	For the Year Ended December 31	
	2019	2018
Revenue from the sale of goods	$ 2,483,373	$ 2,152,754
Royalty income	922	765
	$ 2,484,295	$ 2,153,519

b. Contract balances

	For the Year Ended December 31	
	2019	2018
Trade receivables (Note 9)	$ 628,847	$ 400,900
Contract liabilities		
Sale of goods	$ -	$ 157

The changes in the contract liability balances primarily result from the timing difference between the Company's performance and the customer's payment.

c. Disaggregation of revenue

For the year ended December 31, 2019

	Reportable Segments			
	Multimedia Integrated Circuits (ICs)	Computer Peripherals Oriented ICs	Others	Total
Type of goods or services				
Sale of goods	$ 2,327,708	$ 155,337	$ 328	$ 2,483,373
Royalty	-	-	922	922
	$ 2,327,708	$ 155,337	$ 1,250	$ 2,484,295

For the year ended December 31, 2018

	Reportable Segments			
	Multimedia Integrated Circuits (ICs)	Computer Peripherals Oriented ICs	Others	Total
Type of goods or services				
Sale of goods	$ 2,014,508	$ 136,556	$ 1,690	$ 2,152,754
Royalty	-	-	765	765
	$ 2,014,508	$ 136,556	$ 2,455	$ 2,153,519

23. NET PROFIT FROM CONTINUING OPERATIONS

a. Other income

	For the Year Ended December 31	
	2019	2018
Interest income		
Bank deposits	$ 6,116	$ 5,021
Repurchase agreements collateralized by bonds	7,997	7,395
Other	183	1,260
	14,296	13,676
Government grants (Note 27)	-	19,355
Others	2,654	1,558
	$ 16,950	$ 34,589

b. Other gains and losses

	For the Year Ended December 31	
	2019	2018
Net foreign exchange (losses) gains	$ (20,021)	$ 27,199
Gain (loss) on disposal of investment properties	6,282	(8,075)
Net gain arising on fair value changes of financial assets through profit or loss	2,692	1,640
Loss on disposal of property, plant and equipment	(1,643)	-
Others	(218)	(488)
	$ (12,908)	$ 20,276

c. Finance costs

	For the Year Ended December 31	
	2019	2018
Interest on loans	$ 1,454	$ 723
Interest on lease liabilities	410	-
	$ 1,864	$ 723

d. Depreciation and amortization

	For the Year Ended December 31	
	2019	2018
An analysis of depreciation by function		
Operating costs	$ -	$ -
Operating expenses	48,879	30,964
	$ 48,879	$ 30,964

(Continued)

	For the Year Ended December 31	
	2019	2018
An analysis of amortization by function		
Operating costs	$ -	$ -
Selling and marketing expenses	18,194	18,195
General and administration expenses	6,777	6,737
Research and development expenses	80,422	82,286
	$ 105,393	$ 107,218

(Concluded)

e. Employee benefits expense

	For the Year Ended December 31	
	2019	2018
Post-employment benefits (Note 20)		
Defined contribution plans	$ 5,024	$ 4,181
Share-based payments (Note 26)	12,418	13,924
Other employee benefits	308,496	259,070
Total employee benefits expense	$ 325,938	$ 277,175
An analysis of employee benefits expense by function		
Operating costs	$ -	$ -
Operating expenses	325,938	277,175
	$ 325,938	$ 277,175

f. Employees' compensation and remuneration of directors

The Company accrued employees' compensation and remuneration of directors and supervisors at rates of no less than 8% and no higher than 3%, respectively, of net profit before income tax, employees' compensation, and remuneration of directors and supervisors. The employees' compensation and remuneration of directors and supervisors for the years ended December 31, 2019 and 2018, which have been approved by the Company's board of directors on March 2, 2020 and March 11, 2019, respectively, were as follows:

Accrual rate

	For the Year Ended December 31	
	2019	2018
Employees' compensation	8%	8%
Remuneration of directors and supervisors	1%	1%

Amount

	For the Year Ended December 31			
	2019		2018	
	Cash	Shares	Cash	Shares
Employees' compensation	$ -	$ 92,361	$ -	$ 74,991
Remuneration of directors and supervisors	11,140	-	9,374	-

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

The number of shares of the employees' compensation, which was determined by dividing the amount of the employees' compensation resolved for 2019 and 2018 by NT$946 and NT$725, respectively, which is the closing price per share determined on the day immediately preceding the meeting of the Company's board of directors, was 98 thousand shares and 103 thousand shares for 2019 and 2018, respectively.

There is no difference between the actual amounts of employees' compensation and remuneration of directors and supervisors paid and the amounts recognized in the consolidated financial statements for the years ended December 31, 2018 and 2017.

Information on the employees' compensation and remuneration of directors resolved by the Company's board of directors in 2020 and 2019 is available at the Market Observation Post System website of the Taiwan Stock Exchange.

g. Gains or losses on foreign currency exchange

	For the Year Ended December 31	
	2019	2018
Foreign exchange gains	$ 25,589	$ 54,484
Foreign exchange losses	(45,610)	(27,285)
	$ (20,021)	$ 27,199

24. INCOME TAXES RELATING TO CONTINUING OPERATIONS

a. Major components of income tax expense recognized in profit or loss

	For the Year Ended December 31	
	2019	2018
Current tax		
In respect of the current year	$ 203,129	$ 167,068
Adjustments for prior years	(668)	(558)
	202,461	166,510
Deferred tax		
In respect of the current year	(23,079)	(6,653)
Effect of tax rate changes	-	8,251
Income tax expense recognized in profit or loss	$ 179,382	$ 168,108

A reconciliation of accounting loss and income tax expenses was as follows:

	For the Year Ended December 31	
	2019	2018
Income before tax from continuing operations	$ 1,010,567	$ 854,030
Income tax expense calculated at the statutory rate	$ 205,299	$ 173,729
Non-deductible expenses in determining taxable income	(2,031)	1,022
Deductible temporary differences	(2,931)	14,153
Additional income tax under the Alternative Minimum Tax Act	25	24
Investment credits	(20,312)	(12,011)
Effect of tax rate changes	-	(8,251)
Adjustments for prior years' tax	(668)	(558)
Income tax expense recognized in profit or loss	$ 179,382	$ 168,108

The Income Tax Act in the ROC was amended in February 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 was reduced from 10% to 5%.

b. Current tax liabilities

	December 31	
	2019	2018
Current tax liabilities		
Income tax payable	$ 141,092	$ 113,794

c. Deferred tax assets and liabilities

The movements of deferred tax assets and deferred tax liabilities were as follows:

For the year ended December 31, 2019

	Opening Balance	Recognized in Profit or Loss	Closing Balance
Deferred Tax Assets			
Temporary differences			
Inventory write-down	$ 1,020	$ (832)	$ 188
Investments accounted for using the equity method	4,950	(1,083)	3,867
Provisions	4,334	980	5,314
Refund liabilities	21,598	6,605	28,203
Estimated expense payable and others	3,798	1,549	5,347
	$ 35,700	$ 7,219	$ 42,919
Deferred Tax Liabilities			
Temporary differences			
Unrealized net foreign exchange gains	$ 4,721	$ (1,812)	$ 2,909
Other intangible assets - acquisitions	73,123	(13,897)	59,226
	$ 77,844	$ (15,709)	$ 62,135

For the year ended December 31, 2018

	Opening Balance	Recognized in Profit or Loss	Closing Balance
Deferred Tax Assets			
Temporary differences			
Inventory write-downs	$ 328	$ 692	$ 1,020
Investments accounted for using the equity method	4,908	42	4,950
Unrealized net foreign exchange gains (losses)	267	(267)	-
Provisions	2,887	1,447	4,334
Refund liabilities	18,821	2,777	21,598
Estimated expense payable and others	4,488	(690)	3,798
	$ 31,699	$ 4,001	$ 35,700
Deferred Tax Liabilities			
Temporary differences			
Unrealized net foreign exchange gains	$ -	$ 4,721	$ 4,721
Other intangible assets - acquisitions	73,967	(844)	73,123
	$ 73,967	$ 3,877	$ 77,844

d. Income tax assessments

The Company's tax returns through 2016 have been assessed by the tax authorities.

25. EARNINGS PER SHARE

Unit: NT$ Per Share

	For the Year Ended December 31	
	2019	2018
Basic earnings per share	$ 24.39	$ 20.20
Diluted earnings per share	$ 24.28	$ 20.10

The income and weighted average number of ordinary shares outstanding in the computation of earnings per share from continuing operations were as follows:

Net Income for the Year

	For the Year Ended December 31	
	2019	2018
Income for the year attributable to owners of the Company	$ 831,185	$ 685,922

Weighted average number of ordinary shares outstanding (in thousand shares):

	For the Year Ended December 31	
	2019	2018
Weighted average number of ordinary shares in computation of basic earnings per share	34,075	33,958
Effect of potentially dilutive ordinary shares:		
Employees' compensation	116	140
Restricted shares to employees	48	25
Weighted average number of ordinary shares in computation of diluted earnings per share	34,239	34,123

Since the Group offered to settle compensation in cash or shares, the Group assumed the entire amount of the compensation 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.

26. SHARE-BASED PAYMENT ARRANGEMENTS

a. Restricted share plan for employees

Information on restricted share plan for employees was as follows:

Approved Date	Grant Shares (Thousand)	Board of Directors Approved Issue Date	Issued Date	Issued Shares (Thousand)	Fair Value
2016/06/29	100	2016/11/04	2016/12/05	30	446
2017/05/26	100	2017/11/03	2018/02/05	36	740
2018/05/30	40	2018/11/05	2018/11/12	21	481
2019/05/29	100	2019/08/02	2019/09/10	28	791
2019/05/29	100	2019/08/02	2020/02/05	31	952
2019/05/29	100	2019/08/02	2020/03/02	9	1,005

On May 29, 2019, the shareholder's meeting resolved to issue a restricted share plan for employees with a total of 100 thousand shares. The Company shall set up the actual issuance date(s) in one tranche or in installments within one year from the date of receipt of the effective registration of the competent authority. The board of directors authorized the Company's chairman to determine the issue date. The main elements of the restricted share plan for employees were as follows:

1) Issue price: the Company issued the gratuitous restricted stocks for employees.

2) Vesting conditions of restricted stocks for employees are as follows:

   a) To meet the vesting conditions, an employee has to meet performance and other conditions over the vesting period, as follows:

      Remain employed by the Company within 1 year - 10% of restricted shares will be vested;

      Remain employed by the Company within 2 year - 10% of restricted shares will be vested;

Remain employed by the Company within 3 year - 40% of restricted shares will be vested;

Remain employed by the Company within 4 year - 40% of restricted shares will be vested;

b) When the employees do not reach the vesting conditions, the Company will recover and cancel the shares.

c) During the vesting period, the dividends will distribute to employees gratuitously.

3) In addition to the vesting conditions, the limitations are as follows:

a) The employees cannot sell, pledge, transfer, donate or, in any other way, dispose of these shares.

b) During the vesting period, the rights of attending shareholders' meeting, proposal, speech, resolution and voting right, etc., will enforce by trust institutions.

Information on restricted share plan for employees was as follows:

	Number of Shares (In Thousands)	
	For the Year Ended December 31	
	2019	**2018**
Balance at January 1	78	46
Granted	28	57
Vested	(16)	(25)
Cancelled	(12)	-
Balance at December 31	78	78

For the years ended December 31, 2019 and 2018, the compensation costs recognized were NT$12,418 thousand and NT$13,924 thousand, respectively.

27. GOVERNMENT GRANTS

In March 2017, the Group applied for a government grant of NT$33,100 thousand towards its project related to an industrial upgrading innovation platform from Industrial Development Bureau, Ministry of Economic Affairs. The period of the grant is from November 1, 2016 to October 31, 2018. The grant that the Group received was NT$33,100 thousand and was recognized as other income as of December 31, 2019.

28. CAPITAL MANAGEMENT

The Group manages its capital to ensure that the Group will be able to operate under the premises of going concerns while maximizing the return to shareholders 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 Group (comprising issued capital, reserves, retained earnings and other equity).

The Group is not subject to any externally imposed capital requirements.

Key management personnel of the Group review the capital structure on a regular basis. As part of this review, the key management personnel consider the cost of capital and the risks associated with each class of capital. Based on recommendations of the key management personnel, in order to balance the overall capital structure, the Group may adjust the amount of dividends paid to shareholders and the number of new shares issued.

29. FINANCIAL INSTRUMENTS

a. Fair value of financial instruments not measured at fair value

The management considers that the carrying amounts of financial assets and financial liabilities recognized in the consolidated financial statements approximate their fair values.

b. Fair value of financial instruments measured at fair value

1) Fair value hierarchy

December 31, 2019

	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Domestic listed shares	$ 132,325	$ -	$ -	$ 132,325
Mutual funds	30,616	-	-	30,616
	$ 162,941	$ -	$ -	$ 162,941

December 31, 2018

	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Mutual funds	$ 89,030	$ -	$ -	$ 89,030

There were no transfers between Level 1 and Level 2 in the current and prior periods.

c. Categories of financial instruments

	December 31	
	2019	2018
Financial assets		
Financial assets at amortized cost (i)	2,064,354	1,583,031
Financial assets at FVTPL	162,941	89,030
Financial liabilities		
Measured at amortized cost (ii)	170,445	72,410

i) The balances include financial assets measured at amortized cost, which comprise cash and cash equivalents, trade and other receivables (including related parties), financial assets at amortized cost and refundable deposits.

ii) The balances include financial liabilities measured at amortized cost, which comprise trade payables (including related parties) and other payables.

d. Financial risk management objectives and policies

The Group's major financial instruments include mutual investments, trade receivables and trade payables. 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 foreign currency risk and interest rate risk), credit risk and liquidity risk.

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).

a) Foreign currency risk

The Group had foreign currency sales and purchases, which exposed the Group to foreign currency risk. Approximately 100% of the Group's sales were denominated in currencies other than the functional currency, whilst almost 99% of costs were denominated in the group entity's functional currency.

The carrying amounts of the Group's foreign currency denominated monetary assets and monetary liabilities at the end of the reporting period are set out in Note 32.

Sensitivity analysis

The Group was mainly exposed to the USD.

The following table details the Group's sensitivity to a 5% increase and decrease in the New Taiwan dollar (i.e., the functional currency) against the relevant foreign currencies. The sensitivity rate used when reporting foreign currency risk internally to key management personnel and representing management's assessment of the reasonably possible change in foreign exchange rates is 5%. The sensitivity analysis included only outstanding foreign currency denominated monetary items, and adjusts their translation at the end of the reporting period for a 5% change in foreign currency rates. A positive number below indicates an increase in pre-tax profit associated with the New Taiwan dollar strengthening 5% against the relevant currency. For a 5% weakening of the New Taiwan dollar against the relevant currency, there would be an equal and opposite impact on pre-tax profit, and the balances below would be negative.

	USD Impact	
	For the Year Ended December 31	
	2019	**2018**
Pre-tax profit	$ 41,197	$ 23,537

This was mainly attributable to the exposure on outstanding receivables and payables in USD which were not hedged at the end of the reporting period.

The Group's sensitivity to USD currency decreased during the current period mainly due to the decrease in the net assets of the USD which was due to the decrease in cash and cash equivalents denominated in USD.

The management believes that the sensitivity analysis cannot represent the inherent risk of the exchange rate, because the foreign currency risk at the end of the reporting period cannot reflect the mid-year risk situation.

b) Interest rate risk

Hedging activities are evaluated regularly to align with interest rate views and defined risk appetite, ensuring that the most cost-effective hedging strategies are applied.

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	
	2019	2018
Fair value interest rate risk		
Financial assets	$ 1,147,765	$ 992,888
Cash flow interest rate risk		
Financial assets	274,119	180,382

<u>Sensitivity analysis</u>

The sensitivity analysis below was determined based on the Group's exposure to interest rates for both derivative and non-derivative instruments at the end of the reporting period. For floating rate liabilities, the analysis was prepared assuming the amount of each liability outstanding at the end of the reporting period was outstanding for the whole year.

A 0.1 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.

The Group had no floating rate liabilities for the years ended December 31, 2019 and 2018.

2) Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group.

The Group adopted a policy of only dealing with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial loss from defaults. The Group only transacts with entities that are rated the equivalent of investment grade and above. This information is supplied by independent rating agencies where available and, if not available, the Group uses other publicly available financial information and its own trading records to rate its major customers. The Group's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counterparties. Credit exposure is controlled by counterparty limits that are reviewed and approved by the risk management committee annually.

Ongoing credit evaluation is performed on the financial condition of trade receivables and, where appropriate, credit guarantee insurance cover is purchased.

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 liquidity. As of December 31, 2019 and 2018, the Group had available unutilized short-term bank loan facilities of $650,000 thousand.

a) Liquidity and interest risk rate table for non-derivative financial liabilities

The Group's remaining contractual maturity for its non-derivative financial liabilities had been drawn up based on the undiscounted cash flows (included principal and interest) of financial liabilities from the earliest date on which the Group can be required to pay.

December 31, 2019

	On Demand or Less than 1 Month	1-3 Months	3 Months - 1 Year	1-5 Years	5+ Years	Total
Non-derivative financial liabilities						
Lease liabilities	$ 2,177	$ 4,353	$ 19,342	$ 89,264	$ -	$ 115,136
Non-interest bearing						
Trade payables (including related parties)	85,875	69,906	-	-	-	155,781
Other payables	9,848	2,585	2,244	-	-	14,677
	$ 97,900	$ 76,844	$ 21,586	$ 89,264	$ -	$ 285,594

Additional information about the maturity analysis for lease liabilities:

	Less than 1 Year	1-5 Years	5-10 Years	10-15 Years	15-20 Years	20+ Years
Lease liabilities	$ 25,872	$ 89,264	$ -	$ -	$ -	$ -

December 31, 2018

	On Demand or Less than 1 Month	1-3 Months	3 Months - 1 Year	1-5 Years	5+ Years	Total
Non-derivative financial liabilities						
Non-interest bearing						
Trade payables (including related parties)	$ 53,078	$ 334	$ -	$ -	$ -	$ 53,412
Other payables	15,720	3,229	282	-	-	19,231
	$ 68,798	$ 3,563	$ 282	$ -	$ -	$ 72,643

b) Financing facilities:

	December 31	
	2019	2018
Unsecured borrowings facilities		
Amount unused	$ 650,000	$ 650,000

30. TRANSACTIONS WITH RELATED PARTIES

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. Besides information disclosed elsewhere in the other notes, details of transactions between the Group and other related parties are disclosed below:

a. Related parties and their relationships associated with the Group:

Related Parties	Relationship with the Group
ATEN International Co., Ltd.	Investor with significant influence over the Group
Avago Technologies International Sales PTE. Limited	Investor with significant influence over the Group
EMEL Explorer Inc.	Substantial related party

b. Operating revenues

Related Party Category	For the Year Ended December 31	
	2019	2018
Investor with significant influence over the Group	$ 7,824	$ 9,682

The sales of the related parties are determined according to the agreed terms of both parties, and the collection conditions are equivalent to the general trading conditions.

c. Purchases

Related Party Name	For the Year Ended December 31	
	2019	2018
Avago Technologies International Sales PTE. Limited	$ 103,236	$ 210,062

The purchase of the related party is determined according to the agreed terms of the two parties, and there is no other suitable trading object to compare.

d. Receivables from related parties

Related Party Category	December 31	
	2019	2018
Investor with significant influence over the Group	$ 1,018	$ 2,249

The outstanding trade receivables from related parties are unsecured. For the years ended December 31, 2019 and 2018, no impairment loss was recognized for trade receivables from related parties.

e. Payables to related parties

Related Party Name	December 31	
	2019	2018
Avago Technologies International Sales PTE. Limited	$ 14,990	$ 17,915

The outstanding trade payables from related parties are unsecured. The transaction price was based on the market price and is determined by both parties.

f. Acquisitions of other assets

Related Party Name	December 31 2019	December 31 2018
EMEL Explorer Inc.	$ -	$ 10,476

g. Compensation of key management personnel

The total amount of payroll to directors and supervisors and other key executives in 2019 and 2018 were as follows:

	For the Year Ended December 31 2019	For the Year Ended December 31 2018
Short-term benefits	$ 27,483	$ 25,146
Post-employment benefits	324	459
Share-based payments	2,774	4,468
	$ 30,581	$ 30,073

The remuneration of key executives was determined by the remuneration committee based on the performance of individuals and market trends.

31. 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, 2019 and 2018 were as follows:

Under an agreement, the Group shall pay royalties at a percentage of net sales of certain products. For the years ended December 31, 2019 and 2018, royalty expense amounted to $157 thousand and $339 thousand, respectively.

32. SIGNIFICANT 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, 2019

	Foreign Currencies	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
USD	$ 36,755	29.98	$ 1,101,915
Non-monetary items			
Financial assets at FVTPL			
USD	1,021	29.98	30,610
Financial liabilities			
Monetary items			
USD	10,293	29.98	308,584

December 31, 2018

	Foreign Currencies	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
USD	$ 20,221	30.715	$ 621,088
Non-monetary items			
Financial assets at FVTPL			
USD	960	30.715	29,490
Financial liabilities			
Monetary items			
USD	5,855	30.715	179,836

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

	For the Year Ended December 31			
	2019		2018	
Foreign Currencies	Exchange Rate	Net Foreign Exchange Gains (Losses)	Exchange Rate	Net Foreign Exchange Gains (Losses)
USD	29.98 (USD:NTD)	$ 14,545	30.715 (USD:NTD)	$ 23,607

33. SEPARATELY DISCLOSED ITEMS

a. Information on significant transactions and information on investees:

1) Financing provided to others: None

2) Endorsements/guarantees provided: None

3) Marketable securities held:

Holding Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	December 31, 2019				Note
				Number of Shares (In Thousands)	Carrying Amount (In Thousands)	Percentage of Ownership (%)	Fair Value (In Thousands)	
ASPEED Technology Inc.	Funds - Allianz Global Investors Fund - Allianz Flexi Asia Bond AT USD	-	Financial assets at FVTPL - current	85	$ 30,616	-	$ 30,616	Note
	Shares - CTBC Financial Holding Co., Ltd. Preferred Shares C	-	Financial assets at FVTPL - current	1,000	63,400	0.6	63,400	Note
	Shares - Shin Kong Financial Holding Co.,Ltd. Preferred Shares A	-	Financial assets at FVTPL - current	1,500	68,925	2	68,925	Note

Note: The value is calculated by net value on December 31, 2019.

4) Marketable securities acquired and disposed of at costs or prices of at least NT$300 million or 20% of the paid-in capital: (Table 1)

5) Acquisition of individual real estate at costs of at least NT$300 million or 20% of the paid-in capital: None

6) Disposal of individual real estate at prices of at least NT$300 million or 20% of the paid-in capital: None

7) Total purchases from or sales to related parties amounting to at least NT$100 million or 20% of the paid-in capital: (Table 2)

8) Receivables from related parties amounting to at least NT$100 million or 20% of the paid-in capital: None

9) Trading in derivative instruments: None

10) Intercompany relationships and significant intercompany transactions (Table 3)

11) Information on investees:

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount (In thousands) December 31		As of December 31, 2019			Net Income (Loss) of the Investee (In Thousands)	Share of Profits (Loss) (In Thousands)	Note
				2019	2018	Number of Shares (In Thousands)	%	Carrying Amount (In Thousands)			
ASPEED Technology Inc.	ASPEED Technology (Samoa) Inc.	Samoa	Investment holding company	$ 48,763	$ 48,763	1,550	100	$ 31,186	$ 7,555	$ 7,555	-
	ASPEED Technology India Private Limited	India	R&D and technical services	166	166	35	1	113	1,260	13	-
	Cupola360 Inc.	Taiwan	Software Design Services	15,000	15,000	1,500	100	11,073	(2,154)	(2,154)	-
ASPEED Technology (Samoa) Inc.	ASPEED Technology (U.S.A) Inc.	U.S.A.	R&D and technical services	31,460	31,460	1,000	100	19,465	6,345	6,345	-
	ASPEED Technology India Private Limited	India	R&D and technical services	16,068	16,068	3,465	99	11,173	1,260	1,247	-

c. 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 gains or losses, carrying amount of the investment at the end of the period, repatriations investment gains or losses, and limit on the amount of investment in the mainland China area: None

2) Any of the following significant transactions with investee companies in mainland China, either directly or indirectly through a third party, and their prices, payment terms, and unrealized gains or losses: None.

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 receipt of services

34. SEGMENT INFORMATION

The Group is considered as a single operating segment. Profit and loss, assets and liabilities are measured on the same basis as the basis for the preparation of the consolidated financial statements. For relevant operating information, refer to the consolidated financial statements.

a. Major revenue of products and service

The following was an analysis of the Group's major revenue by products and service from continuing operations by reportable segments.

	For the Year Ended December 31	
	2019	2018
Multimedia Integrated Circuits (ICs)	$ 2,327,708	$ 2,014,508
Computer Peripherals Oriented ICs	155,537	136,556
Other	1,250	2,455
	$ 2,484,295	$ 2,153,519

b. Geographical information

The Group's net operating revenue from external customers by location of customer and information about its non-current assets by location are detailed below.

	Revenue from External Customers		Non-current Assets	
	For the Year Ended December 31		December 31	
	2019	2018	2019	2018
Taiwan	$ 985,081	$ 774,574	$ 1,045,996	$ 969,862
China	1,086,059	930,834	-	-
U.S.A.	245,539	343,552	12,604	502
Others	167,616	104,559	1,141	63
	$ 2,484,295	$ 2,153,519	$ 1,059,741	$ 970,427

Non-current assets exclude financial instruments and deferred tax assets.

c. Information about major customers

Single customers who contributed 10% or more to the Group's revenue were as follows:

	For the Year Ended December 31	
	2019	2018
Customer A	$ 537,116	$ 473,283
Customer B	368,222	228,113
Customer C	253,925	207,400
Customer D	200,170	300,207

TABLE 1

ASPEED TECHNOLOGY INC. 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, 2019
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Company Name	Type and Name of Marketable Securities	Financial Statement Account	Beginning Balance		Acquisition		Unrealized Assessment of Financial Assets	Ending Balance	
			Number of Shares (Thousands)	Amount	Number of Shares (Thousands)	Amount		Number of Shares (Thousands)	Amount
ASPEED Technology Inc.	Shin Kong Financial Holding Co., Ltd. Preferred Shares A	Financial assets at FVTPL - current	-	$ -	1,500	$ 69,870	$ (945)	1,500	$ 68,925

TABLE 2

ASPEED TECHNOLOGY INC. AND SUBSIDIARIES

TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES AMOUNTING TO AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Buyer	Related Party	Relationship	Transaction Details				Abnormal Transaction		Notes/Trades Receivable (Payable)	
			Purchase/ Sale	Amount	% of Total	Payment Terms	Unit Price	Payment Terms	Ending Balance	% of Total
ASPEED Technology Inc.	Avago Technologies International Sales PTE. Limited	Investor with significant influence over the group	Purchase	$ 103,236	12.43	Payment shall be made within 30 days after inspection and acceptance	No major differences	No major differences	$ 14,990	9.62

TABLE 3

ASPEED TECHNOLOGY INC. AND SUBSIDIARIES

INTERCOMPANY RELATIONSHIPS AND SIGNIFICANT INTERCOMPANY TRANSACTIONS
FOR THE YEAR ENDED DECEMBER 31, 2019
(Amounts in Thousands of New Taiwan Dollars)

No.	Investee Company	Counterparty	Relationship (Note 1)	Transactions Details			
				Financial Statement Accounts	Amount	Payment Terms	% of Total Sales or Assets
0	The Company	ASPEED Technology (U.S.A.) Inc.	1	Other payables	$ 7,364	Note 2	0.22
				Technical service expense	77,595	Note 2	3.12
		ASPEED Technology India Private Limited	1	Other payables	1,339	Note 2	0.04
				Technical service expense	9,702	Note 2	0.39

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

Note 2: Payment terms are determined according to the agreed terms of the two parties.

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INDEPENDENT AUDITORS' REPORT

The Board of Directors and the Shareholders
ASPEED Technology Inc.

Opinion

We have audited the accompanying financial statements of ASPEED Technology Inc. (the "Company"), which comprise the balance sheets as of December 31, 2019 and 2018, 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, 2019 and 2018, 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, 2019. 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 matters for the Company's financial statements for the year ended December 31, 2019 are stated as follows:

<u>Recognition of revenue</u>

The Company operates principally as a supplier of multimedia integrated circuits (ICs) and computer peripherals oriented ICs. For the year ended December 31, 2019, the Company recognized revenue of NT$2,484,295 thousand, which increased by 15% compared with that of last year, refer to Note 22 for related information. Due to the increasing market demand for remote server management system, the significant changes in the amount of the

Company's operating revenue in recent years have a significant impact on the financial statements for the year ended December 31, 2019. For customers whose sales growth rates were significant, we considered that testing the existence and occurrence of sales is a key audit matter of the current period.

Our audit procedures performed included, but not limited to the following: We evaluated the appropriateness of the Company's accounting policies relating to revenue recognition. We understood the internal controls over the approval of sales order and shipping. We tested the effectiveness of those internal controls and sampled the sales documents to inspect sales details, including cash collections in the audited period and the subsequent period. Moreover, we verified if any deviant occurred in those parties when the sales were recorded and cash was received.

<u>Goodwill impairment test</u>

To create synergy that benefits the Company's existing products in response to the global growth of server remote management system, the Company acquired Emulex Corporation's Pilot Business, which was under Broadcom Group, at the price of NT$926,937 thousand (or US$28,658 thousand), and it also recognized intangible assets including client relationship, know-how, licenses, trademark, and goodwill. As of December 31, 2019, goodwill was NT$369,040 thousand, accounting for 11% of the total assets, and it was significant to the financial statements. According to IAS 36, the goodwill impairment assessment test should be conducted annually. When assessing whether goodwill is impaired or not, the management needs to assess whether the recoverable amount calculated according to the value-of-use model is still higher than the book value of goodwill. In assessing the foregoing, it is necessary to estimate the operating cash flow that may arise in the future and determine the appropriate discount rate to calculate the recoverable amount.

The management engaged an external appraiser to issue a goodwill impairment assessment report. When determining the future operating cash flow, the management will consider the sales growth rate and profit rate based on the future operating outlook, and calculate the weighted average cost of capital as the discount rate. Since these key assumptions involve subjective judgments of management and may be affected by future market or economy, there is a high degree of uncertainty over the estimates. Therefore, the goodwill impairment assessment is one of the key audit matters for the year.

Refer to Note 4 (i), Note 5 and Note 14 to the financial statements for the information on the accounting policies, accounting estimates and assumptions of the impairment assessments.

We performed the following major auditing procedures (but not limited to the following) to assess the significant estimates and the reasonableness of assumptions used in the estimated future operating cash flows and weighted average cost of capital ratios when the Company estimates the impairment of goodwill:

1. We understood the process and basis for the management's estimated sales growth rate and profit margin for the future operating outlook.

2. We examined whether the estimates of the future operating cash flows are consistent with the future operating plans approved by the board of directors or not. The future sales growth rates and profit margins adopted, whether to consider the recent operating results, historical trends and industry profiles, etc., were updated as appropriate.

3. We adopted the financial advisors of the firm to assist in assessing the recoverable amount calculated by the management based on the value-of-use model, using the weighted average cost of capital, including the risk-free rate, volatility and risk premium assumptions, whether or not to comply with the industry situation, re-calculated and checked.

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 and 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, 2019 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 Ming Hui Chen and Yi Shin Kao.

Deloitte & Touche
Taipei, Taiwan
Republic of China

March 2, 2020

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

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

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

ASPEED TECHNOLOGY INC.

BALANCE SHEETS
DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars)

ASSETS	2019 Amount	2019 %	2018 Amount	2018 %
CURRENT ASSETS				
Cash and cash equivalents (Note 6)	$ 1,390,725	41	$ 1,070,739	38
Financial assets at fair value through profit or loss - current (Note 7)	162,941	5	89,030	3
Financial assets at amortized cost-current (Note 8)	-	-	80,000	3
Trade receivables, net (Note 9)	627,829	19	398,741	14
Receivables from related parties, net (Notes 9 and 30)	1,018	-	2,249	-
Inventories (Note 10)	82,078	2	138,841	5
Prepayments and other current assets (Note 16)	15,251	-	9,217	-
Total current assets	2,279,842	67	1,788,817	63
NON-CURRENT ASSETS				
Investment accounted for using equity method (Notes 11 and 33)	42,372	1	38,055	1
Property, plant and equipment (Note 12)	122,691	4	84,277	3
Right-of-use assets (Notes 3 and 13)	98,690	3	-	-
Goodwill (Notes 5 and 14)	369,040	11	369,040	13
Other intangible assets, net (Note 15)	435,235	13	463,897	17
Deferred tax assets (Note 24)	37,572	1	31,902	1
Refundable deposits (Note 16)	10,685	-	5,455	-
Other non-current assets (Note 16)	2,845	-	43,743	2
Total non-current assets	1,119,130	33	1,036,369	37
TOTAL	$ 3,398,972	100	$ 2,825,186	100

LIABILITIES AND EQUITY	2019 Amount	2019 %	2018 Amount	2018 %
CURRENT LIABILITIES				
Trade payables (Note 17)	$ 140,791	4	$ 35,497	1
Payables to related parties (Note 30)	14,990	1	17,915	1
Accrued employees' compensation and remuneration of directors (Note 23)	103,501	3	84,365	3
Other payables (Note 18)	26,918	1	27,195	1
Other payables to related parties (Note 30)	8,703	-	9,102	-
Current tax liabilities (Note 24)	141,092	4	113,794	4
Provisions - current (Note 19)	26,571	1	21,670	1
Lease liabilities - current (Notes 3 and 13)	20,820	1	-	-
Other current liabilities (Note 18)	142,034	4	108,864	4
Total current liabilities	625,420	19	418,402	15
NON-CURRENT LIABILITIES				
Deferred tax liabilities (Note 24)	62,135	2	77,844	3
Lease liabilities - non-current (Notes 3 and 13)	77,121	2	-	-
Provisions - non-current (Note 19)	910	-	-	-
Total non-current liabilities	140,166	4	77,844	3
Total liabilities	765,586	23	496,246	18
EQUITY ATTRIBUTABLE TO OWNERS OF THE COMPANY (Note 21)				
Share capital				
Ordinary shares	341,848	10	340,656	12
Capital surplus	1,145,044	33	1,056,831	37
Retained earnings				
Legal reserve	286,740	9	218,148	8
Special reserve	31,499	1	10,166	-
Unappropriated earnings	862,848	25	734,639	26
Total retained earnings	1,181,087	35	962,953	34
Other equity	(34,593)	(1)	(31,500)	(1)
Total equity	2,633,386	77	2,328,940	82
TOTAL	$ 3,398,972	100	$ 2,825,186	100

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

ASPEED TECHNOLOGY INC.

STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2019		2018	
	Amount	%	Amount	%
OPERATING REVENUE (Notes 22 and 30)				
Sale	$ 2,483,373	100	$ 2,152,754	100
Other operating revenue	922	-	765	-
Total operating revenue	2,484,295	100	2,153,519	100
OPERATING COSTS (Notes 10, 23 and 30)				
Cost of goods sold	913,248	37	863,688	40
GROSS PROFIT	1,571,047	63	1,289,831	60
OPERATING EXPENSES (Note 23)				
Selling and marketing expenses	62,227	3	67,817	3
General and administrative expenses	81,683	3	68,866	3
Research and development expenses	424,389	17	358,329	17
Total operating expenses	568,299	23	495,012	23
INCOME FROM OPERATIONS	1,002,748	40	794,819	37
NON-OPERATING INCOME AND EXPENSES				
Other income (Notes 23, 27 and 30)	16,875	1	34,513	2
Other gains and losses (Note 23)	(12,722)	(1)	20,296	1
Finance costs (Note 23)	(1,799)	-	(723)	-
Share of profit or loss of subsidiaries	5,414	-	4,122	-
Total non-operating income and expenses, net	7,768	-	58,208	3
INCOME BEFORE INCOME TAX FROM CONTINUING OPERATIONS	1,010,516	40	853,027	40
INCOME TAX EXPENSE (Note 24)	179,331	7	167,105	8
NET INCOME FOR THE YEAR	831,185	33	685,922	32

(Continued)

ASPEED TECHNOLOGY INC.

STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	2019		2018	
	Amount	**%**	**Amount**	**%**
OTHER COMPREHENSIVE LOSS				
Items that may be reclassified subsequently to profit or loss:				
Exchange differences on translating financial statements of foreign operations	$ (1,097)	-	$ (152)	-
Other comprehensive loss for the year, net of income tax	(1,097)	-	(152)	-
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	$ 830,088	33	$ 685,770	32
EARNINGS PER SHARE (Note 25)				
Basic	$ 24.39		$ 20.20	
Diluted	$ 24.28		$ 20.10	

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

ASPEED TECHNOLOGY INC.

PARENT COMPANY ONLY STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars, Except Earnings Per Share)

	Share Capital			Retained Earning			Other Equity			
	Shares (In thousands)	Ordinary Shares	Capital Surplus	Legal Reserve	Special Reserve	Unappropriated Earnings (Accumulated Deficit)	Employee Unearned Compensation	Exchange Differences on Translating Foreign Operations	Unrealized Gain (loss) from Available-for-sale Financial Assets	Total Equity
BALANCE AT JANUARY 1, 2018	33,937	$ 339,378	$ 960,462	$ 165,011	$ 13,085	$ 610,179	$ (7,558)	$ (973)	$ (1,637)	$ 2,077,947
Effect of retrospective application	-	-	-	-	-	(1,637)	-	-	1,637	-
BALANCE AT JANUARY 1, 2018 AS RESTATED	33,937	339,378	960,462	165,011	13,085	608,542	(7,558)	(973)	-	2,077,947
Appropriation of prior year's earnings										
Legal reserve	-	-	-	53,137	-	(53,137)	-	-	-	-
Special reserve	-	-	-	-	(2,919)	2,919	-	-	-	-
Cash dividends to shareholders - NT$15.00 per share	-	-	-	-	-	(509,607)	-	-	-	(509,607)
Net income for the year ended December 31, 2018	-	-	-	-	-	685,922	-	-	-	685,922
Other comprehensive income after tax	-	-	-	-	-	-	-	(152)	-	(152)
Comprehensive income for the year ended December 31, 2018	-	-	-	-	-	685,922	-	(152)	-	685,770
Employee stock bonus - Record date: August 7, 2018	71	708	60,198	-	-	-	-	-	-	60,906
Issuance of restricted stock under employees share options on February 5 and November 12, 2018	57	570	36,171	-	-	-	(36,741)	-	-	-
Compensation cost of restricted shares for employees	-	-	-	-	-	-	13,924	-	-	13,924
BALANCE AT DECEMBER 31, 2018	34,065	340,656	1,056,831	218,148	10,166	734,639	(30,375)	(1,125)	-	2,328,940
Appropriation of prior year's earnings										
Legal reserve	-	-	-	68,592	-	(68,592)	-	-	-	-
Special reserve	-	-	-	-	21,333	(21,333)	-	-	-	-
Cash dividends to shareholders - NT$18.00 per share	-	-	-	-	-	(613,051)	-	-	-	(613,051)
Net income for the year ended December 31, 2019	-	-	-	-	-	831,185	-	-	-	831,185
Other comprehensive income after tax	-	-	-	-	-	-	-	(1,097)	-	(1,097)
Comprehensive income for the year ended December 31, 2019	-	-	-	-	-	831,185	-	(1,097)	-	830,088
Employee Stock Bonus - Record date: August 2, 2019	103	1,034	73,957	-	-	-	-	-	-	74,991
Issuance of restricted stock under employees share options on September 10, 2019	28	280	21,867	-	-	-	(22,147)	-	-	-
Cancellation of restricted stock under employees share options on March 11, 2019 and August 5, 2019	(12)	(122)	(7,611)	-	-	-	7,733	-	-	-
Compensation cost of restricted shares for employees	-	-	-	-	-	-	12,418	-	-	12,418
BALANCE AT DECEMBER 31, 2019	34,184	$ 341,848	$ 1,145,044	$ 286,740	$ 31,499	$ 862,848	$ (32,371)	$ (2,222)	$ -	$ 2,633,386

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

ASPEED TECHNOLOGY INC.

STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars)

	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES		
Income before income tax	$ 1,010,516	$ 853,027
Adjustments for:		
Depreciation expense	47,728	30,722
Amortization expense	103,297	105,648
Net gain on fair value changes of financial assets designated as at fair value through profit or loss	(2,692)	(1,640)
Finance costs	1,799	723
Interest income	(14,209)	(13,600)
Compensation cost of employee restricted shares	12,418	13,924
Share of gain of subsidiaries	(5,414)	(4,122)
(Reversal of) write-down of inventories	(1,928)	5,329
Net gain on foreign currency exchange	(38,151)	(25,178)
Recognition of provisions	4,901	4,688
Loss on disposal of property, plant and equipment	1,643	-
(Gain) loss on disposal of financial assets	(6,282)	8,075
Changes in operating assets and liabilities		
Trade receivables (include related parties)	(239,469)	(35,899)
Inventories	58,691	(53,664)
Other current assets	(5,974)	(92)
Trade payables (include related parties)	104,906	(24,191)
Other payables (include related parties)	4,973	(5,340)
Provisions	-	(3,674)
Other current liabilities	35,173	(4,301)
Payables for employees' compensation and remuneration of directors	94,127	77,439
Cash generated from operations	1,166,053	927,874
Interest paid	(1,799)	(751)
Income tax paid	(173,412)	(141,790)
Net cash generated from operating activities	990,842	785,333
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchase of financial assets at amortized cost	-	(80,000)
Proceeds from of financial assets at amortized cost	80,000	-
Acquisition of investment accounted for using equity method	-	(15,000)
Purchase of financial assets at fair value through profit or loss	(180,112)	(89,894)
Proceeds from sale of financial assets at fair value through profit or loss	115,175	271,960
Payments for property, plant and equipment	(81,053)	(75,391)
Increase in refundable deposits	(5,230)	(1,380)
Payments for intangible assets	(36,697)	(35,629)
Increase in prepayments for equipment	(2,845)	-
Interest received	14,140	13,578
Net cash used in investing activities	(96,622)	(11,756)

(Continued)

ASPEED TECHNOLOGY INC.

STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018
(In Thousands of New Taiwan Dollars)

	2019	2018
CASH FLOWS FROM FINANCING ACTIVITIES		
Repayments of short-term borrowings	$ -	$ (50,000)
Repayments of the principal portion of lease liabilities	(6,293)	-
Cash dividends	(613,051)	(509,607)
Net cash used in financing activities	(619,344)	(559,607)
EFFECT OF EXCHANGE RATE CHANGES ON THE BALANCE OF CASH AND CASH EQUIVALENTS HELD IN FOREIGN CURRENCIES	45,110	27,223
NET INCREASE IN CASH AND CASH EQUIVALENTS	319,986	241,193
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	1,070,739	829,546
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	$ 1,390,725	$ 1,070,739

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

1. GENERAL INFORMATION

ASPEED Technology Inc. (the "Company") has been approved by the Ministry of Economic Affairs for establishment on November 15, 2004. The Company is mainly engaged in the manufacturing of electronic products, wholesale of information software, retail and service industry, international trade, intellectual property, product design, and other industrial and commercial service. The Company's shares have been traded on the Taipei Exchange since April 30, 2013.

The financial statements are presented in the Company's functional currency, the New Taiwan dollar.

2. APPROVAL OF FINANCIAL STATEMENTS

The parent company only financial statements were approved by the Company's board of directors and authorized for issue on March 2, 2020.

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), IFRIC Interpretations (IFRIC), and SIC Interpretations (SIC) (collectively, the "IFRSs") endorsed and issued into effect by the Financial Supervisory Commission (FSC)

Except for the following, 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 did not have material impact on the Company's accounting policies:

1) IFRS 16 "Leases"

IFRS 16 provides a comprehensive model for the identification of lease arrangements and their treatment in the financial statements of both lessee and lessor. It supersedes IAS 17 "Leases", IFRIC 4 "Determining whether an Arrangement contains a Lease", and a number of related interpretations. Refer to Note 4 for information relating to the relevant accounting policies.

<u>Definition of a lease</u>

The Company elects 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 are not reassessed and are accounted for in accordance with the transitional provisions under IFRS 16.

The Company as lessee

The Company recognizes right-of-use assets, and lease liabilities for all leases on the balance sheets except for those whose payments under low-value asset and short-term leases are recognized as expenses on a straight-line basis. On the statements of comprehensive income, the Company presents 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 are classified within financing activities; cash payments for the interest portion are classified within operating activities. Prior to the application of IFRS 16, payments under operating lease contracts were recognized as expenses on a straight-line basis. Cash flows for operating leases were classified within operating activities on the consolidated statements of cash flows Leased assets and finance lease payables were recognized on the balance sheets for contracts classified as finance leases.

The Company elects to apply IFRS 16 retrospectively with the cumulative effect of the initial application of this standard recognized in retained earnings on January 1, 2019. Comparative information is not restated.

The weighted average lessee's incremental borrowing rate applied to lease liabilities recognized on January 1, 2019 is 2.15%. The difference between the (i) lease liabilities recognized and (ii) operating lease commitments disclosed under IAS 17 on December 31, 2018 is explained as follows:

The future minimum lease payments of non-cancellable operating lease commitments on December 31, 2018	$ 12,100
Less: Recognition exemption for short-term leases	(3,795)
Undiscounted amounts on January 1, 2019	$ 8,305
Discounted amounts using the incremental borrowing rate on January 1, 2019	$ 8,098
Lease liabilities recognized on January 1, 2019	$ 8,098

The impact on assets, liabilities and equity as of January 1, 2019 from the initial application of IFRS 16 is set out as follows:

	Pre-Adjusted Amount on January 1, 2019	Adjustments Arising from Initial Application	Adjusted Amount on January 1, 2019
Right-of-use assets	$ -	$ 8,098	$ 8,098
Total effect on assets	$ -	$ 8,098	$ 8,098
Lease liabilities - current	$ -	$ 3,670	$ 3,670
Lease liabilities - non-current	-	4,428	4,428
Total effect on liabilities	$ -	$ 8,098	$ 8,098

b. The IFRSs endorsed by the Financial Supervisory Commission (FSC) for application starting from 2020

New, Amended or Revised Standards and Interpretations (the "New IFRSs")	Effective Date Announced by IASB
Amendments to IFRS 3 "Definition of a Business"	January 1, 2020 (Note 1)
Amendments to IFRS 9, IAS 39 and IFRS 7 "Interest Rate Benchmark Reform"	January 1, 2020 (Note 2)
Amendments to IAS 1 and IAS 8 "Definition of Material"	January 1, 2020 (Note 3)

Note 1: 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 2: The Company shall apply these amendments retrospectively for annual reporting periods beginning on or after January 1, 2020.

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

As of the date the consolidated financial statements were authorized for issue, the Company is continuously assessing the possible impact that the application of 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.

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

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

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 POLICY

For the convenience of readers, the accompanying parent company only financial statements have been translated into English from the original Chinese version prepared and used in the 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 parent company only financial statements shall prevail.

a. Statement of compliance

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

b. Basis of Preparation

The 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, which 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 an 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 an asset or liability.

When preparing its parent company only financial statements, the Company used equity method to account for its investment in subsidiaries. In order for the amounts of the net profit for the year, other comprehensive income for the year and total equity in the parent company only financial statements to be the same with the amounts attributable to the owner of the Company in its consolidated financial statements, adjustments arising from the differences in accounting treatment between parent company only basis and consolidated basis were made to investments accounted for using the equity method, share of profit or loss of subsidiaries and related equity items, as appropriate, in the parent company only financial statements.

c. Classification of current and non-current 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 financial statements are authorized for issue; and

3) Liabilities for which the Company does not have an unconditional right to defer settlement for at least 12 months after the reporting period.

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

d. Business combinations

Acquisitions of businesses are accounted for using the acquisition method. Acquisition-related costs are generally recognized in profit or loss as they are incurred.

Goodwill is measured as the excess of the sum of the consideration transferred and the fair value of the acquirer's previously held equity interests in the acquire over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed.

e. Foreign currencies

In preparing the parent company only financial statements, transactions in currencies other than the Company's functional currency (i.e., 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 in which they arise.

Non-monetary items measured at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Exchange differences 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.

f. Inventories

Inventories consist of work-in-process and finished goods 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 Company 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 standard cost and adjusted to approximate weighted-average cost on the balance sheet date.

g. Investments in subsidiaries

The Company uses the equity method to account for its investments in subsidiaries.

Subsidiaries are the entities controlled by the Company.

Under the equity method, the investment in a subsidiary is initially recognized at cost, and the carrying amount is increased or decreased to recognize the Company's share of the profit or loss and other comprehensive income of the subsidiary after the date of acquisition. Besides, the Company also recognizes the Company's share of the change in other equity of the subsidiary.

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. Any difference between the carrying amount of the investment and the fair value of the consideration paid or received is recognized in equity.

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 investee's financial statements as a whole. Impairment loss is recognized when the carrying amount exceeds the recoverable amount. If the recoverable amount of the investment subsequently increases, the Company recognizes the 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 the 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 had the Company directly disposed of the related assets or liabilities.

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

h. Property, plant and equipment

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

Depreciation on property, plant and equipment is recognized using the straight-line method. Each significant part is depreciated separately. The estimated useful lives, residual values and depreciation methods are reviewed at the end of each reporting period, with the effects of any changes in estimates 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. Goodwill

Goodwill arising from the acquisition of a business is measured at cost as established at the date of acquisition of the business less accumulated impairment loss.

For the purposes of impairment testing, goodwill is allocated to each of the Company's cash-generating units or groups of cash-generating units (referred to as "cash-generating units") that is expected to benefit from the synergies of the combination.

A cash-generating unit to which goodwill has been allocated is tested for impairment annually or more frequently when there is an indication that the unit may be impaired, by comparing its carrying amount, including the attributed goodwill, with its recoverable amount. However, if the goodwill allocated to a cash-generating unit was acquired in a business combination during the current annual period, that unit shall be tested for impairment before the end of the current annual period. If the recoverable amount of the cash-generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then pro rata to the other assets of the unit based on the carrying amount of each asset in the unit. Any impairment loss is recognized directly in profit or loss. Any impairment loss recognized for goodwill is not reversed in subsequent periods.

If goodwill has been allocated to a cash-generating unit and the entity disposes of an operation within that unit, the goodwill associated with the operation which is disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal and is measured on the basis of the relative values of the operation disposed of and the portion of the cash-generating unit retained.

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. 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 the estimate 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) Internally-generated intangible assets - research and development expenditure

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from the development phase of an internal project is recognized if, and only if, all of the following have been demonstrated:

a) The technical feasibility of completing the intangible asset so that it will be available for use or sale;

b) The intention to complete the intangible asset and use or sell it;

c) The ability to use or sell the intangible asset;

d) How the intangible asset will generate probable future economic benefits;

e) The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and

f) The ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for internally-generated intangible assets is the sum of the expenditure incurred from the date when such an intangible asset first meets the recognition criteria listed above. Subsequent to initial recognition, they are measured on the same basis as intangible assets that are acquired separately.

3) Intangible assets acquired in a business combination

Intangible assets acquired in a business combination and recognized separately from goodwill are initially recognized at their fair value at the acquisition date (which is regarded as their cost). Subsequent to initial recognition, they are measured on the same basis as intangible assets that are acquired separately.

4) 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 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 smallest group of 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 on the asset or cash-generating unit in prior years. A reversal of an impairment loss is recognized in profit or loss.

l. Financial instruments

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

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 FVTPL) 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 FVTPL 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 trade date basis.

a) Measurement categories

Financial assets are classified into the following categories: Financial assets at FVTPL and financial assets at amortized cost.

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 incorporates any dividends or interest earned on such a financial asset. Fair value is determined in the manner described in Note 29.

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 (including related parties) at amortized cost and other receivables, are measured at amortized cost, which equals the gross carrying amount determined using 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 are not credit-impaired on purchase or origination but 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 in subsequent reporting periods.

A financial asset is credit impaired when one or more of the following events have occurred:

i) Significant financial difficulty of the issuer or the borrower;

ii) Breach of contract, such as a default;

iii) It is becoming probable that the borrower will enter bankruptcy or undergo a financial reorganization; or

iv) The disappearance of an active market for that financial asset because of financial difficulties.

Cash equivalents include time deposits 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.

b) Impairment of financial assets

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

The Company always recognizes lifetime expected credit losses (ECLs) for trade receivables. For all other financial instruments, the Company recognizes lifetime ECLs when there has been a significant increase in credit risk since initial recognition. If, on the other hand, the credit risk on 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 the financial asset.

c) Derecognition of financial assets

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

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.

2) Equity instruments

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

Equity instruments issued by the Company are recognized at the proceeds received, net of direct issue costs.

Repurchase of the Company's own equity instruments is recognized in and deducted directly from equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

3) Financial Liabilities

a) Subsequent measurement

All financial liabilities are measured at amortized cost using the effective interest method.

b) Derecognition of financial liabilities

The difference between the carrying amount of the financial liabilities derecognized and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognized in profit or loss.

m. Provisions

Provisions are measured at the best estimate of the discounted cash flows of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation.

1) Warranties

Provisions for the expected cost of warranty obligations to assure that products comply with agreed-upon specifications are recognized on the date of sale of the relevant products at the best estimate by the management of the Company of the expenditures required to settle the Company's obligations.

2) Decommissioning

The Company has the obligation for decommissioning at the end of the useful lives of offices. Pursuant to regulations, the Company estimates the decommissioning costs, which are discounted by applying the effective interest rate and recognized as the carrying amount. The decommissioning costs are capitalized and added to the carrying amount of property, plant and equipment.

The Company recognizes both the increased decommissioning provisions discounted on a time basis and interest expenses. The Company regularly reviews the change of decommissioning obligation at each end of the reporting period and adjusts it to reflect the best estimates.

n. Revenue recognition

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. Allowance for sales returns and liability 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.

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

1) Revenue from the sale of goods

Revenue from the sale of goods comes from sales of multimedia integrated circuits (ICs) and computer peripherals oriented ICs. Sales of multimedia ICs and computer peripherals oriented ICs are recognized as revenue when the ICs are delivered to the customer. Trade receivables are recognized concurrently. Any amounts are reclassified to trade receivables when the remaining obligations are performed.

The Company does not recognize revenue on materials delivered to subcontractors because this delivery does not involve a transfer of control. There were no materials delivered to subcontractors in 2019.

2) Royalties revenue

Royalty revenue is recognized on an accrual basis in accordance with the substance of the relevant agreement and provided that it is probable that the economic benefits will flow to the Company and that the amount of revenue can be measured reliably. Royalties determined on a time basis are recognized on a straight-line basis over the period of the agreement. Royalty arrangements that are based on production, sales and other measures are recognized by reference to the underlying arrangements.

o. Leasing

2019

At the inception of a contract, the Company assesses whether the contract is, or contains, a lease.

1) The Company as lessor

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

When the Company subleases a right-of-use asset, the sublease is classified by reference to the right-of-use asset arising from the head lease, not with reference to the underlying asset. However, if the head lease is a short-term lease that the Company, as a lessee, has accounted for applying recognition exemption, the sublease is classified as an operating lease.

2) The Company as lessee

The Company recognizes right-of-use assets and lease liabilities for all leases at the commencement date of a lease, except for short-term leases and low-value asset leases accounted for applying a recognition exemption where lease payments are recognized as expenses on a straight-line over the lease terms.

Right-of-use assets are initially measured at cost, which comprises the initial measurement of lease liabilities adjusted for lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs needed to restore the underlying assets, and less any lease incentives received. Right-of-use assets are subsequently measured at cost less accumulated depreciation and impairment losses and adjusted for any remeasurement of the lease liabilities. Right-of-use assets are presented on a separate line in the balance sheets.

Right-of-use assets are depreciated using the straight-line method from the commencement dates to the earlier of the end of the useful lives of the right-of-use assets or the end of the lease terms.

Lease liabilities are initially measured at the present value of the lease payments. The lease payments are discounted using the interest rate implicit in a lease, if that rate can be readily determined. If that rate cannot be readily determined, the Company uses the lessee's incremental borrowing rate.

Subsequently, lease liabilities are measured at amortized cost using the effective interest method, with interest expense recognized over the lease terms. When there is a change in a lease term, the Company remeasures the lease liabilities with a corresponding adjustment to the right-of-use-assets. However, if the carrying amount of the right-of-use assets is reduced to zero, any remaining amount of the remeasurement is recognized in profit or loss. Lease liabilities are presented on a separate line in the balance sheets.

2018

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.

The Company as lessee

Assets held under finance leases are initially recognized as assets of the Company at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lessor is included in the consolidated balance sheets as a finance lease obligation.

Operating lease payments are recognized as an expense on a straight-line basis over the lease term.

p. Government grants

Government grants are not recognized until there is reasonable assurance that the Company will comply with the conditions attached to them and that the grants will be received.

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.

q. 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 services.

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.

r. Restricted shares for employees

The fair value at the grant date of the restricted shares for employees is expensed on a straight-line basis over the vesting period, based on the Company's best estimates of the number of shares or options that are expected to ultimately vest, with a corresponding increase in other equity - unearned employee benefit. It is recognized as an expense in full at the grant date if vesting immediately.

When restricted shares for employees are issued, other equity - unearned employee benefits is recognized on the grant date, with a corresponding increase in capital surplus - restricted shares for employees. If restricted shares for employees are granted for consideration and should be returned, they are recognized as payables. Dividends paid to employees on restricted shares that do not need to be returned if employees resign in the vesting period are recognized as expenses when the dividends are declared with a corresponding adjustment in capital surplus - restricted shares for employees.

At the end of each reporting period, the Company revises its estimate of the number of restricted shares for employees expected to vest. The impact of the revision of the original estimates is recognized in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to capital surplus - restricted share option for employees.

s. Taxation

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

1) Current tax

Income tax on unappropriated earnings is expensed in the year the shareholders approved the appropriation of earnings which is the year subsequent to the year the earnings are generated.

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.

If a temporary difference arises from the initial recognition of assets and liabilities in a transaction that (other than in the acquisition of a subsidiary) affects neither the taxable profit nor the accounting profit, the resulting deferred tax asset or liability is not recognized. In addition, a deferred tax liability is not recognized on any taxable temporary difference arising from the initial recognition of goodwill included in the investment in the subsidiary.

Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences, research and development expenditures and personnel training expenditures 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, 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 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 year which the liability is settled or the asset is 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.

3) Current and deferred taxes

Current and deferred taxes 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 taxes 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 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 years.

Key Sources of Estimation Uncertainty

Impairment of goodwill

Determining whether goodwill is impaired requires an estimation of the value in use of the cash-generating units to which goodwill has been allocated. The calculation of the value in use requires management to estimate the future cash flows expected to arise from the cash-generating units and a suitable discount rate in order to calculate the present value. Where the actual future cash flows are less than expected, a material impairment loss may arise.

6. CASH AND CASH EQUIVALENTS

	December 31	
	2019	**2018**
Cash on hand	$ 76	$ 76
Demand deposits	242,884	157,775
Cash equivalents		
Time deposits with original maturities of less than 3 months	815,956	668,430
Repurchase agreements collateralized by bonds	331,809	244,458
	$ 1,390,725	$ 1,070,739

The market rate intervals of cash in the bank at the end of the reporting period were as follows:

	December 31	
	2019	**2018**
Bank deposits	0.01%-2.30%	0.01%-2.90%
Repurchase agreements collateralized by bonds	2.10%	0.45%-3.25%

7. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	December 31	
	2019	**2018**
Financial assets mandatorily classified as at FVTPL		
Non-derivative financial assets		
Domestic listed shares	$ 132,325	$ -
Mutual funds	30,616	89,030
	$ 162,941	$ 89,030

8. FINANCIAL ASSETS AT AMORTIZED COST

	December 31	
	2019	2018
Current		
Time deposits with original maturity of more than 3 months	$ -	$ 80,000

The range of interest rates for time deposits with original maturity of more than 3 months was 0.15% to 0.78% per annum as of December 31, 2018.

9. TRADE RECEIVABLES

	December 31	
	2019	2018
Trade receivables		
Non-related parties	$ 627,829	$ 398,741
Related parties	1,018	2,249
	$ 628,847	$ 400,990
Trade receivables		
At amortized cost		
Gross carrying amount	$ 628,847	$ 400,990
Less: Allowance for impairment loss	-	-
	$ 628,847	$ 400,990

The average credit period of sale of goods was 30-60 days. The Company adopted a policy that is in order to minimize credit risk, the management of the Company regularly reviews credit limits and credit approvals and performs other monitoring procedures to ensure that follow-up action is taken to recover overdue debts.

Before trading with new customers, the Company assesses the potential customer's credit quality and defines credit limits based on the credit rating system. Credit rating information is obtained from independent rating agencies where available or, if not available, the Company uses other publicly available financial information or its own trading records to rate its major customers.

As for the trade receivables that are overdue at the end of the reporting date but not yet recognized as the allowance for bad debts, the credit quality has not changed significantly; thus, the management of the Company believes that the amount can still be recovered. The Company does not hold any collateral or other credit enhancements to those trade receivables.

The Company applies the simplified approach to provisions 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, 2019

	Gross Carrying Amount	Loss Allowance	Amortized Cost
Not past due	$ 481,267	$ -	$ 481,267
Past due			
Within 30 days	140,311	-	140,311
31-60 days	7,269	-	7,269
61-90 days	-	-	-
91-180 days	-	-	-
	$ 628,847	$ -	$ 628,847

December 31, 2018

	Gross Carrying Amount	Loss Allowance	Amortized Cost
Not past due	$ 307,346	$ -	$ 307,346
Past due			
Within 30 days	93,339	-	93,339
31-60 days	305	-	305
61-90 days	-	-	-
91-180 days	-	-	-
	$ 400,990	$ -	$ 400,990

10. INVENTORIES

	December 31	
	2019	2018
Finished goods	$ 69,044	$ 130,581
Work in progress	13,034	8,260
	$ 82,078	$ 138,841

The cost of inventories recognized as cost of goods sold for the years ended December 31, 2019 and 2018 was $913,248 thousand and $863,688 thousand, respectively. The cost of inventories recognized as operating cost were as follows:

	December 31	
	2019	2018
Inventory write-downs (reversed)	$ (1,928)	$ 5,329

11. INVESTMENT ACCOUNTED FOR USING EQUITY METHOD

a. Investments in subsidiaries

	December 31	
	2019	2018
ASPEED Technology (Samoa) Inc.	$ 31,186	$ 24,722
ASPEED Technology India Private Limited	113	106
Cupola360 Inc.	11,073	13,227
	$ 42,372	$ 38,055

	Proportion of Ownership and Voting Rights	
	December 31	
Name of Subsidiaries	2019	2018
ASPEED Technology (Samoa) Inc.	100%	100%
ASPEED Technology India Private Limited	1%	1%
Cupola360 Inc.	100%	100%

1) Cupola360 Inc. was established in February 2018.

2) The Company holds 99% shares of ASPEED Technology India Private Limited through ASPEED Technology (Samoa) Inc., as ASPEED Technology India Private Limited is a 100% owned subsidiary of the Company.

3) The investment accounted for using the equity method and the calculation of the share of profit or loss and other comprehensive income were recognized based on the financial statements of subsidiaries that have been audited.

12. PROPERTY, PLANT AND EQUIPMENT

	December 31, 2019
Assets used by the Company	$ 122,691

a. Assets used by the Company - 2019

	Year Ended December 31, 2019			
	Balance, Beginning of the Year	Additions	Disposals	Balance, End of the Year
Cost				
Machinery equipment	$ 19,463	$ 7,233	$ -	$ 26,696
Office equipment	5,814	2,674	-	8,488
Other equipment	94,247	46,327	(18,880)	121,694
Construction in progress	-	25,097	-	25,097
	119,524	$ 81,331	$ (18,880)	181,975
Accumulated depreciation				
Machinery equipment	4,191	$ 4,745	$ -	8,936
Office equipment	1,356	1,461	-	2,817
Other equipment	29,700	35,068	(17,237)	47,531
	35,247	$ 41,274	$ (17,237)	59,284
Carrying amount	$ 84,277			$ 122,691

b. 2018

	Year Ended December 31, 2018			
	Balance, Beginning of the Year	Additions	Disposals	Balance, End of the Year
Cost				
Machinery equipment	$ 4,825	$ 15,751	$ (1,113)	$ 19,463
Office equipment	2,356	3,608	(150)	5,814
Other equipment	62,432	43,198	(11,383)	94,247
	69,613	$ 62,557	$ (12,646)	119,524
Accumulated depreciation				
Machinery equipment	1,936	$ 3,368	$ (1,113)	4,191
Office equipment	565	941	(150)	1,356
Other equipment	14,670	26,413	(11,383)	29,700
	17,171	$ 30,722	$ (12,646)	35,247
Carrying amount	$ 52,442			$ 84,277

The above items of property, plant and equipment are depreciated on a straight-line basis over their following estimated useful lives as follows:

Machinery equipment	3-5 years
Office equipment	4-5 years
Other equipment	2-6 years

13. LEASE ARRANGEMENTS

a. Right-of-use assets - 2019

	December 31, 2019
Carrying amounts	
Buildings	$ 97,146
Transportation equipment	1,544
	$ 98,690

	For the Year Ended December 31, 2019
Additions to right-of-use assets	$ 97,046
Depreciation charge for right-of-use assets	
Buildings	$ 5,571
Transportation equipment	883
	$ 6,454

b. Lease liabilities - 2019

	December 31, 2019
Carrying amounts	
Current	$ 20,820
Non-current	$ 77,121

Range of discount rate for lease liabilities was as follows:

	December 31, 2019
Buildings	2.00%
Transportation equipment	2.50%

c. Material lease-in activities and terms

The Company leases certain buildings for the use of manufacturing and office with lease terms of 1 to 5 years. The Company doesn’t have options to purchase the equipment for a nominal amount at the end of the lease terms. In addition, the Company is prohibited from subleasing or transferring all or any portion of the underlying assets without the lessor’s consent.

d. Other lease information

2019

	For the Year Ended December 31, 2019
Expenses relating to short-term leases	$ 930
Expenses relating to low-value asset leases	$ 165
Total cash outflow for leases	$ (7,733)

The Company leases certain office equipment which qualifies as short-term and low-value asset leases. The Company has elected to apply the recognition exemption and thus, did not recognize right-of-use assets and lease liabilities for these leases.

2018

The future minimum lease payments of non-cancellable operating lease commitments are as follows:

	December 31, 2018
Not later than 1 year	$ 4,381
Later than 1 year and not later than 5 years	1,740
	$ 6,121

14. GOODWILL

	December 31	
	2019	2018
Cost		
Balance at the January 1 and December 31	$ 369,040	$ 369,040

The Company acquired the Pilot product line on December 30, 2016, which is mainly expected to create synergies and benefit the company's existing products. When an impairment test is performed, the goodwill is related to the Company and deemed as a single cash-generating unit. Therefore, the impairment of goodwill is assessed by calculating the recoverable amount of the Company and the carrying amount of the net assets.

In addition, according to the asset impairment assessment analysis report issued by the Company, the financial forecast of the company from 2020 to 2024 is based on the financial analysis, according to the following: (a) management's reference to revenue growth rate of historical period, and (b) the difference between actual results and estimates on operating profit in 2019, 2018 and 2017, with conservative data as the basis for prediction.

The recoverable amount of the total cash-generating unit is still greater than the book value, so no impairment loss is recognized.

The Company's recoverable amount is determined on the basis of the value in use, and the cash flow estimate of the financial budget for the next five years is approved by the management of the Company, and is calculated using the annual discount rate of 13.73%.

15. OTHER INTANGIBLE ASSETS

	Years Ended December 31, 2019			
	Balance, Beginning of the Year	Additions	Disposals	Balance, End of the Year
Cost				
Licenses	$ 98,037	$ 73,667	$ (6,773)	$ 164,931
Software	1,212	518	(96)	1,634
Client relationship	145,552	-	-	145,552
Existing technology	359,030	-	-	359,030
Trademark	45,283	-	-	45,283
Others	-	450	-	450
	649,114	$ 74,635	$ (6,869)	716,880
Accumulated amortization				
Licenses	32,668	$ 26,902	$ (6,773)	52,797
Software	642	418	(96)	964
Client relationship	36,388	18,194	-	54,582
Existing technology	102,581	51,289	-	153,870
Trademark	12,938	6,469	-	19,407
Others	-	25	-	25
	185,217	$ 103,297	$ (6,869)	281,645
Carrying amount	$ 463,897			$ 435,235

	Years Ended December 31, 2018			
	Balance, Beginning of the Year	Additions	Disposals	Balance, End of the Year
Cost				
Licenses	$ 110,289	$ -	$ (12,252)	$ 98,037
Software	2,315	-	(1,103)	1,212
Client relationship	145,552	-	-	145,552
Existing technology	359,030	-	-	359,030
Trademark	45,283	-	-	45,283
Others	15,822	-	(15,822)	-
	678,291	$ -	$ (29,177)	649,114

(Continued)

	Years Ended December 31, 2018			
	Balance, Beginning of the Year	Additions	Disposals	Balance, End of the Year
Accumulated amortization				
Licenses	$ 20,624	$ 24,296	$ (12,252)	$ 32,668
Software	1,176	569	(1,103)	642
Client relationship	18,194	18,194	-	36,388
Existing technology	51,290	51,291	-	102,581
Trademark	6,469	6,469	-	12,938
Others	10,993	4,829	(15,822)	-
	108,746	$ 105,648	$ (29,177)	185,217
Carrying amount	$ 569,545			$ 463,897

(Concluded)

Intangible assets are amortized on a straight-line basis over their estimated useful lives as follows:

Licenses	2-7 years
Software	3-5 years
Client relationship	8 years
Existing technology	7 years
Trademark	7 years
Others	3 years

16. OTHER ASSETS

	December 31	
	2019	2018
Current		
Prepayments	$ 12,665	$ 8,877
Tax refund receivables	1,659	-
Other receivable	927	340
	$ 15,251	$ 9,217
Non-current		
Refundable deposits	$ 10,685	$ 5,455
Prepayments for equipment	2,845	-
Prepayments for licenses	-	43,743
	$ 13,530	$ 49,198

17. TRADE PAYABLES

	December 31	
	2019	2018
Trade payables		
Operating	$ 140,791	$ 35,497

18. OTHER PAYABLES

	December 31 2019	December 31 2018
Current		
Other payables		
Payables for salaries or bonuses	$ 12,317	$ 8,064
Payables for royalties	4,468	4,080
Payables for service	3,898	2,642
Payables for licenses	-	5,805
Others	6,235	6,604
	$ 26,918	$ 27,195
Other liabilities		
Refund liabilities	$ 141,015	$ 107,992
Others	1,019	872
	$ 142,034	$ 108,864

19. PROVISIONS

	December 31 2019	December 31 2018
Current		
Warranties (a)	$ 26,571	$ 21,670
Non-current		
Decommissioning (b)	$ 910	$ -

	Warranties	Decommissioning
Balance at January 1, 2019	$ 21,670	$ -
Additional provisions recognized	4,901	910
Balance at December 31, 2019	$ 26,571	$ 910

a. The provision for warranty claims represents the present value of management's best estimate of the future outflow of economic benefits. The estimate has been made on the basis of historical warranty trends and may vary as a result of new materials, altered manufacturing processes or other events affecting product quality.

b. The provision for decommissioning represents the Company's obligation to decommission.(including the restoration of the office). The costs are estimated based on internal research, and the Company regularly reviews and adjusts it to reflect the best estimates.

20. RETIREMENT BENEFIT PLANS

The Company adopted a pension plan under the Labor Pension Act (the LPA), which is deemed a defined contribution plan. Pursuant to the LPA, the Company makes monthly contributions to employees' individual pension accounts at 6% of monthly salaries and wages.

The total expenses recognized in the consolidated statement of comprehensive income were $5,024 thousand and $4,181 thousand, representing the contributions made and to be made to these plans by the Company at the rates specified in the plans for the years ended December 31, 2019 and 2018, respectively.

21. EQUITY

a. Share capital

Ordinary shares

	December 31	
	2019	2018
Number of shares authorized (in thousands of shares)	50,000	50,000
Shares authorized par value $10 (in thousands of NTD)	$ 500,000	$ 500,000
Number of shares issued and fully paid (in thousands of shares)	34,184	34,065
Shares issued and fully paid (in thousands of NTD)	$ 341,848	$ 340,656

Fully paid ordinary shares issued each has a par value of NT$10. Each share is entitled to the rights to vote and to dividends.

In order to cooperate with the Company's acquisition of Emulex Corporation's server remote management chip Pilot product line and related assets follow-up strategic cooperation plan, the Company held a resolution of the temporary shareholders meeting on December 23, 2016, and issued a private placement in accordance with Article 43-6 of the Securities Exchange Act. The total ordinary shares issued were 2,022 thousand shares, and the price per share of private placement was NT$297.6. The total private placement price was NT$601,747 thousand, and the capital increase base date was December 30, 2016.

The above-mentioned private shares issued by private placement have the same rights and obligations as the issued ordinary shares of the Company; they are not freely transferable within 3 years after delivery, except in the specific circumstances that comply with the law. The board of directors were authorized to complete supplementary procedures for classification as a public company and apply for listing cabinet transactions to the competent authority in accordance with relevant laws and regulations after the delivery of the private equity ordinary shares for three years.

b. Capital surplus

	December 31 2019	December 31 2018
May be used to offset a deficit, distributed as cash dividends, or transferred to share capital (a)		
Issuance of ordinary shares	$ 793,019	$ 793,019
May only be used to offset a deficit		
Employee stock bonus	268,353	194,396
Arising from expired/vested employee restricted shares	29,936	22,020
Arising from exercised/expired employee share options	2,156	2,156
May not be used for any purpose		
Employee restricted shares	51,580	45,240
	$ 1,145,044	$ 1,056,831

a) The 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 to once a year).

c. Retained earnings and dividend policy

The shareholders of the Company held their regular meeting on May 29, 2019 and in that meeting, resolved the amendments to the Company's Articles of Incorporation (the "Articles"). The amendments explicitly stipulate that the Corporation may allocate a portion or all of its reserves for distribution in accordance with relevant laws or regulations or the orders of the authorities in charge. When the reserves are to be distributed in cash, the distribution may be approved by the board of directors and reported to the shareholders' meeting.

Under the dividends policy as set forth in the amended Articles, where the Company made a profit in a fiscal year, the profit shall be first utilized for paying taxes, offsetting losses of previous years, setting aside as a legal reserve of 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 when the reserves are to be distributed as bonuses to shareholders.

For the policies on the distribution of employees' compensation and remuneration of directors and supervisors after the amendment, refer to employees' compensation and remuneration of directors and supervisors in Note 23(f).

The Company's Articles stipulate the dividends policy based on present and future projects, investment environment, capital requirements, domestic and international competitive environment, and the interests of shareholders, whereby the Company distributes no less than 10% of the distributable earnings in the form of dividend bonus. If the accumulatively distributable earnings were less than 50% of the Company's paid-in capital, the dividend bonus would not be distributed. In principle, cash dividends are limited to no less than 10% of the total dividends distributed.

The appropriation of earnings to a legal reserve shall be made until the legal reserve equals the Company's paid-in capital. The legal reserve may be used to offset any 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.

Items referred to under Rule No. 1010012865 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 2018 and 2017 approved in the shareholders' meetings on May 29, 2019 and May 30, 2018, respectively, were as follows:

	Appropriation of Earnings For the Year Ended December 31	
	2018	2017
Legal reserve	$ 68,592	$ 53,137
Special reserve	$ 21,333	$ (2,919)
Cash dividends	$ 613,051	$ 509,607
Cash dividends per share (NT$)	$ 18.00	$ 15.00

The appropriation of earnings for 2019 has been proposed by the Company's board of directors on March 2, 2020. The appropriation and dividends per share were as follows:

	For the Year Ended December 31, 2019
Legal reserve	$ 83,118
Special reserve	$ 3,093
Cash dividends	$ 752,946
Cash dividends per share (NT$)	$ 22.00

d. Special reserve

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ 10,166	$ 13,085
Debits (reversal of debits) to other equity items	21,333	(2,919)
Balance at December 31	$ 31,499	$ 10,166

e. Other equity items

1) Unearned employee benefits

For information about the restricted share plans for employees, refer to Note 26.

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ (30,375)	$ (7,558)
Issued	(22,147)	(36,741)
Cancelled	7,733	-
Share-based payment expenses recognized	12,418	13,924
Balance at December 31	$ (32,371)	$ (30,375)

2) Exchange differences on translating foreign operations

	For the Year Ended December 31	
	2019	2018
Balance at January 1	$ (1,125)	$ (973)
Exchange differences on translating the financial statements of foreign operations	(1,097)	(152)
Balance at December 31	$ (2,222)	$ (1,125)

22. REVENUE

a. Revenue from contracts with customers

	For the Year Ended December 31	
	2019	2018
Revenue from the sale of goods	$ 2,483,373	$ 2,152,754
Royalty income	922	765
	$ 2,484,295	$ 2,153,519

b. Contract balances

	For the Year Ended December 31	
	2019	2018
Trade receivables (Note 9)	$ 628,847	$ 400,990
Contract liabilities		
Sale of goods	$ -	$ 157

The changes in the contract liability balances primarily result from the timing difference between the Company's performance and the customer's payment.

c. Disaggregation of revenue

For the year ended December 31, 2019

	Reportable Segments			
	Multimedia Integrated Circuits (ICs)	Computer Peripherals Oriented ICs	Others	Total
Type of goods or services				
Sale of goods	$ 2,327,708	$ 155,337	$ 328	$ 2,483,373
Royalty	-	-	922	922
	$ 2,327,708	$ 155,337	$ 1,250	$ 2,484,295

For the year ended December 31, 2018

	Reportable Segments			
	Multimedia Integrated Circuits (ICs)	Computer Peripherals Oriented ICs	Others	Total
Type of goods or services				
Sale of goods	$ 2,014,508	$ 136,556	$ 1,690	$ 2,152,754
Royalty	-	-	765	765
	$ 2,014,508	$ 136,556	$ 2,455	$ 2,153,519

23. NET PROFIT FROM CONTINUING OPERATIONS

a. Other income

	For the Year Ended December 31	
	2019	2018
Interest income		
Bank deposits	$ 6,029	$ 4,945
Repurchase agreements collateralized by bonds	7,997	7,395
Other	183	1,260
	14,209	13,600
Government grants (Note 27)	-	19,355
Others	2,666	1,558
	$ 16,875	$ 34,513

b. Other gains and losses

	For the Year Ended December 31	
	2019	2018
Net foreign exchange (losses) gains	$ (19,911)	$ 27,219
Gain (loss) on disposal of investment properties	6,282	(8,075)
Net gain arising on fair value changes of financial assets through profit or loss	2,692	1,640
Loss on disposal of property, plant and equipment	(1,643)	-
Others	(142)	(488)
	$ (12,722)	$ 20,296

c. Finance costs

	For the Year Ended December 31	
	2019	2018
Interest on loans	$ 1,454	$ 723
Interest on lease liability	345	-
	$ 1,799	$ 723

d. Depreciation and amortization

	For the Year Ended December 31	
	2019	2018
An analysis of depreciation by function		
Operating costs	$ -	$ -
Operating expenses	47,728	30,722
	$ 47,728	$ 30,722
An analysis of amortization by function		
Operating costs	$ -	$ -
Selling and marketing expenses	18,194	18,195
General and administration expenses	6,777	6,737
Research and development expenses	78,326	80,716
	$ 103,297	$ 105,648

e. Employee benefits expense

	For the Year Ended December 31	
	2019	2018
Post-employment benefits (Note 20)		
Defined contribution plans	$ 5,024	$ 4,181
Share-based payments (Note 26)	12,418	13,924
Other employee benefits	241,155	195,258
Total employee benefits expense	$ 258,597	$ 213,363
An analysis of employee benefits expense by function		
Operating costs	$ -	$ -
Operating expenses	258,597	213,363
	$ 258,597	$ 213,363

f. Employees' compensation and remuneration of directors

The Company accrued employees' compensation and remuneration of directors and supervisors at rates of no less than 8% and no higher than 3%, respectively, of net profit before income tax, employees' compensation, and remuneration of directors and supervisors. The employees' compensation and remuneration of directors and supervisors for the years ended December 31, 2019 and 2018, which have been approved by the Company's board of directors on March 2, 2020 and March 11, 2019, respectively, were as follows:

Accrual rate

	For the Year Ended December 31	
	2019	2018
Employees' compensation	8%	8%
Remuneration of directors and supervisors	1%	1%

Amount

	For the Year Ended December 31			
	2019		2018	
	Cash	Shares	Cash	Shares
Employees' compensation	$ -	$ 92,361	$ -	$ 74,991
Remuneration of directors and supervisors	11,140	-	9,374	-

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

The number of shares of the employees' compensation, which was determined by dividing the amount of the employees' compensation resolved for 2019 and 2018 by NT$946 and NT$725, respectively, which is the closing price per share determined on the day immediately preceding the meeting of the Company's board of directors, was 98 thousand shares and 103 thousand shares for 2019 and 2018, respectively.

There is no difference between the actual amounts of employees' compensation and remuneration of directors and supervisors paid and the amounts recognized in the parent company only financial statements for the years ended December 31, 2018 and 2017.

Information on the employees' compensation and remuneration of directors resolved by the Company's board of directors in 2020 and 2019 is available at the Market Observation Post System website of the Taiwan Stock Exchange.

g. Gains or losses on foreign currency exchange

	For the Year Ended December 31	
	2019	2018
Foreign exchange gains	$ 25,533	$ 54,453
Foreign exchange losses	(45,444)	(27,234)
	$ (19,911)	$ 27,219

24. INCOME TAXES RELATING TO CONTINUING OPERATIONS

a. Major components of income tax expense recognized in profit or loss

	For the Year Ended December 31	
	2019	2018
Current tax		
In respect of the current year	$ 201,378	$ 166,849
Adjustments for prior years	(668)	(558)
	200,710	166,291
Deferred tax		
In respect of the current year	(21,379)	(7,437)
Effect of tax rate changes	-	8,251
Income tax expense recognized in profit or loss	$ 179,331	$ 167,105

A reconciliation of accounting loss and income tax expenses was as follows:

	For the Year Ended December 31	
	2019	2018
Income before tax from continuing operations	$ 1,010,516	$ 853,027
Income tax expense calculated at the statutory rate	$ 202,103	$ 170,605
Non-deductible expenses in determining taxable income	(1,567)	1,413
Deductible temporary differences	(225)	15,907
Effect of tax rate changes	-	(8,251)
Investment credits	(20,312)	(12,011)
Adjustments for prior years' tax	(668)	(558)
Income tax expense recognized in profit or loss	$ 179,331	$ 167,105

The Income Tax Act in the ROC was amended in February 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 was reduced from 10% to 5%.

b. Current tax liabilities

	December 31	
	2019	2018
Current tax liabilities		
Income tax payable	$ 141,092	$ 113,794

c. Deferred tax assets and liabilities

The movements of deferred tax assets and deferred tax liabilities were as follows:

For the year ended December 31, 2019

	Opening Balance	Recognized in Profit or Loss	Closing Balance
Deferred Tax Assets			
Temporary differences			
Inventory write-down	$ 1,020	$ (832)	$ 188
Investments accounted for using the equity method	4,950	(1,083)	3,867
Provisions	4,334	980	5,314
Refund liabilities	21,598	6,605	28,203
	$ 31,902	$ 5,670	$ 37,572
Deferred Tax Liabilities			
Temporary differences			
Unrealized net foreign exchange gains	$ 4,721	$ (1,812)	$ 2,909
Other intangible assets - acquisitions	73,123	(13,897)	59,226
	$ 77,844	$ (15,709)	$ 62,135

For the year ended December 31, 2018

	Opening Balance	Recognized in Profit or Loss	Closing Balance
Deferred Tax Assets			
Temporary differences			
Inventory write-downs	$ 328	$ 692	$ 1,020
Investments accounted for using the equity method	4,908	42	4,950
Unrealized net foreign exchange gains (losses)	267	(267)	-
Provisions	2,887	1,447	4,334
Refund liabilities	18,821	2,777	21,598
	$ 27,211	$ 4,691	$ 31,902
Deferred Tax Liabilities			
Temporary differences			
Unrealized net foreign exchange gains	$ -	$ 4,721	$ 4,721
Other intangible assets - acquisitions	73,967	(844)	73,123
	$ 73,967	$ 3,877	$ 77,844

d. Income tax assessments

The Company's tax returns through 2016 have been assessed by the tax authorities.

25. EARNINGS PER SHARE

Unit: NT$ Per Share

	For the Year Ended December 31	
	2019	2018
Basic earnings per share	$ 24.39	$ 20.20
Diluted earnings per share	$ 24.28	$ 20.10

The income and weighted average number of ordinary shares outstanding in the computation of earnings per share from continuing operations were as follows:

Net Income for the Year

	For the Year Ended December 31	
	2019	2018
Income for the year attributable to owners of the Company	$ 831,185	$ 685,922

The weighted average number of ordinary shares outstanding (in thousands of shares) is as follows:

	For the Year Ended December 31	
	2019	2018
Weighted average number of ordinary shares in computation of basic earnings per share	34,075	33,958
Effect of potentially dilutive ordinary shares:		
Employees' compensation	116	140
Restricted shares to employees	48	25
Weighted average number of ordinary shares in computation of diluted earnings per share	34,239	34,123

Since the Company offered to settle compensation in cash or shares, the Company assumed the entire amount of the compensation 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.

26. SHARE-BASED PAYMENT ARRANGEMENTS

Restricted share plan for employees

Information on restricted share plan for employees was as follows:

Approved Date	Grant Shares (Thousand)	Board of Directors Approved Issue Date	Issued Date	Issued Shares (Thousand)	Fair Value
2016/06/29	100	2016/11/04	2016/12/05	30	$ 446
2017/05/26	100	2017/11/03	2018/02/05	36	740
2018/05/30	40	2018/11/05	2018/11/12	21	481
2019/05/29	100	2019/08/02	2019/09/10	28	791
2019/05/29	100	2019/08/02	2020/02/05	31	952
2019/05/29	100	2019/08/02	2020/03/02	9	1,005

On May 29, 2019, the shareholder's meeting resolved to issue a restricted share plan for employees with a total of 100 thousand shares. The Company shall set up the actual issuance date (s) in one tranche or in installments within one year from the date of receipt of the effective registration of the competent authority. The board of directors authorized the Company's chairman to determine the issue date. The main elements of the restricted share plan for employees were as follows:

a. Issue price: the Company issued the gratuitous restricted stocks for employees.

b. Vesting conditions of restricted stocks for employees are as follows:

   a) To meet the vesting conditions, an employee has to meet performance and other conditions over the vesting period, as follows:

      Remain employed by the Company within 1 year - 10% of restricted shares will be vested;

      Remain employed by the Company within 2 year - 10% of restricted shares will be vested;

      Remain employed by the Company within 3 year - 40% of restricted shares will be vested;

Remain employed by the Company within 4 year - 40% of restricted shares will be vested;

b) When the employees do not reach the vesting conditions, the Company will recover and cancel the shares.

c) During the vesting period, the dividends will distribute to employees gratuitously.

c. In addition to the vesting conditions, the limitations are as follows:

a) The employees cannot sell, pledge, transfer, donate or, in any other way, dispose of these shares.

b) During the vesting period, the rights of attending shareholders' meeting, proposal, speech, resolution and voting right, etc., will enforce by trust institutions.

Information on restricted share plan for employees was as follows:

	Number of Shares (In Thousands) For the Year Ended December 31	
	2019	**2018**
Balance at January 1	78	46
Granted	28	57
Vested	(16)	(25)
Cancelled	(12)	-
Balance at December 31	78	78

For the years ended December 31, 2019 and 2018, the compensation costs recognized were NT$12,418 thousand and NT$13,924 thousand, respectively.

27. GOVERNMENT GRANTS

In March 2017, the Company applied for a government grant of NT$33,100 thousand towards its project related to an industrial upgrading innovation platform from Industrial Development Bureau, Ministry of Economic Affairs. The period of the grant is from November 1, 2016 to October 31, 2018. The grant that the Company received was NT$33,100 thousand, and was recognized as other income as of December 31, 2019.

28. CAPITAL MANAGEMENT

The Company manages its capital to ensure that the Company will be able to operate under the premises of going concerns while maximizing the return to shareholders 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.

Key management personnel of the Company review the capital structure on a regular basis. As part of this review, the key management personnel consider the cost of capital and the risks associated with each class of capital. Based on recommendations of the key management personnel, in order to balance the overall capital structure, the Company may adjust the amount of dividends paid to shareholders and the number of new shares issued.

29. FINANCIAL INSTRUMENTS

a. Fair value of financial instruments not measured at fair value

The management considers that the carrying amounts of financial assets and financial liabilities recognized in the financial statements approximate their fair values.

b. Fair value of financial instruments measured at fair value

1) Fair value hierarchy

December 31, 2019

	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Domestic listed shares	$ 132,325	$ -	$ -	$ 132,325
Mutual funds	30,616	-	-	30,616
	$ 162,941	$ -	$ -	$ 162,941

December 31, 2018

	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL				
Mutual funds	$ 89,030	$ -	$ -	$ 89,030

There were no transfers between Level 1 and Level 2 in the current and prior years.

c. Categories of financial instruments

	December 31	
	2019	2018
Financial assets		
Financial assets at amortized cost (i)	$ 2,031,184	$ 1,557,524
Financial assets at FVTPL	162,941	89,030
Financial liabilities		
Measured at amortized cost (ii)	177,780	80,404

i) The balances include loans and receivables measured at amortized cost, which comprise cash and cash equivalents, trade and other receivables (including related parties), and refundable deposits.

ii) The balances include financial liabilities measured at amortized cost, which comprise trade payables (including related parties) and other payables.

d. Financial risk management objectives and policies

The Company's major financial instruments include mutual investments, trade receivables and trade payables. 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 foreign currency risk and interest rate risk), credit risk and liquidity risk.

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).

a) Foreign currency risk

The Company had foreign currency sales and purchases, which exposed the Company to foreign currency risk. Approximately 100% of the Company's sales were denominated in currencies other than the functional currency, whilst almost 99% of costs were denominated in the Company's functional currency.

The carrying amounts of the Company's foreign currency denominated monetary assets and monetary liabilities at the end of the reporting period are set out in Note 32.

Sensitivity analysis

The Company was mainly exposed to the USD.

The following table details the Company's sensitivity to a 5% increase and decrease in the New Taiwan dollar (i.e., the functional currency) against the relevant foreign currencies. The sensitivity rate used when reporting foreign currency risk internally to key management personnel and representing management's assessment of the reasonably possible change in foreign exchange rates is 5%. The sensitivity analysis included only outstanding foreign currency denominated monetary items, and adjusts their translation at the end of the reporting period for a 5% change in foreign currency rates. A positive number below indicates an increase in pre-tax profit associated with the New Taiwan dollar strengthening 5% against the relevant currency. For a 5% weakening of the New Taiwan dollar against the relevant currency, there would be an equal and opposite impact on pre-tax profit, and the balances below would be negative.

	USD Impact	
	For the Year Ended December 31	
	2019	**2018**
Pre-tax profit	$ 41,197	$ 23,537

This was mainly attributable to the exposure on outstanding receivables and payables in USD which were not hedged at the end of the reporting period.

The Company's sensitivity to USD currency decreased during the current period mainly due to the decrease in the net assets of the USD which was due to the decrease in cash and cash equivalents denominated in USD.

The management believes that the sensitivity analysis cannot represent the inherent risk of the exchange rate, because the foreign currency risk at the end of the reporting period cannot reflect the mid-year risk situation.

b) Interest rate risk

Hedging activities are evaluated regularly to align with interest rate views and defined risk appetite, ensuring that the most cost-effective hedging strategies are applied.

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	
	2019	**2018**
Fair value interest rate risk		
Financial assets	$ 1,147,765	$ 992,888
Cash flow interest rate risk		
Financial assets	242,884	157,775

Sensitivity analysis

The sensitivity analysis below was determined based on the Company's exposure to interest rates for both derivative and non-derivative instruments at the end of the reporting period. For floating rate liabilities, the analysis was prepared assuming the amount of each liability outstanding at the end of the reporting period was outstanding for the whole year.

A 0.1 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.

The Company had no floating rate liabilities for the years ended December 31, 2019 and 2018.

2) Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Company.

The Company adopted a policy of only dealing with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial loss from defaults. The Company only transacts with entities that are rated the equivalent of investment grade and above. This information is supplied by independent rating agencies where available and, if not available, the Company uses other publicly available financial information and its own trading records to rate its major customers. The Company's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counterparties. Credit exposure is controlled by counterparty limits that are reviewed and approved by the risk management committee annually.

Ongoing credit evaluation is performed on the financial condition of trade receivables and, where appropriate, credit guarantee insurance cover is purchased.

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 liquidity. As of December 31, 2019 and 2018, the Company had available unutilized short-term bank loan facilities of $650,000 thousand.

a) Liquidity and interest risk rate table for non-derivative financial liabilities

The Company's remaining contractual maturity for its non-derivative financial liabilities had been drawn up based on the undiscounted cash flows (included principal and interest) of financial liabilities from the earliest date on which the Company can be required to pay.

December 31, 2019

	On Demand or Less than 1 Month	1-3 Months	3 Months - 1 Year	1-5 Years	5+ Years	Total
Non-derivative financial liabilities						
Lease liabilities	$ 1,906	$ 3,812	$ 16,875	$ 80,043	$ -	$ 102,636
Non-interest bearing						
Trade payables (including related parties)	85,875	69,906	-	-	-	155,781
Other payables (including related parties)	17,183	2,585	2,244	-	-	22,012
	$ 104,964	$ 76,303	$ 19,119	$ 80,043	$ -	$ 280,429

Additional information about the maturity analysis for lease liabilities:

	Less than 1 Year	1-5 Years	5-10 Years	10-15 Years	15-20 Years	20+ Years
Lease liabilities	$ 22,593	$ 80,043	$ -	$ -	$ -	$ -

December 31, 2018

	On Demand or Less than 1 Month	1-3 Months	3 Months - 1 Year	1-5 Years	5+ Years	Total
Non-derivative financial liabilities						
Non-interest bearing						
Trade payables (including related parties)	$ 50,078	$ 334	$ -	$ -	$ -	$ 53,412
Other payables (including related parties)	23,614	3,229	282	-	-	27,125
	$ 76,692	$ 3,563	$ 282	$ -	$ -	$ 80,537

b) Financing facilities:

	December 31 2019	December 31 2018
Unsecured borrowings facilities		
Amount unused	$ 650,000	$ 650,000

30. TRANSACTIONS WITH RELATED PARTIES

In addition to those disclosed in other notes, detail of transactions between the Company and related parties are disclosed below.

a. Related parties and their relationships associated with the Company:

Related Parties	Relationship with the Company
ATEN International Co., Ltd.	Investors with significant influence over the Company
Avago Technologies International Sales PTE. Limited	Investors with significant influence over the Company
ASPEED Technology (U.S.A.) Inc.	Subsidiary
ASPEED Technology India Private Limited	Subsidiary
Cupola360 Inc.	Subsidiary

b. Operating revenues

Related Party Category	For the Year Ended December 31	
	2019	2018
Investor with significant influence over the Company	$ 7,824	$ 9,682

The sales of the related party are determined according to the agreed terms of both parties, and the collection conditions are equivalent to the general trading conditions.

c. Purchases

Related Party Name	For the Year Ended December 31	
	2019	2018
Avago Technologies International Sales PTE. Limited	$ 103,236	$ 210,062

The purchase of the related party is determined according to the agreed terms of the two parties, and there is no other suitable trading object to compare.

d. Operating expenses - Technology service expense

Related Party Name	December 31	
	2019	2018
ASPEED Technology (U.S.A.) Inc.	$ 77,595	$ 63,413
ASPEED Technology India Private Limited	9,702	18,476
	$ 87,297	$ 81,889

e. Receivables from related parties

Related Party Category	December 31	
	2019	2018
Investor with significant influence over the Company	$ 1,018	$ 2,249

The outstanding trade receivables from related parties are unsecured. For the years ended December 31, 2019 and 2018, no impairment loss was recognized for trade receivables from related parties.

f. Payables to related parties

Line Items	Related Party Name	December 31 2019	December 31 2018
Payables to related parties	Avago Technologies International Sales PTE. Limited	$ 14,990	$ 17,915
Other payables to related parties	ASPEED Technology (U.S.A.) Inc.	$ 7,364	$ 5,928
	ASPEED Technology India Private Limited	1,339	3,174
		$ 8,703	$ 9,102

The outstanding trade payables from related parties are unsecured. The transaction price was based on the market price and is determined by both parties.

g. Lease arrangements - Company is lessor arrangements

Lease arrangements - Company is lessor under operating leases

The Company leases out its equipment to its subsidiary - Cupola360 Inc. under operating leases with lease terms of 1 year.

Future lease payment receivables are as follows:

Related Party Category/Name	December 31 2019	December 31 2018
Cupola360 Inc.	$ 36	$ -

Lease income was as follows:

Related Party Category/Name	For the Year Ended December 31 2019	For the Year Ended December 31 2018
Cupola360 Inc.	$ 12	$ -

h. Compensation of key management personnel

The total amount of payroll to directors and supervisors and other key executives in 2019 and 2018 were as follows:

	For the Year Ended December 31 2019	For the Year Ended December 31 2018
Short-term benefits	$ 27,483	$ 25,146
Post-employment benefits	324	459
Share-based payments	2,774	4,468
	$ 30,581	$ 30,073

The remuneration of key executives was determined by the remuneration committee based on the performance of individuals and market trends.

31. 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, 2019 and 2018 were as follows:

Under an agreement, the Company shall pay royalties at a percentage of net sales of certain products. For the years ended December 31, 2019 and 2018, royalty expenses amounted to $157 thousand and $339 thousand, respectively.

32. SIGNIFICANT ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCIES

The Company' 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, 2019

	Foreign Currencies	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
USD	$ 36,755	29.98	$ 1,101,915
Non-monetary items			
Investments accounted for using the equity method			
USD	1,044	29.98	31,299
Financial assets at FVTPL			
USD	1,021	29.98	30,610
Financial liabilities			
Monetary items			
USD	10,293	29.98	308,584

December 31, 2018

	Foreign Currencies	Exchange Rate	Carrying Amount
Financial assets			
Monetary items			
USD	$ 20,221	30.715	$ 621,088
Non-monetary items			
Investments accounted for using the equity method			
USD	808	30.715	24,828
Financial assets at FVTPL			
USD	960	30.715	29,490
Financial liabilities			
Monetary items			
USD	5,855	30.715	179,836

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

Foreign Currencies	2019 Exchange Rate	2019 Net Foreign Exchange Gains (Losses)	2018 Exchange Rate	2018 Net Foreign Exchange Gains (Losses)
USD	29.98 (USD:NTD)	$ 14,545	30.715 (USD:NTD)	$ 23,607

33. SEPARATELY DISCLOSED ITEMS

a. Information on significant transactions and information on investees:

1) Financing provided to others: None

2) Endorsements/guarantees provided: None

3) Marketable securities held:

Holding Company Name	Type and Name of Marketable Securities	Relationship with the Holding Company	Financial Statement Account	December 31, 2019 Number of Shares (In thousands)	Carrying Amount (In thousands)	Percentage of Ownership (%)	Fair Value (In thousands)	Note
ASPEED Technology Inc.	CTBC Financial Holding Co., Ltd. Preferred Shares B	-	Financial assets at FVTPL-current	85	$ 30,616	-	$ 30,616	Note
	Shin Kong Financial Holding Co., Ltd. Preferred Shares A	-	Financial assets at FVTPL-current	1,000	63,400	0.6	63,400	Note
	Allianz Flex Asia Bond AT (USD)	-	Financial assets at FVTPL-current	1,500	68,925	2	68,925	Note

Note: The value is calculated by net value on December 31, 2019.

4) Marketable securities acquired and disposed of at costs or prices of at least NT$300 million or 20% of the paid-in capital: (Table 1)

5) Acquisition of individual real estate at costs of at least NT$300 million or 20% of the paid-in capital: None

6) Disposal of individual real estate at prices of at least NT$300 million or 20% of the paid-in capital: None

7) Total purchases from or sales to related parties amounting to at least NT$100 million or 20% of the paid-in capital: (Table 2)

8) Receivables from related parties amounting to at least NT$100 million or 20% of the paid-in capital: None

9) Trading in derivative instruments: None

10) Information on investees:

Investor Company	Investee Company	Location	Main Businesses and Products	Original Investment Amount (In thousands) December 31 2019	2018	As of December 31, 2019 Number of Shares (In thousands)	%	Carrying Amount (In thousands)	Net Income (Loss) of the Investee (In thousands)	Share of Profits (Loss) (In thousands)	Note
ASPEED Technology Inc.	ASPEED Technology (Samoa) Inc.	Samoa	Investment holding company	$ 48,763	$ 48,763	1,550	100	$ 31,186	$ 7,555	$ 7,555	-
	ASPEED Technology India Private Limited	India	R&D and technical services	166	166	35	1	113	1,260	13	-
	Cupola360 Inc.	Taiwan	Software Design Services	15,000	15,000	1,500	100	11,073	(2,154)	(2,154)	-

c. 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 gains or losses, carrying amount of the investment at the end of the period, repatriations investment gains or losses, and limit on the amount of investment in the mainland China area: None

2) Any of the following significant transactions with investee companies in mainland China, either directly or indirectly through a third party, and their prices, payment terms, and unrealized gains or losses: None.

   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 receipt of services

34. SEGMENT INFORMATION

The Company has disclosed the department information in the financial report, and the individual financial report does not disclose relevant information.

TABLE 1

ASPEED TECHNOLOGY INC.

MARKETABLE SECURITIES ACQUIRED AND DISPOSED AT COSTS OR PRICES OF AT LEAST NT$300 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Company Name	Type and Name of Marketable Securities	Financial Statement Account	Beginning Balance		Acquisition		Unrealized Assessment of Financial Assets	Ending Balance	
			Number of Shares (thousands)	Amount	Number of Shares (thousands)	Amount		Number of Shares (thousands)	Amount
ASPEED Technology Inc.	Shin Kong Financial Holding Co., Ltd. Preferred Shares A	Financial assets at FVTPL - current	-	$ -	1,500	$ 69,870	$ (945)	1,500	$ 68,925

TABLE 2

ASPEED TECHNOLOGY INC.

TOTAL PURCHASES FROM OR SALES TO RELATED PARTIES AMOUNTING TO AT LEAST NT$100 MILLION OR 20% OF THE PAID-IN CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 2019
(In Thousands of New Taiwan Dollars, Unless Stated Otherwise)

Buyer	Related Party	Relationship	Transaction Details				Abnormal Transaction		Notes/Trades Receivable (Payable)	
			Purchase/ Sale	Amount	% of Total	Payment Terms	Unit Price	Payment Terms	Ending Balance	% of Total
ASPEED Technology Inc.	Avago Technologies International Sales PTE. Limited	Investor with significant influence over the Company	Purchase	$ 103,236	12.43	Payment shall be made within 30 days after inspection and acceptance	No major differences	No major differences	$ 14,990	9.62

6. The Effect of Insolvency of the Company and Affiliates on the Financial Status of the Company：None

VIII. Financial Satus, Operating Results and Satus of Risk Management

1. Financial Satus

(1) Consolidated Report

Unit: NT$1,000 / %

Item \ Year	2018	2019	Change	% of Change
Current Assets	1,819,316	2,316,234	496,918	27.31%
Property, Plant and Equipment	84,841	123,198	38,357	45.21%
Right-of-use assets	—	110,675	110,675	100.00%
Intangible Assets	841,843	811,085	(30,758)	(3.65)%
Other non-current assets	86,675	57,702	(28,973)	(33.43)%
Total assets	**2,832,675**	**3,418,894**	**586,219**	**20.69%**
Current Liabilities	424,282	636,265	211,983	49.96%
Non-current Liabilities	79,453	149,243	69,790	87.84%
Total liabilities	**503,735**	**785,508**	**281,773**	**55.94%**
Capital	340,656	341,848	1,192	0.35%
Capital surplus	1,056,831	1,145,044	88,213	8.35%
Retained Earnings	962,953	1,181,087	218,134	22.65%
Other Equity	(31,500)	(34,593)	(3,093)	9.82%
Total equity	**2,328,940**	**2,633,386**	**304,446**	**13.07%**

a. Explanation for changes that exceed 20% and reached NT$10 million in the past two years:

(I) Current Assets: Due to increase in cash and cash equivalents and accounts receivable.

(II) Increase in property, plant and equipment: Due to the acquisition of real property, plan and equipment for operating.

(III) Right-of-use assets: Due to the application of IFRS16 beginning in 2019.

(IV) Other non-current assets: Due to decrease in prepayments.

(V) Total assets: Due to the increase in current assets.

(VI) Current Liabilities: Due to increase in accounts payable.

(VII) Non-current Liabilities: Due to the recognition of a Lease liabilities due to the application of IFRS16 beginning in 2019.

(VIII) Total liabilities: Due to the increase in current liabilities.

(IX) Increase retained earnings: Mainly due to the profit generated from the 2019 business operation.

b. Future response plans to changes with material impact: Not applicable.

(2) Parent Company

Unit: NT$1,000 / %

Item \ Year	2018	2019	Change	% of Change
Current Assets	1,788,817	2,279,842	491,025	27.45%
Investment accounted for using equity method	38,055	42,372	4,317	11.34%
Property, Plant and Equipment	84,277	122,691	38,414	45.58%
Right-of-use assets	—	98,690	98,690	100.00%
Intangible Assets	832,937	804,275	(28,662)	(3.44)%
Other non-current assets	81,100	51,102	(29,998)	(36.99)%
Total assets	**2,825,186**	**3,398,972**	**573,786**	**20.31%**
Current Liabilities	418,402	625,420	207,018	49.48%
Non-current Liabilities	77,844	140,166	62,322	80.06%
Total liabilities	**496,246**	**765,586**	**269,340**	**54.28%**
Capital	340,656	341,848	1,192	0.35%
Capital surplus	1,056,831	1,145,044	88,213	8.35%
Retained Earnings	962,953	1,181,087	218,134	22.65%
Other Equity	(31,500)	(34,593)	(3,093)	9.82%
Total equity	**2,328,940**	**2,633,386**	**304,446**	**13.07%**

a. Explanation for changes that exceed 20% and reached NT$10 million in the past two years:

(I) Current Assets: Due to increase in cash and cash equivalents and accounts receivable.

(II) Increase in property, plant and equipment: Due to the acquisition of real property, plan and equipment for operating.

(III) Right-of-use assets: Due to the application of IFRS16 beginning in 2019.

(IV) Other non-current assets: Due to decrease in prepayments.

(V) Current Liabilities: Due to increase in accounts payable.

(VI) Non-current Liabilities: Due to the recognition of a Lease liabilities due to the application of IFRS16 beginning in 2019.

(VII) Total liabilities: Due to the increase in current liabilities.

(VIII) Increase retained earnings: Mainly due to the profit generated from the 2019 business operation.

b. Future response plans to changes with material impact: Not applicable.

2. Operating Results

(1) Consolidated Report

Unit: NT$1,000 / %

Year / Item	2018	2019	Change	% of Change
Net Sales	2,153,519	2,484,295	330,776	15.36%
Operating Costs	863,688	913,248	49,560	5.74%
Gross Profit	1,289,831	1,571,047	281,216	21.80%
Operating Expenses	489,943	562,658	72,715	14.84%
Operating Income	799,888	1,008,389	208,501	26.07%
Non-operating Income and Expenses	54,142	2,178	(51,964)	(95.98)%
Net Income before Income Tax	854,030	1,010,567	156,537	18.33%
Income Tax Expenses	168,108	179,382	11,274	6.71%
Net Income	685,922	831,185	145,263	21.18%
Total other comprehensive income (loss)	(152)	(1,097)	(945)	621.71%
Total comprehensive income the year	685,770	830,088	144,318	21.04%
Net Income attributable to owners of the Company	685,922	831,185	145,263	21.18%
Total comprehensive income attributable to owners of the Company	685,770	830,088	144,318	21.04%

a. Explanation for changes that exceed 20% and reached NT$10 million in the past two years:

(I) Gross Profit , Operating Income , Net Income, Total comprehensive income the year, Net Income attributable to owners of the Company,and Total comprehensive income attributable to owners of the Company: Due to increase in market demand and revenue growth this year.

(II) Non-operating income and expenses: Due to an increase in net foreign currency translation losses.

b. Expected sales and their basis, as well as the possible impact on the Company's future financial operations and response plans:

The Company’s main products are Multimedia IC, Computer peripherals IC ,and High-end consumer electronics IC. Based on sales forecasts for the existing products, development progress of new products, customers’ expected production requirements, and the business development strategy, the sales unit expects that sales volume will continue to grow in 2020. Due to the continued growth of the Company's business scale, the Company mainly uses long-term funding sources for capital expenditures, and there should not be any shortage of funds within the near future. Furthermore, the Company has a solid relationship with suppliers, so there should not be any issue with product supply.

(2) Parent Company

Unit: NT$1,000 / %

Item \ Year	2018	2019	Change	% of Change
Net Sales	2,153,519	2,484,295	330,776	15.36%
Operating Costs	863,688	913,248	49,560	5.74%
Gross Profit	1,289,831	1,571,047	281,216	21.80%
Operating Expenses	495,012	568,299	73,287	14.81%
Operating Income	794,819	1,002,748	207,929	26.16%
Non-operating Income and Expenses	58,208	7,768	(50,440)	(86.65)%
Net Income before Income Tax	853,027	1,010,516	157,489	18.46%
Income Tax Expenses	167,105	179,331	12,226	7.32%
Net Income	685,922	831,185	145,263	21.18%
Other comprehensive income (loss)	(152)	(1,097)	(945)	621.71%
Total comprehensive income	685,770	830,088	144,318	21.04%
Net Income attributable to owners of the Company	685,922	831,185	145,263	21.18%
Total comprehensive income attributable to owners of the Company	685,770	830,088	144,318	21.04%

a. Explanation for changes that exceed 20% and reached NT$10 million in the past two years:

(I) Gross Profit , Operating Income , Net Income, Total comprehensive income, Net Income attributable to owners of the Company,and Total comprehensive income attributable to owners of the Company: Due to increase in market demand and revenue growth this year.

(II) Non-operating income and expenses: Due to an increase in net foreign currency translation losses.

b. Expected sales and their basis, as well as the possible impact on the Company's future financial operations and response plans:

The Company’s main products are Multimedia IC, Computer peripherals IC ,and High-end consumer electronics IC. Based on sales forecasts for the existing products, development progress of new products, customers’ expected production requirements, and the business development strategy, the sales unit expects that sales volume will continue to grow in 2020. Due to the continued growth of the Company's business scale, the Company mainly uses long-term funding sources for capital expenditures, and there should not be any shortage of funds within the near future. Furthermore, the Company has a solid relationship with suppliers, so there should not be any issue with product supply.

3. Cash Flow Analysis

(1) Consolidated Report

a. Analysis of the Change in Cash Flow in 2019

Unit: NT$1,000

Cash Balance Dec. 31, 2018	Net Cash Provided by Operating Activities in 2019	Net Cash Outflows from Investing and Financing Activities in 2019	Impact of Foreign Echange ratio	Cash Balance Dec. 31,2019	Remedy for Cash Shortfall (Investment & Financing Plan)
$ 1,093,346	$ 1,001,277	($ 716,670)	$ 44,006	$ 1,421,959	—
Analysis of cash flow changes in the current year: a. Operating activities: Net cash inflow of NT$ 1,001,277 thousand, mainly from operating profits. b. Financing activities: Net cash outflow of NT$ 716,670 thousand, mainly due to the distribution of cash dividend.					

b. Remedial Actions for Cash Shortfall: The Company has ample cash on-hand; remedial actions are not required.

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

(2) Parent Company

a. Analysis of the Change in Cash Flow in 2019

Unit: NT$1,000

Cash Balance Dec. 31, 2018	Net Cash Provided by Operating Activities in 2019	Net Cash Outflows from Investing and Financing Activities in 2019	Impact of Foreign Echange ratio	Cash Balance Dec. 31,2019	Remedy for Cash Shortfall (Investment & Financing Plan)
$ 1,070,739	$ 990,842	($ 715,966)	$ 45,110	$ 1,390,725	—
Analysis of cash flow changes in the current year: a. Operating activities: Net cash inflow of NT$ 990,842 thousand, mainly from operating profits. b. Financing activities: Net cash outflow of NT$ 715,966 thousand, mainly due to the distribution of cash dividend.					

b. Remedial Actions for Cash Shortfall: The Company has ample cash on-hand; remedial actions are not required.

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

4. Major Capital Expenditure: None.

5. Investment Policie

The Company's investments are long-term strategic investments. Investment gain from equity method investment in 2019 was NT$ 5,414 thousand. The Company will keep its long-term strategic investment policy and evaluate investment plans prudently.

6. Risk Management

(1) Risks Associated with Interest Rate Fluctuation, Foreign Exchange Volatility, and Inflation

Unit: NT$1,000

Item	2018		2019	
	Amount	% of net income before tax	Amount	% of net income before tax
Net Interest income	13,676	2%	14,296	1%
Net Interest expense	723	—	1,864	—
Net exchange gains (loss)	27,199	3%	(20,021)	(2)%

Sources: financial reports certified by CPA.

a. Risks associated with interest rate:

The Company mainly operates on its own funds and only has a low amount of bank loans, so interest expenses are limited. Furthermore, the Company is conservative in principle when using its funds, and mainly uses short-term time deposits, so its interest revenue is not high. In the future, the Company will continue to monitor changes in the economic environment of Taiwan and overseas, and take necessary measures in a timely manner to avoid the risk of rising interest rates.

b. Risks associated with foreign currency:

The Company's exchange gains (losses) accounted for 1.26% and (0.81%) of its net operating income in 2018 and 2019, respectively. Hence, changes in exchange rates do not have a material effect on the Company's profit and loss. The Company's transactions are mainly calculated in USD, so changes in the NTD/USD exchange rate have certain impact on the Company's profit and loss, and response measures are as follows:

(I) The Company's Finance Department utilizes the natural hedging effect from procurements and sales both denominated in foreign currency.

(II) Dedicated personnel closely follow exchange rate fluctuations, collect information on international exchange rate trends and exchange rate fluctuations, are fully aware of future trends in exchange rates, and keep in touch with the foreign exchange department of banks. After considering the professional advice provided by the departments and the Company's cash requirements, the personnel reduce risks by exchanging currency at appropriate times.

(III) Depending on the position of foreign currency, hedging is carried out in accordance with the Operating Procedures for Asset Acquisition or Disposal Handing Procedure when necessary.

c. Risks associated with inflation:

Inflation is currently not severe in Taiwan and has not had a material impact on the Company, but the Company will continue to appropriately monitor inflation.

(2) Risks Associated with High-Risk/High-Leveraged Investment; Lending, Endorsements, and Guarantees for Other Parties; and Financial Derivative Transactions

Risks	Implementation status	Policy and response measures
High risk, highly leveraged investments	The Company has not engaged in any high risk, highly leveraged investments as of the print date of this report respectively	The Company is focused on its main business and does not use its capital for high risk, highly leveraged investments.
loans to third parties	The Company has not lent any funds to others as of the print date of this report respectively.	If the Company lends funds to others in the future, it will carry out procedures in accordance with its Procedures for Regulations Governing Management of Loaning of Funds, and make a public announcement and report the lending of funds to others in accordance with the law.
Endorsements and guarantees	The Company has not provided endorsements or guarantees for others as of the print date of this report respectively.	If the Company provides endorsements or guarantees for others in the future, it will carry out procedures in accordance with its Endorsement and Guarantee Operation Procedure, and make a public announcement and report the endorsements or guarantees for others in accordance with the law.
Derivative transactions	The Company has not engaged in any derivative transactions as of the print date of this report respectively.	If the Company needs to engage in derivative transactions in the future, it will do so in accordance with its Procedures for Handling Derivative Transactions, and make a public announcement and report the derivative transactions in accordance with the law.

(3) Future R&D Plans and Expected R&D Spending

The popularization of mobile devices and broadband networks has led to the prevalence of online communities and enriched content on the Internet. As enterprises continue to pursue energy conservation, carbon reduction, and lower costs, centralized management of usage and sharing of resources has become a trend and led to the rise of cloud computing. The Company has the ability to independently design and develop ICs, and strives to use 2D VGA, BMC, and KVM over IP technologies to become a SoC solutions provider for the centralized management of (cloud) computing. Future R&D projects and product development strategies include:

a. Future R&D Plan

- ✧ Multimedia IC
  - 7th generation BMC
- ✧ Computer peripherals IC
  - PC & 8K Audio/Video Extension controller
- ✧ High-end consumer electronics IC
  - Cupola360 spherical image processing chip

b. Expected R&D Spending

The Company plans to sequentially allocate its R&D budget based on the progress of new product and new technology development. R&D expenditure will maintain a certain level of growth based on the Company’s operations to ensure its competitive advantages. Actual R&D expenses in 2018 and 2019 were NT$326,983 thousand and NT$382,851 thousand, and accounted for 15% and 15% of revenue, respectively. The Company will be ready to adjust its R&D expenditure based on future changes in the market and demand anytime. The Company's R&D expenditure in 2020 is estimated at NT$406,125 thousand and will enhance the Company's R&D ability and competitiveness.

(4) Risk Associated with Changes in the Political and Regulatory Environment

The Company aims to comply with laws and regulations of the competent authority in all of its operations, and constantly monitors changes in important policies and laws in Taiwan and overseas to obtain all external information possible. The Company's recent business and finances have not been impacted by any changes to important policies and laws in Taiwan and overseas.

(5) Impact of New Technology and Industry Changes

The Company constantly monitors technology changes and developments relevant to its industry, and rapidly gains information on industry changes. Moreover, the Company is constantly strengthening its R&D ability and applies for patents to further protect its innovative concepts and designs, as it actively expands future markets and applications. This enables the Company to respond to the impact of technology and industry changes. Hence, no major technology changes have had a material impact on the Company's financial condition.

(6) Changes in Corporate Image and Impact on Company’s Crisis Management

The Company has always upheld the principles of integrity and professionalism, and operates its business with a sure-footed and steadfast approach. Ever since the Company was established, it has actively strengthened its internal management and improved its quality and efficiency. Up to the date of report, no material events have affected the Company's corporate image.

(7) Risks Associated with Mergers and Acquisitions

The Company's Finance Department and business units are responsible for management and execution of these risks.

The Company currently does not have any mergers or acquisition plans. during 2019 and this year up to the date of report.

(8) Risks Associated with Facility Expansion

The Company does not have any plans for factory expansions in the most recent year and up to the date of report.

(9) Risks Associated with Purchase Concentration and Sales Concentration

a. Risks of purchasing concentration:

The Company is a fabless IC design company without any back-end personnel. Hence, all products are produced through a turnkey service provider. When deciding on the turnkey service provider, besides considering the completeness of its silicon IP and APR (Auto Place & Route) technical capabilities, which foundry, assembly house and testing house it is in a strategic alliance with is even more important, because the foundry's process technologies, quality and yield are key factors to whether or not a product is successful. Therefore, the R&D Department selects the turnkey service provider during initial stages of product development.

In the semiconductor industry's value chain, IC design companies are all inclined to maintain long-term relationships with specific foundries, assembly houses, and testing houses to obtain reliable and stable capacity. This is due to considerations of process technology, quality and yield, sufficient capacity, and on-time delivery.

This situation is common among IC design companies. The Company has worked well with the current wafer supplier (turnkey service provider) for many years, and there is no risk of supply shortage. At present, the Company mainly makes procurements from 2-3 turnkey service providers, but it will continue to search for suitable turnkey service providers in coordination with the development and mass production of new products, so as to reduce the risk of concentrated procurements.

b. Risks of sales concentration:

The Company's main product is BMC, which accounts for over 90% of its revenue, and customers are mainly server brands. Since server brands mainly rely on an ODM or EMS for manufacturing, the Company directly sells its product to the ODM or EMS designated by the brand customer. Analysis of customers in 2018 and 2019 show that the Company's sales are not overly concentrated. Furthermore, besides maintaining relationships with current customers, the Company will actively develop new products and new customers to expand its product portfolio and increase its purchase orders, thereby avoiding the risk of sales being overly concentrated.

(10) Risks Associated with Sales of Significant Numbers of Shares by the Company's Directors and Major Shareholders Who Own 10% or more of the Company's Total Outstanding Shares

Share transfer by directors, supervisors, managers and shareholders holding more than 10% of the Company's shares due to personal financial planning or in coordination with strategic partners brought in by the Company have been reasonable in the past year and up to the date of report. There have been no mass transfers of shares and there has been no impact on the Company's operations.

(11) Risks Associated with Change in Management

No change in management team in the Company occurred in the most recent year to the date of printing of this annual report

(12) Risks Associated with Litigations

a. If the results of concluded or pending litigious, non-litigious, or administrative litigation events involving the Company in the past two years and up to the date of report can have a material impact on shareholders' equity or stock prices, the facts in contention, amount of the subject matter, starting date of the litigation, main parties involved, and current status shall be disclosed: None.

b. Concluded or pending litigious, non-litigious, or administrative litigation events in the most recent two years and up to the date of report involving directors, supervisors, the president, de facto responsible person, major shareholders holding more than 10% of the Company's shares, or subsidiaries of the Company with an outcome that can have a material impact on shareholder equity or stock prices:

Except for director ATEN Technology Co., Ltd. which are involved in the following litigious and non-litigious events, the Company's other directors, supervisors, the president, de facto responsible person, major shareholders holding more than 10% of the Company's shares, or subsidiaries were not involved in any concluded or pending litigious, non-litigious, or administrative litigation events in the past two years and up to the date of the print date of this report.

(I) ATEN Technology Co., Ltd. (hereinafter referred to as "ATEN")

(a) During 2014, the ATEN filed patent infringement suits against Uniclass Technology Co., Ltd, Electronic Technology Co., Ltd. Of Dongguan Uniclass, Airlink 101, Pheobe Micro Inc, Broadtech International Co., Ltd, d/b/a Linkskey, and Black Box Corporation on Eastern District of Taxes. In August 2009, the U.S. Court of Appeals for the Federal Circuit Court ruled that the patent was valid; the jury's verdict of non-infringement was affirmed and the case was closed.

(b) The Emine Technology On the ground that the ATEN claimed leave of absence from the court to seize its products during the year 2005 and suffered damage as a result. In September 2019, a lawsuit for damages was filed against the ATEN and counsel has been appointed by the ATEN, the final outcome of which is uncertain.

(13) Other Material Risk: None.

7. If the company or its affiliates have experienced financial difficulties, the annual report shall explain how said difficulties will affect the company's financial situation: None

8. Other Material Events:

(1) Risks Associated with Cyber Attacks

Even though ASPEED has established a comprehensive internet and computing security network, it cannot guarantee that the Company's computing systems which control or maintain vital corporate functions ,such as its manufacturing operations and enterprise accounting, would be completely immune to crippling cyber attacks by any third party to gain unauthorized access to its internal network systems, to sabotage its operations and goodwill or otherwise. In the event of a serious cyber attack, ASPEED's systems has may lose important corporate data, therefore, ASPEED has executed backup data procedure of such attack. While ASPEED also seeks to periodically review and assess its cybersecurity architecture to ensure their adequacy and effectiveness, it cannot guarantee that the Company will not be susceptible to new and emerging risks and attacks in the evolving landscape of cybersecurity threats. These cyber attacks may also attempt to steal ASPEED's trade secrets and other intellectual properties and other sensitive information, such as proprietary information of the Company's customers and other stakeholders and personal information of the Company's employees. Malicious hackers may also try to introduce computer viruses, corrupted software or ransomware into the Company's network systems to disrupt its operations, blackmail it for regaining control of its computing systems or spy for sensitive information. These attacks may result in ASPEED having to pay damages for its delayed or disrupted orders or incur significant expenses in implementing remedial and improvement measures to enhance the Company's cybersecurity network, and may also expose the Company to significant legal liabilities arising from or related to legal proceedings or regulatory investigations associated with, among other things, leakage of customer or third party information which ASPEED has an obligation to keep confidential.

During 2019 and as of the date of this Annual Report, the Company had not been aware of any material cyber attacks or incidents that had or would expected to have a material adverse effect on its business and operations, nor had it been involved in any legal proceedings or regulatory investigations related thereof.

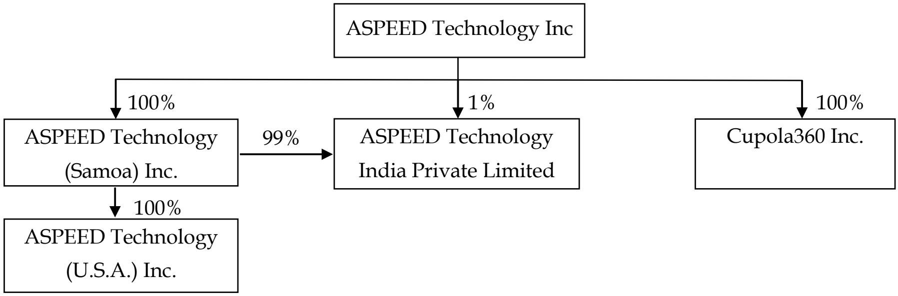
(2) Other Material Risks

During 2019 as of the date of this annual report, ASPEED's management is not aware of any other risk event that could impart a potentially material impact on the financial status of the Company.

IX. Special Disclosures

1. Summary of Affiliated Companies:
   (1) Profiles of Affiliates and Subsidiaries

December 31, 2019



   (2) Profile of individual affiliates

December 31, 2019; Unit:NT$ 1,000/Foreign currency thousand

Company	Date of Incorporation	Place of Registration	Capital Stock	Major business
ASPEED Technology (Samoa) Inc.	2016/06	Samoa	USD 1,550	Investment Holdings
ASPEED Technology (U.S.A.) Inc.	2016/07	U.S.	USD 1,000	R&D and technical services
ASPEED Technology India Private Limited	2016/10	India	INR 35,000	R&D and technical services
Cupola360 Inc.	2018/02	Taiwan	NTD 15,000	Software Design services

   (3) Common Shareholders of the Company and Its Subsidiaries or Its Affiliates with Actual of Deemed Control: None.
   (4) Business Scope of the Company and Its Affiliated Companies
   Business activities covered by ASPEED Technology and affiliates' operations include IC design, R&D, and sales and investments. Business activities covered by the affiliated enterprises' overall operations include R&D, marketing, and after-sales services for Multimedia IC, Computer peripherals IC and High-end consumer electronics IC, as well as general investments.

(5) Directors, supervisors and presidents of affiliates and subsidiaries

December 31, 2019; Unit: share/ %

Company	Title	Name or Representative	Sareholding	
			Shares	Shareholding %
ASPEED Technology (Samoa) Inc.	Director	ASPEED Technology Inc. Representative: Chris Lin	1,550,000	100%
ASPEED Technology (U.S.A.) Inc.	Director	ASPEED Technology (Samoa) Inc. Representative: Chris Lin	1,000,000	100%
ASPEED Technology India Private Limited	Director	ASPEED Technology Inc. Representative: Chris Lin	35,000	1%
		ASPEED Technology Inc. Representative: Arnold Yu		
		ASPEED Technology (Samoa) Inc. Representative: Yuvaraj Mahadevan	3,465,000	99%
Cupola360 Inc.	Director	ASPEED Technology Inc. Representative: Chris Lin	1,500,000	100%

(6) Directors, supervisors and presidents of affiliates and subsidiaries

December 31, 2019; Unit: NT$1,000 except for EPS

Campany	Capital	Assets	Liabilities	Net worth	Operating income	Net operating profit (loss)	Net profit (loss) this year	Earnings (losses) per share (NTD)
ASPEED Technology (Samoa) Inc.	48,763	31,186	－	31,186	－	40	7,555	4.87
ASPEED Technology (U.S.A.) Inc.	31,460	47,421	27,956	19,465	77,637	7,058	6,345	6.35
ASPEED Technology India Private Limited	16,234	11,949	666	11,283	9,710	823	1,260	0.40
Cupola360 Inc.	15,000	11,073	－	11,073	－	(2,157)	(2,154)	(1.44)

Note: The capital, total assets, total liabilities, and net worth listed in this table are calculated using the exchange rate at the end of 2019. The operating income, net operating profit (loss), net profit (loss) this year, and earnings per share are calculated using the yearly average exchange rate of 2019.

2. Private Placement Securities: None.
3. Holding or Disposition of the Company Stocks by Subsidiaries: None.
4. Other Necessary Supplement: None.

X. Any Events that Had Significant Impacts on Shareholders' Rights or Security Prices as Stated in Item 2 Paragraph 2 of Article 36 of Securities and Exchange Law of Taiwan: None.